

**Prepared for:**



**HYDRAULIC DESIGN AND RISK ASSESSMENT FOR  
BRIDGE REPLACEMENT OVER**

**ROCKY CREEK**

**AT I-85**

**PROJECT ID# P038111  
GREENVILLE COUNTY  
FEBRUARY 2019**

**PREPARED BY:**

**Michael Baker**

**I N T E R N A T I O N A L**

**HYDRAULIC DESIGN REFERENCE FOR  
THIS STUDY IS THE:**

**2009 EDITION OF SCDOT'S "REQUIREMENTS  
FOR HYDRAULIC DESIGN STUDIES"**

# Table of Contents

	<u>Page</u>
Hydraulic and Hydrological Report	1 - 12
Appendix A – Site Photos	
Appendix B – Risk Assessment Sheet	
Appendix C – General Site Maps	
Appendix D – FEMA FIS Excerpts	
Appendix E – Storage Areas used for Hydrology	
Appendix F – Conceptual Bridge Plan	
Appendix G – Hydrology Model Results	
1) Original HEC-1 Model	
2) Duplicate Effective HEC-HMS Model	
3) Corrected Effective/Existing HEC-HMS Model	
4) Proposed HEC-HMS Model	
Appendix H – Hydraulic Model Results	
1) Duplicate Effective HEC-RAS Model	
2) Corrected Effective/Existing HEC-RAS Model	
3) Proposed HEC-RAS Model	
4) Natural HEC-RAS Model	
5) Duplicate Effective Floodway HEC-RAS Model	
6) Corrected Effective/Existing Floodway HEC-RAS Model	
7) Proposed Floodway HEC-RAS Model	
Appendix I – Flood Inundation Maps	

\*Note: An “Annotated FEMA FIRM Map” and “Topographic Work Map” have been created in conjunction with this report.

*INTERSTATE 85 OVER ROCKY CREEK*  
**Hydraulic and Hydrological Report**

**Introduction**

The Rocky Creek crossing is located approximately 0.5 miles west of Pelham Road. The crossing, which consists of quadruple 10 feet wide x 8 feet high box culverts, experienced significant flooding on August 10, 2014. Four to five feet of water reportedly flooded southbound I-85 for a distance of up to 500 feet at the Rocky Creek culvert.

The Rocky Creek crossing at I-85 is located in a Federal Emergency Management Agency (FEMA) Zone AE with defined base flood elevations (BFE) and a defined floodway. Rocky Creek is included in the Flood Insurance Study (FIS) for Greenville County and Incorporated Areas, which was last updated August 18, 2014. The current FIS, which became effective 8 days after the flooding event of August 10, 2014 showed an increase in the BFE upstream of the I-85 Rocky Creek culverts in excess of 6 feet as compared to the 2004 FIS.

The purpose of this study is to determine what measures need to be taken to prevent the Interstate from overtopping for the 1% annual chance flood. A replacement structure has been determined by the results of this detailed hydraulic analysis. This study also determines the impacts of the proposed replacement structure on the FEMA BFEs for affected properties. A map was developed showing existing and proposed flood inundations and floodway limits with property lines and owner information.

## **Hydrologic Analysis**

The original Hydrologic model used in the FEMA FIS was created using HEC-1. This model was obtained from SCDOT, and then imported into HEC-HMS. The I-85 crossing is modeled in HEC-1/HEC-HMS using storage routing data. For this particular crossing, storage-area and storage-discharge rating curves were used. The storage-area values were checked using USGS quad maps and LiDAR data. When tracing these contours to calculate storage areas, the storage areas for the lower stages were less than the original HEC-1 values, but the higher stages had measured storage areas that were greater than the original HEC-1 input (see Table 1 and Appendix E). The new storage areas calculated using LiDAR – and reinforced by the USGS quad map – were used to replace the existing HEC-1 areas for the I-85 crossing. In order to maintain consistency with the original HEC-1 input, the storage areas calculated at the even, 2-foot intervals in GIS were interpolated in order to find the storage area corresponding with the elevations used in the original storage calculations of the HEC-1/HEC-HMS model. The HEC-HMS model was then re-run to calculate new flowrates at the I-85 crossing and further downstream of Rocky Creek. This amendment was used as a Corrected Effective flow rate.

<b>Elevation (ft NAVD)</b>	<b>Area (Acres)</b>	
	Effective (HEC-1)	Corrected Effective (Measured in GIS)
839.40	0.00	0.00
841.42	1.07	0.40
843.33	1.49	0.86
845.88	6.55	4.23
849.27	12.90	10.66
852.42	18.05	31.89
853.16	18.54	36.36
853.44	18.75	38.05
854.66	19.78	45.64
856.00	19.95	54.18

**Table 1. Storage Area Comparisons upstream of I-85 Rocky Creek crossing**



## **Hydraulic Analysis**

The HEC-RAS model Stantec prepared for the “*I-85/I-385 Interchange – FEMA No-Rise Study*” was obtained from Stantec and reviewed. The model included plans for the Effective FEMA model, a Duplicate Effective Truncated model, Duplicate Effective Truncated Existing Floodway model, and a Duplicate Effective Truncated Proposed Floodway model. Per the FEMA guidelines in the MT-2 form, the Michael Baker International HEC-RAS model was built to include a Duplicate Effective model, Corrected Effective/Existing model and a Proposed model. As defined by FEMA, the Duplicate Effective Model is a copy of the hydraulic analysis used in the Effective FIS – referred to as the Effective Model. The Corrected Effective Model is the model that corrects any errors that occur in the Duplicate Effective Model, adds any additional cross sections to the Duplicate Effective Model, or incorporates more detailed topographic information than that used in the current Effective model.

For this study, changes made to the Duplicate Effective Model include adjustment of flowrates based on more detailed storage areas, and removal of some floodplain obstructions that do not appear to be accurate based on field survey and recent satellite imaging. Field survey was also used to verify channel cross sections within the study limits. There do not appear to have been any man-made physical changes since the date of the effective FIS, therefore it is unclear exactly what some of the obstructions from the original 1992 model were based on. Because of this, there is no separate Existing or Pre-Project Conditions Model that reflects only modifications that have occurred within the floodplain since the date of the Effective model. These revisions were applied to the Effective geometry from Stantec to create a Corrected Effective geometry. For purposes of this study, all of the changes described above will be referred to as the Corrected Effective/Existing Model.

Several iterations of potential proposed structures were discussed with the bridge and roadway design engineers and the potential designs modeled in HEC-RAS. The evaluation of potential structures was based on requirements for roadway conditions and traffic phasing during construction, prevention of over-topping during the 1%-chance design storm, and considerations of the removal of the existing box culverts, among other variables.

The Corrected Effective/Existing Model was modified to reflect proposed post-project conditions. A rating curve was developed for the proposed bridge using the Corrected Effective HEC-RAS data. This rating curve was translated in to HEC-HMS as a stage-outflow curve. The results from this HEC-HMS provided the Q values used to model the flow through the proposed bridge and to create the “Proposed” HEC-RAS model.

Flow Change Location (by HEC-RAS Cross- Section station)	Existing 1%-Chance Storm Discharge (cfs)	Corrected Effective 1%-Chance Storm Discharge (cfs)	Proposed 1%-Chance Storm Discharge (cfs)
29985.12	4813	4824.5	4824.5
25687.20	4939	4585.7	4959
22946.88	4850	4676.4	4991.9

**Table 2. Steady Flow Discharges**

The proposed geometry is a 210'-0" bridge with two 105'-0" spans and 2H:1V sloping abutments under the bridge. The roadway fill embankments are supported by parallel MSE walls at the northwest and southeast corners of the bridge, with all other bridge approaches sloped at 2H:1V transverse to the interstate. The bridge is wide enough to accommodate nine 12-foot travel lanes, one 12-foot median with barrier, one 12-foot shoulder in the westbound direction, and one variable width shoulder eastbound to accommodate traffic during the staged construction and an exit ramp taper. An exterior barrier width of 1'-7½" gives the bridge a total width of 169'-3". The bents will be constructed on approximately a 20 degree skew from the perpendicular. This design met all necessary criteria and was used to model the proposed conditions (see Appendix F).

The Proposed water surface profile created was carried far enough upstream and downstream to tie in to the water surface elevations of the Existing model. The upstream-most and downstream-most cross sections of the Corrected Effective and Proposed model used for this analysis were located at the stations 29985.12 and 22496.88, respectively. Using these cross-sections, the Duplicate Effective Model has also been truncated to the limits of this study.

## **FEMA FIS Impacts**

The Proposed and Corrected Effective models were compared to the Duplicate Effective water surface elevation (WSE) to ensure that they were within 0.5' of the existing published FEMA WSE. Further, the Duplicate Effective Floodway limits were compared to the Proposed Floodway limits and the encroachments were adjusted in the Proposed Floodway model where necessary in order to comply with the 1 foot delta from the floodway to the base flood (see Tables 3.1, 3.2, and 3.3 below).

River Sta	Effective BFE (ft)	Duplicate Effective W.S. Elev (ft)	Corrected Effective W.S. Elev (ft)	Delta (ft)	Comments
29985.12	AZ 860.6	860.61	860.62	0.01	
29958.72BR U		860.61	860.62	0.01	
29958.72BR D		860.61	860.62	0.01	
29927.04		858.49	858.29	-0.20	
29700	AY 858.7	858.71	858.54	-0.17	
29573.28		858.67	858.49	-0.18	
29362.08		858.57	858.38	-0.19	
29203.68	AX 858.3	858.33	858.22	-0.11	
28944.96		857.65	857.57	-0.08	
28707.36	AW 857.4	857.51	857.43	-0.08	
28570.08		857.47	857.39	-0.08	
28374.72		857.24	857.16	-0.08	
28216.32	AV 856.5	856.57	856.48	-0.09	
27999.84		854.98	854.89	-0.09	
27809.76		854.55	854.46	-0.09	
27572.16	AU 854.2	854.24	854.15	-0.09	
27339.84		854.16	854.07	-0.09	
27155.04		854.00	853.90	-0.10	
27091.68		Culvert	Culvert		
27033.6	AT 853.9	853.85	853.73	-0.12	
26806.56		853.73	853.61	-0.12	Deleted obstruction
26574.24		853.71	853.59	-0.12	
26400	AS 853.6	853.62	853.46	-0.16	
26220.48		853.59	853.48	-0.11	Added survey & deleted obstruction
26083.2		853.58	853.46	-0.12	Added survey & deleted obstruction
25893.12		853.57	853.41	-0.16	Added survey
25687.2	AR 853.6	853.54	853.40	-0.14	
25539.36		853.48	853.35	-0.13	
25460.16		Culvert	Culvert		
25380.96		851.43	851.17	-0.26	
24668.16	AQ 849.9	849.94	849.68	-0.26	
24541.44		849.52	849.28	-0.24	
24314.4		848.26	848.10	-0.16	
24277.44BR U		848.26	848.10	-0.16	
24277.44BR D		848.26	848.10	-0.16	
24240.48		847.22	847.08	-0.14	
24156		846.87	846.76	-0.11	
24029.28		846.68	846.59	-0.09	
23860.32		846.64	846.56	-0.08	
23596.32	AO 846.5	846.46	846.40	-0.06	
23453.76		846.32	846.28	-0.04	
23327.04		846.30	846.26	-0.04	
23110.56	AN 846.00	846.00	846.00	0.00	
22946.88		845.89	845.89	0.00	

**Table 3.1 Baseflood elevation comparison for Duplicate Effective vs. Corrected Effective**

River Sta	Effective BFE (ft)	Corrected Effective W.S. Elev (ft)	Proposed W.S. Elev (ft)	Delta (ft)	Comments
29985.12	AZ 860.6	860.62	860.62	0.00	
29958.72BR U		860.62	860.62	0.00	
29958.72BR D		860.62	860.62	0.00	
29927.04		858.29	858.29	0.00	
29700	AY 858.7	858.54	858.53	-0.01	
29573.28		858.49	858.48	-0.01	
29362.08		858.38	858.37	-0.01	
29203.68	AX 858.3	858.22	858.21	-0.01	
28944.96		857.57	857.55	-0.02	
28707.36	AW 857.4	857.43	857.41	-0.02	
28570.08		857.39	857.37	-0.02	
28374.72		857.16	857.14	-0.02	
28216.32	AV 856.5	856.48	856.45	-0.03	
27999.84		854.89	854.60	-0.29	
27809.76		854.46	854.02	-0.44	
27572.16	AU 854.2	854.15	853.50	-0.65	
27339.84		854.07	853.37	-0.70	
27155.04		853.90	853.12	-0.78	
27091.68		Culvert	Culvert	Culvert	
27033.6	AT 853.9	853.73	852.51	-1.22	
26806.56		853.61	852.25	-1.36	Deleted obstruction
26574.24		853.59	852.20	-1.39	
26400	AS 853.6	853.46	851.93	-1.53	
26220.48		853.48	851.97	-1.51	Added survey & deleted obstruction
26083.2		853.46	851.92	-1.54	Added survey & deleted obstruction
25893.12		853.41	851.83	-1.58	Added survey
25687.2	AR 853.6	853.40	851.80	-1.60	
25539.36		853.35	851.27	-2.08	
25460.16		Culvert	Bridge	Bridge	Replaced box culverts with 210' bridge
25380.96		851.17	851.23	0.06	
24668.16	AQ 849.9	849.68	849.95	0.27	
24541.44		849.28	849.53	0.25	
24314.4		848.10	848.26	0.16	
24277.44BR U		848.10	848.26	0.16	
24277.44BR D		848.10	848.26	0.16	
24240.48		847.08	847.23	0.15	
24156		846.76	846.88	0.12	
24029.28		846.59	846.69	0.10	
23860.32		846.56	846.65	0.09	
23596.32	AO 846.5	846.40	846.48	0.08	
23453.76		846.28	846.33	0.05	
23327.04		846.26	846.32	0.06	
23110.56	AN 846.00	846.00	846.01	0.01	
22946.88		845.89	845.89	0.00	

**Table 3.2 Baseflood elevation comparison for Corrected Effective vs. Proposed**

River Sta	Profile	Effective		Duplicate Effective						Corrected Effective						Proposed					
			FW Width	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
29985.12	Baseflood	AZ	180	860.61		435.81				860.62		436.47				860.62		436.47			
29985.12	Floodway			861.53	0.92	180.00	180	600	780	861.07	0.45	180.00	180	600	780	861.09	0.48	180.00	180	600	780
29958.72BR U	Baseflood			860.61		307.46				860.62		309.37				860.62		309.37			
29958.72BR U	Floodway			861.53	0.92	134.02	180	600	780	861.07	0.45	133.69	180	600	780	861.09	0.48	133.71	180	600	780
29958.72BR D	Baseflood			860.61		307.46				860.62		309.38				860.62		309.38			
29958.72BR D	Floodway			861.46	0.86	133.97	180	600	780	861.07	0.45	83.69	130	620	750	861.09	0.48	83.71	130	620	750
29927.04	Baseflood			858.49		435.35				858.29		413.57				858.29		413.57			
29927.04	Floodway			859.49	1.00	180.00	180	600	780	858.63	0.34	130.00	130	620	750	858.69	0.39	130.00	130	620	750
29700	Baseflood	AY	330	858.71		561.96				858.54		558.92				858.53		558.77			
29700	Floodway			859.66	0.95	330.00	330	390	720	859.19	0.65	400.00	400	380	780	859.23	0.70	400.00	400	380	780
29573.28	Baseflood			858.67		681.49				858.49		677.63				858.48		677.44			
29573.28	Floodway			859.60	0.93	350.00	350	390	740	859.16	0.67	528.68	530	250	780	859.21	0.73	528.94	530	250	780
29362.08	Baseflood			858.57		679.09				858.38		672.23				858.37		671.89			
29362.08	Floodway			859.43	0.86	280.00	280	340	620	858.99	0.61	350.00	350	300	650	859.03	0.66	350.00	350	300	650
29203.68	Baseflood	AX	250	858.33		376.88				858.22		525.88				858.21		525.79			
29203.68	Floodway			859.16	0.83	250.00	250	380	630	858.74	0.52	300.00	300	360	660	858.79	0.58	300.00	300	360	660
28944.96	Baseflood			857.65		321.52				857.57		320.96				857.55		320.85			
28944.96	Floodway			858.64	0.99	250.00	250	265	515	858.24	0.68	295.00	295	220	515	858.31	0.76	295.00	295	220	515
28707.36	Baseflood	AW	250	857.51		451.02				857.43		449.77				857.41		449.51			
28707.36	Floodway			858.44	0.93	250.00	250	235	485	858.08	0.65	305.00	305	180	485	858.15	0.74	305.00	305	180	485
28570.08	Baseflood			857.47		549.22				857.39		548.15				857.37		547.92			
28570.08	Floodway			858.38	0.91	250.00	250	250	500	858.07	0.68	430.00	430	220	650	858.14	0.77	430.00	430	220	650
28374.72	Baseflood			857.24		472.49				857.16		471.62				857.14		471.40			
28374.72	Floodway			857.96	0.72	235.00	235	275	510	857.84	0.69	360.00	360	250	610	857.73	0.59	235.00	235	275	510
28216.32	Baseflood	AV	155	856.57		280.12				856.48		278.99				856.45		278.55			
28216.32	Floodway			856.96	0.39	155.00	155	300	455	856.86	0.38	155.00	155	300	455	856.64	0.19	155.00	155	300	455
27999.84	Baseflood			854.98		192.97				854.89		191.90				854.60		188.39			
27999.84	Floodway			855.93	0.95	155.00	155	250	405	855.83	0.94	155.00	155	250	405	855.27	0.67	155.00	155	250	405
27809.76	Baseflood			854.55		235.08				854.46		234.28				854.02		230.30			
27809.76	Floodway			855.47	0.92	155.00	155	235	390	855.37	0.91	155.00	155	235	390	854.60	0.58	155.00	155	235	390
27572.16	Baseflood	AU	215	854.24		362.01				854.15		360.77				853.50		352.49			

River Sta	Profile	Effective		Duplicate Effective						Corrected Effective						Proposed					
			FW Width	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
27572.16	Floodway			855.24	1.00	215.00	215	220	435	855.14	0.99	215.00	215	220	435	854.20	0.69	215.00	215	220	435
27339.84	Baseflood			854.16		487.33				854.07		485.23				853.37		470.23			
27339.84	Floodway			855.05	0.89	230.00	230	305	535	854.95	0.89	230.00	230	305	535	853.87	0.50	230.00	230	305	535
27155.04	Baseflood			854.00		421.93				853.90		420.64				853.12		410.38			
27155.04	Floodway			854.93	0.93	270.00	270	280	550	854.84	0.94	270.00	270	280	550	853.67	0.55	270.00	270	280	550
27091.68				Culvert						Culvert						Culvert					
27033.6	Baseflood	AT	270	853.85		349.94				853.73		348.84				852.51		336.03			
27033.6	Floodway			854.81	0.96	270.00	270	280	550	854.75	1.02	270.00	270	280	550	852.79	0.28	270.00	270	280	550
26806.56	Baseflood			853.73		471.80				853.61		489.67				852.25		476.51			
26806.56	Floodway			854.68	0.95	270.00	270	200	470	854.62	1.01	270.00	270	200	470	852.46	0.21	270.00	270	200	470
26574.24	Baseflood			853.71		450.26				853.59		449.18				852.20		436.30			
26574.24	Floodway			854.67	0.96	270.00	270	160	430	854.62	1.03	270.00	270	160	430	852.43	0.23	270.00	270	160	430
26400	Baseflood	AS	225	853.62		370.39				853.46		434.00				851.93		480.17			
26400	Floodway			854.58	0.95	225.00	225	550	775	854.48	1.02	275.00	275	500	775	852.19	0.26	350.00	350	450	800
26220.48	Baseflood			853.59		421.56				853.48		545.74				851.97		429.21			
26220.48	Floodway			854.51	0.92	225.00	225	550	775	854.22	0.74	135.00	135	640	775	852.13	0.16	250.00	250	550	800
26083.2	Baseflood			853.58		549.93				853.46		607.60				851.92		410.13			
26083.2	Floodway			854.51	0.93	225.00	225	550	775	854.05	0.59	105.00	105	675	780	851.94	0.02	165.00	165	650	815
25893.12	Baseflood			853.57		597.66				853.41		585.29				851.83		445.73			
25893.12	Floodway			854.52	0.95	300.00	300	500	800	853.93	0.51	140.00	140	660	800	851.90	0.07	270.00	270	550	820
25687.2	Baseflood	AR	330	853.54		556.72				853.40		552.26				851.80		511.18			
25687.2	Floodway			854.50	0.96	330.43	350	1690	2040	854.05	0.65	327.52	350	1690	2040	851.88	0.08	313.51	420	1620	2040
25549.36	Baseflood			853.48		860.98				853.35		859.42				851.27		250.00			
25549.36	Floodway			854.34	0.86	350.00	350	1665	2015	853.94	0.59	395.00	480	1620	2100	851.38	0.11	231.52	480	1690	2170
25460.16BR U	Baseflood															851.39		195.43			
25460.16BR U	Floodway															851.50	0.10	195.84	480	1690	2170
25460.16BR D	Baseflood			Culvert						Culvert											
25460.16BR D	Floodway															851.32		195.14			
25370.96	Baseflood			851.43		107.00				851.17		107.00				851.23		217.15			
25370.96	Floodway			851.52	0.10	107.00	382	1670	2052	851.23	0.06	107.00	382	1670	2052	851.34	0.11	220.88	500	1670	2170

River Sta	Profile	Effective		Duplicate Effective						Corrected Effective						Proposed					
			FW Width	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R	W.S. Elev	Prof Delta	Top Wdth	Enc WD	Enc Sta L	Enc Sta R
			(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
24668.16	Baseflood	AQ	160	849.94		198.65				849.68		195.27				849.95		198.81			
24668.16	Floodway			850.19	0.26	160.00	160	1604.16	1764.16	849.92	0.23	159.97	160	1604.16	1764.16	850.22	0.27	160.00	160	1604.16	1764.16
24541.44	Baseflood			849.52		220.74				849.28		177.87				849.53		221.78			
24541.44	Floodway			849.85	0.33	160.00	160	1510.5	1670.5	849.59	0.31	160.00	160	1510.5	1670.5	849.88	0.35	160.00	160	1510.5	1670.5
24314.4	Baseflood			848.26		210.00				848.10		210.00				848.26		210.00			
24314.4	Floodway			848.81	0.56	160.00	160	540	700	848.61	0.51	160.00	160	540	700	848.84	0.59	160.00	160	540	700
24277.44BR U	Baseflood			848.26						848.10						848.26					
24277.44BR U	Floodway			848.81	0.56	160.00	160	540	700	848.61	0.51	160.00	160	540	700	848.84	0.59	160.00	160	540	700
24277.44BR D	Baseflood			848.26						848.10						848.26					
24277.44BR D	Floodway			848.81	0.56	160.00	160	540	700	848.61	0.51	160.00	160	540	700	848.84	0.59	160.00	160	540	700
24240.48	Baseflood			847.22		110.00				847.08		110.00				847.23		110.00			
24240.48	Floodway			847.74	0.52	110.00	160	540	700	847.62	0.54	110.00	160	540	700	847.76	0.53	110.00	160	540	700
24156	Baseflood	AP	160	846.87		110.00				846.76		110.00				846.88		110.00			
24156	Floodway			847.56	0.69	160.00	160	520	680	847.37	0.61	110.00	160	520	680	847.58	0.70	160.00	160	520	680
24029.28	Baseflood			846.68		228.93				846.59		228.18				846.69		229.04			
24029.28	Floodway			847.35	0.67	170.00	170	430	600	847.19	0.60	170.00	170	430	600	847.37	0.68	170.00	170	430	600
23860.32	Baseflood			846.64		396.08				846.56		395.77				846.65		396.13			
23860.32	Floodway			847.29	0.65	250.00	250	480	730	847.14	0.59	250.00	250	480	730	847.31	0.66	250.00	250	480	730
23596.32	Baseflood			846.46		452.66				846.40		451.87				846.48		452.81			
23596.32	Floodway	AO	270	847.03	0.57	270.00	270	380	650	846.91	0.51	270.00	270	380	650	847.06	0.58	270.00	270	380	650
23453.76	Baseflood			846.32		454.30				846.28		453.73				846.33		454.43			
23453.76	Floodway			846.73	0.41	240.00	240	510	750	846.64	0.36	240.00	240	510	750	846.75	0.42	240.00	240	510	750
23327.04	Baseflood			846.30		484.12				846.26		483.88				846.32		484.18			
23327.04	Floodway			846.64	0.34	230.00	230	570	800	846.56	0.30	230.00	230	570	800	846.66	0.35	230.00	230	570	800
23110.56	Baseflood	AN	151	846.00		360.45				846.00		360.36				846.01		360.76			
23110.56	Floodway			846.04	0.05	151.00	151	610	761	846.04	0.05	151.00	151	610	761	846.06	0.05	151.00	151	610	761
22946.88	Baseflood			845.89		370.64				845.89		370.64				845.89		370.64			
22946.88	Floodway			845.89	0.00	151.00	151	659	810	845.89	0.00	151.00	151	659	810	845.89	0.00	151.00	151	659	810

**Table 3.3 Floodway Data Table**



## Conclusions

The proposed replacement structure for the existing box culverts under I-85 at Rocky Creek is a 210' bridge with two 105' spans. The bridge will prevent over-topping of the interstate for the 1% annual chance flood. Further, the replacement will lower water surface elevations just upstream of the interstate during the 1% chance flood as well as slightly increase the water surface elevations just downstream of the interstate crossing. The proposed water surface elevations downstream increase by a maximum amount of 0.27 feet and there are no additional structures impacted beyond those which are already shown as impacted in the effective FIS study (refer to Exhibit I). The proposed water surface profiles tie-in to the existing FEMA profiles within 0.5' at reach station 29985.12 – upstream of Muddy Ford Road – and station 22946.88 – upstream of Garlington Road. The proposed structure will require a conditional Letter of Map Revision from FEMA

The final bridge hydrology data and overtopping data can be seen in Table 4, below.

<b>BRIDGE HYDROLOGY DATA</b>		
D.A.	5.84	SQ MI
Q <sub>50</sub>	4323.2	CFS
V <sub>50</sub>	5.58	FT/SEC
50 YEAR W.S. ELEV.	850.78	FT
50 YEAR FREEBOARD	2.10	FT
Q <sub>100</sub>	4959	CFS
V <sub>100</sub>	5.95	FT/SEC
100 YEAR W.S. ELEV.	851.27	FT
*100 YEAR BACKWATER	0.53	FT

\*Natural model created by removing I-85 along with the culverts. The Q for this model was adjusted by ignoring the effects of the storage upstream of the current crossing.

<b>OVERTOPPING FLOOD</b>		
Q	>7947	CFS
PROBABILITY	<.2	%

**Table 4. Bridge Hydrology Data**

## **Previous Hydrology and Hydraulic Studies**

Previous studies of Rocky Creek that were referenced in this study include:

- 1) *HEC-1 Hydrologic Model for Rocky Creek Watershed, Woolpert LLP, July 26, 2000*
- 2) *FEMA FIS for Greenville County and Incorporated Areas, August 18, 2014*
- 3) *I-85/I-385 Interchange – FEMA No-Rise Study, Stantec for CECS, April 9, 2015*

## **Design Software**

The following computer programs and models were used in the analysis of the I-85 over Rocky Creek crossing:

- 1) *HEC-HMS 4.2, US Army Corps of Engineers*
- 2) *HEC-RAS 4.1.0, US Army Corps of Engineers*
- 3) *HEC-GeoRAS 10.1, US Army Corps of Engineers*
- 4) *MicroStation V8i*
- 5) *ArcGIS ArcMap, Version 10.2.2, ESRI*

# APPENDIX A

## SITE PHOTOS



Looking downstream at I-85 box culverts at Rocky Creek



Looking upstream of I-85 box culverts





Looking upstream at I-85 box culverts at Rocky Creek from Honbarrier Drive.



Looking upstream at I-85 box culverts at Rocky Creek from Honbarrier Drive.





Floodway/floodplain between I-85 and Honbarrier Drive Bridge over Rocky Creek.



Looking southwest at the upstream face of the Honbarrier Drive bridge over Rocky Creek.





Looking downstream from Honbarrier Drive Bridge over Rocky Creek.



Looking west from Honbarrier Drive Bridge over Rocky Creek.





Looking east from Honbarrier Drive Bridge over Rocky Creek.



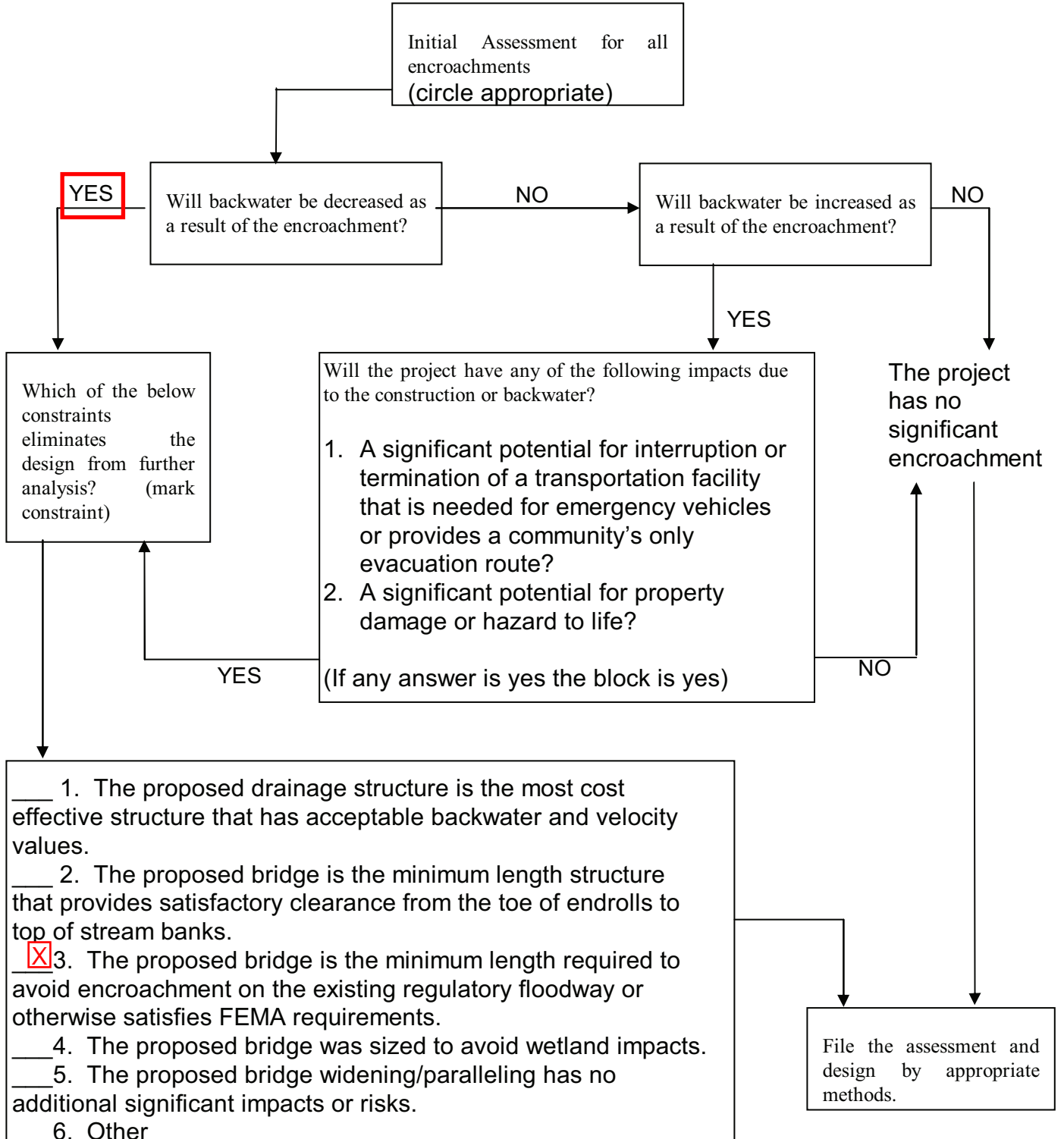
Looking upstream from Honbarrier Drive Bridge over Rocky Creek.



**APPENDIX B**  
**RISK ASSESSMENT SHEET**

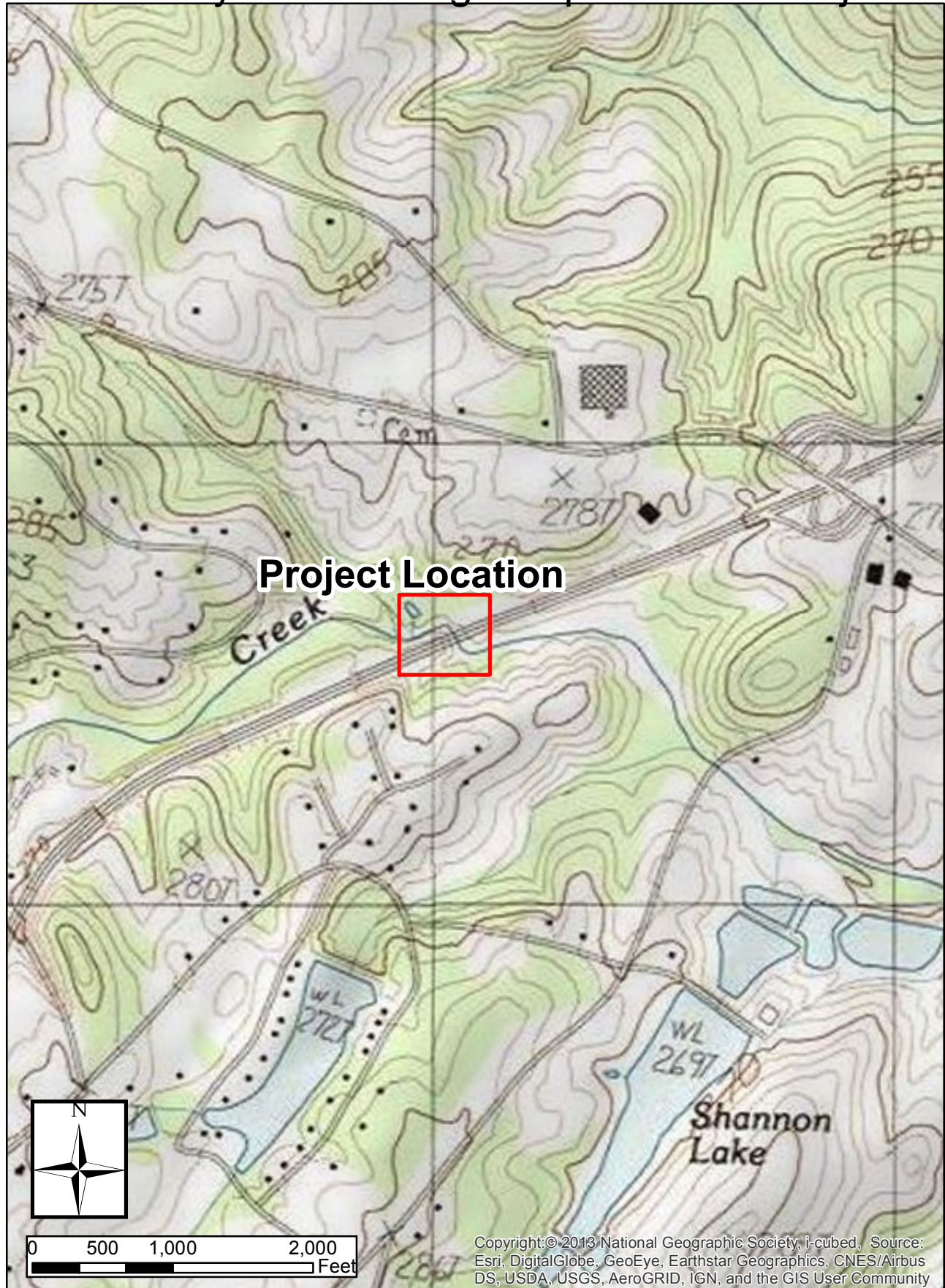
BRIDGE HYDRAULIC DESIGN CRITERIA

APPENDIX 'GYWjcb') - Risk Assessment



**APPENDIX C**  
**GENERAL SITE MAPS**

# I-85 Rocky Creek Bridge Replacement Project





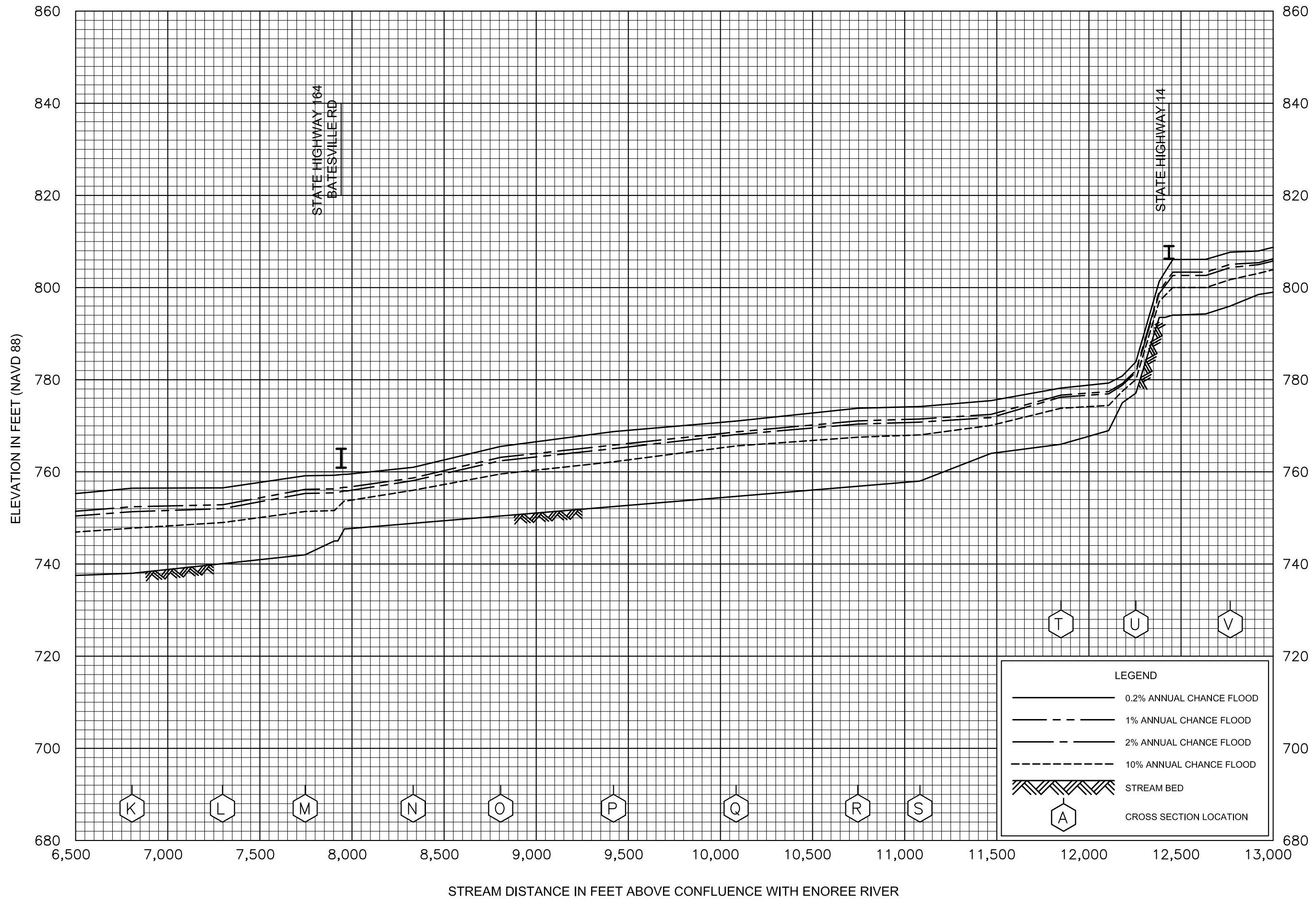
# I-85 Rocky Creek Bridge Drainage Area





**APPENDIX D**  
**FEMA FIS EXCERPTS**

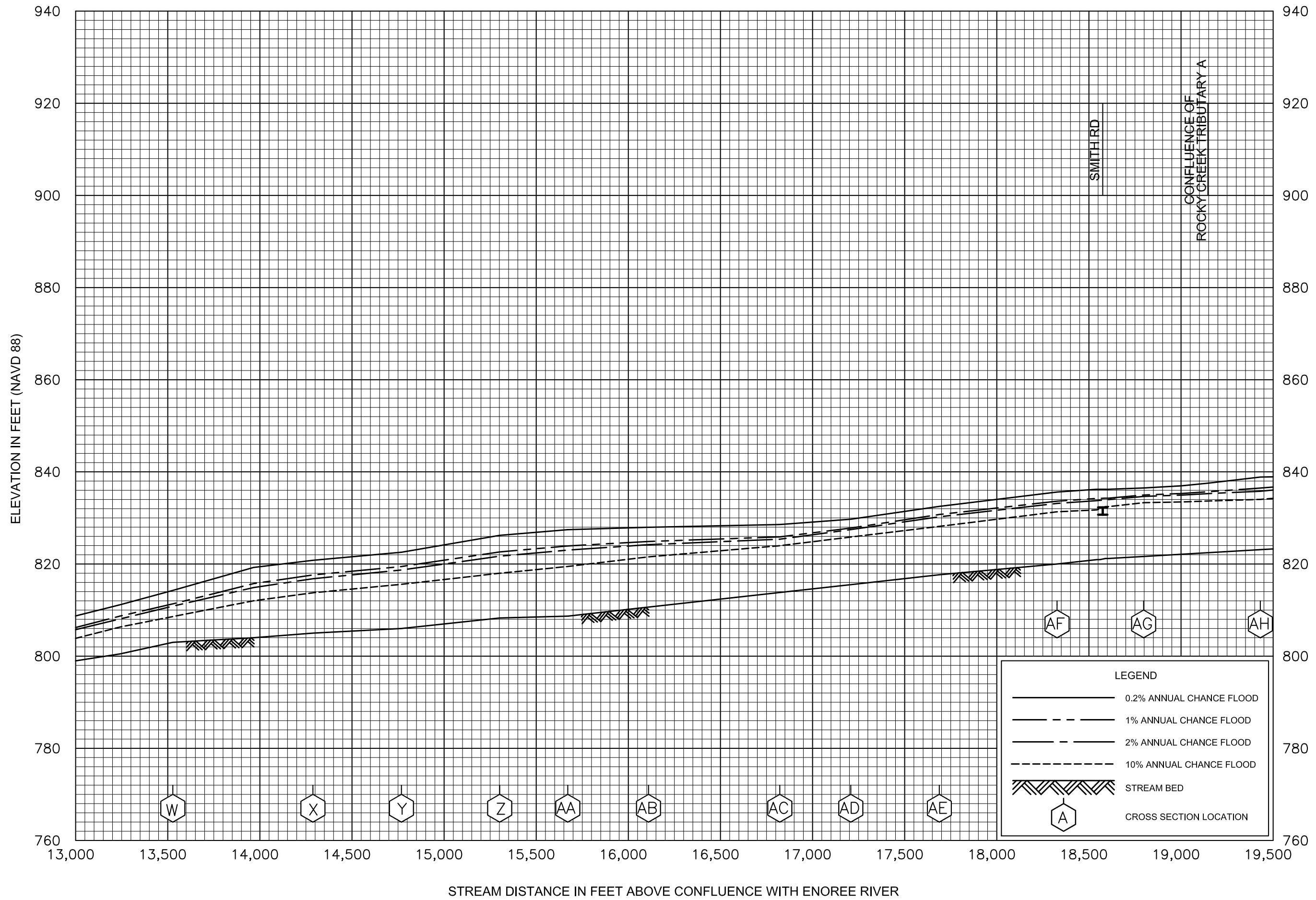




FLOOD PROFILES  
ROCKY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS





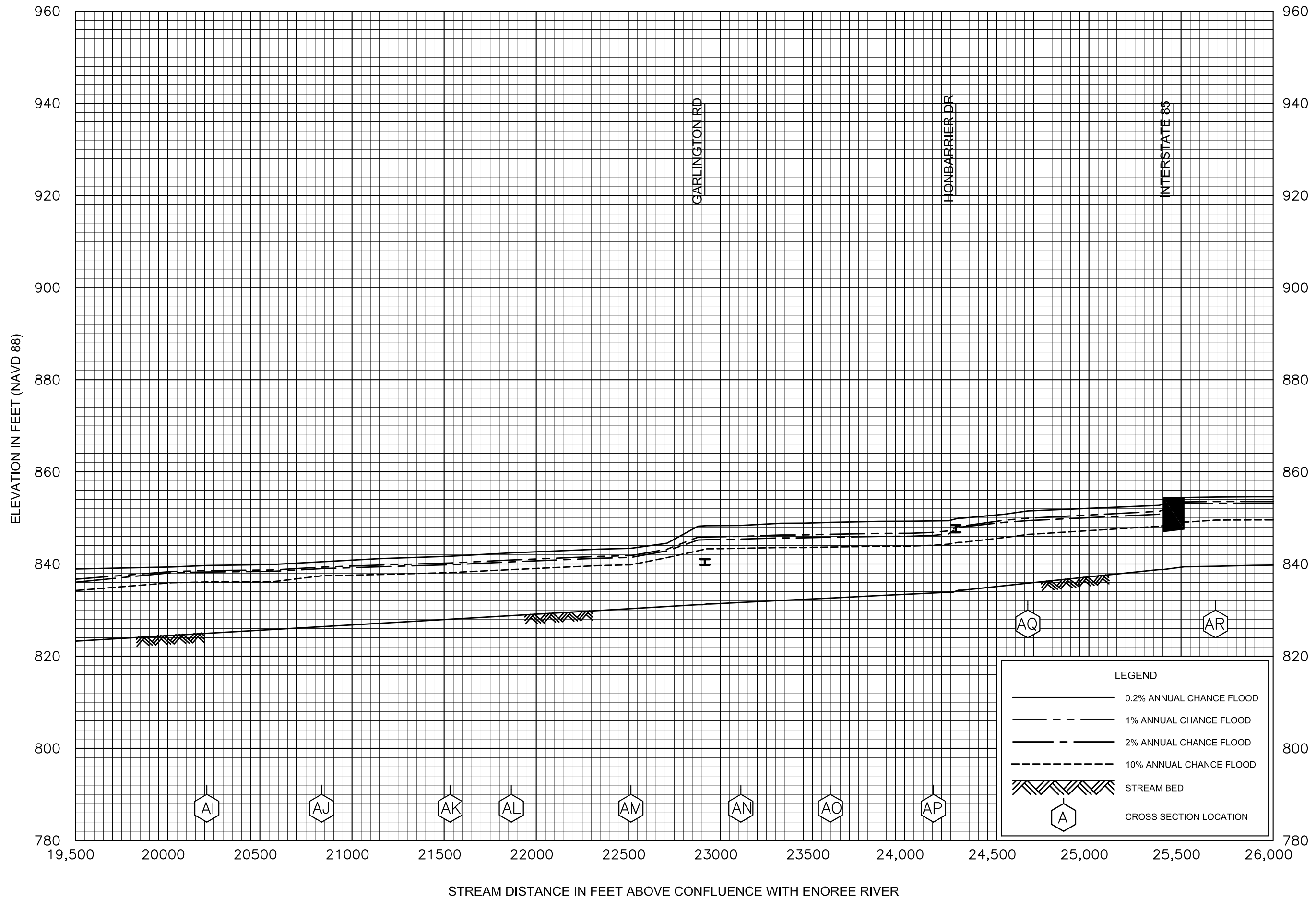
FLOOD PROFILES

ROCKY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS

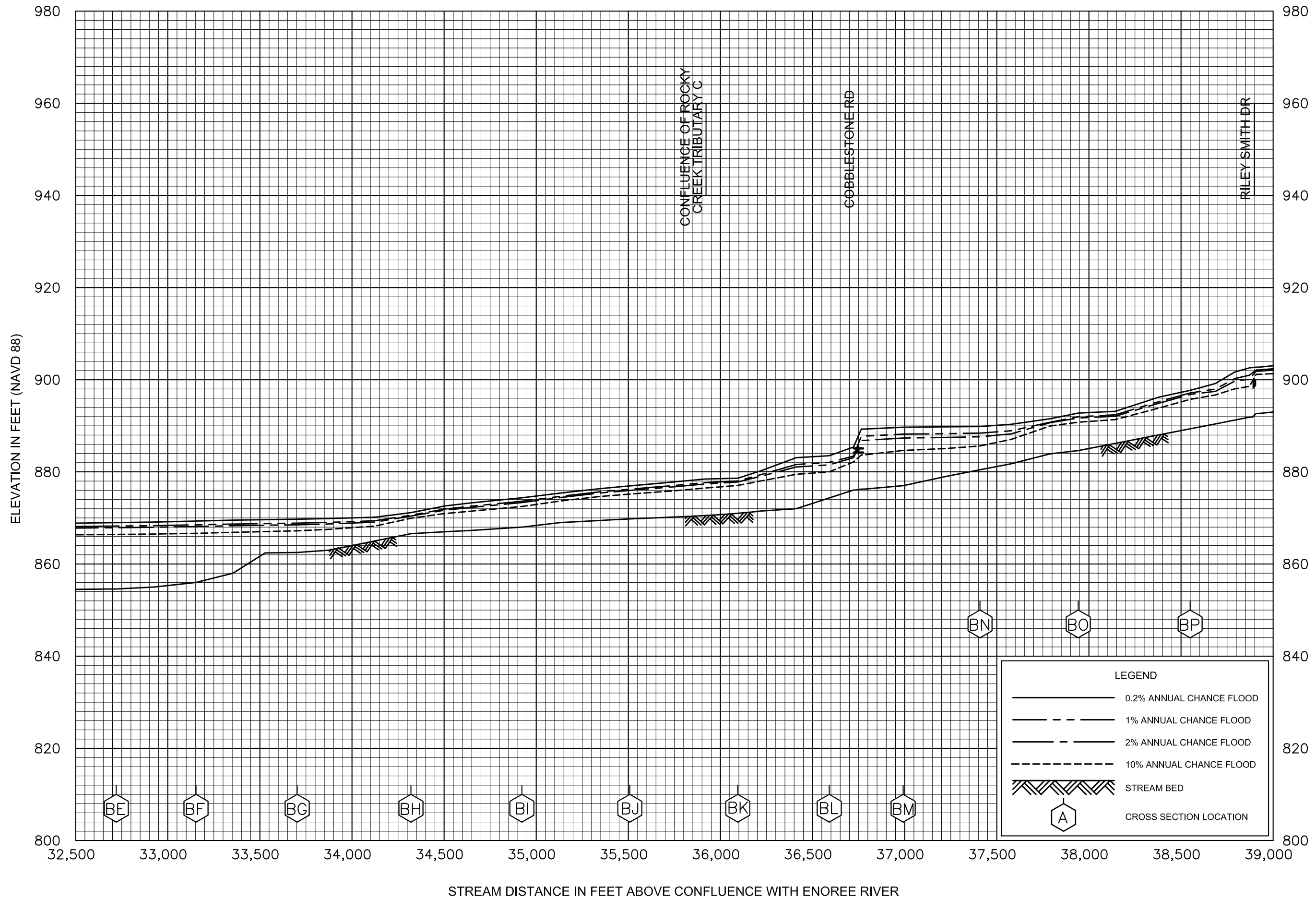
324P



FLOOD PROFILES  
ROCKY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS

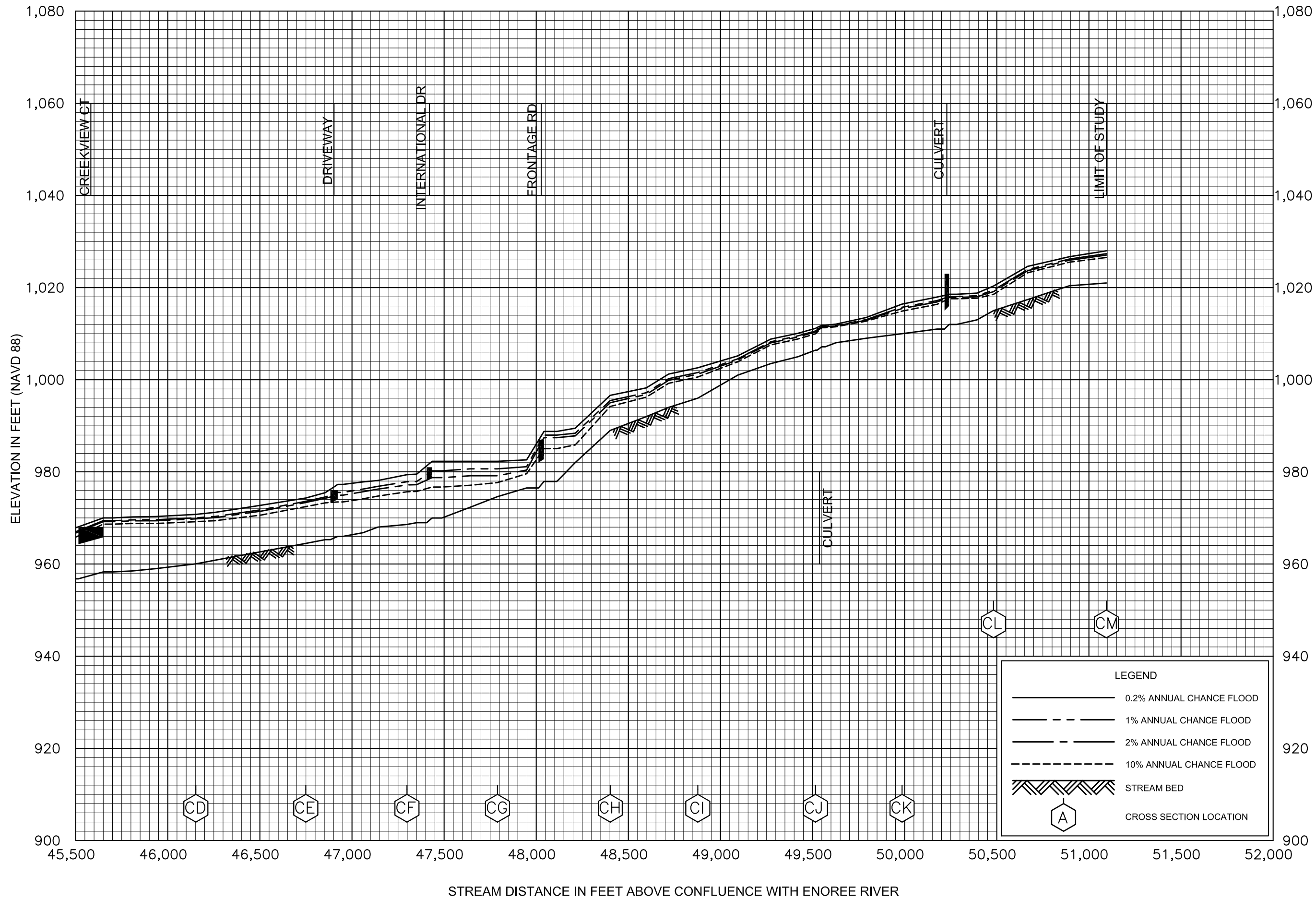




FLOOD PROFILES  
ROCKY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY  
GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS





FLOOD PROFILES

ROCKY CREEK

FEDERAL EMERGENCY MANAGEMENT AGENCY

GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS

329P

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Rocky Creek</b>								
A	84	56	644	11.1	711.8	709.0 <sup>2</sup>	709.8	0.8
B	528	65	579	12.3	711.8	711.3 <sup>2</sup>	712.1	0.8
C	950	65	510	14.0	716.0	716.0	716.2	0.2
D	1,621	65	781	9.1	722.2	722.2	722.6	0.4
E	2,144	100	1,157	6.2	723.9	723.9	724.5	0.6
F	2,651	185	1,623	4.4	724.8	724.8	725.8	1.0
G	3,627	100	848	8.4	727.2	727.2	727.9	0.7
H	4,662	92	596	12.0	735.5	735.5	735.5	0.0
I	5,396	90	653	10.9	744.1	744.1	745.1	1.0
J	6,156	60	744	9.6	750.4	750.4	750.5	0.1
K	6,806	67	828	8.6	752.4	752.4	752.9	0.5
L	7,297	67	639	11.2	752.9	752.9	753.8	0.9
M	7,746	90	1,182	6.0	756.2	756.2	756.8	0.6
N	8,332	136	729	9.8	758.7	758.7	758.8	0.1
O	8,807	136	981	7.3	763.2	763.2	763.4	0.2
P	9,420	136	943	7.6	765.8	765.8	766.3	0.5
Q	10,085	121	1,031	6.4	768.7	768.7	769.7	1.0
R	10,745	120	1,318	5.0	771.1	771.1	771.8	0.7
S	11,083	120	1,177	5.6	771.5	771.5	772.3	0.8
T	11,848	95	866	7.6	776.7	776.7	777.3	0.6
U	12,255	129	554	11.9	782.0	782.0	782.0	0.0

<sup>1</sup> Feet above confluence with Enoree River.

<sup>2</sup> Elevation computed without consideration of backwater effects from Enoree River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**ROCKY CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Rocky Creek (continued)</b>								
V	12,767	68	636	10.4	805.1	805.1	806.0	0.9
W	13,527	60	485	13.6	811.4	811.4	811.8	0.4
X	14,288	55	664	9.9	817.6	817.6	818.2	0.6
Y	14,768	55	649	10.2	819.5	819.5	820.3	0.8
Z	15,301	100	1,053	6.3	822.6	822.6	823.3	0.7
AA	15,671	210	1,571	4.2	823.9	823.9	824.9	1.0
AB	16,109	210	1,521	4.3	824.9	824.9	825.8	0.9
AC	16,822	210	1,108	6.0	825.9	825.9	826.9	1.0
AD	17,208	210	1,114	5.9	827.8	827.8	828.5	0.7
AE	17,688	210	1,208	5.5	830.8	830.8	831.4	0.6
AF	18,327	260	1,564	4.2	833.6	833.6	834.1	0.5
AG	18,797	110	927	7.1	835.0	835.0	835.6	0.6
AH	19,430	150	799	6.1	836.5	836.5	837.4	0.9
AI	20,212	215	1,886	2.6	838.6	838.6	839.4	0.8
AJ	20,835	237	1,972	2.5	839.3	839.3	840.3	1.0
AK	21,532	270	1,663	2.9	840.2	840.2	841.2	1.0
AL	21,864	260	1,475	3.3	840.9	840.9	841.7	0.8
AM	22,514	151	1,057	4.6	841.8	841.8	842.6	0.8
AN	23,111	151	1,418	3.5	846.0	846.0	846.4	0.4
AO	23,596	270	2,417	2.0	846.5	846.5	847.3	0.8

<sup>1</sup> Feet above confluence with Enoree River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**GREENVILLE COUNTY, SC**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**ROCKY CREEK**



FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Rocky Creek (continued)</b>								
AP	24,156	160	1,305	3.8	846.9	846.9	847.8	0.9
AQ	24,668	160	1,069	4.6	849.9	849.9	850.3	0.4
AR	25,687	330	3,198	1.5	853.6	853.6	854.5	0.9
AS	26,400	225	2,173	2.2	853.6	853.6	854.6	1.0
AT	27,034	270	1,995	2.4	853.9	853.9	854.8	0.9
AU	27,572	215	1,397	3.5	854.2	854.2	855.2	1.0
AV	28,216	155	1,004	4.8	856.5	856.5	856.9	0.4
AW	28,707	250	1,777	2.7	857.4	857.4	858.3	0.9
AX	29,204	250	1,668	2.9	858.3	858.3	859.1	0.8
AY	29,700	330	2,082	2.3	858.7	858.7	859.6	0.9
AZ	29,985	180	997	4.8	860.6	860.6	861.5	0.9
BA	30,624	270	2,249	2.7	862.2	862.2	862.9	0.7
BB	31,305	545	2,960	2.1	862.5	862.5	863.4	0.9
BC	31,875	300	1,985	2.4	863.1	863.1	863.8	0.7
BD	32,303	300	2,640	1.9	868.1	868.1	868.2	0.1
BE	32,720	215	1,676	2.9	868.2	868.2	868.5	0.3
BF	33,153	215	1,650	3.0	868.5	868.5	869.1	0.6
BG	33,702	205	1,217	4.0	868.9	868.9	869.9	1.0
BH	34,320	200	801	6.1	870.6	870.6	871.4	0.8
BI	34,922	200	1,002	4.9	873.6	873.6	874.4	0.8

<sup>1</sup> Feet above confluence with Enoree River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY

**GREENVILLE COUNTY, SC  
AND INCORPORATED AREAS**

**FLOODWAY DATA**

**ROCKY CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Rocky Creek (continued)</b>								
BJ	35,508	260	1,411	3.5	876.2	876.2	877.3	1.1
BK	36,094	80	430	7.7	878.0	878.0	878.8	0.8
BL	36,590	80	381	8.7	882.1	882.1	882.2	0.1
BM	36,992	175	1,187	2.8	888.2	888.2	888.2	0.0
BN	37,409	110	594	5.6	888.4	888.4	888.6	0.2
BO	37,942	145	776	4.3	892.0	892.0	892.8	0.8
BP	38,549	52	332	10.0	897.1	897.1	898.0	0.9
BQ	39,024	170	922	3.2	902.5	902.5	902.9	0.4
BR	39,447	142	850	3.4	903.2	903.2	904.0	0.8
BS	39,980	50	264	11.1	905.6	905.6	905.6	0.0
BT	40,572	75	499	5.9	911.0	911.0	911.7	0.7
BU	41,237	58	334	8.8	913.2	913.2	914.2	1.0
BV	41,649	56	390	6.7	917.9	917.9	918.8	0.9
BW	42,134	81	601	4.3	923.4	923.4	924.3	0.9
BX	42,742	50	217	11.0	930.8	930.8	930.9	0.1
BY	43,301	79	252	9.5	943.7	943.7	944.0	0.3
BZ	43,808	87	413	4.5	949.1	949.1	949.4	0.3
CA	44,415	30	208	8.8	950.9	950.9	951.7	0.8
CB	45,001	50	251	7.3	955.3	955.3	956.1	0.8
CC	45,329	42	290	6.3	965.5	965.5	966.4	0.9

<sup>1</sup> Feet above confluence with Enoree River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**GREENVILLE COUNTY, SC**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**ROCKY CREEK**

FLOODING SOURCE		FLOODWAY			BASE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE <sup>1</sup>	WIDTH (FEET)	SECTION AREA (SQUARE FEET)	MEAN VELOCITY (FEET PER SECOND)	REGULATORY (FEET NAVD 88)	WITHOUT FLOODWAY (FEET NAVD 88)	WITH FLOODWAY (FEET NAVD 88)	INCREASE (FEET)
<b>Rocky Creek (continued)</b>								
CD	46,152	50	317	3.2	970.0	970.0	970.9	0.9
CE	46,749	30	187	5.5	973.6	973.6	974.4	0.8
CF	47,298	35	228	3.8	977.9	977.9	978.2	0.3
CG	47,789	30	137	6.3	980.5	980.5	980.9	0.4
CH	48,402	34	98	5.7	995.5	995.5	995.5	0.0
CI	48,877	21	105	5.3	1,001.6	1,001.6	1,002.0	0.4
CJ	49,516	82	122	4.6	1,010.6	1,010.6	1,010.7	0.1
CK	49,986	67	153	3.7	1,015.7	1,015.7	1,015.9	0.2
CL	50,482	26	82	6.8	1,019.4	1,019.4	1,020.0	0.6
CM	51,095	53	258	2.2	1,027.4	1,027.4	1,027.9	0.5

<sup>1</sup> Feet above confluence with Enoree River.

**TABLE 8**

FEDERAL EMERGENCY MANAGEMENT AGENCY  
**GREENVILLE COUNTY, SC**  
 AND INCORPORATED AREAS

**FLOODWAY DATA**

**ROCKY CREEK**

**Table 6: Summary of Discharges (continued)**

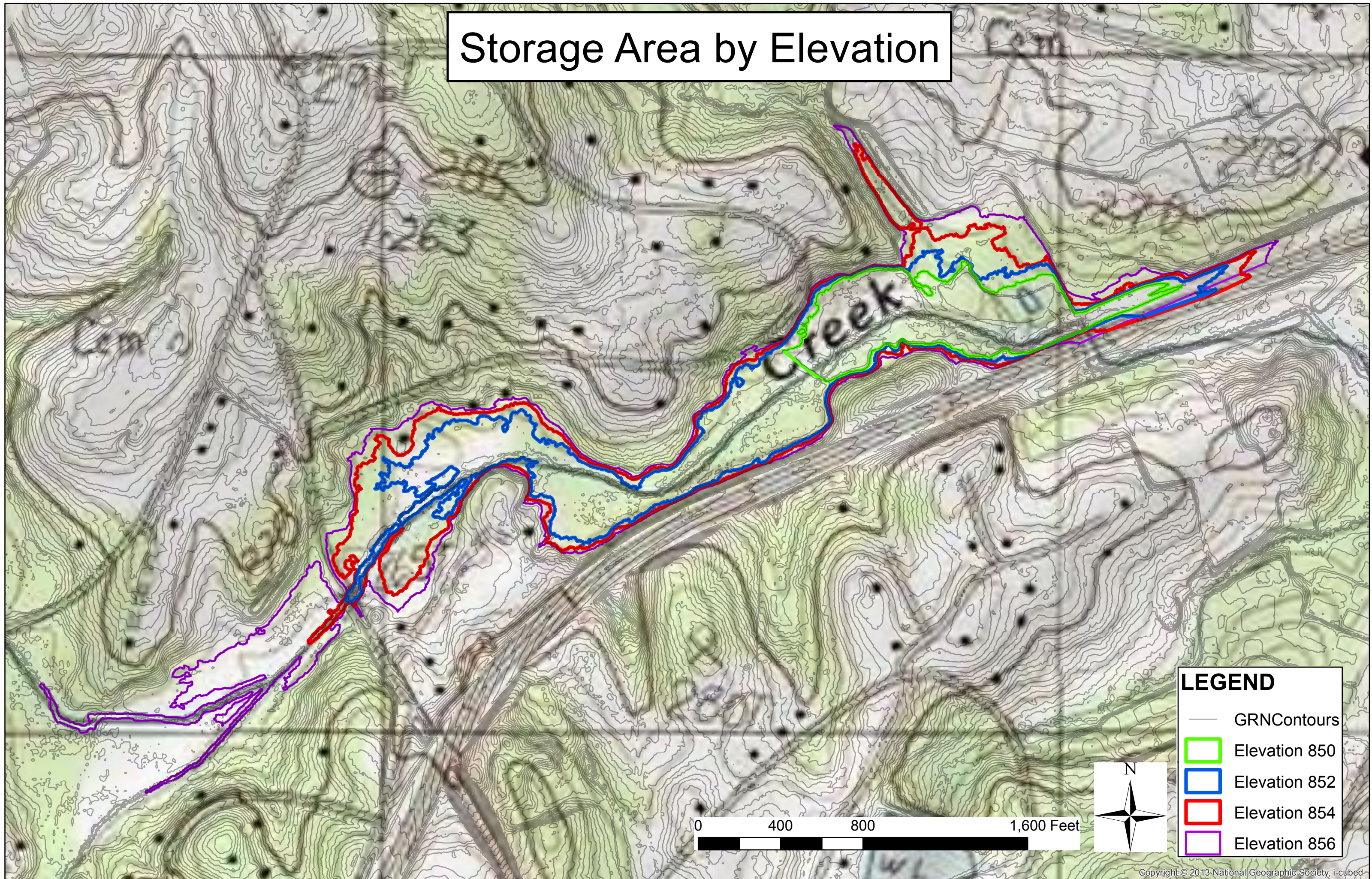
Flooding Source and Location	Drainage Area (Square miles)	Peak Discharges (Cubic Feet per Second)			
		10-percent	2-percent	1-percent	0.2-percent
<b>RICHLAND CREEK TRIBUTARY 5A</b>					
At confluence with Tributary 5	0.59	350	704	1,099	2,166
<b>RICHLAND CREEK TRIBUTARY 6</b>					
At confluence with Richland Creek	0.83	444	882	1,320	2,315
Approximately 1,500 feet downstream of Stephens Lane	0.37	373	720	1,036	1,717
<b>RICHLAND CREEK TRIBUTARY 7</b>					
At confluence with Richland Creek	0.48	477	779	1,041	1,605
<b>RICHLAND CREEK TRIBUTARY 8</b>					
At confluence with Richland Creek	0.49	416	739	1,077	1,995
<b>ROCKY CREEK</b>					
At mouth	13.87	3,227	6,106	7,137	11,907
Approximately 250 feet upstream of confluence with Rocky Creek Tributary A	8.09	2,241	4,223	4,851	7,809
Approximately 300 feet upstream of confluence with Rocky Creek Tributary C	1.79	1,758	2,875	3,323	4,624
At Roper Mountain Road	0.79	1,136	1,626	1,838	2,675
At Patewood Drive	0.23	358	480	561	827
<b>ROCKY CREEK TRIBUTARY A</b>					
At confluence with Rocky Creek	2.81	1,393	2,728	3,218	4,449
At Roper Mountain Road	1.70	1,279	2,487	2,914	3,958
Just upstream of Garlington Road	1.09	524	816	927	1,220

# APPENDIX E

## STORAGE AREAS



# Storage Area by Elevation



**LEGEND**

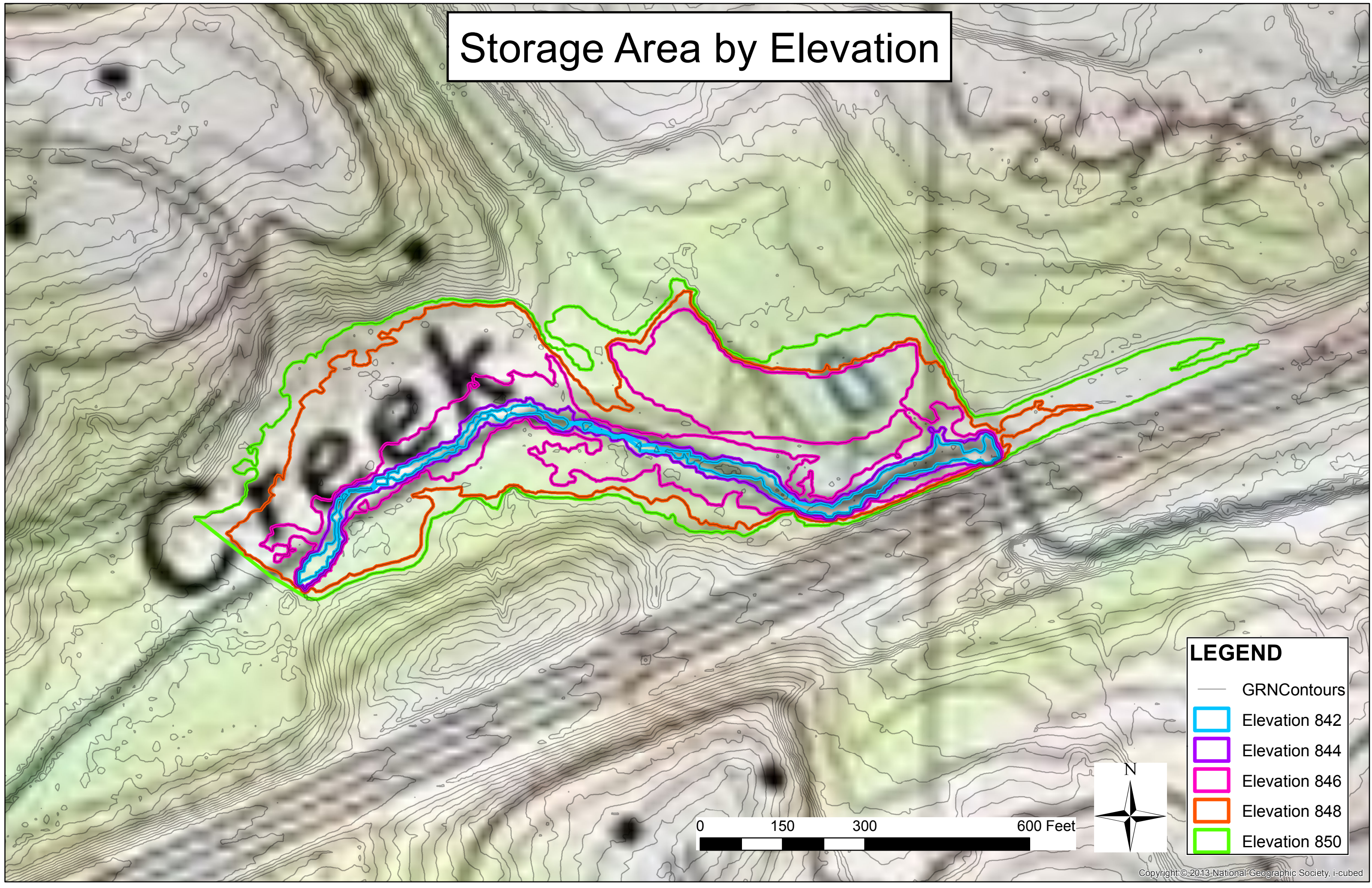
- GRNContours
- Elevation 850
- Elevation 852
- Elevation 854
- Elevation 856

0 400 800 1,600 Feet





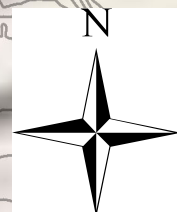
# Storage Area by Elevation



## LEGEND

- GRNContours
- Elevation 842
- Elevation 844
- Elevation 846
- Elevation 848
- Elevation 850

0 150 300 600 Feet





**APPENDIX F**  
**CONCEPTUAL BRIDGE PLAN**





**APPENDIX G**  
**HYDROLOGY MODEL RESULTS**

**ORIGINAL MODEL**

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1)
* JUN 1998
* VERSION 4.1
*
* RUN DATE 26JUL00 TIME 11:34:09
*
*****

```

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS
* HYDROLOGIC ENGINEERING CENTER
* 609 SECOND STREET
* DAVIS, CALIFORNIA 95616
* (916) 756-1104
*
*****

```

```

X X XXXXXXX XXXXX X
X X X X X XX
X X X X X
XXXXXXXX XXXX X XXXXX X
X X X X X
X X X X X
X X XXXXXXX XXXXX XXX

```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE.  
 THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION  
 NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE , SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY,  
 DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION  
 KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

```

LINE      ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
1         ID          HYDROLOGIC MODEL FOR ROCKY CREEK WATERSHED
2         ID          GREENVILLE, SC
3         ID          MODEL SET-UP PERFORMED BY WOOLPERT LLP - CHARLOTTE OFFICE
4         ID          EXISTING CONDITIONS          A=0.2*S
5         ID          FILENAME= ROCKY_E.HC1
6         ID
7         IT          1  1JAN00          0      1920
8         IN          6  1JAN00          0
9         IO          3          0          0
*
* *****
*          BEGIN ROCKY CREEK MAINSTEM
* *****
*
10        KK          1XP
11        KM          BASIN 1 (HYDROGRAPH FROM XP-SWMM MODEL)
12        BA          .170
* *****
*          ***** PB DATA FOR 2-YEAR, 24-HOUR DURATION
*          3.60
*          ***** PB DATA FOR 10-YEAR, 24-HOUR DURATION
*          5.52
*          ***** PB DATA FOR 25-YEAR, 24-HOUR DURATION
*          6.48
*          ***** PB DATA FOR 50-YEAR, 24-HOUR DURATION
*          7.44
*          ***** PB DATA FOR 100-YEAR, 24-HOUR DURATION
13        PB          8.16
*          ***** PB DATA FOR 500-YEAR, 24-HOUR DURATION
*          10.04
* *****
*          ***** PC DATA FOR 24-HOUR TYPE II DISTRIBUTION          *****
*          *****          25 LINES OF DATA ARE IN THIS SECTION          *****
* *****
14        PC          .0000 .00101 .00202 .00305 .00408 .00513 .00618 .00725 .00832 .00941
15        PC          .0105 .01161 .01272 .01385 .01498 .01613 .01728 .01845 .01962 .02081
16        PC          .0220 .02321 .02442 .02565 .02688 .02813 .02938 .03065 .03192 .03321
17        PC          .0345 .03581 .03712 .03845 .03978 .04113 .04248 .04385 .04522 .04661
18        PC          .0480 .04941 .05084 .05229 .05376 .05525 .05676 .05829 .05984 .06141
19        PC          .0630 .06461 .06624 .06789 .06956 .07125 .07296 .07469 .07644 .07821
20        PC          .0800 .08181 .08364 .08549 .08736 .08925 .09116 .09309 .09504 .09701
21        PC          .0990 .10101 .10304 .10509 .10716 .10925 .11136 .11349 .11564 .11781
22        PC          .1200 .12225 .12460 .12705 .12960 .13225 .13500 .13785 .14080 .14385
23        PC          .1470 .15020 .15340 .15660 .15980 .16300 .16628 .16972 .17332 .17708
24        PC          .1810 .18512 .18948 .19408 .19892 .20400 .20940 .21520 .22140 .22800
25        PC          .2350 .24268 .25132 .26092 .27148 .28300 .30684 .35436 .43079 .56786
26        PC          .6630 .68196 .69864 .71304 .72516 .73500 .74344 .75136 .75876 .76564
27        PC          .7720 .77796 .78364 .78904 .79416 .79900 .80360 .80800 .81220 .81620
28        PC          .8200 .82367 .82726 .83079 .83424 .83763 .84094 .84419 .84736 .85047
29        PC          .8535 .85647 .85936 .86219 .86494 .86763 .87024 .87279 .87526 .87767
30        PC          .8800 .88229 .88455 .88679 .88900 .89119 .89335 .89549 .89760 .89969
31        PC          .9018 .90379 .90580 .90779 .90975 .91169 .91360 .91549 .91735 .91919
32        PC          .9210 .92279 .92455 .92629 .92800 .92969 .93135 .93299 .93460 .93619
33        PC          .9377 .93929 .94080 .94229 .94375 .94519 .94660 .94799 .94935 .95069

```

LINE	ID	1	2	3	4	5	6	7	8	9	10
34	PC	.9520	.95330	.95459	.95588	.95716	.95844	.95971	.96098	.96224	.96350
35	PC	.9647	.96600	.96724	.96848	.96971	.97094	.97216	.97338	.97459	.97580
36	PC	.9770	.97820	.97939	.98058	.98176	.98294	.98411	.98528	.98644	.98760
37	PC	.9887	.98990	.99104	.99218	.99331	.99444	.99556	.99668	.99779	.99890
38	PC	1.0									
*****											
***** QI DATA FOR 2-YEAR EVENT *****											
***** 30 LINES OF DATA ARE IN THIS SECTION *****											
*****											
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	1
*	1	1	1	1	1	1	1	1	1	1	1
*	1	1	1	1	1	1	1	1	2	2	2
*	2	2	2	3	3	3	3	3	4	4	5
*	6	7	8	9	11	13	19	40	81	159	
*	174	194	131	85	56	44	35	29	26	24	
*	22	20	19	18	17	16	15	15	14	13	
*	13	12	12	11	11	11	10	10	10	10	
*	10	10	9	9	9	9	8	8	8	8	
*	8	7	7	7	7	7	7	7	7	7	
*	7	7	6	6	6	6	6	6	6	6	
*	6	6	6	6	6	5	5	5	5	5	
*	5	5	5	5	5	5	5	5	5	5	
*	4	4	4	4	4	4	4	4	4	4	
*	4	4	4	4	4	4	4	4	4	4	
*	4	4	4	4	4	4	4	4	4	4	
*	4	4	4	4	4	4	4	4	4	4	
*	4	4	4	4	4	4	4	4	4	4	
*	2	1	0	0	0	0	0	0	0	0	
*	0	0	0	0	0	0	0	0	0	0	
*	0	0	0	0	0	0	0	0	0	0	
*	0	0	0	0	0	0	0	0	0	0	
*	0	0	0	0	0	0	0	0	0	0	
*	0	0	0	0	0	0	0	0	0	0	
*****											
***** QI DATA FOR 10-YEAR EVENT *****											
***** 30 LINES OF DATA ARE IN THIS SECTION *****											
*****											
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	1	1	1	1	1
*	1	1	1	1	1	1	1	1	1	1	1
*	1	1	1	1	1	1	2	2	2	2	2
*	2	2	2	2	2	3	3	3	3	3	4
*	4	4	4	5	5	5	5	6	6	6	7
*	7	8	8	9	10	10	11	13	14	15	

*	16	18	20	23	27	31	46	90	163	250
*	358	275	228	230	219	102	63	55	46	41
*	38	35	33	31	29	28	27	25	24	23
*	22	21	20	20	19	19	18	18	18	17
*	17	17	16	16	15	15	15	14	14	14
*	13	13	13	12	12	12	12	12	12	11
*	11	11	11	11	11	11	11	10	10	10
*	10	10	10	10	10	9	9	9	9	9
*	9	9	8	8	8	8	8	8	8	8
*	7	7	7	7	7	7	7	7	7	7
*	7	7	7	7	7	7	7	7	7	7
*	7	7	7	7	7	6	6	6	6	6
*	6	6	6	6	6	6	6	6	6	6
*	4	1	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0

\*\*\*\*\*  
\*\*\*\*\*

\*\*\*\*\* QI DATA FOR 25-YEAR EVENT \*\*\*\*\*  
\*\*\*\*\* 30 LINES OF DATA ARE IN THIS SECTION \*\*\*\*\*

*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	1
*	1	1	1	1	1	1	1	1	1	1
*	1	1	1	1	1	1	2	2	2	2
*	2	2	2	2	2	2	2	3	3	3
*	3	3	3	4	4	4	4	5	5	6
*	6	7	7	7	8	8	8	8	9	10
*	10	11	12	13	14	15	16	17	19	20
*	22	25	27	32	36	41	62	113	217	391
*	410	366	281	226	201	175	141	64	57	51
*	46	43	40	38	36	34	32	31	29	28
*	27	26	25	24	23	23	22	22	21	21
*	21	20	20	19	19	18	18	17	17	17
*	16	16	15	15	15	15	14	14	14	14
*	14	14	13	13	13	13	13	13	13	12
*	12	12	12	12	12	11	11	11	11	11
*	10	10	10	10	10	10	10	9	9	9
*	9	9	9	9	9	8	8	8	8	8
*	8	8	8	8	8	8	8	8	8	8
*	8	8	8	8	8	8	8	8	8	8
*	8	8	8	8	8	8	8	8	7	7
*	4	2	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0

\*\*\*\*\*  
\*\*\*\*\*

\*\*\*\*\* QI DATA FOR 50-YEAR EVENT \*\*\*\*\*  
\*\*\*\*\* 30 LINES OF DATA ARE IN THIS SECTION \*\*\*\*\*

\*\*\*\*\*

```

* 0 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0 0
* 0 0 0 1 1 1 1 1 1 1 1
* 1 1 1 1 1 1 1 1 1 1 2
* 2 2 2 2 2 2 2 2 2 2 3
* 3 3 3 3 3 4 4 4 4 4 4
* 5 5 5 6 6 6 7 7 8 8 8
* 9 9 10 10 10 11 11 11 12 13
* 14 14 15 16 18 19 20 22 24 26
* 29 32 35 40 45 51 76 142 229 454
* 468 480 327 248 210 206 163 139 68 58
* 56 51 47 44 42 40 38 36 34 33
* 31 30 29 28 27 27 26 26 25 25
* 24 24 23 22 22 21 21 20 20 19
* 19 18 18 18 17 17 17 17 17 16
* 16 16 16 16 15 15 15 15 15 14
* 14 14 14 14 13 13 13 13 13 13
* 12 12 12 12 12 11 11 11 11 11
* 10 10 10 10 10 10 10 10 10 10
* 10 10 10 10 10 10 10 10 10 9
* 9 9 9 9 9 9 9 9 9 9
* 9 9 9 9 9 9 9 9 9 9
* 5 2 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0

```

```

*****
*****
***** QI DATA FOR 100-YEAR EVENT *****
***** 30 LINES OF DATA ARE IN THIS SECTION *****
*****

```

1

HEC-1 INPUT

PAGE 3

LINE	ID	1	2	3	4	5	6	7	8	9	10
39	QI	0	0	0	0	0	0	0	0	0	0
40	QI	0	0	0	0	0	0	0	0	0	0
41	QI	0	0	0	0	0	0	0	0	0	0
42	QI	0	0	0	0	0	0	0	0	0	1
43	QI	1	1	1	1	1	1	1	1	1	1
44	QI	1	1	1	1	2	2	2	2	2	2
45	QI	2	2	2	2	3	3	3	3	3	3
46	QI	4	4	4	4	5	5	5	5	5	6
47	QI	6	6	7	7	7	8	8	9	9	10
48	QI	11	11	12	12	12	13	13	14	14	15
49	QI	16	17	18	20	21	22	24	26	28	31
50	QI	34	37	41	47	53	59	88	161	238	493
51	QI	543	561	368	261	221	198	193	148	136	67
52	QI	58	57	54	49	47	44	42	40	38	36
53	QI	35	33	32	31	30	29	29	28	28	27
54	QI	27	26	26	25	24	24	23	23	22	22
55	QI	21	20	20	20	19	19	19	19	18	18
56	QI	18	18	18	17	17	17	17	16	16	16
57	QI	16	16	15	15	15	15	15	14	14	14
58	QI	14	13	13	13	13	13	12	12	12	12



59	QI	12	11	11	11	11	11	11	11	11	11
60	QI	11	11	11	11	11	11	11	11	11	10
61	QI	10	10	10	10	10	10	10	10	10	10
62	QI	10	10	10	10	10	10	10	10	10	10
63	QI	5	2	0	0	0	0	0	0	0	0
64	QI	0	0	0	0	0	0	0	0	0	0
65	QI	0	0	0	0	0	0	0	0	0	0
66	QI	0	0	0	0	0	0	0	0	0	0
67	QI	0	0	0	0	0	0	0	0	0	0
68	QI	0	0	0	0	0	0	0	0	0	0

```

*****
*****
***** QI DATA FOR 500-YEAR EVENT *****
***** 30 LINES OF DATA ARE IN THIS SECTION *****
*****
*      0      0      0      0      0      0      0      0      0      0
*      0      0      0      0      0      0      0      0      0      0
*      0      0      0      0      0      0      0      0      0      0
*      0      0      1      1      1      1      1      1      1      1
*      1      1      1      1      2      2      2      2      2      2
*      2      2      2      3      3      3      3      3      3      4
*      4      4      4      5      5      5      6      6      6      6
*      7      7      7      8      8      8      8      9      9      9
*     10     10     10     11     12     12     13     14     14     15
*     16     17     17     18     18     19     19     20     21     22
*     23     25     26     28     30     32     34     37     40     44
*     47     51     57     64     71     84     118    220    374    564
*    827    713    469    307    248    216    168    177    156    145
*   137     75     66     61     58     57     55     51     48     46
*    44     42     40     39     38     37     36     36     35     34
*    34     33     32     31     30     30     29     28     28     27
*    26     26     25     25     24     24     24     23     23     23
*    23     22     22     22     22     21     21     21     20     20
*    20     20     19     19     19     19     18     18     18     18
*    17     17     17     17     16     16     16     15     15     15
*    15     14     14     14     14     14     14     14     14     14
*    13     14     13     13     13     13     13     13     13     13
*    13     13     13     13     13     13     13     13     13     13
*    12     12     12     12     12     12     12     12     12     12
*     6     3     0     0     0     0     0     0     0     0
*     0     0     0     0     0     0     0     0     0     0
*     0     0     0     0     0     0     0     0     0     0
*     0     0     0     0     0     0     0     0     0     0
*     0     0     0     0     0     0     0     0     0     0
*     0     0     0     0     0     0     0     0     0     0
*****
*

```

1

HEC-1 INPUT

PAGE 4

LINE	ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
69	KK 02S1
70	KM ROUTE HYDROGRAPH FROM 01C1 TO CULVERT IN WOODS
71	RS 8 FLOW -1
72	SV 0.00 1.34 3.70 4.87 7.31 8.17 8.77 9.47 10.67 12.87
73	SQ 0 65 130 259 480 564 622 694 823 1070
	*

74 KK 02S2  
 75 KM ROUTE HYDROGRAPH FROM 02S2 TO MOUTH OF SUB-BASIN 02  
 76 RS 4 FLOW -1  
 77 SV 0.00 0.65 1.06 1.82 3.07 3.52 3.84 4.21 4.92 5.97  
 78 SQ 0 73 146 293 658 799 915 1037 1304 1695  
 \*

79 KK 02C1  
 80 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 02  
 81 BA 0.060  
 82 LS 74  
 83 UD 0.463  
 \*

84 KK 03C1  
 85 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 03  
 86 BA 0.110  
 87 LS 91  
 88 UD 0.161  
 \*

\* \*\*\*\*\* HY-8 CULVERT ROUTING

89 KK 03R1  
 90 KM ROUTE HYDROGRAPH FROM SUB-BASIN 03 THROUGH I-385  
 91 RS 1 FLOW -1  
 92 SQ 0 70 140 210 280 350 420 490 560 700  
 93 SE 984.75 990.38 999.13 999.32 999.44 999.54 999.63 999.71 999.77 999.89  
 94 SA .001 .068 3.216 3.411 3.535 3.638 3.731 3.813 3.875 3.998  
 \*

95 KK 0201  
 96 KM COMBINE ROUTED HYDROGRAPH 02S2 WITH HYDROGRAPH FROM  
 97 KM SUB-BASIN 02 AND SUB-BASIN 03  
 98 HC 3  
 \*  
 \* FRONTAGE ROAD  
 \*

99 KK 04R1  
 100 KM ROUTE HYDROGRAPH FROM 0201 THROUGH DRIVEWAY CULVERT  
 101 RS 1 FLOW -1  
 102 SQ 0 73 146 293 658 799 915 1037 1304 1695  
 103 SE 969.99 971.89 972.91 974.67 978.15 979.54 981.06 981.61 982.20 982.70  
 104 SA 0.00 0.11 0.13 0.17 0.24 0.31 0.39 0.43 0.47 0.51  
 \*

1

HEC-1 INPUT

PAGE 5

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

105 KK 04S1  
 106 KM ROUTE HYDROGRAPH FROM 04R1 TO MOUTH OF SUB-BASIN 04  
 107 RS 1 FLOW -1  
 108 SV 0.00 0.22 0.38 0.67 1.25 1.48 1.72 1.97 2.47 3.14  
 109 SQ 0 91 182 365 782 976 1103 1257 1635 2125  
 \*

110 KK 04C1  
 111 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 04

```

112 BA 0.068
113 LS 86
114 UD 0.244
*

115 KK 0401
116 KM COMBINE ROUTED HYDROGRAPH 04S1 WITH HYDROGRAPH FROM SUB-BASIN 04
117 HC 2
*
* CANCER CENTER
*

118 KK 05S1
119 KM ROUTE HYDROGRAPH FROM 0401 TO MOUTH OF SUB-BASIN 05
120 RS 3 FLOW -1
121 SV 0.00 0.54 0.91 1.72 2.90 3.48 3.90 4.34 5.39 6.64
122 SQ 0 91 182 365 782 976 1103 1257 1635 2125
*

123 KK 05C1
124 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 05
125 BA 0.145
126 LS 77
127 UD 0.428
*

128 KK 06C1
129 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 06
130 BA 0.035
131 LS 92
132 UD 0.050
*

133 KK 06D1
134 KM ROUTE HYDROGRAPH FROM SUB-BASIN 06 THROUGH DETENTION BASIN
135 RS 1 FLOW -1
136 SQ 0 2.37 6.70 12.30 18.94 26.47 31.22 35.40 39.13 42.54
137 SQ 45.70 48.65 51.43 54.07 162.65 359.00 612.44
138 SE 874 874.5 875 875.5 876 876.5 877 877.5 878 878.5
139 SE 879 879.5 880 880.5 881 881.5 882
140 SA .01 .01 .01 .02 .02 .13 .24 .35 .46 .51
141 SA .56 .60 .65 .89 1.12 1.35 1.58
*

```

HEC-1 INPUT

```

1
LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

```

```

142 KK 0501
143 KM COMBINE ROUTED HYDROGRAPH 05S1 WITH HYDROGRAPH FROM
144 KM SUB-BASIN 05 AND ROUTED HYDROGRAPH 06D1
145 HC 3
*
*

146 KK 7XP
147 KM BASIN 7 (HYDROGRAPH FROM XP-SWMM MODEL)
148 BA 0.160
* *****

```

```

*          ***** QI DATA FOR 2-YEAR EVENT          *****
*          ***** 30 LINES OF DATA ARE IN THIS SECTION *****
*          *****
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      1      1      1      1      1      1      1
*          1      1      1      1      1      1      1      1      1      1
*          1      1      1      2      2      2      2      2      2      2
*          2      2      3      3      3      3      3      3      3      3
*          4      4      4      5      5      5      5      6      6      7
*          8      9      9      10     11     13     15     18     33     54
*          149    187    178    147    122    100    79     68     54     30
*          26     24     22     21     20     24     17     16     15     15
*          14     14     13     13     12     12     11     11     11     11
*          11     11     10     9      9      9      9      10     9      8
*          8      8      8      8      8      8      7      7      7      7
*          7      7      7      7      7      6      6      6      6      6
*          6      6      6      6      6      6      6      6      5      5
*          5      5      5      5      5      5      5      5      5      5
*          5      4      4      4      4      4      4      4      4      4
*          4      4      4      4      4      4      4      4      4      4
*          4      4      4      4      4      4      4      4      4      4
*          4      4      4      4      4      4      4      4      4      4
*          4      3      2      1      1      1      1      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          *****
*          ***** QI DATA FOR 10-YEAR EVENT          *****
*          ***** 30 LINES OF DATA ARE IN THIS SECTION *****
*          *****
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      0      0      0      0      0      0      0      0
*          0      0      1      1      1      1      1      1      1      1
*          1      1      1      1      1      1      1      1      2      2
*          2      2      2      2      2      2      2      2      2      2
*          3      3      3      3      3      3      3      3      3      3
*          4      4      4      4      4      5      5      5      5      6
*          6      6      7      7      7      7      7      8      9      9
*          9      9      11     11     12     12     13     14     15     16
*          17     18     20     22     24     27     33     49    112    208
*          269    276    240    216    180    146    115     95     82     75
*          70     66     63     60     58     42     27     26     24     23
*          39     22     20     19     19     18     18     17     17     17
*          16     16     16     15     35     18     15     14     14     13
*          13     13     13     12     12     12     12     12     12     12
*          12     11     11     11     11     11     11     11     11     11
*          10     10     10     10     10     10     10     10     10     10
*          13     8      9      8      8      8      8      8      8      8
*          8      7      7      7      7      7      7      7      7      7

```

*	8	7	6	6	6	7	7	7	7	7
*	7	7	7	7	7	7	7	6	7	7
*	6	6	6	6	6	6	6	6	6	6
*	5	4	3	2	1	1	1	1	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0

\*\*\*\*\*  
\*\*\*\*\*

\*\*\*\*\* QI DATA FOR 25-YEAR EVENT \*\*\*\*\*  
\*\*\*\*\* 30 LINES OF DATA ARE IN THIS SECTION \*\*\*\*\*

*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	1	1	1	1	1
*	1	1	1	1	1	1	1	1	1	1
*	2	2	2	2	2	2	2	2	2	2
*	3	3	3	3	3	3	3	3	3	4
*	4	4	4	4	4	4	4	5	5	5
*	5	5	5	6	6	6	7	7	7	8
*	8	9	9	10	10	9	10	10	11	12
*	12	13	13	14	15	15	16	17	19	20
*	21	23	25	27	30	33	67	89	155	236
*	318	320	271	241	200	175	152	118	96	86
*	81	76	72	69	65	63	61	58	49	28
*	26	25	24	23	22	21	21	20	20	19
*	19	19	18	18	17	44	21	17	16	16
*	16	15	15	15	14	14	14	14	14	13
*	13	13	13	13	13	13	13	12	12	12
*	12	12	12	12	12	17	12	10	10	11
*	11	10	10	10	9	9	9	9	10	10
*	9	8	8	9	8	8	9	9	8	8
*	8	8	8	8	8	8	8	8	8	8
*	8	8	8	8	8	8	8	8	8	7
*	8	7	7	7	7	7	7	7	7	7
*	6	4	3	2	2	1	1	1	1	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0

\*\*\*\*\*  
\*\*\*\*\*

\*\*\*\*\* QI DATA FOR 50-YEAR EVENT \*\*\*\*\*  
\*\*\*\*\* 30 LINES OF DATA ARE IN THIS SECTION \*\*\*\*\*

*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	0	0	0	0	0	0	0	0	0
*	0	1	1	1	1	1	1	1	1	1
*	1	1	1	1	2	2	2	2	2	2
*	2	2	2	3	3	3	3	3	3	3
*	3	3	4	4	4	4	4	5	5	4
*	5	5	6	5	6	6	6	6	6	7
*	7	7	7	7	8	8	10	9	9	10
*	12	11	11	12	13	13	13	13	14	14



```

* *****
* ***** QI DATA FOR 500-YEAR EVENT *****
* ***** 30 LINES OF DATA ARE IN THIS SECTION *****
* *****
*   0   0   0   0   0   0   0   0   0   0
*   0   0   0   0   0   0   0   0   0   0
*   0   0   0   1   1   1   1   1   1   1
*   1   1   1   2   2   2   2   2   2   3
*   3   3   3   3   3   3   4   4   4   4
*   5   4   5   5   5   5   5   6   6   6
*   7   7   7   7   7   8   9   9   9   8
*   9   9   9  10  11  11  11  11  11  11
*  12  12  12  13  13  14  14  15  15  16
*  16  17  18  18  19  19  19  20  20  21
*  22  23  24  25  27  28  29  31  48  64
*  65  65  51  57  64  71  117 159 224 331
* 472 474 434 411 368 259 215 198 155 127
* 115 108 100 93 91 88 86 84 82 80
* 79 77 75 74 72 70 67 65 63 61
* 59 56 33 28 27 27 26 26 25 25
* 24 24 23 23 22 22 21 21 27 48
* 27 20 19 19 19 19 19 18 18 18
* 18 18 18 18 17 17 17 17 16 16
* 16 16 16 15 15 15 15 41 20 15
* 14 13 13 13 13 13 13 13 13 13
* 13 13 13 13 13 13 13 13 13 13
* 12 12 12 12 12 12 12 12 12 12
* 12 12 12 12 12 12 12 12 12 12
* 10 5 4 2 1 1 1 1 1 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* 0 0 0 0 0 0 0 0 0 0
* *****

```

1

HEC-1 INPUT

```

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

179 KK 0801
180 KM COMBINE HYDROGRAPH 0501 WITH HYDROGRAPH FROM SUB-BASIN 07
181 HC 2
*

182 KK 08C1
183 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 08
184 BA 0.033
185 LS 77
186 UD 0.177
*

187 KK 0802
188 KM COMBINE HYDROGRAPH 0801 WITH HYDROGRAPH FROM SUB-BASIN 08
189 HC 2
*

190 KK 08S1

```

191 KM ROUTE HYDROGRAPH FROM 0802 TO CREEKVIEW COURT  
 192 RS 3 FLOW -1  
 193 SV 0.00 0.48 0.89 2.55 4.04 4.50 5.04 5.37 6.43 7.61  
 194 SQ 0 192 384 769 1456 1742 2059 2279 2965 3854  
 \*

195 KK 09C1  
 196 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 09  
 197 BA 0.025  
 198 LS 87  
 199 UD 0.094  
 \*

200 KK 0901  
 201 KM COMBINE ROUTED HYDROGRAPH 08S1 WITH HYDROGRAPH FROM SUB-BASIN 09  
 202 HC 2  
 \*

203 KK 09R1  
 204 KM ROUTE HYDROGRAPH FROM 0901 THROUGH ROPER MOUNTAIN EXT  
 205 RS 1 FLOW -1  
 206 SQ 0 192 384 768 1467 1757 2061 2309 3003 3904  
 207 SE 952.91 956.01 958.06 961.77 965.32 965.63 965.87 966.07 966.61 967.20  
 208 SA 0.00 0.12 0.14 0.30 0.74 0.76 0.77 0.79 0.83 0.87  
 \*

209 KK 10S1  
 210 KM ROUTE HYDROGRAPH FROM 09R1 TO MOUTH OF SUB-BASIN 10  
 211 RS 6 FLOW -1  
 212 SV 0.00 2.53 4.17 8.16 16.44 19.31 22.17 24.43 30.42 37.14  
 213 SQ 0 218 436 871 1698 2089 2520 2874 3796 4935  
 \*

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

214 KK 10C1  
 215 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 10  
 216 BA 0.163  
 217 LS 70  
 218 UD 0.257  
 \*

219 KK 11C1  
 220 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 11  
 221 BA 0.105  
 222 LS 71  
 223 UD 0.325  
 \*

224 KK 1001  
 225 KM COMBINE ROUTED HYDROGRAPH 10S1 WITH HYDROGRAPH FROM  
 226 KM SUB-BASIN 10 AND SUB-BASIN 11  
 227 HC 3  
 \*

228 KK 12S1  
 229 KM ROUTE HYDROGRAPH FROM 1001 TO MOUTH OF SUB-BASIN 12



230	RS	2	FLOW	-1							
231	SV	0.00	0.74	1.38	2.56	3.95	4.69	5.38	5.95	7.34	9.10
232	SQ	0	230	460	921	1797	2236	2724	3110	4138	5379
	*										

233	KK	12C1									
234	KM		RUNOFF HYDROGRAPH FROM SUB-BASIN 12								
235	BA	0.107									
236	LS		74								
237	UD	0.244									
	*										

238	KK	1201									
239	KM		COMBINE ROUTED HYDROGRAPH 12S1 WITH HYDROGRAPH FROM SUB-BASIN 12								
240	HC	2									
	*										

241	KK	13S1									
242	KM		ROUTE HYDROGRAPH FROM 1201 TO MOUTH OF SUB-BASIN 13								
243	RS	3	FLOW	-1							
244	SV	0.00	1.31	2.62	6.38	10.87	12.52	14.18	15.37	18.40	21.60
245	SQ	0	244	488	976	1933	2444	2995	3430	4607	5989
	*										

246	KK	13C1									
247	KM		RUNOFF HYDROGRAPH FROM SUB-BASIN 13								
248	BA	0.079									
249	LS		72								
250	UD	0.430									
	*										

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

251	KK	14C1									
252	KM		RUNOFF HYDROGRAPH FROM SUB-BASIN 14								
253	BA	0.088									
254	LS		66								
255	UD	0.253									
	*										

256	KK	1301									
257	KM		COMBINE ROUTED HYDROGRAPH 13S1 WITH HYDROGRAPH FROM								
258	KM		SUB-BASIN 13 AND SUB-BASIN 14								
259	HC	3									
	*		HITCHING POST LN								
	*										

260	KK	15S1									
261	KM		ROUTE HYDROGRAPH FROM 1301 TO MOUTH OF SUB-BASIN 15								
262	RS	5	FLOW	-1							
263	SV	0.00	2.24	3.85	7.40	13.72	16.61	19.60	21.87	27.92	34.83
264	SQ	0	244	488	976	1933	2444	2995	3430	4607	5989
	*										

265	KK	15C1									
266	KM		RUNOFF HYDROGRAPH FROM SUB-BASIN 15								

267 BA 0.246  
 268 LS 71  
 269 UD 0.293  
 \*

270 KK 1501  
 271 KM COMBINE ROUTED HYDROGRAPH 15S1 WITH HYDROGRAPH FROM SUB-BASIN 15  
 272 HC 2  
 \*

273 KK 15R1  
 274 KM ROUTE HYDROGRAPH FROM 1501 THROUGH RILEY SMITH RD  
 275 RS 1 FLOW -1  
 276 SQ 0 256 512 1025 2066 2688 3305 3816 5128 6666  
 277 SE 892.67 899.12 900.00 900.67 901.41 901.72 902.08 902.34 903.16 904.51  
 278 SA 0.00 3.80 4.55 5.02 5.54 5.77 6.20 6.36 7.32 7.76  
 \*

279 KK 16S1  
 280 KM ROUTE HYDROGRAPH FROM 15R1 TO COBBLESTONE RD  
 281 RS 6 FLOW -1  
 282 SV 0.00 3.04 6.14 11.15 21.77 30.18 38.38 44.20 55.31 65.54  
 283 SQ 0 256 512 1025 2066 2688 3305 3816 5128 6666  
 \*  
 \* COBBLESTONE RD  
 \*

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

284 KK 16S2  
 285 KM ROUTE HYDROGRAPH FROM 16S1 TO MOUTH OF SUB-BASIN 16  
 286 RS 2 FLOW -1  
 287 SV 0.00 1.41 2.25 3.58 5.80 6.94 7.99 8.84 11.32 14.10  
 288 SQ 0 379 758 1516 3111 3957 4740 5375 6960 9048  
 \*

289 KK 16C1  
 290 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 16  
 291 BA 0.192  
 292 LS 70  
 293 UD 0.476  
 \*

294 KK 1601  
 295 KM COMBINE ROUTED HYDROGRAPH 16S2 WITH HYDROGRAPH FROM SUB-BASIN 16  
 296 HC 2  
 \*

\* \*\*\*\*\*  
 \* BEGIN TRIB C  
 \* \*\*\*\*\*  
 \*

297 KK 17C1  
 298 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 17  
 299 BA 0.197  
 300 LS 70  
 301 UD 0.391

\*  
 302 KK 18C1  
 303 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 18  
 304 BA 0.086  
 305 LS 67  
 306 UD 0.288  
 \*

307 KK 1701  
 308 KM COMBINE HYDROGRAPH FROM SUB-BASIN 17 WITH HYDROGRAPH FROM SUB-BASIN 18  
 309 HC 2  
 \*

310 KK 19C1  
 311 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 19  
 312 BA 0.053  
 313 LS 70  
 314 UD 0.310  
 \*

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

315 KK 1901  
 316 KM COMBINE 1701 WITH HYDROGRAPH FROM SUB-BASIN 19  
 317 HC 2  
 \*

318 KK 19R1  
 319 KM ROUTE HYDROGRAPH FROM 1901 THROUGH RADCLIFFE RD  
 320 RS 1 FLOW -1  
 321 SQ 0 38 75 150 387 526 666 773 1056 1373  
 322 SE 943.83 946.39 947.54 949.40 952.00 952.33 952.69 952.86 953.26 953.64  
 323 SA 0.00 0.12 0.18 0.35 0.80 0.88 0.97 1.01 1.11 1.19  
 \*

324 KK 20S1  
 325 KM ROUTE HYDROGRAPH FROM 19R1 TO MOUTH OF SUB-BASIN 20  
 326 RS 2 FLOW -1  
 327 SV 0.00 0.18 0.28 0.48 1.01 1.39 1.83 2.27 3.59 5.46  
 328 SQ 0 43 86 173 441 599 758 875 1189 1546  
 \*

329 KK 20C1  
 330 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 20  
 331 BA 0.044  
 332 LS 72  
 333 UD 0.354  
 \*

334 KK 2001  
 335 KM COMBINE ROUTED HYDROGRAPH 20S1 WITH HYDROGRAPH FROM SUB-BASIN 20  
 336 HC 2  
 \*  
 \* ALL STAR WAY  
 \*

337 KK 21S1  
 338 KM ROUTE HYDROGRAPH FROM 2001 TO MOUTH OF SUB-BASIN 21  
 339 RS 4 FLOW -1  
 340 SV 0.00 0.42 0.68 1.12 2.34 3.23 4.23 5.14 7.69 10.33  
 341 SQ 0 43 86 173 441 599 758 875 1189 1546  
 \*

342 KK 21C1  
 343 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 21  
 344 BA 0.071  
 345 LS 71  
 346 UD 0.327  
 \*

347 KK 21O1  
 348 KM COMBINE ROUTED HYDROGRAPH 21S1 WITH HYDROGRAPH FROM SUB-BASIN 21  
 349 HC 2  
 \*

\* \*\*\*\*\*  
 \* BEGIN TRIB E  
 \* \*\*\*\*\*  
 \*  
 \*

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

350 KK 22C1  
 351 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 22  
 352 BA 0.199  
 353 LS 72  
 354 UD 0.356  
 \*

355 KK 22R1  
 356 KM ROUTE HYDROGRAPH FROM 22C1 THROUGH MERRIFIELD CT  
 357 RS 1 FLOW -1  
 358 SQ 0 31 62 124 288 378 470 540 728 946  
 359 SE 933.87 936.55 938.33 940.51 941.36 941.63 941.83 942.05 942.33 942.71  
 360 SA 0.00 0.10 0.12 0.44 0.62 0.71 0.77 0.82 0.89 0.97  
 \*

361 KK 23R1  
 362 KM ROUTE HYDROGRAPH FROM 22R1 THROUGH HILLSBOROUGH  
 363 RS 1 FLOW -1  
 364 SQ 0 31 62 124 288 378 470 540 728 946  
 365 SE 928.58 930.26 931.04 932.40 936.07 936.53 936.80 936.95 937.37 937.76  
 366 SA 0.00 0.03 0.05 0.18 0.59 0.65 0.68 0.70 0.79 0.87  
 \*

367 KK 23S1  
 368 KM ROUTE HYDROGRAPH FROM 23R1 TO MOUTH OF SUB-BASIN 23  
 369 RS 3 FLOW -1  
 370 SV 0.00 0.20 0.32 0.58 3.52 4.89 6.22 7.29 9.95 12.28  
 371 SQ 0 31 62 124 288 378 470 540 728 946  
 \*

372 KK 23C1

373 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 23  
 374 BA 0.051  
 375 LS 71  
 376 UD 0.228  
 \*

377 KK 24C1  
 378 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 24  
 379 BA 0.081  
 380 LS 71  
 381 UD 0.272  
 \*

382 KK 2301  
 383 KM COMBINE ROUTED HYDROGRAPH 23S1 WITH HYDROGRAPH  
 384 KM FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24  
 385 HC 3  
 \*

\* \*\*\*\*\*  
 \* CONTINUE TRIB C  
 \* \*\*\*\*\*  
 \*

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

386 KK 2102  
 387 KM COMBINE HYDROGRAPH FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24  
 388 HC 2  
 \*

389 KK 21R1  
 390 KM ROUTE HYDROGRAPH FROM 2102 THROUGH CROSS CREEK LN  
 391 RS 1 FLOW -1  
 392 SQ 0 86 172 343 811 1099 1422 1680 2353 3059  
 393 SE 918.71 921.15 922.57 924.98 928.73 929.28 929.76 930.12 930.88 931.00  
 394 SA 0.00 0.09 0.11 0.15 0.94 1.04 1.17 1.29 1.51 1.57  
 \*

395 KK 25S1  
 396 KM ROUTE HYDROGRAPH FROM 21R1 TO MOUTH OF SUB-BASIN 25  
 397 RS 6 FLOW -1  
 398 SV 0.00 0.87 1.40 2.32 6.45 9.17 11.88 13.80 19.33 24.90  
 399 SQ 0 92 184 368 857 1168 1514 1785 2500 3250  
 \*

400 KK 25C1  
 401 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 25  
 402 BA 0.090  
 403 LS 69  
 404 UD 0.297  
 \*

405 KK 2501  
 406 KM COMBINE ROUTED HYDROGRAPH 25S1 WITH HYDROGRAPH FROM SUB-BASIN 25  
 407 HC 2

```

*
408 KK 26S1
409 KM ROUTE HYDROGRAPH FROM 2501 TO MOUTH OF SUB-BASIN 26
410 RS 6 FLOW -1
411 SV 0.00 0.95 1.51 2.53 5.77 8.44 11.31 13.69 19.57 24.24
412 SQ 0 100 200 401 912 1239 1601 1877 2656 3453
*

```

```

413 KK 26C1
414 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 26
415 KO 0 0 0 1 21
416 KF YES(2HQI,F6.2,9F8.2)
417 BA 0.075
418 LS 70
419 UD 0.229
*

```

```

420 KK 27C1
421 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 27
422 BA 0.053
423 LS 72
424 UD 0.283
*

```

HEC-1 INPUT

1

```

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

```

```

425 KK 2601
426 KM COMBINE RUNOFF HYDROGRAPHS FROM SUB-BASIN 26 AND SUB-BASIN 27
427 KM WITH ROUTED HYDROGRAPH 26S1
428 HC 3
*

```

```

429 KK 28S1
430 KM ROUTE HYDROGRAPH FROM 2601 TO 2801
431 RS 3 FLOW -1
432 SV 0.00 0.35 0.60 1.11 2.24 3.51 6.91 13.21 19.65 22.22
433 SQ 0 100 200 401 912 1239 1601 1877 2656 3453
*

```

```

434 KK 28C1
435 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 28
436 BA 0.049
437 LS 71
438 UD 0.194
*

```

```

* *****
* BEGIN TRIB C1
* *****
*

```

```

439 KK 29C1
440 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 29
441 BA 0.104
442 LS 72

```

443 UD 0.327  
 \*  
 444 KK 29D1  
 445 KM ROUTE HYDROGRAPH FROM SUB-BASIN 29 THROUGH DETENTION BASIN  
 446 RS 1 FLOW -1  
 447 SQ 0 7.95 22.48 41.29 63.57 308.04 736.78 1286.18 1933.42  
 448 SE 912 912.5 913 913.5 914 914.5 915 915.5 916  
 449 SA 4.82 4.89 4.95 5.02 5.08 5.15 5.21 5.28 5.34  
 \*

450 KK 30C1  
 451 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 30  
 452 BA 0.064  
 453 LS 69  
 454 UD 0.211  
 \*

455 KK 3001  
 456 KM COMBINE HYDROGRAPH FROM 29D1 WITH HYDROGRAPH FROM SUB-BASIN 30  
 457 HC 2  
 \*  
 \*

\* \*\*\*\*\* HY-8 CULVERT ROUTING  
 HEC-1 INPUT

1

PAGE 16

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

458 KK 30R1  
 459 KM ROUTE HYDROGRAPH FROM 3001 THROUGH 30R1  
 460 RS 1 FLOW -1  
 461 SQ 0 60 120 180 240 300 360 420 480 600  
 462 SE 891.5 894.82 897.02 900.39 904.07 904.29 904.44 904.57 904.67 904.87  
 463 SA 0 .099 .172 .3015 .4392 .4485 .4549 .4604 .4646 .4731  
 \*  
 \*

\* \*\*\*\*\*  
 \* CONTINUE TRIB C  
 \* \*\*\*\*\*  
 \*  
 \*

464 KK 2801  
 465 KM COMBINE HYDROGRAPH FROM 28S1 AND RUNOFF HYDROGRAPH 28C1 WITH  
 466 KM HYDROGRAPH FROM 30R1  
 467 KO 0 0 0 1 21  
 468 KF YES (2HQI, F6.2, 9F8.2)  
 469 HC 3  
 \*  
 \*

470 KK 28R1  
 471 KM ROUTE HYDROGRAPH FROM 2801 THROUGH PELHAM RD  
 472 KO 0 0 0 1 21  
 473 KF YES (2HQI, F6.2, 9F8.2)  
 474 RS 1 FLOW -1  
 475 SQ 0 104 208 417 878 1071 1240 1366 2155 2801  
 476 SE 875.20 879.07 880.77 883.36 887.72 890.27 893.40 896.12 900.23 901.08

477 SA 0.00 0.30 0.52 1.50 3.21 3.67 4.07 4.56 5.26 5.40  
 \*  
 \*  
 \* \*\*\*\*\*  
 \* BEGIN TRIB D  
 \* \*\*\*\*\*  
 \*  
 \*

478 KK 32C1  
 479 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 32  
 480 BA 0.125  
 481 LS 69  
 482 UD 0.580  
 \*

483 KK 32R1  
 484 KM ROUTE HYDROGRAPH FROM BASIN 32 THROUGH PELHAM RD  
 485 RS 1 FLOW -1  
 486 SQ 0 10 20 41 105 141 178 205 272 380  
 487 SE 886.05 887.23 887.72 888.47 890.05 890.81 891.55 892.09 894.03 898.66  
 488 SA 0.00 0.06 0.14 0.15 0.19 0.21 0.24 0.27 0.45 0.74  
 \*  
 \* \*\*\*\*\*  
 \* CONTINUE TRIB C  
 \* \*\*\*\*\*  
 \*  
 \*

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

489 KK 3101  
 490 KM COMBINE ROUTED HYDROGRAPH FROM 28R1 WITH ROUTED HYDROGRAPH FROM 32R1  
 491 HC 2  
 \*

492 KK 31R1  
 493 KM ROUTE HYDROGRAPH FROM BASIN 3101 THROUGH 31R1  
 494 RS 1 FLOW -1  
 495 SQ 0 112 223 446 963 1186 1344 1526 2418 3143  
 496 SE 873.46 876.27 877.06 878.12 880.38 881.40 882.10 883.30 884.56 886.00  
 497 SA 0.00 0.08 0.13 0.24 0.45 0.53 0.59 0.67 0.83 1.22  
 \*

498 KK 31S1  
 499 KM ROUTE HYDROGRAPH FROM 31R1 TO MOUTH OF SUB-BASIN 31  
 500 RS 4 FLOW -1  
 501 SV 0.00 1.15 2.02 3.51 6.13 7.28 8.29 9.28 11.54 14.07  
 502 SQ 0 112 223 446 963 1186 1344 1526 2418 3143  
 \*

503 KK 31C1  
 504 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 31  
 505 BA 0.046



```

506 LS          68
507 UD    0.263
*
508 KK    3102
509 KM      COMBINE ROUTED HYDROGRAPH 31S1 WITH HYDROGRAPH FROM SUB-BASIN 31
510 HC      2
*
* *****
*          CONTINUE MAINSTEM
* *****
*
511 KK    1602
512 KM      COMBINE HYDROGRAPH 3102 WITH HYDROGRAPH 1601
513 HC      2
*
514 KK    33S1
515 KM      ROUTE HYDROGRAPH FROM 1602 TO MOUTH OF SUB-BASIN 33
516 RS      10      FLOW      -1
517 SV      0.00    11.23    17.50    27.22    43.35    50.73    57.16    62.17    73.92    87.96
518 SQ      0       379     758     1516    3111    3957    4740    5375    6960    9048
*

```

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

```

519 KK    33C1
520 KM      RUNOFF HYDROGRAPH FROM SUB-BASIN 33
521 BA    0.377
522 LS          68
523 UD    0.484
*
524 KK    3301
525 KM      COMBINE ROUTED HYDROGRAPH 3301 WITH HYDROGRAPH FROM SUB-BASIN 33
526 KO      0       0       0       1       21
527 KF      YES (2HQI,F6.2,9F8.2)
528 HC      2
*
529 KK    33R1
530 KM      ROUTE HYDROGRAPH FROM 3301 THROUGH BLACK DR
531 RS      1       FLOW      -1
532 SQ      0       209     418     835     1979    2811    3872    4717    7246    9420
533 SE      854.00  858.17  859.90  861.99  866.40  867.06  867.64  868.02  868.80  869.47
534 SA      0.00    7.16    12.53   14.50   17.46   18.12   18.48   18.72   19.15   19.56
*
* *****
*          BEGIN TRIB B
* *****
*

```

535 KK 35C1  
 536 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 35  
 537 BA 0.392  
 538 LS 72  
 539 UD 0.319  
 \*

540 KK 35D1  
 541 KM ROUTE HYDROGRAPH FROM SUB-BASIN 35 THROUGH DETENTION BASIN  
 542 RS 1 FLOW -1  
 543 SQ 0 14.25 40.30 74.04 113.99 159.30 209.40 263.88 322.40 384.70  
 544 SQ 450.57 815.74 1429.29 2205.51 3113.76 4136.28 5261.06  
 545 SE 960 960.5 961 961.5 962 962.5 963 963.5 964 964.5  
 546 SE 965 965.5 966 966.5 967 967.5 968  
 547 SA 10.58 10.99 11.40 11.81 12.22 12.63 13.04 13.45 13.86 14.01  
 548 SA 14.16 14.31 14.46 14.62 14.77 14.92 15.07  
 \*

549 KK 36R1  
 550 KM ROUTE HYDROGRAPH FROM 35D1 THROUGH ROPER MTN RD  
 551 RS 1 FLOW -1  
 552 SQ 0 10 20 39 122 175 231 275 386 502  
 553 SE 923.08 923.74 924.15 924.79 926.85 927.92 928.94 929.68 931.80 934.59  
 554 SA 0.00 0.09 0.10 0.11 0.15 0.27 0.58 0.78 1.38 1.92  
 \*

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

555 KK 36S1  
 556 KM ROUTE HYDROGRAPH FROM 36R1 TO ROSEBAY DR  
 557 RS 6 FLOW -1  
 558 SV 0.00 0.18 0.28 0.44 1.00 1.32 1.66 1.97 2.91 3.97  
 559 SQ 0 10 20 39 122 175 231 275 386 502  
 \*

560 KK 36S2  
 561 KM ROUTE HYDROGRAPH FROM 36S1 TO MOUTH OF SUB-BASIN 36  
 562 RS 1 FLOW -1  
 563 SV 0.00 0.02 0.04 0.05 0.13 0.17 0.23 0.26 0.36 0.44  
 564 SQ 0 10 20 39 122 175 231 275 386 502  
 \*

565 KK 36C1  
 566 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 36  
 567 BA 0.291  
 568 LS 68  
 569 UD 0.382  
 \*

570 KK 36O1  
 571 KM COMBINE ROUTED HYDROGRAPH 36S2 WITH HYDROGRAPH FROM SUB-BASIN 36  
 572 HC 2  
 \*

573 KK 36R2  
 574 KM ROUTE HYDROGRAPH 36O1 THROUGH DEWBERRY LN



```

*
* *****
* BEGIN TRIB B1
* *****
*
*

```

```

615 KK 38C1
616 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 38
617 BA 0.080
618 LS 85
619 UD 0.213
*

```

```

620 KK 38D1
621 KM ROUTE HYDROGRAPH FROM SUB-BASIN 38 THROUGH DETENTION BASIN
622 RS 1 FLOW -1
623 SQ 0 14.99 42.39 77.88 119.90 167.56 200.58 205.08 209.50 213.82
624 SQ 218.05 222.20 226.28 230.29 234.22 238.09 241.90 421.02 745.35 1164.20
625 SE 904 904.5 905 905.5 906 906.5 907 907.5 908 908.5
HEC-1 INPUT

```

1

PAGE 21

```

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10
626 SE 909 909.5 910 910.5 911 911.5 912 912.5 913 913.5
627 SA 1.45 1.48 1.52 1.55 1.59 1.62 1.66 1.69 1.73 1.95
628 SA 2.17 2.39 2.61 2.83 3.05 3.27 3.49 3.62 3.75 3.88
*

```

```

629 KK 39C1
630 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 39
631 BA 0.398
632 LS 76
633 UD 0.601
*

```

\* \*\*\*\*\* HY-8 CULVERT ROUTING

```

634 KK 39R1
635 KM ROUTE HYDROGRAPH FROM SUB-BASIN 39 THROUGH ROPER MTN ROAD
636 RS 1 FLOW -1
637 SQ 0 120 240 360 480 600 720 840 960 1200
638 SE 903.5 907.70 909.91 912.73 916.77 921.37 921.92 922.19 922.39 922.72
639 SA 0 .921 1.266 1.880 3.392 5.126 5.352 5.463 5.546 5.682
*

```

```

640 KK 39O1
641 KM COMBINE HYDROGRAPH 38D1 WITH HYDROGRAPH FROM ROUTED HYDROGRAPH 39R1
642 HC 2
*
* ***** HY-8 CULVERT ROUTING

```

```

643 KK 39R2
644 KM ROUTE HYDROGRAPH 39O1 THROUGH I-85
645 RS 1 FLOW -1
646 SQ 0 120 240 360 480 600 720 840 960 1200
647 SE 891.5 895.49 898.4 902.16 904.33 904.6 904.81 904.98 905.13 905.26
648 SA 0 .3252 .8325 1.504 1.835 1.853 1.866 1.877 1.886 1.895
*

```

649 KK 40S1  
 650 KM ROUTE HYDROGRAPH 39R1 TO MOUTH OF SUB-BASIN 40  
 651 RS 1 FLOW -1  
 652 RC .075 .055 .085 900 .0089  
 653 RX 0 150 162.5 165.8 174.3 177.5 185 235  
 654 RY 896 888 887 883 883 887 888 896  
 \*

655 KK 40C1  
 656 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 40  
 657 BA 0.351  
 658 LS 75  
 659 UD 0.603  
 \*

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

660 KK 4001  
 661 KM COMBINE ROUTED HYDROGRAPH 40S1 WITH HYDROGRAPH FROM SUB-BASIN 40  
 662 HC 2  
 \*

663 KK 40D1  
 664 KM ROUTE HYDROGRAPH FROM 4001 THROUGH DETENTION BASIN  
 665 RS 1 FLOW -1  
 666 SQ 0 4 94.3 376.1 593.1 600.9 608.5 616.1 623.6 1288.6  
 667 SQ 2498.2 4062.5 5913.5  
 668 SE 884 886.5 887 887.5 888 888.5 889 889.5 890 890.5  
 669 SE 891 891.5 892  
 670 SA 12.78 14.09 14.35 14.62 14.88 15.52 16.15 16.79 17.43 18.06  
 671 SA 18.70 19.34 19.97  
 \*

672 KK 37S3  
 673 KM ROUTE HYDROGRAPH 40D1 TO 3702  
 674 RS 2 FLOW -1  
 675 RC .063 .043 .063 640 .0094  
 676 RX 0 240 445.5 447 453 454.5 488 510  
 677 RY 868 864 860 855 855 860 864 868  
 \*

\* \*\*\*\*\*  
 \* CONTINUE TRIB B  
 \* \*\*\*\*\*  
 \*  
 \*

678 KK 3702  
 679 KM COMBINE HYDROGRAPH 3701 WITH HYDROGRAPH FROM SUB-BASIN 40D1  
 680 HC 2  
 \*

681 KK 34S1  
 682 KM ROUTE HYDROGRAPH 3702 TO 3401  
 683 RS 2 FLOW -1  
 684 SV 0.00 0.22 0.34 0.51 3.46 4.87 6.25 7.14 9.95 11.71  
 685 SQ 0 45 90 181 774 1114 1347 1489 2586 3362



\*  
 \* \*\*\*\*\*  
 \* CONTINUE MAINSTEM  
 \* \*\*\*\*\*  
 \*  
 \*

686 KK 3401  
 687 KM COMBINE ROUTED HYDROGRAPH 34S1 WITH ROUTED HYDROGRAPH 33R1  
 688 HC 2  
 \*

HEC-1 INPUT

PAGE 23

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

689 KK 34C1  
 690 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 34  
 691 BA 0.247  
 692 LS 67  
 693 UD 0.378  
 \*

694 KK 3402  
 695 KM COMBINE HYDROGRAPH 3401 WITH HYDROGRAPH FROM SUB-BASIN 34  
 696 HC 2  
 \*

697 KK 34R1  
 698 KM ROUTE HYDROGRAPH 3402 THROUGH MUDDY FORD  
 699 RS 1 FLOW -1  
 700 SQ 0 216 432 863 2204 3553 4237 4730 9308 12100  
 701 SE 848.24 851.93 853.54 855.00 859.57 859.94 861.50 862.16 863.01 863.58  
 702 SA 0.00 1.11 5.57 13.09 22.80 23.60 24.54 24.97 26.09 26.70  
 \*

703 KK 41S1  
 704 KM ROUTE HYDROGRAPH 34R1 TO MOUTH OF SUB-BASIN 41  
 705 RS 15 FLOW -1  
 706 SV 0.00 4.89 9.98 32.67 73.13 103.84 119.59 129.50 200.33 240.85  
 707 SQ 0 216 432 863 2204 3553 4237 4730 9308 12100  
 \*

708 KK 41C1  
 709 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 41  
 710 BA 0.367  
 711 LS 67  
 712 UD 0.529  
 \*

713 KK 4301  
 714 KM COMBINE ROUTED HYDROGRAPH 41S1 WITH HYDROGRAPH FROM SUB-BASIN 41  
 715 HC 2  
 \*

\*  
 \* \*\*\*\*\*  
 \* BEGIN TRIB 3  
 \* \*\*\*\*\*  
 \*

\*

716 KK 42C1  
 717 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 42  
 718 BA 0.305  
 719 LS 74  
 720 UD 0.445  
 \*

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

721 KK 42D1  
 722 KM ROUTE HYDROGRAPH FROM SUB-BASIN 42 THROUGH DETENTION BASIN  
 723 RS 1 FLOW -1  
 724 SQ 0 0 0 0 0 26.64 75.36 185.03 278.07 390.32  
 725 SQ 522.86 672.92 838.62 1018.58 1211.73 1417.24 1634.37  
 726 SE 876 876.5 877 877.5 878 878.5 879 879.5 880 880.5  
 727 SE 881 881.5 882 882.5 883 883.5 884  
 728 SA 4.65 5.10 5.55 6.01 6.46 6.91 7.36 7.81 8.26 8.57  
 729 SA 8.88 9.19 9.50 9.81 10.12 10.43 10.74  
 \*

730 KK 43S1  
 731 KM ROUTE HYDROGRAPH 42D1 TO MOUTH OF SUB-BASIN 43  
 732 RS 1 FLOW -1  
 733 RC .072 .068 .068 1750 .0091  
 734 RX 0 65 131.5 136 144 148.5 198 240  
 735 RY 872 864 860 855 855 860 868 876  
 \*

736 KK 43C1  
 737 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 43  
 738 BA 0.236  
 739 LS 83  
 740 UD 0.428  
 \*

741 KK 43O1  
 742 KM COMBINE ROUTED HYDROGRAPH 43S1 WITH HYDROGRAPH FROM SUB-BASIN 43  
 743 HC 2  
 \*

744 KK 43D1  
 745 KM ROUTE HYDROGRAPH FROM 43O1 THROUGH DETENTION BASIN  
 746 RS 1 FLOW -1  
 747 SQ 0 12.27 36.88 71.73 116.56 179.46 1786.63 3159.90 4783.02  
 748 SE 876 876.5 877 877.5 878 878.5 879 879.5 880  
 749 SA 1.54 1.64 1.75 1.85 1.95 2.06 2.16 2.26 2.36  
 \*

\*  
 \* \*\*\*\*\*  
 \* CONTINUE MAINSTEM  
 \* \*\*\*\*\*  
 \*  
 \*

750 KK 43O2

751 KM COMBINE HYDROGRAPH 4301 WITH HYDROGRAPH 43D1  
 752 HC 2  
 \*

HEC-1 INPUT

1

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

753 KK 41R1  
 754 KM ROUTE HYDROGRAPH 4302 THROUGH I-85  
 755 RS 1 FLOW -1  
 756 SQ 0 235 470 939 2321 3415 4346 4941 8993 11691  
 757 SE 839.40 841.42 843.33 845.88 849.27 852.42 853.16 853.44 854.66 856.00  
 758 SA 0.00 1.07 1.49 6.55 12.90 18.05 18.54 18.75 19.78 19.95  
 \*

759 KK 44R1  
 760 KM ROUTE HYDROGRAPH 41R1 THROUGH HORN BARRIER DR  
 761 RS 1 FLOW -1  
 762 SQ 0 235 470 939 2321 3415 4346 4941 8993 11691  
 763 SE 834.32 838.33 840.30 842.14 844.81 846.12 847.48 848.93 852.57 854.00  
 764 SA 0.00 0.70 0.79 2.27 7.36 8.10 9.48 11.17 19.36 20.40  
 \*

765 KK 44C1  
 766 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 44  
 767 BA 0.161  
 768 LS 72  
 769 UD 0.334  
 \*

770 KK 44O1  
 771 KM COMBINE ROUTED HYDROGRAPH 44R1 WITH HYDROGRAPH FROM SUB-BASIN 44  
 772 HC 2  
 \*

\* \*\*\*\*\*  
 \* BEGIN TRIB 2  
 \* \*\*\*\*\*  
 \*  
 \*

773 KK 45C1  
 774 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 45  
 775 BA 0.522  
 776 LS 73  
 777 UD 0.377  
 \*

778 KK 45D1  
 779 KM ROUTE HYDROGRAPH FROM SUB-BASIN 45 THROUGH DETENTION BASIN  
 780 RS 1 FLOW -1  
 781 SQ 0 17.8 39.9 68.5 102.4 140.8 183.3 229.4 279.0 715.4  
 782 SQ 1472.5 2439.5 3576.4 4860.4 6275.9 7811.5 9458.3  
 783 SE 888 888.5 889 889.5 890 890.5 891 891.5 892 892.5  
 784 SE 893 893.5 894 894.5 895 895.5 896  
 785 SA 13.58 14.10 14.61 15.12 15.63 16.14 16.65 17.17 17.68 18.72  
 786 SA 19.77 20.82 21.87 22.92 23.96 25.01 26.06  
 \*

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

787 KK 46S1  
 788 KM ROUTE HYDROGRAPH 45D1 TO MOUTH OF SUB-BASIN 46  
 789 RS 1 FLOW -1  
 790 RC .075 .04 .075 3100 .0097  
 791 RX 0 160 209.5 212 218 221.5 300 400  
 792 RY 864 852 848 844.5 844.5 848 852 864  
 \*

793 KK 46C1  
 794 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 46  
 795 BA 0.176  
 796 LS 70  
 797 UD 0.392  
 \*

798 KK 46O1  
 799 KM COMBINE ROUTED HYDROGRAPH 46S1 WITH HYDROGRAPH FROM SUB-BASIN 46  
 800 HC 2  
 \*

\* \*\*\*\*\*  
 \* CONTINUE MAINSTEM  
 \* \*\*\*\*\*  
 \*

801 KK 44O2  
 802 KM COMBINE HYDROGRAPH 44O1 WITH HYDROGRAPH 46O1  
 803 HC 2  
 \*

804 KK 44R2  
 805 KM ROUTE HYDROGRAPH 44O2 THROUGH GARLINGTON RD  
 806 RS 1 FLOW -1  
 807 SQ 0 236 471 942 2346 3412 4393 5005 7552 9818  
 808 SE 831.32 836.69 838.82 840.69 843.43 844.51 845.42 845.98 848.29 849.32  
 809 SA 0.00 2.55 4.82 11.50 15.23 17.09 17.69 18.07 19.78 20.64  
 \*

\* \*\*\*\*\*  
 \* BEGIN TRIB 1  
 \* \*\*\*\*\*  
 \*

810 KK 48C1  
 811 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 48  
 812 BA 0.338  
 813 LS 75  
 814 UD 0.343  
 \*

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

815 KK 48D1  
 816 KM ROUTE HYDROGRAPH FROM SUB-BASIN 48 THROUGH DETENTION BASIN  
 817 RS 1 FLOW -1  
 818 SQ 0 6.5 61.4 161.6 291.4 445.1 619.5 812.3 1624.6 2951.9  
 819 SE 876 878 878.5 879 879.5 880 880.5 881 881.5 882  
 820 SA 18.85 20.65 21.10 21.55 22.00 22.45 22.93 23.41 23.89 24.37  
 \*

821 KK 48D2  
 822 KM ROUTE HYDROGRAPH FROM 48D1 THROUGH DETENTION BASIN  
 823 RS 1 FLOW -1  
 824 SQ 0 1 8.8 518.0 1440.6 2632.9 4043.7 5643.1 7411.0 9332.7  
 825 SE 852 855 855.5 856 856.5 857 857.5 858 858.5 859  
 826 SA 4.82 5.49 5.60 5.71 5.86 6.00 6.15 6.29 6.43 6.58  
 \*

\* \*\*\*\*\*  
 \* CONTINUE MAINSTEM  
 \* \*\*\*\*\*  
 \*  
 \*

827 KK 4701  
 828 KM COMBINE HYDROGRAPH 44R2 AND HYDROGRAPH 48D2  
 829 HC 2  
 \*

830 KK 47S1  
 831 KM ROUTE HYDROGRAPH 4701 TO MOUTH OF SUB-BASIN 47  
 832 RS 19 FLOW -1  
 833 SV 0.00 7.04 13.00 33.18 96.62 124.90 143.76 155.11 208.52 251.27  
 834 SQ 0 236 471 942 2346 3413 4393 5006 7746 10070  
 \*

835 KK 47C1  
 836 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 47  
 837 BA 0.370  
 838 LS 79  
 839 UD 0.319  
 \*

840 KK 4702  
 841 KM COMBINE ROUTED HYDROGRAPH 47S1 WITH HYDROGRAPH FROM SUB-BASIN 47  
 842 KO 0 0 0 1 21  
 843 KF YES (2HQI, F6.2, 9F8.2)  
 844 HC 2  
 \*

\* \*\*\*\*\*  
 \* BEGIN TRIB A  
 \* \*\*\*\*\*  
 \*

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

845 KK 49C1





```

885      KK      51C1
886      KM      RUNOFF HYDROGRAPH FROM SUB-BASIN 51
887      BA      0.809
888      LS              78
889      UD      0.732
          *

890      KK      51O1
891      KM      COMBINE ROUTED HYDROGRAPH 51S2 WITH HYDROGRAPH FROM SUB-BASIN 51
892      HC      2
          *

893      KK      51R2
894      KM      ROUTE HYDROGRAPH 51O1 THROUGH ROPER MTN RD
895      RS      1      FLOW      -1
896      SQ      0      191      382      764      1290      1747      2316      2648      3910      5083
897      SE      865.86  869.17  871.01  874.24  878.95  879.51  879.88  880.13  880.82  881.35
898      SA      0.00   0.52   1.17   4.81   9.72   10.30   10.64   10.79   11.20   11.53
          *

899      KK      52S1
900      KM      ROUTE HYDROGRAPH FROM 51R2 TO MOUTH OF SUB-BASIN 52
901      RS      13     FLOW      -1
902      SV      0.00   4.61   7.71   16.33   27.93   36.42   46.03   51.30   70.11   85.37
903      SQ      0      208     415     830     1394     1901     2529     2904     4387     5703
          *

904      KK      52C1
905      KM      RUNOFF HYDROGRAPH FROM SUB-BASIN 52
906      BA      0.644
907      LS              69
908      UD      0.490
          *

909      KK      52O1
910      KM      COMBINE ROUTED HYDROGRAPH 52S1 WITH HYDROGRAPH FROM SUB-BASIN 52
911      HC      2
          *

912      KK      53S1
913      KM      ROUTE HYDROGRAPH FROM 52O1 TO 53S2
914      RS      11     FLOW      -1
915      SV      0.00   4.14   6.79   13.86   23.22   31.00   39.85   44.70   61.96   75.79
916      SQ      0      208     415     830     1394     1901     2529     2904     4387     5703
          *

917      KK      53S2
918      KM      ROUTE HYDROGRAPH FROM 53S1 TO MOUTH OF SUB-BASIN 53
919      RS      6      FLOW      -1
920      SV      0.00   2.12   3.65   8.15   20.00   24.31   29.07   32.71   48.20   61.53
921      SQ      0      208     415     830     1394     1901     2529     2904     4387     5703
          *

922      KK      53C1
923      KM      RUNOFF HYDROGRAPH FROM SUB-BASIN 53

```

1

HEC-1 INPUT

PAGE 30

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

```

924 BA 0.489
925 LS 68
926 UD 0.450
*

927 KK 5301
928 KM COMBINE ROUTED HYDROGRAPH 53S2 WITH HYDROGRAPH FROM SUB-BASIN 53
929 HC 2
*
* *****
* CONTINUE MAINSTEM
* *****
*

930 KK 4703
931 KM COMBINE HYDROGRAPH FROM 5301 WITH HYDROGRAPH FROM 4702
932 HC 2
*

933 KK 47S2
934 KM ROUTE HYDROGRAPH 4703 TO SMITH RD
935 RS 2 FLOW -1
936 SV 0.00 1.56 2.51 6.47 17.15 18.45 19.99 21.30 27.69 32.50
937 SQ 0 356 712 1425 3227 4782 5893 6790 10838 14089
*

938 KK 54S1
939 KM ROUTE HYDROGRAPH FROM 47S2 TO S.R.14
940 RS 16 FLOW -1
941 SV 0.00 13.38 21.06 33.88 83.78 131.03 164.57 191.19 307.76 398.98
942 SQ 0 356 712 1425 3227 4782 5893 6790 10838 14089
*

943 KK 54S2
944 KM ROUTE HYDROGRAPH FROM S.R.14 TO MOUTH OF SUB-BASIN 54
945 RS 7 FLOW -1
946 SV 0.00 7.08 11.60 19.62 41.11 59.30 70.58 79.95 117.76 145.42
947 SQ 0 403 806 1612 3446 5068 6300 7328 11680 15184
*

```

1

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

```

948 KK 54C1
949 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 54
950 BA 0.952
951 LS 73
952 UD 0.722
*

953 KK 55C1
954 KM RUNOFF HYDROGRAPH FROM SUB-BASIN 55
955 BA 1.389
956 LS 68
957 UD 0.966
*

958 KK 5401

```

```

959      KM      COMBINE ROUTED HYDROGRAPH 54S2 WITH HYDROGRAPH FROM SUB-BASIN 54 AND
960      KM      FROM SUB-BASIN 55
961      HC      3
          *

962      KK      56S1
963      KM      ROUTE HYDROGRAPH FROM 5401 TO BATESVILLE RD
964      RS      4      FLOW      -1
965      SV      0.00    3.73    5.67    8.83    16.61    25.41    31.66    36.64    55.18    68.73
966      SQ      0      403     806     1612    3446     5068     6300     7328    11680    15184
          *

967      KK      56S2
968      KM      ROUTE HYDROGRAPH FROM 56S1 TO ROCK RD
969      RS      11     FLOW      -1
970      SV      0.00    11.30   17.96   28.76   49.91   69.91   86.73   102.37  164.75  211.26
971      SQ      0      403     806     1612    3446     5068     6300     7328    11680    15184
          *

972      KK      56S3
973      KM      ROUTE HYDROGRAPH FROM 56S2 TO MOUTH OF SUB-BASIN 56
974      RS      7      FLOW      -1
975      SV      0.00    6.39   10.22   16.79   33.91   49.72   61.87   72.33   114.69  148.10
976      SQ      0      403     806     1612    3446     5068     6300     7328    11680    15184
          *

977      KK      56C1
978      KM      RUNOFF HYDROGRAPH FROM SUB-BASIN 56
979      BA      0.692
980      LS      67
981      UD      0.592
          *

982      KK      56O1
983      KM      COMBINE ROUTED HYDROGRAPH 56S3 WITH HYDROGRAPH FROM SUB-BASIN 56
984      HC      2
          *
985      ZZ

```

```

1*****
*
* FLOOD HYDROGRAPH PACKAGE (HEC-1) *
* JUN 1998 *
* VERSION 4.1 *
* RUN DATE 26JUL00 TIME 11:34:09 *
*
*****

```

```

*****
*
* U.S. ARMY CORPS OF ENGINEERS *
* HYDROLOGIC ENGINEERING CENTER *
* 609 SECOND STREET *
* DAVIS, CALIFORNIA 95616 *
* (916) 756-1104 *
*
*****

```

```

HYDROLOGIC MODEL FOR ROCKY CREEK WATERSHED
GREENVILLE, SC
MODEL SET-UP PERFORMED BY WOOLPERT LLP - CHARLOTTE OFFICE
EXISTING CONDITIONS A=0.2*S
FILENAME= ROCKY_E.HC1

```



(INCHES) 4.730 5.970 5.970 5.970  
 (AC-FT) 43. 54. 54. 54.  
 CUMULATIVE AREA = .17 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 69 KK \* 02S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 01C1 TO CULVERT IN WOODS

HYDROGRAPH ROUTING DATA

71 RS STORAGE ROUTING  
 NSTPS 8 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

72 SV	STORAGE	.0	1.3	3.7	4.9	7.3	8.2	8.8	9.5	10.7	12.9
73 SQ	DISCHARGE	0.	65.	130.	259.	480.	564.	622.	694.	823.	1070.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 02S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
547.	12.17	86.	27.	20.	20.
		(INCHES) 4.729	5.970	5.970	5.970
		(AC-FT) 43.	54.	54.	54.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
1.	12.17	0.	0.	0.	0.

CUMULATIVE AREA = .17 SQ MI

\*\*\* \*\*



```

*****
*
74 KK      *      02S2 *
*
*****

```

ROUTE HYDROGRAPH FROM 02S2 TO MOUTH OF SUB-BASIN 02

HYDROGRAPH ROUTING DATA

```

76 RS      STORAGE ROUTING
           NSTPS          4  NUMBER OF SUBREACHES
           ITYP          FLOW  TYPE OF INITIAL CONDITION
           RSVRIC       -1.00  INITIAL CONDITION
           X             .00  WORKING R AND D COEFFICIENT

77 SV      STORAGE          .0      .6      1.1      1.8      3.1      3.5      3.8      4.2      4.9      6.0

78 SQ      DISCHARGE        0.      73.     146.     293.     658.     799.     915.     1037.    1304.    1695.

```

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 1037. TO 1695.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 02S2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 544.	12.22	86.	27.	20.	20.	
		(INCHES)	4.729	5.970	5.970	5.970
		(AC-FT)	43.	54.	54.	54.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 1.	12.20	0.	0.	0.	0.	

CUMULATIVE AREA = .17 SQ MI

\*\*\* \*\*

```

*****
*
79 KK      *      02C1 *
*
*****

```

RUNOFF HYDROGRAPH FROM SUB-BASIN 02

















HYDROGRAPH ROUTING DATA

91 RS	STORAGE ROUTING											
	NSTPS	1	NUMBER OF SUBREACHES									
	ITYP	FLOW	TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
94 SA	AREA	.0	.1	3.2	3.4	3.5	3.6	3.7	3.8	3.9	4.0	
92 SQ	DISCHARGE	0.	70.	140.	210.	280.	350.	420.	490.	560.	700.	
93 SE	ELEVATION	984.75	990.38	999.13	999.32	999.44	999.54	999.63	999.71	999.77	999.89	

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.14	11.09	11.72	12.13	12.49	12.82	13.13	13.36	13.83
ELEVATION	984.75	990.38	999.13	999.32	999.44	999.54	999.63	999.71	999.77	999.89

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION            03R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 206.	12.27	64.	21.	16.	16.	
		(INCHES)	5.412	7.082	7.082	7.082
		(AC-FT)	32.	42.	42.	42.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 12.	12.27	3.	1.	1.	1.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 999.31	12.27	990.49	986.58	986.12	986.12	

CUMULATIVE AREA = .11 SQ MI

\*\*\* \*\*

\*\*\*\*\*

\*                    \*

95 KK            \*            0201            \*















COMBINE ROUTED HYDROGRAPH 04S1 WITH HYDROGRAPH FROM SUB-BASIN 04

117 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 0401

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
1028.	12.25	213.	68.	51.	51.	
		(INCHES)	4.855	6.223	6.223	6.223
		(AC-FT)	106.	135.	135.	135.

CUMULATIVE AREA = .41 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 \* 05S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 0401 TO MOUTH OF SUB-BASIN 05

HYDROGRAPH ROUTING DATA

STATION	ROUTING TYPE	NSTPS	FLOW	TYPE OF INITIAL CONDITION	RSVRIC	WORKING R AND D COEFFICIENT
120 RS	STORAGE	3	-1.00	INITIAL CONDITION	.00	
121 SV	STORAGE	.0	.5	.9	1.7	2.9 3.5 3.9 4.3 5.4 6.6
122 SQ	DISCHARGE	0.	91.	182.	365.	782. 976. 1103. 1257. 1635. 2125.

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 05S1

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
1024.	12.30	213.	68.	51.	51.









126 LS SCS LOSS RATE  
 STRTL .60 INITIAL ABSTRACTION  
 CRVNBR 77.00 CURVE NUMBER  
 RTIMP .00 PERCENT IMPERVIOUS AREA

127 UD SCS DIMENSIONLESS UNITGRAPH  
 TLAG .43 LAG

\*\*\*

UNIT HYDROGRAPH  
 130 END-OF-PERIOD ORDINATES

2.	4.	6.	11.	15.	20.	26.	32.	39.	46.
55.	65.	75.	86.	98.	109.	119.	128.	136.	143.
149.	153.	157.	159.	160.	160.	160.	159.	158.	155.
151.	147.	142.	138.	133.	128.	123.	117.	111.	104.
96.	89.	83.	77.	72.	67.	63.	59.	56.	52.
49.	46.	44.	41.	39.	37.	35.	32.	31.	29.
27.	25.	23.	22.	21.	20.	18.	17.	16.	15.
14.	14.	13.	12.	11.	11.	10.	9.	9.	8.
8.	7.	7.	6.	6.	6.	5.	5.	5.	4.
4.	4.	4.	3.	3.	3.	3.	3.	2.	2.
2.	2.	2.	2.	2.	2.	2.	2.	1.	1.
1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
1.	1.	0.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 05C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 2.74, TOTAL EXCESS = 5.42

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	31.98-HR
361.	12.30	67.	21.	16.	16.
		(INCHES)	4.328	5.421	5.421
		(AC-FT)	33.	42.	42.

CUMULATIVE AREA = .14 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 128 KK            06C1 \*  
 \*                    \*  
 \*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 06

SUBBASIN RUNOFF DATA

130 BA            SUBBASIN CHARACTERISTICS







+ 230. 11.92 21. 7. 5. 5.  
 (INCHES) 5.474 7.202 7.202 7.202  
 (AC-FT) 10. 13. 13. 13.

CUMULATIVE AREA = .04 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 133 KK \* 06D1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM SUB-BASIN 06 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

135 RS STORAGE ROUTING  
 NSTPS 1 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

140 SA AREA .0 .0 .0 .0 .0 .1 .2 .3 .5 .5  
 .6 .6 .6 .9 1.1 1.4 1.6

136 SQ DISCHARGE 0. 2. 7. 12. 19. 26. 31. 35. 39. 43.  
 46. 49. 51. 54. 163. 359. 612.

138 SE ELEVATION 874.00 874.50 875.00 875.50 876.00 876.50 877.00 877.50 878.00 878.50  
 879.00 879.50 880.00 880.50 881.00 881.50 882.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE .00 .00 .01 .02 .03 .06 .15 .30 .50 .74  
 ELEVATION 874.00 874.50 875.00 875.50 876.00 876.50 877.00 877.50 878.00 878.50

STORAGE 1.01 1.30 1.61 2.00 2.50 3.11 3.85  
 ELEVATION 879.00 879.50 880.00 880.50 881.00 881.50 882.00

\*\*\* \*\*

HYDROGRAPH AT STATION 06D1

PEAK FLOW TIME MAXIMUM AVERAGE FLOW  
 + (CFS) (HR) 6-HR 24-HR 72-HR 31.98-HR  
 (CFS)  
 + 175. 12.02 21. 7. 5. 5.  
 (INCHES) 5.474 7.202 7.202 7.202  
 (AC-FT) 10. 13. 13. 13.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE



			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	3.	12.02	0.	0.	0.	0.

	PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	881.03	12.02	876.10	874.84	874.63	874.63

CUMULATIVE AREA = .04 SQ MI

\*\*\* \*\*

```

*****
*
142 KK * 0501 *
*
*****

```

COMBINE ROUTED HYDROGRAPH 05S1 WITH HYDROGRAPH FROM  
SUB-BASIN 05 AND ROUTED HYDROGRAPH 06D1

145 HC HYDROGRAPH COMBINATION  
ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 0501

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
	1437.	12.30	301.	96.	72.	72.
			(INCHES)	4.756	6.084	6.084
			(AC-FT)	149.	191.	191.

CUMULATIVE AREA = .59 SQ MI

\*\*\* \*\*

```

*****
*
146 KK * 7XP *
*
*****

```

BASIN 7 (HYDROGRAPH FROM XP-SWMM MODEL)

8 IN TIME DATA FOR INPUT TIME SERIES  
JXMIN 6 TIME INTERVAL IN MINUTES

JXDATE 1JAN 0 STARTING DATE  
JXTIME 0 STARTING TIME

SUBBASIN RUNOFF DATA

148 BA SUBBASIN CHARACTERISTICS  
TAREA .16 SUBBASIN AREA

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 7XP

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 392.	12.10	(CFS) 86.	28.	21.	21.
		(INCHES) 4.989	6.428	6.428	6.428
		(AC-FT) 43.	55.	55.	55.

CUMULATIVE AREA = .16 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
179 KK \* 0801 \*  
\* \*  
\*\*\*\*\*

COMBINE HYDROGRAPH 0501 WITH HYDROGRAPH FROM SUB-BASIN 07

181 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 0801

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 1761.	12.30	(CFS) 386.	124.	93.	93.
		(INCHES) 4.803	6.157	6.157	6.157
		(AC-FT) 192.	246.	246.	246.

CUMULATIVE AREA = .75 SQ MI







2.	7.	14.	23.	33.	47.	61.	72.	80.	85.
86.	85.	82.	76.	71.	64.	56.	47.	39.	34.
29.	25.	22.	19.	17.	14.	12.	11.	9.	8.
7.	6.	5.	4.	4.	3.	3.	2.	2.	2.
2.	1.	1.	1.	1.	1.	1.	1.	1.	0.
0.	0.	0.	0.	0.					

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        08C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    2.74, TOTAL EXCESS =    5.42

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 132.	12.07		15.	5.	4.	4.
		(INCHES)	4.333	5.421	5.421	5.421
		(AC-FT)	8.	10.	10.	10.

CUMULATIVE AREA =    .03 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
187 KK        \*        0802 \*  
\*        \*  
\*\*\*\*\*

COMBINE HYDROGRAPH 0801 WITH HYDROGRAPH FROM SUB-BASIN 08

189 HC            HYDROGRAPH COMBINATION  
                  ICOMP            2    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        0802

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 1817.	12.28		402.	129.	97.	97.
		(INCHES)	4.783	6.126	6.126	6.126
		(AC-FT)	199.	255.	255.	255.

CUMULATIVE AREA =    .78 SQ MI

\*\*\* \*\*

```

*****
*
190 KK * 08S1 *
*
*****

```

ROUTE HYDROGRAPH FROM 0802 TO CREEKVIEW COURT

HYDROGRAPH ROUTING DATA

```

192 RS STORAGE ROUTING
      NSTPS          3 NUMBER OF SUBREACHES
      ITYP           FLOW TYPE OF INITIAL CONDITION
      RSVRIC        -1.00 INITIAL CONDITION
      X             .00 WORKING R AND D COEFFICIENT

193 SV STORAGE          .0      .5      .9      2.5      4.0      4.5      5.0      5.4      6.4      7.6

194 SQ DISCHARGE        0.      192.    384.    769.    1456.   1742.   2059.   2279.   2965.   3854.

```

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 1456. TO 3854.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 08S1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)	(CFS)	6-HR	24-HR	72-HR	31.98-HR
+ 1816.	12.30	402.	129.	97.	97.	
		(INCHES)	4.783	6.126	6.126	6.126
		(AC-FT)	199.	255.	255.	255.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
+ (AC-FT)	(HR)		6-HR	24-HR	72-HR	31.98-HR
+ 2.	12.28	0.	0.	0.	0.	0.

CUMULATIVE AREA = .78 SQ MI

\*\*\* \*\*

```

*****
*
195 KK * 09C1 *
*
*****

```









TOTAL RAINFALL = 8.16, TOTAL LOSS = 1.55, TOTAL EXCESS = 6.61

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
+ 140.	11.97	14.	4.	3.	3.	
		(INCHES) 5.140	6.606	6.606	6.606	
		(AC-FT) 7.	9.	9.	9.	

CUMULATIVE AREA = .03 SQ MI

\*\*\* \*\*

```

*****
*
200 KK * 0901 *
*
*****

```

COMBINE ROUTED HYDROGRAPH 08S1 WITH HYDROGRAPH FROM SUB-BASIN 09

202 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE  
 \*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 0901

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
+ 1838.	12.30	415.	133.	100.	100.	
		(INCHES) 4.793	6.141	6.141	6.141	
		(AC-FT) 206.	264.	264.	264.	

CUMULATIVE AREA = .81 SQ MI

\*\*\* \*\*

```

*****
*
203 KK * 09R1 *
*
*****

```

ROUTE HYDROGRAPH FROM 0901 THROUGH ROPER MOUNTAIN EXT

HYDROGRAPH ROUTING DATA

205 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
208 SA	AREA	.0	.1	.1	.3	.7	.8	.8	.8	.8	.9
206 SQ	DISCHARGE	0.	192.	384.	768.	1467.	1757.	2061.	2309.	3003.	3904.
207 SE	ELEVATION	952.91	956.01	958.06	961.77	965.32	965.63	965.87	966.07	966.61	967.20

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.12	.39	1.19	2.98	3.21	3.39	3.55	3.99	4.49
ELEVATION	952.91	956.01	958.06	961.77	965.32	965.63	965.87	966.07	966.61	967.20

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 3904.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 09R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 1838.	12.30	415.	133.	100.	100.	
		(INCHES)	4.793	6.141	6.141	6.141
		(AC-FT)	206.	264.	264.	264.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 3.	12.30	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 965.69	12.30	957.56	954.54	954.13	954.13	

CUMULATIVE AREA = .81 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*

209 KK \* 10S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 09R1 TO MOUTH OF SUB-BASIN 10

HYDROGRAPH ROUTING DATA

211 RS STORAGE ROUTING  
 NSTPS 6 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

212 SV STORAGE .0 2.5 4.2 8.2 16.4 19.3 22.2 24.4 30.4 37.1

213 SQ DISCHARGE 0. 218. 436. 871. 1698. 2089. 2520. 2874. 3796. 4935.

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 10S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
1828.	12.37	415.	133.	100.	100.
		(INCHES) 4.793	6.141	6.141	6.141
		(AC-FT) 206.	264.	264.	264.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
3.	12.37	1.	0.	0.	0.

CUMULATIVE AREA = .81 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 214 KK \* 10C1 \*  
 \* \*  
 \*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 10

SUBBASIN RUNOFF DATA

216 BA SUBBASIN CHARACTERISTICS  
 TAREA .16 SUBBASIN AREA

PRECIPITATION DATA















222 LS            SCS LOSS RATE  
                   STRTL            .82    INITIAL ABSTRACTION  
                   CRVNBR          71.00    CURVE NUMBER  
                   RTIMP            .00    PERCENT IMPERVIOUS AREA

223 UD            SCS DIMENSIONLESS UNITGRAPH  
                   TLAG            .32    LAG

\*\*\*

UNIT HYDROGRAPH  
 99 END-OF-PERIOD ORDINATES

2.	5.	10.	15.	22.	29.	38.	47.	59.	72.
86.	100.	113.	125.	133.	142.	146.	151.	151.	152.
151.	151.	146.	142.	136.	131.	125.	119.	111.	103.
94.	85.	78.	70.	65.	59.	55.	50.	46.	43.
40.	37.	34.	31.	29.	27.	25.	22.	21.	19.
18.	16.	15.	14.	13.	12.	11.	10.	9.	8.
8.	7.	7.	6.	6.	5.	5.	4.	4.	4.
3.	3.	3.	3.	3.	2.	2.	2.	2.	2.
2.	1.	1.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION    11C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.44, TOTAL EXCESS =    4.72

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	31.98-HR
271.	12.20	43.	13.	10.	10.
		(INCHES)	3.805	4.719	4.719
		(AC-FT)	21.	26.	26.

CUMULATIVE AREA =    .10 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 224 KK            \*            1001            \*  
 \*  
 \*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 10S1 WITH HYDROGRAPH FROM  
 SUB-BASIN 10 AND SUB-BASIN 11

227 HC            HYDROGRAPH COMBINATION  
                   ICOMP            3    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 1001

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 2383.	12.28	523.	166.	125.	125.	
		(INCHES)	4.530	5.768	5.768	5.768
		(AC-FT)	260.	330.	330.	330.

CUMULATIVE AREA = 1.07 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
228 KK \* 12S1 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 1001 TO MOUTH OF SUB-BASIN 12

HYDROGRAPH ROUTING DATA

230 RS	STORAGE ROUTING										
	NSTPS	2	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
231 SV	STORAGE	.0	.7	1.4	2.6	4.0	4.7	5.4	5.9	7.3	9.1
232 SQ	DISCHARGE	0.	230.	460.	921.	1797.	2236.	2724.	3110.	4138.	5379.

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3110. TO 4138.  
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 12S1

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 2378.	12.30	523.	166.	125.	125.	
		(INCHES)	4.530	5.769	5.769	5.769
		(AC-FT)	259.	330.	330.	330.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE









RTIMP .00 PERCENT IMPERVIOUS AREA

237 UD SCS DIMENSIONLESS UNITGRAPH  
TLAG .24 LAG

\*\*\*

UNIT HYDROGRAPH  
75 END-OF-PERIOD ORDINATES

4.	11.	20.	32.	46.	63.	84.	107.	133.	155.
174.	189.	198.	203.	205.	204.	200.	192.	183.	173.
162.	149.	135.	118.	104.	92.	82.	74.	66.	59.
54.	49.	44.	40.	36.	31.	28.	26.	23.	21.
19.	17.	15.	13.	12.	11.	10.	9.	8.	7.
6.	6.	5.	5.	4.	4.	3.	3.	3.	2.
2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
1.	1.	0.	0.	0.					

\*\*\* \*\*

HYDROGRAPH AT STATION 12C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.09, TOTAL EXCESS = 5.07

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
348.	12.13	47.	15.	11.	11.
		(INCHES) 4.072	5.069	5.069	5.069
		(AC-FT) 23.	29.	29.	29.

CUMULATIVE AREA = .11 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
238 KK \* 1201 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 12S1 WITH HYDROGRAPH FROM SUB-BASIN 12

240 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 1201

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR

+ 2608. 12.28 (CFS) 570. 181. 136. 136.  
 (INCHES) 4.489 5.705 5.705 5.705  
 (AC-FT) 283. 359. 359. 359.  
 CUMULATIVE AREA = 1.18 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 241 KK \* 13S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 1201 TO MOUTH OF SUB-BASIN 13

HYDROGRAPH ROUTING DATA

243 RS	STORAGE ROUTING										
	NSTPS	3	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
244 SV	STORAGE	.0	1.3	2.6	6.4	10.9	12.5	14.2	15.4	18.4	21.6
245 SQ	DISCHARGE	0.	244.	488.	976.	1933.	2444.	2995.	3430.	4607.	5989.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 13S1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 2597.	12.33	570.	181.	136.	136.	
		(INCHES) 4.489	5.705	5.705	5.705	
		(AC-FT) 283.	359.	359.	359.	
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
4.	12.33	1.	0.	0.	0.	

CUMULATIVE AREA = 1.18 SQ MI

\*\*\* \*\*

















\*\*\* \*\*

\*\*\*\*\*  
\*  
256 KK \* 1301 \*  
\*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 13S1 WITH HYDROGRAPH FROM  
SUB-BASIN 13 AND SUB-BASIN 14

259 HC HYDROGRAPH COMBINATION  
ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 1301

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 2923.	12.32	635.	201.	151.	151.
		(INCHES) 4.379	5.552	5.552	5.552
		(AC-FT) 315.	399.	399.	399.

CUMULATIVE AREA = 1.35 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
260 KK \* 15S1 \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 1301 TO MOUTH OF SUB-BASIN 15

HYDROGRAPH ROUTING DATA

262 RS STORAGE ROUTING  
NSTPS 5 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

263 SV STORAGE .0 2.2 3.8 7.4 13.7 16.6 19.6 21.9 27.9 34.8

264 SQ DISCHARGE 0. 244. 488. 976. 1933. 2444. 2995. 3430. 4607. 5989.









\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 15S1 WITH HYDROGRAPH FROM SUB-BASIN 15

272 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 1501

PEAK FLOW (CFS)	TIME (HR)	6-HR (CFS)	24-HR (INCHES)	72-HR (AC-FT)	31.98-HR (CFS)
3363.	12.35	736.	4.290	461.	174.
		232.	5.423	461.	174.
		174.	5.423	461.	174.

CUMULATIVE AREA = 1.59 SQ MI

\*\*\*\*\*

\*\*\*\*\*  
\* \*  
273 KK \* 15R1 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 1501 THROUGH RILEY SMITH RD

HYDROGRAPH ROUTING DATA

275 RS STORAGE ROUTING  
NSTPS 1 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

278 SA	AREA	.0	3.8	4.6	5.0	5.5	5.8	6.2	6.4	7.3	7.8
276 SQ	DISCHARGE	0.	256.	512.	1025.	2066.	2688.	3305.	3816.	5128.	6666.
277 SE	ELEVATION	892.67	899.12	900.00	900.67	901.41	901.72	902.08	902.34	903.16	904.51

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	8.17	11.84	15.04	18.95	20.70	22.86	24.49	30.09	40.27
ELEVATION	892.67	899.12	900.00	900.67	901.41	901.72	902.08	902.34	903.16	904.51

\*\*\* \*\*

HYDROGRAPH AT STATION 15R1

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
3323.	12.40	734.	232.	174.	174.	
		(INCHES)	4.282	5.423	5.423	5.423
		(AC-FT)	364.	461.	461.	461.

PEAK STORAGE + (AC-FT)	TIME (HR)		MAXIMUM AVERAGE STORAGE			31.98-HR
			6-HR	24-HR	72-HR	
23.	12.40		11.	4.	3.	3.

PEAK STAGE + (FEET)	TIME (HR)		MAXIMUM AVERAGE STAGE			31.98-HR
			6-HR	24-HR	72-HR	
902.09	12.40		899.45	895.60	894.86	894.86

CUMULATIVE AREA = 1.59 SQ MI

\*\*\* \*\*

```

*****
*           *
279 KK    * 16S1 *
*           *
*****

```

ROUTE HYDROGRAPH FROM 15R1 TO COBBLESTONE RD

HYDROGRAPH ROUTING DATA

281 RS	STORAGE ROUTING		6	NUMBER OF SUBREACHES							
	NSTPS			FLOW TYPE OF INITIAL CONDITION							
	ITYP			INITIAL CONDITION							
	RSVRIC	-1.00		WORKING R AND D COEFFICIENT							
	X	.00									
282 SV	STORAGE	.0	3.0	6.1	11.1	21.8	30.2	38.4	44.2	55.3	65.5
283 SQ	DISCHARGE	0.	256.	512.	1025.	2066.	2688.	3305.	3816.	5128.	6666.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 16S1



PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
	(CFS)				
+ 3234.	12.57	734.	232.	174.	174.
	(INCHES)	4.281	5.423	5.423	5.423
	(AC-FT)	364.	461.	461.	461.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
+ 6.	12.57	1.	0.	0.	0.

CUMULATIVE AREA = 1.59 SQ MI

\*\*\* \*\*

```

*****
*
284 KK * 16S2 *
*
*****

```

ROUTE HYDROGRAPH FROM 16S1 TO MOUTH OF SUB-BASIN 16

HYDROGRAPH ROUTING DATA

STATION	ROUTING	NSTPS		NUMBER OF SUBREACHES		FLOW TYPE OF INITIAL CONDITION									
		ITYP	RSVRIC	FLOW	TYPE OF INITIAL CONDITION										
286 RS	STORAGE ROUTING			2	INITIAL CONDITION										
					INITIAL CONDITION										
					WORKING R AND D COEFFICIENT										
287 SV	STORAGE			.0	1.4	2.3	3.6	5.8	6.9	8.0	8.8	11.3	14.1		
288 SQ	DISCHARGE			0.	379.	758.	1516.	3111.	3957.	4740.	5375.	6960.	9048.		

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3111. TO 9048.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 16S2

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
	(CFS)				
+ 3231.	12.58	734.	232.	174.	174.
	(INCHES)	4.281	5.423	5.423	5.423
	(AC-FT)	364.	461.	461.	461.







STRTL .86 INITIAL ABSTRACTION  
 CRVNR 70.00 CURVE NUMBER  
 RTIMP .00 PERCENT IMPERVIOUS AREA

293 UD SCS DIMENSIONLESS UNITGRAPH  
 TLAG .48 LAG

\*\*\*

UNIT HYDROGRAPH  
 145 END-OF-PERIOD ORDINATES

2.	4.	6.	11.	15.	20.	26.	32.	39.	47.
54.	63.	74.	84.	96.	108.	121.	132.	143.	153.
162.	169.	176.	181.	185.	189.	190.	191.	191.	191.
190.	189.	185.	182.	177.	173.	168.	164.	158.	153.
147.	141.	134.	127.	119.	111.	104.	97.	91.	85.
81.	76.	72.	68.	64.	61.	57.	54.	52.	49.
47.	44.	42.	40.	38.	36.	34.	32.	30.	28.
26.	25.	24.	23.	21.	20.	19.	18.	17.	16.
15.	14.	14.	13.	12.	11.	11.	10.	10.	9.
9.	8.	8.	7.	7.	7.	6.	6.	6.	5.
5.	5.	4.	4.	4.	4.	4.	3.	3.	3.
3.	3.	3.	2.	2.	2.	2.	2.	2.	2.
2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 16C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.56, TOTAL EXCESS = 4.60

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	31.98-HR
378.	12.35	77.	24.	18.	18.
		(INCHES)	4.602	4.602	4.602
		(AC-FT)	38.	47.	47.

CUMULATIVE AREA = .19 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 294 KK            1601 \*  
 \*  
 \*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 16S2 WITH HYDROGRAPH FROM SUB-BASIN 16

296 HC            HYDROGRAPH COMBINATION  
 ICOMP            2    NUMBER OF HYDROGRAPHS TO COMBINE

















1. 1. 0. 0. 0. 0. 0. 0.

\*\*\* \*\*

HYDROGRAPH AT STATION 18C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.91, TOTAL EXCESS = 4.25

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
214.	12.17	32.	10.	7.	7.	
		(INCHES) 3.447	4.254	4.254	4.254	
		(AC-FT) 16.	20.	20.	20.	
CUMULATIVE AREA =			.09 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 307 KK \* 1701 \*  
 \* \*  
 \*\*\*\*\*

COMBINE HYDROGRAPH FROM SUB-BASIN 17 WITH HYDROGRAPH FROM SUB-BASIN 18

309 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 1701

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
641.	12.23	111.	34.	26.	26.	
		(INCHES) 3.633	4.496	4.496	4.496	
		(AC-FT) 55.	68.	68.	68.	
CUMULATIVE AREA =			.28 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 310 KK \* 19C1 \*  
 \* \*









3.	3.	3.	3.	2.	2.	2.	2.	2.	2.
1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        19C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.56, TOTAL EXCESS =    4.60

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	137.	12.18	21.	7.	5.	5.
		(INCHES)	3.716	4.602	4.602	4.602
		(AC-FT)	11.	13.	13.	13.

CUMULATIVE AREA =    .05 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 315 KK            \*    1901    \*  
 \*                    \*  
 \*\*\*\*\*

COMBINE 1701 WITH HYDROGRAPH FROM SUB-BASIN 19

317 HC                    HYDROGRAPH COMBINATION  
 ICOMP                    2    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        1901

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	776.	12.22	132.	41.	31.	31.
		(INCHES)	3.646	4.513	4.513	4.513
		(AC-FT)	65.	81.	81.	81.

CUMULATIVE AREA =    .34 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 318 KK \* 19R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 1901 THROUGH RADCLIFFE RD

HYDROGRAPH ROUTING DATA

320 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
323 SA	AREA	.0	.1	.2	.3	.8	.9	1.0	1.0	1.1	1.2
321 SQ	DISCHARGE	0.	38.	75.	150.	387.	526.	666.	773.	1056.	1373.
322 SE	ELEVATION	943.83	946.39	947.54	949.40	952.00	952.33	952.69	952.86	953.26	953.64

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.10	.27	.76	2.21	2.49	2.82	2.99	3.42	3.85
ELEVATION	943.83	946.39	947.54	949.40	952.00	952.33	952.69	952.86	953.26	953.64

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 19R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 773.	12.25	132.	41.	31.	31.	
		(INCHES)	3.646	4.513	4.513	4.513
		(AC-FT)	65.	81.	81.	81.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 3.	12.23	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 952.86	12.25	947.82	945.36	944.99	944.99	

CUMULATIVE AREA = .34 SQ MI

\*\*\* \*\*

324 KK \* 20S1 \*

ROUTE HYDROGRAPH FROM 19R1 TO MOUTH OF SUB-BASIN 20

HYDROGRAPH ROUTING DATA

326 RS STORAGE ROUTING NSTPS 2 NUMBER OF SUBREACHES ITYP FLOW TYPE OF INITIAL CONDITION RSVRIC -1.00 INITIAL CONDITION X .00 WORKING R AND D COEFFICIENT

327 SV STORAGE .0 .2 .3 .5 1.0 1.4 1.8 2.3 3.6 5.5

328 SQ DISCHARGE 0. 43. 86. 173. 441. 599. 758. 875. 1189. 1546.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 20S1

PEAK FLOW TIME MAXIMUM AVERAGE FLOW 6-HR 24-HR 72-HR 31.98-HR + (CFS) (HR) (CFS) 767. 12.28 132. 41. 31. 31. (INCHES) 3.646 4.513 4.513 4.513 (AC-FT) 65. 81. 81. 81.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE 6-HR 24-HR 72-HR 31.98-HR + (AC-FT) (HR) 1. 12.28 0. 0. 0. 0.

CUMULATIVE AREA = .34 SQ MI

\*\*\* \*\*

329 KK \* 20C1 \*

RUNOFF HYDROGRAPH FROM SUB-BASIN 20

SUBBASIN RUNOFF DATA







```

***          ***          ***          ***          ***
          HYDROGRAPH AT STATION      20C1
TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.32, TOTAL EXCESS = 4.84
PEAK FLOW      TIME
+ (CFS)        (HR)
+ 111.         12.23
          (CFS)
          (INCHES)  3.893
          (AC-FT)   9.
          CUMULATIVE AREA = .04 SQ MI
          MAXIMUM AVERAGE FLOW
          6-HR      24-HR      72-HR      31.98-HR
          18.        6.         4.         4.
          4.835     4.835     4.835     4.835
          11.       11.       11.       11.

```

\*\*\* \*\*

```

*****
*
334 KK * 2001 *
*
*****

```

COMBINE ROUTED HYDROGRAPH 20S1 WITH HYDROGRAPH FROM SUB-BASIN 20

```

336 HC      HYDROGRAPH COMBINATION
          ICOMP      2      NUMBER OF HYDROGRAPHS TO COMBINE

```

\*\*\*

```

***          ***          ***          ***          ***
          HYDROGRAPH AT STATION      2001
PEAK FLOW      TIME
+ (CFS)        (HR)
+ 875.         12.28
          (CFS)
          (INCHES)  3.674
          (AC-FT)   74.
          CUMULATIVE AREA = .38 SQ MI
          MAXIMUM AVERAGE FLOW
          6-HR      24-HR      72-HR      31.98-HR
          150.       46.        35.        35.
          4.550     4.550     4.550     4.550
          92.       92.       92.       92.

```

\*\*\* \*\*

```

*****
*
337 KK * 21S1 *
*

```











			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
			(CFS)			
+	183.	12.20	29.	9.	7.	7.
			(INCHES)	3.805	4.718	4.718
			(AC-FT)	14.	18.	18.
			CUMULATIVE AREA =	.07 SQ MI		

\*\*\* \*\*

```

*****
*
347 KK *      2101 *
*
*****

```

COMBINE ROUTED HYDROGRAPH 21S1 WITH HYDROGRAPH FROM SUB-BASIN 21

349 HC            HYDROGRAPH COMBINATION  
                  ICOMP            2    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION    2101

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
			(CFS)			
+	1006.	12.35	179.	55.	42.	42.
			(INCHES)	3.693	4.577	4.577
			(AC-FT)	89.	110.	110.
			CUMULATIVE AREA =	.45 SQ MI		

\*\*\* \*\*

```

*****
*
350 KK *      22C1 *
*
*****

```

RUNOFF HYDROGRAPH FROM SUB-BASIN 22

SUBBASIN RUNOFF DATA

352 BA            SUBBASIN CHARACTERISTICS  
                  TAREA            .20    SUBBASIN AREA







TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.32, TOTAL EXCESS = 4.84

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
498.	12.23	83.	26.	19.	19.
	(INCHES)	3.893	4.835	4.835	4.835
	(AC-FT)	41.	51.	51.	51.

CUMULATIVE AREA = .20 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 355 KK \* 22R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 22C1 THROUGH MERRIFIELD CT

HYDROGRAPH ROUTING DATA

STATION	PARAMETER	0	1	2	3	4	5	6	7	8	9	10
357 RS	STORAGE ROUTING											
	NSTPS		1									
	ITYP		FLOW									
	RSVRIC		-1.00									
	X		.00									
360 SA	AREA	.0	.1	.1	.4	.6	.7	.8	.8	.9	1.0	
358 SQ	DISCHARGE	0.	31.	62.	124.	288.	378.	470.	540.	728.	946.	
359 SE	ELEVATION	933.87	936.55	938.33	940.51	941.36	941.63	941.83	942.05	942.33	942.71	

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	0	1	2	3	4	5	6	7	8	9	10
ELEVATION	933.87	936.55	938.33	940.51	941.36	941.63	941.83	942.05	942.33	942.71	

\*\*\* \*\*

HYDROGRAPH AT STATION 22R1

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
	(CFS)				



+	494.	12.27	83.	26.	19.	19.
			(INCHES) 3.893	4.835	4.835	4.835
			(AC-FT) 41.	51.	51.	51.
	PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE		
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	2.	12.27	0.	0.	0.	0.
	PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	941.91	12.27	937.57	935.23	934.89	934.89
	CUMULATIVE AREA =		.20 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 361 KK \* 23R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 22R1 THROUGH HILLSBOROUGH

HYDROGRAPH ROUTING DATA

363 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
366 SA	AREA	.0	.0	.1	.2	.6	.6	.7	.7	.8	.9
364 SQ	DISCHARGE	0.	31.	62.	124.	288.	378.	470.	540.	728.	946.
365 SE	ELEVATION	928.58	930.26	931.04	932.40	936.07	936.53	936.80	936.95	937.37	937.76

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.02	.05	.19	1.54	1.82	2.00	2.10	2.42	2.74
ELEVATION	928.58	930.26	931.04	932.40	936.07	936.53	936.80	936.95	937.37	937.76

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 31.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 23R1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
493.	12.28	83.	26.	19.	19.	
		(INCHES)	3.893	4.835	4.835	4.835
		(AC-FT)	41.	51.	51.	51.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
2.	12.28	0.	0.	0.	0.

PEAK STAGE + (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	31.98-HR
936.85	12.28	931.18	929.50	929.28	929.28

CUMULATIVE AREA = .20 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
367 KK        23S1 \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 23R1 TO MOUTH OF SUB-BASIN 23

HYDROGRAPH ROUTING DATA

369 RS	STORAGE ROUTING	NSTPS		3 NUMBER OF SUBREACHES							
		ITYP	RSVRIC	FLOW	TYPE OF INITIAL CONDITION						
				-1.00	INITIAL CONDITION						
		X		.00	WORKING R AND D COEFFICIENT						
370 SV	STORAGE	.0	.2	.3	.6	3.5	4.9	6.2	7.3	9.9	12.3
371 SQ	DISCHARGE	0.	31.	62.	124.	288.	378.	470.	540.	728.	946.

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 23S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR







.00 .00 .00 .00 .00 .00 .00 .00 .00 .00  
 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00

375 LS SCS LOSS RATE  
 STRTL .82 INITIAL ABSTRACTION  
 CRVNBR 71.00 CURVE NUMBER  
 RTIMP .00 PERCENT IMPERVIOUS AREA

376 UD SCS DIMENSIONLESS UNITGRAPH  
 TLAG .23 LAG

\*\*\*

UNIT HYDROGRAPH  
 70 END-OF-PERIOD ORDINATES

2.	6.	12.	18.	26.	36.	48.	62.	75.	86.
94.	100.	103.	104.	104.	101.	97.	92.	86.	80.
73.	64.	56.	49.	43.	39.	34.	31.	27.	25.
22.	20.	18.	15.	14.	12.	11.	10.	9.	8.
7.	6.	5.	5.	4.	4.	4.	3.	3.	2.
2.	2.	2.	2.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 23C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.44, TOTAL EXCESS = 4.72

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	31.98-HR
160.	12.12	21.	6.	5.	5.
		(INCHES) 3.807	4.718	4.718	4.718
		(AC-FT) 10.	13.	13.	13.

CUMULATIVE AREA = .05 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 377 KK \* 24C1 \*  
 \*  
 \*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 24

SUBBASIN RUNOFF DATA

379 BA SUBBASIN CHARACTERISTICS  
 TAREA .08 SUBBASIN AREA

PRECIPITATION DATA









			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
			(CFS)			
+	232.	12.15	33.	10.	8.	8.
			(INCHES)	3.806	4.718	4.718
			(AC-FT)	16.	20.	20.
			CUMULATIVE AREA =	.08 SQ MI		

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 382 KK \* 2301 \*  
 \* \*  
 \*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 23S1 WITH HYDROGRAPH  
 FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24

385 HC HYDROGRAPH COMBINATION  
 ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 2301

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
			(CFS)			
+	599.	12.42	137.	43.	32.	32.
			(INCHES)	3.857	4.789	4.789
			(AC-FT)	68.	85.	85.
			CUMULATIVE AREA =	.33 SQ MI		

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 386 KK \* 2102 \*  
 \* \*  
 \*\*\*\*\*

COMBINE HYDROGRAPH FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24

388 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 2102

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
1594.	12.37	316.	98.	74.	74.
		3.762 (INCHES)	4.666	4.666	4.666
		157. (AC-FT)	195.	195.	195.

CUMULATIVE AREA = .78 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 389 KK \* 21R1 \*  
 \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 2102 THROUGH CROSS CREEK LN

HYDROGRAPH ROUTING DATA

391 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
394 SA	AREA	.0	.1	.1	.2	.9	1.0	1.2	1.3	1.5	1.6
392 SQ	DISCHARGE	0.	86.	172.	343.	811.	1099.	1422.	1680.	2353.	3059.
393 SE	ELEVATION	918.71	921.15	922.57	924.98	928.73	929.28	929.76	930.12	930.88	931.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.07	.21	.53	2.36	2.90	3.43	3.88	4.94	5.12
ELEVATION	918.71	921.15	922.57	924.98	928.73	929.28	929.76	930.12	930.88	931.00

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 2353. TO 3059.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 21R1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 1590.	12.38	316.	98.	74.	74.
	(CFS)				
	(INCHES)	3.762	4.666	4.666	4.666
	(AC-FT)	157.	195.	195.	195.
PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
+ (AC-FT)	(HR)	6-HR	24-HR	72-HR	31.98-HR
4.	12.38	1.	0.	0.	0.
PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
+ (FEET)	(HR)	6-HR	24-HR	72-HR	31.98-HR
929.99	12.38	923.30	920.40	919.99	919.99
CUMULATIVE AREA =		.78 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 395 KK \* 25S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 21R1 TO MOUTH OF SUB-BASIN 25

HYDROGRAPH ROUTING DATA

397 RS	STORAGE ROUTING										
	NSTPS	6	NUMBER OF SUBREACHES								
	ITYP		FLOW TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
398 SV	STORAGE	.0	.9	1.4	2.3	6.4	9.2	11.9	13.8	19.3	24.9
399 SQ	DISCHARGE	0.	92.	184.	368.	857.	1168.	1514.	1785.	2500.	3250.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 25S1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
	(CFS)				







.00 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00

403 LS SCS LOSS RATE  
STRTL .90 INITIAL ABSTRACTION  
CRVNBR 69.00 CURVE NUMBER  
RTIMP .00 PERCENT IMPERVIOUS AREA

404 UD SCS DIMENSIONLESS UNITGRAPH  
TLAG .30 LAG

\*\*\*

UNIT HYDROGRAPH  
91 END-OF-PERIOD ORDINATES

2.	5.	11.	17.	24.	32.	41.	52.	65.	79.
94.	107.	118.	127.	134.	139.	141.	142.	142.	141.
137.	132.	127.	121.	115.	108.	101.	92.	83.	74.
67.	61.	55.	51.	46.	42.	39.	36.	33.	30.
28.	26.	23.	21.	19.	18.	16.	15.	14.	12.
11.	10.	10.	9.	8.	7.	7.	6.	6.	5.
5.	4.	4.	4.	3.	3.	3.	3.	2.	2.
2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
0.									

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 25C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.67, TOTAL EXCESS = 4.49

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW	
(CFS)	(HR)	6-HR 24-HR 72-HR 31.98-HR	
+	233.	12.18	35. 11. 8. 8.
+			(INCHES) 3.627 4.486 4.486 4.486
			(AC-FT) 17. 22. 22. 22.

CUMULATIVE AREA = .09 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
405 KK \* 2501 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 25S1 WITH HYDROGRAPH FROM SUB-BASIN 25

407 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*



\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        2501

PEAK FLOW + (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 1699.	12.45	(CFS)	351.	109.	82.	82.
		(INCHES)	3.747	4.648	4.648	4.648
		(AC-FT)	174.	216.	216.	216.
CUMULATIVE AREA =			.87 SQ MI			

\*\*\* \*\*

```

*****
*
408 KK *      26S1 *
*
*****

```

ROUTE HYDROGRAPH FROM 2501 TO MOUTH OF SUB-BASIN 26

HYDROGRAPH ROUTING DATA

410 RS	STORAGE ROUTING										
	NSTPS	6	NUMBER OF SUBREACHES								
	ITYP		FLOW TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
411 SV	STORAGE	.0	.9	1.5	2.5	5.8	8.4	11.3	13.7	19.6	24.2
412 SQ	DISCHARGE	0.	100.	200.	401.	912.	1239.	1601.	1877.	2656.	3453.

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        26S1

PEAK FLOW + (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ 1684.	12.55	(CFS)	351.	109.	82.	82.
		(INCHES)	3.747	4.648	4.648	4.648
		(AC-FT)	174.	216.	216.	216.
PEAK STORAGE + (AC-FT)	TIME (HR)		MAXIMUM AVERAGE STORAGE			
+ 2.	12.55		6-HR	24-HR	72-HR	31.98-HR
			0.	0.	0.	0.







.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

418 LS SCS LOSS RATE  
 STRTL .86 INITIAL ABSTRACTION  
 CRVNBR 70.00 CURVE NUMBER  
 RTIMP .00 PERCENT IMPERVIOUS AREA

419 UD SCS DIMENSIONLESS UNITGRAPH  
 TLAG .23 LAG

\*\*\*

UNIT HYDROGRAPH  
 71 END-OF-PERIOD ORDINATES

3.	9.	17.	26.	38.	53.	70.	90.	109.	126.
137.	146.	151.	152.	152.	149.	143.	135.	127.	118.
108.	96.	83.	72.	64.	57.	51.	45.	41.	37.
33.	29.	26.	23.	21.	19.	16.	15.	13.	12.
10.	9.	8.	7.	7.	6.	5.	5.	4.	4.
3.	3.	3.	2.	2.	2.	2.	2.	1.	1.
1.	1.	1.	1.	1.	1.	0.	0.	0.	0.
0.									

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 26C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.56, TOTAL EXCESS = 4.60

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR
+	(CFS)	(HR)			31.98-HR
+	229.	12.12	(CFS)		
			30.	9.	7.
			(INCHES)	4.602	4.602
			(AC-FT)	18.	18.

CUMULATIVE AREA = .08 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 420 KK \*                    27C1 \*  
 \*                    \*  
 \*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 27

SUBBASIN RUNOFF DATA

422 BA SUBBASIN CHARACTERISTICS  
 TAREA .05 SUBBASIN AREA









TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.32, TOTAL EXCESS = 4.84

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
+ 152.	12.17	22.	7.	5.	5.	
		(INCHES) 3.895	4.835	4.835	4.835	
		(AC-FT) 11.	14.	14.	14.	

CUMULATIVE AREA = .05 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
425 KK \* 2601 \*  
\* \*  
\*\*\*\*\*

COMBINE RUNOFF HYDROGRAPHS FROM SUB-BASIN 26 AND SUB-BASIN 27 WITH ROUTED HYDROGRAPH 26S1

428 HC HYDROGRAPH COMBINATION  
ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 2601

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
+ 1800.	12.53	403.	125.	94.	94.	
		(INCHES) 3.751	4.654	4.654	4.654	
		(AC-FT) 200.	248.	248.	248.	

CUMULATIVE AREA = 1.00 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
429 KK \* 28S1 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 2601 TO 2801

HYDROGRAPH ROUTING DATA

431 RS STORAGE ROUTING  
 NSTPS 3 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

432 SV STORAGE .0 .3 .6 1.1 2.2 3.5 6.9 13.2 19.6 22.2

433 SQ DISCHARGE 0. 100. 200. 401. 912. 1239. 1601. 1877. 2656. 3453.

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 28S1

PEAK FLOW TIME MAXIMUM AVERAGE FLOW  
 (CFS) (HR) 6-HR 24-HR 72-HR 31.98-HR  
 + 1711. 12.73 (CFS) 403. 125. 94. 94.  
 (INCHES) 3.751 4.654 4.654 4.654  
 (AC-FT) 200. 248. 248. 248.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE  
 (AC-FT) (HR) 6-HR 24-HR 72-HR 31.98-HR  
 + 3. 12.73 0. 0. 0. 0.

CUMULATIVE AREA = 1.00 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 434 KK \* 28C1 \*  
 \* \*  
 \*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 28

SUBBASIN RUNOFF DATA

436 BA SUBBASIN CHARACTERISTICS  
 TAREA .05 SUBBASIN AREA

PRECIPITATION DATA

13 PB STORM 8.16 BASIN TOTAL PRECIPITATION

14 PI INCREMENTAL PRECIPITATION PATTERN  
 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00  
 .00 .00 .00 .00 .00 .00 .00 .00 .00 .00















\*\*\*

UNIT HYDROGRAPH  
100 END-OF-PERIOD ORDINATES

2.	4.	10.	15.	22.	28.	37.	46.	58.	70.
84.	98.	110.	122.	130.	139.	143.	148.	149.	150.
149.	148.	144.	140.	135.	130.	124.	118.	111.	103.
95.	86.	78.	70.	65.	60.	55.	50.	47.	43.
40.	37.	34.	32.	29.	27.	25.	23.	21.	19.
18.	16.	15.	14.	13.	12.	11.	10.	9.	9.
8.	7.	7.	6.	6.	5.	5.	5.	4.	4.
4.	3.	3.	3.	3.	2.	2.	2.	2.	2.
2.	2.	1.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION      29C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.32, TOTAL EXCESS =    4.84

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
274.	12.20	44.	14.	10.	10.
		(INCHES) 3.894	4.835	4.835	4.835
		(AC-FT) 22.	27.	27.	27.

CUMULATIVE AREA =    .10 SQ MI

\*\*\* \*\*

```

*****
*
444 KK *      29D1 *
*
*****

```

ROUTE HYDROGRAPH FROM SUB-BASIN 29 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

446 RS	STORAGE ROUTING									
	NSTPS	1	NUMBER OF SUBREACHES							
	ITYP	FLOW	TYPE OF INITIAL CONDITION							
	RSVRIC	-1.00	INITIAL CONDITION							
	X	.00	WORKING R AND D COEFFICIENT							
449 SA	AREA	4.8	4.9	4.9	5.0	5.1	5.2	5.2	5.3	5.3
447 SQ	DISCHARGE	0.	8.	22.	41.	64.	308.	737.	1286.	1933.
448 SE	ELEVATION	912.00	912.50	913.00	913.50	914.00	914.50	915.00	915.50	916.00

\*\*\*









\*\*\* \*\*

\*\*\*\*\*  
\*  
\* 3001 \*  
\*  
\*\*\*\*\*

COMBINE HYDROGRAPH FROM 29D1 WITH HYDROGRAPH FROM SUB-BASIN 30

457 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3001

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
221.	12.12	63.	21.	16.	16.
		(INCHES) 3.467	4.672	4.672	4.672
		(AC-FT) 31.	42.	42.	42.
CUMULATIVE AREA =		.17 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
\*  
\* 30R1 \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 3001 THROUGH 30R1

HYDROGRAPH ROUTING DATA

460 RS STORAGE ROUTING  
NSTPS 1 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

463 SA	AREA	.0	.1	.2	.3	.4	.4	.5	.5	.5	.5
461 SQ	DISCHARGE	0.	60.	120.	180.	240.	300.	360.	420.	480.	600.
462 SE	ELEVATION	891.50	894.82	897.02	900.39	904.07	904.29	904.44	904.57	904.67	904.87

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.11	.40	1.19	2.55	2.64	2.71	2.77	2.82	2.91
ELEVATION	891.50	894.82	897.02	900.39	904.07	904.29	904.44	904.57	904.67	904.87

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION            30R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 185.	12.23	63.	21.	16.	16.	
		(INCHES)	3.467	4.672	4.672	4.672
		(AC-FT)	31.	42.	42.	42.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 1.	12.23	0.	0.	0.	0.	0.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 900.67	12.23	894.74	892.61	892.34	892.34	

CUMULATIVE AREA = .17 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*                    \*  
464 KK            \*        2801    \*  
\*                    \*  
\*\*\*\*\*

COMBINE HYDROGRAPH FROM 28S1 AND RUNOFF HYDROGRAPH 28C1 WITH HYDROGRAPH FROM 30R1

467 KO            OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	1	PUNCH COMPUTED HYDROGRAPH
IOUT	21	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	1920	LAST ORDINATE PUNCHED OR SAVED
TIMINT	.017	TIME INTERVAL IN HOURS

469 HC            HYDROGRAPH COMBINATION

ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 2801

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+ 1888.	12.72	486.	152.	114.	114.	
	(INCHES)	3.710	4.659	4.659	4.659	
	(AC-FT)	241.	302.	302.	302.	

CUMULATIVE AREA = 1.22 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
470 KK \* 28R1 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 2801 THROUGH PELHAM RD

472 KO OUTPUT CONTROL VARIABLES

IPRNT	3	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE
IPNCH	1	PUNCH COMPUTED HYDROGRAPH
IOUT	21	SAVE HYDROGRAPH ON THIS UNIT
ISAV1	1	FIRST ORDINATE PUNCHED OR SAVED
ISAV2	1920	LAST ORDINATE PUNCHED OR SAVED
TIMINT	.017	TIME INTERVAL IN HOURS

HYDROGRAPH ROUTING DATA

474 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	FLOW	TYPE OF INITIAL CONDITION
RSVRIC	-1.00	INITIAL CONDITION
X	.00	WORKING R AND D COEFFICIENT

477 SA	AREA	.0	.3	.5	1.5	3.2	3.7	4.1	4.6	5.3	5.4
475 SQ	DISCHARGE	0.	104.	208.	417.	878.	1071.	1240.	1366.	2155.	2801.
476 SE	ELEVATION	875.20	879.07	880.77	883.36	887.72	890.27	893.40	896.12	900.23	901.08











PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	31.98-HR
		(CFS)				
+ 209.	12.47		49.	15.	11.	11.
		(INCHES)	3.618	4.486	4.486	4.486
		(AC-FT)	24.	30.	30.	30.
		CUMULATIVE AREA =	.13 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 483 KK \* 32R1 \*  
 \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM BASIN 32 THROUGH PELHAM RD

HYDROGRAPH ROUTING DATA

485 RS	STORAGE ROUTING										
	NSTPS		1	NUMBER OF SUBREACHES							
	ITYP		FLOW	TYPE OF INITIAL CONDITION							
	RSVRIC		-1.00	INITIAL CONDITION							
	X		.00	WORKING R AND D COEFFICIENT							
488 SA	AREA	.0	.1	.1	.2	.2	.2	.2	.3	.4	.7
486 SQ	DISCHARGE	0.	10.	20.	41.	105.	141.	178.	205.	272.	380.
487 SE	ELEVATION	886.05	887.23	887.72	888.47	890.05	890.81	891.55	892.09	894.03	898.66

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.02	.07	.18	.45	.60	.77	.90	1.59	4.32
ELEVATION	886.05	887.23	887.72	888.47	890.05	890.81	891.55	892.09	894.03	898.66

\*\*\* \*\*

HYDROGRAPH AT STATION 32R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	31.98-HR
		(CFS)				
+ 206.	12.53		49.	15.	11.	11.
		(INCHES)	3.618	4.486	4.486	4.486

	(AC-FT)	24.	30.	30.	30.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE		
		6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
	1.	12.53	0.	0.	0.
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
		6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)				
	892.11	12.53	888.41	886.99	886.74
	CUMULATIVE AREA =		.13 SQ MI		

\*\*\* \*\*

```

*****
*
489 KK * 3101 *
*
*****

```

COMBINE ROUTED HYDROGRAPH FROM 28R1 WITH ROUTED HYDROGRAPH FROM 32R1

491 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3101

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
	1518.	12.93	534.	167.	126.
		(CFS)			
		3.701	4.643	4.643	4.643
		(INCHES)			
		265.	332.	332.	332.
		(AC-FT)			
	CUMULATIVE AREA =		1.34 SQ MI		

\*\*\* \*\*

```

*****
*
492 KK * 31R1 *
*
*****

```

ROUTE HYDROGRAPH FROM BASIN 3101 THROUGH 31R1

HYDROGRAPH ROUTING DATA

494 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
497 SA	AREA	.0	.1	.1	.2	.4	.5	.6	.7	.8	1.2
495 SQ	DISCHARGE	0.	112.	223.	446.	963.	1186.	1344.	1526.	2418.	3143.
496 SE	ELEVATION	873.46	876.27	877.06	878.12	880.38	881.40	882.10	883.30	884.56	886.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.07	.16	.35	1.12	1.62	2.01	2.76	3.71	5.17
ELEVATION	873.46	876.27	877.06	878.12	880.38	881.40	882.10	883.30	884.56	886.00

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 112.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 31R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 1512.	12.95	534.	167.	126.	126.	
		(INCHES)	3.701	4.643	4.643	4.643
		(AC-FT)	265.	332.	332.	332.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 3.	12.95	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 883.21	12.95	878.42	875.53	875.02	875.02	

CUMULATIVE AREA = 1.34 SQ MI

\*\*\* \*\*

```

*****
*
498 KK * 31S1 *
*
*****

```

ROUTE HYDROGRAPH FROM 31R1 TO MOUTH OF SUB-BASIN 31

HYDROGRAPH ROUTING DATA

```

500 RS STORAGE ROUTING
      NSTPS      4 NUMBER OF SUBREACHES
      ITYP      FLOW TYPE OF INITIAL CONDITION
      RSVRIC    -1.00 INITIAL CONDITION
      X          .00 WORKING R AND D COEFFICIENT

501 SV STORAGE .0 1.1 2.0 3.5 6.1 7.3 8.3 9.3 11.5 14.1

502 SQ DISCHARGE 0. 112. 223. 446. 963. 1186. 1344. 1526. 2418. 3143.

```

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 1526. TO 2418.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 31S1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+ (CFS)	(HR)	(CFS)				
+ 1508.	13.02	534.	167.	126.	126.	
		(INCHES)	3.701	4.643	4.643	4.643
		(AC-FT)	265.	332.	332.	332.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
+ 2.	13.00	1.	0.	0.	0.

CUMULATIVE AREA = 1.34 SQ MI

\*\*\* \*\*

```

*****
*
503 KK * 31C1 *
*
*****

```

RUNOFF HYDROGRAPH FROM SUB-BASIN 31









\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        31C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.79, TOTAL EXCESS =    4.37

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
124.	12.15	18.	5.	4.	4.	
		(INCHES)	3.537	4.370	4.370	4.370
		(AC-FT)	9.	11.	11.	11.

CUMULATIVE AREA =    .05 SQ MI

\*\*\* \*\*

```

*****
*
508 KK *   3102 *
*
*****

```

COMBINE ROUTED HYDROGRAPH 31S1 WITH HYDROGRAPH FROM SUB-BASIN 31

510 HC                    HYDROGRAPH COMBINATION  
                          ICOMP                    2    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        3102

PEAK FLOW + (CFS)	TIME (HR)	(CFS)	MAXIMUM AVERAGE FLOW			31.98-HR
			6-HR	24-HR	72-HR	
1524.	13.00	552.	173.	130.	130.	
		(INCHES)	3.695	4.634	4.634	4.634
		(AC-FT)	274.	343.	343.	343.

CUMULATIVE AREA =    1.39 SQ MI

\*\*\* \*\*

```

*****
*
511 KK *   1602 *
*
*****

```

COMBINE HYDROGRAPH 3102 WITH HYDROGRAPH 1601

513 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 1602

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
4899.	12.58	1362.	429.	322.	322.	
		(INCHES)	3.990	5.025	5.028	5.028
		(AC-FT)	675.	851.	851.	851.

CUMULATIVE AREA = 3.17 SQ MI

\*\*\* \*\*

\*\*\*\*\*

514 KK \* 33S1 \*

\*\*\*\*\*

ROUTE HYDROGRAPH FROM 1602 TO MOUTH OF SUB-BASIN 33

HYDROGRAPH ROUTING DATA

STATION	ROUTING TYPE	STORAGE	DISCHARGE	11.2	17.5	27.2	43.3	50.7	57.2	62.2	73.9	88.0
516 RS	STORAGE ROUTING	.0	0.	379.	758.	1516.	3111.	3957.	4740.	5375.	6960.	9048.
517 SV	STORAGE	.0	0.	379.	758.	1516.	3111.	3957.	4740.	5375.	6960.	9048.
518 SQ	DISCHARGE	.0	0.	379.	758.	1516.	3111.	3957.	4740.	5375.	6960.	9048.

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 6960. TO 9048.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 33S1

PEAK FLOW TIME MAXIMUM AVERAGE FLOW









.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

522 LS      SCS LOSS RATE  
                  STRTL            .94 INITIAL ABSTRACTION  
                  CRVNBR        68.00 CURVE NUMBER  
                  RTIMP            .00 PERCENT IMPERVIOUS AREA

523 UD      SCS DIMENSIONLESS UNITGRAPH  
                  TLAG            .48 LAG

\*\*\*

UNIT HYDROGRAPH  
 147 END-OF-PERIOD ORDINATES

4.	8.	12.	20.	29.	38.	49.	61.	72.	87.
102.	118.	138.	158.	179.	203.	227.	250.	270.	290.
308.	322.	335.	347.	354.	362.	367.	368.	369.	369.
368.	367.	362.	355.	347.	339.	330.	322.	312.	302.
292.	280.	268.	255.	241.	226.	211.	198.	185.	173.
163.	155.	146.	138.	131.	123.	117.	110.	104.	99.
95.	90.	86.	81.	77.	73.	69.	65.	62.	58.
54.	52.	49.	47.	44.	42.	39.	37.	35.	34.
32.	30.	28.	27.	25.	24.	23.	21.	20.	19.
18.	17.	16.	15.	14.	14.	13.	12.	12.	11.
10.	10.	9.	9.	8.	8.	8.	7.	7.	6.
6.	6.	5.	5.	5.	5.	4.	4.	4.	4.
4.	3.	3.	3.	3.	3.	3.	3.	2.	2.
2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
1.	1.	1.	0.	0.	0.	0.			

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION      33C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.79, TOTAL EXCESS =    4.37

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 695.	12.37	(CFS)			
		143.	44.	33.	33.
		(INCHES)	4.370	4.370	4.370
		(AC-FT)	71.	88.	88.

CUMULATIVE AREA =    .38 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*            \*  
 524 KK    \*    3301    \*  
 \*            \*



533 SE ELEVATION 854.00 858.17 859.90 861.99 866.40 867.06 867.64 868.02 868.80 869.47

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	9.95	26.77	54.99	125.36	137.10	147.72	154.78	169.55	182.52
ELEVATION	854.00	858.17	859.90	861.99	866.40	867.06	867.64	868.02	868.80	869.47

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 33R1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+	(CFS)	(CFS)				
+	4739.	12.88	1478.	473.	355.	355.
		(INCHES)	3.871	4.955	4.958	4.958
		(AC-FT)	733.	938.	939.	939.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE				
		6-HR	24-HR	72-HR	31.98-HR	
+	(AC-FT)	(HR)				
+	155.	12.88	78.	25.	19.	19.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE				
		6-HR	24-HR	72-HR	31.98-HR	
+	(FEET)	(HR)				
+	868.03	12.88	863.33	858.17	857.13	857.13

CUMULATIVE AREA = 3.55 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
535 KK \* 35C1 \*  
\* \*  
\*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 35

SUBBASIN RUNOFF DATA

537 BA SUBBASIN CHARACTERISTICS  
TAREA .39 SUBBASIN AREA

PRECIPITATION DATA

13 PB STORM 8.16 BASIN TOTAL PRECIPITATION

14 PI INCREMENTAL PRECIPITATION PATTERN







+ 1049. 12.20 (CFS) 164. 51. 38. 38.  
 (INCHES) 3.894 4.835 4.835 4.835  
 (AC-FT) 81. 101. 101. 101.

CUMULATIVE AREA = .39 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 540 KK \* 35D1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM SUB-BASIN 35 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

542 RS STORAGE ROUTING  
 NSTPS 1 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

547 SA	AREA	10.6	11.0	11.4	11.8	12.2	12.6	13.0	13.4	13.9	14.0
		14.2	14.3	14.5	14.6	14.8	14.9	15.1			

543 SQ DISCHARGE 0. 14. 40. 74. 114. 159. 209. 264. 322. 385.  
 451. 816. 1429. 2206. 3114. 4136. 5261.

545 SE	ELEVATION	960.00	960.50	961.00	961.50	962.00	962.50	963.00	963.50	964.00	964.50
		965.00	965.50	966.00	966.50	967.00	967.50	968.00			

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	5.39	10.99	16.79	22.80	29.01	35.43	42.05	48.88	55.85
ELEVATION	960.00	960.50	961.00	961.50	962.00	962.50	963.00	963.50	964.00	964.50

STORAGE	62.89	70.01	77.20	84.47	91.81	99.24	106.73
ELEVATION	965.00	965.50	966.00	966.50	967.00	967.50	968.00

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION 35D1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW	
		6-HR	24-HR	72-HR
+	(CFS)	(HR)		31.98-HR
		(CFS)		
+	280.	12.75	145.	50.
			38.	38.
	(INCHES)		3.438	4.767
	(AC-FT)		72.	100.
			100.	100.

PEAK STORAGE	TIME	6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
44.	12.75	27.	11.	8.	8.

PEAK STAGE	TIME	6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)				
963.63	12.75	962.28	960.95	960.72	960.72

CUMULATIVE AREA = .39 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 549 KK \* 36R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 35D1 THROUGH ROPER MTN RD

HYDROGRAPH ROUTING DATA

551 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
554 SA	AREA	.0	.1	.1	.1	.2	.3	.6	.8	1.4	1.9
552 SQ	DISCHARGE	0.	10.	20.	39.	122.	175.	231.	275.	386.	502.
553 SE	ELEVATION	923.08	923.74	924.15	924.79	926.85	927.92	928.94	929.68	931.80	934.59

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.02	.06	.13	.39	.61	1.04	1.54	3.80	8.38
ELEVATION	923.08	923.74	924.15	924.79	926.85	927.92	928.94	929.68	931.80	934.59

\*\*\* \*\*

HYDROGRAPH AT STATION 36R1

PEAK FLOW	TIME	6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 275.	12.92	145.	50.	38.	38.



		(INCHES)	3.437	4.767	4.767	4.767
		(AC-FT)	72.	100.	100.	100.
PEAK STORAGE	TIME			MAXIMUM AVERAGE STORAGE		
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
	2.	12.90	1.	0.	0.	0.
PEAK STAGE	TIME			MAXIMUM AVERAGE STAGE		
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
	929.68	12.92	927.17	924.77	924.36	924.36
CUMULATIVE AREA =			.39 SQ MI			

\*\*\* \*\*

```

*****
*
555 KK * 36S1 *
*
*****

```

ROUTE HYDROGRAPH FROM 36R1 TO ROSEBAY DR

HYDROGRAPH ROUTING DATA

557 RS	STORAGE ROUTING										
	NSTPS	6	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
558 SV	STORAGE	.0	.2	.3	.4	1.0	1.3	1.7	2.0	2.9	4.0
559 SQ	DISCHARGE	0.	10.	20.	39.	122.	175.	231.	275.	386.	502.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 36S1

PEAK FLOW	TIME			MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)					
	275.	13.00	145.	50.	38.	38.
		(CFS)				
		(INCHES)	3.437	4.763	4.764	4.764
		(AC-FT)	72.	100.	100.	100.
PEAK STORAGE	TIME			MAXIMUM AVERAGE STORAGE		
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					

0. 12.95 0. 0. 0. 0.

CUMULATIVE AREA = .39 SQ MI

\*\*\* \*\*

560 KK \*\*\*\*\*  
\* \*  
\* 36S2 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 36S1 TO MOUTH OF SUB-BASIN 36

HYDROGRAPH ROUTING DATA

562 RS	STORAGE ROUTING											
	NSTPS	1	NUMBER OF SUBREACHES									
	ITYP	FLOW	TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
563 SV	STORAGE	.0	.0	.0	.1	.1	.2	.2	.3	.4	.4	
564 SQ	DISCHARGE	0.	10.	20.	39.	122.	175.	231.	275.	386.	502.	

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 20. TO 275.  
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*

HYDROGRAPH AT STATION 36S2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 275.	13.02	145.	50.	38.	38.	
		(INCHES)	3.437	4.763	4.763	4.763
		(AC-FT)	72.	100.	100.	100.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 0.	12.95	0.	0.	0.	0.	0.

CUMULATIVE AREA = .39 SQ MI









CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 573 KK \* 36R2 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 3601 THROUGH DEWBERRY LN

HYDROGRAPH ROUTING DATA

575 RS	STORAGE ROUTING											
	NSTPS	1	NUMBER OF SUBREACHES									
	ITYP		FLOW TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
578 SA	AREA	.0	.1	.1	.1	.6	1.0	1.2	1.2	1.3	1.4	
576 SQ	DISCHARGE	0.	31.	62.	125.	344.	454.	620.	736.	1039.	1351.	
577 SE	ELEVATION	884.54	886.76	887.72	889.16	892.90	894.49	895.17	895.43	896.10	896.48	

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.06	.15	.32	1.54	2.76	3.49	3.79	4.64	5.15
ELEVATION	884.54	886.76	887.72	889.16	892.90	894.49	895.17	895.43	896.10	896.48

\*\*\* \*\*

HYDROGRAPH AT STATION 36R2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 740.	12.37	252.	84.	63.	63.	
		(INCHES)	3.428	4.595	4.595	4.595
		(AC-FT)	125.	167.	167.	167.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 4.	12.35	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR

+ (FEET) (HR)  
 895.44 12.37 890.99 887.39 886.67 886.67

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 579 KK \* 37S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 36R2 TO ROSEBAY DR

HYDROGRAPH ROUTING DATA

581 RS STORAGE ROUTING  
 NSTPS 2 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

582 SV STORAGE .0 .1 .2 .4 1.0 1.4 1.8 2.1 3.0 3.6

583 SQ DISCHARGE 0. 31. 62. 125. 344. 454. 620. 736. 1039. 1351.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 37S1

PEAK FLOW TIME MAXIMUM AVERAGE FLOW  
 + (CFS) (HR) 6-HR 24-HR 72-HR 31.98-HR  
 + 738. 12.38 (CFS) 252. 84. 63. 63.  
 (INCHES) 3.428 4.595 4.595 4.595  
 (AC-FT) 125. 167. 167. 167.

PEAK STORAGE TIME MAXIMUM AVERAGE STORAGE  
 + (AC-FT) (HR) 6-HR 24-HR 72-HR 31.98-HR  
 + 1. 12.38 0. 0. 0. 0.

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*



\*\*\*\*\*  
 \* \*  
 584 KK \* 37R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 37S1 THROUGH ROSEBAY DR

HYDROGRAPH ROUTING DATA

586 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
589 SA	AREA	.0	.1	.1	.1	1.1	1.2	1.3	1.4	1.5	1.5
587 SQ	DISCHARGE	0.	31.	62.	125.	344.	454.	620.	736.	1039.	1351.
588 SE	ELEVATION	876.14	878.34	879.30	880.78	884.95	885.65	886.35	886.57	887.10	887.52

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.06	.14	.30	2.60	3.42	4.30	4.60	5.35	5.98
ELEVATION	876.14	878.34	879.30	880.78	884.95	885.65	886.35	886.57	887.10	887.52

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 37R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 729.	12.43	252.	84.	63.	63.	
		(INCHES)	3.428	4.595	4.595	4.595
		(AC-FT)	125.	167.	167.	167.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 5.	12.43	2.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 886.56	12.43	882.65	878.98	878.27	878.27	

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 590 KK \* 37R2 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 37R1 THROUGH ROSEBAY DR

HYDROGRAPH ROUTING DATA

592 RS	STORAGE ROUTING											
	NSTPS	1	NUMBER OF SUBREACHES									
	ITYP	FLOW	TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
595 SA	AREA	.0	.1	.1	.1	.4	.9	1.3	2.1	2.3	2.4	
593 SQ	DISCHARGE	0.	31.	62.	125.	344.	454.	620.	736.	1039.	1351.	
594 SE	ELEVATION	869.03	871.23	872.17	873.55	877.35	878.85	879.24	879.43	879.74	880.03	

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.07	.16	.30	1.26	2.22	2.63	2.95	3.62	4.29
ELEVATION	869.03	871.23	872.17	873.55	877.35	878.85	879.24	879.43	879.74	880.03

\*\*\* \*\*

HYDROGRAPH AT STATION 37R2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 718.	12.48	252.	84.	63.	63.	
		(INCHES)	3.427	4.594	4.594	4.594
		(AC-FT)	125.	167.	167.	167.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 3.	12.48	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 879.40	12.48	875.39	871.84	871.13	871.13	

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 596 KK \* 37R3 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 37R2 THROUGH SUGARBERRY DR

HYDROGRAPH ROUTING DATA

598 RS	STORAGE ROUTING											
	NSTPS	1	NUMBER OF SUBREACHES									
	ITYP	FLOW	TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
601 SA	AREA	.0	.1	.1	.2	.8	1.1	1.4	1.4	1.7	2.0	
599 SQ	DISCHARGE	0.	31.	62.	125.	344.	454.	620.	736.	1039.	1351.	
600 SE	ELEVATION	862.05	864.26	865.21	866.64	869.54	869.82	870.30	870.49	871.06	871.38	

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.09	.21	.45	1.89	2.16	2.74	3.01	3.90	4.50
ELEVATION	862.05	864.26	865.21	866.64	869.54	869.82	870.30	870.49	871.06	871.38

\*\*\* \*\*

HYDROGRAPH AT STATION 37R3

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 710.	12.52	252.	84.	63.	63.	
		(INCHES)	3.426	4.594	4.594	4.594
		(AC-FT)	125.	167.	167.	167.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 3.	12.52	1.	0.	0.	0.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 870.45	12.52	867.86	864.74	864.06	864.06	

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

602 KK \* 37S2 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH 37R3 TO MOUTH OF SUB-BASIN 37

HYDROGRAPH ROUTING DATA

604 RS STORAGE ROUTING  
NSTPS 2 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

605 SV	STORAGE	.0	.2	.3	.5	1.3	2.0	3.1	4.1	9.3	13.2
606 SQ	DISCHARGE	0.	31.	62.	125.	344.	454.	620.	736.	1039.	1351.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 37S2

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
676.	12.63	252.	84.	63.	63.
	(INCHES)	3.426	4.594	4.594	4.594
	(AC-FT)	125.	167.	167.	167.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
2.	12.63	1.	0.	0.	0.

CUMULATIVE AREA = .68 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*







87.	82.	78.	73.	69.	65.	61.	58.	56.	53.
50.	48.	46.	43.	41.	39.	37.	36.	34.	33.
32.	30.	29.	27.	26.	25.	24.	23.	21.	20.
19.	18.	18.	17.	16.	15.	14.	14.	13.	13.
12.	11.	11.	10.	10.	9.	9.	8.	8.	8.
7.	7.	7.	6.	6.	6.	5.	5.	5.	5.
5.	4.	4.	4.	4.	4.	3.	3.	3.	3.
3.	3.	3.	2.	2.	2.	2.	2.	2.	2.
2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION            37C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.44, TOTAL EXCESS =    4.72

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+	279.	12.43	63.	19.	15.	15.
		(CFS)				
		(INCHES)	3.798	4.718	4.718	4.718
		(AC-FT)	31.	39.	39.	39.

CUMULATIVE AREA =    .15 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*                    \*  
612 KK            \*            3701            \*  
\*                    \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 37S2 WITH HYDROGRAPH FROM SUB-BASIN 37

614 HC            HYDROGRAPH COMBINATION  
                  ICOMP                    2    NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION            3701

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+	923.	12.60	313.	104.	78.	78.
		(CFS)				
		(INCHES)	3.481	4.616	4.616	4.616
		(AC-FT)	155.	206.	206.	206.









\*\*\*

UNIT HYDROGRAPH  
66 END-OF-PERIOD ORDINATES

4.	11.	22.	33.	49.	69.	91.	116.	137.	153.
165.	173.	174.	174.	170.	162.	153.	142.	131.	117.
102.	88.	76.	67.	59.	53.	47.	42.	37.	33.
29.	25.	23.	20.	18.	16.	14.	12.	11.	9.
8.	7.	7.	6.	5.	5.	4.	4.	3.	3.
2.	2.	2.	2.	2.	1.	1.	1.	1.	1.
1.	1.	0.	0.	0.	0.				

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        38C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    1.79, TOTAL EXCESS =    6.37

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+	338.	43.	14.	10.	10.	
	12.10	(INCHES)	4.988	6.368	6.368	6.368
+		(AC-FT)	21.	27.	27.	27.

CUMULATIVE AREA =    .08 SQ MI

\*\*\* \*\*

```

*****
*           *
620 KK      *   38D1 *
*           *
*****

```

ROUTE HYDROGRAPH FROM SUB-BASIN 38 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

STATION	ROUTING DATA	1	2	3	4	5	6	7	8	9	10	11
622 RS	STORAGE ROUTING											
	NSTPS	1										
	ITYP	FLOW										
	RSVRIC	-1.00										
	X	.00										
627 SA	AREA	1.5	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	2.0	
		2.2	2.4	2.6	2.8	3.0	3.3	3.5	3.6	3.8	3.9	
623 SQ	DISCHARGE	0.	15.	42.	78.	120.	168.	201.	205.	210.	214.	
		218.	222.	226.	230.	234.	238.	242.	421.	745.	1164.	
625 SE	ELEVATION	904.00	904.50	905.00	905.50	906.00	906.50	907.00	907.50	908.00	908.50	
		909.00	909.50	910.00	910.50	911.00	911.50	912.00	912.50	913.00	913.50	











HYDROGRAPH AT STATION 39C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 2.86, TOTAL EXCESS = 5.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	770.	12.48	181.	57.	43.	43.
		(INCHES)	4.236	5.304	5.304	5.304
		(AC-FT)	90.	113.	113.	113.
		CUMULATIVE AREA =	.40 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \*  
 634 KK \* 39R1 \*  
 \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM SUB-BASIN 39 THROUGH ROPER MTN ROAD

HYDROGRAPH ROUTING DATA

636 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
639 SA	AREA	.0	.9	1.3	1.9	3.4	5.1	5.4	5.5	5.5	5.7
637 SQ	DISCHARGE	0.	120.	240.	360.	480.	600.	720.	840.	960.	1200.
638 SE	ELEVATION	903.50	907.70	909.91	912.73	916.77	921.37	921.92	922.19	922.39	922.72

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	1.29	3.70	8.10	18.60	38.06	40.94	42.40	43.50	45.35
ELEVATION	903.50	907.70	909.91	912.73	916.77	921.37	921.92	922.19	922.39	922.72

\*\*\* \*\*

HYDROGRAPH AT STATION 39R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR

+	(CFS)	(HR)				
+	485.	12.90	(CFS)	181.	57.	43.
			(INCHES)	4.235	5.304	5.304
			(AC-FT)	90.	113.	113.
	PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE		
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	19.	12.90	5.	1.	1.	1.
	PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	916.94	12.90	908.72	905.20	904.78	904.78
			CUMULATIVE AREA =	.40 SQ MI		

\*\*\* \*\*

```

*****
*
640 KK * 3901 *
*
*****

```

COMBINE HYDROGRAPH 38D1 WITH HYDROGRAPH FROM ROUTED HYDROGRAPH 39R1

642 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3901

	PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
+	600.	12.47	(CFS)	224.	70.	53.
			(INCHES)	4.354	5.482	5.482
			(AC-FT)	111.	140.	140.
			CUMULATIVE AREA =	.48 SQ MI		

\*\*\* \*\*

```

*****
*
643 KK * 39R2 *

```

\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH 3901 THROUGH I-85

HYDROGRAPH ROUTING DATA

645 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
648 SA	AREA	.0	.3	.8	1.5	1.8	1.9	1.9	1.9	1.9	1.9
646 SQ	DISCHARGE	0.	120.	240.	360.	480.	600.	720.	840.	960.	1200.
647 SE	ELEVATION	891.50	895.49	898.40	902.16	904.33	904.60	904.81	904.98	905.13	905.26

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.43	2.06	6.39	10.01	10.51	10.90	11.21	11.50	11.74
ELEVATION	891.50	895.49	898.40	902.16	904.33	904.60	904.81	904.98	905.13	905.26

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        39R2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 573.	12.77	224.	70.	53.	53.	
		(INCHES)	4.354	5.482	5.482	5.482
		(AC-FT)	111.	140.	140.	140.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 10.	12.77	3.	1.	1.	1.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 904.54	12.77	897.76	893.54	893.04	893.04	
CUMULATIVE AREA =			.48 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 649 KK \* 40S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 39R1 TO MOUTH OF SUB-BASIN 40

HYDROGRAPH ROUTING DATA

651 RS STORAGE ROUTING  
 NSTPS 1 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

652 RC NORMAL DEPTH CHANNEL  
 ANL .075 LEFT OVBANK N-VALUE  
 ANCH .055 MAIN CHANNEL N-VALUE  
 ANR .085 RIGHT OVBANK N-VALUE  
 RLNTH 900. REACH LENGTH  
 SEL .0089 ENERGY SLOPE  
 ELMAX .0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

--- LEFT OVBANK --- + ----- MAIN CHANNEL ----- + --- RIGHT OVBANK ---  
 654 RY ELEVATION 896.00 888.00 887.00 883.00 883.00 887.00 888.00 896.00  
 653 RX DISTANCE .00 150.00 162.50 165.80 174.30 177.50 185.00 235.00

\*\*\*

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.13	.27	.43	.61	.80	1.01	1.34	1.89	2.67
OUTFLOW	.00	11.31	35.68	70.31	114.54	168.25	233.75	327.67	451.93	620.46
ELEVATION	883.00	883.68	884.37	885.05	885.74	886.42	887.11	887.79	888.47	889.16
STORAGE	3.70	4.96	6.47	8.22	10.21	12.45	14.92	17.64	20.60	23.80
OUTFLOW	844.91	1135.24	1500.63	1949.59	2490.22	3130.22	3876.98	4737.62	5719.06	6827.97
ELEVATION	889.84	890.53	891.21	891.89	892.58	893.26	893.95	894.63	895.32	896.00

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 40S1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 567.	12.85	224.	70.	53.	53.	
		(INCHES)	4.353	5.482	5.482	5.482
		(AC-FT)	111.	140.	140.	140.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 2.	12.85	1.	0.	0.	0.	0.
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			







RTIMP .00 PERCENT IMPERVIOUS AREA

659 UD SCS DIMENSIONLESS UNITGRAPH  
TLAG .60 LAG

\*\*\*

UNIT HYDROGRAPH  
183 END-OF-PERIOD ORDINATES

2.	5.	7.	10.	15.	21.	26.	32.	39.	46.
53.	62.	71.	80.	90.	102.	114.	126.	140.	154.
169.	183.	195.	207.	219.	230.	238.	247.	255.	261.
265.	270.	275.	275.	276.	277.	277.	276.	276.	275.
272.	267.	263.	258.	253.	247.	242.	237.	231.	225.
218.	211.	204.	196.	189.	180.	171.	162.	153.	145.
138.	130.	124.	119.	114.	108.	104.	99.	95.	90.
87.	83.	79.	76.	73.	70.	68.	65.	62.	59.
57.	54.	52.	50.	48.	45.	43.	41.	39.	38.
36.	35.	33.	32.	30.	29.	28.	27.	26.	24.
23.	22.	21.	20.	19.	19.	18.	17.	16.	15.
15.	14.	14.	13.	12.	12.	11.	11.	10.	10.
10.	9.	9.	8.	8.	8.	7.	7.	7.	6.
6.	6.	6.	5.	5.	5.	5.	4.	4.	4.
4.	4.	4.	3.	3.	3.	3.	3.	3.	3.
3.	3.	2.	2.	2.	2.	2.	2.	2.	2.
2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	1.	1.	0.	0.	0.	0.
0.	0.	0.							

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 40C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 2.97, TOTAL EXCESS = 5.19

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
663.	12.48	157.	49.	37.	37.
		(INCHES) 4.149	5.186	5.186	5.186
		(AC-FT) 78.	97.	97.	97.

CUMULATIVE AREA = .35 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
660 KK \* 4001 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 40S1 WITH HYDROGRAPH FROM SUB-BASIN 40

662 HC HYDROGRAPH COMBINATION



ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 4001

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 1096.	12.70	380.	119.	90.	90.
	(INCHES)	4.267	5.357	5.357	5.357
	(AC-FT)	189.	237.	237.	237.
CUMULATIVE AREA =		.83 SQ MI			

\*\*\* \*\*

```

*****
*
663 KK * 40D1 *
*
*****

```

ROUTE HYDROGRAPH FROM 4001 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

665 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
670 SA	AREA	12.8	14.1	14.4	14.6	14.9	15.5	16.1	16.8	17.4	18.1
		18.7	19.3	20.0							
666 SQ	DISCHARGE	0.	4.	94.	376.	593.	601.	609.	616.	624.	1289.
		2498.	4063.	5914.							
668 SE	ELEVATION	884.00	886.50	887.00	887.50	888.00	888.50	889.00	889.50	890.00	890.50
		891.00	891.50	892.00							

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	33.57	40.68	47.93	55.30	62.90	70.82	79.05	87.61	96.48
ELEVATION	884.00	886.50	887.00	887.50	888.00	888.50	889.00	889.50	890.00	890.50
STORAGE	105.67	115.18	125.00							
ELEVATION	891.00	891.50	892.00							

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 40D1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 613.	13.63	336.	103.	77.	77.
	(INCHES)	3.770	4.631	4.631	4.631
	(AC-FT)	167.	205.	205.	205.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
+ 75.	13.63	53.	35.	26.	26.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)				
+ 889.28	13.63	887.80	886.56	885.92	885.92

CUMULATIVE AREA = .83 SQ MI

\*\*\* \*\*

```

*****
*
672 KK      37S3 *
*
*****
    
```

ROUTE HYDROGRAPH 40D1 TO 3702

HYDROGRAPH ROUTING DATA

674 RS STORAGE ROUTING  
 NSTPS 2 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

675 RC NORMAL DEPTH CHANNEL  
 ANL .063 LEFT OVBANK N-VALUE  
 ANCH .043 MAIN CHANNEL N-VALUE  
 ANR .063 RIGHT OVBANK N-VALUE  
 RLNTH 640. REACH LENGTH  
 SEL .0094 ENERGY SLOPE  
 ELMAX .0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

	---	LEFT OVBANK	---	+	-----	MAIN CHANNEL	-----	+	---	RIGHT OVBANK	---
677 RY	ELEVATION	868.00	864.00	860.00	855.00	855.00	860.00	864.00	868.00		
676 RX	DISTANCE	.00	240.00	445.50	447.00	453.00	454.50	488.00	510.00		

\*\*\*

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.06	.13	.20	.27	.35	.44	.52	.71	1.29
OUTFLOW	.00	9.82	29.28	54.90	85.56	120.77	160.28	204.01	267.09	392.25
ELEVATION	855.00	855.68	856.37	857.05	857.74	858.42	859.11	859.79	860.47	861.16
STORAGE	2.28	3.69	5.50	7.72	10.37	13.47	17.02	21.02	25.47	30.38
OUTFLOW	621.70	991.42	1532.91	2274.90	3230.75	4445.62	5949.13	7766.81	9923.31	12442.41
ELEVATION	861.84	862.53	863.21	863.89	864.58	865.26	865.95	866.63	867.32	868.00

\*\*\* \*\*

HYDROGRAPH AT STATION 37S3

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
613.	13.68	336.	103.	77.	77.	
		(INCHES)	3.769	4.630	4.630	4.630
		(AC-FT)	167.	205.	205.	205.
PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE				
		6-HR	24-HR	72-HR	31.98-HR	
1.	13.52	1.	0.	0.	0.	
PEAK STAGE + (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE				
		6-HR	24-HR	72-HR	31.98-HR	
861.82	13.67	859.96	856.99	856.49	856.49	

CUMULATIVE AREA = .83 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
678 KK \* 3702 \*  
\* \*  
\*\*\*\*\*

COMBINE HYDROGRAPH 3701 WITH HYDROGRAPH FROM SUB-BASIN 40D1

680 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3702

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR

+	(CFS)	(HR)							
+	1477.	12.67	(CFS)	643.	207.	155.	155.		
			(INCHES)	3.593	4.623	4.623	4.623		
			(AC-FT)	319.	411.	411.	411.		

CUMULATIVE AREA = 1.66 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 681 KK \* 34S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 3702 TO 3401

HYDROGRAPH ROUTING DATA

683 RS	STORAGE ROUTING										
	NSTPS	2	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
684 SV	STORAGE	.0	.2	.3	.5	3.5	4.9	6.3	7.1	9.9	11.7
685 SQ	DISCHARGE	0.	45.	90.	181.	774.	1114.	1347.	1489.	2586.	3362.

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 34S1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR		
+	(CFS)	(HR)					
+	1453.	12.77	(CFS)	643.	207.	155.	155.
			(INCHES)	3.592	4.623	4.623	4.623
			(AC-FT)	319.	410.	411.	411.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE				
		6-HR	24-HR	72-HR	31.98-HR		
+	(AC-FT)	(HR)					
	3.	12.75	1.	0.	0.	0.	

CUMULATIVE AREA = 1.66 SQ MI

\*\*\* \*\*

686 KK \* 3401 \*

COMBINE ROUTED HYDROGRAPH 34S1 WITH ROUTED HYDROGRAPH 33R1

688 HC HYDROGRAPH COMBINATION ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3401

Table with 6 columns: PEAK FLOW, TIME, MAXIMUM AVERAGE FLOW (6-HR, 24-HR, 72-HR, 31.98-HR), and units (CFS, HR, INCHES, AC-FT).

CUMULATIVE AREA = 5.22 SQ MI

\*\*\* \*\*

689 KK \* 34C1 \*

RUNOFF HYDROGRAPH FROM SUB-BASIN 34

SUBBASIN RUNOFF DATA

691 BA SUBBASIN CHARACTERISTICS TAREA .25 SUBBASIN AREA

PRECIPITATION DATA

13 PB STORM 8.16 BASIN TOTAL PRECIPITATION

Table with 11 columns showing INCREMENTAL PRECIPITATION PATTERN with values .00.









CUMULATIVE AREA = .25 SQ MI

\*\*\* \*\*

694 KK 3402

COMBINE HYDROGRAPH 3401 WITH HYDROGRAPH FROM SUB-BASIN 34

696 HC HYDROGRAPH COMBINATION ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 3402

Table with 6 columns: PEAK FLOW, TIME, 6-HR, 24-HR, 72-HR, 31.98-HR. Rows include flow in CFS, inches, and AC-FT.

CUMULATIVE AREA = 5.46 SQ MI

\*\*\* \*\*

697 KK 34R1

ROUTE HYDROGRAPH 3402 THROUGH MUDDY FORD

HYDROGRAPH ROUTING DATA

699 RS STORAGE ROUTING NSTPS 1 NUMBER OF SUBREACHES ITYP FLOW TYPE OF INITIAL CONDITION RSVRIC -1.00 INITIAL CONDITION X .00 WORKING R AND D COEFFICIENT

702 SA AREA .0 1.1 5.6 13.1 22.8 23.6 24.5 25.0 26.1 26.7

700 SQ DISCHARGE 0. 216. 432. 863. 2204. 3553. 4237. 4730. 9308. 12100.

701 SE            ELEVATION        848.24    851.93    853.54    855.00    859.57    859.94    861.50    862.16    863.01    863.58

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	1.37	6.28	19.52	100.51	109.09	146.64	162.98	184.68	199.72
ELEVATION	848.24	851.93	853.54	855.00	859.57	859.94	861.50	862.16	863.01	863.58

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        34R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
+	4813.	13.28	(CFS)			
			2193.	707.	532.	532.
			(INCHES)	4.818	4.824	4.824
			(AC-FT)	1404.	1405.	1405.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
+	163.	13.28	78.	22.	16.	16.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
+	862.18	13.28	858.12	852.75	851.64	851.64

CUMULATIVE AREA =    5.46 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*            \*  
703 KK    \*    41S1   \*  
\*            \*  
\*\*\*\*\*

ROUTE HYDROGRAPH 34R1 TO MOUTH OF SUB-BASIN 41

HYDROGRAPH ROUTING DATA

705 RS            STORAGE ROUTING

NSTPS	15	NUMBER OF SUBREACHES
ITYP	FLOW	TYPE OF INITIAL CONDITION
RSVRIC	-1.00	INITIAL CONDITION
X	.00	WORKING R AND D COEFFICIENT

706 SV            STORAGE        .0        4.9        10.0        32.7        73.1        103.8        119.6        129.5        200.3        240.9









(AC-FT) 67. 83. 83. 83.  
CUMULATIVE AREA = .37 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
713 KK \* 4301 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 41S1 WITH HYDROGRAPH FROM SUB-BASIN 41

715 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 4301

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 4894.	13.48	2281.	749.	563.	563.
		(INCHES) 3.637	4.782	4.787	4.787
		(AC-FT) 1131.	1487.	1489.	1489.

CUMULATIVE AREA = 5.83 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
716 KK \* 42C1 \*  
\* \*  
\*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 42

SUBBASIN RUNOFF DATA

718 BA SUBBASIN CHARACTERISTICS  
TAREA .31 SUBBASIN AREA

PRECIPITATION DATA

13 PB STORM 8.16 BASIN TOTAL PRECIPITATION

14 PI INCREMENTAL PRECIPITATION PATTERN









PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	31.98-HR
		(CFS)				
+ 693.	12.32		133.	42.	31.	31.
		(INCHES)	4.067	5.069	5.069	5.069
		(AC-FT)	66.	82.	82.	82.
		CUMULATIVE AREA =	.31 SQ MI			

\*\*\* \*\*

```

*****
*
721 KK * 42D1 *
*
*****

```

ROUTE HYDROGRAPH FROM SUB-BASIN 42 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

723 RS	STORAGE ROUTING										
	NSTPS		1	NUMBER OF SUBREACHES							
	ITYP		FLOW	TYPE OF INITIAL CONDITION							
	RSVRIC		-1.00	INITIAL CONDITION							
	X		.00	WORKING R AND D COEFFICIENT							
728 SA	AREA	4.7	5.1	5.6	6.0	6.5	6.9	7.4	7.8	8.3	8.6
		8.9	9.2	9.5	9.8	10.1	10.4	10.7			
724 SQ	DISCHARGE	0.	0.	0.	0.	0.	27.	75.	185.	278.	390.
		523.	673.	839.	1019.	1212.	1417.	1634.			
726 SE	ELEVATION	876.00	876.50	877.00	877.50	878.00	878.50	879.00	879.50	880.00	880.50
		881.00	881.50	882.00	882.50	883.00	883.50	884.00			

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	2.44	5.10	7.99	11.10	14.45	18.01	21.81	25.82	30.03
ELEVATION	876.00	876.50	877.00	877.50	878.00	878.50	879.00	879.50	880.00	880.50
STORAGE	34.39	38.91	43.58	48.41	53.39	58.53	63.82			
ELEVATION	881.00	881.50	882.00	882.50	883.00	883.50	884.00			

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION 42D1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
+ (CFS)	(HR)		6-HR	24-HR	72-HR	31.98-HR
		(CFS)				

+	448.	12.63	131.	42.	31.	31.
		(INCHES)	3.979	5.067	5.068	5.068
		(AC-FT)	65.	82.	82.	82.
PEAK STORAGE	TIME		6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	32.	12.63	20.	14.	14.	14.
PEAK STAGE	TIME		6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	880.72	12.63	879.18	878.46	878.34	878.34
CUMULATIVE AREA =			.31 SQ MI			

\*\*\* \*\*

```

*****
*
730 KK * 43S1 *
*
*****

```

ROUTE HYDROGRAPH 42D1 TO MOUTH OF SUB-BASIN 43

HYDROGRAPH ROUTING DATA

732 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	FLOW	TYPE OF INITIAL CONDITION
RSVRIC	-1.00	INITIAL CONDITION
X	.00	WORKING R AND D COEFFICIENT

733 RC NORMAL DEPTH CHANNEL

ANL	.072	LEFT OVBANK N-VALUE
ANCH	.068	MAIN CHANNEL N-VALUE
ANR	.068	RIGHT OVBANK N-VALUE
RLNTH	1750.	REACH LENGTH
SEL	.0091	ENERGY SLOPE
ELMAX	.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

	---	LEFT OVBANK	---	+	-----	MAIN CHANNEL	-----	+	---	RIGHT OVBANK	---
735 RY	ELEVATION	872.00	864.00	860.00	855.00	855.00	860.00	860.00	868.00	876.00	
734 RX	DISTANCE	.00	65.00	131.50	136.00	144.00	148.50	198.00	240.00		

\*\*\*

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.40	.89	1.46	2.13	3.00	4.85	7.81	11.90	16.95
OUTFLOW	.00	19.46	62.70	126.91	212.62	335.66	544.51	884.19	1398.27	2151.95
ELEVATION	855.00	856.11	857.21	858.32	859.42	860.53	861.63	862.74	863.84	864.95
STORAGE	22.71	29.18	36.34	44.17	52.66	61.81	71.54	81.55	91.82	102.35











CUMULATIVE AREA = .24 SQ MI

\*\*\* \*\*

741 KK 4301

COMBINE ROUTED HYDROGRAPH 43S1 WITH HYDROGRAPH FROM SUB-BASIN 43

743 HC HYDROGRAPH COMBINATION ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 4301

Table with 6 columns: PEAK FLOW (CFS), TIME (HR), MAXIMUM AVERAGE FLOW (6-HR, 24-HR, 72-HR, 31.98-HR), and values for peak flow (913), time (12.42), and flow rates (250, 80, 60, 60).

CUMULATIVE AREA = .54 SQ MI

\*\*\* \*\*

744 KK 43D1

ROUTE HYDROGRAPH FROM 4301 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

746 RS STORAGE ROUTING NSTPS 1 NUMBER OF SUBREACHES ITYP FLOW TYPE OF INITIAL CONDITION RSVRIC -1.00 INITIAL CONDITION X .00 WORKING R AND D COEFFICIENT

Table with 11 columns: AREA, DISCHARGE, and values for area (1.5-2.4) and discharge (0-4783).

748 SE ELEVATION 876.00 876.50 877.00 877.50 878.00 878.50 879.00 879.50 880.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.79	1.64	2.54	3.49	4.49	5.55	6.65	7.81
ELEVATION	876.00	876.50	877.00	877.50	878.00	878.50	879.00	879.50	880.00

\*\*\* \*\*

HYDROGRAPH AT STATION 43D1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
		6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)			
		(CFS)			
+	913.	12.42	250.	80.	60.
		(INCHES)	4.289	5.525	5.531
		(AC-FT)	124.	159.	160.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE		
		6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)			
	5.	12.42	3.	2.	1.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
		6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)			
	878.59	12.42	877.95	876.98	876.74

CUMULATIVE AREA = .54 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 750 KK \* 4302 \*  
 \* \*  
 \*\*\*\*\*

COMBINE HYDROGRAPH 4301 WITH HYDROGRAPH 43D1

752 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 4302

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
		6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)			
		(CFS)			

+	5231.	13.48	2518.	829.	624.	624.
		(INCHES)	3.675	4.845	4.850	4.850
		(AC-FT)	1249.	1646.	1648.	1648.

CUMULATIVE AREA = 6.37 SQ MI

\*\*\* \*\*

```

*****
*
753 KK * 41R1 *
*
*****

```

ROUTE HYDROGRAPH 4302 THROUGH I-85

HYDROGRAPH ROUTING DATA

755 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
758 SA	AREA	.0	1.1	1.5	6.6	12.9	18.0	18.5	18.8	19.8	20.0
756 SQ	DISCHARGE	0.	235.	470.	939.	2321.	3415.	4346.	4941.	8993.	11691.
757 SE	ELEVATION	839.40	841.42	843.33	845.88	849.27	852.42	853.16	853.44	854.66	856.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.72	3.15	12.64	45.01	93.53	107.07	112.29	135.79	162.41
ELEVATION	839.40	841.42	843.33	845.88	849.27	852.42	853.16	853.44	854.66	856.00

\*\*\* \*\*

HYDROGRAPH AT STATION 41R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW				
			6-HR	24-HR	72-HR	31.98-HR	
+	(CFS)	(HR)					
+	4939.	13.75	(CFS)				
			2507.	829.	624.	624.	
			(INCHES)	3.658	4.845	4.850	4.850
			(AC-FT)	1243.	1646.	1648.	1648.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE				
			6-HR	24-HR	72-HR	31.98-HR	
+	(AC-FT)	(HR)					

112.	13.75	55.	15.	12.	12.
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE		
		6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)				
853.44	13.75	849.52	843.54	842.51	842.51

CUMULATIVE AREA = 6.37 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 759 KK \* 44R1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 41R1 THROUGH HORN BARRIER DR

HYDROGRAPH ROUTING DATA

761 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
764 SA	AREA	.0	.7	.8	2.3	7.4	8.1	9.5	11.2	19.4	20.4
762 SQ	DISCHARGE	0.	235.	470.	939.	2321.	3415.	4346.	4941.	8993.	11691.
763 SE	ELEVATION	834.32	838.33	840.30	842.14	844.81	846.12	847.48	848.93	852.57	854.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.94	2.40	5.10	17.31	27.43	39.37	54.33	109.21	137.64
ELEVATION	834.32	838.33	840.30	842.14	844.81	846.12	847.48	848.93	852.57	854.00

\*\*\* \*\*

HYDROGRAPH AT STATION 44R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 4652.	14.02	2505.	829.	623.	623.
		(INCHES)	3.656	4.845	4.850
		(AC-FT)	1242.	1646.	1648.

















.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

776 LS      SCS LOSS RATE  
                      STRTL         .74    INITIAL ABSTRACTION  
                      CRVNBR      73.00    CURVE NUMBER  
                      RTIMP         .00    PERCENT IMPERVIOUS AREA

777 UD      SCS DIMENSIONLESS UNITGRAPH  
                      TLAG            .38    LAG

\*\*\*

UNIT HYDROGRAPH  
 115 END-OF-PERIOD ORDINATES

8.	17.	33.	53.	75.	100.	127.	160.	194.	237.
282.	331.	385.	438.	483.	528.	562.	593.	617.	634.
648.	651.	654.	652.	649.	638.	621.	604.	584.	564.
541.	519.	493.	464.	434.	400.	366.	338.	310.	287.
267.	249.	232.	215.	201.	187.	175.	165.	155.	144.
134.	126.	117.	109.	100.	93.	88.	82.	76.	71.
66.	62.	58.	54.	50.	46.	43.	40.	37.	35.
33.	30.	28.	26.	25.	23.	21.	20.	19.	17.
16.	15.	14.	13.	12.	11.	11.	10.	9.	9.
8.	7.	7.	7.	6.	6.	6.	5.	5.	5.
4.	4.	4.	3.	3.	3.	2.	2.	2.	2.
1.	1.	1.	0.	0.					

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION      45C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.21, TOTAL EXCESS =    4.95

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(CFS)			
+	1291.	224.	69.	52.	52.
	(HR)	(INCHES)			
		3.981	4.952	4.952	4.952
		(AC-FT)			
		111.	138.	138.	138.

CUMULATIVE AREA =    .52 SQ MI

\*\*\* \*\*

778 KK      \*\*\*\*\*  
                      \*                    \*  
                      \*         45D1      \*  
                      \*                    \*  
                      \*\*\*\*\*

ROUTE HYDROGRAPH FROM SUB-BASIN 45 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

780 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
785 SA	AREA	13.6	14.1	14.6	15.1	15.6	16.1	16.6	17.2	17.7	18.7
		19.8	20.8	21.9	22.9	24.0	25.0	26.1			
781 SQ	DISCHARGE	0.	18.	40.	69.	102.	141.	183.	229.	279.	715.
		1473.	2440.	3576.	4860.	6276.	7812.	9458.			
783 SE	ELEVATION	888.00	888.50	889.00	889.50	890.00	890.50	891.00	891.50	892.00	892.50
		893.00	893.50	894.00	894.50	895.00	895.50	896.00			

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	6.92	14.10	21.53	29.22	37.16	45.36	53.81	62.52	71.62
ELEVATION	888.00	888.50	889.00	889.50	890.00	890.50	891.00	891.50	892.00	892.50
STORAGE	81.24	91.39	102.06	113.26	124.98	137.22	149.98			
ELEVATION	893.00	893.50	894.00	894.50	895.00	895.50	896.00			

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION 45D1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)	(CFS)				
+ 340.	12.90	183.	68.	51.	51.	
		(INCHES)	3.254	4.856	4.856	4.856
		(AC-FT)	91.	135.	135.	135.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)					
+ 64.	12.90	44.	19.	14.	14.	
PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)					
+ 892.07	12.90	890.91	889.27	888.95	888.95	

CUMULATIVE AREA = .52 SQ MI

\*\*\* \*\*

```

*****
*
787 KK * 46S1 *
*
*****

```

ROUTE HYDROGRAPH 45D1 TO MOUTH OF SUB-BASIN 46

HYDROGRAPH ROUTING DATA

```

789 RS STORAGE ROUTING
      NSTPS          1 NUMBER OF SUBREACHES
      ITYP           FLOW TYPE OF INITIAL CONDITION
      RSVRIC         -1.00 INITIAL CONDITION
      X              .00 WORKING R AND D COEFFICIENT

```

```

790 RC NORMAL DEPTH CHANNEL
      ANL           .075 LEFT OVBANK N-VALUE
      ANCH          .040 MAIN CHANNEL N-VALUE
      ANR           .075 RIGHT OVBANK N-VALUE
      RLNTH         3100. REACH LENGTH
      SEL           .0097 ENERGY SLOPE
      ELMAX          .0 MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

```

CROSS-SECTION DATA

```

--- LEFT OVBANK --- + ----- MAIN CHANNEL ----- + --- RIGHT OVBANK ---
792 RY ELEVATION 864.00 852.00 848.00 844.50 844.50 848.00 852.00 864.00
791 RX DISTANCE .00 160.00 209.50 212.00 218.00 221.50 300.00 400.00

```

\*\*\*

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.50	1.13	1.89	3.18	6.67	12.56	20.84	31.34	43.51
OUTFLOW	.00	22.52	72.92	148.72	270.01	492.13	868.21	1445.94	2294.22	3414.43
ELEVATION	844.50	845.53	846.55	847.58	848.61	849.63	850.66	851.68	852.71	853.74
STORAGE	57.29	72.70	89.74	108.39	128.68	150.58	174.11	199.27	226.05	254.45
OUTFLOW	4808.97	6495.19	8490.86	10813.71	13481.35	16511.10	19920.04	23724.93	27942.27	32588.27
ELEVATION	854.76	855.79	856.82	857.84	858.87	859.89	860.92	861.95	862.97	864.00

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 46S1

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
+ (CFS)	(HR)					
+ 317.	13.07	182.	68.	51.	51.	
		(INCHES)	3.246	4.850	4.850	4.850
		(AC-FT)	90.	135.	135.	135.
PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE				
		6-HR	24-HR	72-HR	31.98-HR	
+ (AC-FT)	(HR)					
+ 4.	13.07	2.	1.	1.	1.	
PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE				









RTIMP .00 PERCENT IMPERVIOUS AREA

797 UD SCS DIMENSIONLESS UNITGRAPH  
TLAG .39 LAG

\*\*\*

UNIT HYDROGRAPH  
120 END-OF-PERIOD ORDINATES

3.	5.	10.	16.	23.	31.	39.	49.	59.	71.
86.	100.	116.	133.	148.	163.	176.	186.	195.	202.
207.	211.	211.	212.	212.	211.	207.	202.	196.	190.
184.	177.	170.	162.	154.	145.	134.	124.	114.	105.
97.	90.	84.	79.	73.	68.	64.	60.	56.	53.
50.	47.	44.	41.	38.	36.	33.	31.	29.	27.
25.	24.	22.	21.	19.	18.	17.	16.	15.	14.
13.	12.	11.	10.	10.	9.	8.	8.	7.	7.
6.	6.	6.	5.	5.	5.	4.	4.	4.	4.
3.	3.	3.	3.	3.	2.	2.	2.	2.	2.
2.	2.	2.	1.	1.	1.	1.	1.	1.	1.
1.	1.	1.	1.	0.	0.	0.	0.	0.	0.

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 46C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.56, TOTAL EXCESS = 4.60

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
394.	12.27	70.	22.	16.	16.
		(INCHES) 3.714	4.602	4.602	4.602
		(AC-FT) 35.	43.	43.	43.

CUMULATIVE AREA = .18 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
798 KK \* 4601 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 46S1 WITH HYDROGRAPH FROM SUB-BASIN 46

800 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 4601

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
		(CFS)			
+ 503.	12.35	247.	90.	67.	67.
		(INCHES)	4.787	4.788	4.788
		(AC-FT)	123.	178.	178.
CUMULATIVE AREA =		.70 SQ MI			

\*\*\* \*\*

```

*****
*
801 KK * 4402 *
*
*****

```

COMBINE HYDROGRAPH 4401 WITH HYDROGRAPH 4601

803 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 4402

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
		(CFS)			
+ 4966.	14.00	2797.	940.	707.	707.
		(INCHES)	3.597	4.838	4.844
		(AC-FT)	1387.	1866.	1868.
CUMULATIVE AREA =		7.23 SQ MI			

\*\*\* \*\*

```

*****
*
804 KK * 44R2 *
*
*****

```

ROUTE HYDROGRAPH 4402 THROUGH GARLINGTON RD

HYDROGRAPH ROUTING DATA

806 RS STORAGE ROUTING

	NSTPS ITYP RSVRIC X	1 FLOW -1.00 .00	NUMBER OF SUBREACHES TYPE OF INITIAL CONDITION INITIAL CONDITION WORKING R AND D COEFFICIENT								
809 SA	AREA	.0	2.5	4.8	11.5	15.2	17.1	17.7	18.1	19.8	20.6
807 SQ	DISCHARGE	0.	236.	471.	942.	2346.	3412.	4393.	5005.	7552.	9818.
808 SE	ELEVATION	831.32	836.69	838.82	840.69	843.43	844.51	845.42	845.98	848.29	849.32

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	4.56	12.29	27.10	63.60	81.04	96.87	106.88	150.58	171.40
ELEVATION	831.32	836.69	838.82	840.69	843.43	844.51	845.42	845.98	848.29	849.32

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION 44R2

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
4850.	14.25	2773.	940.	706.	706.
		(INCHES) 3.566	4.838	4.843	4.843
		(AC-FT) 1375.	1865.	1867.	1867.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
104.	14.25	68.	23.	18.	18.

PEAK STAGE + (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	31.98-HR
845.84	14.25	843.59	837.85	836.25	836.25

CUMULATIVE AREA = 7.23 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
810 KK \* 48C1 \*  
\* \*  
\*\*\*\*\*

RUNOFF HYDROGRAPH FROM SUB-BASIN 48







1. 1. 1. 0. 0.

\*\*\* \*\*

HYDROGRAPH AT STATION 48C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 2.97, TOTAL EXCESS = 5.19

PEAK FLOW	TIME	6-HR	24-HR	72-HR	31.98-HR
(CFS)	(HR)	(CFS)	(INCHES)	(AC-FT)	
928.	12.22	151.	47.	35.	35.
		4.157	5.186	5.186	5.186
		75.	93.	93.	93.
CUMULATIVE AREA =		.34 SQ MI			

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 815 KK \* 48D1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM SUB-BASIN 48 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

STATION	ROUTING DATA	18.9	20.6	21.1	21.5	22.0	22.5	22.9	23.4	23.9	24.4
817 RS	STORAGE ROUTING NSTPS 1 NUMBER OF SUBREACHES ITYP FLOW TYPE OF INITIAL CONDITION RSVRIC -1.00 INITIAL CONDITION X .00 WORKING R AND D COEFFICIENT										
820 SA	AREA										
818 SQ	DISCHARGE	0.	7.	61.	162.	291.	445.	620.	812.	1625.	2952.
819 SE	ELEVATION	876.00	878.00	878.50	879.00	879.50	880.00	880.50	881.00	881.50	882.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	39.49	49.92	60.59	71.47	82.59	93.93	105.52	117.34	129.40
ELEVATION	876.00	878.00	878.50	879.00	879.50	880.00	880.50	881.00	881.50	882.00

\*\*\* \*\*

HYDROGRAPH AT STATION 48D1



PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
+ 115.	13.32	(CFS)	73.	28.	21.
		(INCHES)	2.016	3.135	3.135
		(AC-FT)	36.	57.	57.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (AC-FT)	(HR)				
+ 56.	13.32		51.	37.	28.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	31.98-HR
+ (FEET)	(HR)				
+ 878.77	13.32	878.54	877.86	877.39	877.39

CUMULATIVE AREA = .34 SQ MI

\*\*\* \*\*

```

*****
*           *
821 KK      * 48D2 *
*           *
*****

```

ROUTE HYDROGRAPH FROM 48D1 THROUGH DETENTION BASIN

HYDROGRAPH ROUTING DATA

823 RS	STORAGE ROUTING										
	NSTPS	1	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
826 SA	AREA	4.8	5.5	5.6	5.7	5.9	6.0	6.2	6.3	6.4	6.6
824 SQ	DISCHARGE	0.	1.	9.	518.	1441.	2633.	4044.	5643.	7411.	9333.
825 SE	ELEVATION	852.00	855.00	855.50	856.00	856.50	857.00	857.50	858.00	858.50	859.00

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	15.45	18.23	21.05	23.95	26.91	29.95	33.06	36.24	39.49
ELEVATION	852.00	855.00	855.50	856.00	856.50	857.00	857.50	858.00	858.50	859.00

```

***          ***          ***          ***          ***
HYDROGRAPH AT STATION      48D2

PEAK FLOW      TIME          MAXIMUM AVERAGE FLOW
+ (CFS)        (HR)          6-HR      24-HR      72-HR      31.98-HR
+   80.        14.95          (CFS)
                                50.         20.         15.         15.
                                (INCHES)  1.380      2.159      2.159      2.159
                                (AC-FT)   25.         39.         39.         39.

PEAK STORAGE   TIME          MAXIMUM AVERAGE STORAGE
+ (AC-FT)      (HR)          6-HR      24-HR      72-HR      31.98-HR
+   19.        14.93          18.         14.         10.         10.

PEAK STAGE     TIME          MAXIMUM AVERAGE STAGE
+ (FEET)       (HR)          6-HR      24-HR      72-HR      31.98-HR
+  855.57      14.95          855.54    854.68    854.01    854.01

CUMULATIVE AREA =      .34 SQ MI

```

\*\*\* \*\*

```

*****
*
827 KK *      4701 *
*
*****

```

COMBINE HYDROGRAPH 44R2 AND HYDROGRAPH 48D2

```

829 HC      HYDROGRAPH COMBINATION
            ICOMP      2  NUMBER OF HYDROGRAPHS TO COMBINE

```

\*\*\*

```

***          ***          ***          ***          ***
HYDROGRAPH AT STATION      4701

PEAK FLOW      TIME          MAXIMUM AVERAGE FLOW
+ (CFS)        (HR)          6-HR      24-HR      72-HR      31.98-HR
+  4851.       14.25          (CFS)
                                2809.      959.       721.       721.
                                (INCHES)  3.451      4.718      4.723      4.723
                                (AC-FT)   1393.      1904.      1906.      1906.

CUMULATIVE AREA =      7.57 SQ MI

```

\*\*\* \*\*

830 KK \* 47S1 \*

ROUTE HYDROGRAPH 4701 TO MOUTH OF SUB-BASIN 47

HYDROGRAPH ROUTING DATA

Table with columns for station ID, routing type, and numerical values. Includes rows for 832 RS (STORAGE ROUTING) and 833 SV (STORAGE).

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 47S1

Table showing peak flow and maximum average flow at station 47S1. Columns include flow type (CFS, INCHES, AC-FT) and time (6-HR, 24-HR, 72-HR, 31.98-HR).

Table showing peak storage and maximum average storage at station 47S1. Columns include storage type (AC-FT) and time (6-HR, 24-HR, 72-HR, 31.98-HR).

CUMULATIVE AREA = 7.57 SQ MI

\*\*\* \*\*

835 KK \* 47C1 \*

RUNOFF HYDROGRAPH FROM SUB-BASIN 47

SUBBASIN RUNOFF DATA







```

***                ***                ***                ***                ***
HYDROGRAPH AT STATION      47C1
TOTAL RAINFALL =      8.16, TOTAL LOSS =      2.50, TOTAL EXCESS =      5.66
PEAK FLOW      TIME                        MAXIMUM AVERAGE FLOW
+  (CFS)        (HR)                            6-HR      24-HR      72-HR      31.98-HR
+   1149.      12.20
    (CFS)
    (INCHES)   4.501        5.657        5.657        5.657
    (AC-FT)    89.         112.         112.         112.
CUMULATIVE AREA =      .37 SQ MI

```

\*\*\* \*\* \*\* \*\* \*\*

```

*****
*           *
840 KK   *   4702  *
*           *
*****

```

COMBINE ROUTED HYDROGRAPH 47S1 WITH HYDROGRAPH FROM SUB-BASIN 47

```

842 KO      OUTPUT CONTROL VARIABLES
             IPRNT          3  PRINT CONTROL
             IPLOT          0  PLOT CONTROL
             QSCAL          0.  HYDROGRAPH PLOT SCALE
             IPNCH          1  PUNCH COMPUTED HYDROGRAPH
             IOUT           21  SAVE HYDROGRAPH ON THIS UNIT
             ISAV1          1  FIRST ORDINATE PUNCHED OR SAVED
             ISAV2        1920  LAST ORDINATE PUNCHED OR SAVED
             TIMINT         .017  TIME INTERVAL IN HOURS

```

```

844 HC      HYDROGRAPH COMBINATION
             ICOMP          2  NUMBER OF HYDROGRAPHS TO COMBINE

```

\*\*\*

```

***                ***                ***                ***                ***
HYDROGRAPH AT STATION      4702
PEAK FLOW      TIME                        MAXIMUM AVERAGE FLOW
+  (CFS)        (HR)                            6-HR      24-HR      72-HR      31.98-HR
+   4912.      14.48
    (CFS)
    (INCHES)   3.357        4.759        4.765        4.765
    (AC-FT)    1421.       2015.       2017.       2017.
CUMULATIVE AREA =      7.94 SQ MI

```



















CUMULATIVE AREA = .69 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
860 KK \* 5001 \*  
\*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 50S1 WITH HYDROGRAPH FROM SUB-BASIN 50

862 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 5001

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
2175.	12.57	490.	154.	115.	115.
	(INCHES)	4.379	5.499	5.499	5.499
	(AC-FT)	243.	305.	305.	305.

CUMULATIVE AREA = 1.04 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
863 KK \* 50R1 \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH 5001 THROUGH FEESTER RD

HYDROGRAPH ROUTING DATA

865 RS STORAGE ROUTING  
NSTPS 1 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

868 SA	AREA	.0	.3	.3	2.2	3.5	4.1	4.8	5.2	6.1	7.6
--------	------	----	----	----	-----	-----	-----	-----	-----	-----	-----



866 SQ	DISCHARGE	0.	147.	294.	588.	1206.	1514.	1752.	1940.	2521.	3277.
867 SE	ELEVATION	888.50	890.85	892.13	893.40	894.52	895.07	896.11	896.94	898.80	900.59

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.21	.58	1.99	5.17	7.26	11.86	15.99	26.46	38.74
ELEVATION	888.50	890.85	892.13	893.40	894.52	895.07	896.11	896.94	898.80	900.59

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        50R1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	1937.	12.73	490.	154.	115.	115.
		(INCHES)	4.379	5.499	5.499	5.499
		(AC-FT)	243.	305.	305.	305.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	16.	12.73	2.	1.	0.	0.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	896.92	12.73	892.23	889.93	889.58	889.58

CUMULATIVE AREA =        1.04 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 869 KK            \*        51S1    \*  
 \*                    \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 50R1 TO BAGWELL RD

HYDROGRAPH ROUTING DATA

871 RS	STORAGE ROUTING	
	NSTPS	5    NUMBER OF SUBREACHES
	ITYP	FLOW    TYPE OF INITIAL CONDITION
	RSVRIC	-1.00    INITIAL CONDITION
	X	.00    WORKING R AND D COEFFICIENT

872 SV	STORAGE	.0	1.0	1.9	4.7	10.6	13.5	15.4	16.9	20.9	25.8
873 SQ	DISCHARGE	0.	147.	294.	588.	1206.	1514.	1752.	1940.	2521.	3277.

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION      51S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
1928.	12.83	490.	154.	115.	115.
		(INCHES) 4.378	5.499	5.499	5.499
		(AC-FT) 243.	305.	305.	305.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
3.	12.83	1.	0.	0.	0.

CUMULATIVE AREA =      1.04 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
874 KK      \*      51R1      \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH 51S1 THROUGH BAGWELL RD

HYDROGRAPH ROUTING DATA

876 RS	STORAGE ROUTING										
	NSTPS		1	NUMBER OF SUBREACHES							
	ITYP		FLOW	TYPE OF INITIAL CONDITION							
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								

879 SA	AREA	.0	.4	.6	3.3	4.9	5.6	5.8	5.9	6.3	6.6
--------	------	----	----	----	-----	-----	-----	-----	-----	-----	-----

877 SQ	DISCHARGE	0.	147.	294.	588.	1206.	1514.	1752.	1940.	2521.	3277.
--------	-----------	----	------	------	------	-------	-------	-------	-------	-------	-------

878 SE	ELEVATION	877.15	880.42	882.00	884.14	886.14	887.31	887.42	887.52	887.81	888.17
--------	-----------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.39	1.18	5.01	13.12	19.29	19.92	20.50	22.28	24.61
ELEVATION	877.15	880.42	882.00	884.14	886.14	887.31	887.42	887.52	887.81	888.17

\*\*\* \*\*

HYDROGRAPH AT STATION 51R1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW				
		6-HR	24-HR	72-HR	31.98-HR	
1915.	12.90	490.	154.	115.	115.	
		(INCHES)	4.378	5.499	5.499	5.499
		(AC-FT)	243.	305.	305.	305.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
20.	12.88	4.	1.	1.	1.

PEAK STAGE + (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	31.98-HR
887.51	12.90	882.36	879.15	878.65	878.65

CUMULATIVE AREA = 1.04 SQ MI

\*\*\*\*\*

880 KK \*\*\*\*\*  
\* \*  
\* 51S2 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 50R1 TO MOUTH OF SUB-BASIN 51

HYDROGRAPH ROUTING DATA

882 RS	STORAGE ROUTING										
	NSTPS	6	NUMBER OF SUBREACHES								
	ITYP		FLOW TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
883 SV	STORAGE	.0	1.3	2.1	4.4	11.6	14.8	16.9	18.4	22.3	26.8
884 SQ	DISCHARGE	0.	147.	294.	588.	1206.	1514.	1752.	1940.	2521.	3277.

\*\*\*







.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

888 LS      SCS LOSS RATE  
               STRTL           .56 INITIAL ABSTRACTION  
               CRVNBR       78.00 CURVE NUMBER  
               RTIMP           .00 PERCENT IMPERVIOUS AREA

889 UD      SCS DIMENSIONLESS UNITGRAPH  
               TLAG           .73 LAG

\*\*\*

UNIT HYDROGRAPH  
 222 END-OF-PERIOD ORDINATES

4.	7.	11.	14.	20.	29.	37.	45.	54.	65.
75.	86.	97.	110.	124.	138.	153.	168.	187.	206.
225.	244.	266.	289.	311.	334.	355.	374.	393.	412.
431.	445.	458.	471.	484.	494.	501.	508.	516.	523.
524.	525.	526.	527.	527.	526.	525.	524.	522.	514.
507.	500.	493.	485.	477.	468.	460.	452.	442.	433.
423.	414.	402.	390.	378.	366.	354.	339.	325.	311.
297.	285.	273.	261.	249.	239.	230.	222.	214.	206.
198.	191.	184.	177.	171.	165.	159.	153.	147.	143.
138.	134.	130.	125.	121.	117.	112.	108.	105.	101.
98.	94.	90.	87.	83.	80.	77.	74.	72.	70.
67.	65.	62.	60.	58.	56.	54.	52.	50.	48.
47.	45.	43.	41.	40.	39.	37.	36.	35.	33.
32.	31.	29.	28.	27.	27.	26.	25.	24.	23.
22.	21.	21.	20.	19.	19.	18.	17.	17.	16.
15.	15.	14.	14.	13.	13.	12.	12.	12.	11.
11.	10.	10.	10.	9.	9.	9.	8.	8.	8.
7.	7.	7.	7.	6.	6.	6.	6.	6.	5.
5.	5.	5.	5.	5.	5.	4.	4.	4.	4.
4.	4.	4.	3.	3.	3.	3.	3.	3.	3.
3.	2.	2.	2.	2.	2.	2.	2.	2.	1.
1.	1.	1.	1.	1.	1.	1.	0.	0.	0.
0.	0.								

\*\*\*                   \*\*\*                   \*\*\*                   \*\*\*                   \*\*\*

HYDROGRAPH AT STATION      51C1

TOTAL RAINFALL =   8.16, TOTAL LOSS =   2.62, TOTAL EXCESS =   5.54

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW	
		6-HR	24-HR	72-HR   31.98-HR
+	(CFS)	(HR)	(CFS)	
+	1419.	12.62	383.	120.
			90.	90.
			(INCHES)	4.402   5.539   5.539   5.539
			(AC-FT)	190.   239.   239.   239.

CUMULATIVE AREA = .81 SQ MI

\*\*\* \*\*

890 KK \* 5101 \*

COMBINE ROUTED HYDROGRAPH 51S2 WITH HYDROGRAPH FROM SUB-BASIN 51

892 HC HYDROGRAPH COMBINATION ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 5101

Table with 6 columns: PEAK FLOW, TIME, 6-HR, 24-HR, 72-HR, 31.98-HR. Rows include (CFS), (HR), (CFS), (INCHES), (AC-FT).

CUMULATIVE AREA = 1.85 SQ MI

\*\*\* \*\*

893 KK \* 51R2 \*

ROUTE HYDROGRAPH 5101 THROUGH ROPER MTN RD

HYDROGRAPH ROUTING DATA

895 RS STORAGE ROUTING NSTPS 1 NUMBER OF SUBREACHES ITYP FLOW TYPE OF INITIAL CONDITION RSVRIC -1.00 INITIAL CONDITION X .00 WORKING R AND D COEFFICIENT

898 SA AREA .0 .5 1.2 4.8 9.7 10.3 10.6 10.8 11.2 11.5



896 SQ	DISCHARGE	0.	191.	382.	764.	1290.	1747.	2316.	2648.	3910.	5083.
897 SE	ELEVATION	865.86	869.17	871.01	874.24	878.95	879.51	879.88	880.13	880.82	881.35

\*\*\*

COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.57	2.09	11.08	44.63	50.23	54.11	56.79	64.37	70.39
ELEVATION	865.86	869.17	871.01	874.24	878.95	879.51	879.88	880.13	880.82	881.35

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION            51R2

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	2914.	13.03	872.	274.	206.	206.
		(INCHES)	4.387	5.517	5.517	5.517
		(AC-FT)	433.	544.	544.	544.

PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	58.	13.03	19.	5.	4.	4.

PEAK STAGE	TIME		MAXIMUM AVERAGE STAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(FEET)	(HR)				
	880.28	13.03	873.79	868.81	868.08	868.08

CUMULATIVE AREA =    1.85 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 899 KK            \*            52S1            \*  
 \*                    \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 51R2 TO MOUTH OF SUB-BASIN 52

HYDROGRAPH ROUTING DATA

901 RS	STORAGE ROUTING		
	NSTPS	13	NUMBER OF SUBREACHES
	ITYP		FLOW TYPE OF INITIAL CONDITION
	RSVRIC	-1.00	INITIAL CONDITION
	X	.00	WORKING R AND D COEFFICIENT









CUMULATIVE AREA = .64 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
909 KK \* 5201 \*  
\*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 52S1 WITH HYDROGRAPH FROM SUB-BASIN 52

911 HC HYDROGRAPH COMBINATION  
ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 5201

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
(CFS)	(HR)	6-HR	24-HR	72-HR	31.98-HR
+	3218.	1123.	352.	264.	264.
	13.18	4.188	5.250	5.250	5.250
		(INCHES)			
		(AC-FT)	557.	698.	698.

CUMULATIVE AREA = 2.49 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\*  
912 KK \* 53S1 \*  
\*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 5201 TO 53S2

HYDROGRAPH ROUTING DATA

914 RS STORAGE ROUTING  
NSTPS 11 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

915 SV STORAGE .0 4.1 6.8 13.9 23.2 31.0 39.8 44.7 62.0 75.8

916 SQ DISCHARGE 0. 208. 415. 830. 1394. 1901. 2529. 2904. 4387. 5703.

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 53S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
3195.	13.33	1123.	352.	264.	264.
		(INCHES) 4.188	5.250	5.250	5.250
		(AC-FT) 557.	698.	698.	698.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
4.	13.33	2.	1.	0.	0.

CUMULATIVE AREA = 2.49 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
\* \*  
917 KK \* 53S2 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 53S1 TO MOUTH OF SUB-BASIN 53

HYDROGRAPH ROUTING DATA

919 RS STORAGE ROUTING  
NSTPS 6 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

920 SV STORAGE .0 2.1 3.7 8.1 20.0 24.3 29.1 32.7 48.2 61.5

921 SQ DISCHARGE 0. 208. 415. 830. 1394. 1901. 2529. 2904. 4387. 5703.

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 53S2

PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR









.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

925 LS            SCS LOSS RATE  
                   STRTL            .94    INITIAL ABSTRACTION  
                   CRVNBR          68.00    CURVE NUMBER  
                   RTIMP            .00    PERCENT IMPERVIOUS AREA

926 UD            SCS DIMENSIONLESS UNITGRAPH  
                   TLAG            .45    LAG

\*\*\*

UNIT HYDROGRAPH  
 137 END-OF-PERIOD ORDINATES

6.	11.	19.	32.	45.	60.	77.	94.	115.	137.
160.	190.	220.	251.	287.	322.	355.	385.	415.	438.
459.	479.	491.	502.	511.	513.	514.	514.	513.	511.
502.	491.	479.	466.	453.	439.	425.	410.	393.	374.
355.	334.	311.	289.	270.	251.	234.	221.	208.	195.
184.	173.	163.	154.	144.	137.	131.	124.	117.	110.
104.	98.	93.	87.	81.	76.	72.	68.	65.	61.
57.	54.	51.	48.	45.	42.	40.	38.	36.	34.
31.	29.	28.	26.	25.	23.	22.	21.	20.	19.
18.	16.	15.	15.	14.	13.	12.	12.	11.	10.
10.	9.	9.	8.	8.	7.	7.	6.	6.	6.
5.	5.	5.	5.	5.	4.	4.	4.	4.	3.
3.	3.	3.	3.	2.	2.	2.	2.	2.	1.
1.	1.	1.	1.	0.	0.	0.			

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION    53C1

TOTAL RAINFALL =    8.16, TOTAL LOSS =    3.79, TOTAL EXCESS =    4.37

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW		
		6-HR	24-HR	72-HR	31.98-HR
+ (CFS)	(HR)				
		(CFS)			
+ 947.	12.33	186.	57.	43.	43.
		(INCHES)	4.370	4.370	4.370
		(AC-FT)	92.	114.	114.

CUMULATIVE AREA =    .49 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \*                    \*  
 927 KK            5301 \*  
 \*                    \*  
 \*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 53S2 WITH HYDROGRAPH FROM SUB-BASIN 53

929 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 5301

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 3321.	13.47	(CFS) 1308.	409.	307.	307.
		(INCHES) 4.078	5.106	5.106	5.106
		(AC-FT) 649.	812.	812.	812.

CUMULATIVE AREA = 2.98 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 930 KK \* 4703 \*  
 \* \*  
 \*\*\*\*\*

COMBINE HYDROGRAPH FROM 5301 WITH HYDROGRAPH FROM 4702

932 HC HYDROGRAPH COMBINATION  
 ICOMP 2 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 4703

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 6592.	14.18	(CFS) 4131.	1424.	1070.	1070.
		(INCHES) 3.517	4.853	4.858	4.858
		(AC-FT) 2049.	2826.	2829.	2829.

CUMULATIVE AREA = 10.92 SQ MI

\*\*\* \*\*

\*\*\*\*\*

933 KK \* 47S2 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH 4703 TO SMITH RD

HYDROGRAPH ROUTING DATA

935 RS STORAGE ROUTING  
 NSTPS 2 NUMBER OF SUBREACHES  
 ITYP FLOW TYPE OF INITIAL CONDITION  
 RSVRIC -1.00 INITIAL CONDITION  
 X .00 WORKING R AND D COEFFICIENT

936 SV STORAGE .0 1.6 2.5 6.5 17.1 18.5 20.0 21.3 27.7 32.5

937 SQ DISCHARGE 0. 356. 712. 1425. 3227. 4782. 5893. 6790. 10838. 14089.

\*\*\*

\*\*\* WARNING \*\*\* MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3227. TO 4782.  
 THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.  
 THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

\*\*\* \*\*\* \*\*\* \*\*\* \*\*\*

HYDROGRAPH AT STATION 47S2

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
6591.	14.20	4130.	1424.	1070.	1070.
		(INCHES) 3.516	4.853	4.858	4.858
		(AC-FT) 2048.	2826.	2829.	2829.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
11.	14.20	9.	3.	2.	2.

CUMULATIVE AREA = 10.92 SQ MI

\*\*\* \*\*

938 KK \* 54S1 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM 47S2 TO S.R.14

HYDROGRAPH ROUTING DATA

940 RS	STORAGE ROUTING										
	NSTPS	16	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
941 SV	STORAGE	.0	13.4	21.1	33.9	83.8	131.0	164.6	191.2	307.8	399.0
942 SQ	DISCHARGE	0.	356.	712.	1425.	3227.	4782.	5893.	6790.	10838.	14089.

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

\*\*\*

HYDROGRAPH AT STATION 54S1

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	31.98-HR
+	(CFS)	(HR)				
		(CFS)				
+	6557.	14.58	4126.	1424.	1070.	1070.
		(INCHES)	3.513	4.853	4.856	4.856
		(AC-FT)	2046.	2826.	2828.	2828.
PEAK STORAGE	TIME		MAXIMUM AVERAGE STORAGE			
			6-HR	24-HR	72-HR	31.98-HR
+	(AC-FT)	(HR)				
	12.	14.58	7.	2.	2.	2.

CUMULATIVE AREA = 10.92 SQ MI

\*\*\* \*\*

\*\*\*\*\*  
 \* \*  
 943 KK \* 54S2 \*  
 \* \*  
 \*\*\*\*\*

ROUTE HYDROGRAPH FROM S.R.14 TO MOUTH OF SUB-BASIN 54

HYDROGRAPH ROUTING DATA

945 RS	STORAGE ROUTING										
	NSTPS	7	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
946 SV	STORAGE	.0	7.1	11.6	19.6	41.1	59.3	70.6	79.9	117.8	145.4
947 SQ	DISCHARGE	0.	403.	806.	1612.	3446.	5068.	6300.	7328.	11680.	15184.

















RTIMP .00 PERCENT IMPERVIOUS AREA

957 UD SCS DIMENSIONLESS UNITGRAPH  
 TLAG .97 LAG

\*\*\*

UNIT HYDROGRAPH  
 292 END-OF-PERIOD ORDINATES

4.	7.	11.	14.	18.	22.	30.	38.	47.	55.
63.	72.	83.	93.	104.	115.	125.	137.	152.	166.
180.	194.	208.	225.	244.	263.	282.	300.	319.	341.
363.	386.	408.	430.	453.	472.	491.	510.	528.	547.
566.	579.	592.	605.	618.	630.	642.	649.	656.	663.
670.	677.	682.	683.	685.	686.	687.	688.	688.	687.
686.	684.	683.	682.	677.	670.	663.	656.	649.	642.
633.	625.	617.	609.	600.	592.	583.	573.	564.	555.
545.	535.	524.	512.	500.	488.	476.	464.	450.	436.
421.	407.	393.	380.	368.	357.	345.	333.	321.	312.
303.	295.	287.	279.	270.	263.	256.	249.	242.	235.
228.	222.	216.	210.	204.	198.	192.	188.	184.	180.
175.	171.	167.	162.	158.	154.	149.	145.	141.	138.
134.	131.	127.	124.	120.	116.	113.	109.	106.	102.
100.	97.	95.	93.	90.	88.	85.	83.	81.	78.
76.	74.	72.	70.	68.	67.	65.	63.	61.	60.
58.	56.	54.	53.	51.	50.	49.	47.	46.	45.
44.	42.	41.	40.	38.	37.	36.	36.	35.	34.
33.	32.	31.	30.	29.	28.	28.	27.	26.	26.
25.	24.	24.	23.	22.	22.	21.	20.	20.	19.
19.	18.	18.	18.	17.	17.	16.	16.	15.	15.
14.	14.	14.	13.	13.	13.	12.	12.	11.	11.
11.	10.	10.	10.	10.	9.	9.	9.	9.	8.
8.	8.	8.	8.	7.	7.	7.	7.	7.	7.
7.	6.	6.	6.	6.	6.	6.	6.	5.	5.
5.	5.	5.	5.	5.	4.	4.	4.	4.	4.
4.	4.	3.	3.	3.	3.	3.	3.	3.	3.
3.	2.	2.	2.	2.	2.	2.	2.	2.	1.
1.	1.	1.	1.	1.	1.	1.	1.	0.	0.
0.	0.								

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION 55C1

TOTAL RAINFALL = 8.16, TOTAL LOSS = 3.79, TOTAL EXCESS = 4.37

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
1556.	12.88	524.	163.	122.	122.
		(INCHES) 3.508	4.370	4.370	4.370
		(AC-FT) 260.	324.	324.	324.

CUMULATIVE AREA = 1.39 SQ MI

\*\*\* \*\*

958 KK \*\*\*\*\*  
\* \*  
\* 5401 \*  
\* \*  
\*\*\*\*\*

COMBINE ROUTED HYDROGRAPH 54S2 WITH HYDROGRAPH FROM SUB-BASIN 54 AND FROM SUB-BASIN 55

961 HC HYDROGRAPH COMBINATION  
ICOMP 3 NUMBER OF HYDROGRAPHS TO COMBINE

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 5401

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
+ 7137.	14.63	4976.	1714.	1287.	1287.
	(INCHES)	3.489	4.809	4.811	4.811
	(AC-FT)	2468.	3401.	3403.	3403.

CUMULATIVE AREA = 13.26 SQ MI

\*\*\* \*\*

962 KK \*\*\*\*\*  
\* \*  
\* 56S1 \*  
\* \*  
\*\*\*\*\*

ROUTE HYDROGRAPH FROM 5401 TO BATESVILLE RD

HYDROGRAPH ROUTING DATA

964 RS STORAGE ROUTING  
NSTPS 4 NUMBER OF SUBREACHES  
ITYP FLOW TYPE OF INITIAL CONDITION  
RSVRIC -1.00 INITIAL CONDITION  
X .00 WORKING R AND D COEFFICIENT

965 SV	STORAGE	.0	3.7	5.7	8.8	16.6	25.4	31.7	36.6	55.2	68.7
966 SQ	DISCHARGE	0.	403.	806.	1612.	3446.	5068.	6300.	7328.	11680.	15184.

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        56S1

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
7134.	14.70	4976.	1714.	1287.	1287.
		(INCHES) 3.489	4.809	4.811	4.811
		(AC-FT) 2467.	3401.	3402.	3402.

PEAK STORAGE + (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	31.98-HR
9.	14.70	6.	2.	2.	2.

CUMULATIVE AREA = 13.26 SQ MI

\*\*\* \*\*

```

*****
*
967 KK      56S2 *
*
*****

```

ROUTE HYDROGRAPH FROM 56S1 TO ROCK RD

HYDROGRAPH ROUTING DATA

969 RS	STORAGE ROUTING										
	NSTPS	11	NUMBER OF SUBREACHES								
	ITYP	FLOW	TYPE OF INITIAL CONDITION								
	RSVRIC	-1.00	INITIAL CONDITION								
	X	.00	WORKING R AND D COEFFICIENT								
970 SV	STORAGE	.0	11.3	18.0	28.8	49.9	69.9	86.7	102.4	164.8	211.3
971 SQ	DISCHARGE	0.	403.	806.	1612.	3446.	5068.	6300.	7328.	11680.	15184.

\*\*\*

\*\*\*                    \*\*\*                    \*\*\*                    \*\*\*                    \*\*\*

HYDROGRAPH AT STATION        56S2

PEAK FLOW + (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	31.98-HR
7123.	14.88	4975.	1713.	1287.	1287.
		(INCHES) 3.488	4.809	4.810	4.810
		(AC-FT) 2467.	3401.	3402.	3402.



PEAK STORAGE	TIME	6-HR	MAXIMUM AVERAGE 24-HR	STORAGE 72-HR	31.98-HR
+ (AC-FT)	(HR)				
9.	14.88	6.	2.	2.	2.

CUMULATIVE AREA = 13.26 SQ MI

\*\*\* \*\*

```

*****
*
972 KK * 56S3 *
*
*****

```

ROUTE HYDROGRAPH FROM 56S2 TO MOUTH OF SUB-BASIN 56

HYDROGRAPH ROUTING DATA

974 RS	STORAGE ROUTING											
	NSTPS	7	NUMBER OF SUBREACHES									
	ITYP	FLOW	TYPE OF INITIAL CONDITION									
	RSVRIC	-1.00	INITIAL CONDITION									
	X	.00	WORKING R AND D COEFFICIENT									
975 SV	STORAGE	.0	6.4	10.2	16.8	33.9	49.7	61.9	72.3	114.7	148.1	
976 SQ	DISCHARGE	0.	403.	806.	1612.	3446.	5068.	6300.	7328.	11680.	15184.	

\*\*\*

\*\*\* \*\*

HYDROGRAPH AT STATION 56S3

PEAK FLOW	TIME	6-HR	MAXIMUM AVERAGE FLOW 24-HR	STORAGE 72-HR	31.98-HR
+ (CFS)	(HR)				
+ 7116.	15.02	4973.	1713.	1287.	1287.
	(INCHES)	3.487	4.808	4.809	4.809
	(AC-FT)	2466.	3401.	3401.	3401.

PEAK STORAGE	TIME	6-HR	MAXIMUM AVERAGE 24-HR	STORAGE 72-HR	31.98-HR
+ (AC-FT)	(HR)				
10.	15.00	7.	3.	2.	2.

CUMULATIVE AREA = 13.26 SQ MI

















+		2001	875.	12.28	150.	46.	35.	.38		
	ROUTED TO									
+		21S1	858.	12.37	150.	46.	35.	.38		
	HYDROGRAPH AT									
+		21C1	183.	12.20	29.	9.	7.	.07		
	2 COMBINED AT									
+		21O1	1006.	12.35	179.	55.	42.	.45		
	HYDROGRAPH AT									
+		22C1	498.	12.23	83.	26.	19.	.20		
	ROUTED TO									
+		22R1	494.	12.27	83.	26.	19.	.20	941.91	12.27
+										
	ROUTED TO									
+		23R1	493.	12.28	83.	26.	19.	.20	936.85	12.28
+										
	ROUTED TO									
+		23S1	438.	12.48	83.	26.	19.	.20		
	HYDROGRAPH AT									
+		23C1	160.	12.12	21.	6.	5.	.05		
	HYDROGRAPH AT									
+		24C1	232.	12.15	33.	10.	8.	.08		
	3 COMBINED AT									
+		23O1	599.	12.42	137.	43.	32.	.33		
	2 COMBINED AT									
+		21O2	1594.	12.37	316.	98.	74.	.78		
	ROUTED TO									
+		21R1	1590.	12.38	316.	98.	74.	.78	929.99	12.38
+										
	ROUTED TO									
+		25S1	1578.	12.47	316.	98.	74.	.78		
	HYDROGRAPH AT									
+		25C1	233.	12.18	35.	11.	8.	.09		
	2 COMBINED AT									
+		25O1	1699.	12.45	351.	109.	82.	.87		
	ROUTED TO									
+		26S1	1684.	12.55	351.	109.	82.	.87		
	HYDROGRAPH AT									
+		26C1	229.	12.12	30.	9.	7.	.08		
	HYDROGRAPH AT									
+		27C1	152.	12.17	22.	7.	5.	.05		

+	3 COMBINED AT	2601	1800.	12.53	403.	125.	94.	1.00		
	ROUTED TO									
+		28S1	1711.	12.73	403.	125.	94.	1.00		
	HYDROGRAPH AT									
+		28C1	166.	12.08	20.	6.	5.	.05		
	HYDROGRAPH AT									
+		29C1	274.	12.20	44.	14.	10.	.10		
	ROUTED TO									
+		29D1	126.	12.55	39.	13.	10.	.10		
+									914.13	12.55
	HYDROGRAPH AT									
+		30C1	198.	12.10	25.	8.	6.	.06		
	2 COMBINED AT									
+		30O1	221.	12.12	63.	21.	16.	.17		
	ROUTED TO									
+		30R1	185.	12.23	63.	21.	16.	.17		
+									900.67	12.23
	3 COMBINED AT									
+		28O1	1888.	12.72	486.	152.	114.	1.22		
	ROUTED TO									
+		28R1	1387.	12.93	486.	152.	114.	1.22		
+									896.23	12.93
	HYDROGRAPH AT									
+		32C1	209.	12.47	49.	15.	11.	.13		
	ROUTED TO									
+		32R1	206.	12.53	49.	15.	11.	.13		
+									892.11	12.53
	2 COMBINED AT									
+		31O1	1518.	12.93	534.	167.	126.	1.34		
	ROUTED TO									
+		31R1	1512.	12.95	534.	167.	126.	1.34		
+									883.21	12.95
	ROUTED TO									
+		31S1	1508.	13.02	534.	167.	126.	1.34		
	HYDROGRAPH AT									
+		31C1	124.	12.15	18.	5.	4.	.05		
	2 COMBINED AT									
+		31O2	1524.	13.00	552.	173.	130.	1.39		
	2 COMBINED AT									
+		16O2	4899.	12.58	1362.	429.	322.	3.17		



+		37C1	279.	12.43	63.	19.	15.	.15		
	2 COMBINED AT									
+		37O1	923.	12.60	313.	104.	78.	.84		
	HYDROGRAPH AT									
+		38C1	338.	12.10	43.	14.	10.	.08		
	ROUTED TO									
+		38D1	206.	12.27	43.	14.	10.	.08		
+									907.56	12.27
	HYDROGRAPH AT									
+		39C1	770.	12.48	181.	57.	43.	.40		
	ROUTED TO									
+		39R1	485.	12.90	181.	57.	43.	.40		
+									916.94	12.90
	2 COMBINED AT									
+		39O1	600.	12.47	224.	70.	53.	.48		
	ROUTED TO									
+		39R2	573.	12.77	224.	70.	53.	.48		
+									904.54	12.77
	ROUTED TO									
+		40S1	567.	12.85	224.	70.	53.	.48		
+									888.94	12.85
	HYDROGRAPH AT									
+		40C1	663.	12.48	157.	49.	37.	.35		
	2 COMBINED AT									
+		40O1	1096.	12.70	380.	119.	90.	.83		
	ROUTED TO									
+		40D1	613.	13.63	336.	103.	77.	.83		
+									889.28	13.63
	ROUTED TO									
+		37S3	613.	13.68	336.	103.	77.	.83		
+									861.82	13.67
	2 COMBINED AT									
+		37O2	1477.	12.67	643.	207.	155.	1.66		
	ROUTED TO									
+		34S1	1453.	12.77	643.	207.	155.	1.66		
	2 COMBINED AT									
+		34O1	6140.	12.87	2121.	679.	511.	5.22		
	HYDROGRAPH AT									
+		34C1	521.	12.27	92.	28.	21.	.25		
	2 COMBINED AT									
+		34O2	6295.	12.87	2206.	707.	532.	5.46		







+		56S1	7134.	14.70	4976.	1714.	1287.	13.26
	ROUTED TO							
+		56S2	7123.	14.88	4975.	1713.	1287.	13.26
	ROUTED TO							
+		56S3	7116.	15.02	4973.	1713.	1287.	13.26
	HYDROGRAPH AT							
+		56C1	1078.	12.48	256.	79.	59.	.69
	2 COMBINED AT							
+		56O1	7221.	15.02	5172.	1792.	1346.	13.95

\*\*\* NORMAL END OF HEC-1 \*\*\*



**DUPLICATE EFFECTIVE**

DUPLICATE EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
1XP	0.170	561.0	01Jan2000, 12:06	5.97
02S1	0.170	546.8	01Jan2000, 12:10	5.97
Junction-1	0.170	546.8	01Jan2000, 12:10	5.97
02S2	0.170	544.2	01Jan2000, 12:13	5.97
03C1	0.110	581.4	01Jan2000, 12:02	7.08
03R1	0.110	209.5	01Jan2000, 12:16	7.08
02C1	0.060	134.5	01Jan2000, 12:20	5.07
02O1	0.340	871.3	01Jan2000, 12:14	6.17
04R1	0.340	846.3	01Jan2000, 12:17	6.17
04S1	0.340	844.0	01Jan2000, 12:18	6.17
04C1	0.068	281.8	01Jan2000, 12:07	6.49
04O1	0.408	1037.2	01Jan2000, 12:15	6.22
05S1	0.408	1033.0	01Jan2000, 12:17	6.22
05C1	0.145	366.2	01Jan2000, 12:18	5.42
06C1	0.035	240.0	01Jan2000, 11:56	7.20
06D1	0.035	189.5	01Jan2000, 12:00	7.20
05O1	0.588	1451.4	01Jan2000, 12:17	6.08
7XP	0.160	392.0	01Jan2000, 12:06	6.43
08O1	0.748	1775.7	01Jan2000, 12:17	6.16
08C1	0.033	137.6	01Jan2000, 12:04	5.42
08O2	0.781	1829.4	01Jan2000, 12:16	6.13
08S1	0.781	1828.6	01Jan2000, 12:18	6.13
09C1	0.025	148.2	01Jan2000, 11:59	6.61
09O1	0.806	1851.1	01Jan2000, 12:18	6.14
09R1	0.806	1851.3	01Jan2000, 12:18	6.14
10S1	0.806	1839.7	01Jan2000, 12:23	6.14
10C1	0.163	482.3	01Jan2000, 12:08	4.60
11C1	0.105	276.8	01Jan2000, 12:12	4.72
10O1	1.074	2394.3	01Jan2000, 12:17	5.77
12S1	1.074	2390.1	01Jan2000, 12:18	5.77
12C1	0.107	358.2	01Jan2000, 12:07	5.07
12O1	1.181	2621.9	01Jan2000, 12:17	5.70
13S1	1.181	2609.5	01Jan2000, 12:19	5.70
14C1	0.088	235.7	01Jan2000, 12:08	4.14
13C1	0.079	177.7	01Jan2000, 12:18	4.84
13O1	1.348	2938.2	01Jan2000, 12:19	5.55
15S1	1.348	2917.4	01Jan2000, 12:23	5.55
15C1	0.246	691.1	01Jan2000, 12:10	4.72
15O1	1.594	3387.3	01Jan2000, 12:21	5.42
15R1	1.594	3348.8	01Jan2000, 12:23	5.42
16S1	1.594	3254.4	01Jan2000, 12:33	5.42
Junction-2	1.594	3254.4	01Jan2000, 12:33	5.42

DUPLICATE EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
16S2	1.594	3252.0	01Jan2000, 12:34	5.42
16C1	0.192	382.6	01Jan2000, 12:21	4.60
16O1	1.786	3563.5	01Jan2000, 12:33	5.33
17C1	0.197	449.0	01Jan2000, 12:16	4.60
18C1	0.086	219.6	01Jan2000, 12:10	4.25
17O1	0.283	652.3	01Jan2000, 12:14	4.50
19C1	0.053	140.3	01Jan2000, 12:11	4.60
19O1	0.336	790.5	01Jan2000, 12:13	4.51
19R1	0.336	787.4	01Jan2000, 12:14	4.51
20S1	0.336	780.0	01Jan2000, 12:17	4.51
20C1	0.044	112.6	01Jan2000, 12:14	4.84
20O1	0.380	889.3	01Jan2000, 12:17	4.55
21S1	0.380	872.2	01Jan2000, 12:22	4.55
21C1	0.071	186.4	01Jan2000, 12:12	4.72
21O1	0.451	1020.3	01Jan2000, 12:21	4.58
22C1	0.199	507.3	01Jan2000, 12:14	4.84
22R1	0.199	502.8	01Jan2000, 12:16	4.84
23R1	0.199	501.2	01Jan2000, 12:17	4.84
23S1	0.199	443.5	01Jan2000, 12:29	4.84
24C1	0.081	237.9	01Jan2000, 12:09	4.72
23C1	0.051	165.3	01Jan2000, 12:07	4.72
23O1	0.331	601.9	01Jan2000, 12:25	4.79
21O2	0.782	1610.9	01Jan2000, 12:22	4.67
21R1	0.782	1606.6	01Jan2000, 12:23	4.67
25S1	0.782	1594.4	01Jan2000, 12:28	4.67
25C1	0.090	238.1	01Jan2000, 12:11	4.49
25O1	0.872	1713.8	01Jan2000, 12:27	4.65
26S1	0.872	1698.7	01Jan2000, 12:33	4.65
26C1	0.075	236.6	01Jan2000, 12:07	4.60
27C1	0.053	155.8	01Jan2000, 12:10	4.84
26O1	1.000	1813.4	01Jan2000, 12:32	4.65
28S1	1.000	1720.2	01Jan2000, 12:44	4.65
29C1	0.104	279.9	01Jan2000, 12:12	4.84
29D1	0.104	126.4	01Jan2000, 12:33	4.79
30C1	0.064	205.4	01Jan2000, 12:06	4.49
30O1	0.168	227.3	01Jan2000, 12:07	4.67
30R1	0.168	186.6	01Jan2000, 12:14	4.67
28C1	0.049	172.3	01Jan2000, 12:05	4.72
28O1	1.217	1897.3	01Jan2000, 12:43	4.66
28R1	1.217	1398.8	01Jan2000, 12:56	4.66
32C1	0.125	210.8	01Jan2000, 12:28	4.49
32R1	0.125	206.7	01Jan2000, 12:32	4.49

DUPLICATE EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
31O1	1.342	1529.2	01Jan2000, 12:55	4.64
31R1	1.342	1520.7	01Jan2000, 12:57	4.64
31S1	1.342	1516.2	01Jan2000, 13:01	4.64
31C1	0.046	127.4	01Jan2000, 12:09	4.37
31O2	1.388	1532.3	01Jan2000, 13:01	4.63
16O2	3.174	4920.5	01Jan2000, 12:34	5.03
33S1	3.174	4904.0	01Jan2000, 12:40	5.03
33C1	0.377	703.0	01Jan2000, 12:22	4.37
33O1	3.551	5393.2	01Jan2000, 12:39	4.96
33R1	3.551	4747.1	01Jan2000, 12:53	4.96
35C1	0.392	1071.1	01Jan2000, 12:12	4.84
35D1	0.392	280.0	01Jan2000, 12:45	4.77
36R1	0.392	275.1	01Jan2000, 12:55	4.77
36S1	0.392	274.9	01Jan2000, 13:00	4.76
36S2	0.392	274.9	01Jan2000, 13:01	4.76
36C1	0.291	637.8	01Jan2000, 12:16	4.37
36O1	0.683	753.7	01Jan2000, 12:19	4.60
36R2	0.683	747.4	01Jan2000, 12:21	4.60
37S1	0.683	744.7	01Jan2000, 12:23	4.59
37R1	0.683	736.2	01Jan2000, 12:26	4.59
37R2	0.683	724.5	01Jan2000, 12:28	4.59
37R3	0.683	716.0	01Jan2000, 12:31	4.59
37S2	0.683	680.8	01Jan2000, 12:38	4.59
37C1	0.153	281.9	01Jan2000, 12:26	4.72
37O1	0.836	930.1	01Jan2000, 12:36	4.62
39C1	0.398	776.7	01Jan2000, 12:29	5.30
39R1	0.398	485.4	01Jan2000, 12:54	5.30
38C1	0.080	350.0	01Jan2000, 12:05	6.37
38D1	0.080	206.1	01Jan2000, 12:16	6.37
39O1	0.478	603.6	01Jan2000, 12:28	5.48
39R2	0.478	575.6	01Jan2000, 12:46	5.48
40S1	0.478	573.9	01Jan2000, 12:50	5.48
40C1	0.351	668.5	01Jan2000, 12:29	5.19
40O1	0.829	1101.5	01Jan2000, 12:43	5.36
40D1	0.829	612.8	01Jan2000, 13:38	4.63
37S3	0.829	612.8	01Jan2000, 13:41	4.63
37O2	1.665	1489.3	01Jan2000, 12:40	4.62
34S1	1.665	1461.1	01Jan2000, 12:45	4.62
34O1	5.216	6152.4	01Jan2000, 12:52	4.85
34C1	0.247	530.0	01Jan2000, 12:15	4.25
34O2	5.463	6306.2	01Jan2000, 12:52	4.82
34R1	5.463	4824.5	01Jan2000, 13:16	4.82

<b>DUPPLICATE EFFECTIVE 100 YR</b>				
<b>Hydrologic Element</b>	<b>Drainage Area (mi2)</b>	<b>Peak Discharge (cfs)</b>	<b>Time of Peak</b>	<b>Volume (in)</b>
41S1	5.463	4766.4	01Jan2000, 13:29	4.82
41C1	0.367	624.5	01Jan2000, 12:25	4.25
43O1	5.830	4902.9	01Jan2000, 13:29	4.79
42C1	0.305	702.7	01Jan2000, 12:19	5.07
42D1	0.305	450.8	01Jan2000, 12:37	5.07
43S1	0.305	448.4	01Jan2000, 12:44	5.07
43C1	0.236	665.9	01Jan2000, 12:17	6.13
Junction-3	0.541	922.1	01Jan2000, 12:23	5.53
43D1	0.541	921.3	01Jan2000, 12:24	5.53
43O2	6.371	5240.6	01Jan2000, 13:28	4.85
41R1	6.371	4940.1	01Jan2000, 13:45	4.85
44R1	6.371	4652.7	01Jan2000, 14:01	4.85
44C1	0.161	427.3	01Jan2000, 12:13	4.84
44O1	6.532	4685.3	01Jan2000, 14:01	4.85
45C1	0.522	1313.1	01Jan2000, 12:15	4.95
45D1	0.522	341.3	01Jan2000, 12:54	4.86
46S1	0.522	338.3	01Jan2000, 13:06	4.85
46C1	0.176	400.5	01Jan2000, 12:16	4.60
46O1	0.698	505.9	01Jan2000, 12:22	4.79
44O2	7.230	4968.2	01Jan2000, 14:00	4.84
44R2	7.230	4851.5	01Jan2000, 14:15	4.84

Basin: Basin 1  
Description: HYDROLOGIC MODEL FOR ROCKY CREEK WATERSHED  
GREENVILLE, SC MODEL SET-UP PERFORMED BY WOOLPERT LLP - CHARLOTTE  
OFFICE EXISTING CONDITIONS A=0.2\*S FILENAME= ROCKY\_E.HC1  
Last Modified Date: 8 May 2017  
Last Modified Time: 13:18:21  
Version: 4.2  
Filepath Separator: \  
Unit System: English  
Missing Flow To Zero: No  
Enable Flow Ratio: No  
Compute Local Flow At Junctions: No  
  
Enable Sediment Routing: No  
  
Enable Quality Routing: No  
End:

Source: 1XP  
Description: BASIN 1 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 14 March 2017  
Last Modified Time: 16:23:32  
Canvas X: 40.0  
Canvas Y: 10.0  
Area: 0.170  
Observed Hydrograph Gage: 1XP  
Downstream: 02S1  
  
Flow Method: GAGE\_FLOW  
Flow Gage: 1XP  
End Flow Method:  
End:

Reach: 02S1  
Description: ROUTE HYDROGRAPH FROM 01C1 TO CULVERT IN WOODS  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0  
Canvas Y: 140.0  
Downstream: Junction-1  
  
Route: Modified Puls  
Number of Reaches: 8  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S1(Basin 1)  
Channel Loss: None  
End:

Junction: Junction-1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0

Canvas Y: 140.0  
Downstream: 02S2  
End:

Reach: 02S2  
Description: ROUTE HYDROGRAPH FROM 02S2 TO MOUTH OF SUB-BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
From Canvas X: 40.0  
From Canvas Y: 140.0  
Downstream: 02O1

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S2(Basin 1)  
Channel Loss: None  
End:

Subbasin: 03C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 80.0  
Area: 0.110  
Downstream: 03R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 91

Transform: SCS  
Lag: 9.66  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Reservoir: 03R1  
Description: ROUTE HYDROGRAPH FROM SUB-BASIN 03 THROUGH I-385  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 140.0  
Downstream: 0201

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 03R1(Basin 1)  
Elevation-Outflow Table: 03R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 02C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 80.0  
Canvas Y: 140.0  
Area: 0.060  
Downstream: 0201

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 27.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0201

Description: COMBINE ROUTED HYDROGRAPH 02S2 WITH HYDROGRAPH  
FROM SUB-BASIN 02 AND SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
Downstream: 04R1

End:

Reservoir: 04R1

Description: ROUTE HYDROGRAPH FROM 0201 THROUGH DRIVEWAY  
CULVERT



Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 330.0  
Downstream: 04S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 04R1(Basin 1)  
Elevation-Outflow Table: 04R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 04S1

Description: ROUTE HYDROGRAPH FROM 04R1 TO MOUTH OF SUB-BASIN 04

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 390.0  
Downstream: 04O1

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 04S1(Basin 1)

End:

Subbasin: 04C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 110.0  
Canvas Y: 330.0  
Area: 0.068  
Downstream: 04O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 86

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None  
End:  
Junction: 0401  
Description: COMBINE ROUTED HYDROGRAPH 04S1 WITH HYDROGRAPH  
FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 85.0  
Canvas Y: 460.0  
Downstream: 05S1  
End:

Reach: 05S1  
Description: ROUTE HYDROGRAPH FROM 0401 TO MOUTH OF SUB-  
BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
From Canvas X: 85.0  
From Canvas Y: 460.0  
Downstream: 0501  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 05S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 05C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 125.0  
Canvas Y: 460.0  
Area: 0.145  
Downstream: 0501  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77  
  
Transform: SCS  
Lag: 25.68

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 06C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 06

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 400.0

Area: 0.035

Downstream: 06D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 92

Transform: SCS

Lag: 3.0

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 06D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 06 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 460.0

Downstream: 0501

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 06D1(Basin 1)

Elevation-Outflow Table: 06D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 0501

Description: COMBINE ROUTED HYDROGRAPH 05S1 WITH HYDROGRAPH  
FROM SUB-BASIN 05 AND ROUTED HYDROGRAPH 06D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
Downstream: 0801

End:

Source: 7XP

Description: BASIN 7 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 155.0  
Canvas Y: 530.0  
Area: 0.160  
Downstream: 0801

Flow Method: GAGE\_FLOW  
Flow Gage: 7XP  
End Flow Method:

End:

Junction: 0801

Description: COMBINE HYDROGRAPH 0501 WITH HYDROGRAPH FROM  
SUB-BASIN 07  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 130.0  
Canvas Y: 660.0  
Downstream: 0802

End:

Subbasin: 08C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 170.0  
Canvas Y: 600.0  
Area: 0.033  
Downstream: 0802

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77

Transform: SCS  
Lag: 10.62  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Junction: 0802  
Description: COMBINE HYDROGRAPH 0801 WITH HYDROGRAPH FROM  
SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 145.0  
Canvas Y: 730.0  
Downstream: 08S1  
End:

Reach: 08S1  
Description: ROUTE HYDROGRAPH FROM 0802 TO CREEKVIEW COURT  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 160.0  
Canvas Y: 860.0  
From Canvas X: 145.0  
From Canvas Y: 730.0  
Downstream: 0901  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 08S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 09C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 09  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 185.0  
Canvas Y: 730.0  
Area: 0.025  
Downstream: 0901  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 87  
  
Transform: SCS  
Lag: 5.64

Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0901

Description: COMBINE ROUTED HYDROGRAPH 08S1 WITH HYDROGRAPH  
FROM SUB-BASIN 09

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 860.0

Downstream: 09R1

End:

Reservoir: 09R1

Description: ROUTE HYDROGRAPH FROM 0901 THROUGH ROPER  
MOUNTAIN EXT

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 920.0

Downstream: 10S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 09R1(Basin 1)

Elevation-Outflow Table: 09R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 10S1

Description: ROUTE HYDROGRAPH FROM 09R1 TO MOUTH OF SUB-  
BASIN 10

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 190.0

Canvas Y: 1050.0

From Canvas X: 160.0

From Canvas Y: 920.0

Downstream: 1001

Route: Modified Puls

Number of Reaches: 6

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 10S1(Basin 1)

Channel Loss: None

End:

Subbasin: 10C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 10

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 200.0  
Canvas Y: 920.0  
Area: 0.163  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 15.42  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 11C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 240.0  
Canvas Y: 860.0  
Area: 0.105  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.5  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1001

Description: COMBINE ROUTED HYDROGRAPH 10S1 WITH HYDROGRAPH

FROM SUB-BASIN 10 AND SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 190.0  
Canvas Y: 1050.0  
Downstream: 12S1

End:

Reach: 12S1

Description: ROUTE HYDROGRAPH FROM 1001 TO MOUTH OF SUB-BASIN 12

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
From Canvas X: 190.0  
From Canvas Y: 1050.0  
Downstream: 12O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 12S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 12C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 230.0  
Canvas Y: 1050.0  
Area: 0.107  
Downstream: 12O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None

End:



Junction: 1201  
Description: COMBINE ROUTED HYDROGRAPH 12S1 WITH HYDROGRAPH  
FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
Downstream: 13S1  
End:

Reach: 13S1  
Description: ROUTE HYDROGRAPH FROM 1201 TO MOUTH OF SUB-  
BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
From Canvas X: 205.0  
From Canvas Y: 1180.0  
Downstream: 1301  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 13S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 14C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 285.0  
Canvas Y: 1120.0  
Area: 0.088  
Downstream: 1301  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 66  
  
Transform: SCS  
Lag: 15.18  
Unitgraph Type: STANDARD  
  
Baseflow: None

End:

Subbasin: 13C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 245.0  
Canvas Y: 1180.0  
Area: 0.079  
Downstream: 1301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 25.8  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1301

Description: COMBINE ROUTED HYDROGRAPH 13S1 WITH HYDROGRAPH  
FROM SUB-BASIN 13 AND SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
Downstream: 15S1

End:

Reach: 15S1

Description: ROUTE HYDROGRAPH FROM 1301 TO MOUTH OF SUB-  
BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
From Canvas X: 235.0  
From Canvas Y: 1310.0  
Downstream: 1501

Route: Modified Puls  
Number of Reaches: 5  
Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 15S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 15C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 275.0  
Canvas Y: 1310.0  
Area: 0.246  
Downstream: 15O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 17.58  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 15O1

Description: COMBINE ROUTED HYDROGRAPH 15S1 WITH HYDROGRAPH  
FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
Downstream: 15R1

End:

Reservoir: 15R1

Description: ROUTE HYDROGRAPH FROM 15O1 THROUGH RILEY SMITH  
RD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1500.0  
Downstream: 16S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 15R1(Basin 1)  
Elevation-Outflow Table: 15R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 16S1

Description: ROUTE HYDROGRAPH FROM 15R1 TO COBBLESTONE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
From Canvas X: 250.0  
From Canvas Y: 1500.0  
Downstream: Junction-2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S1(Basin 1)  
Channel Loss: None

End:

Junction: Junction-2

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
Downstream: 16S2

End:

Reach: 16S2

Description: ROUTE HYDROGRAPH FROM 16S1 TO MOUTH OF SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 265.0  
Canvas Y: 1760.0  
From Canvas X: 250.0  
From Canvas Y: 1630.0  
Downstream: 1601

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 16C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 290.0  
Canvas Y: 1630.0  
Area: 0.192  
Downstream: 1601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 28.56  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1601

Description: COMBINE ROUTED HYDROGRAPH 16S2 WITH HYDROGRAPH  
FROM SUB-BASIN 16

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 265.0

Canvas Y: 1760.0

Downstream: 1602

End:

Subbasin: 17C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 17

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 305.0

Canvas Y: 1700.0

Area: 0.197

Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS

Lag: 23.46  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 18C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 345.0  
Canvas Y: 1640.0  
Area: 0.086  
Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 17.280  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1701

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 17 WITH  
HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 320.0  
Canvas Y: 1830.0  
Downstream: 1901

End:

Subbasin: 19C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 360.0  
Canvas Y: 1770.0  
Area: 0.053  
Downstream: 1901

Canopy: None

Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 18.6  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1901

Description: COMBINE 1701 WITH HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1900.0  
Downstream: 19R1

End:

Reservoir: 19R1

Description: ROUTE HYDROGRAPH FROM 1901 THROUGH RADCLIFFE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1960.0  
Downstream: 20S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 19R1(Basin 1)  
Elevation-Outflow Table: 19R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 20S1

Description: ROUTE HYDROGRAPH FROM 19R1 TO MOUTH OF SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
From Canvas X: 335.0  
From Canvas Y: 1960.0  
Downstream: 2001

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 20S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 20C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 375.0  
Canvas Y: 1960.0  
Area: 0.044  
Downstream: 2001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.24  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2001

Description: COMBINE ROUTED HYDROGRAPH 20S1 WITH HYDROGRAPH  
FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
Downstream: 21S1

End:

Reach: 21S1

Description: ROUTE HYDROGRAPH FROM 2001 TO MOUTH OF SUB-  
BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
From Canvas X: 350.0  
From Canvas Y: 2090.0



Downstream: 2101

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 21S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 21C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 390.0  
Canvas Y: 2090.0  
Area: 0.071  
Downstream: 2101

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2101

Description: COMBINE ROUTED HYDROGRAPH 21S1 WITH HYDROGRAPH  
FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
Downstream: 2102

End:

Subbasin: 22C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 22  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2160.0  
Area: 0.199

Downstream: 22R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.36  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 22R1

Description: ROUTE HYDROGRAPH FROM 22C1 THROUGH MERRIFIELD  
CT

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2220.0  
Downstream: 23R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 22R1(Basin 1)  
Elevation-Outflow Table: 22R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 23R1

Description: ROUTE HYDROGRAPH FROM 22R1 THROUGH HILLSBOROUGH  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2280.0  
Downstream: 23S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 23R1(Basin 1)  
Elevation-Outflow Table: 23R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 23S1

Description: ROUTE HYDROGRAPH FROM 23R1 TO MOUTH OF SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 435.0

Canvas Y: 2410.0

From Canvas X: 405.0

From Canvas Y: 2280.0

Downstream: 23O1

Route: Modified Puls

Number of Reaches: 3

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 23S1(Basin 1)

Channel Loss: None

End:

Subbasin: 24C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 24

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 485.0

Canvas Y: 2220.0

Area: 0.081

Downstream: 23O1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 71

Transform: SCS

Lag: 16.32

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 23C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 445.0

Canvas Y: 2280.0

Area: 0.051

Downstream: 23O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 13.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2301

Description: COMBINE ROUTED HYDROGRAPH 23S1 WITH HYDROGRAPH  
FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 435.0  
Canvas Y: 2410.0  
Downstream: 2102

End:

Junction: 2102

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 23 AND  
HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2480.0  
Downstream: 21R1

End:

Reservoir: 21R1

Description: ROUTE HYDROGRAPH FROM 2102 THROUGH CROSS CREEK  
LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2540.0  
Downstream: 25S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 21R1(Basin 1)  
Elevation-Outflow Table: 21R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 25S1  
Description: ROUTE HYDROGRAPH FROM 21R1 TO MOUTH OF SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 425.0  
Canvas Y: 2670.0  
From Canvas X: 410.0  
From Canvas Y: 2540.0  
Downstream: 2501

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 25S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 25C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 450.0  
Canvas Y: 2540.0  
Area: 0.090  
Downstream: 2501

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 17.82  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2501  
Description: COMBINE ROUTED HYDROGRAPH 25S1 WITH HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 425.0  
Canvas Y: 2670.0  
Downstream: 26S1

End:

Reach: 26S1

Description: ROUTE HYDROGRAPH FROM 2501 TO MOUTH OF SUB-BASIN 26

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
From Canvas X: 425.0  
From Canvas Y: 2670.0  
Downstream: 2601

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 26S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 26C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 26  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 465.0  
Canvas Y: 2670.0  
Area: 0.075  
Downstream: 2601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 13.74  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 27C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 27  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47  
Canvas X: 505.0  
Canvas Y: 2610.0  
Area: 0.053  
Downstream: 2601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 16.980  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2601

Description: COMBINE RUNOFF HYDROGRAPHS FROM SUB-BASIN 26  
AND SUB-BASIN 27 WITH ROUTED HYDROGRAPH 26S1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
Downstream: 28S1

End:

Reach: 28S1

Description: ROUTE HYDROGRAPH FROM 2601 TO 2801  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 500.0  
Canvas Y: 3060.0  
From Canvas X: 455.0  
From Canvas Y: 2800.0  
Downstream: 2801

Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 28S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 29C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 29

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2740.0  
Area: 0.104  
Downstream: 29D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 29D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 29 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2800.0  
Downstream: 3001

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 29D1(Basin 1)  
Elevation-Outflow Table: 29D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 30C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 575.0  
Canvas Y: 2740.0  
Area: 0.064  
Downstream: 3001

Canopy: None  
Allow Simultaneous Precip Et: No



Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 12.66  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3001

Description: COMBINE HYDROGRAPH FROM 29D1 WITH HYDROGRAPH  
FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2930.0  
Downstream: 30R1

End:

Reservoir: 30R1

Description: ROUTE HYDROGRAPH FROM 3001 THROUGH 30R1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2990.0  
Downstream: 2801

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 30R1(Basin 1)  
Elevation-Outflow Table: 30R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 28C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 28  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 495.0  
Canvas Y: 2800.0  
Area: 0.049  
Downstream: 2801

Canopy: None  
Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 11.64  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2801

Description: COMBINE HYDROGRAPH FROM 28S1 AND RUNOFF  
HYDROGRAPH 28C1 WITH HYDROGRAPH FROM 30R1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 500.0  
Canvas Y: 3060.0  
Downstream: 28R1

End:

Reservoir: 28R1

Description: ROUTE HYDROGRAPH FROM 2801 THROUGH PELHAM RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 500.0  
Canvas Y: 3120.0  
Downstream: 3101

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 28R1(Basin 1)  
Elevation-Outflow Table: 28R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 32C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 32  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 540.0  
Canvas Y: 3060.0  
Area: 0.125  
Downstream: 32R1

Canopy: None  
Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 69

Transform: SCS

Lag: 34.8

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 32R1

Description: ROUTE HYDROGRAPH FROM BASIN 32 THROUGH PELHAM

RD

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 540.0

Canvas Y: 3120.0

Downstream: 3101

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 32R1(Basin 1)

Elevation-Outflow Table: 32R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 3101

Description: COMBINE ROUTED HYDROGRAPH FROM 28R1 WITH ROUTED  
HYDROGRAPH FROM 32R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 515.0

Canvas Y: 3190.0

Downstream: 31R1

End:

Reservoir: 31R1

Description: ROUTE HYDROGRAPH FROM BASIN 3101 THROUGH 31R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 515.0

Canvas Y: 3250.0

Downstream: 31S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 31R1(Basin 1)  
Elevation-Outflow Table: 31R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 31S1

Description: ROUTE HYDROGRAPH FROM 31R1 TO MOUTH OF SUB-BASIN 31

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
From Canvas X: 515.0  
From Canvas Y: 3250.0  
Downstream: 31O2

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 31S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 31C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 555.0  
Canvas Y: 3250.0  
Area: 0.046  
Downstream: 31O2

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 15.780  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 31O2

Description: COMBINE ROUTED HYDROGRAPH 31S1 WITH HYDROGRAPH

FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
Downstream: 1602

End:

Junction: 1602  
Description: COMBINE HYDROGRAPH 3102 WITH HYDROGRAPH 1601  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 505.0  
Canvas Y: 3450.0  
Downstream: 33S1

End:

Reach: 33S1  
Description: ROUTE HYDROGRAPH FROM 1602 TO MOUTH OF SUB-  
BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 520.0  
Canvas Y: 3580.0  
From Canvas X: 505.0  
From Canvas Y: 3450.0  
Downstream: 3301

Route: Modified Puls  
Number of Reaches: 10  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 33S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 33C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 545.0  
Canvas Y: 3450.0  
Area: 0.377  
Downstream: 3301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0

Curve Number: 68

Transform: SCS  
Lag: 29.04  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3301

Description: COMBINE ROUTED HYDROGRAPH 3301 WITH HYDROGRAPH  
FROM SUB-BASIN 33

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 520.0

Canvas Y: 3580.0

Downstream: 33R1

End:

Reservoir: 33R1

Description: ROUTE HYDROGRAPH FROM 3301 THROUGH BLACK DR

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 520.0

Canvas Y: 3640.0

Downstream: 3401

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 33R1(Basin 1)

Elevation-Outflow Table: 33R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Subbasin: 35C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 35

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 560.0

Canvas Y: 3580.0

Area: 0.392

Downstream: 35D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 72

Transform: SCS  
Lag: 19.14  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 35D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 35 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3640.0  
Downstream: 36R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 35D1(Basin 1)  
Elevation-Outflow Table: 35D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 36R1

Description: ROUTE HYDROGRAPH FROM 35D1 THROUGH ROPER MTN RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3700.0  
Downstream: 36S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R1(Basin 1)  
Elevation-Outflow Table: 36R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 36S1

Description: ROUTE HYDROGRAPH FROM 36R1 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
From Canvas X: 560.0  
From Canvas Y: 3700.0  
Downstream: 36S2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 36S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 36S2

Description: ROUTE HYDROGRAPH FROM 36S1 TO MOUTH OF SUB-BASIN 36

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
Downstream: 3601

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 36S2(Basin 1)

End:

Subbasin: 36C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 36  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 600.0  
Canvas Y: 3760.0  
Area: 0.291  
Downstream: 3601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 22.92  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3601

Description: COMBINE ROUTED HYDROGRAPH 36S2 WITH HYDROGRAPH FROM SUB-BASIN 36

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3890.0  
Downstream: 36R2

End:

Reservoir: 36R2

Description: ROUTE HYDROGRAPH 3601 THROUGH DEWBERRY LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3950.0  
Downstream: 37S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R2(Basin 1)  
Elevation-Outflow Table: 36R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S1

Description: ROUTE HYDROGRAPH 36R2 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
From Canvas X: 575.0  
From Canvas Y: 3950.0  
Downstream: 37R1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 37R1

Description: ROUTE HYDROGRAPH 37S1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
Downstream: 37R2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R1(Basin 1)  
Elevation-Outflow Table: 37R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reservoir: 37R2

Description: ROUTE HYDROGRAPH 37R1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4130.0  
Downstream: 37R3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R2(Basin 1)  
Elevation-Outflow Table: 37R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 37R3

Description: ROUTE HYDROGRAPH 37R2 THROUGH SUGARBERRY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4190.0  
Downstream: 37S2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R3(Basin 1)  
Elevation-Outflow Table: 37R3(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S2

Description: ROUTE HYDROGRAPH 37R3 TO MOUTH OF SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 590.0  
Canvas Y: 4320.0  
From Canvas X: 575.0  
From Canvas Y: 4190.0  
Downstream: 37O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 37C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 615.0  
Canvas Y: 4190.0  
Area: 0.153  
Downstream: 3701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 33.120  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3701

Description: COMBINE ROUTED HYDROGRAPH 37S2 WITH HYDROGRAPH  
FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 590.0  
Canvas Y: 4320.0  
Downstream: 3702

End:

Subbasin: 39C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 39  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4260.0  
Area: 0.398  
Downstream: 39R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 76

Transform: SCS  
Lag: 36.06  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 39R1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 39 THROUGH  
ROPER MTN ROAD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4320.0  
Downstream: 39O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 39R1(Basin 1)  
Elevation-Outflow Table: 39R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 38C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 38  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 630.0  
Canvas Y: 4260.0  
Area: 0.080  
Downstream: 38D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 85

Transform: SCS  
Lag: 12.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 38D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 38 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 630.0

Canvas Y: 4320.0

Downstream: 3901

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 38D1(Basin 1)

Elevation-Outflow Table: 38D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 3901

Description: COMBINE HYDROGRAPH 38D1 WITH HYDROGRAPH FROM  
ROUTED HYDROGRAPH 39R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4390.0

Downstream: 39R2

End:

Reservoir: 39R2

Description: ROUTE HYDROGRAPH 3901 THROUGH I-85

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4450.0

Downstream: 40S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 39R2(Basin 1)

Elevation-Outflow Table: 39R2(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 40S1

Description: ROUTE HYDROGRAPH 39R1 TO MOUTH OF SUB-BASIN 40

Last Modified Date: 16 March 2017

Last Modified Time: 12:12:22

Canvas X: 660.0

Canvas Y: 4580.0

From Canvas X: 645.0

From Canvas Y: 4450.0

Downstream: 4001  
  
Route: Muskingum Cunge  
Channel: 8-point  
Length: 900  
Energy Slope: 0.0089  
Mannings n: 0.055  
Left Mannings n: 0.075  
Right Mannings n: 0.085  
Cross Section Name: 40S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 40C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 685.0  
Canvas Y: 4450.0  
Area: 0.351  
Downstream: 4001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 75

Transform: SCS  
Lag: 36.18  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4001

Description: COMBINE ROUTED HYDROGRAPH 40S1 WITH HYDROGRAPH  
FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4580.0  
Downstream: 40D1

End:

Reservoir: 40D1

Description: ROUTE HYDROGRAPH FROM 4001 THROUGH DETENTION

BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4640.0  
Downstream: 37S3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 40D1(Basin 1)  
Elevation-Outflow Table: 40D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S3

Description: ROUTE HYDROGRAPH 40D1 TO 3702  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:10:35  
Canvas X: 635.0  
Canvas Y: 4770.0  
From Canvas X: 660.0  
From Canvas Y: 4640.0  
Downstream: 3702

Route: Muskingum Cunge  
Channel: 8-point  
Length: 640  
Energy Slope: 0.0094  
Mannings n: 0.043  
Left Mannings n: 0.063  
Right Mannings n: 0.063  
Cross Section Name: 37S3(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Junction: 3702

Description: COMBINE HYDROGRAPH 3701 WITH HYDROGRAPH FROM  
SUB-BASIN 40D1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 635.0  
Canvas Y: 4770.0  
Downstream: 34S1

End:

Reach: 34S1

Description: ROUTE HYDROGRAPH 3702 TO 3401  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0

Canvas Y: 4900.0  
From Canvas X: 635.0  
From Canvas Y: 4770.0  
Downstream: 3401

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 34S1(Basin 1)  
Channel Loss: None

End:

Junction: 3401

Description: COMBINE ROUTED HYDROGRAPH 34S1 WITH ROUTED  
HYDROGRAPH 33R1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0  
Canvas Y: 4900.0  
Downstream: 3402

End:

Subbasin: 34C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 34  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 650.0  
Canvas Y: 4840.0  
Area: 0.247  
Downstream: 3402

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 22.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3402

Description: COMBINE HYDROGRAPH 3401 WITH HYDROGRAPH FROM  
SUB-BASIN 34

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 4970.0  
Downstream: 34R1

End:

Reservoir: 34R1

Description: ROUTE HYDROGRAPH 34O2 THROUGH MUDDY FORD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 5030.0  
Downstream: 41S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 34R1(Basin 1)  
Elevation-Outflow Table: 34R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 41S1

Description: ROUTE HYDROGRAPH 34R1 TO MOUTH OF SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 640.0  
Canvas Y: 5160.0  
From Canvas X: 625.0  
From Canvas Y: 5030.0  
Downstream: 43O1

Route: Modified Puls  
Number of Reaches: 15  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 41S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 41C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 665.0  
Canvas Y: 5030.0  
Area: 0.367  
Downstream: 43O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 31.740  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4301

Description: COMBINE ROUTED HYDROGRAPH 41S1 WITH HYDROGRAPH  
FROM SUB-BASIN 41

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 640.0

Canvas Y: 5160.0

Downstream: 4302

End:

Subbasin: 42C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 42

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 680.0

Canvas Y: 5100.0

Area: 0.305

Downstream: 42D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 26.7  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 42D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 42 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 680.0  
Canvas Y: 5160.0  
Downstream: 43S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 42D1(Basin 1)  
Elevation-Outflow Table: 42D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 43S1

Description: ROUTE HYDROGRAPH 42D1 TO MOUTH OF SUB-BASIN 43  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:14:32  
Canvas X: 695.0  
Canvas Y: 5290.0  
From Canvas X: 680.0  
From Canvas Y: 5160.0  
Downstream: Junction-3

Route: Muskingum Cunge  
Channel: 8-point  
Length: 1750  
Energy Slope: 0.0091  
Mannings n: 0.068  
Left Mannings n: 0.072  
Right Mannings n: 0.068  
Cross Section Name: 43S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 43C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 43  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 720.0  
Canvas Y: 5160.0  
Area: 0.236  
Downstream: Junction-3

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 83

Transform: SCS  
Lag: 25.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: Junction-3

Description: COMBINE ROUTED HYDROGRAPH 43S1 WITH HYDROGRAPH  
FROM SUB-BASIN 43

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5290.0

Downstream: 43D1

End:

Reservoir: 43D1

Description: ROUTE HYDROGRAPH FROM 43O1 THROUGH DETENTION  
BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5350.0

Downstream: 43O2

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 43D1(Basin 1)

Elevation-Outflow Table: 43D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 43O2

Description: COMBINE HYDROGRAPH 43O1 WITH HYDROGRAPH 43D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:46:25

Canvas X: 666.3463777645311

Canvas Y: 5418.189159935088

Downstream: 41R1

End:

Reservoir: 41R1

Description: ROUTE HYDROGRAPH 43O2 THROUGH I-85

Last Modified Date: 15 March 2017

Last Modified Time: 19:34:20

Canvas X: 670.0

Canvas Y: 5480.0

Downstream: 44R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 41R1(Basin 1)  
Elevation-Outflow Table: 41R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 44R1

Description: ROUTE HYDROGRAPH 41R1 THROUGH HORN BARRIER DR  
Last Modified Date: 20 March 2017  
Last Modified Time: 19:34:54  
Canvas X: 673.9004963965499  
Canvas Y: 5540.887266097396  
Label X: -1.0  
Label Y: 0.0  
Downstream: 44O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 44R1(Basin 1)  
Elevation-Outflow Table: 44R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 44C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 44  
Last Modified Date: 15 March 2017  
Last Modified Time: 19:42:13  
Canvas X: 727.825169882547  
Canvas Y: 5477.68004447215  
Area: 0.161  
Downstream: 44O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 20.040  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4401

Description: COMBINE ROUTED HYDROGRAPH 44R1 WITH HYDROGRAPH  
FROM SUB-BASIN 44

Last Modified Date: 15 March 2017

Last Modified Time: 20:23:58

Canvas X: 684.3816690574948

Canvas Y: 5625.387947277328

Downstream: 4402

End:

Subbasin: 45C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 45

Last Modified Date: 15 March 2017

Last Modified Time: 19:45:22

Canvas X: 764.0280872367573

Canvas Y: 5545.017470750981

Area: 0.522

Downstream: 45D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 73

Transform: SCS

Lag: 22.62

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 45D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 45 THROUGH  
DETENTION BASIN

Last Modified Date: 15 March 2017

Last Modified Time: 20:15:00

Canvas X: 757.610513121083

Canvas Y: 5629.330645905207

Downstream: 46S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 45D1(Basin 1)

Elevation-Outflow Table: 45D1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 46S1

Description: ROUTE HYDROGRAPH 45D1 TO MOUTH OF SUB-BASIN 46  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:33:51  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
From Canvas X: 757.610513121083  
From Canvas Y: 5629.330645905207  
Downstream: 4601

Route: Muskingum Cunge  
Channel: 8-point  
Length: 3100  
Energy Slope: 0.0097  
Mannings n: 0.04  
Left Mannings n: 0.075  
Right Mannings n: 0.075  
Cross Section Name: 46S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 46C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:22:09  
Canvas X: 871.5478166291224  
Canvas Y: 5627.361735313  
Area: 0.176  
Downstream: 4601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 23.52  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4601

Description: COMBINE ROUTED HYDROGRAPH 46S1 WITH HYDROGRAPH  
FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:24:06  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
Downstream: 44O2

End:

Junction: 44O2  
Description: COMBINE HYDROGRAPH 44O1 WITH HYDROGRAPH 46O1  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:36:34  
Canvas X: 767.7211792353773  
Canvas Y: 6044.146089039335  
Downstream: 44R2

End:



EXISTING/  
CORRECTED EFFECTIVE

CORRECTED EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
1XP	0.170	561.0	01Jan2000, 12:06	5.97
02S1	0.170	546.8	01Jan2000, 12:10	5.97
Junction-1	0.170	546.8	01Jan2000, 12:10	5.97
02S2	0.170	544.2	01Jan2000, 12:13	5.97
03C1	0.110	581.4	01Jan2000, 12:02	7.08
03R1	0.110	209.5	01Jan2000, 12:16	7.08
02C1	0.060	134.5	01Jan2000, 12:20	5.07
02O1	0.340	871.3	01Jan2000, 12:14	6.17
04R1	0.340	846.3	01Jan2000, 12:17	6.17
04S1	0.340	844.0	01Jan2000, 12:18	6.17
04C1	0.068	281.8	01Jan2000, 12:07	6.49
04O1	0.408	1037.2	01Jan2000, 12:15	6.22
05S1	0.408	1033.0	01Jan2000, 12:17	6.22
05C1	0.145	366.2	01Jan2000, 12:18	5.42
06C1	0.035	240.0	01Jan2000, 11:56	7.20
06D1	0.035	189.5	01Jan2000, 12:00	7.20
05O1	0.588	1451.4	01Jan2000, 12:17	6.08
7XP	0.160	392.0	01Jan2000, 12:06	6.43
08O1	0.748	1775.7	01Jan2000, 12:17	6.16
08C1	0.033	137.6	01Jan2000, 12:04	5.42
08O2	0.781	1829.4	01Jan2000, 12:16	6.13
08S1	0.781	1828.6	01Jan2000, 12:18	6.13
09C1	0.025	148.2	01Jan2000, 11:59	6.61
09O1	0.806	1851.1	01Jan2000, 12:18	6.14
09R1	0.806	1851.3	01Jan2000, 12:18	6.14
10S1	0.806	1839.7	01Jan2000, 12:23	6.14
10C1	0.163	482.3	01Jan2000, 12:08	4.60
11C1	0.105	276.8	01Jan2000, 12:12	4.72
10O1	1.074	2394.3	01Jan2000, 12:17	5.77
12S1	1.074	2390.1	01Jan2000, 12:18	5.77
12C1	0.107	358.2	01Jan2000, 12:07	5.07
12O1	1.181	2621.9	01Jan2000, 12:17	5.70
13S1	1.181	2609.5	01Jan2000, 12:19	5.70
14C1	0.088	235.7	01Jan2000, 12:08	4.14
13C1	0.079	177.7	01Jan2000, 12:18	4.84
13O1	1.348	2938.2	01Jan2000, 12:19	5.55
15S1	1.348	2917.4	01Jan2000, 12:23	5.55
15C1	0.246	691.1	01Jan2000, 12:10	4.72
15O1	1.594	3387.3	01Jan2000, 12:21	5.42
15R1	1.594	3348.8	01Jan2000, 12:23	5.42
16S1	1.594	3254.4	01Jan2000, 12:33	5.42
Junction-2	1.594	3254.4	01Jan2000, 12:33	5.42

CORRECTED EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
16S2	1.594	3252.0	01Jan2000, 12:34	5.42
16C1	0.192	382.6	01Jan2000, 12:21	4.60
16O1	1.786	3563.5	01Jan2000, 12:33	5.33
17C1	0.197	449.0	01Jan2000, 12:16	4.60
18C1	0.086	219.6	01Jan2000, 12:10	4.25
17O1	0.283	652.3	01Jan2000, 12:14	4.50
19C1	0.053	140.3	01Jan2000, 12:11	4.60
19O1	0.336	790.5	01Jan2000, 12:13	4.51
19R1	0.336	787.4	01Jan2000, 12:14	4.51
20S1	0.336	780.0	01Jan2000, 12:17	4.51
20C1	0.044	112.6	01Jan2000, 12:14	4.84
20O1	0.380	889.3	01Jan2000, 12:17	4.55
21S1	0.380	872.2	01Jan2000, 12:22	4.55
21C1	0.071	186.4	01Jan2000, 12:12	4.72
21O1	0.451	1020.3	01Jan2000, 12:21	4.58
22C1	0.199	507.3	01Jan2000, 12:14	4.84
22R1	0.199	502.8	01Jan2000, 12:16	4.84
23R1	0.199	501.2	01Jan2000, 12:17	4.84
23S1	0.199	443.5	01Jan2000, 12:29	4.84
24C1	0.081	237.9	01Jan2000, 12:09	4.72
23C1	0.051	165.3	01Jan2000, 12:07	4.72
23O1	0.331	601.9	01Jan2000, 12:25	4.79
21O2	0.782	1610.9	01Jan2000, 12:22	4.67
21R1	0.782	1606.6	01Jan2000, 12:23	4.67
25S1	0.782	1594.4	01Jan2000, 12:28	4.67
25C1	0.090	238.1	01Jan2000, 12:11	4.49
25O1	0.872	1713.8	01Jan2000, 12:27	4.65
26S1	0.872	1698.7	01Jan2000, 12:33	4.65
26C1	0.075	236.6	01Jan2000, 12:07	4.60
27C1	0.053	155.8	01Jan2000, 12:10	4.84
26O1	1.000	1813.4	01Jan2000, 12:32	4.65
28S1	1.000	1720.2	01Jan2000, 12:44	4.65
29C1	0.104	279.9	01Jan2000, 12:12	4.84
29D1	0.104	126.4	01Jan2000, 12:33	4.79
30C1	0.064	205.4	01Jan2000, 12:06	4.49
30O1	0.168	227.3	01Jan2000, 12:07	4.67
30R1	0.168	186.6	01Jan2000, 12:14	4.67
28C1	0.049	172.3	01Jan2000, 12:05	4.72
28O1	1.217	1897.3	01Jan2000, 12:43	4.66
28R1	1.217	1398.8	01Jan2000, 12:56	4.66
32C1	0.125	210.8	01Jan2000, 12:28	4.49
32R1	0.125	206.7	01Jan2000, 12:32	4.49

CORRECTED EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
31O1	1.342	1529.2	01Jan2000, 12:55	4.64
31R1	1.342	1520.7	01Jan2000, 12:57	4.64
31S1	1.342	1516.2	01Jan2000, 13:01	4.64
31C1	0.046	127.4	01Jan2000, 12:09	4.37
31O2	1.388	1532.3	01Jan2000, 13:01	4.63
16O2	3.174	4920.5	01Jan2000, 12:34	5.03
33S1	3.174	4904.0	01Jan2000, 12:40	5.03
33C1	0.377	703.0	01Jan2000, 12:22	4.37
33O1	3.551	5393.2	01Jan2000, 12:39	4.96
33R1	3.551	4747.1	01Jan2000, 12:53	4.96
35C1	0.392	1071.1	01Jan2000, 12:12	4.84
35D1	0.392	280.0	01Jan2000, 12:45	4.77
36R1	0.392	275.1	01Jan2000, 12:55	4.77
36S1	0.392	274.9	01Jan2000, 13:00	4.76
36S2	0.392	274.9	01Jan2000, 13:01	4.76
36C1	0.291	637.8	01Jan2000, 12:16	4.37
36O1	0.683	753.7	01Jan2000, 12:19	4.60
36R2	0.683	747.4	01Jan2000, 12:21	4.60
37S1	0.683	744.7	01Jan2000, 12:23	4.59
37R1	0.683	736.2	01Jan2000, 12:26	4.59
37R2	0.683	724.5	01Jan2000, 12:28	4.59
37R3	0.683	716.0	01Jan2000, 12:31	4.59
37S2	0.683	680.8	01Jan2000, 12:38	4.59
37C1	0.153	281.9	01Jan2000, 12:26	4.72
37O1	0.836	930.1	01Jan2000, 12:36	4.62
39C1	0.398	776.7	01Jan2000, 12:29	5.30
39R1	0.398	485.4	01Jan2000, 12:54	5.30
38C1	0.080	350.0	01Jan2000, 12:05	6.37
38D1	0.080	206.1	01Jan2000, 12:16	6.37
39O1	0.478	603.6	01Jan2000, 12:28	5.48
39R2	0.478	575.6	01Jan2000, 12:46	5.48
40S1	0.478	573.9	01Jan2000, 12:50	5.48
40C1	0.351	668.5	01Jan2000, 12:29	5.19
40O1	0.829	1101.5	01Jan2000, 12:43	5.36
40D1	0.829	612.8	01Jan2000, 13:38	4.63
37S3	0.829	612.8	01Jan2000, 13:41	4.63
37O2	1.665	1489.3	01Jan2000, 12:40	4.62
34S1	1.665	1461.1	01Jan2000, 12:45	4.62
34O1	5.216	6152.4	01Jan2000, 12:52	4.85
34C1	0.247	530.0	01Jan2000, 12:15	4.25
34O2	5.463	6306.2	01Jan2000, 12:52	4.82
34R1	5.463	4824.5	01Jan2000, 13:16	4.82

CORRECTED EFFECTIVE 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
41S1	5.463	4766.4	01Jan2000, 13:29	4.82
41C1	0.367	624.5	01Jan2000, 12:25	4.25
43O1	5.830	4902.9	01Jan2000, 13:29	4.79
42C1	0.305	702.7	01Jan2000, 12:19	5.07
42D1	0.305	450.8	01Jan2000, 12:37	5.07
43S1	0.305	448.4	01Jan2000, 12:44	5.07
43C1	0.236	665.9	01Jan2000, 12:17	6.13
Junction-3	0.541	922.1	01Jan2000, 12:23	5.53
43D1	0.541	921.3	01Jan2000, 12:24	5.53
43O2	6.371	5240.6	01Jan2000, 13:28	4.85
41R1	6.371	4585.7	01Jan2000, 13:57	4.85
44R1	6.371	4454.9	01Jan2000, 14:12	4.85
44C1	0.161	427.3	01Jan2000, 12:13	4.84
44O1	6.532	4484.8	01Jan2000, 14:12	4.85
45C1	0.522	1313.1	01Jan2000, 12:15	4.95
45D1	0.522	341.3	01Jan2000, 12:54	4.86
46S1	0.522	338.3	01Jan2000, 13:06	4.85
46C1	0.176	400.5	01Jan2000, 12:16	4.60
46O1	0.698	505.9	01Jan2000, 12:22	4.79
44O2	7.230	4753.3	01Jan2000, 14:10	4.84
44R2	7.230	4676.4	01Jan2000, 14:25	4.84

Basin: Basin 1  
Description: HYDROLOGIC MODEL FOR ROCKY CREEK WATERSHED  
GREENVILLE, SC MODEL SET-UP PERFORMED BY WOOLPERT LLP - CHARLOTTE  
OFFICE EXISTING CONDITIONS A=0.2\*S FILENAME= ROCKY\_E.HC1  
Last Modified Date: 11 May 2017  
Last Modified Time: 15:43:56  
Version: 4.2  
Filepath Separator: \  
Unit System: English  
Missing Flow To Zero: No  
Enable Flow Ratio: No  
Compute Local Flow At Junctions: No  
  
Enable Sediment Routing: No  
  
Enable Quality Routing: No  
End:

Source: 1XP  
Description: BASIN 1 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 14 March 2017  
Last Modified Time: 16:23:32  
Canvas X: 40.0  
Canvas Y: 10.0  
Area: 0.170  
Observed Hydrograph Gage: 1XP  
Downstream: 02S1  
  
Flow Method: GAGE\_FLOW  
Flow Gage: 1XP  
End Flow Method:  
End:

Reach: 02S1  
Description: ROUTE HYDROGRAPH FROM 01C1 TO CULVERT IN WOODS  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0  
Canvas Y: 140.0  
Downstream: Junction-1  
  
Route: Modified Puls  
Number of Reaches: 8  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S1(Basin 1)  
Channel Loss: None  
End:

Junction: Junction-1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0

Canvas Y: 140.0  
Downstream: 02S2  
End:

Reach: 02S2  
Description: ROUTE HYDROGRAPH FROM 02S2 TO MOUTH OF SUB-  
BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
From Canvas X: 40.0  
From Canvas Y: 140.0  
Downstream: 02O1

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S2(Basin 1)  
Channel Loss: None  
End:

Subbasin: 03C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 80.0  
Area: 0.110  
Downstream: 03R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 91

Transform: SCS  
Lag: 9.66  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Reservoir: 03R1  
Description: ROUTE HYDROGRAPH FROM SUB-BASIN 03 THROUGH I-  
385  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 140.0  
Downstream: 0201

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 03R1(Basin 1)  
Elevation-Outflow Table: 03R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 02C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 80.0  
Canvas Y: 140.0  
Area: 0.060  
Downstream: 0201

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 27.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0201

Description: COMBINE ROUTED HYDROGRAPH 02S2 WITH HYDROGRAPH  
FROM SUB-BASIN 02 AND SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
Downstream: 04R1

End:

Reservoir: 04R1

Description: ROUTE HYDROGRAPH FROM 0201 THROUGH DRIVEWAY  
CULVERT



Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 330.0  
Downstream: 04S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 04R1(Basin 1)  
Elevation-Outflow Table: 04R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 04S1

Description: ROUTE HYDROGRAPH FROM 04R1 TO MOUTH OF SUB-BASIN 04

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 390.0  
Downstream: 04O1

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 04S1(Basin 1)

End:

Subbasin: 04C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 110.0  
Canvas Y: 330.0  
Area: 0.068  
Downstream: 04O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 86

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None  
End:  
Junction: 0401  
Description: COMBINE ROUTED HYDROGRAPH 04S1 WITH HYDROGRAPH  
FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 85.0  
Canvas Y: 460.0  
Downstream: 05S1  
End:

Reach: 05S1  
Description: ROUTE HYDROGRAPH FROM 0401 TO MOUTH OF SUB-  
BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
From Canvas X: 85.0  
From Canvas Y: 460.0  
Downstream: 05O1  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 05S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 05C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 125.0  
Canvas Y: 460.0  
Area: 0.145  
Downstream: 05O1  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77  
  
Transform: SCS  
Lag: 25.68

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 06C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 06

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 400.0

Area: 0.035

Downstream: 06D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 92

Transform: SCS

Lag: 3.0

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 06D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 06 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 460.0

Downstream: 0501

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 06D1(Basin 1)

Elevation-Outflow Table: 06D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 0501

Description: COMBINE ROUTED HYDROGRAPH 05S1 WITH HYDROGRAPH  
FROM SUB-BASIN 05 AND ROUTED HYDROGRAPH 06D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
Downstream: 0801

End:

Source: 7XP

Description: BASIN 7 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 155.0  
Canvas Y: 530.0  
Area: 0.160  
Downstream: 0801

Flow Method: GAGE\_FLOW  
Flow Gage: 7XP  
End Flow Method:

End:

Junction: 0801

Description: COMBINE HYDROGRAPH 0501 WITH HYDROGRAPH FROM  
SUB-BASIN 07  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 130.0  
Canvas Y: 660.0  
Downstream: 0802

End:

Subbasin: 08C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 170.0  
Canvas Y: 600.0  
Area: 0.033  
Downstream: 0802

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77

Transform: SCS  
Lag: 10.62  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Junction: 0802  
Description: COMBINE HYDROGRAPH 0801 WITH HYDROGRAPH FROM  
SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 145.0  
Canvas Y: 730.0  
Downstream: 08S1  
End:

Reach: 08S1  
Description: ROUTE HYDROGRAPH FROM 0802 TO CREEKVIEW COURT  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 160.0  
Canvas Y: 860.0  
From Canvas X: 145.0  
From Canvas Y: 730.0  
Downstream: 0901  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 08S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 09C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 09  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 185.0  
Canvas Y: 730.0  
Area: 0.025  
Downstream: 0901  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 87  
  
Transform: SCS  
Lag: 5.64

Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0901

Description: COMBINE ROUTED HYDROGRAPH 08S1 WITH HYDROGRAPH  
FROM SUB-BASIN 09

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 860.0

Downstream: 09R1

End:

Reservoir: 09R1

Description: ROUTE HYDROGRAPH FROM 0901 THROUGH ROPER  
MOUNTAIN EXT

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 920.0

Downstream: 10S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 09R1(Basin 1)

Elevation-Outflow Table: 09R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 10S1

Description: ROUTE HYDROGRAPH FROM 09R1 TO MOUTH OF SUB-  
BASIN 10

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 190.0

Canvas Y: 1050.0

From Canvas X: 160.0

From Canvas Y: 920.0

Downstream: 1001

Route: Modified Puls

Number of Reaches: 6

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 10S1(Basin 1)

Channel Loss: None

End:

Subbasin: 10C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 10

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 200.0  
Canvas Y: 920.0  
Area: 0.163  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 15.42  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 11C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 240.0  
Canvas Y: 860.0  
Area: 0.105  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.5  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1001

Description: COMBINE ROUTED HYDROGRAPH 10S1 WITH HYDROGRAPH

FROM SUB-BASIN 10 AND SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 190.0  
Canvas Y: 1050.0  
Downstream: 12S1

End:

Reach: 12S1

Description: ROUTE HYDROGRAPH FROM 1001 TO MOUTH OF SUB-BASIN 12

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
From Canvas X: 190.0  
From Canvas Y: 1050.0  
Downstream: 12O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 12S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 12C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 230.0  
Canvas Y: 1050.0  
Area: 0.107  
Downstream: 12O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None

End:



Junction: 1201  
Description: COMBINE ROUTED HYDROGRAPH 12S1 WITH HYDROGRAPH  
FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
Downstream: 13S1  
End:

Reach: 13S1  
Description: ROUTE HYDROGRAPH FROM 1201 TO MOUTH OF SUB-  
BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
From Canvas X: 205.0  
From Canvas Y: 1180.0  
Downstream: 1301  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 13S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 14C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 285.0  
Canvas Y: 1120.0  
Area: 0.088  
Downstream: 1301  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 66  
  
Transform: SCS  
Lag: 15.18  
Unitgraph Type: STANDARD  
  
Baseflow: None

End:

Subbasin: 13C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 245.0  
Canvas Y: 1180.0  
Area: 0.079  
Downstream: 1301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 25.8  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1301

Description: COMBINE ROUTED HYDROGRAPH 13S1 WITH HYDROGRAPH  
FROM SUB-BASIN 13 AND SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
Downstream: 15S1

End:

Reach: 15S1

Description: ROUTE HYDROGRAPH FROM 1301 TO MOUTH OF SUB-  
BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
From Canvas X: 235.0  
From Canvas Y: 1310.0  
Downstream: 1501

Route: Modified Puls  
Number of Reaches: 5  
Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 15S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 15C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 275.0  
Canvas Y: 1310.0  
Area: 0.246  
Downstream: 15O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 17.58  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 15O1

Description: COMBINE ROUTED HYDROGRAPH 15S1 WITH HYDROGRAPH  
FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
Downstream: 15R1

End:

Reservoir: 15R1

Description: ROUTE HYDROGRAPH FROM 15O1 THROUGH RILEY SMITH  
RD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1500.0  
Downstream: 16S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 15R1(Basin 1)  
Elevation-Outflow Table: 15R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 16S1

Description: ROUTE HYDROGRAPH FROM 15R1 TO COBBLESTONE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
From Canvas X: 250.0  
From Canvas Y: 1500.0  
Downstream: Junction-2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S1(Basin 1)  
Channel Loss: None

End:

Junction: Junction-2

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
Downstream: 16S2

End:

Reach: 16S2

Description: ROUTE HYDROGRAPH FROM 16S1 TO MOUTH OF SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 265.0  
Canvas Y: 1760.0  
From Canvas X: 250.0  
From Canvas Y: 1630.0  
Downstream: 1601

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 16C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 290.0  
Canvas Y: 1630.0  
Area: 0.192  
Downstream: 1601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 28.56  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1601

Description: COMBINE ROUTED HYDROGRAPH 16S2 WITH HYDROGRAPH  
FROM SUB-BASIN 16

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 265.0

Canvas Y: 1760.0

Downstream: 1602

End:

Subbasin: 17C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 17

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 305.0

Canvas Y: 1700.0

Area: 0.197

Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS

Lag: 23.46  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 18C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 345.0  
Canvas Y: 1640.0  
Area: 0.086  
Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 17.280  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1701

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 17 WITH  
HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 320.0  
Canvas Y: 1830.0  
Downstream: 1901

End:

Subbasin: 19C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 360.0  
Canvas Y: 1770.0  
Area: 0.053  
Downstream: 1901

Canopy: None

Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 18.6  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1901

Description: COMBINE 1701 WITH HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1900.0  
Downstream: 19R1

End:

Reservoir: 19R1

Description: ROUTE HYDROGRAPH FROM 1901 THROUGH RADCLIFFE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1960.0  
Downstream: 20S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 19R1(Basin 1)  
Elevation-Outflow Table: 19R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 20S1

Description: ROUTE HYDROGRAPH FROM 19R1 TO MOUTH OF SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
From Canvas X: 335.0  
From Canvas Y: 1960.0  
Downstream: 2001

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 20S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 20C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 375.0  
Canvas Y: 1960.0  
Area: 0.044  
Downstream: 2001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.24  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2001

Description: COMBINE ROUTED HYDROGRAPH 20S1 WITH HYDROGRAPH  
FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
Downstream: 21S1

End:

Reach: 21S1

Description: ROUTE HYDROGRAPH FROM 2001 TO MOUTH OF SUB-  
BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
From Canvas X: 350.0  
From Canvas Y: 2090.0



Downstream: 2101

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 21S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 21C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 390.0  
Canvas Y: 2090.0  
Area: 0.071  
Downstream: 2101

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2101

Description: COMBINE ROUTED HYDROGRAPH 21S1 WITH HYDROGRAPH  
FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
Downstream: 2102

End:

Subbasin: 22C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 22  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2160.0  
Area: 0.199

Downstream: 22R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.36  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 22R1

Description: ROUTE HYDROGRAPH FROM 22C1 THROUGH MERRIFIELD  
CT

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2220.0  
Downstream: 23R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 22R1(Basin 1)  
Elevation-Outflow Table: 22R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 23R1

Description: ROUTE HYDROGRAPH FROM 22R1 THROUGH HILLSBOROUGH  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2280.0  
Downstream: 23S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 23R1(Basin 1)  
Elevation-Outflow Table: 23R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 23S1

Description: ROUTE HYDROGRAPH FROM 23R1 TO MOUTH OF SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 435.0

Canvas Y: 2410.0

From Canvas X: 405.0

From Canvas Y: 2280.0

Downstream: 23O1

Route: Modified Puls

Number of Reaches: 3

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 23S1(Basin 1)

Channel Loss: None

End:

Subbasin: 24C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 24

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 485.0

Canvas Y: 2220.0

Area: 0.081

Downstream: 23O1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 71

Transform: SCS

Lag: 16.32

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 23C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 445.0

Canvas Y: 2280.0

Area: 0.051

Downstream: 23O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 13.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2301

Description: COMBINE ROUTED HYDROGRAPH 23S1 WITH HYDROGRAPH  
FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 435.0  
Canvas Y: 2410.0  
Downstream: 2102

End:

Junction: 2102

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 23 AND  
HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2480.0  
Downstream: 21R1

End:

Reservoir: 21R1

Description: ROUTE HYDROGRAPH FROM 2102 THROUGH CROSS CREEK  
LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2540.0  
Downstream: 25S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 21R1(Basin 1)  
Elevation-Outflow Table: 21R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 25S1  
Description: ROUTE HYDROGRAPH FROM 21R1 TO MOUTH OF SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 425.0  
Canvas Y: 2670.0  
From Canvas X: 410.0  
From Canvas Y: 2540.0  
Downstream: 2501

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 25S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 25C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 450.0  
Canvas Y: 2540.0  
Area: 0.090  
Downstream: 2501

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 17.82  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2501  
Description: COMBINE ROUTED HYDROGRAPH 25S1 WITH HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 425.0  
Canvas Y: 2670.0  
Downstream: 26S1

End:

Reach: 26S1

Description: ROUTE HYDROGRAPH FROM 2501 TO MOUTH OF SUB-BASIN 26

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
From Canvas X: 425.0  
From Canvas Y: 2670.0  
Downstream: 26O1

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 26S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 26C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 26  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 465.0  
Canvas Y: 2670.0  
Area: 0.075  
Downstream: 26O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 13.74  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 27C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 27  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47  
Canvas X: 505.0  
Canvas Y: 2610.0  
Area: 0.053  
Downstream: 2601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 16.980  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2601

Description: COMBINE RUNOFF HYDROGRAPHS FROM SUB-BASIN 26  
AND SUB-BASIN 27 WITH ROUTED HYDROGRAPH 26S1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
Downstream: 28S1

End:

Reach: 28S1

Description: ROUTE HYDROGRAPH FROM 2601 TO 2801  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 500.0  
Canvas Y: 3060.0  
From Canvas X: 455.0  
From Canvas Y: 2800.0  
Downstream: 2801

Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 28S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 29C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 29

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2740.0  
Area: 0.104  
Downstream: 29D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 29D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 29 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2800.0  
Downstream: 3001

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 29D1(Basin 1)  
Elevation-Outflow Table: 29D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 30C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 575.0  
Canvas Y: 2740.0  
Area: 0.064  
Downstream: 3001

Canopy: None  
Allow Simultaneous Precip Et: No



Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 12.66  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3001

Description: COMBINE HYDROGRAPH FROM 29D1 WITH HYDROGRAPH  
FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2930.0  
Downstream: 30R1

End:

Reservoir: 30R1

Description: ROUTE HYDROGRAPH FROM 3001 THROUGH 30R1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2990.0  
Downstream: 2801

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 30R1(Basin 1)  
Elevation-Outflow Table: 30R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 28C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 28  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 495.0  
Canvas Y: 2800.0  
Area: 0.049  
Downstream: 2801

Canopy: None  
Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 11.64  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2801

Description: COMBINE HYDROGRAPH FROM 28S1 AND RUNOFF  
HYDROGRAPH 28C1 WITH HYDROGRAPH FROM 30R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 500.0

Canvas Y: 3060.0

Downstream: 28R1

End:

Reservoir: 28R1

Description: ROUTE HYDROGRAPH FROM 2801 THROUGH PELHAM RD

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 500.0

Canvas Y: 3120.0

Downstream: 3101

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 28R1(Basin 1)

Elevation-Outflow Table: 28R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Subbasin: 32C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 32

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 540.0

Canvas Y: 3060.0

Area: 0.125

Downstream: 32R1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 69

Transform: SCS

Lag: 34.8

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 32R1

Description: ROUTE HYDROGRAPH FROM BASIN 32 THROUGH PELHAM

RD

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 540.0

Canvas Y: 3120.0

Downstream: 3101

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 32R1(Basin 1)

Elevation-Outflow Table: 32R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 3101

Description: COMBINE ROUTED HYDROGRAPH FROM 28R1 WITH ROUTED  
HYDROGRAPH FROM 32R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 515.0

Canvas Y: 3190.0

Downstream: 31R1

End:

Reservoir: 31R1

Description: ROUTE HYDROGRAPH FROM BASIN 3101 THROUGH 31R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 515.0

Canvas Y: 3250.0

Downstream: 31S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 31R1(Basin 1)  
Elevation-Outflow Table: 31R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 31S1

Description: ROUTE HYDROGRAPH FROM 31R1 TO MOUTH OF SUB-BASIN 31

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
From Canvas X: 515.0  
From Canvas Y: 3250.0  
Downstream: 31O2

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 31S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 31C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 555.0  
Canvas Y: 3250.0  
Area: 0.046  
Downstream: 31O2

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 15.780  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 31O2

Description: COMBINE ROUTED HYDROGRAPH 31S1 WITH HYDROGRAPH

FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
Downstream: 1602

End:

Junction: 1602  
Description: COMBINE HYDROGRAPH 3102 WITH HYDROGRAPH 1601  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 505.0  
Canvas Y: 3450.0  
Downstream: 33S1

End:

Reach: 33S1  
Description: ROUTE HYDROGRAPH FROM 1602 TO MOUTH OF SUB-  
BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 520.0  
Canvas Y: 3580.0  
From Canvas X: 505.0  
From Canvas Y: 3450.0  
Downstream: 3301

Route: Modified Puls  
Number of Reaches: 10  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 33S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 33C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 545.0  
Canvas Y: 3450.0  
Area: 0.377  
Downstream: 3301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0

Curve Number: 68

Transform: SCS  
Lag: 29.04  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3301

Description: COMBINE ROUTED HYDROGRAPH 3301 WITH HYDROGRAPH  
FROM SUB-BASIN 33

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 520.0

Canvas Y: 3580.0

Downstream: 33R1

End:

Reservoir: 33R1

Description: ROUTE HYDROGRAPH FROM 3301 THROUGH BLACK DR

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 520.0

Canvas Y: 3640.0

Downstream: 3401

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 33R1(Basin 1)

Elevation-Outflow Table: 33R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Subbasin: 35C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 35

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 560.0

Canvas Y: 3580.0

Area: 0.392

Downstream: 35D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 72

Transform: SCS  
Lag: 19.14  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 35D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 35 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3640.0  
Downstream: 36R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 35D1(Basin 1)  
Elevation-Outflow Table: 35D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 36R1

Description: ROUTE HYDROGRAPH FROM 35D1 THROUGH ROPER MTN RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3700.0  
Downstream: 36S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R1(Basin 1)  
Elevation-Outflow Table: 36R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 36S1

Description: ROUTE HYDROGRAPH FROM 36R1 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
From Canvas X: 560.0  
From Canvas Y: 3700.0  
Downstream: 36S2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 36S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 36S2

Description: ROUTE HYDROGRAPH FROM 36S1 TO MOUTH OF SUB-BASIN 36

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
Downstream: 3601

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 36S2(Basin 1)

End:

Subbasin: 36C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 36  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 600.0  
Canvas Y: 3760.0  
Area: 0.291  
Downstream: 3601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 22.92  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3601

Description: COMBINE ROUTED HYDROGRAPH 36S2 WITH HYDROGRAPH FROM SUB-BASIN 36

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3890.0  
Downstream: 36R2

End:

Reservoir: 36R2

Description: ROUTE HYDROGRAPH 3601 THROUGH DEWBERRY LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3950.0  
Downstream: 37S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R2(Basin 1)  
Elevation-Outflow Table: 36R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S1

Description: ROUTE HYDROGRAPH 36R2 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
From Canvas X: 575.0  
From Canvas Y: 3950.0  
Downstream: 37R1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 37R1

Description: ROUTE HYDROGRAPH 37S1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
Downstream: 37R2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R1(Basin 1)  
Elevation-Outflow Table: 37R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reservoir: 37R2  
Description: ROUTE HYDROGRAPH 37R1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4130.0  
Downstream: 37R3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R2(Basin 1)  
Elevation-Outflow Table: 37R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 37R3  
Description: ROUTE HYDROGRAPH 37R2 THROUGH SUGARBERRY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4190.0  
Downstream: 37S2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R3(Basin 1)  
Elevation-Outflow Table: 37R3(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S2  
Description: ROUTE HYDROGRAPH 37R3 TO MOUTH OF SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 590.0  
Canvas Y: 4320.0  
From Canvas X: 575.0  
From Canvas Y: 4190.0  
Downstream: 37O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 37C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 615.0  
Canvas Y: 4190.0  
Area: 0.153  
Downstream: 3701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 33.120  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3701

Description: COMBINE ROUTED HYDROGRAPH 37S2 WITH HYDROGRAPH  
FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 590.0  
Canvas Y: 4320.0  
Downstream: 3702

End:

Subbasin: 39C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 39  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4260.0  
Area: 0.398  
Downstream: 39R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 76

Transform: SCS  
Lag: 36.06  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 39R1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 39 THROUGH  
ROPER MTN ROAD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4320.0  
Downstream: 39O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 39R1(Basin 1)  
Elevation-Outflow Table: 39R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 38C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 38  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 630.0  
Canvas Y: 4260.0  
Area: 0.080  
Downstream: 38D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 85

Transform: SCS  
Lag: 12.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 38D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 38 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 630.0

Canvas Y: 4320.0

Downstream: 39O1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 38D1(Basin 1)

Elevation-Outflow Table: 38D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 39O1

Description: COMBINE HYDROGRAPH 38D1 WITH HYDROGRAPH FROM  
ROUTED HYDROGRAPH 39R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4390.0

Downstream: 39R2

End:

Reservoir: 39R2

Description: ROUTE HYDROGRAPH 39O1 THROUGH I-85

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4450.0

Downstream: 40S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 39R2(Basin 1)

Elevation-Outflow Table: 39R2(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 40S1

Description: ROUTE HYDROGRAPH 39R1 TO MOUTH OF SUB-BASIN 40

Last Modified Date: 16 March 2017

Last Modified Time: 12:12:22

Canvas X: 660.0

Canvas Y: 4580.0

From Canvas X: 645.0

From Canvas Y: 4450.0

Downstream: 4001  
  
Route: Muskingum Cunge  
Channel: 8-point  
Length: 900  
Energy Slope: 0.0089  
Mannings n: 0.055  
Left Mannings n: 0.075  
Right Mannings n: 0.085  
Cross Section Name: 40S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 40C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 685.0  
Canvas Y: 4450.0  
Area: 0.351  
Downstream: 4001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 75

Transform: SCS  
Lag: 36.18  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4001

Description: COMBINE ROUTED HYDROGRAPH 40S1 WITH HYDROGRAPH  
FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4580.0  
Downstream: 40D1

End:

Reservoir: 40D1

Description: ROUTE HYDROGRAPH FROM 4001 THROUGH DETENTION

BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4640.0  
Downstream: 37S3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 40D1(Basin 1)  
Elevation-Outflow Table: 40D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S3

Description: ROUTE HYDROGRAPH 40D1 TO 3702  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:10:35  
Canvas X: 635.0  
Canvas Y: 4770.0  
From Canvas X: 660.0  
From Canvas Y: 4640.0  
Downstream: 3702

Route: Muskingum Cunge  
Channel: 8-point  
Length: 640  
Energy Slope: 0.0094  
Mannings n: 0.043  
Left Mannings n: 0.063  
Right Mannings n: 0.063  
Cross Section Name: 37S3(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Junction: 3702

Description: COMBINE HYDROGRAPH 3701 WITH HYDROGRAPH FROM  
SUB-BASIN 40D1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 635.0  
Canvas Y: 4770.0  
Downstream: 34S1

End:

Reach: 34S1

Description: ROUTE HYDROGRAPH 3702 TO 3401  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0

Canvas Y: 4900.0  
From Canvas X: 635.0  
From Canvas Y: 4770.0  
Downstream: 3401

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 34S1(Basin 1)  
Channel Loss: None

End:

Junction: 3401

Description: COMBINE ROUTED HYDROGRAPH 34S1 WITH ROUTED  
HYDROGRAPH 33R1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0  
Canvas Y: 4900.0  
Downstream: 3402

End:

Subbasin: 34C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 34  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 650.0  
Canvas Y: 4840.0  
Area: 0.247  
Downstream: 3402

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 22.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3402

Description: COMBINE HYDROGRAPH 3401 WITH HYDROGRAPH FROM  
SUB-BASIN 34

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 4970.0  
Downstream: 34R1

End:

Reservoir: 34R1

Description: ROUTE HYDROGRAPH 34O2 THROUGH MUDDY FORD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 5030.0  
Downstream: 41S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 34R1(Basin 1)  
Elevation-Outflow Table: 34R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 41S1

Description: ROUTE HYDROGRAPH 34R1 TO MOUTH OF SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 640.0  
Canvas Y: 5160.0  
From Canvas X: 625.0  
From Canvas Y: 5030.0  
Downstream: 43O1

Route: Modified Puls  
Number of Reaches: 15  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 41S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 41C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 665.0  
Canvas Y: 5030.0  
Area: 0.367  
Downstream: 43O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 31.740  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4301

Description: COMBINE ROUTED HYDROGRAPH 41S1 WITH HYDROGRAPH  
FROM SUB-BASIN 41

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 640.0

Canvas Y: 5160.0

Downstream: 4302

End:

Subbasin: 42C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 42

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 680.0

Canvas Y: 5100.0

Area: 0.305

Downstream: 42D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 26.7  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 42D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 42 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 680.0  
Canvas Y: 5160.0  
Downstream: 43S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 42D1(Basin 1)  
Elevation-Outflow Table: 42D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 43S1

Description: ROUTE HYDROGRAPH 42D1 TO MOUTH OF SUB-BASIN 43  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:14:32  
Canvas X: 695.0  
Canvas Y: 5290.0  
From Canvas X: 680.0  
From Canvas Y: 5160.0  
Downstream: Junction-3

Route: Muskingum Cunge  
Channel: 8-point  
Length: 1750  
Energy Slope: 0.0091  
Mannings n: 0.068  
Left Mannings n: 0.072  
Right Mannings n: 0.068  
Cross Section Name: 43S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 43C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 43  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 720.0  
Canvas Y: 5160.0  
Area: 0.236  
Downstream: Junction-3

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 83

Transform: SCS  
Lag: 25.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: Junction-3

Description: COMBINE ROUTED HYDROGRAPH 43S1 WITH HYDROGRAPH  
FROM SUB-BASIN 43

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5290.0

Downstream: 43D1

End:

Reservoir: 43D1

Description: ROUTE HYDROGRAPH FROM 43O1 THROUGH DETENTION  
BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5350.0

Downstream: 43O2

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 43D1(Basin 1)

Elevation-Outflow Table: 43D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 43O2

Description: COMBINE HYDROGRAPH 43O1 WITH HYDROGRAPH 43D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:46:25

Canvas X: 666.3463777645311

Canvas Y: 5418.189159935088

Downstream: 41R1

End:

Reservoir: 41R1

Description: ROUTE HYDROGRAPH 43O2 THROUGH I-85

Last Modified Date: 15 March 2017

Last Modified Time: 19:34:20

Canvas X: 670.0

Canvas Y: 5480.0

Downstream: 44R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 41R1(Basin 1)  
Elevation-Outflow Table: 41R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 44R1

Description: ROUTE HYDROGRAPH 41R1 THROUGH HORN BARRIER DR  
Last Modified Date: 20 March 2017  
Last Modified Time: 19:34:54  
Canvas X: 673.9004963965499  
Canvas Y: 5540.887266097396  
Label X: -1.0  
Label Y: 0.0  
Downstream: 44O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 44R1(Basin 1)  
Elevation-Outflow Table: 44R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 44C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 44  
Last Modified Date: 15 March 2017  
Last Modified Time: 19:42:13  
Canvas X: 727.825169882547  
Canvas Y: 5477.68004447215  
Area: 0.161  
Downstream: 44O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 20.040  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4401

Description: COMBINE ROUTED HYDROGRAPH 44R1 WITH HYDROGRAPH  
FROM SUB-BASIN 44

Last Modified Date: 15 March 2017

Last Modified Time: 20:23:58

Canvas X: 684.3816690574948

Canvas Y: 5625.387947277328

Downstream: 4402

End:

Subbasin: 45C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 45

Last Modified Date: 15 March 2017

Last Modified Time: 19:45:22

Canvas X: 764.0280872367573

Canvas Y: 5545.017470750981

Area: 0.522

Downstream: 45D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 73

Transform: SCS

Lag: 22.62

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 45D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 45 THROUGH  
DETENTION BASIN

Last Modified Date: 15 March 2017

Last Modified Time: 20:15:00

Canvas X: 757.610513121083

Canvas Y: 5629.330645905207

Downstream: 46S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 45D1(Basin 1)

Elevation-Outflow Table: 45D1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 46S1

Description: ROUTE HYDROGRAPH 45D1 TO MOUTH OF SUB-BASIN 46  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:33:51  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
From Canvas X: 757.610513121083  
From Canvas Y: 5629.330645905207  
Downstream: 46O1

Route: Muskingum Cunge  
Channel: 8-point  
Length: 3100  
Energy Slope: 0.0097  
Mannings n: 0.04  
Left Mannings n: 0.075  
Right Mannings n: 0.075  
Cross Section Name: 46S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 46C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:22:09  
Canvas X: 871.5478166291224  
Canvas Y: 5627.361735313  
Area: 0.176  
Downstream: 46O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 23.52  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 46O1

Description: COMBINE ROUTED HYDROGRAPH 46S1 WITH HYDROGRAPH  
FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:24:06  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
Downstream: 44O2

End:

Junction: 44O2

Description: COMBINE HYDROGRAPH 44O1 WITH HYDROGRAPH 46O1  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:36:34  
Canvas X: 767.7211792353773  
Canvas Y: 6044.146089039335  
Downstream: 44R2

End:



**PROPOSED**

PROPOSED 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
1XP	0.170	561.0	01Jan2000, 12:06	5.97
02S1	0.170	546.8	01Jan2000, 12:10	5.97
Junction-1	0.170	546.8	01Jan2000, 12:10	5.97
02S2	0.170	544.2	01Jan2000, 12:13	5.97
03C1	0.110	581.4	01Jan2000, 12:02	7.08
03R1	0.110	209.5	01Jan2000, 12:16	7.08
02C1	0.060	134.5	01Jan2000, 12:20	5.07
02O1	0.340	871.3	01Jan2000, 12:14	6.17
04R1	0.340	846.3	01Jan2000, 12:17	6.17
04S1	0.340	844.0	01Jan2000, 12:18	6.17
04C1	0.068	281.8	01Jan2000, 12:07	6.49
04O1	0.408	1037.2	01Jan2000, 12:15	6.22
05S1	0.408	1033.0	01Jan2000, 12:17	6.22
05C1	0.145	366.2	01Jan2000, 12:18	5.42
06C1	0.035	240.0	01Jan2000, 11:56	7.20
06D1	0.035	189.5	01Jan2000, 12:00	7.20
05O1	0.588	1451.4	01Jan2000, 12:17	6.08
7XP	0.160	392.0	01Jan2000, 12:06	6.43
08O1	0.748	1775.7	01Jan2000, 12:17	6.16
08C1	0.033	137.6	01Jan2000, 12:04	5.42
08O2	0.781	1829.4	01Jan2000, 12:16	6.13
08S1	0.781	1828.6	01Jan2000, 12:18	6.13
09C1	0.025	148.2	01Jan2000, 11:59	6.61
09O1	0.806	1851.1	01Jan2000, 12:18	6.14
09R1	0.806	1851.3	01Jan2000, 12:18	6.14
10S1	0.806	1839.7	01Jan2000, 12:23	6.14
10C1	0.163	482.3	01Jan2000, 12:08	4.60
11C1	0.105	276.8	01Jan2000, 12:12	4.72
10O1	1.074	2394.3	01Jan2000, 12:17	5.77
12S1	1.074	2390.1	01Jan2000, 12:18	5.77
12C1	0.107	358.2	01Jan2000, 12:07	5.07
12O1	1.181	2621.9	01Jan2000, 12:17	5.70
13S1	1.181	2609.5	01Jan2000, 12:19	5.70
14C1	0.088	235.7	01Jan2000, 12:08	4.14
13C1	0.079	177.7	01Jan2000, 12:18	4.84
13O1	1.348	2938.2	01Jan2000, 12:19	5.55
15S1	1.348	2917.4	01Jan2000, 12:23	5.55
15C1	0.246	691.1	01Jan2000, 12:10	4.72
15O1	1.594	3387.3	01Jan2000, 12:21	5.42
15R1	1.594	3348.8	01Jan2000, 12:23	5.42
16S1	1.594	3254.4	01Jan2000, 12:33	5.42
Junction-2	1.594	3254.4	01Jan2000, 12:33	5.42

PROPOSED 100 YR				
Hydrologic Element	Drainage Area (mi <sup>2</sup> )	Peak Discharge (cfs)	Time of Peak	Volume (in)
16S2	1.594	3252.0	01Jan2000, 12:34	5.42
16C1	0.192	382.6	01Jan2000, 12:21	4.60
16O1	1.786	3563.5	01Jan2000, 12:33	5.33
17C1	0.197	449.0	01Jan2000, 12:16	4.60
18C1	0.086	219.6	01Jan2000, 12:10	4.25
17O1	0.283	652.3	01Jan2000, 12:14	4.50
19C1	0.053	140.3	01Jan2000, 12:11	4.60
19O1	0.336	790.5	01Jan2000, 12:13	4.51
19R1	0.336	787.4	01Jan2000, 12:14	4.51
20S1	0.336	780.0	01Jan2000, 12:17	4.51
20C1	0.044	112.6	01Jan2000, 12:14	4.84
20O1	0.380	889.3	01Jan2000, 12:17	4.55
21S1	0.380	872.2	01Jan2000, 12:22	4.55
21C1	0.071	186.4	01Jan2000, 12:12	4.72
21O1	0.451	1020.3	01Jan2000, 12:21	4.58
22C1	0.199	507.3	01Jan2000, 12:14	4.84
22R1	0.199	502.8	01Jan2000, 12:16	4.84
23R1	0.199	501.2	01Jan2000, 12:17	4.84
23S1	0.199	443.5	01Jan2000, 12:29	4.84
24C1	0.081	237.9	01Jan2000, 12:09	4.72
23C1	0.051	165.3	01Jan2000, 12:07	4.72
23O1	0.331	601.9	01Jan2000, 12:25	4.79
21O2	0.782	1610.9	01Jan2000, 12:22	4.67
21R1	0.782	1606.6	01Jan2000, 12:23	4.67
25S1	0.782	1594.4	01Jan2000, 12:28	4.67
25C1	0.090	238.1	01Jan2000, 12:11	4.49
25O1	0.872	1713.8	01Jan2000, 12:27	4.65
26S1	0.872	1698.7	01Jan2000, 12:33	4.65
26C1	0.075	236.6	01Jan2000, 12:07	4.60
27C1	0.053	155.8	01Jan2000, 12:10	4.84
26O1	1.000	1813.4	01Jan2000, 12:32	4.65
28S1	1.000	1720.2	01Jan2000, 12:44	4.65
29C1	0.104	279.9	01Jan2000, 12:12	4.84
29D1	0.104	126.4	01Jan2000, 12:33	4.79
30C1	0.064	205.4	01Jan2000, 12:06	4.49
30O1	0.168	227.3	01Jan2000, 12:07	4.67
30R1	0.168	186.6	01Jan2000, 12:14	4.67
28C1	0.049	172.3	01Jan2000, 12:05	4.72
28O1	1.217	1897.3	01Jan2000, 12:43	4.66
28R1	1.217	1398.8	01Jan2000, 12:56	4.66
32C1	0.125	210.8	01Jan2000, 12:28	4.49
32R1	0.125	206.7	01Jan2000, 12:32	4.49

PROPOSED 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
31O1	1.342	1529.2	01Jan2000, 12:55	4.64
31R1	1.342	1520.7	01Jan2000, 12:57	4.64
31S1	1.342	1516.2	01Jan2000, 13:01	4.64
31C1	0.046	127.4	01Jan2000, 12:09	4.37
31O2	1.388	1532.3	01Jan2000, 13:01	4.63
16O2	3.174	4920.5	01Jan2000, 12:34	5.03
33S1	3.174	4904.0	01Jan2000, 12:40	5.03
33C1	0.377	703.0	01Jan2000, 12:22	4.37
33O1	3.551	5393.2	01Jan2000, 12:39	4.96
33R1	3.551	4747.1	01Jan2000, 12:53	4.96
35C1	0.392	1071.1	01Jan2000, 12:12	4.84
35D1	0.392	280.0	01Jan2000, 12:45	4.77
36R1	0.392	275.1	01Jan2000, 12:55	4.77
36S1	0.392	274.9	01Jan2000, 13:00	4.76
36S2	0.392	274.9	01Jan2000, 13:01	4.76
36C1	0.291	637.8	01Jan2000, 12:16	4.37
36O1	0.683	753.7	01Jan2000, 12:19	4.60
36R2	0.683	747.4	01Jan2000, 12:21	4.60
37S1	0.683	744.7	01Jan2000, 12:23	4.59
37R1	0.683	736.2	01Jan2000, 12:26	4.59
37R2	0.683	724.5	01Jan2000, 12:28	4.59
37R3	0.683	716.0	01Jan2000, 12:31	4.59
37S2	0.683	680.8	01Jan2000, 12:38	4.59
37C1	0.153	281.9	01Jan2000, 12:26	4.72
37O1	0.836	930.1	01Jan2000, 12:36	4.62
39C1	0.398	776.7	01Jan2000, 12:29	5.30
39R1	0.398	485.4	01Jan2000, 12:54	5.30
38C1	0.080	350.0	01Jan2000, 12:05	6.37
38D1	0.080	206.1	01Jan2000, 12:16	6.37
39O1	0.478	603.6	01Jan2000, 12:28	5.48
39R2	0.478	575.6	01Jan2000, 12:46	5.48
40S1	0.478	573.9	01Jan2000, 12:50	5.48
40C1	0.351	668.5	01Jan2000, 12:29	5.19
40O1	0.829	1101.5	01Jan2000, 12:43	5.36
40D1	0.829	612.8	01Jan2000, 13:38	4.63
37S3	0.829	612.8	01Jan2000, 13:41	4.63
37O2	1.665	1489.3	01Jan2000, 12:40	4.62
34S1	1.665	1461.1	01Jan2000, 12:45	4.62
34O1	5.216	6152.4	01Jan2000, 12:52	4.85
34C1	0.247	530.0	01Jan2000, 12:15	4.25
34O2	5.463	6306.2	01Jan2000, 12:52	4.82
34R1	5.463	4824.5	01Jan2000, 13:16	4.82

PROPOSED 100 YR				
Hydrologic Element	Drainage Area (mi2)	Peak Discharge (cfs)	Time of Peak	Volume (in)
41S1	5.463	4766.4	01Jan2000, 13:29	4.82
41C1	0.367	624.5	01Jan2000, 12:25	4.25
43O1	5.830	4902.9	01Jan2000, 13:29	4.79
42C1	0.305	702.7	01Jan2000, 12:19	5.07
42D1	0.305	450.8	01Jan2000, 12:37	5.07
43S1	0.305	448.4	01Jan2000, 12:44	5.07
43C1	0.236	665.9	01Jan2000, 12:17	6.13
Junction-3	0.541	922.1	01Jan2000, 12:23	5.53
43D1	0.541	921.3	01Jan2000, 12:24	5.53
43O2	6.371	5240.6	01Jan2000, 13:28	4.85
41R1	6.371	4959.0	01Jan2000, 13:44	4.85
44R1	6.371	4760.6	01Jan2000, 14:00	4.85
44C1	0.161	427.3	01Jan2000, 12:13	4.84
44O1	6.532	4793.5	01Jan2000, 14:00	4.85
45C1	0.522	1313.1	01Jan2000, 12:15	4.95
45D1	0.522	341.3	01Jan2000, 12:54	4.86
46S1	0.522	338.3	01Jan2000, 13:06	4.85
46C1	0.176	400.5	01Jan2000, 12:16	4.60
46O1	0.698	505.9	01Jan2000, 12:22	4.79
44O2	7.230	5077.5	01Jan2000, 13:59	4.84
44R2	7.230	4991.9	01Jan2000, 14:13	4.84

Basin: Basin 1  
Description: HYDROLOGIC MODEL FOR ROCKY CREEK WATERSHED  
GREENVILLE, SC MODEL SET-UP PERFORMED BY WOOLPERT LLP - CHARLOTTE  
OFFICE EXISTING CONDITIONS A=0.2\*S FILENAME= ROCKY\_E.HC1  
Last Modified Date: 8 May 2017  
Last Modified Time: 16:35:17  
Version: 4.2  
Filepath Separator: \  
Unit System: English  
Missing Flow To Zero: No  
Enable Flow Ratio: No  
Compute Local Flow At Junctions: No  
  
Enable Sediment Routing: No  
  
Enable Quality Routing: No  
End:

Source: 1XP  
Description: BASIN 1 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 14 March 2017  
Last Modified Time: 16:23:32  
Canvas X: 40.0  
Canvas Y: 10.0  
Area: 0.170  
Observed Hydrograph Gage: 1XP  
Downstream: 02S1  
  
Flow Method: GAGE\_FLOW  
Flow Gage: 1XP  
End Flow Method:  
End:

Reach: 02S1  
Description: ROUTE HYDROGRAPH FROM 01C1 TO CULVERT IN WOODS  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0  
Canvas Y: 140.0  
Downstream: Junction-1  
  
Route: Modified Puls  
Number of Reaches: 8  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S1(Basin 1)  
Channel Loss: None  
End:

Junction: Junction-1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 40.0

Canvas Y: 140.0  
Downstream: 02S2  
End:

Reach: 02S2  
Description: ROUTE HYDROGRAPH FROM 02S2 TO MOUTH OF SUB-  
BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
From Canvas X: 40.0  
From Canvas Y: 140.0  
Downstream: 02O1

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 02S2(Basin 1)  
Channel Loss: None  
End:

Subbasin: 03C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 80.0  
Area: 0.110  
Downstream: 03R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 91

Transform: SCS  
Lag: 9.66  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Reservoir: 03R1  
Description: ROUTE HYDROGRAPH FROM SUB-BASIN 03 THROUGH I-  
385  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 120.0  
Canvas Y: 140.0  
Downstream: 0201

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 03R1(Basin 1)  
Elevation-Outflow Table: 03R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 02C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 02  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 80.0  
Canvas Y: 140.0  
Area: 0.060  
Downstream: 0201

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 27.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0201

Description: COMBINE ROUTED HYDROGRAPH 02S2 WITH HYDROGRAPH  
FROM SUB-BASIN 02 AND SUB-BASIN 03  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 270.0  
Downstream: 04R1

End:

Reservoir: 04R1

Description: ROUTE HYDROGRAPH FROM 0201 THROUGH DRIVEWAY  
CULVERT



Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 330.0  
Downstream: 04S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 04R1(Basin 1)  
Elevation-Outflow Table: 04R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 04S1

Description: ROUTE HYDROGRAPH FROM 04R1 TO MOUTH OF SUB-BASIN 04

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 70.0  
Canvas Y: 390.0  
Downstream: 04O1

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 04S1(Basin 1)

End:

Subbasin: 04C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 110.0  
Canvas Y: 330.0  
Area: 0.068  
Downstream: 04O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 86

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None  
End:  
Junction: 0401  
Description: COMBINE ROUTED HYDROGRAPH 04S1 WITH HYDROGRAPH  
FROM SUB-BASIN 04  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 85.0  
Canvas Y: 460.0  
Downstream: 05S1  
End:

Reach: 05S1  
Description: ROUTE HYDROGRAPH FROM 0401 TO MOUTH OF SUB-  
BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
From Canvas X: 85.0  
From Canvas Y: 460.0  
Downstream: 0501  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 05S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 05C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 05  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 125.0  
Canvas Y: 460.0  
Area: 0.145  
Downstream: 0501  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77  
  
Transform: SCS  
Lag: 25.68

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 06C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 06

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 400.0

Area: 0.035

Downstream: 06D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 92

Transform: SCS

Lag: 3.0

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 06D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 06 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46

Canvas X: 165.0

Canvas Y: 460.0

Downstream: 0501

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 06D1(Basin 1)

Elevation-Outflow Table: 06D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 0501

Description: COMBINE ROUTED HYDROGRAPH 05S1 WITH HYDROGRAPH  
FROM SUB-BASIN 05 AND ROUTED HYDROGRAPH 06D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:46  
Canvas X: 115.0  
Canvas Y: 590.0  
Downstream: 0801

End:

Source: 7XP

Description: BASIN 7 (HYDROGRAPH FROM XP-SWMM MODEL)  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:46  
Canvas X: 155.0  
Canvas Y: 530.0  
Area: 0.160  
Downstream: 0801

Flow Method: GAGE\_FLOW  
Flow Gage: 7XP  
End Flow Method:

End:

Junction: 0801

Description: COMBINE HYDROGRAPH 0501 WITH HYDROGRAPH FROM  
SUB-BASIN 07  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 130.0  
Canvas Y: 660.0  
Downstream: 0802

End:

Subbasin: 08C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 170.0  
Canvas Y: 600.0  
Area: 0.033  
Downstream: 0802

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 77

Transform: SCS  
Lag: 10.62  
Unitgraph Type: STANDARD

Baseflow: None  
End:

Junction: 0802  
Description: COMBINE HYDROGRAPH 0801 WITH HYDROGRAPH FROM  
SUB-BASIN 08  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 145.0  
Canvas Y: 730.0  
Downstream: 08S1  
End:

Reach: 08S1  
Description: ROUTE HYDROGRAPH FROM 0802 TO CREEKVIEW COURT  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 160.0  
Canvas Y: 860.0  
From Canvas X: 145.0  
From Canvas Y: 730.0  
Downstream: 0901  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 08S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 09C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 09  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 185.0  
Canvas Y: 730.0  
Area: 0.025  
Downstream: 0901  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 87  
  
Transform: SCS  
Lag: 5.64

Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 0901

Description: COMBINE ROUTED HYDROGRAPH 08S1 WITH HYDROGRAPH  
FROM SUB-BASIN 09

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 860.0

Downstream: 09R1

End:

Reservoir: 09R1

Description: ROUTE HYDROGRAPH FROM 0901 THROUGH ROPER  
MOUNTAIN EXT

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 160.0

Canvas Y: 920.0

Downstream: 10S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 09R1(Basin 1)

Elevation-Outflow Table: 09R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 10S1

Description: ROUTE HYDROGRAPH FROM 09R1 TO MOUTH OF SUB-  
BASIN 10

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 190.0

Canvas Y: 1050.0

From Canvas X: 160.0

From Canvas Y: 920.0

Downstream: 1001

Route: Modified Puls

Number of Reaches: 6

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 10S1(Basin 1)

Channel Loss: None

End:

Subbasin: 10C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 10

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 200.0  
Canvas Y: 920.0  
Area: 0.163  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 15.42  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 11C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 240.0  
Canvas Y: 860.0  
Area: 0.105  
Downstream: 1001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.5  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1001

Description: COMBINE ROUTED HYDROGRAPH 10S1 WITH HYDROGRAPH

FROM SUB-BASIN 10 AND SUB-BASIN 11  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 190.0  
Canvas Y: 1050.0  
Downstream: 12S1

End:

Reach: 12S1

Description: ROUTE HYDROGRAPH FROM 1001 TO MOUTH OF SUB-BASIN 12

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
From Canvas X: 190.0  
From Canvas Y: 1050.0  
Downstream: 12O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 12S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 12C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 230.0  
Canvas Y: 1050.0  
Area: 0.107  
Downstream: 12O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 14.64  
Unitgraph Type: STANDARD

Baseflow: None

End:



Junction: 1201  
Description: COMBINE ROUTED HYDROGRAPH 12S1 WITH HYDROGRAPH  
FROM SUB-BASIN 12  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 205.0  
Canvas Y: 1180.0  
Downstream: 13S1  
End:

Reach: 13S1  
Description: ROUTE HYDROGRAPH FROM 1201 TO MOUTH OF SUB-  
BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
From Canvas X: 205.0  
From Canvas Y: 1180.0  
Downstream: 1301  
  
Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 13S1(Basin 1)  
Channel Loss: None  
End:

Subbasin: 14C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 285.0  
Canvas Y: 1120.0  
Area: 0.088  
Downstream: 1301  
  
Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None  
  
Surface: None  
  
LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 66  
  
Transform: SCS  
Lag: 15.18  
Unitgraph Type: STANDARD  
  
Baseflow: None

End:

Subbasin: 13C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 13  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 245.0  
Canvas Y: 1180.0  
Area: 0.079  
Downstream: 1301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 25.8  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1301

Description: COMBINE ROUTED HYDROGRAPH 13S1 WITH HYDROGRAPH  
FROM SUB-BASIN 13 AND SUB-BASIN 14  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 235.0  
Canvas Y: 1310.0  
Downstream: 15S1

End:

Reach: 15S1

Description: ROUTE HYDROGRAPH FROM 1301 TO MOUTH OF SUB-  
BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
From Canvas X: 235.0  
From Canvas Y: 1310.0  
Downstream: 1501

Route: Modified Puls  
Number of Reaches: 5  
Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 15S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 15C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 275.0  
Canvas Y: 1310.0  
Area: 0.246  
Downstream: 15O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 17.58  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 15O1

Description: COMBINE ROUTED HYDROGRAPH 15S1 WITH HYDROGRAPH  
FROM SUB-BASIN 15  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1440.0  
Downstream: 15R1

End:

Reservoir: 15R1

Description: ROUTE HYDROGRAPH FROM 15O1 THROUGH RILEY SMITH  
RD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1500.0  
Downstream: 16S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 15R1(Basin 1)  
Elevation-Outflow Table: 15R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 16S1

Description: ROUTE HYDROGRAPH FROM 15R1 TO COBBLESTONE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
From Canvas X: 250.0  
From Canvas Y: 1500.0  
Downstream: Junction-2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S1(Basin 1)  
Channel Loss: None

End:

Junction: Junction-2

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 250.0  
Canvas Y: 1630.0  
Downstream: 16S2

End:

Reach: 16S2

Description: ROUTE HYDROGRAPH FROM 16S1 TO MOUTH OF SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 265.0  
Canvas Y: 1760.0  
From Canvas X: 250.0  
From Canvas Y: 1630.0  
Downstream: 1601

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 16S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 16C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 16  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 290.0  
Canvas Y: 1630.0  
Area: 0.192  
Downstream: 1601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 28.56  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1601

Description: COMBINE ROUTED HYDROGRAPH 16S2 WITH HYDROGRAPH  
FROM SUB-BASIN 16

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 265.0

Canvas Y: 1760.0

Downstream: 1602

End:

Subbasin: 17C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 17

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 305.0

Canvas Y: 1700.0

Area: 0.197

Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS

Lag: 23.46  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 18C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 345.0  
Canvas Y: 1640.0  
Area: 0.086  
Downstream: 1701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 17.280  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1701

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 17 WITH  
HYDROGRAPH FROM SUB-BASIN 18  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 320.0  
Canvas Y: 1830.0  
Downstream: 1901

End:

Subbasin: 19C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 360.0  
Canvas Y: 1770.0  
Area: 0.053  
Downstream: 1901

Canopy: None

Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 18.6  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 1901

Description: COMBINE 1701 WITH HYDROGRAPH FROM SUB-BASIN 19  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1900.0  
Downstream: 19R1

End:

Reservoir: 19R1

Description: ROUTE HYDROGRAPH FROM 1901 THROUGH RADCLIFFE RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 335.0  
Canvas Y: 1960.0  
Downstream: 20S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 19R1(Basin 1)  
Elevation-Outflow Table: 19R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 20S1

Description: ROUTE HYDROGRAPH FROM 19R1 TO MOUTH OF SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
From Canvas X: 335.0  
From Canvas Y: 1960.0  
Downstream: 2001

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 20S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 20C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 375.0  
Canvas Y: 1960.0  
Area: 0.044  
Downstream: 2001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.24  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2001

Description: COMBINE ROUTED HYDROGRAPH 20S1 WITH HYDROGRAPH  
FROM SUB-BASIN 20  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 350.0  
Canvas Y: 2090.0  
Downstream: 21S1

End:

Reach: 21S1

Description: ROUTE HYDROGRAPH FROM 2001 TO MOUTH OF SUB-  
BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
From Canvas X: 350.0  
From Canvas Y: 2090.0



Downstream: 2101

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 21S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 21C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 390.0  
Canvas Y: 2090.0  
Area: 0.071  
Downstream: 2101

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2101

Description: COMBINE ROUTED HYDROGRAPH 21S1 WITH HYDROGRAPH  
FROM SUB-BASIN 21  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 365.0  
Canvas Y: 2220.0  
Downstream: 2102

End:

Subbasin: 22C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 22  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2160.0  
Area: 0.199

Downstream: 22R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 21.36  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 22R1

Description: ROUTE HYDROGRAPH FROM 22C1 THROUGH MERRIFIELD  
CT

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2220.0  
Downstream: 23R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 22R1(Basin 1)  
Elevation-Outflow Table: 22R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 23R1

Description: ROUTE HYDROGRAPH FROM 22R1 THROUGH HILLSBOROUGH  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 405.0  
Canvas Y: 2280.0  
Downstream: 23S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 23R1(Basin 1)  
Elevation-Outflow Table: 23R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 23S1

Description: ROUTE HYDROGRAPH FROM 23R1 TO MOUTH OF SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 435.0

Canvas Y: 2410.0

From Canvas X: 405.0

From Canvas Y: 2280.0

Downstream: 23O1

Route: Modified Puls

Number of Reaches: 3

Initial Outflow Equals Inflow: Yes

Storage Outflow Table Name: 23S1(Basin 1)

Channel Loss: None

End:

Subbasin: 24C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 24

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 485.0

Canvas Y: 2220.0

Area: 0.081

Downstream: 23O1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 71

Transform: SCS

Lag: 16.32

Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 23C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 23

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47

Canvas X: 445.0

Canvas Y: 2280.0

Area: 0.051

Downstream: 23O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 13.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2301

Description: COMBINE ROUTED HYDROGRAPH 23S1 WITH HYDROGRAPH  
FROM SUB-BASIN 23 AND HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 435.0  
Canvas Y: 2410.0  
Downstream: 2102

End:

Junction: 2102

Description: COMBINE HYDROGRAPH FROM SUB-BASIN 23 AND  
HYDROGRAPH FROM SUB-BASIN 24  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2480.0  
Downstream: 21R1

End:

Reservoir: 21R1

Description: ROUTE HYDROGRAPH FROM 2102 THROUGH CROSS CREEK  
LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 410.0  
Canvas Y: 2540.0  
Downstream: 25S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 21R1(Basin 1)  
Elevation-Outflow Table: 21R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 25S1  
Description: ROUTE HYDROGRAPH FROM 21R1 TO MOUTH OF SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 425.0  
Canvas Y: 2670.0  
From Canvas X: 410.0  
From Canvas Y: 2540.0  
Downstream: 2501

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 25S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 25C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 450.0  
Canvas Y: 2540.0  
Area: 0.090  
Downstream: 2501

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 17.82  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2501  
Description: COMBINE ROUTED HYDROGRAPH 25S1 WITH HYDROGRAPH FROM SUB-BASIN 25  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47

Canvas X: 425.0  
Canvas Y: 2670.0  
Downstream: 26S1

End:

Reach: 26S1

Description: ROUTE HYDROGRAPH FROM 2501 TO MOUTH OF SUB-BASIN 26

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
From Canvas X: 425.0  
From Canvas Y: 2670.0  
Downstream: 2601

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 26S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 26C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 26  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 465.0  
Canvas Y: 2670.0  
Area: 0.075  
Downstream: 2601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 13.74  
Unitgraph Type: STANDARD

Baseflow: None

End:

Subbasin: 27C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 27  
Last Modified Date: 13 March 2017

Last Modified Time: 13:07:47  
Canvas X: 505.0  
Canvas Y: 2610.0  
Area: 0.053  
Downstream: 2601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 16.980  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2601

Description: COMBINE RUNOFF HYDROGRAPHS FROM SUB-BASIN 26  
AND SUB-BASIN 27 WITH ROUTED HYDROGRAPH 26S1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 455.0  
Canvas Y: 2800.0  
Downstream: 28S1

End:

Reach: 28S1

Description: ROUTE HYDROGRAPH FROM 2601 TO 2801  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 500.0  
Canvas Y: 3060.0  
From Canvas X: 455.0  
From Canvas Y: 2800.0  
Downstream: 2801

Route: Modified Puls  
Number of Reaches: 3  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 28S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 29C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 29

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2740.0  
Area: 0.104  
Downstream: 29D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 19.62  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 29D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 29 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 535.0  
Canvas Y: 2800.0  
Downstream: 3001

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 29D1(Basin 1)  
Elevation-Outflow Table: 29D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 30C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 575.0  
Canvas Y: 2740.0  
Area: 0.064  
Downstream: 3001

Canopy: None  
Allow Simultaneous Precip Et: No



Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 12.66  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3001

Description: COMBINE HYDROGRAPH FROM 29D1 WITH HYDROGRAPH  
FROM SUB-BASIN 30  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2930.0  
Downstream: 30R1

End:

Reservoir: 30R1

Description: ROUTE HYDROGRAPH FROM 3001 THROUGH 30R1  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 550.0  
Canvas Y: 2990.0  
Downstream: 2801

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 30R1(Basin 1)  
Elevation-Outflow Table: 30R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 28C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 28  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:47  
Canvas X: 495.0  
Canvas Y: 2800.0  
Area: 0.049  
Downstream: 2801

Canopy: None  
Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 11.64  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 2801

Description: COMBINE HYDROGRAPH FROM 28S1 AND RUNOFF  
HYDROGRAPH 28C1 WITH HYDROGRAPH FROM 30R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 500.0

Canvas Y: 3060.0

Downstream: 28R1

End:

Reservoir: 28R1

Description: ROUTE HYDROGRAPH FROM 2801 THROUGH PELHAM RD

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 500.0

Canvas Y: 3120.0

Downstream: 3101

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 28R1(Basin 1)

Elevation-Outflow Table: 28R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Subbasin: 32C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 32

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 540.0

Canvas Y: 3060.0

Area: 0.125

Downstream: 32R1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 69

Transform: SCS  
Lag: 34.8  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 32R1

Description: ROUTE HYDROGRAPH FROM BASIN 32 THROUGH PELHAM

RD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 540.0  
Canvas Y: 3120.0  
Downstream: 3101

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 32R1(Basin 1)  
Elevation-Outflow Table: 32R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Junction: 3101

Description: COMBINE ROUTED HYDROGRAPH FROM 28R1 WITH ROUTED  
HYDROGRAPH FROM 32R1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 515.0  
Canvas Y: 3190.0  
Downstream: 31R1

End:

Reservoir: 31R1

Description: ROUTE HYDROGRAPH FROM BASIN 3101 THROUGH 31R1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 515.0  
Canvas Y: 3250.0  
Downstream: 31S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 31R1(Basin 1)  
Elevation-Outflow Table: 31R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 31S1

Description: ROUTE HYDROGRAPH FROM 31R1 TO MOUTH OF SUB-BASIN 31

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
From Canvas X: 515.0  
From Canvas Y: 3250.0  
Downstream: 31O2

Route: Modified Puls  
Number of Reaches: 4  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 31S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 31C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 555.0  
Canvas Y: 3250.0  
Area: 0.046  
Downstream: 31O2

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 15.780  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 31O2

Description: COMBINE ROUTED HYDROGRAPH 31S1 WITH HYDROGRAPH

FROM SUB-BASIN 31  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 530.0  
Canvas Y: 3380.0  
Downstream: 1602

End:

Junction: 1602  
Description: COMBINE HYDROGRAPH 3102 WITH HYDROGRAPH 1601  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 505.0  
Canvas Y: 3450.0  
Downstream: 33S1

End:

Reach: 33S1  
Description: ROUTE HYDROGRAPH FROM 1602 TO MOUTH OF SUB-BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 520.0  
Canvas Y: 3580.0  
From Canvas X: 505.0  
From Canvas Y: 3450.0  
Downstream: 3301

Route: Modified Puls  
Number of Reaches: 10  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 33S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 33C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 33  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 545.0  
Canvas Y: 3450.0  
Area: 0.377  
Downstream: 3301

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0

Curve Number: 68

Transform: SCS  
Lag: 29.04  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3301

Description: COMBINE ROUTED HYDROGRAPH 3301 WITH HYDROGRAPH  
FROM SUB-BASIN 33

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 520.0

Canvas Y: 3580.0

Downstream: 33R1

End:

Reservoir: 33R1

Description: ROUTE HYDROGRAPH FROM 3301 THROUGH BLACK DR

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 520.0

Canvas Y: 3640.0

Downstream: 3401

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 33R1(Basin 1)

Elevation-Outflow Table: 33R1(Basin 1)

Primary Table: Elevation-Outflow

End:

Subbasin: 35C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 35

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 560.0

Canvas Y: 3580.0

Area: 0.392

Downstream: 35D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 72

Transform: SCS  
Lag: 19.14  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 35D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 35 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3640.0  
Downstream: 36R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 35D1(Basin 1)  
Elevation-Outflow Table: 35D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 36R1

Description: ROUTE HYDROGRAPH FROM 35D1 THROUGH ROPER MTN RD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3700.0  
Downstream: 36S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R1(Basin 1)  
Elevation-Outflow Table: 36R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 36S1

Description: ROUTE HYDROGRAPH FROM 36R1 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
From Canvas X: 560.0  
From Canvas Y: 3700.0  
Downstream: 36S2

Route: Modified Puls  
Number of Reaches: 6  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 36S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 36S2

Description: ROUTE HYDROGRAPH FROM 36S1 TO MOUTH OF SUB-BASIN 36

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 560.0  
Canvas Y: 3820.0  
Downstream: 3601

Route: Modified Puls  
Routing Curve: Storage-Outflow  
Initial Outflow Equals Inflow: Yes  
Storage-Outflow Table: 36S2(Basin 1)

End:

Subbasin: 36C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 36  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 600.0  
Canvas Y: 3760.0  
Area: 0.291  
Downstream: 3601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 68

Transform: SCS  
Lag: 22.92  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3601

Description: COMBINE ROUTED HYDROGRAPH 36S2 WITH HYDROGRAPH FROM SUB-BASIN 36

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3890.0  
Downstream: 36R2

End:

Reservoir: 36R2

Description: ROUTE HYDROGRAPH 3601 THROUGH DEWBERRY LN  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 3950.0  
Downstream: 37S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 36R2(Basin 1)  
Elevation-Outflow Table: 36R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S1

Description: ROUTE HYDROGRAPH 36R2 TO ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
From Canvas X: 575.0  
From Canvas Y: 3950.0  
Downstream: 37R1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S1(Basin 1)  
Channel Loss: None

End:

Reservoir: 37R1

Description: ROUTE HYDROGRAPH 37S1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4070.0  
Downstream: 37R2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R1(Basin 1)  
Elevation-Outflow Table: 37R1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reservoir: 37R2

Description: ROUTE HYDROGRAPH 37R1 THROUGH ROSEBAY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4130.0  
Downstream: 37R3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R2(Basin 1)  
Elevation-Outflow Table: 37R2(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 37R3

Description: ROUTE HYDROGRAPH 37R2 THROUGH SUGARBERRY DR  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 575.0  
Canvas Y: 4190.0  
Downstream: 37S2

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 37R3(Basin 1)  
Elevation-Outflow Table: 37R3(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S2

Description: ROUTE HYDROGRAPH 37R3 TO MOUTH OF SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 590.0  
Canvas Y: 4320.0  
From Canvas X: 575.0  
From Canvas Y: 4190.0  
Downstream: 37O1

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 37S2(Basin 1)  
Channel Loss: None

End:

Subbasin: 37C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 615.0  
Canvas Y: 4190.0  
Area: 0.153  
Downstream: 3701

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 71

Transform: SCS  
Lag: 33.120  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3701

Description: COMBINE ROUTED HYDROGRAPH 37S2 WITH HYDROGRAPH  
FROM SUB-BASIN 37  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 590.0  
Canvas Y: 4320.0  
Downstream: 3702

End:

Subbasin: 39C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 39  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4260.0  
Area: 0.398  
Downstream: 39R1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 76

Transform: SCS  
Lag: 36.06  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 39R1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 39 THROUGH  
ROPER MTN ROAD

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 670.0  
Canvas Y: 4320.0  
Downstream: 39O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 39R1(Basin 1)  
Elevation-Outflow Table: 39R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 38C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 38  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 630.0  
Canvas Y: 4260.0  
Area: 0.080  
Downstream: 38D1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 85

Transform: SCS  
Lag: 12.78  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 38D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 38 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 630.0

Canvas Y: 4320.0

Downstream: 39O1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 38D1(Basin 1)

Elevation-Outflow Table: 38D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 39O1

Description: COMBINE HYDROGRAPH 38D1 WITH HYDROGRAPH FROM  
ROUTED HYDROGRAPH 39R1

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4390.0

Downstream: 39R2

End:

Reservoir: 39R2

Description: ROUTE HYDROGRAPH 39O1 THROUGH I-85

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:48

Canvas X: 645.0

Canvas Y: 4450.0

Downstream: 40S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 39R2(Basin 1)

Elevation-Outflow Table: 39R2(Basin 1)

Primary Table: Elevation-Outflow

End:

Reach: 40S1

Description: ROUTE HYDROGRAPH 39R1 TO MOUTH OF SUB-BASIN 40

Last Modified Date: 16 March 2017

Last Modified Time: 12:12:22

Canvas X: 660.0

Canvas Y: 4580.0

From Canvas X: 645.0

From Canvas Y: 4450.0

Downstream: 4001  
  
Route: Muskingum Cunge  
Channel: 8-point  
Length: 900  
Energy Slope: 0.0089  
Mannings n: 0.055  
Left Mannings n: 0.075  
Right Mannings n: 0.085  
Cross Section Name: 40S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 40C1  
Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 685.0  
Canvas Y: 4450.0  
Area: 0.351  
Downstream: 4001

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 75

Transform: SCS  
Lag: 36.18  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4001  
Description: COMBINE ROUTED HYDROGRAPH 40S1 WITH HYDROGRAPH  
FROM SUB-BASIN 40  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4580.0  
Downstream: 40D1

End:

Reservoir: 40D1  
Description: ROUTE HYDROGRAPH FROM 4001 THROUGH DETENTION

BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:48  
Canvas X: 660.0  
Canvas Y: 4640.0  
Downstream: 37S3

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 40D1(Basin 1)  
Elevation-Outflow Table: 40D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 37S3

Description: ROUTE HYDROGRAPH 40D1 TO 3702  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:10:35  
Canvas X: 635.0  
Canvas Y: 4770.0  
From Canvas X: 660.0  
From Canvas Y: 4640.0  
Downstream: 3702

Route: Muskingum Cunge  
Channel: 8-point  
Length: 640  
Energy Slope: 0.0094  
Mannings n: 0.043  
Left Mannings n: 0.063  
Right Mannings n: 0.063  
Cross Section Name: 37S3(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Junction: 3702

Description: COMBINE HYDROGRAPH 3701 WITH HYDROGRAPH FROM  
SUB-BASIN 40D1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 635.0  
Canvas Y: 4770.0  
Downstream: 34S1

End:

Reach: 34S1

Description: ROUTE HYDROGRAPH 3702 TO 3401  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0

Canvas Y: 4900.0  
From Canvas X: 635.0  
From Canvas Y: 4770.0  
Downstream: 3401

Route: Modified Puls  
Number of Reaches: 2  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 34S1(Basin 1)  
Channel Loss: None

End:

Junction: 3401

Description: COMBINE ROUTED HYDROGRAPH 34S1 WITH ROUTED  
HYDROGRAPH 33R1

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 610.0  
Canvas Y: 4900.0  
Downstream: 3402

End:

Subbasin: 34C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 34  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 650.0  
Canvas Y: 4840.0  
Area: 0.247  
Downstream: 3402

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 22.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 3402

Description: COMBINE HYDROGRAPH 3401 WITH HYDROGRAPH FROM  
SUB-BASIN 34

Last Modified Date: 13 March 2017



Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 4970.0  
Downstream: 34R1

End:

Reservoir: 34R1

Description: ROUTE HYDROGRAPH 34O2 THROUGH MUDDY FORD  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 625.0  
Canvas Y: 5030.0  
Downstream: 41S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 34R1(Basin 1)  
Elevation-Outflow Table: 34R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 41S1

Description: ROUTE HYDROGRAPH 34R1 TO MOUTH OF SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 640.0  
Canvas Y: 5160.0  
From Canvas X: 625.0  
From Canvas Y: 5030.0  
Downstream: 43O1

Route: Modified Puls  
Number of Reaches: 15  
Initial Outflow Equals Inflow: Yes  
Storage Outflow Table Name: 41S1(Basin 1)  
Channel Loss: None

End:

Subbasin: 41C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 41  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 665.0  
Canvas Y: 5030.0  
Area: 0.367  
Downstream: 43O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 67

Transform: SCS  
Lag: 31.740  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4301

Description: COMBINE ROUTED HYDROGRAPH 41S1 WITH HYDROGRAPH  
FROM SUB-BASIN 41

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 640.0

Canvas Y: 5160.0

Downstream: 4302

End:

Subbasin: 42C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 42

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 680.0

Canvas Y: 5100.0

Area: 0.305

Downstream: 42D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 74

Transform: SCS  
Lag: 26.7  
Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 42D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 42 THROUGH  
DETENTION BASIN

Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 680.0  
Canvas Y: 5160.0  
Downstream: 43S1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 42D1(Basin 1)  
Elevation-Outflow Table: 42D1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reach: 43S1

Description: ROUTE HYDROGRAPH 42D1 TO MOUTH OF SUB-BASIN 43  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:14:32  
Canvas X: 695.0  
Canvas Y: 5290.0  
From Canvas X: 680.0  
From Canvas Y: 5160.0  
Downstream: Junction-3

Route: Muskingum Cunge  
Channel: 8-point  
Length: 1750  
Energy Slope: 0.0091  
Mannings n: 0.068  
Left Mannings n: 0.072  
Right Mannings n: 0.068  
Cross Section Name: 43S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 43C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 43  
Last Modified Date: 13 March 2017  
Last Modified Time: 13:07:49  
Canvas X: 720.0  
Canvas Y: 5160.0  
Area: 0.236  
Downstream: Junction-3

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0  
Curve Number: 83

Transform: SCS  
Lag: 25.68  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: Junction-3

Description: COMBINE ROUTED HYDROGRAPH 43S1 WITH HYDROGRAPH  
FROM SUB-BASIN 43

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5290.0

Downstream: 43D1

End:

Reservoir: 43D1

Description: ROUTE HYDROGRAPH FROM 43O1 THROUGH DETENTION  
BASIN

Last Modified Date: 13 March 2017

Last Modified Time: 13:07:49

Canvas X: 695.0

Canvas Y: 5350.0

Downstream: 43O2

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 43D1(Basin 1)

Elevation-Outflow Table: 43D1(Basin 1)

Primary Table: Elevation-Outflow

End:

Junction: 43O2

Description: COMBINE HYDROGRAPH 43O1 WITH HYDROGRAPH 43D1

Last Modified Date: 13 March 2017

Last Modified Time: 13:46:25

Canvas X: 666.3463777645311

Canvas Y: 5418.189159935088

Downstream: 41R1

End:

Reservoir: 41R1

Description: ROUTE HYDROGRAPH 43O2 THROUGH I-85

Last Modified Date: 15 March 2017

Last Modified Time: 19:34:20

Canvas X: 670.0

Canvas Y: 5480.0

Downstream: 44R1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 41R1(Basin 1)  
Elevation-Outflow Table: 41R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Reservoir: 44R1

Description: ROUTE HYDROGRAPH 41R1 THROUGH HORN BARRIER DR  
Last Modified Date: 20 March 2017  
Last Modified Time: 19:34:54  
Canvas X: 673.9004963965499  
Canvas Y: 5540.887266097396  
Label X: -1.0  
Label Y: 0.0  
Downstream: 44O1

Route: Modified Puls  
Routing Curve: Elevation-Area-Outflow  
Initial Outflow Equals Inflow: Yes  
Elevation-Area Table: 44R1(Basin 1)  
Elevation-Outflow Table: 44R1(Basin 1)  
Primary Table: Elevation-Outflow

End:

Subbasin: 44C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 44  
Last Modified Date: 15 March 2017  
Last Modified Time: 19:42:13  
Canvas X: 727.825169882547  
Canvas Y: 5477.68004447215  
Area: 0.161  
Downstream: 44O1

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 72

Transform: SCS  
Lag: 20.040  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4401

Description: COMBINE ROUTED HYDROGRAPH 44R1 WITH HYDROGRAPH  
FROM SUB-BASIN 44

Last Modified Date: 15 March 2017

Last Modified Time: 20:23:58

Canvas X: 684.3816690574948

Canvas Y: 5625.387947277328

Downstream: 4402

End:

Subbasin: 45C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 45

Last Modified Date: 15 March 2017

Last Modified Time: 19:45:22

Canvas X: 764.0280872367573

Canvas Y: 5545.017470750981

Area: 0.522

Downstream: 45D1

Canopy: None

Allow Simultaneous Precip Et: No

Plant Uptake Method: None

Surface: None

LossRate: SCS

Percent Impervious Area: 0.0

Curve Number: 73

Transform: SCS

Lag: 22.62

Unitgraph Type: STANDARD

Baseflow: None

End:

Reservoir: 45D1

Description: ROUTE HYDROGRAPH FROM SUB-BASIN 45 THROUGH  
DETENTION BASIN

Last Modified Date: 15 March 2017

Last Modified Time: 20:15:00

Canvas X: 757.610513121083

Canvas Y: 5629.330645905207

Downstream: 46S1

Route: Modified Puls

Routing Curve: Elevation-Area-Outflow

Initial Outflow Equals Inflow: Yes

Elevation-Area Table: 45D1(Basin 1)

Elevation-Outflow Table: 45D1(Basin 1)

Primary Table: Elevation-Outflow  
End:

Reach: 46S1

Description: ROUTE HYDROGRAPH 45D1 TO MOUTH OF SUB-BASIN 46  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:33:51  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
From Canvas X: 757.610513121083  
From Canvas Y: 5629.330645905207  
Downstream: 4601

Route: Muskingum Cunge  
Channel: 8-point  
Length: 3100  
Energy Slope: 0.0097  
Mannings n: 0.04  
Left Mannings n: 0.075  
Right Mannings n: 0.075  
Cross Section Name: 46S1(Basin 1)  
Use Variable Time Step: No  
Channel Loss: None

End:

Subbasin: 46C1

Description: RUNOFF HYDROGRAPH FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:22:09  
Canvas X: 871.5478166291224  
Canvas Y: 5627.361735313  
Area: 0.176  
Downstream: 4601

Canopy: None  
Allow Simultaneous Precip Et: No  
Plant Uptake Method: None

Surface: None

LossRate: SCS  
Percent Impervious Area: 0.0  
Curve Number: 70

Transform: SCS  
Lag: 23.52  
Unitgraph Type: STANDARD

Baseflow: None

End:

Junction: 4601

Description: COMBINE ROUTED HYDROGRAPH 46S1 WITH HYDROGRAPH  
FROM SUB-BASIN 46  
Last Modified Date: 15 March 2017  
Last Modified Time: 20:24:06  
Canvas X: 816.3033809394217  
Canvas Y: 5839.700435726636  
Downstream: 44O2

End:

Junction: 44O2  
Description: COMBINE HYDROGRAPH 44O1 WITH HYDROGRAPH 46O1  
Last Modified Date: 16 March 2017  
Last Modified Time: 12:36:34  
Canvas X: 767.7211792353773  
Canvas Y: 6044.146089039335  
Downstream: 44R2

End:



02S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
1.34	65.0
3.70	130.0
4.87	259.0
7.31	480.0
8.17	564.0
8.77	622.0
9.47	694.0
10.67	823.0
12.87	1070.0

02S2 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.65	73.0
1.06	146.0
1.82	293.0
3.07	658.0
3.52	799.0
3.84	915.0
4.21	1037.0
4.92	1304.0
5.97	1695.0

04S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.22	91.0
0.38	182.0
0.67	365.0
1.25	782.0
1.48	976.0
1.72	1103.0
1.97	1257.0
2.47	1635.0
3.14	2125.0

05S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.54	91.0
0.91	182.0
1.72	365.0
2.90	782.0
3.48	976.0
3.90	1103.0
4.34	1257.0
5.39	1635.0
6.64	2125.0

08S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.48	192.0
0.89	384.0
2.55	769.0
4.04	1456.0
4.50	1742.0
5.04	2059.0
5.37	2279.0
6.43	2965.0
7.61	3854.0

10S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
2.53	218.0
4.17	436.0
8.16	871.0
16.44	1698.0
19.31	2089.0
22.17	2520.0
24.43	2874.0
30.42	3796.0
37.14	4935.0

12S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.74	230.0
1.38	460.0
2.56	921.0
3.95	1797.0
4.69	2236.0
5.38	2724.0
5.95	3110.0
7.34	4138.0
9.10	5379.0

13S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
1.31	244.0
2.62	488.0
6.38	976.0
10.87	1933.0
12.52	2444.0
14.18	2995.0
15.37	3430.0
18.40	4607.0
21.60	5989.0

15S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
2.24	244.0
3.85	488.0
7.40	976.0
13.72	1933.0
16.61	2444.0
19.60	2995.0
21.87	3430.0
27.92	4607.0
34.83	5989.0

16S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
3.04	256.0
6.14	512.0
11.15	1025.0
21.77	2066.0
30.18	2688.0
38.38	3305.0
44.20	3816.0
55.31	5128.0
65.54	6666.0

16S2 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
1.41	379.0
2.25	758.0
3.58	1516.0
5.80	3111.0
6.94	3957.0
7.99	4740.0
8.84	5375.0
11.32	6960.0
14.10	9048.0

20S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.18	43.0
0.28	86.0
0.48	173.0
1.01	441.0
1.39	599.0
1.83	758.0
2.27	875.0
3.59	1189.0
5.46	1546.0

21S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.42	43.0
0.68	86.0
1.12	173.0
2.34	441.0
3.23	599.0
4.23	758.0
5.14	875.0
7.69	1189.0
10.33	1546.0

23S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.20	31.0
0.32	62.0
0.58	124.0
3.52	288.0
4.89	378.0
6.22	470.0
7.29	540.0
9.95	728.0
12.28	946.0

25S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.87	92.0
1.40	184.0
2.32	368.0
6.45	857.0
9.17	1168.0
11.88	1514.0
13.80	1785.0
19.33	2500.0
24.90	3250.0

26S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.95	100.0
1.51	200.0
2.53	401.0
5.77	912.0
8.44	1239.0
11.31	1601.0
13.69	1877.0
19.57	2656.0
24.24	3453.0

28S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
0.35	100.0
0.60	200.0
1.11	401.0
2.24	912.0
3.51	1239.0
6.91	1601.0
13.21	1877.0
19.65	2656.0
22.22	3453.0

31S1 (Basin 1)	
Storage (ac-ft)	Discharge (cfs)
0.00	0.0
1.15	112.0
2.02	223.0
3.51	446.0
6.13	963.0
7.28	1186.0
8.29	1344.0
9.28	1526.0
11.54	2418.0
14.07	3143.0

<b>33S1 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
11.23	379.0
17.50	758.0
27.22	1516.0
43.35	3111.0
50.73	3957.0
57.16	4740.0
62.17	5375.0
73.92	6960.0
87.96	9048.0

<b>34S1 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
0.22	45.0
0.34	90.0
0.51	181.0
3.46	774.0
4.87	1114.0
6.25	1347.0
7.14	1489.0
9.95	2586.0
11.71	3362.0

<b>36S1 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
0.18	10.0
0.28	20.0
0.44	39.0
1.00	122.0
1.32	175.0
1.66	231.0
1.97	275.0
2.91	386.0
3.97	502.0

<b>36S2 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
0.02	10.0
0.04	20.0
0.05	39.0
0.13	122.0
0.17	175.0
0.23	231.0
0.26	275.0
0.36	386.0
0.44	502.0

<b>37S1 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
0.14	31.0
0.22	62.0
0.37	125.0
1.02	344.0
1.37	454.0
1.84	620.0
2.08	736.0
2.98	1039.0
3.60	1351.0

<b>37S2 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
0.16	31.0
0.29	62.0
0.54	125.0
1.33	344.0
2.02	454.0
3.09	620.0
4.12	736.0
9.26	1039.0
13.19	1351.0

<b>41S1 (Basin 1)</b>	
<b>Storage (ac-ft)</b>	<b>Discharge (cfs)</b>
0.00	0.0
4.89	216.0
9.98	432.0
32.67	863.0
73.13	2204.0
103.84	3553.0
119.59	4237.0
129.50	4730.0
200.33	9308.0
240.85	12100.0

03R1 (Basin 1)	
Elevation (ft)	Area (ac)
984.75	0.00
990.38	0.07
999.13	3.22
999.32	3.41
999.44	3.54
999.54	3.64
999.63	3.73
999.71	3.81
999.77	3.88
999.89	4.00

04R1 (Basin 1)	
Elevation (ft)	Area (ac)
969.99	0.00
971.89	0.11
972.91	0.13
974.67	0.17
978.15	0.24
979.54	0.31
981.06	0.39
981.61	0.43
982.20	0.47
982.70	0.51

06D1 (Basin 1)	
Elevation (ft)	Area (ac)
874.00	0.01
874.50	0.01
875.00	0.01
875.50	0.02
876.00	0.02
876.50	0.13
877.00	0.24
877.50	0.35
878.00	0.46
878.50	0.51
879.00	0.56
879.50	0.60
880.00	0.65
880.50	0.89
881.00	1.12
881.50	1.35
882.00	1.58

09R1 (Basin 1)	
Elevation (ft)	Area (ac)
952.91	0.00
956.01	0.12
958.06	0.14
961.77	0.30
965.32	0.74
965.63	0.76
965.87	0.77
966.07	0.79
966.61	0.83
967.20	0.87

15R1 (Basin 1)	
Elevation (ft)	Area (ac)
892.67	0.00
899.12	3.80
900.00	4.55
900.67	5.02
901.41	5.54
901.72	5.77
902.08	6.20
902.34	6.36
903.16	7.32
904.51	7.76

19R1 (Basin 1)	
Elevation (ft)	Area (ac)
943.83	0.00
946.39	0.12
947.54	0.18
949.40	0.35
952.00	0.80
952.33	0.88
952.69	0.97
952.86	1.01
953.26	1.11
953.64	1.19

21R1 (Basin 1)	
Elevation (ft)	Area (ac)
918.71	0.00
921.15	0.09
922.57	0.11
924.98	0.15
928.73	0.94
929.28	1.04
929.76	1.17
930.12	1.29
930.88	1.51
931.00	1.57

22R1 (Basin 1)	
Elevation (ft)	Area (ac)
933.87	0.00
936.55	0.10
938.33	0.12
940.51	0.44
941.36	0.62
941.63	0.71
941.83	0.77
942.05	0.82
942.33	0.89
942.71	0.97

23R1 (Basin 1)	
Elevation (ft)	Area (ac)
928.58	0.00
930.26	0.03
931.04	0.05
932.40	0.18
936.07	0.59
936.53	0.65
936.80	0.68
936.95	0.70
937.37	0.79
937.76	0.87

28R1 (Basin 1)	
Elevation (ft)	Area (ac)
875.20	0.00
879.07	0.30
880.77	0.52
883.36	1.50
887.72	3.21
890.27	3.67
893.40	4.07
896.12	4.56
900.23	5.26
901.08	5.40

29D1 (Basin 1)	
Elevation (ft)	Area (ac)
912.00	4.82
912.50	4.89
913.00	4.95
913.50	5.02
914.00	5.08
914.50	5.15
915.00	5.21
915.50	5.28
916.00	5.34

30R1 (Basin 1)	
Elevation (ft)	Area (ac)
891.50	0.00
894.82	0.10
897.02	0.17
900.39	0.30
904.07	0.44
904.29	0.45
904.44	0.45
904.57	0.46
904.67	0.46
904.87	0.47

31R1 (Basin 1)	
Elevation (ft)	Area (ac)
873.46	0.00
876.27	0.08
877.06	0.13
878.12	0.24
880.38	0.45
881.40	0.53
882.10	0.59
883.30	0.67
884.56	0.83
886.00	1.22

32R1 (Basin 1)	
Elevation (ft)	Area (ac)
886.05	0.00
887.23	0.06
887.72	0.14
888.47	0.15
890.05	0.19
890.81	0.21
891.55	0.24
892.09	0.27
894.03	0.45
898.66	0.74

33R1 (Basin 1)	
Elevation (ft)	Area (ac)
854.00	0.00
858.17	7.16
859.90	12.53
861.99	14.50
866.40	17.46
867.06	18.12
867.64	18.48
868.02	18.72
868.80	19.15
869.47	19.56

34R1 (Basin 1)	
Elevation (ft)	Area (ac)
848.24	0.00
851.93	1.11
853.54	5.57
855.00	13.09
859.57	22.80
859.94	23.60
861.50	24.54
862.16	24.97
863.01	26.09
863.58	26.70

35D1 (Basin 1)	
Elevation (ft)	Area (ac)
960.00	10.58
960.50	10.99
961.00	11.40
961.50	11.81
962.00	12.22
962.50	12.63
963.00	13.04
963.50	13.45
964.00	13.86
964.50	14.01
965	14.16
965.5	14.31
966	14.46
966.5	14.62
967	14.77
967.5	14.92
968	15.07

36R1 (Basin 1)	
Elevation (ft)	Area (ac)
923.08	0.00
923.74	0.09
924.15	0.10
924.79	0.11
926.85	0.15
927.92	0.27
928.94	0.58
929.68	0.78
931.80	1.38
934.59	1.92

<b>36R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
884.54	0.00
886.76	0.08
887.72	0.10
889.16	0.14
892.90	0.56
894.49	0.99
895.17	1.16
895.43	1.21
896.10	1.32
896.48	1.35

<b>37R1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
876.14	0.00
878.34	0.08
879.30	0.09
880.78	0.13
884.95	1.14
885.65	1.21
886.35	1.30
886.57	1.37
887.10	1.47
887.52	1.51

<b>37R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
869.03	0.00
871.23	0.09
872.17	0.10
873.55	0.11
877.35	0.43
878.85	0.87
879.24	1.28
879.43	2.06
879.74	2.27
880.03	2.39

<b>37R3 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
862.05	0.00
864.26	0.12
865.21	0.13
866.64	0.22
869.54	0.84
869.82	1.07
870.30	1.36
870.49	1.42
871.06	1.72
871.38	2.00

<b>38D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
904.00	1.45
904.50	1.48
905.00	1.52
905.50	1.55
906.00	1.59
906.50	1.62
907.00	1.66
907.50	1.69
908.00	1.73
908.50	1.95
909.00	2.17
909.50	2.39
910.00	2.61
910.50	2.83
911.00	3.05
911.50	3.27
912.00	3.49
912.50	3.62
913.00	3.75
913.50	3.88

<b>39R1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
903.50	0.00
907.70	0.92
909.91	1.27
912.73	1.88
916.77	3.39
921.37	5.13
921.92	5.35
922.19	5.46
922.39	5.55
922.72	5.68

<b>39R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
891.50	0.00
895.49	0.33
898.40	0.83
902.16	1.50
904.33	1.84
904.60	1.85
904.81	1.87
904.98	1.88
905.13	1.89
905.26	1.90

<b>40D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
884.00	12.78
886.50	14.09
887.00	14.35
887.50	14.62
888.00	14.88
888.50	15.52
889.00	16.15
889.50	16.79
890.00	17.43
890.50	18.06
891	18.70
891.5	19.34
892	19.97

<b>41R1 (Basin 1) CE</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
839.40	0.00
841.42	0.40
843.33	0.86
845.88	4.23
849.27	10.66
852.42	31.89
853.16	36.36
853.44	38.05
854.66	45.64
856.00	54.18

<b>41R1 (Basin 1) PROP</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
839.40	0.00
842.22	0.57
844.01	1.05
846.01	4.45
848.25	9.40
849.61	11.08
850.69	17.70
851.21	22.32
853.62	39.14
855.59	51.57

<b>42D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
876.00	4.65
876.50	5.10
877.00	5.55
877.50	6.01
878.00	6.46
878.50	6.91
879.00	7.36
879.50	7.81
880.00	8.26
880.50	8.57
881.00	8.88
881.50	9.19
882.00	9.50
882.50	9.81
883.00	10.12
883.50	10.43
884.00	10.74

<b>43D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Area (ac)</b>
876.00	1.54
876.50	1.64
877.00	1.75
877.50	1.85
878.00	1.95
878.50	2.06
879.00	2.16
879.50	2.26
880.00	2.36

44R1 (Basin 1)	
Elevation (ft)	Area (ac)
834.32	0.00
838.33	0.70
840.30	0.79
842.14	2.27
844.81	7.36
846.12	8.10
847.48	9.48
848.93	11.17
852.57	19.36
854.00	20.40

44R2 (Basin 1)	
Elevation (ft)	Area (ac)
831.32	0.00
836.69	2.55
838.82	4.82
840.69	11.50
843.43	15.23
844.51	17.09
845.42	17.69
845.98	18.07
848.29	19.78
849.32	20.64

45D1 (Basin 1)	
Elevation (ft)	Area (ac)
888.00	13.58
888.50	14.10
889.00	14.61
889.50	15.12
890.00	15.63
890.50	16.14
891.00	16.65
891.50	17.17
892.00	17.68
892.50	18.72
893	19.77
893.5	20.82
894	21.87
894.5	22.92
895	23.96
895.5	25.01
896	26.06



03R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
984.75	0.00
990.38	70.00
999.13	140.00
999.32	210.00
999.44	280.00
999.54	350.00
999.63	420.00
999.71	490.00
999.77	560.00
999.89	700.00

04R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
969.99	0.00
971.89	73.00
972.91	146.00
974.67	293.00
978.15	658.00
979.54	799.00
981.06	915.00
981.61	1037.00
982.20	1304.00
982.70	1695.00

06D1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
874.00	0.00
874.50	2.37
875.00	6.70
875.50	12.30
876.00	18.94
876.50	26.47
877.00	31.22
877.50	35.40
878.00	39.13
878.50	42.54
879.00	45.70
879.50	48.65
880.00	51.43
880.50	54.07
881.00	162.65
881.50	359.00
882.00	612.44

09R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
952.91	0.00
956.01	192.00
958.06	384.00
961.77	768.00
965.32	1467.00
965.63	1757.00
965.87	2061.00
966.07	2309.00
966.61	3003.00
967.20	3904.00

15R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
892.67	0.00
899.12	256.00
900.00	512.00
900.67	1025.00
901.41	2066.00
901.72	2688.00
902.08	3305.00
902.34	3816.00
903.16	5128.00
904.51	6666.00

19R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
943.83	0.00
946.39	38.00
947.54	75.00
949.40	150.00
952.00	387.00
952.33	526.00
952.69	666.00
952.86	773.00
953.26	1056.00
953.64	1373.00

21R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
918.71	0.00
921.15	86.00
922.57	172.00
924.98	343.00
928.73	811.00
929.28	1099.00
929.76	1422.00
930.12	1680.00
930.88	2353.00
931.00	3059.00

22R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
933.87	0.00
936.55	31.00
938.33	62.00
940.51	124.00
941.36	288.00
941.63	378.00
941.83	470.00
942.05	540.00
942.33	728.00
942.71	946.00

23R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
928.58	0.00
930.26	31.00
931.04	62.00
932.40	124.00
936.07	288.00
936.53	378.00
936.80	470.00
936.95	540.00
937.37	728.00
937.76	946.00

28R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
875.20	0.00
879.07	104.00
880.77	208.00
883.36	417.00
887.72	878.00
890.27	1071.00
893.40	1240.00
896.12	1366.00
900.23	2155.00
901.08	2801.00

29D1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
912.00	0.00
912.50	7.95
913.00	22.48
913.50	41.29
914.00	63.57
914.50	308.04
915.00	736.78
915.50	1286.18
916.00	1933.42

30R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
891.50	0.00
894.82	60.00
897.02	120.00
900.39	180.00
904.07	240.00
904.29	300.00
904.44	360.00
904.57	420.00
904.67	480.00
904.87	600.00

31R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
873.46	0.00
876.27	112.00
877.06	223.00
878.12	446.00
880.38	963.00
881.40	1186.00
882.10	1344.00
883.30	1526.00
884.56	2418.00
886.00	3143.00

32R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
886.05	0.00
887.23	10.00
887.72	20.00
888.47	41.00
890.05	105.00
890.81	141.00
891.55	178.00
892.09	205.00
894.03	272.00
898.66	380.00

33R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
854.00	0.00
858.17	209.00
859.90	418.00
861.99	835.00
866.40	1979.00
867.06	2811.00
867.64	3872.00
868.02	4717.00
868.80	7246.00
869.47	9420.00

34R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
848.24	0.00
851.93	216.00
853.54	432.00
855.00	863.00
859.57	2204.00
859.94	3553.00
861.50	4237.00
862.16	4730.00
863.01	9308.00
863.58	12100.00

35D1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
960.00	0.00
960.50	14.25
961.00	40.30
961.50	74.04
962.00	113.99
962.50	159.30
963.00	209.40
963.50	263.88
964.00	322.40
964.50	384.70
965	450.57
965.5	815.74
966	1429.29
966.5	2205.51
967	3113.76
967.5	4136.28
968	5261.06

36R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
923.08	0.00
923.74	10.00
924.15	20.00
924.79	39.00
926.85	122.00
927.92	175.00
928.94	231.00
929.68	275.00
931.80	386.00
934.59	502.00

<b>36R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
884.54	0.00
886.76	31.00
887.72	62.00
889.16	125.00
892.90	344.00
894.49	454.00
895.17	620.00
895.43	736.00
896.10	1039.00
896.48	1351.00

<b>37R1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
876.14	0.00
878.34	31.00
879.30	62.00
880.78	125.00
884.95	344.00
885.65	454.00
886.35	620.00
886.57	736.00
887.10	1039.00
887.52	1351.00

<b>37R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
869.03	0.00
871.23	31.00
872.17	62.00
873.55	125.00
877.35	344.00
878.85	454.00
879.24	620.00
879.43	736.00
879.74	1039.00
880.03	1351.00

<b>37R3 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
862.05	0.00
864.26	31.00
865.21	62.00
866.64	125.00
869.54	344.00
869.82	454.00
870.30	620.00
870.49	736.00
871.06	1039.00
871.38	1351.00

<b>38D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
904.00	0.00
904.50	14.99
905.00	42.39
905.50	77.88
906.00	119.90
906.50	167.56
907.00	200.58
907.50	205.08
908.00	209.50
908.50	213.82
909.00	218.05
909.50	222.20
910.00	226.28
910.50	230.29
911.00	234.22
911.50	238.09
912.00	241.90
912.50	421.02
913.00	745.35
913.5	1164.20

<b>39R1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
903.50	0.00
907.70	120.00
909.91	240.00
912.73	360.00
916.77	480.00
921.37	600.00
921.92	720.00
922.19	840.00
922.39	960.00
922.72	1200.00

<b>39R2 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
891.50	0.00
895.49	120.00
898.40	240.00
902.16	360.00
904.33	480.00
904.60	600.00
904.81	720.00
904.98	840.00
905.13	960.00
905.26	1200.00

<b>40D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
884.00	0.00
886.50	4.00
887.00	94.30
887.50	376.10
888.00	593.10
888.50	600.90
889.00	608.50
889.50	616.10
890.00	623.60
890.50	1288.60
891	2498.20
891.5	4062.50
892	5913.50

<b>41R1 (Basin 1) CE</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
839.40	0.00
841.42	235.00
843.33	470.00
845.88	939.00
849.27	2321.00
852.42	3415.00
853.16	4346.00
853.44	4941.00
854.66	8993.00
856.00	11691.00

<b>41R1 (Basin 1) PROP</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
839.40	0.00
842.22	235.00
844.01	470.00
846.01	939.00
848.25	2321.00
849.61	3415.00
850.69	4346.00
851.21	4941.00
853.62	8993.00
855.59	11691.00

<b>42D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
876.00	0.00
876.50	0.00
877.00	0.00
877.50	0.00
878.00	0.00
878.50	26.64
879.00	75.36
879.50	185.03
880.00	278.07
880.50	390.32
881.00	522.86
881.50	672.92
882.00	838.62
882.50	1018.58
883.00	1211.73
883.50	1417.24
884	1634.37

<b>43D1 (Basin 1)</b>	
<b>Elevation (ft)</b>	<b>Discharge (cfs)</b>
876.00	0.00
876.50	12.27
877.00	36.88
877.50	71.73
878.00	116.56
878.50	179.46
879.00	1786.63
879.50	3159.90
880.00	4783.02

44R1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
834.32	0.00
838.33	235.00
840.30	470.00
842.14	939.00
844.81	2321.00
846.12	3415.00
847.48	4346.00
848.93	4941.00
852.57	8993.00
854.00	11691.00

44R2 (Basin 1)	
Elevation (ft)	Discharge (cfs)
831.32	0.00
836.69	236.00
838.82	471.00
840.69	942.00
843.43	2346.00
844.51	3412.00
845.42	4393.00
845.98	5005.00
848.29	7552.00
849.32	9818.00

45D1 (Basin 1)	
Elevation (ft)	Discharge (cfs)
888.00	0.00
888.50	17.80
889.00	39.90
889.50	68.50
890.00	102.40
890.50	140.80
891.00	183.30
891.50	229.40
892.00	279.00
892.50	715.40
893	1472.50
893.5	2439.50
894	3576.40
894.5	4860.40
895	6275.90
895.5	7811.50
896	9458.30

<b>37S3 (Basin 1)</b>	
<b>Station (ft)</b>	<b>Elevation (ft)</b>
0.00	868.00
240.00	864.00
445.50	860.00
447.00	855.00
453.00	855.00
454.50	860.00
488.00	864.00
510.00	868.00

<b>40S1 (Basin 1)</b>	
<b>Station (ft)</b>	<b>Elevation (ft)</b>
0.00	896.00
150.00	888.00
162.50	887.00
165.80	883.00
174.30	883.00
177.50	887.00
185.00	888.00
235.00	896.00

<b>43S1 (Basin 1)</b>	
<b>Station (ft)</b>	<b>Elevation (ft)</b>
0.00	872.00
65.00	864.00
131.50	860.00
136.00	855.00
144.00	855.00
148.50	860.00
198.00	868.00
240.00	876.00

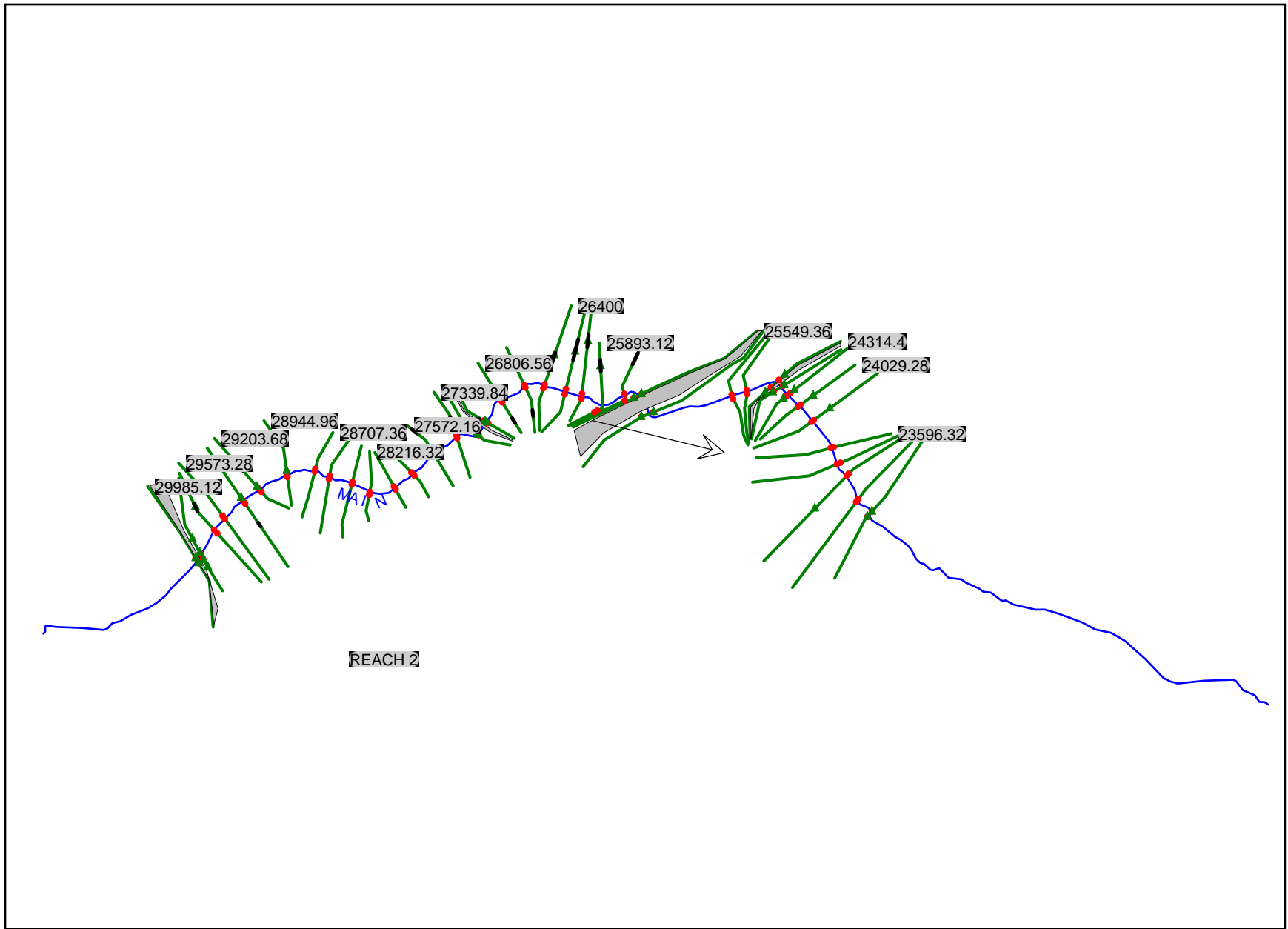
<b>46S1 (Basin 1)</b>	
<b>Station (ft)</b>	<b>Elevation (ft)</b>
0.00	864.00
160.00	852.00
209.50	848.00
212.00	844.50
218.00	844.50
221.50	848.00
300.00	852.00
400.00	864.00

# APPENDIX H

## HYDRAULIC MODEL RESULTS

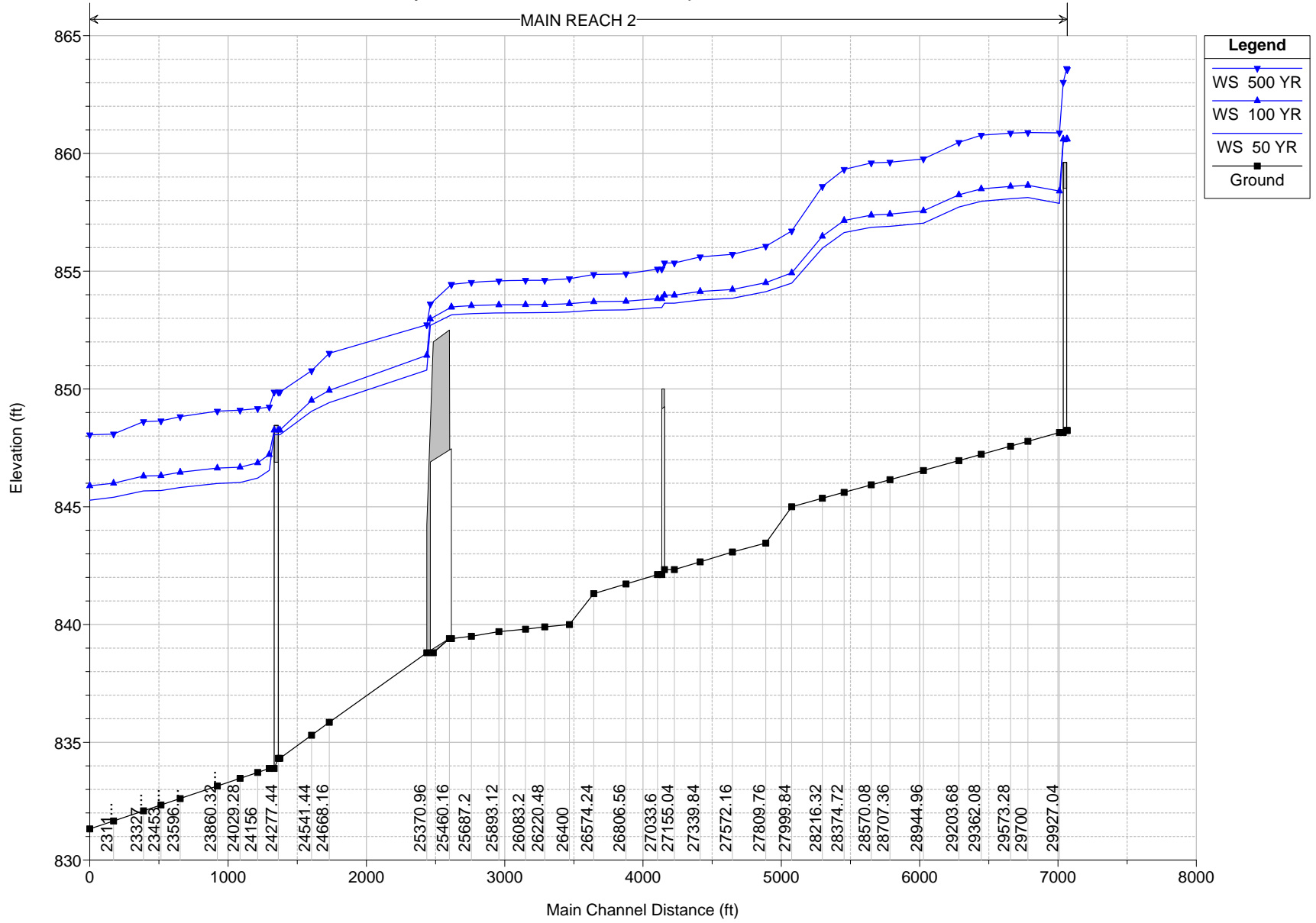
**DUPLICATE EFFECTIVE**



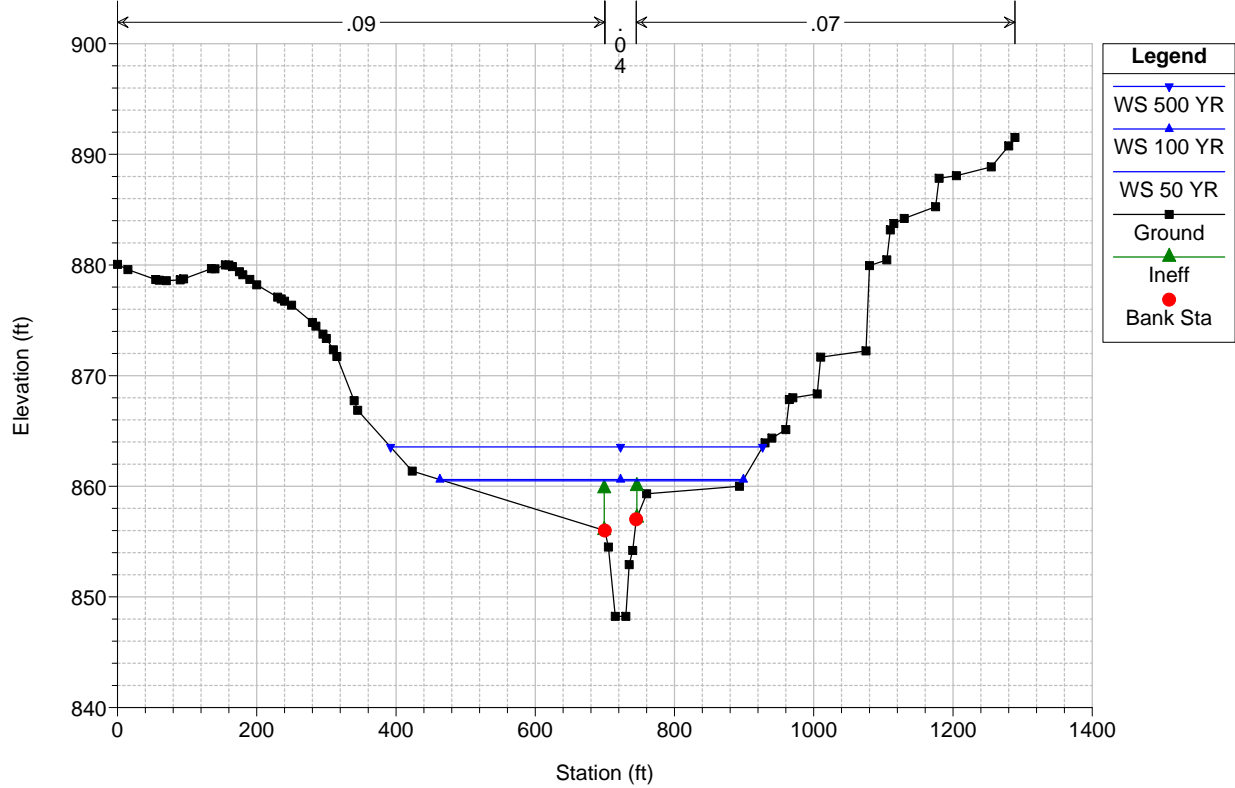


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

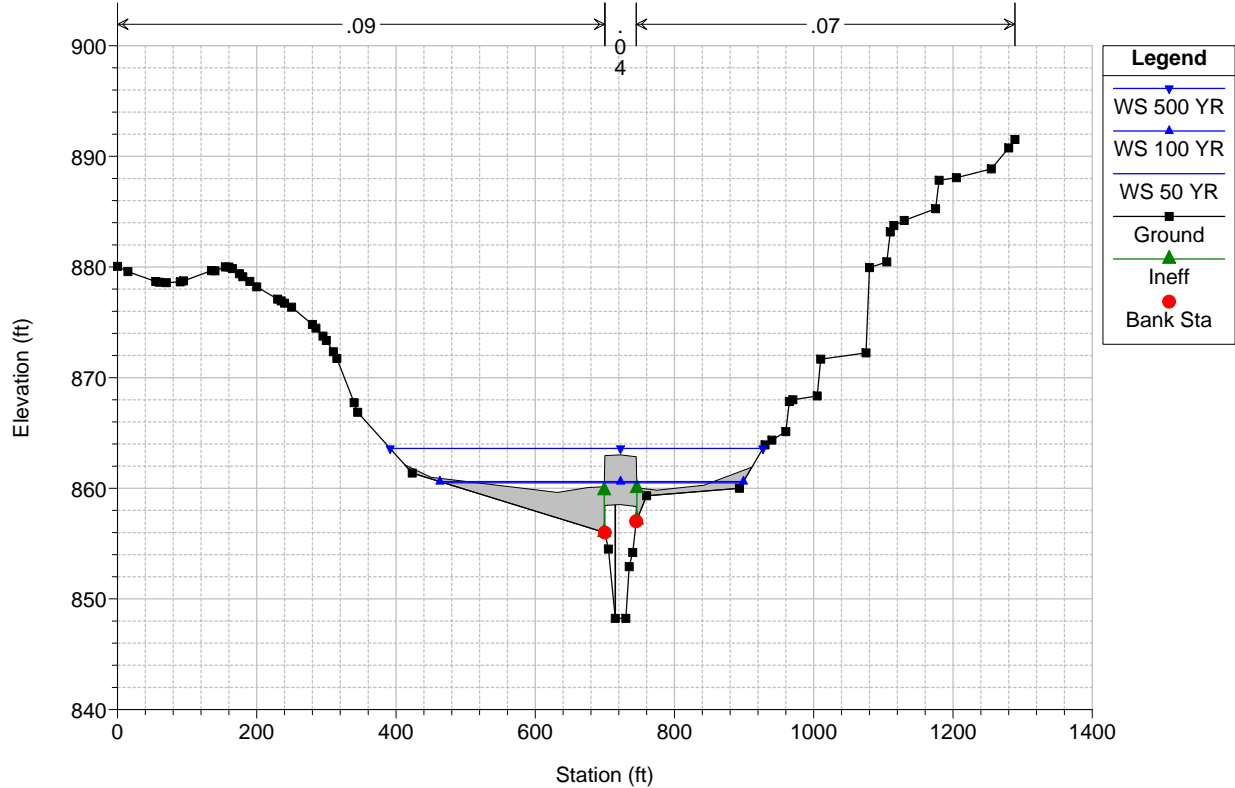
MAIN REACH 2



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford

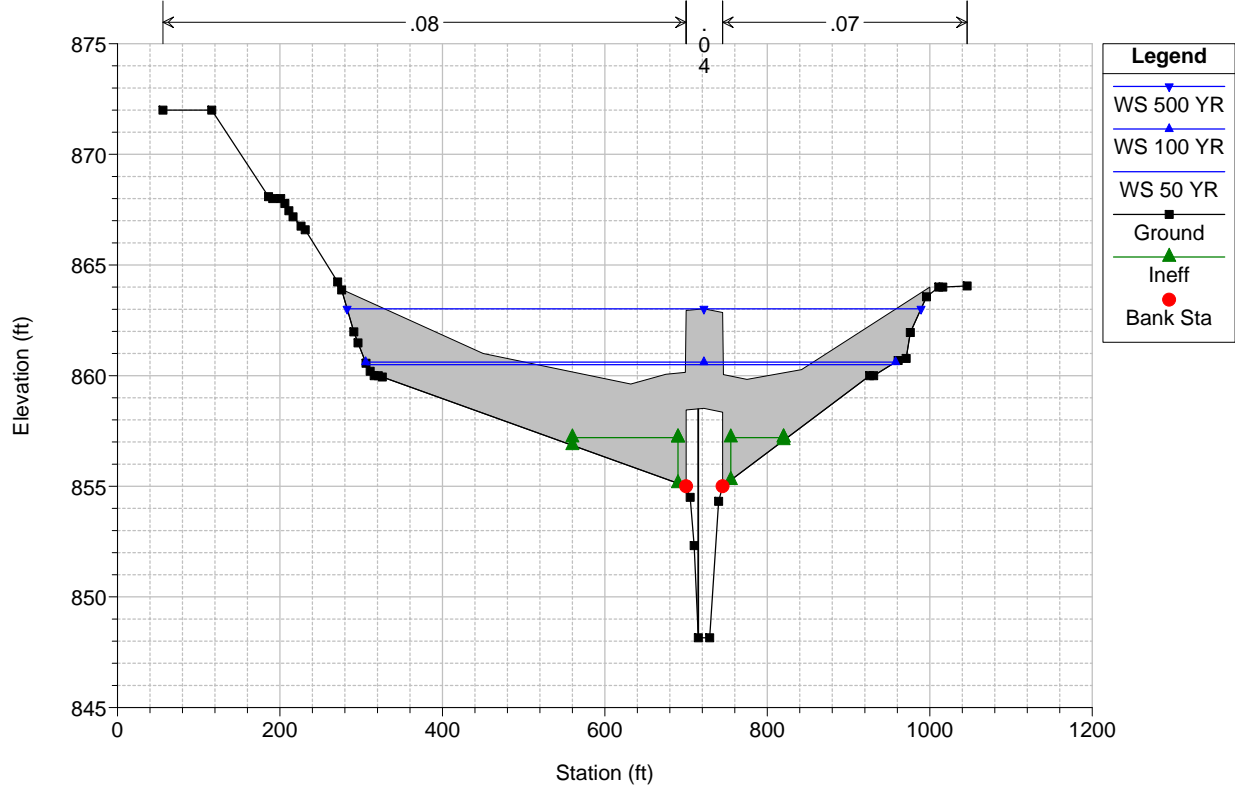


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29958.72 BR



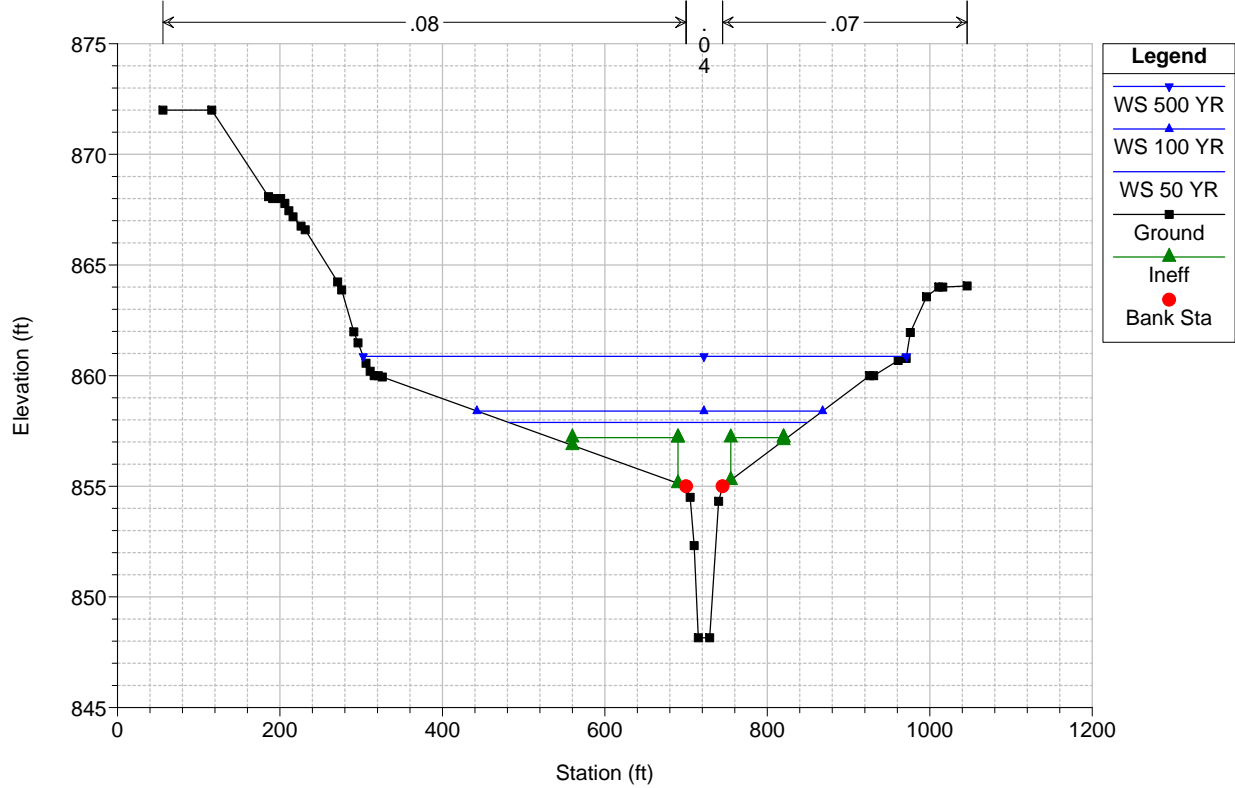
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



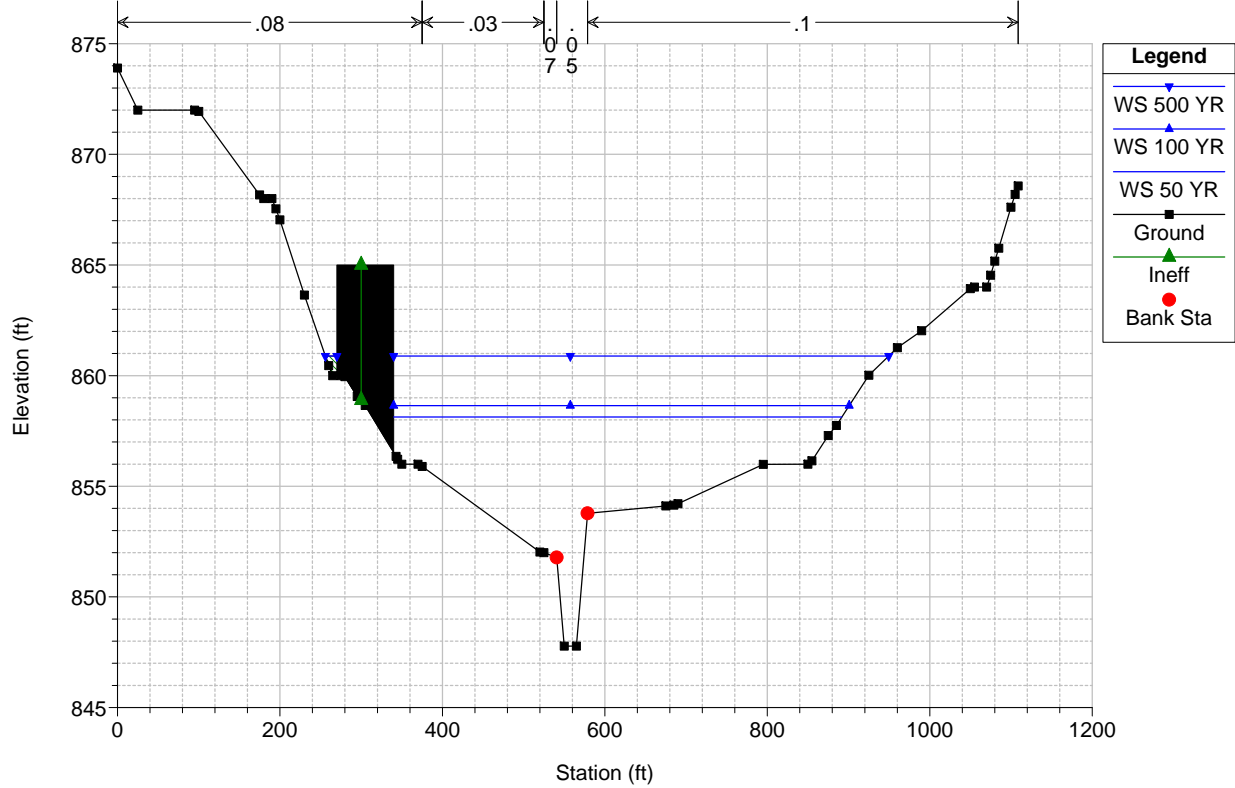
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



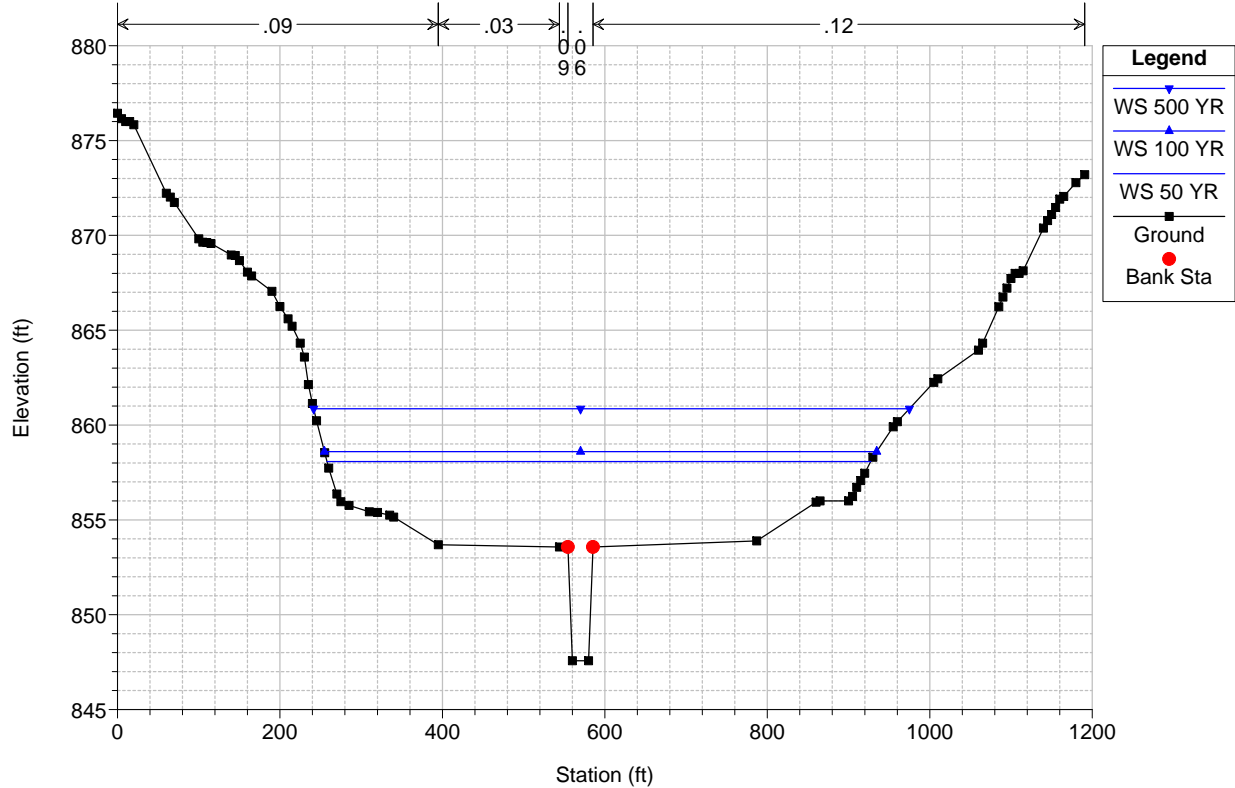
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96



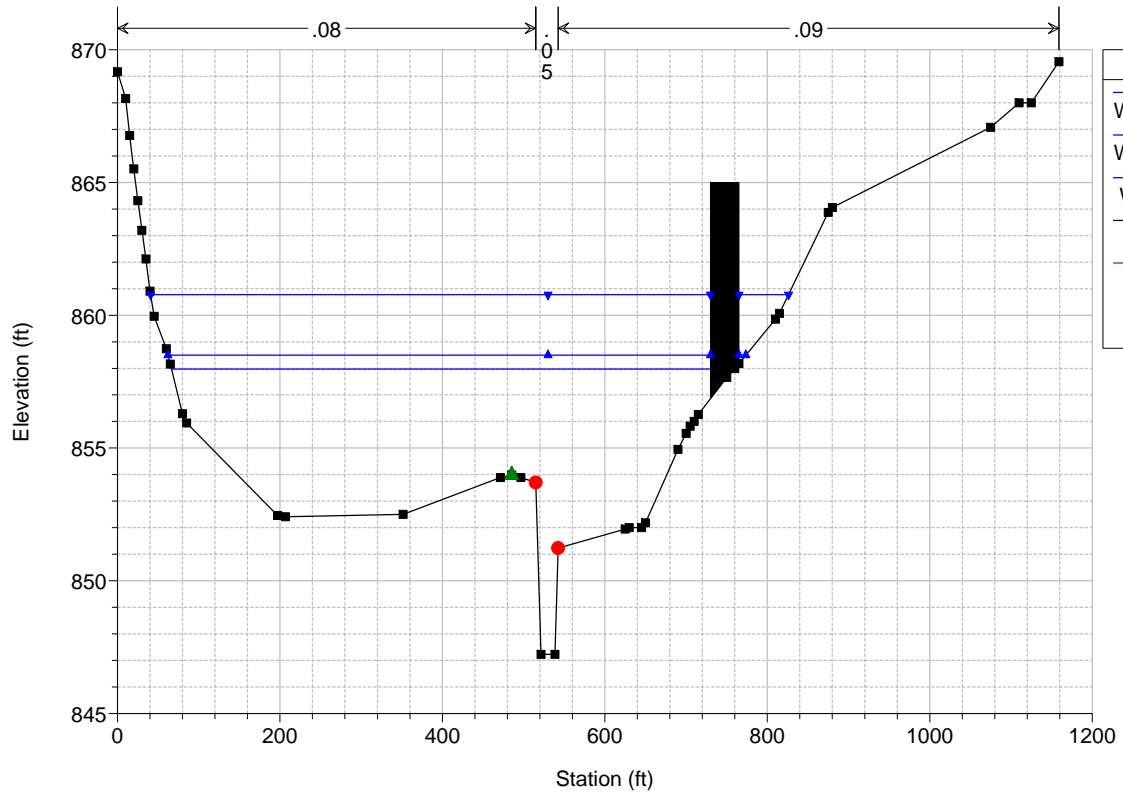
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29573.28 MS95



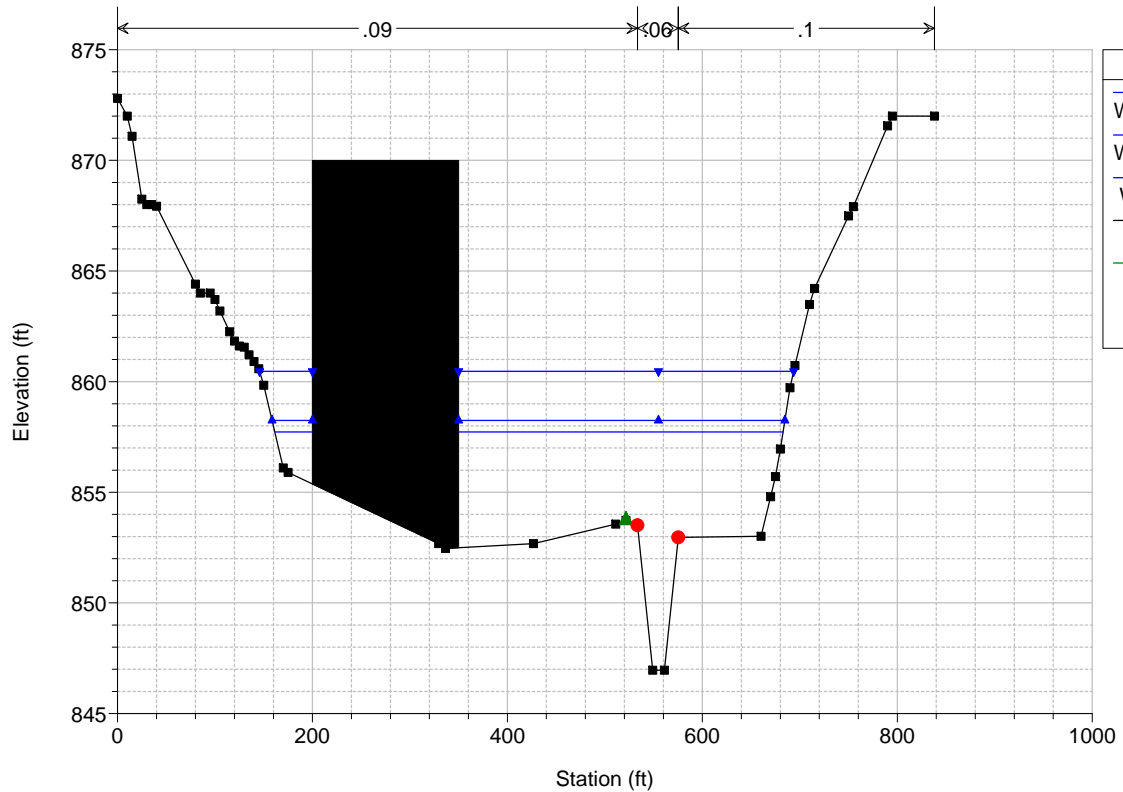
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29362.08 MS94



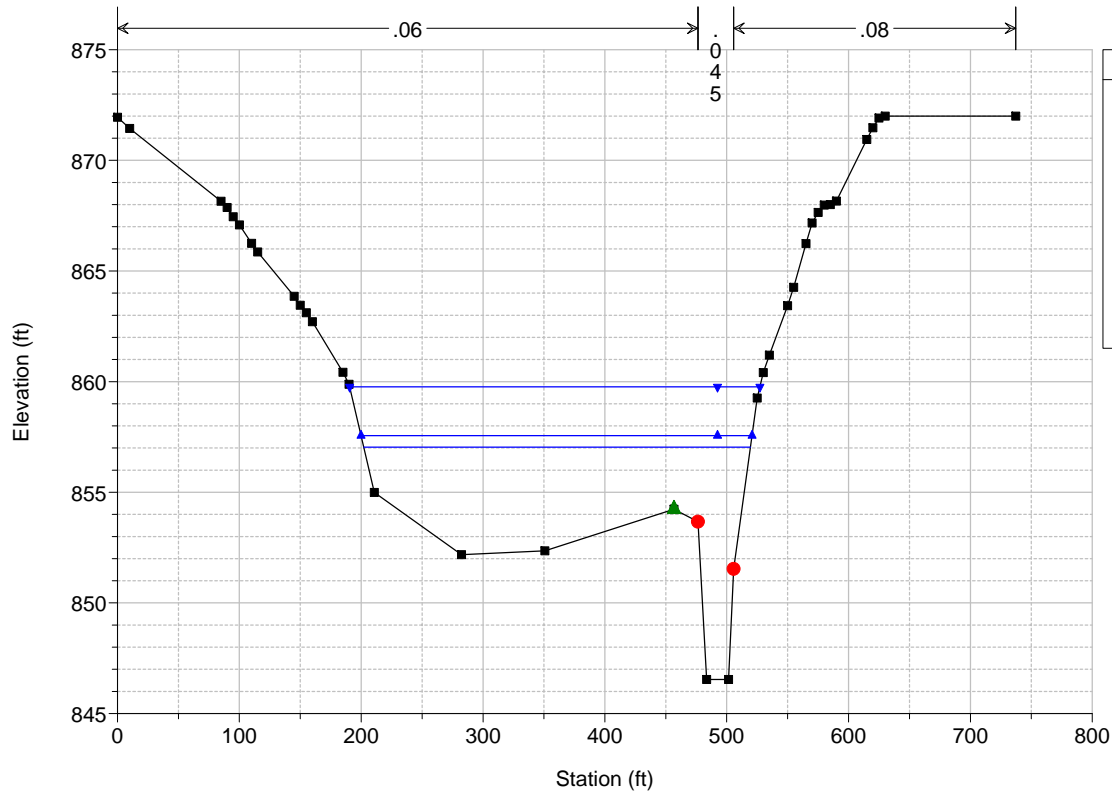
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29203.68 MS93



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

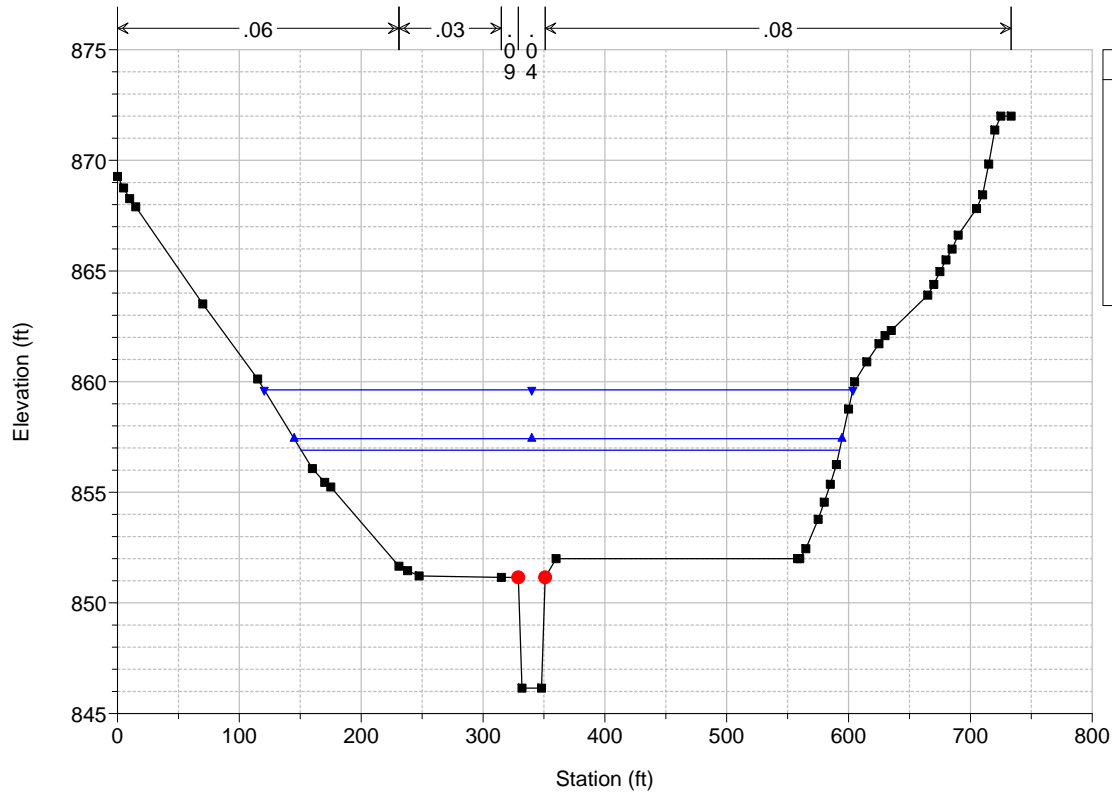
River = MAIN Reach = REACH 2 RS = 28944.96 MS92



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square
Ineff	Green line with upward-pointing triangle
Bank Sta	Red line with circle

Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

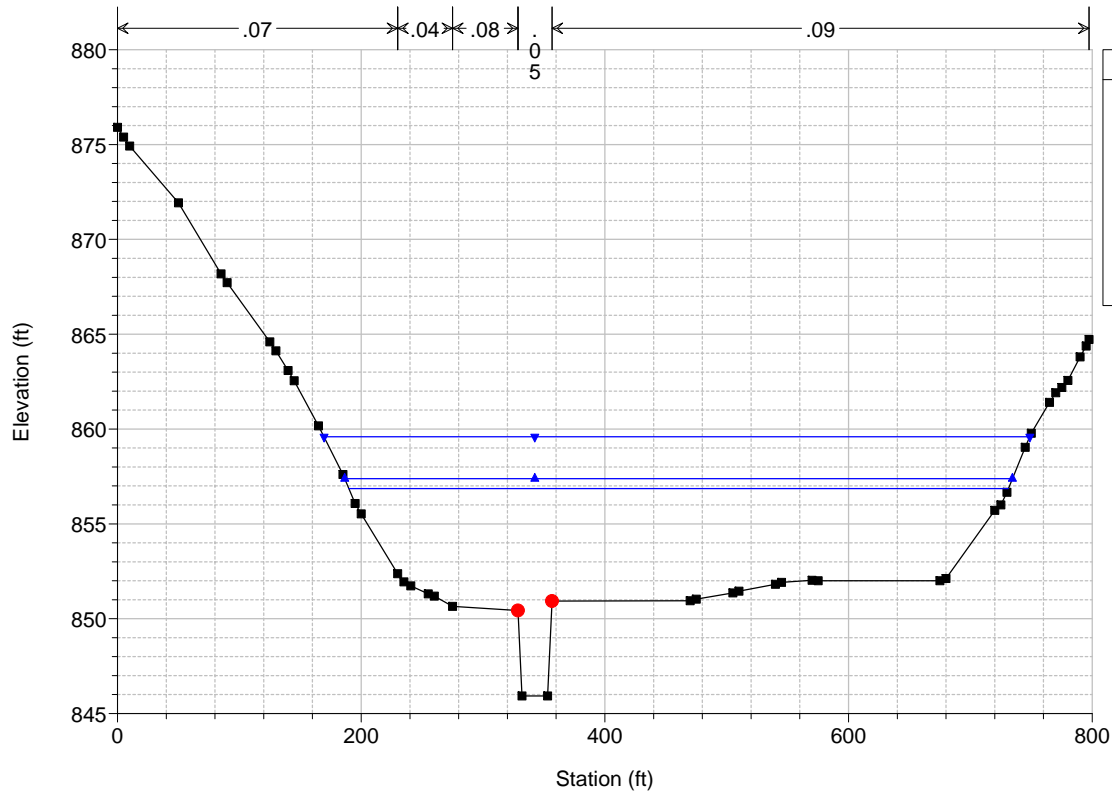
River = MAIN Reach = REACH 2 RS = 28707.36 MS91



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square
Bank Sta	Red line with circle

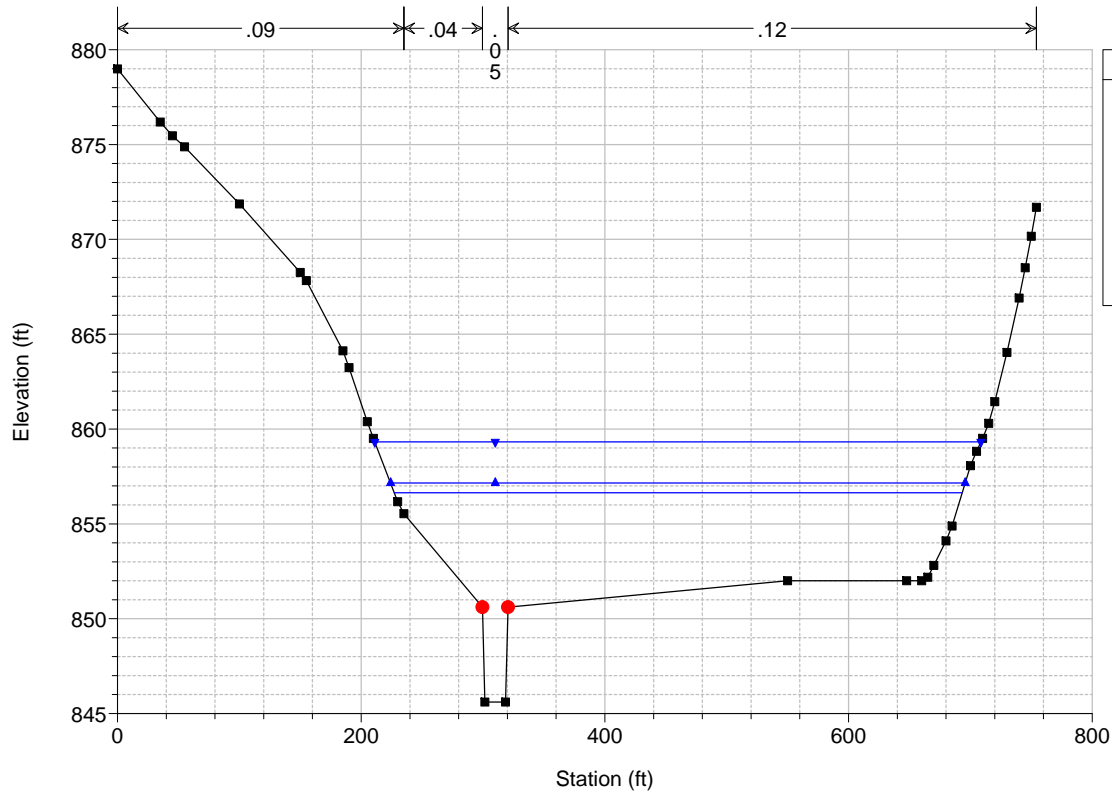
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 28570.08 MS90



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

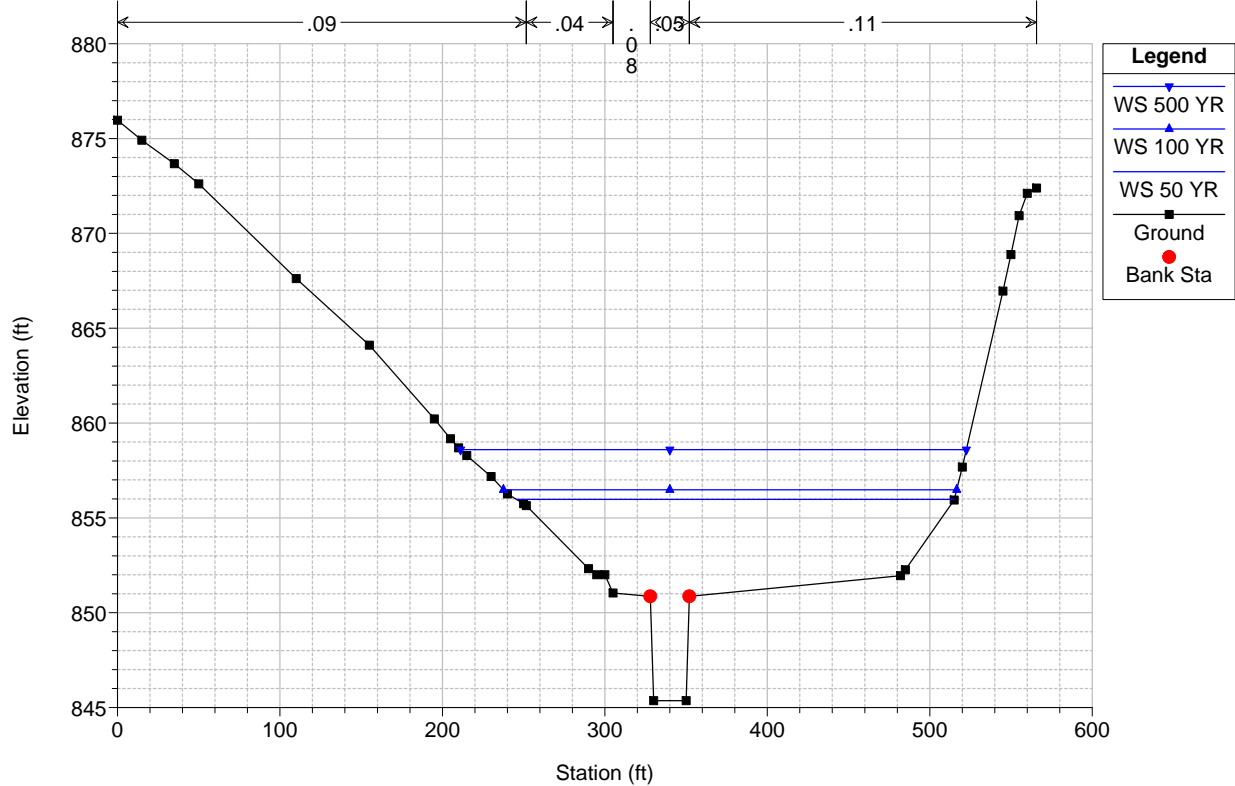
River = MAIN Reach = REACH 2 RS = 28374.72 MS89





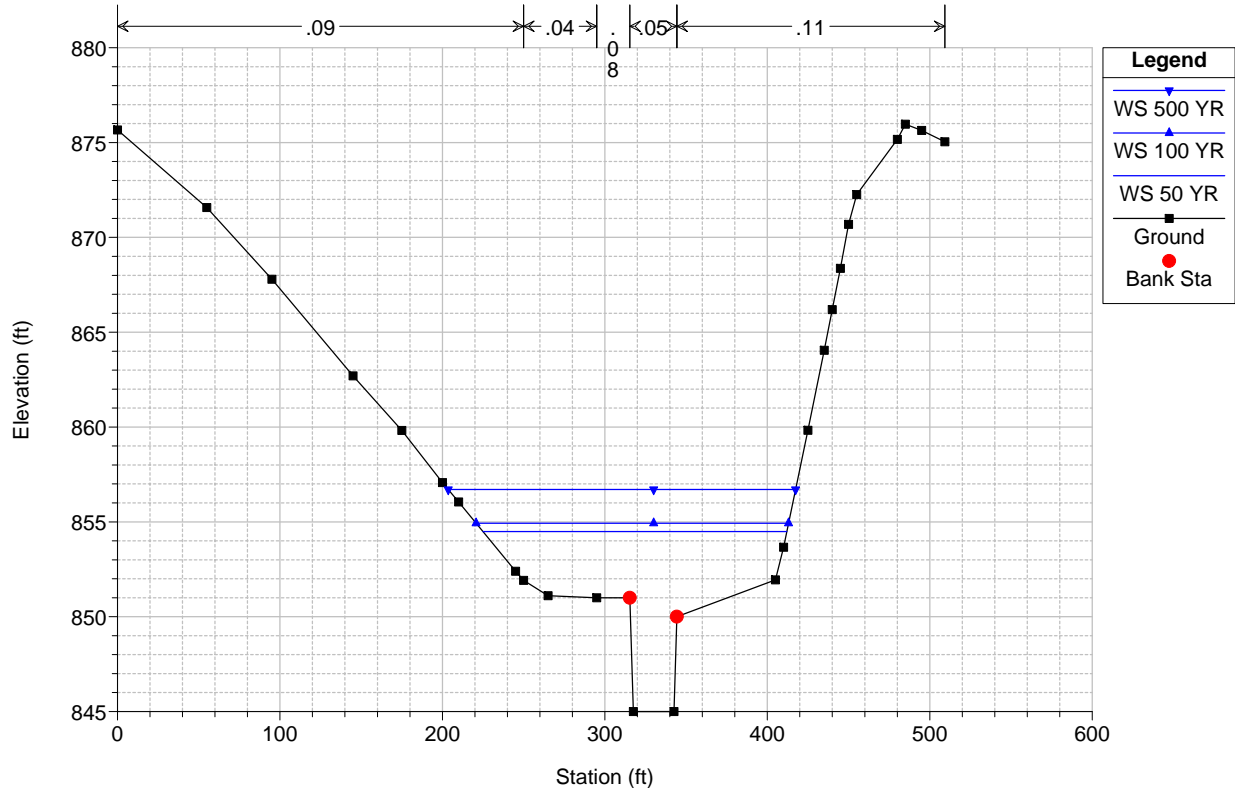
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88



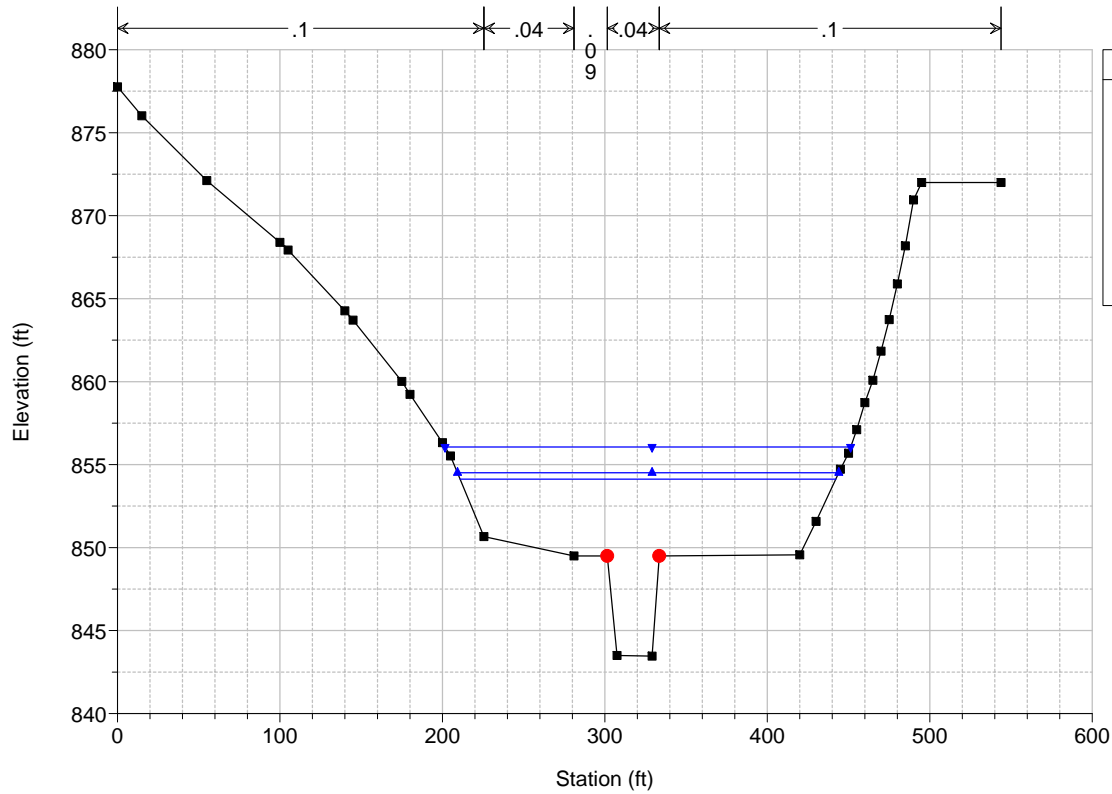
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27999.84 MS87



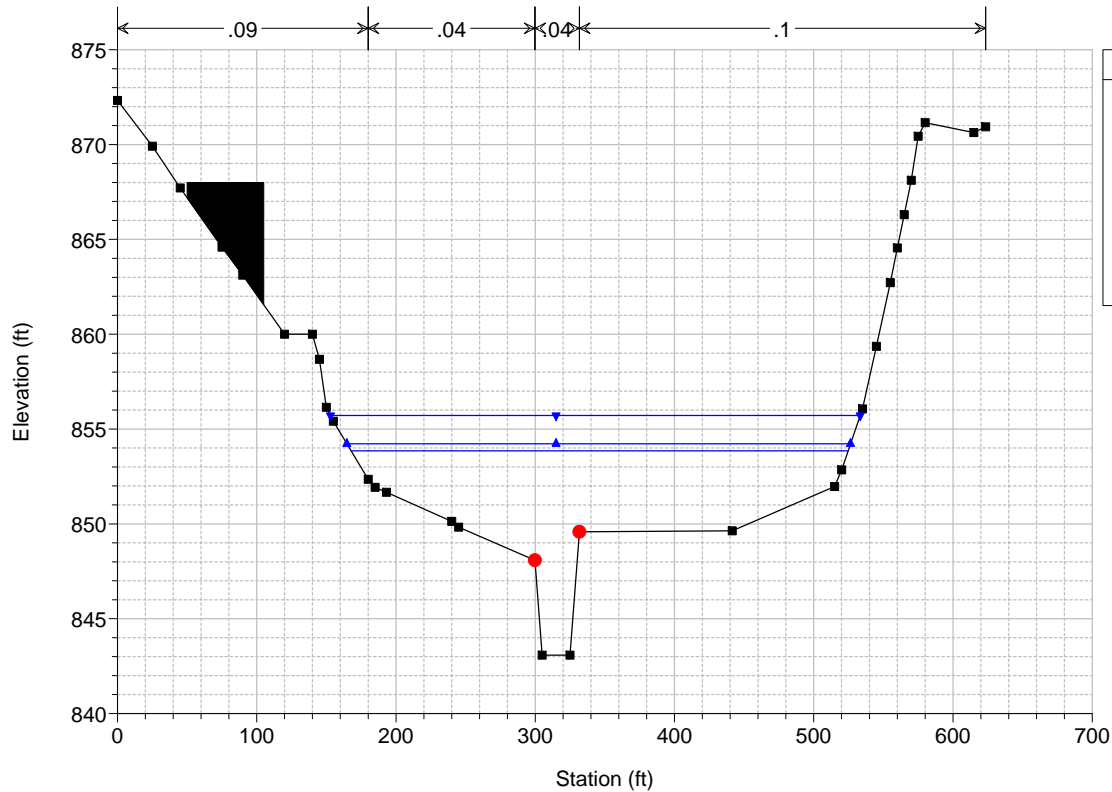
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27809.76 MS86



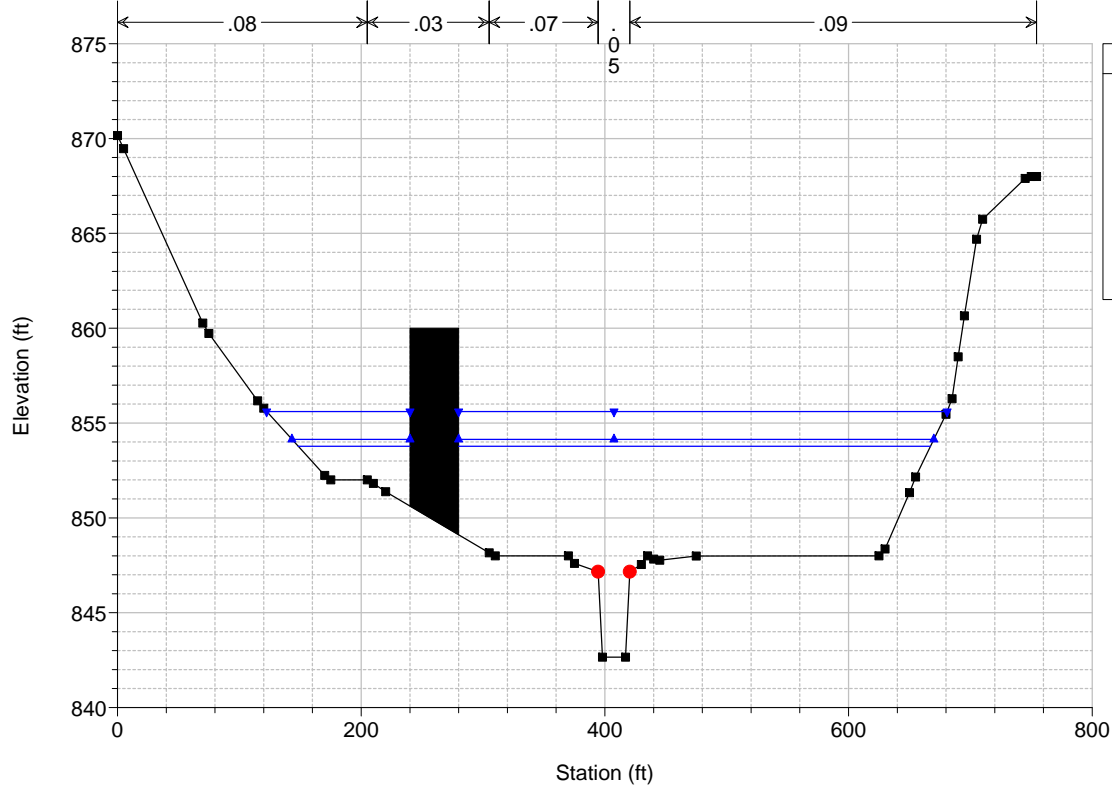
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27572.16 MS85

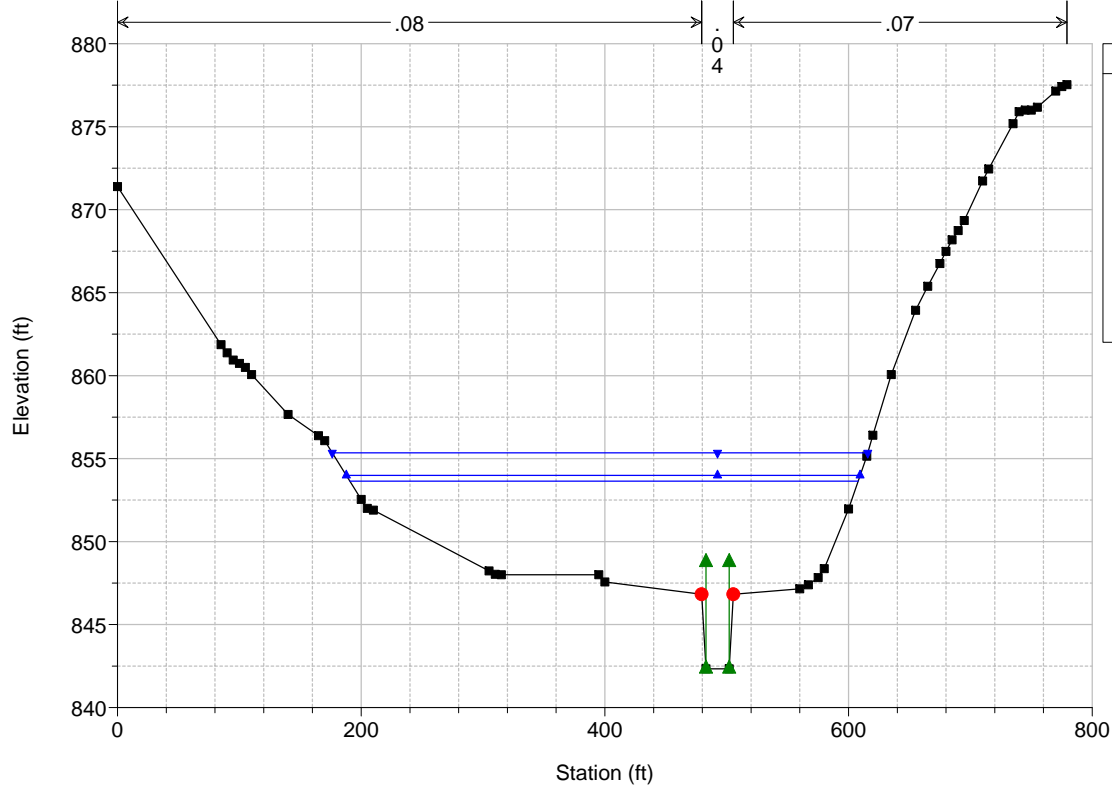


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

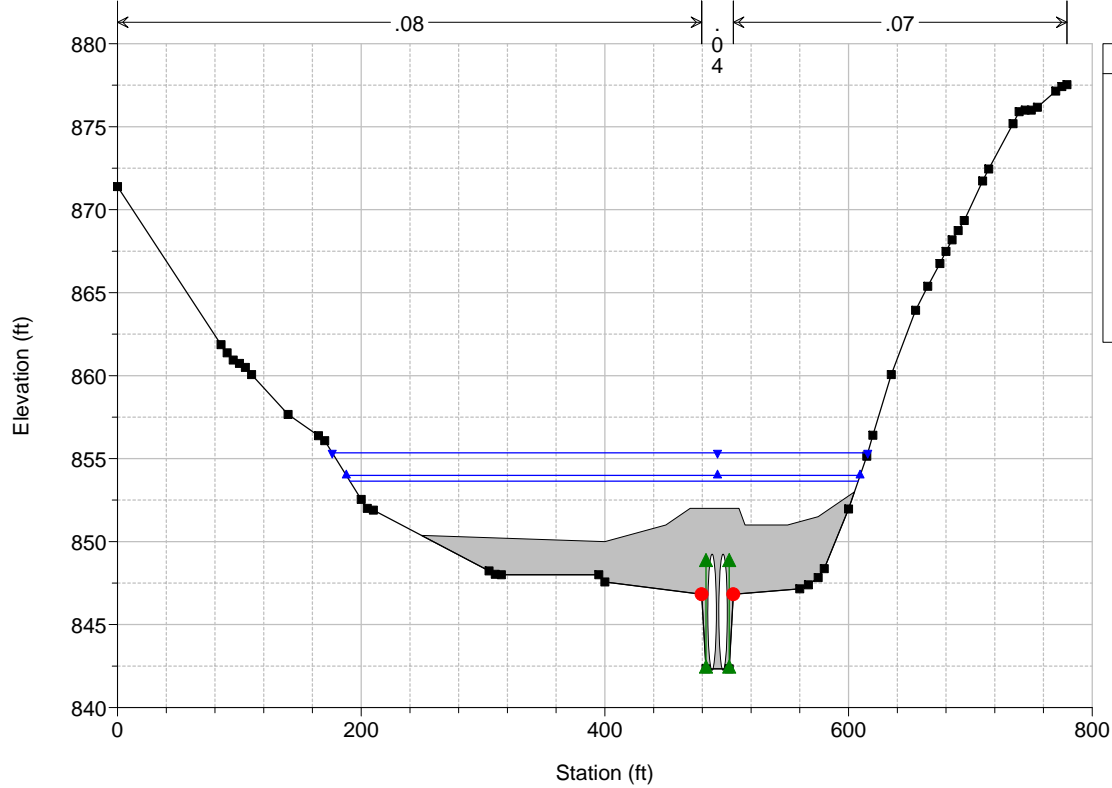
River = MAIN Reach = REACH 2 RS = 27339.84 MS84



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert

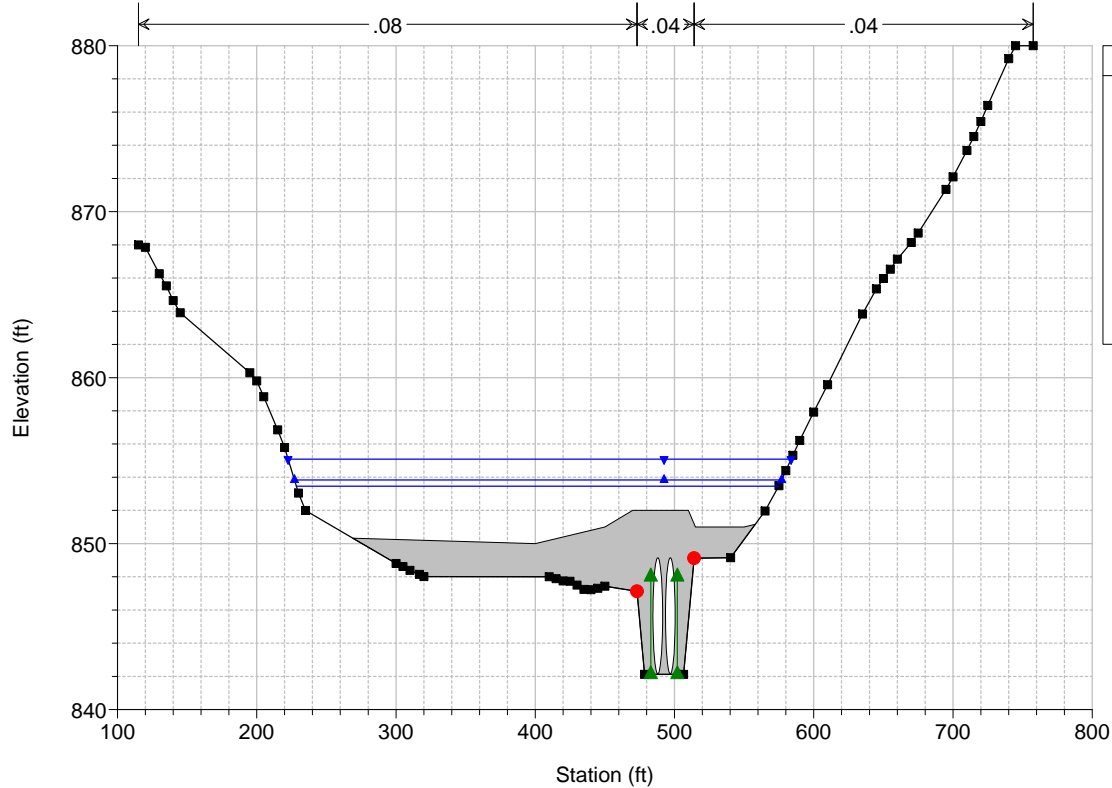


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert

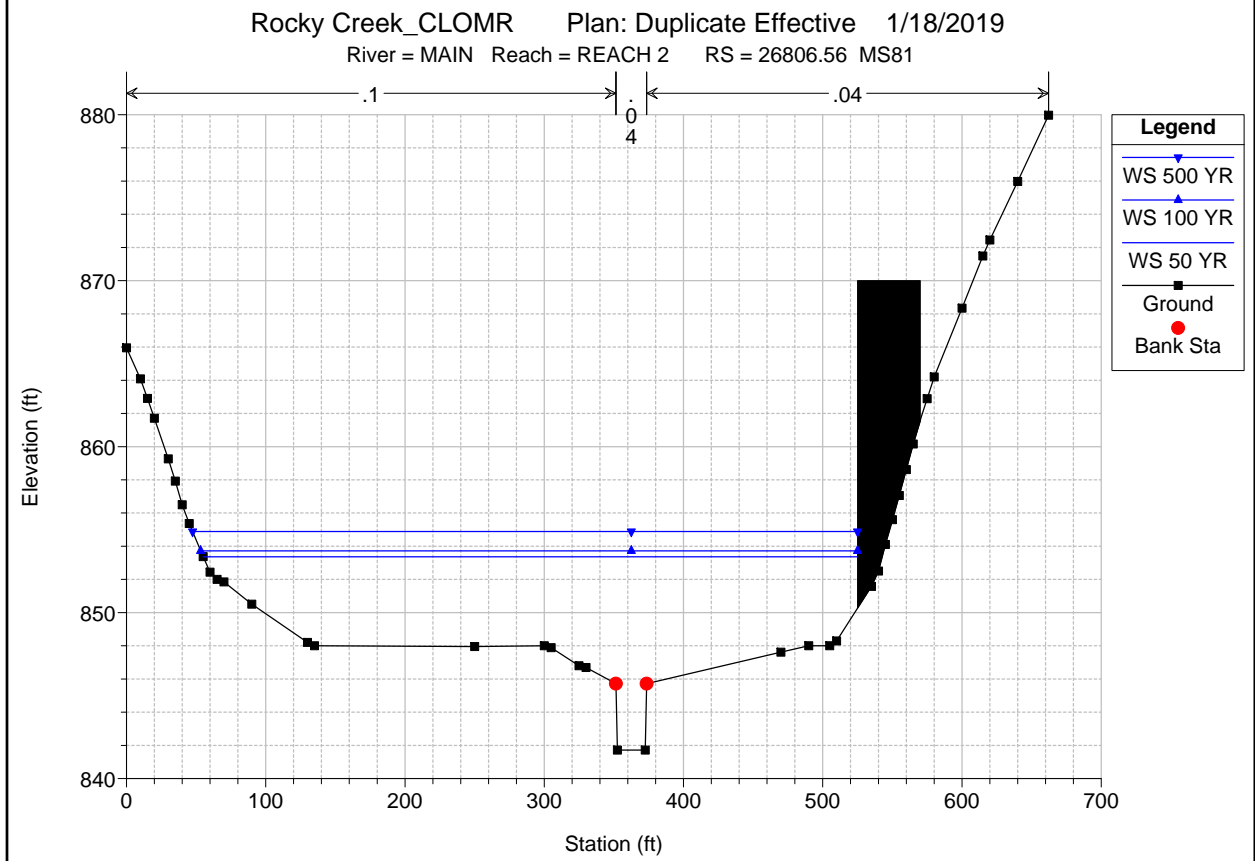
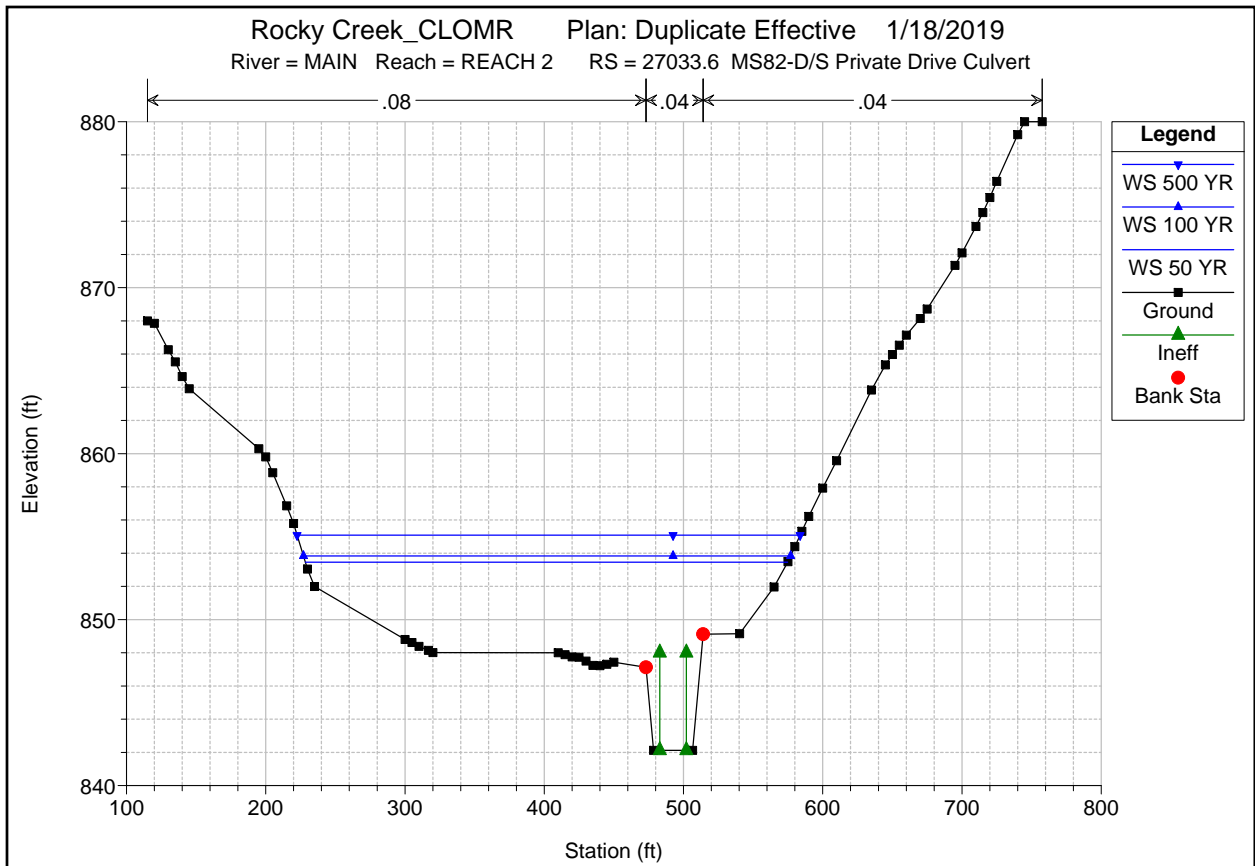


Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with inverted triangles
Ground	Black line with squares
Ineff	Green line with triangles
Bank Sta	Red dot

Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert

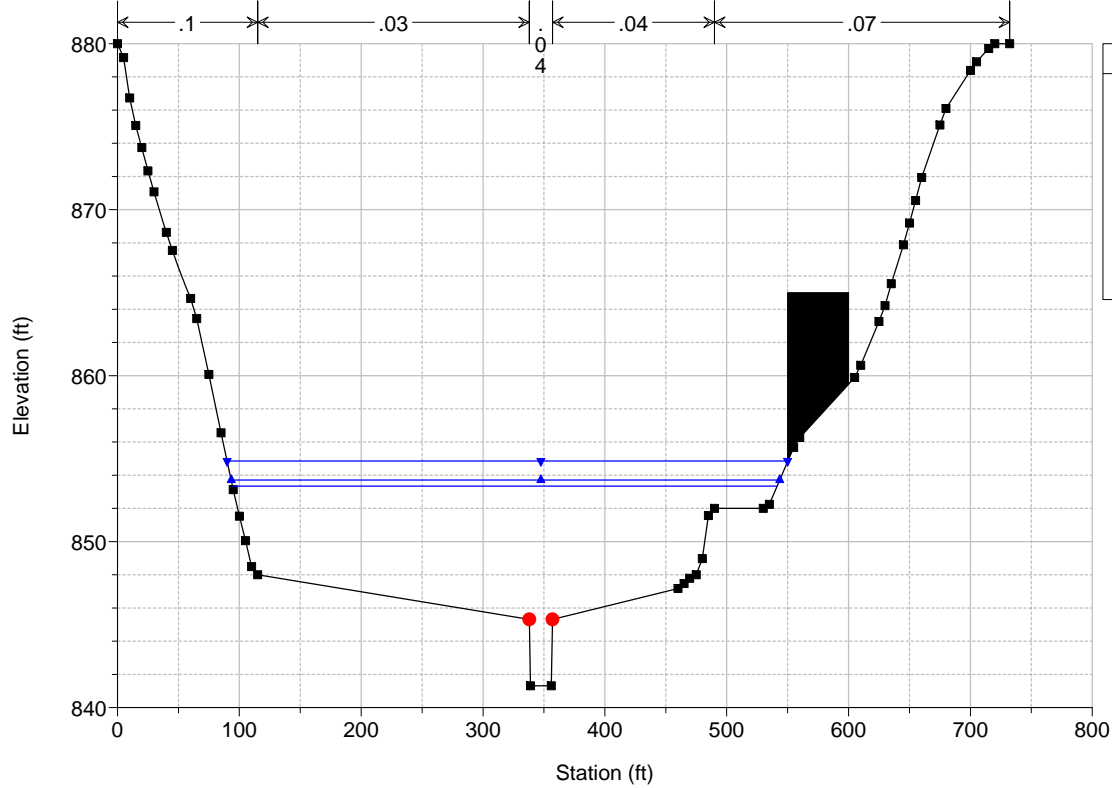


Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with inverted triangles
Ground	Black line with squares
Ineff	Green line with triangles
Bank Sta	Red dot



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

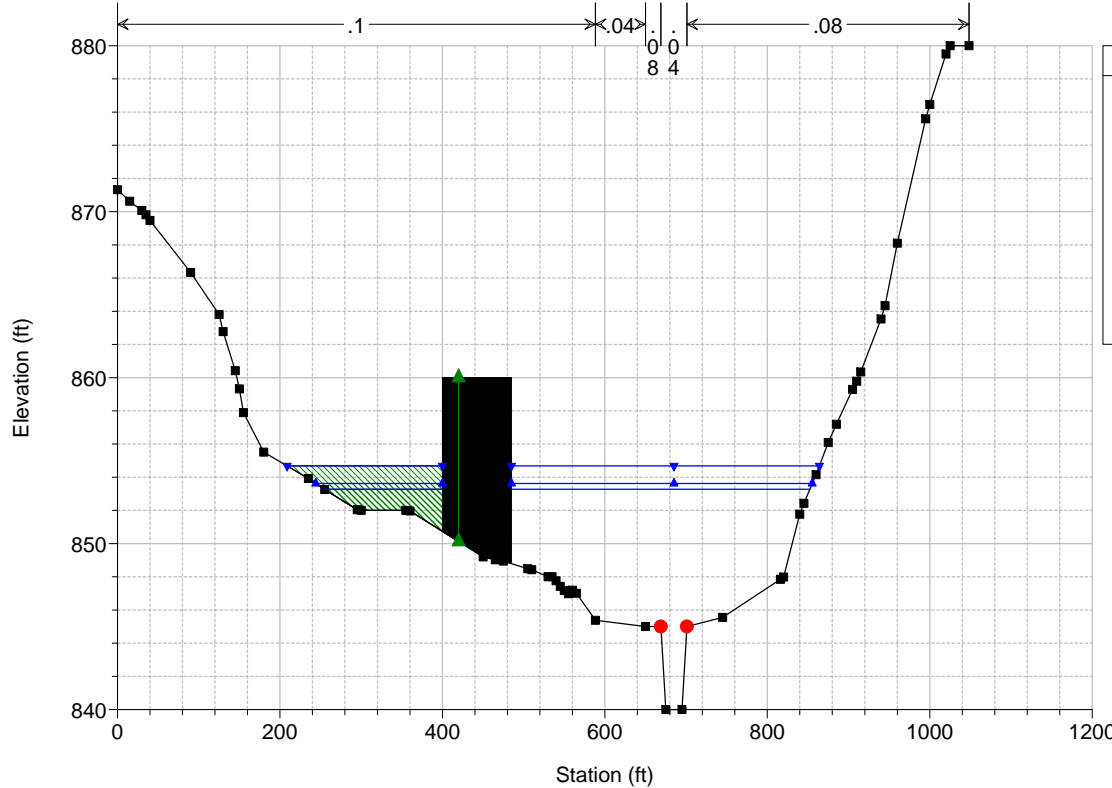
River = MAIN Reach = REACH 2 RS = 26574.24 MS80



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with horizontal bar
Ground	Black line with square markers
Bank Sta	Red dot

Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

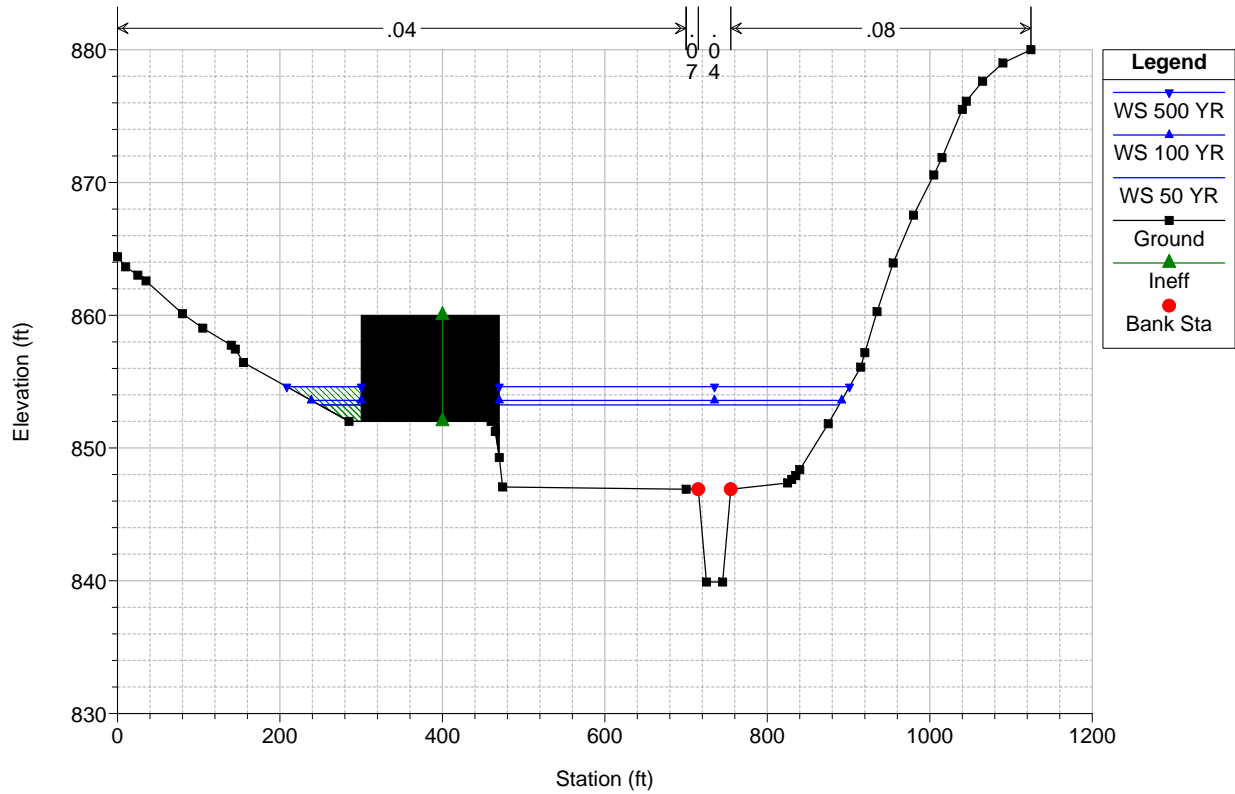
River = MAIN Reach = REACH 2 RS = 26400 MS79



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with horizontal bar
Ground	Black line with square markers
Ineff	Green line with upward-pointing triangle
Bank Sta	Red dot

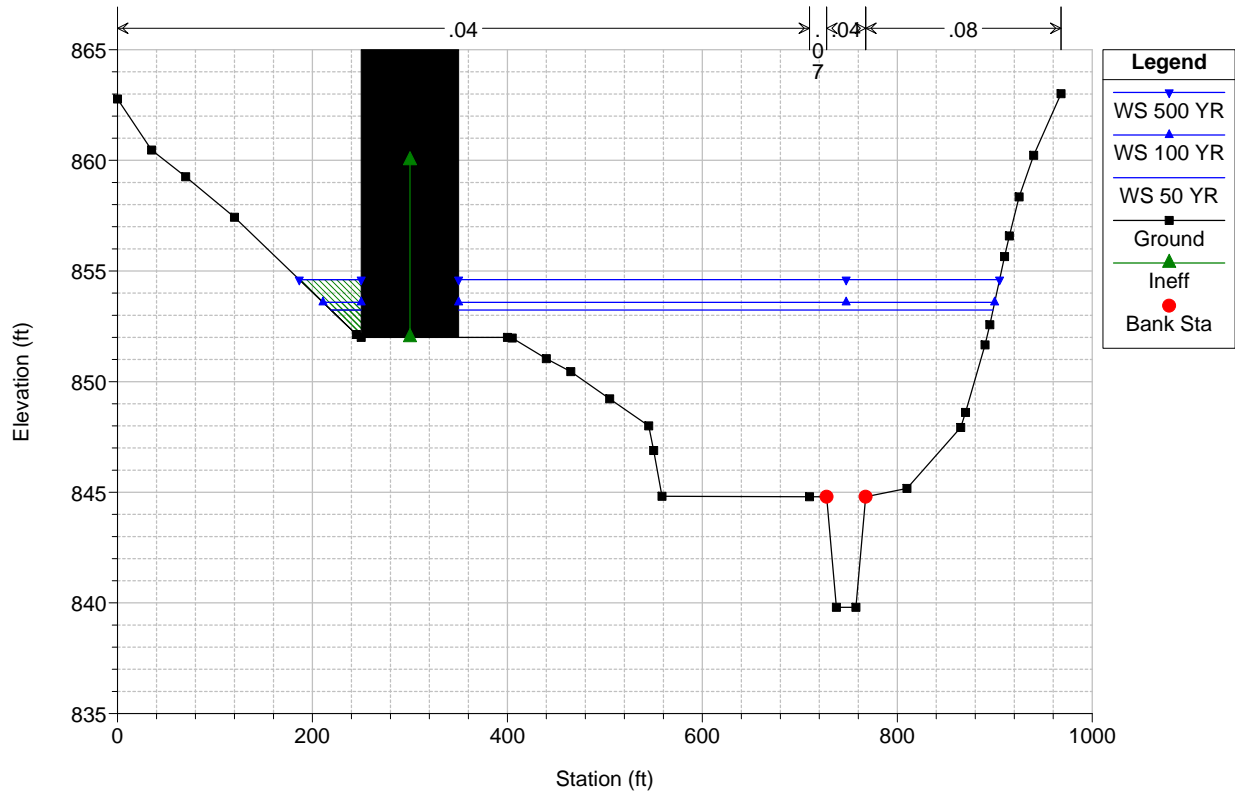
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78



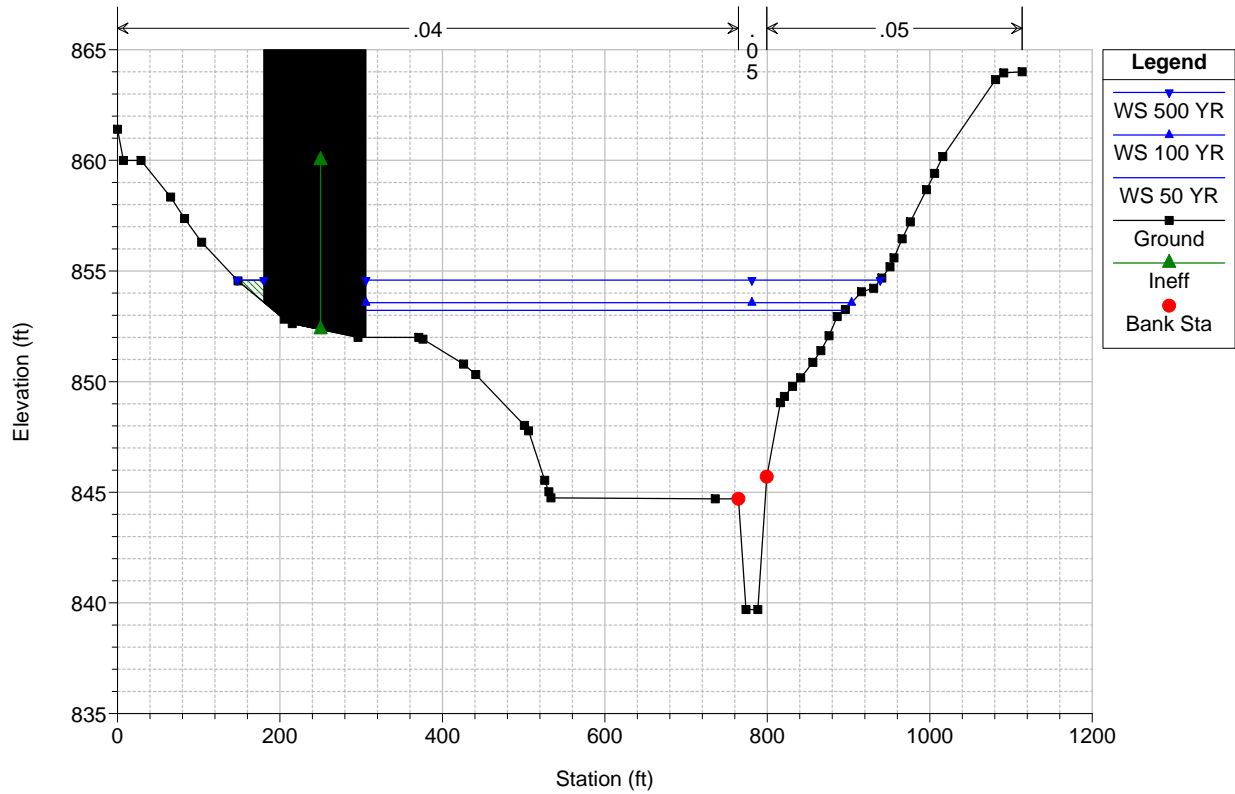
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26083.2 MS77



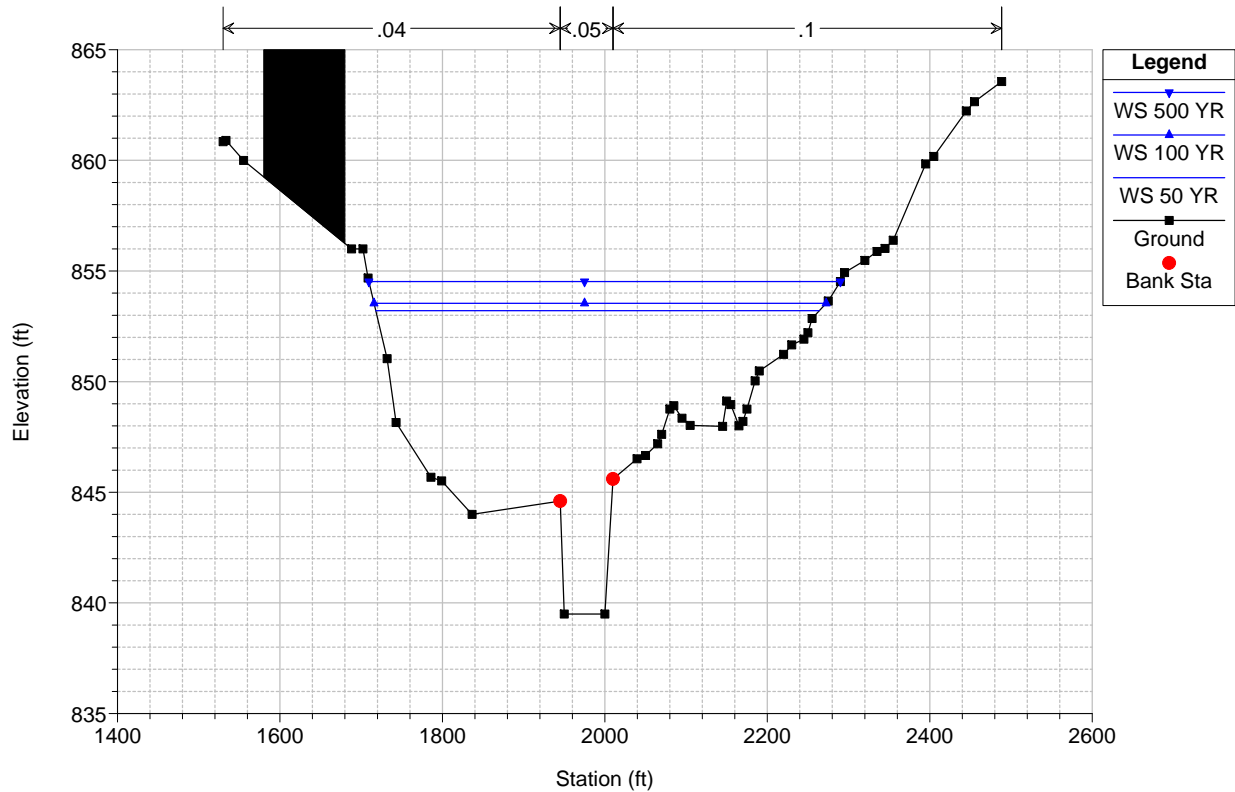
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25893.12 MS76



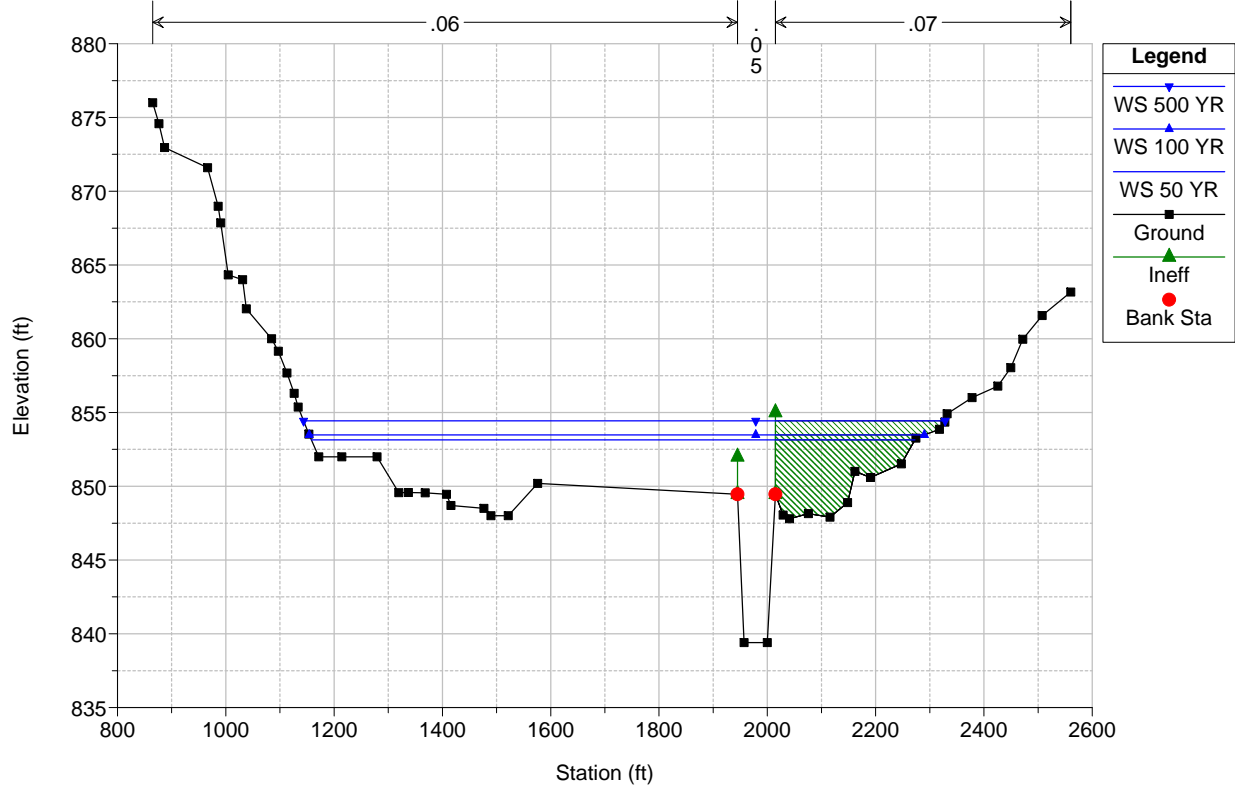
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25687.2 MS75

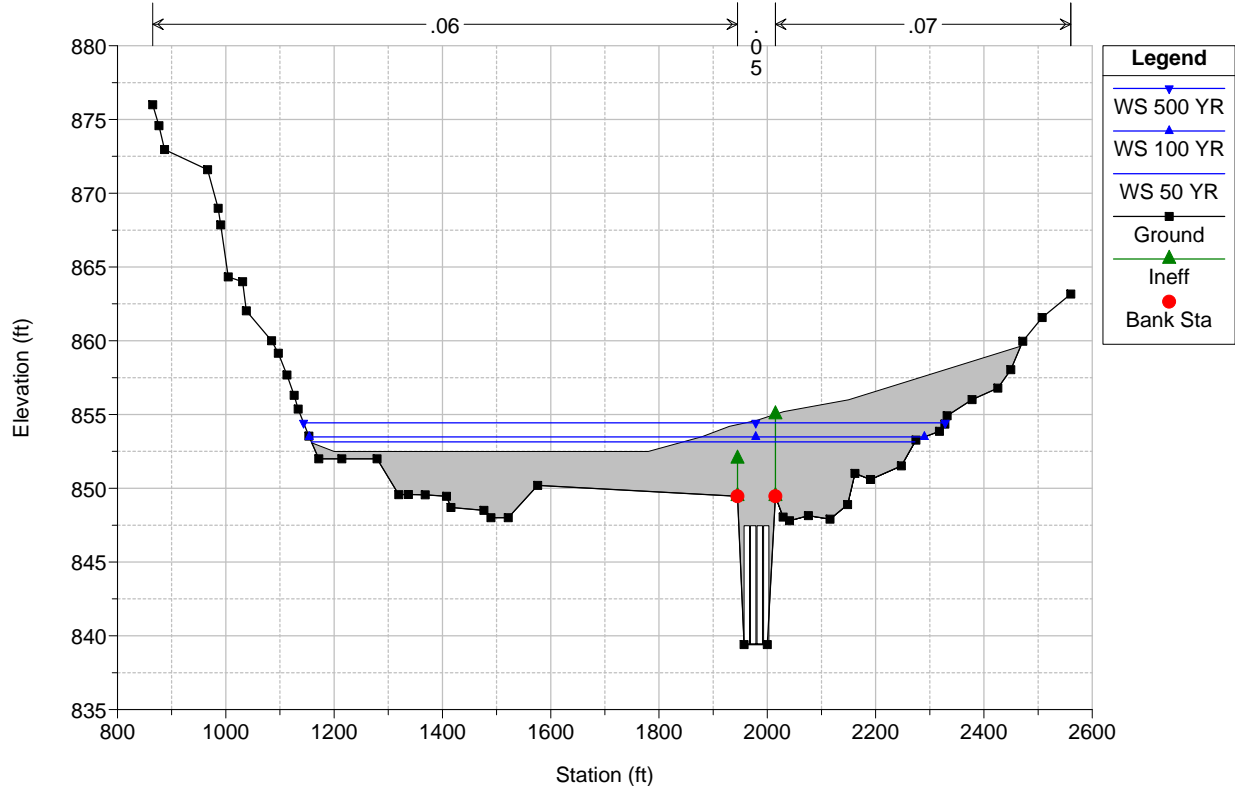




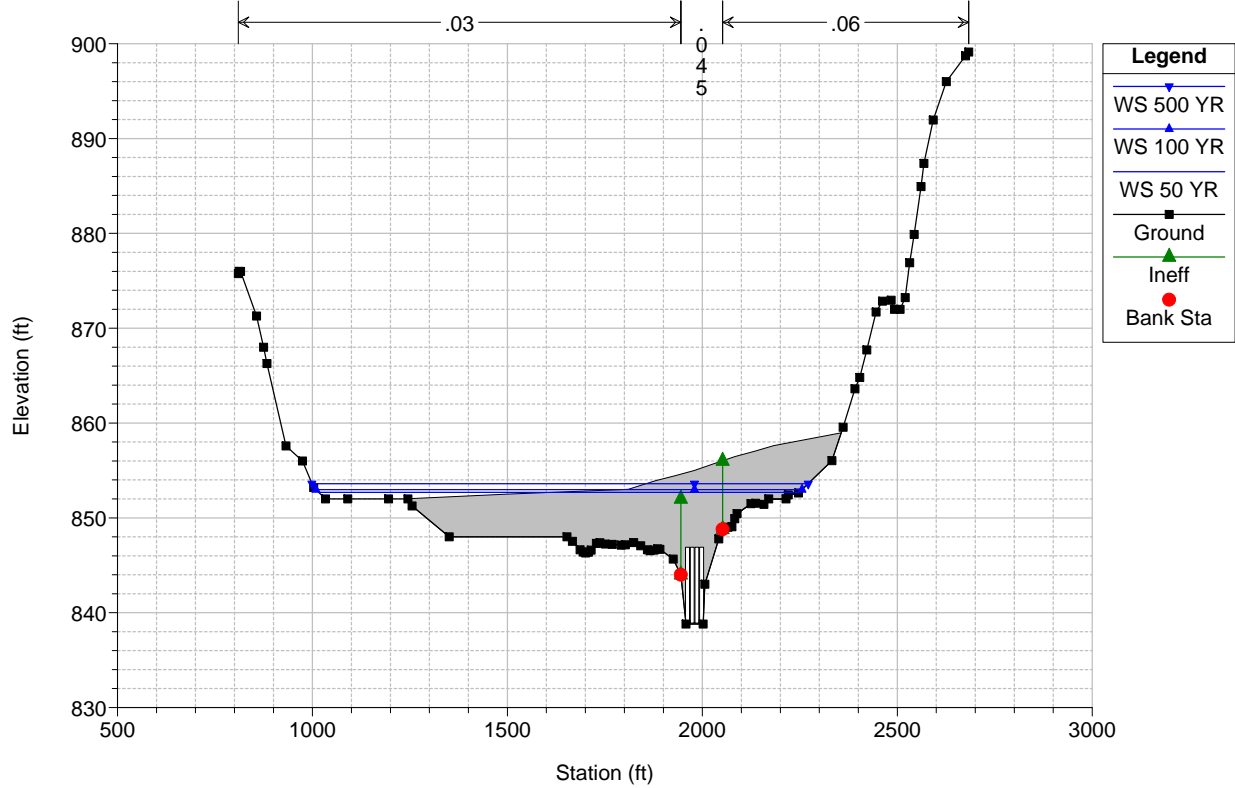
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert



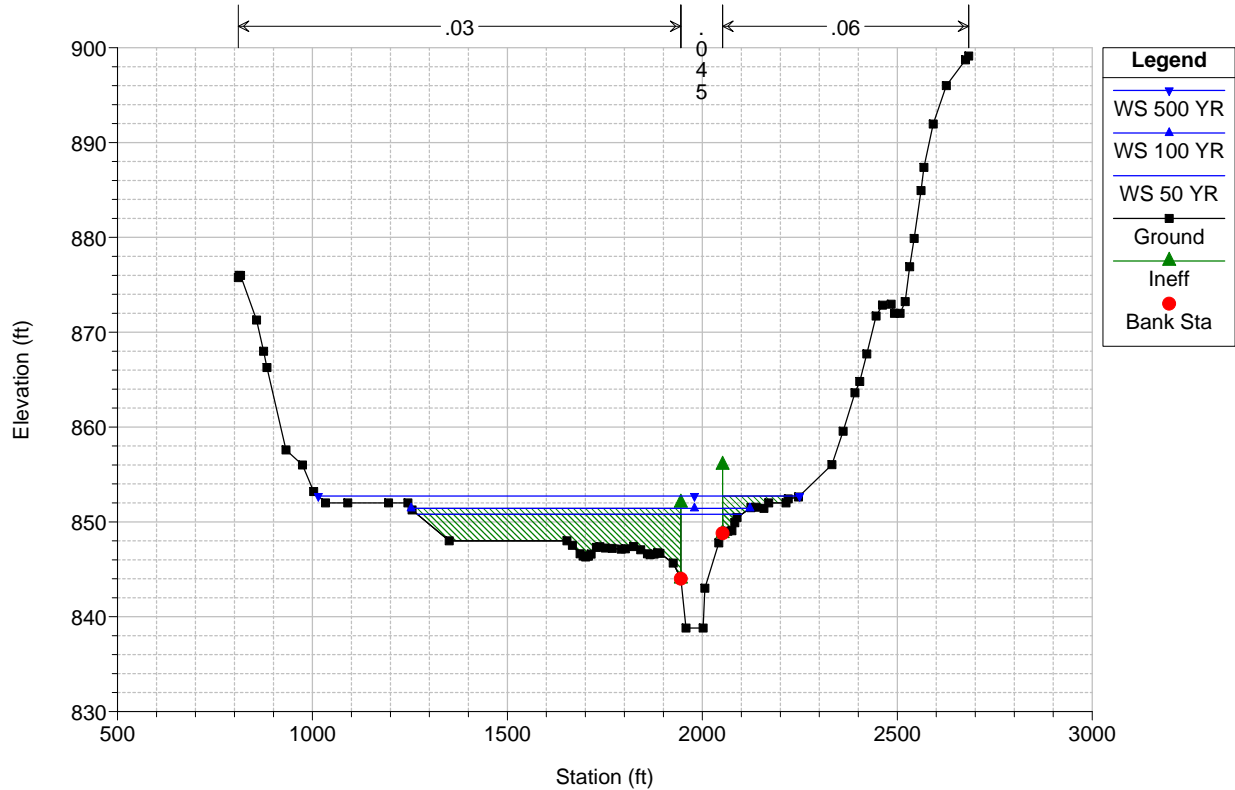
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert

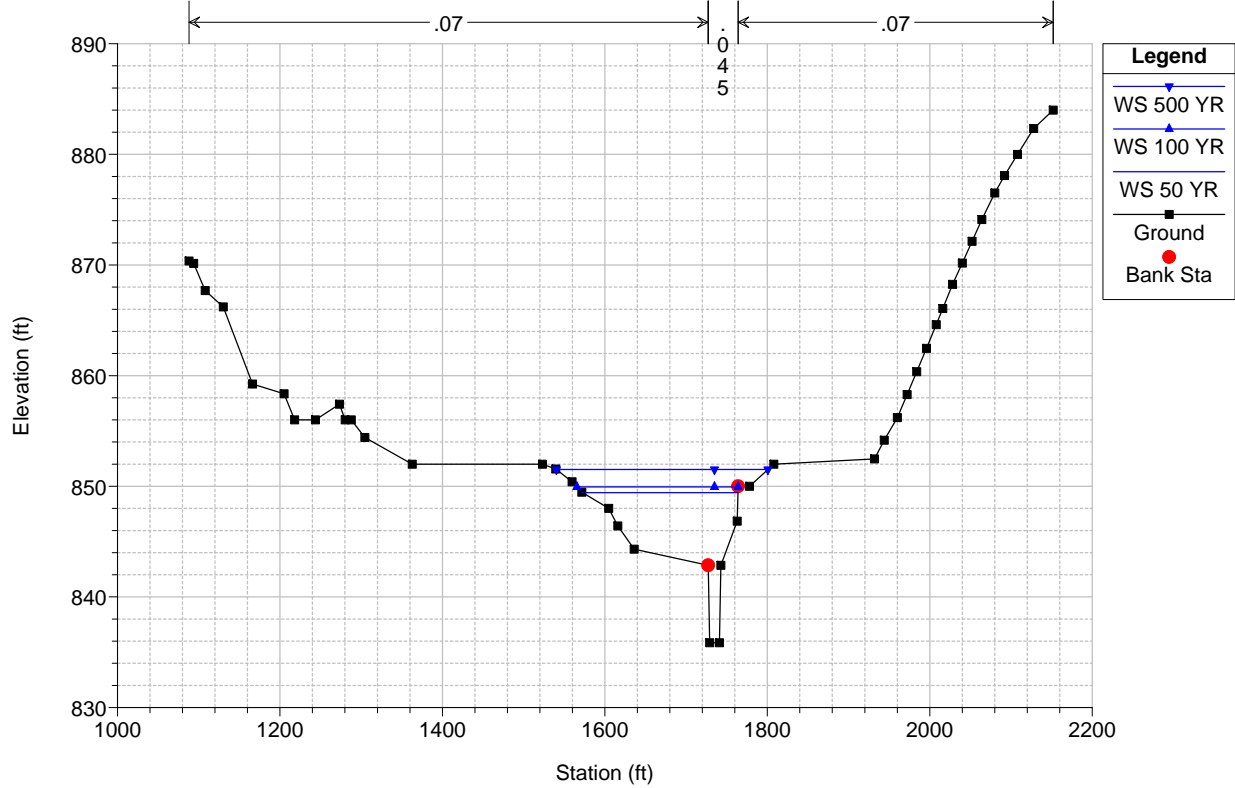


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25370.96 MS73-D/S I85 Culvert



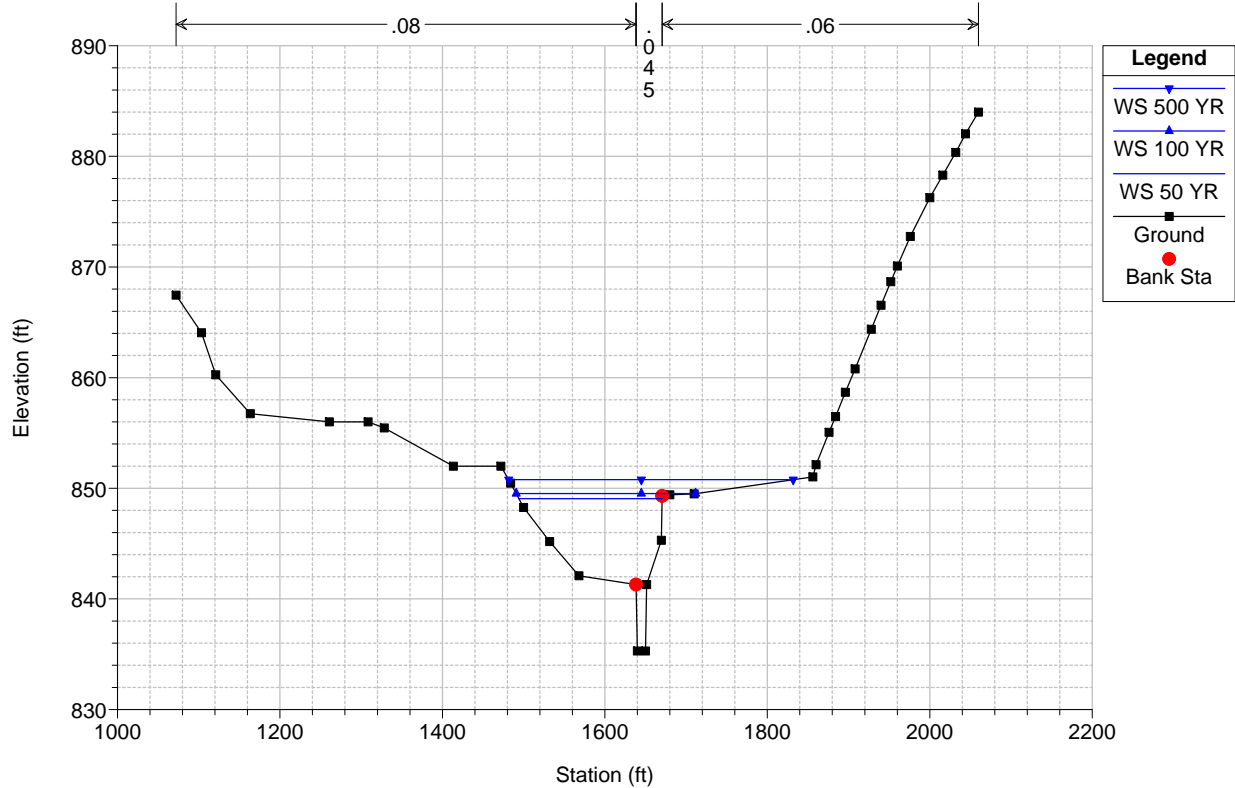
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24668.16 MS72

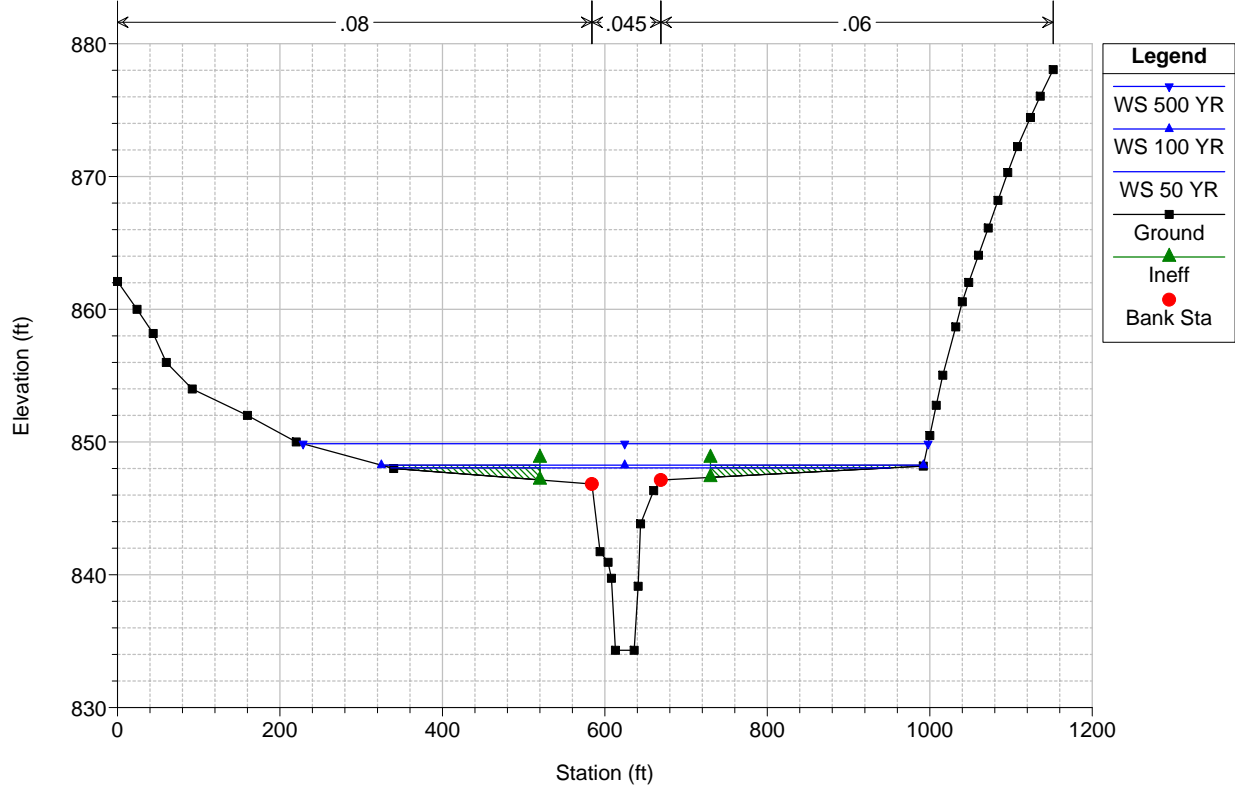


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

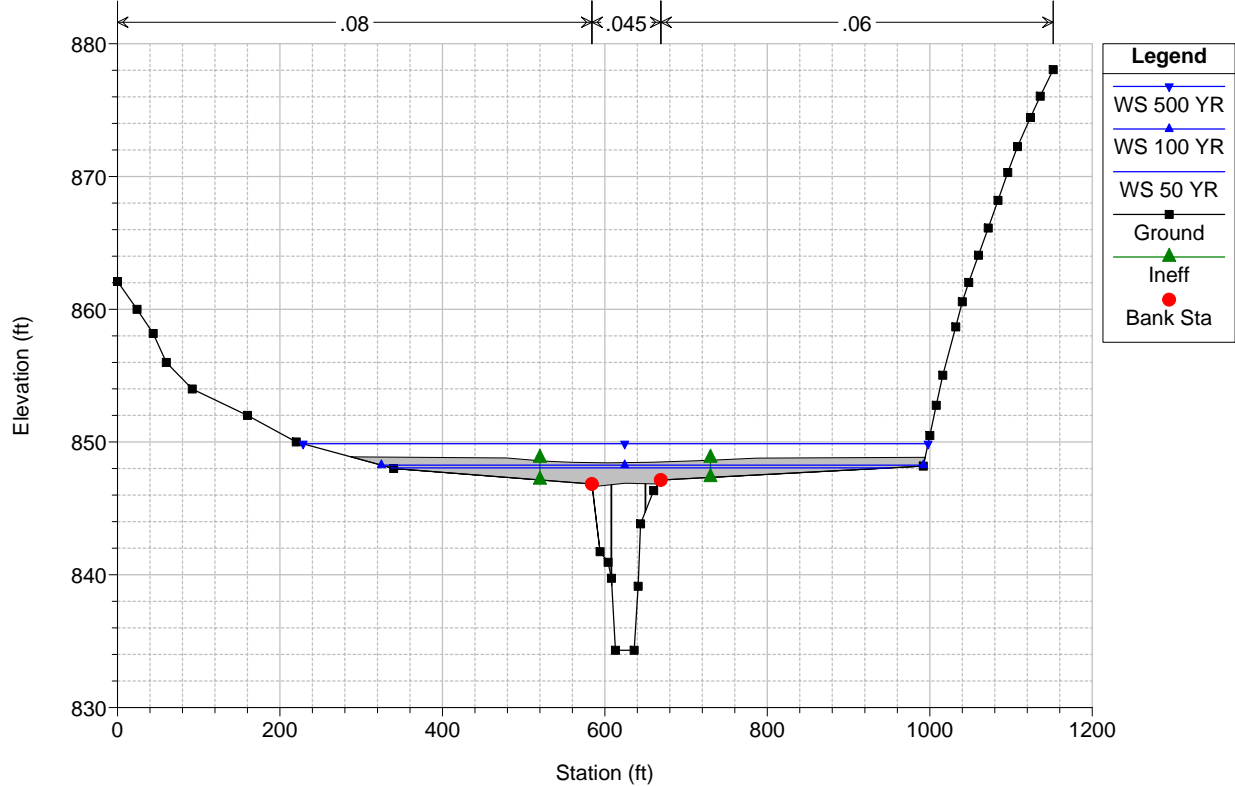
River = MAIN Reach = REACH 2 RS = 24541.44 MS71



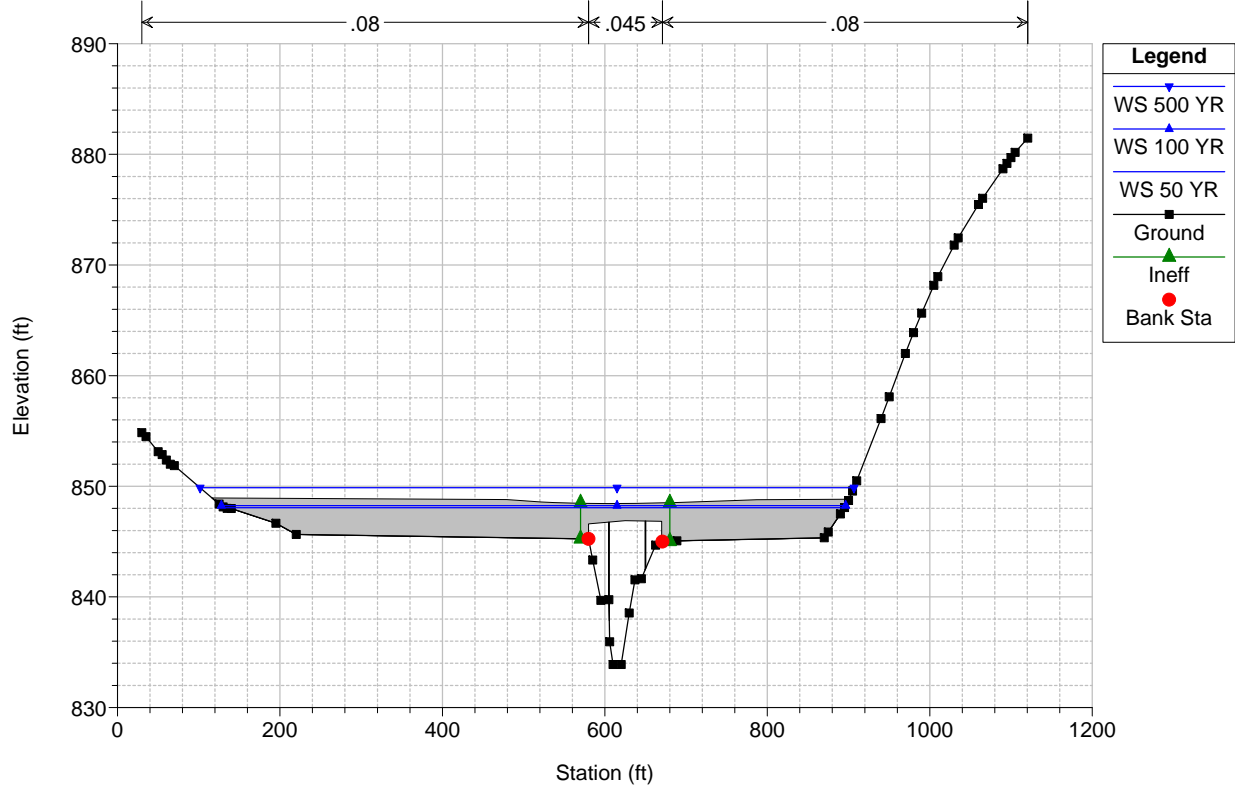
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive



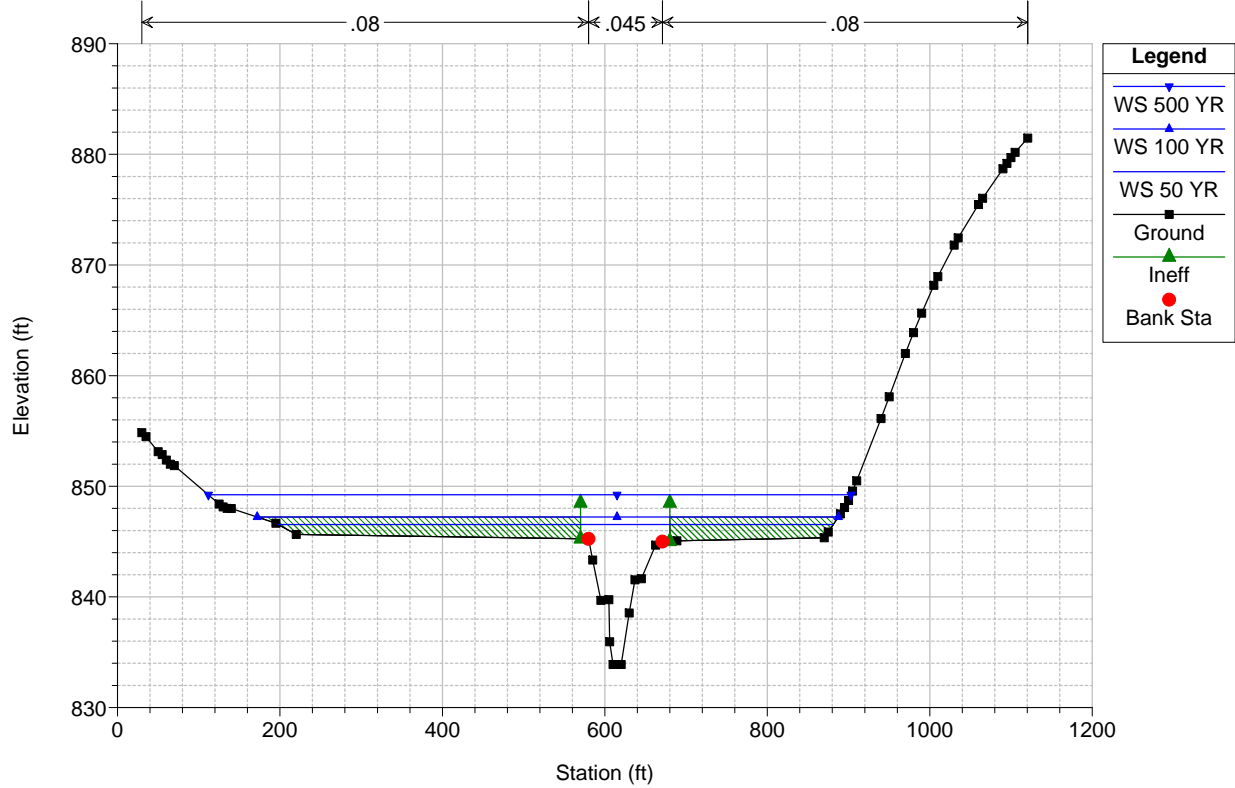
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive

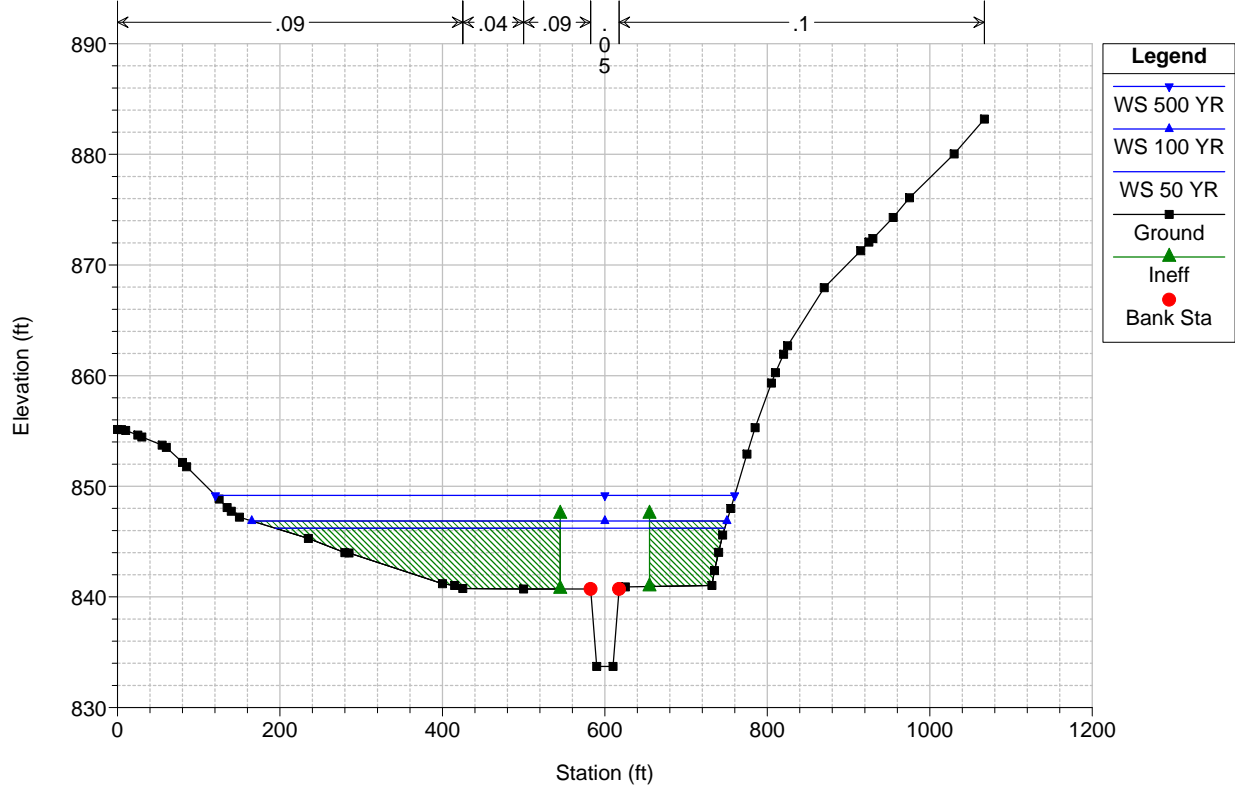


Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive



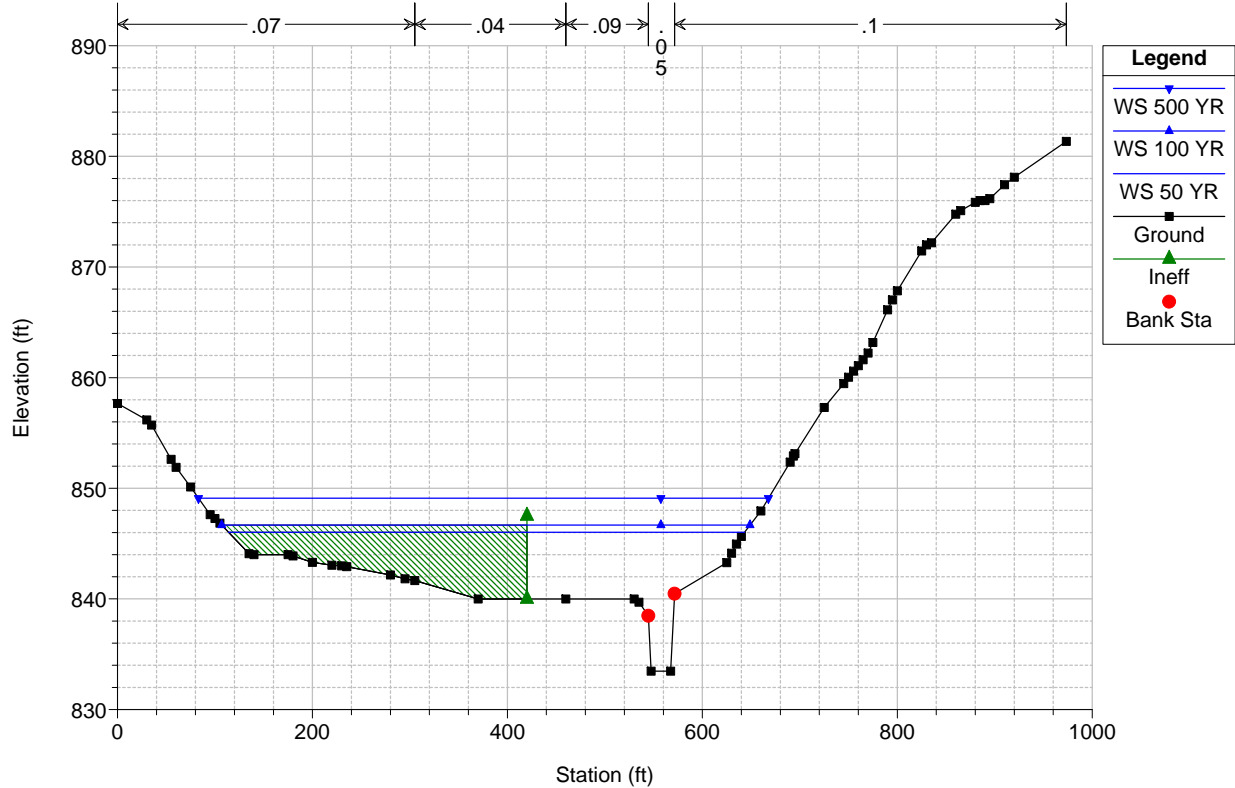
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24156 MS68



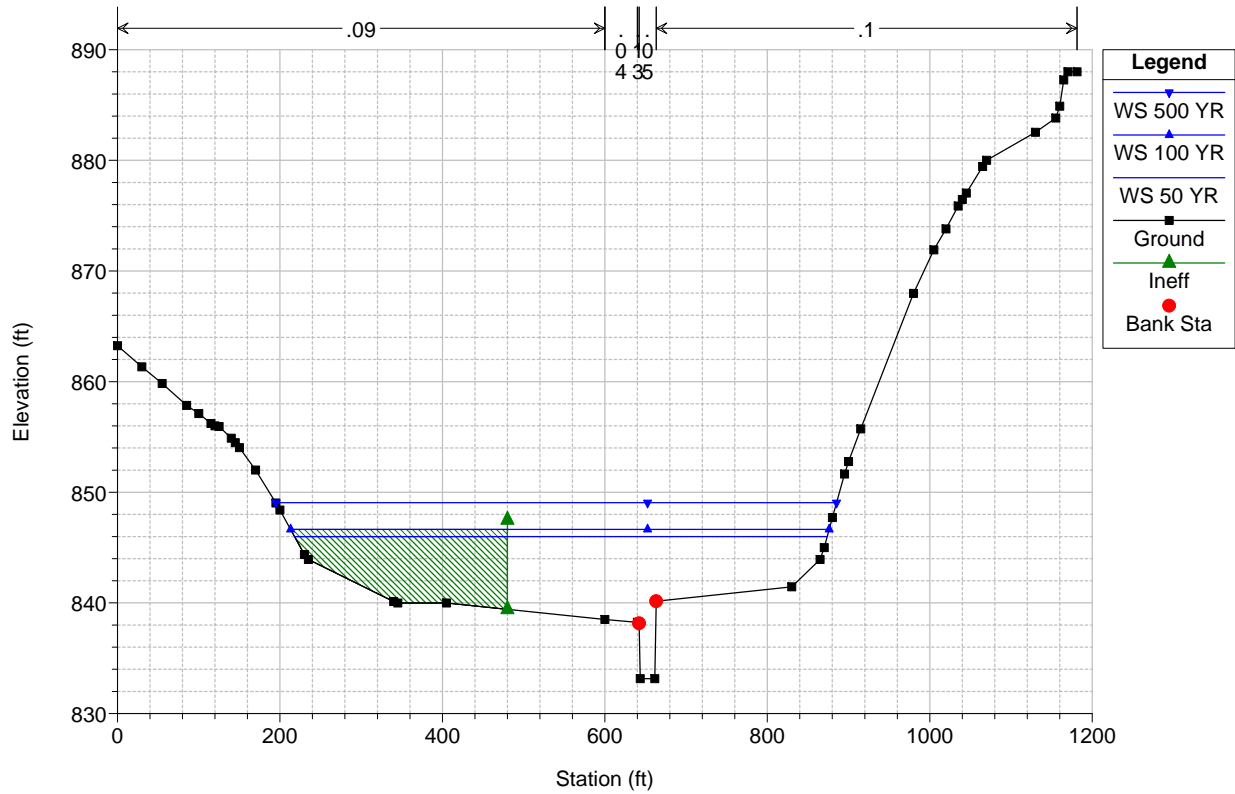
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24029.28 MS67



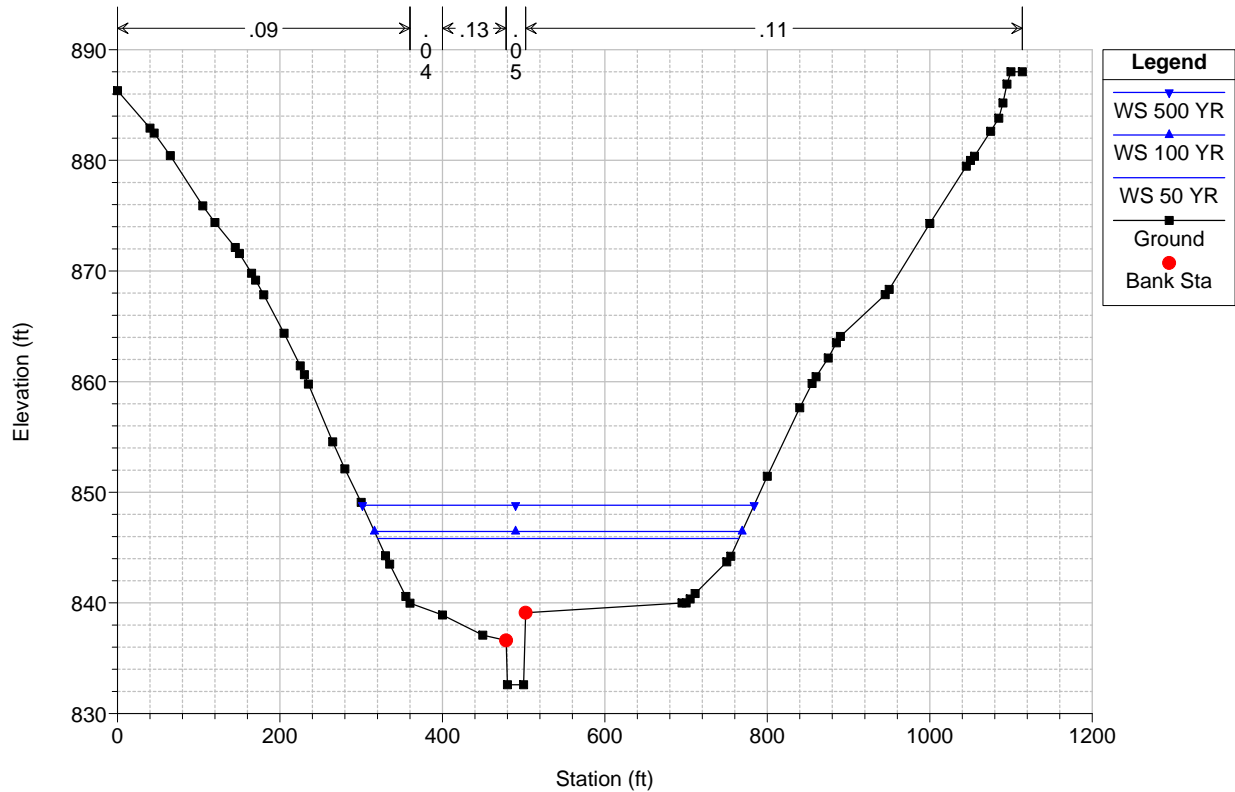
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23860.32 MS66



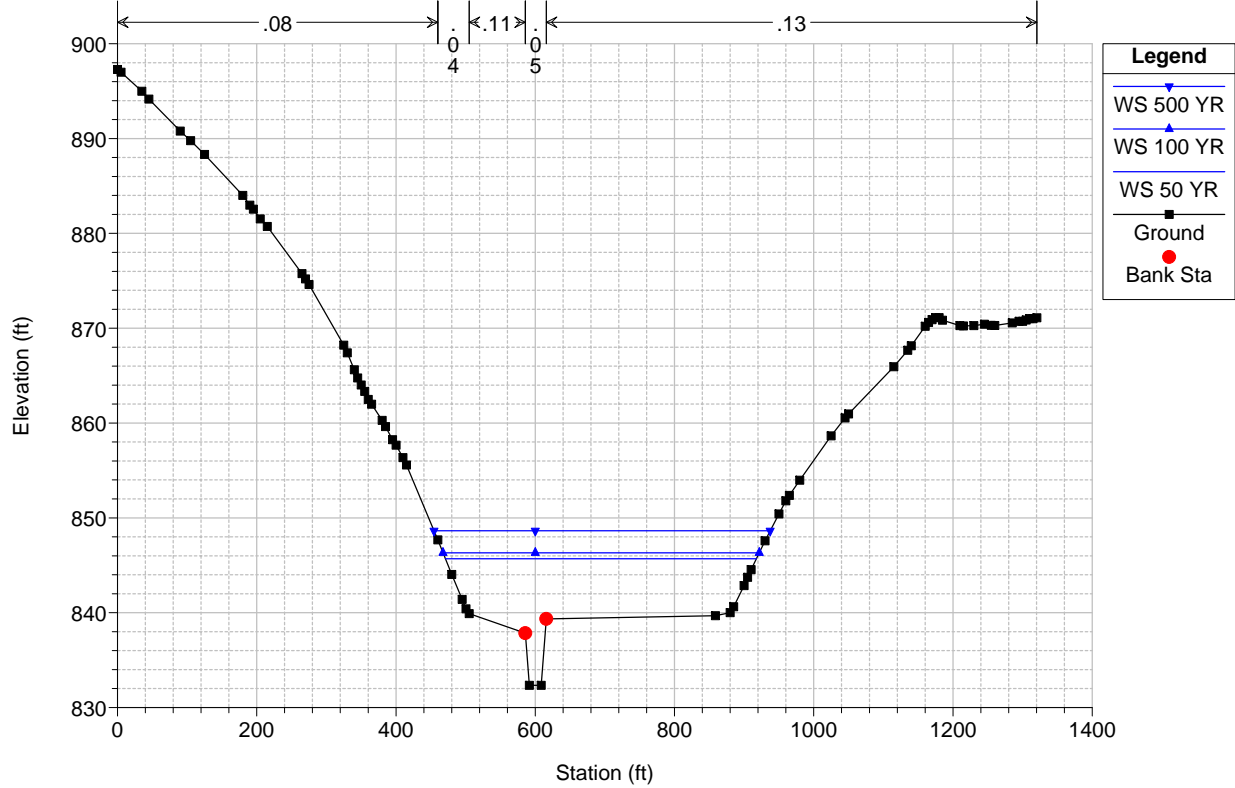
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23596.32 MS65



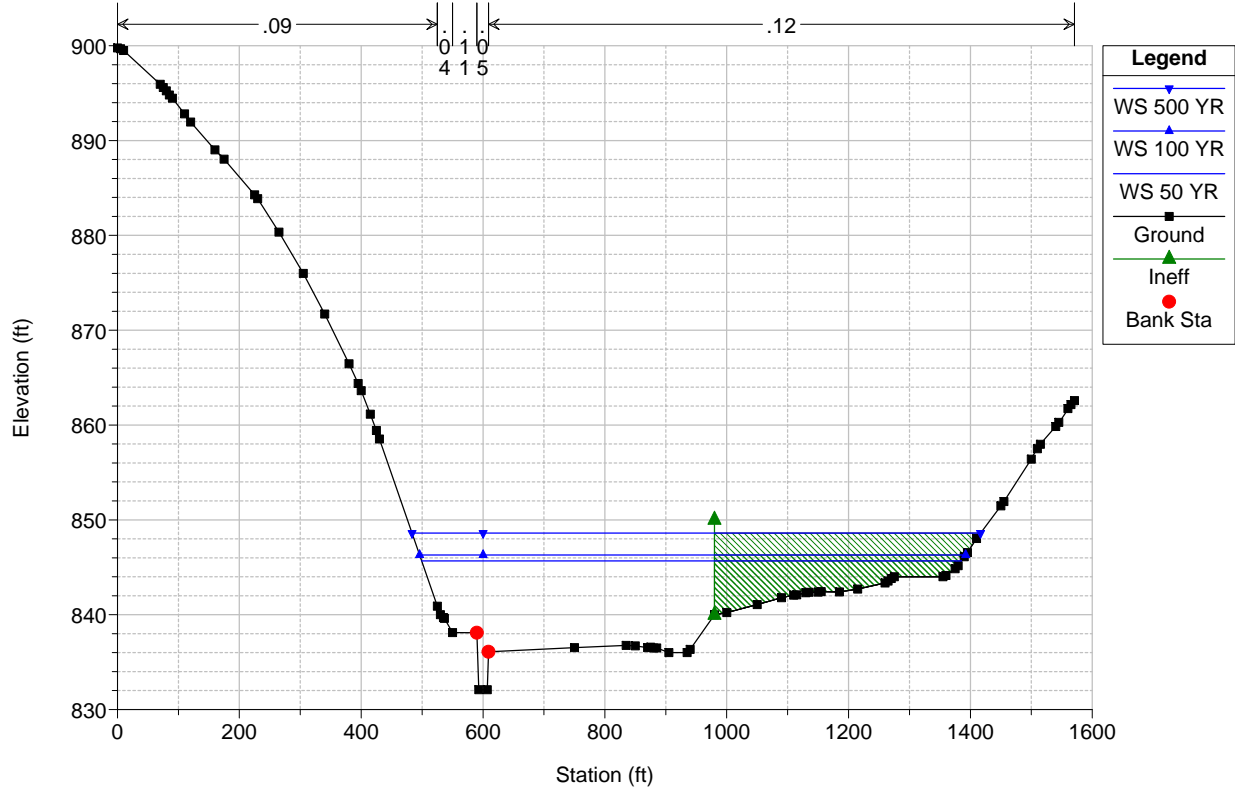
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23453.76 MS64



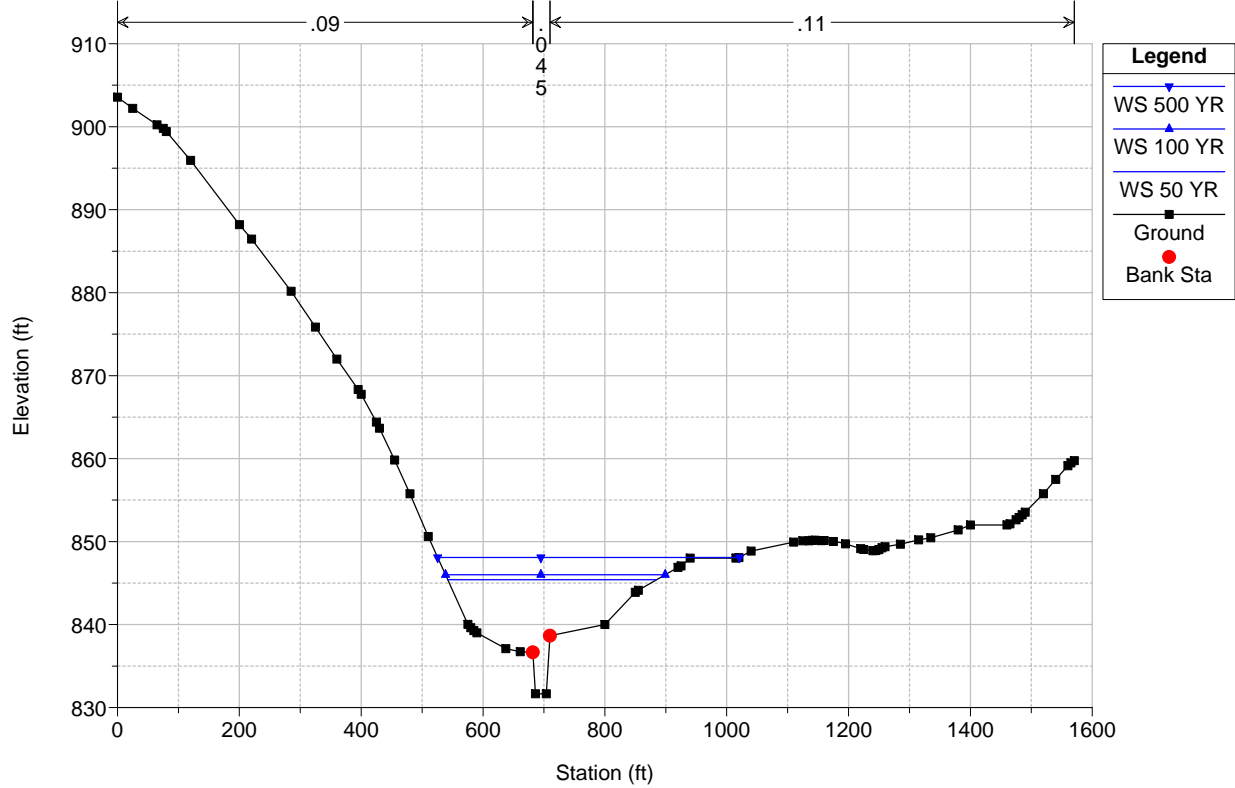
Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23327.04 MS63

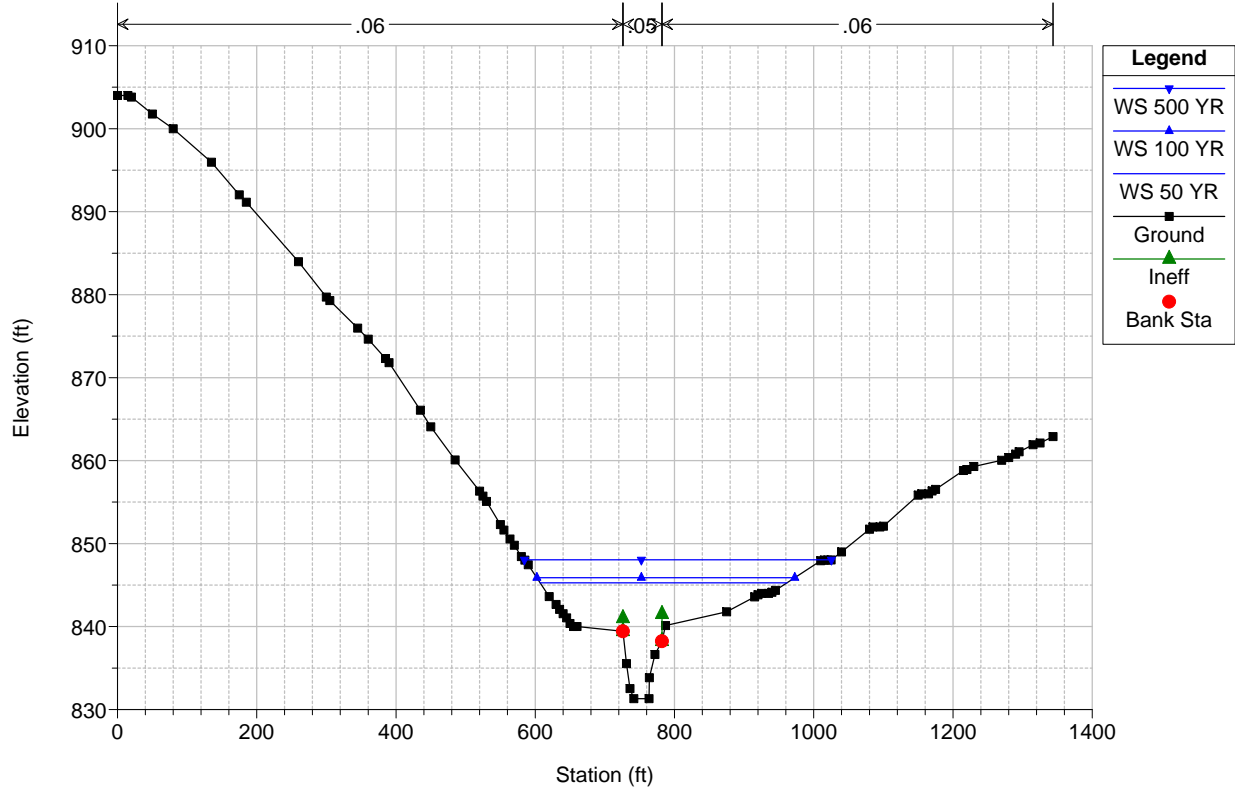




Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Rocky Creek\_CLOMR Plan: Duplicate Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



HEC-RAS Plan: Duplicate Effect River: MAIN Reach: REACH 2

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	29985.12	50 YR	4110.00	848.24	860.50	857.79	861.24	0.002643	7.79	1077.68	429.21	0.45
REACH 2	29985.12	100 YR	4813.00	848.24	860.61	858.50	861.56	0.003377	8.88	1126.05	436.00	0.52
REACH 2	29985.12	500 YR	8445.00	848.24	863.56	861.62	864.09	0.001863	7.93	2587.21	534.30	0.40
REACH 2	29958.72	Bridge										
REACH 2	29927.04	50 YR	4110.00	848.15	857.88	857.88	859.20	0.006933	10.44	766.51	367.53	0.71
REACH 2	29927.04	100 YR	4813.00	848.15	858.40	858.28	859.62	0.006274	10.44	972.37	425.62	0.68
REACH 2	29927.04	500 YR	8445.00	848.15	860.87	859.71	861.52	0.003216	9.09	2356.03	668.78	0.51
REACH 2	29700	50 YR	4110.00	847.78	858.13	855.21	858.24	0.000649	3.11	2082.09	551.68	0.18
REACH 2	29700	100 YR	4813.00	847.78	858.65	855.49	858.77	0.000622	3.16	2370.53	560.81	0.18
REACH 2	29700	500 YR	8445.00	847.78	860.89	856.65	861.05	0.000558	3.46	3674.26	623.55	0.18
REACH 2	29573.28	50 YR	4110.00	847.57	858.08		858.15	0.000598	2.44	2610.86	669.48	0.14
REACH 2	29573.28	100 YR	4813.00	847.57	858.60		858.67	0.000568	2.46	2964.84	680.04	0.14
REACH 2	29573.28	500 YR	8445.00	847.57	860.86		860.96	0.000502	2.65	4558.79	733.29	0.13
REACH 2	29362.08	50 YR	4110.00	847.23	857.97	854.39	858.01	0.000511	2.77	3243.89	663.48	0.16
REACH 2	29362.08	100 YR	4813.00	847.23	858.50	854.57	858.54	0.000510	2.87	3597.31	676.53	0.16
REACH 2	29362.08	500 YR	8445.00	847.23	860.77	855.34	860.83	0.000513	3.29	5229.15	750.37	0.16
REACH 2	29203.68	50 YR	4110.00	846.96	857.73	854.89	857.87	0.001866	4.29	1759.40	371.49	0.26
REACH 2	29203.68	100 YR	4813.00	846.96	858.25	855.13	858.40	0.001894	4.50	1953.70	376.14	0.26
REACH 2	29203.68	500 YR	8445.00	846.96	860.47	856.20	860.67	0.002019	5.38	2813.32	397.97	0.28
REACH 2	28944.96	50 YR	4110.00	846.54	857.04	855.12	857.26	0.001706	5.39	1351.16	317.42	0.31
REACH 2	28944.96	100 YR	4813.00	846.54	857.56	855.35	857.79	0.001666	5.53	1517.62	320.93	0.31
REACH 2	28944.96	500 YR	8445.00	846.54	859.77	856.37	860.05	0.001607	6.21	2241.16	336.71	0.32
REACH 2	28707.36	50 YR	4110.00	846.15	856.90		857.00	0.000519	3.39	2114.60	441.86	0.19
REACH 2	28707.36	100 YR	4813.00	846.15	857.42		857.53	0.000527	3.53	2346.42	449.71	0.19
REACH 2	28707.36	500 YR	8445.00	846.15	859.63		859.77	0.000564	4.14	3375.07	483.08	0.20
REACH 2	28570.08	50 YR	4110.00	845.93	856.86		856.91	0.000523	2.90	2831.81	541.38	0.16
REACH 2	28570.08	100 YR	4813.00	845.93	857.38		857.44	0.000539	3.04	3115.49	548.10	0.16
REACH 2	28570.08	500 YR	8445.00	845.93	859.59		859.67	0.000604	3.65	4360.47	579.26	0.18
REACH 2	28374.72	50 YR	4110.00	845.61	856.64		856.75	0.001356	4.37	2285.09	466.09	0.24
REACH 2	28374.72	100 YR	4813.00	845.61	857.16		857.28	0.001363	4.52	2525.71	471.58	0.24
REACH 2	28374.72	500 YR	8445.00	845.61	859.32		859.49	0.001431	5.22	3574.99	497.51	0.25
REACH 2	28216.32	50 YR	4110.00	845.36	855.98		856.39	0.003781	7.12	1159.95	269.53	0.39
REACH 2	28216.32	100 YR	4813.00	845.36	856.48		856.91	0.003758	7.33	1299.41	278.99	0.40
REACH 2	28216.32	500 YR	8445.00	845.36	858.60		859.11	0.003766	8.28	1922.57	311.33	0.41
REACH 2	27999.84	50 YR	4110.00	845.00	854.49		855.30	0.006318	8.81	738.63	187.09	0.51
REACH 2	27999.84	100 YR	4813.00	845.00	854.93		855.81	0.006578	9.27	821.64	192.35	0.53
REACH 2	27999.84	500 YR	8445.00	845.00	856.71		857.92	0.007716	11.25	1183.09	213.89	0.59
REACH 2	27809.76	50 YR	4110.00	843.46	854.13		854.58	0.002083	6.92	1102.82	231.29	0.39
REACH 2	27809.76	100 YR	4813.00	843.46	854.51		855.03	0.002315	7.48	1192.89	234.77	0.42
REACH 2	27809.76	500 YR	8445.00	843.46	856.06		856.92	0.003393	9.97	1566.87	249.68	0.52
REACH 2	27572.16	50 YR	4110.00	843.08	853.85		854.12	0.001327	5.61	1468.68	356.92	0.32
REACH 2	27572.16	100 YR	4813.00	843.08	854.22		854.52	0.001434	5.99	1602.48	361.71	0.33
REACH 2	27572.16	500 YR	8445.00	843.08	855.72		856.19	0.001924	7.61	2157.77	380.48	0.39
REACH 2	27339.84	50 YR	4110.00	842.66	853.78		853.84	0.000622	3.21	2417.97	478.99	0.17
REACH 2	27339.84	100 YR	4813.00	842.66	854.14		854.22	0.000697	3.47	2593.89	486.89	0.19
REACH 2	27339.84	500 YR	8445.00	842.66	855.61		855.75	0.001039	4.61	3331.92	518.52	0.23
REACH 2	27155.04	50 YR	4110.00	842.33	853.64	849.96	853.75	0.000684	4.25	2245.99	417.23	0.23
REACH 2	27155.04	100 YR	4813.00	842.33	853.98	850.23	854.11	0.000786	4.66	2390.29	421.76	0.25
REACH 2	27155.04	500 YR	8445.00	842.33	855.35	851.41	855.58	0.001291	6.45	2978.12	439.60	0.32
REACH 2	27091.68	Culvert										
REACH 2	27033.6	50 YR	4110.00	842.12	853.46	850.03	853.63	0.000779	4.58	1792.20	346.31	0.25
REACH 2	27033.6	100 YR	4813.00	842.12	853.84	850.41	854.04	0.000877	4.98	1924.13	349.82	0.27
REACH 2	27033.6	500 YR	8445.00	842.12	855.09	851.83	855.48	0.001497	7.01	2370.35	361.23	0.36
REACH 2	26806.56	50 YR	4110.00	841.72	853.36		853.43	0.000360	3.03	2643.46	469.94	0.16
REACH 2	26806.56	100 YR	4813.00	841.72	853.72		853.81	0.000410	3.30	2815.55	471.77	0.17
REACH 2	26806.56	500 YR	8445.00	841.72	854.89		855.07	0.000739	4.72	3369.26	477.59	0.23
REACH 2	26574.24	50 YR	4110.00	841.31	853.34		853.38	0.000099	1.59	2707.19	447.03	0.08
REACH 2	26574.24	100 YR	4813.00	841.31	853.71		853.75	0.000114	1.74	2870.33	450.21	0.09
REACH 2	26574.24	500 YR	8445.00	841.31	854.86		854.96	0.000212	2.52	3396.04	460.06	0.12

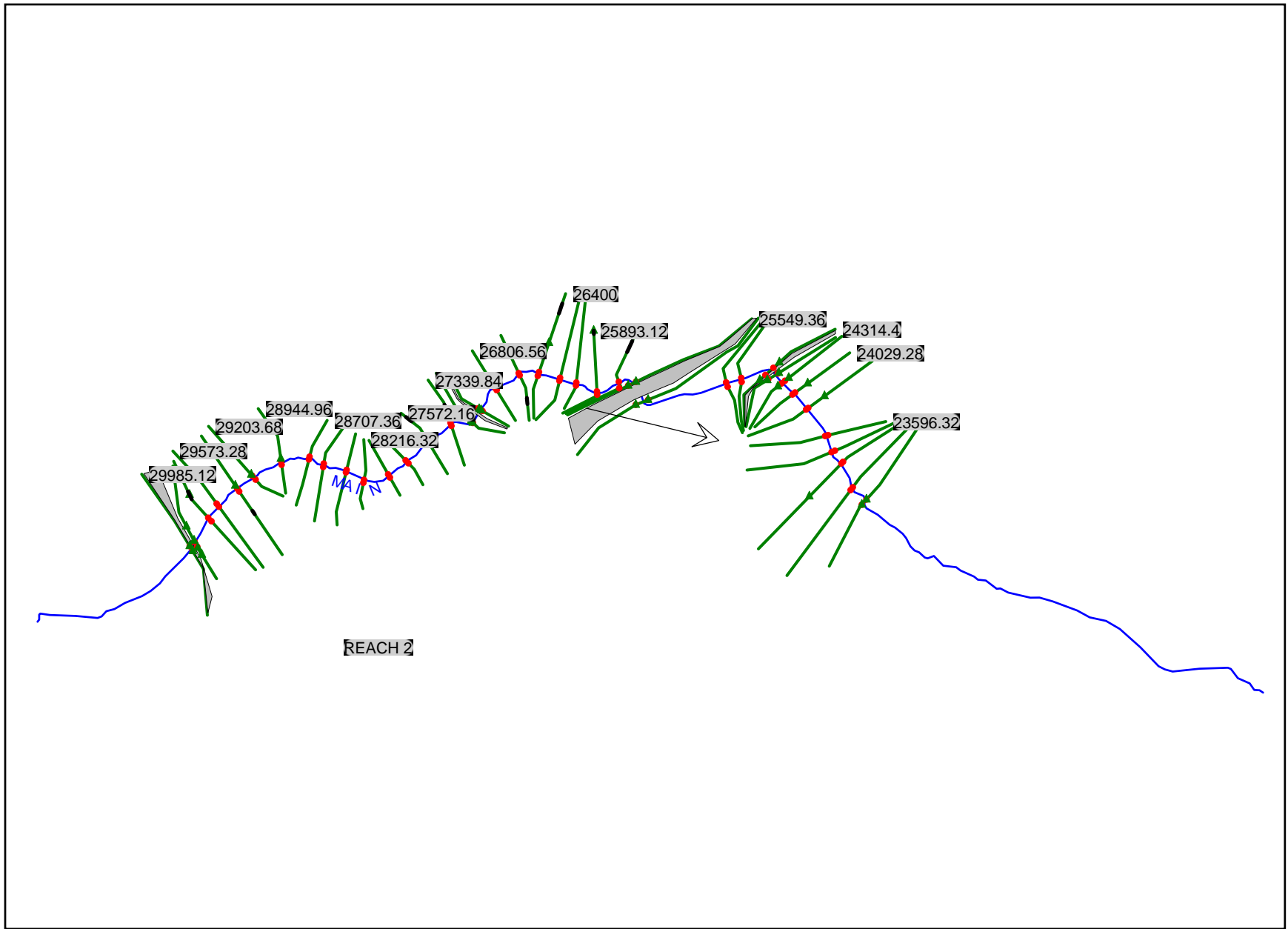
HEC-RAS Plan: Duplicate Effect River: MAIN Reach: REACH 2 (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	26400	50 YR	4110.00	840.00	853.27	847.80	853.34	0.000287	3.13	2554.07	512.65	0.16
REACH 2	26400	100 YR	4813.00	840.00	853.62	848.18	853.70	0.000343	3.48	2682.96	526.30	0.17
REACH 2	26400	500 YR	8445.00	840.00	854.68	849.42	854.87	0.000715	5.30	3079.91	570.36	0.25
REACH 2	26220.48	50 YR	4110.00	839.90	853.24	848.57	853.29	0.000187	2.43	2621.84	469.67	0.13
REACH 2	26220.48	100 YR	4813.00	839.90	853.59	848.79	853.65	0.000219	2.68	2766.71	483.01	0.14
REACH 2	26220.48	500 YR	8445.00	839.90	854.61	849.71	854.76	0.000437	4.00	3204.90	522.72	0.20
REACH 2	26083.2	50 YR	4110.00	839.80	853.24	846.76	853.27	0.000126	2.13	3327.08	579.34	0.11
REACH 2	26083.2	100 YR	4813.00	839.80	853.58	847.00	853.62	0.000146	2.33	3516.70	589.16	0.12
REACH 2	26083.2	500 YR	8445.00	839.80	854.61	848.00	854.70	0.000280	3.40	4085.86	618.48	0.16
REACH 2	25893.12	50 YR	4110.00	839.70	853.22	846.45	853.25	0.000110	1.54	3331.89	588.87	0.08
REACH 2	25893.12	100 YR	4813.00	839.70	853.57	846.64	853.60	0.000125	1.68	3535.83	597.69	0.08
REACH 2	25893.12	500 YR	8445.00	839.70	854.59	847.54	854.66	0.000237	2.44	4162.35	665.60	0.12
REACH 2	25687.2	50 YR	4161.80	839.50	853.20		853.23	0.000098	1.57	3647.61	546.00	0.08
REACH 2	25687.2	100 YR	4939.00	839.50	853.54		853.58	0.000122	1.78	3833.71	556.72	0.09
REACH 2	25687.2	500 YR	8746.80	839.50	854.52		854.62	0.000269	2.77	4392.43	580.60	0.13
REACH 2	25549.36	50 YR	4161.80	839.40	853.14	845.60	853.19	0.000265	2.36	3349.86	1114.52	0.12
REACH 2	25549.36	100 YR	4939.00	839.40	853.48	846.29	853.53	0.000300	2.56	3636.85	1136.08	0.13
REACH 2	25549.36	500 YR	8746.80	839.40	854.43	849.16	854.53	0.000532	3.58	4465.31	1184.91	0.17
REACH 2	25460.16		Culvert									
REACH 2	25370.96	50 YR	4161.80	838.80	850.80	844.87	851.12	0.001141	4.57	911.47	831.91	0.28
REACH 2	25370.96	100 YR	4939.00	838.80	851.43	845.51	851.82	0.001268	5.05	978.57	869.01	0.29
REACH 2	25370.96	500 YR	8746.80	838.80	852.73	848.04	852.78	0.000200	2.19	4747.74	1234.32	0.12
REACH 2	24668.16	50 YR	4161.80	835.85	849.42		849.82	0.003691	6.55	954.32	191.43	0.41
REACH 2	24668.16	100 YR	4939.00	835.85	849.94		850.40	0.003974	7.03	1055.06	198.65	0.43
REACH 2	24668.16	500 YR	8746.80	835.85	851.52		852.33	0.005900	9.60	1426.02	260.46	0.53
REACH 2	24541.44	50 YR	4161.80	835.30	849.05		849.38	0.002990	6.07	1065.77	176.16	0.36
REACH 2	24541.44	100 YR	4939.00	835.30	849.52		849.90	0.003403	6.68	1151.80	220.74	0.39
REACH 2	24541.44	500 YR	8746.80	835.30	850.78		851.55	0.005974	9.65	1511.47	350.32	0.53
REACH 2	24314.4	50 YR	4161.80	834.32	848.06	843.17	848.65	0.002770	6.28	760.80	615.03	0.40
REACH 2	24314.4	100 YR	4939.00	834.32	848.26	844.00	849.03	0.003513	7.19	802.12	667.47	0.46
REACH 2	24314.4	500 YR	8746.80	834.32	849.87	848.95	850.50	0.002990	7.53	2214.73	769.39	0.43
REACH 2	24277.44		Bridge									
REACH 2	24240.48	50 YR	4161.80	833.89	846.55	843.86	847.34	0.004433	7.18	600.71	683.41	0.50
REACH 2	24240.48	100 YR	4939.00	833.89	847.22	844.51	848.11	0.004404	7.66	674.51	715.40	0.51
REACH 2	24240.48	500 YR	8746.80	833.89	849.23	846.90	849.50	0.001637	5.53	3260.16	791.24	0.32
REACH 2	24156	50 YR	4161.80	833.72	846.22	843.19	846.94	0.003440	7.82	790.66	553.69	0.42
REACH 2	24156	100 YR	4939.00	833.72	846.87	843.77	847.71	0.003795	8.53	862.06	585.12	0.44
REACH 2	24156	500 YR	8746.80	833.72	849.17	846.10	849.26	0.000630	3.92	4328.51	639.18	0.18
REACH 2	24029.28	50 YR	4161.80	833.47	846.03	842.52	846.26	0.001468	5.06	1323.52	529.38	0.26
REACH 2	24029.28	100 YR	4939.00	833.47	846.68	842.90	846.93	0.001547	5.38	1469.70	542.03	0.27
REACH 2	24029.28	500 YR	8746.80	833.47	849.10	844.37	849.18	0.000415	3.14	4203.92	584.70	0.14
REACH 2	23860.32	50 YR	4161.80	833.15	845.99	841.38	846.06	0.000604	3.06	2416.15	655.70	0.15
REACH 2	23860.32	100 YR	4939.00	833.15	846.64	841.72	846.72	0.000631	3.24	2673.99	662.98	0.16
REACH 2	23860.32	500 YR	8746.80	833.15	849.06	842.82	849.10	0.000388	2.84	5776.55	690.34	0.13
REACH 2	23596.32	50 YR	4161.80	832.61	845.82		845.88	0.000602	3.34	2778.51	444.63	0.16
REACH 2	23596.32	100 YR	4939.00	832.61	846.46		846.53	0.000635	3.54	3068.17	452.66	0.17
REACH 2	23596.32	500 YR	8746.80	832.61	848.83		848.94	0.000811	4.46	4172.83	482.05	0.20
REACH 2	23453.76	50 YR	4161.80	832.34	845.69		845.78	0.000784	3.93	2747.59	446.61	0.20
REACH 2	23453.76	100 YR	4939.00	832.34	846.32		846.43	0.000830	4.18	3034.63	454.30	0.21
REACH 2	23453.76	500 YR	8746.80	832.34	848.64		848.80	0.001052	5.27	4122.21	483.00	0.24
REACH 2	23327.04	50 YR	4161.80	832.09	845.67	838.84	845.69	0.000274	2.24	4129.65	886.02	0.11
REACH 2	23327.04	100 YR	4939.00	832.09	846.30	839.07	846.33	0.000306	2.45	4435.64	896.33	0.12
REACH 2	23327.04	500 YR	8746.80	832.09	848.61	840.06	848.66	0.000462	3.34	5568.23	933.24	0.15
REACH 2	23110.56	50 YR	4161.80	831.66	845.40		845.58	0.000958	4.91	2005.63	342.60	0.24
REACH 2	23110.56	100 YR	4939.00	831.66	846.00		846.20	0.001065	5.34	2216.15	360.45	0.26
REACH 2	23110.56	500 YR	8746.80	831.66	848.09		848.46	0.001708	7.45	3039.56	495.19	0.34
REACH 2	22946.88	50 YR	4223.00	831.32	845.28	839.41	845.43	0.000732	3.86	1727.96	354.76	0.20
REACH 2	22946.88	100 YR	4850.00	831.32	845.89	840.00	846.05	0.000719	3.96	1949.20	370.64	0.20

HEC-RAS Plan: Duplicate Effect River: MAIN Reach: REACH 2 (Continued)

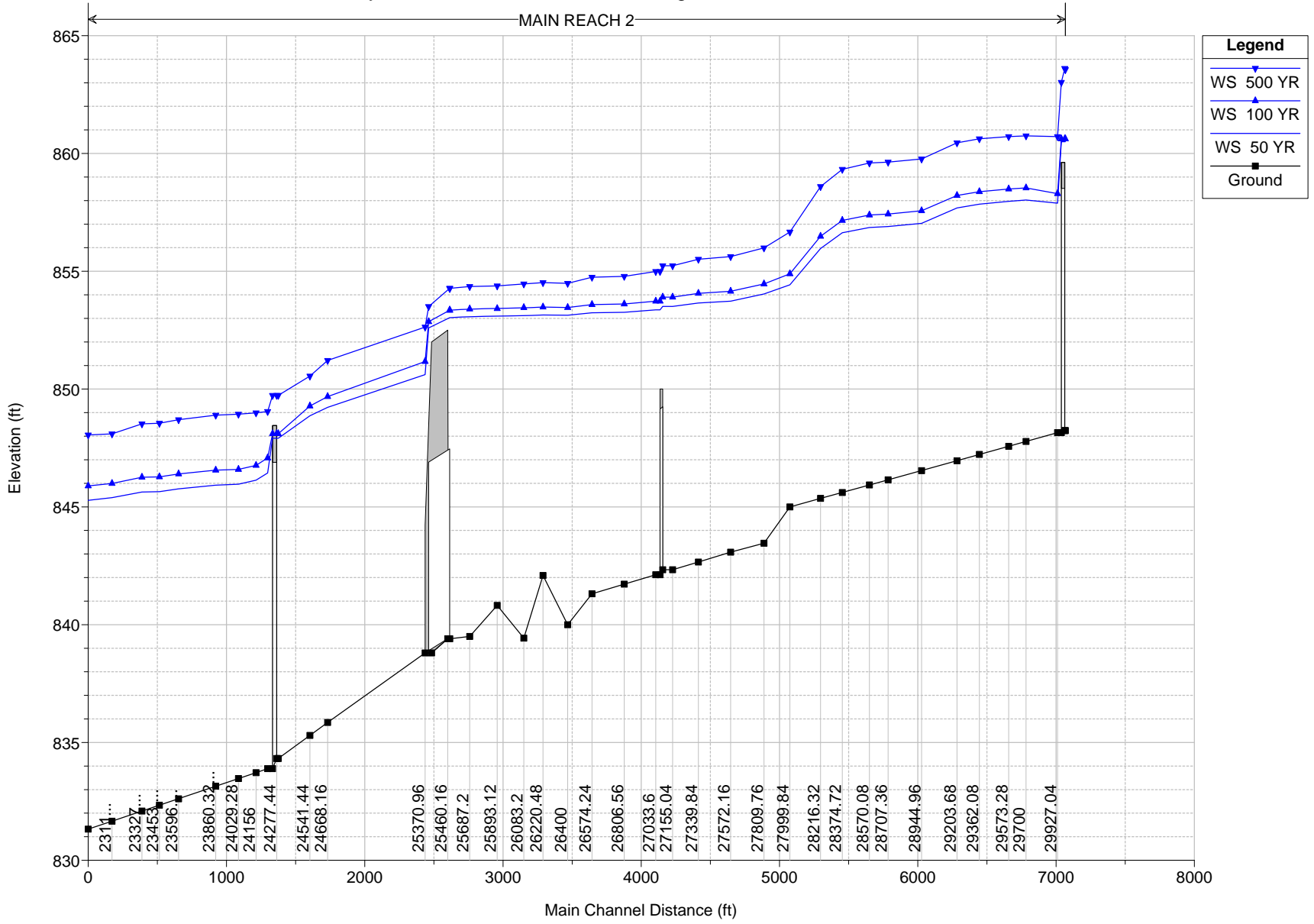
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	22946.88	500 YR	7604.00	831.32	848.05	842.64	848.23	0.000721	4.42	2811.47	440.89	0.21

EXISTING/  
CORRECTED EFFECTIVE



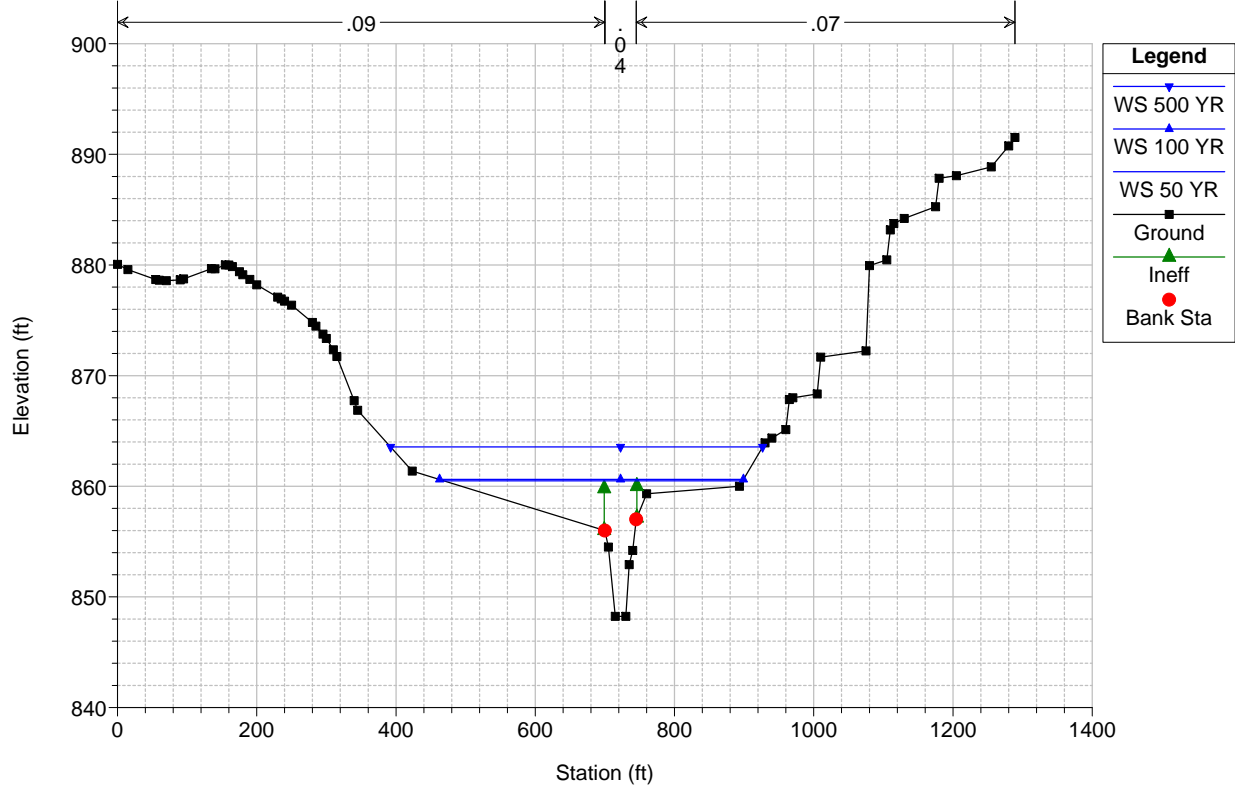
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

MAIN REACH 2



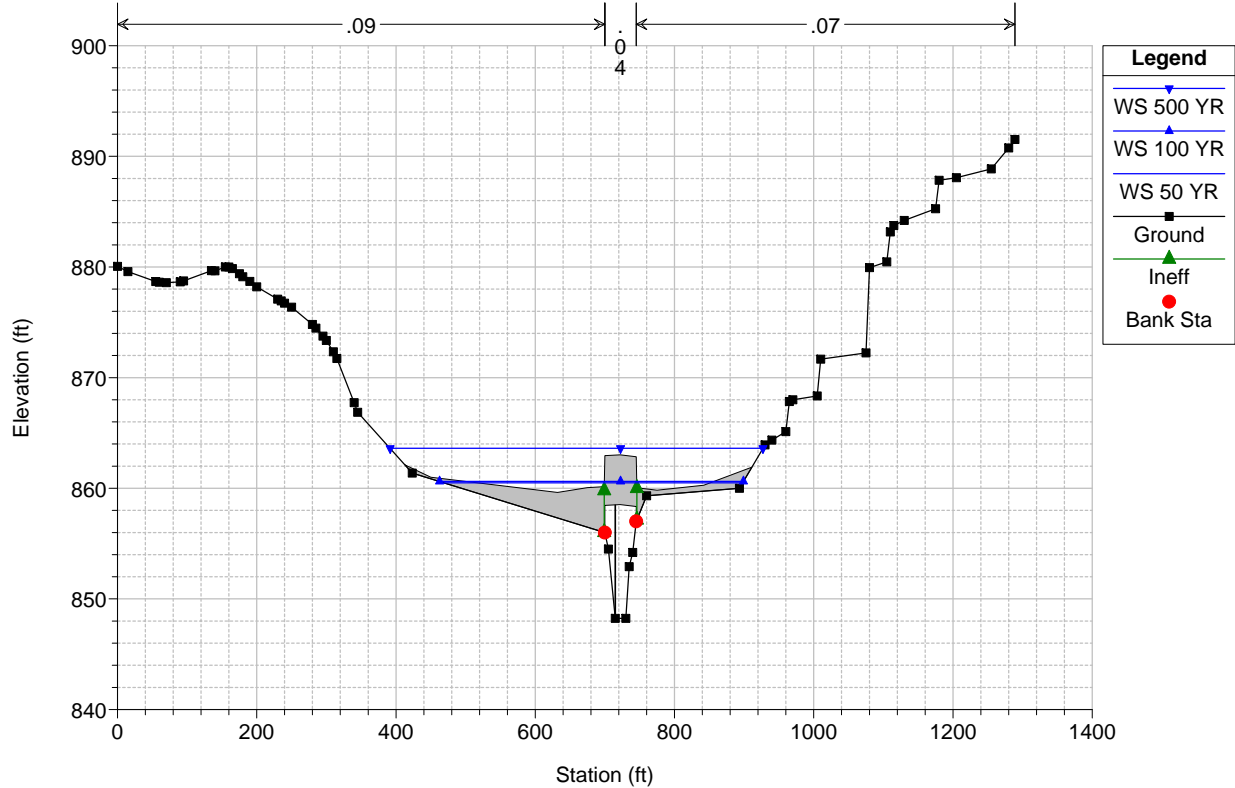
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford



Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

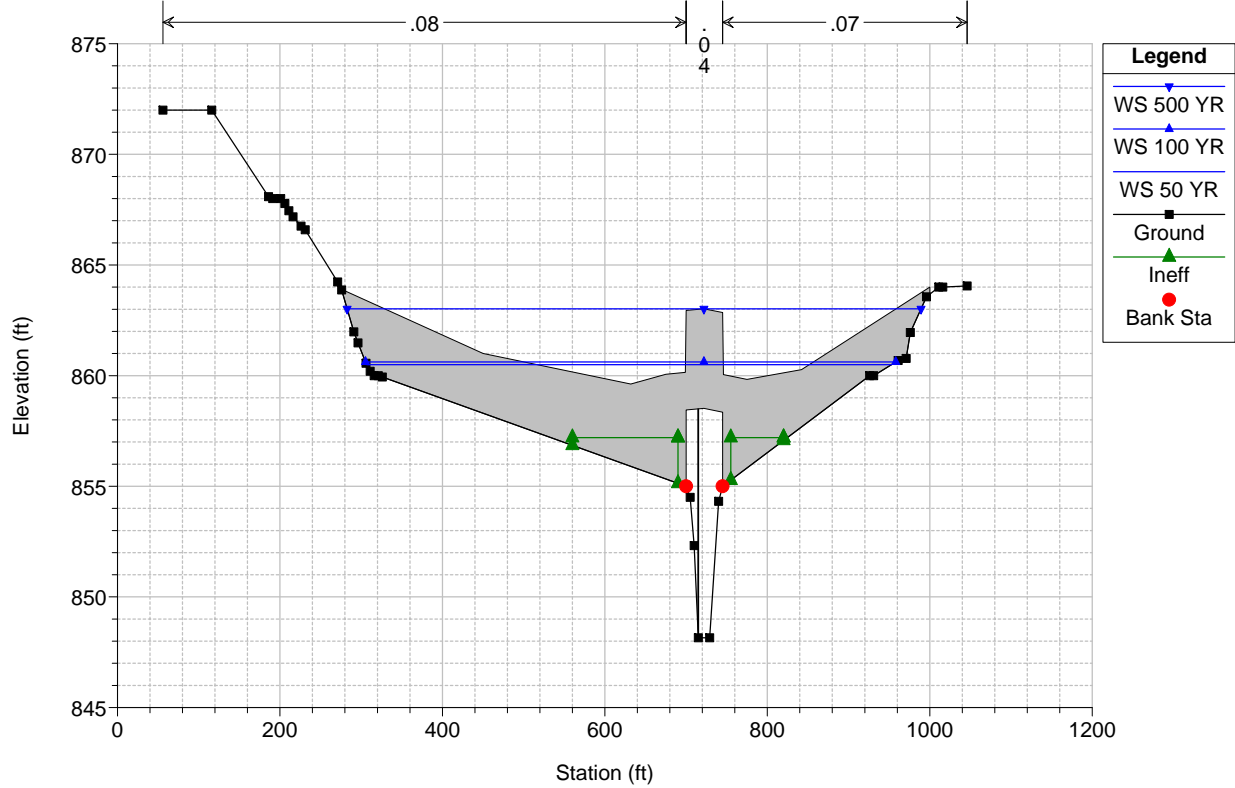
River = MAIN Reach = REACH 2 RS = 29958.72 BR





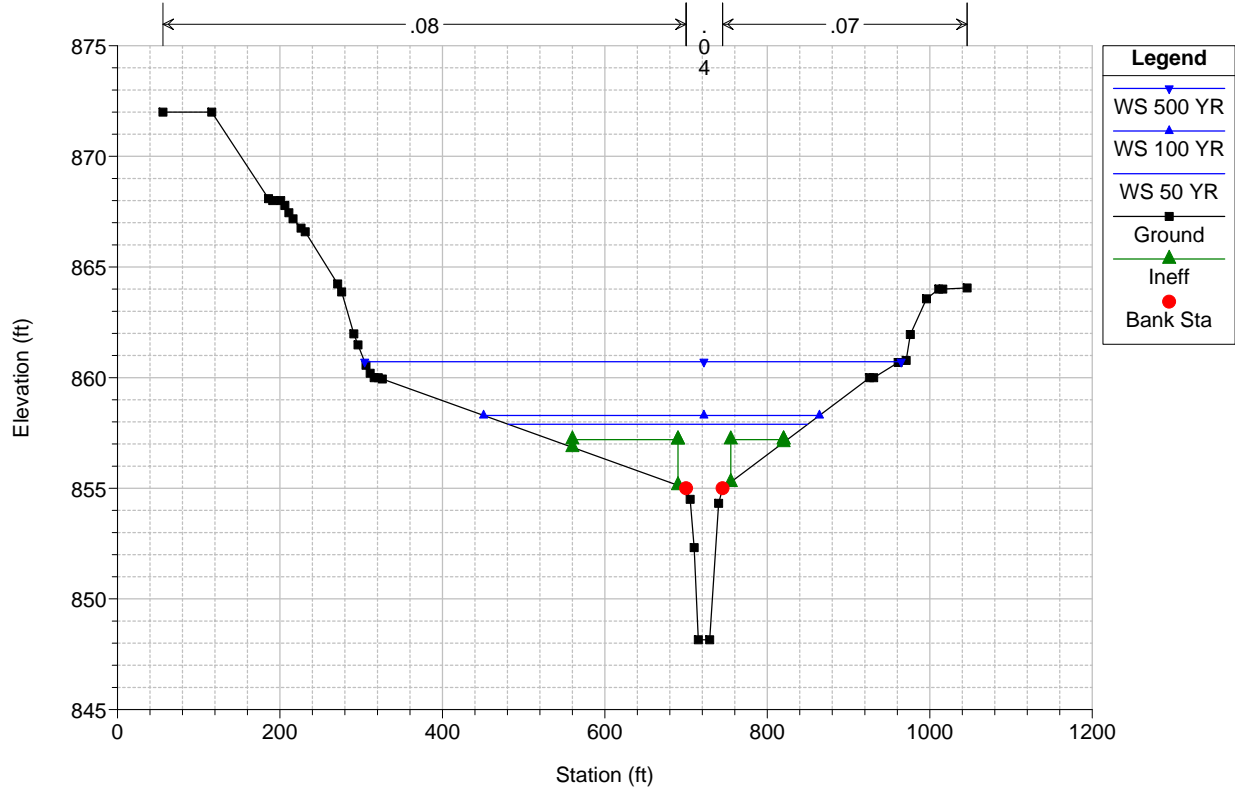
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



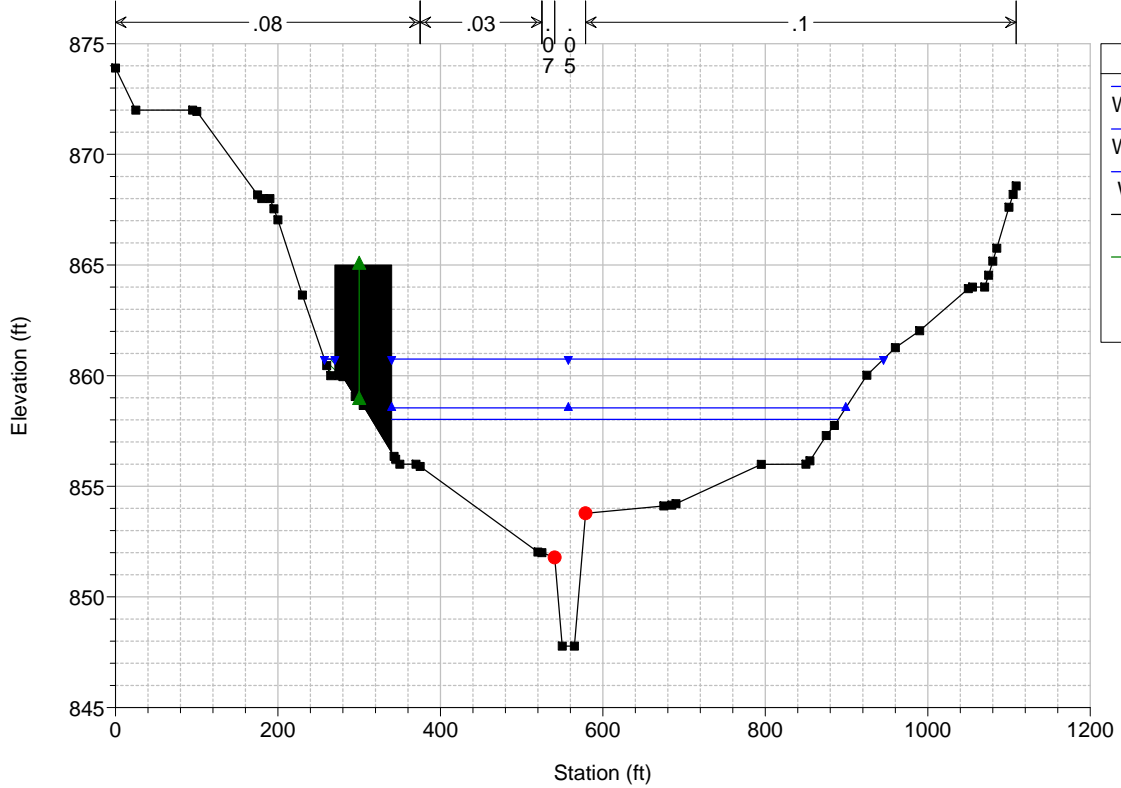
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



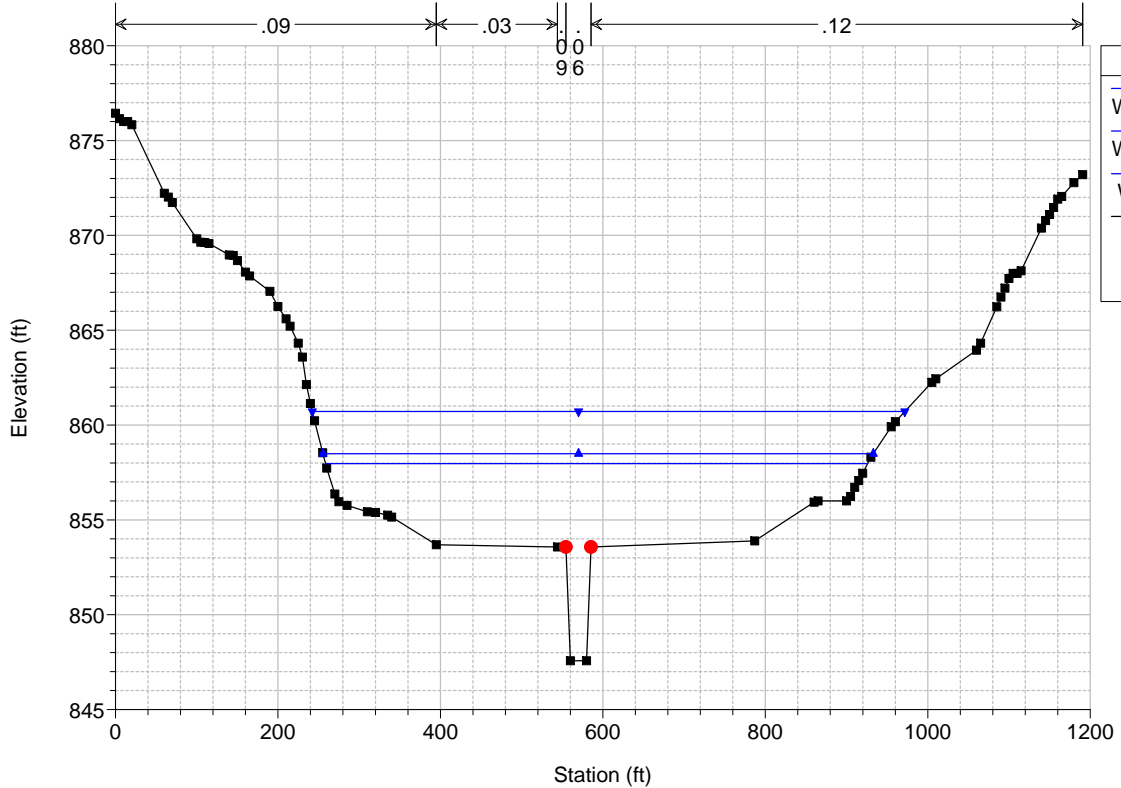
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96



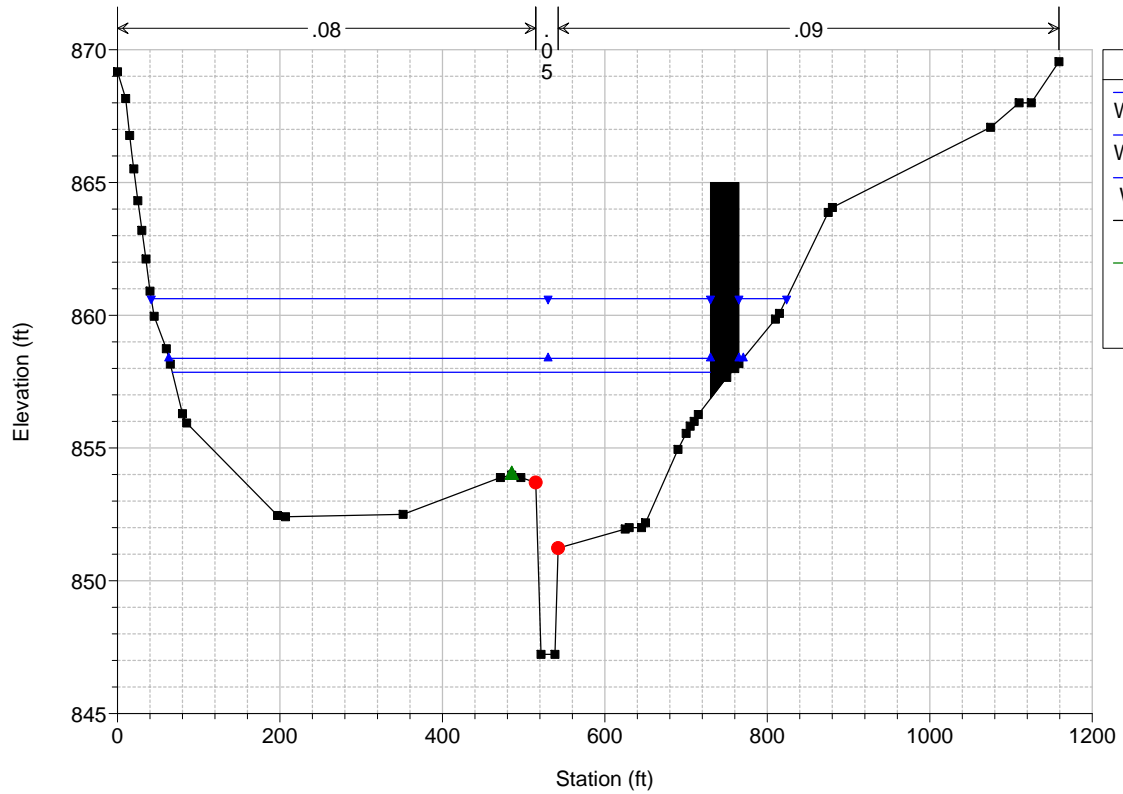
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29573.28 MS95



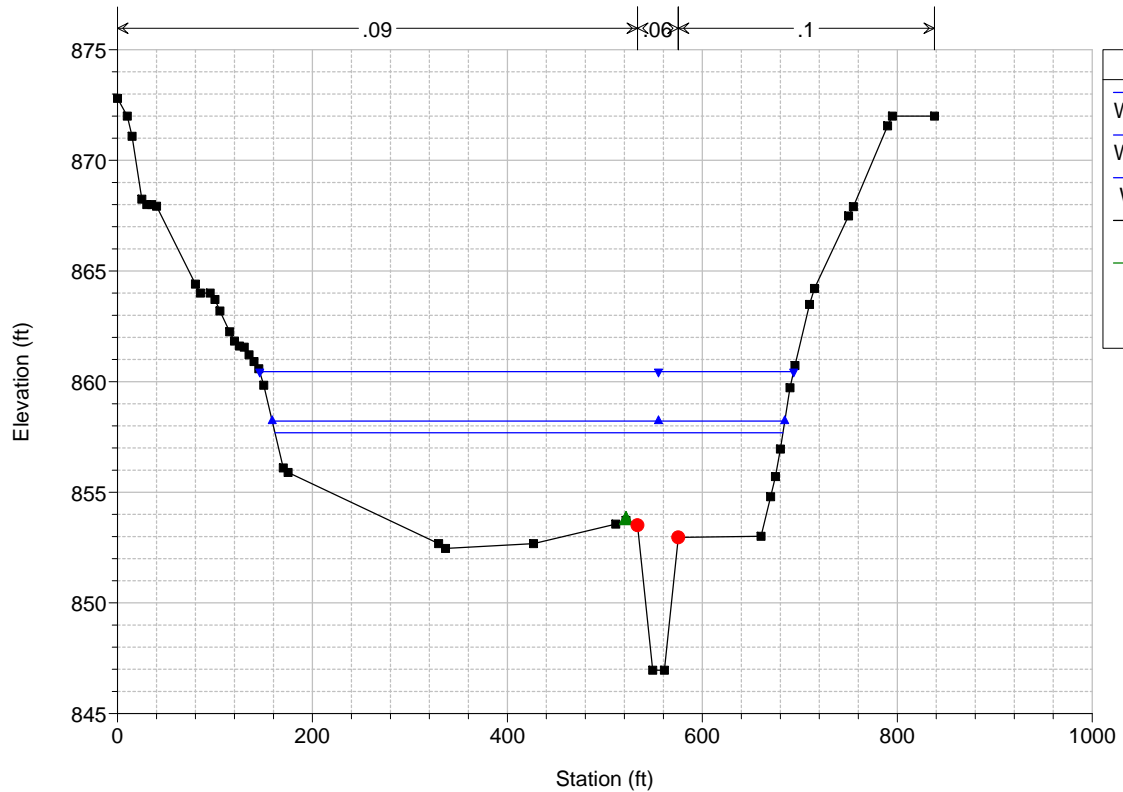
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29362.08 MS94



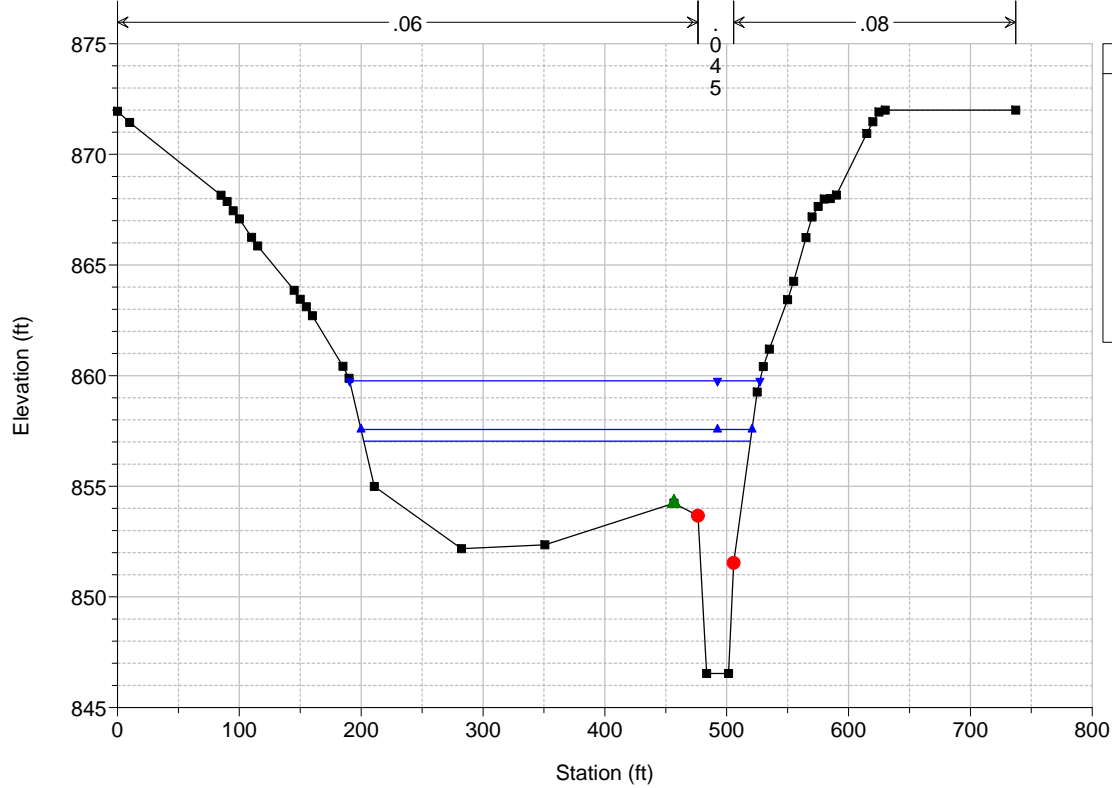
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 29203.68 MS93



Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

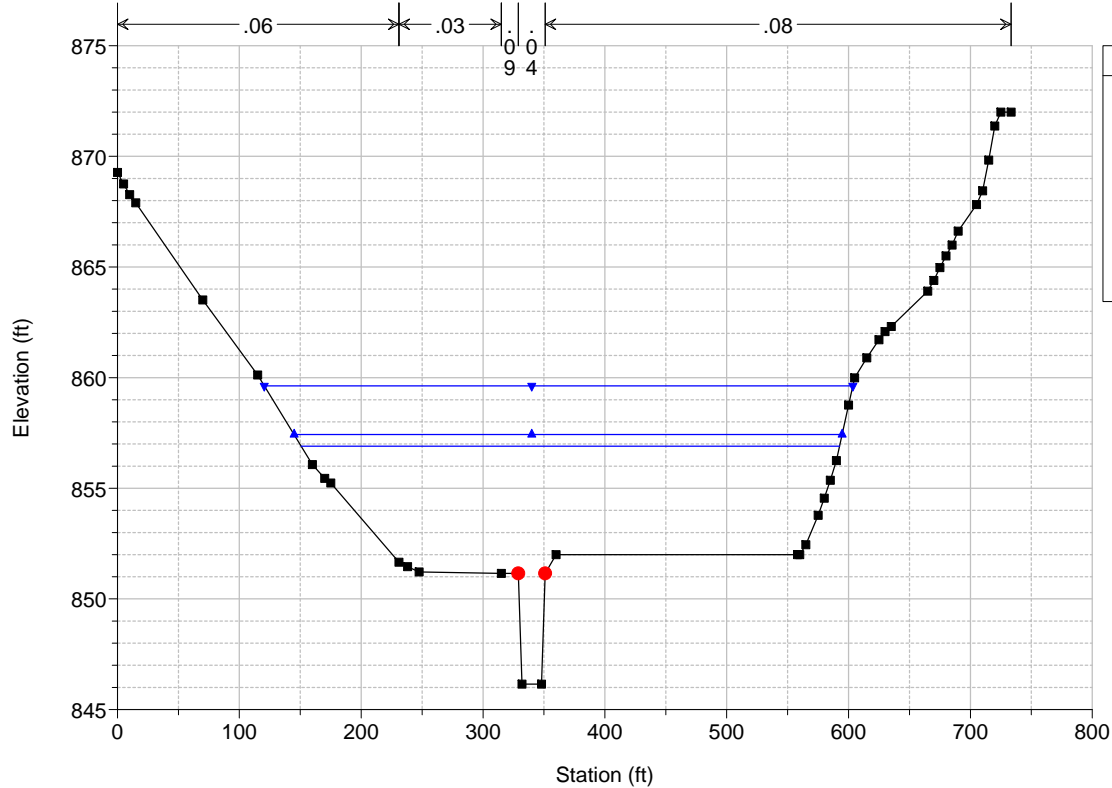
River = MAIN Reach = REACH 2 RS = 28944.96 MS92



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square marker
Ineff	Green line with upward-pointing triangle
Bank Sta	Red line with circle marker

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

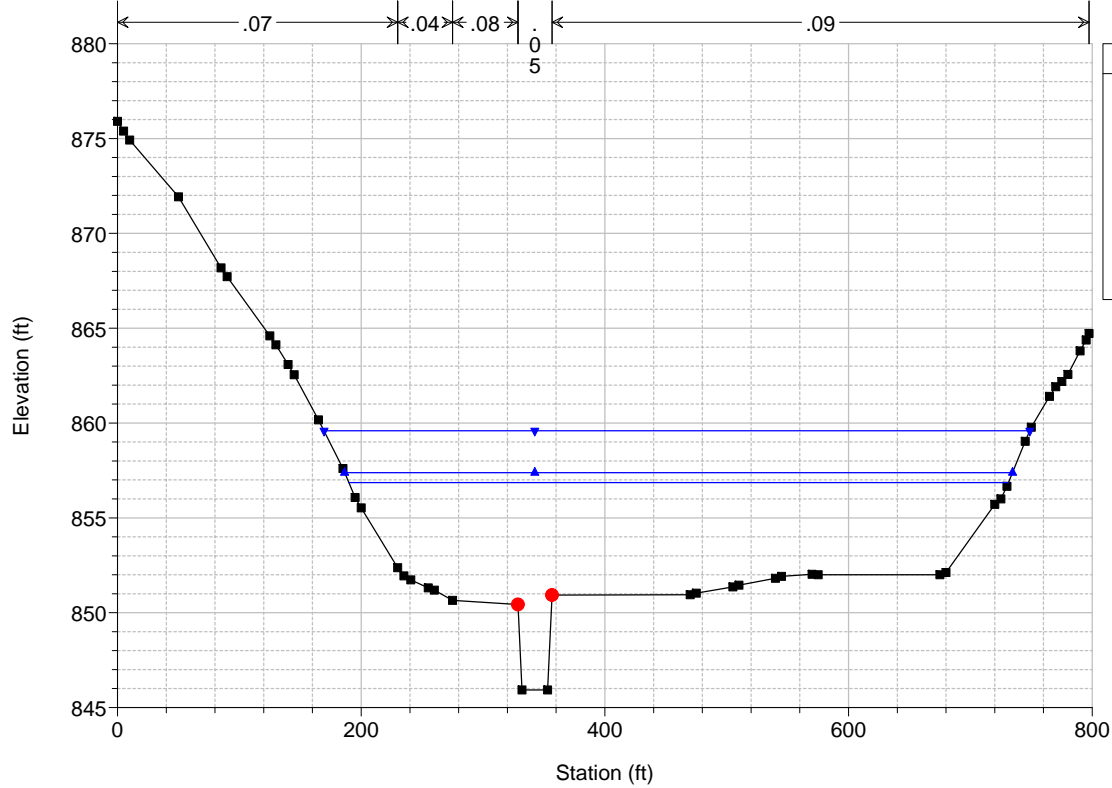
River = MAIN Reach = REACH 2 RS = 28707.36 MS91



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square marker
Bank Sta	Red line with circle marker

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

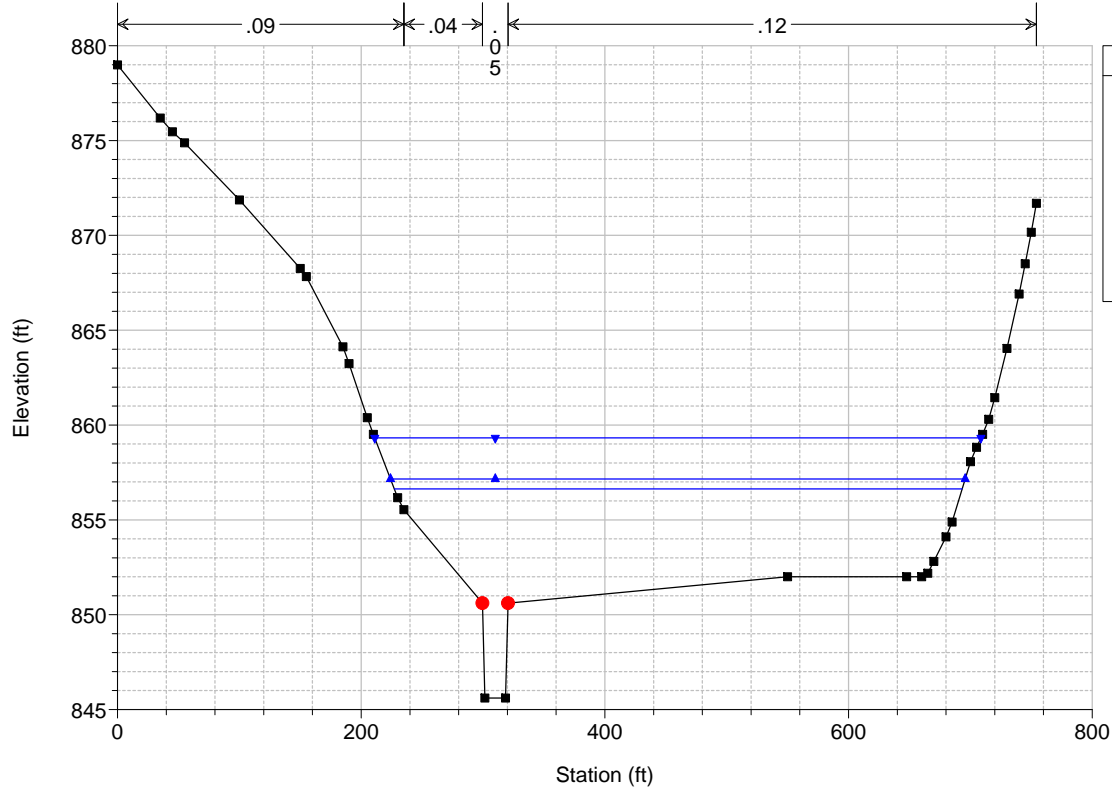
River = MAIN Reach = REACH 2 RS = 28570.08 MS90



Legend	
▼	WS 500 YR
▲	WS 100 YR
—	WS 50 YR
■	Ground
●	Bank Sta

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

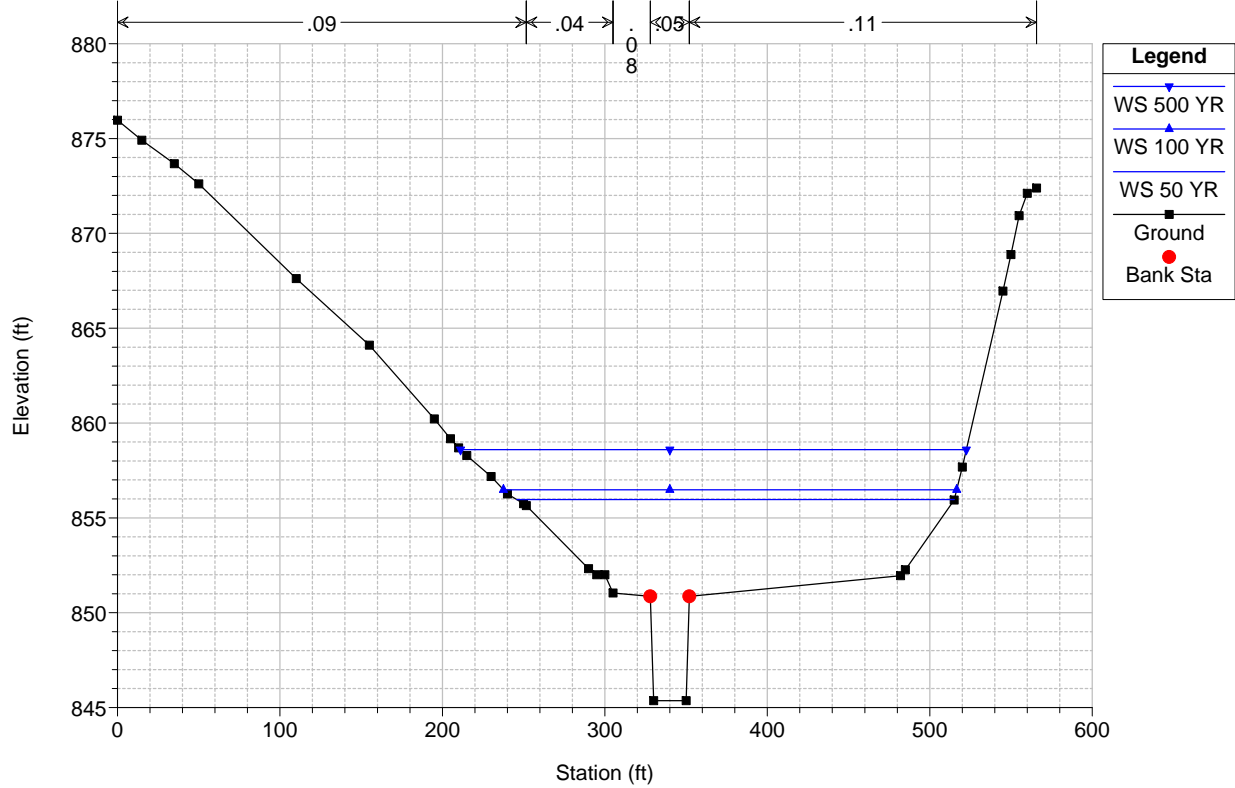
River = MAIN Reach = REACH 2 RS = 28374.72 MS89



Legend	
▼	WS 500 YR
▲	WS 100 YR
—	WS 50 YR
■	Ground
●	Bank Sta

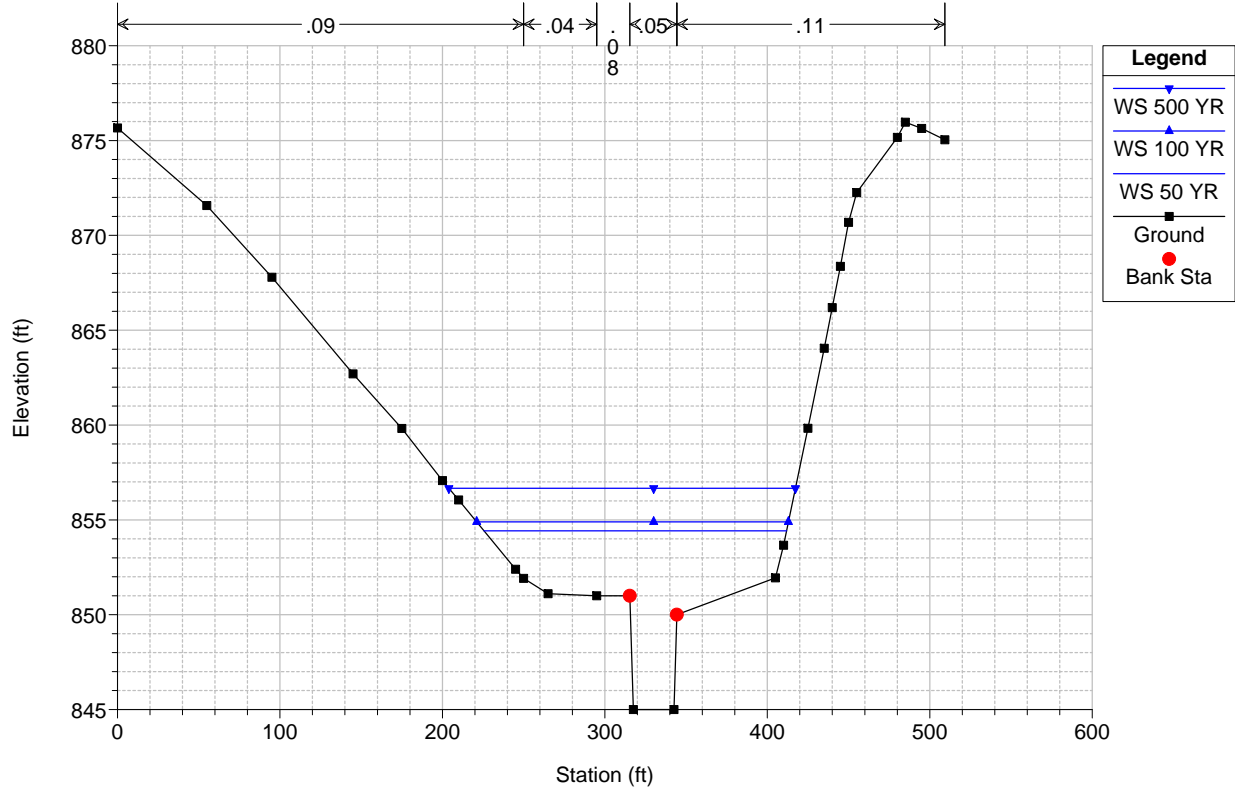
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88



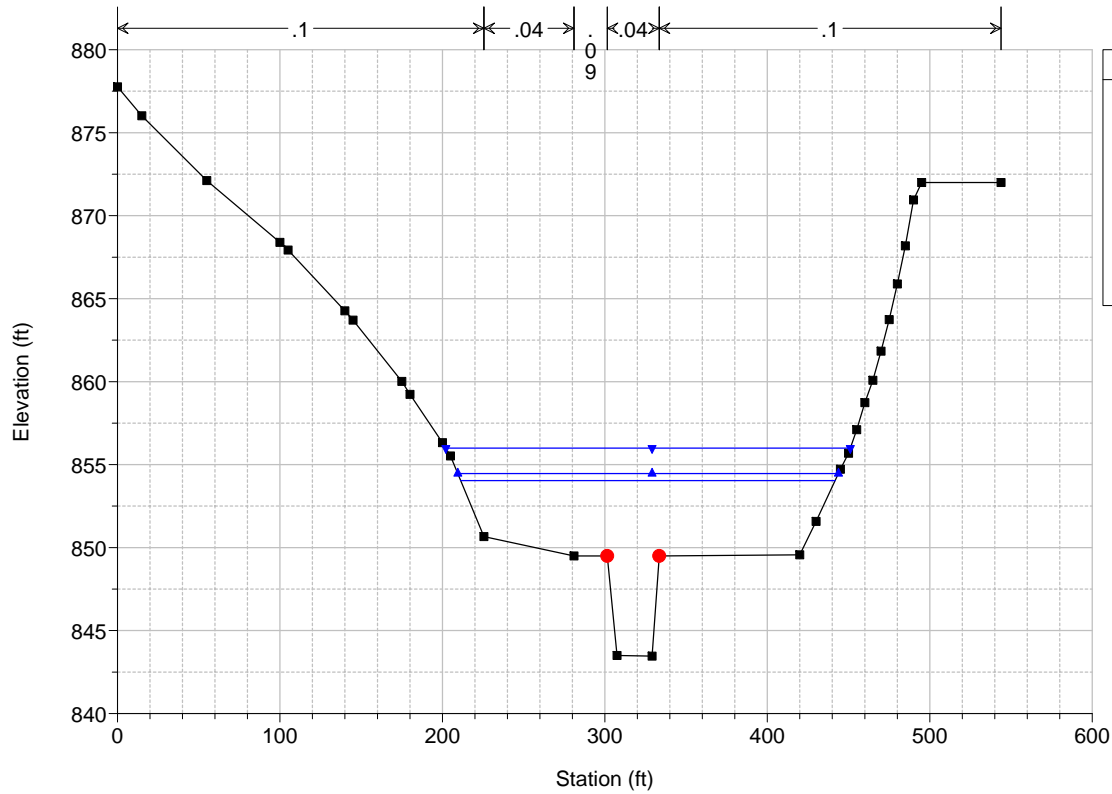
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27999.84 MS87



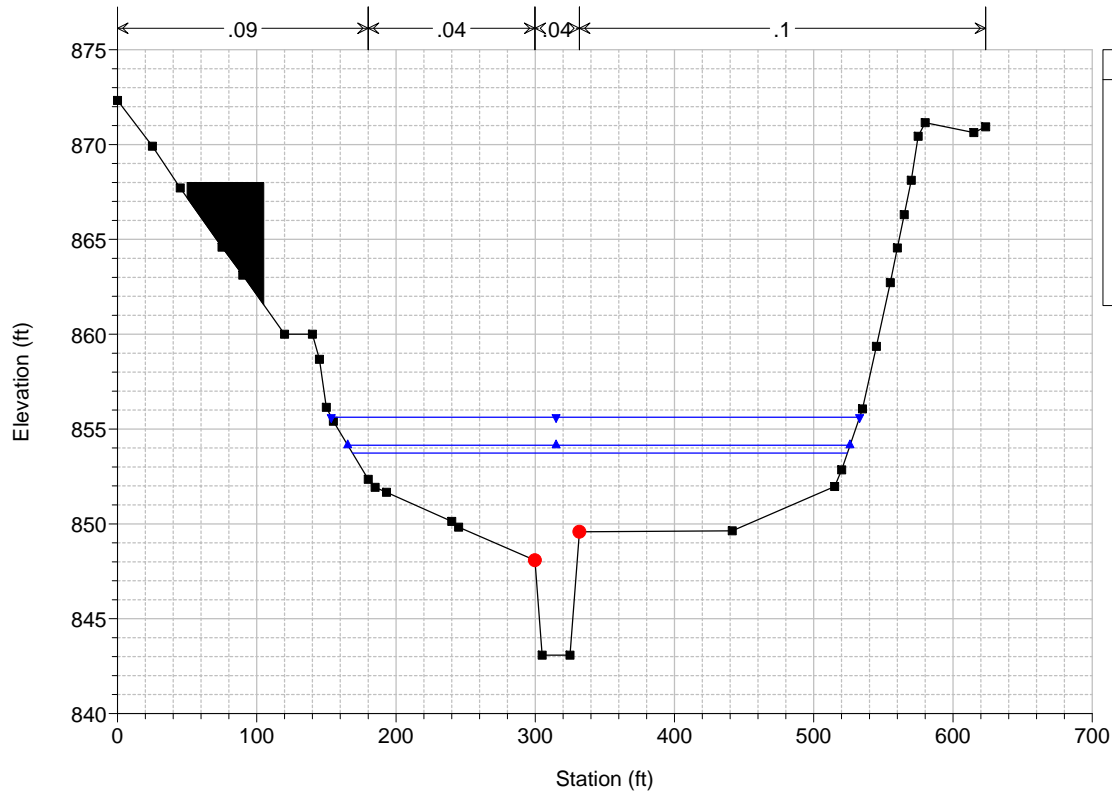
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27809.76 MS86



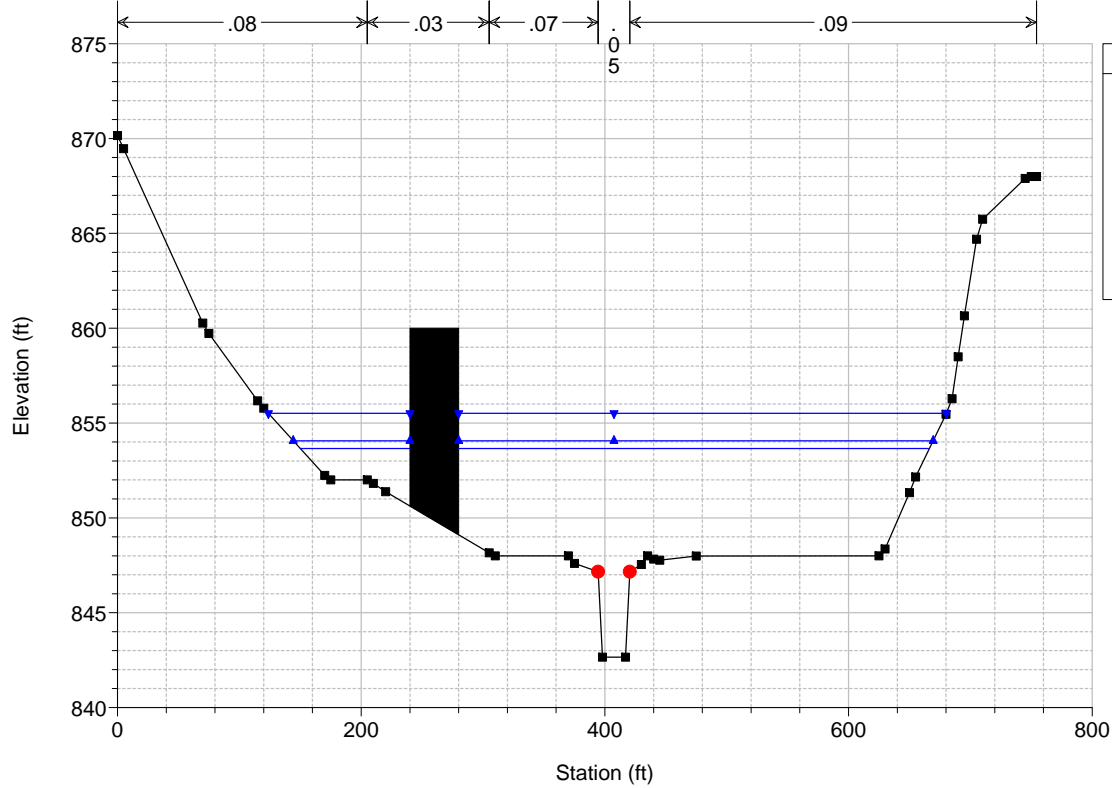
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27572.16 MS85



Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

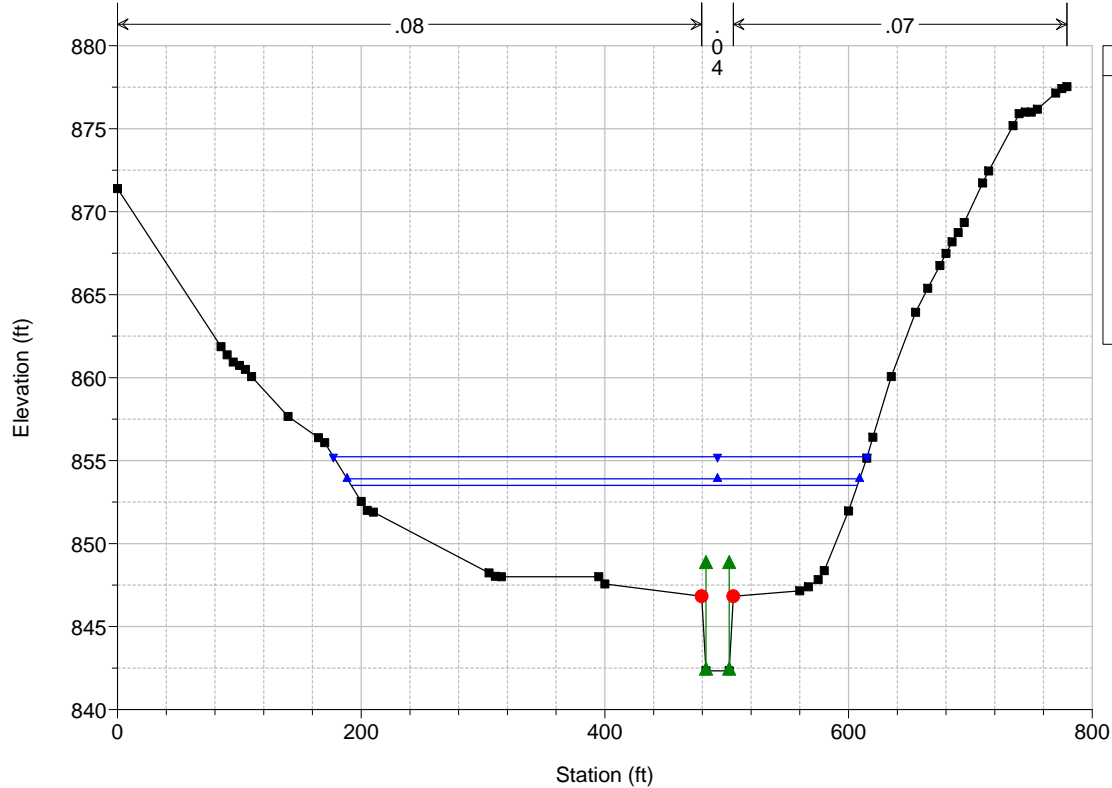
River = MAIN Reach = REACH 2 RS = 27339.84 MS84



Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with inverted triangles
Ground	Black line with squares
Bank Sta	Red dot

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

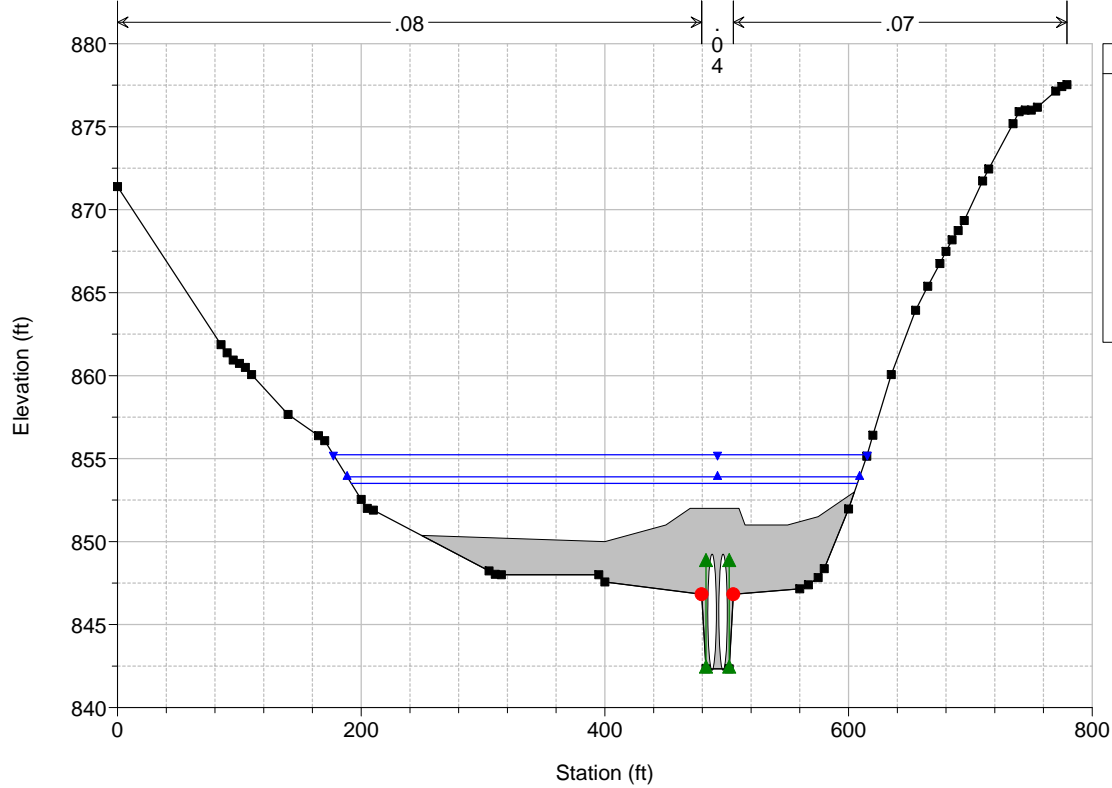
River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert



Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with inverted triangles
Ground	Black line with squares
Ineff	Green line with triangles
Bank Sta	Red dot

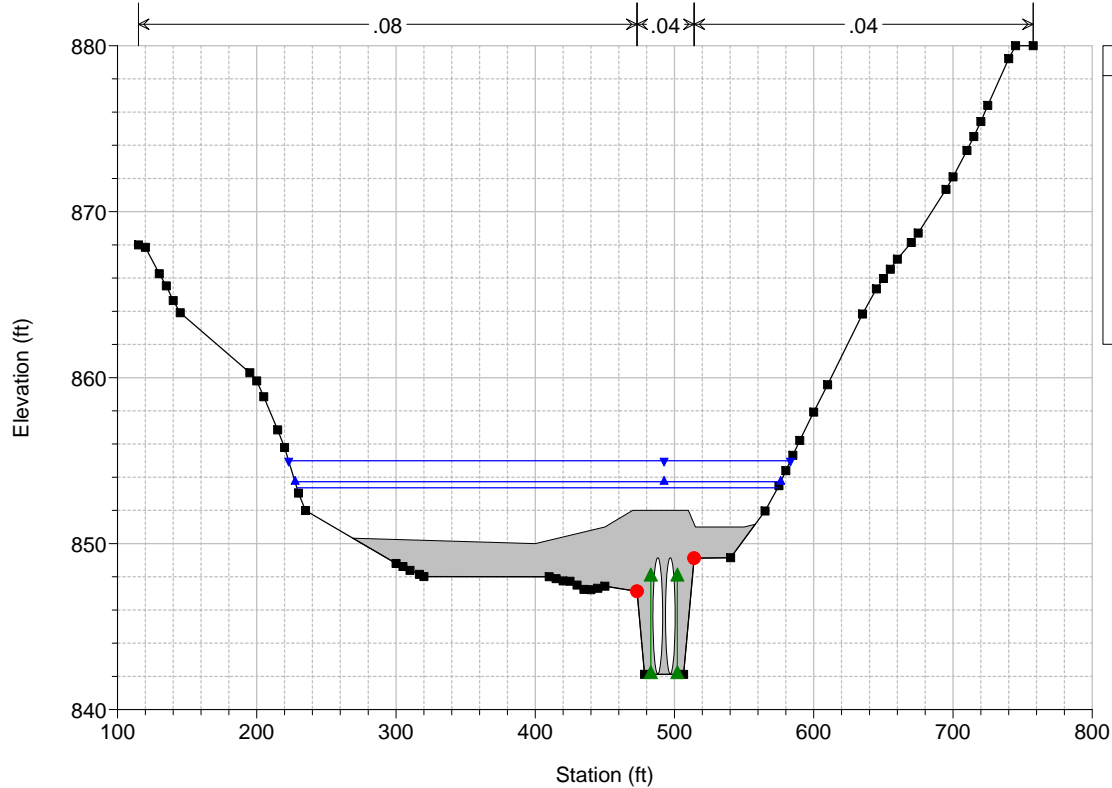


Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with triangles
Ground	Black line with squares
Ineff	Green line with triangles
Bank Sta	Red circle

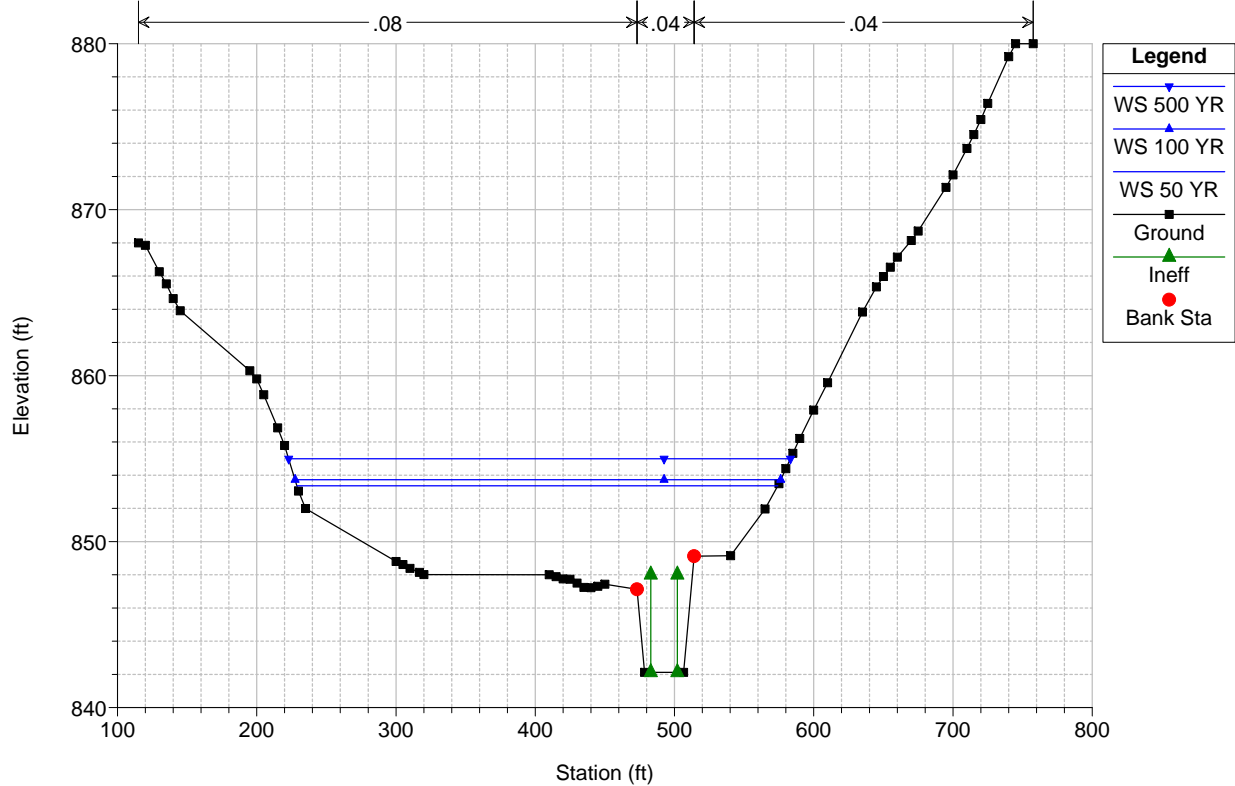
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



Legend	
WS 500 YR	Blue line with inverted triangles
WS 100 YR	Blue line with triangles
WS 50 YR	Blue line with triangles
Ground	Black line with squares
Ineff	Green line with triangles
Bank Sta	Red circle

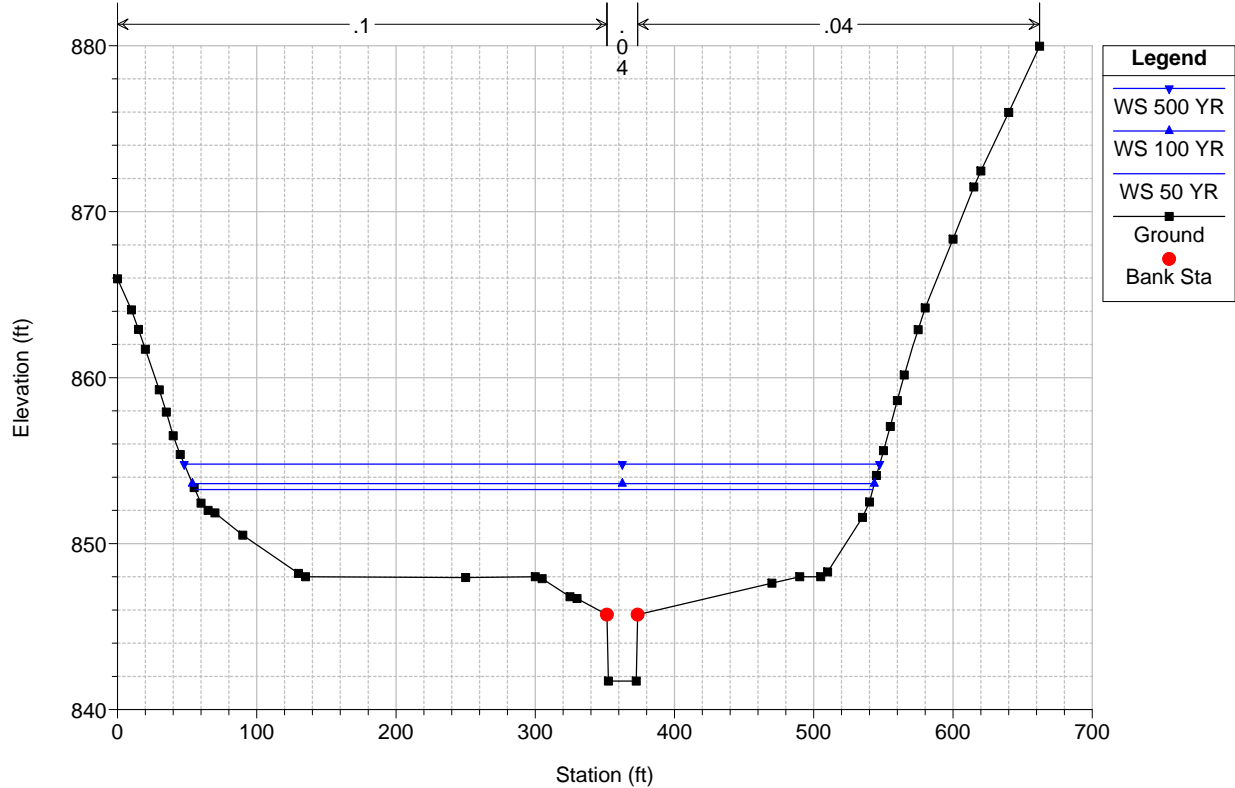
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 27033.6 MS82-D/S Private Drive Culvert



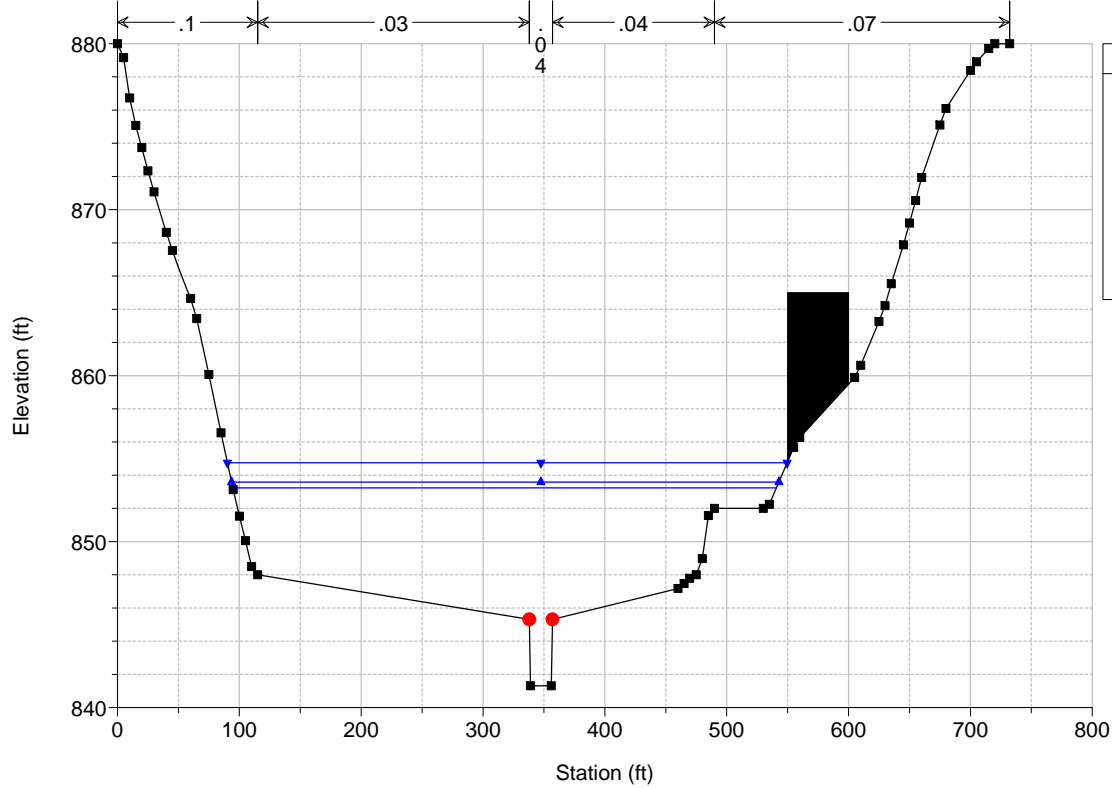
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26806.56 MS81



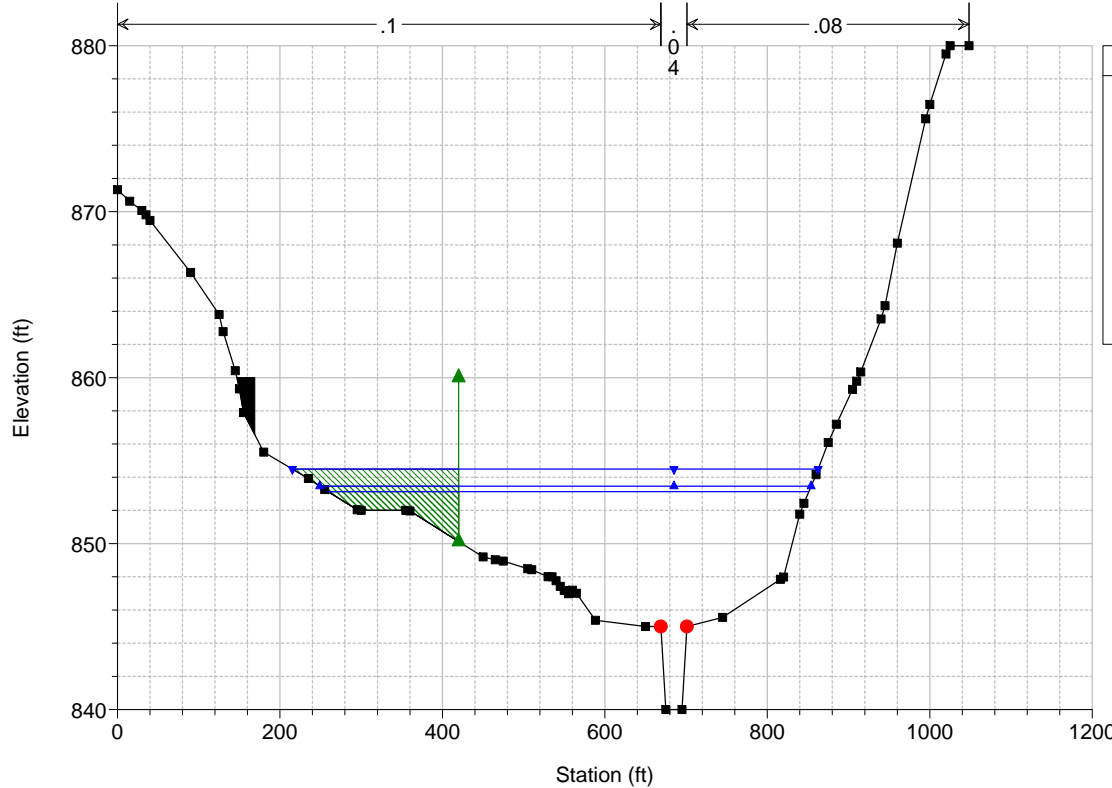
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26574.24 MS80



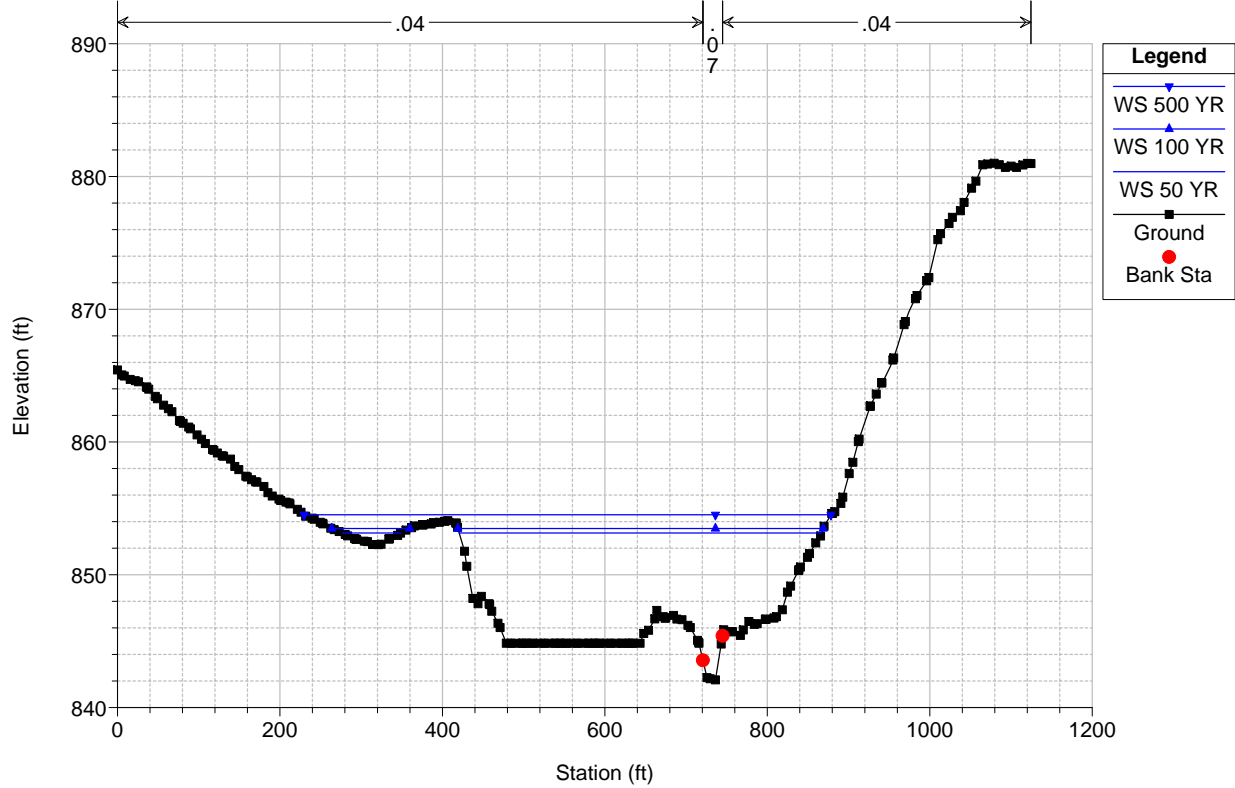
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26400 MS79



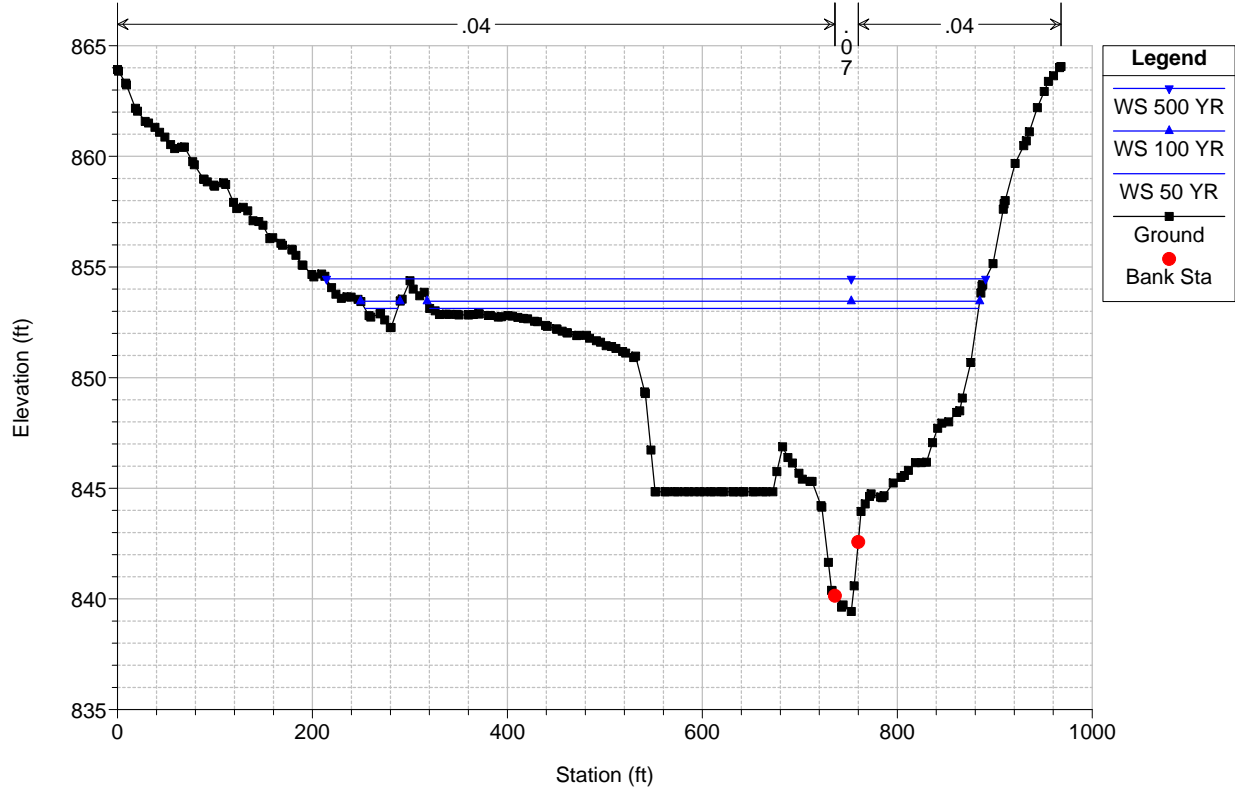
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78



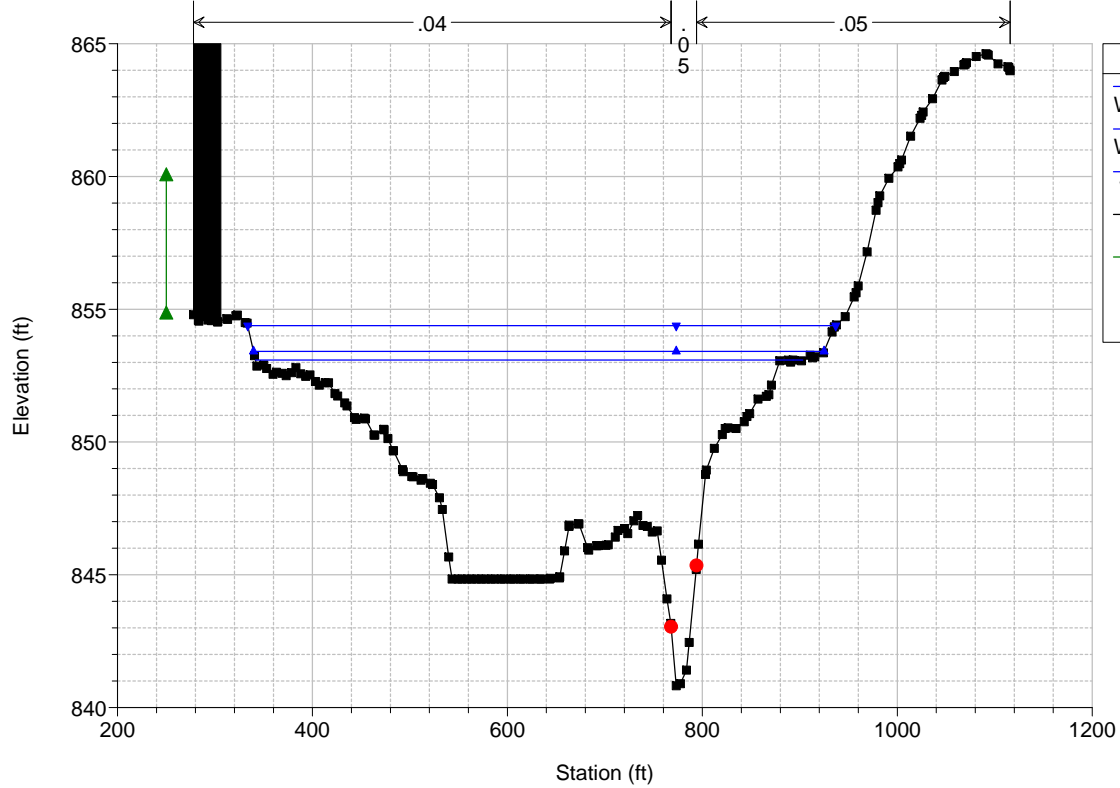
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 26083.2 MS77



Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

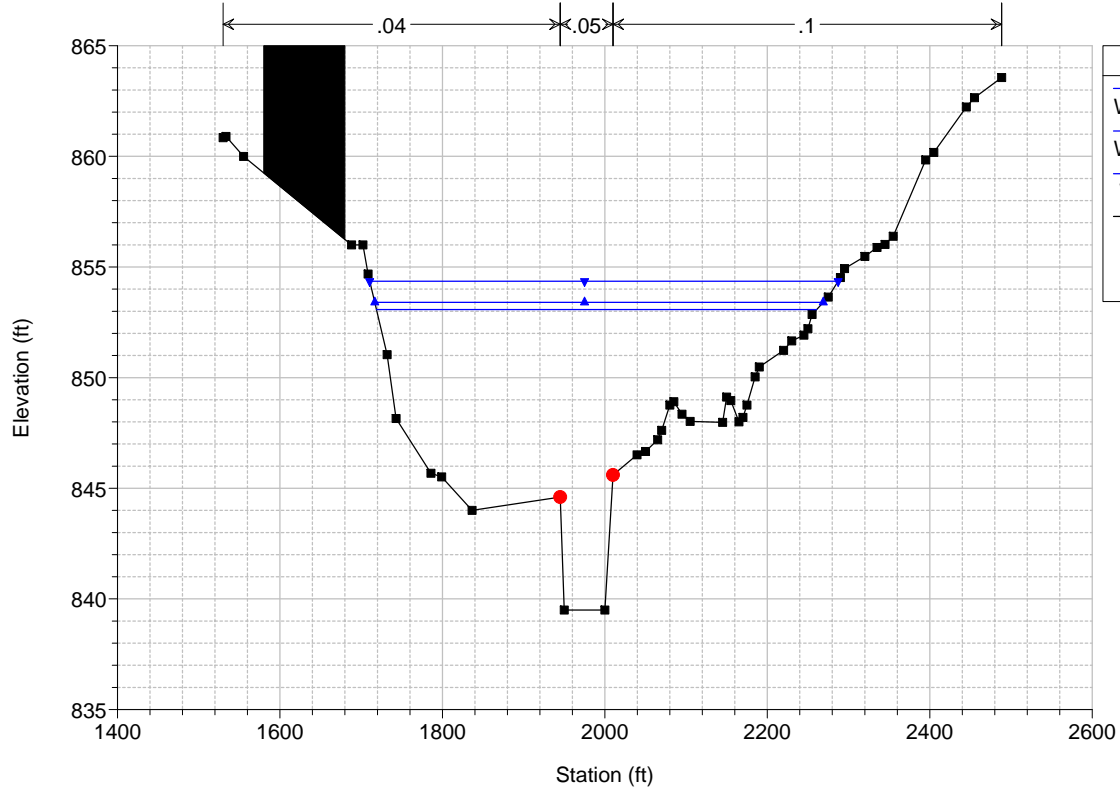
River = MAIN Reach = REACH 2 RS = 25893.12 MS76



Legend	
WS 500 YR	▲
WS 100 YR	▲
WS 50 YR	▲
Ground	■
Ineff	▲
Bank Sta	●

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

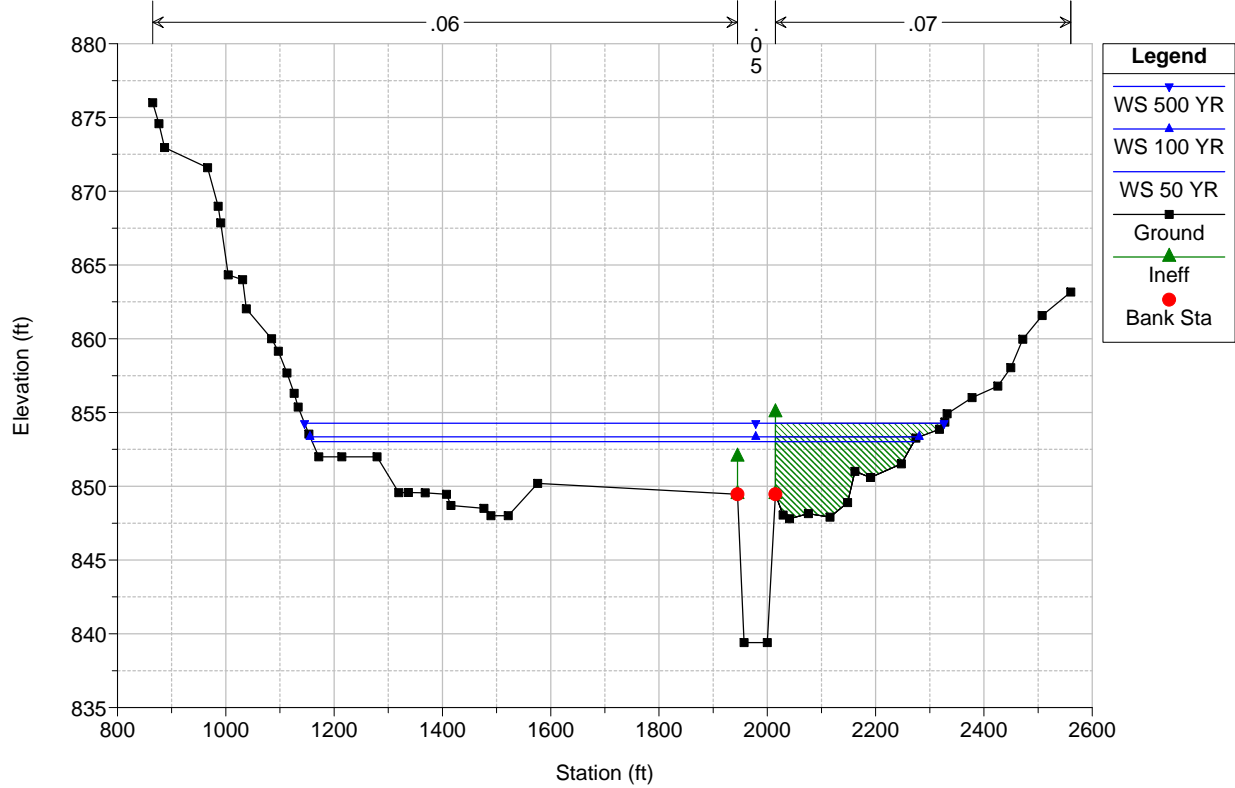
River = MAIN Reach = REACH 2 RS = 25687.2 MS75



Legend	
WS 500 YR	▲
WS 100 YR	▲
WS 50 YR	▲
Ground	■
Bank Sta	●

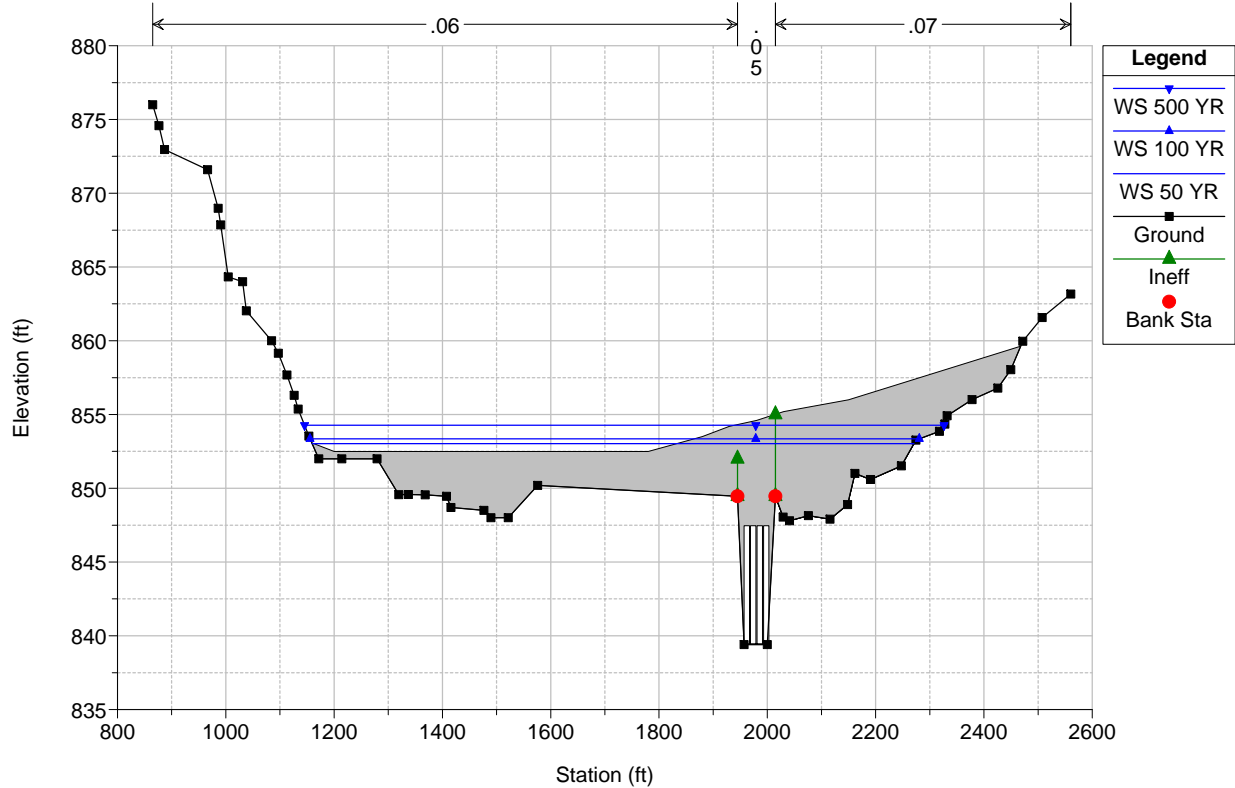
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert



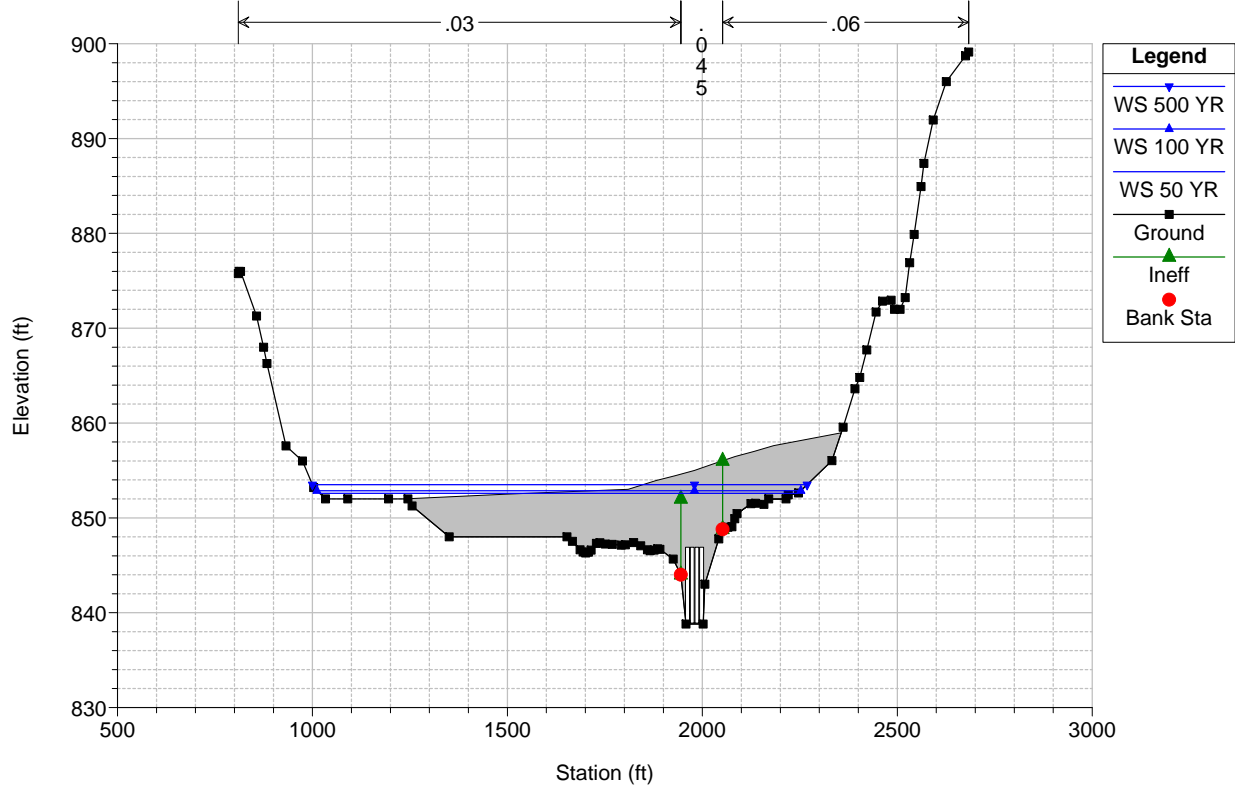
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert



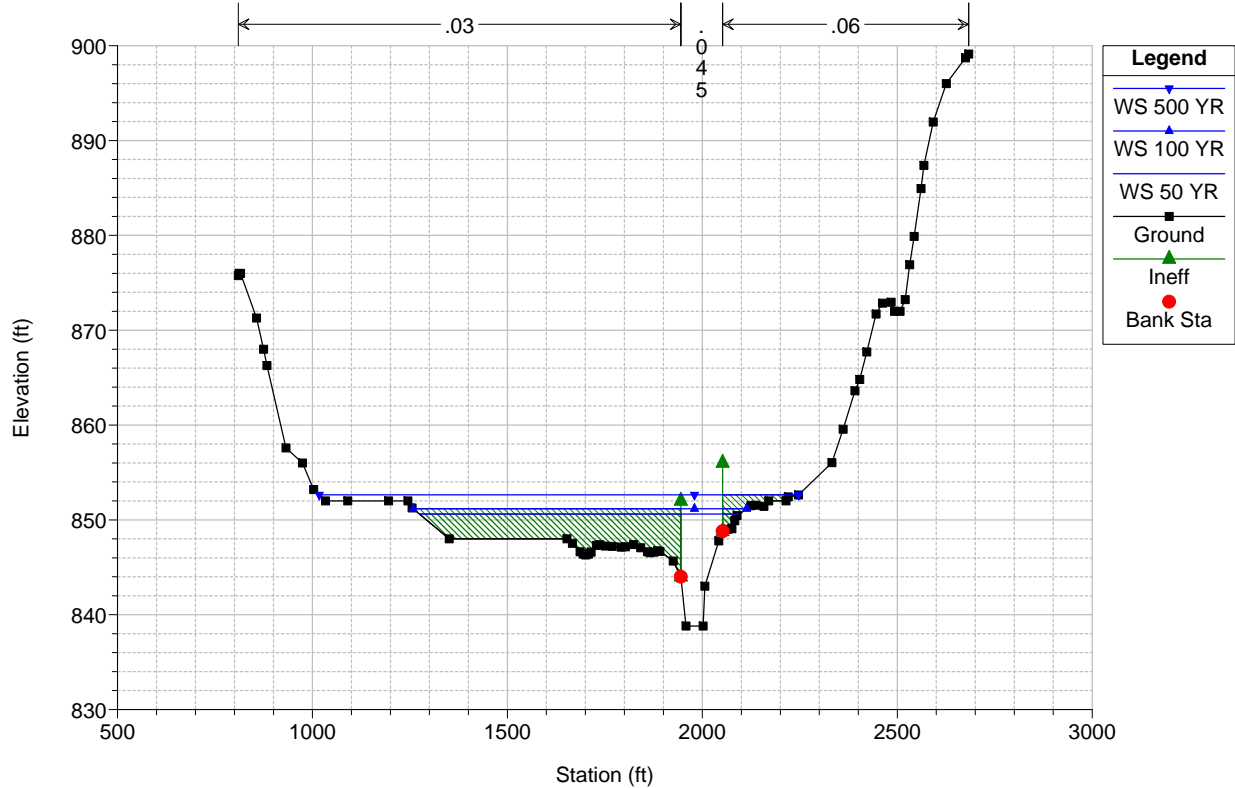
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert



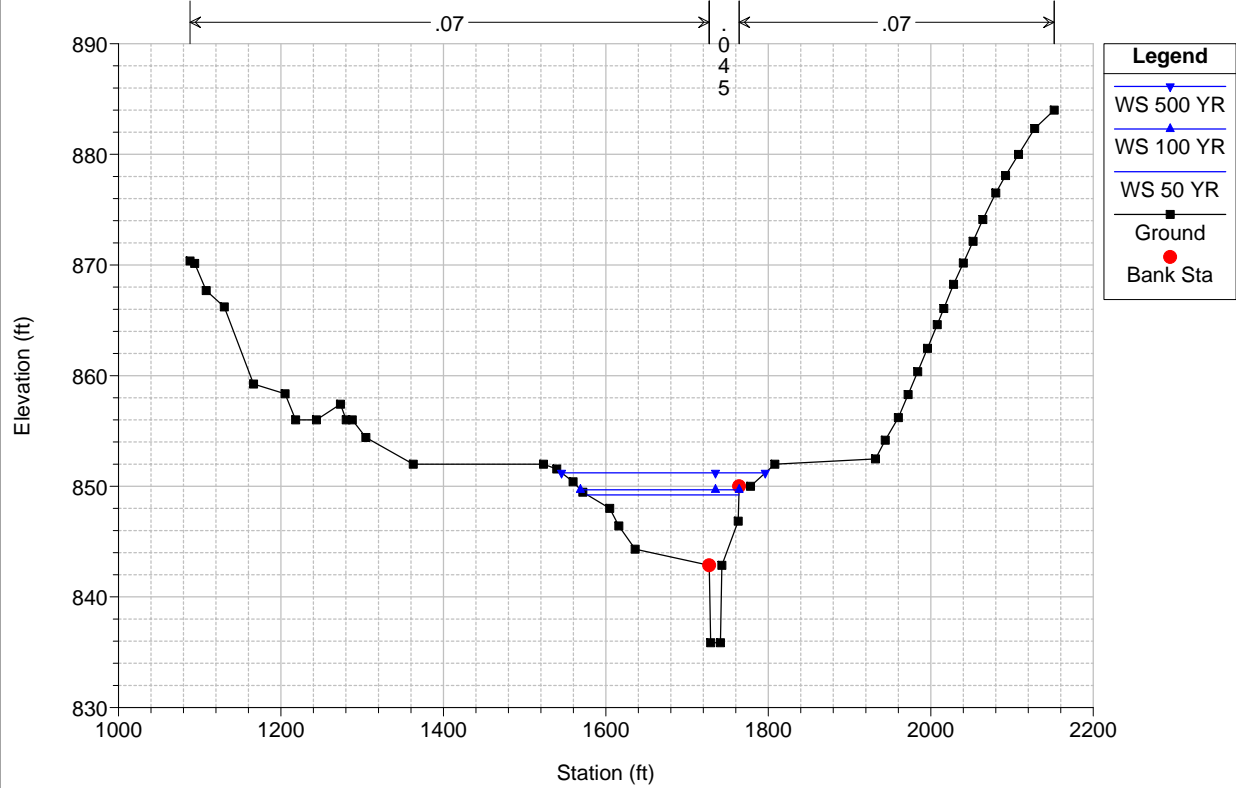
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 25370.96 MS73-D/S I85 Culvert



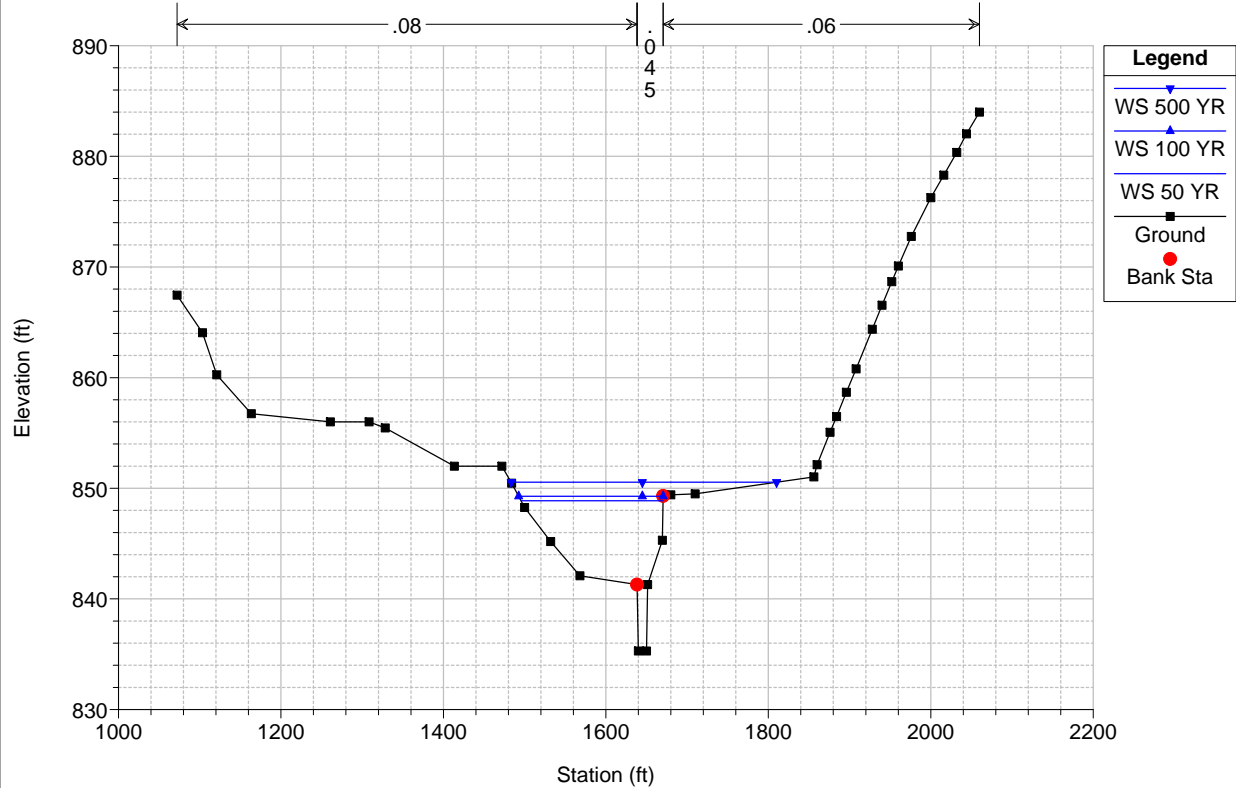
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24668.16 MS72



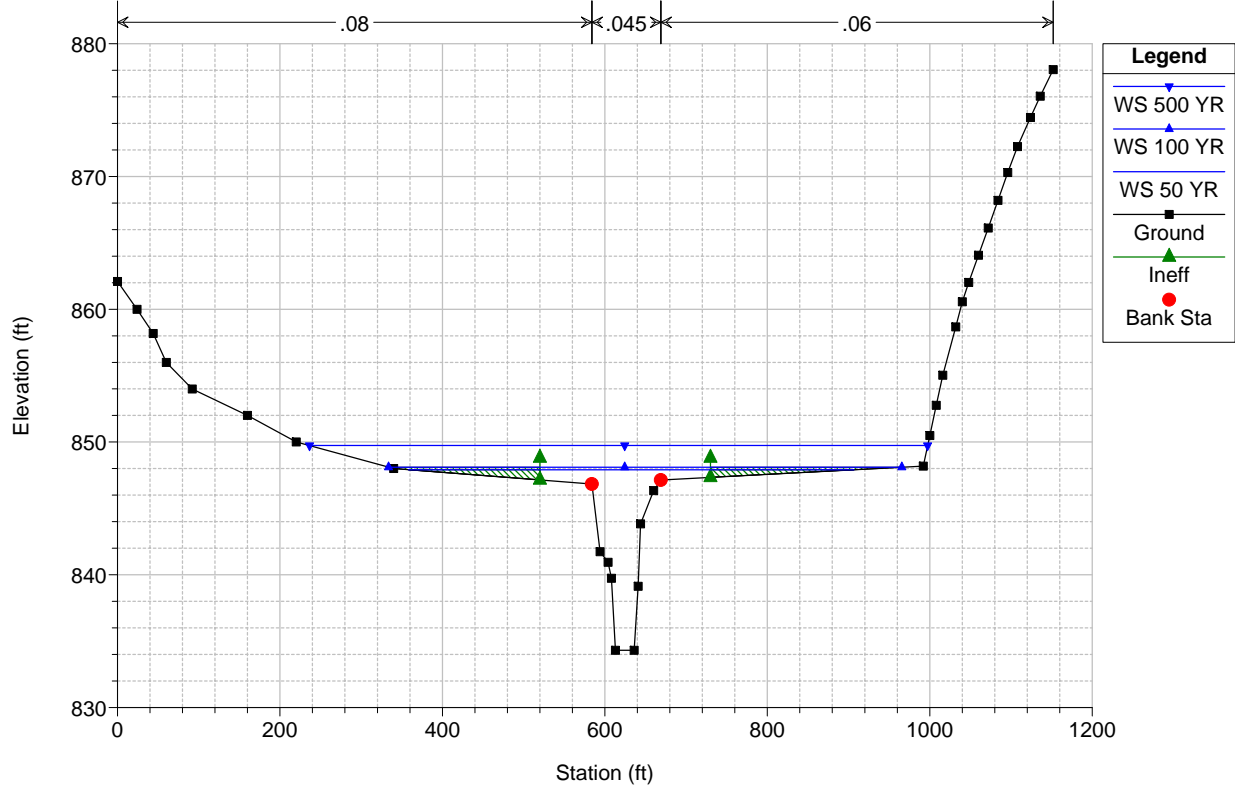
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24541.44 MS71

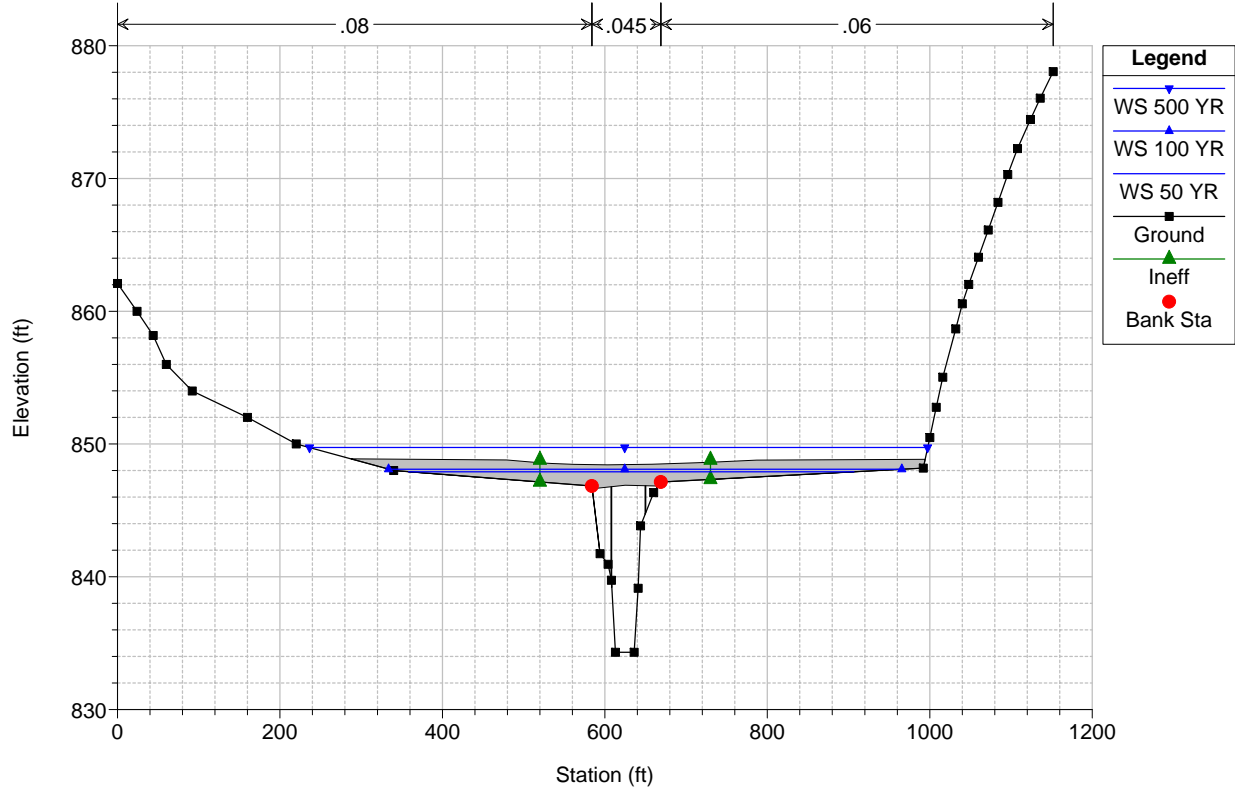




Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive

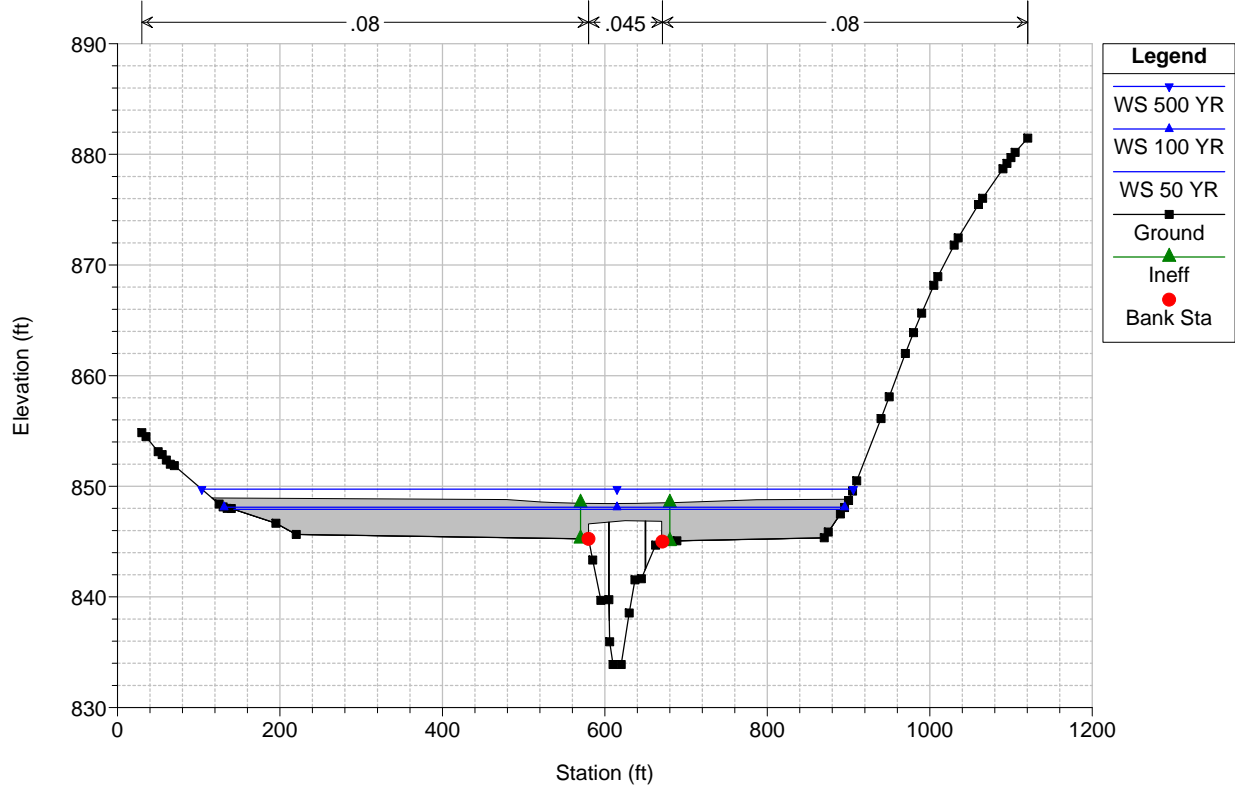


Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



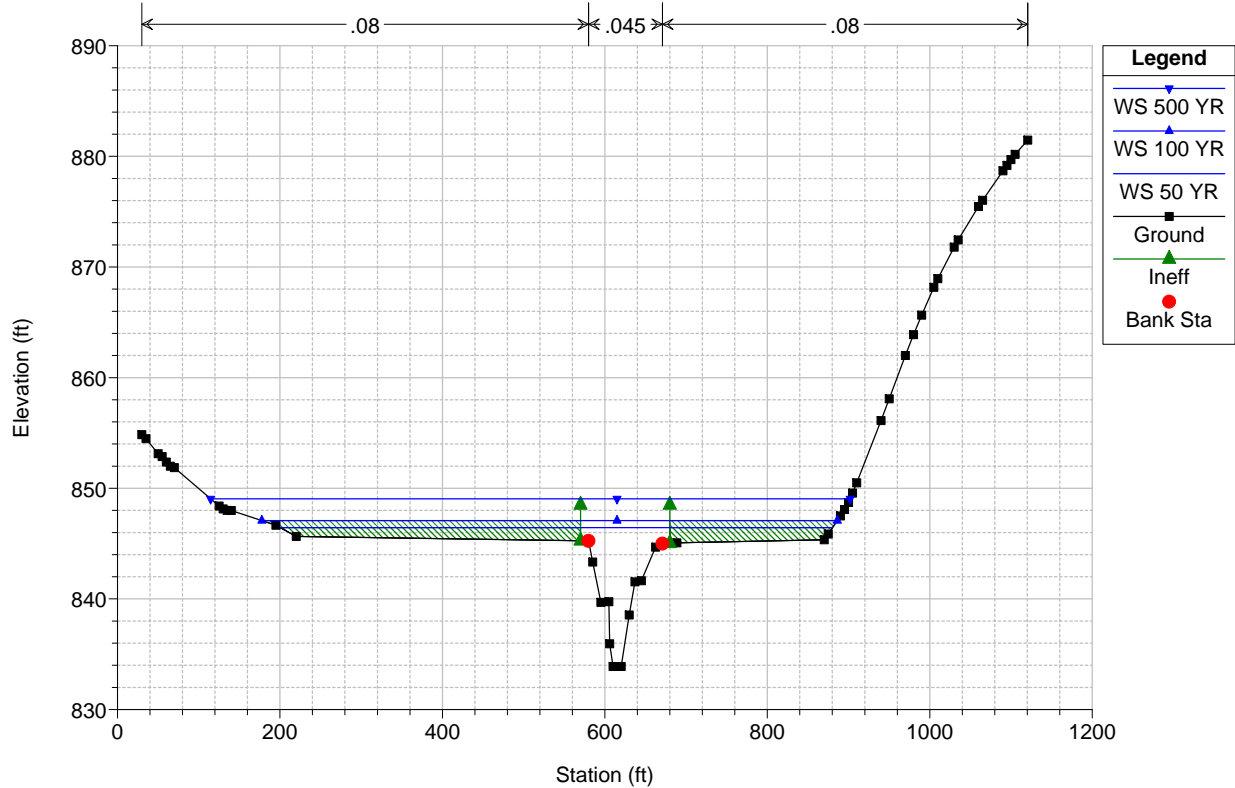
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



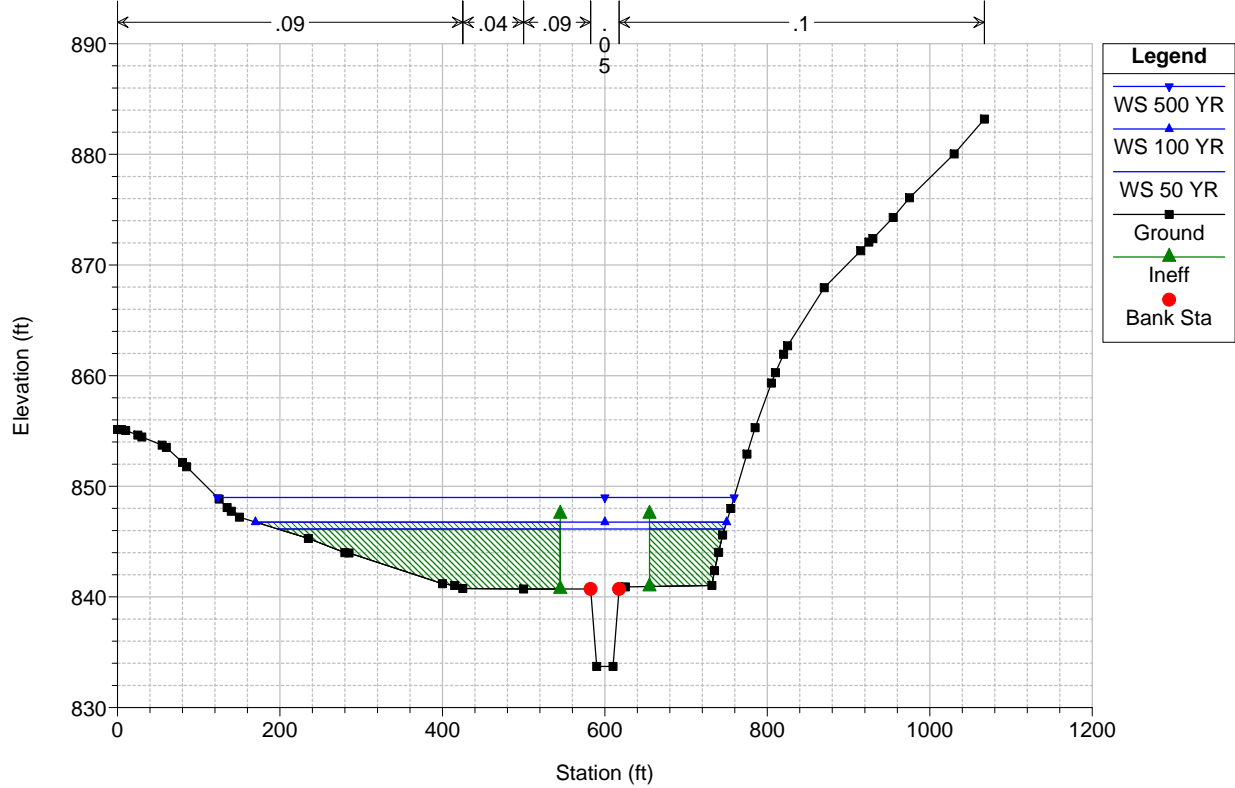
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive



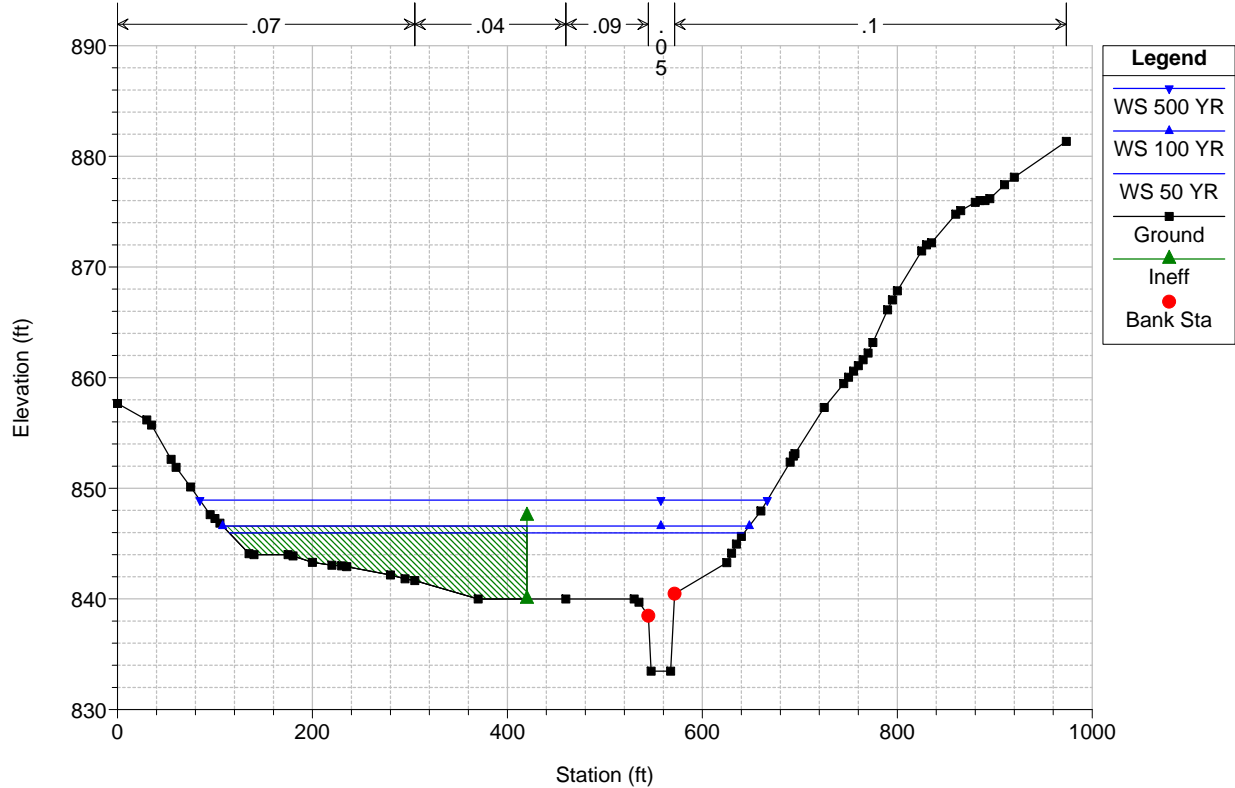
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24156 MS68



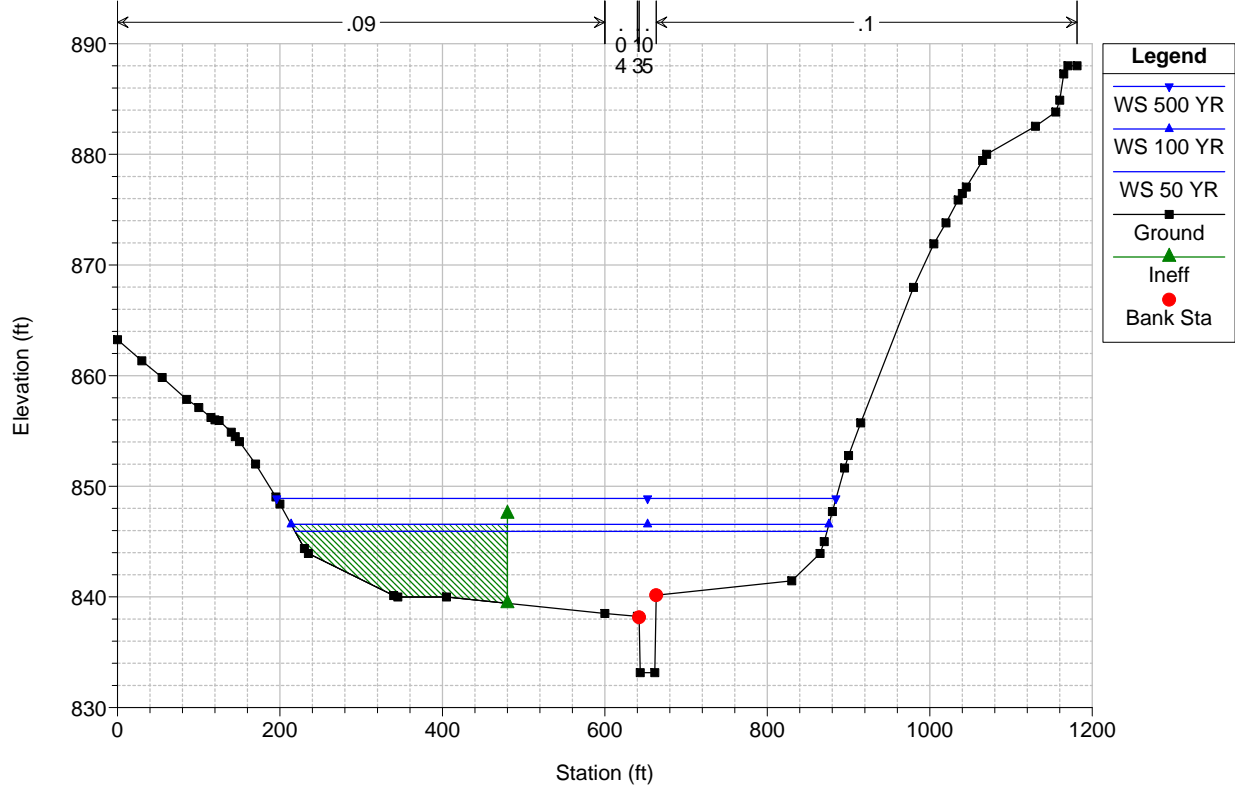
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 24029.28 MS67



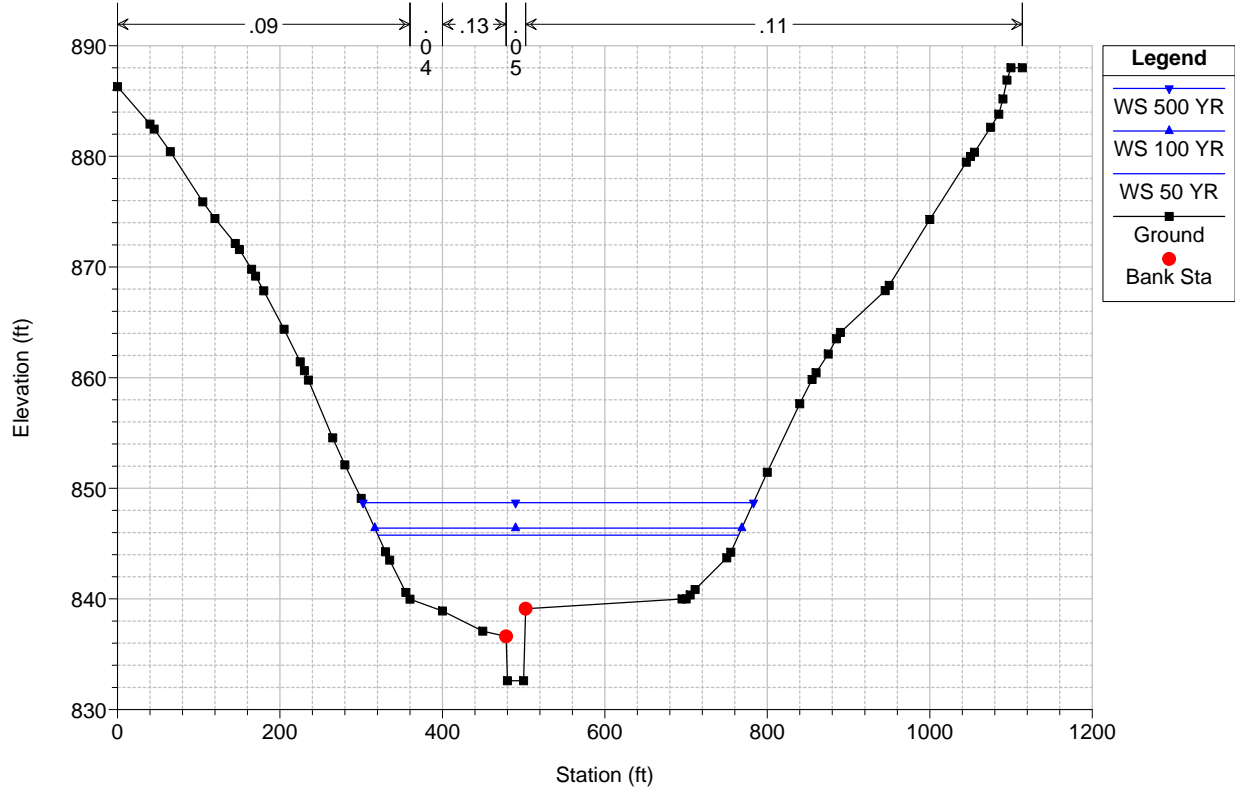
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23860.32 MS66



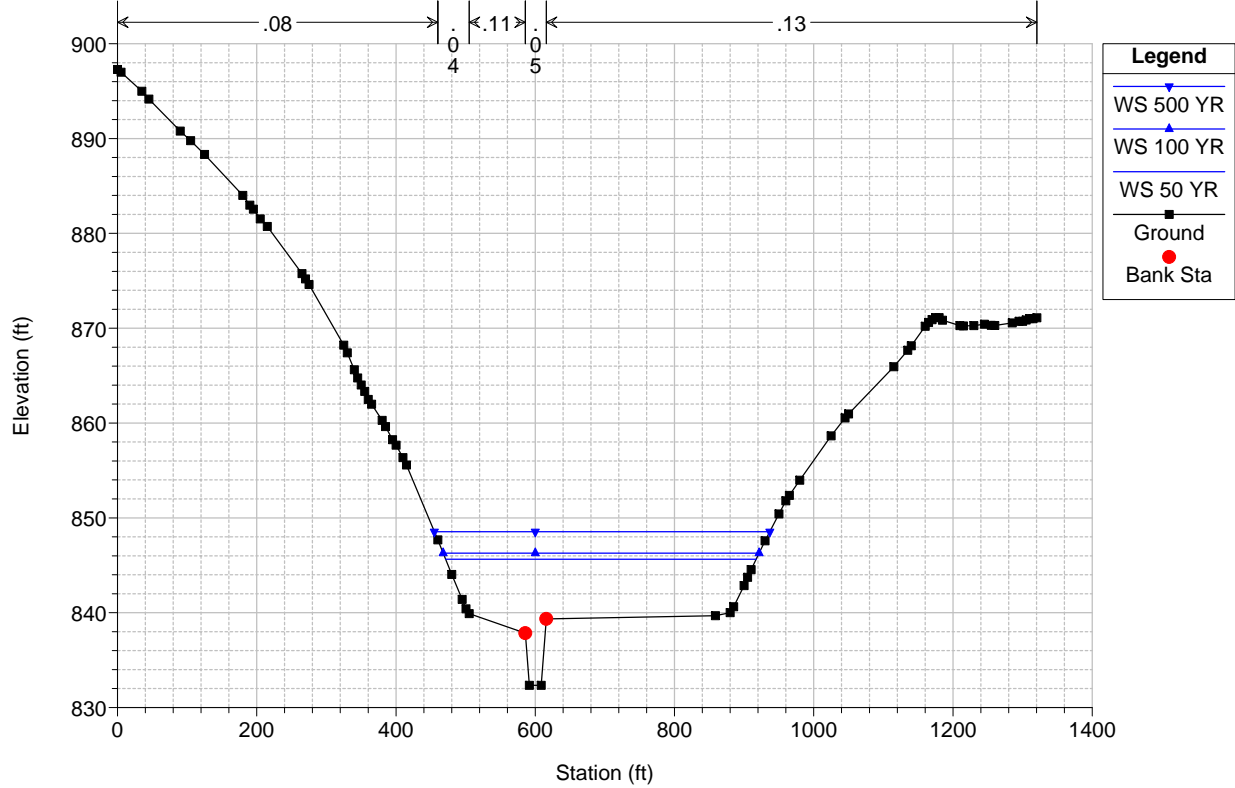
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23596.32 MS65



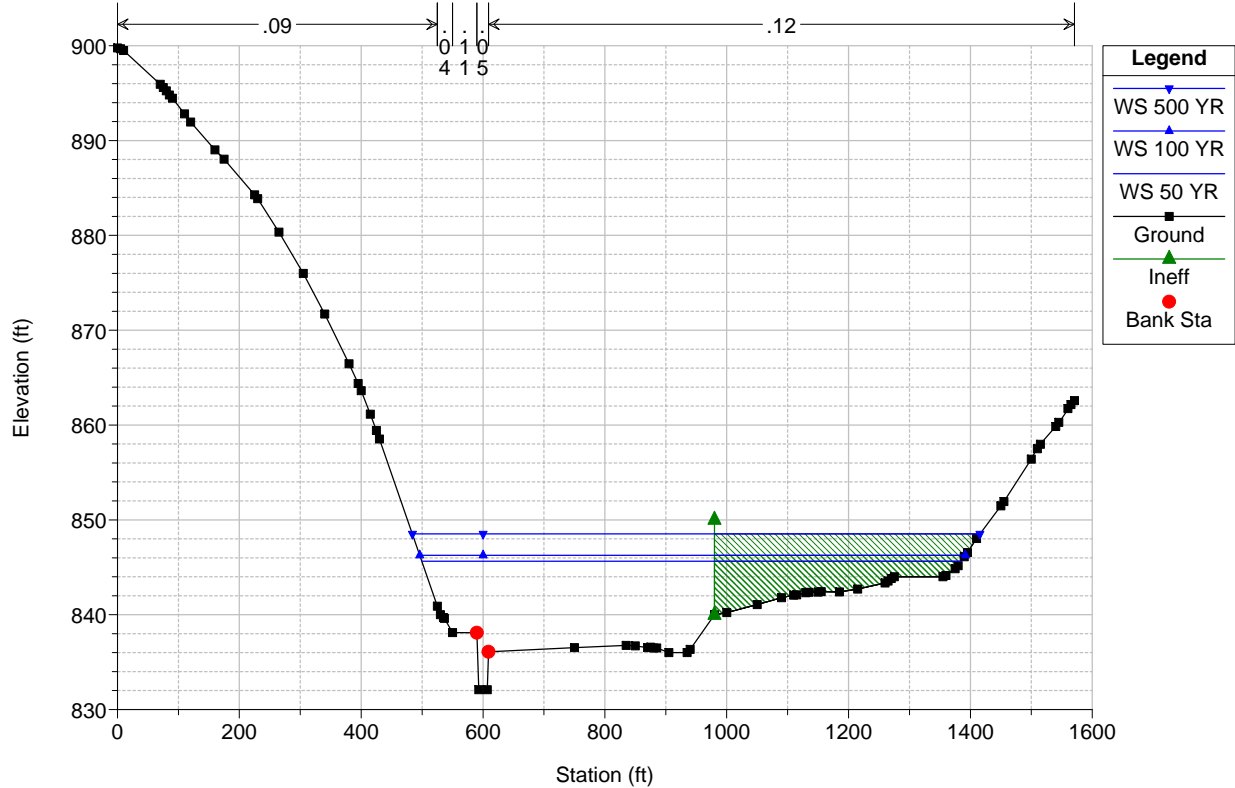
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23453.76 MS64



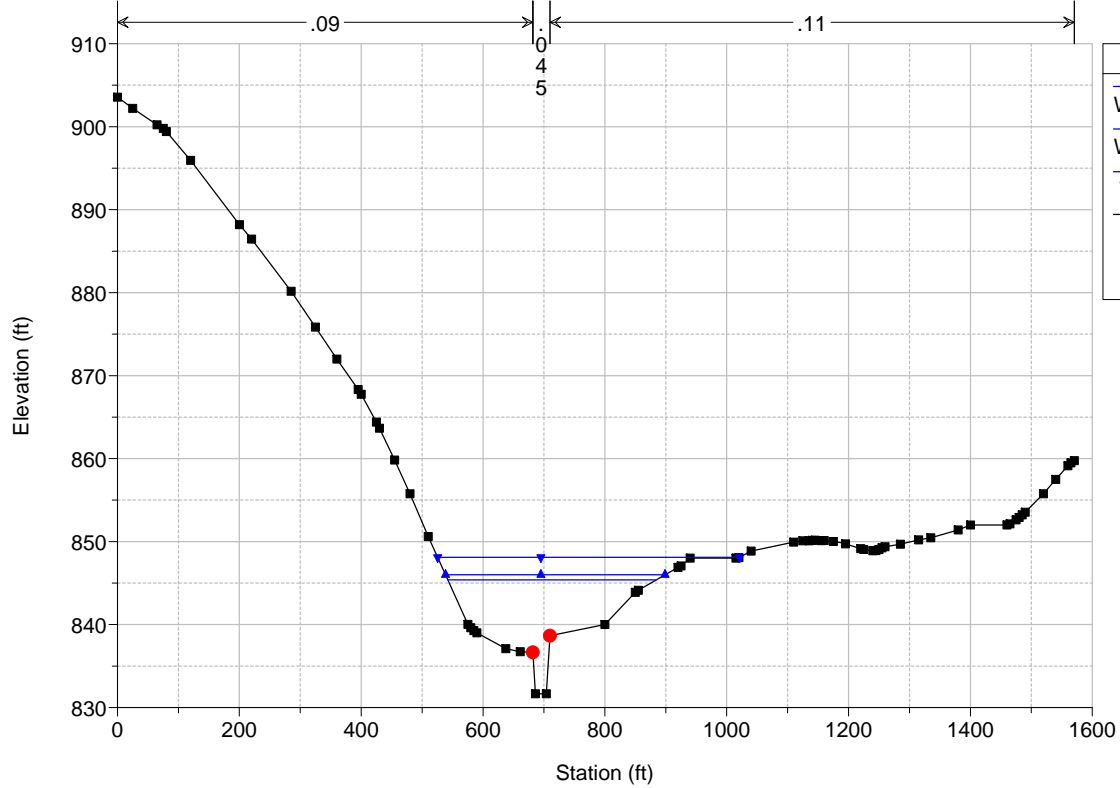
Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 23327.04 MS63



Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

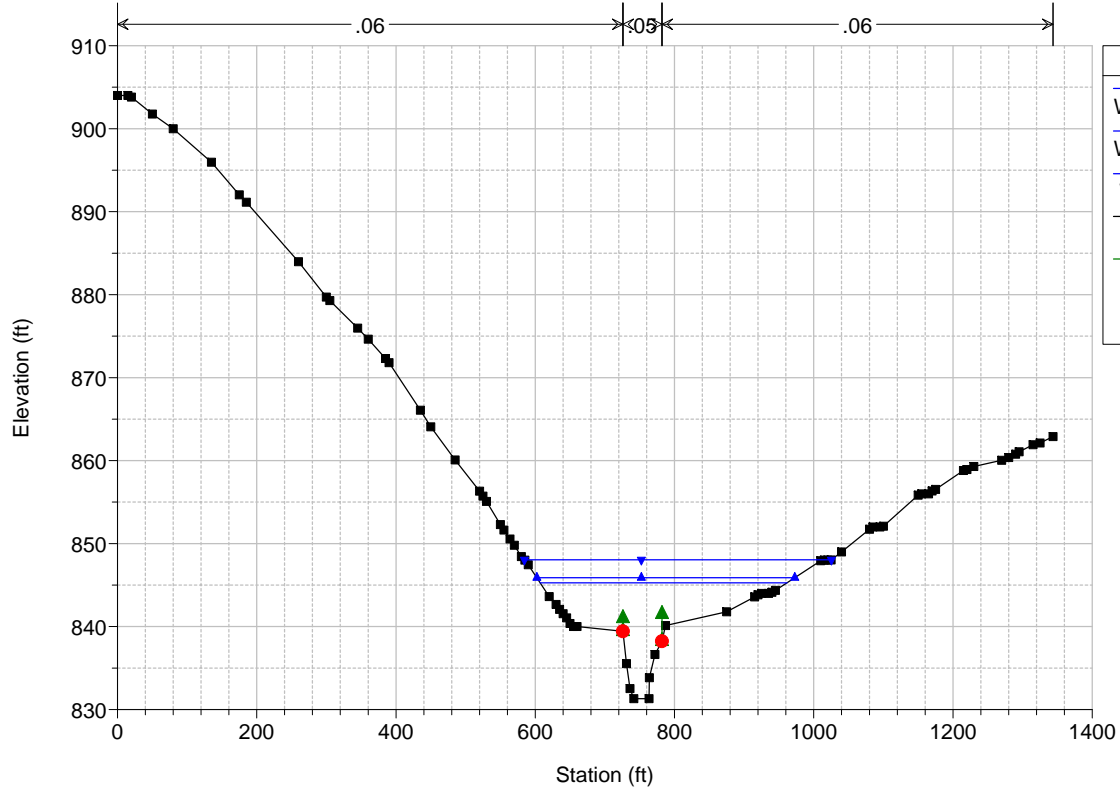
River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with square
Ground	Black line with square
Bank Sta	Red circle

Rocky Creek\_CLOMR Plan: Existing\_Corrected Effective 1/18/2019

River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with square
Ground	Black line with square
Ineff	Green triangle
Bank Sta	Red circle

HEC-RAS Plan: Existing\_CorrEff River: MAIN Reach: REACH 2

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	29985.12	50 YR	4111.00	848.24	860.50	857.77	861.24	0.002644	7.79	1077.76	429.22	0.45
REACH 2	29985.12	100 YR	4824.50	848.24	860.62	858.50	861.56	0.003377	8.88	1129.41	436.47	0.52
REACH 2	29985.12	500 YR	8461.20	848.24	863.56	861.63	864.09	0.001868	7.95	2588.45	534.36	0.40
REACH 2	29958.72	Bridge										
REACH 2	29927.04	50 YR	4111.00	848.15	857.89	857.89	859.20	0.006885	10.41	769.92	368.57	0.71
REACH 2	29927.04	100 YR	4824.50	848.15	858.29	858.29	859.62	0.006865	10.81	927.17	413.57	0.71
REACH 2	29927.04	500 YR	8461.20	848.15	860.72	859.72	861.44	0.003589	9.50	2253.25	660.42	0.54
REACH 2	29700	50 YR	4111.00	847.78	858.02	855.21	858.14	0.000702	3.21	2023.90	549.81	0.19
REACH 2	29700	100 YR	4824.50	847.78	858.54	855.50	858.67	0.000671	3.26	2310.42	558.92	0.19
REACH 2	29700	500 YR	8461.20	847.78	860.75	856.66	860.91	0.000598	3.55	3589.24	618.29	0.19
REACH 2	29573.28	50 YR	4111.00	847.57	857.97		858.04	0.000650	2.52	2536.68	667.47	0.15
REACH 2	29573.28	100 YR	4824.50	847.57	858.49		858.57	0.000615	2.54	2888.77	677.63	0.14
REACH 2	29573.28	500 YR	8461.20	847.57	860.72		860.82	0.000539	2.73	4454.21	729.39	0.14
REACH 2	29362.08	50 YR	4111.00	847.23	857.85	854.39	857.89	0.000552	2.86	3164.09	662.51	0.16
REACH 2	29362.08	100 YR	4824.50	847.23	858.38	854.59	858.42	0.000550	2.95	3515.85	672.23	0.16
REACH 2	29362.08	500 YR	8461.20	847.23	860.62	855.35	860.68	0.000550	3.38	5116.68	747.20	0.17
REACH 2	29203.68	50 YR	4111.00	846.96	857.69	854.77	857.77	0.001242	3.49	2325.56	521.15	0.21
REACH 2	29203.68	100 YR	4824.50	846.96	858.22	855.00	858.30	0.001222	3.61	2602.21	525.88	0.21
REACH 2	29203.68	500 YR	8461.20	846.96	860.45	855.95	860.56	0.001196	4.13	3800.39	547.75	0.22
REACH 2	28944.96	50 YR	4111.00	846.54	857.04	855.11	857.26	0.001712	5.40	1349.76	317.39	0.31
REACH 2	28944.96	100 YR	4824.50	846.54	857.57	855.36	857.80	0.001670	5.53	1518.93	320.96	0.31
REACH 2	28944.96	500 YR	8461.20	846.54	859.77	856.37	860.05	0.001611	6.22	2241.98	336.73	0.32
REACH 2	28707.36	50 YR	4111.00	846.15	856.90		856.99	0.000521	3.39	2112.44	441.79	0.19
REACH 2	28707.36	100 YR	4824.50	846.15	857.43		857.53	0.000529	3.54	2348.09	449.77	0.19
REACH 2	28707.36	500 YR	8461.20	846.15	859.63		859.77	0.000566	4.15	3376.01	483.11	0.20
REACH 2	28570.08	50 YR	4111.00	845.93	856.86		856.91	0.000525	2.91	2829.07	541.31	0.16
REACH 2	28570.08	100 YR	4824.50	845.93	857.39		857.44	0.000541	3.05	3117.46	548.15	0.16
REACH 2	28570.08	500 YR	8461.20	845.93	859.60		859.68	0.000606	3.65	4361.56	579.28	0.18
REACH 2	28374.72	50 YR	4111.00	845.61	856.64		856.75	0.001362	4.38	2282.30	466.03	0.24
REACH 2	28374.72	100 YR	4824.50	845.61	857.16		857.28	0.001368	4.53	2527.07	471.62	0.24
REACH 2	28374.72	500 YR	8461.20	845.61	859.32		859.50	0.001436	5.23	3575.51	497.53	0.25
REACH 2	28216.32	50 YR	4111.00	845.36	855.97		856.38	0.003808	7.14	1157.18	269.30	0.39
REACH 2	28216.32	100 YR	4824.50	845.36	856.48		856.91	0.003777	7.35	1299.35	278.99	0.40
REACH 2	28216.32	500 YR	8461.20	845.36	858.60		859.11	0.003785	8.30	1921.81	311.29	0.41
REACH 2	27999.84	50 YR	4111.00	845.00	854.42		855.27	0.006609	8.96	725.91	186.27	0.53
REACH 2	27999.84	100 YR	4824.50	845.00	854.89		855.79	0.006763	9.38	814.44	191.90	0.54
REACH 2	27999.84	500 YR	8461.20	845.00	856.67		857.91	0.007902	11.36	1174.25	213.38	0.60
REACH 2	27809.76	50 YR	4111.00	843.46	854.04		854.51	0.002194	7.05	1081.77	230.47	0.40
REACH 2	27809.76	100 YR	4824.50	843.46	854.46		854.99	0.002395	7.58	1180.09	234.28	0.42
REACH 2	27809.76	500 YR	8461.20	843.46	855.99		856.88	0.003511	10.10	1549.65	249.00	0.52
REACH 2	27572.16	50 YR	4111.00	843.08	853.73		854.02	0.001437	5.79	1426.47	355.40	0.33
REACH 2	27572.16	100 YR	4824.50	843.08	854.15		854.46	0.001507	6.11	1576.29	360.77	0.34
REACH 2	27572.16	500 YR	8461.20	843.08	855.62		856.11	0.002024	7.76	2122.27	379.41	0.40
REACH 2	27339.84	50 YR	4111.00	842.66	853.65		853.72	0.000669	3.30	2358.65	476.29	0.18
REACH 2	27339.84	100 YR	4824.50	842.66	854.07		854.14	0.000730	3.53	2556.57	485.23	0.19
REACH 2	27339.84	500 YR	8461.20	842.66	855.51		855.65	0.001092	4.70	3279.87	516.49	0.24
REACH 2	27155.04	50 YR	4111.00	842.33	853.51		849.95	0.000735	4.37	2189.91	415.45	0.24
REACH 2	27155.04	100 YR	4824.50	842.33	853.90		850.24	0.000825	4.74	2354.66	420.64	0.25
REACH 2	27155.04	500 YR	8461.20	842.33	855.23		851.39	0.001361	6.58	2927.78	438.17	0.33
REACH 2	27091.68	Culvert										
REACH 2	27033.6	50 YR	4111.00	842.12	853.36		850.02	0.000820	4.67	1759.50	345.34	0.26
REACH 2	27033.6	100 YR	4824.50	842.12	853.73		850.42	0.000931	5.10	1886.88	348.84	0.28
REACH 2	27033.6	500 YR	8461.20	842.12	854.99		851.83	0.001569	7.13	2334.83	360.34	0.36
REACH 2	26806.56	50 YR	4111.00	841.72	853.26		853.33	0.000382	3.11	2626.95	486.77	0.16
REACH 2	26806.56	100 YR	4824.50	841.72	853.61		853.70	0.000436	3.39	2798.93	489.67	0.17
REACH 2	26806.56	500 YR	8461.20	841.72	854.79		854.97	0.000765	4.78	3380.18	499.36	0.23
REACH 2	26574.24	50 YR	4111.00	841.31	853.24		853.28	0.000104	1.62	2661.18	446.13	0.08
REACH 2	26574.24	100 YR	4824.50	841.31	853.59		853.64	0.000121	1.78	2817.55	449.18	0.09
REACH 2	26574.24	500 YR	8461.20	841.31	854.75		854.85	0.000223	2.57	3343.63	459.30	0.12

HEC-RAS Plan: Existing\_CorrEff River: MAIN Reach: REACH 2 (Continued)

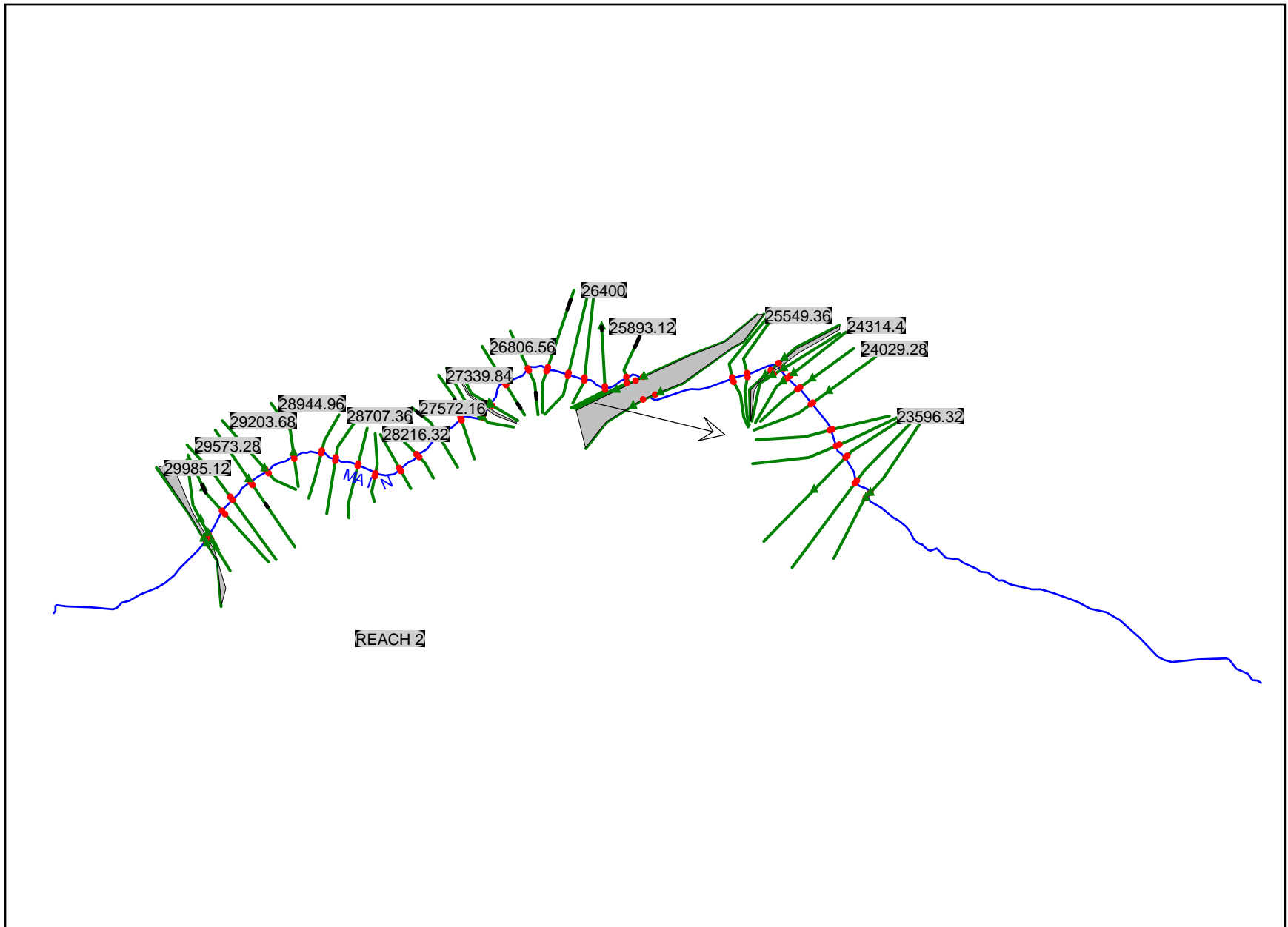
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	26400	50 YR	4111.00	840.00	853.13	848.27	853.23	0.000435	3.82	2752.00	591.95	0.19
REACH 2	26400	100 YR	4824.50	840.00	853.46	848.64	853.58	0.000520	4.25	2894.20	605.09	0.21
REACH 2	26400	500 YR	8461.20	840.00	854.49	850.34	854.74	0.001063	6.41	3344.23	647.26	0.31
REACH 2	26220.48	50 YR	4111.00	842.09	853.15		853.18	0.000106	1.01	3103.77	518.50	0.06
REACH 2	26220.48	100 YR	4824.50	842.09	853.48		853.51	0.000125	1.12	3280.53	545.74	0.06
REACH 2	26220.48	500 YR	8461.20	842.09	854.52		854.59	0.000332	1.94	3908.74	648.61	0.10
REACH 2	26083.2	50 YR	4111.00	839.43	853.13		853.16	0.000172	1.51	2911.18	596.68	0.07
REACH 2	26083.2	100 YR	4824.50	839.43	853.46		853.49	0.000195	1.64	3109.78	607.60	0.08
REACH 2	26083.2	500 YR	8461.20	839.43	854.46		854.55	0.000382	2.41	3765.67	676.29	0.11
REACH 2	25893.12	50 YR	4111.00	840.82	853.09	847.43	853.13	0.000202	2.02	2673.42	561.41	0.11
REACH 2	25893.12	100 YR	4824.50	840.82	853.41	847.65	853.46	0.000231	2.21	2859.36	585.29	0.12
REACH 2	25893.12	500 YR	8461.20	840.82	854.38	848.58	854.49	0.000416	3.13	3434.26	603.24	0.16
REACH 2	25687.2	50 YR	3930.80	839.50	853.08		853.11	0.000092	1.51	3579.94	542.05	0.07
REACH 2	25687.2	100 YR	4585.70	839.50	853.40		853.44	0.000111	1.68	3755.90	552.26	0.08
REACH 2	25687.2	500 YR	7863.10	839.50	854.36		854.43	0.000230	2.54	4295.31	576.67	0.12
REACH 2	25549.36	50 YR	3930.80	839.40	853.03	845.37	853.07	0.000256	2.30	3251.39	1111.37	0.12
REACH 2	25549.36	100 YR	4585.70	839.40	853.35	845.99	853.40	0.000281	2.46	3524.55	1125.05	0.13
REACH 2	25549.36	500 YR	7863.10	839.40	854.28	848.57	854.36	0.000470	3.34	4327.81	1181.06	0.16
REACH 2	25460.16		Culvert									
REACH 2	25370.96	50 YR	3930.80	838.80	850.61	844.68	850.92	0.001095	4.41	891.65	820.23	0.27
REACH 2	25370.96	100 YR	4585.70	838.80	851.17	845.24	851.53	0.001202	4.82	951.14	855.31	0.28
REACH 2	25370.96	500 YR	7863.10	838.80	852.63	847.50	852.68	0.000172	2.02	4652.59	1229.66	0.11
REACH 2	24668.16	50 YR	3930.80	835.85	849.23		849.61	0.003629	6.40	917.32	186.91	0.40
REACH 2	24668.16	100 YR	4585.70	835.85	849.68		850.12	0.003907	6.86	1004.77	195.27	0.42
REACH 2	24668.16	500 YR	7863.10	835.85	851.21		851.94	0.005458	9.05	1348.54	250.69	0.51
REACH 2	24541.44	50 YR	3930.80	835.30	848.87		849.17	0.002913	5.92	1033.03	174.76	0.36
REACH 2	24541.44	100 YR	4585.70	835.30	849.28		849.64	0.003273	6.43	1105.69	177.87	0.38
REACH 2	24541.44	500 YR	7863.10	835.30	850.55		851.23	0.005362	9.01	1434.73	326.93	0.50
REACH 2	24314.4	50 YR	3930.80	834.32	847.91	842.96	848.47	0.002672	6.09	730.21	548.37	0.39
REACH 2	24314.4	100 YR	4585.70	834.32	848.10	843.63	848.82	0.003282	6.86	770.45	631.91	0.44
REACH 2	24314.4	500 YR	7863.10	834.32	849.73	846.84	850.29	0.002660	7.03	2112.41	760.94	0.41
REACH 2	24277.44		Bridge									
REACH 2	24240.48	50 YR	3930.80	833.89	846.44	843.65	847.17	0.004191	6.90	589.08	679.84	0.49
REACH 2	24240.48	100 YR	4585.70	833.89	847.08	844.23	847.88	0.004070	7.26	659.20	708.36	0.49
REACH 2	24240.48	500 YR	7863.10	833.89	849.05	846.49	849.29	0.001491	5.20	3113.67	787.21	0.31
REACH 2	24156	50 YR	3930.80	833.72	846.14	842.99	846.80	0.003169	7.47	781.66	549.72	0.40
REACH 2	24156	100 YR	4585.70	833.72	846.76	843.52	847.51	0.003400	8.03	850.49	580.03	0.42
REACH 2	24156	500 YR	7863.10	833.72	848.99	845.62	849.07	0.000548	3.62	4215.65	636.03	0.17
REACH 2	24029.28	50 YR	3930.80	833.47	845.96	842.40	846.17	0.001352	4.84	1308.45	528.06	0.25
REACH 2	24029.28	100 YR	4585.70	833.47	846.59	842.73	846.82	0.001385	5.07	1450.02	540.34	0.25
REACH 2	24029.28	500 YR	7863.10	833.47	848.93	844.08	849.00	0.000359	2.90	4106.02	582.22	0.13
REACH 2	23860.32	50 YR	3930.80	833.15	845.92	841.28	845.98	0.000556	2.92	2390.59	654.97	0.15
REACH 2	23860.32	100 YR	4585.70	833.15	846.56	841.59	846.62	0.000564	3.05	2641.00	662.05	0.15
REACH 2	23860.32	500 YR	7863.10	833.15	848.89	842.58	848.93	0.000332	2.61	5665.13	688.45	0.12
REACH 2	23596.32	50 YR	3930.80	832.61	845.77		845.83	0.000550	3.18	2755.97	444.00	0.16
REACH 2	23596.32	100 YR	4585.70	832.61	846.40		846.46	0.000563	3.32	3039.35	451.87	0.16
REACH 2	23596.32	500 YR	7863.10	832.61	848.70		848.79	0.000684	4.08	4112.11	480.48	0.18
REACH 2	23453.76	50 YR	3930.80	832.34	845.65		845.73	0.000712	3.73	2730.40	446.15	0.19
REACH 2	23453.76	100 YR	4585.70	832.34	846.28		846.37	0.000730	3.91	3013.48	453.73	0.19
REACH 2	23453.76	500 YR	7863.10	832.34	848.55		848.68	0.000879	4.80	4076.04	481.78	0.22
REACH 2	23327.04	50 YR	3930.80	832.09	845.63	838.76	845.65	0.000248	2.13	4111.94	885.43	0.10
REACH 2	23327.04	100 YR	4585.70	832.09	846.26	838.98	846.28	0.000268	2.29	4414.28	895.59	0.11
REACH 2	23327.04	500 YR	7863.10	832.09	848.52	839.82	848.57	0.000383	3.03	5523.37	931.71	0.13
REACH 2	23110.56	50 YR	3930.80	831.66	845.39		845.55	0.000857	4.64	2002.53	342.33	0.23
REACH 2	23110.56	100 YR	4585.70	831.66	846.00		846.17	0.000919	4.96	2215.09	360.36	0.24
REACH 2	23110.56	500 YR	7863.10	831.66	848.10		848.40	0.001375	6.69	3044.39	495.49	0.30
REACH 2	22946.88	50 YR	4038.50	831.32	845.28	839.28	845.42	0.000669	3.69	1727.96	354.76	0.19
REACH 2	22946.88	100 YR	4676.40	831.32	845.89	839.83	846.03	0.000669	3.82	1949.20	370.64	0.19



HEC-RAS Plan: Existing\_CorrEff River: MAIN Reach: REACH 2 (Continued)

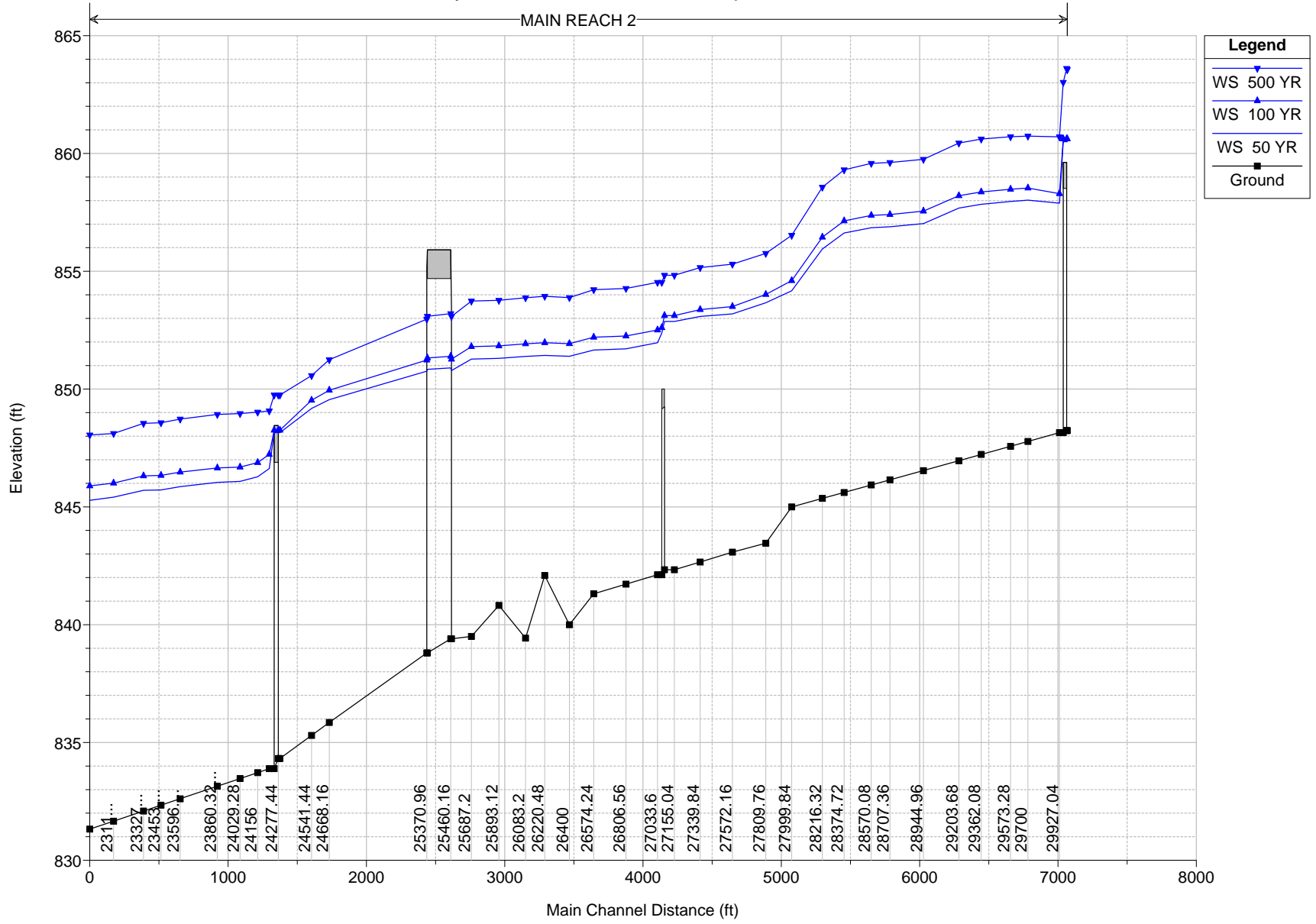
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	22946.88	500 YR	7179.80	831.32	848.05	842.46	848.21	0.000642	4.18	2811.47	440.89	0.20

**PROPOSED**

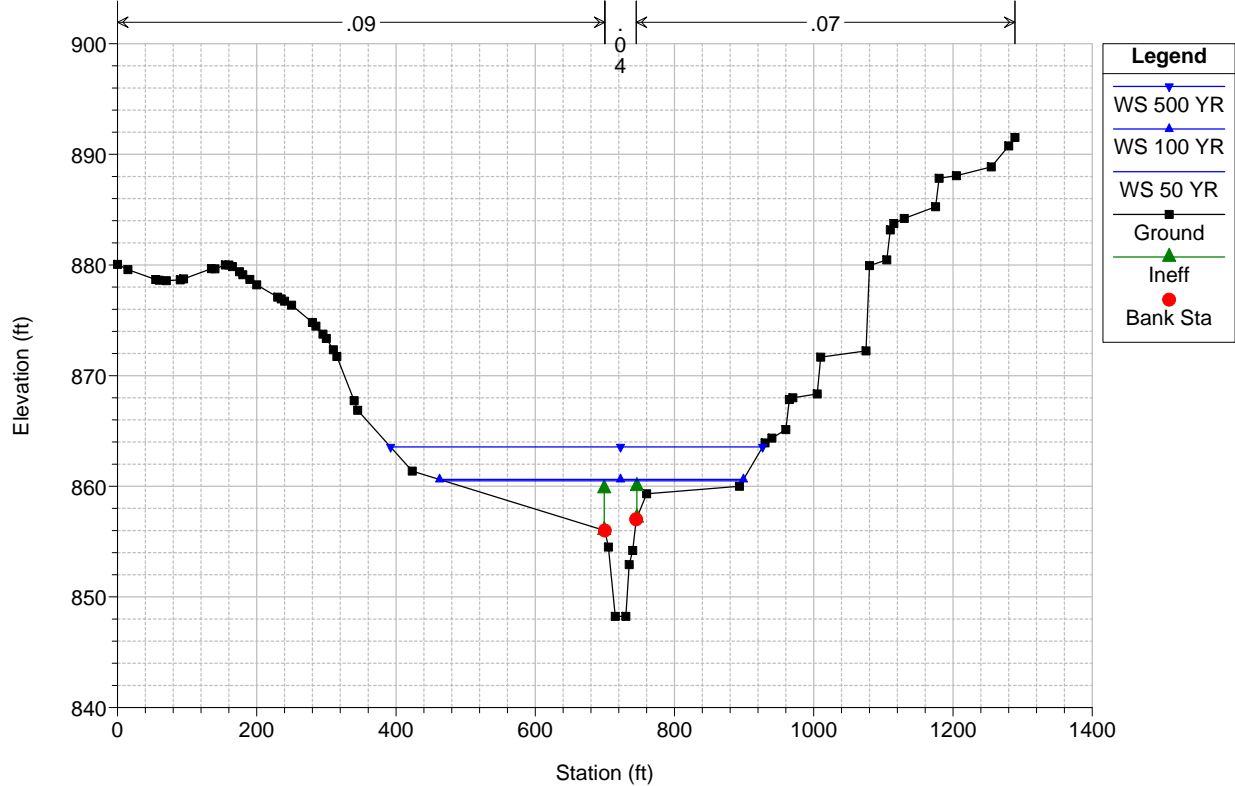


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

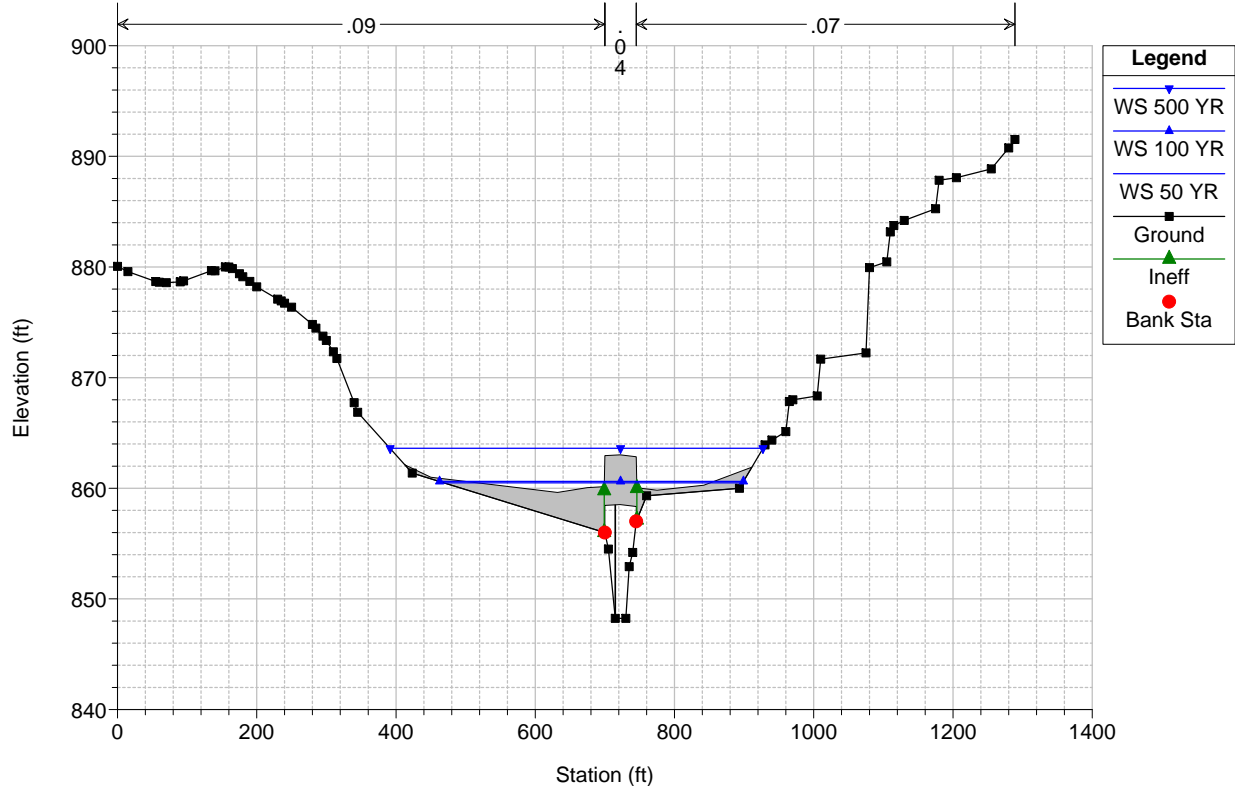
MAIN REACH 2



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford

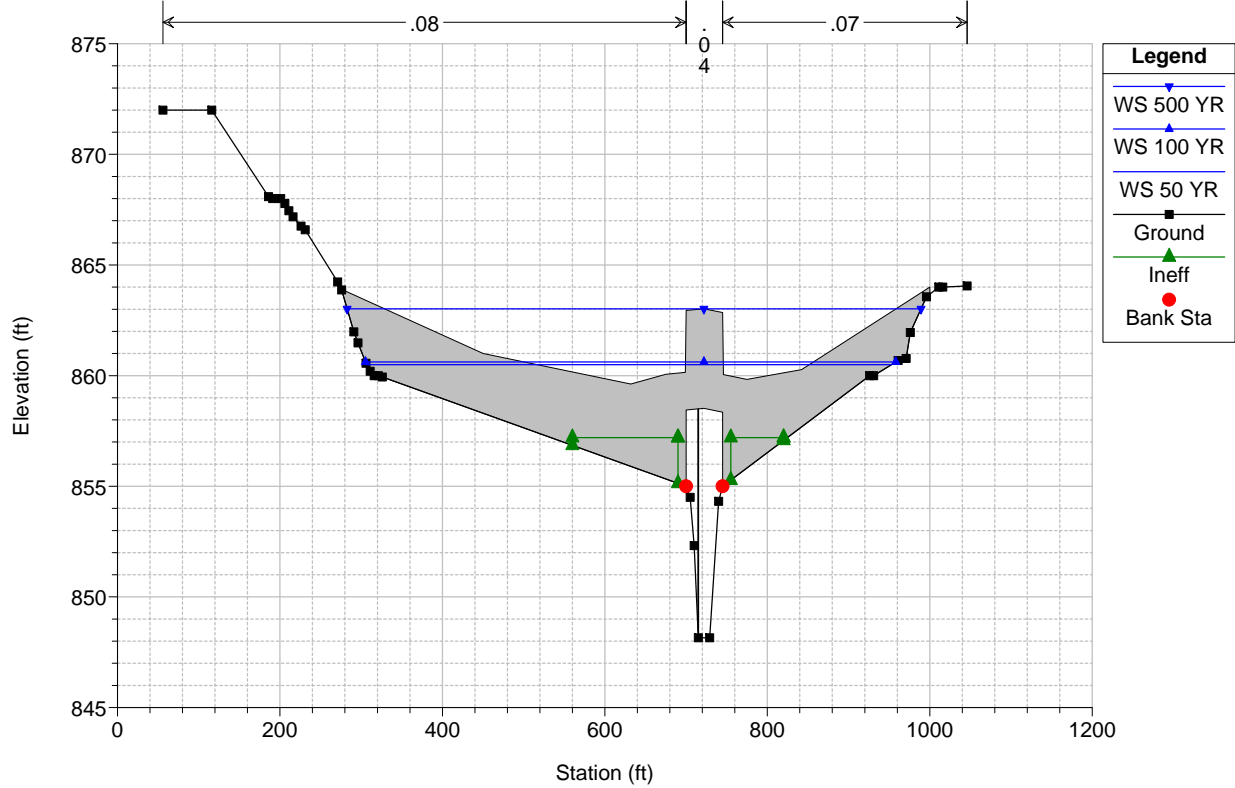


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29958.72 BR

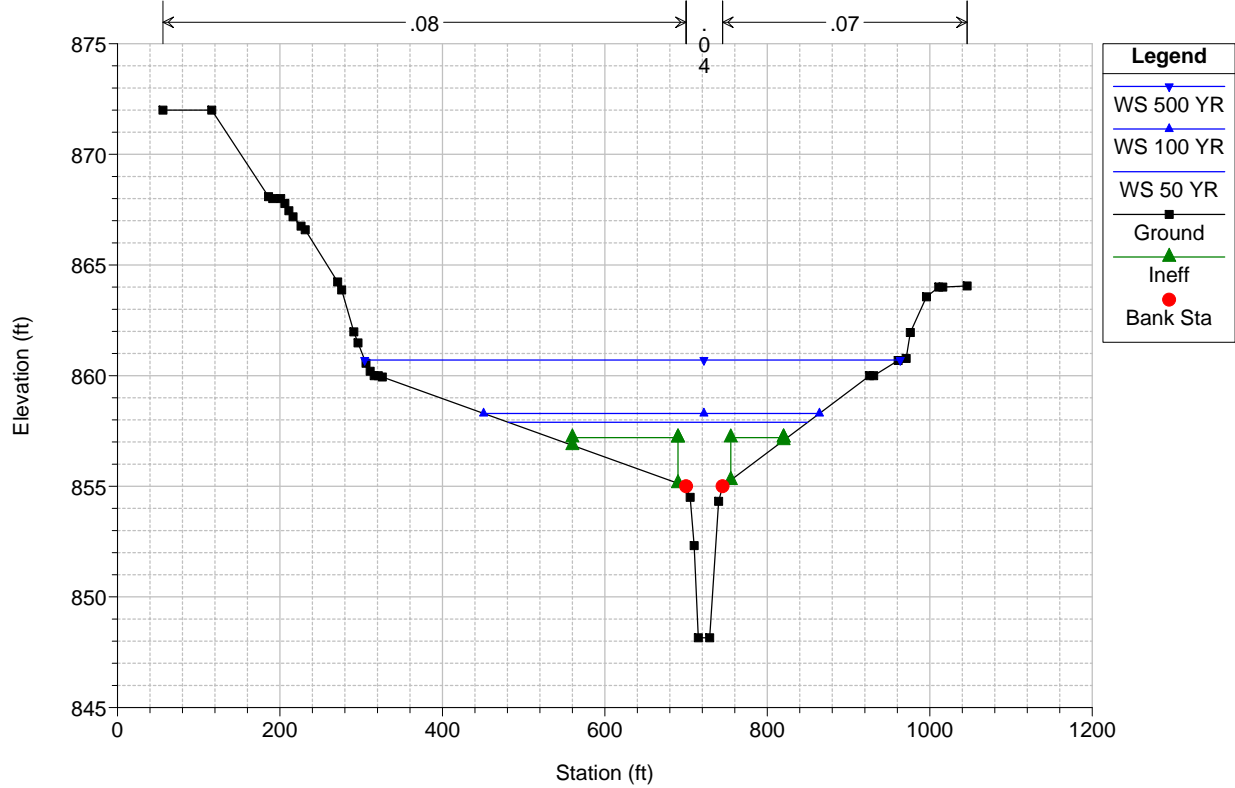


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR

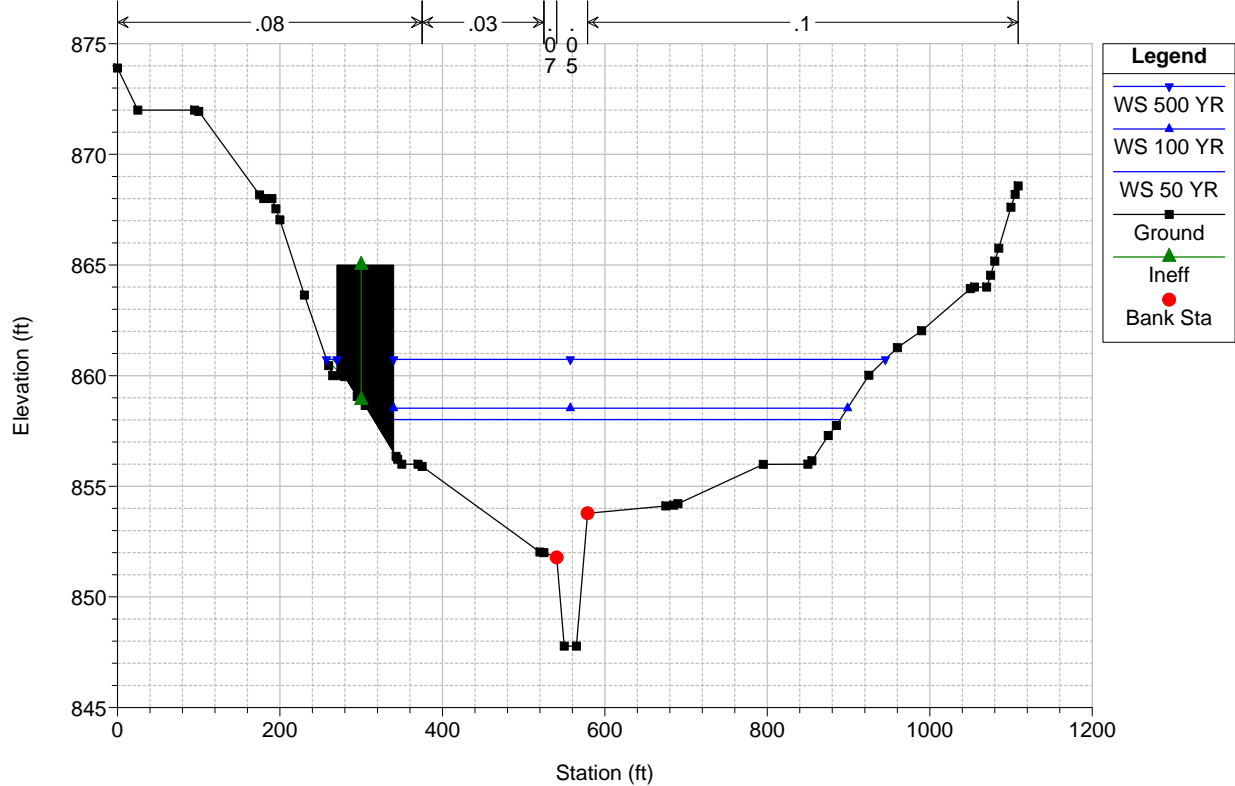


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



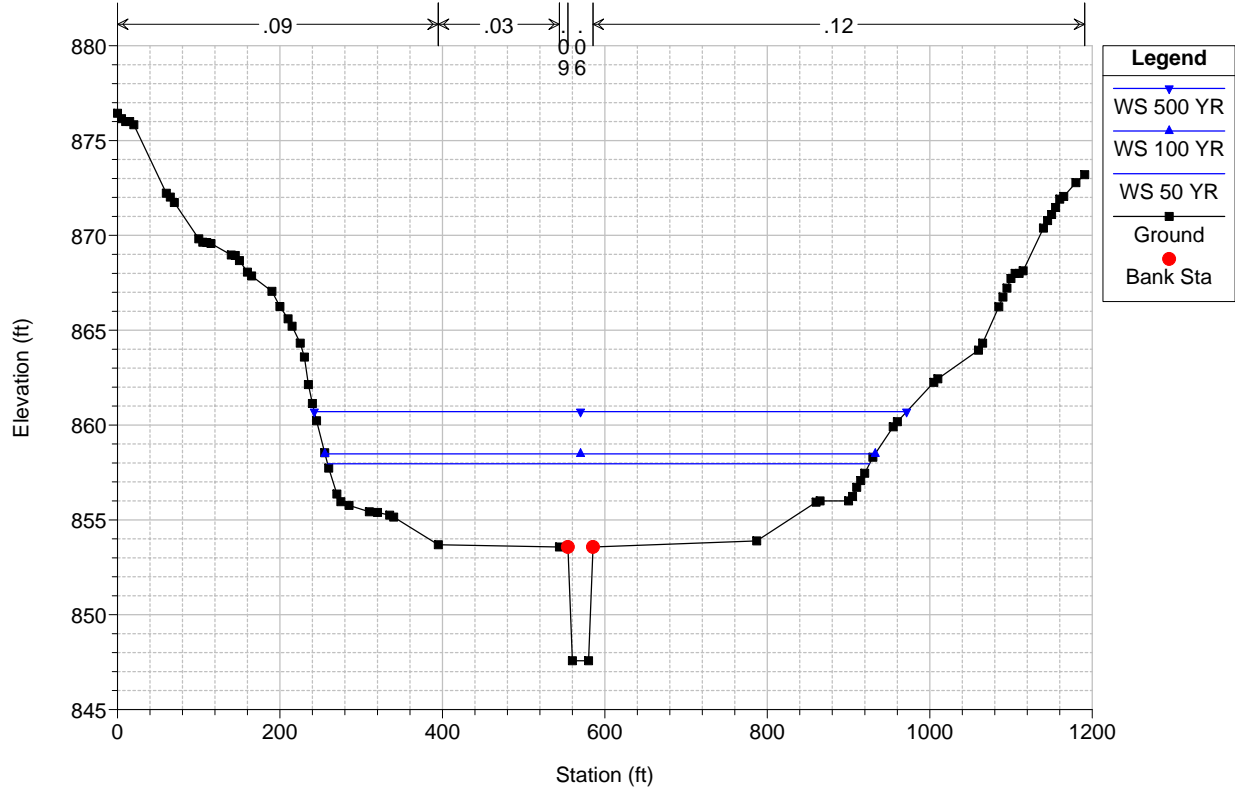
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96

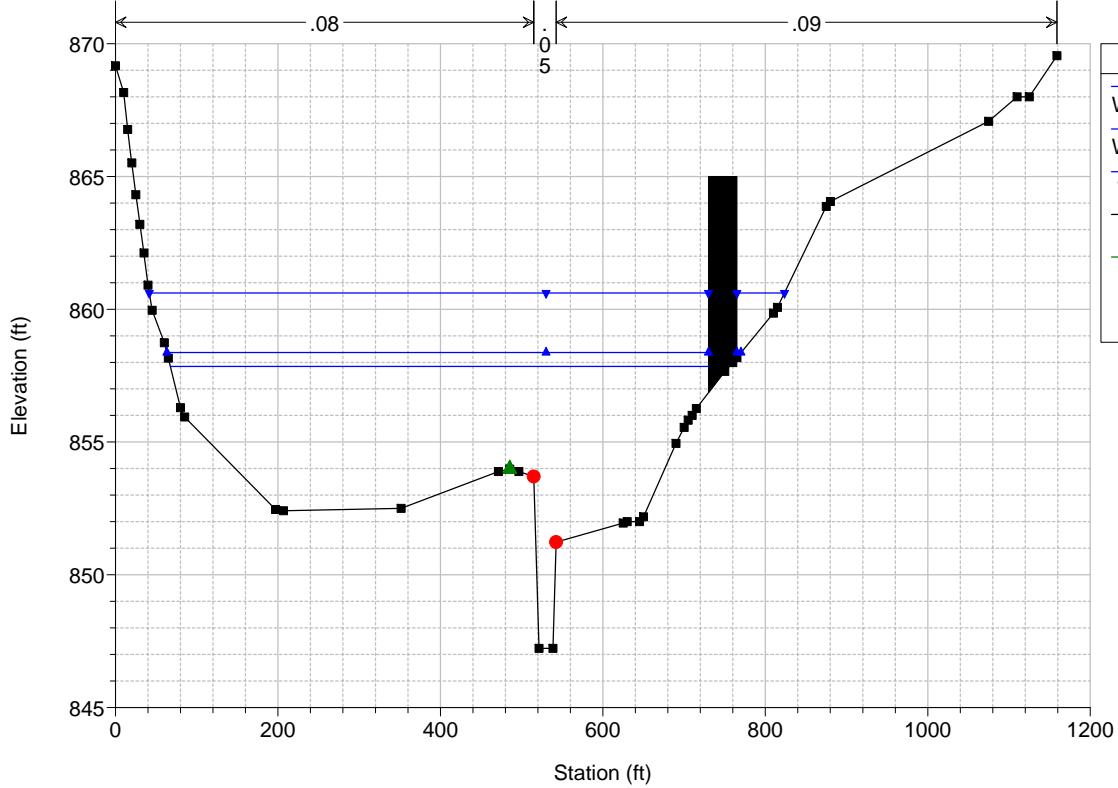


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

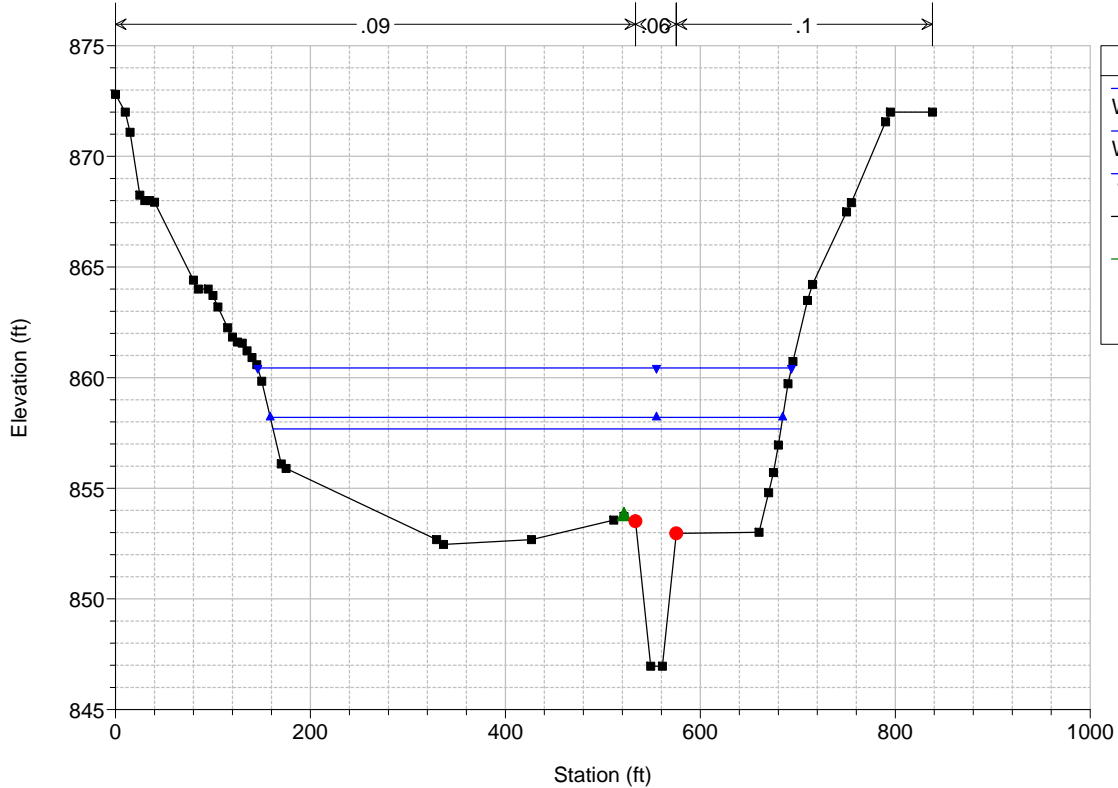
River = MAIN Reach = REACH 2 RS = 29573.28 MS95



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29362.08 MS94



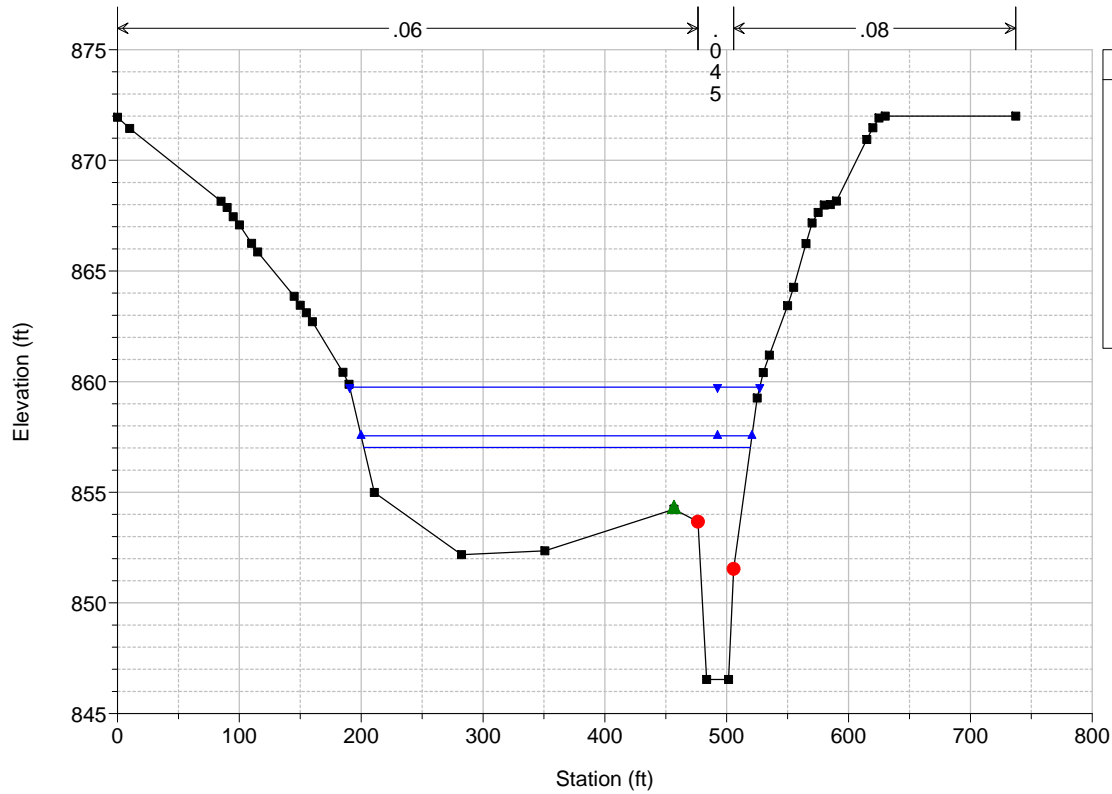
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29203.68 MS93





Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

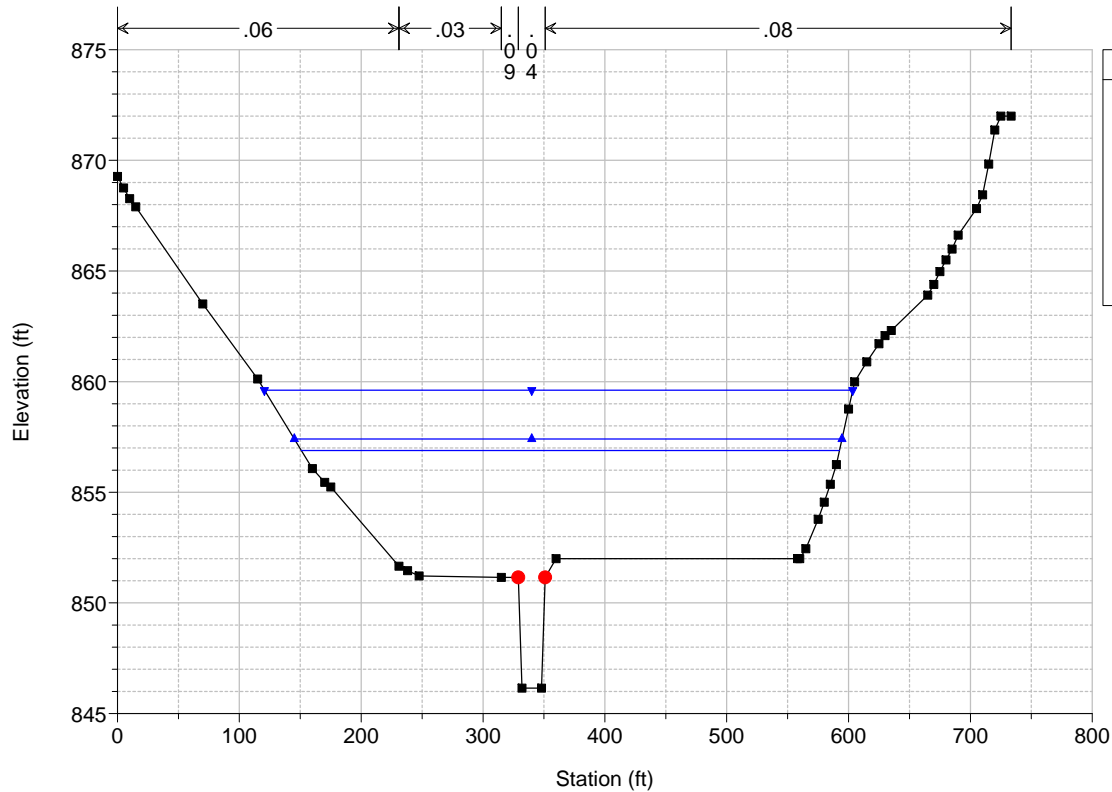
River = MAIN Reach = REACH 2 RS = 28944.96 MS92



Legend	
WS 500 YR	Blue line with downward-pointing triangles
WS 100 YR	Blue line with upward-pointing triangles
WS 50 YR	Blue line with upward-pointing triangles
Ground	Black line with square markers
Ineff	Green triangle
Bank Sta	Red circle

Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

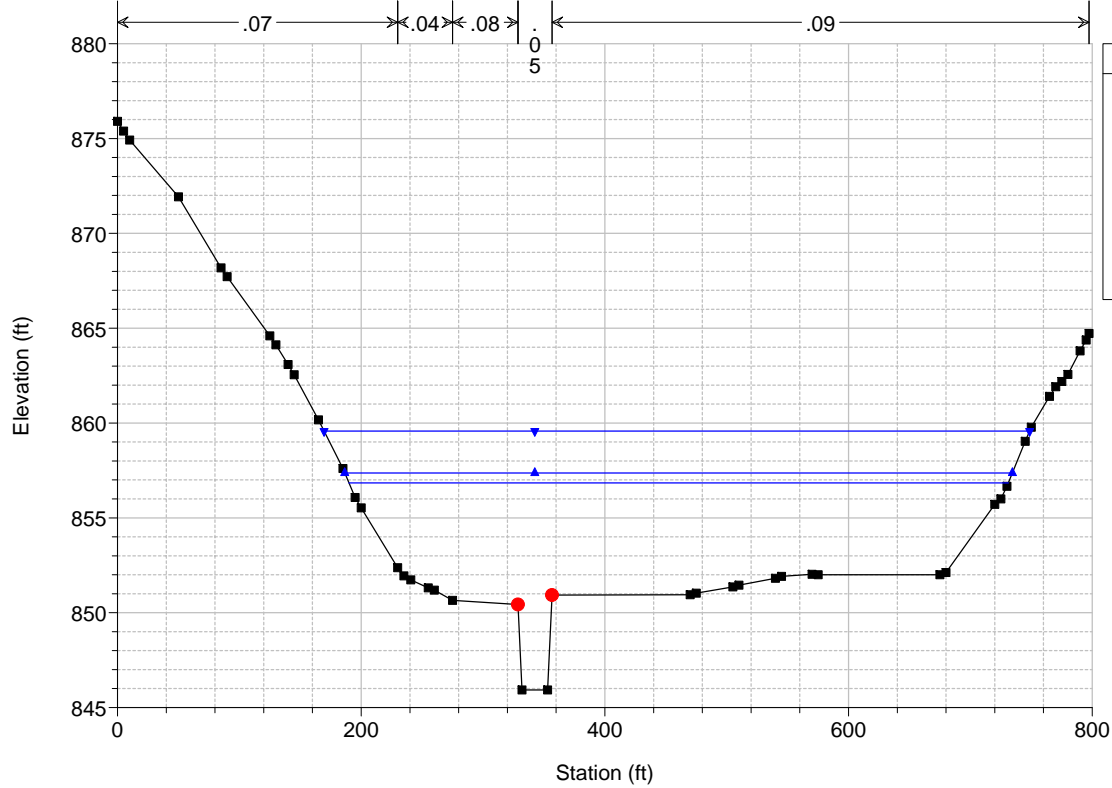
River = MAIN Reach = REACH 2 RS = 28707.36 MS91



Legend	
WS 500 YR	Blue line with downward-pointing triangles
WS 100 YR	Blue line with upward-pointing triangles
WS 50 YR	Blue line with upward-pointing triangles
Ground	Black line with square markers
Bank Sta	Red circle

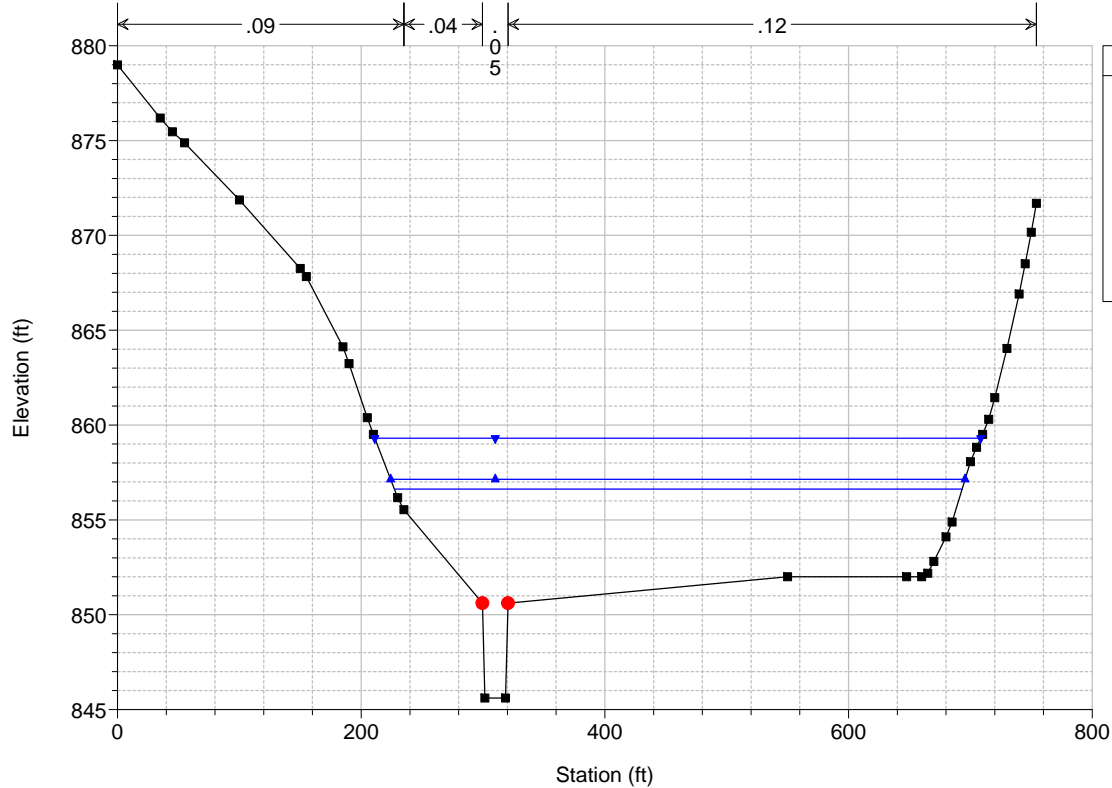
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 28570.08 MS90



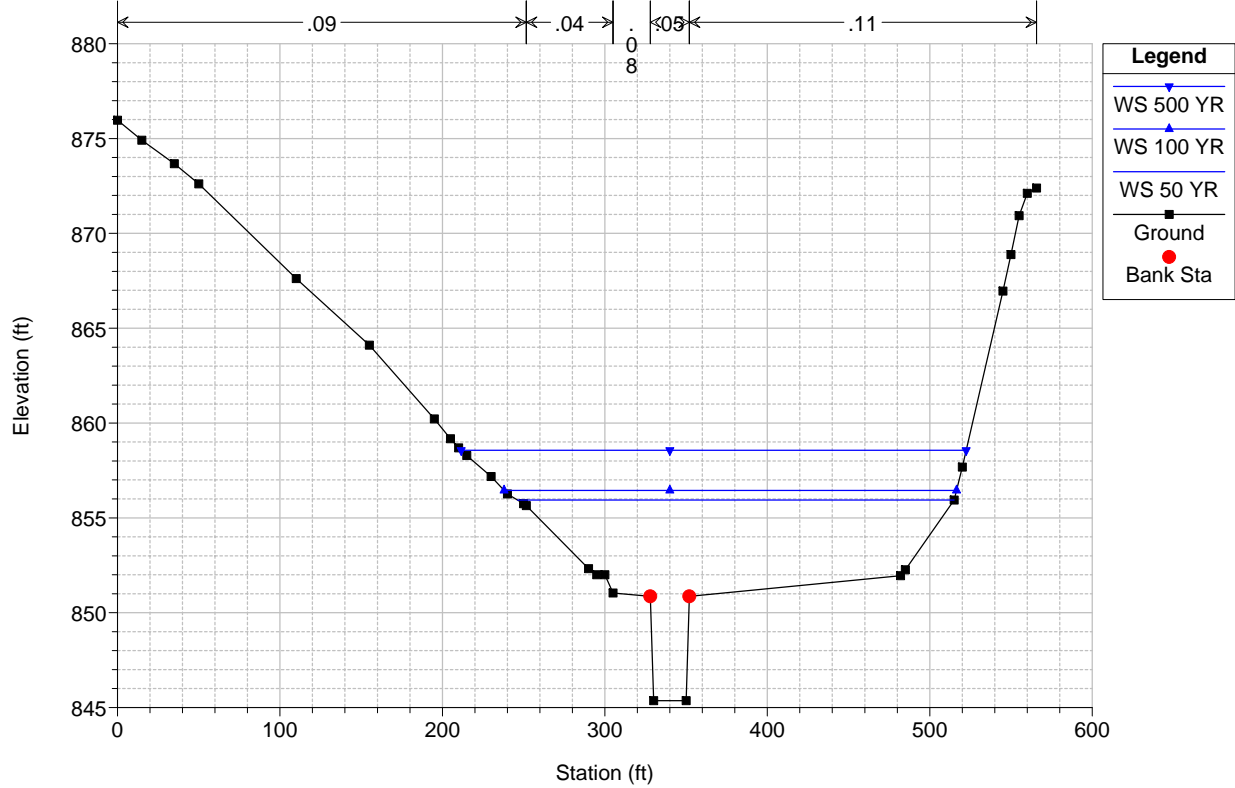
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 28374.72 MS89



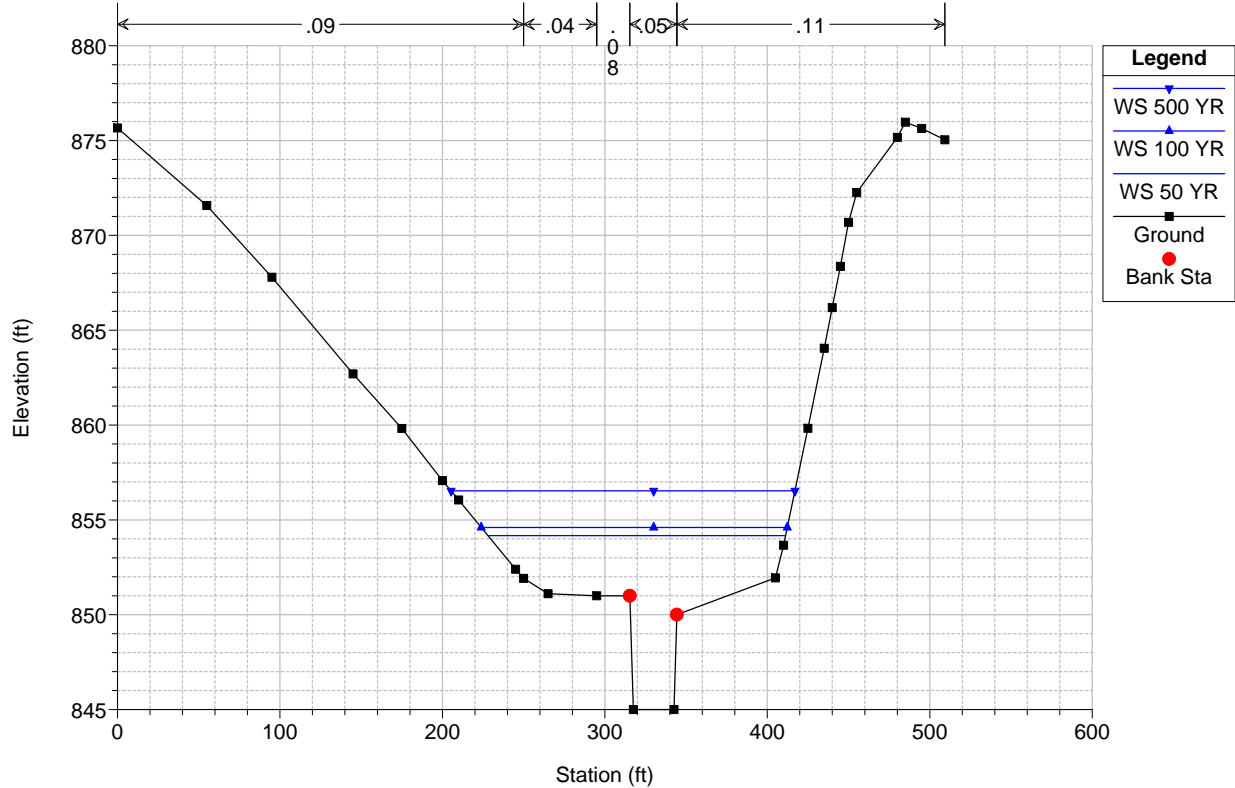
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88

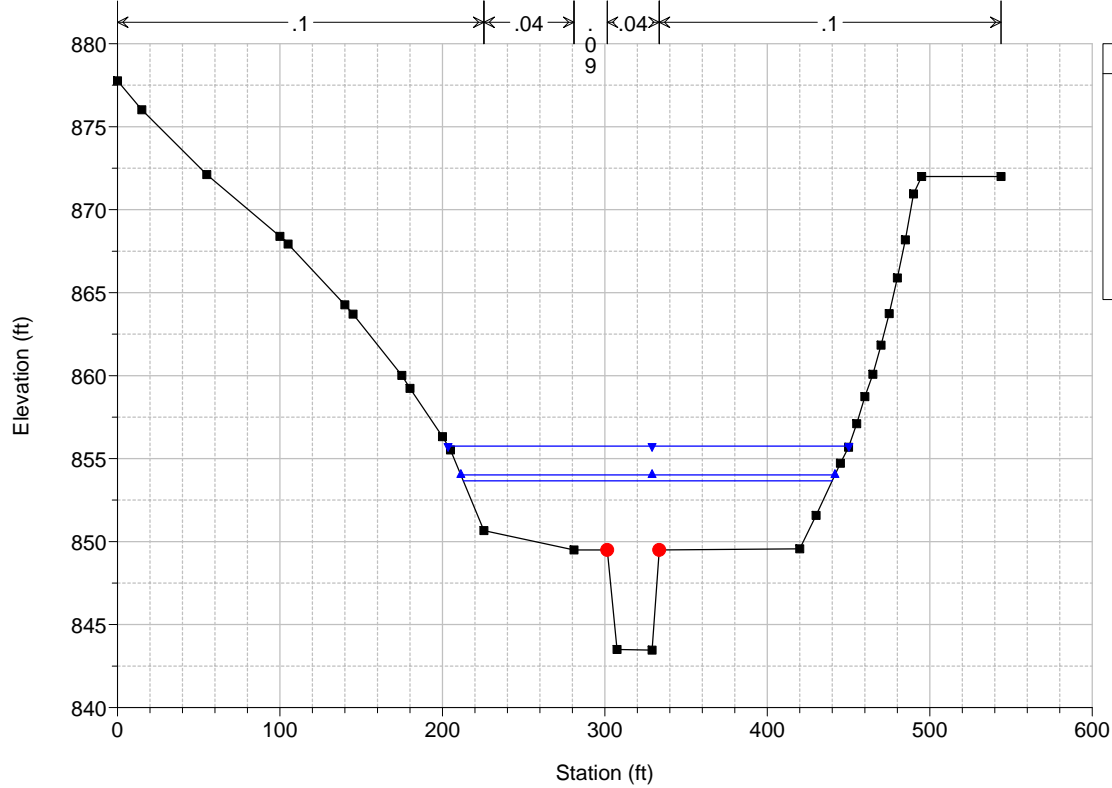


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

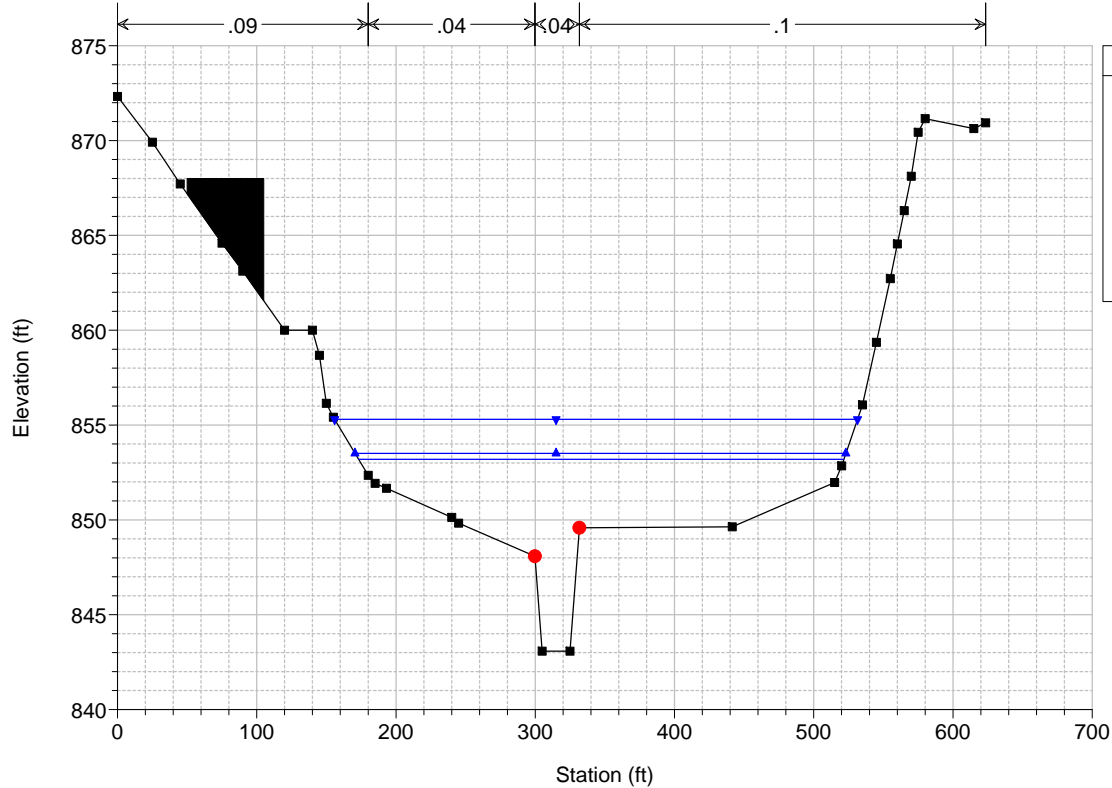
River = MAIN Reach = REACH 2 RS = 27999.84 MS87



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27809.76 MS86

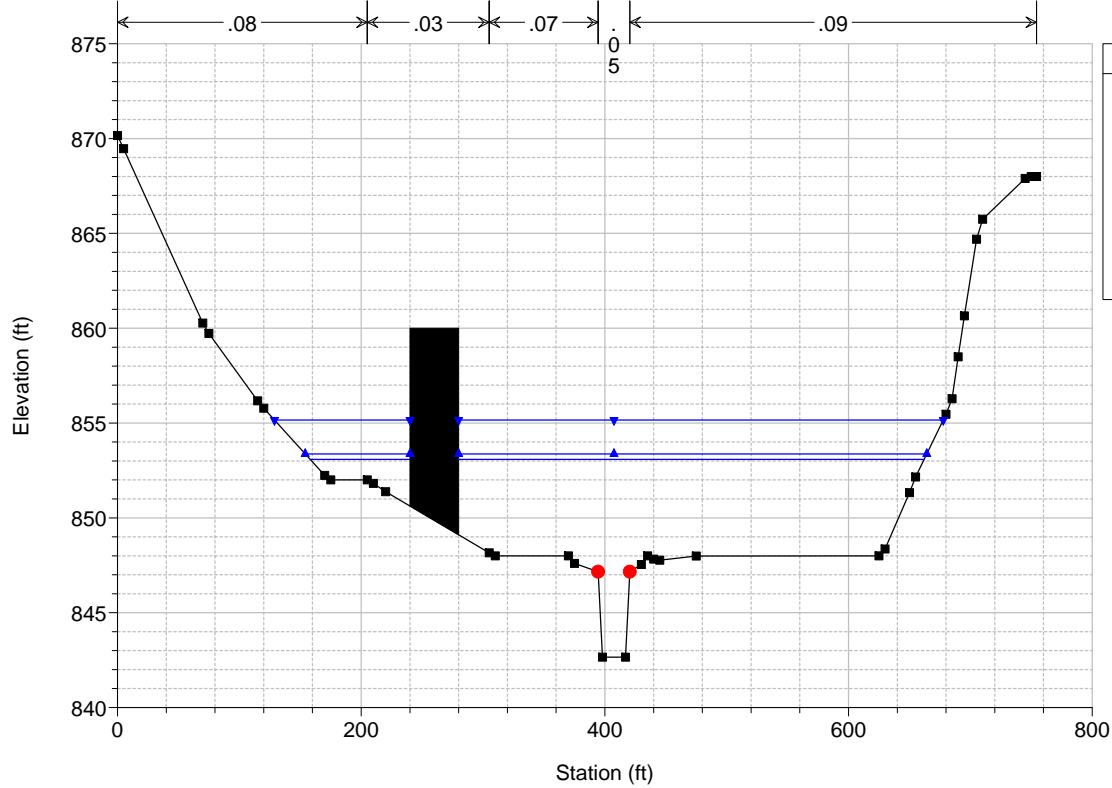


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27572.16 MS85



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

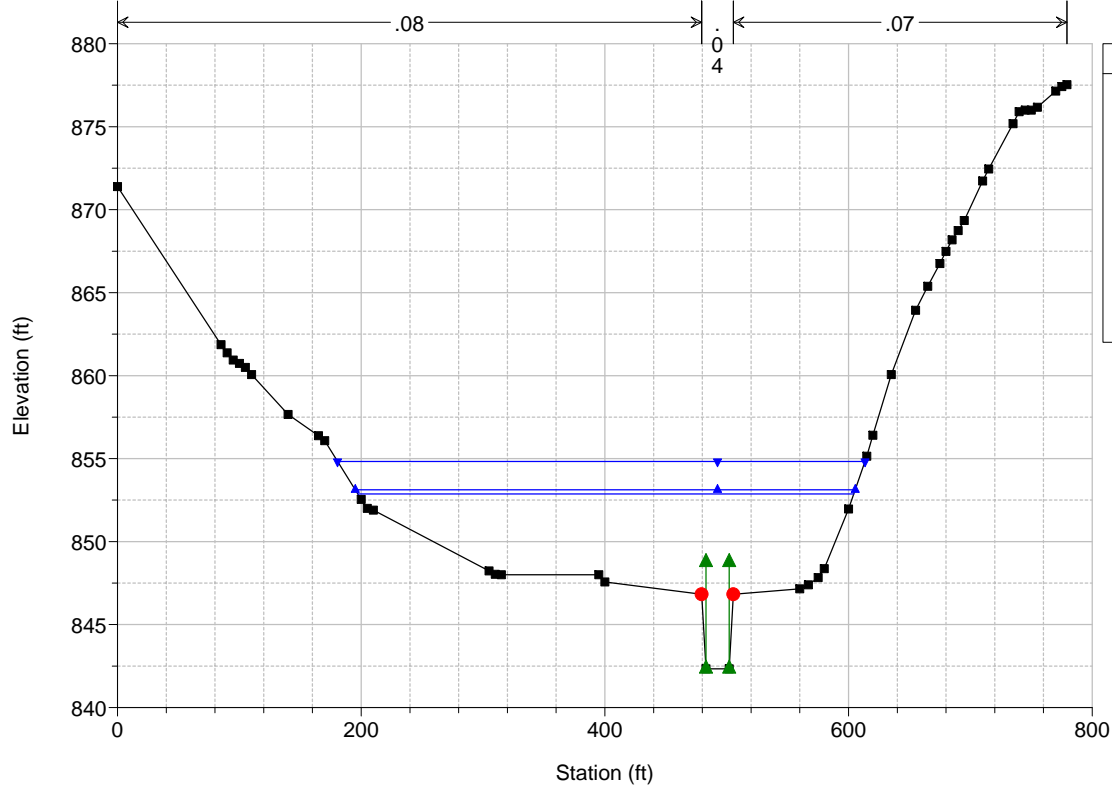
River = MAIN Reach = REACH 2 RS = 27339.84 MS84



Legend	
Blue line with inverted triangle	WS 500 YR
Blue line with triangle	WS 100 YR
Blue line with inverted triangle	WS 50 YR
Black line with square	Ground
Red dot	Bank Sta

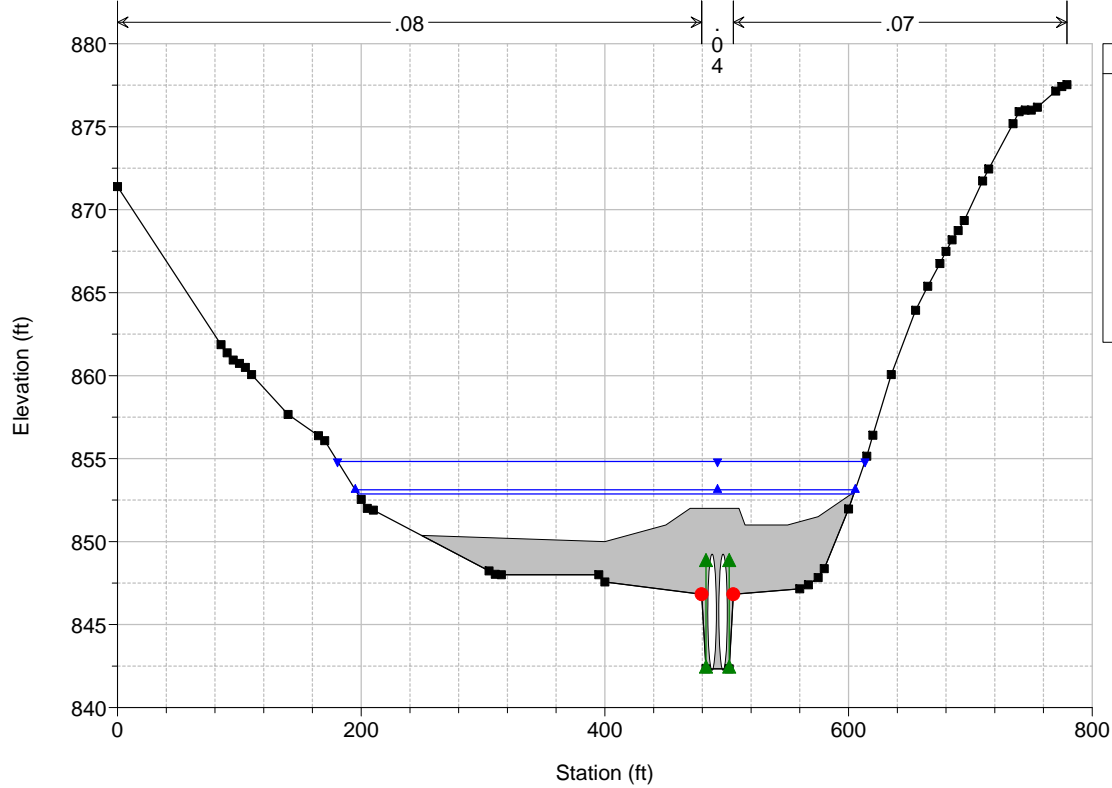
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert



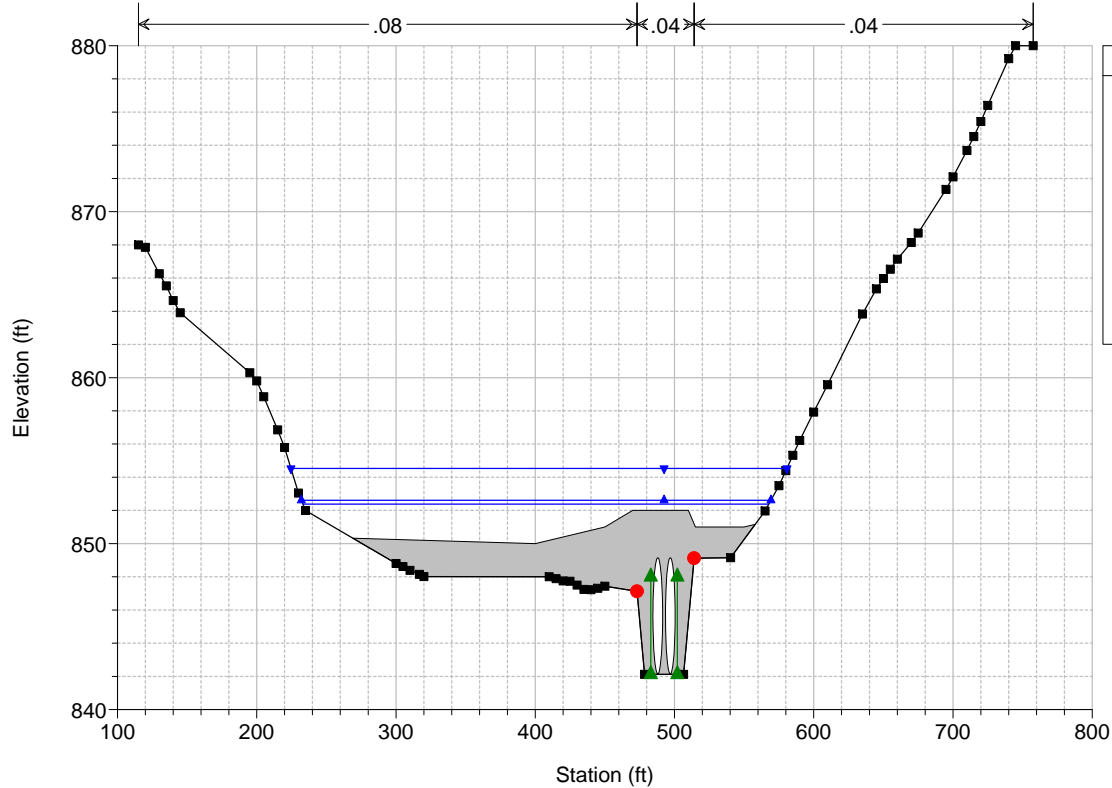
Legend	
Blue line with inverted triangle	WS 500 YR
Blue line with triangle	WS 100 YR
Blue line with inverted triangle	WS 50 YR
Black line with square	Ground
Green line with triangle	Ineff
Red dot	Bank Sta

Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



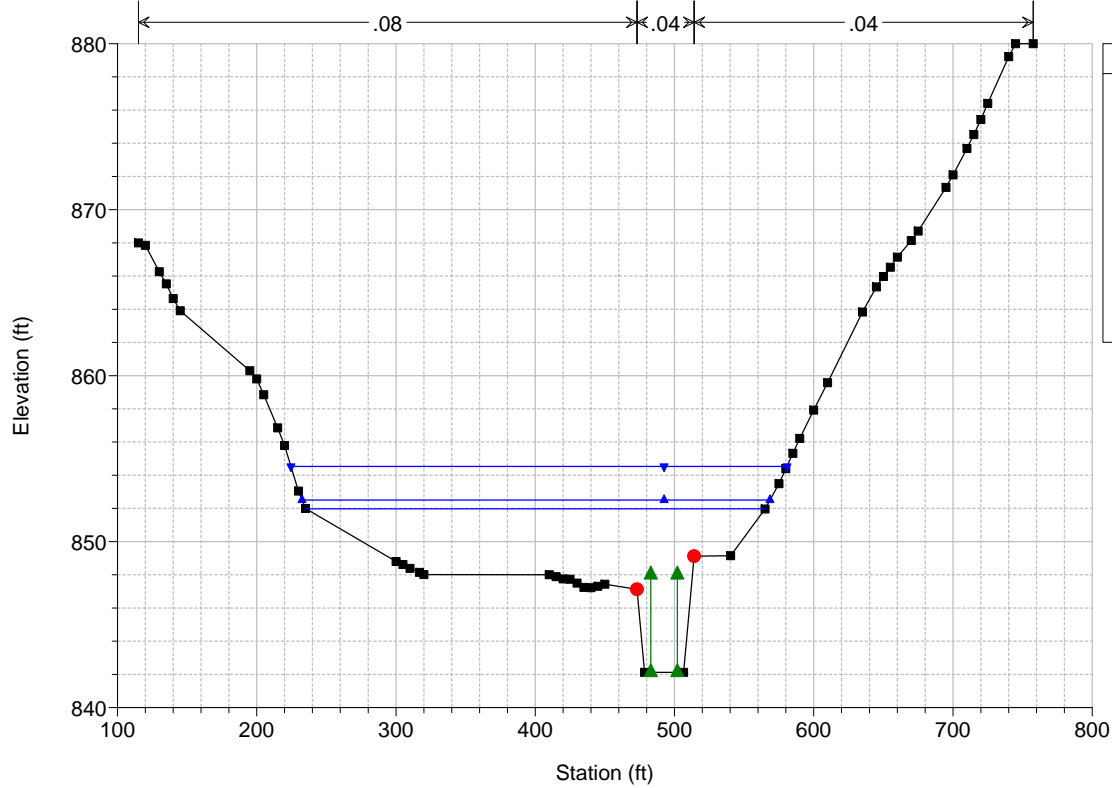
Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square marker
Ineff	Green line with upward-pointing triangle
Bank Sta	Red dot

Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert

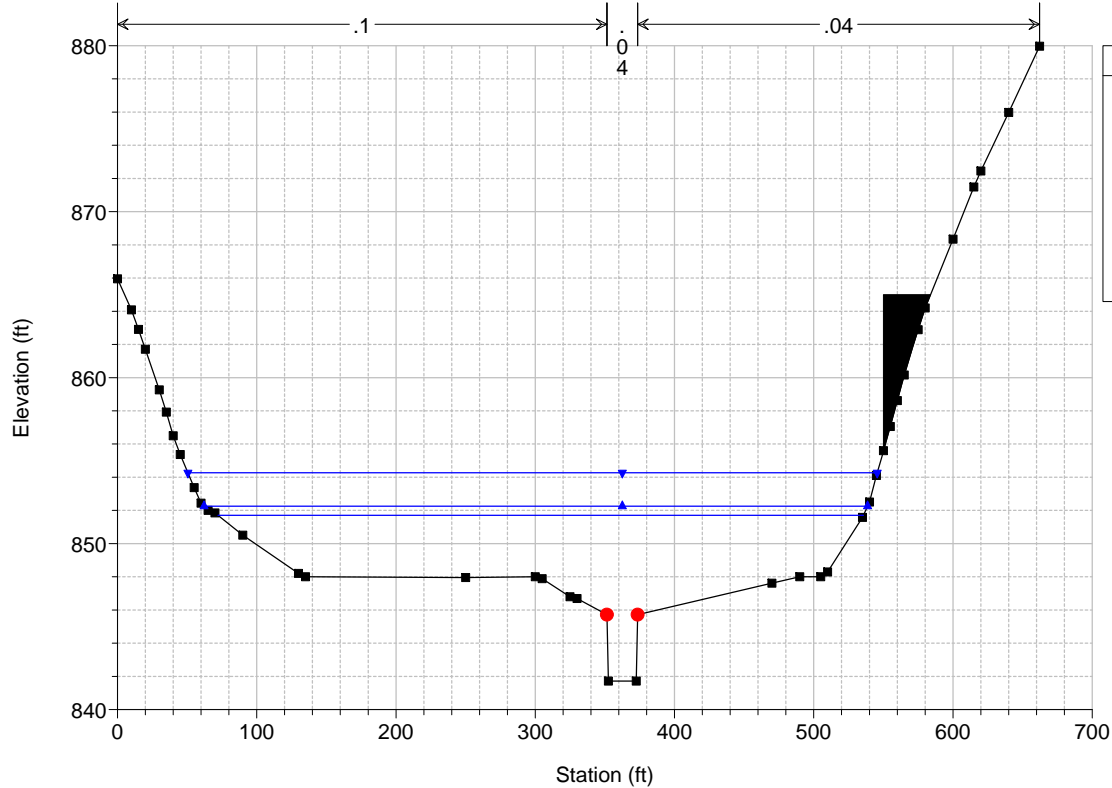


Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square marker
Ineff	Green line with upward-pointing triangle
Bank Sta	Red dot

Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27033.6 MS82-D/S Private Drive Culvert

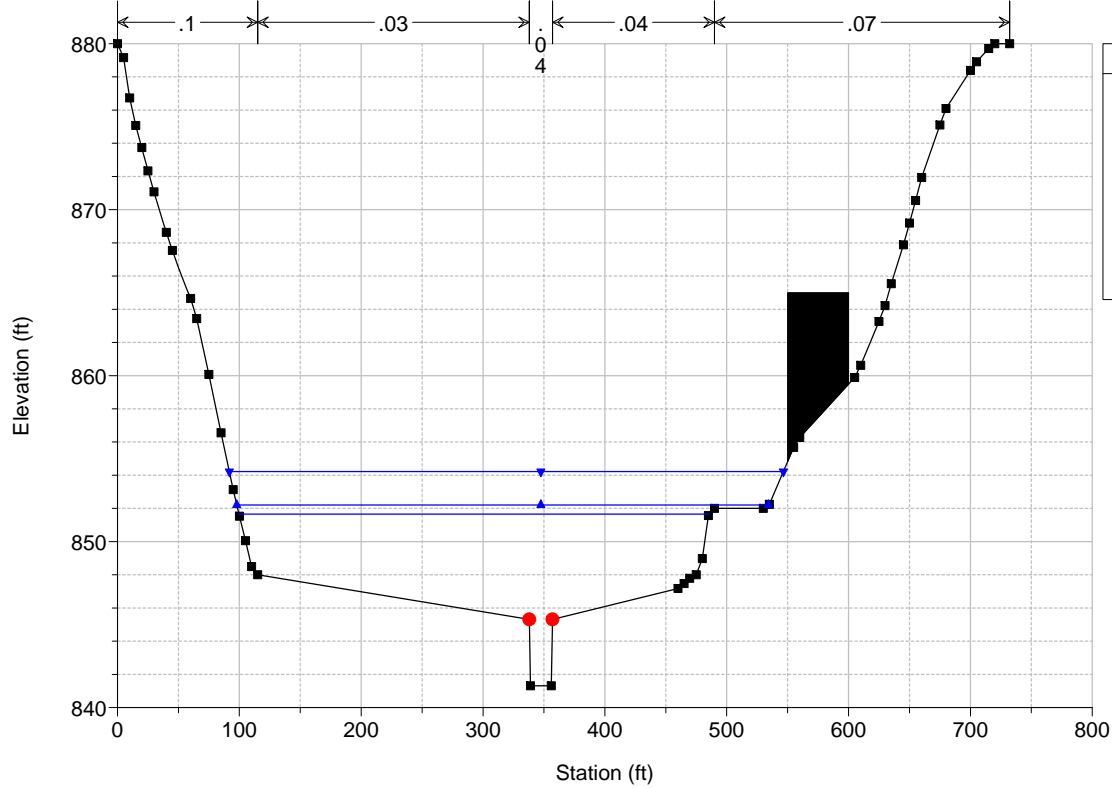


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 26806.56 MS81



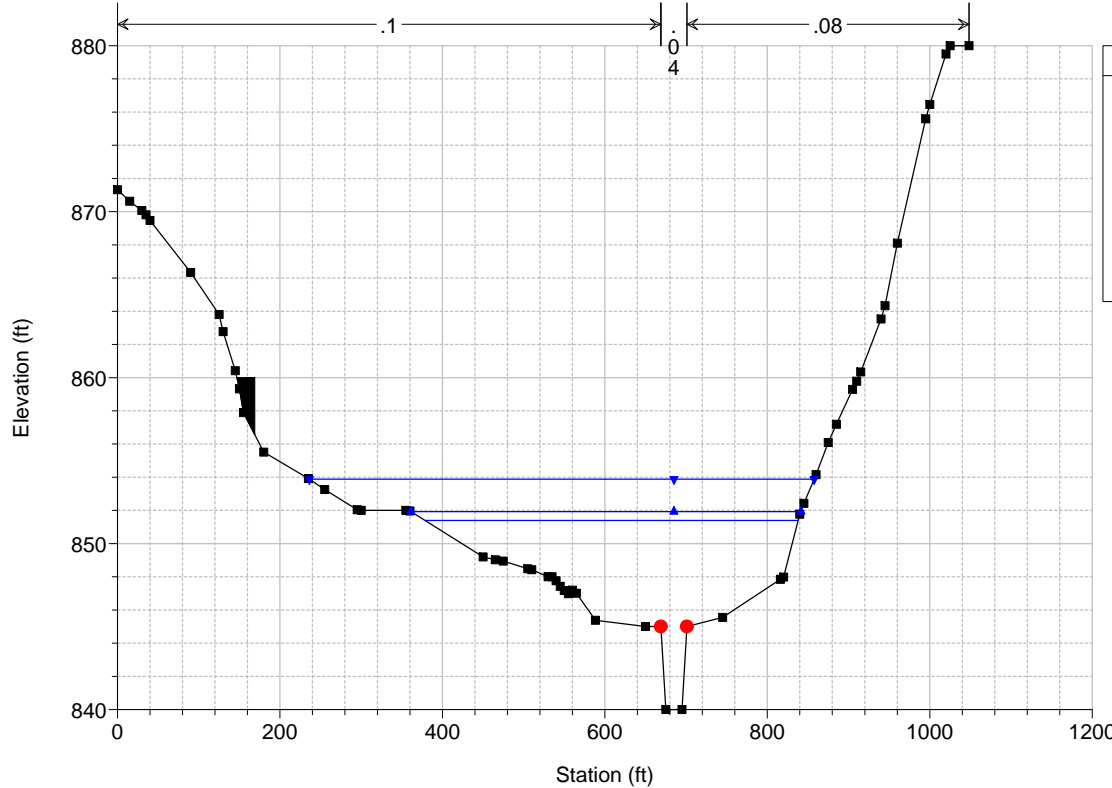
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 26574.24 MS80



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

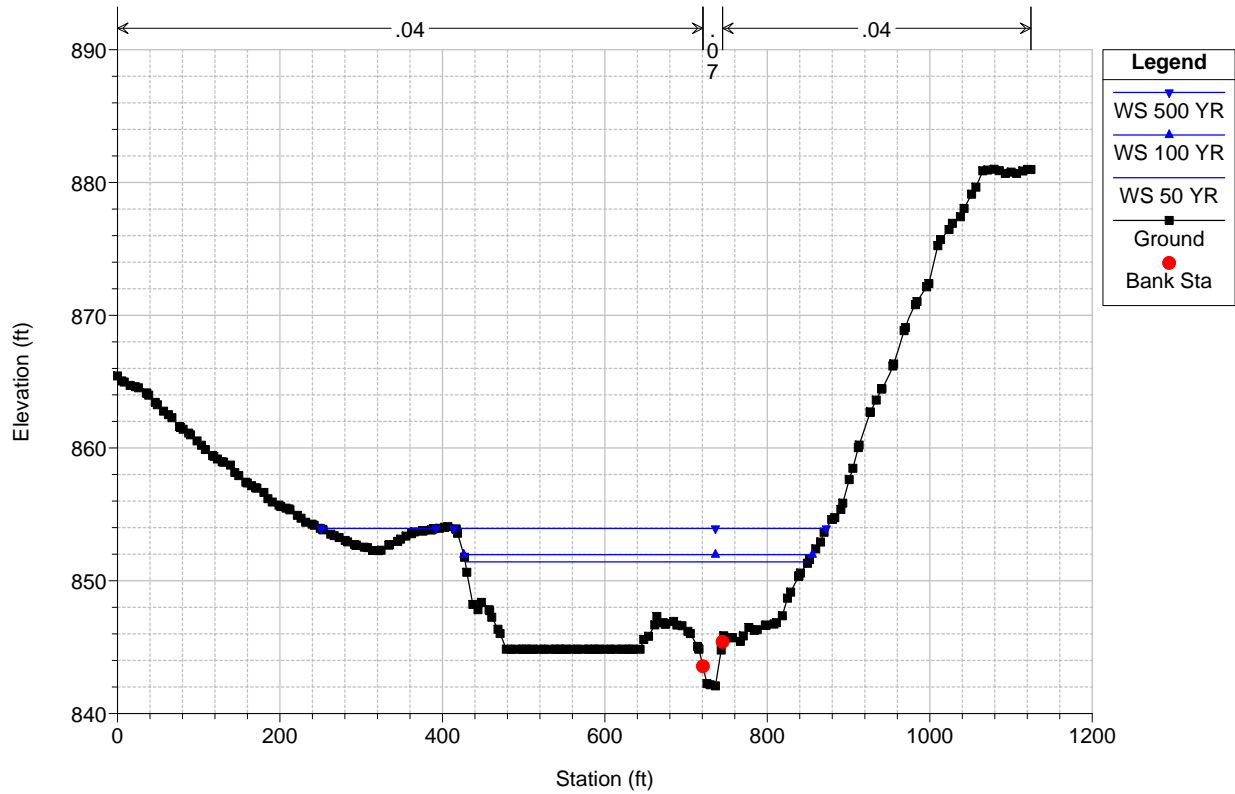
River = MAIN Reach = REACH 2 RS = 26400 MS79





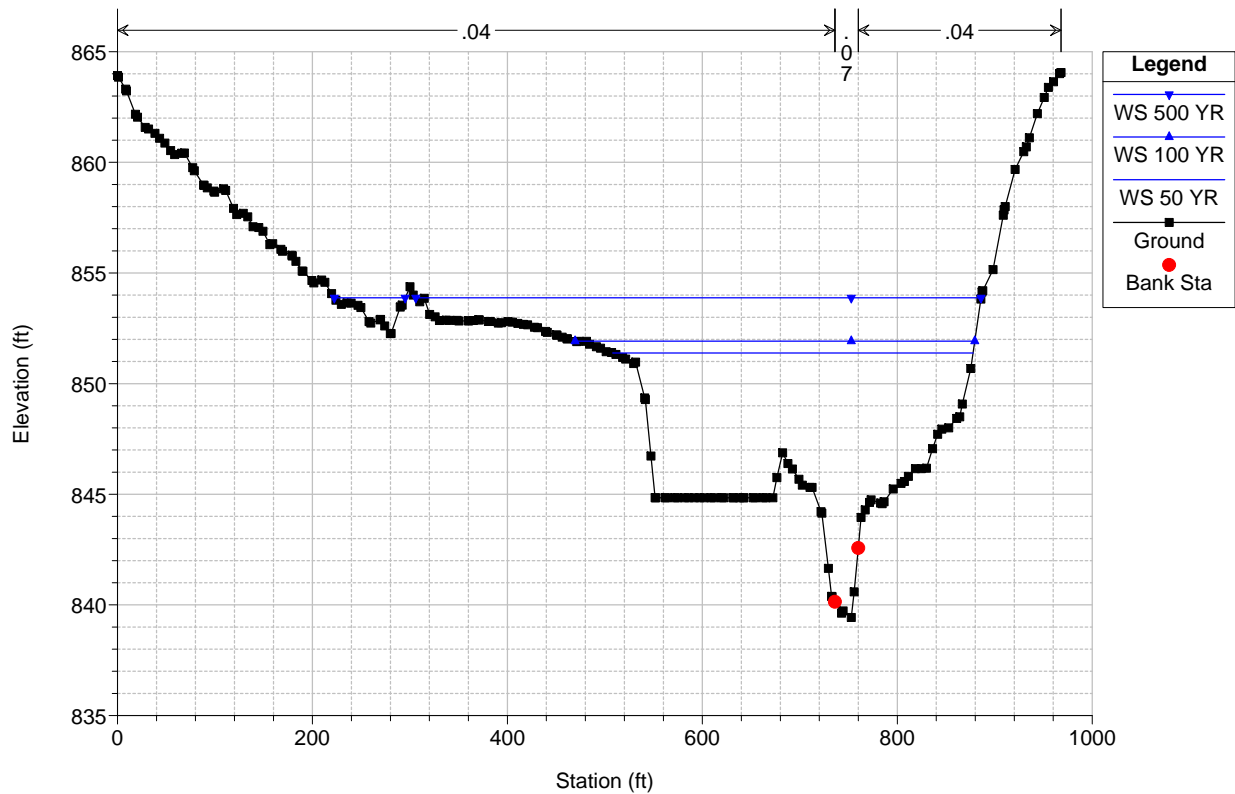
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78

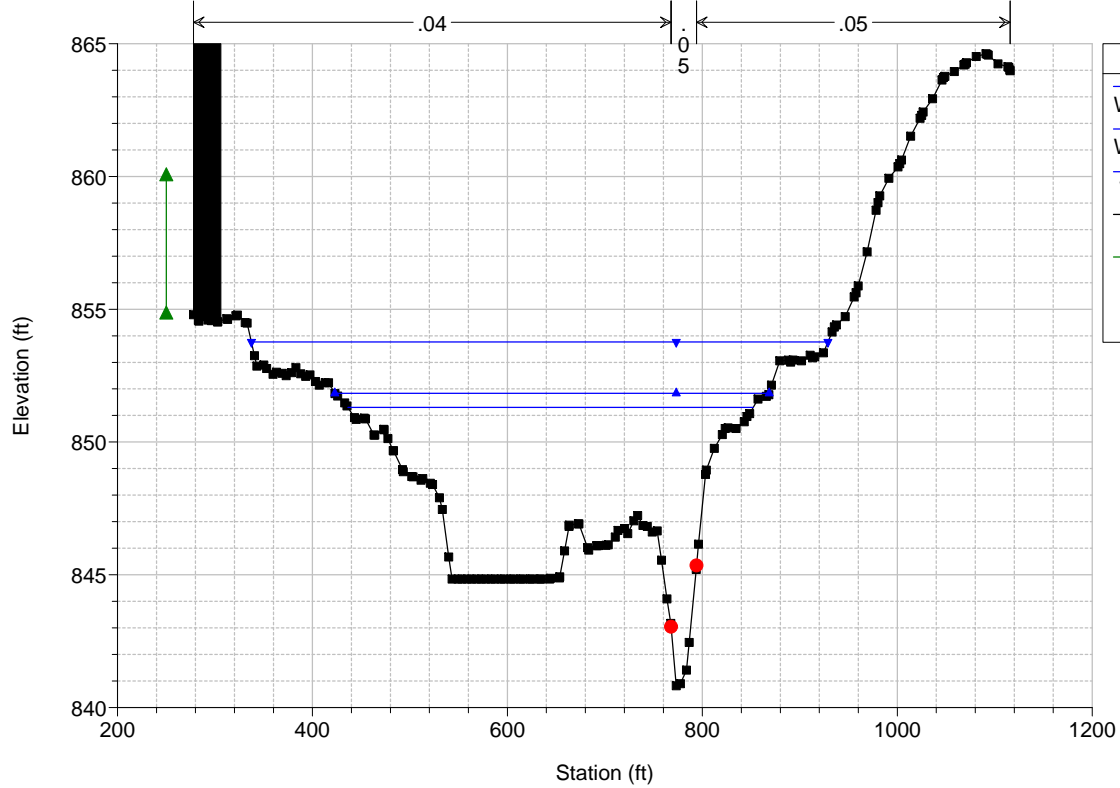


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 26083.2 MS77

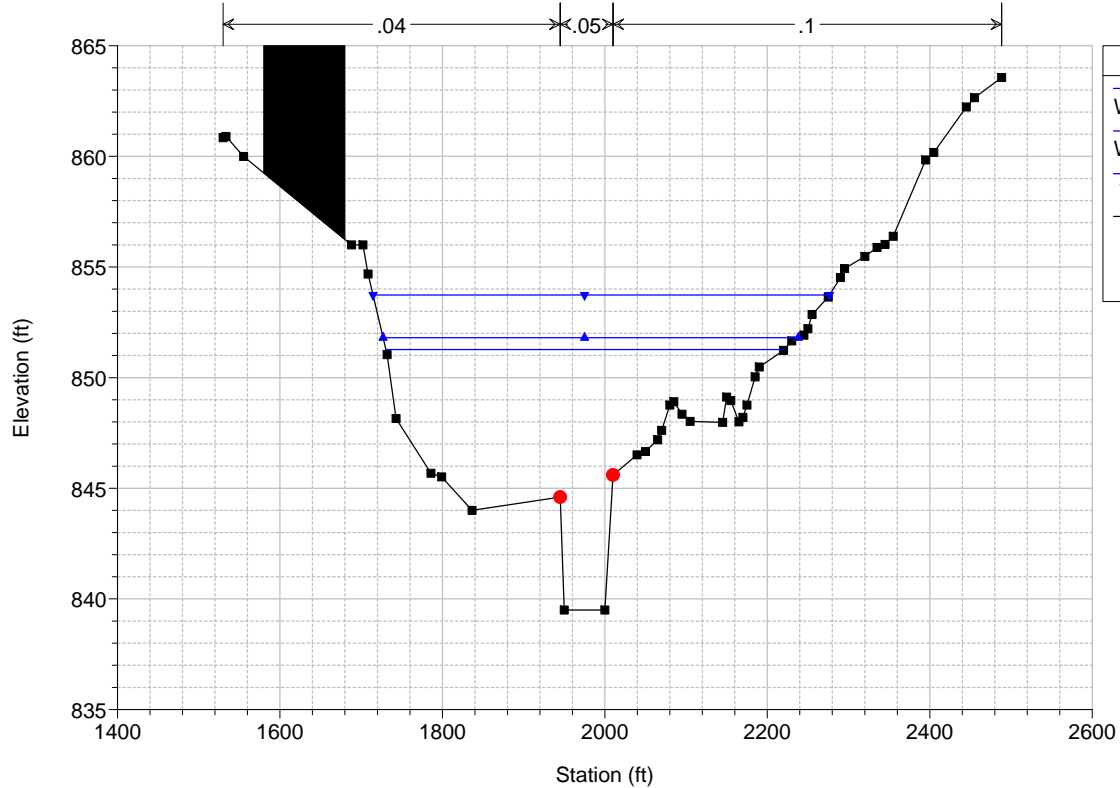


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25893.12 MS76



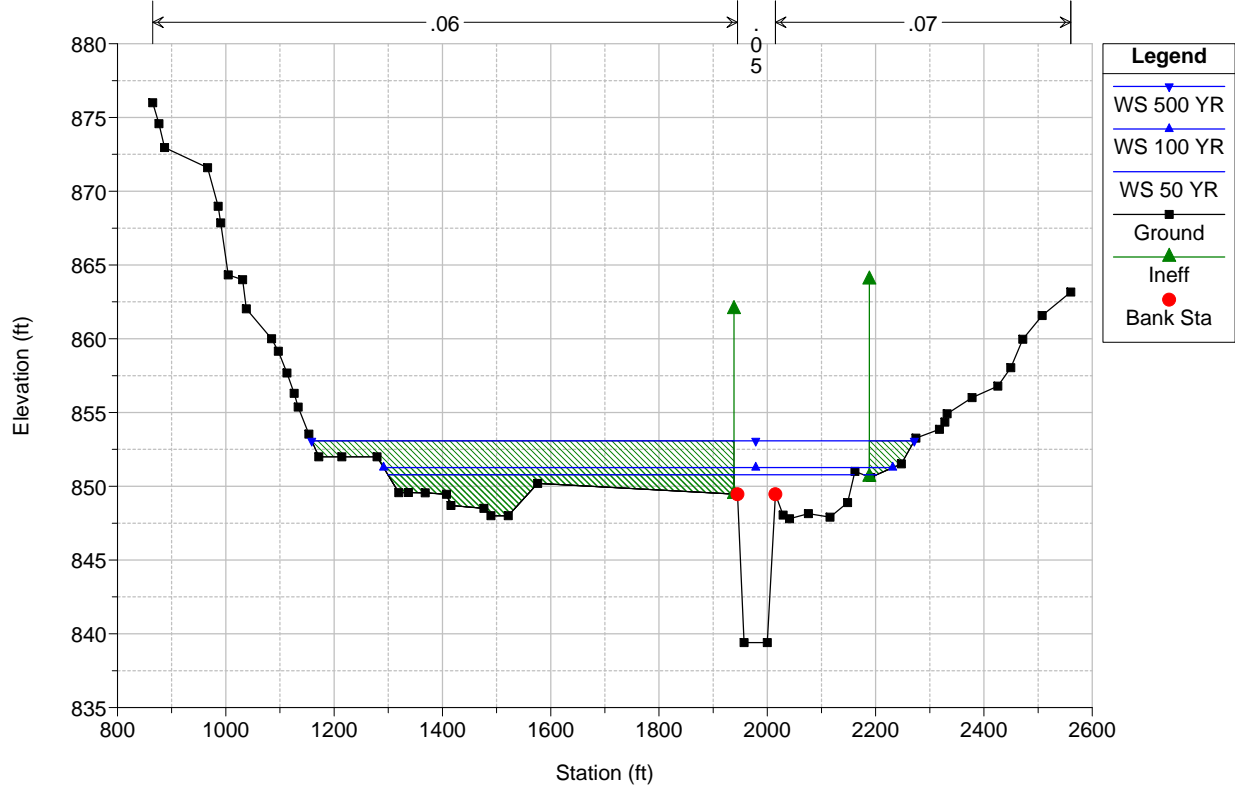
Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square markers
Ineff	Green line with upward-pointing triangle
Bank Sta	Red circle

Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25687.2 MS75

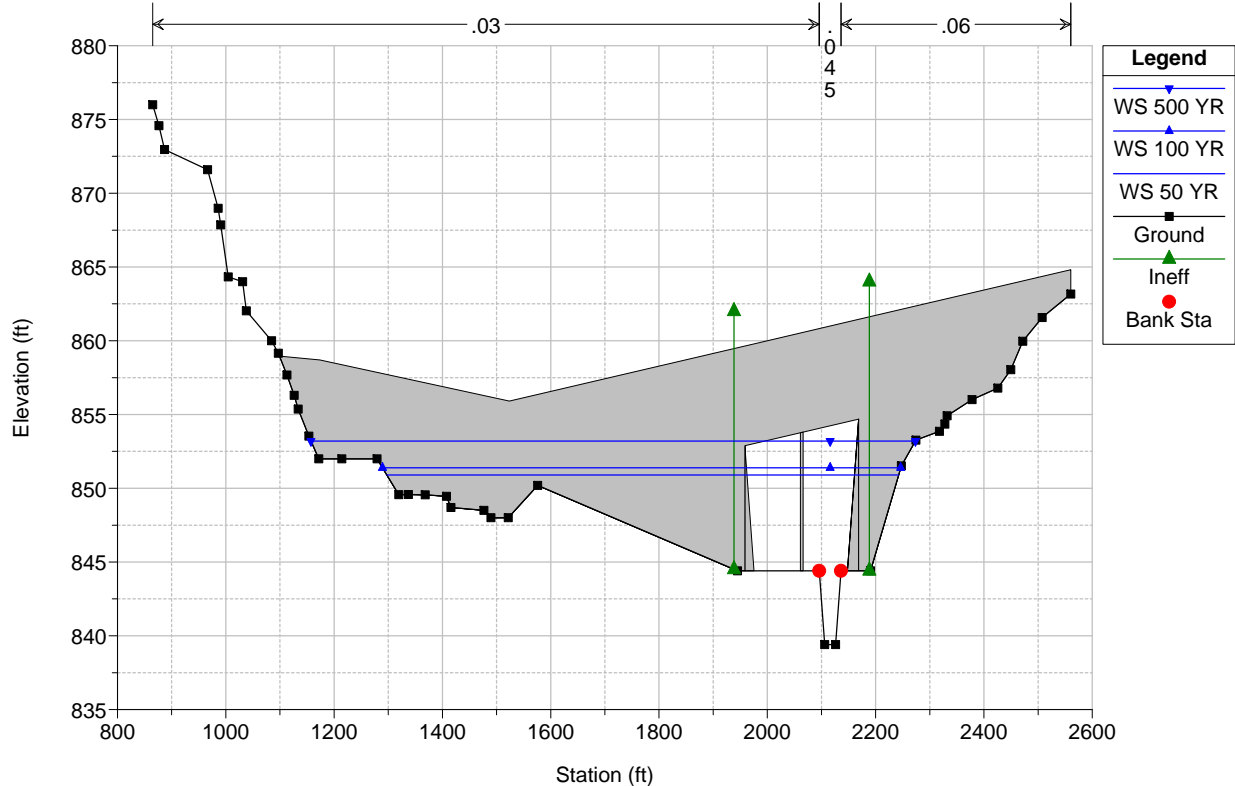


Legend	
WS 500 YR	Blue line with downward-pointing triangle
WS 100 YR	Blue line with upward-pointing triangle
WS 50 YR	Blue line with downward-pointing triangle
Ground	Black line with square markers
Bank Sta	Red circle

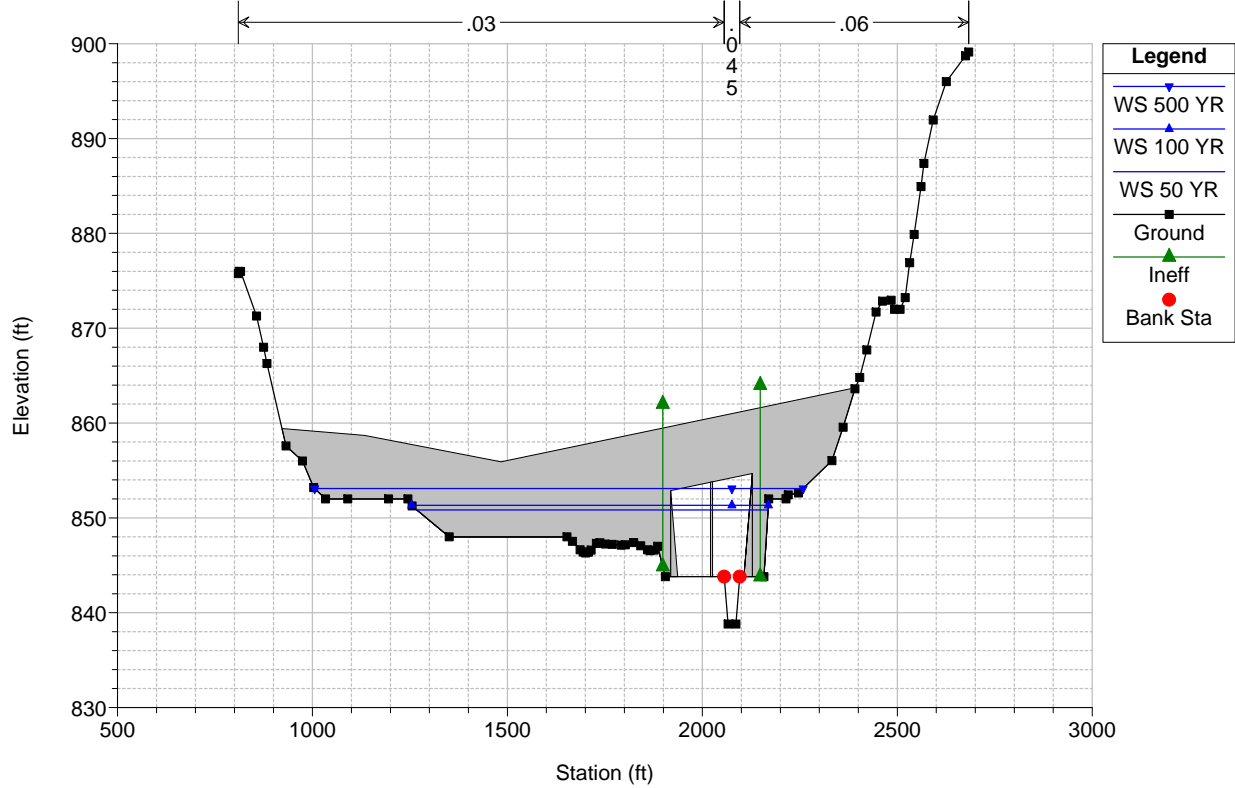
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert



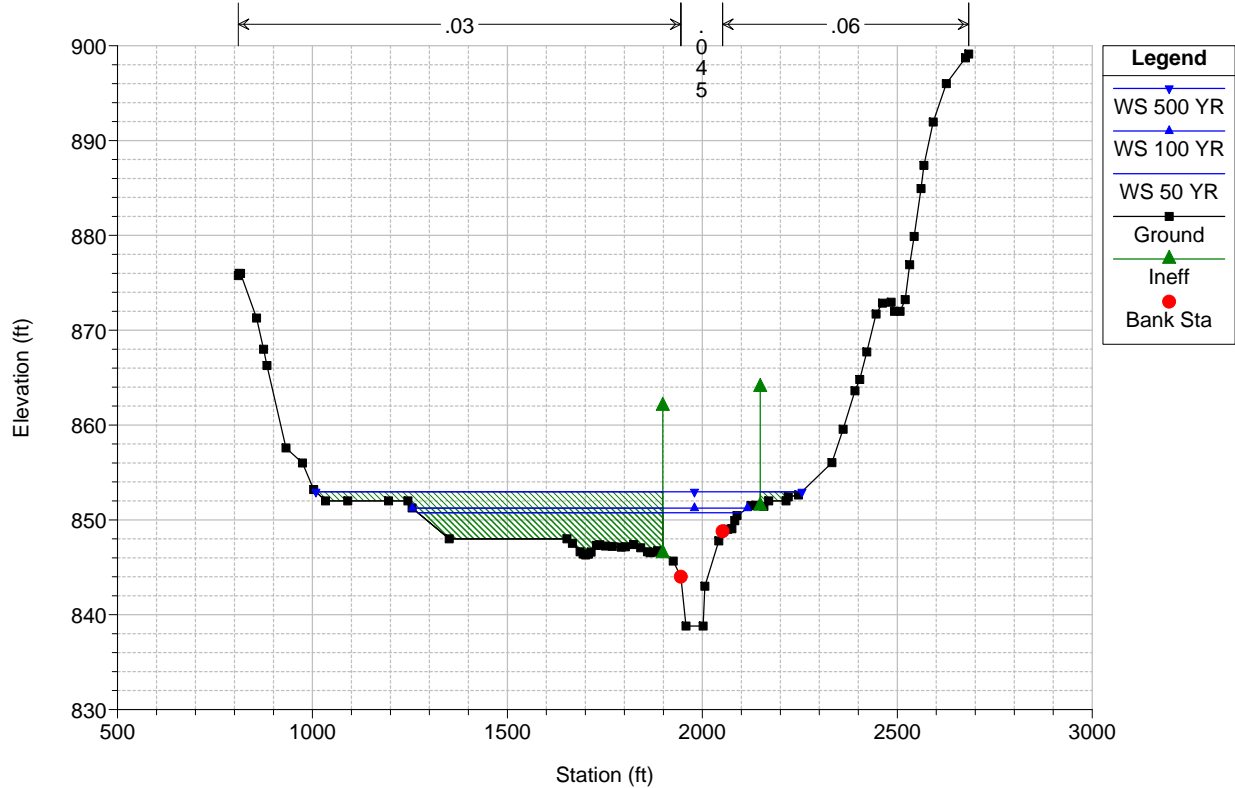
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 BR Interstate 85 Culvert



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 BR Interstate 85 Culvert

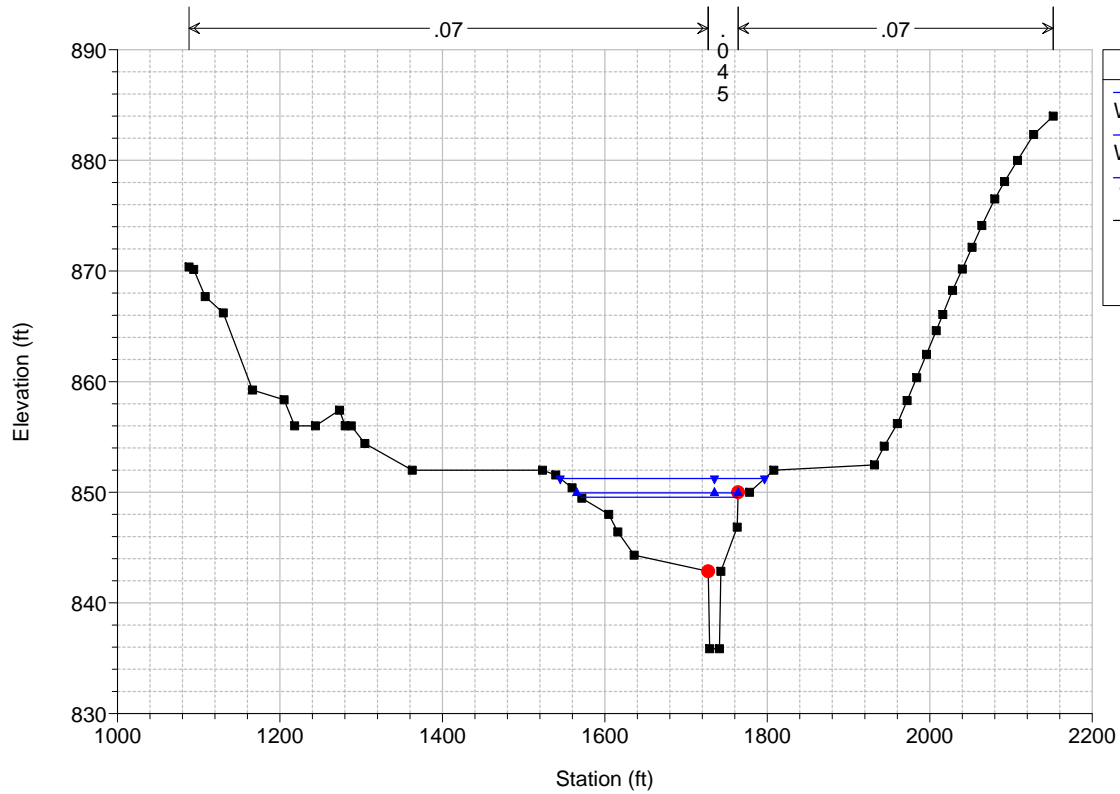


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25370.96 MS73-D/S I85 Culvert



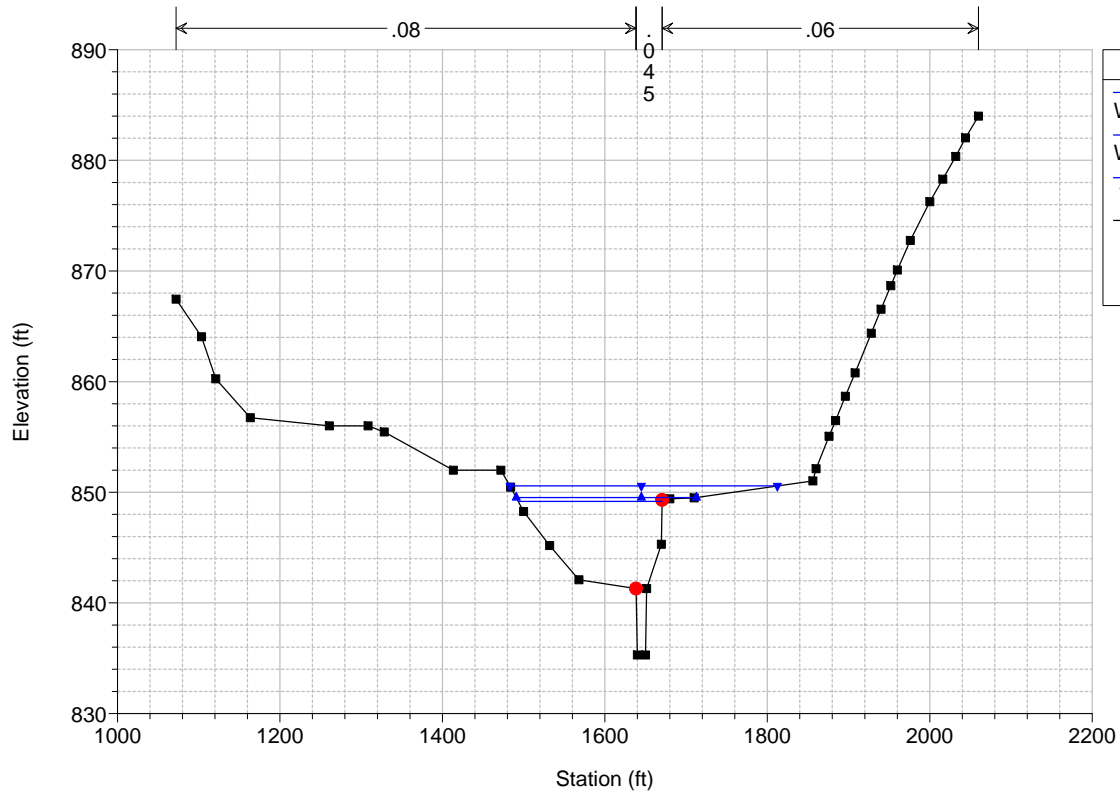
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

River = MAIN Reach = REACH 2 RS = 24668.16 MS72

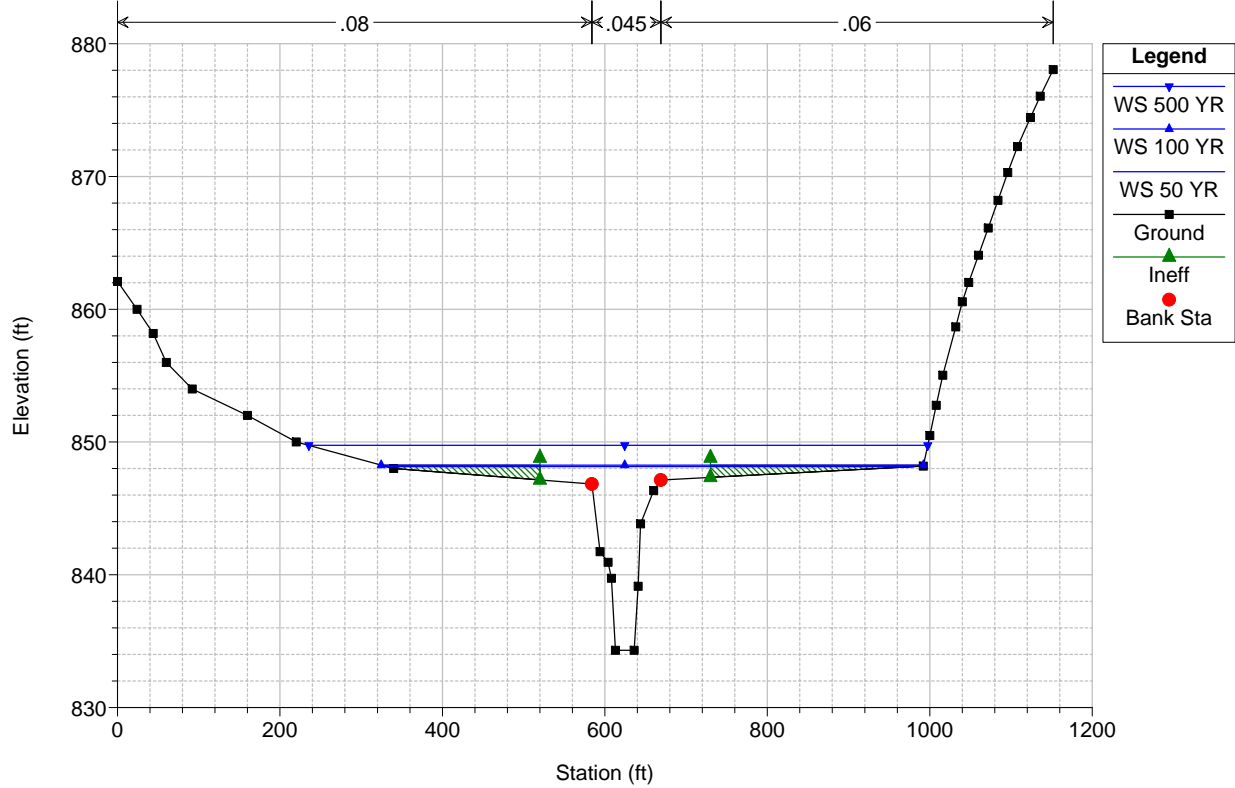


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019

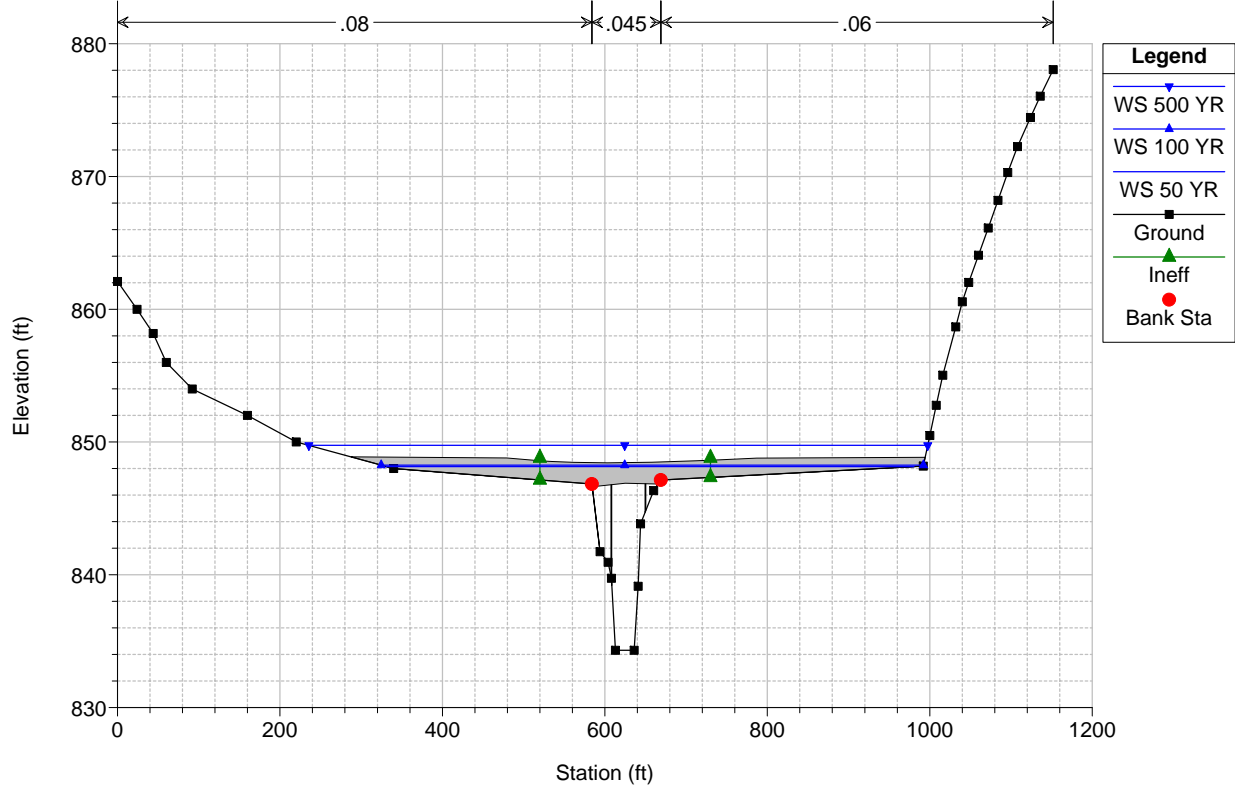
River = MAIN Reach = REACH 2 RS = 24541.44 MS71



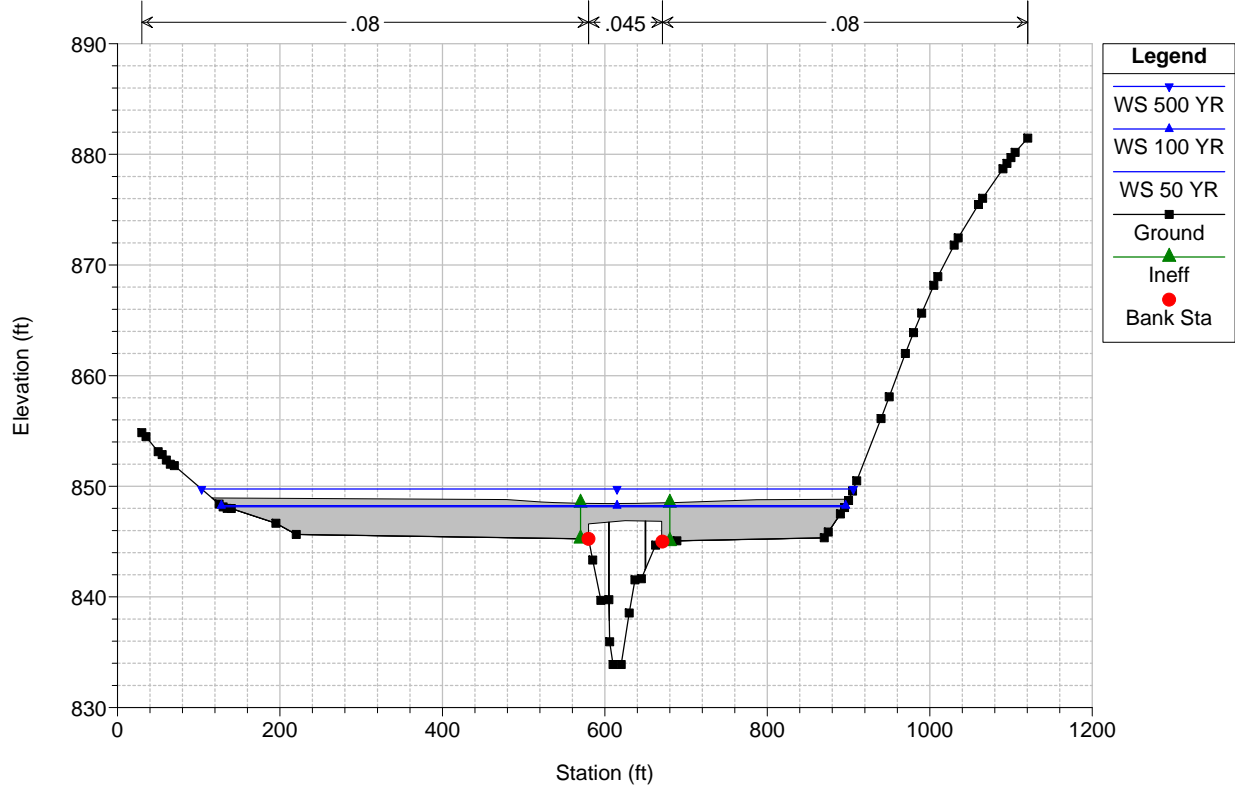
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive



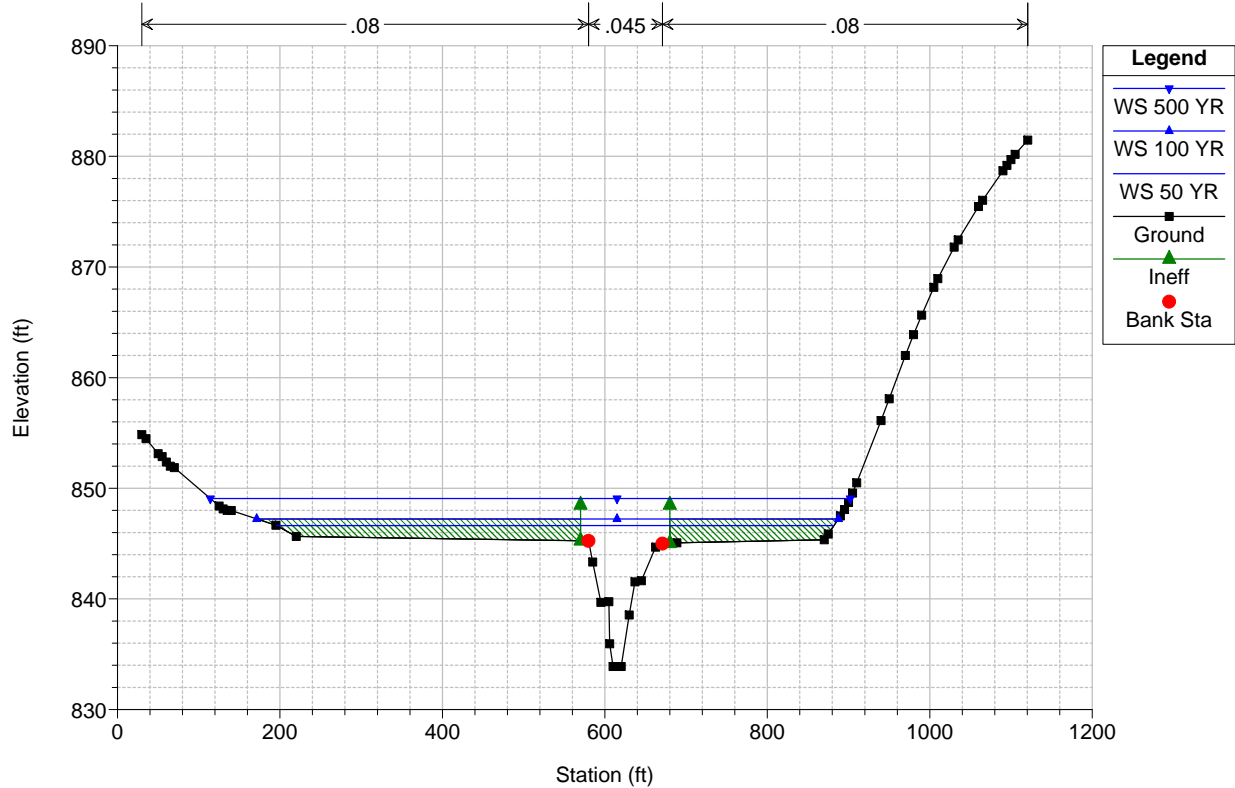
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



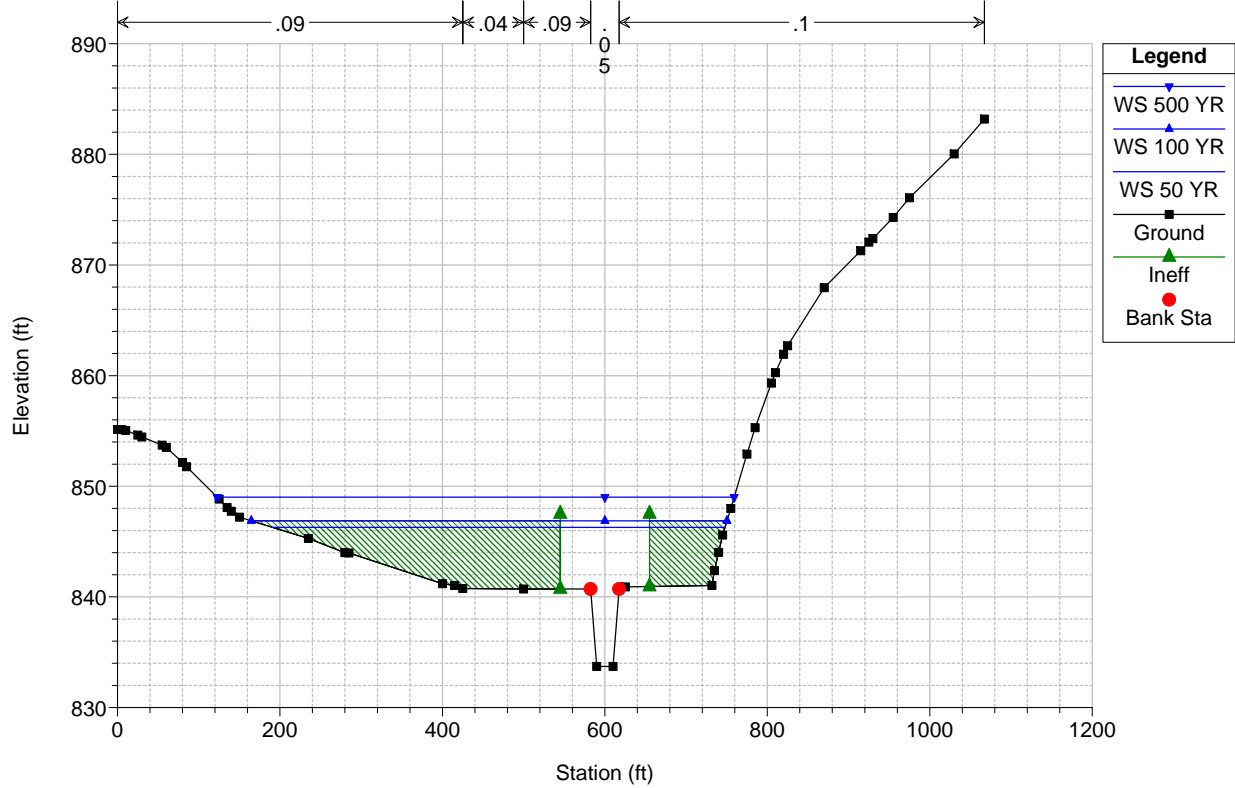
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



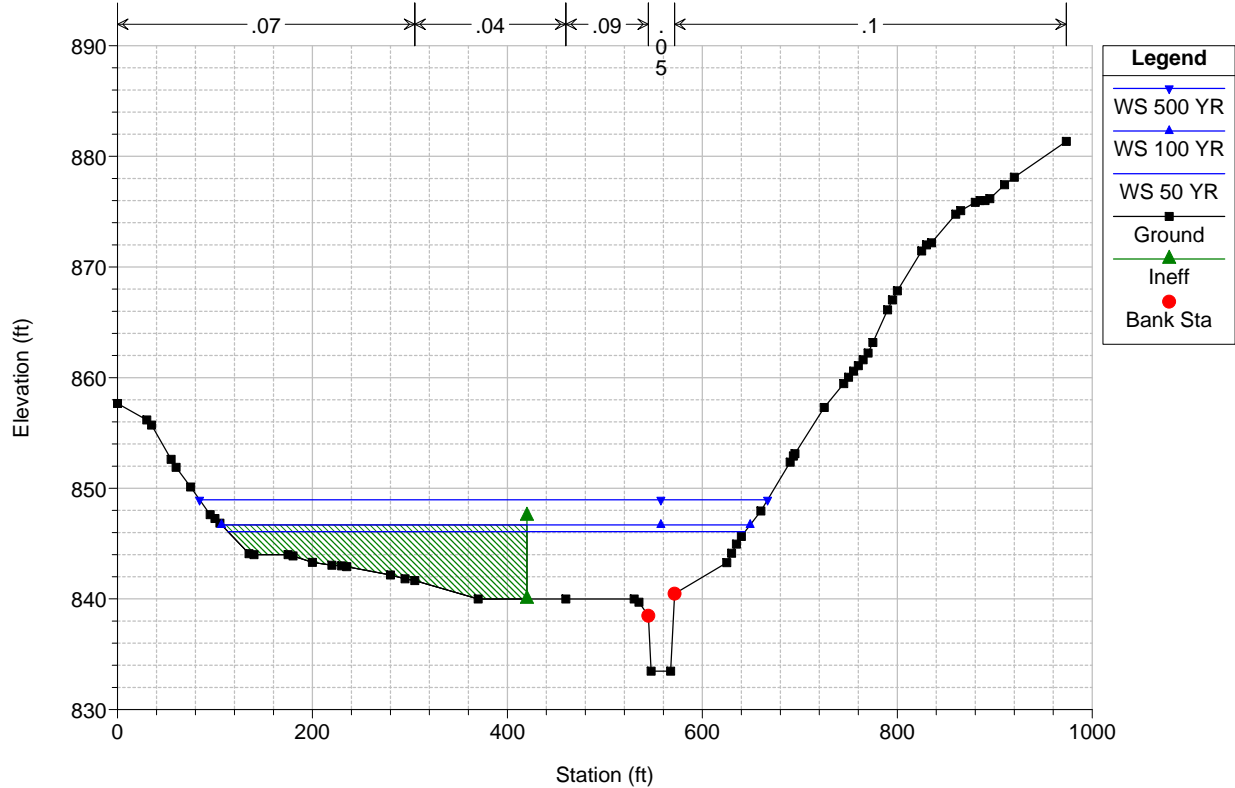
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24156 MS68

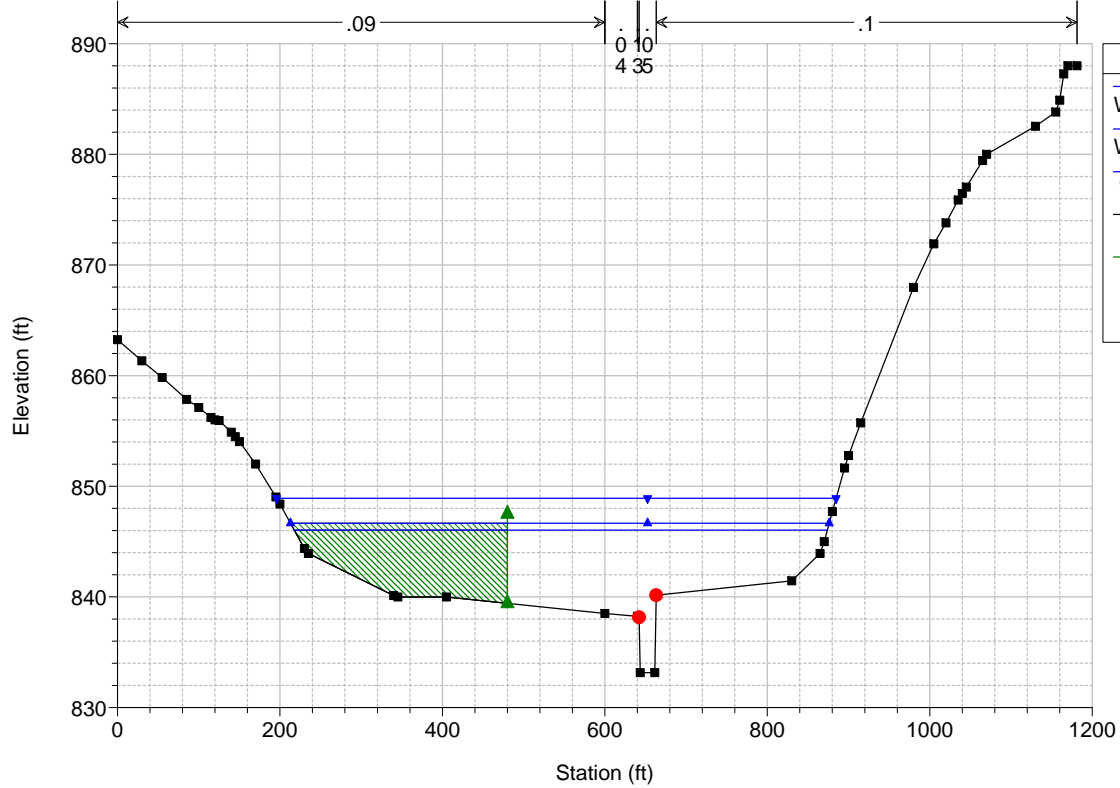


Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24029.28 MS67

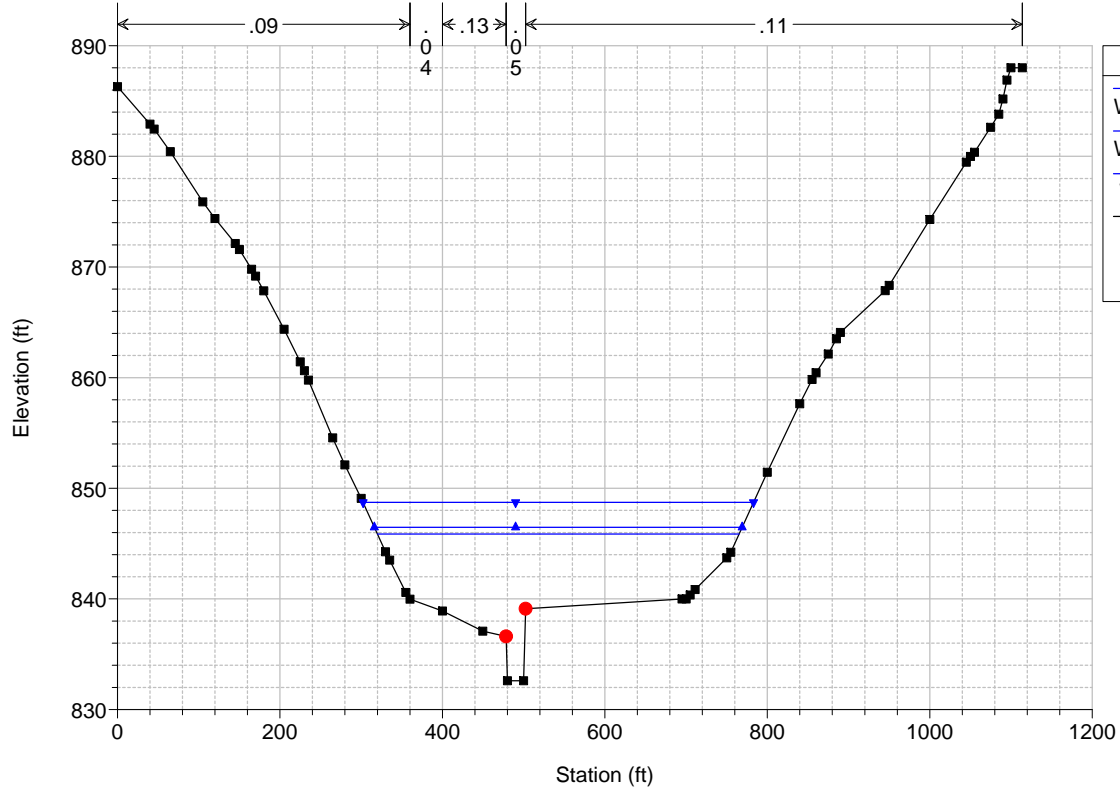




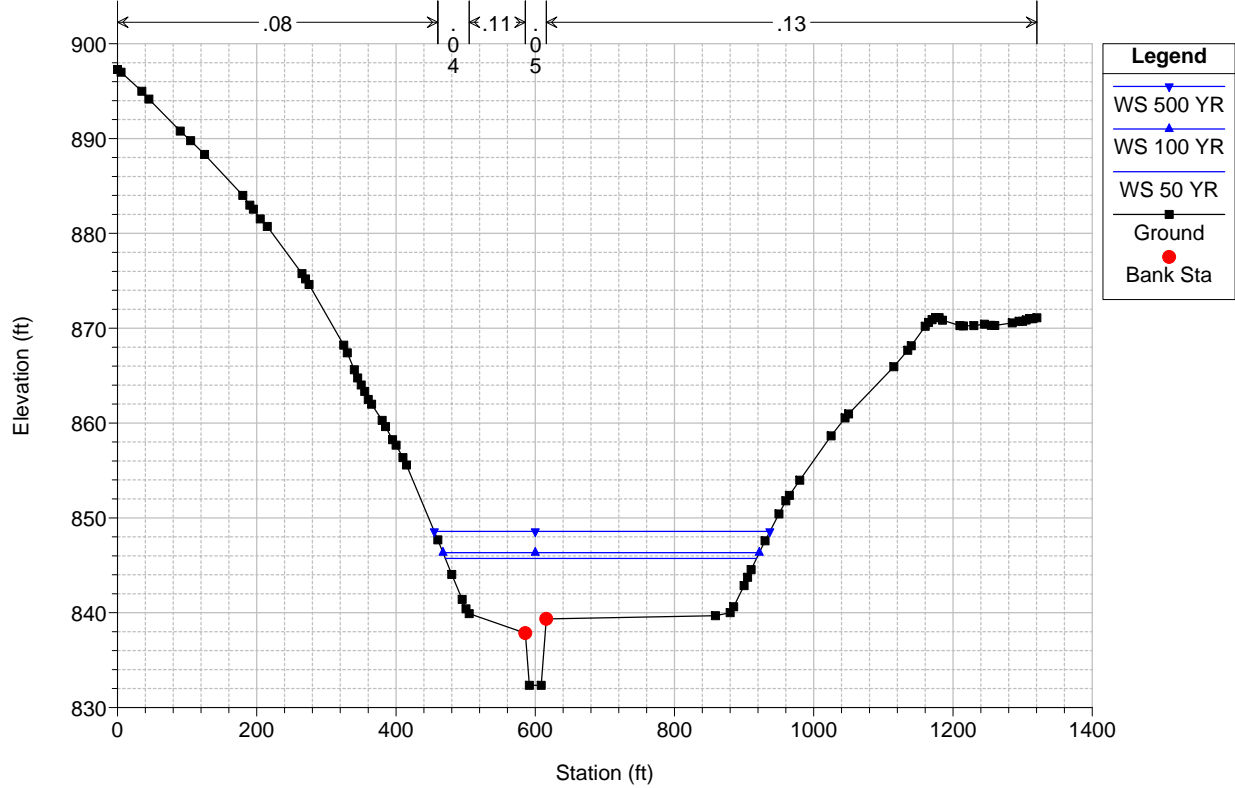
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23860.32 MS66



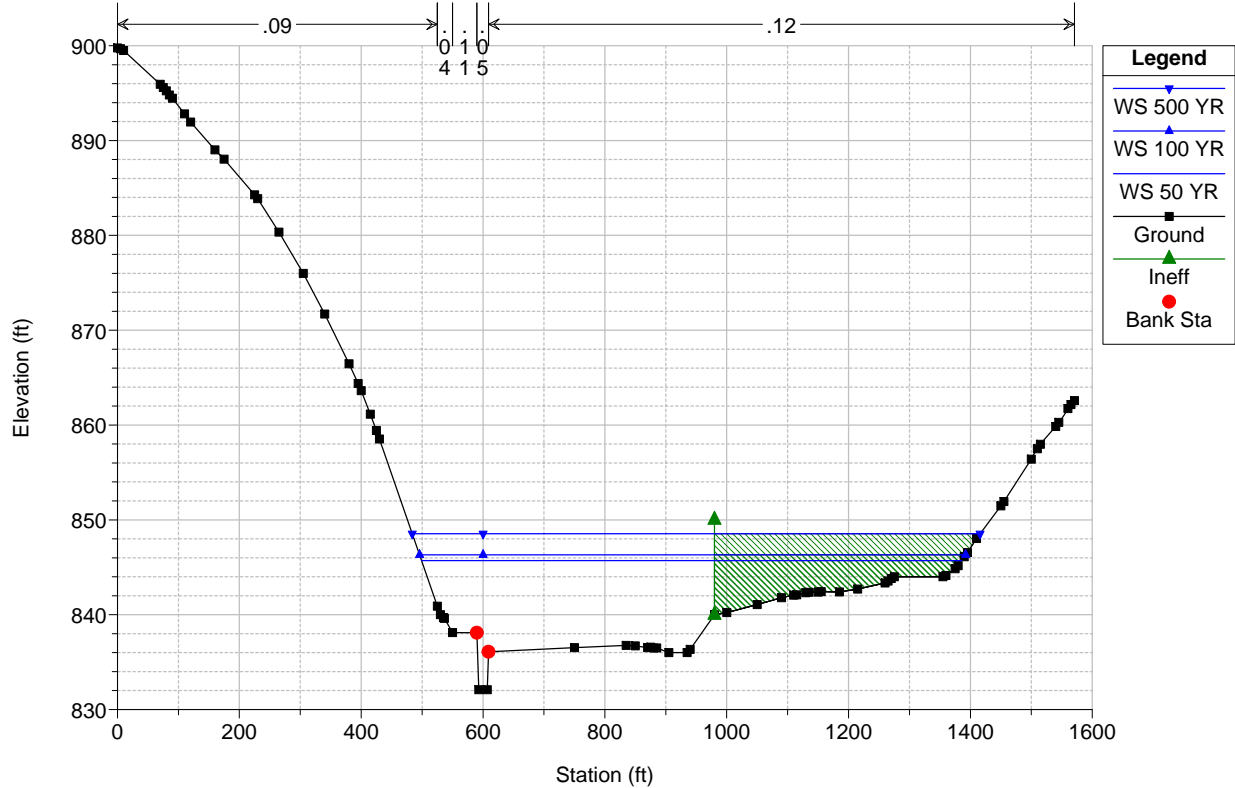
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23596.32 MS65



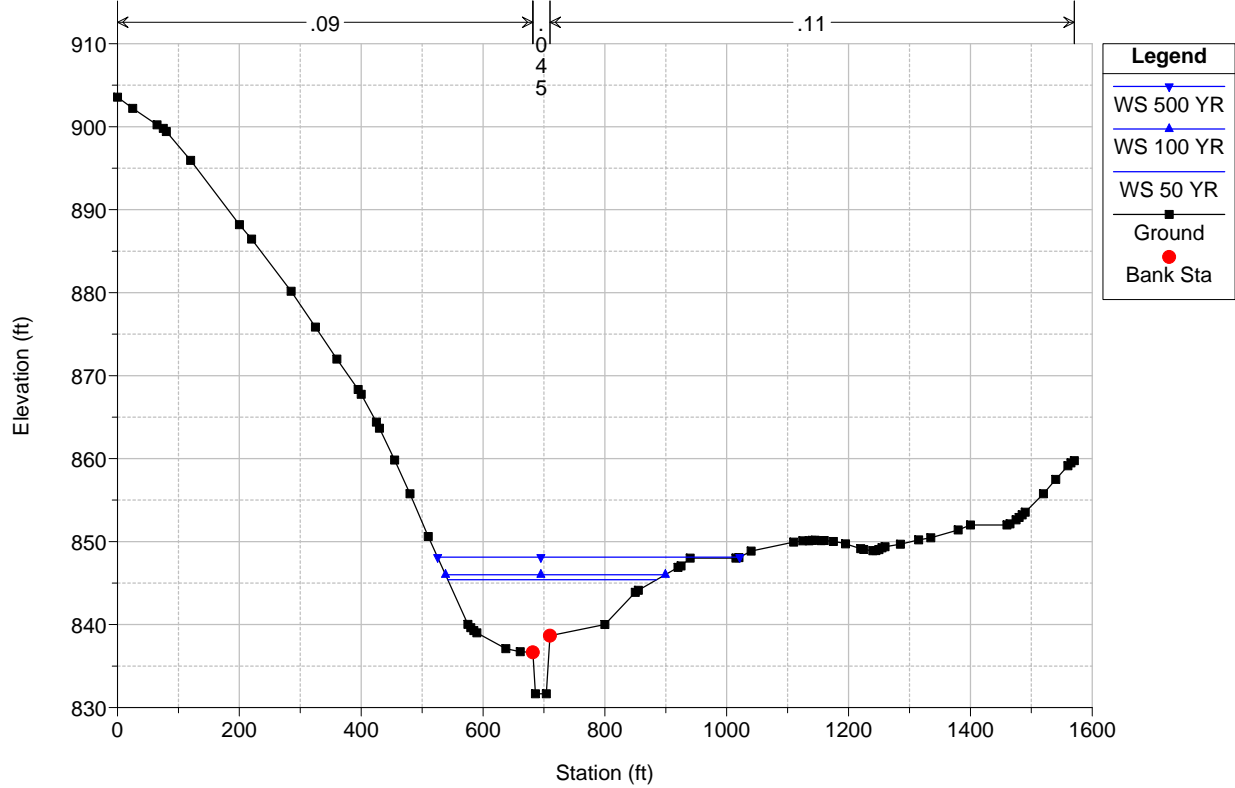
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23453.76 MS64



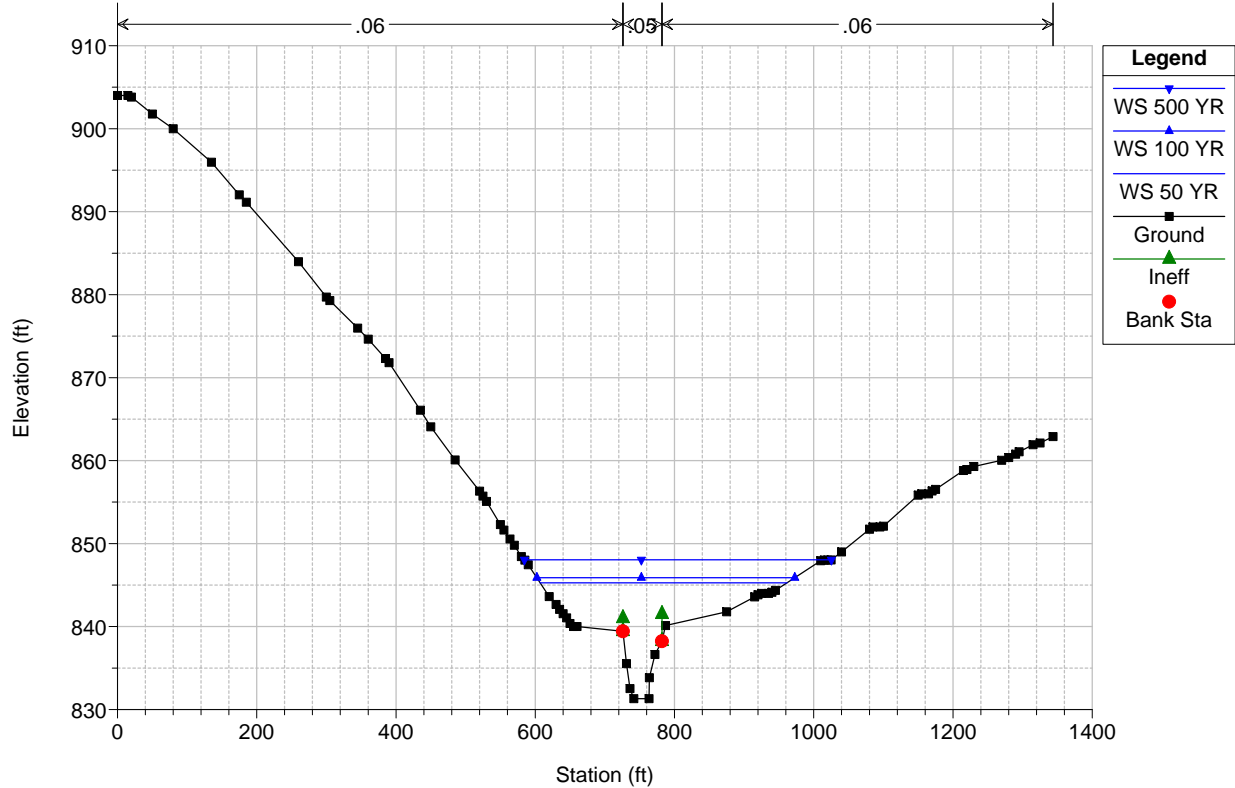
Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23327.04 MS63



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Rocky Creek\_CLOMR Plan: Proposed 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



HEC-RAS Plan: Proposed River: MAIN Reach: REACH 2

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	29985.12	50 YR	4111.00	848.24	860.50	857.77	861.24	0.002644	7.79	1077.76	429.22	0.45
REACH 2	29985.12	100 YR	4824.50	848.24	860.62	858.50	861.56	0.003377	8.88	1129.41	436.47	0.52
REACH 2	29985.12	500 YR	8461.20	848.24	863.56	861.63	864.09	0.001868	7.95	2588.45	534.36	0.40
REACH 2	29958.72	Bridge										
REACH 2	29927.04	50 YR	4111.00	848.15	857.89	857.89	859.20	0.006885	10.41	769.92	368.57	0.71
REACH 2	29927.04	100 YR	4824.50	848.15	858.29	858.29	859.62	0.006865	10.81	927.17	413.57	0.71
REACH 2	29927.04	500 YR	8461.20	848.15	860.71	859.72	861.43	0.003613	9.53	2246.29	659.25	0.54
REACH 2	29700	50 YR	4111.00	847.78	858.02	855.21	858.14	0.000705	3.21	2021.21	549.73	0.19
REACH 2	29700	100 YR	4824.50	847.78	858.53	855.50	858.66	0.000675	3.27	2305.71	558.77	0.19
REACH 2	29700	500 YR	8461.20	847.78	860.74	856.66	860.91	0.000601	3.56	3583.33	617.92	0.19
REACH 2	29573.28	50 YR	4111.00	847.57	857.96		858.03	0.000652	2.52	2533.26	667.38	0.15
REACH 2	29573.28	100 YR	4824.50	847.57	858.48		858.56	0.000619	2.55	2882.77	677.44	0.14
REACH 2	29573.28	500 YR	8461.20	847.57	860.71		860.81	0.000542	2.73	4446.91	729.12	0.14
REACH 2	29362.08	50 YR	4111.00	847.23	857.84	854.39	857.88	0.000554	2.86	3160.45	662.47	0.16
REACH 2	29362.08	100 YR	4824.50	847.23	858.37	854.59	858.41	0.000553	2.96	3509.45	671.89	0.16
REACH 2	29362.08	500 YR	8461.20	847.23	860.61	855.35	860.67	0.000553	3.38	5108.88	746.98	0.17
REACH 2	29203.68	50 YR	4111.00	846.96	857.68	854.77	857.76	0.001247	3.50	2322.35	521.09	0.21
REACH 2	29203.68	100 YR	4824.50	846.96	858.21	855.00	858.29	0.001230	3.61	2596.69	525.79	0.21
REACH 2	29203.68	500 YR	8461.20	846.96	860.44	855.95	860.55	0.001202	4.14	3794.24	547.62	0.22
REACH 2	28944.96	50 YR	4111.00	846.54	857.03	855.11	857.25	0.001723	5.41	1346.62	317.32	0.31
REACH 2	28944.96	100 YR	4824.50	846.54	857.55	855.36	857.78	0.001687	5.56	1513.80	320.85	0.31
REACH 2	28944.96	500 YR	8461.20	846.54	859.75	856.37	860.04	0.001622	6.24	2236.84	336.60	0.32
REACH 2	28707.36	50 YR	4111.00	846.15	856.89		856.98	0.000525	3.40	2107.67	441.63	0.19
REACH 2	28707.36	100 YR	4824.50	846.15	857.41		857.51	0.000534	3.55	2340.24	449.51	0.19
REACH 2	28707.36	500 YR	8461.20	846.15	859.61		859.76	0.000570	4.16	3368.11	482.86	0.21
REACH 2	28570.08	50 YR	4111.00	845.93	856.85		856.90	0.000528	2.91	2823.09	541.17	0.16
REACH 2	28570.08	100 YR	4824.50	845.93	857.37		857.43	0.000546	3.06	3107.66	547.92	0.16
REACH 2	28570.08	500 YR	8461.20	845.93	859.58		859.66	0.000610	3.66	4351.91	579.04	0.18
REACH 2	28374.72	50 YR	4111.00	845.61	856.62		856.74	0.001373	4.39	2276.44	465.89	0.24
REACH 2	28374.72	100 YR	4824.50	845.61	857.14		857.26	0.001384	4.55	2517.51	471.40	0.24
REACH 2	28374.72	500 YR	8461.20	845.61	859.31		859.48	0.001448	5.25	3566.31	497.28	0.25
REACH 2	28216.32	50 YR	4111.00	845.36	855.94		856.36	0.003861	7.18	1151.53	268.83	0.40
REACH 2	28216.32	100 YR	4824.50	845.36	856.45		856.88	0.003852	7.41	1290.36	278.55	0.40
REACH 2	28216.32	500 YR	8461.20	845.36	858.57		859.09	0.003832	8.34	1913.56	310.89	0.41
REACH 2	27999.84	50 YR	4111.00	845.00	854.17		855.15	0.007834	9.57	678.96	183.21	0.57
REACH 2	27999.84	100 YR	4824.50	845.00	854.60		855.65	0.008121	10.06	758.88	188.39	0.58
REACH 2	27999.84	500 YR	8461.20	845.00	856.53		857.84	0.008465	11.66	1144.41	211.66	0.62
REACH 2	27809.76	50 YR	4111.00	843.46	853.67		854.23	0.002723	7.65	996.97	227.14	0.44
REACH 2	27809.76	100 YR	4824.50	843.46	854.02		854.67	0.003055	8.31	1077.41	230.30	0.47
REACH 2	27809.76	500 YR	8461.20	843.46	855.76		856.72	0.003897	10.50	1491.94	246.72	0.55
REACH 2	27572.16	50 YR	4111.00	843.08	853.19		853.60	0.002102	6.74	1236.94	348.48	0.40
REACH 2	27572.16	100 YR	4824.50	843.08	853.50		853.96	0.002312	7.23	1346.19	352.49	0.42
REACH 2	27572.16	500 YR	8461.20	843.08	855.30		855.86	0.002391	8.27	2000.19	375.56	0.44
REACH 2	27339.84	50 YR	4111.00	842.66	853.08		853.17	0.000948	3.78	2089.89	463.89	0.21
REACH 2	27339.84	100 YR	4824.50	842.66	853.37		853.48	0.001088	4.13	2226.38	470.23	0.23
REACH 2	27339.84	500 YR	8461.20	842.66	855.16		855.32	0.001285	5.00	3100.20	508.96	0.26
REACH 2	27155.04	50 YR	4111.00	842.33	852.87		849.95	0.001052	5.02	1927.68	407.05	0.28
REACH 2	27155.04	100 YR	4824.50	842.33	853.12		850.24	0.001252	5.57	2030.86	410.38	0.31
REACH 2	27155.04	500 YR	8461.20	842.33	854.83		851.39	0.001626	7.03	2752.01	432.91	0.36
REACH 2	27091.68	Culvert										
REACH 2	27033.6	50 YR	4111.00	842.12	851.97		850.02	0.001870	6.40	1288.69	329.64	0.38
REACH 2	27033.6	100 YR	4824.50	842.12	852.51		850.42	0.001839	6.61	1467.68	336.03	0.38
REACH 2	27033.6	500 YR	8461.20	842.12	854.53		851.83	0.001935	7.72	2169.32	356.18	0.40
REACH 2	26806.56	50 YR	4111.00	841.72	851.71		851.86	0.000985	4.52	1885.16	463.55	0.25
REACH 2	26806.56	100 YR	4824.50	841.72	852.25		852.41	0.000953	4.61	2141.28	476.51	0.25
REACH 2	26806.56	500 YR	8461.20	841.72	854.27		854.48	0.000969	5.23	3123.39	495.06	0.26
REACH 2	26574.24	50 YR	4111.00	841.31	851.66		851.73	0.000251	2.28	1982.72	386.41	0.13
REACH 2	26574.24	100 YR	4824.50	841.31	852.20		852.28	0.000252	2.36	2203.38	436.30	0.13
REACH 2	26574.24	500 YR	8461.20	841.31	854.22		854.34	0.000279	2.80	3102.16	454.68	0.14

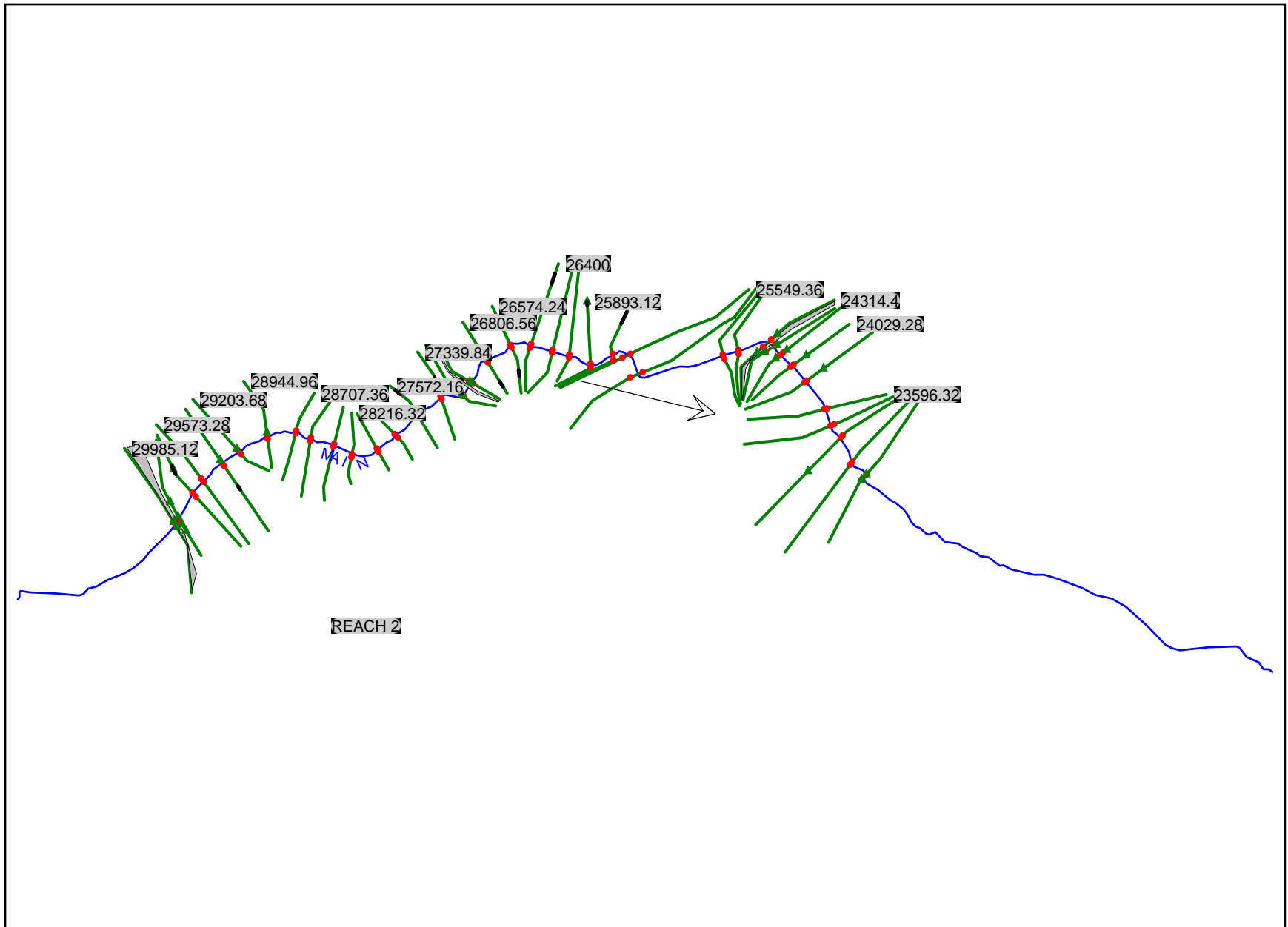
HEC-RAS Plan: Proposed River: MAIN Reach: REACH 2 (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	26400	50 YR	4111.00	840.00	851.39		851.61	0.001059	5.38	2040.62	459.51	0.29
REACH 2	26400	100 YR	4824.50	840.00	851.93		852.16	0.001102	5.68	2292.34	480.17	0.30
REACH 2	26400	500 YR	8461.20	840.00	853.88		854.20	0.001398	7.13	3424.99	621.48	0.35
REACH 2	26220.48	50 YR	4111.00	842.09	851.43		851.48	0.000252	1.38	2322.19	422.26	0.08
REACH 2	26220.48	100 YR	4824.50	842.09	851.97		852.03	0.000258	1.45	2551.21	429.21	0.08
REACH 2	26220.48	500 YR	8461.20	842.09	853.94		854.03	0.000318	1.84	3541.10	600.34	0.10
REACH 2	26083.2	50 YR	4111.00	839.43	851.39		851.45	0.000298	1.81	2123.26	369.77	0.09
REACH 2	26083.2	100 YR	4824.50	839.43	851.92		851.99	0.000343	2.00	2329.95	410.13	0.10
REACH 2	26083.2	500 YR	8461.20	839.43	853.88		853.98	0.000479	2.62	3376.46	652.65	0.12
REACH 2	25893.12	50 YR	4111.00	840.82	851.30	847.43	851.39	0.000485	2.78	1832.84	415.79	0.16
REACH 2	25893.12	100 YR	4824.50	840.82	851.83	847.65	851.93	0.000490	2.90	2059.63	445.73	0.16
REACH 2	25893.12	500 YR	8461.20	840.82	853.77	848.58	853.90	0.000579	3.56	3068.52	591.56	0.18
REACH 2	25687.2	50 YR	4323.20	839.50	851.27		851.33	0.000240	2.21	2640.66	490.56	0.12
REACH 2	25687.2	100 YR	4959.00	839.50	851.80		851.87	0.000249	2.32	2904.97	511.18	0.12
REACH 2	25687.2	500 YR	7947.00	839.50	853.74		853.83	0.000293	2.79	3942.46	562.11	0.13
REACH 2	25549.36	50 YR	4323.20	839.40	850.78	845.75	851.20	0.001996	5.58	1030.02	885.21	0.32
REACH 2	25549.36	100 YR	4959.00	839.40	851.27	846.31	851.73	0.002124	5.95	1148.31	940.19	0.33
REACH 2	25549.36	500 YR	7947.00	839.40	853.08	849.71	853.67	0.002379	7.04	1602.27	1112.81	0.36
REACH 2	25460.16		Bridge									
REACH 2	25370.96	50 YR	4323.20	838.80	850.76	845.17	850.97	0.000731	3.64	1206.88	829.25	0.22
REACH 2	25370.96	100 YR	4959.00	838.80	851.23	845.65	851.48	0.000775	3.89	1306.39	859.28	0.23
REACH 2	25370.96	500 YR	7947.00	838.80	852.97	847.61	853.37	0.000962	4.88	1732.64	1246.74	0.26
REACH 2	24668.16	50 YR	4323.20	835.85	849.55		849.96	0.003719	6.63	979.56	193.55	0.41
REACH 2	24668.16	100 YR	4959.00	835.85	849.95		850.41	0.003983	7.04	1057.36	198.81	0.43
REACH 2	24668.16	500 YR	7947.00	835.85	851.24		851.98	0.005501	9.10	1356.05	251.65	0.51
REACH 2	24541.44	50 YR	4323.20	835.30	849.18		849.51	0.003047	6.17	1087.69	177.10	0.37
REACH 2	24541.44	100 YR	4959.00	835.30	849.53		849.92	0.003415	6.69	1154.04	221.78	0.39
REACH 2	24541.44	500 YR	7947.00	835.30	850.57		851.26	0.005420	9.07	1442.16	329.27	0.50
REACH 2	24314.4	50 YR	4323.20	834.32	848.15	843.37	848.77	0.002842	6.41	780.59	649.64	0.41
REACH 2	24314.4	100 YR	4959.00	834.32	848.26	844.03	849.04	0.003540	7.22	802.34	667.53	0.46
REACH 2	24314.4	500 YR	7947.00	834.32	849.75	847.67	850.31	0.002688	7.08	2123.98	761.90	0.41
REACH 2	24277.44		Bridge									
REACH 2	24240.48	50 YR	4323.20	833.89	846.62	844.00	847.46	0.004583	7.36	609.37	686.06	0.51
REACH 2	24240.48	100 YR	4959.00	833.89	847.23	844.53	848.13	0.004409	7.67	676.03	716.10	0.51
REACH 2	24240.48	500 YR	7947.00	833.89	849.07	846.54	849.32	0.001495	5.22	3136.22	787.84	0.31
REACH 2	24156	50 YR	4323.20	833.72	846.28	843.28	847.05	0.003623	8.05	797.60	556.74	0.43
REACH 2	24156	100 YR	4959.00	833.72	846.88	843.79	847.73	0.003808	8.55	863.47	585.74	0.44
REACH 2	24156	500 YR	7947.00	833.72	849.02	845.66	849.10	0.000553	3.65	4233.51	636.53	0.17
REACH 2	24029.28	50 YR	4323.20	833.47	846.08	842.59	846.32	0.001545	5.21	1335.55	530.43	0.27
REACH 2	24029.28	100 YR	4959.00	833.47	846.69	842.91	846.95	0.001551	5.39	1472.54	542.27	0.27
REACH 2	24029.28	500 YR	7947.00	833.47	848.96	844.11	849.03	0.000363	2.92	4122.02	582.63	0.13
REACH 2	23860.32	50 YR	4323.20	833.15	846.04	841.50	846.11	0.000636	3.15	2436.73	656.28	0.16
REACH 2	23860.32	100 YR	4959.00	833.15	846.65	841.73	846.73	0.000633	3.24	2678.95	663.12	0.16
REACH 2	23860.32	500 YR	7947.00	833.15	848.92	842.62	848.96	0.000336	2.63	5683.79	688.76	0.12
REACH 2	23596.32	50 YR	4323.20	832.61	845.86		845.93	0.000637	3.44	2797.52	445.16	0.17
REACH 2	23596.32	100 YR	4959.00	832.61	846.48		846.55	0.000637	3.55	3073.61	452.81	0.17
REACH 2	23596.32	500 YR	7947.00	832.61	848.73		848.82	0.000693	4.11	4123.90	480.78	0.18
REACH 2	23453.76	50 YR	4323.20	832.34	845.72		845.82	0.000833	4.05	2762.98	447.03	0.21
REACH 2	23453.76	100 YR	4959.00	832.34	846.33		846.44	0.000832	4.19	3039.87	454.43	0.21
REACH 2	23453.76	500 YR	7947.00	832.34	848.57		848.70	0.000891	4.83	4086.84	482.07	0.22
REACH 2	23327.04	50 YR	4323.20	832.09	845.70	838.89	845.73	0.000292	2.32	4145.71	886.56	0.11
REACH 2	23327.04	100 YR	4959.00	832.09	846.32	839.09	846.34	0.000308	2.45	4441.22	896.52	0.12
REACH 2	23327.04	500 YR	7947.00	832.09	848.55	839.85	848.59	0.000389	3.05	5534.27	932.08	0.14
REACH 2	23110.56	50 YR	4323.20	831.66	845.41		845.61	0.001027	5.09	2010.40	343.02	0.25
REACH 2	23110.56	100 YR	4959.00	831.66	846.01		846.21	0.001069	5.35	2219.85	360.76	0.26
REACH 2	23110.56	500 YR	7947.00	831.66	848.12		848.42	0.001397	6.75	3051.96	495.97	0.30
REACH 2	22946.88	50 YR	4434.50	831.32	845.28	839.64	845.45	0.000807	4.05	1727.96	354.76	0.21
REACH 2	22946.88	100 YR	4991.90	831.32	845.89	840.12	846.05	0.000762	4.08	1949.20	370.64	0.21

HEC-RAS Plan: Proposed River: MAIN Reach: REACH 2 (Continued)

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	22946.88	500 YR	7514.60	831.32	848.05	842.60	848.22	0.000704	4.37	2811.47	440.89	0.20

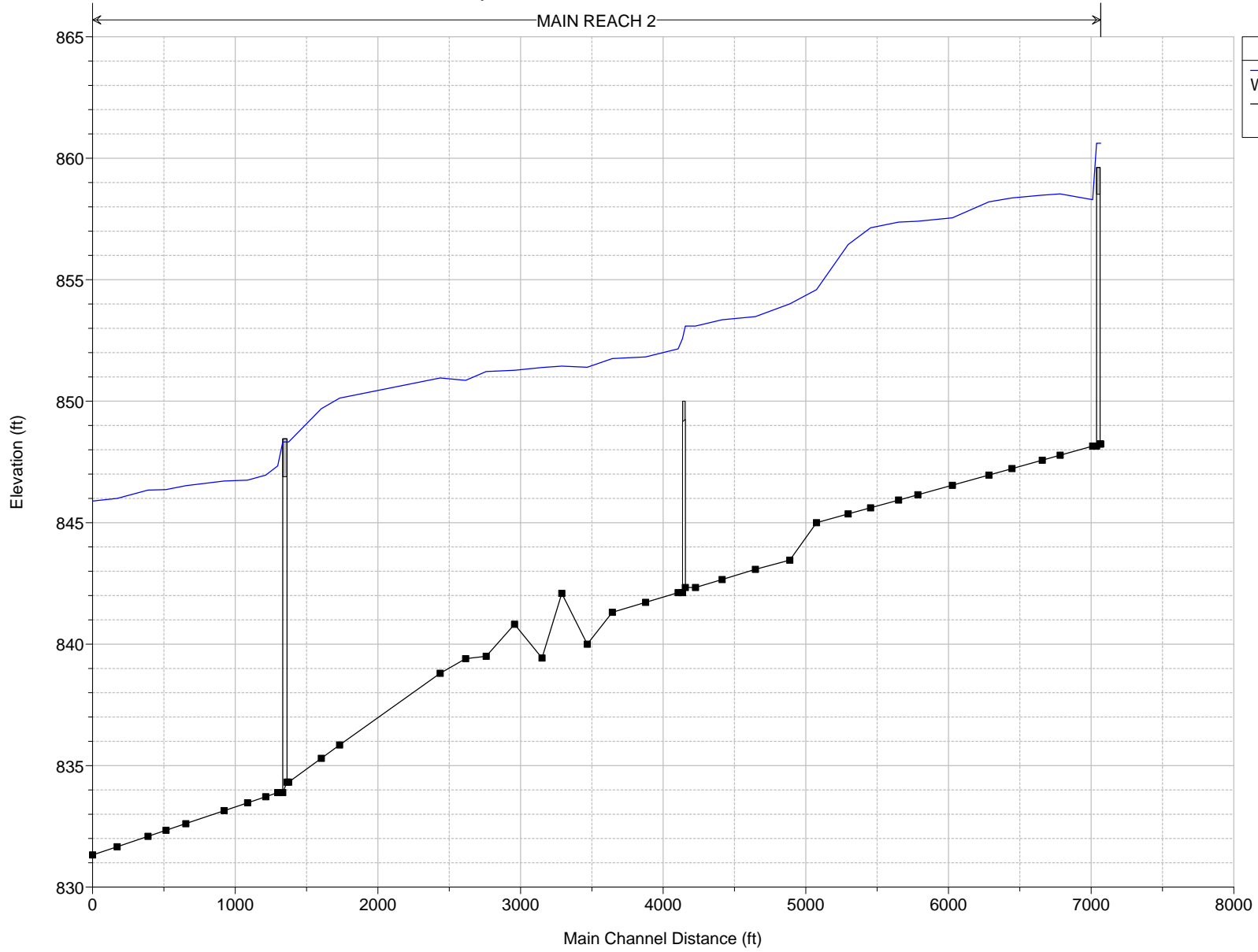
NATURAL





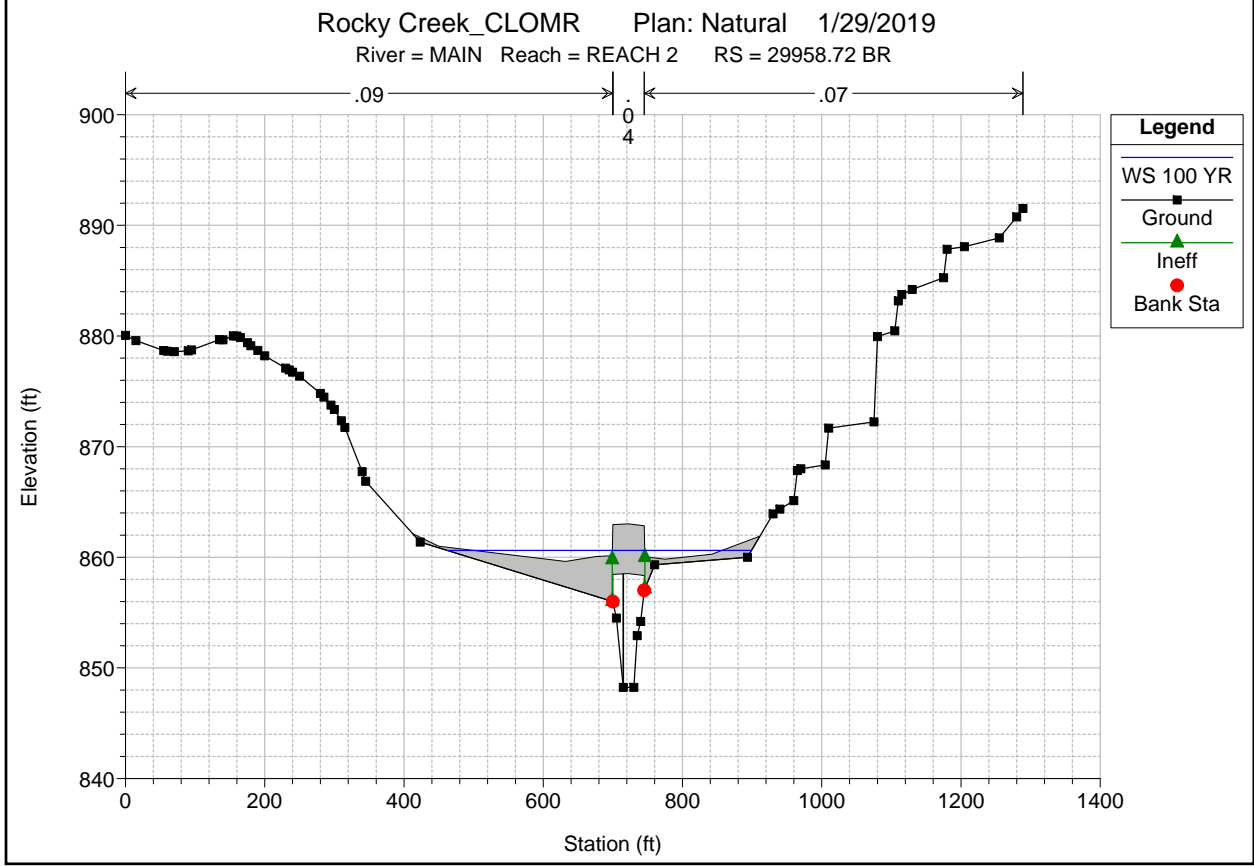
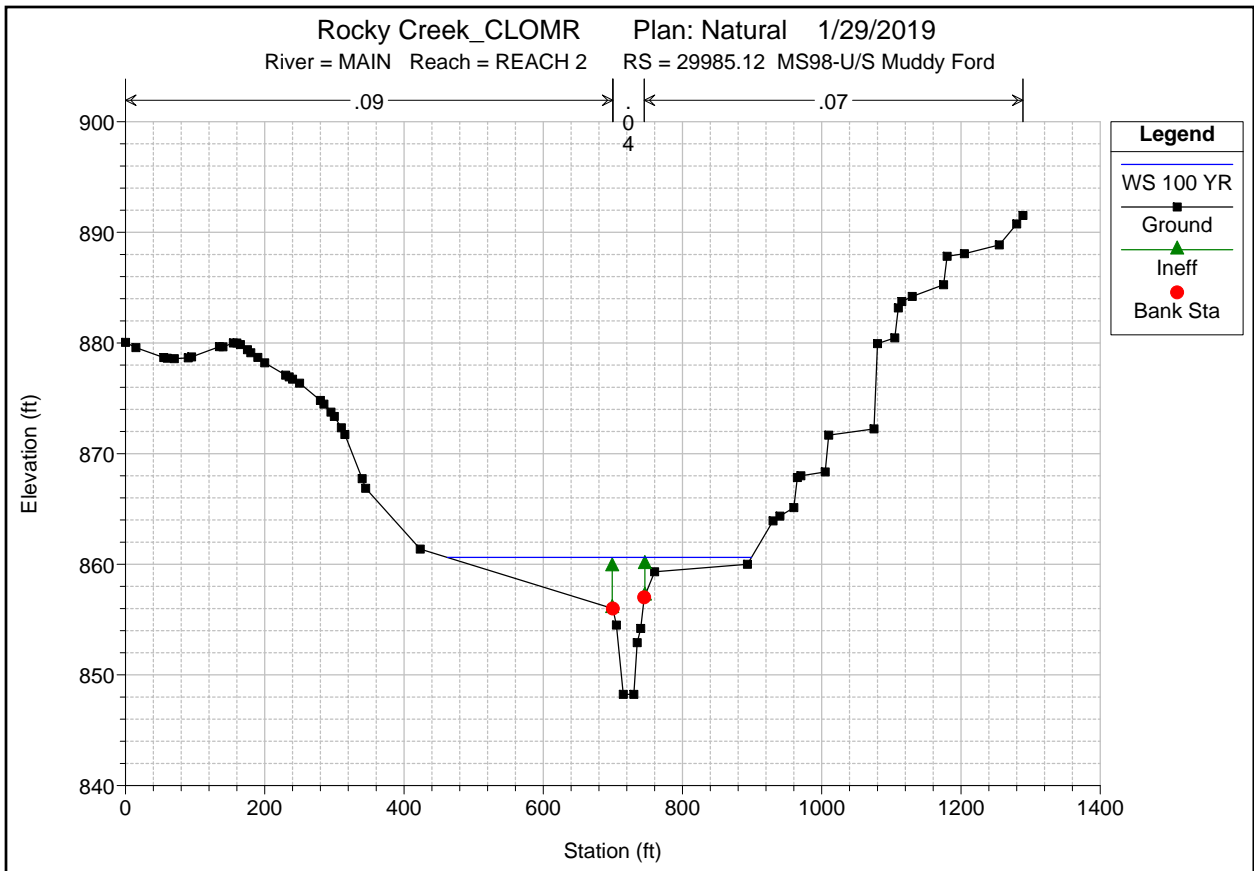
Rocky Creek\_CLOMR Plan: Natural 1/29/2019

MAIN REACH 2



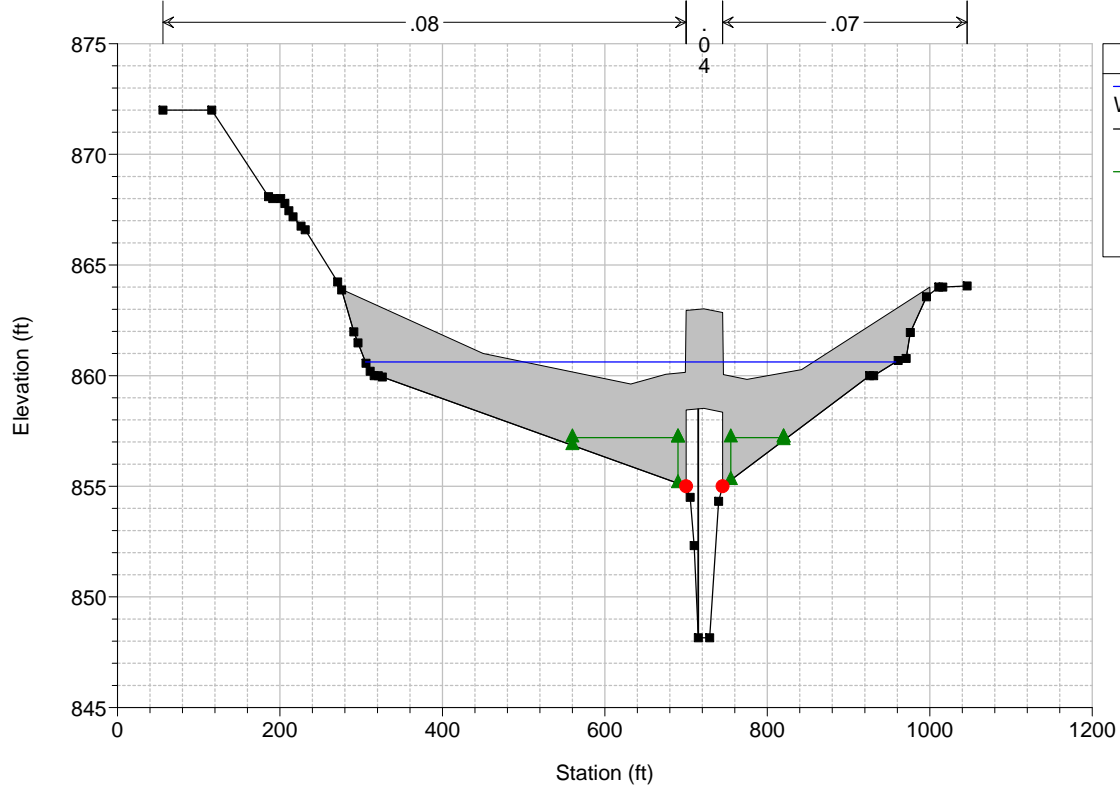
**Legend**

- WS 100 YR
- Ground



Rocky Creek\_CLOMR Plan: Natural 1/29/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR

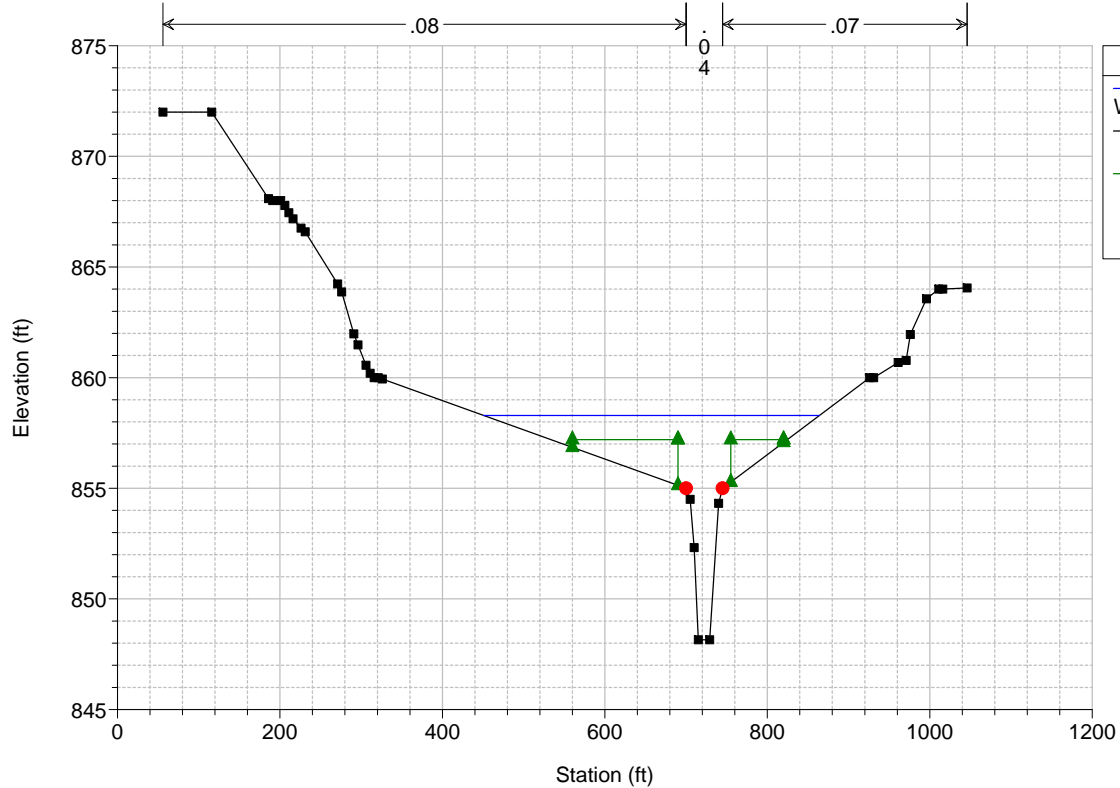


**Legend**

- WS 100 YR
- Ground
- Ineff
- Bank Sta

Rocky Creek\_CLOMR Plan: Natural 1/29/2019

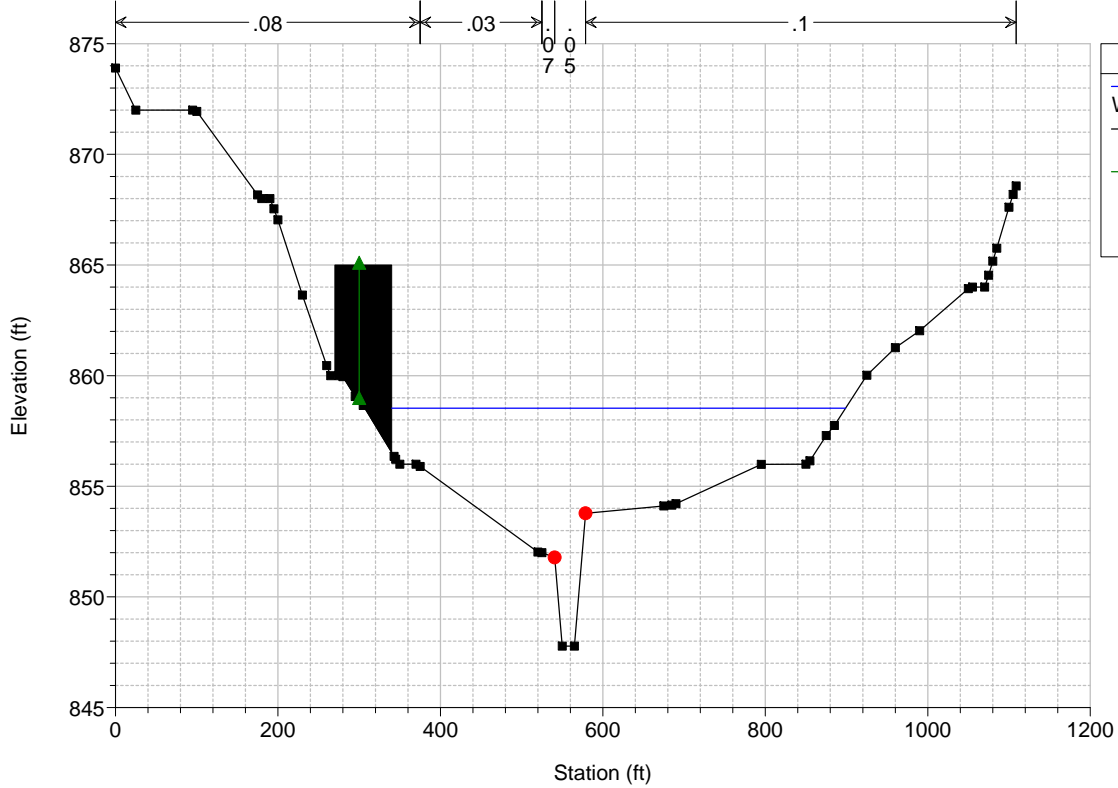
River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



**Legend**

- WS 100 YR
- Ground
- Ineff
- Bank Sta

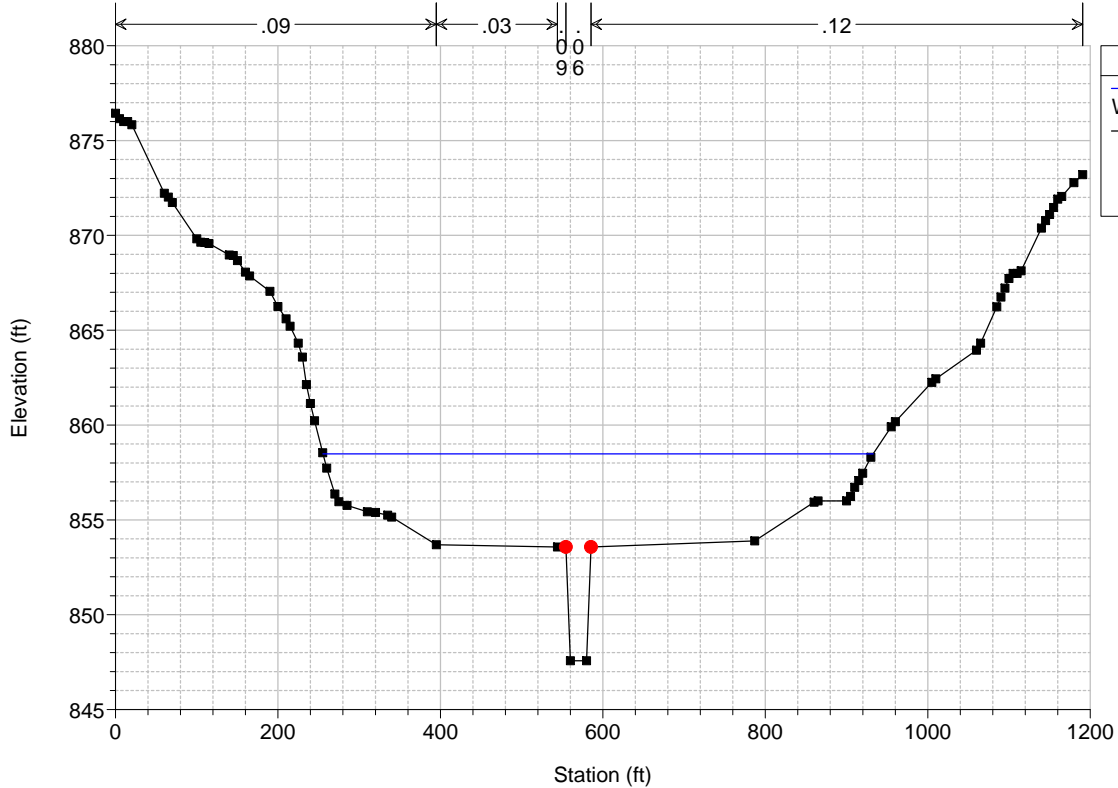
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 29700 MS96



**Legend**

- WS 100 YR
- Ground
- Ineff
- Bank Sta

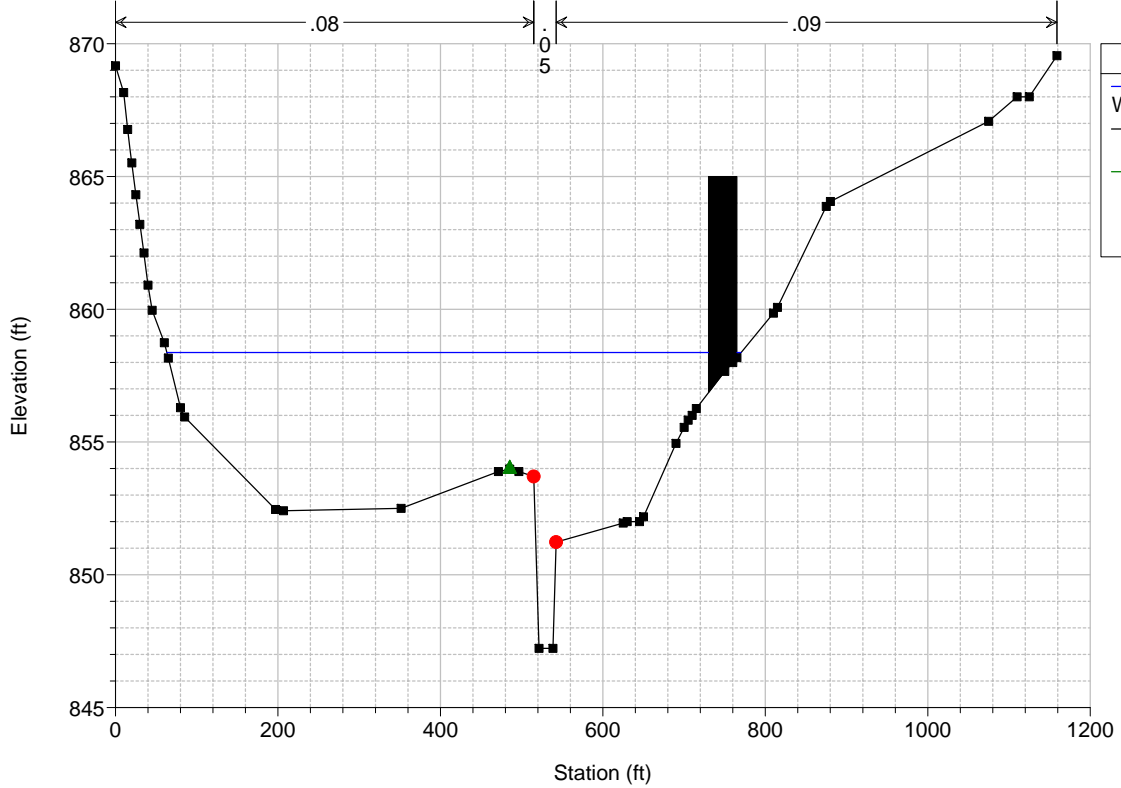
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 29573.28 MS95



**Legend**

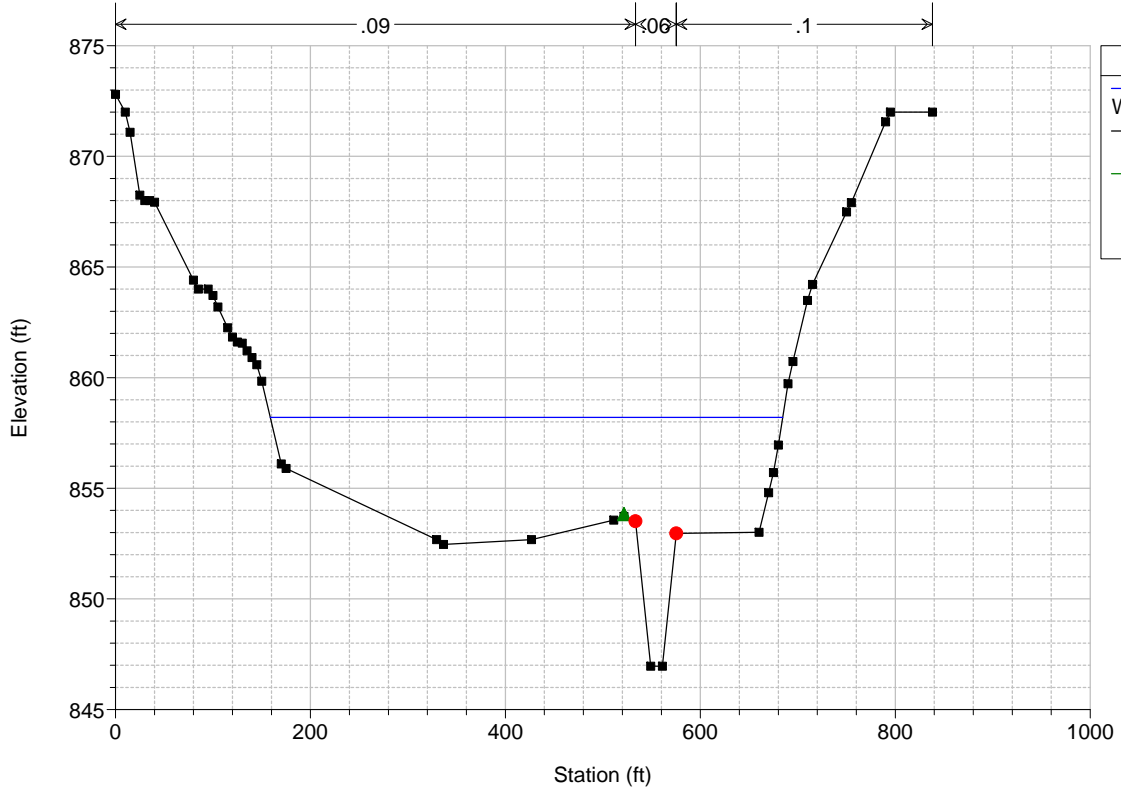
- WS 100 YR
- Ground
- Bank Sta

Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 29362.08 MS94



Legend	
WS 100 YR	—
Ground	■
Ineff	▲
Bank Sta	●

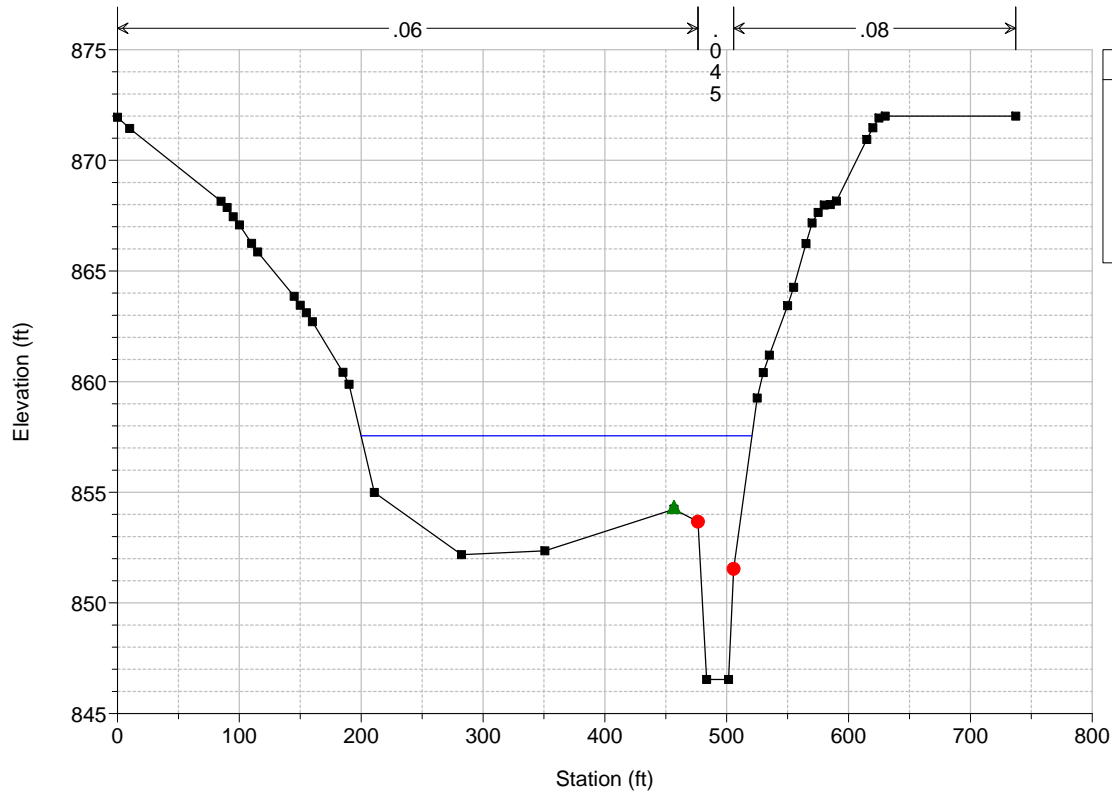
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 29203.68 MS93



Legend	
WS 100 YR	—
Ground	■
Ineff	▲
Bank Sta	●

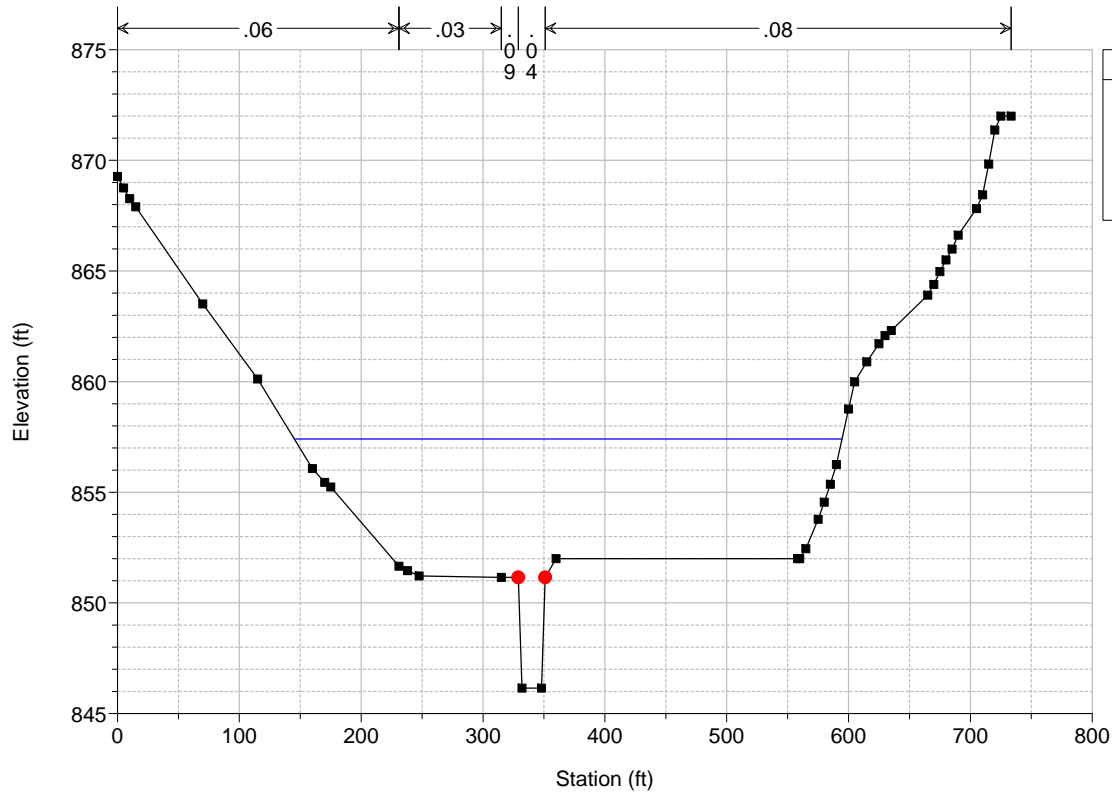
Rocky Creek\_CLOMR Plan: Natural 1/29/2019

River = MAIN Reach = REACH 2 RS = 28944.96 MS92

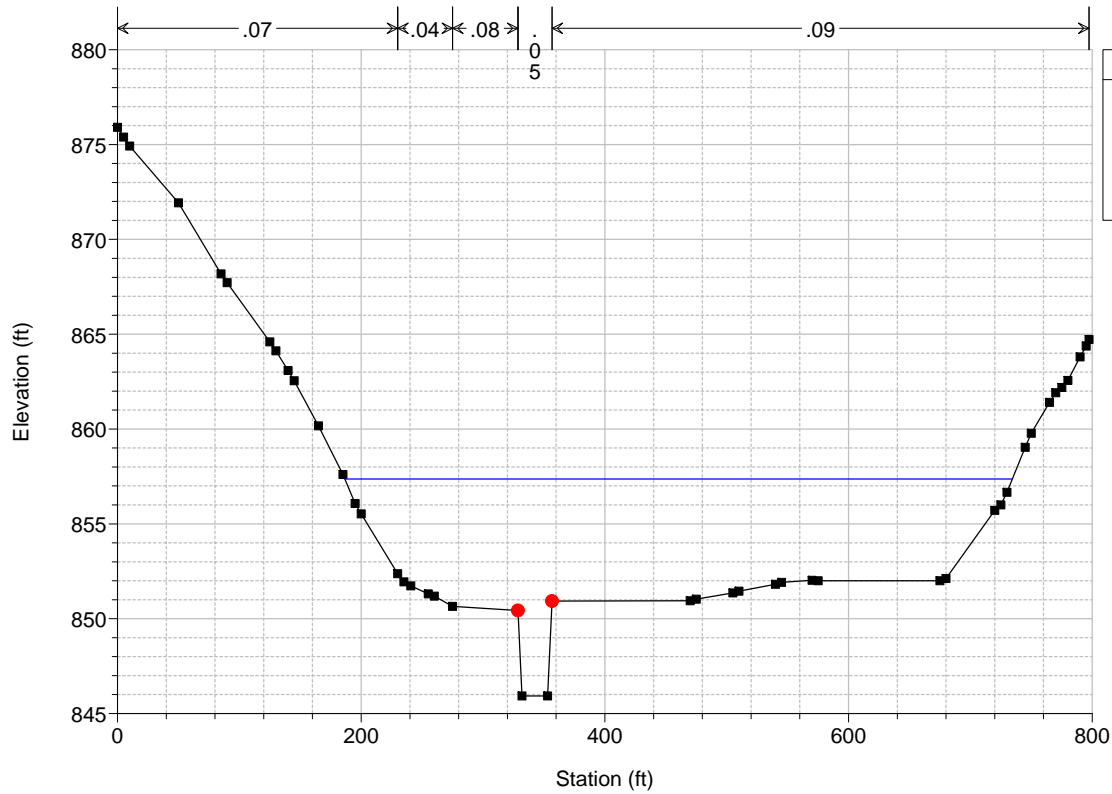


Rocky Creek\_CLOMR Plan: Natural 1/29/2019

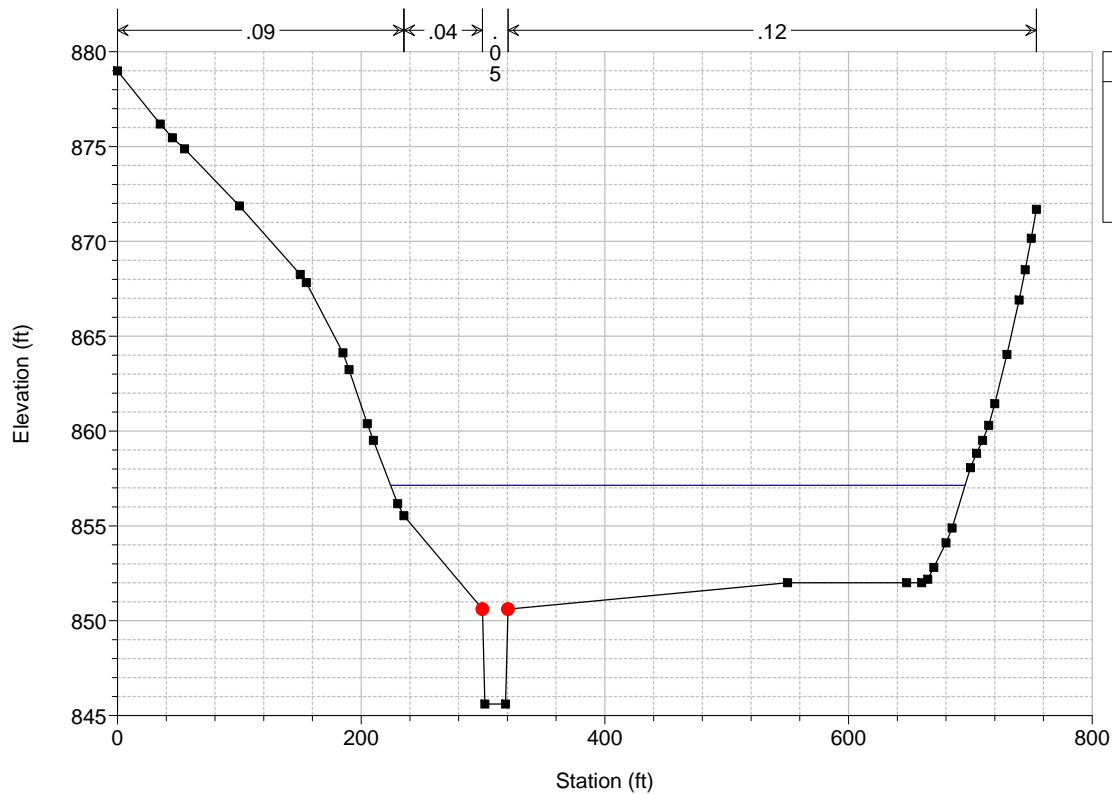
River = MAIN Reach = REACH 2 RS = 28707.36 MS91



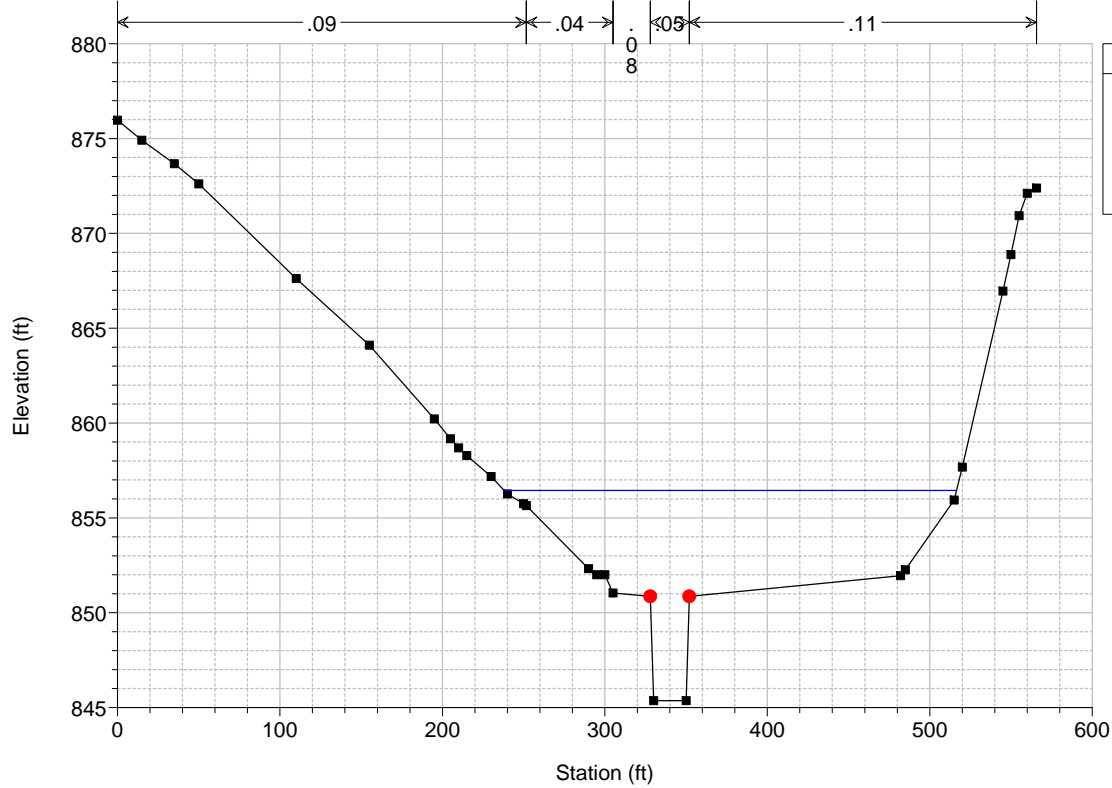
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 28570.08 MS90



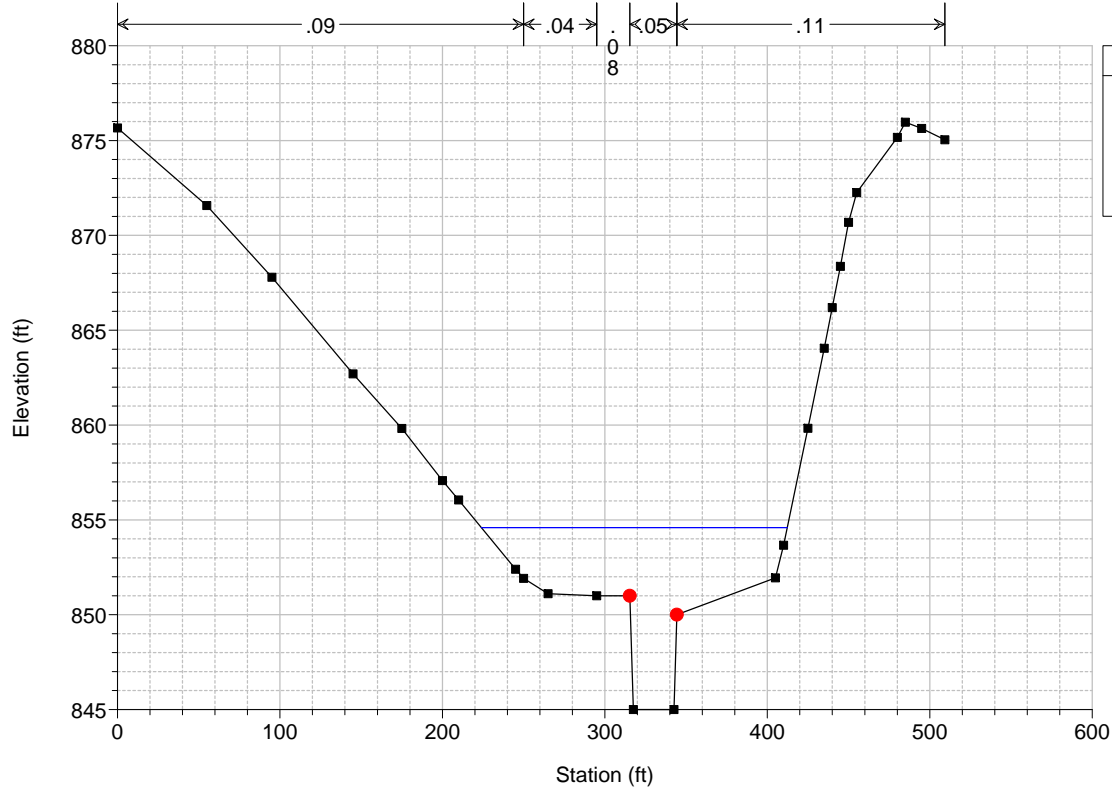
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 28374.72 MS89



Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 28216.32 MS88

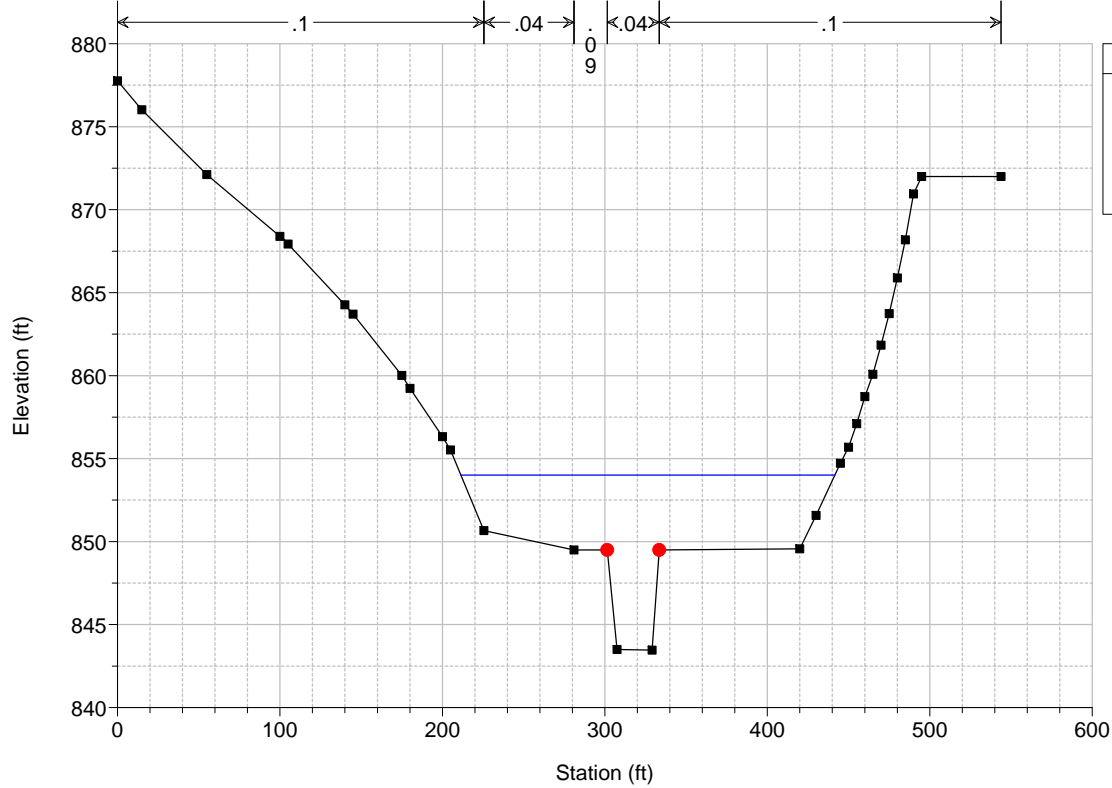


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 27999.84 MS87

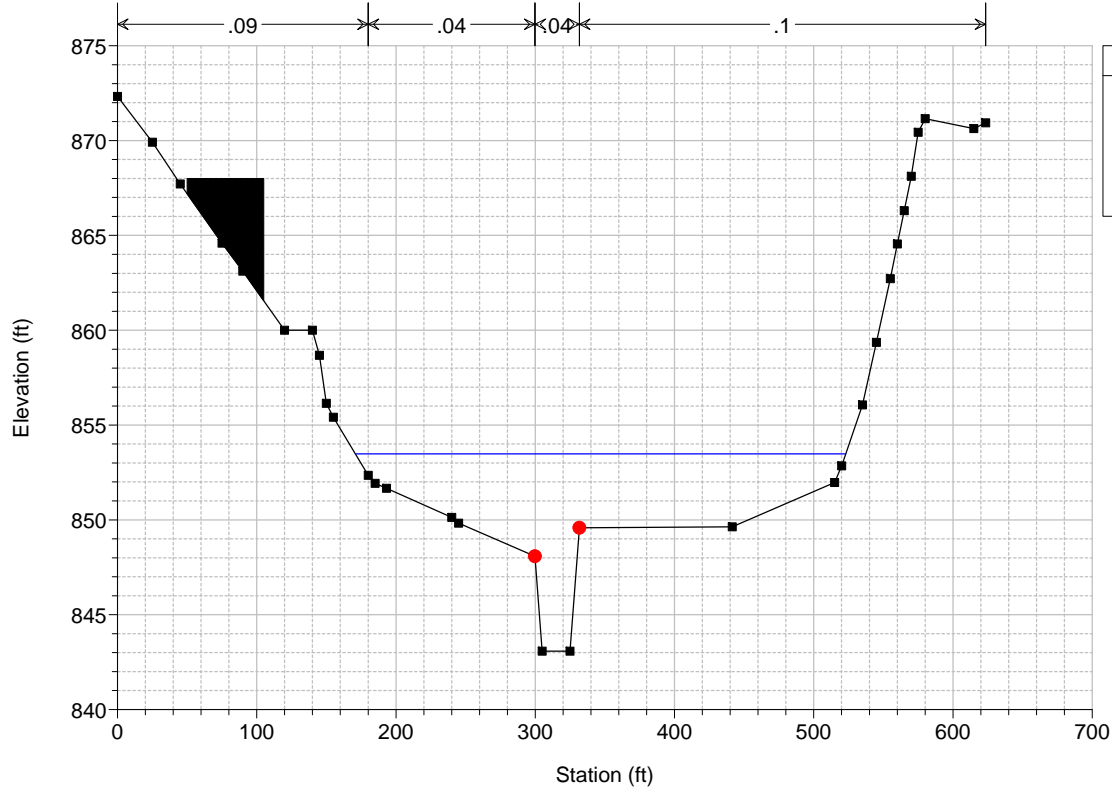




Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 27809.76 MS86

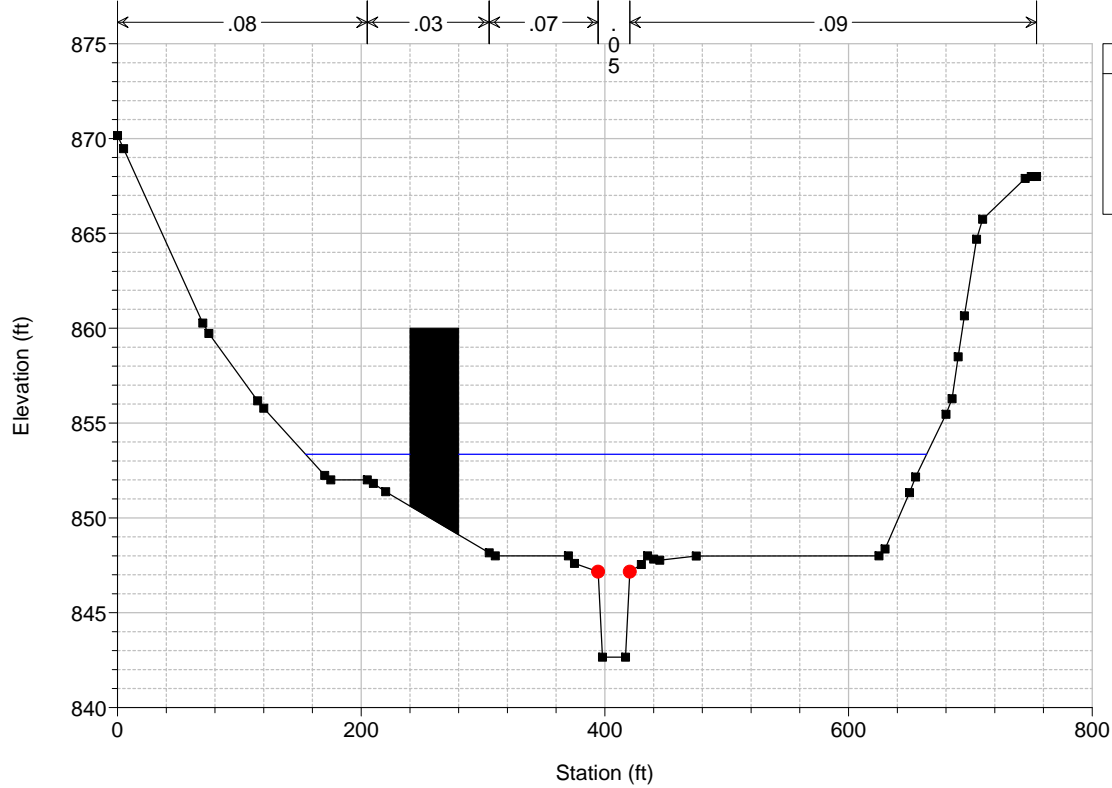


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 27572.16 MS85



Rocky Creek\_CLOMR Plan: Natural 1/29/2019

River = MAIN Reach = REACH 2 RS = 27339.84 MS84

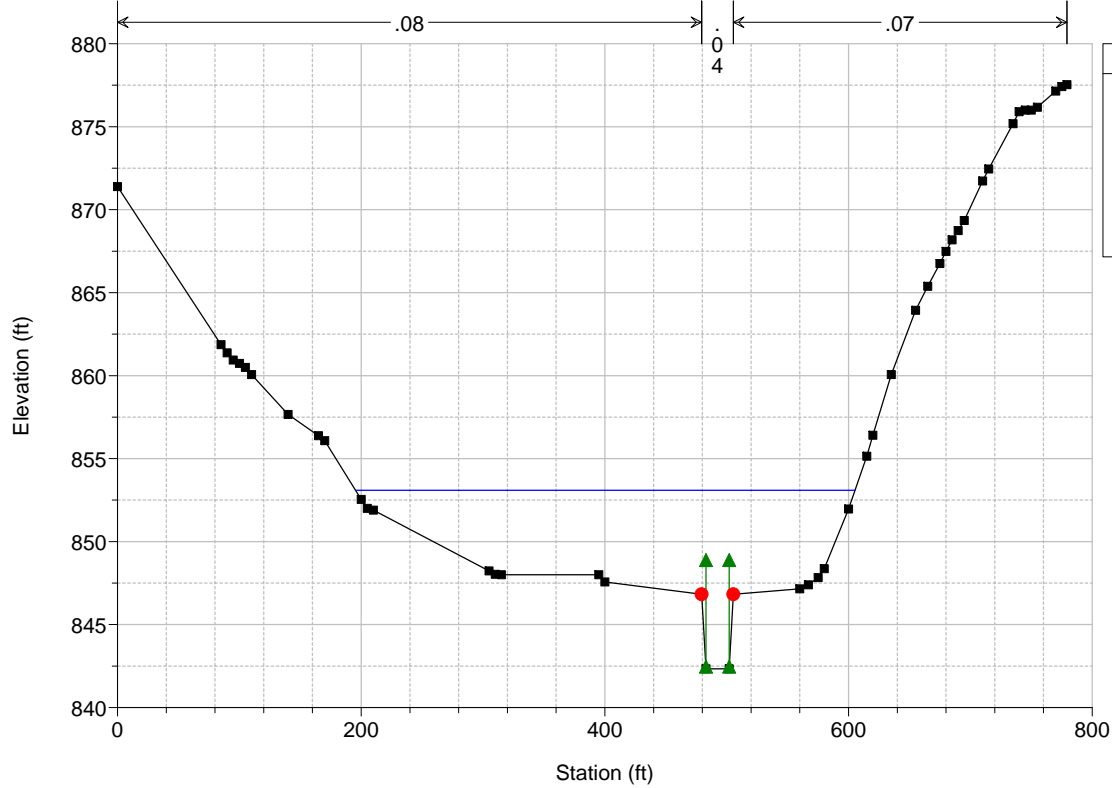


**Legend**

- WS 100 YR
- Ground
- Bank Sta

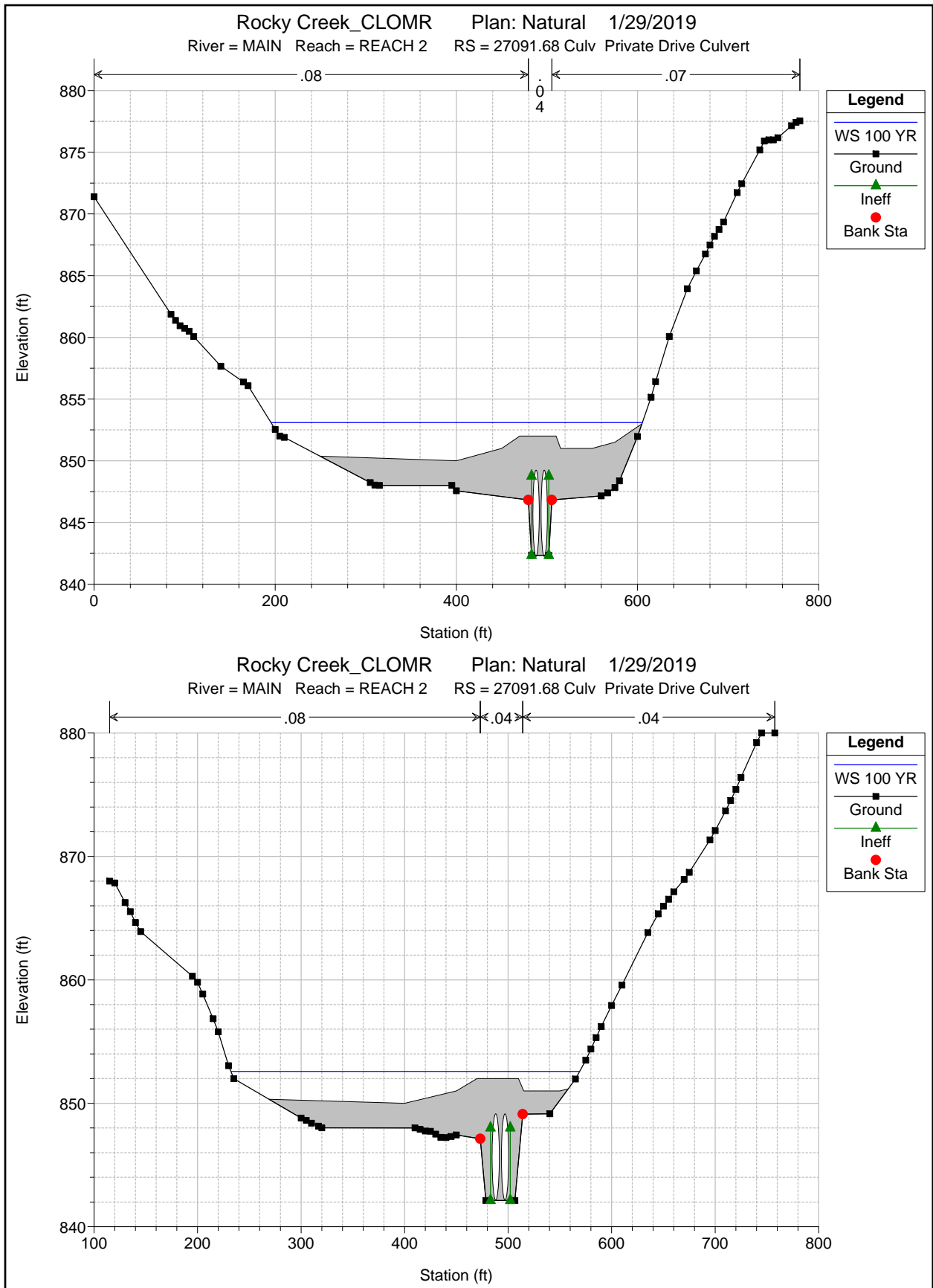
Rocky Creek\_CLOMR Plan: Natural 1/29/2019

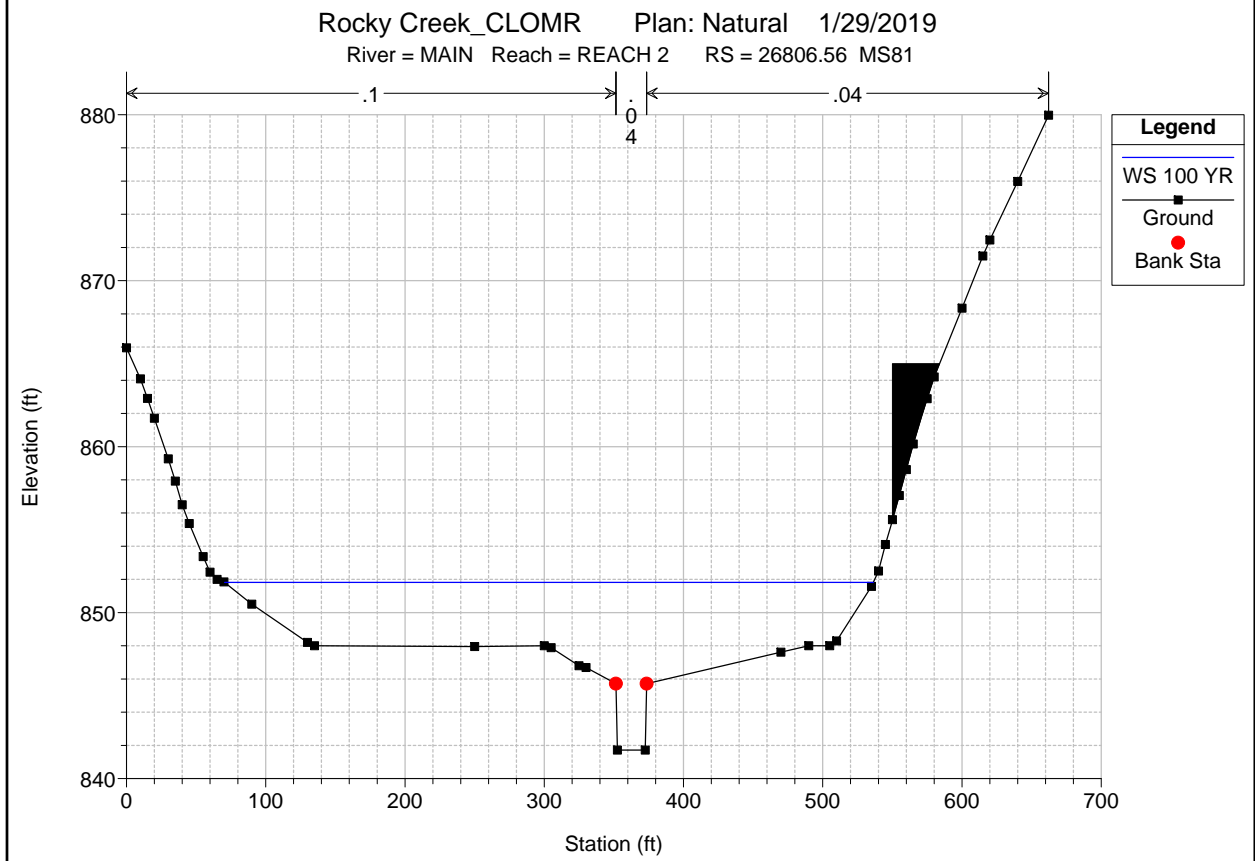
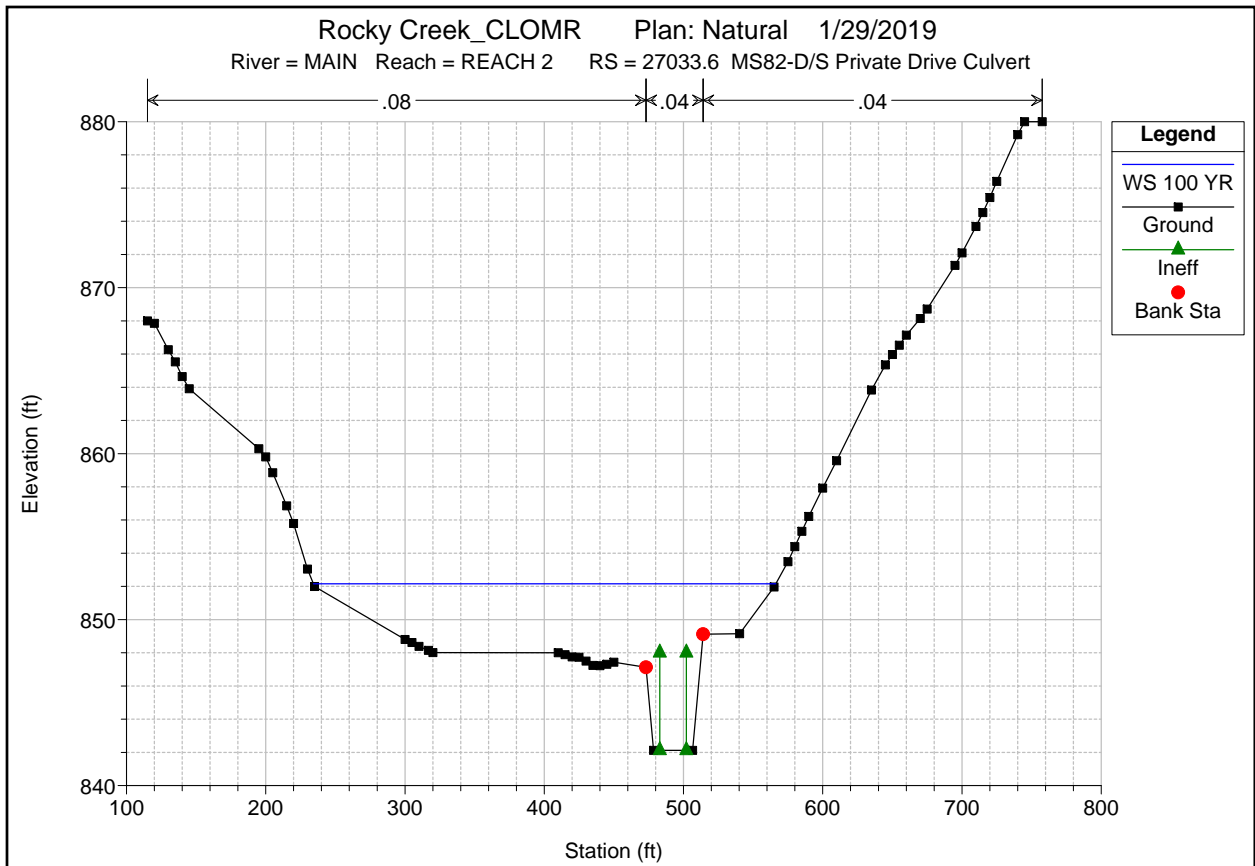
River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert



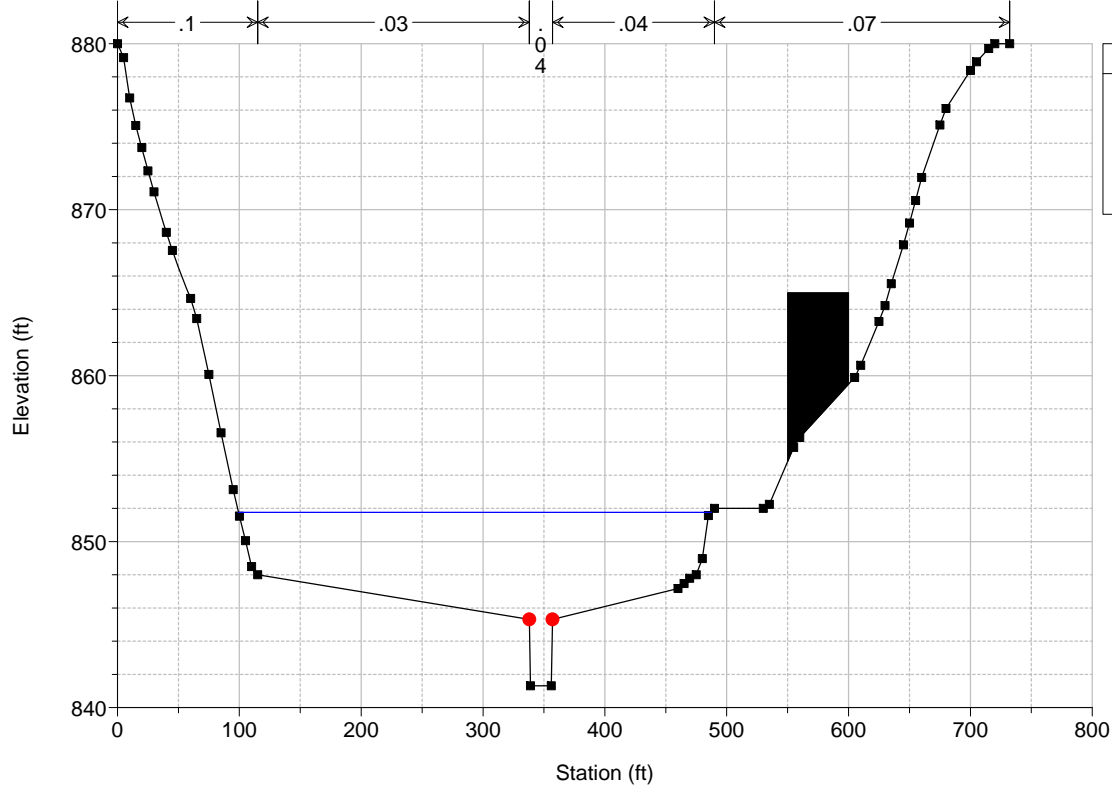
**Legend**

- WS 100 YR
- Ground
- Ineff
- Bank Sta



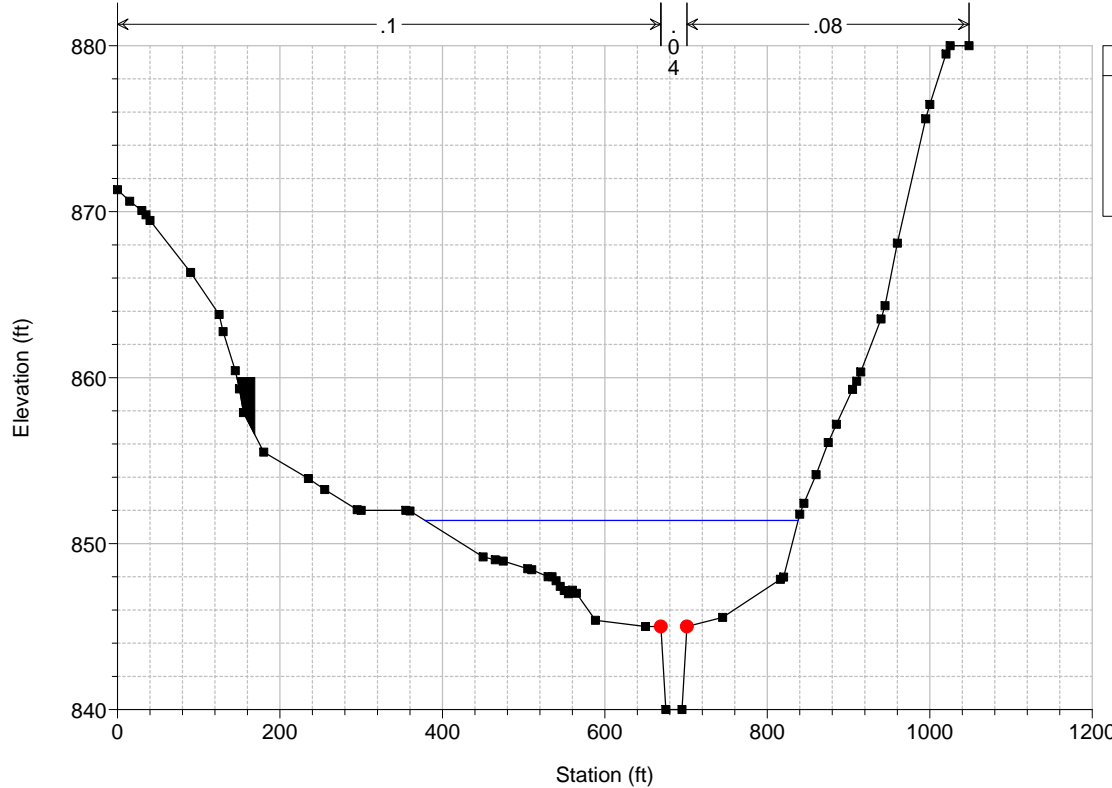


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 26574.24 MS80



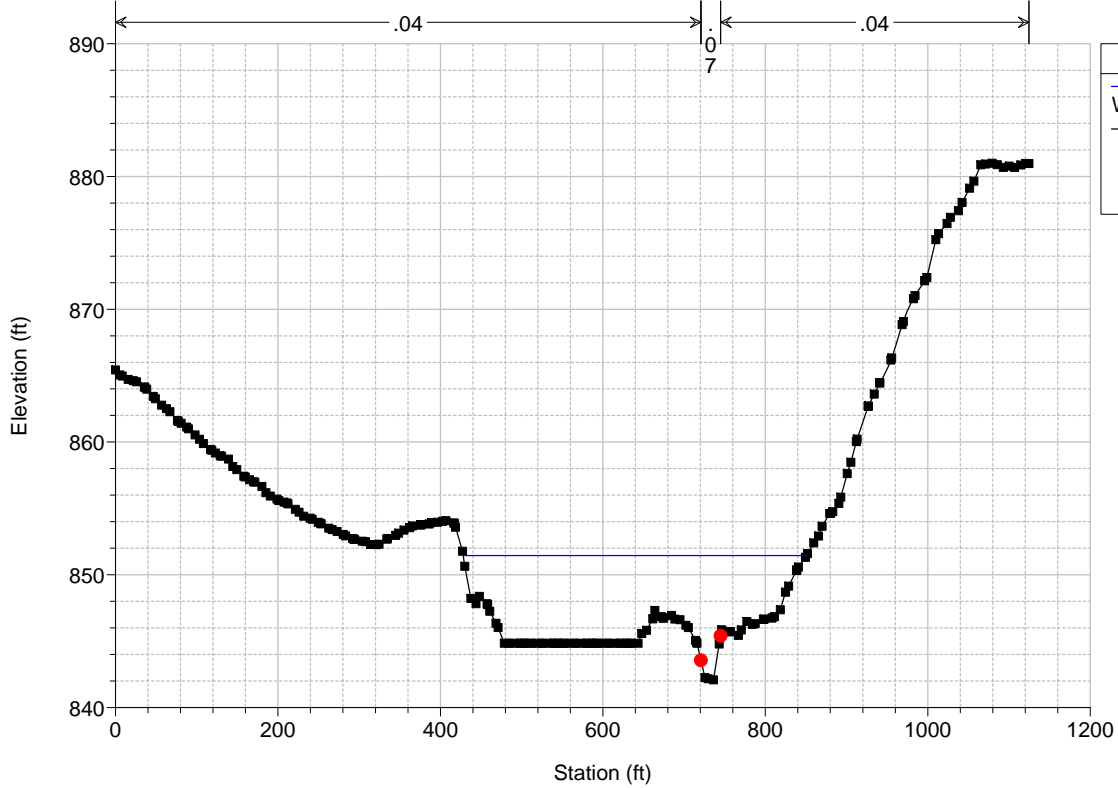
Legend	
—	WS 100 YR
■	Ground
●	Bank Sta

Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 26400 MS79

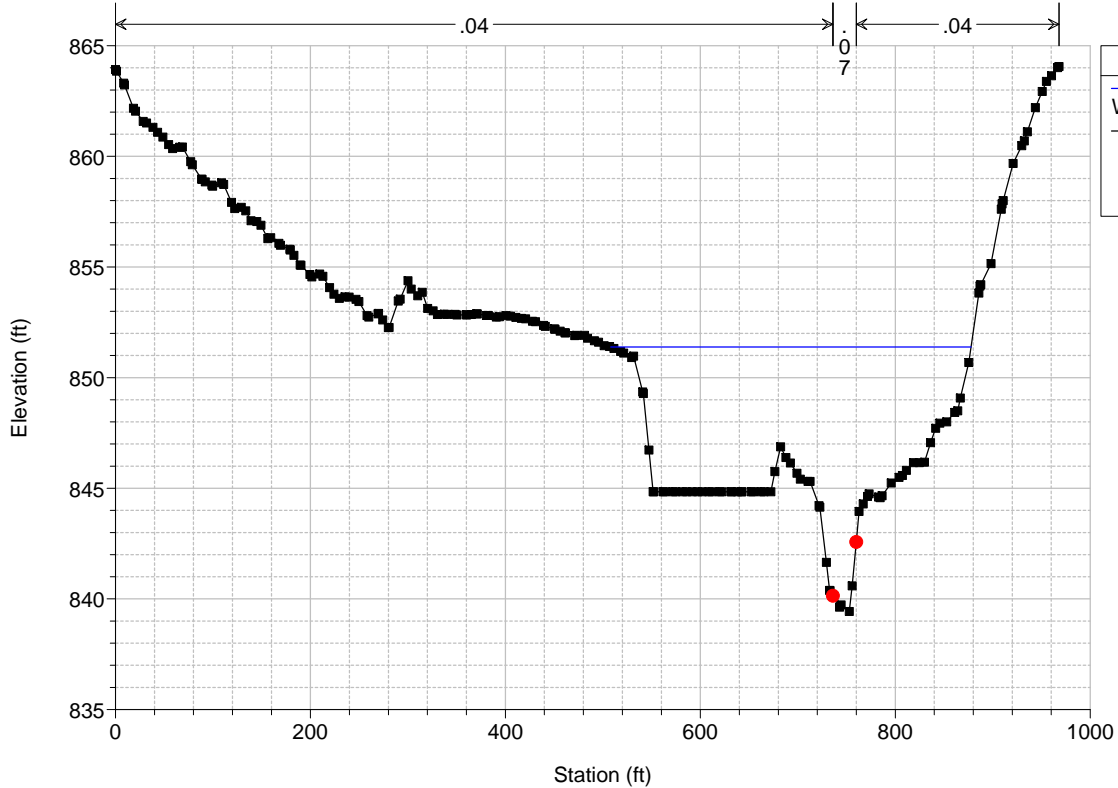


Legend	
—	WS 100 YR
■	Ground
●	Bank Sta

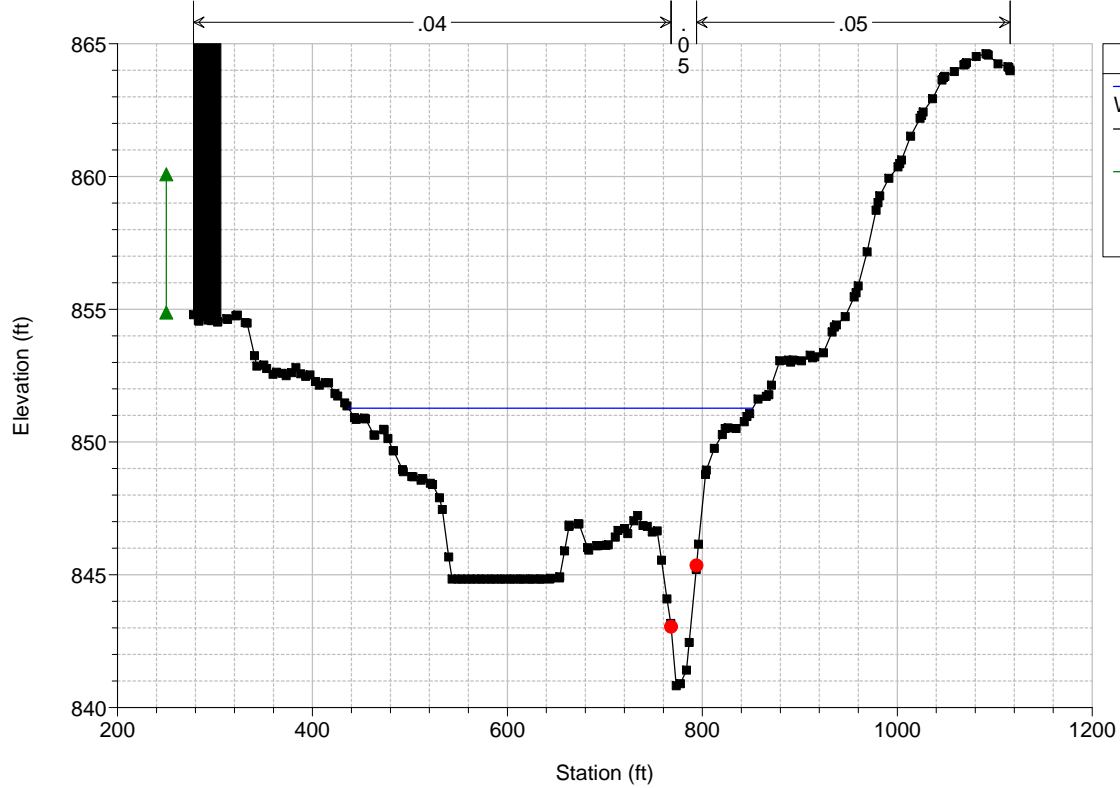
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
River = MAIN Reach = REACH 2 RS = 26220.48 MS78



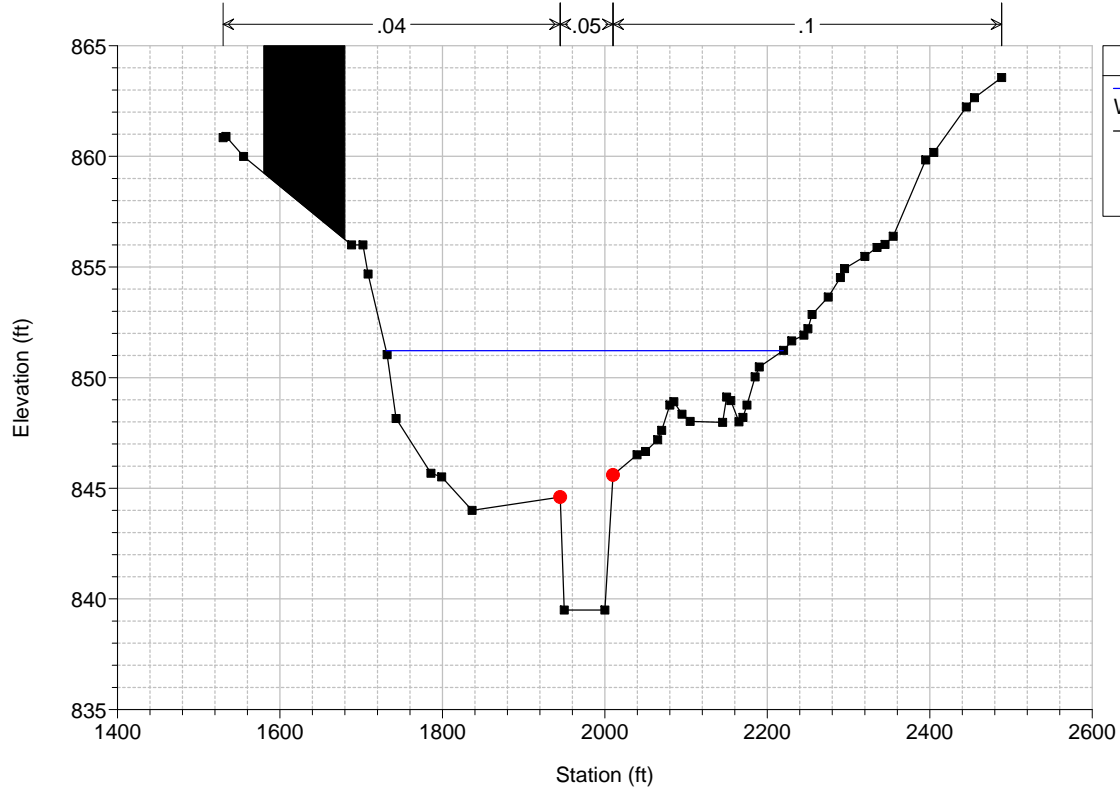
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
River = MAIN Reach = REACH 2 RS = 26083.2 MS77

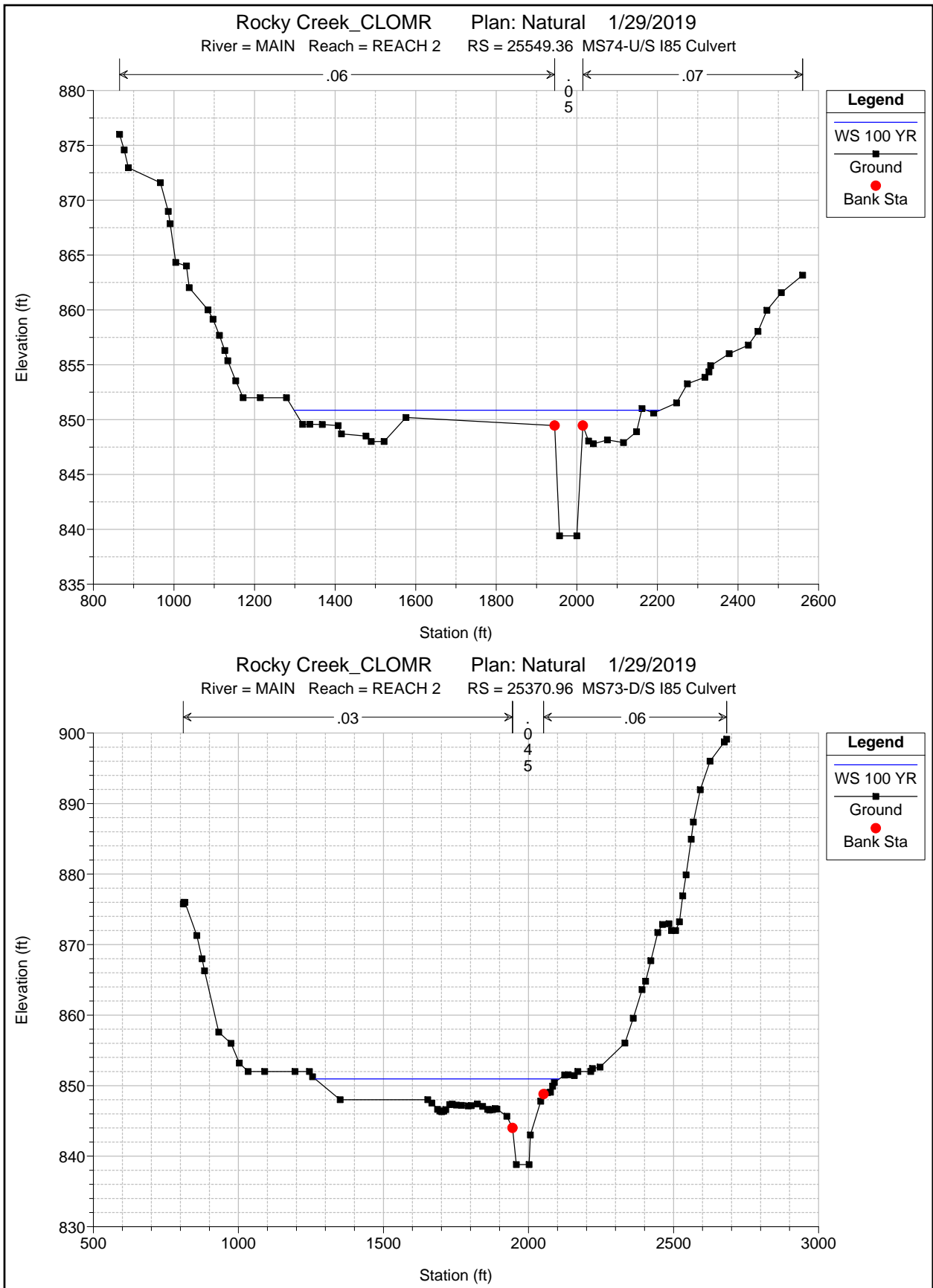


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 25893.12 MS76



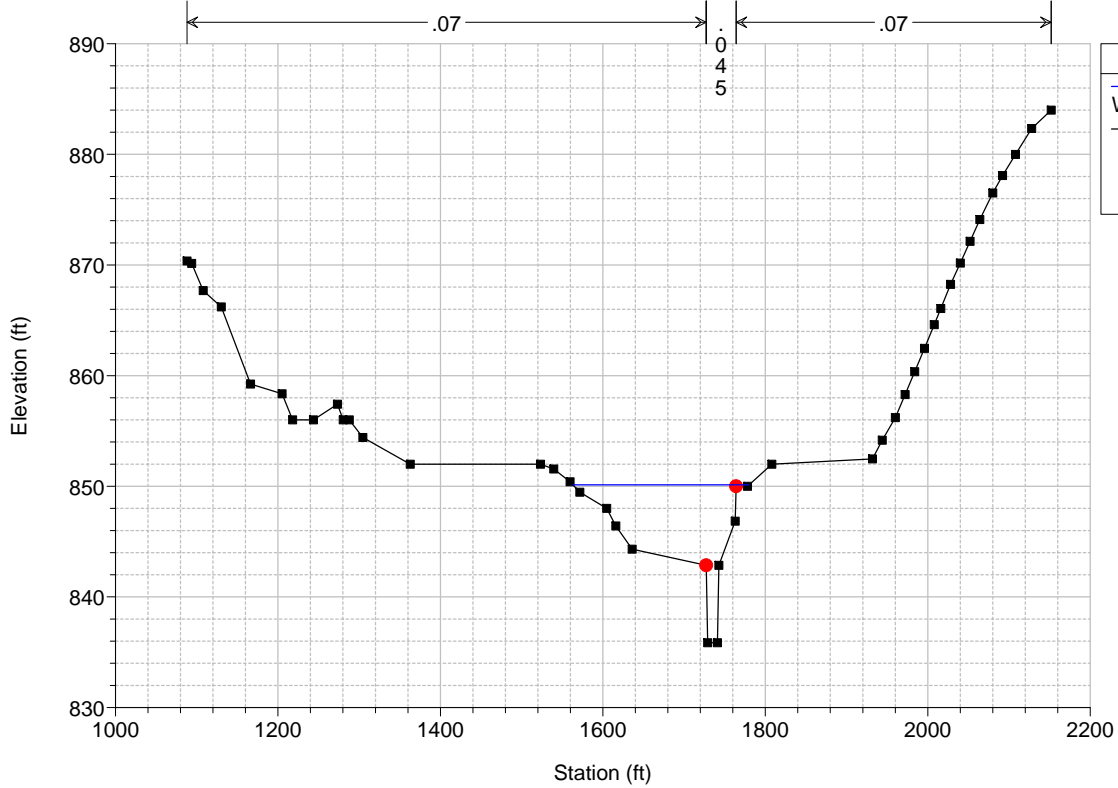
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 25687.2 MS75







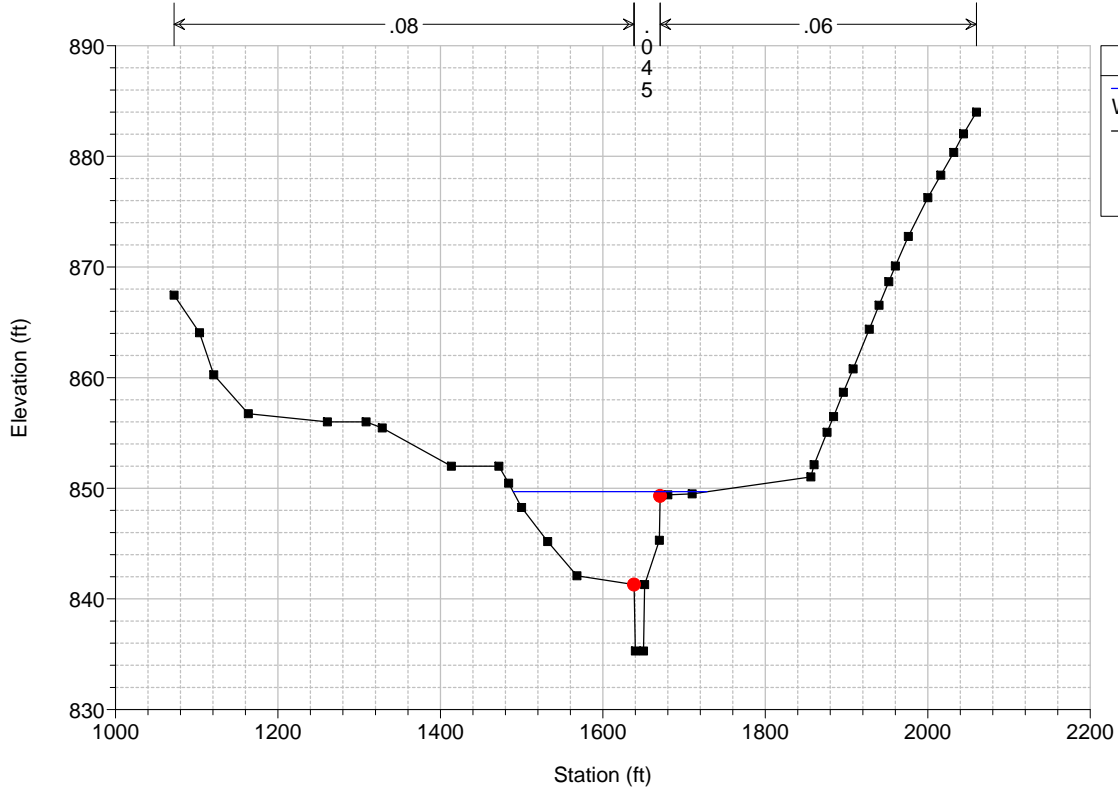
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24668.16 MS72



**Legend**

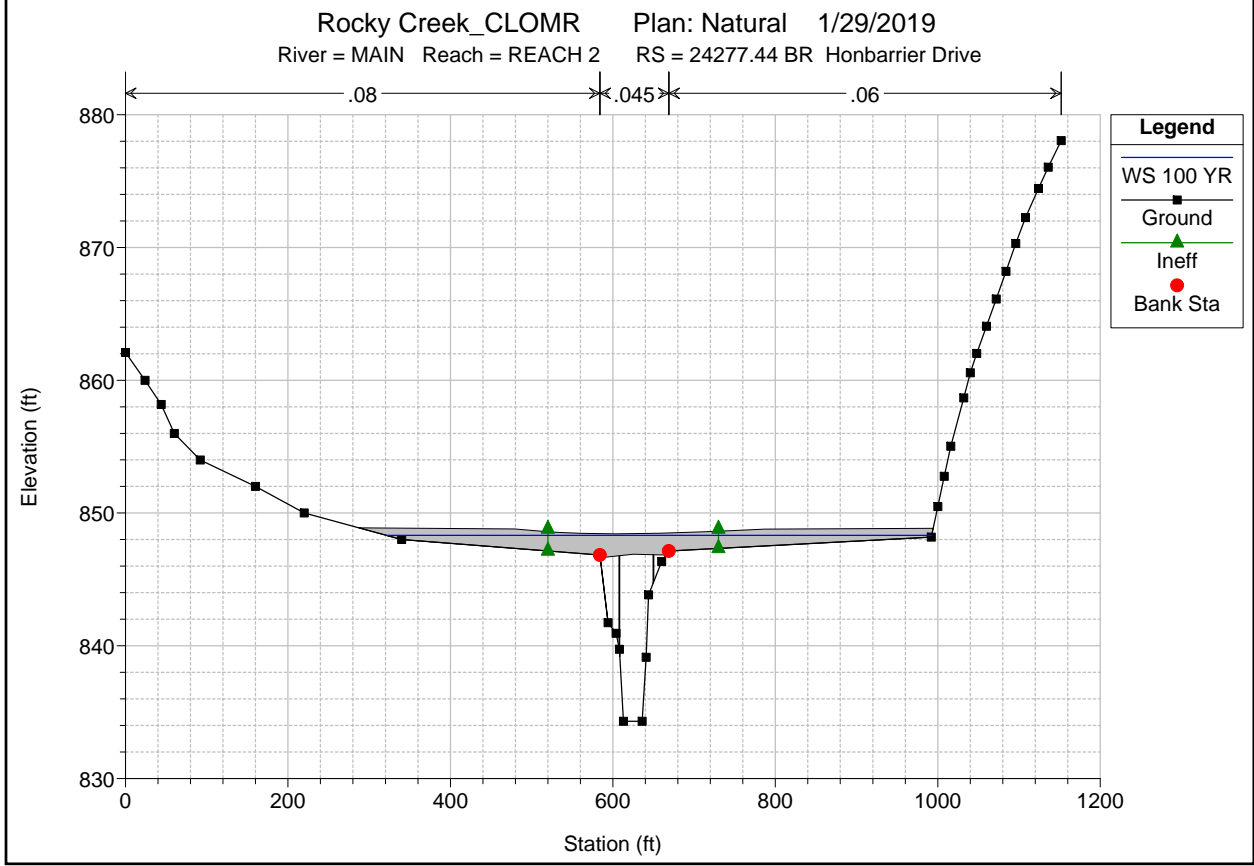
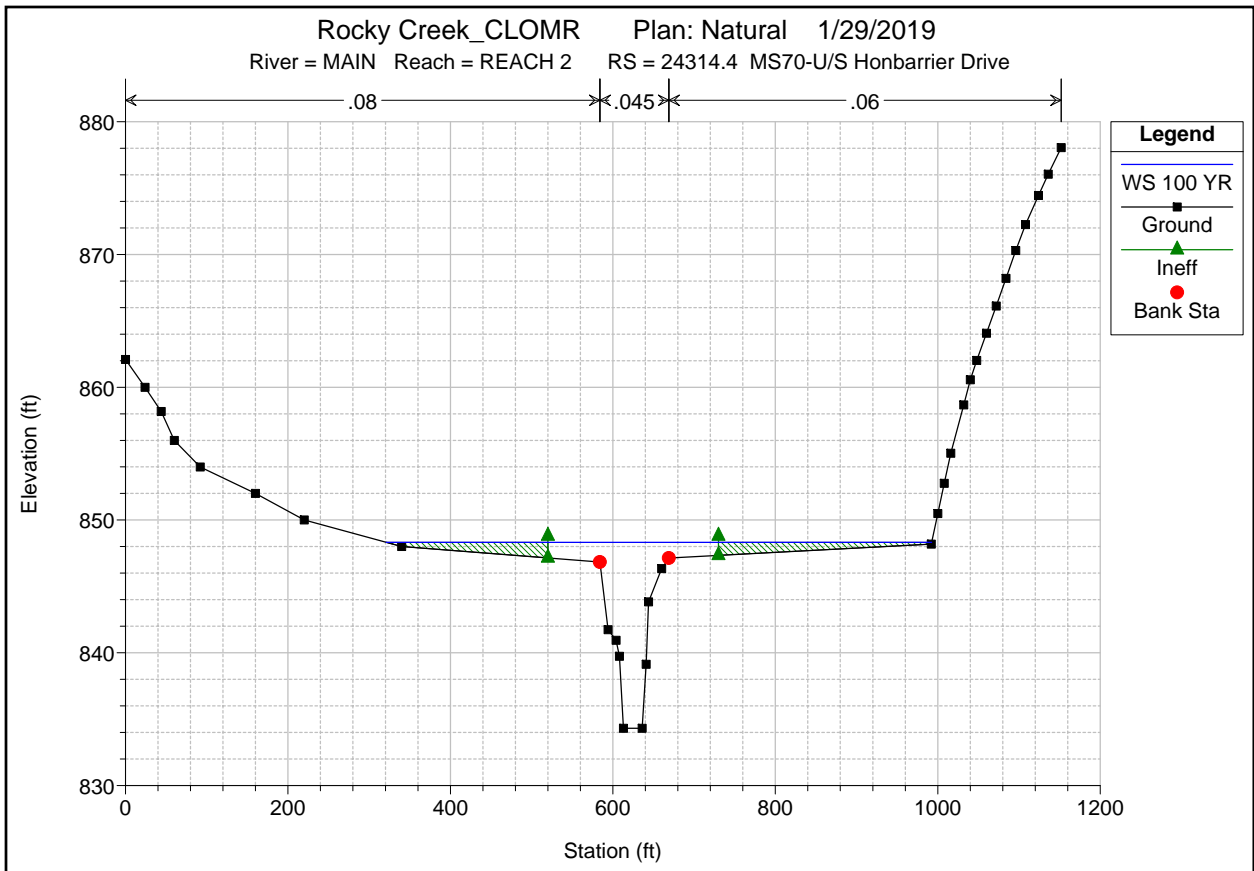
- WS 100 YR
- Ground
- Bank Sta

Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24541.44 MS71

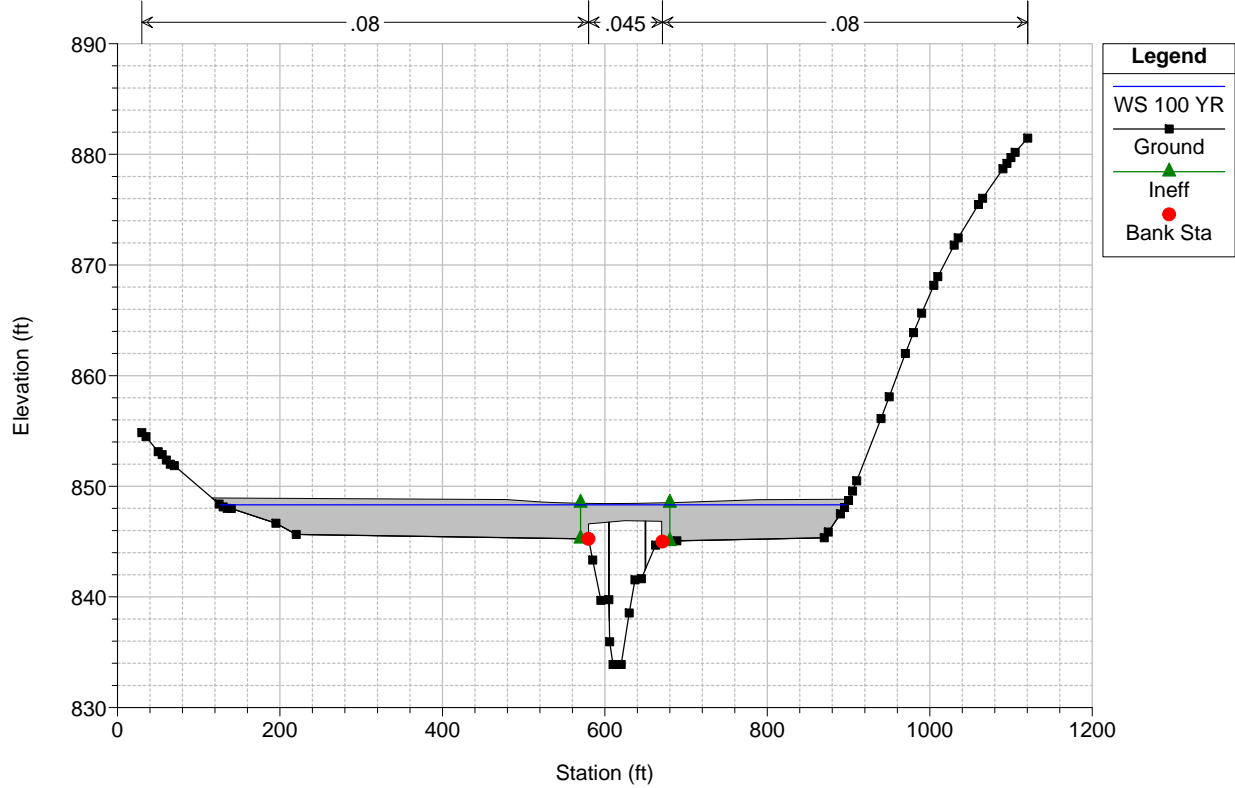


**Legend**

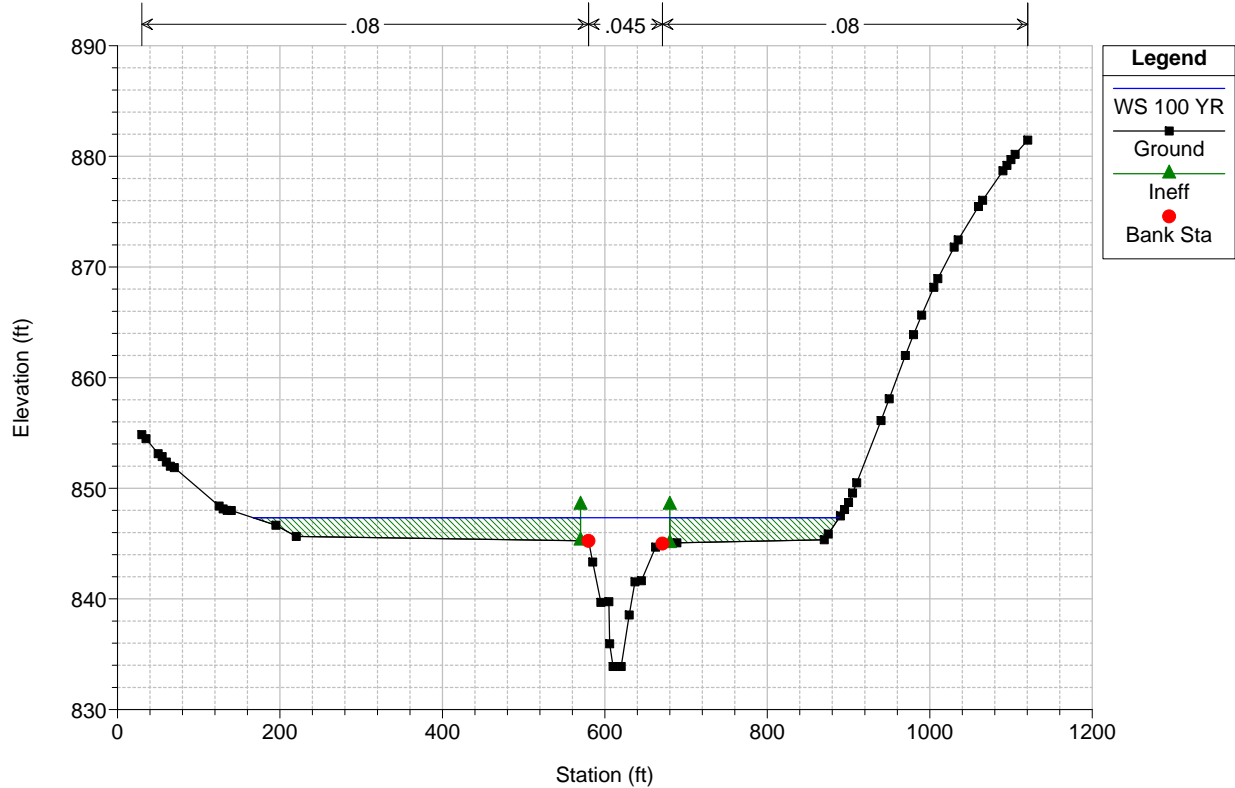
- WS 100 YR
- Ground
- Bank Sta



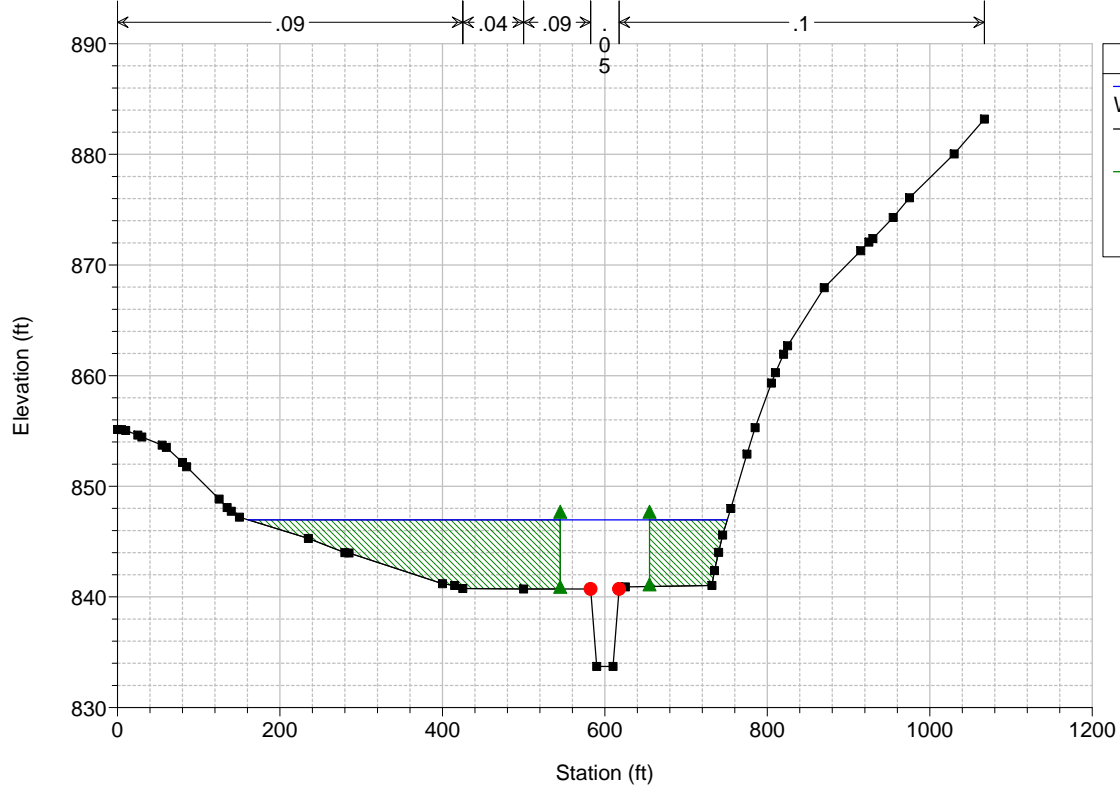
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



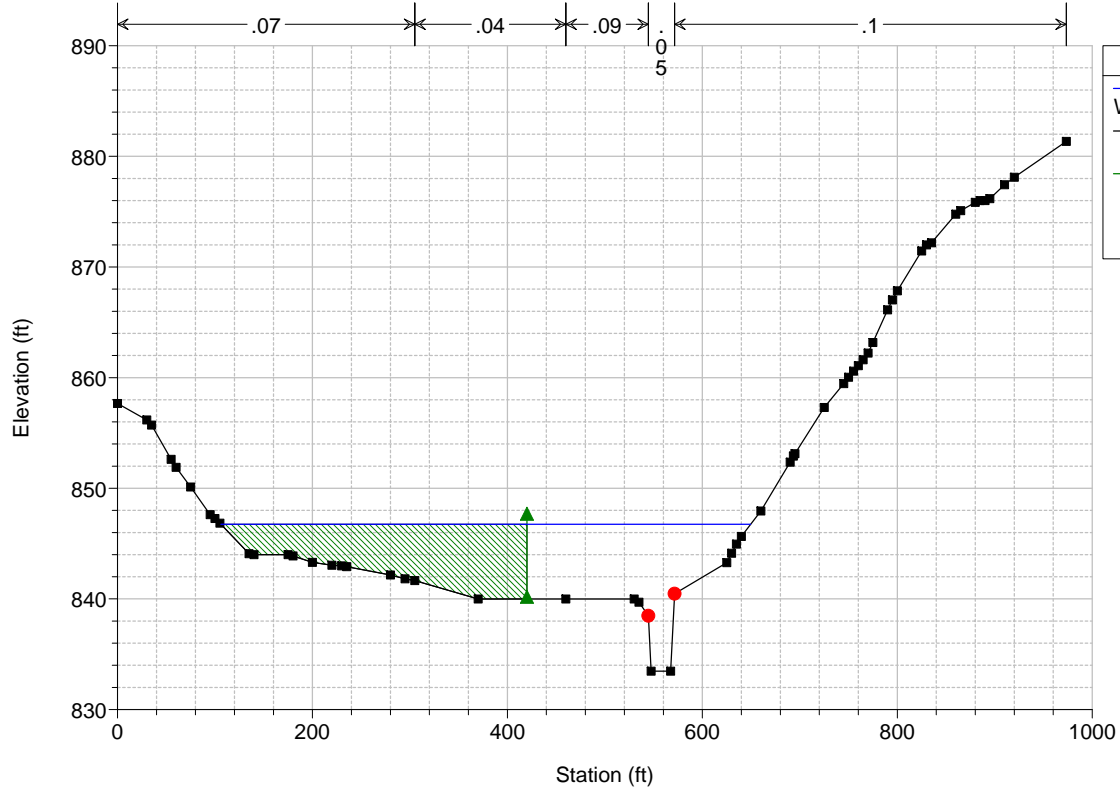
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive

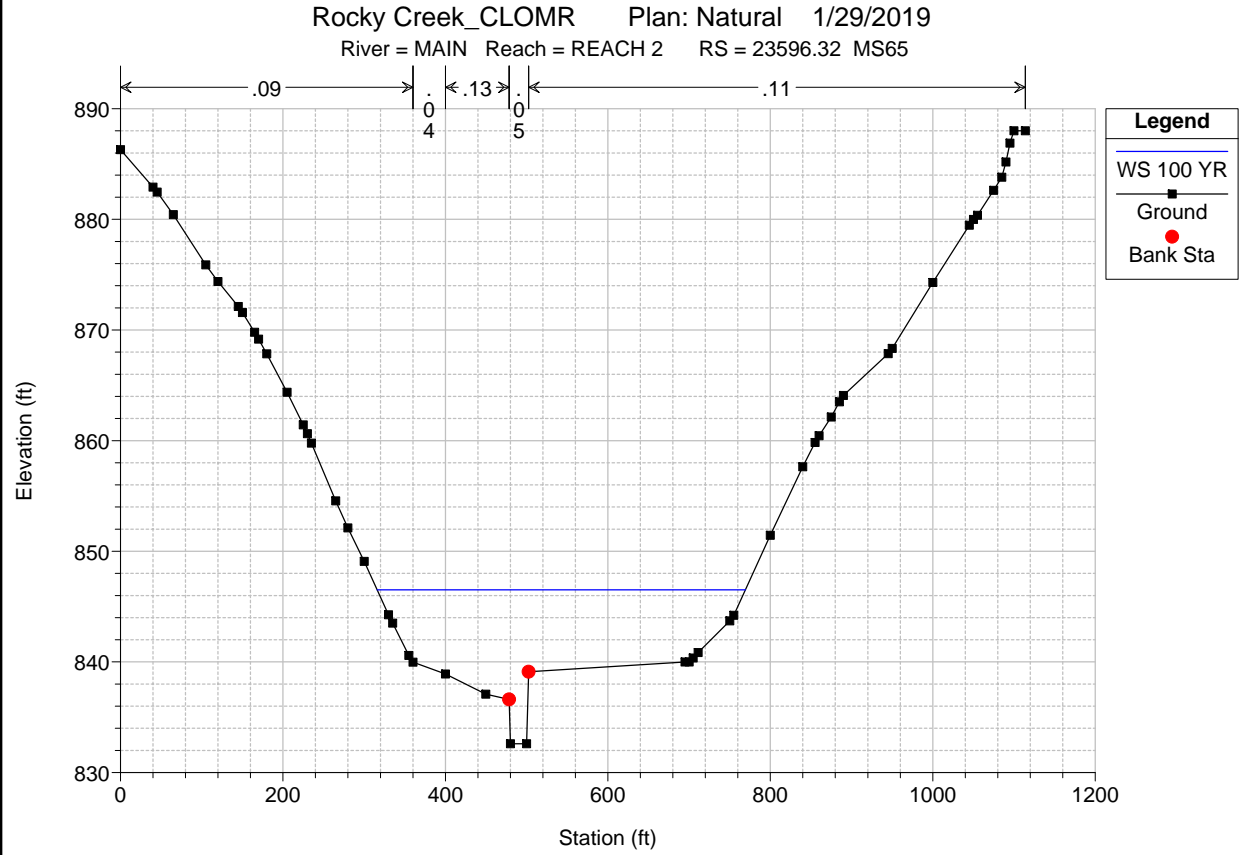
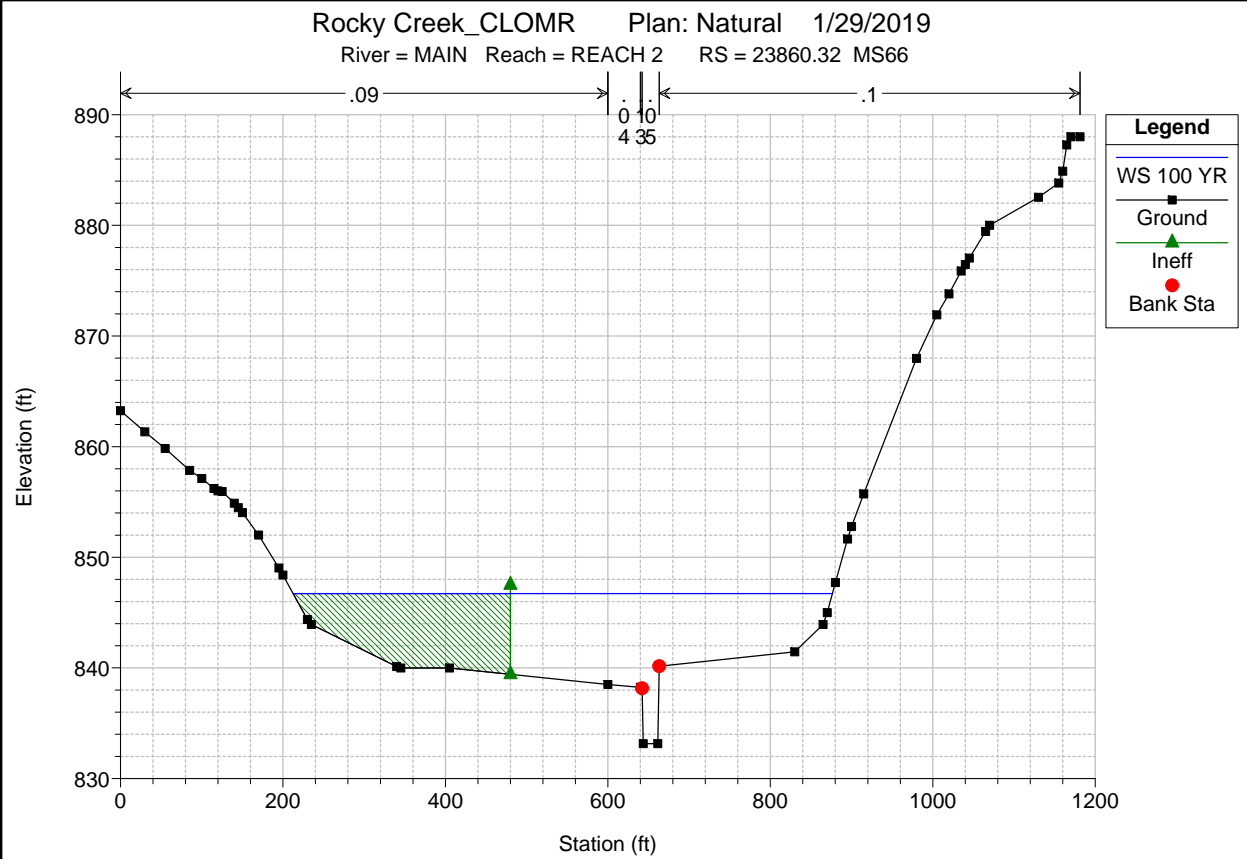


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24156 MS68

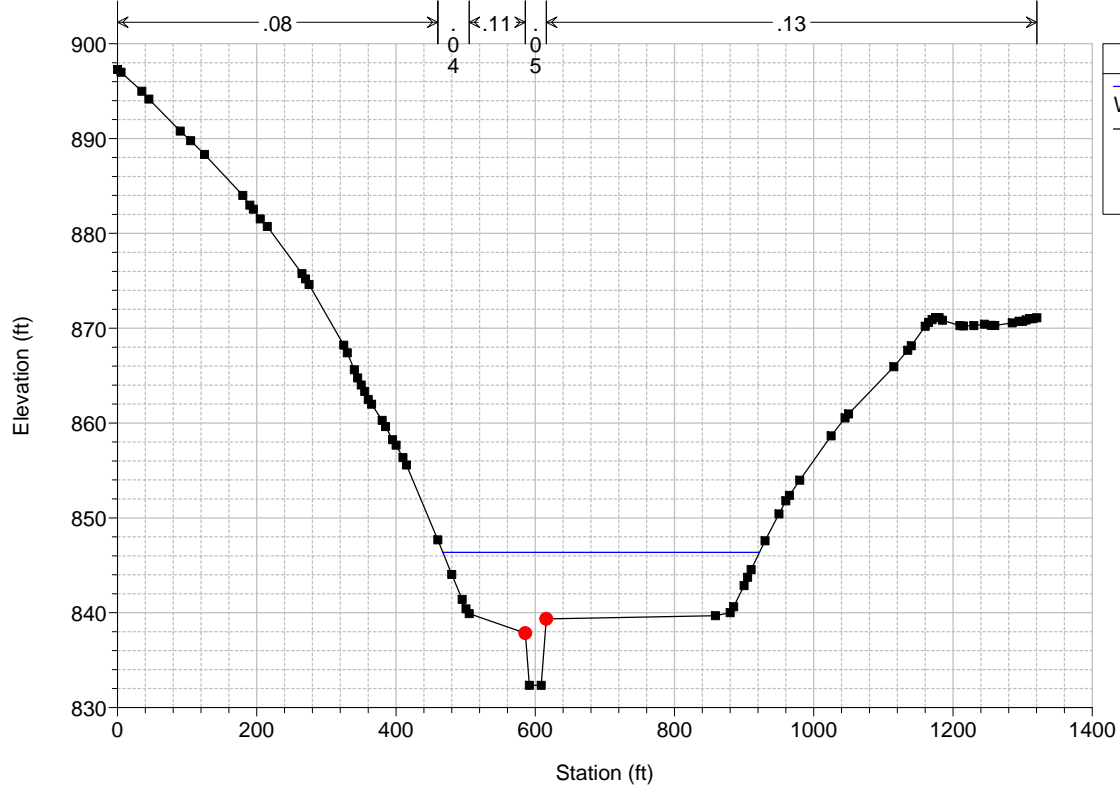


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 24029.28 MS67

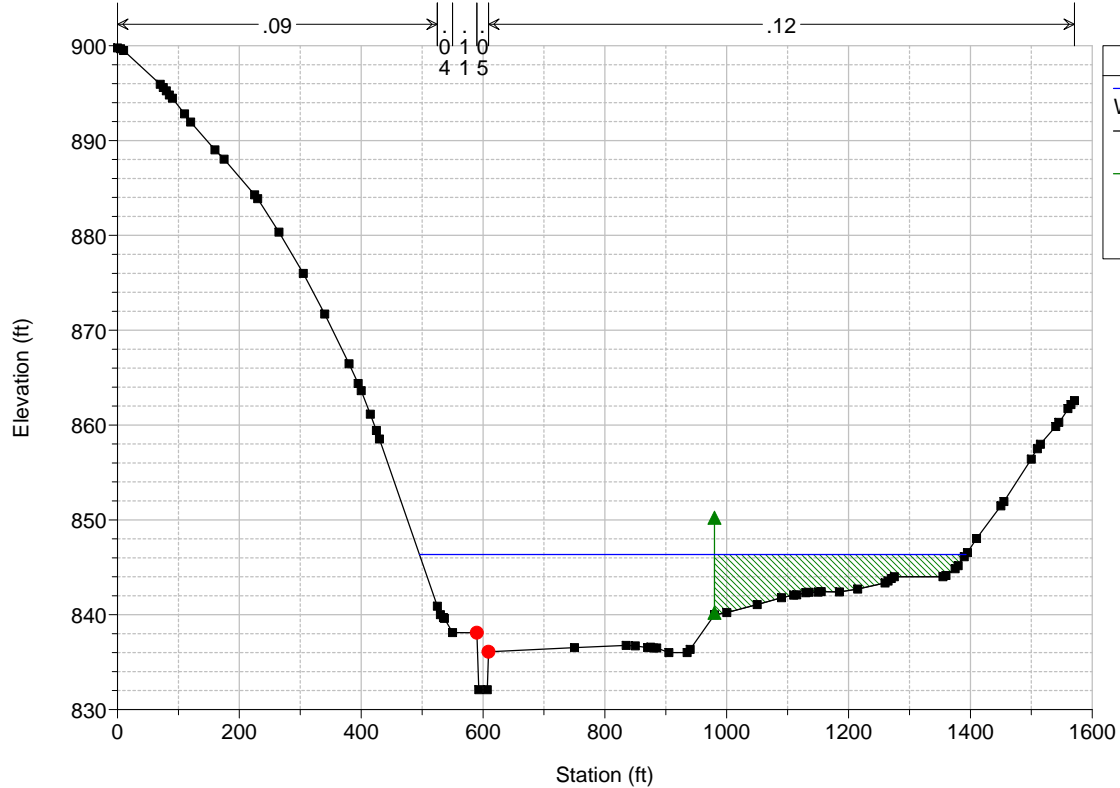




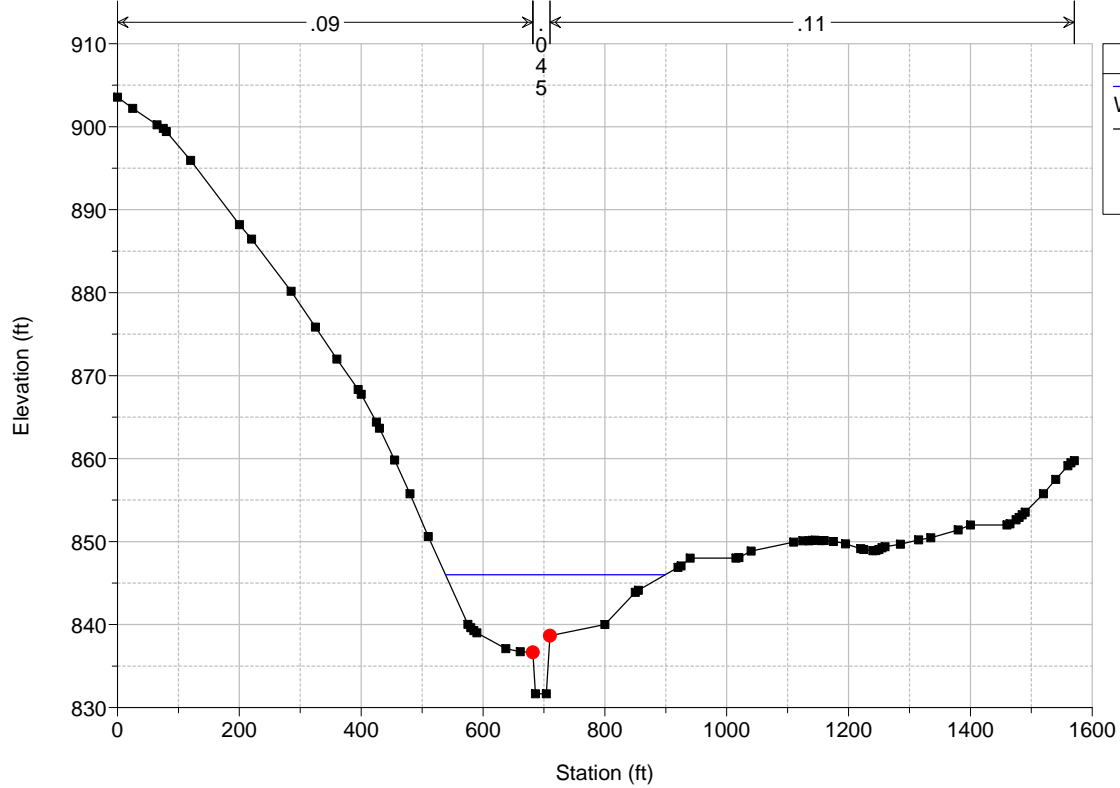
Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 23453.76 MS64



Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 23327.04 MS63

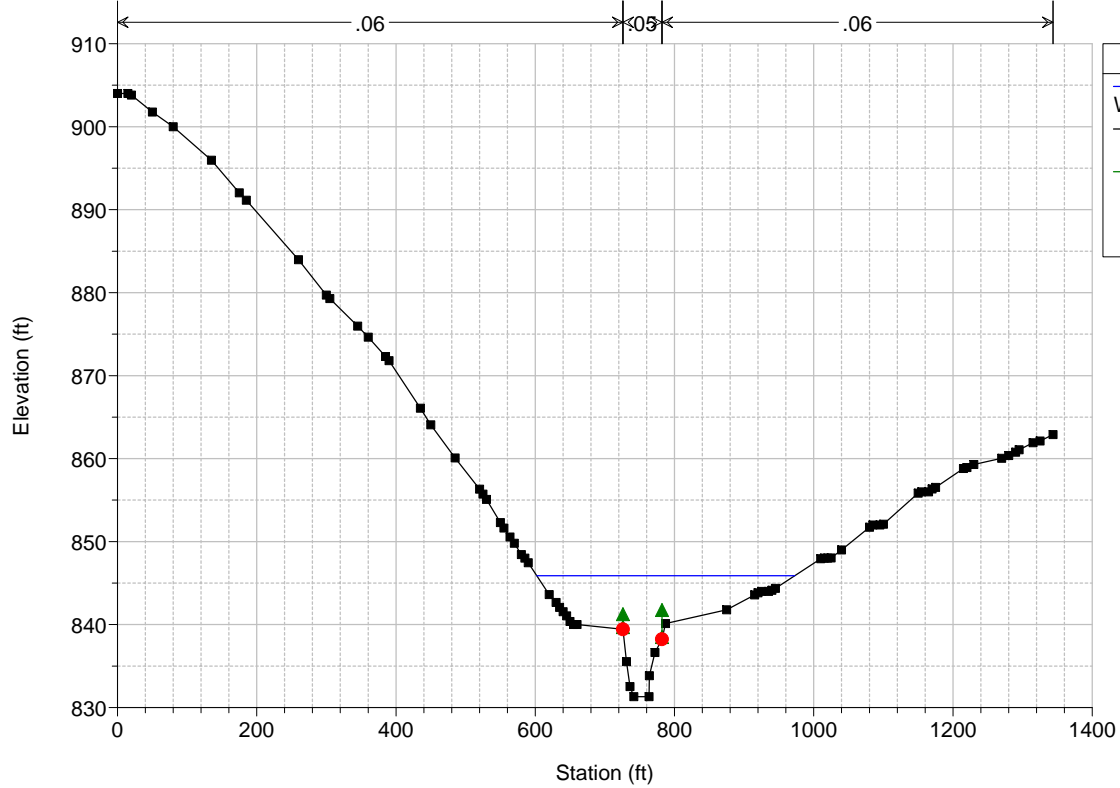


Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Legend	
—	WS 100 YR
■	Ground
●	Bank Sta

Rocky Creek\_CLOMR Plan: Natural 1/29/2019  
 River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



Legend	
—	WS 100 YR
■	Ground
▲	Ineff
●	Bank Sta

HEC-RAS Plan: Natural River: MAIN Reach: REACH 2 Profile: 100 YR

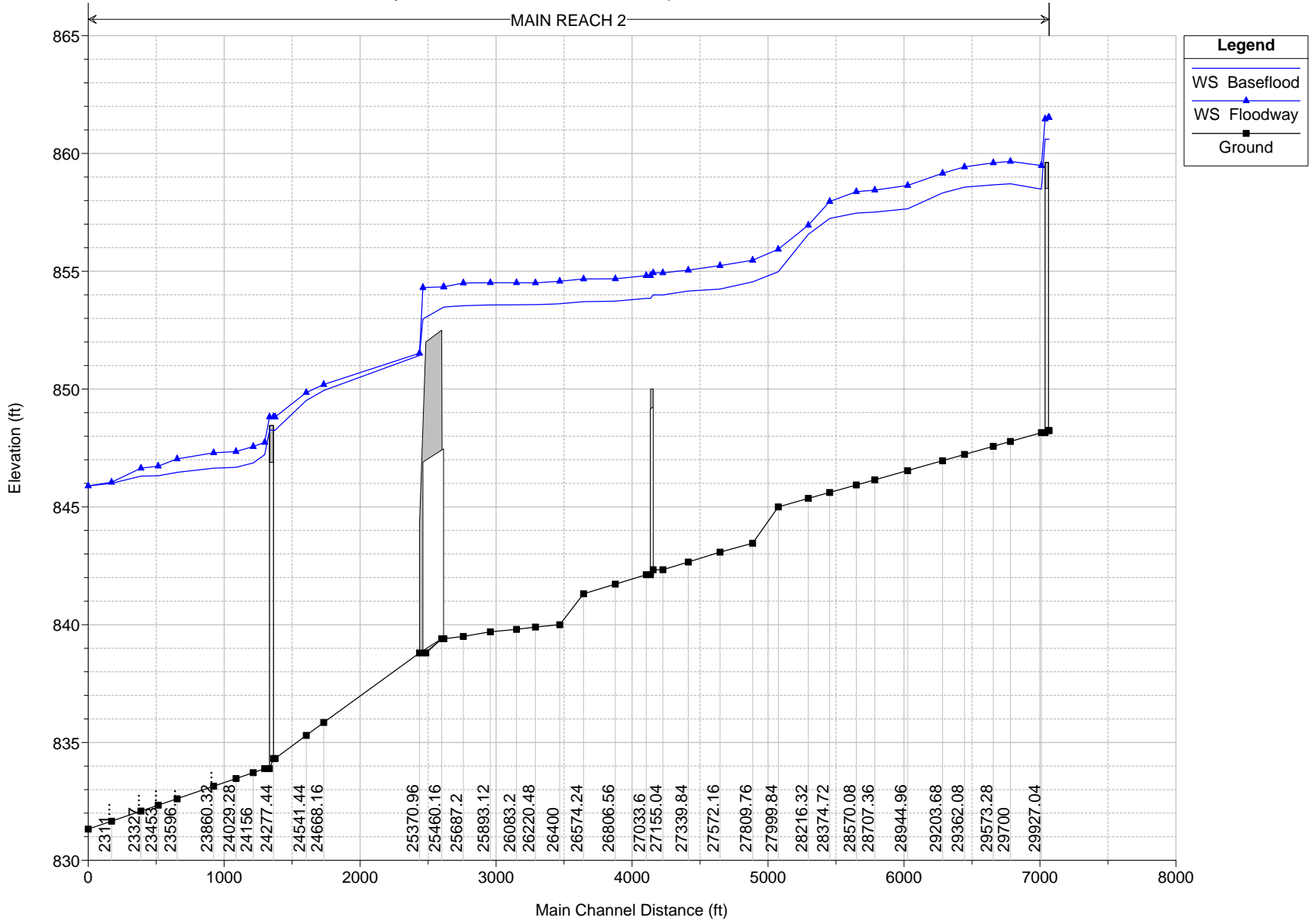
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 2	29985.12	100 YR	4824.50	848.24	860.62	858.50	861.56	0.003377	8.88	1129.41	436.47	0.52
REACH 2	29958.72		Bridge									
REACH 2	29927.04	100 YR	4824.50	848.15	858.29	858.29	859.62	0.006865	10.81	927.17	413.57	0.71
REACH 2	29700	100 YR	4824.50	847.78	858.53	855.50	858.66	0.000675	3.27	2305.68	558.77	0.19
REACH 2	29573.28	100 YR	4824.50	847.57	858.48		858.56	0.000619	2.55	2882.69	677.43	0.14
REACH 2	29362.08	100 YR	4824.50	847.23	858.37	854.59	858.41	0.000553	2.96	3509.37	671.89	0.16
REACH 2	29203.68	100 YR	4824.50	846.96	858.21	855.00	858.29	0.001230	3.61	2596.63	525.79	0.21
REACH 2	28944.96	100 YR	4824.50	846.54	857.55	855.36	857.78	0.001687	5.56	1513.76	320.85	0.31
REACH 2	28707.36	100 YR	4824.50	846.15	857.41		857.51	0.000534	3.55	2340.16	449.50	0.19
REACH 2	28570.08	100 YR	4824.50	845.93	857.37		857.43	0.000546	3.06	3107.56	547.92	0.16
REACH 2	28374.72	100 YR	4824.50	845.61	857.14		857.26	0.001384	4.55	2517.43	471.40	0.24
REACH 2	28216.32	100 YR	4824.50	845.36	856.45		856.88	0.003853	7.41	1290.29	278.54	0.40
REACH 2	27999.84	100 YR	4824.50	845.00	854.59		855.65	0.008156	10.08	757.60	188.30	0.59
REACH 2	27809.76	100 YR	4824.50	843.46	854.01		854.66	0.003075	8.33	1074.73	230.20	0.48
REACH 2	27572.16	100 YR	4824.50	843.08	853.48		853.95	0.002345	7.27	1339.20	352.23	0.42
REACH 2	27339.84	100 YR	4824.50	842.66	853.35		853.46	0.001103	4.15	2216.17	469.76	0.23
REACH 2	27155.04	100 YR	4824.50	842.33	853.09	850.24	853.28	0.001271	5.60	2020.37	410.04	0.31
REACH 2	27091.68		Culvert									
REACH 2	27033.6	100 YR	4824.50	842.12	852.15	850.42	852.63	0.002288	7.18	1349.80	332.05	0.42
REACH 2	26806.56	100 YR	4824.50	841.72	851.82		852.02	0.001254	5.14	1938.85	465.91	0.29
REACH 2	26574.24	100 YR	4824.50	841.31	851.76		851.85	0.000326	2.62	2021.37	387.89	0.14
REACH 2	26400	100 YR	4824.50	840.00	851.39		851.69	0.001456	6.31	2041.63	459.59	0.34
REACH 2	26220.48	100 YR	4824.50	842.09	851.45		851.52	0.000343	1.61	2329.33	422.47	0.10
REACH 2	26083.2	100 YR	4824.50	839.43	851.39		851.47	0.000410	2.12	2123.48	369.80	0.11
REACH 2	25893.12	100 YR	4824.50	840.82	851.27	847.65	851.39	0.000682	3.29	1819.05	414.70	0.19
REACH 2	25687.2	100 YR	5240.60	839.50	851.22		851.31	0.000362	2.70	2614.71	488.81	0.14
REACH 2	25549.36	100 YR	5240.60	839.40	850.86		851.16	0.001751	5.26	1924.14	896.82	0.30
REACH 2	25370.96	100 YR	5240.60	838.80	850.96		851.00	0.000196	1.92	3234.83	841.77	0.11
REACH 2	24668.16	100 YR	5240.60	835.85	850.13		850.61	0.004059	7.21	1095.10	216.89	0.43
REACH 2	24541.44	100 YR	5240.60	835.30	849.69		850.10	0.003538	6.89	1191.75	238.61	0.40
REACH 2	24314.4	100 YR	5240.60	834.32	848.32	844.37	849.18	0.003822	7.55	815.74	671.56	0.48
REACH 2	24277.44		Bridge									
REACH 2	24240.48	100 YR	5240.60	833.89	847.34	844.82	848.31	0.004673	7.98	687.77	721.49	0.53
REACH 2	24156	100 YR	5240.60	833.72	846.96	844.00	847.89	0.004132	8.95	872.15	589.57	0.46
REACH 2	24029.28	100 YR	5240.60	833.47	846.75	843.04	847.03	0.001686	5.64	1487.02	543.50	0.28
REACH 2	23860.32	100 YR	5240.60	833.15	846.71	841.82	846.80	0.000688	3.39	2703.03	663.80	0.17
REACH 2	23596.32	100 YR	5240.60	832.61	846.52		846.60	0.000698	3.73	3093.69	453.36	0.18
REACH 2	23453.76	100 YR	5240.60	832.34	846.36		846.48	0.000918	4.41	3053.35	454.79	0.22
REACH 2	23327.04	100 YR	5240.60	832.09	846.34	839.16	846.37	0.000340	2.58	4454.58	896.99	0.12
REACH 2	23110.56	100 YR	5240.60	831.66	846.00		846.23	0.001198	5.66	2216.76	360.50	0.27
REACH 2	22946.88	100 YR	4991.90	831.32	845.89	840.12	846.05	0.000762	4.08	1949.20	370.64	0.21



# DUPLICATE EFFECTIVE FLOODWAY MODEL

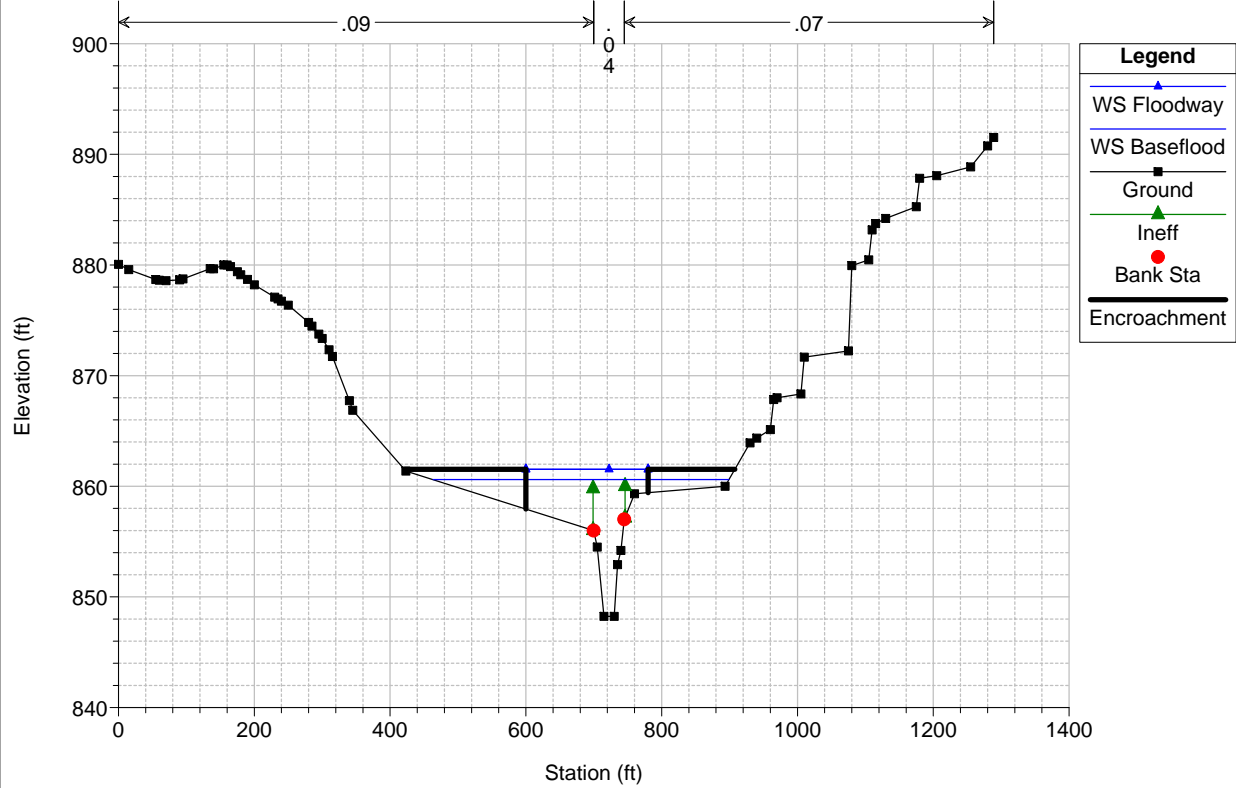
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

MAIN REACH 2



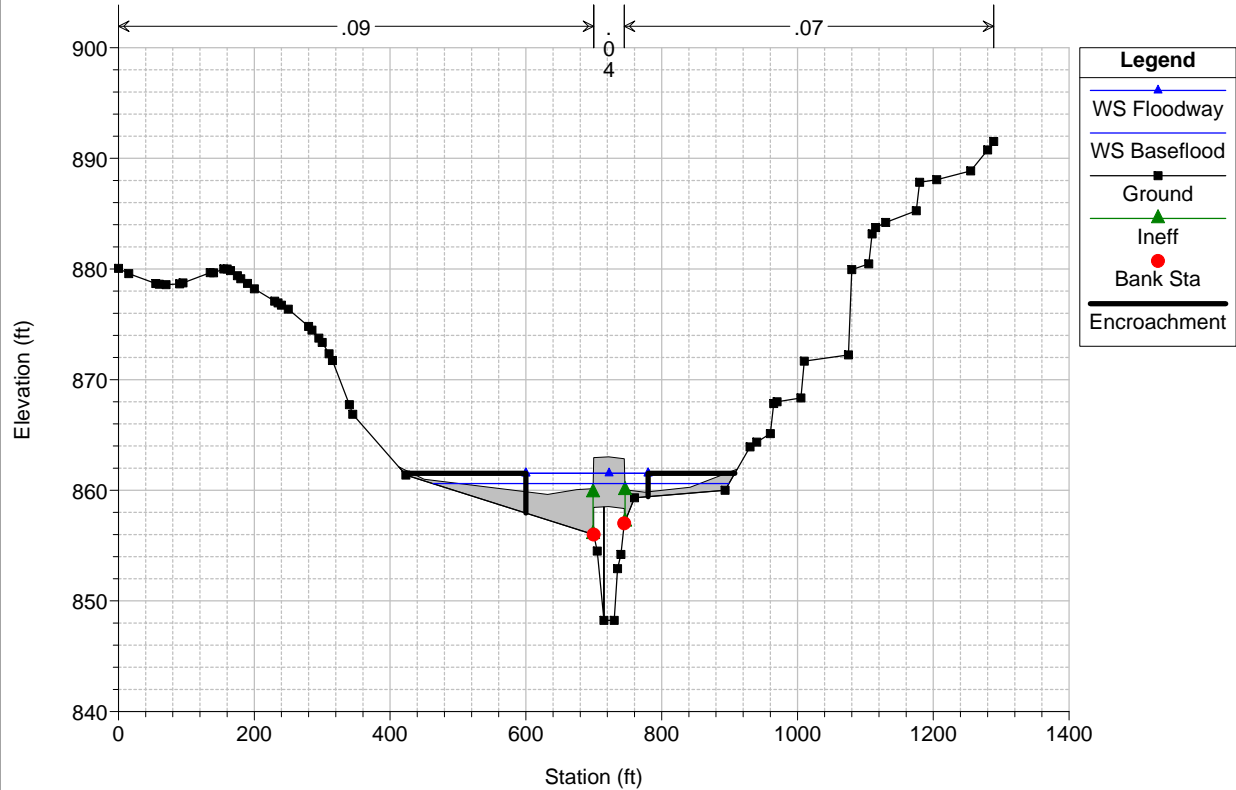
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford



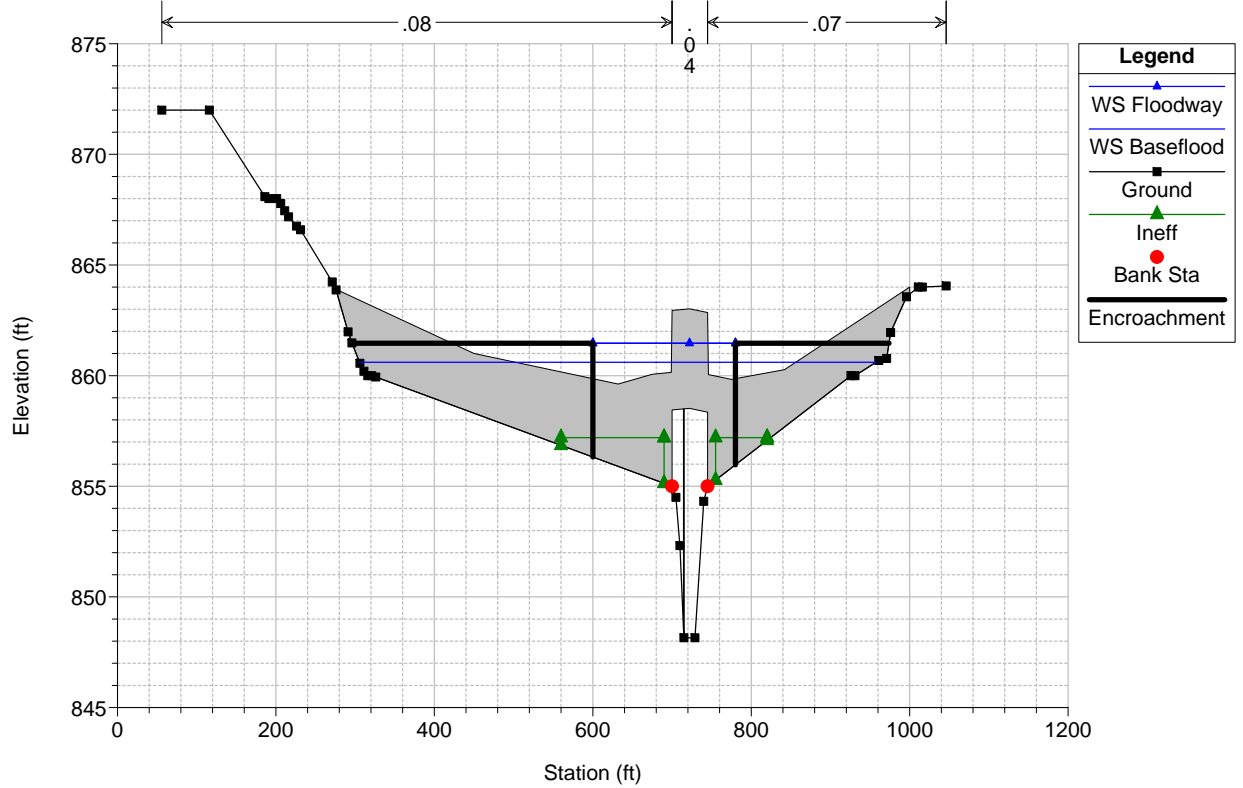
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



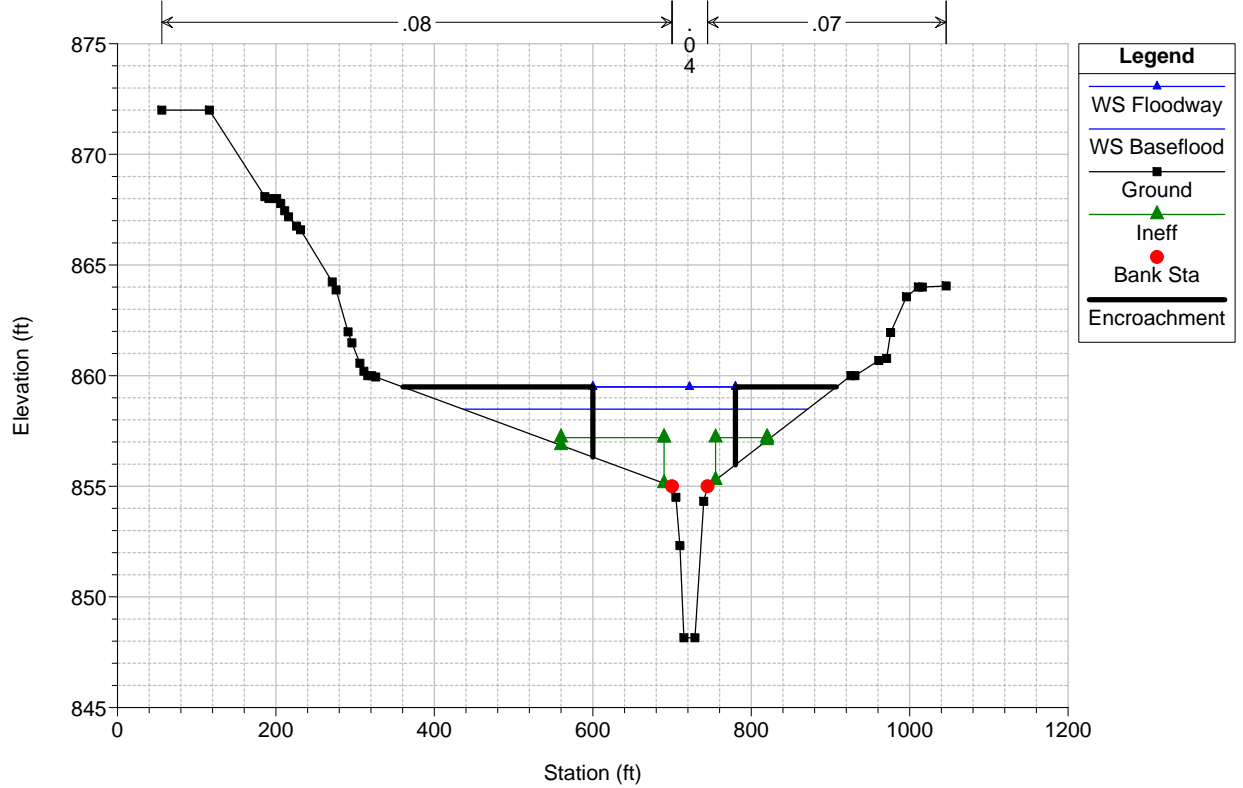
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



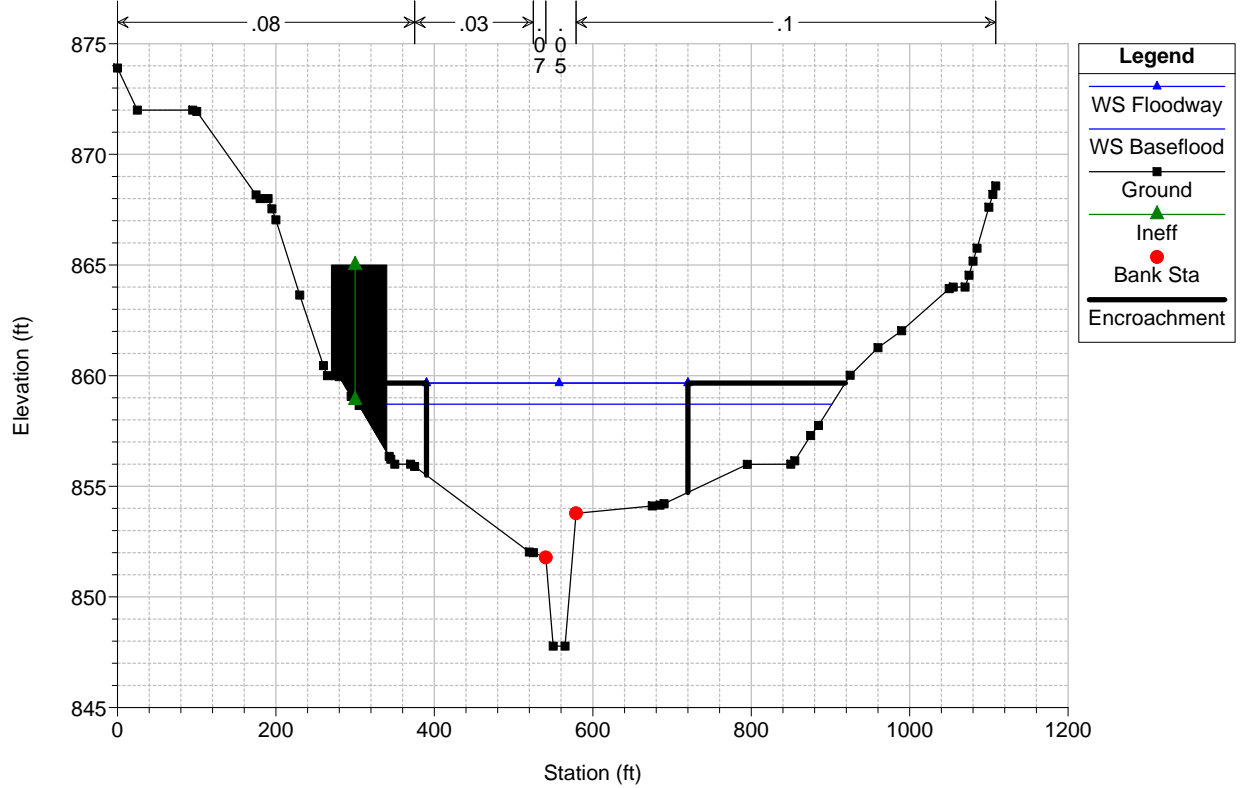
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



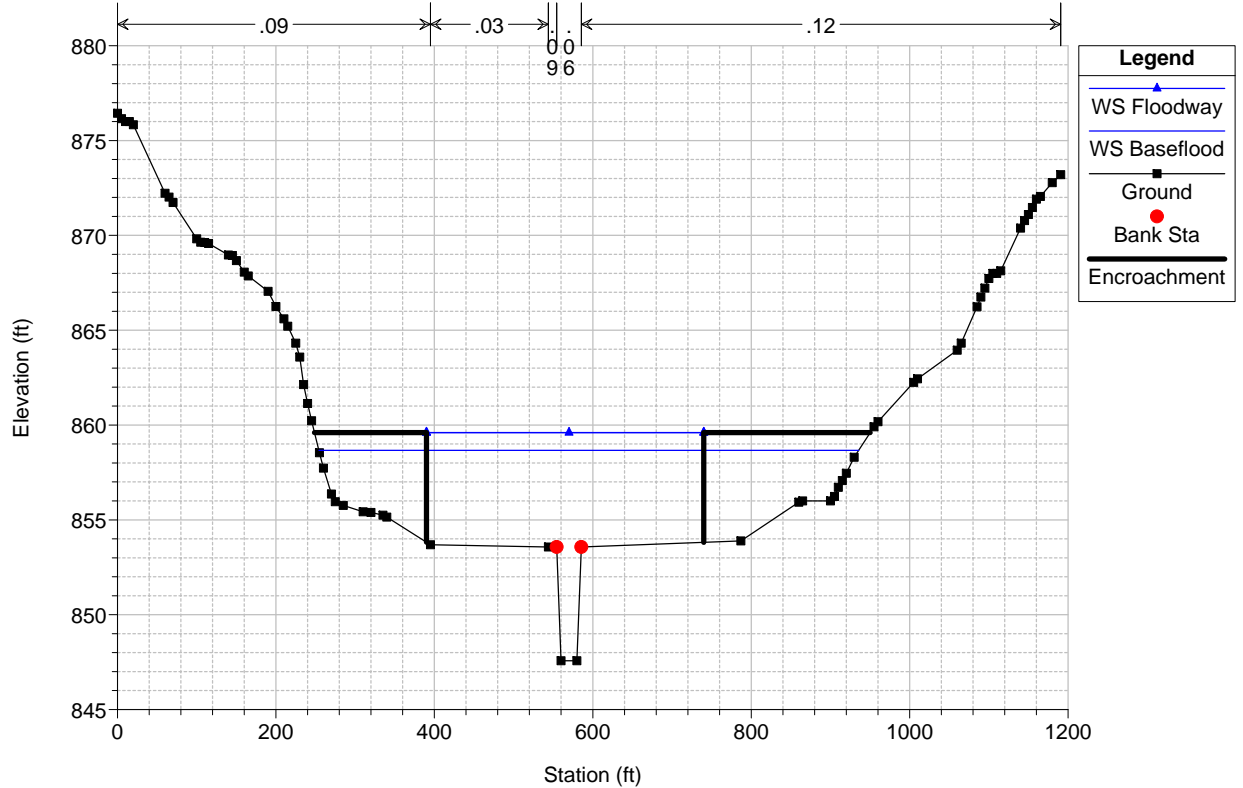
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96



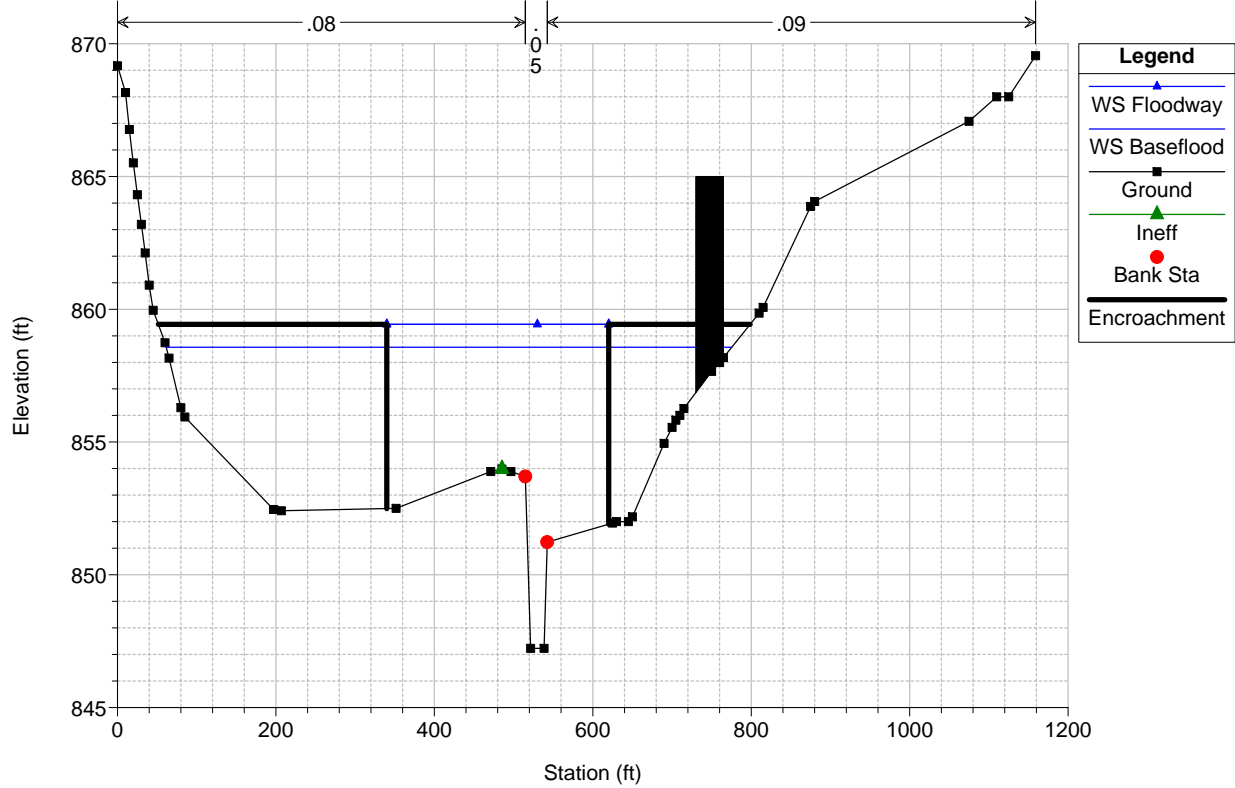
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29573.28 MS95



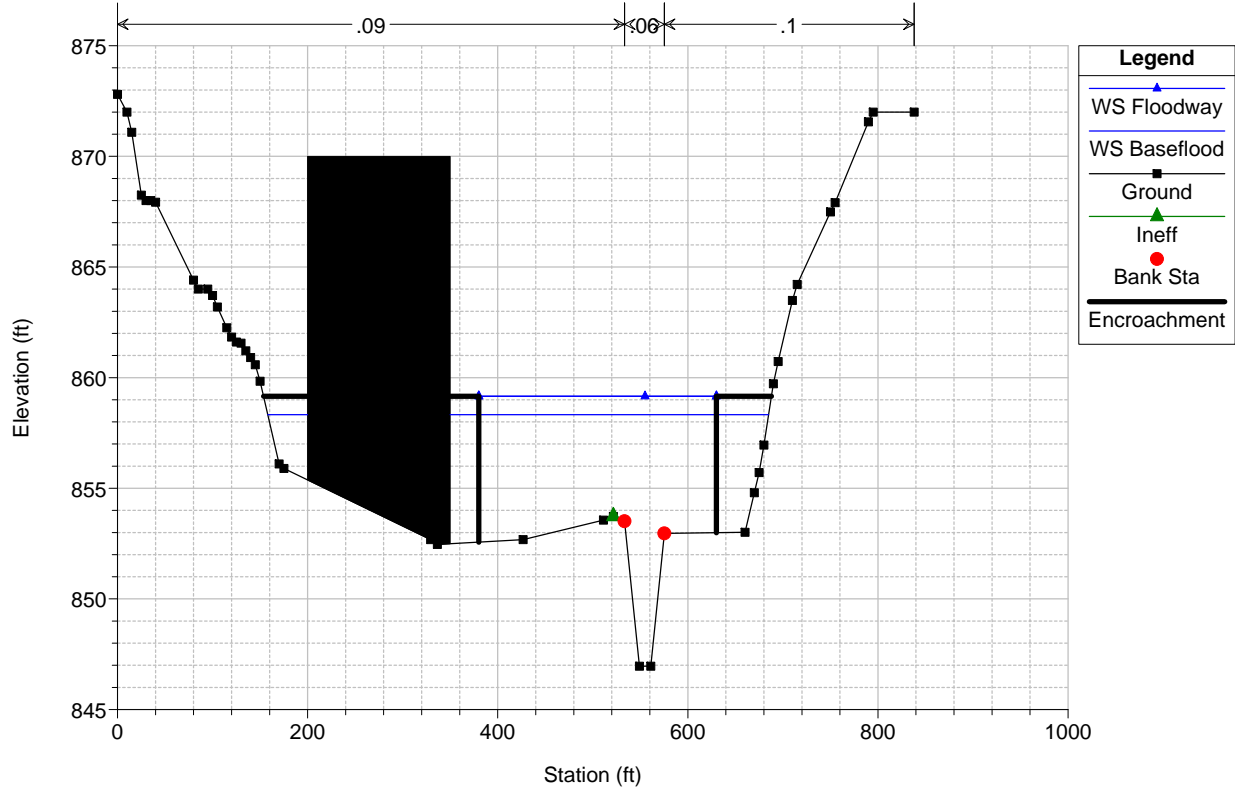
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29362.08 MS94



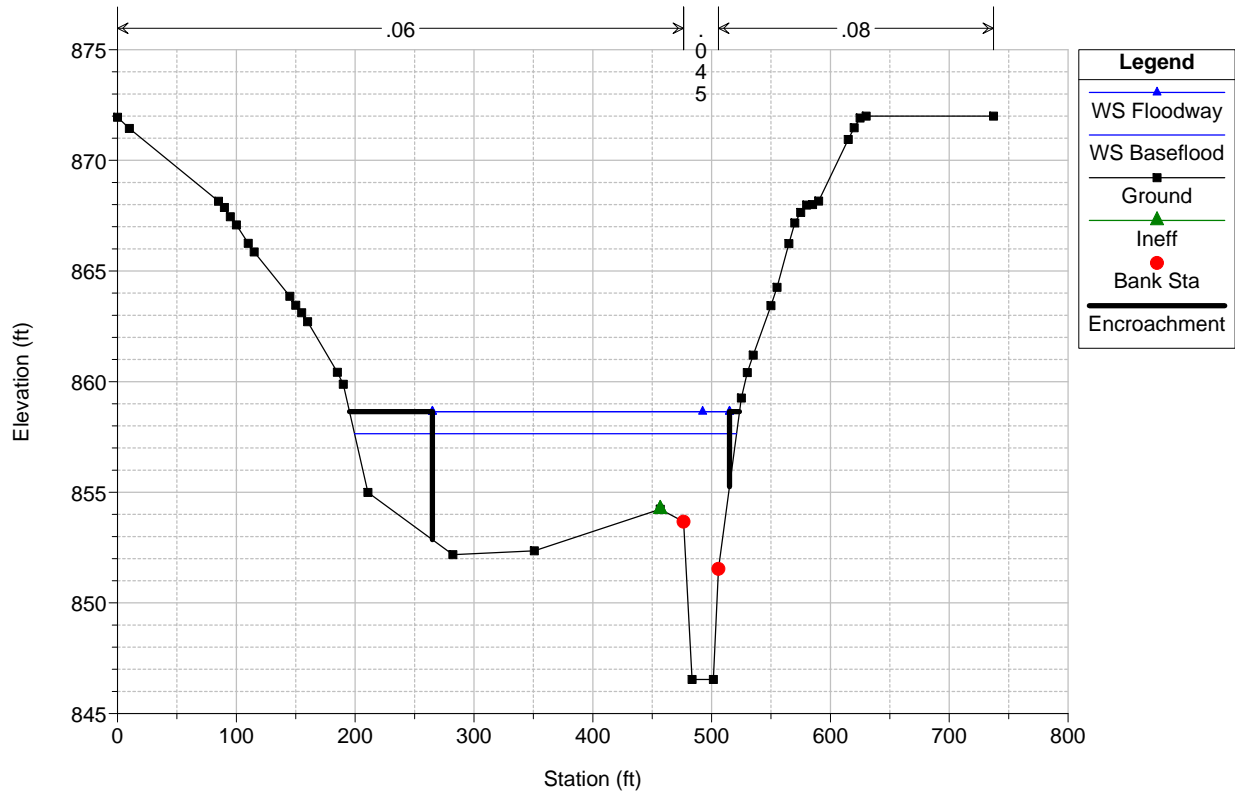
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 29203.68 MS93



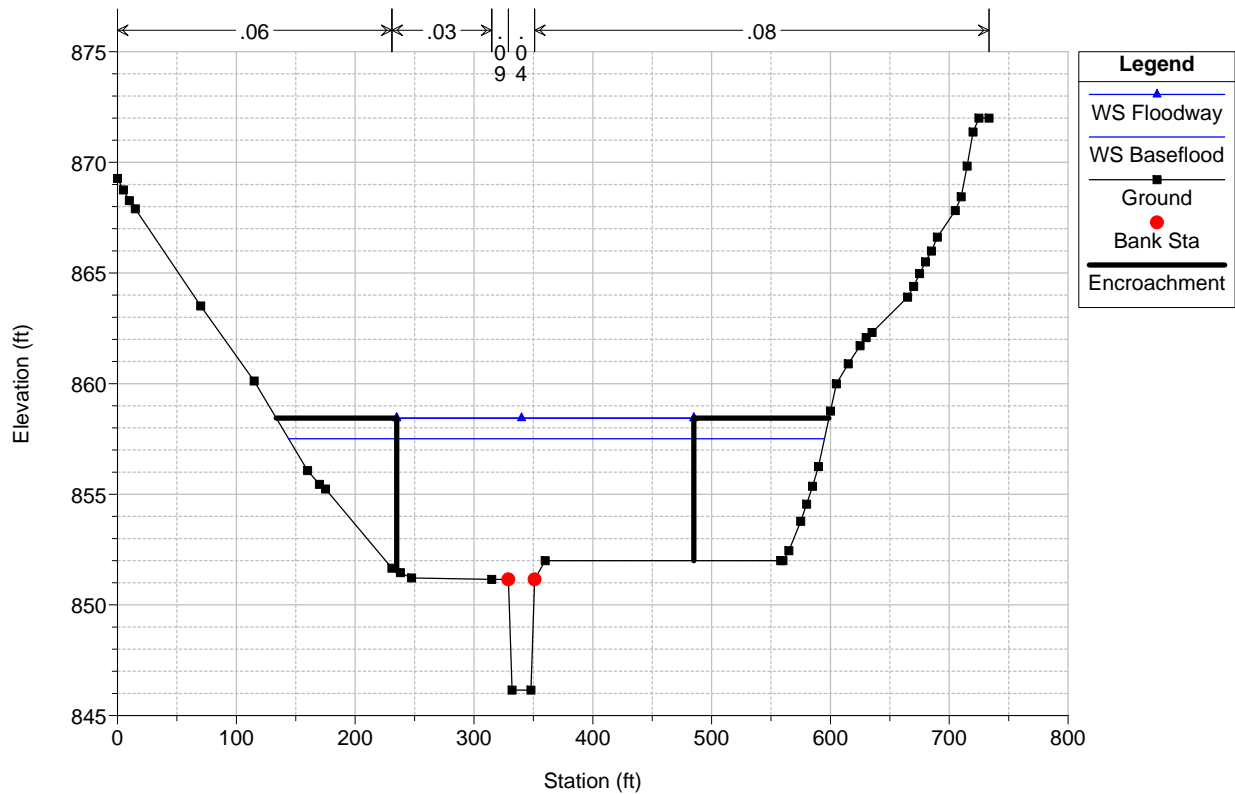
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 28944.96 MS92



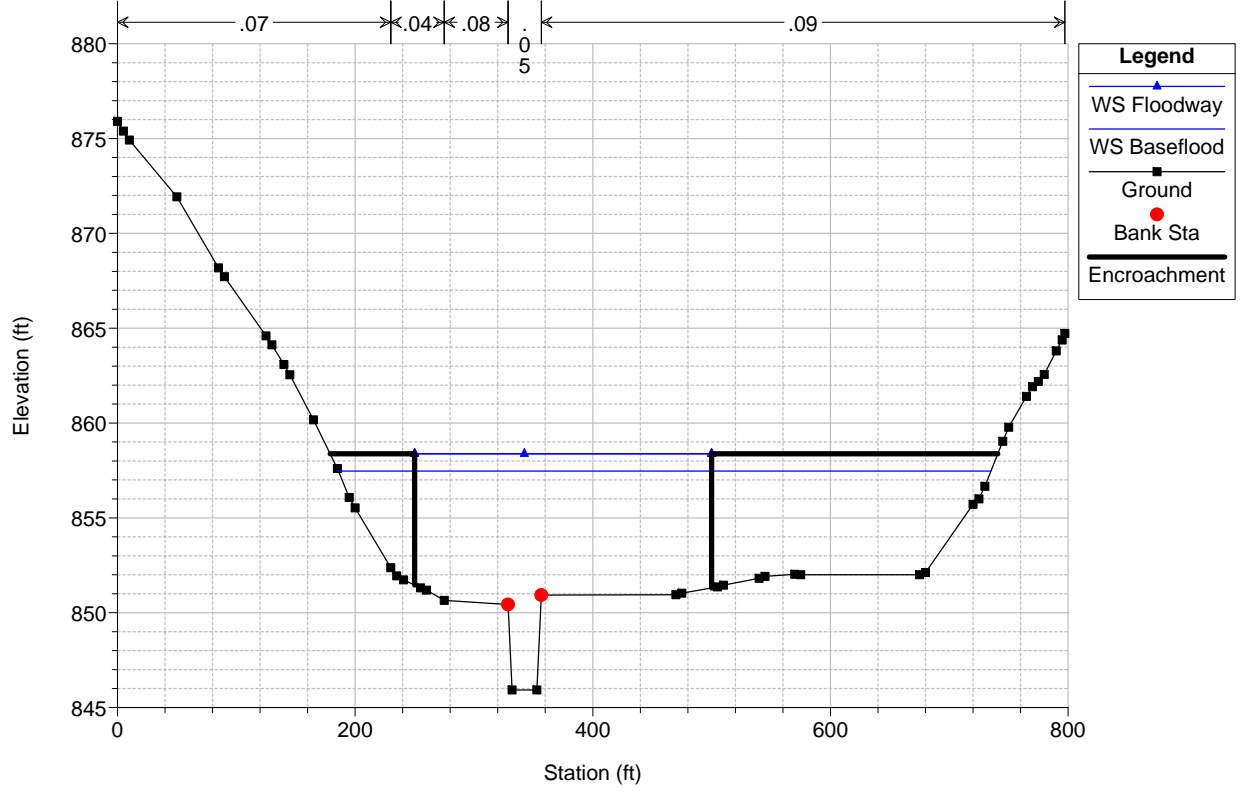
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 28707.36 MS91



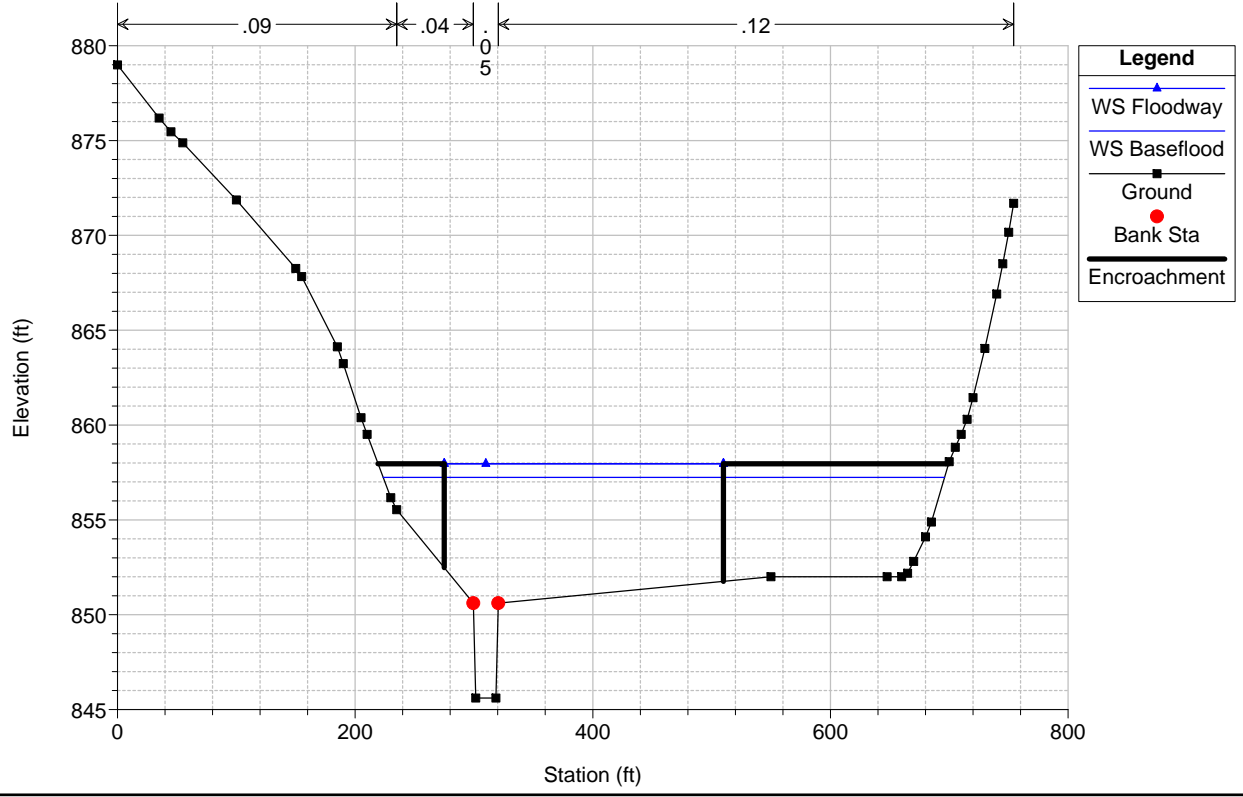
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 28570.08 MS90



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

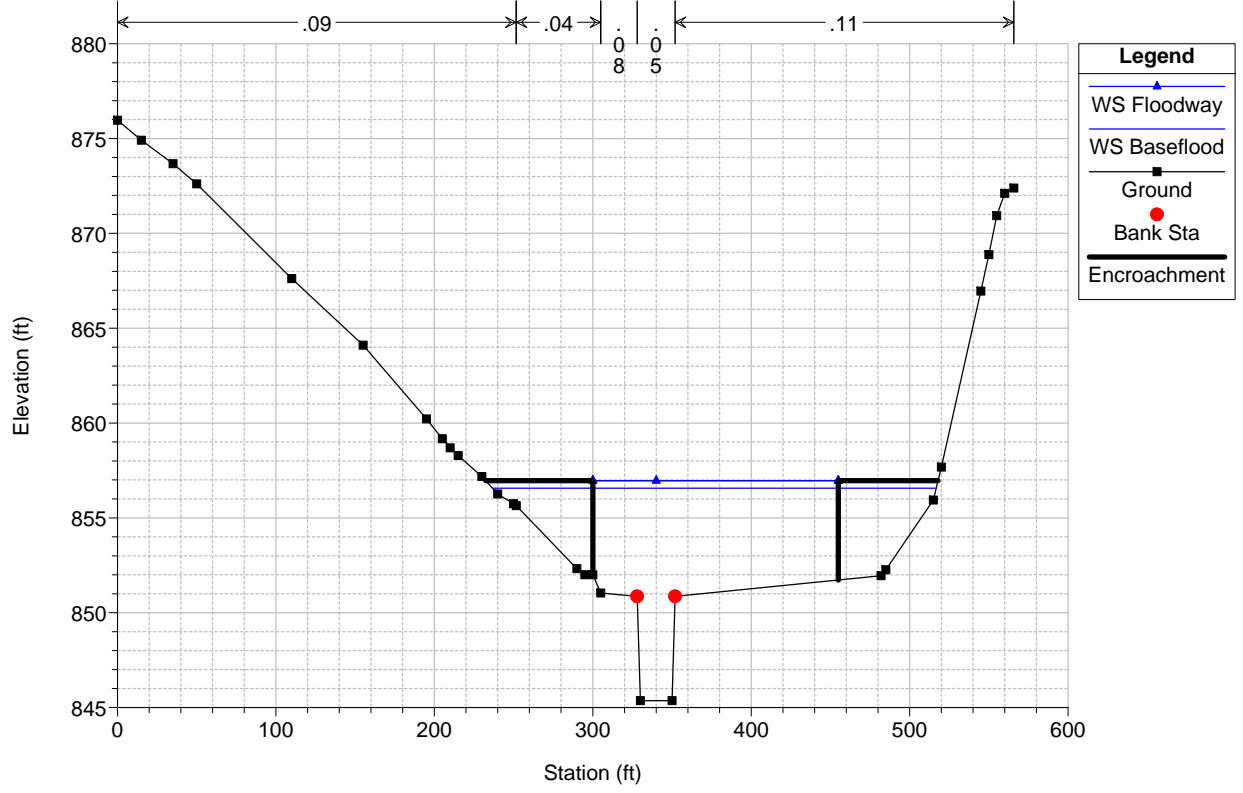
River = MAIN Reach = REACH 2 RS = 28374.72 MS89





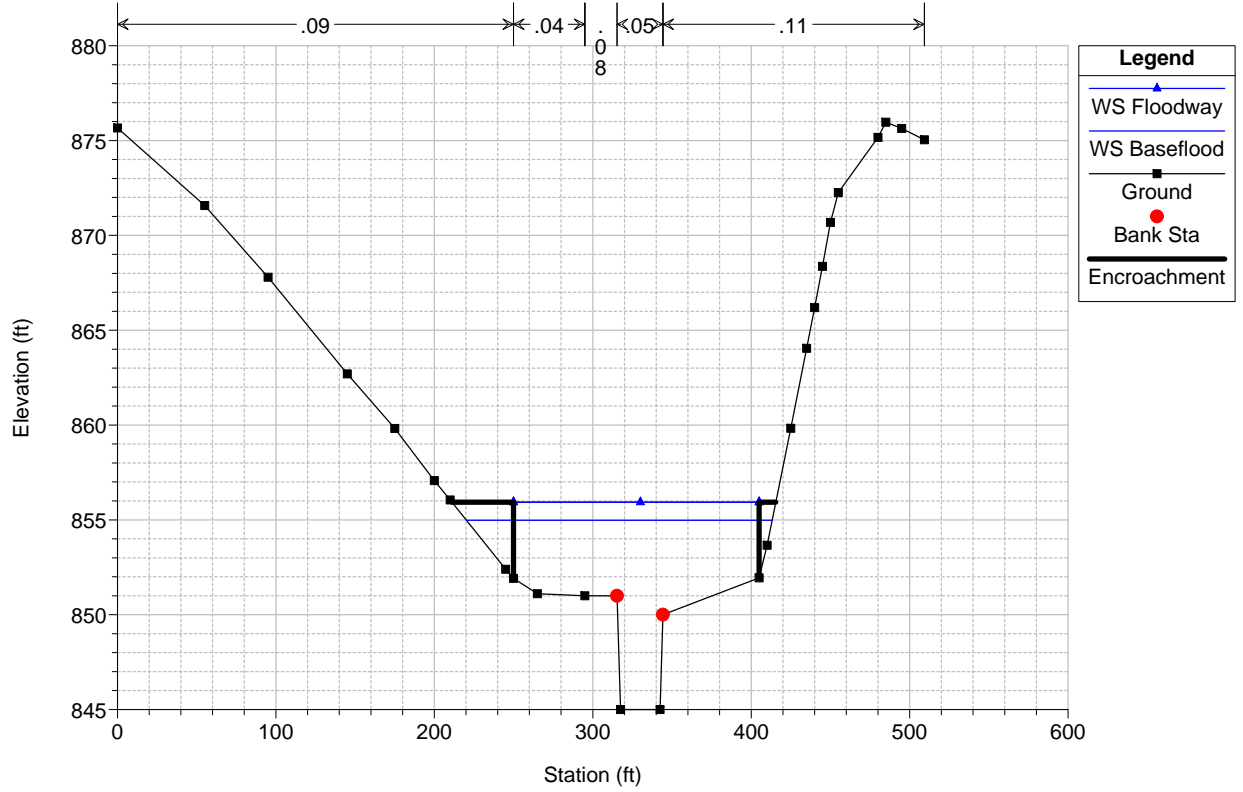
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88



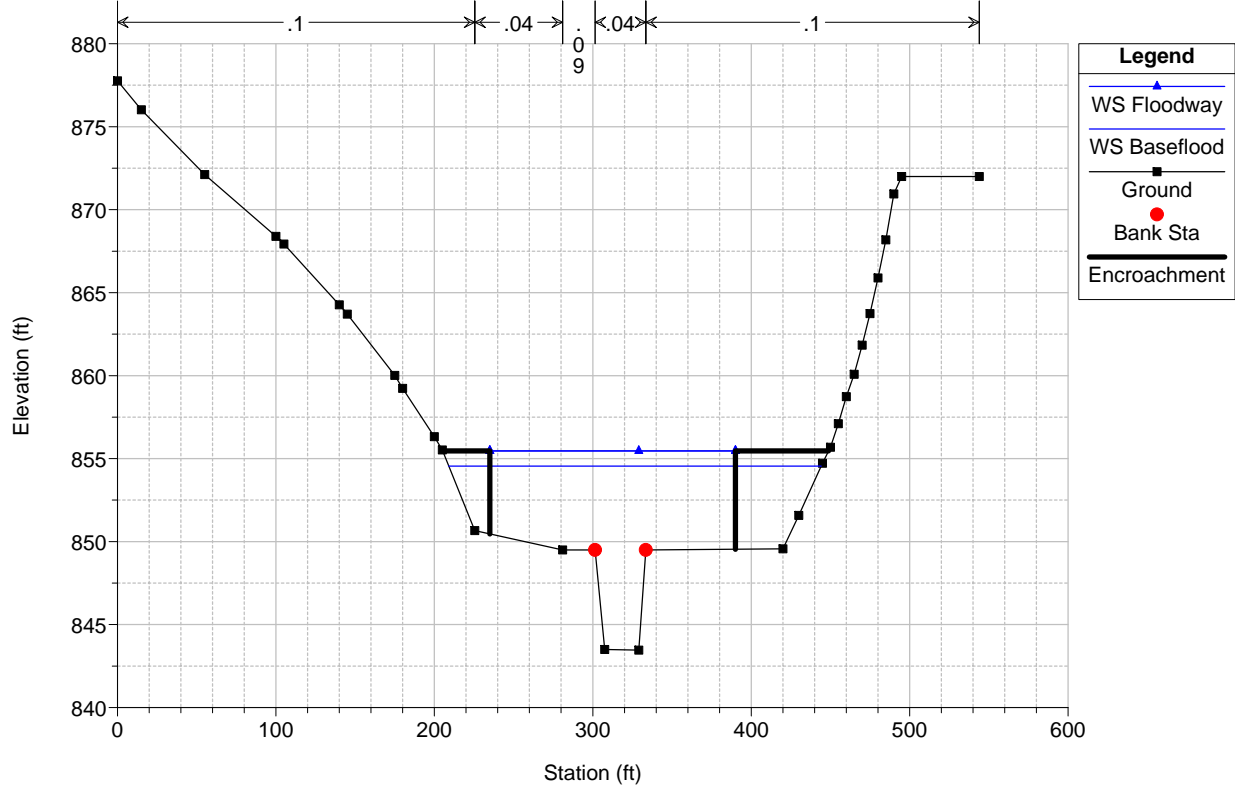
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 27999.84 MS87



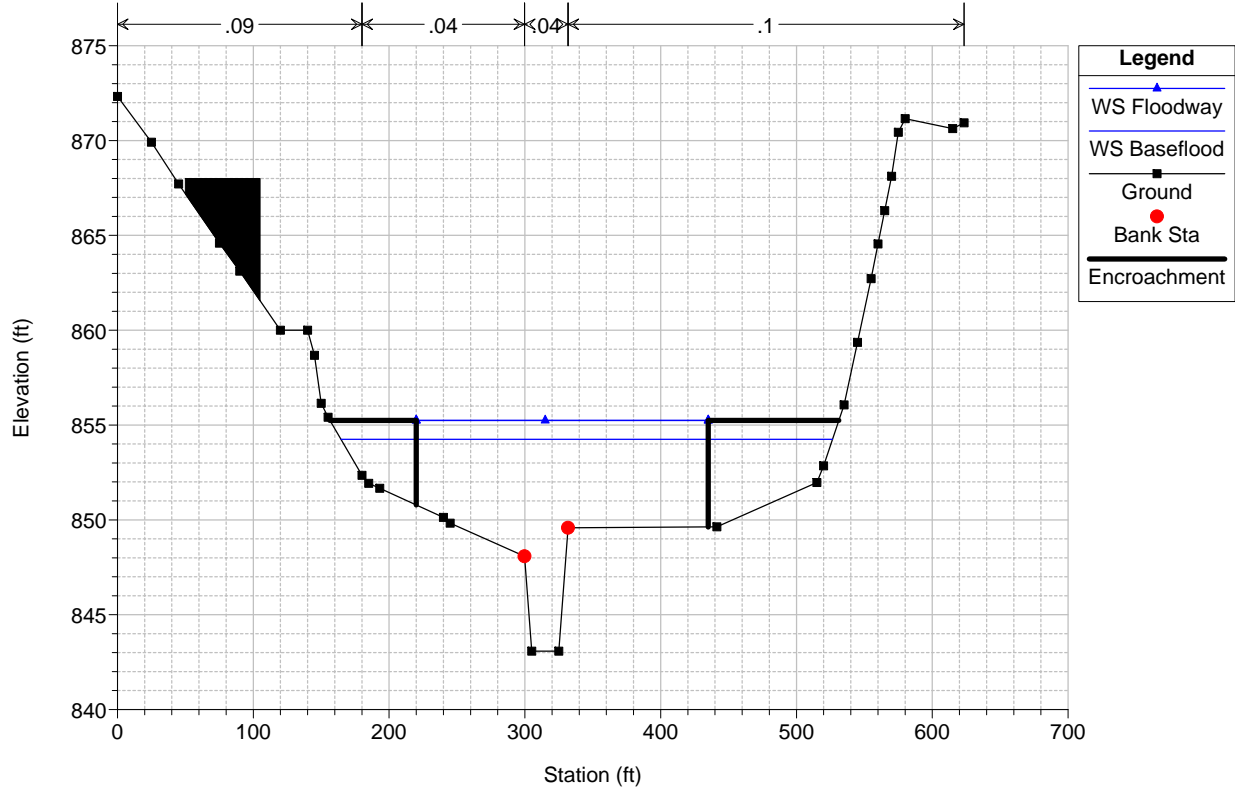
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 27809.76 MS86



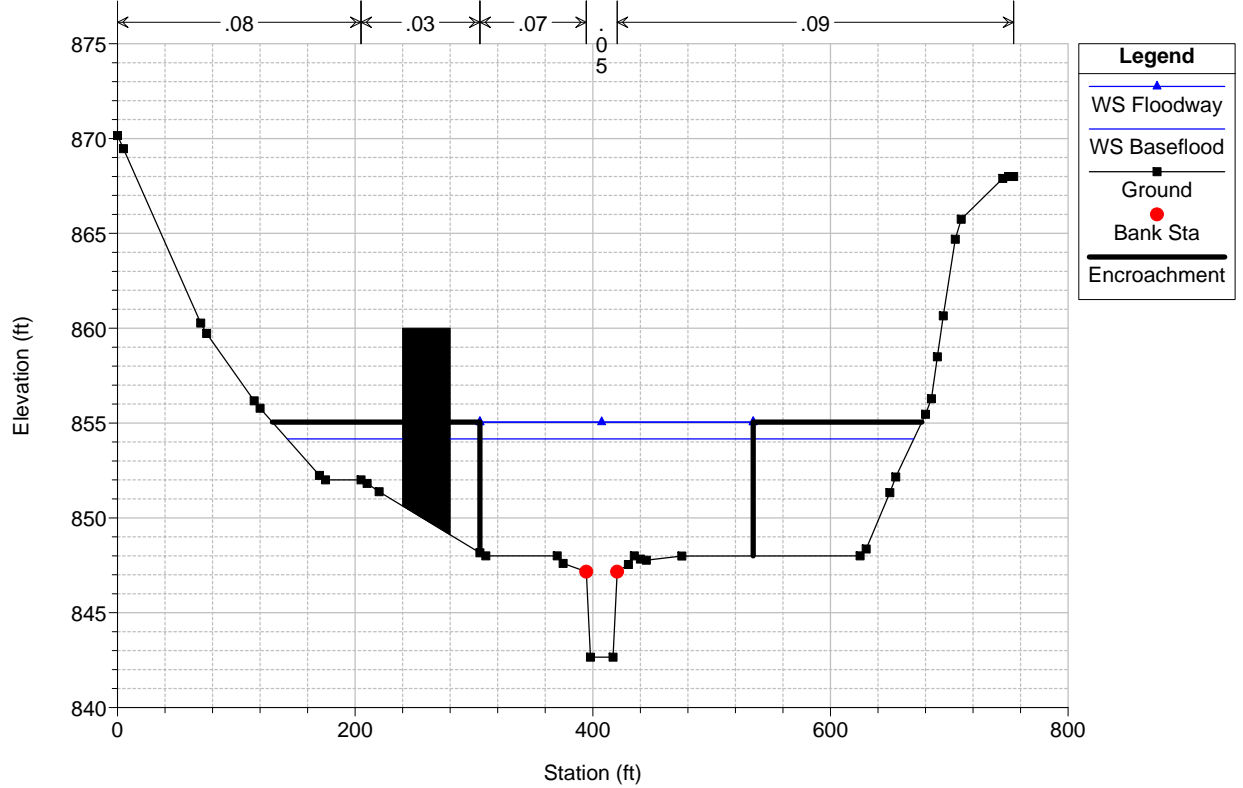
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 27572.16 MS85



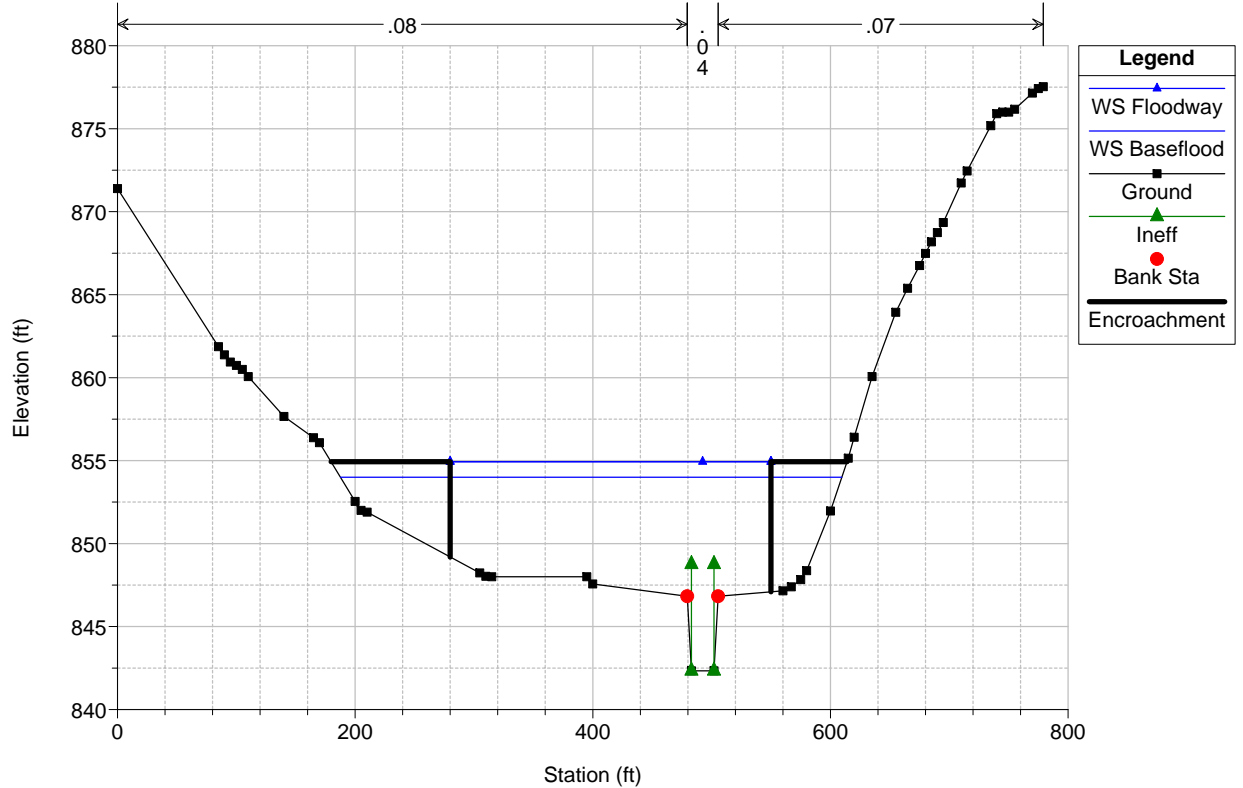
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 27339.84 MS84

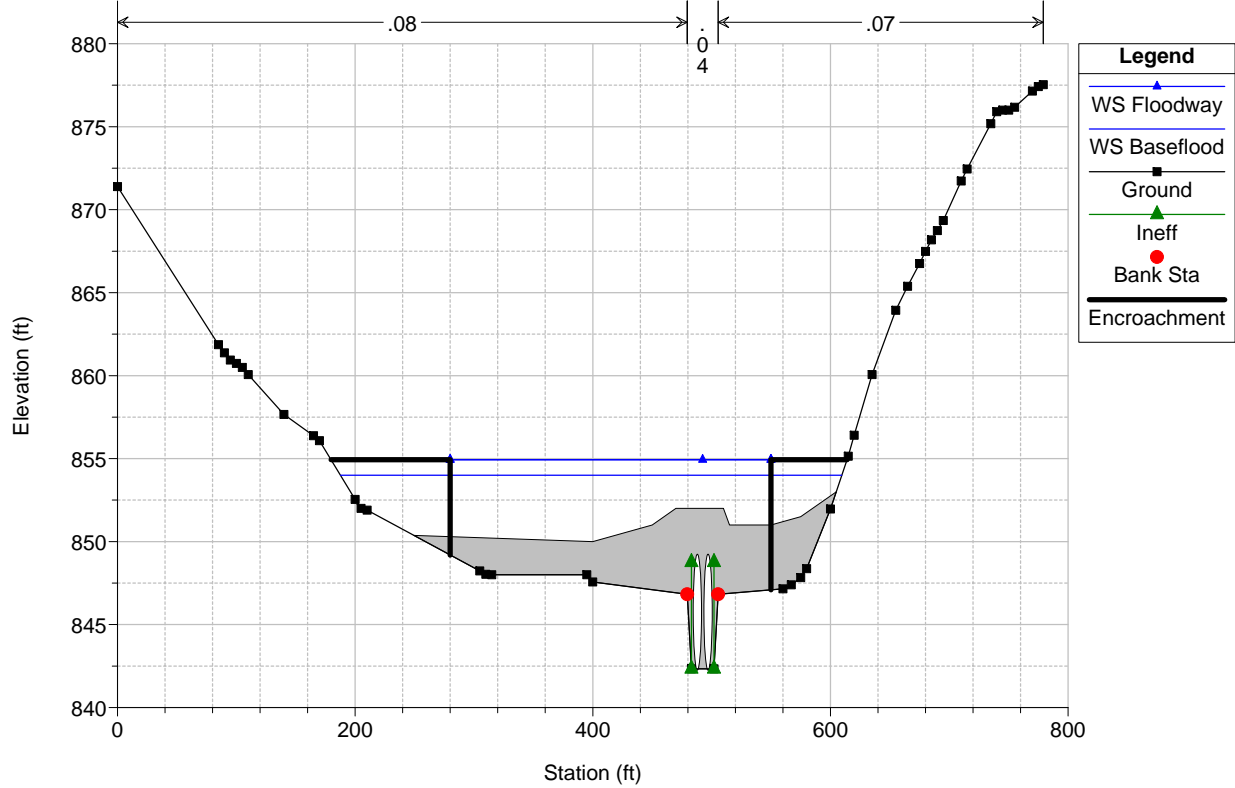


Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

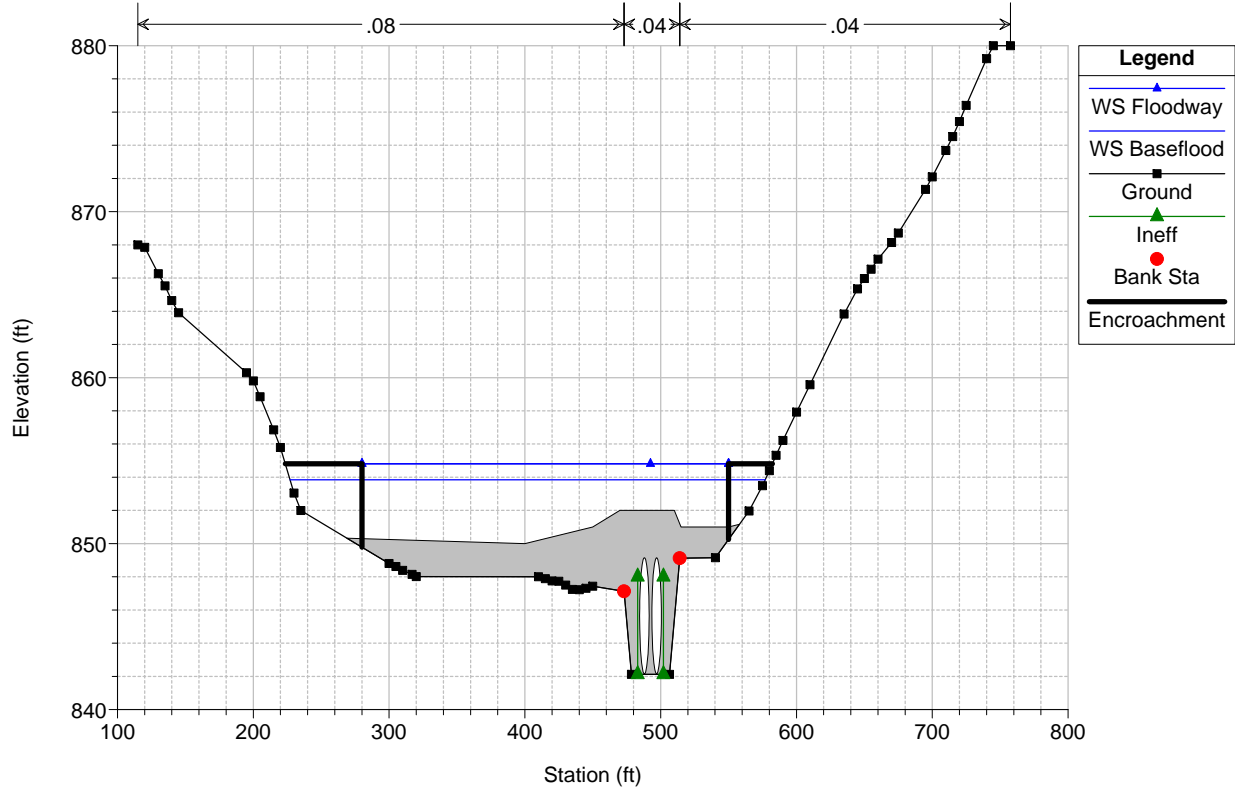
River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert



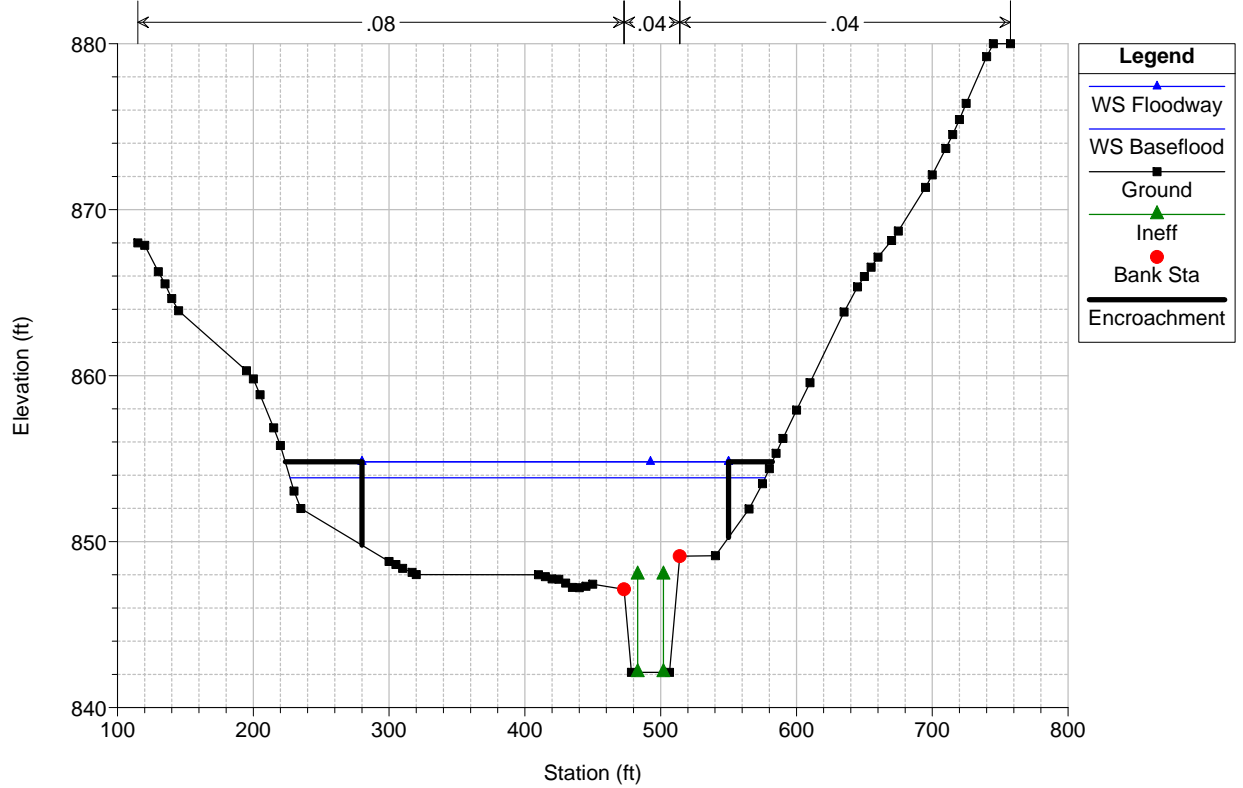
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



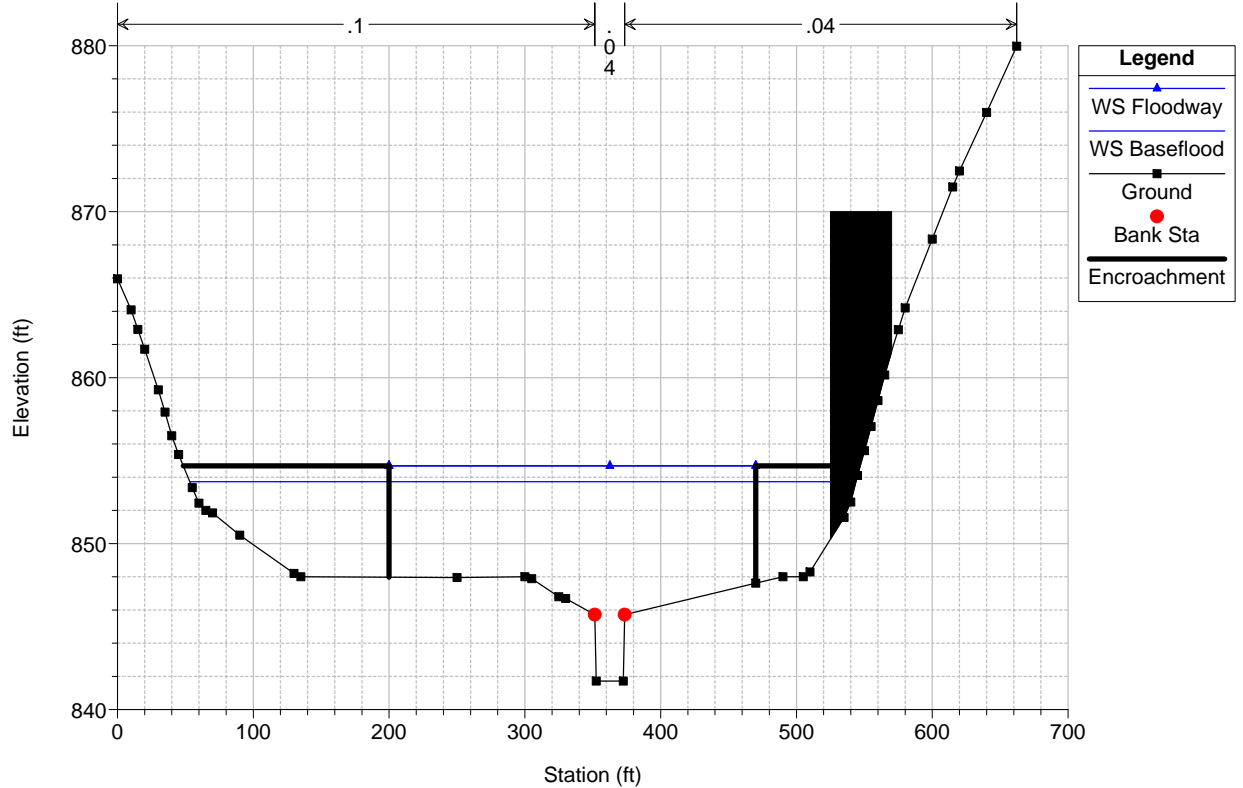
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27033.6 MS82-D/S Private Drive Culvert

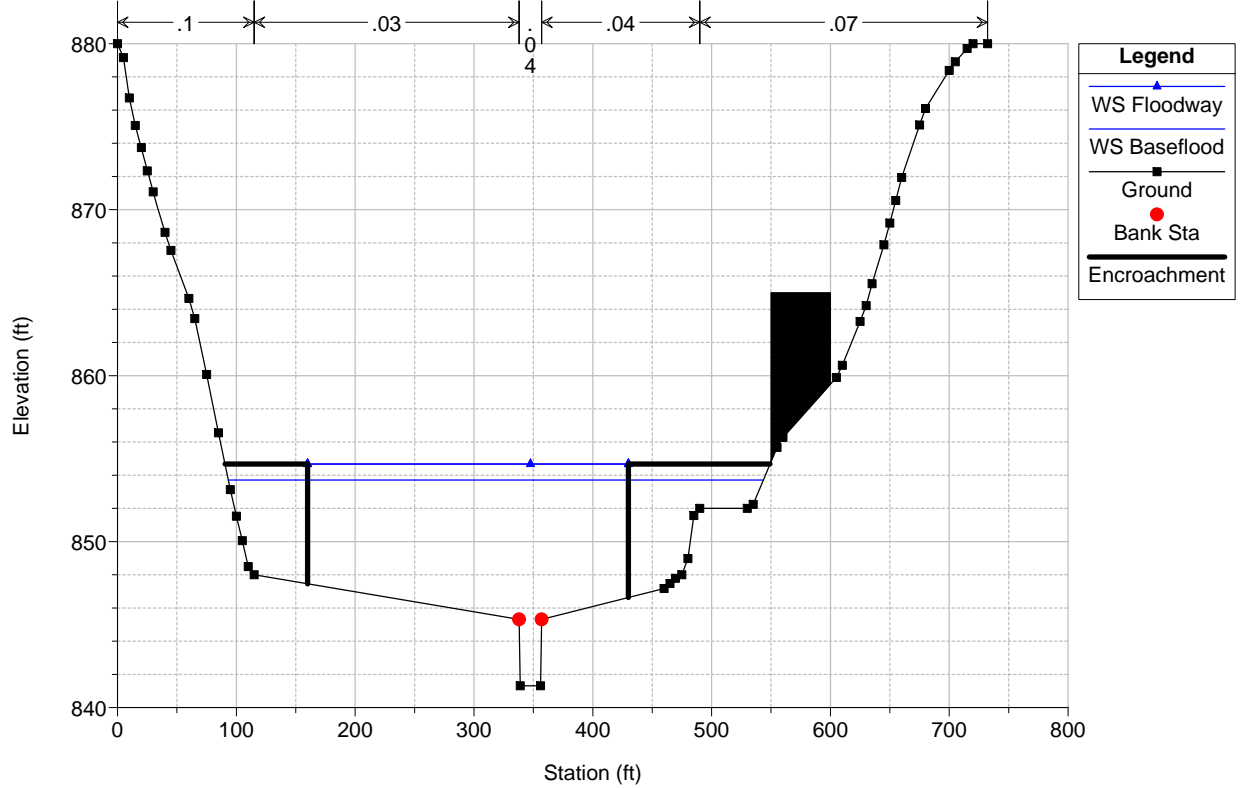


Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 26806.56 MS81



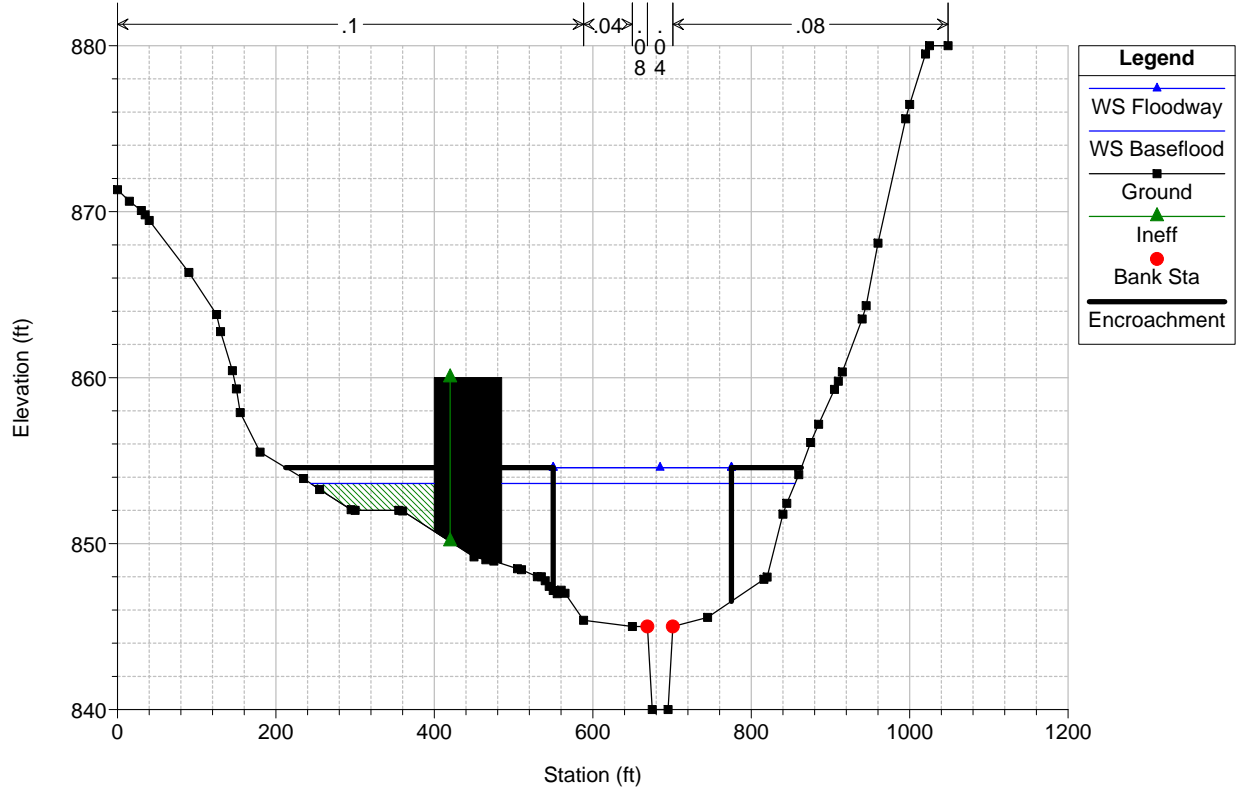
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 26574.24 MS80



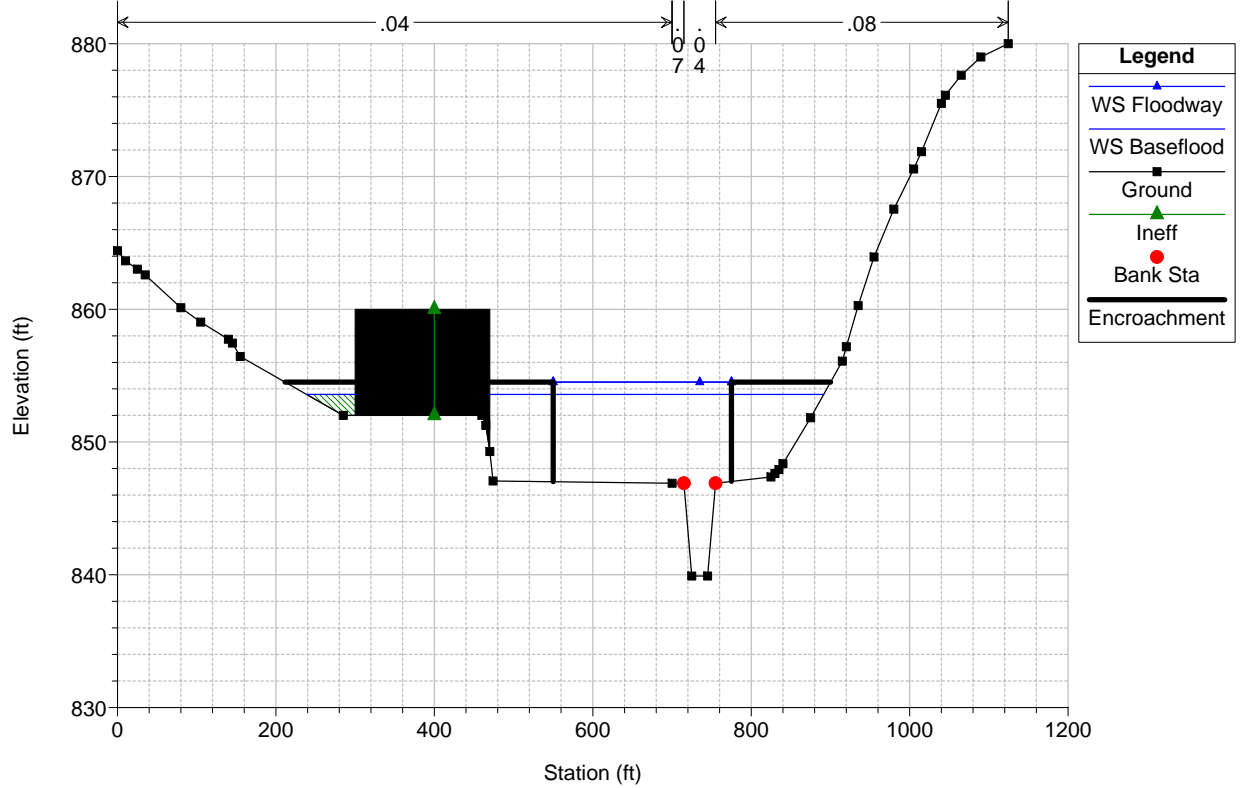
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 26400 MS79



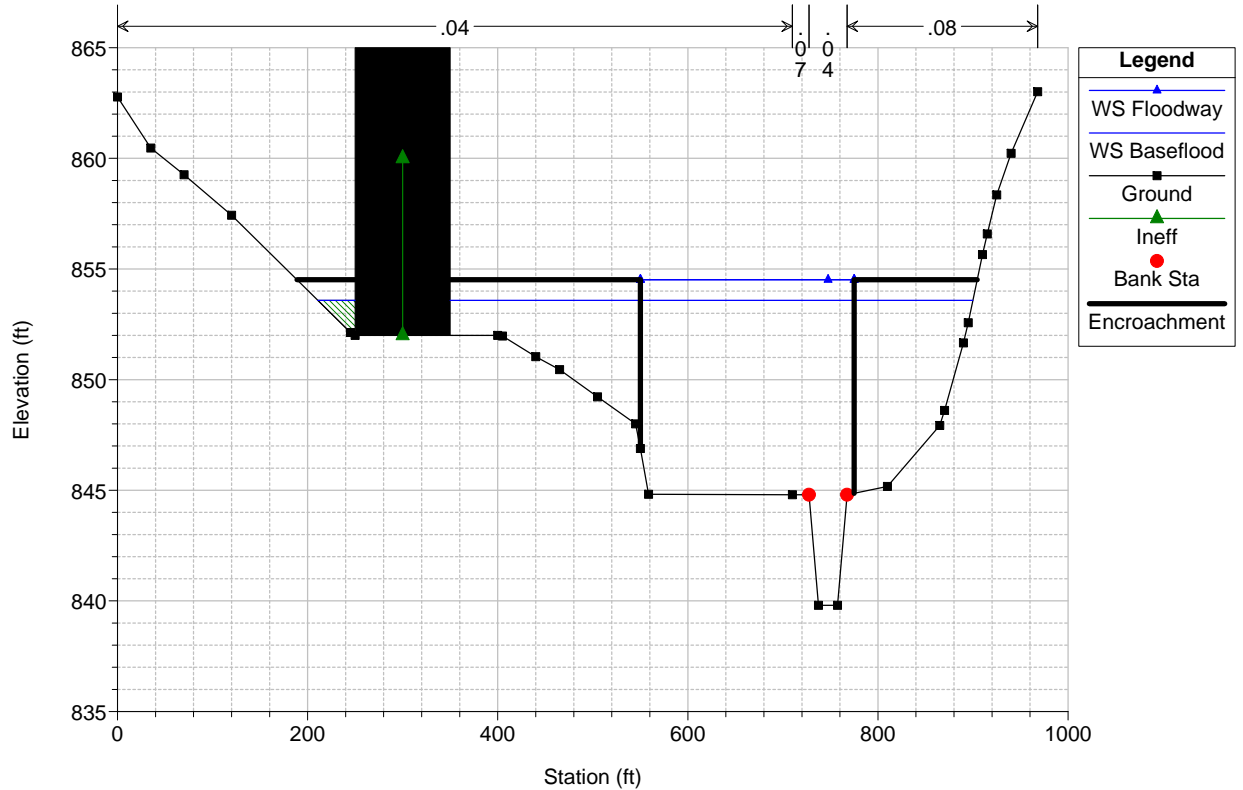
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78



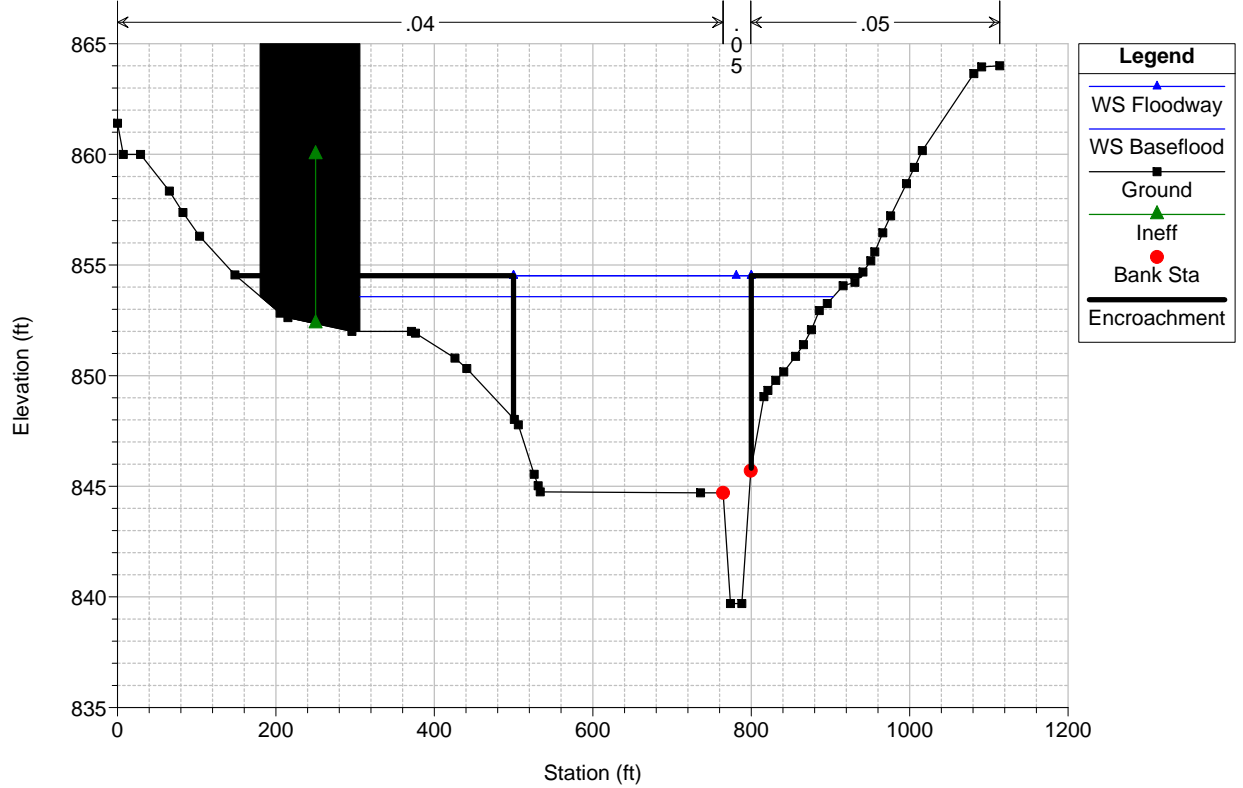
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 26083.2 MS77



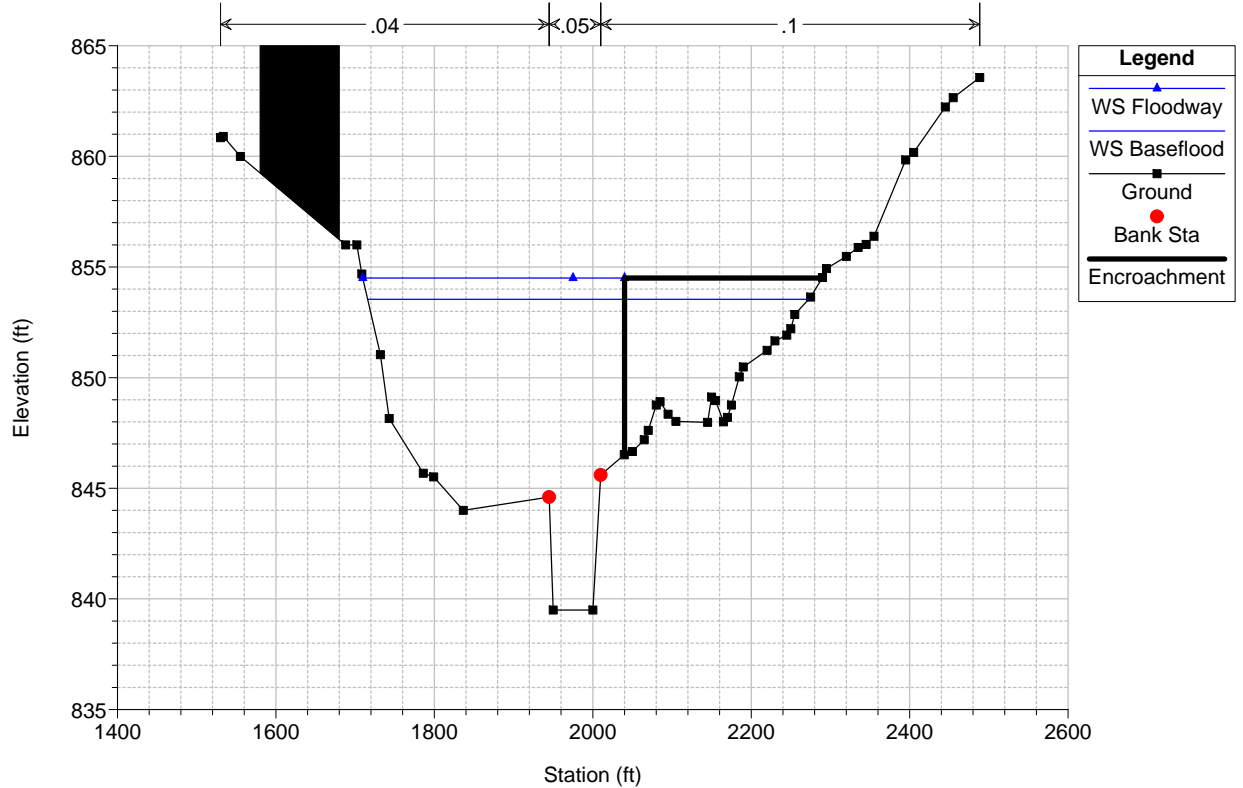
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 25893.12 MS76



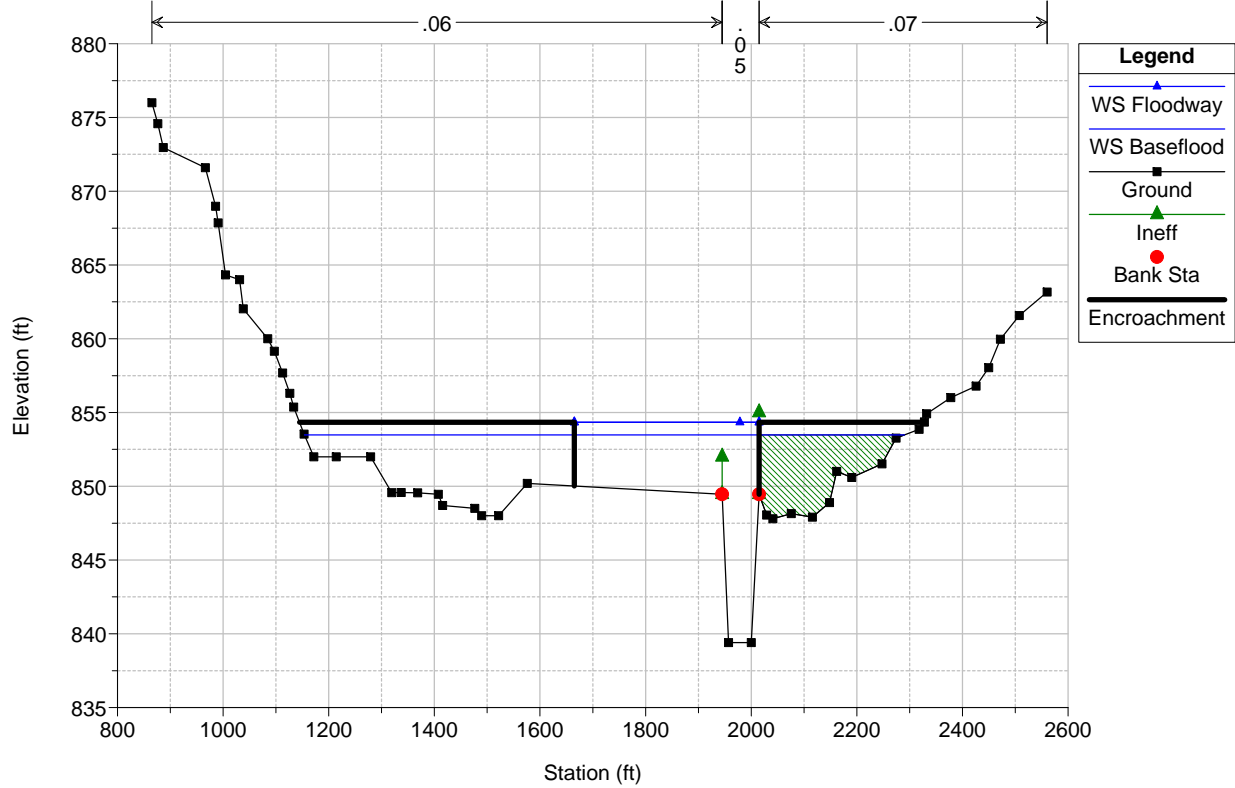
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 25687.2 MS75

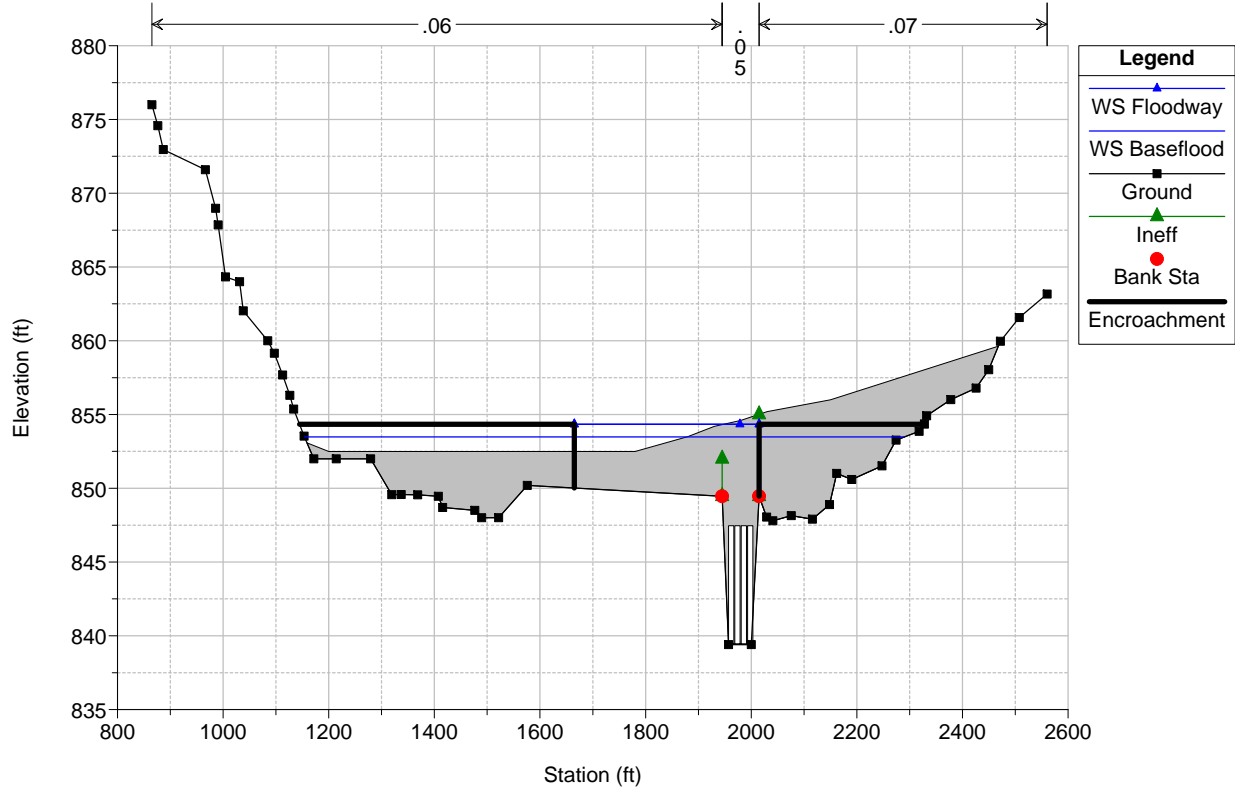




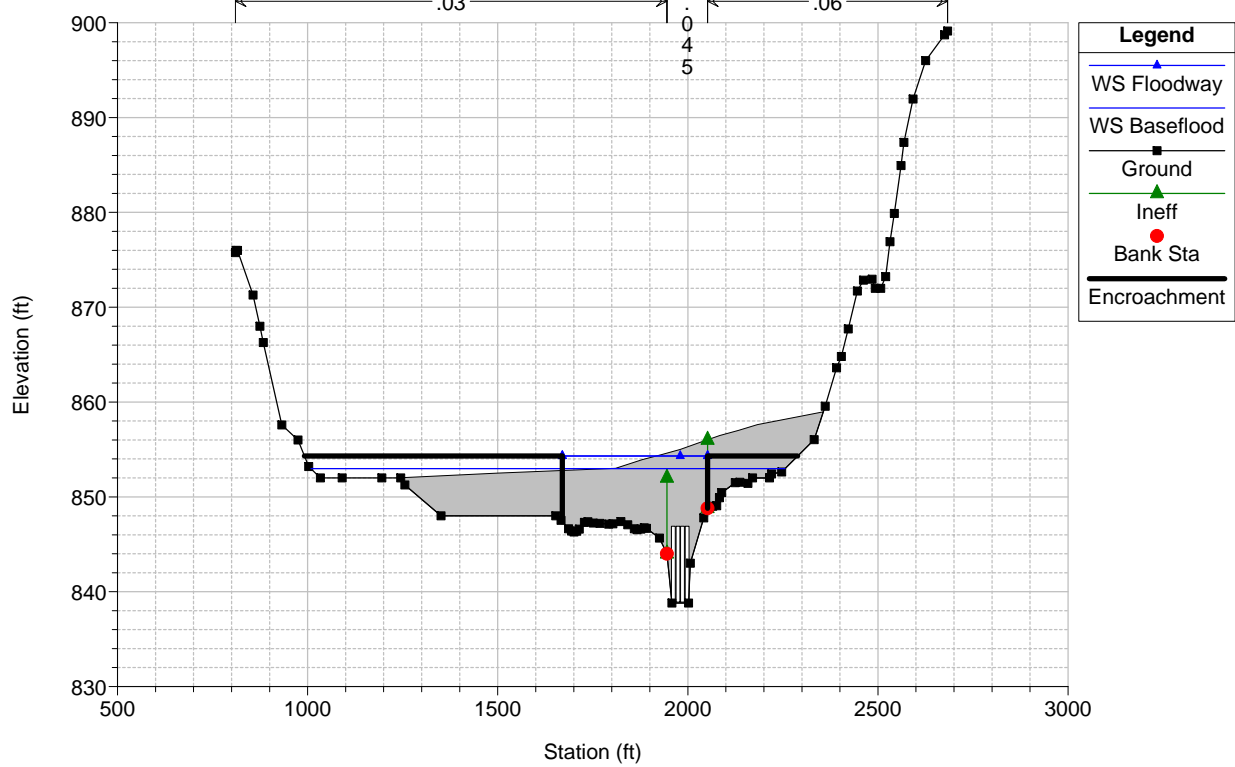
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert



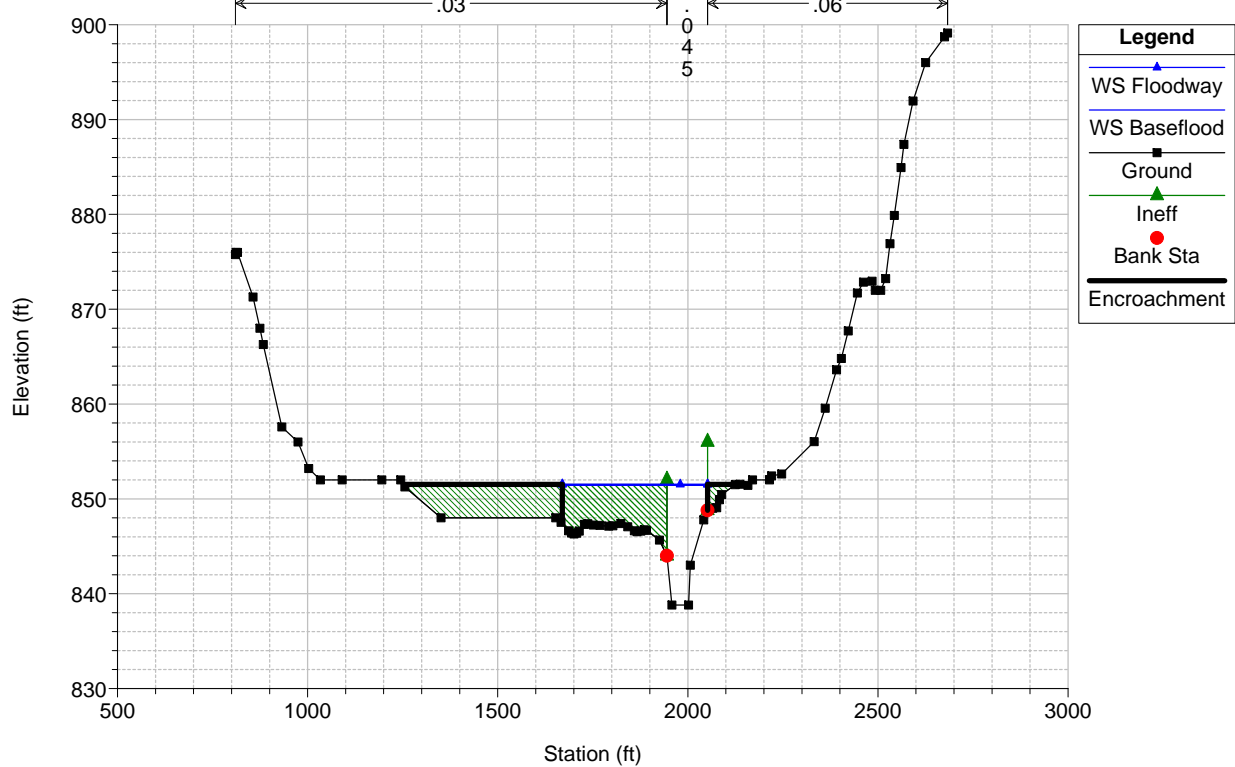
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert

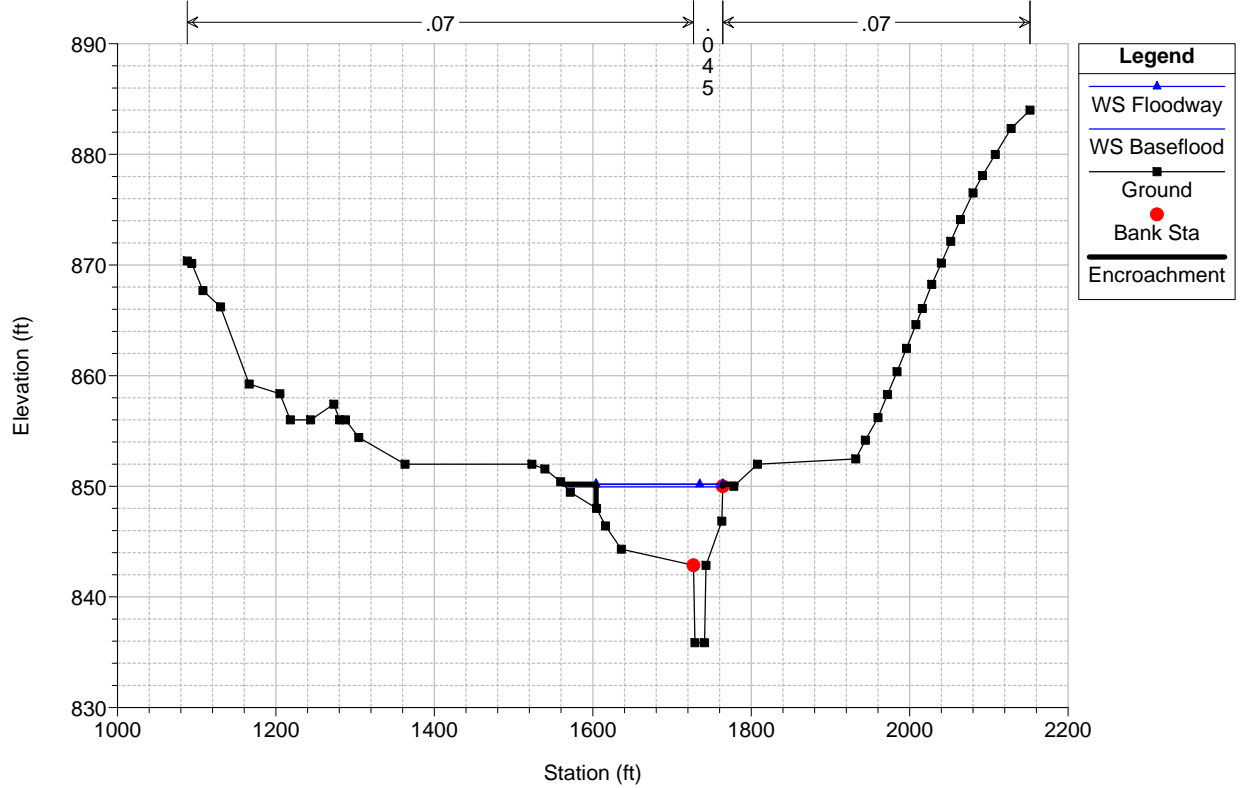


Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25370.96 MS73-D/S I85 Culvert



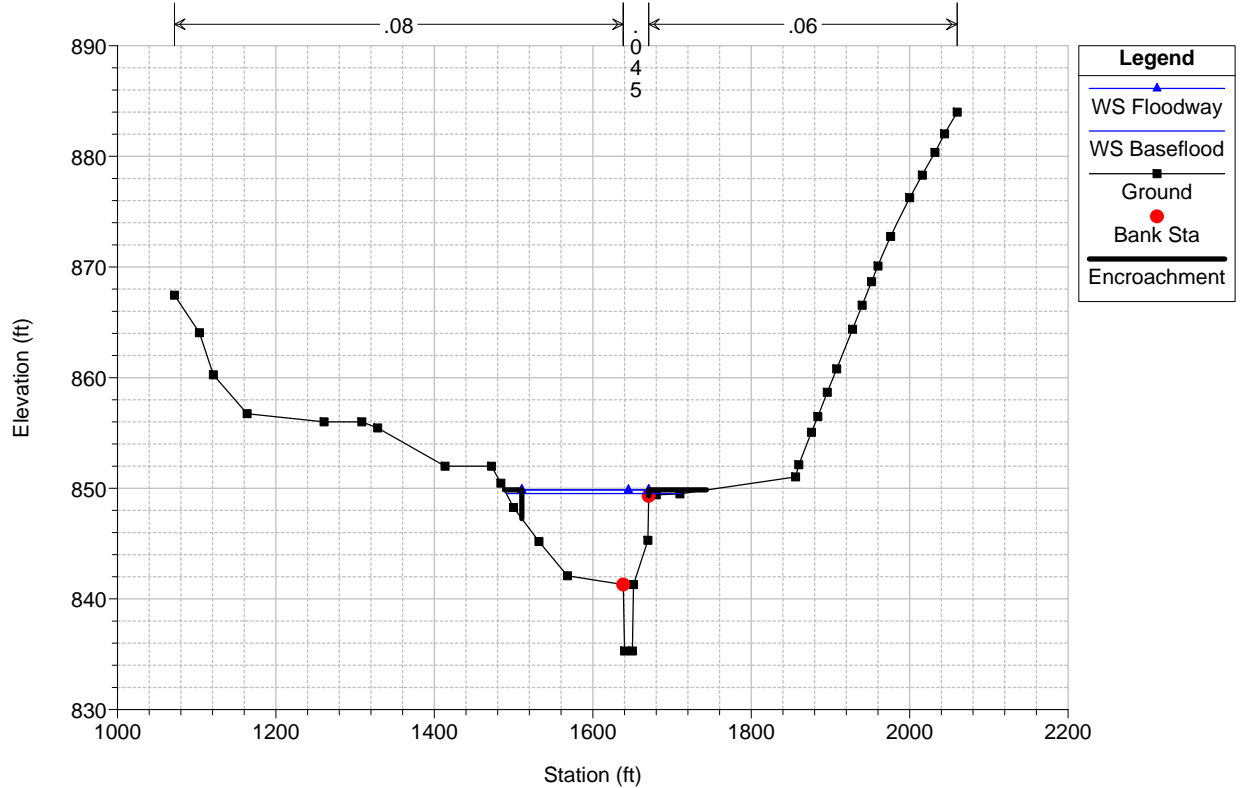
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 24668.16 MS72

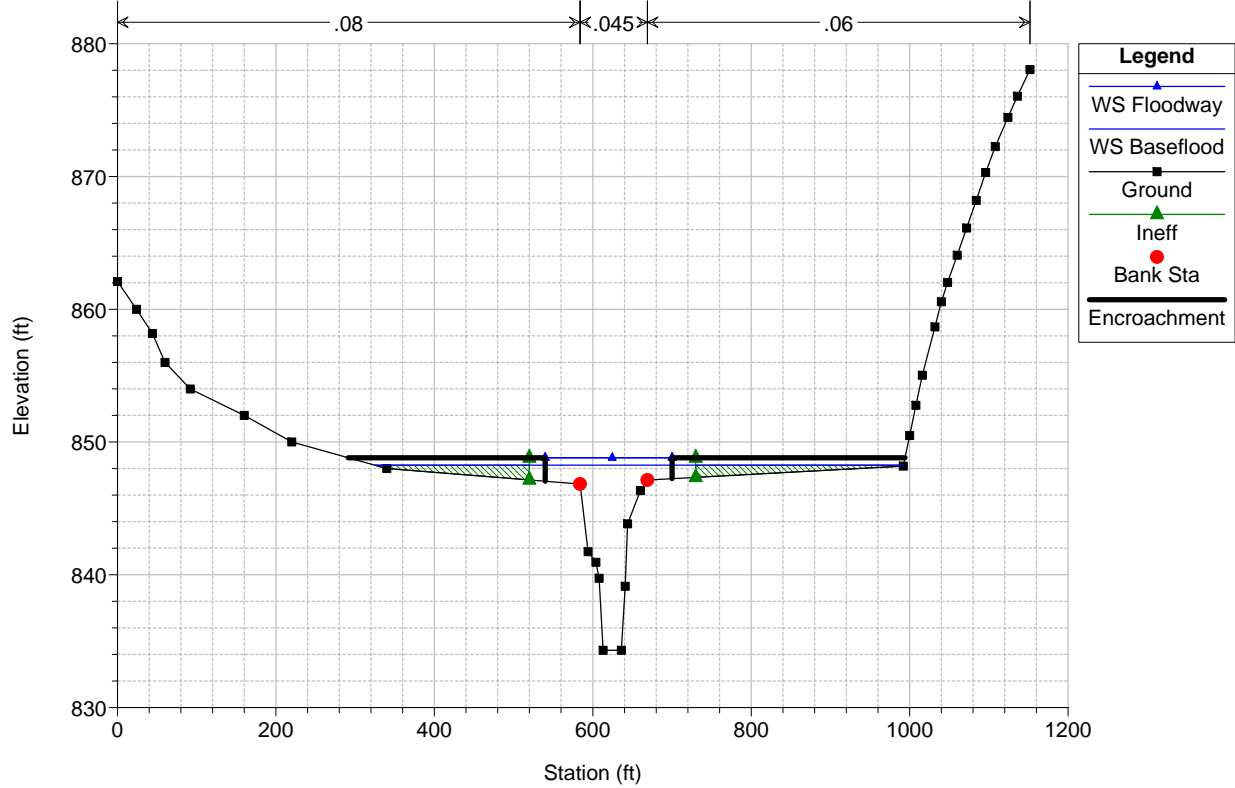


Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

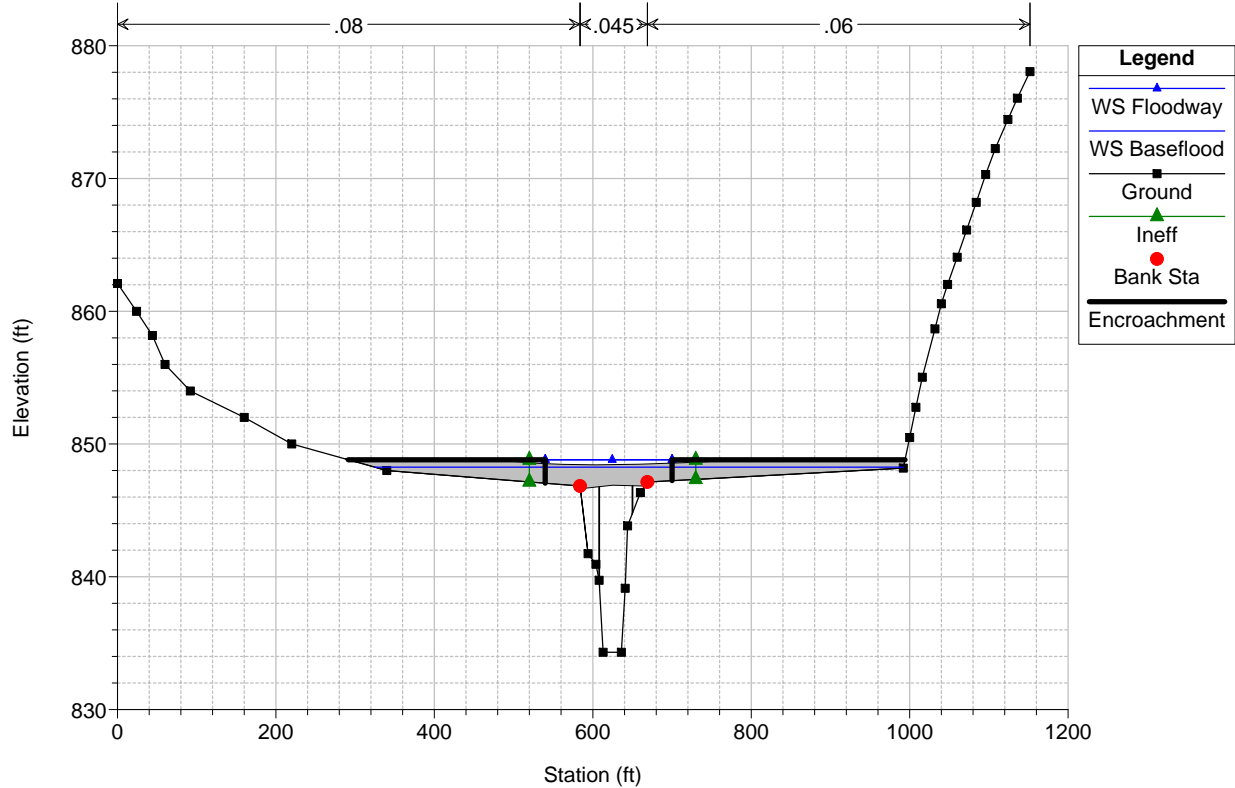
River = MAIN Reach = REACH 2 RS = 24541.44 MS71



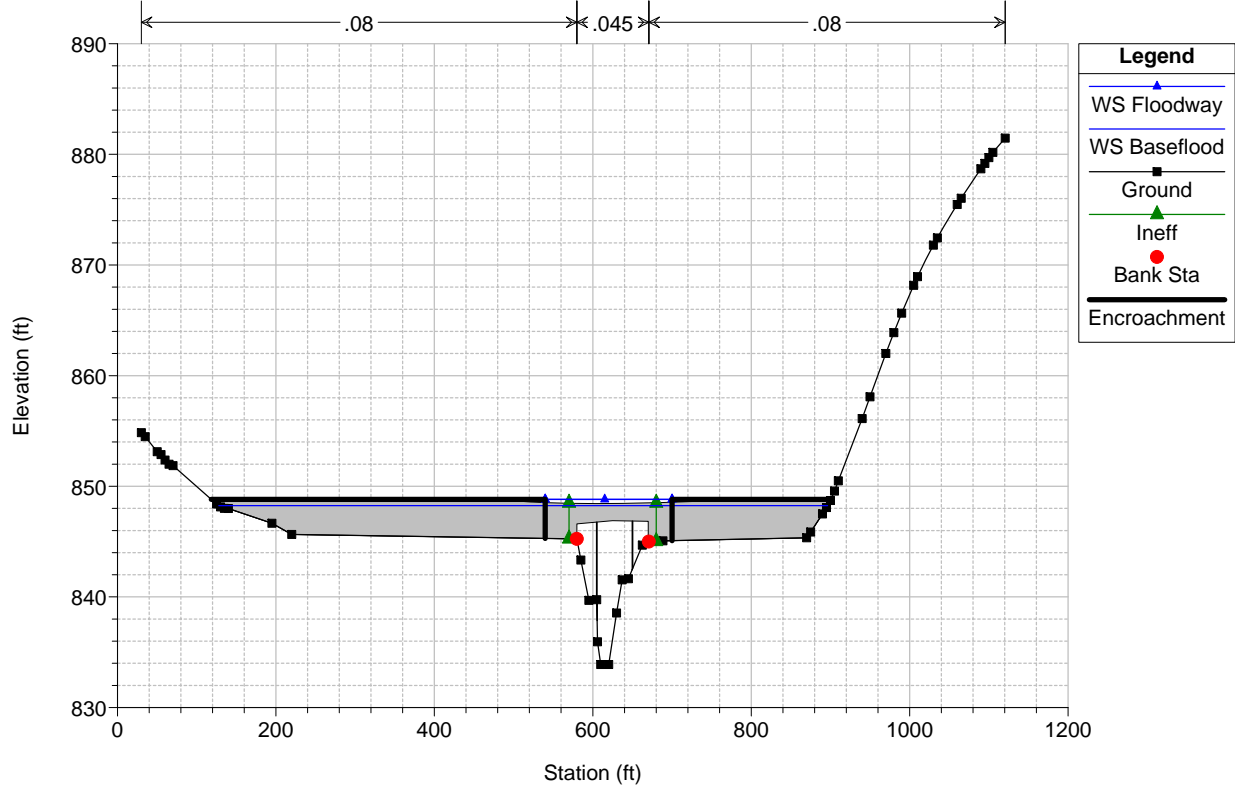
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive



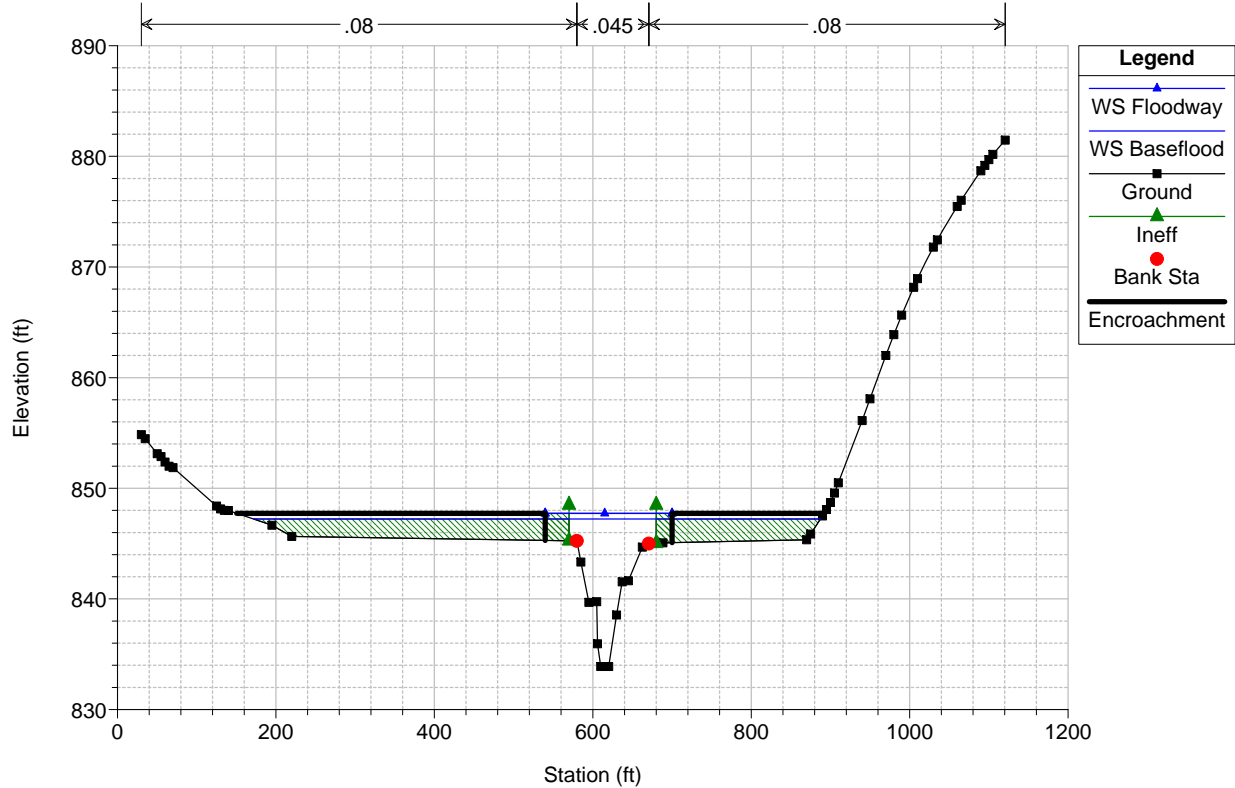
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive

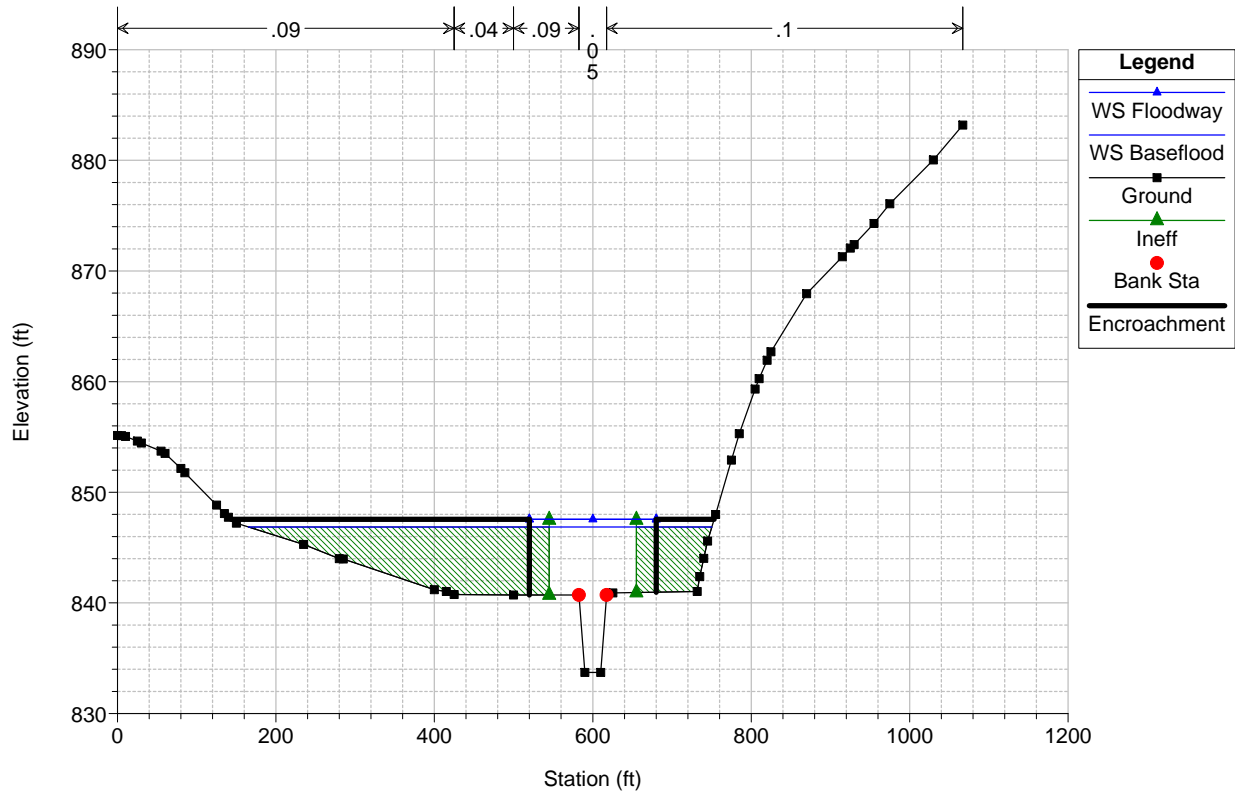


Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive



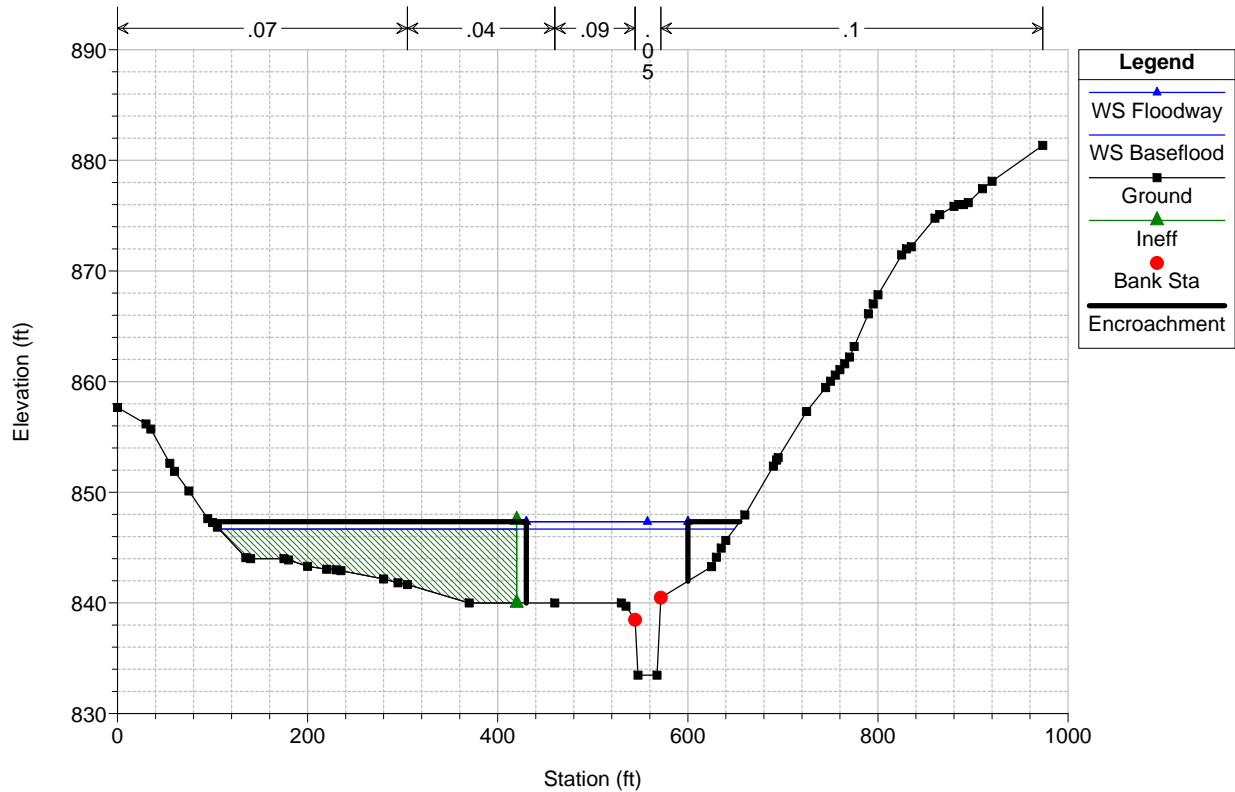
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 24156 MS68



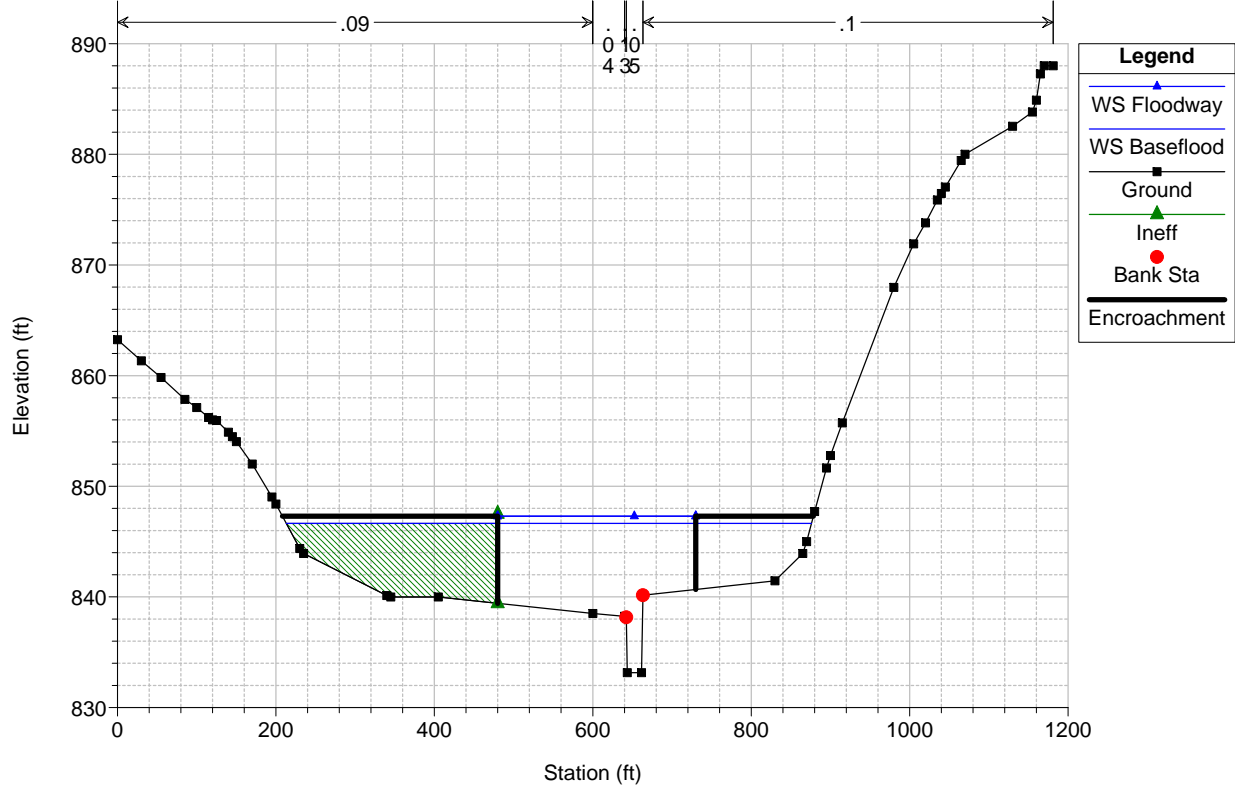
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 24029.28 MS67



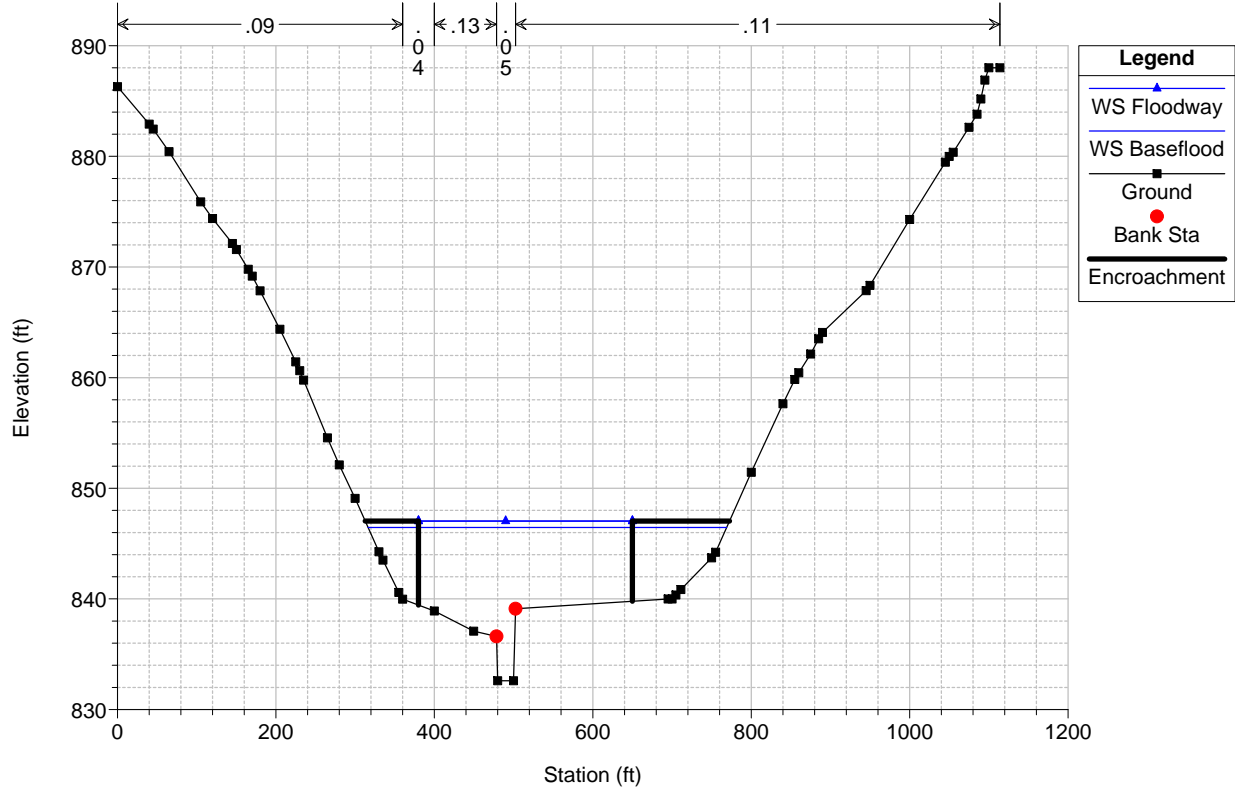
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 23860.32 MS66



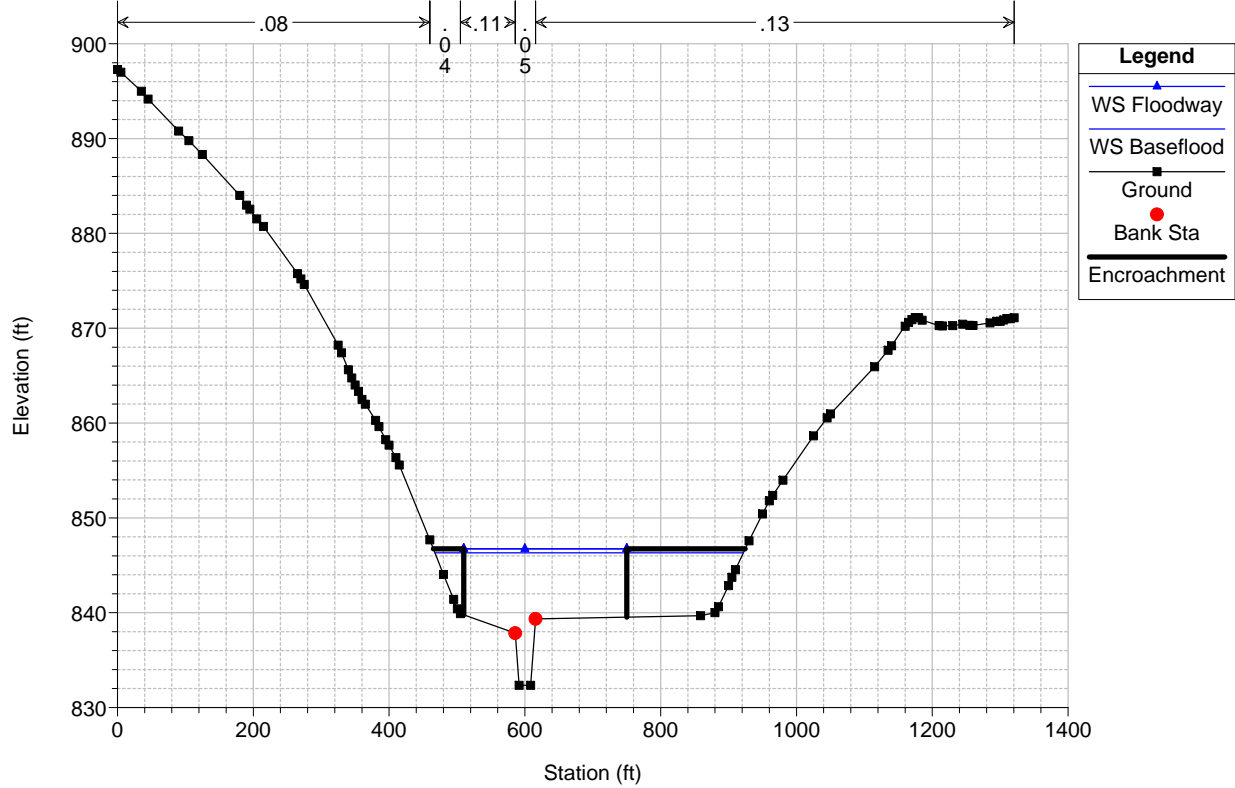
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 23596.32 MS65



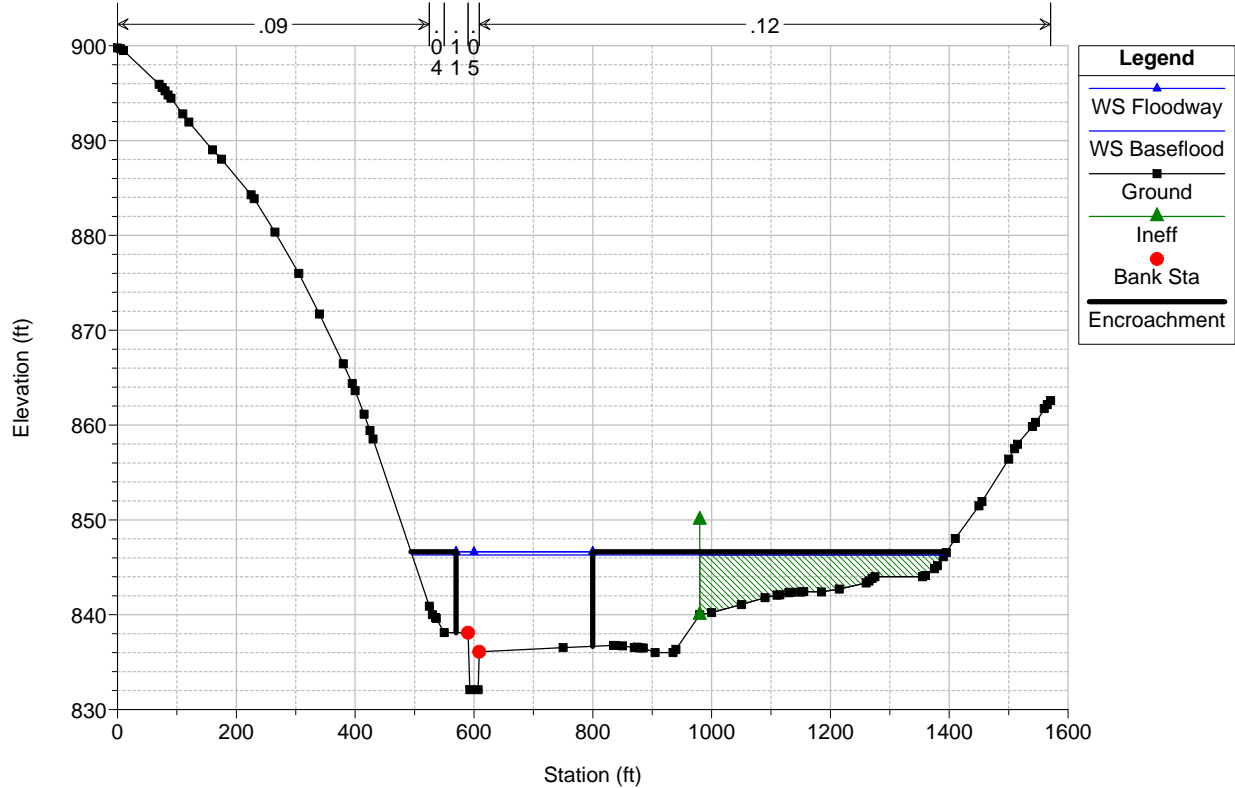
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 23453.76 MS64



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

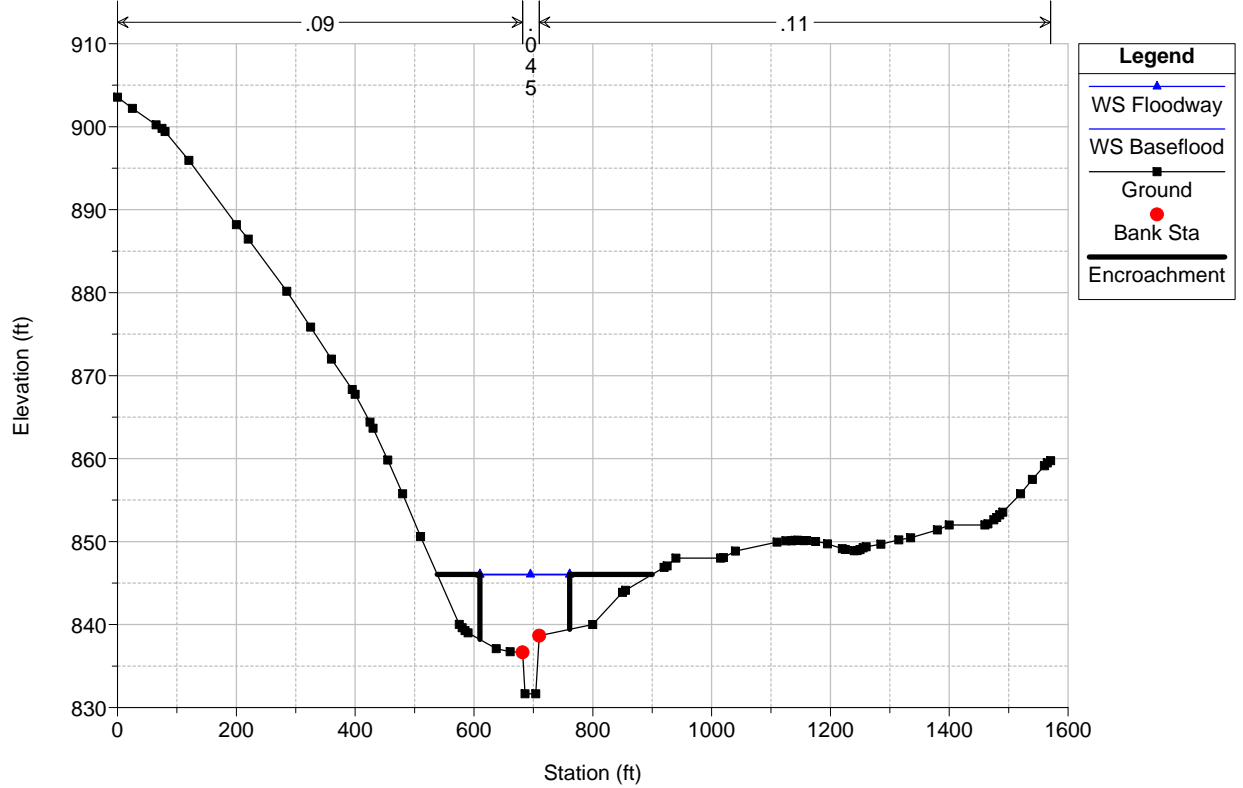
River = MAIN Reach = REACH 2 RS = 23327.04 MS63





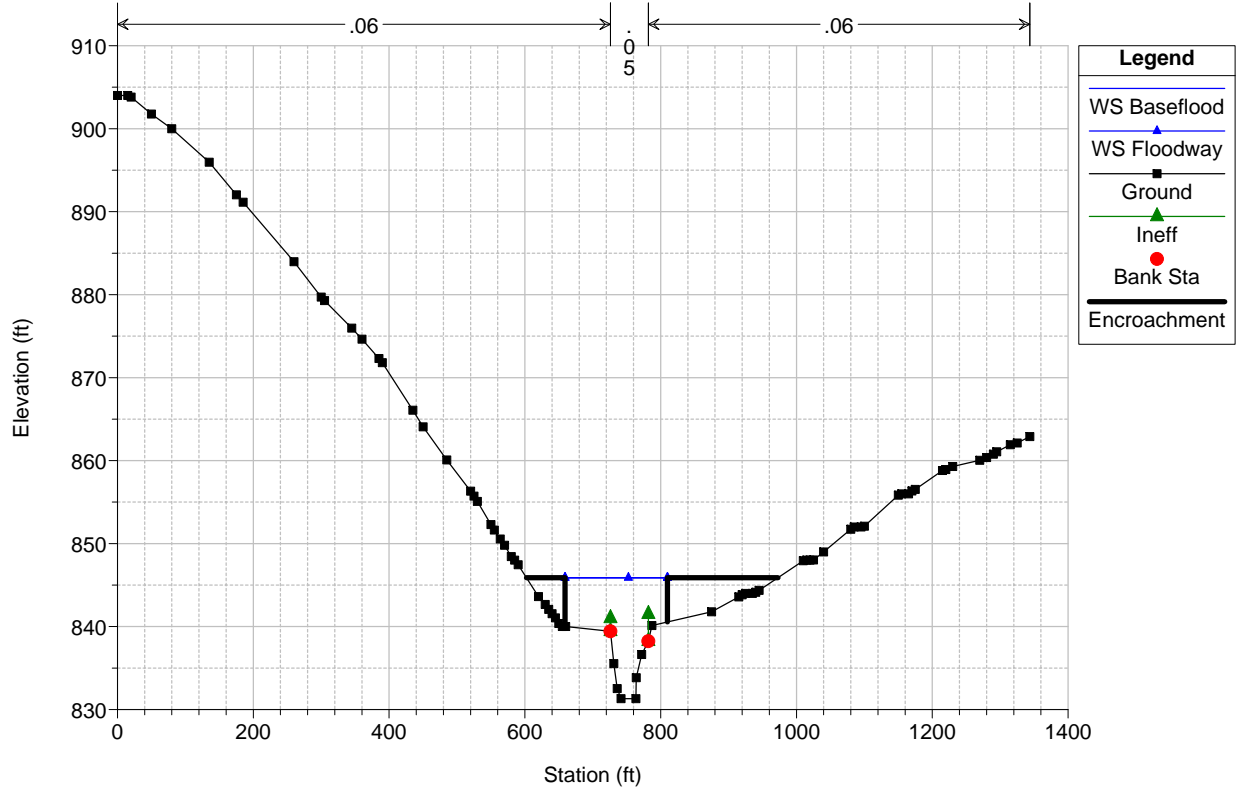
Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Rocky Creek\_CLOMR Plan: Duplicate Effective FW 1/18/2019

River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



HEC-RAS Plan: Dup Eff FW River: MAIN Reach: REACH 2

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	29985.12	Baseflood	860.61		861.55	435.81	913.10	3688.06	211.85		700.00	745.00	
REACH 2	29985.12	Floodway	861.53	0.92	862.29	180.00	989.53	3643.43	180.04	600.00	700.00	745.00	780.00
REACH 2	29958.72BR U	Baseflood	860.61		861.55	307.46	1181.95	2997.03	634.28		700.00	745.00	
REACH 2	29958.72BR U	Floodway	861.53	0.92	862.29	134.02	1122.64	3314.78	367.21	600.00	700.00	745.00	780.00
REACH 2	29958.72BR D	Baseflood	860.61		861.55	307.46	1181.95	2997.03	634.28		700.00	745.00	
REACH 2	29958.72BR D	Floodway	861.46	0.86	862.24	133.97	1122.64	3314.78	367.21	600.00	700.00	745.00	780.00
REACH 2	29927.04	Baseflood	858.49		859.63	435.35	948.79	3345.83	518.37		700.00	745.00	
REACH 2	29927.04	Floodway	859.49	1.00	860.38	180.00	1048.64	3331.24	433.12	600.00	700.00	745.00	780.00
REACH 2	29700	Baseflood	858.71		858.83	561.96	2764.95	1105.53	942.52		540.80	578.80	
REACH 2	29700	Floodway	859.66	0.95	859.79	330.00	2928.10	1123.47	761.42	390.00	540.80	578.80	720.00
REACH 2	29573.28	Baseflood	858.67		858.74	681.49	3012.74	752.21	1048.05		554.50	585.50	
REACH 2	29573.28	Floodway	859.60	0.93	859.73	350.00	3226.58	808.09	778.32	390.00	554.50	585.50	740.00
REACH 2	29362.08	Baseflood	858.57		858.61	679.09	2823.11	800.68	1189.22		514.89	542.50	
REACH 2	29362.08	Floodway	859.43	0.86	859.57	280.00	2170.11	1388.26	1254.63	340.00	514.89	542.50	620.00
REACH 2	29203.68	Baseflood	858.33		858.47	376.88	2180.40	1691.34	941.26		533.41	575.31	
REACH 2	29203.68	Floodway	859.16	0.83	859.35	250.00	2162.55	1973.77	676.69	380.00	533.41	575.31	630.00
REACH 2	28944.96	Baseflood	857.65		857.88	321.52	3259.63	1608.65	70.73		476.44	505.73	
REACH 2	28944.96	Floodway	858.64	0.99	858.85	250.00	3250.26	1614.21	74.53	265.00	476.44	505.73	515.00
REACH 2	28707.36	Baseflood	857.51		857.61	451.02	2481.86	835.82	1621.31		329.00	351.00	
REACH 2	28707.36	Floodway	858.44	0.93	858.62	250.00	2611.19	1013.11	1314.70	235.00	329.00	351.00	485.00
REACH 2	28570.08	Baseflood	857.47		857.53	549.22	1486.36	940.94	2511.70		328.68	356.68	
REACH 2	28570.08	Floodway	858.38	0.91	858.51	250.00	1591.09	1398.02	1949.90	250.00	328.68	356.68	500.00
REACH 2	28374.72	Baseflood	857.24		857.36	472.49	959.24	1066.45	2913.31		299.50	320.50	
REACH 2	28374.72	Floodway	857.96	0.72	858.24	235.00	824.68	1501.11	2613.21	275.00	299.50	320.50	510.00
REACH 2	28216.32	Baseflood	856.57		856.99	280.12	1298.19	1902.66	1738.15		328.00	352.00	
REACH 2	28216.32	Floodway	856.96	0.39	857.67	155.00	763.00	2404.92	1771.08	300.00	328.00	352.00	455.00
REACH 2	27999.84	Baseflood	854.98		855.88	192.97	1644.50	2616.54	677.95		315.32	344.32	
REACH 2	27999.84	Floodway	855.93	0.95	856.61	155.00	1735.47	2457.91	745.62	250.00	315.32	344.32	405.00
REACH 2	27809.76	Baseflood	854.55		855.08	235.08	1504.08	2461.21	973.71		301.50	333.50	
REACH 2	27809.76	Floodway	855.47	0.92	856.05	155.00	1557.70	2675.83	705.47	235.00	301.50	333.50	390.00
REACH 2	27572.16	Baseflood	854.24		854.56	362.01	1854.81	1967.54	1116.65		299.78	331.78	
REACH 2	27572.16	Floodway	855.24	1.00	855.58	215.00	1907.33	2101.05	930.62	220.00	299.78	331.78	435.00
REACH 2	27339.84	Baseflood	854.16		854.24	487.33	1932.29	1004.40	2002.32		394.50	420.50	
REACH 2	27339.84	Floodway	855.05	0.89	855.23	230.00	1718.10	1506.79	1714.11	305.00	394.50	420.50	535.00
REACH 2	27155.04	Baseflood	854.00		854.13	421.93	2411.06	1370.74	1157.20		479.50	505.50	
REACH 2	27155.04	Floodway	854.93	0.93	855.08	270.00	2678.66	1514.03	746.32	280.00	479.50	505.50	550.00
REACH 2	27091.68	Culvert											
REACH 2	27033.6	Baseflood	853.85		854.06	349.94	2136.03	2248.74	554.23		473.08	514.08	
REACH 2	27033.6	Floodway	854.81	0.96	854.99	270.00	2207.04	2188.59	543.36	280.00	473.08	514.08	550.00
REACH 2	26806.56	Baseflood	853.73		853.82	471.80	1475.72	881.14	2582.14		351.50	373.50	
REACH 2	26806.56	Floodway	854.68	0.95	854.83	270.00	1312.23	1109.29	2517.48	200.00	351.50	373.50	470.00
REACH 2	26574.24	Baseflood	853.71		853.76	450.26	3163.17	412.74	1363.09		338.00	357.00	
REACH 2	26574.24	Floodway	854.67	0.96	854.75	270.00	3368.33	494.45	1076.21	160.00	338.00	357.00	430.00
REACH 2	26400	Baseflood	853.62		853.71	370.39	2326.63	1449.67	1162.70		669.00	701.00	
REACH 2	26400	Floodway	854.58	0.95	854.69	225.00	2386.08	1616.85	936.07	550.00	669.00	701.00	775.00
REACH 2	26220.48	Baseflood	853.59		853.65	421.56	3073.56	1312.92	552.53		715.00	755.00	
REACH 2	26220.48	Floodway	854.51	0.92	854.63	225.00	3009.73	1771.38	157.90	550.00	715.00	755.00	775.00
REACH 2	26083.2	Baseflood	853.58		853.62	549.93	3058.10	1197.62	683.28		727.50	767.50	
REACH 2	26083.2	Floodway	854.51	0.93	854.59	225.00	3478.94	1414.26	45.80	550.00	727.50	767.50	775.00
REACH 2	25893.12	Baseflood	853.57		853.60	597.66	3987.28	738.99	212.73		764.43	799.43	
REACH 2	25893.12	Floodway	854.52	0.95	854.56	300.00	4202.79	735.22	0.99	500.00	764.43	799.43	800.00
REACH 2	25687.2	Baseflood	853.54		853.58	556.72	2866.93	1545.84	526.23		1945.00	2010.00	
REACH 2	25687.2	Floodway	854.50	0.96	854.54	330.43	3188.04	1614.19	136.78	1690.00	1945.00	2010.00	2040.00
REACH 2	25549.36	Baseflood	853.48		853.53	860.98	2767.01	2171.99			1945.00	2015.00	
REACH 2	25549.36	Floodway	854.34	0.86	854.45	350.00	1939.03	2999.97		1665.00	1945.00	2015.00	2015.00
REACH 2	25460.16	Culvert											
REACH 2	25370.96	Baseflood	851.43		851.82	107.00		4939.00			1945.00	2052.00	
REACH 2	25370.96	Floodway	851.52	0.10	851.91	107.00		4939.00		1670.00	1945.00	2052.00	2052.00
REACH 2	24668.16	Baseflood	849.94		850.40	198.65	2746.89	2192.11			1727.16	1764.16	

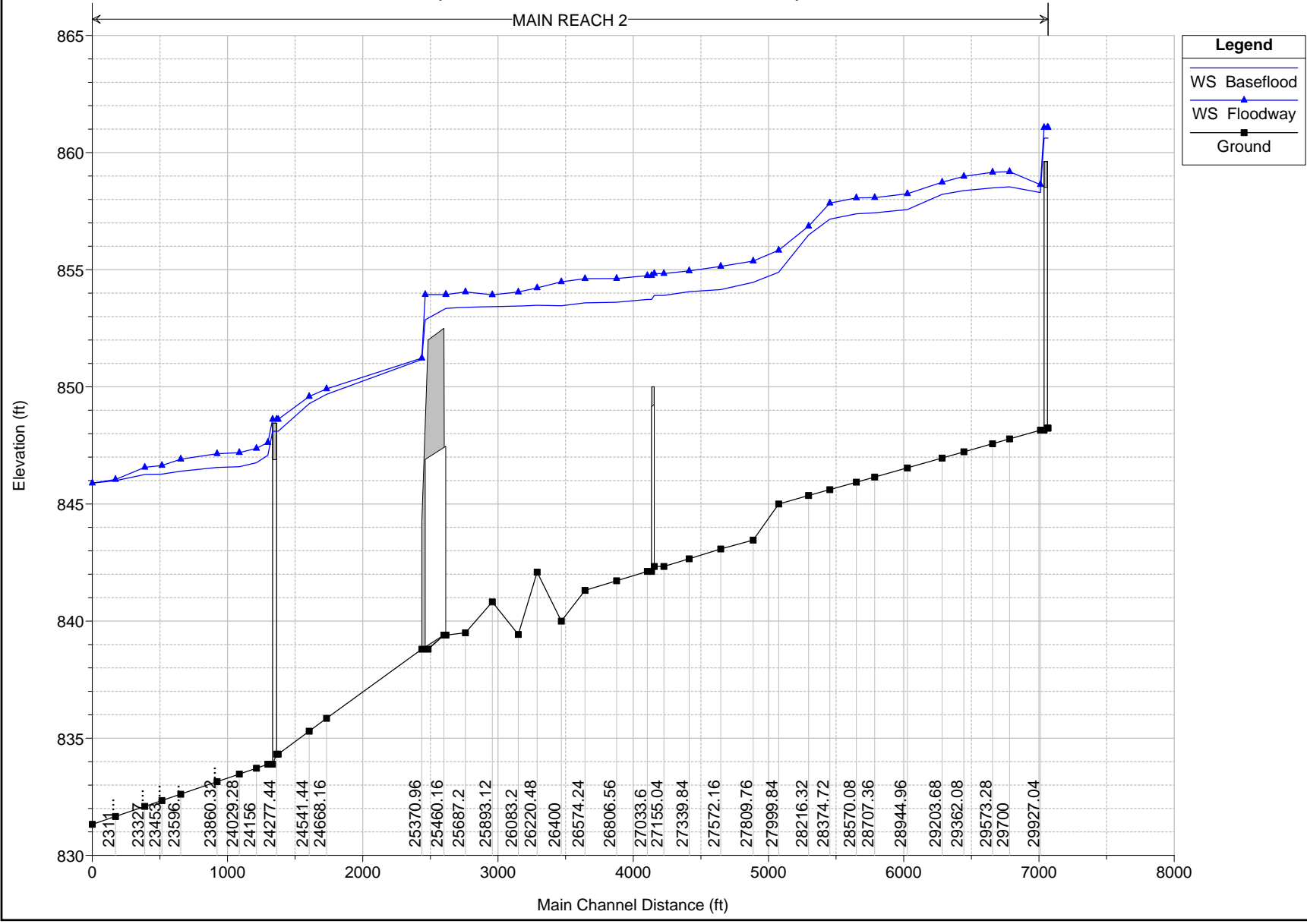
HEC-RAS Plan: Dup Eff FW River: MAIN Reach: REACH 2 (Continued)

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	24668.16	Floodway	850.19	0.26	850.60	160.00	2873.03	2065.97		1604.16	1727.16	1764.16	1764.16
REACH 2	24541.44	Baseflood	849.52		849.90	220.74	3001.97	1936.00	1.03		1638.50	1670.50	
REACH 2	24541.44	Floodway	849.85	0.33	850.19	160.00	3079.48	1859.53		1510.50	1638.50	1670.50	1670.50
REACH 2	24314.4	Baseflood	848.26		849.03	210.00	103.99	4743.06	91.95		584.00	669.00	
REACH 2	24314.4	Floodway	848.81	0.56	849.48	160.00	119.00	4732.21	87.79	540.00	584.00	669.00	700.00
REACH 2	24277.44BR U	Baseflood	848.26		849.03		130.38	4663.56	136.49		584.00	669.00	
REACH 2	24277.44BR U	Floodway	848.81	0.56	849.48	160.00	112.81	4747.86	78.04	540.00	584.00	669.00	700.00
REACH 2	24277.44BR D	Baseflood	848.26		849.03		130.38	4663.56	136.49		580.00	670.83	
REACH 2	24277.44BR D	Floodway	848.81	0.56	849.48	160.00	112.81	4747.86	78.04	540.00	580.00	670.83	700.00
REACH 2	24240.48	Baseflood	847.22		848.11	110.00	38.19	4858.57	42.25		580.00	670.83	
REACH 2	24240.48	Floodway	847.74	0.52	848.50	110.00	49.80	4836.12	53.08	540.00	580.00	670.83	700.00
REACH 2	24156	Baseflood	846.87		847.71	110.00	786.66	3477.79	674.55		582.50	617.50	
REACH 2	24156	Floodway	847.56	0.69	848.00	160.00	1102.73	2889.04	947.24	520.00	582.50	617.50	680.00
REACH 2	24029.28	Baseflood	846.68		846.93	228.93	2719.36	1803.44	416.21		544.58	571.58	
REACH 2	24029.28	Floodway	847.35	0.67	847.63	170.00	2642.36	1989.93	306.72	430.00	544.58	571.58	600.00
REACH 2	23860.32	Baseflood	846.64		846.72	396.08	2772.92	886.93	1279.15		642.25	663.25	
REACH 2	23860.32	Floodway	847.29	0.65	847.40	250.00	3293.58	1024.75	620.68	480.00	642.25	663.25	730.00
REACH 2	23596.32	Baseflood	846.46		846.53	452.66	1962.86	1138.80	1837.34		478.48	502.48	
REACH 2	23596.32	Floodway	847.03	0.57	847.16	270.00	1730.21	1481.18	1727.61	380.00	478.48	502.48	650.00
REACH 2	23453.76	Baseflood	846.32		846.43	454.30	1193.17	1581.81	2164.03		585.78	615.78	
REACH 2	23453.76	Floodway	846.73	0.41	846.98	240.00	1164.16	2217.48	1557.36	510.00	585.78	615.78	750.00
REACH 2	23327.04	Baseflood	846.30		846.33	484.12	761.03	629.27	3548.69		590.00	609.00	
REACH 2	23327.04	Floodway	846.64	0.34	846.76	230.00	241.39	1187.83	3509.78	570.00	590.00	609.00	800.00
REACH 2	23110.56	Baseflood	846.00		846.20	360.45	1931.64	1978.20	1029.17		681.83	709.83	
REACH 2	23110.56	Floodway	846.04	0.05	846.45	151.00	1749.38	2515.53	674.09	610.00	681.83	709.83	761.00
REACH 2	22946.88	Baseflood	845.89		846.05	370.64	1139.41	2674.20	1036.40		726.00	782.00	
REACH 2	22946.88	Floodway	845.89	0.00	846.19	151.00	1099.91	3367.76	382.34	659.00	726.00	782.00	810.00

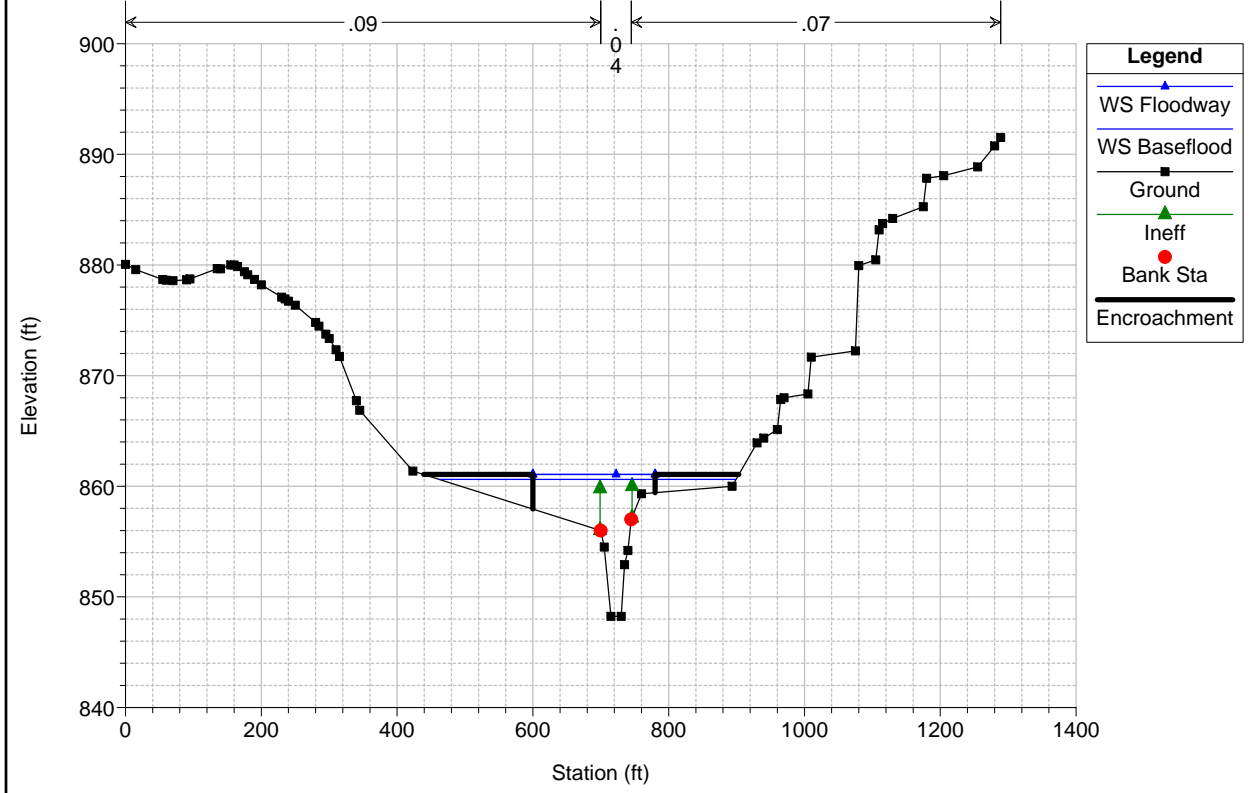
**EXISTING/CORRECTED EFFECTIVE  
FLOODWAY MODEL**

Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

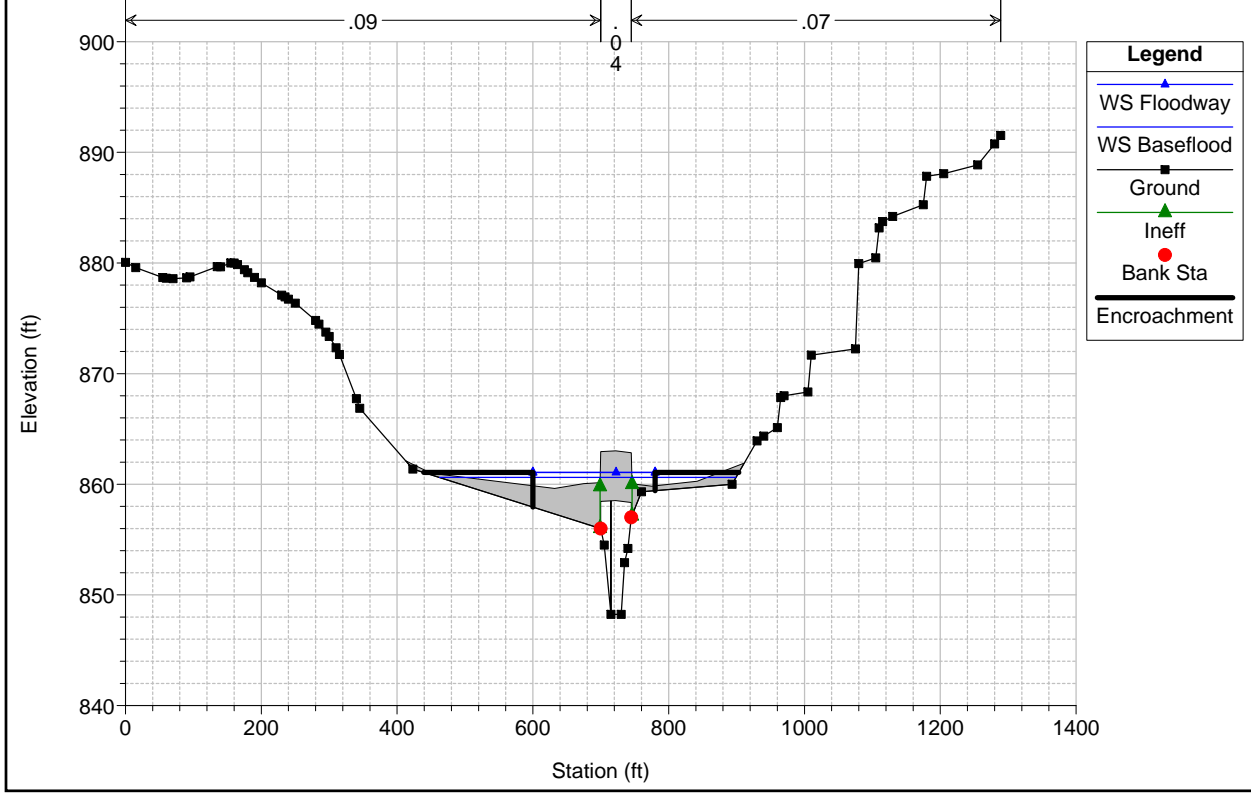
MAIN REACH 2



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford

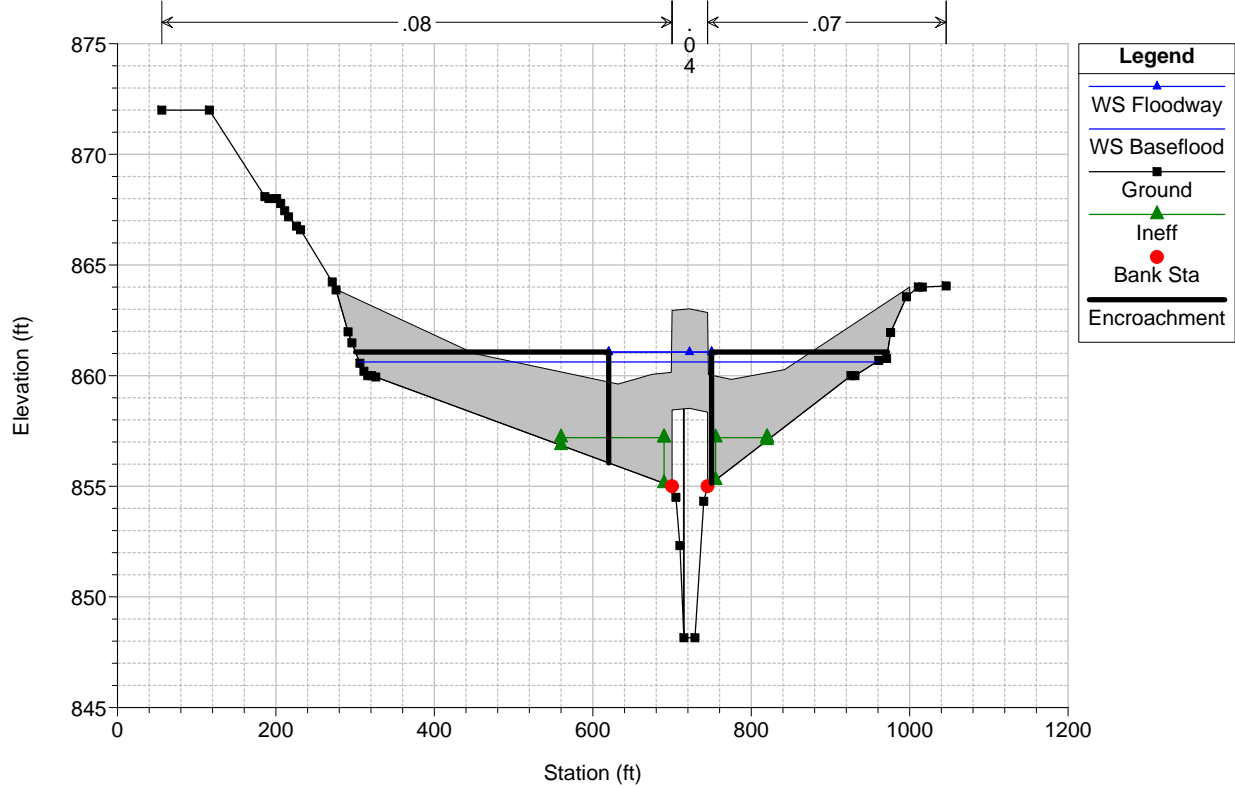


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29958.72 BR



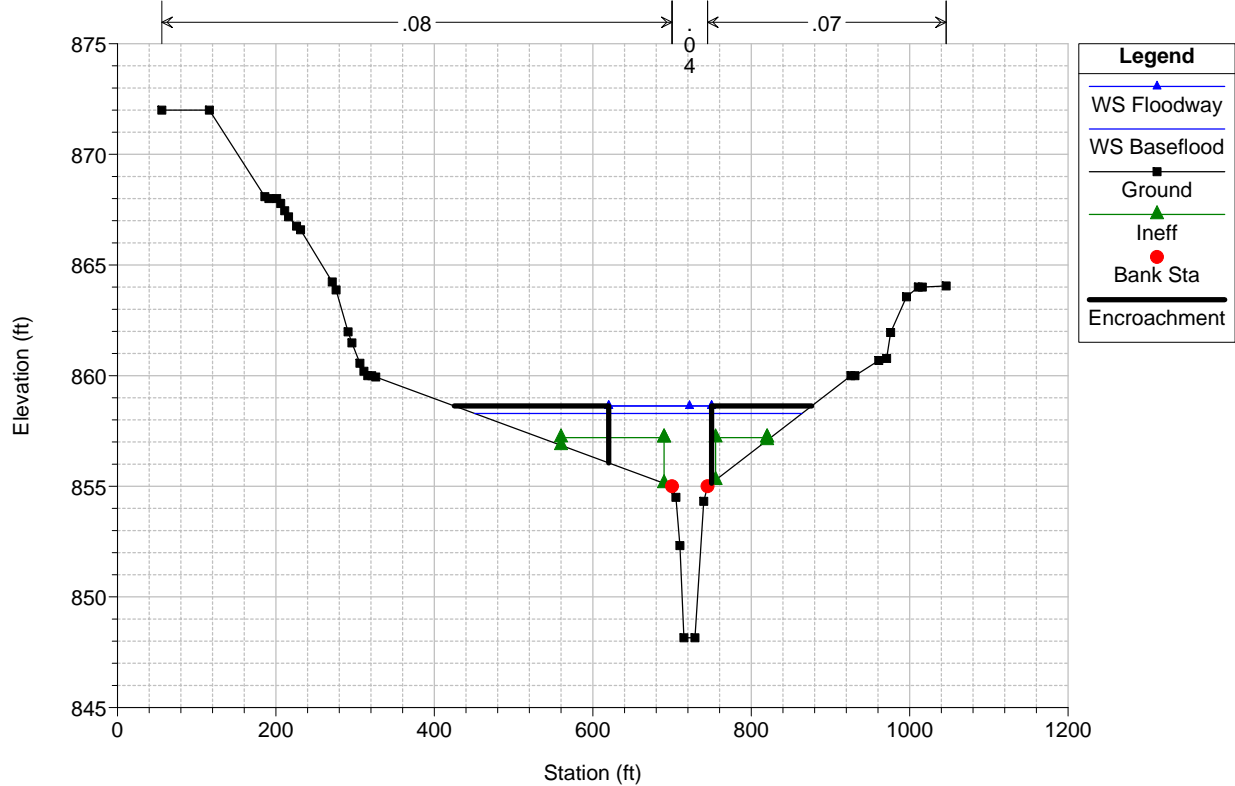
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



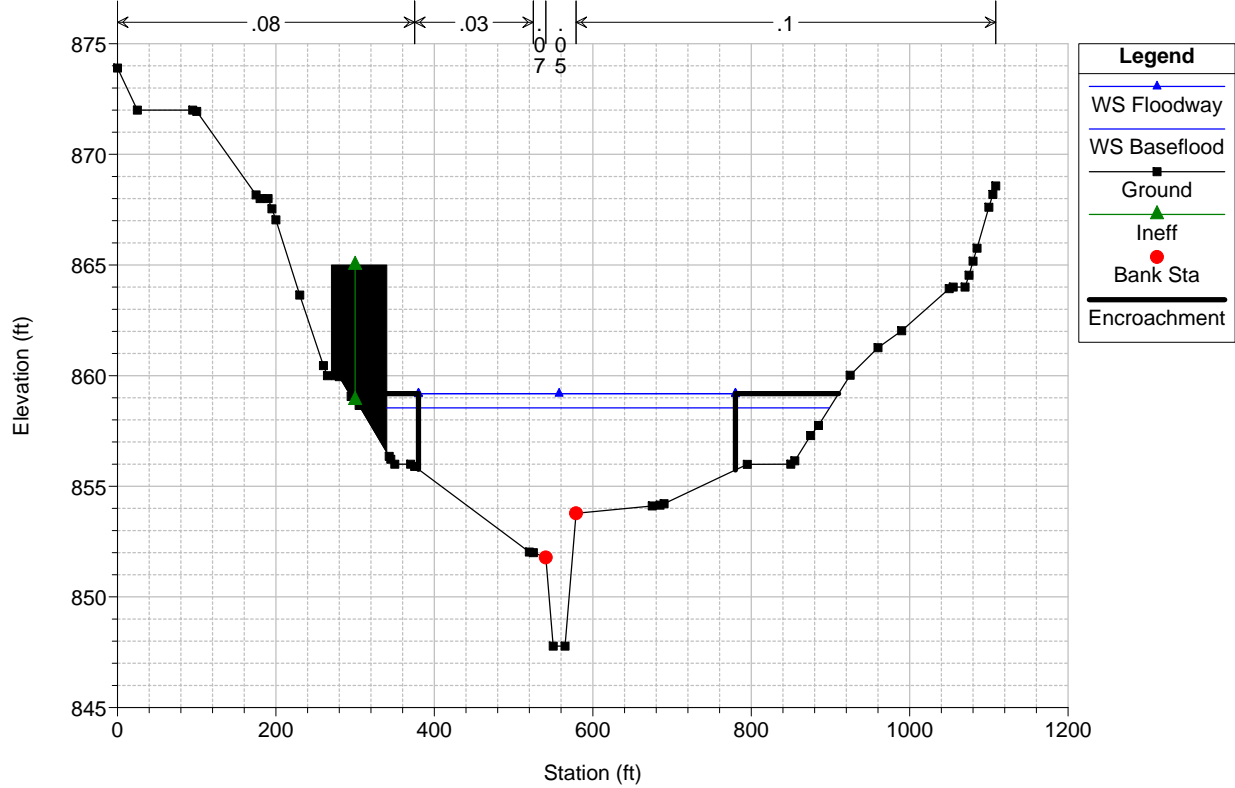
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



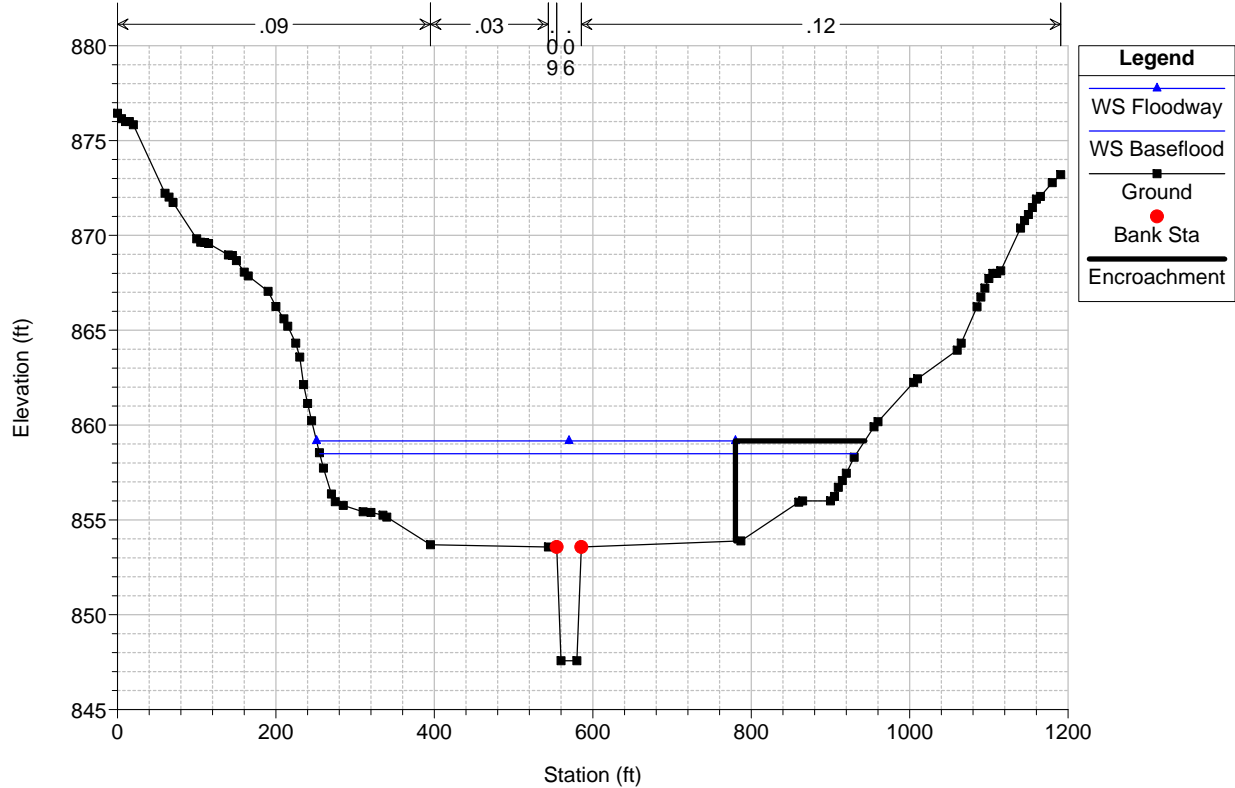
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96



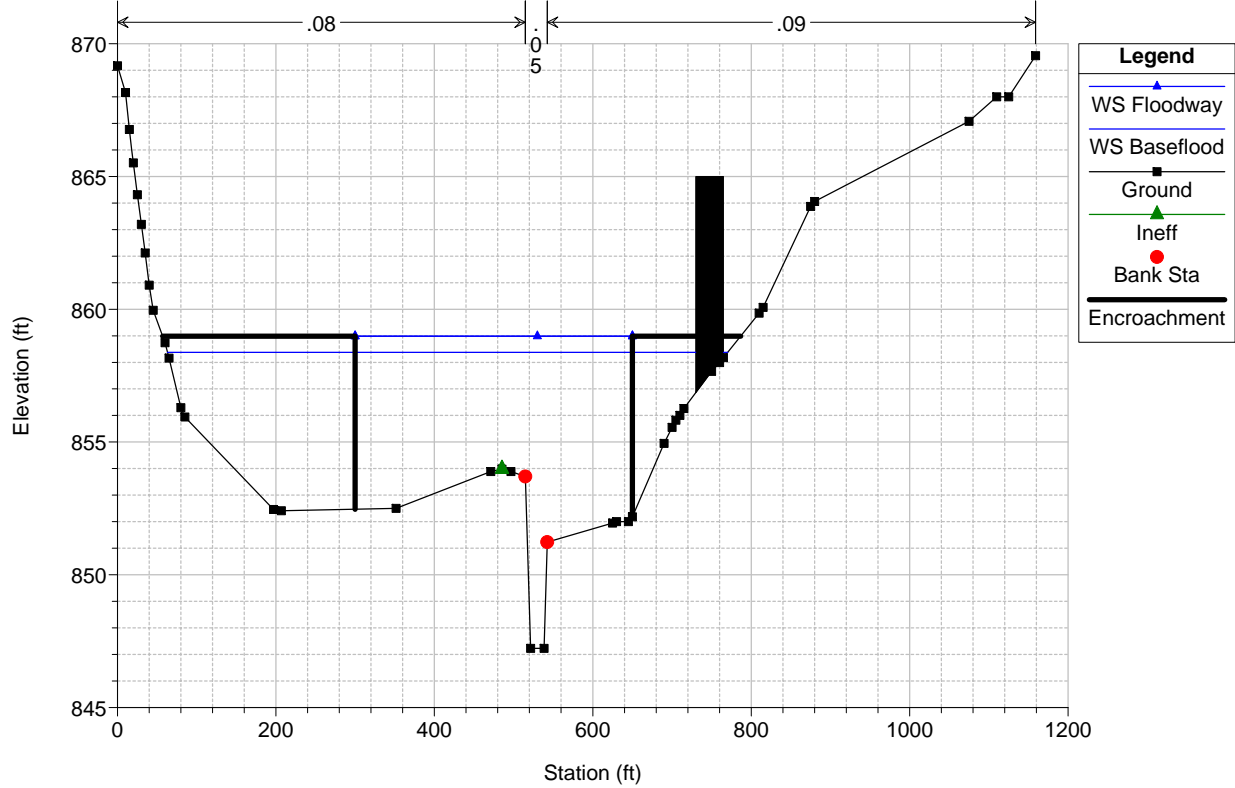
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29573.28 MS95

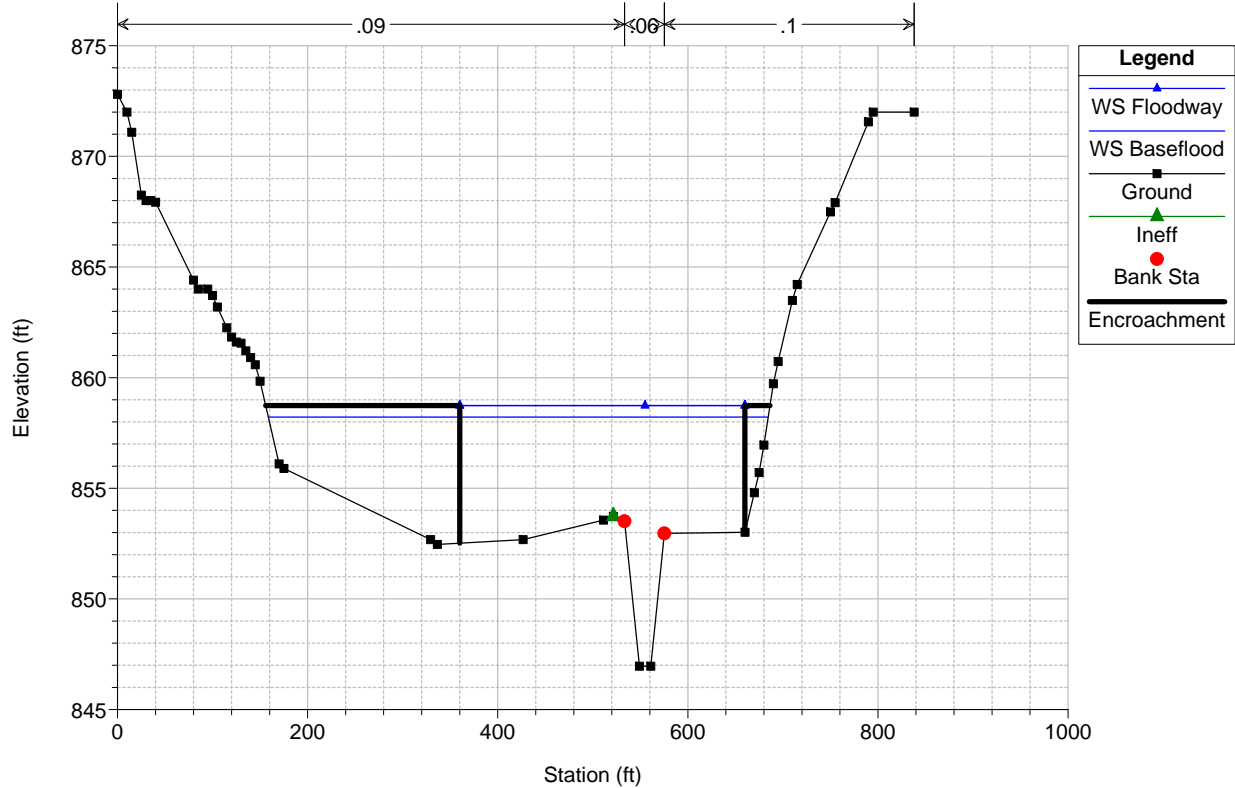




Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29362.08 MS94

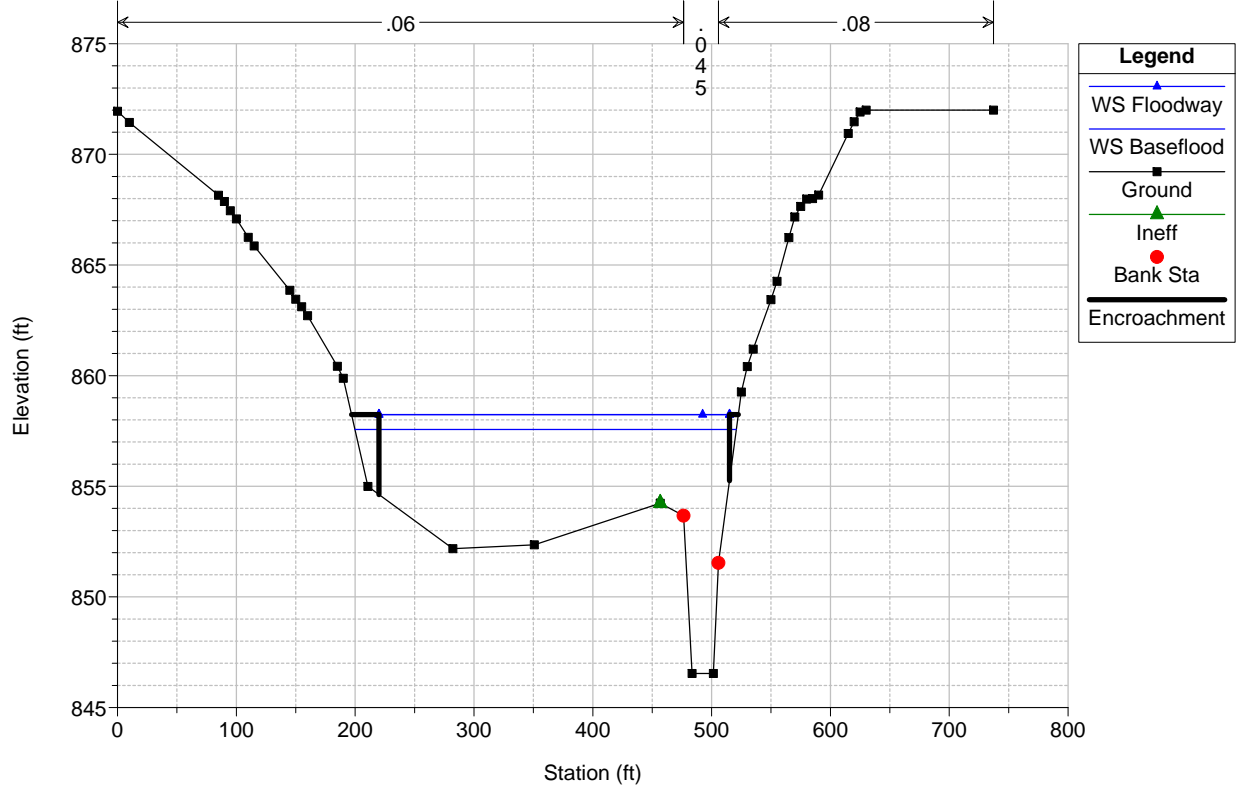


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29203.68 MS93



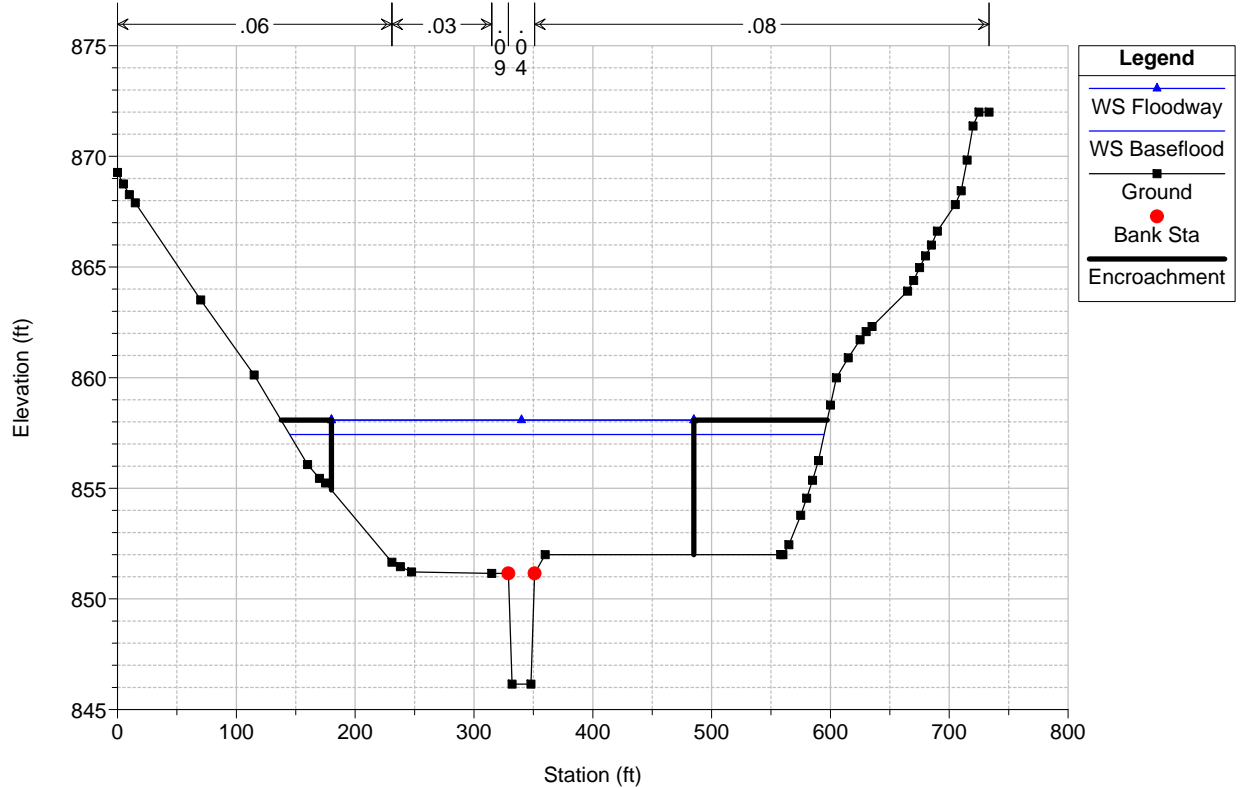
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28944.96 MS92



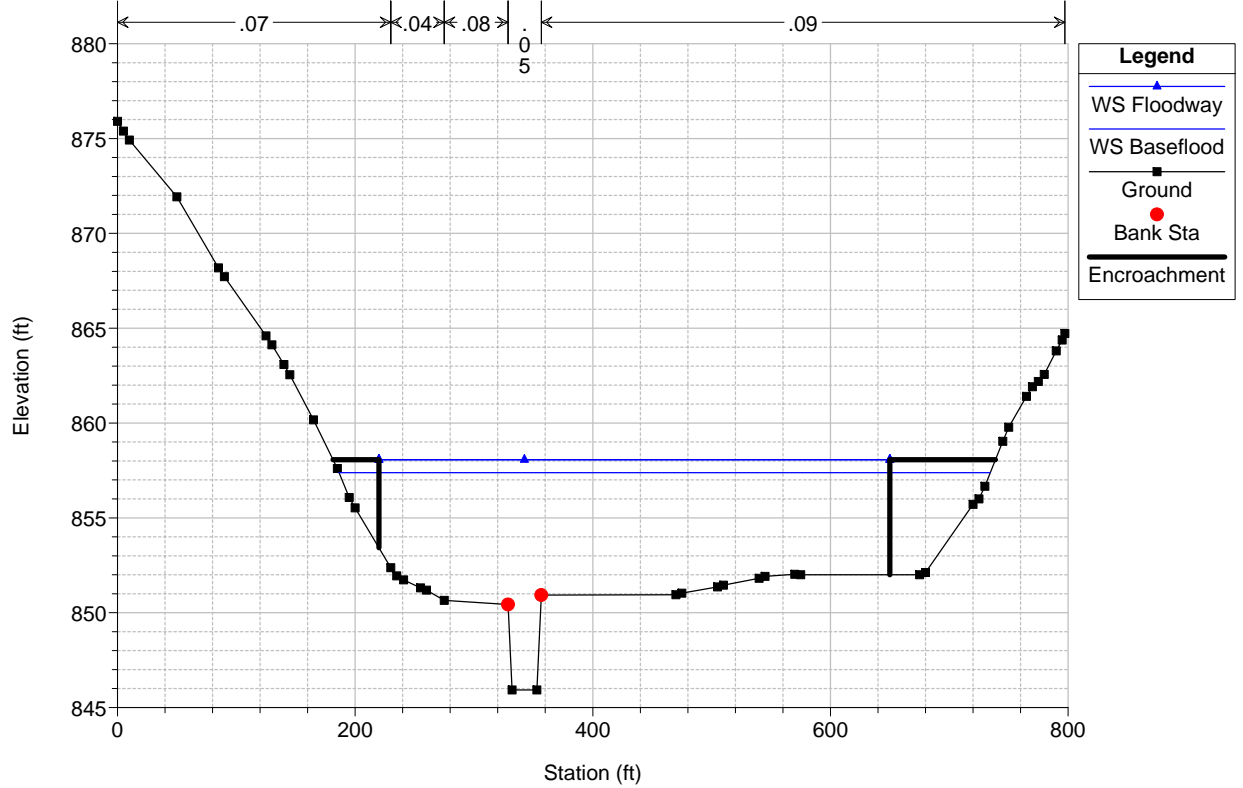
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28707.36 MS91



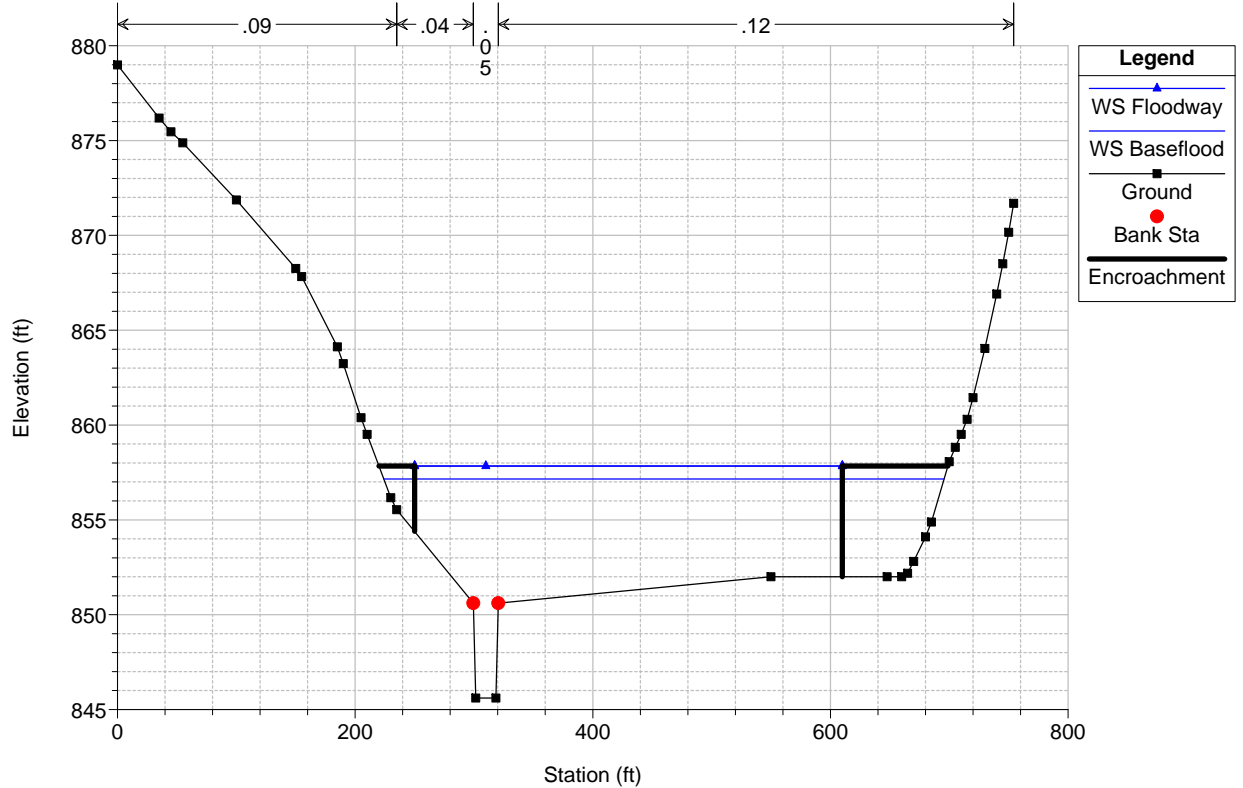
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28570.08 MS90



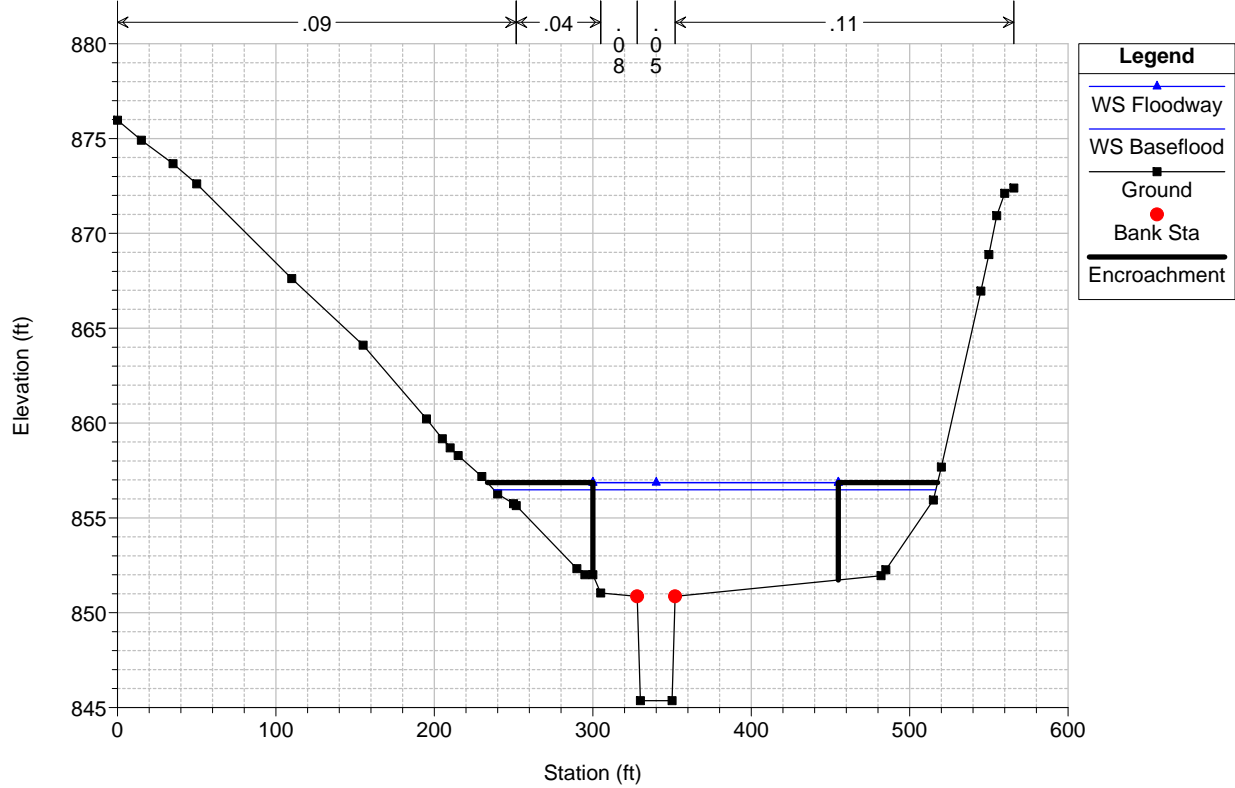
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28374.72 MS89



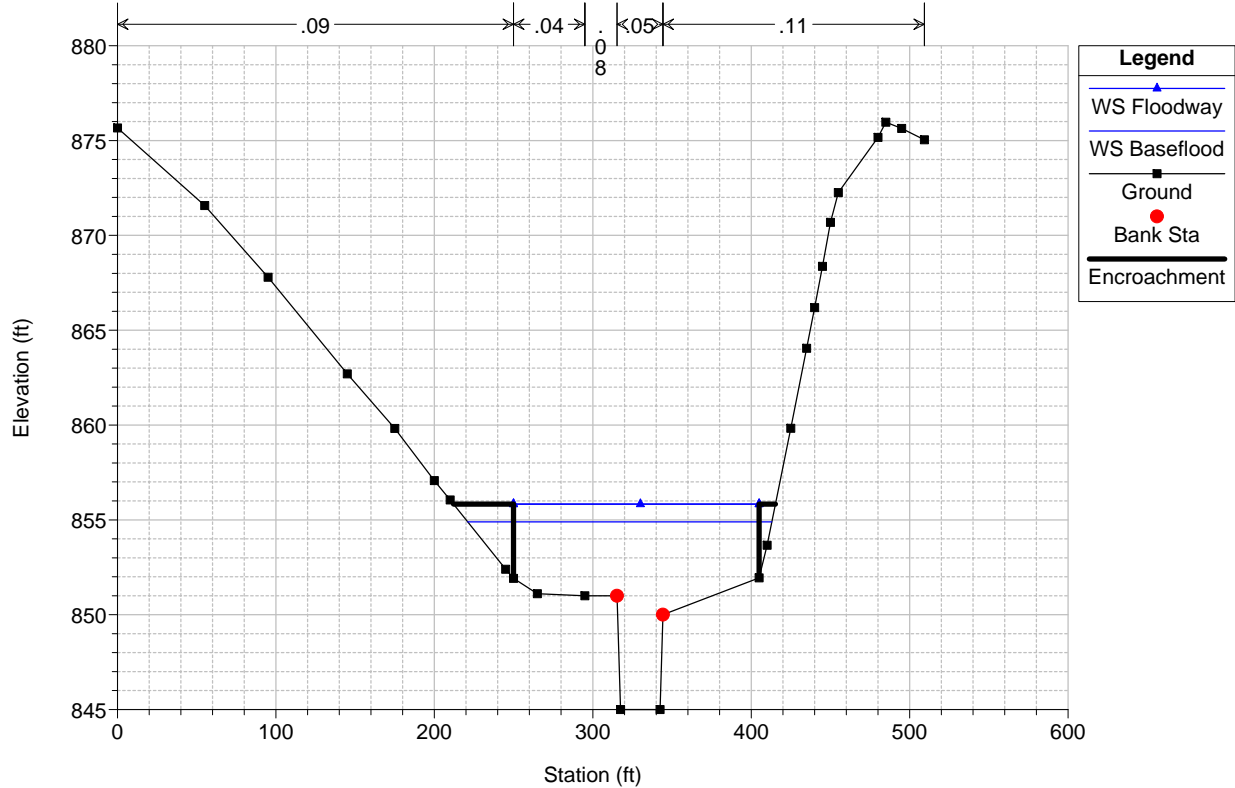
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88

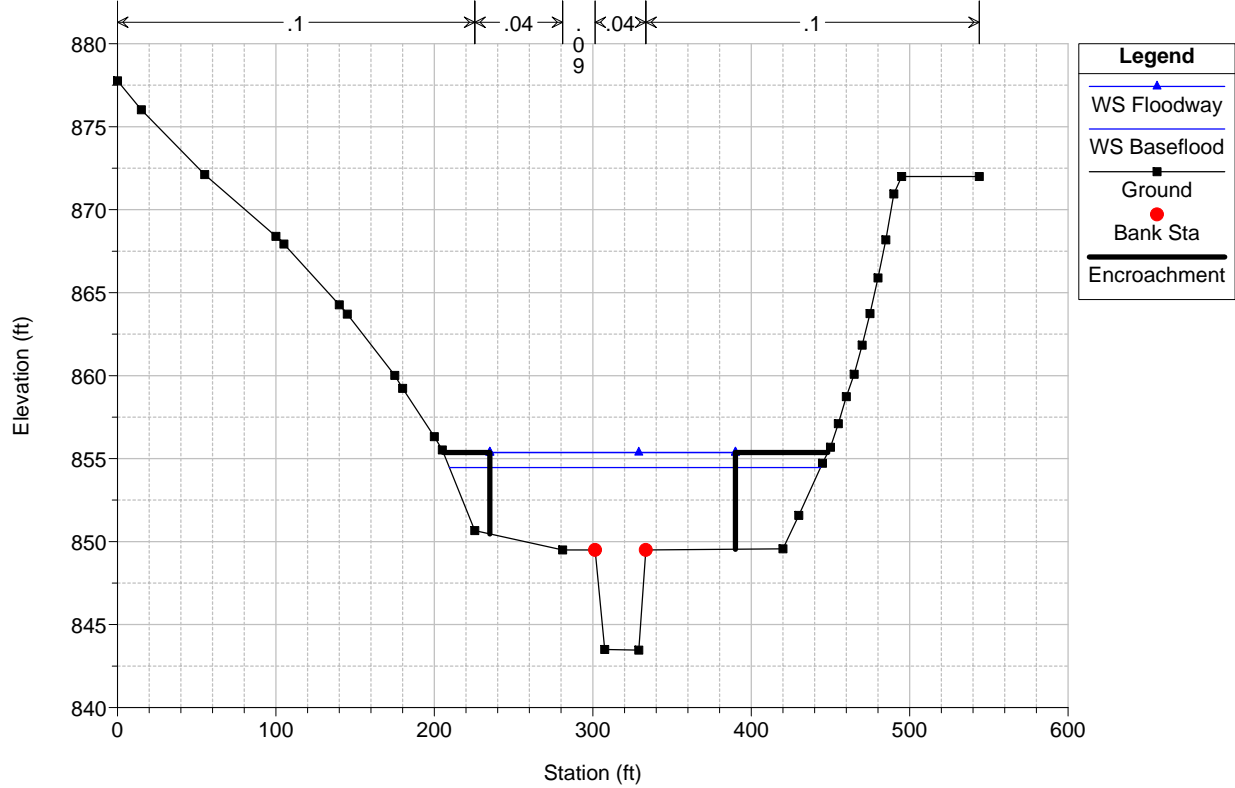


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

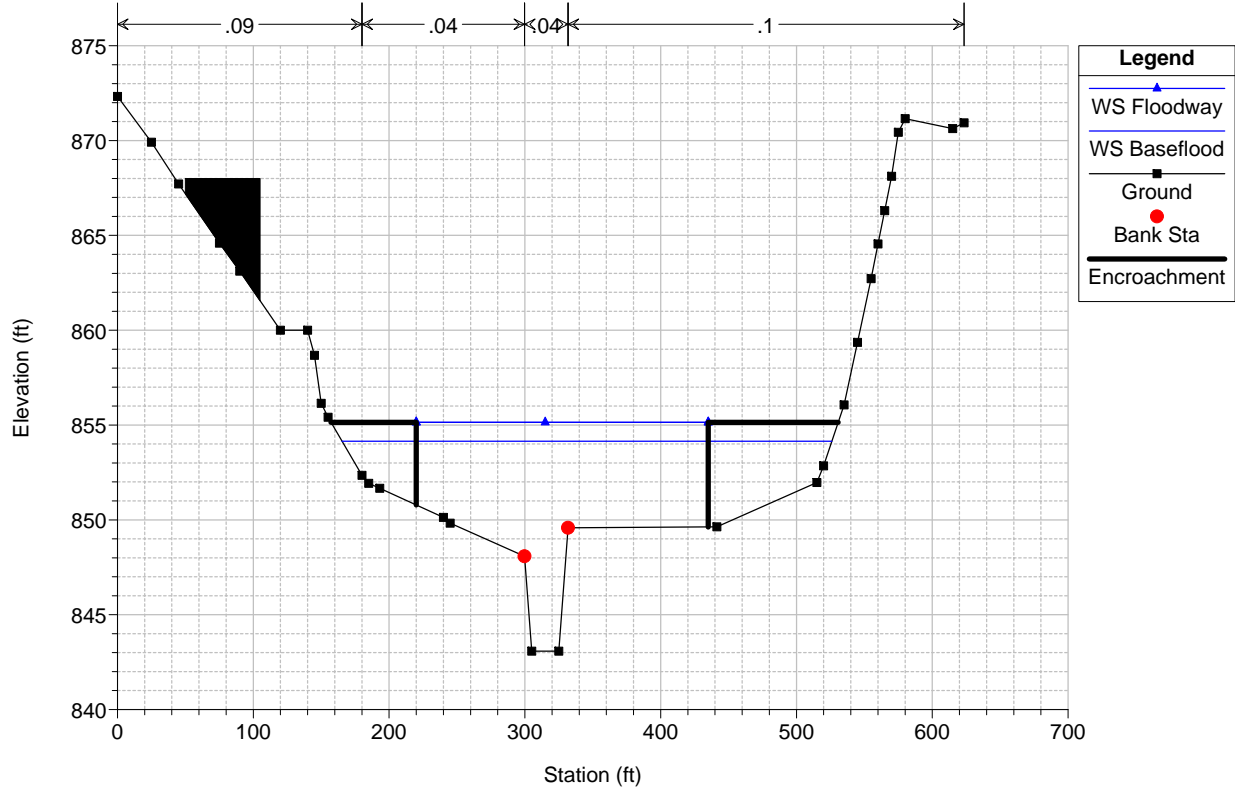
River = MAIN Reach = REACH 2 RS = 27999.84 MS87



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27809.76 MS86

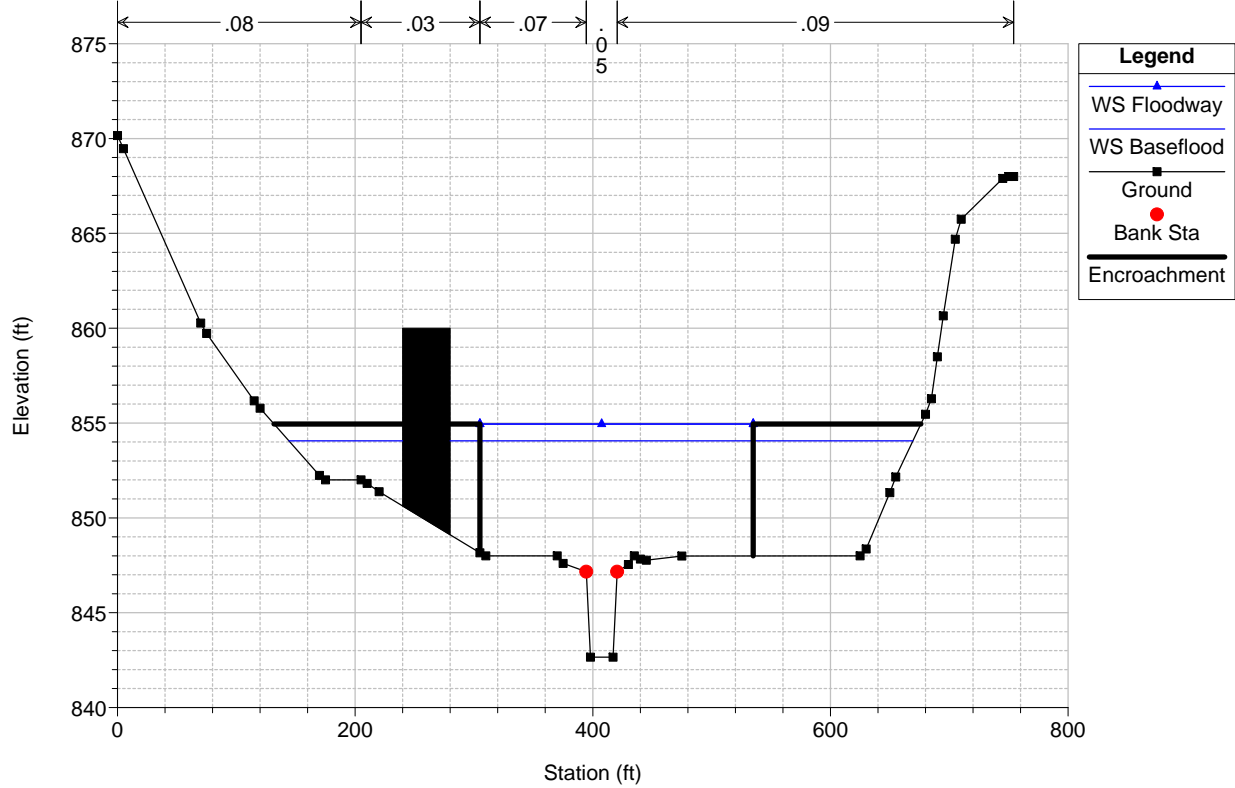


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27572.16 MS85



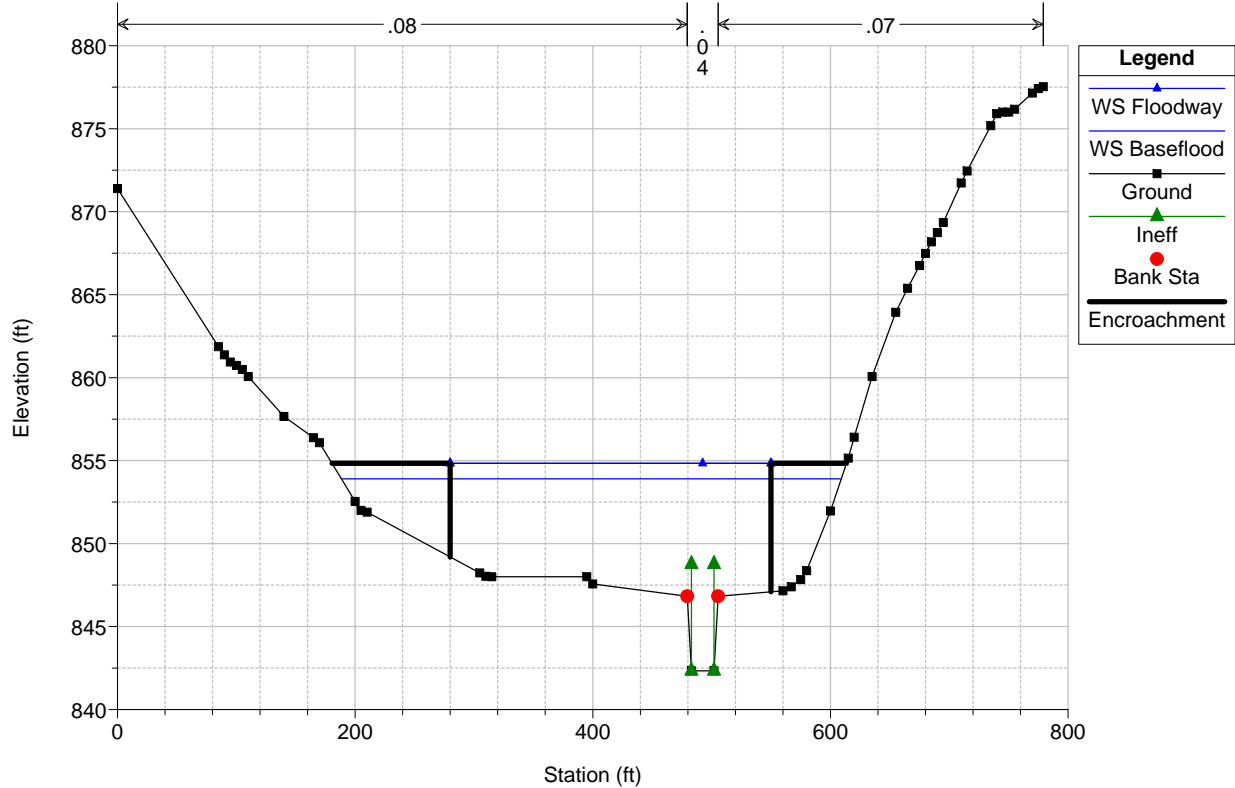
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 27339.84 MS84

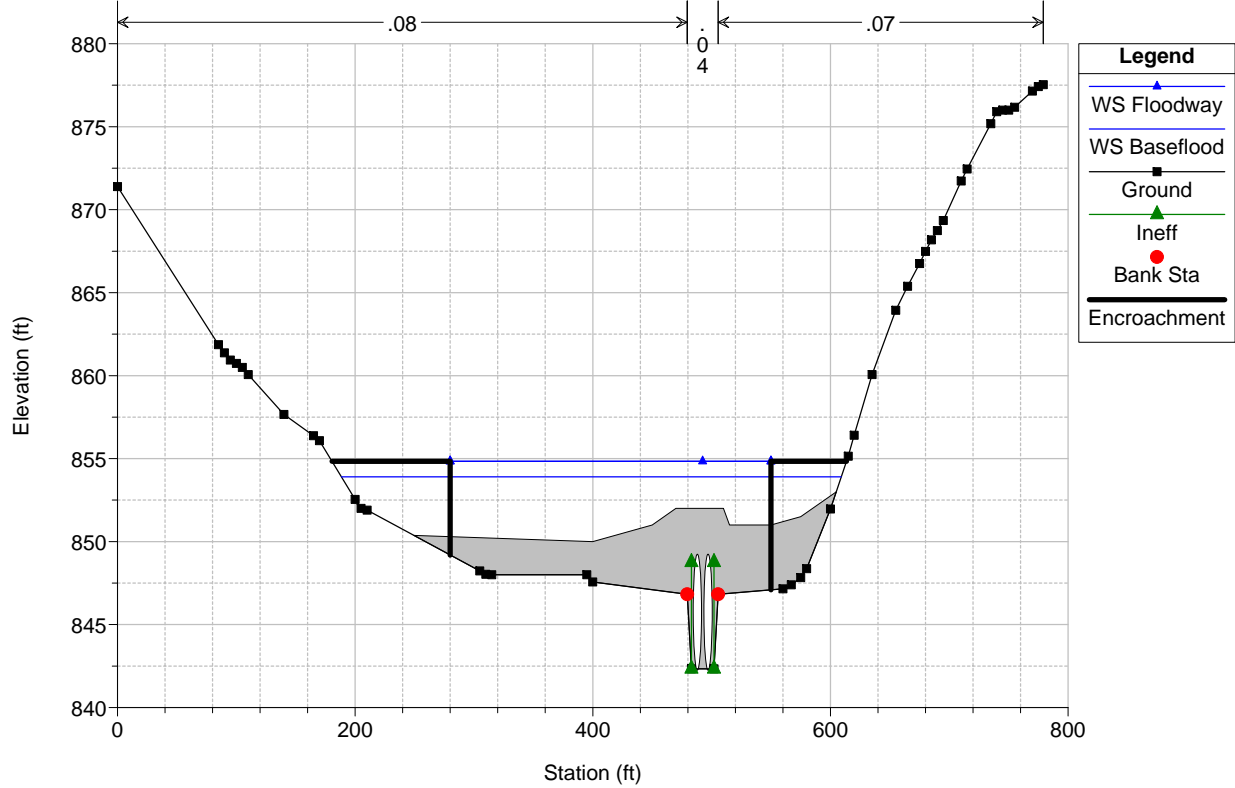


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

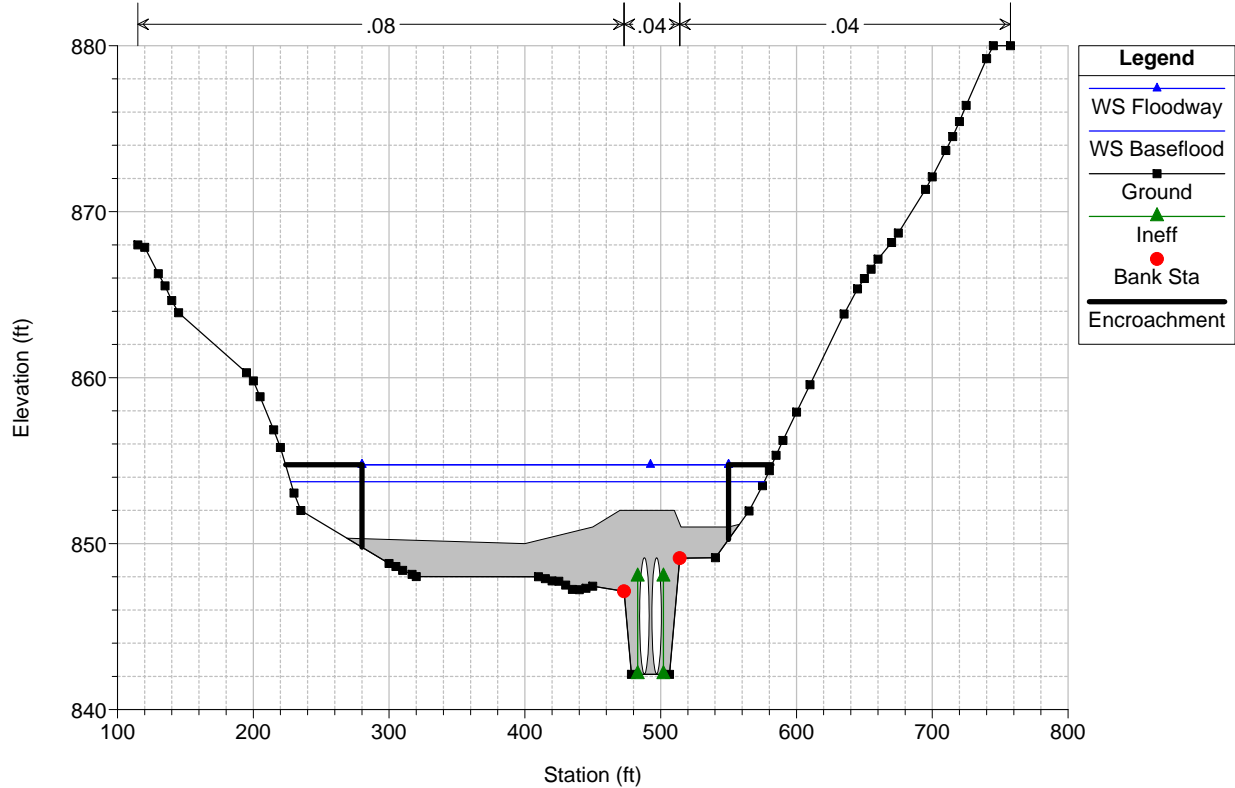
River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert

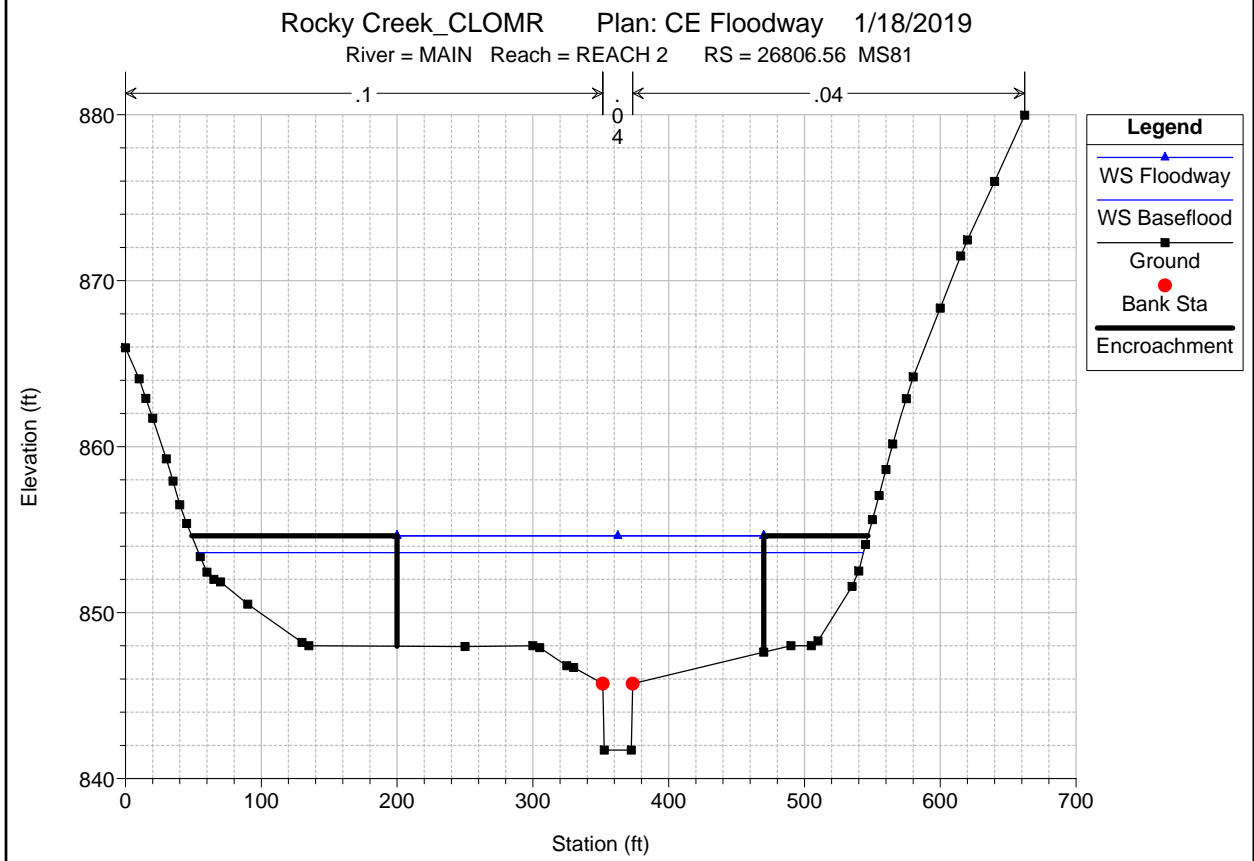
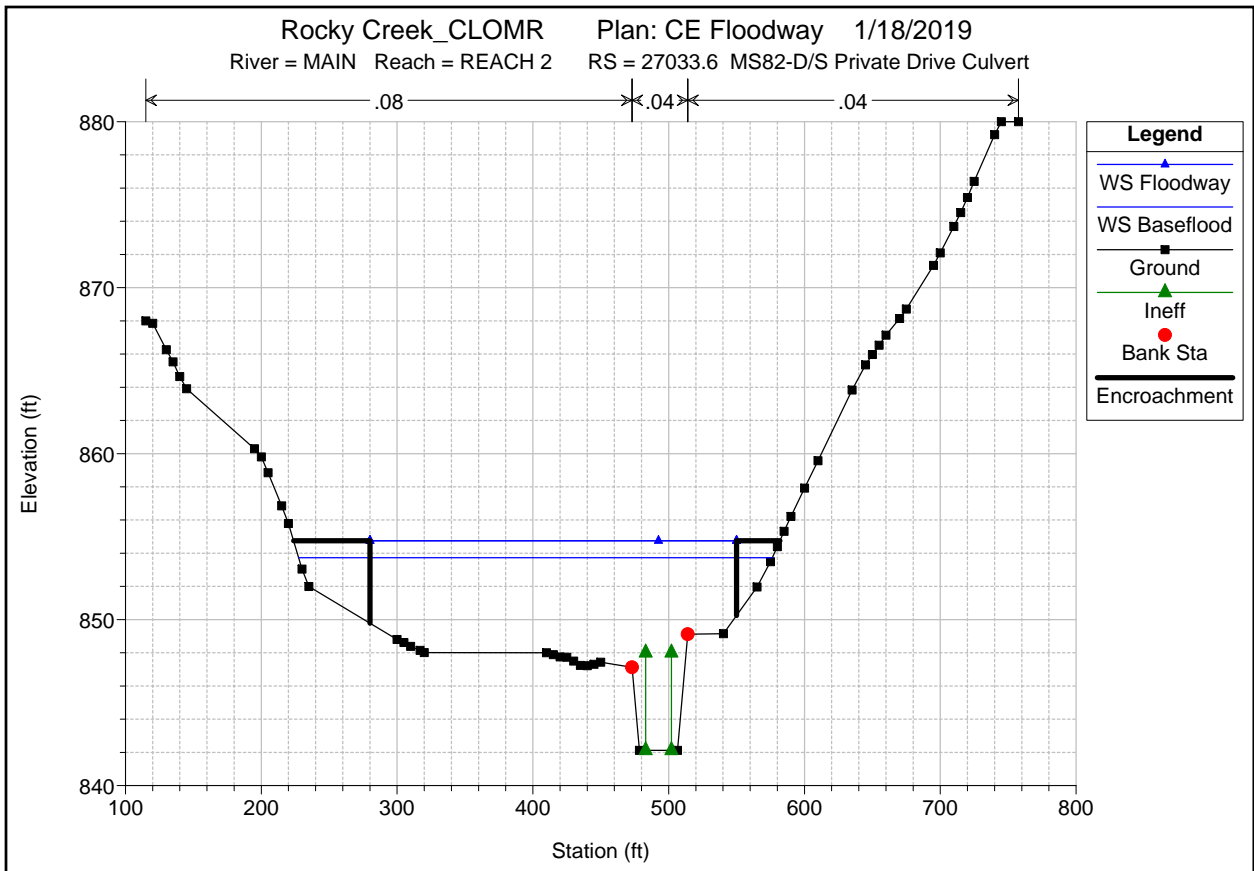


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert

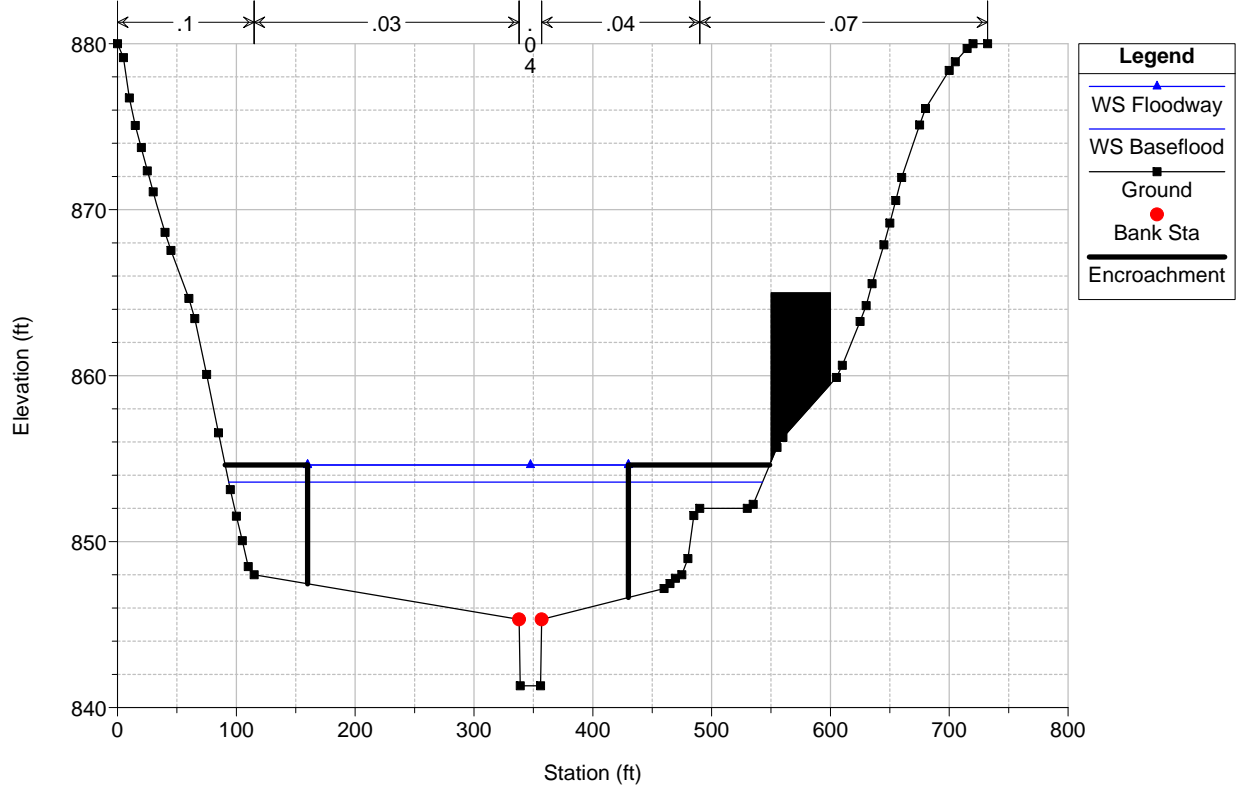






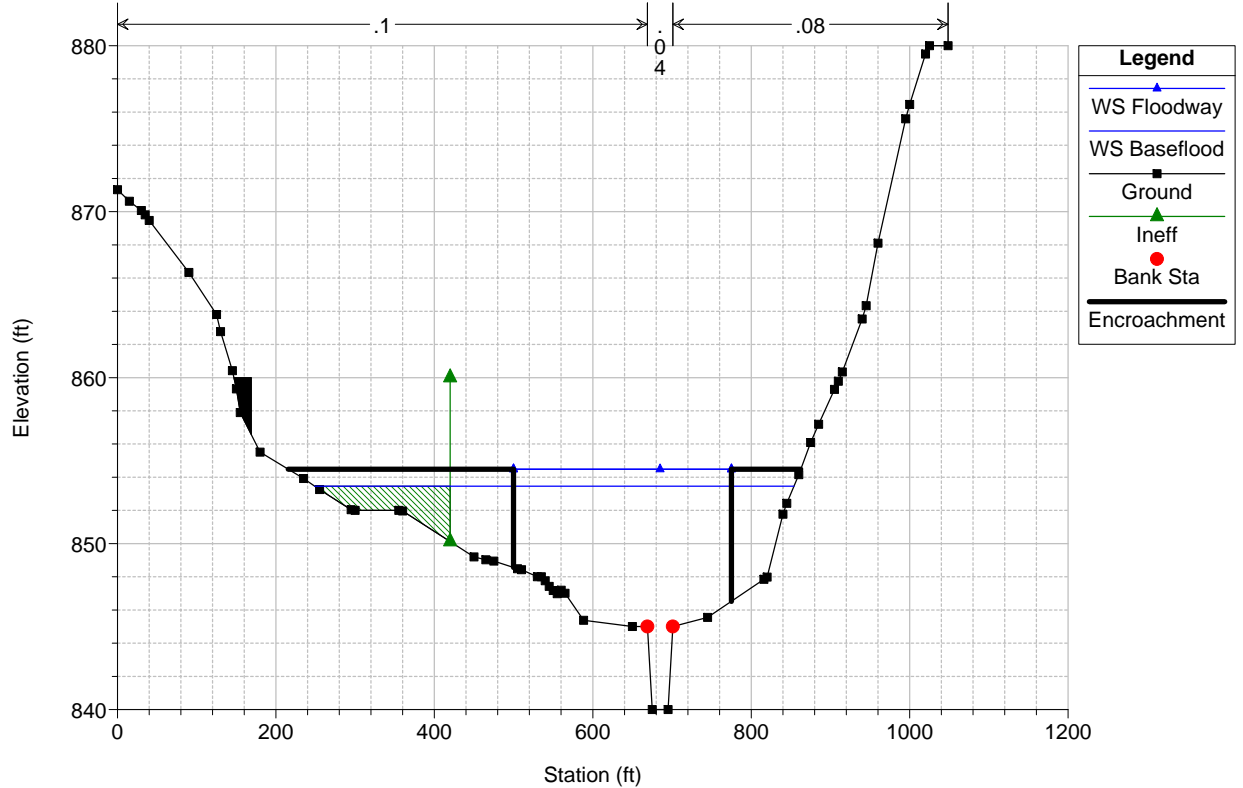
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26574.24 MS80



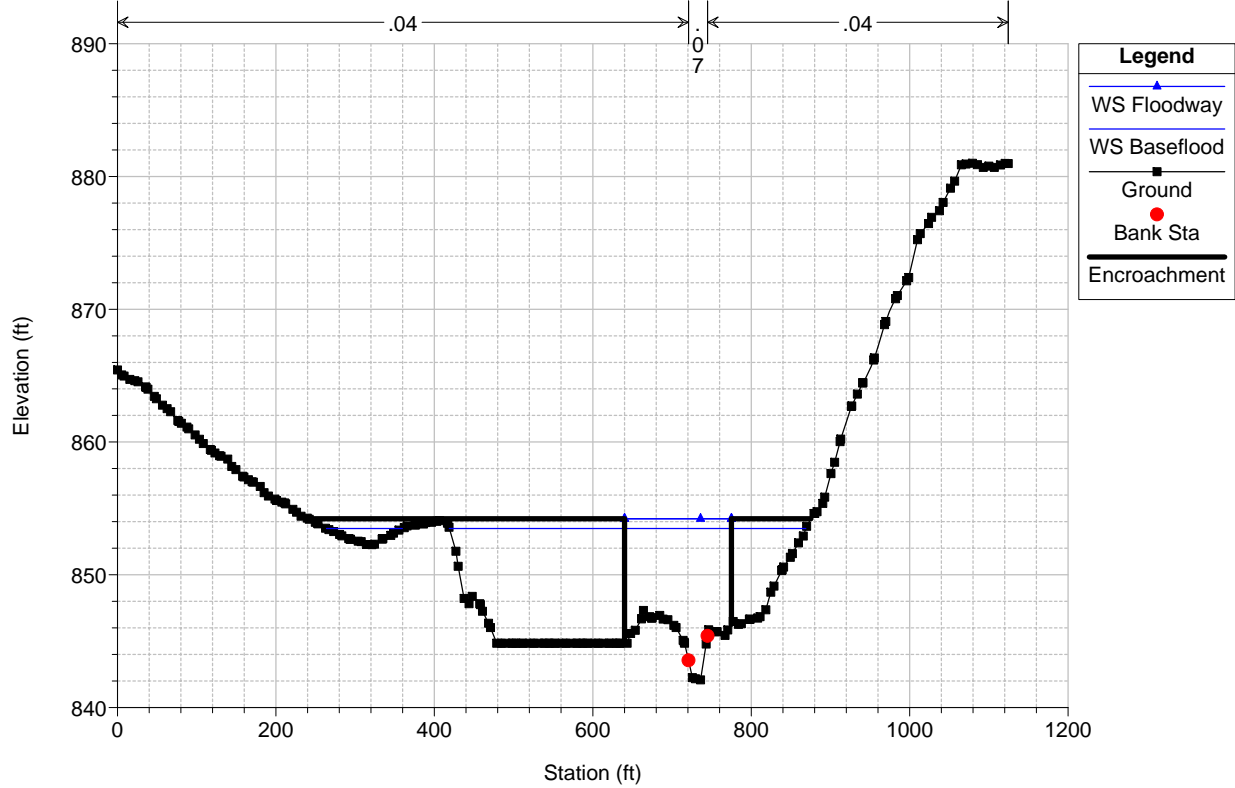
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26400 MS79



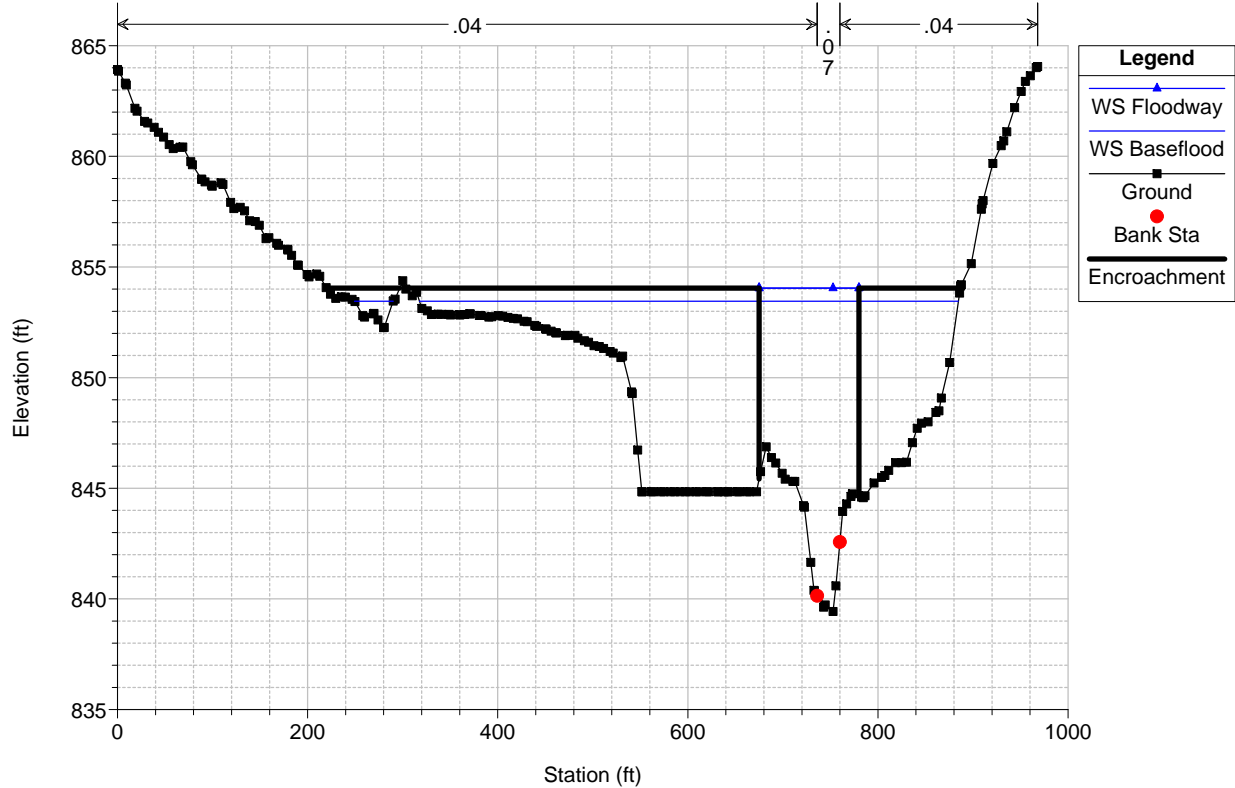
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78

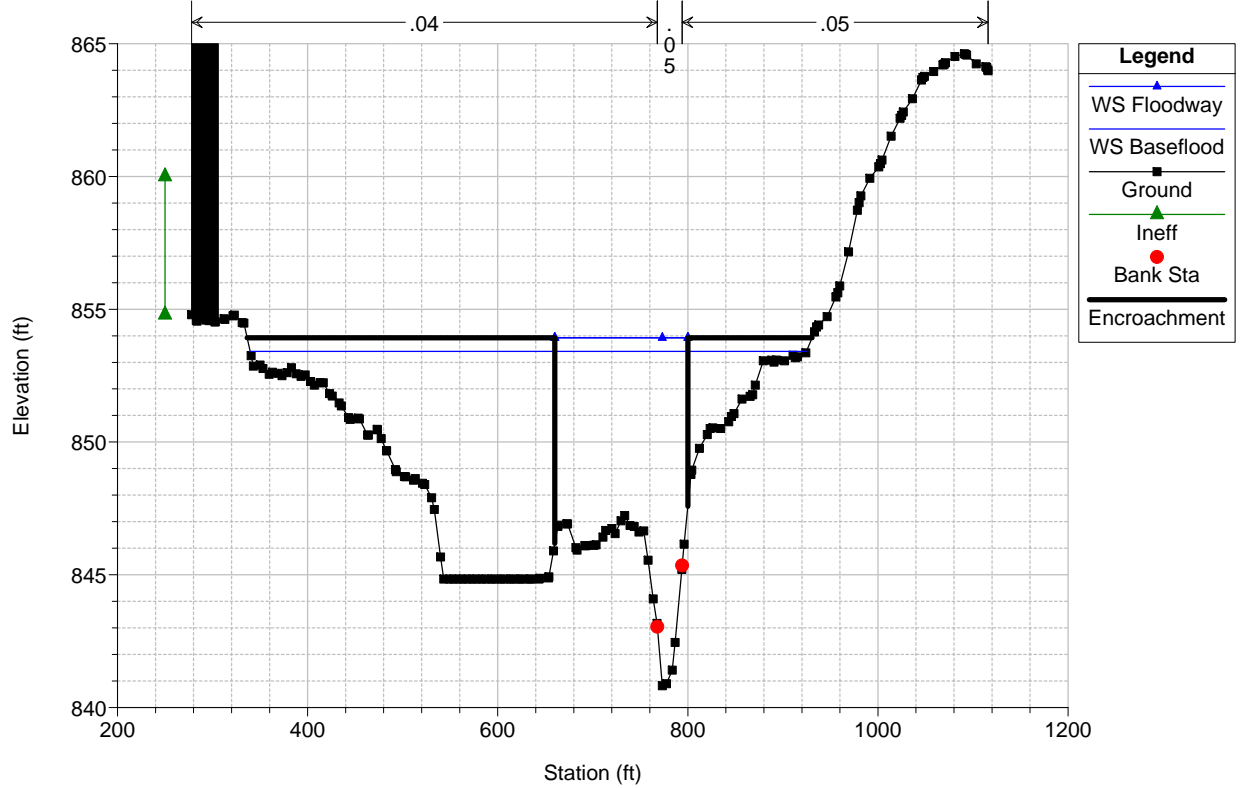


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

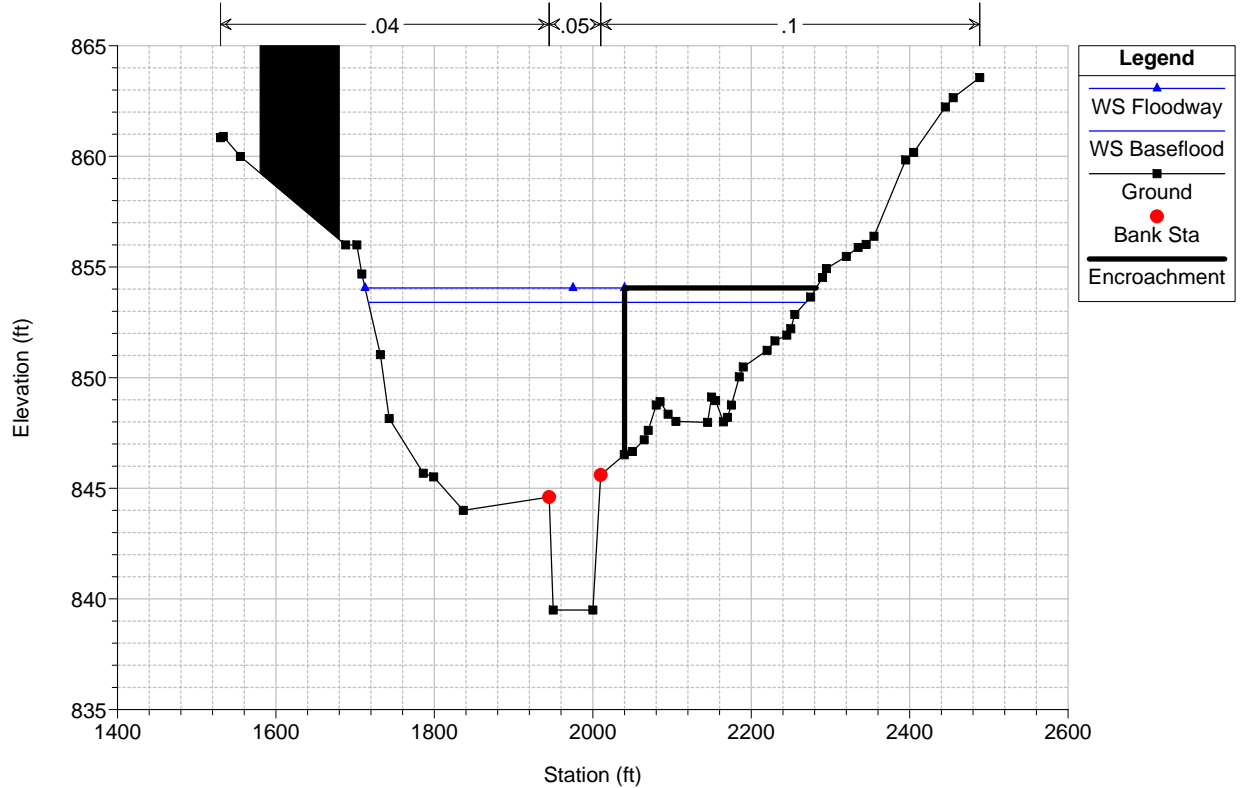
River = MAIN Reach = REACH 2 RS = 26083.2 MS77



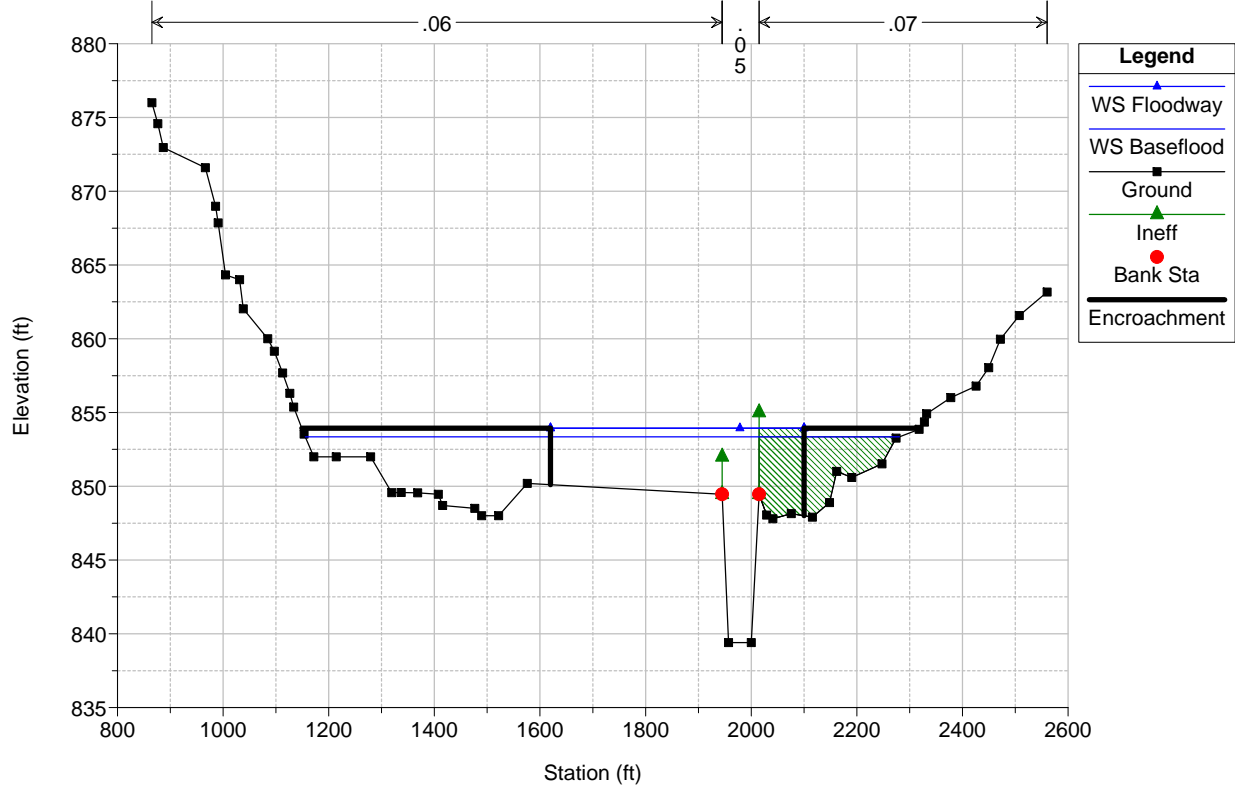
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25893.12 MS76



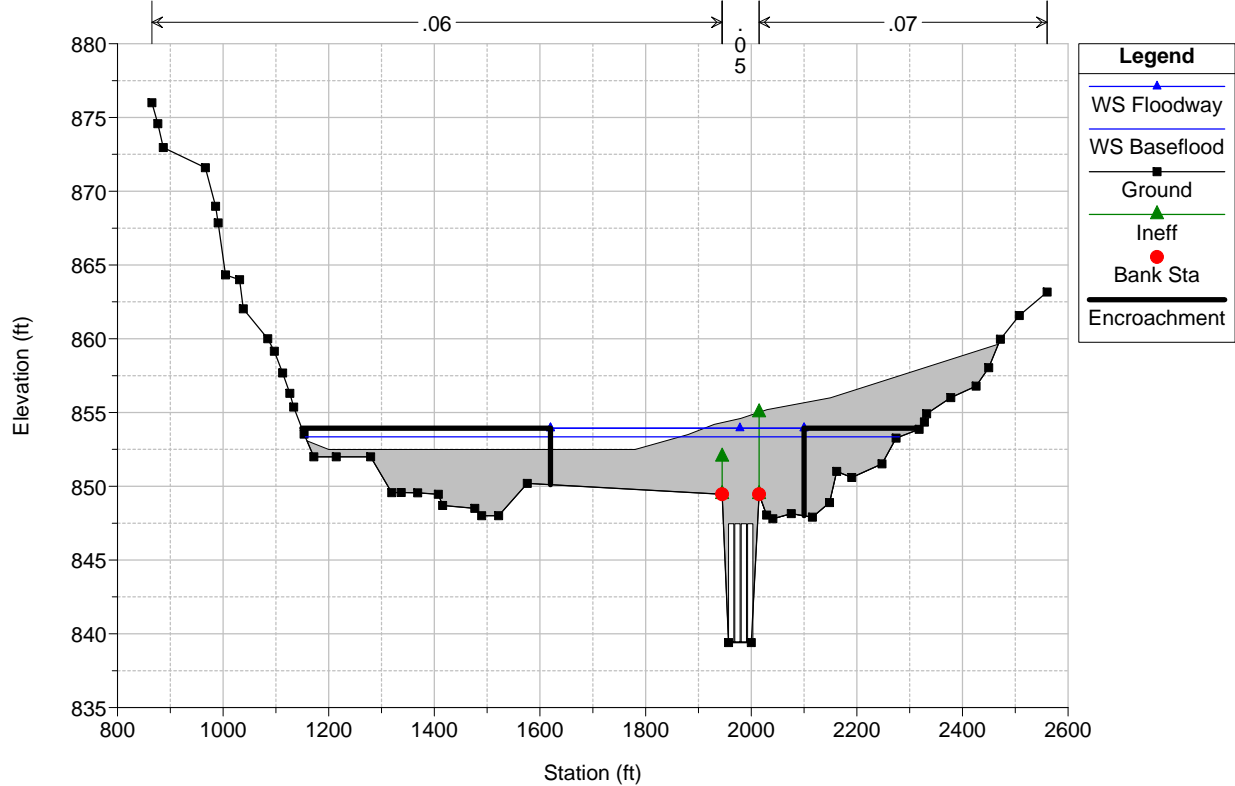
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25687.2 MS75

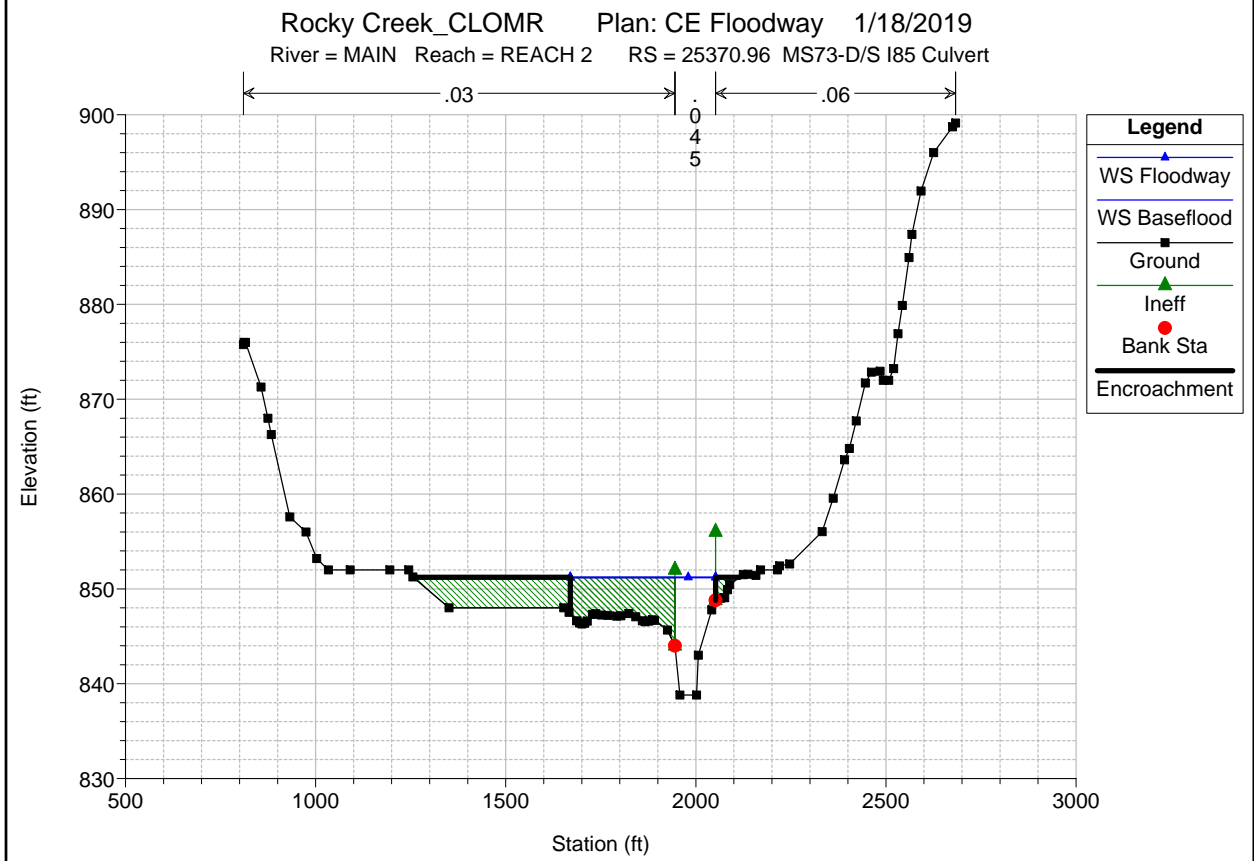
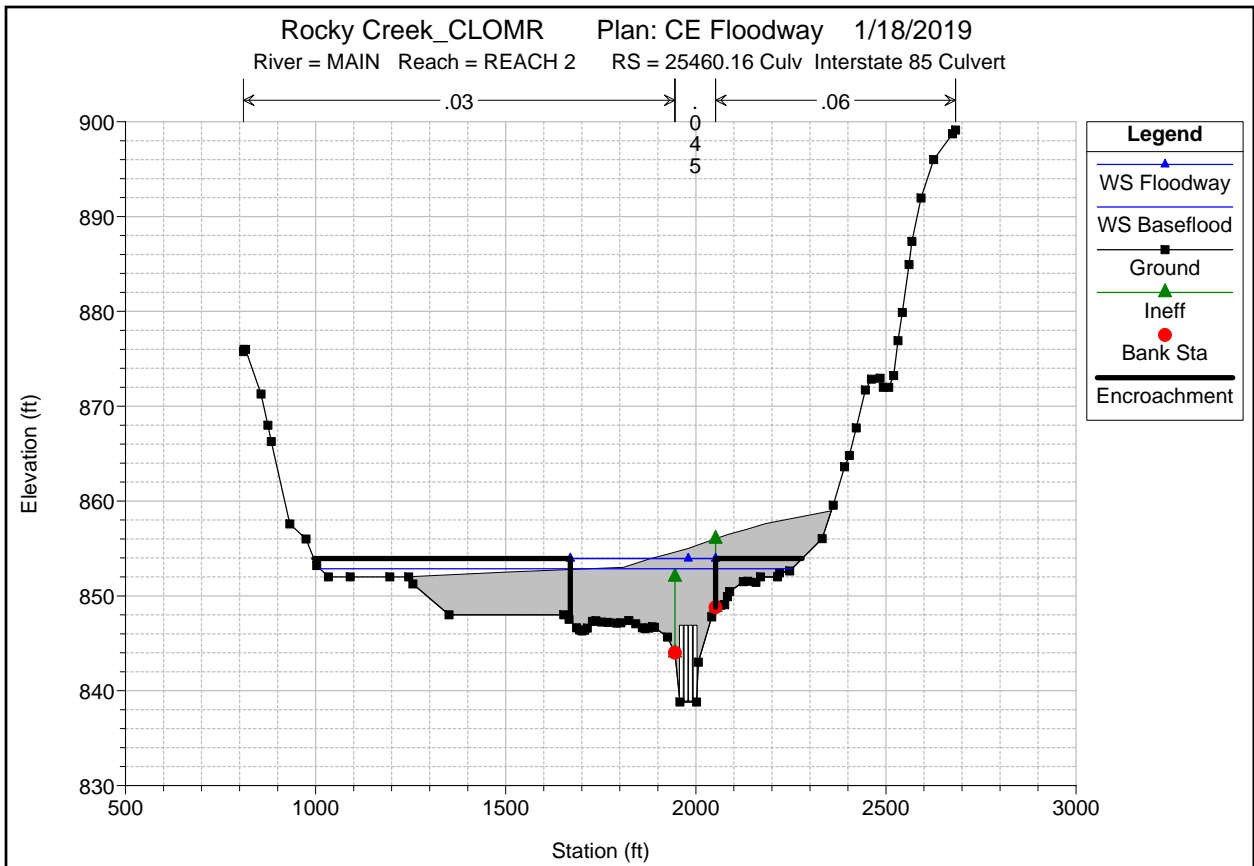


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert

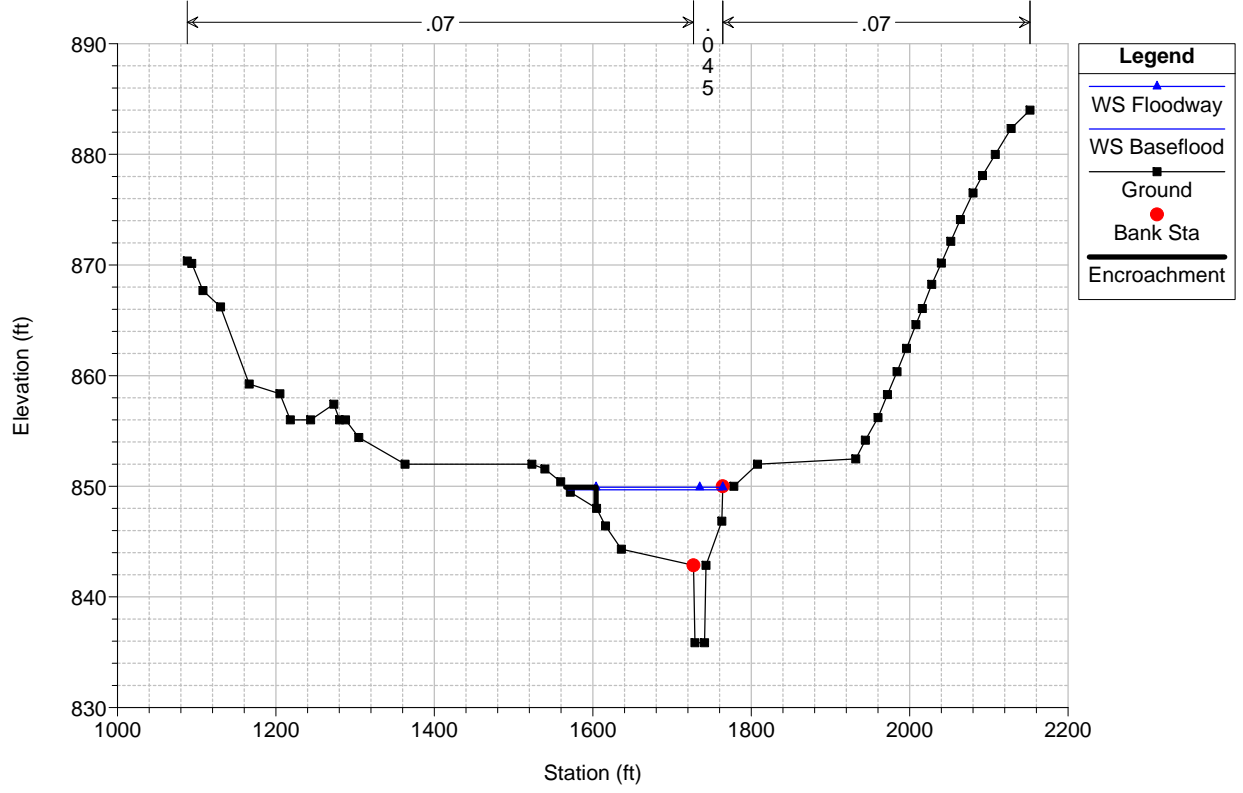


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 Culv Interstate 85 Culvert

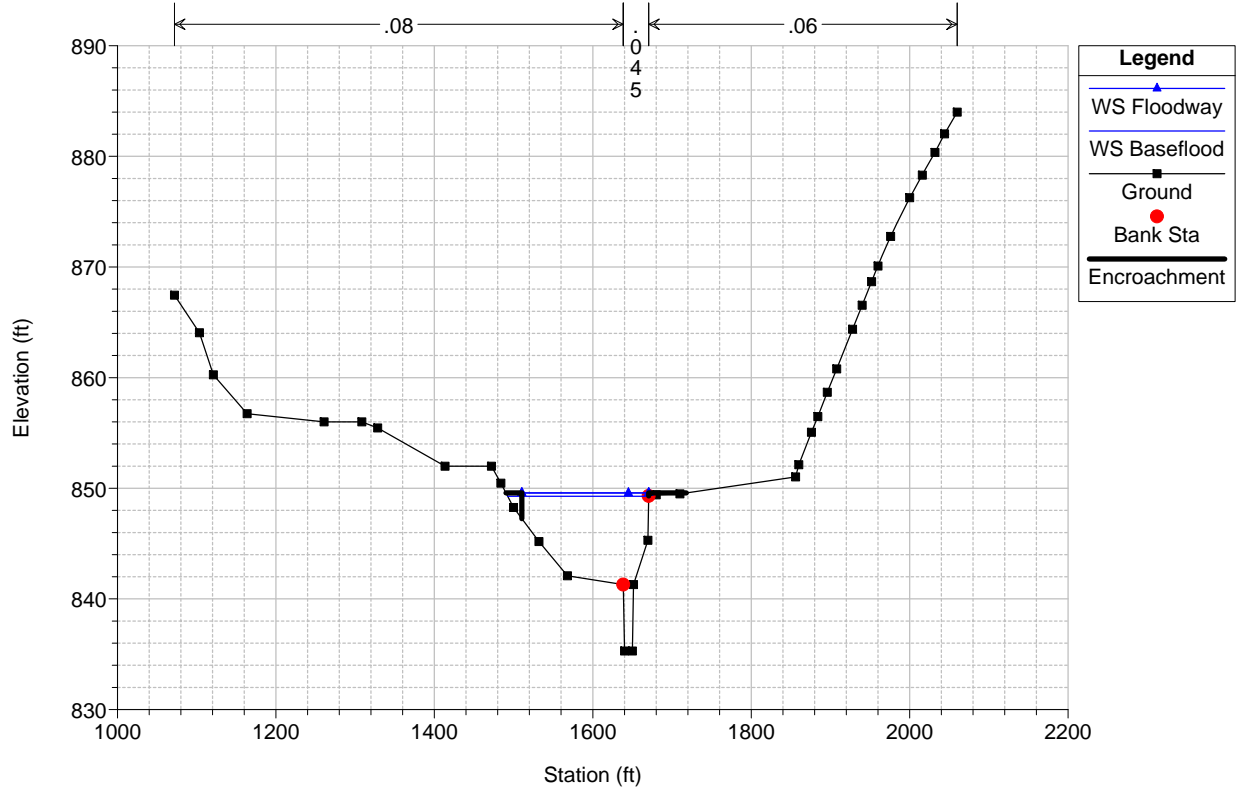




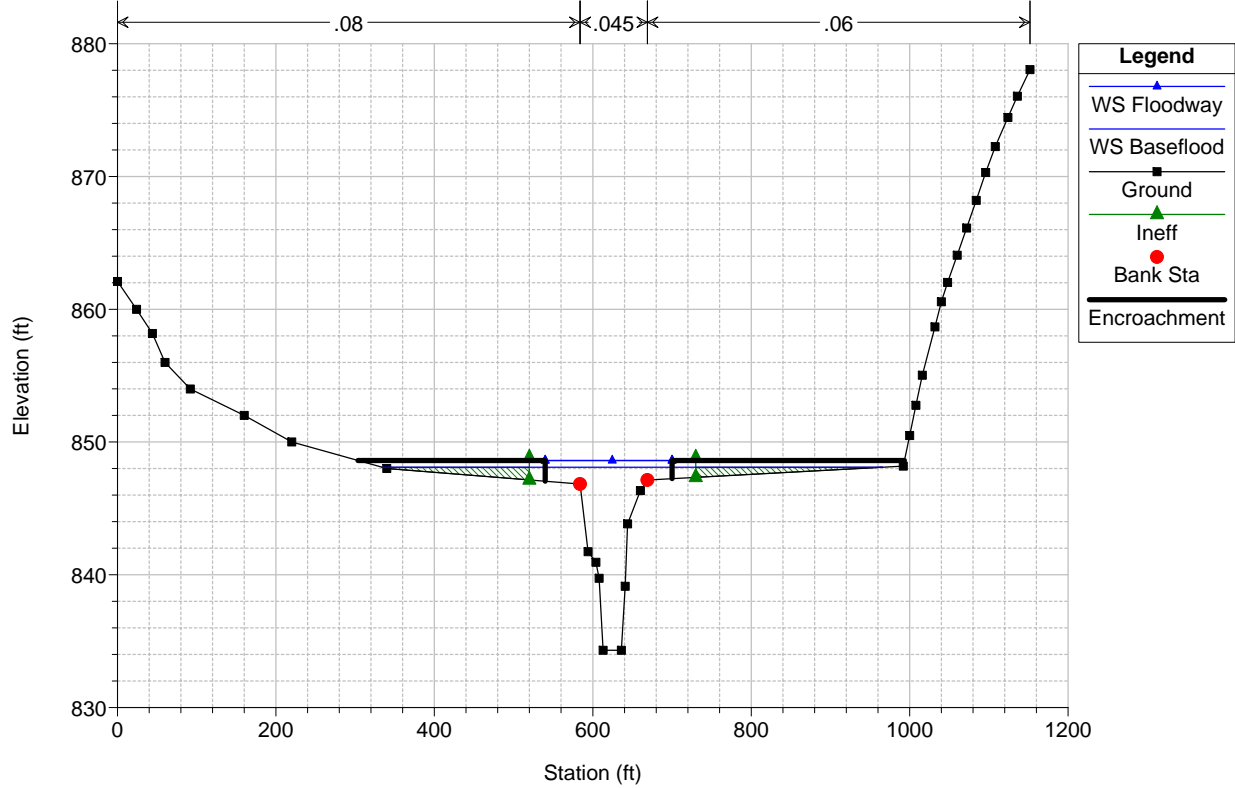
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24668.16 MS72



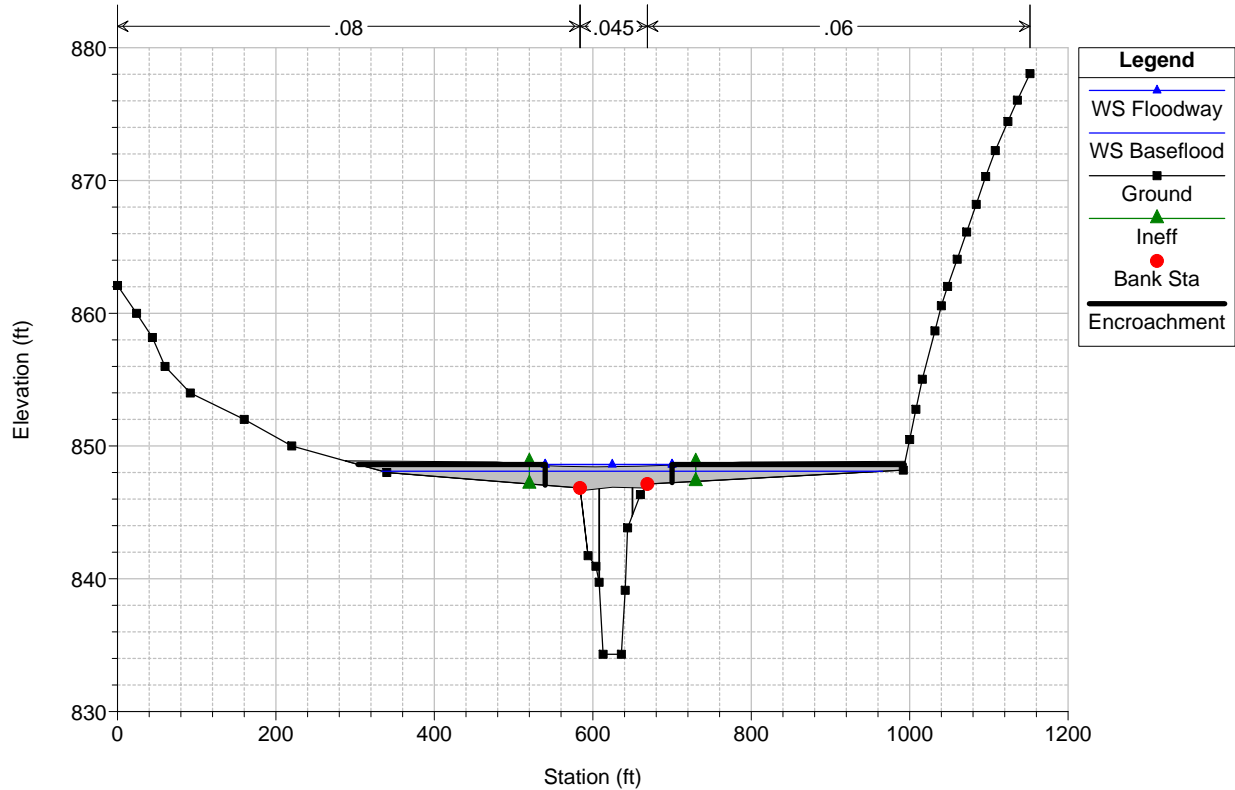
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24541.44 MS71



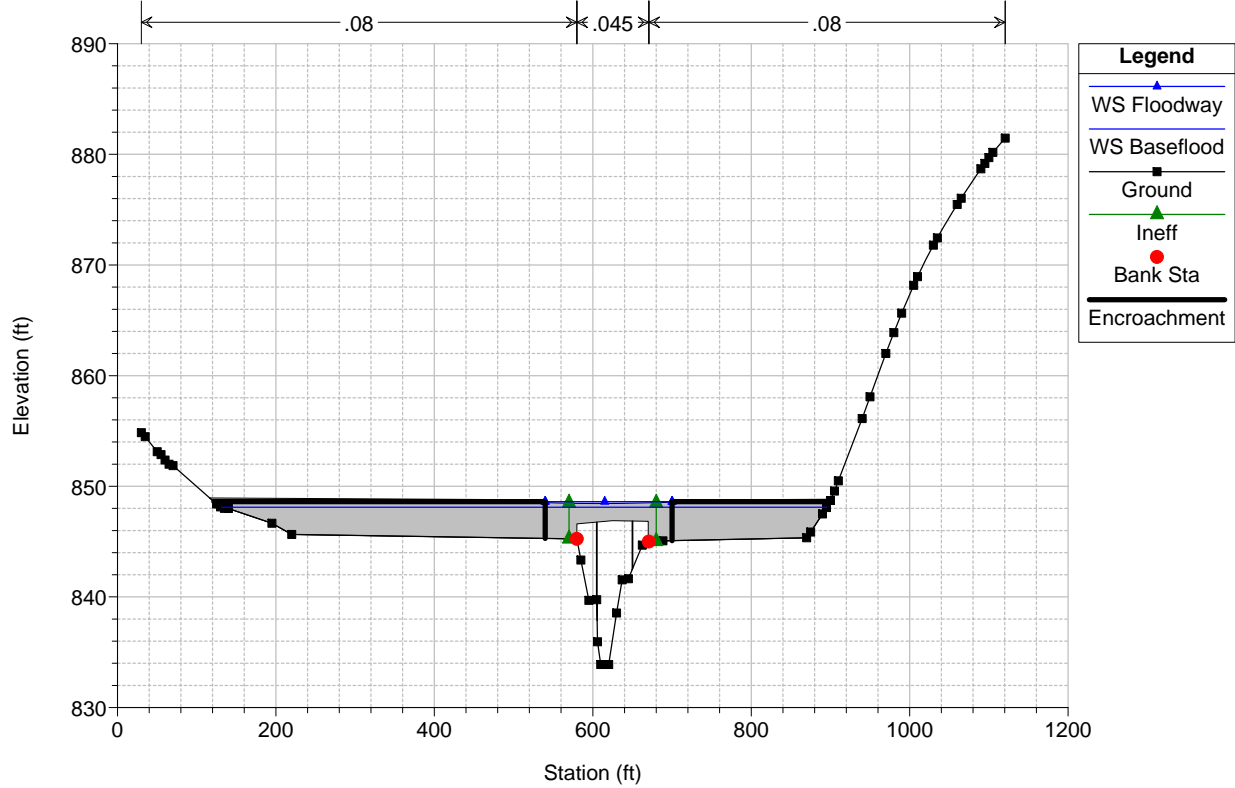
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive



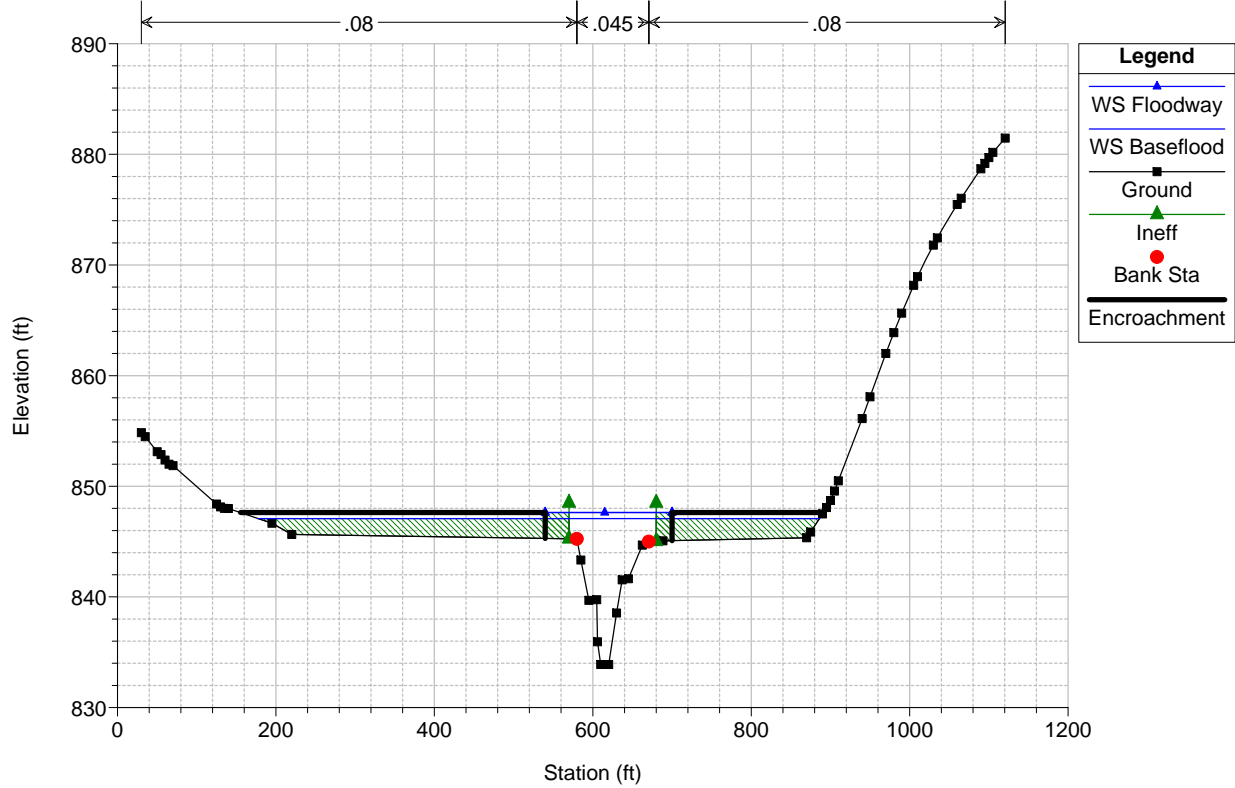
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.4 BR Honbarrier Drive



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive

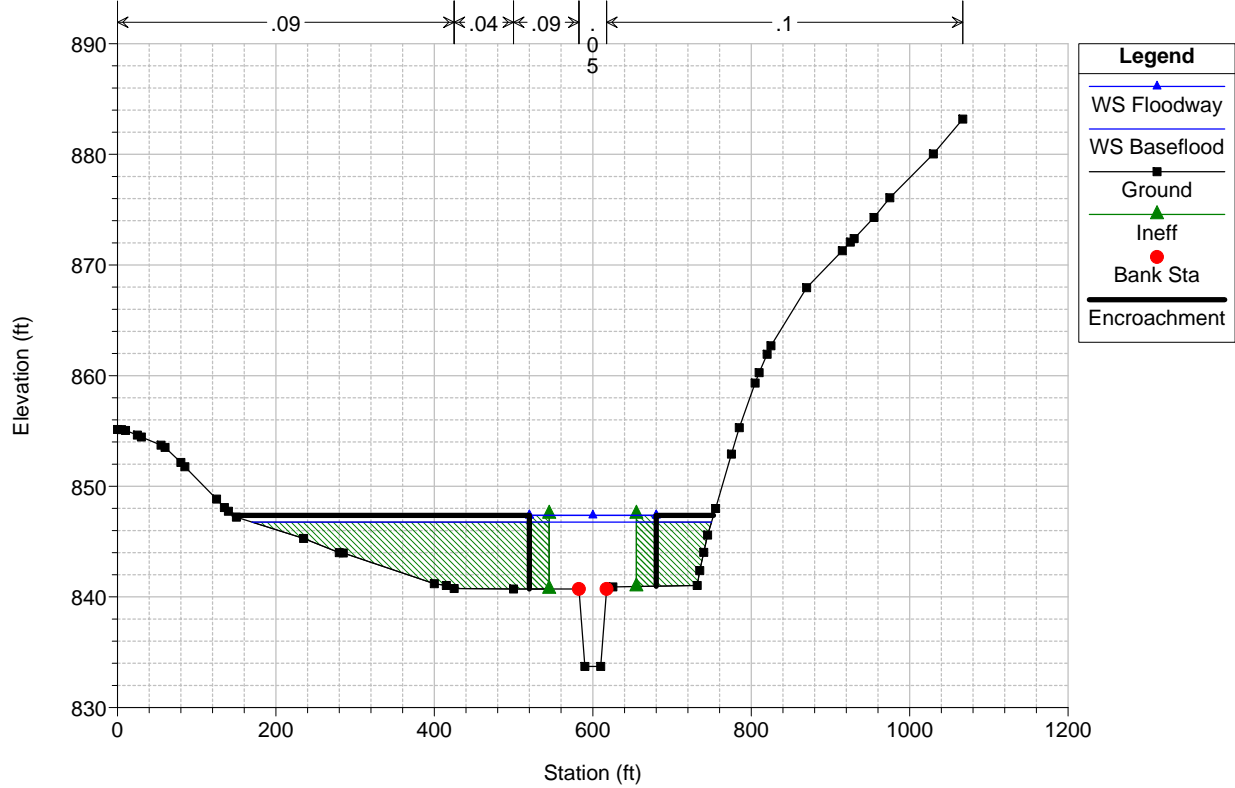


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive

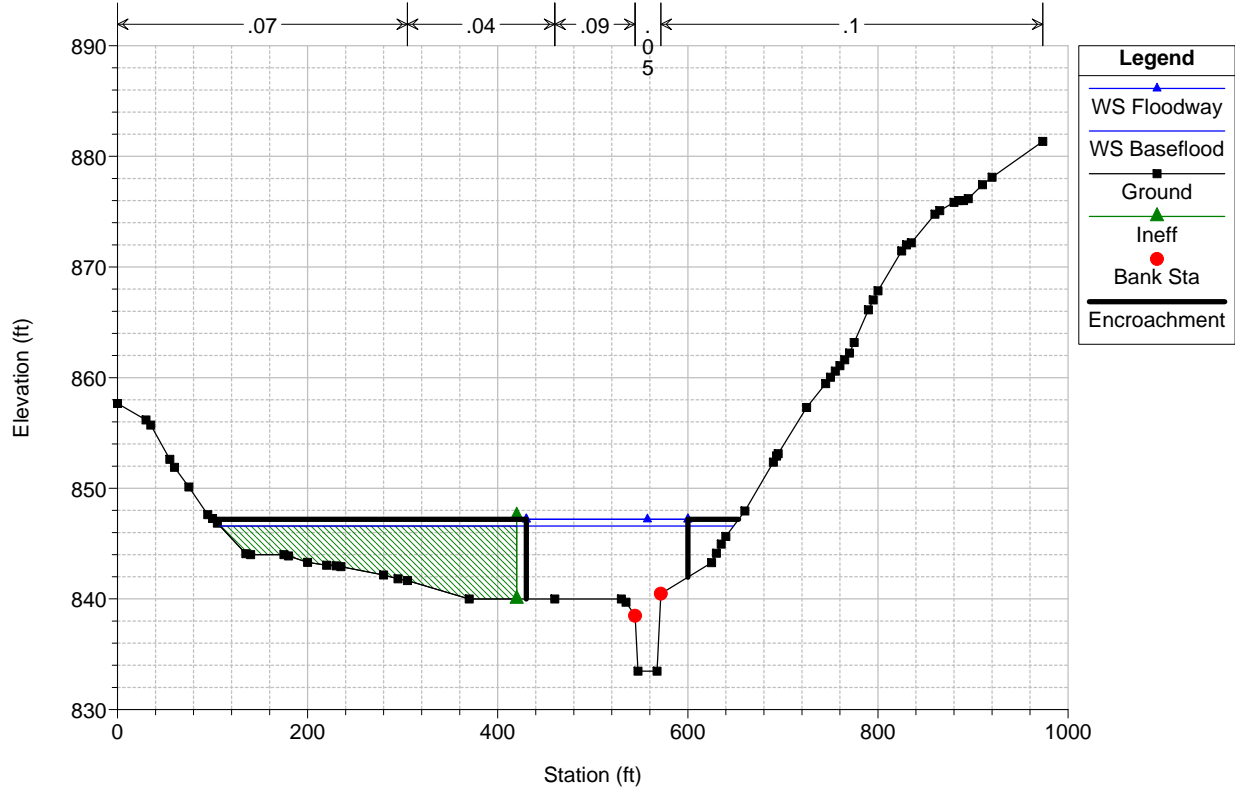




Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24156 MS68

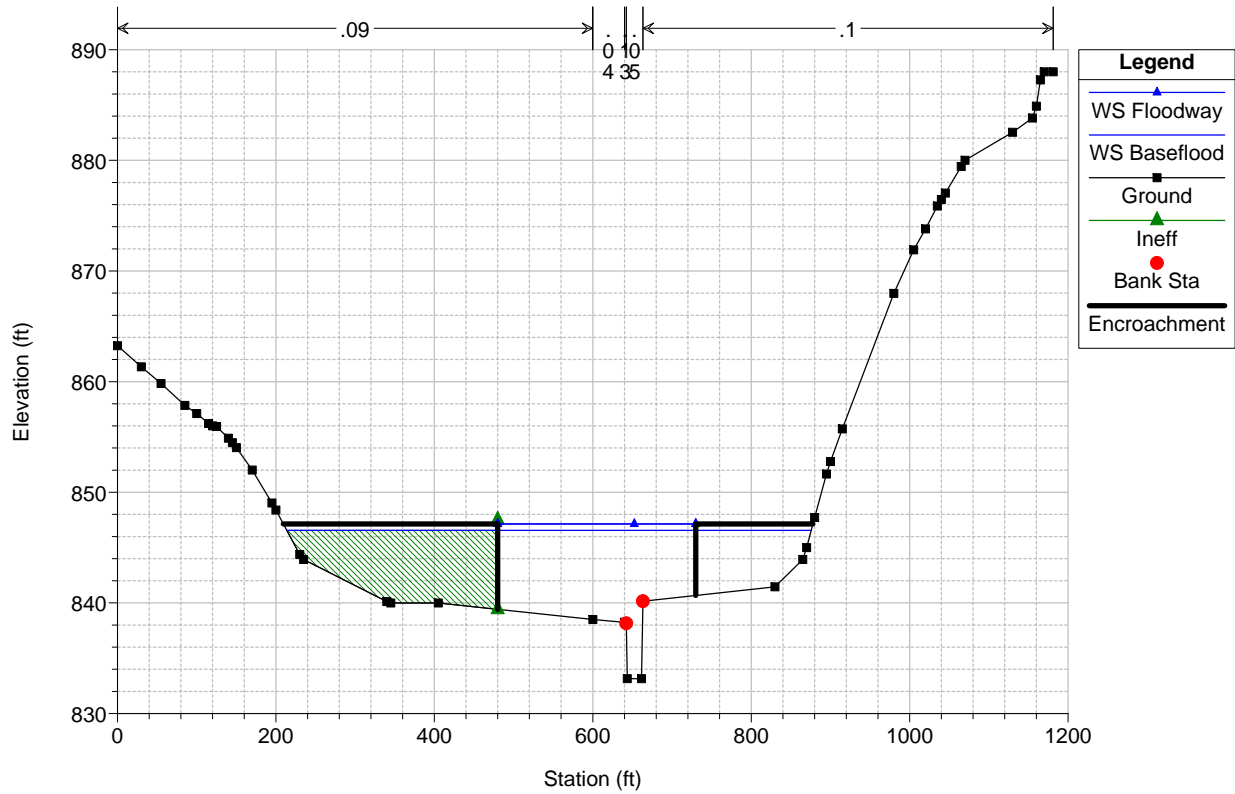


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24029.28 MS67



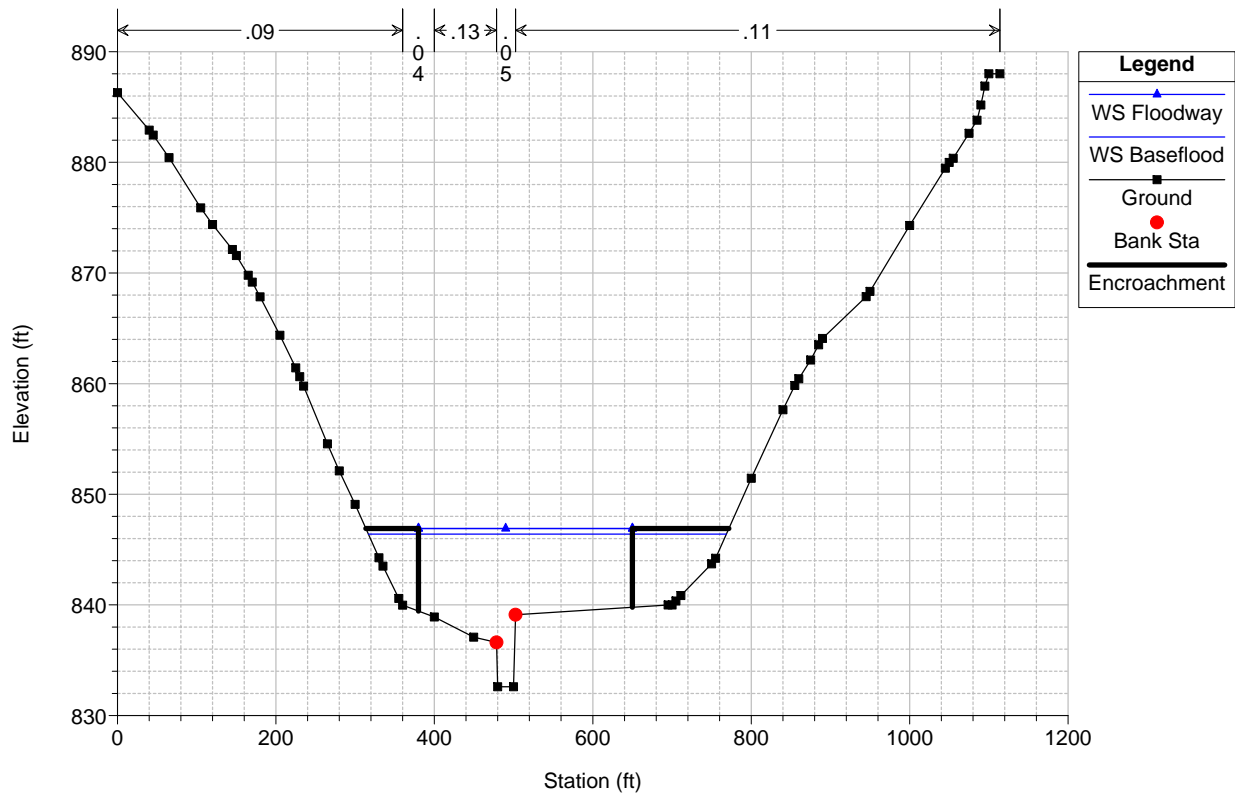
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23860.32 MS66



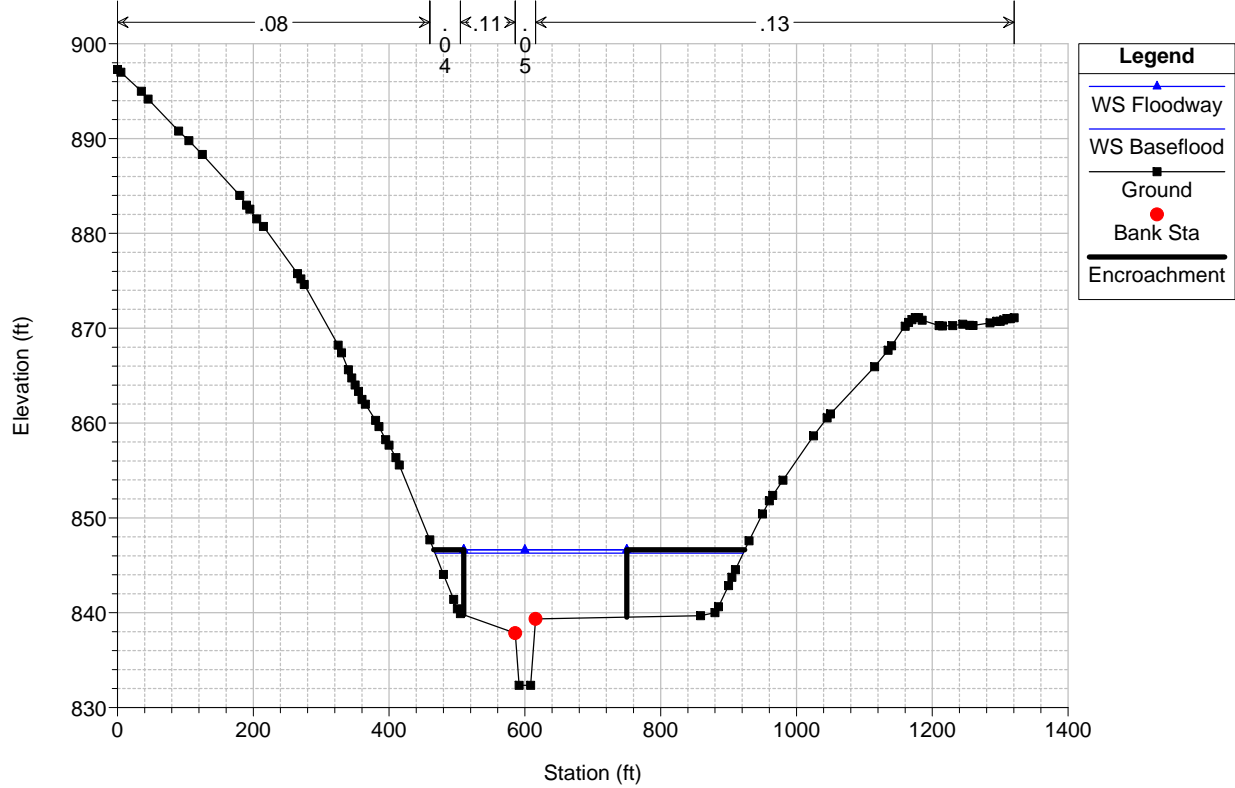
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23596.32 MS65



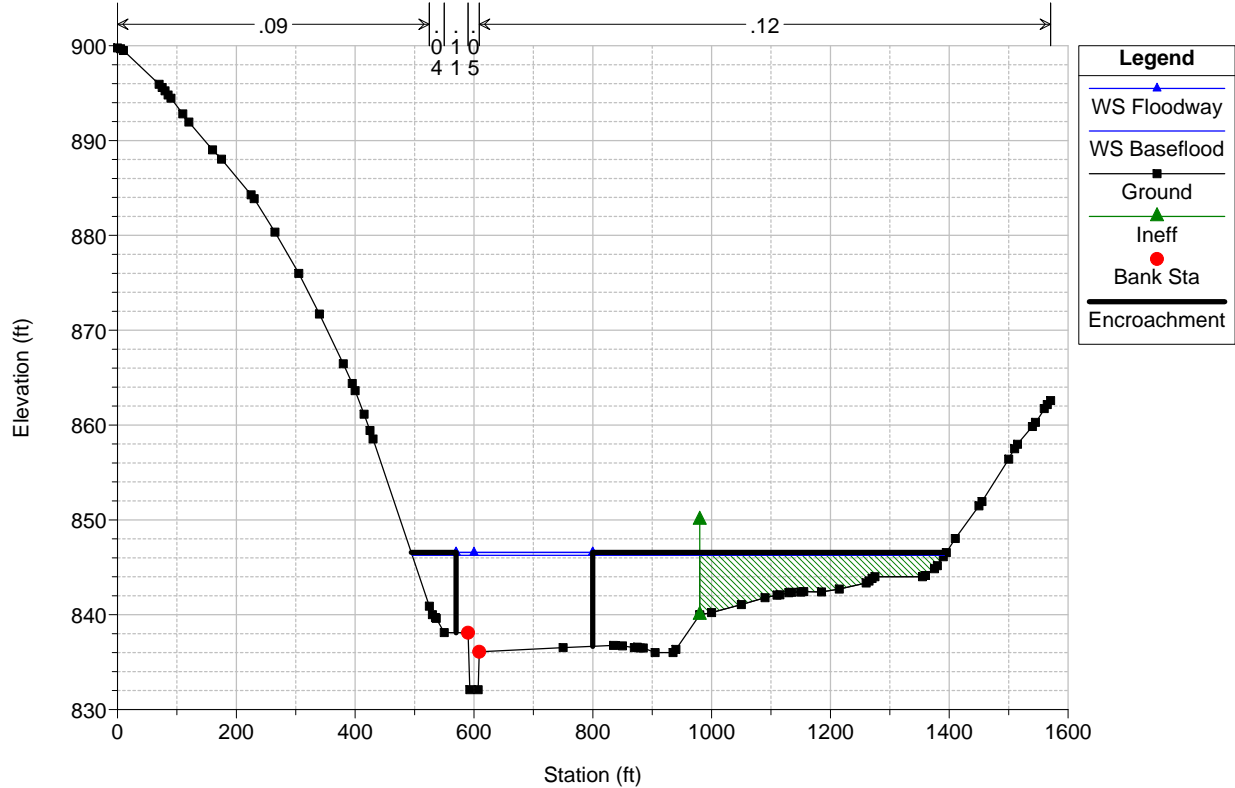
Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23453.76 MS64

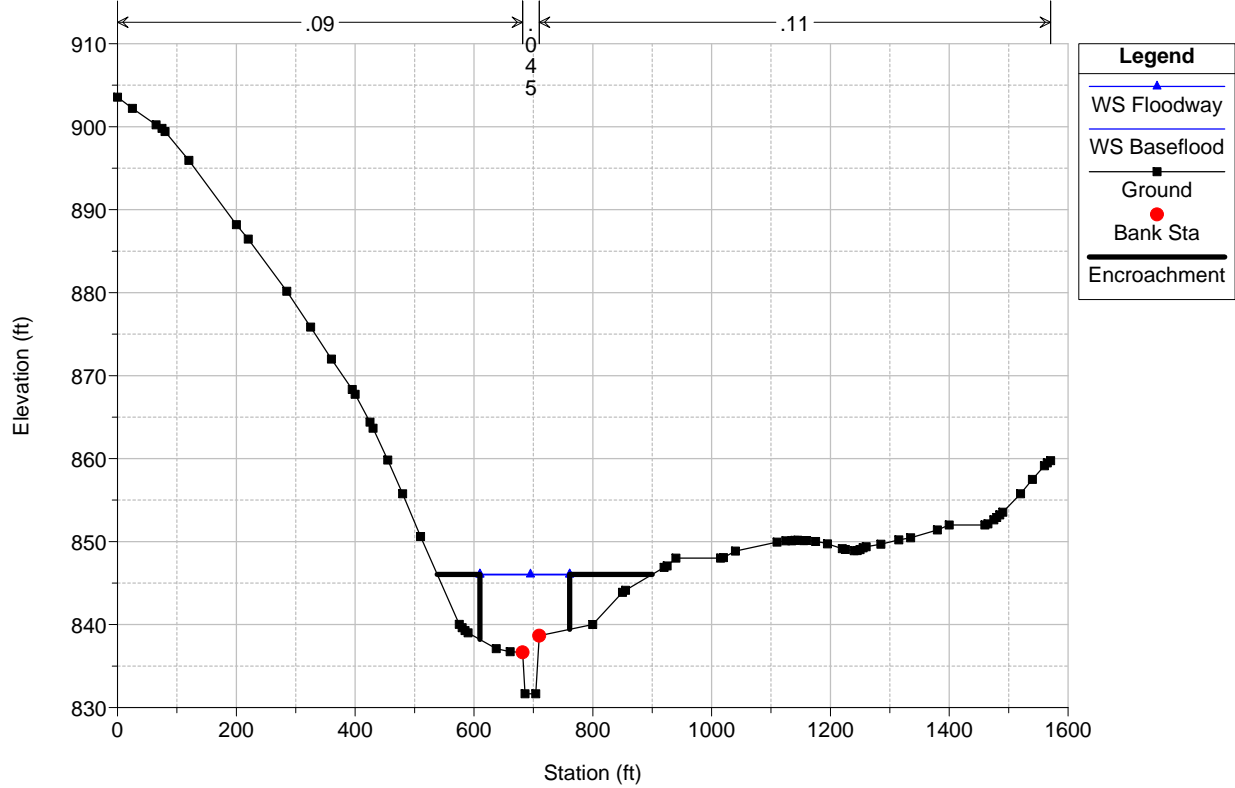


Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019

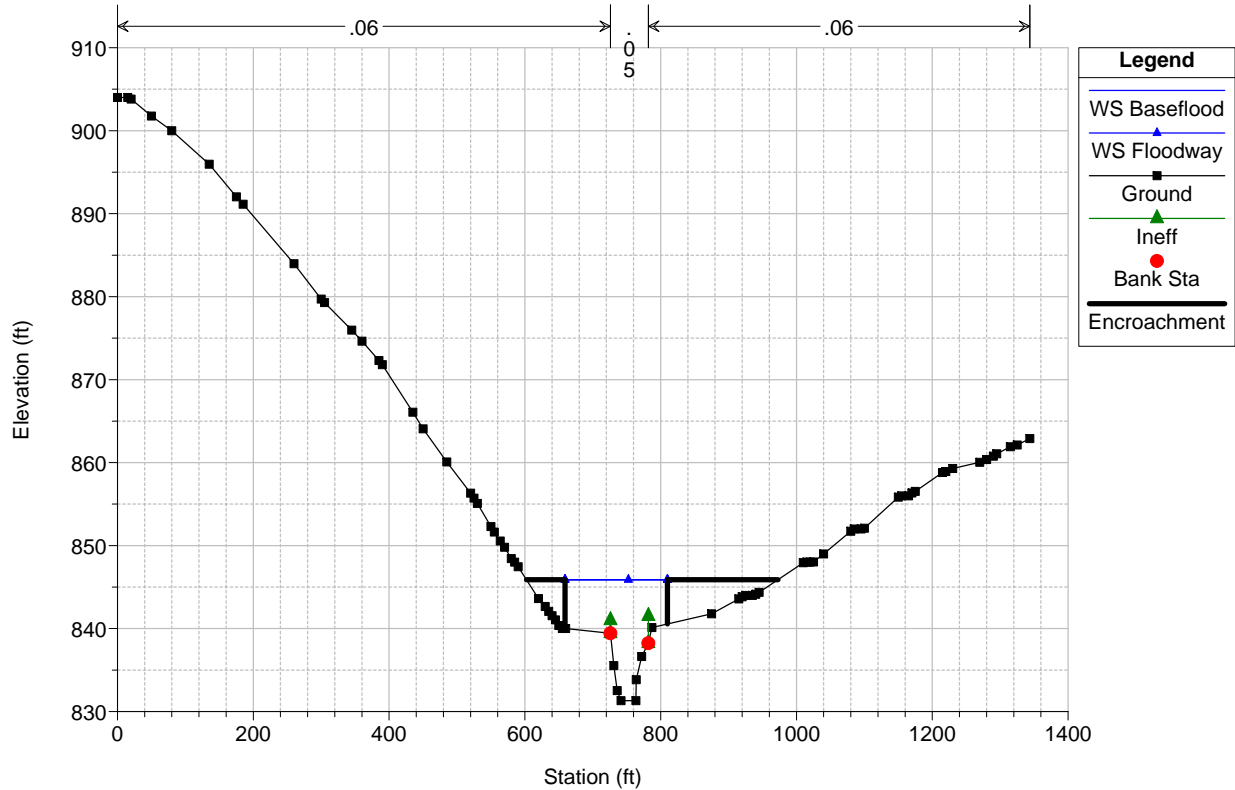
River = MAIN Reach = REACH 2 RS = 23327.04 MS63



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Rocky Creek\_CLOMR Plan: CE Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



HEC-RAS Plan: CE Floodway River: MAIN Reach: REACH 2

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	29985.12	Baseflood	860.62		861.56	436.47	917.91	3691.44	215.15		700.00	745.00	
REACH 2	29985.12	Floodway	861.07	0.45	861.98	180.00	925.17	3751.65	147.68	600.00	700.00	745.00	780.00
REACH 2	29958.72BR U	Baseflood	860.62		861.56	309.37	1194.11	2999.45	640.66		700.00	745.00	
REACH 2	29958.72BR U	Floodway	861.07	0.45	861.98	133.69	912.72	3621.69	295.83	600.00	700.00	745.00	780.00
REACH 2	29958.72BR D	Baseflood	860.62		861.56	309.38	1194.11	2999.45	640.66		700.00	745.00	
REACH 2	29958.72BR D	Floodway	861.07	0.45	861.98	83.69	912.72	3621.69	295.83	620.00	700.00	745.00	750.00
REACH 2	29927.04	Baseflood	858.29		859.62	413.57	881.09	3462.03	481.38		700.00	745.00	
REACH 2	29927.04	Floodway	858.63	0.34	860.40	130.00	836.65	3933.89	53.96	620.00	700.00	745.00	750.00
REACH 2	29700	Baseflood	858.54		858.67	558.92	2761.40	1137.51	925.59		540.80	578.80	
REACH 2	29700	Floodway	859.19	0.65	859.31	400.00	2817.01	1108.26	899.23	380.00	540.80	578.80	780.00
REACH 2	29573.28	Baseflood	858.49		858.57	677.63	3007.46	776.73	1040.31		554.50	585.50	
REACH 2	29573.28	Floodway	859.16	0.67	859.23	528.68	3236.43	742.82	845.25	250.00	554.50	585.50	780.00
REACH 2	29362.08	Baseflood	858.38		858.42	672.23	2813.33	822.19	1188.98		514.89	542.50	
REACH 2	29362.08	Floodway	858.99	0.61	859.08	350.00	2235.23	1171.74	1417.53	300.00	514.89	542.50	650.00
REACH 2	29203.68	Baseflood	858.22		858.30	525.88	2716.87	1361.80	745.83		533.41	575.31	
REACH 2	29203.68	Floodway	858.74	0.52	858.89	300.00	2135.42	1769.11	919.97	360.00	533.41	575.31	660.00
REACH 2	28944.96	Baseflood	857.57		857.80	320.96	3166.60	1589.55	68.34		476.44	505.73	
REACH 2	28944.96	Floodway	858.24	0.68	858.42	295.00	3282.04	1477.54	64.92	220.00	476.44	505.73	515.00
REACH 2	28707.36	Baseflood	857.43		857.53	449.77	2421.03	824.53	1578.95		329.00	351.00	
REACH 2	28707.36	Floodway	858.08	0.65	858.21	305.00	2819.10	893.47	1111.92	180.00	329.00	351.00	485.00
REACH 2	28570.08	Baseflood	857.39		857.44	548.15	1449.62	927.52	2447.37		328.68	356.68	
REACH 2	28570.08	Floodway	858.07	0.68	858.12	430.00	1507.17	939.61	2377.72	220.00	328.68	356.68	650.00
REACH 2	28374.72	Baseflood	857.16		857.28	471.62	927.62	1053.59	2843.29		299.50	320.50	
REACH 2	28374.72	Floodway	857.84	0.69	857.98	360.00	1000.98	1100.45	2723.06	250.00	299.50	320.50	610.00
REACH 2	28216.32	Baseflood	856.48		856.91	278.99	1252.21	1881.28	1691.00		328.00	352.00	
REACH 2	28216.32	Floodway	856.86	0.38	857.57	155.00	741.40	2365.19	1717.91	300.00	328.00	352.00	455.00
REACH 2	27999.84	Baseflood	854.89		855.79	191.90	1583.76	2585.70	655.04		315.32	344.32	
REACH 2	27999.84	Floodway	855.83	0.94	856.51	155.00	1679.44	2422.53	722.53	250.00	315.32	344.32	405.00
REACH 2	27809.76	Baseflood	854.46		854.99	234.28	1454.66	2425.55	944.29		301.50	333.50	
REACH 2	27809.76	Floodway	855.37	0.91	855.94	155.00	1510.11	2629.20	685.19	235.00	301.50	333.50	390.00
REACH 2	27572.16	Baseflood	854.15		854.46	360.77	1794.74	1948.91	1080.85		299.78	331.78	
REACH 2	27572.16	Floodway	855.14	0.99	855.48	215.00	1853.55	2067.69	903.27	220.00	299.78	331.78	435.00
REACH 2	27339.84	Baseflood	854.07		854.14	485.23	1876.61	992.50	1955.39		394.50	420.50	
REACH 2	27339.84	Floodway	854.95	0.89	855.13	230.00	1674.18	1480.42	1669.90	305.00	394.50	420.50	535.00
REACH 2	27155.04	Baseflood	853.90		854.03	420.64	2343.10	1352.15	1129.26		479.50	505.50	
REACH 2	27155.04	Floodway	854.84	0.94	854.98	270.00	2608.15	1487.32	729.03	280.00	479.50	505.50	550.00
REACH 2	27091.68		Culvert										
REACH 2	27033.6	Baseflood	853.73		853.95	348.84	2071.52	2222.75	530.23		473.08	514.08	
REACH 2	27033.6	Floodway	854.75	1.02	854.92	270.00	2150.59	2145.92	527.99	280.00	473.08	514.08	550.00
REACH 2	26806.56	Baseflood	853.61		853.70	489.67	1432.59	872.51	2519.40		351.50	373.50	
REACH 2	26806.56	Floodway	854.62	1.01	854.76	270.00	1278.93	1087.66	2457.91	200.00	351.50	373.50	470.00
REACH 2	26574.24	Baseflood	853.59		853.64	449.18	3088.60	408.12	1327.78		338.00	357.00	
REACH 2	26574.24	Floodway	854.62	1.03	854.68	270.00	3288.24	484.74	1051.51	160.00	338.00	357.00	430.00
REACH 2	26400	Baseflood	853.46		853.58	434.00	1772.98	1705.10	1346.42		669.00	701.00	
REACH 2	26400	Floodway	854.48	1.02	854.62	275.00	1816.83	1908.53	1099.14	500.00	669.00	701.00	775.00
REACH 2	26220.48	Baseflood	853.48		853.51	545.74	3682.14	286.06	856.31		720.80	744.97	
REACH 2	26220.48	Floodway	854.22	0.74	854.49	135.00	2860.89	903.29	1060.32	640.00	720.80	744.97	775.00
REACH 2	26083.2	Baseflood	853.46		853.49	607.60	2779.84	522.02	1522.65		736.12	759.94	
REACH 2	26083.2	Floodway	854.05	0.59	854.36	105.00	2707.45	1297.36	819.69	675.00	736.12	759.94	780.00
REACH 2	25893.12	Baseflood	853.41		853.46	585.29	3987.48	650.54	186.48		767.93	794.06	
REACH 2	25893.12	Floodway	853.93	0.51	854.20	140.00	3354.40	1379.72	90.38	660.00	767.93	794.06	800.00
REACH 2	25687.2	Baseflood	853.40		853.44	552.26	2657.92	1447.58	480.21		1945.00	2010.00	
REACH 2	25687.2	Floodway	854.05	0.65	854.09	327.52	2932.63	1527.49	125.58	1690.00	1945.00	2010.00	2040.00
REACH 2	25549.36	Baseflood	853.35		853.40	859.42	2519.80	2065.90			1945.00	2015.00	
REACH 2	25549.36	Floodway	853.94	0.59	854.04	395.00	1792.03	2793.67		1620.00	1945.00	2015.00	2100.00
REACH 2	25460.16		Culvert										
REACH 2	25370.96	Baseflood	851.17		851.53	107.00		4585.70			1945.00	2052.00	
REACH 2	25370.96	Floodway	851.23	0.06	851.59	107.00		4585.70		1670.00	1945.00	2052.00	2052.00
REACH 2	24668.16	Baseflood	849.68		850.12	195.27	2512.88	2072.82			1727.16	1764.16	

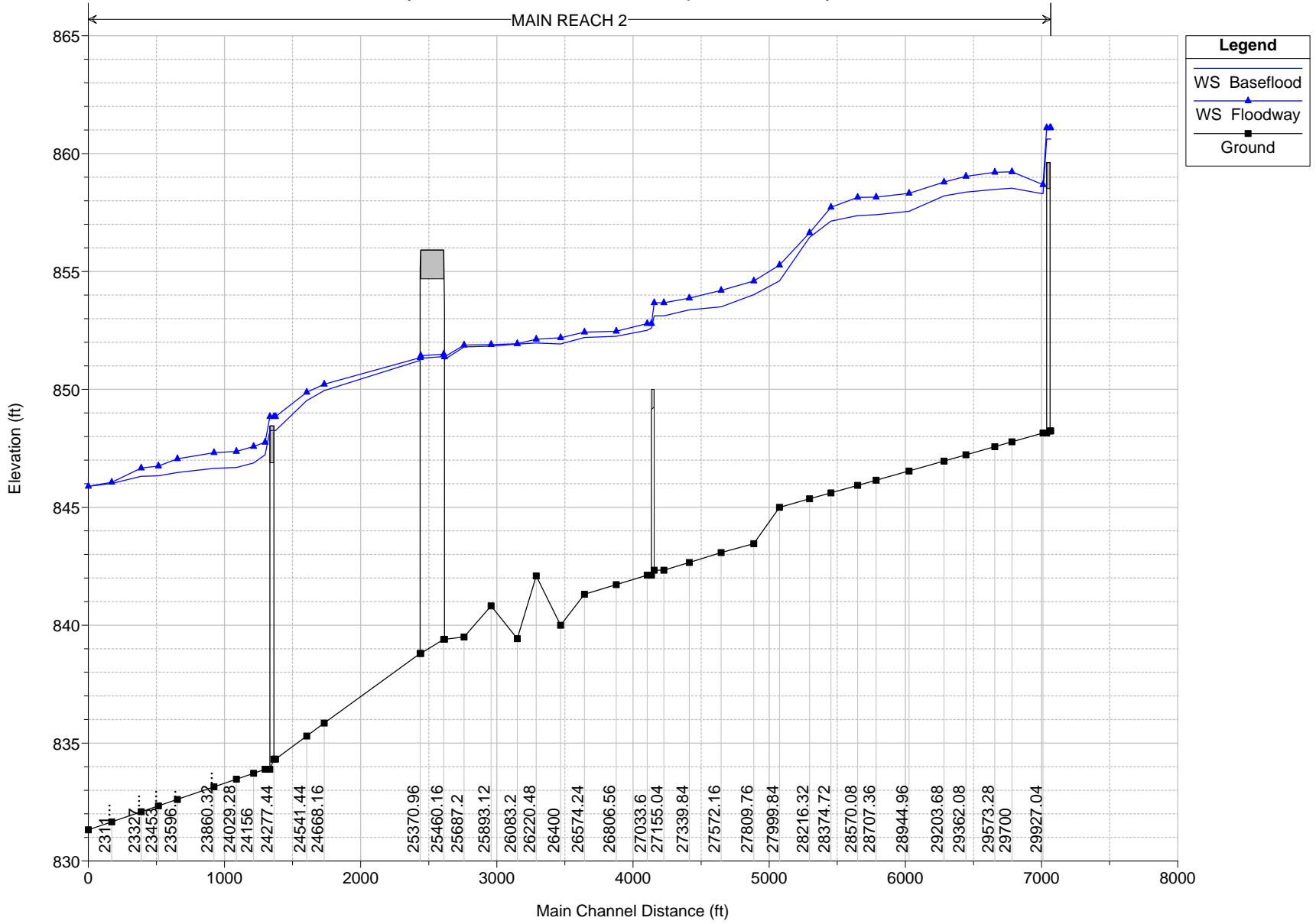
HEC-RAS Plan: CE Floodway River: MAIN Reach: REACH 2 (Continued)

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	24668.16	Floodway	849.92	0.23	850.30	159.97	2636.88	1948.82		1604.16	1727.16	1764.16	1764.16
REACH 2	24541.44	Baseflood	849.28		849.64	177.87	2768.96	1816.74			1638.50	1670.50	
REACH 2	24541.44	Floodway	849.59	0.31	849.91	160.00	2836.83	1748.87		1510.50	1638.50	1670.50	1670.50
REACH 2	24314.4	Baseflood	848.10		848.82	210.00	81.31	4436.40	67.99		584.00	669.00	
REACH 2	24314.4	Floodway	848.61	0.51	849.23	160.00	95.90	4421.12	68.67	540.00	584.00	669.00	700.00
REACH 2	24277.44BR U	Baseflood	848.10		848.81		33.64	4523.91	26.28		584.00	669.00	
REACH 2	24277.44BR U	Floodway	848.61	0.51	849.23	160.00	72.66	4463.87	48.85	540.00	584.00	669.00	700.00
REACH 2	24277.44BR D	Baseflood	848.10		848.81		33.64	4523.91	26.28		580.00	670.83	
REACH 2	24277.44BR D	Floodway	848.61	0.51	849.23	160.00	72.66	4463.87	48.85	540.00	580.00	670.83	700.00
REACH 2	24240.48	Baseflood	847.08		847.88	110.00	32.49	4516.77	36.43		580.00	670.83	
REACH 2	24240.48	Floodway	847.62	0.54	848.31	110.00	43.92	4494.65	47.13	540.00	580.00	670.83	700.00
REACH 2	24156	Baseflood	846.76		847.51	110.00	723.47	3242.39	619.84		582.50	617.50	
REACH 2	24156	Floodway	847.37	0.61	848.01	110.00	761.77	3168.28	655.65	520.00	582.50	617.50	680.00
REACH 2	24029.28	Baseflood	846.59		846.82	228.18	2517.87	1686.34	381.49		544.58	571.58	
REACH 2	24029.28	Floodway	847.19	0.60	847.44	170.00	2440.20	1863.80	281.70	430.00	544.58	571.58	600.00
REACH 2	23860.32	Baseflood	846.56		846.62	395.77	2576.55	829.83	1179.32		642.25	663.25	
REACH 2	23860.32	Floodway	847.14	0.59	847.24	250.00	3053.71	960.23	571.77	480.00	642.25	663.25	730.00
REACH 2	23596.32	Baseflood	846.40		846.46	451.87	1821.06	1063.49	1701.15		478.48	502.48	
REACH 2	23596.32	Floodway	846.91	0.51	847.02	270.00	1605.24	1384.83	1595.63	380.00	478.48	502.48	650.00
REACH 2	23453.76	Baseflood	846.28		846.37	453.73	1105.17	1474.46	2006.08		585.78	615.78	
REACH 2	23453.76	Floodway	846.64	0.36	846.86	240.00	1078.24	2067.89	1439.57	510.00	585.78	615.78	750.00
REACH 2	23327.04	Baseflood	846.26		846.28	483.88	704.58	585.63	3295.49		590.00	609.00	
REACH 2	23327.04	Floodway	846.56	0.30	846.66	230.00	223.73	1105.58	3256.39	570.00	590.00	609.00	800.00
REACH 2	23110.56	Baseflood	846.00		846.17	360.36	1793.36	1837.05	955.29		681.83	709.83	
REACH 2	23110.56	Floodway	846.04	0.05	846.40	151.00	1624.27	2335.53	625.90	610.00	681.83	709.83	761.00
REACH 2	22946.88	Baseflood	845.89		846.03	370.64	1098.62	2578.48	999.30		726.00	782.00	
REACH 2	22946.88	Floodway	845.89	0.00	846.17	151.00	1060.54	3247.21	368.65	659.00	726.00	782.00	810.00

# PROPOSED FLOODWAY MODEL

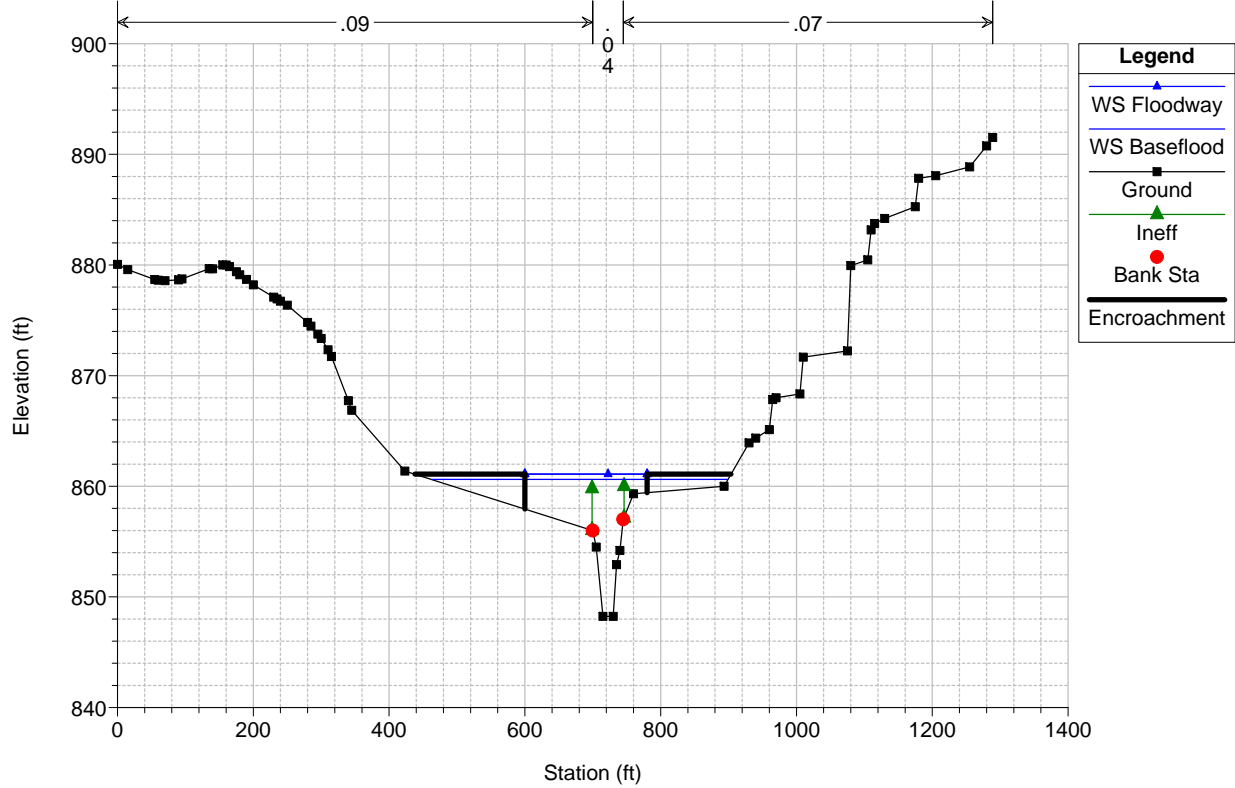
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

MAIN REACH 2

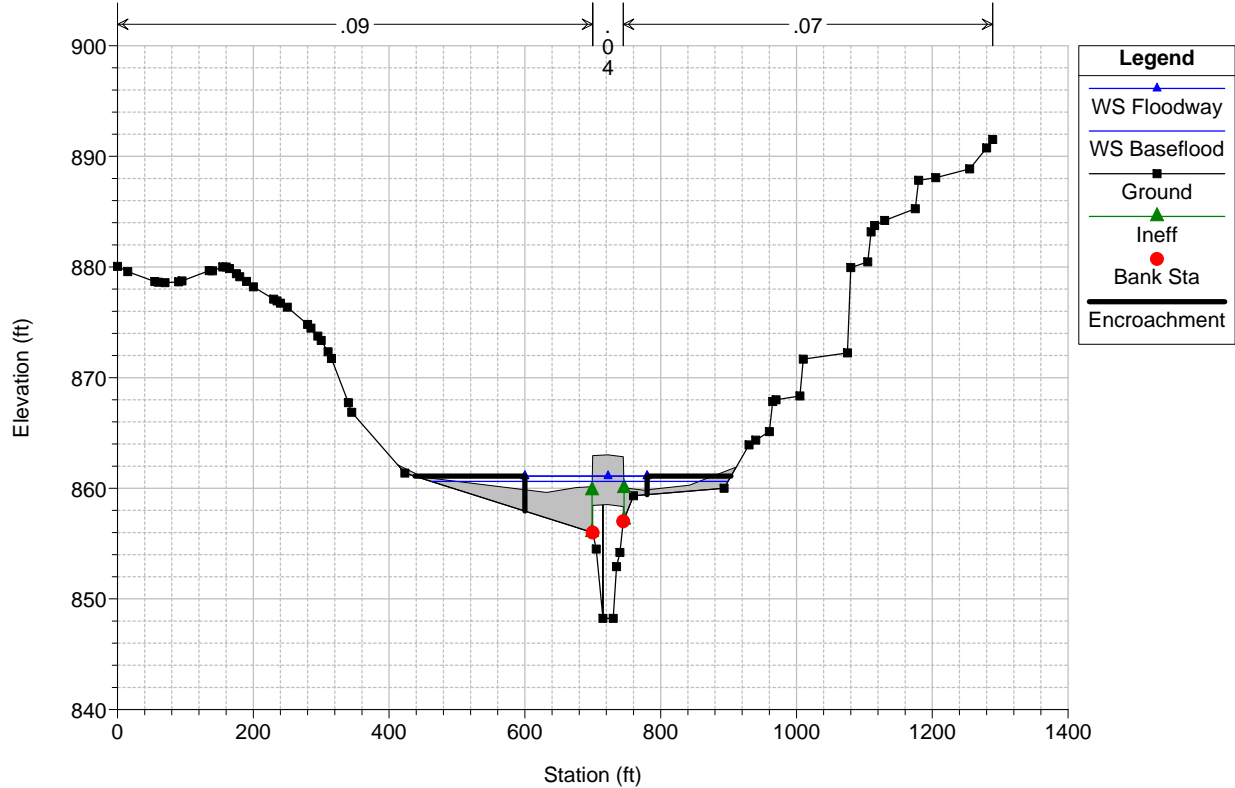




Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29985.12 MS98-U/S Muddy Ford

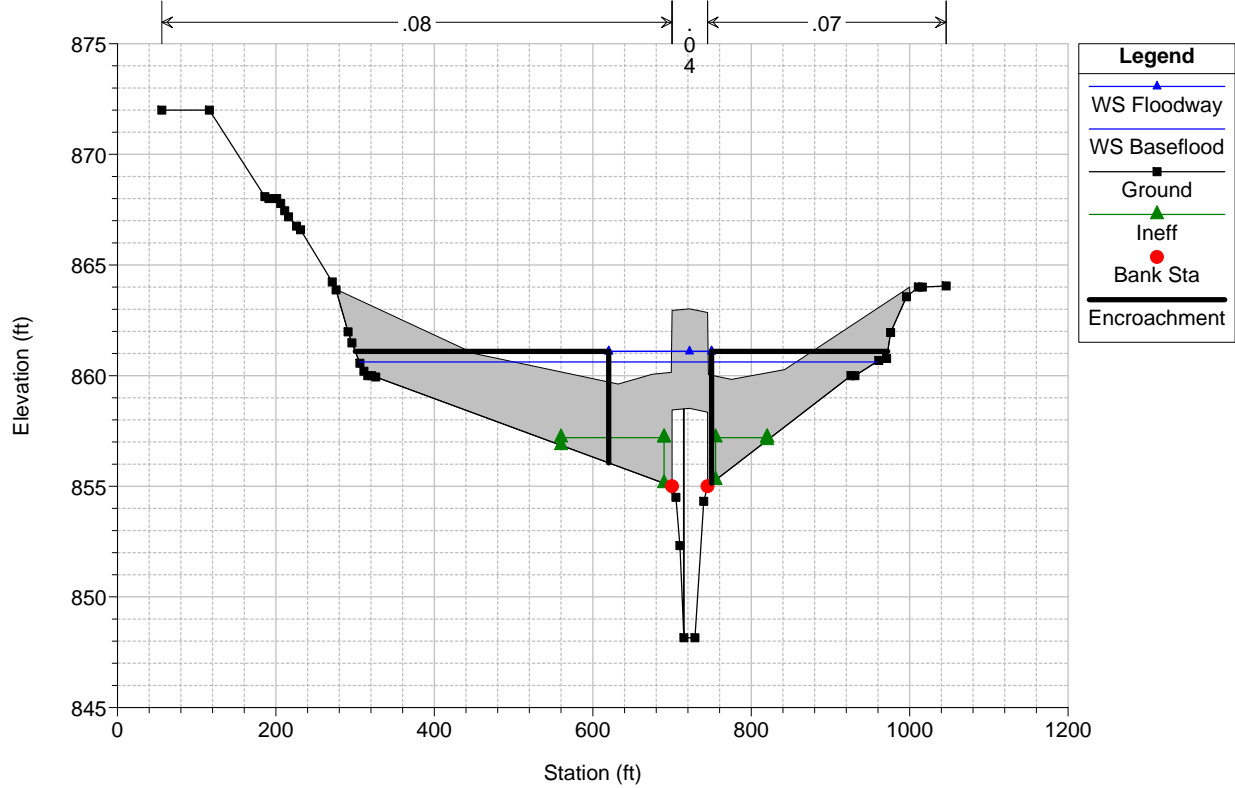


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 29958.72 BR



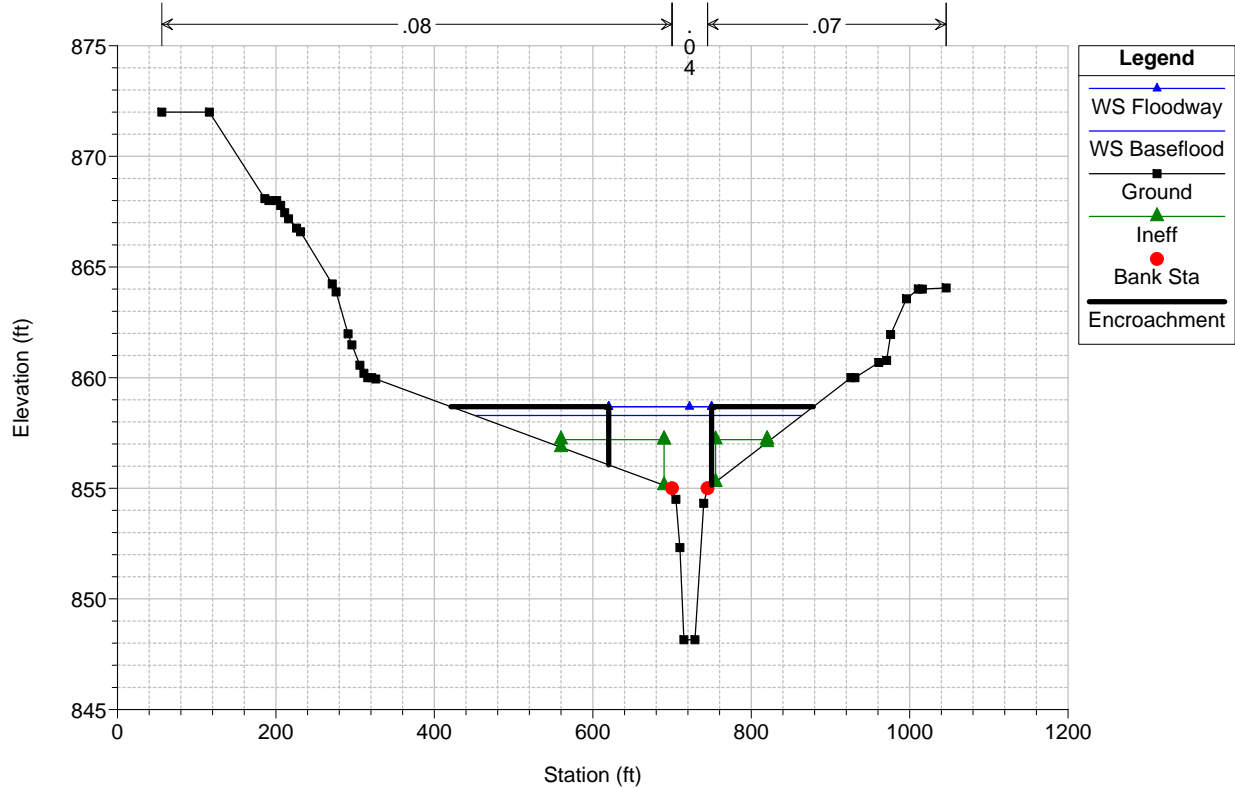
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29958.72 BR



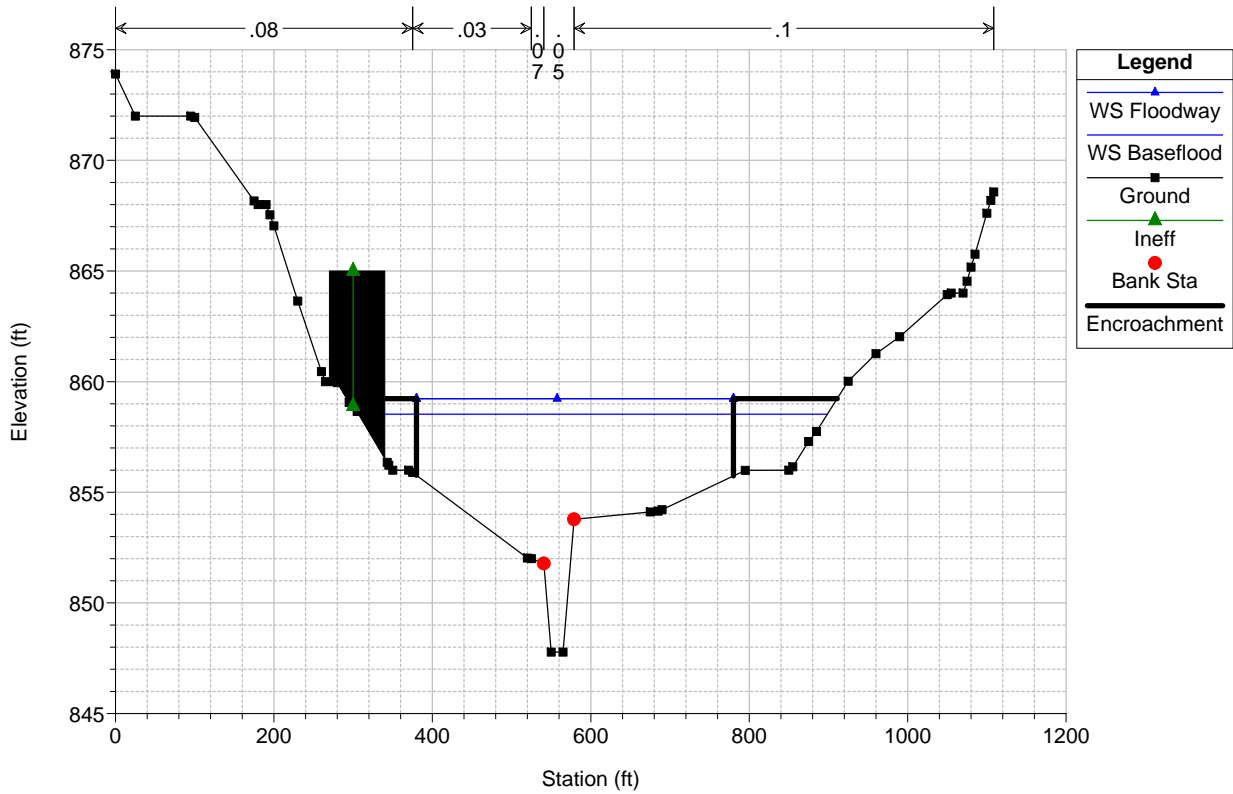
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29927.04 MS97-D/S Muddy Ford



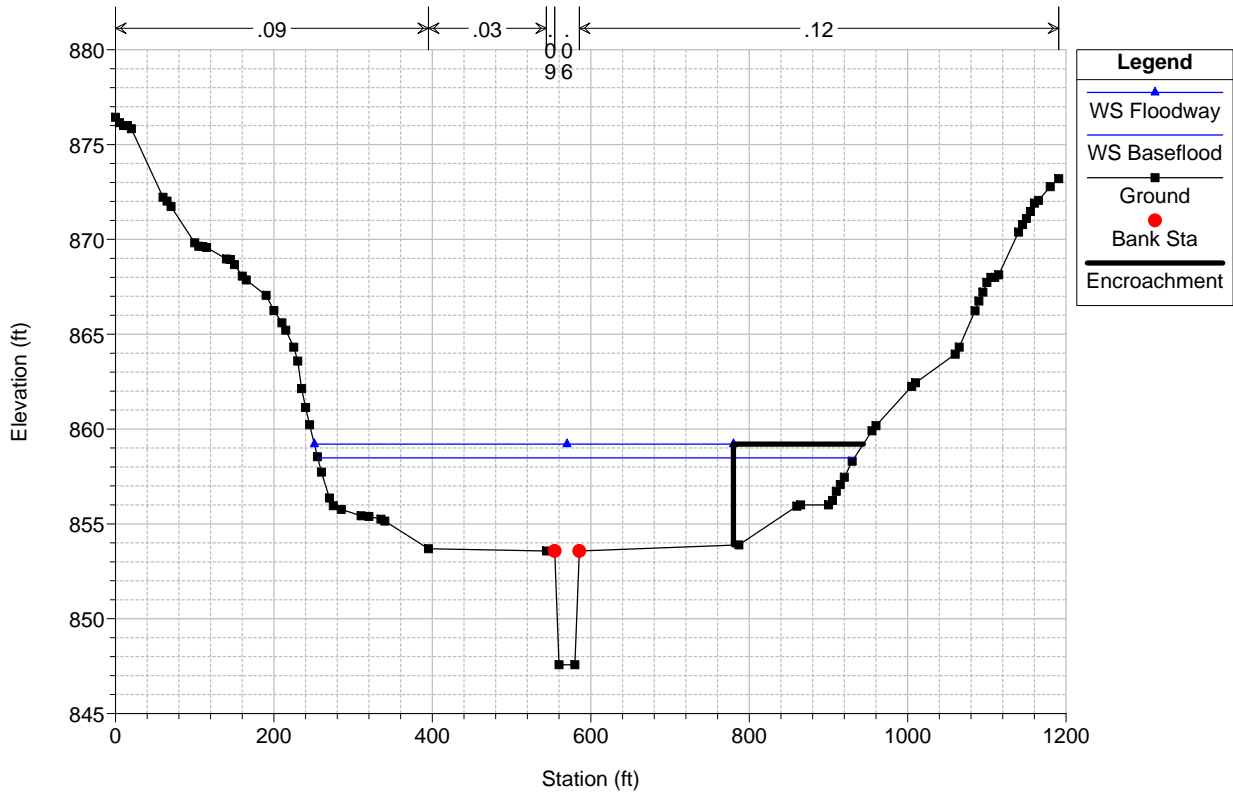
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29700 MS96



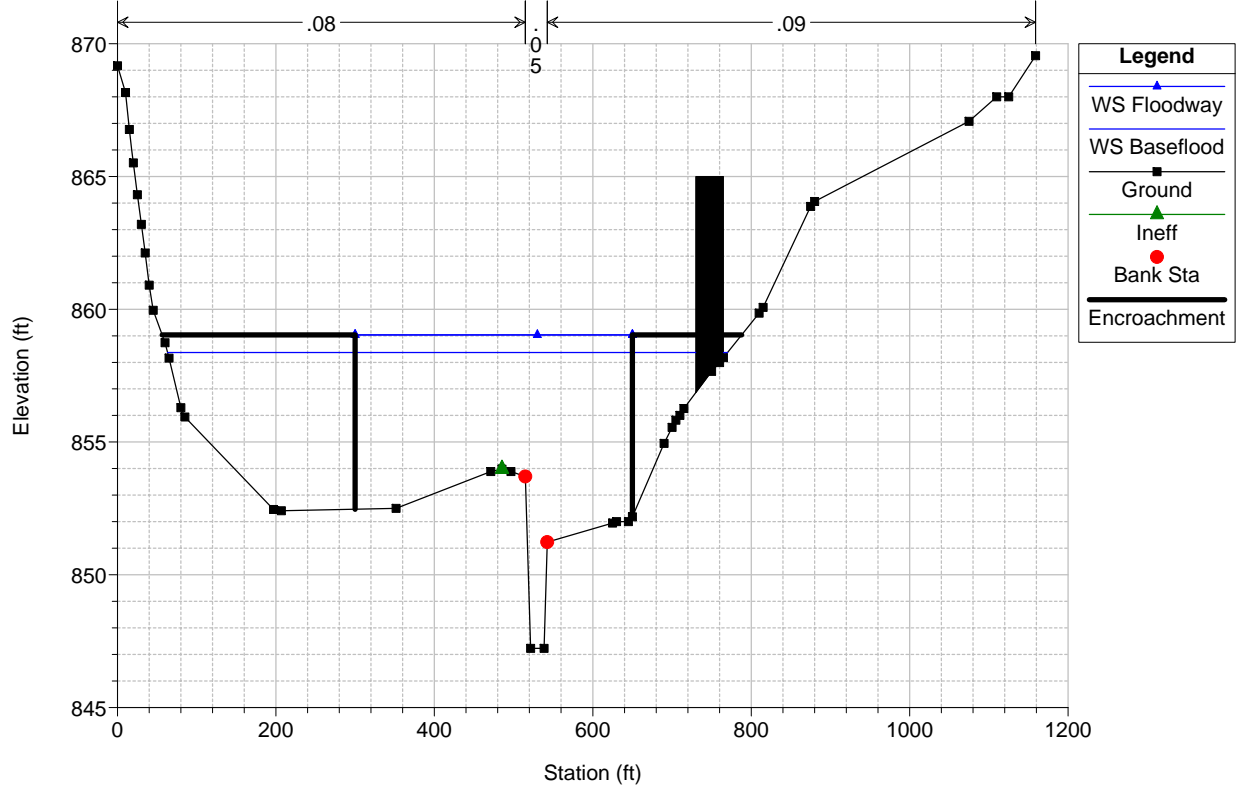
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29573.28 MS95



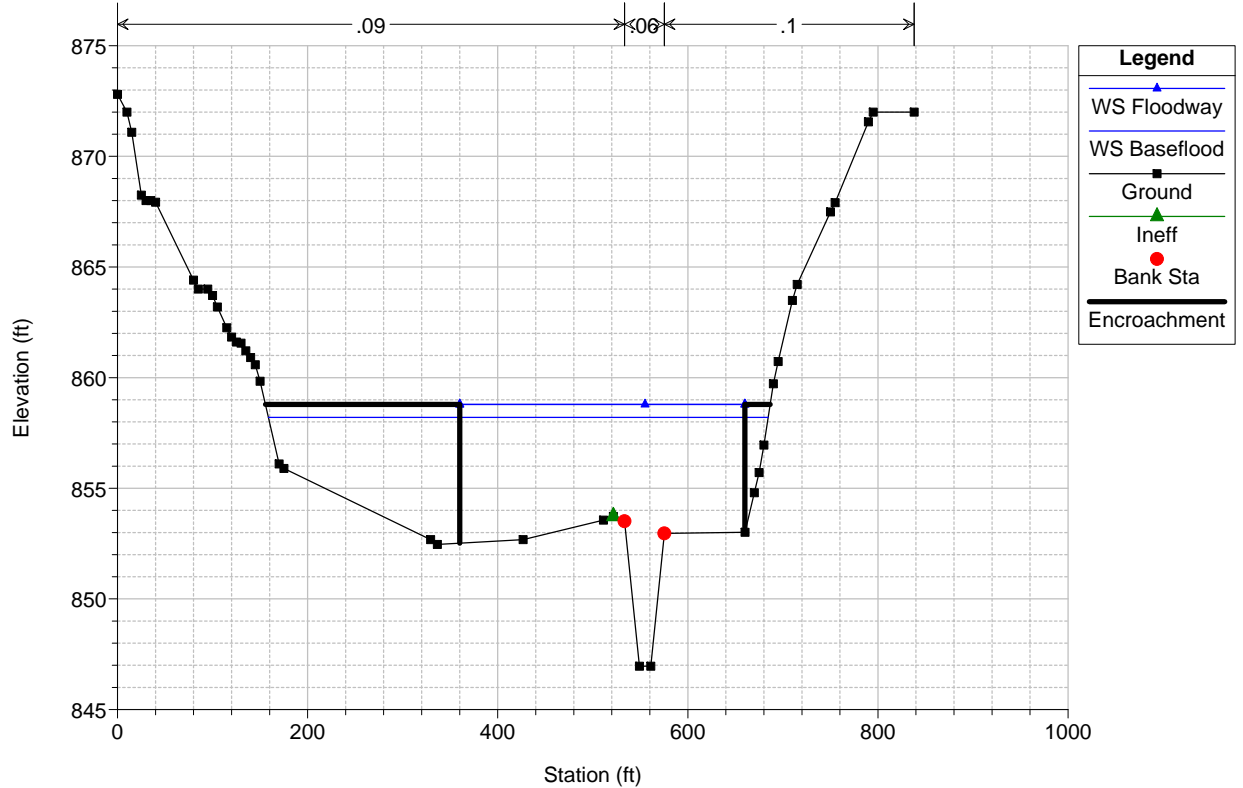
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29362.08 MS94



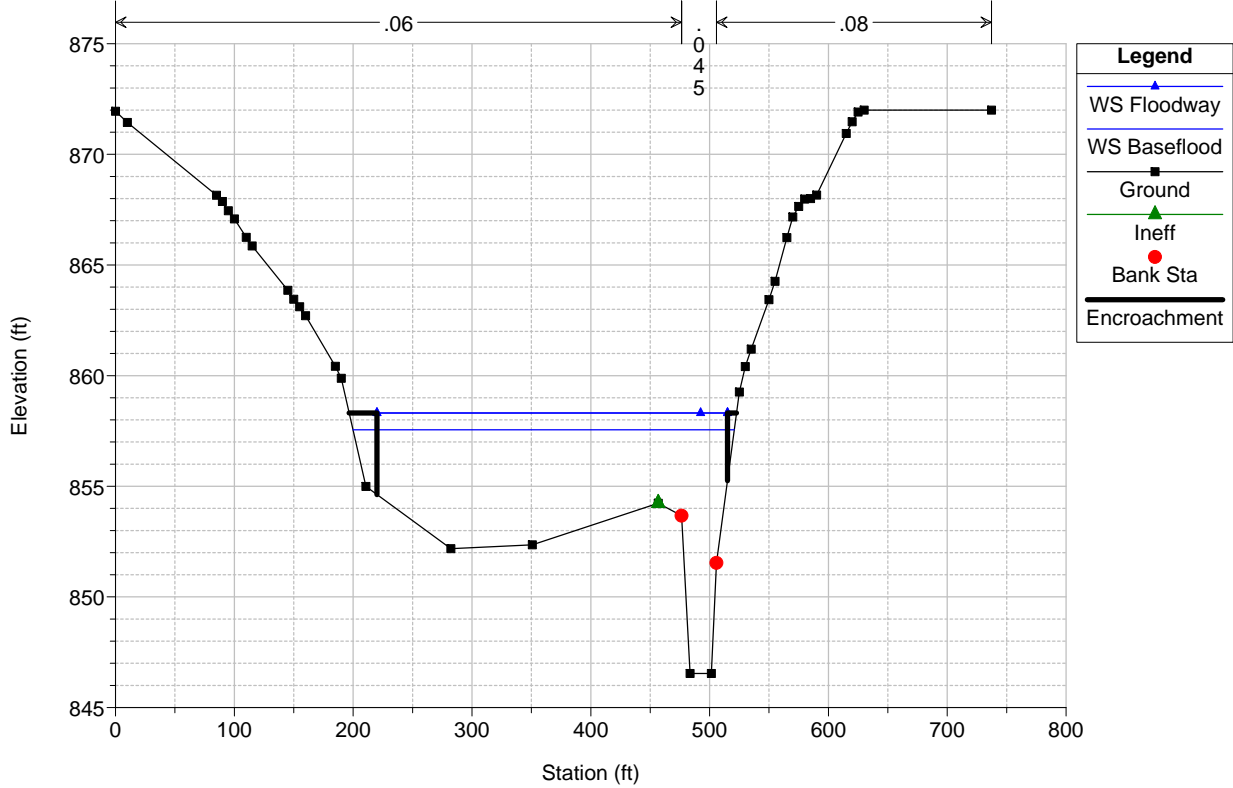
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 29203.68 MS93



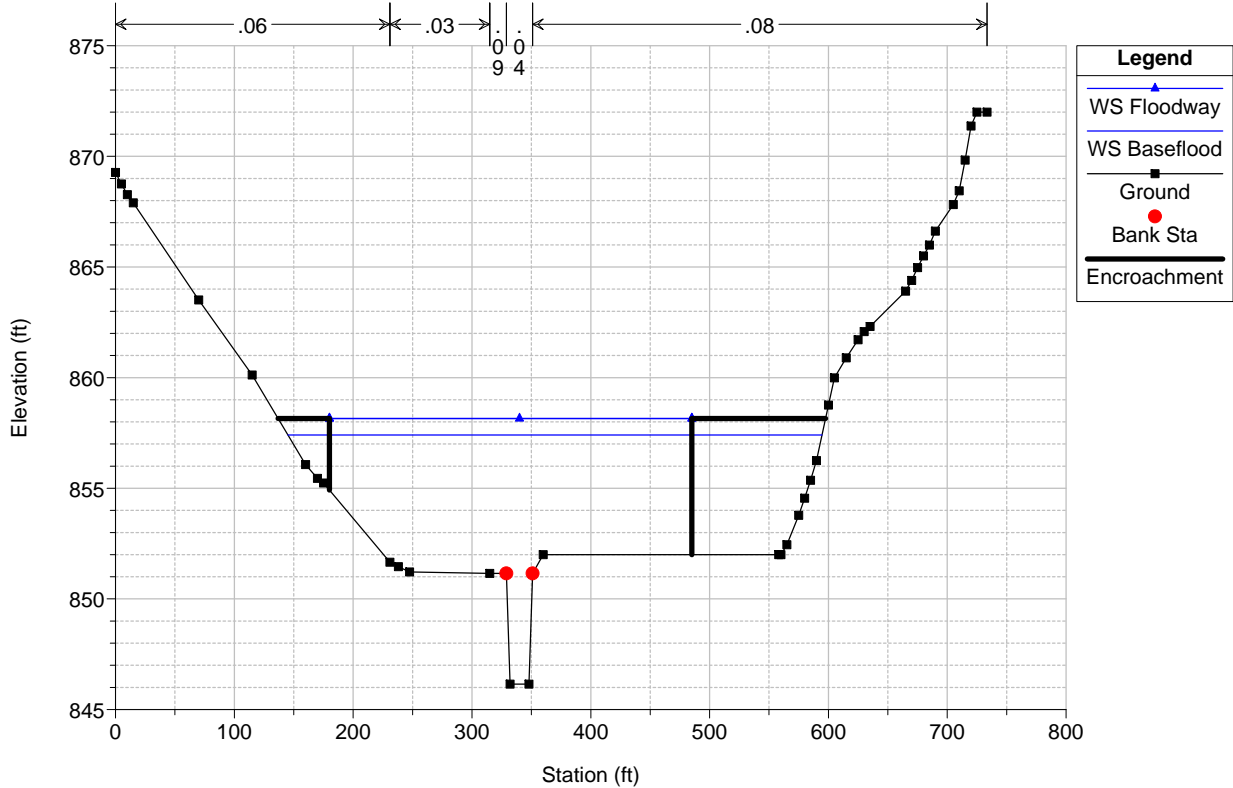
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28944.96 MS92



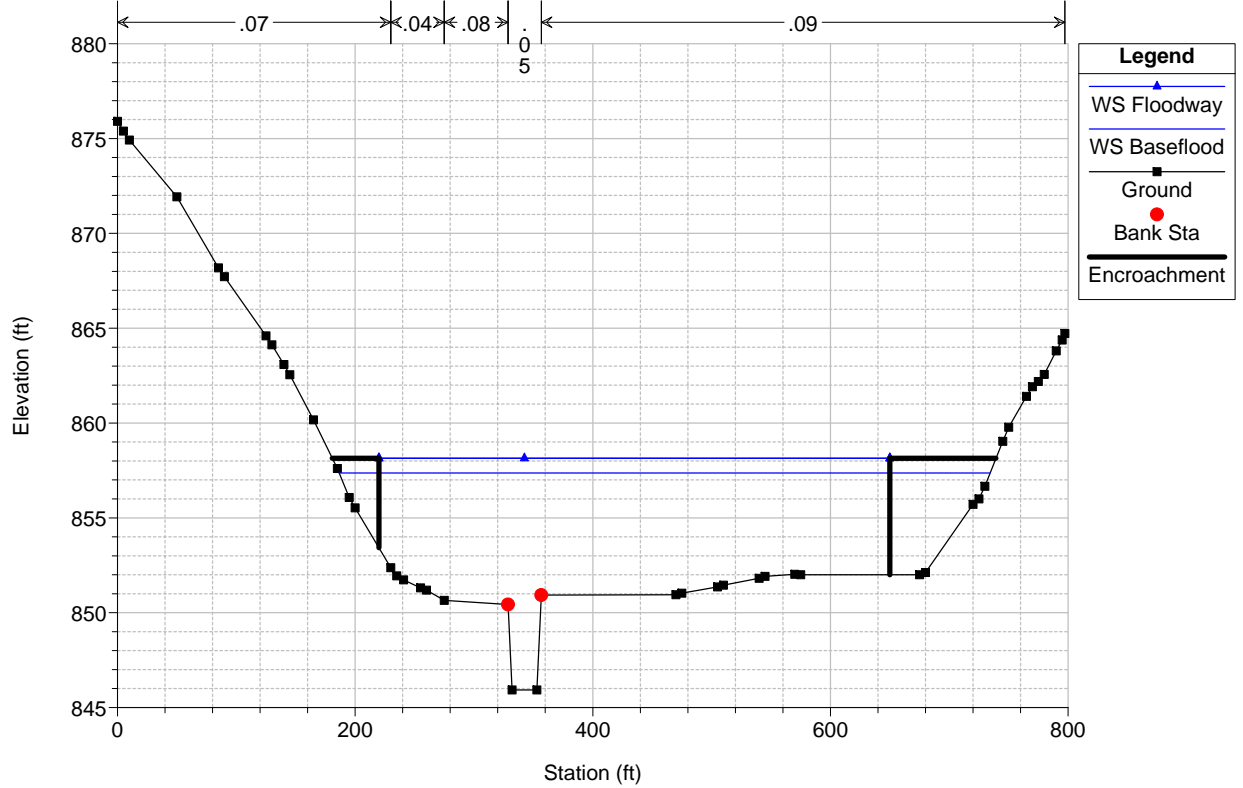
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28707.36 MS91



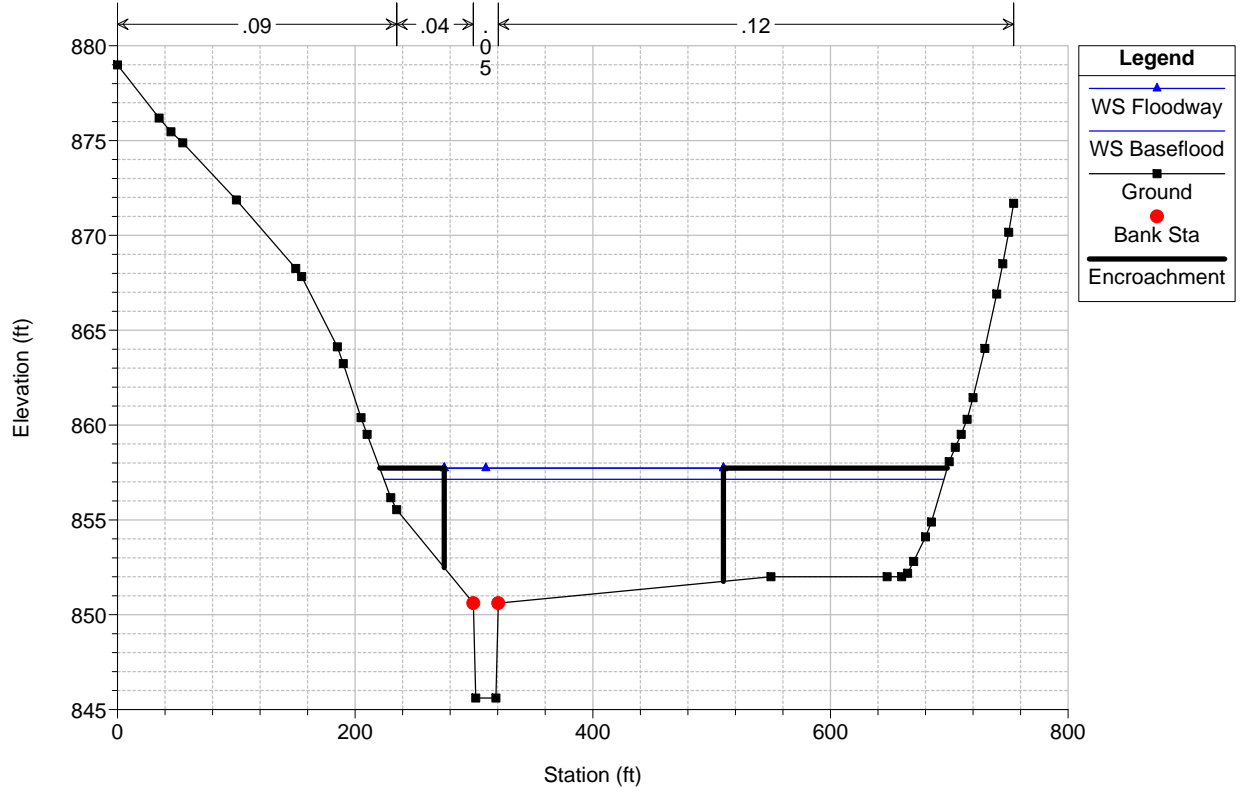
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28570.08 MS90



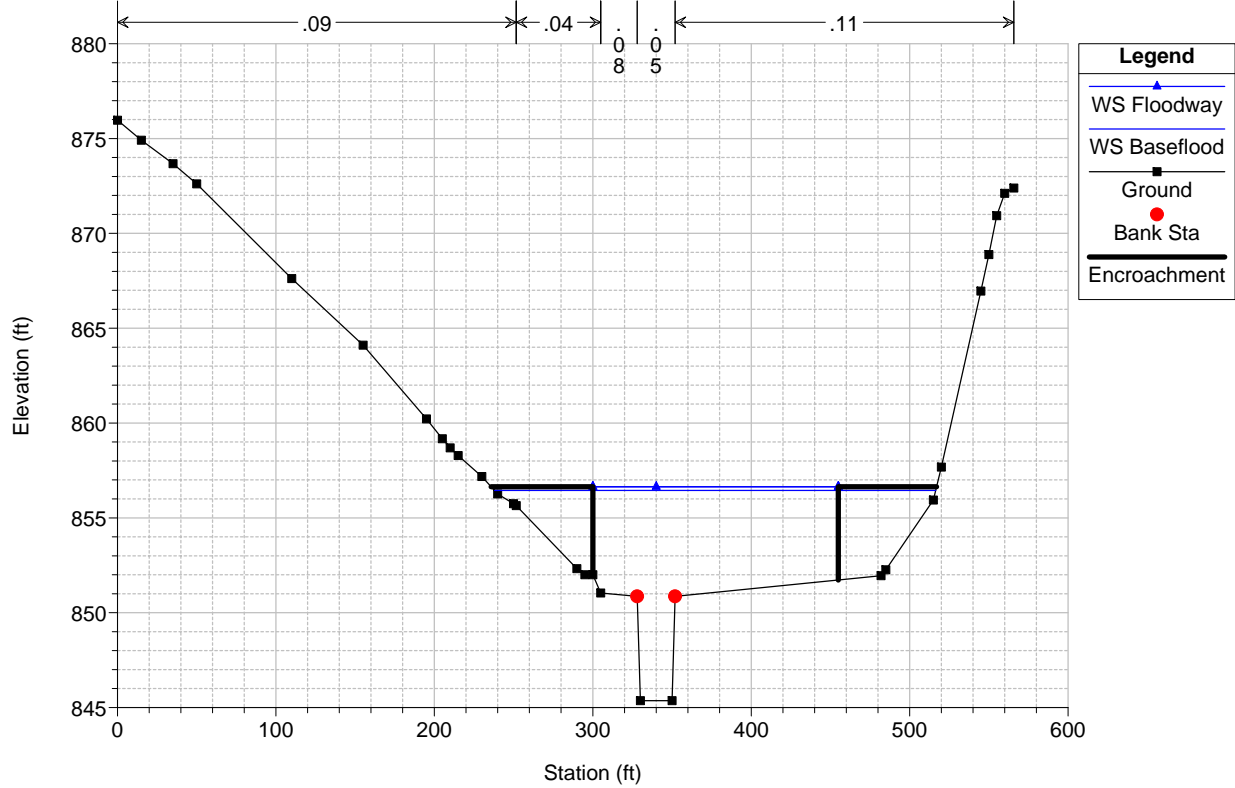
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28374.72 MS89



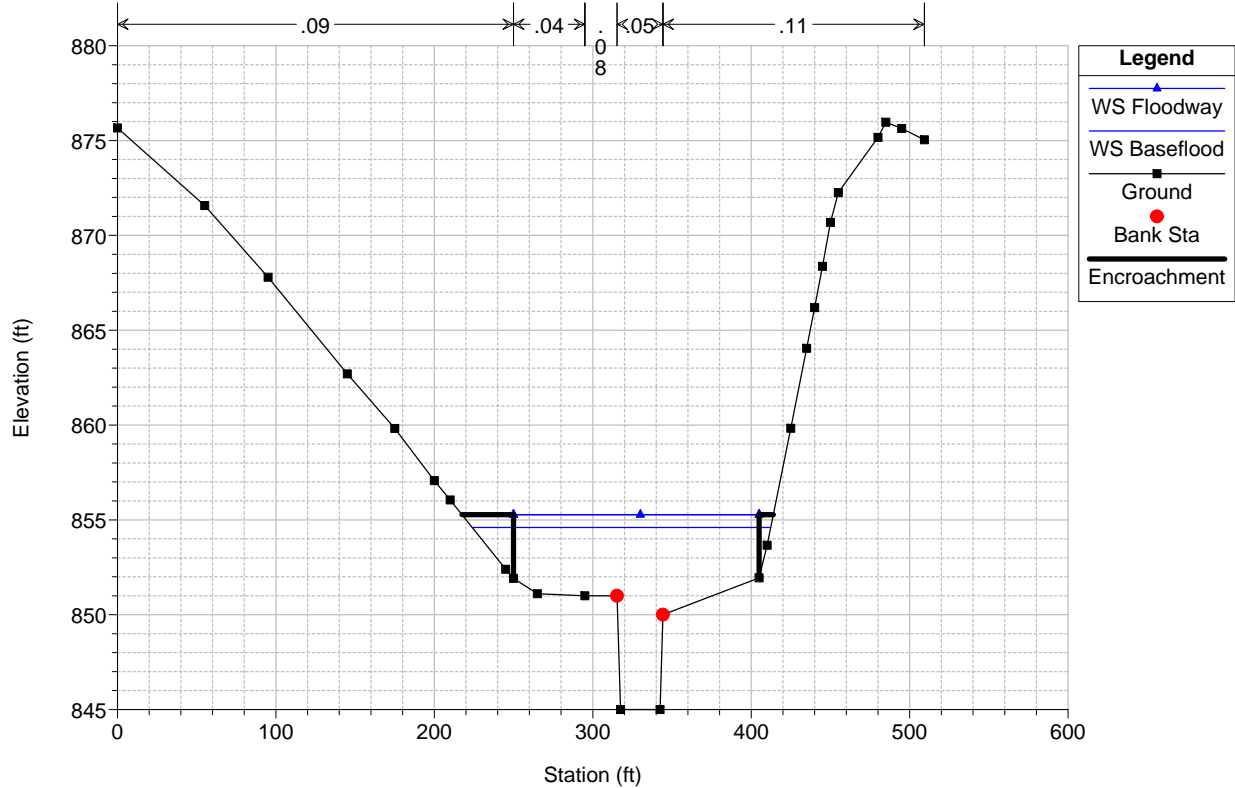
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 28216.32 MS88



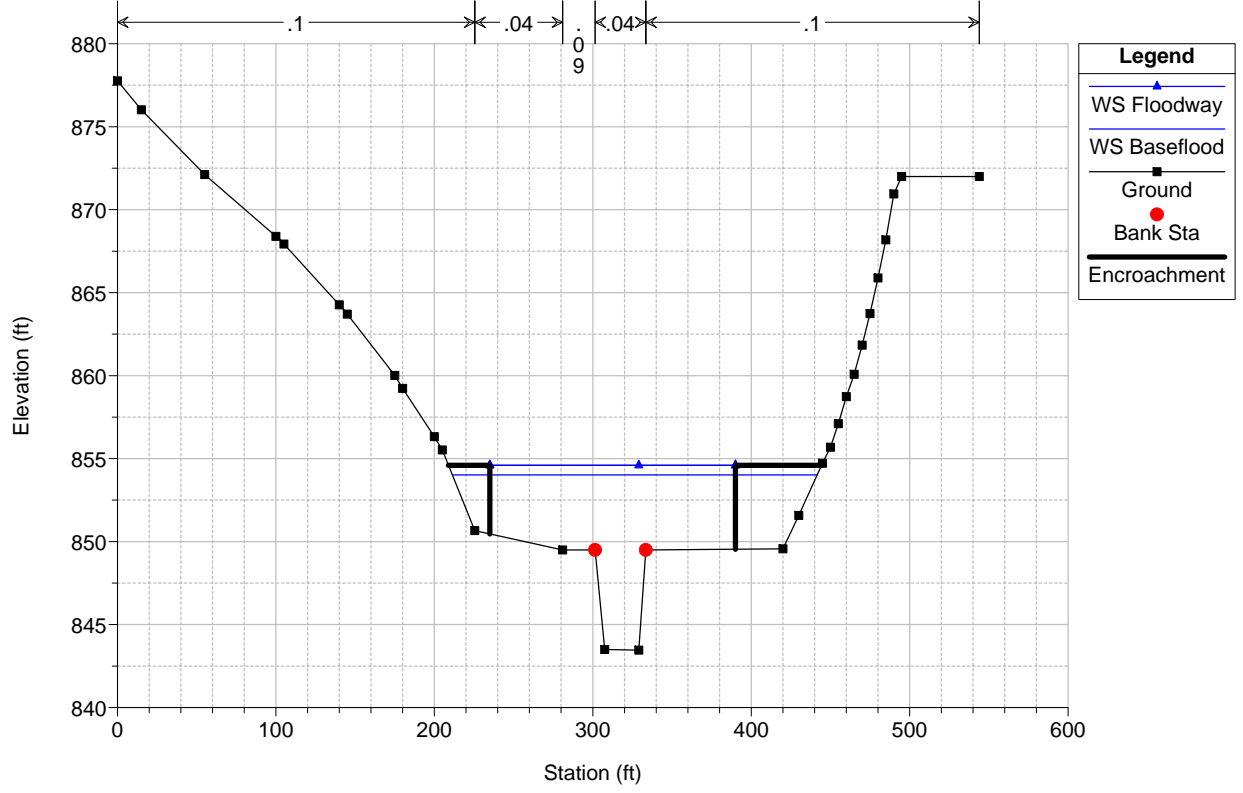
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 27999.84 MS87



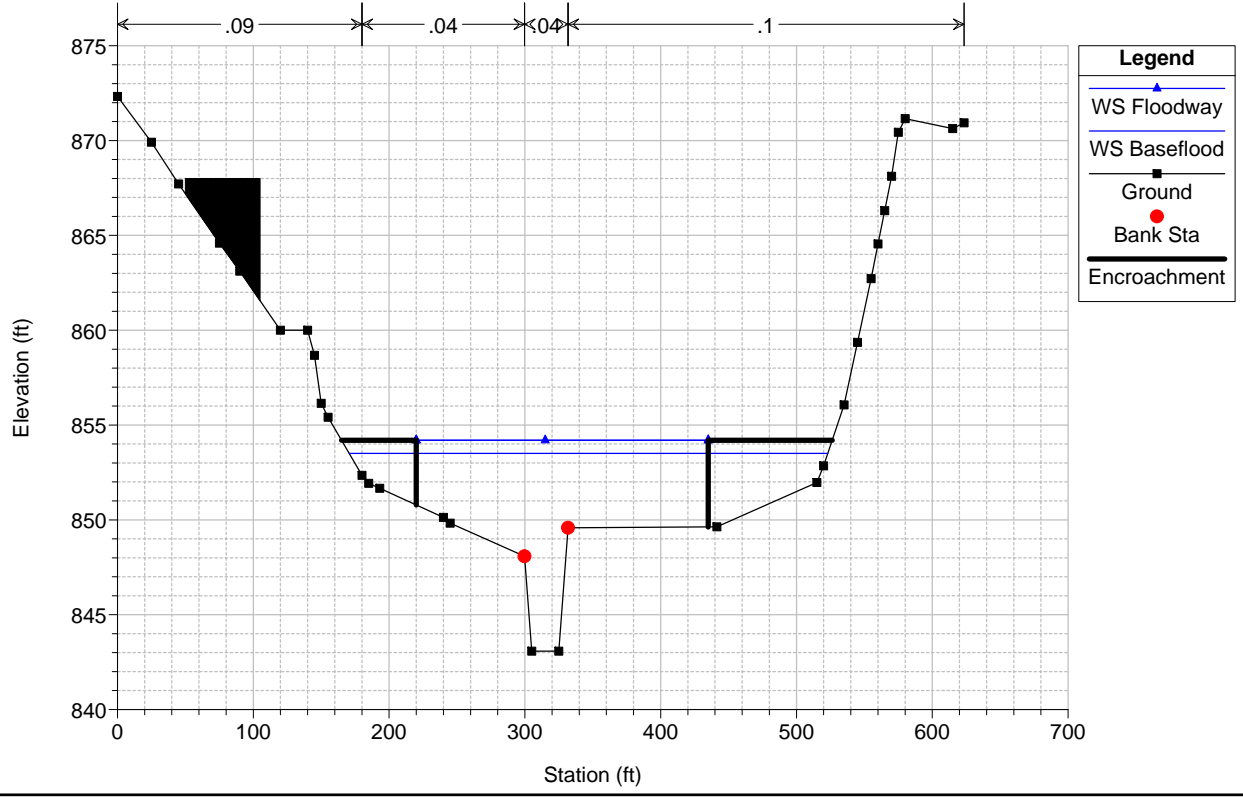
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 27809.76 MS86



Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

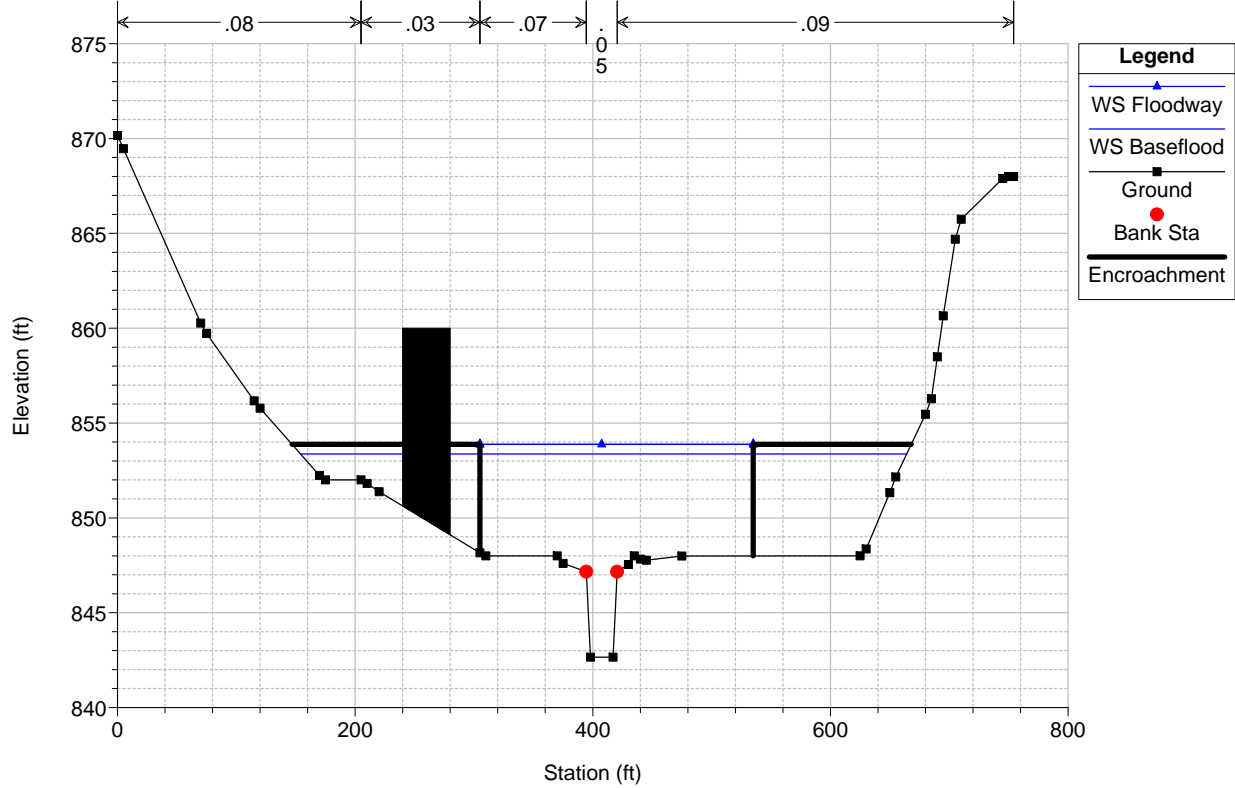
River = MAIN Reach = REACH 2 RS = 27572.16 MS85



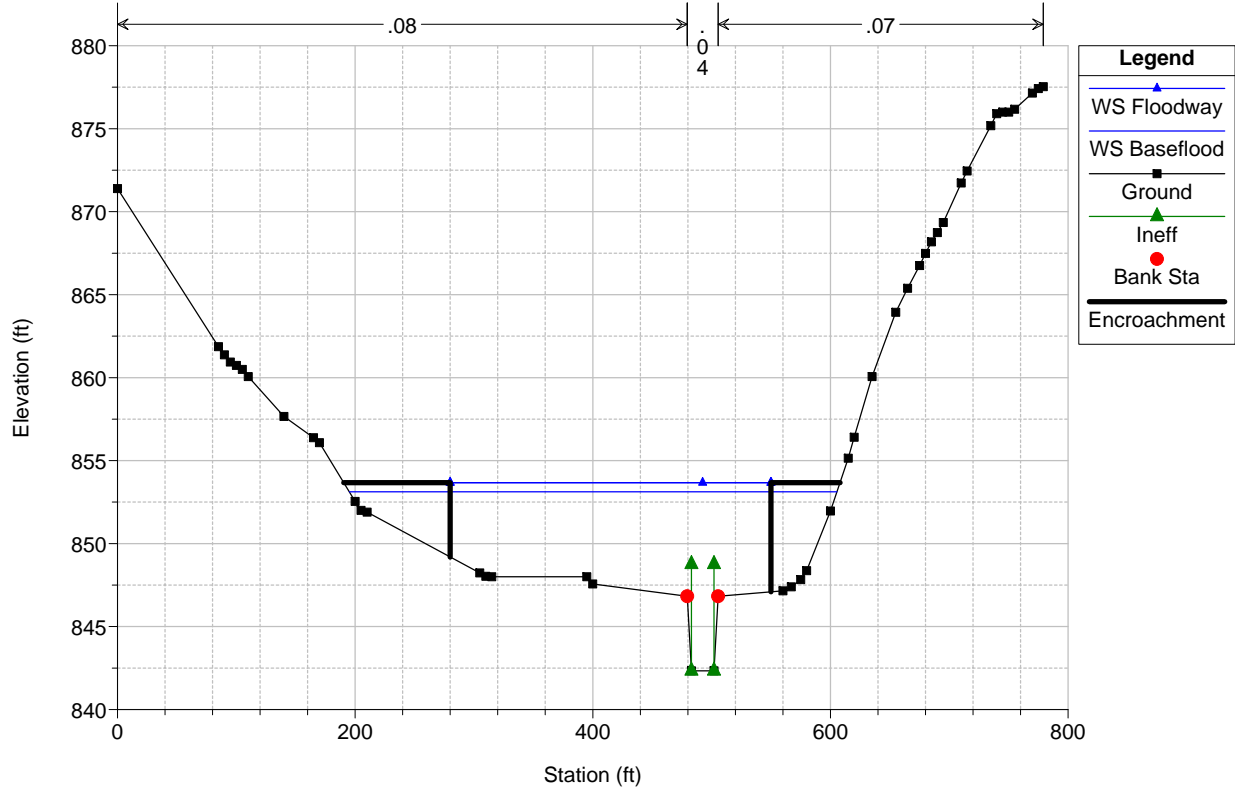


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

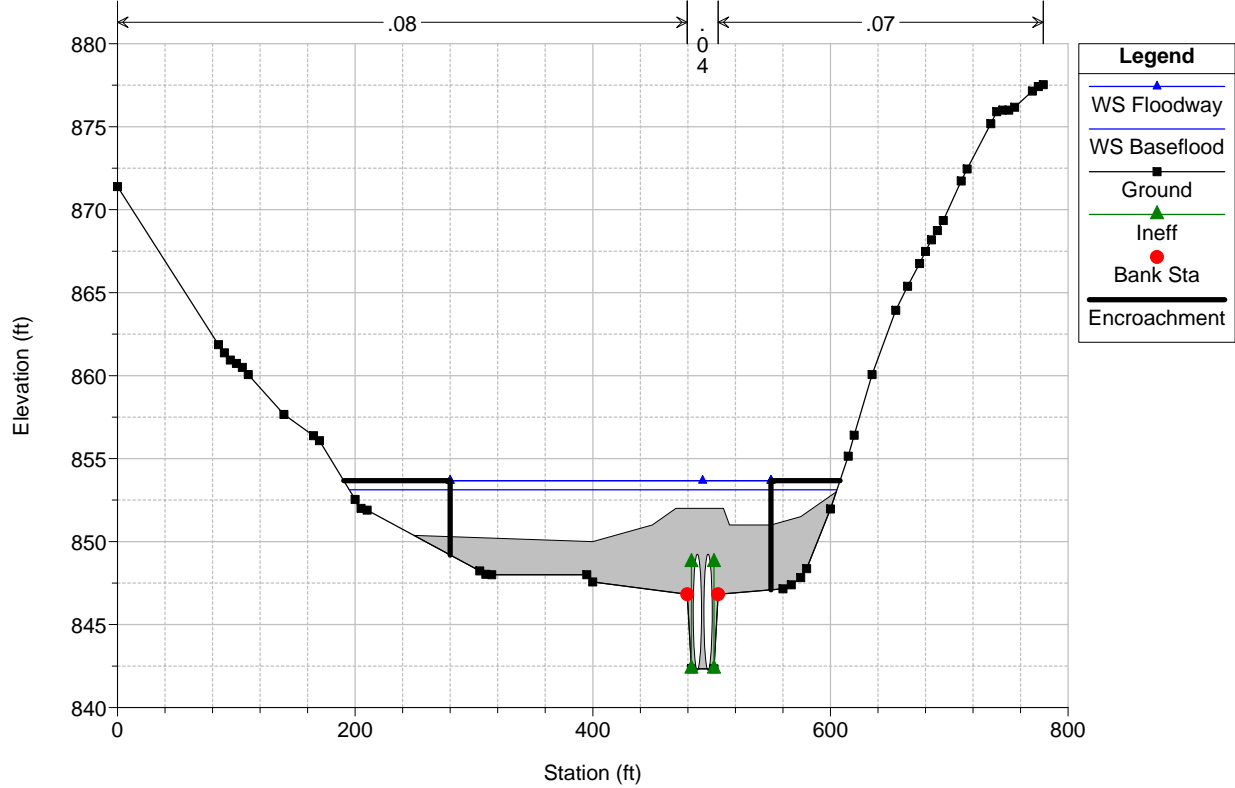
River = MAIN Reach = REACH 2 RS = 27339.84 MS84



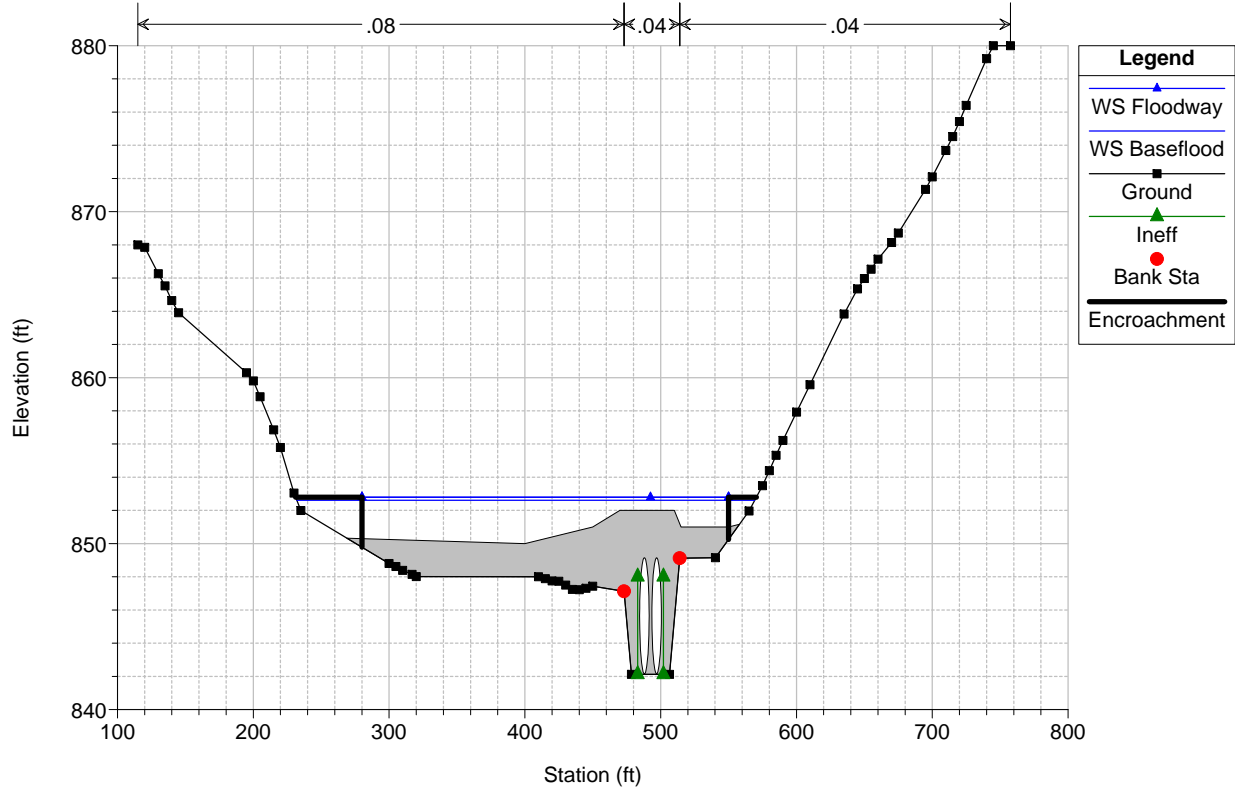
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27155.04 MS83-U/S Private Drive Culvert



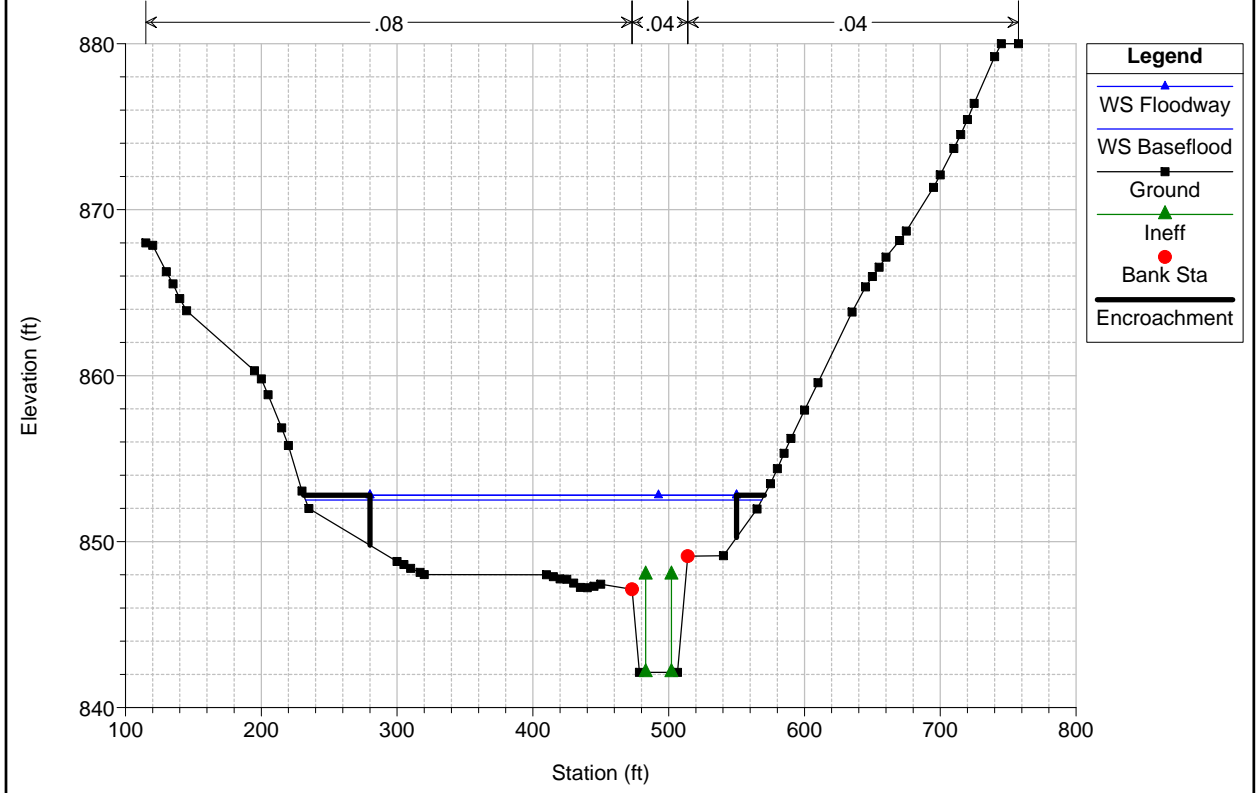
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



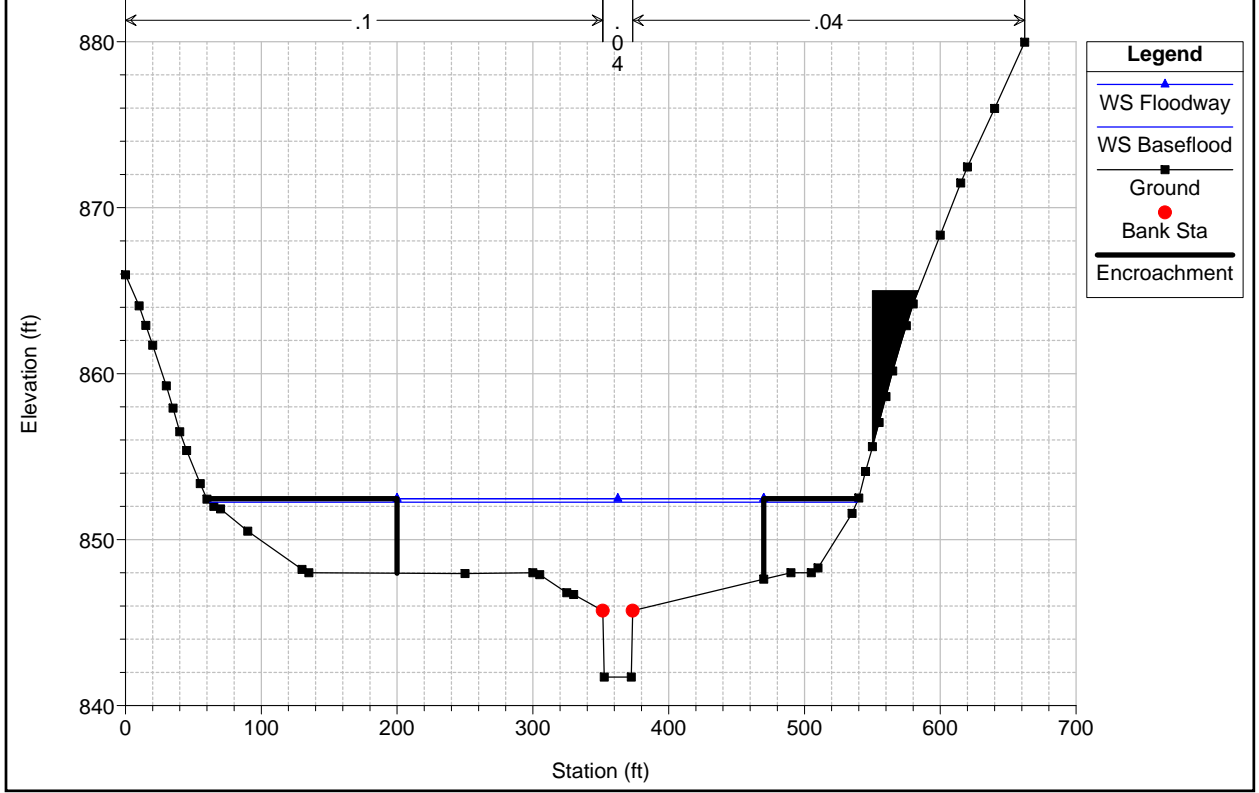
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27091.68 Culv Private Drive Culvert



Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 27033.6 MS82-D/S Private Drive Culvert

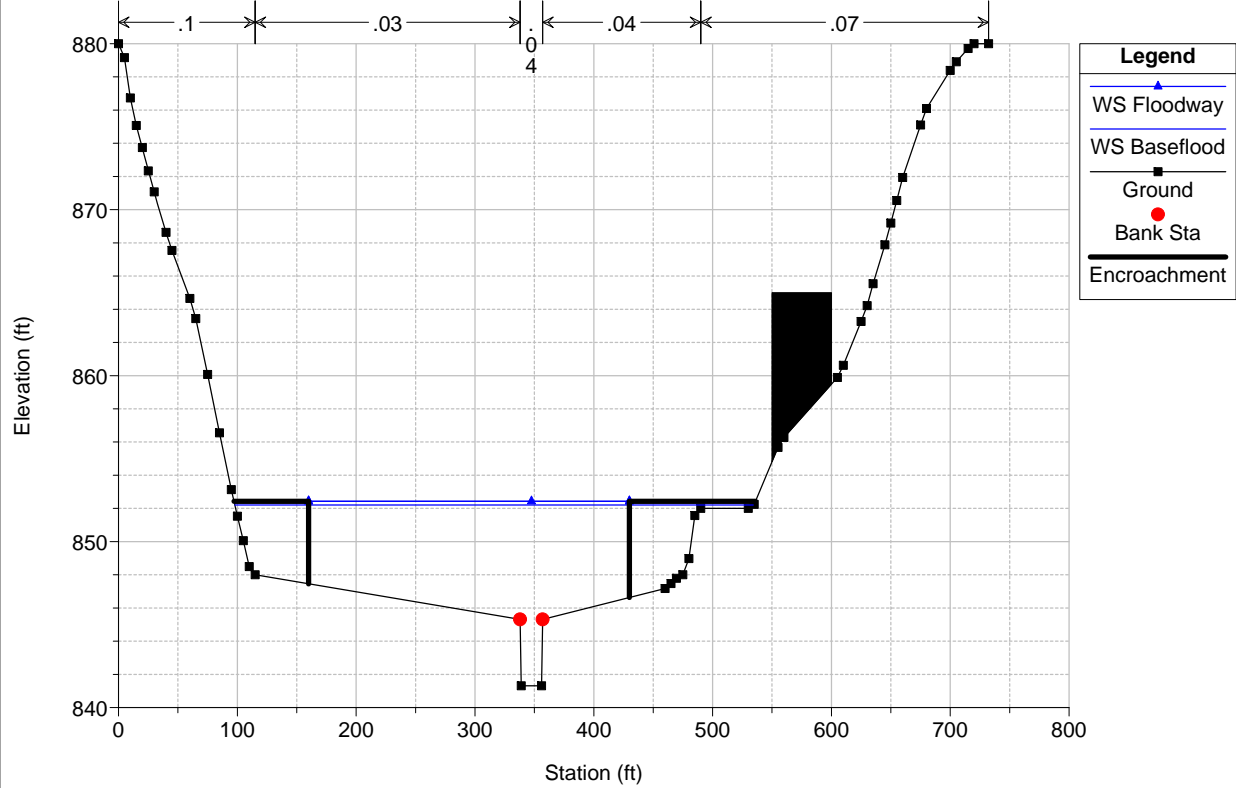


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 26806.56 MS81



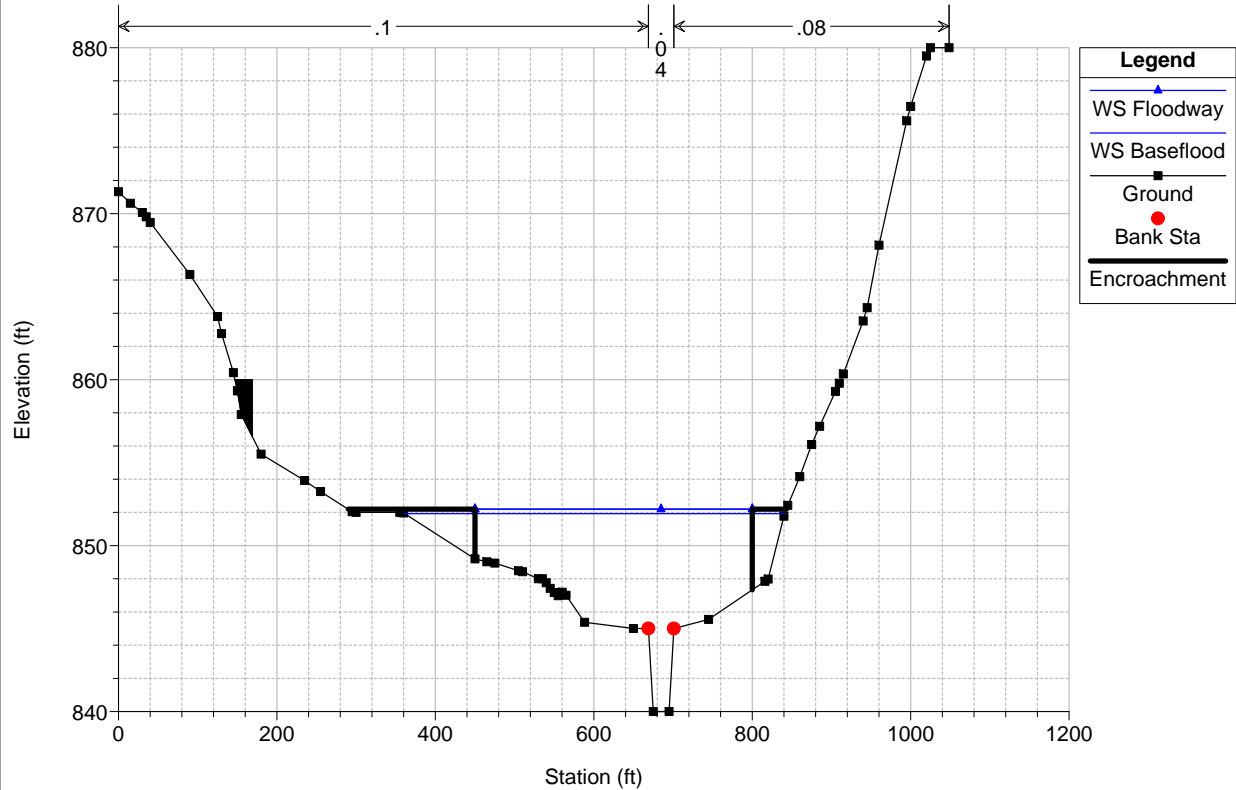
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26574.24 MS80



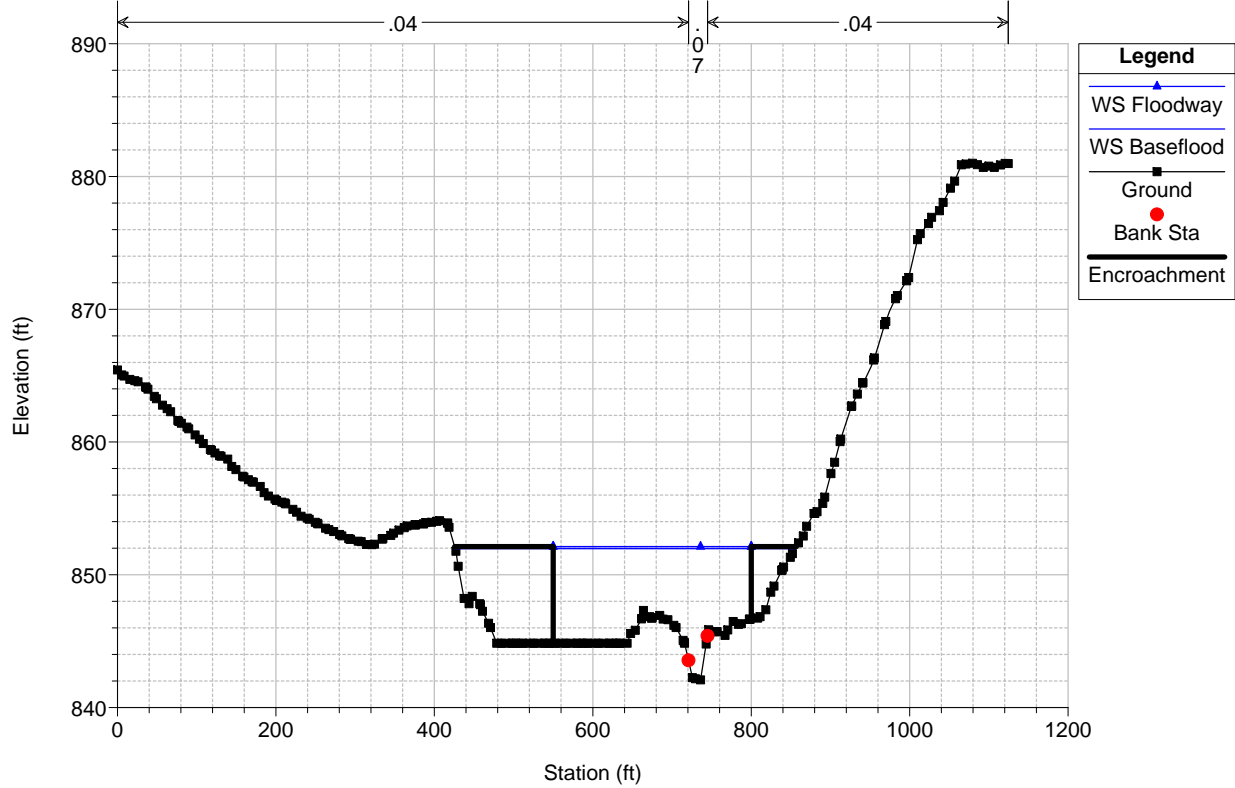
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26400 MS79



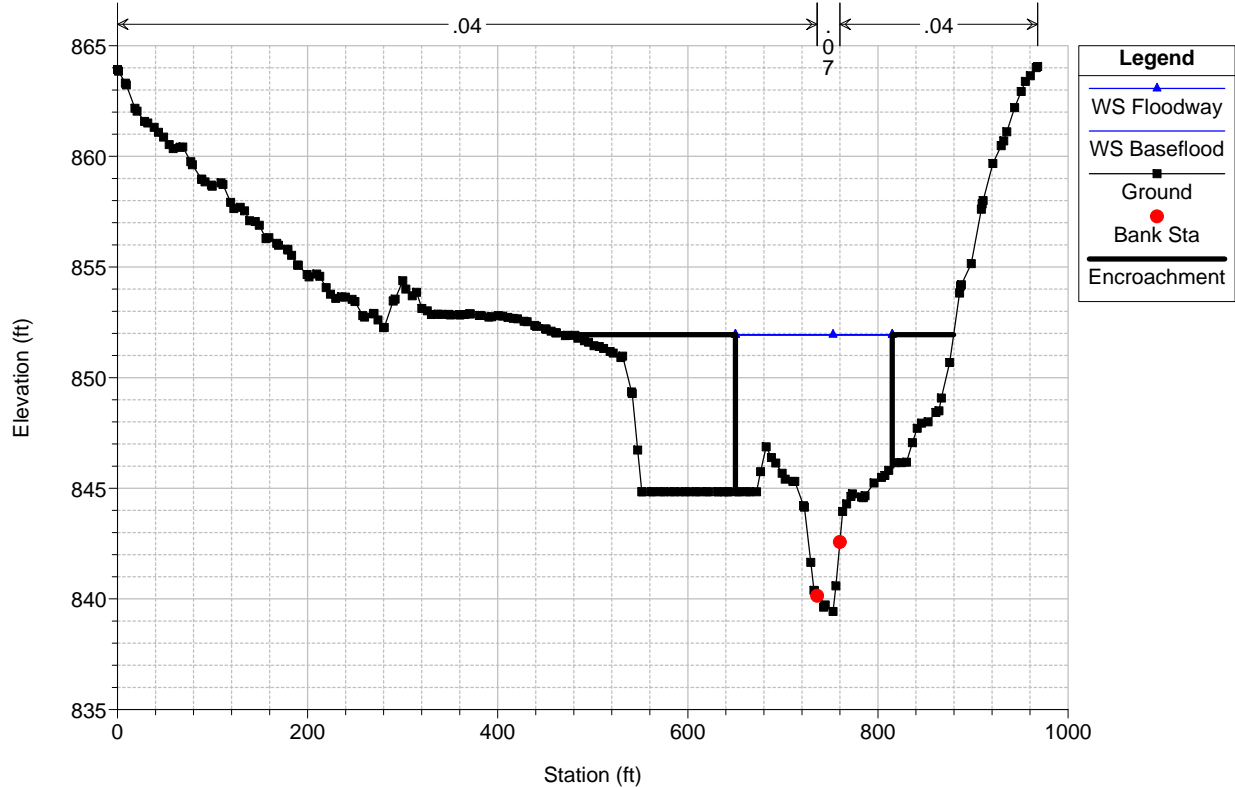
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 26220.48 MS78

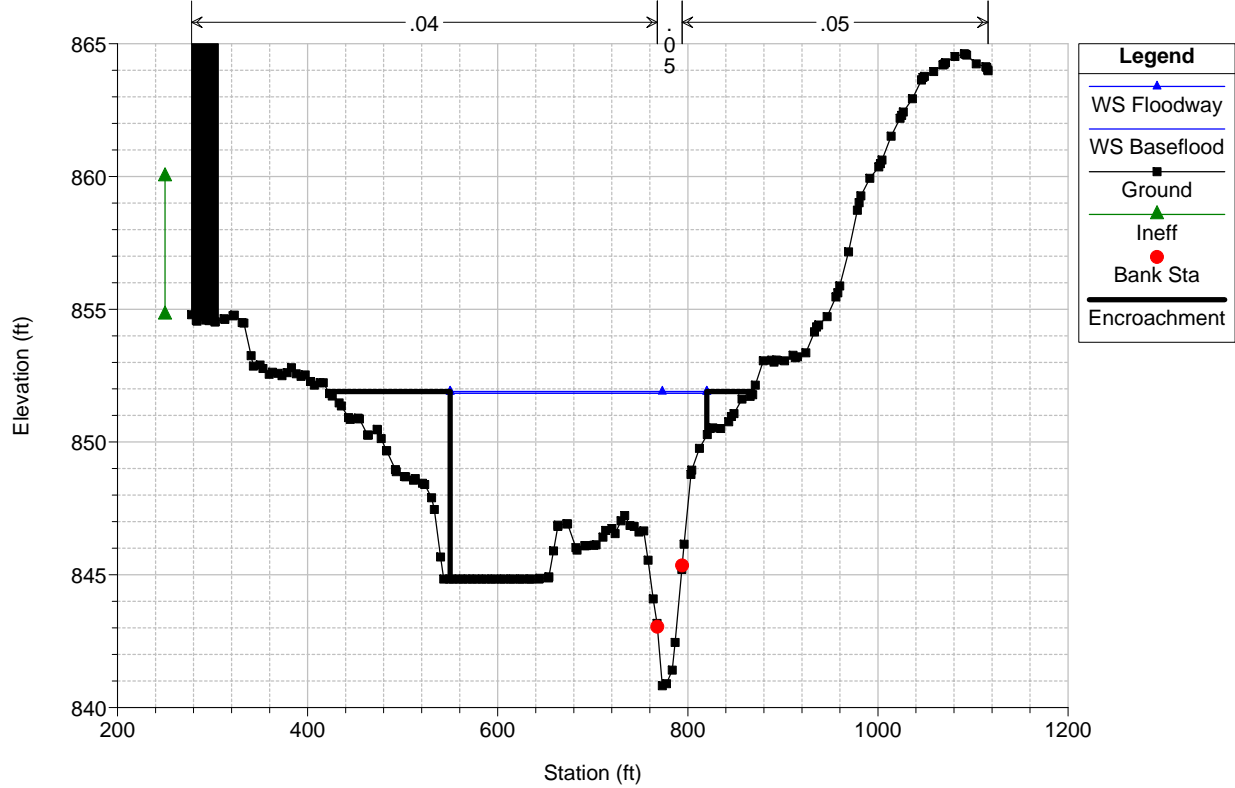


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

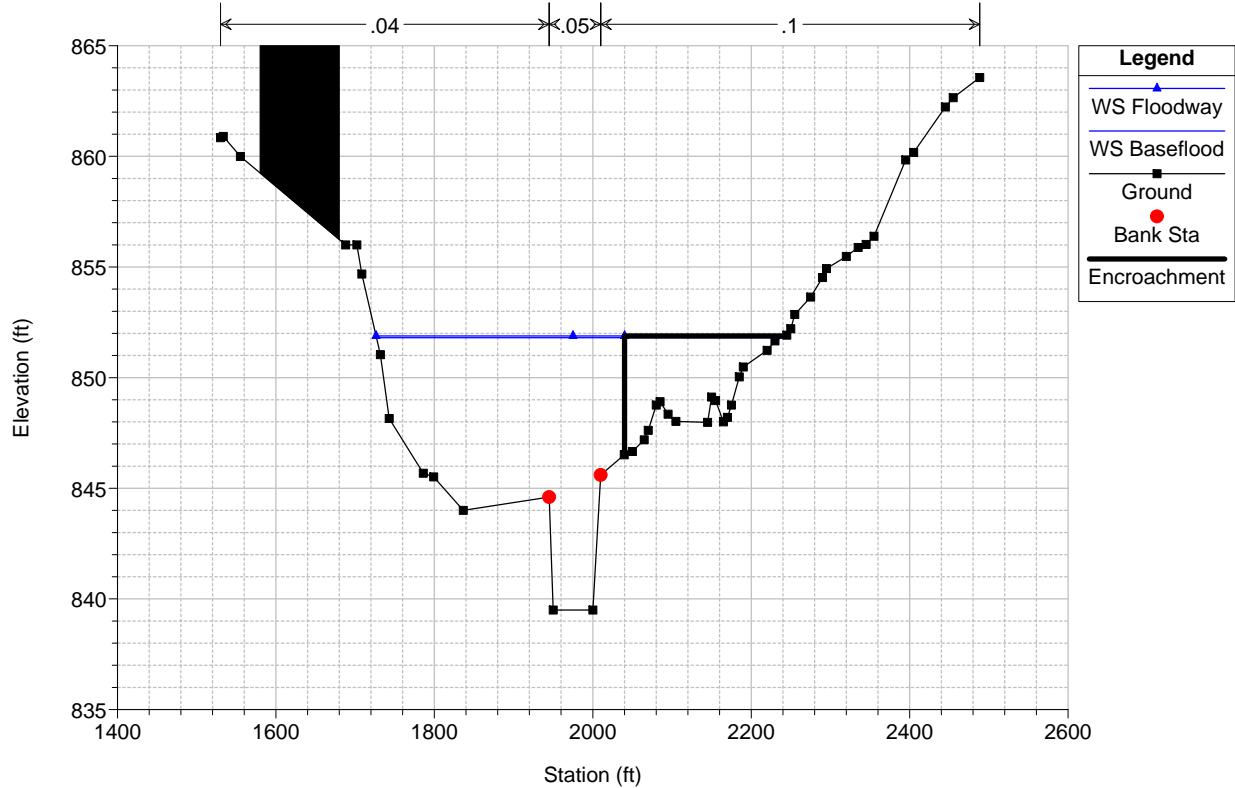
River = MAIN Reach = REACH 2 RS = 26083.2 MS77



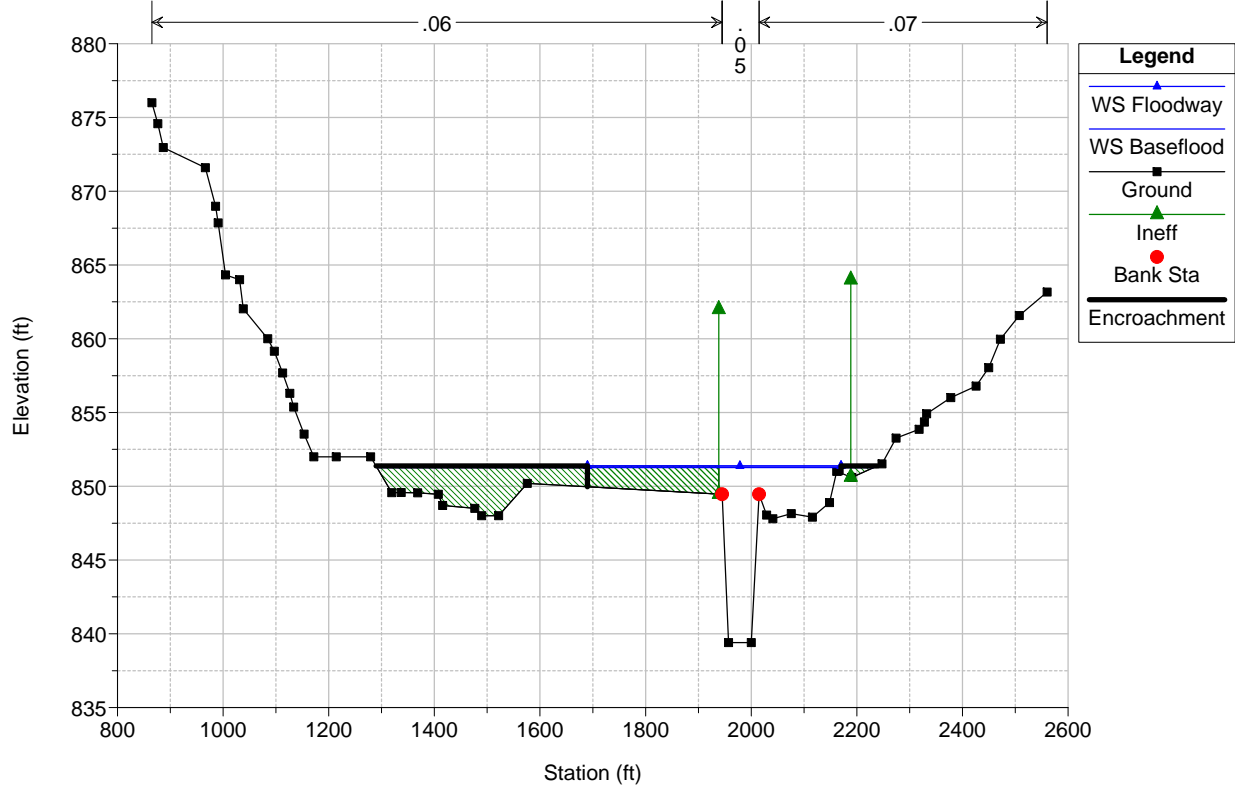
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25893.12 MS76



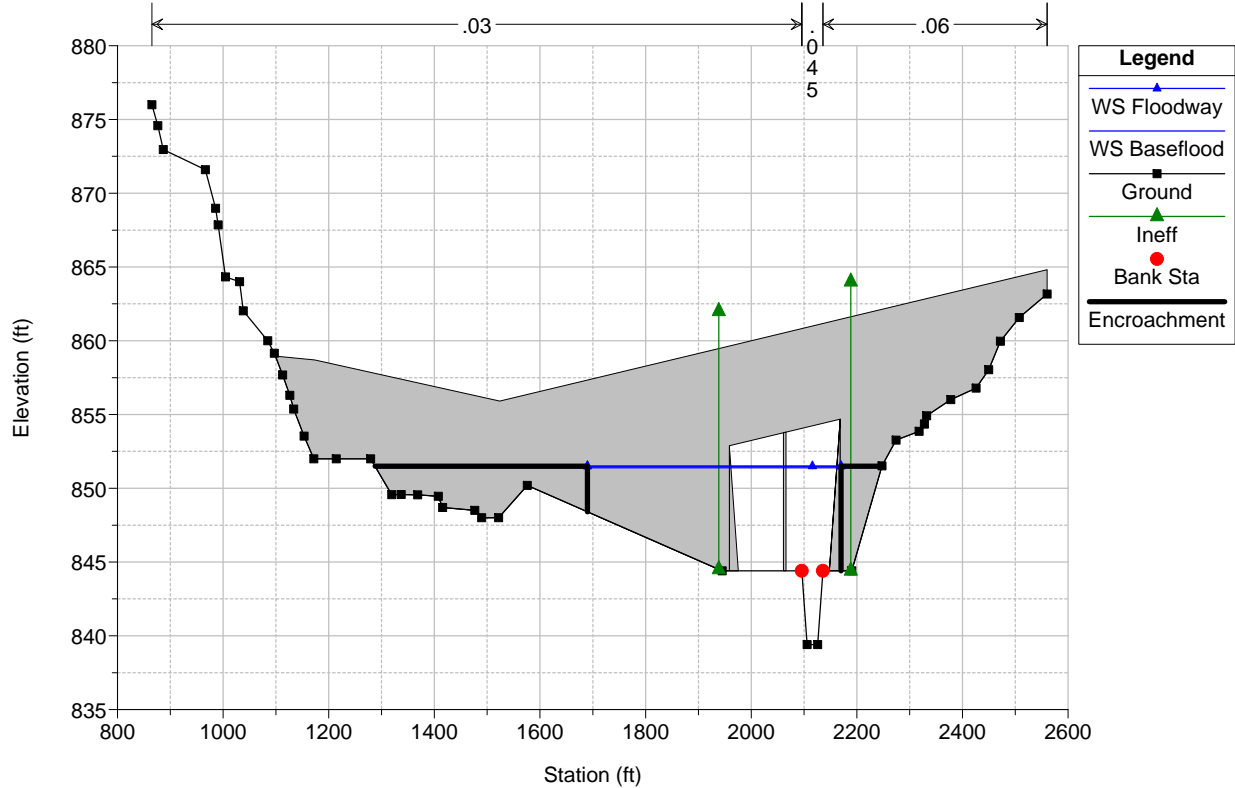
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25687.2 MS75



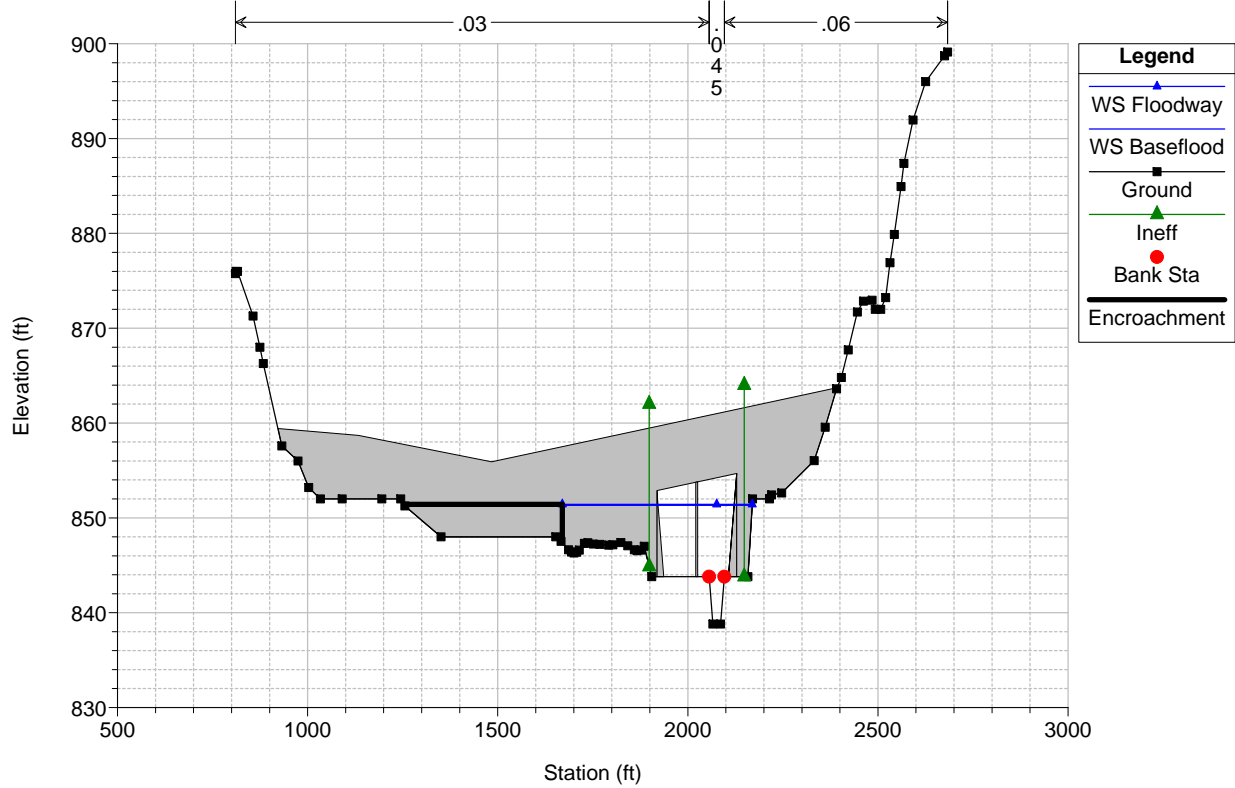
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25549.36 MS74-U/S I85 Culvert



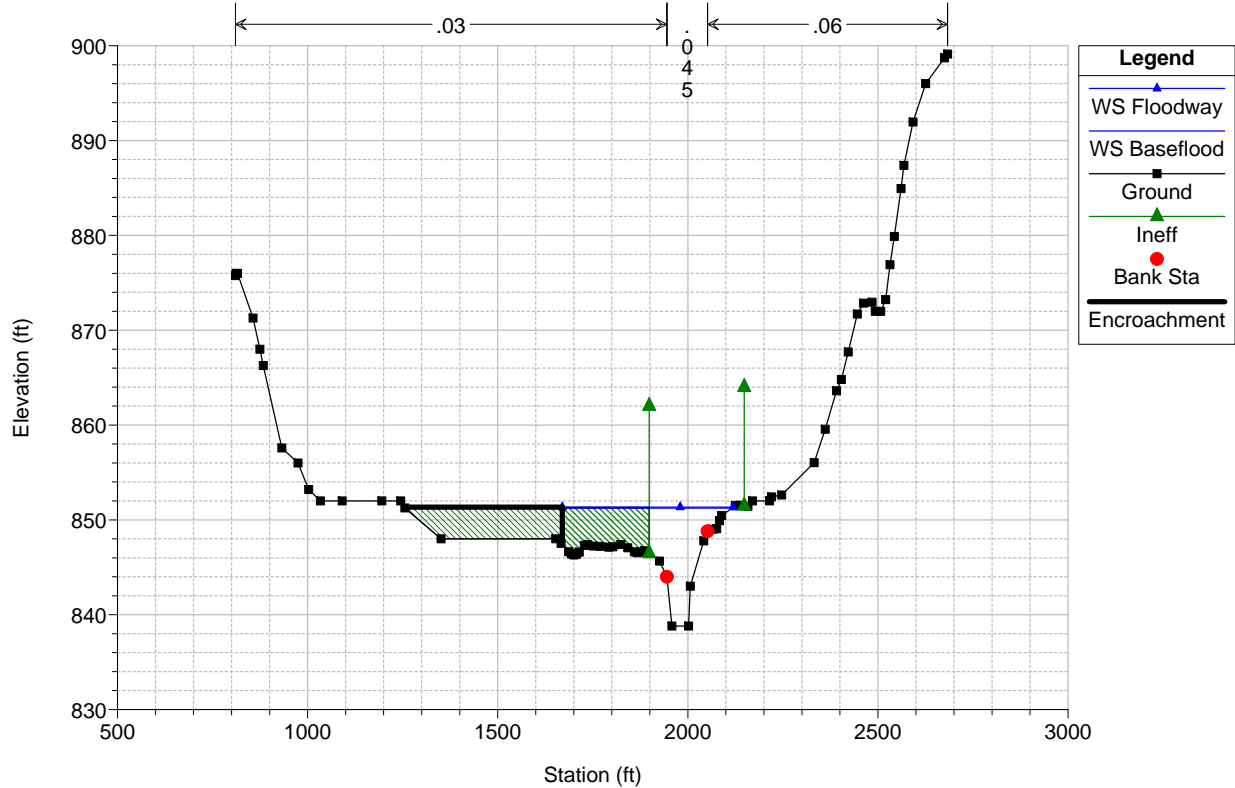
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 BR Interstate 85 Culvert



Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25460.16 BR Interstate 85 Culvert



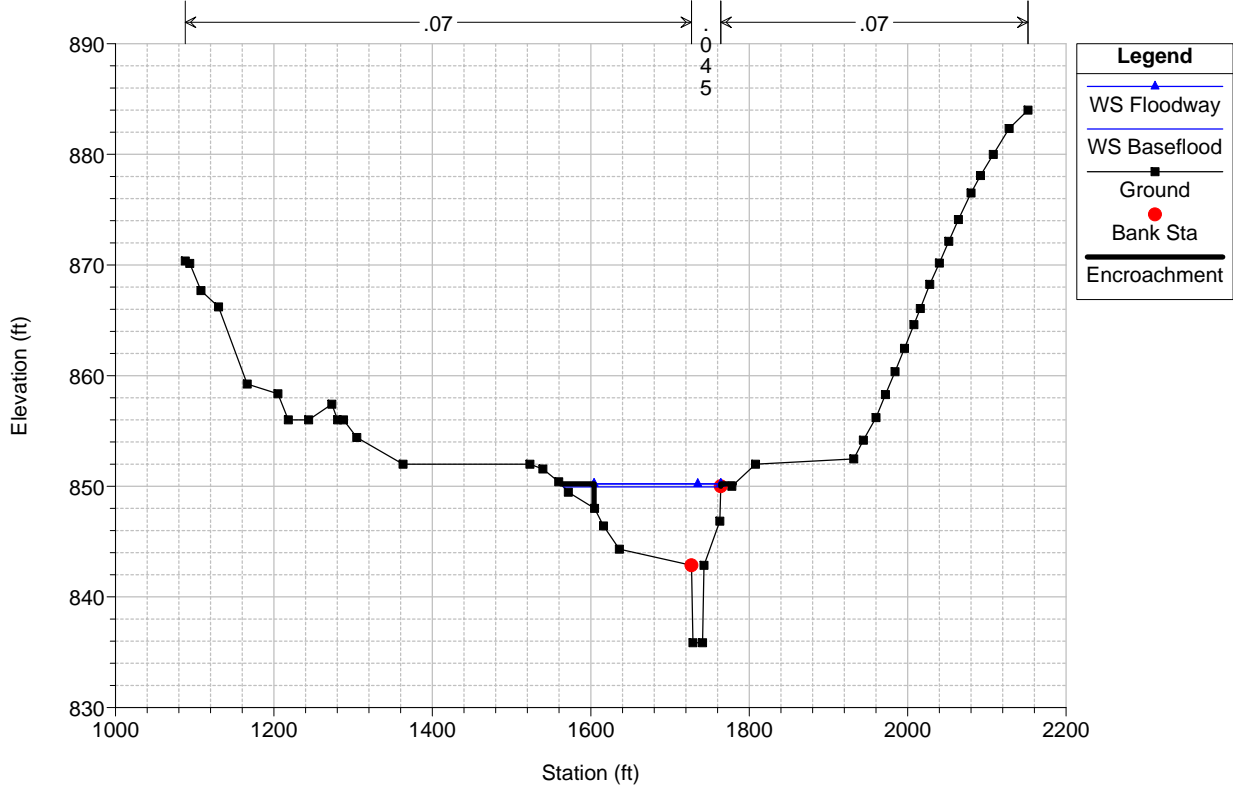
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 25370.96 MS73-D/S I85 Culvert





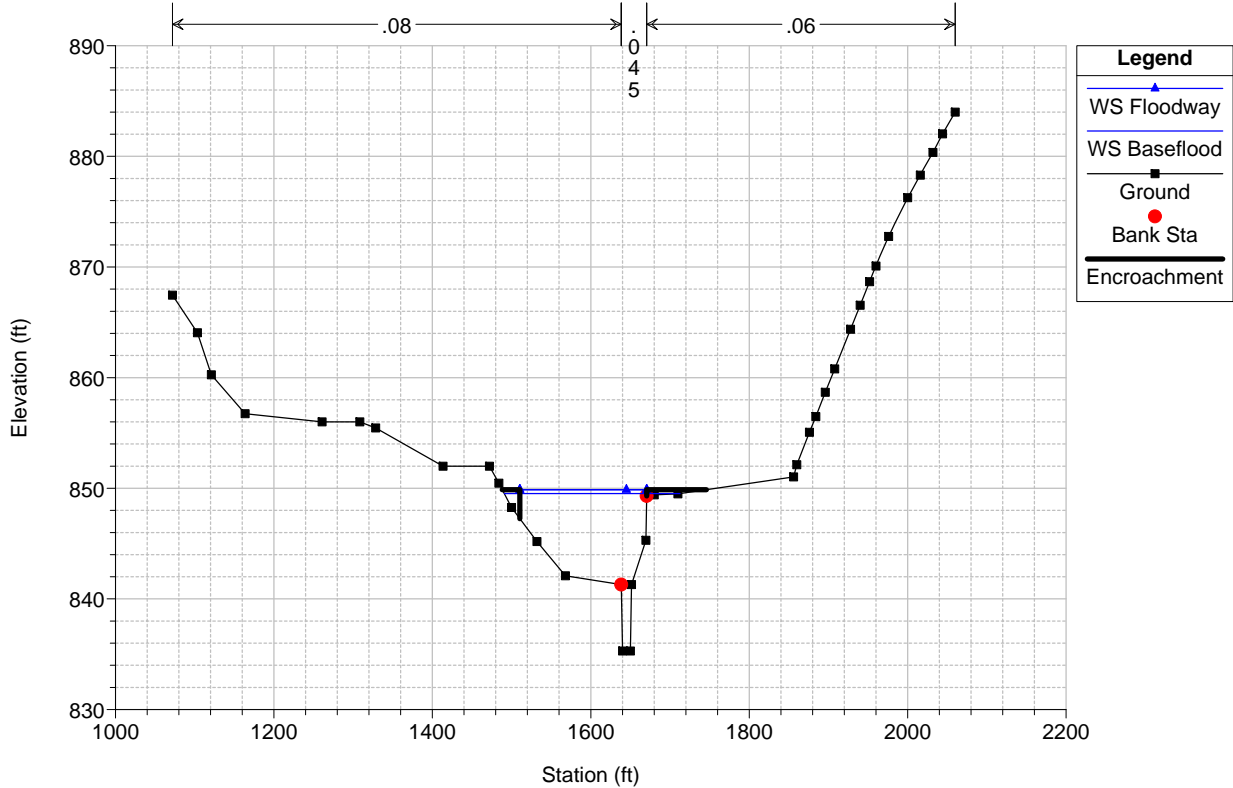
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 24668.16 MS72

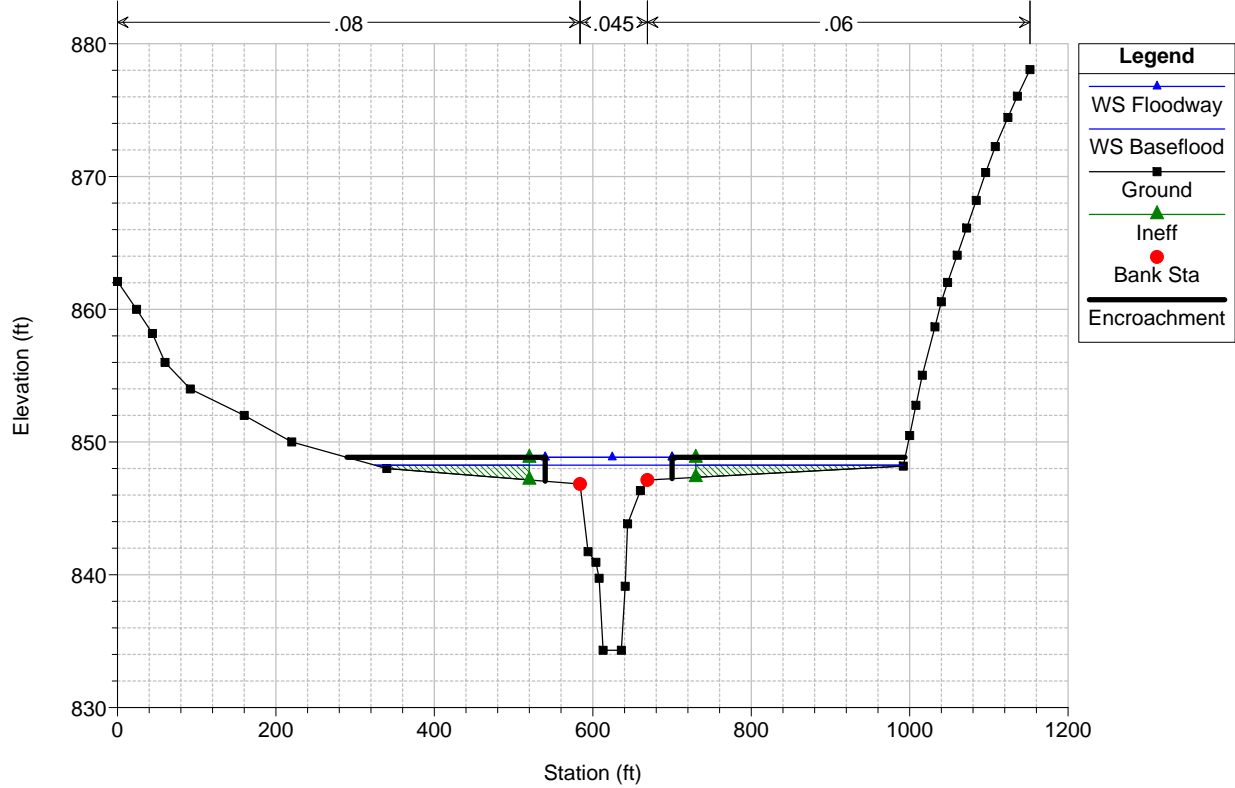


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

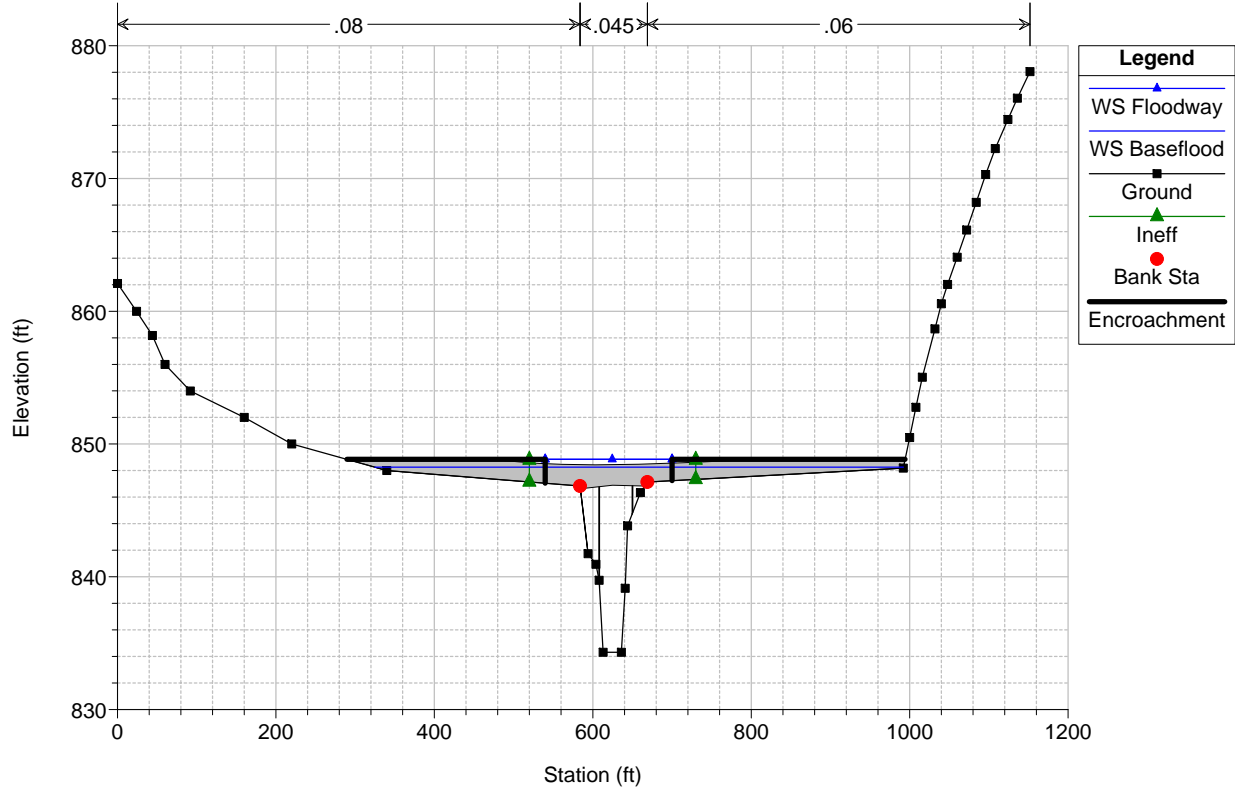
River = MAIN Reach = REACH 2 RS = 24541.44 MS71



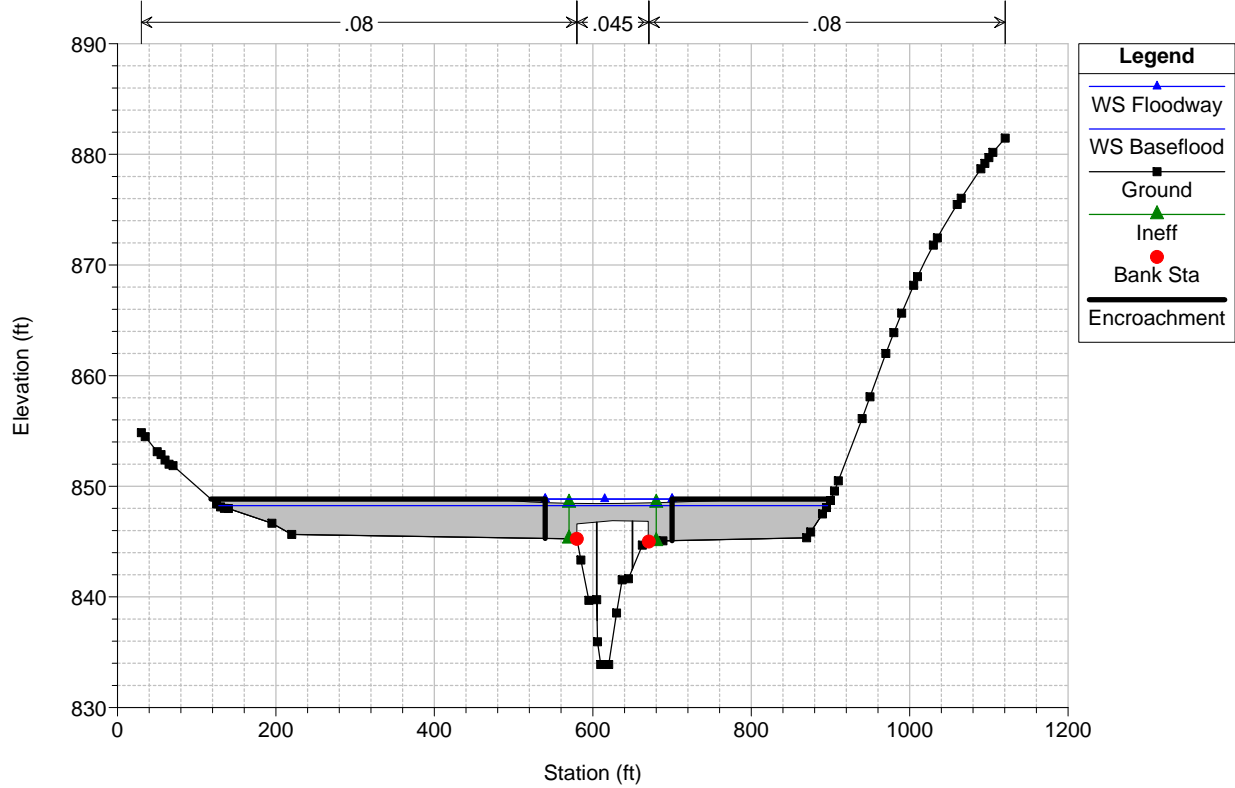
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24314.4 MS70-U/S Honbarrier Drive



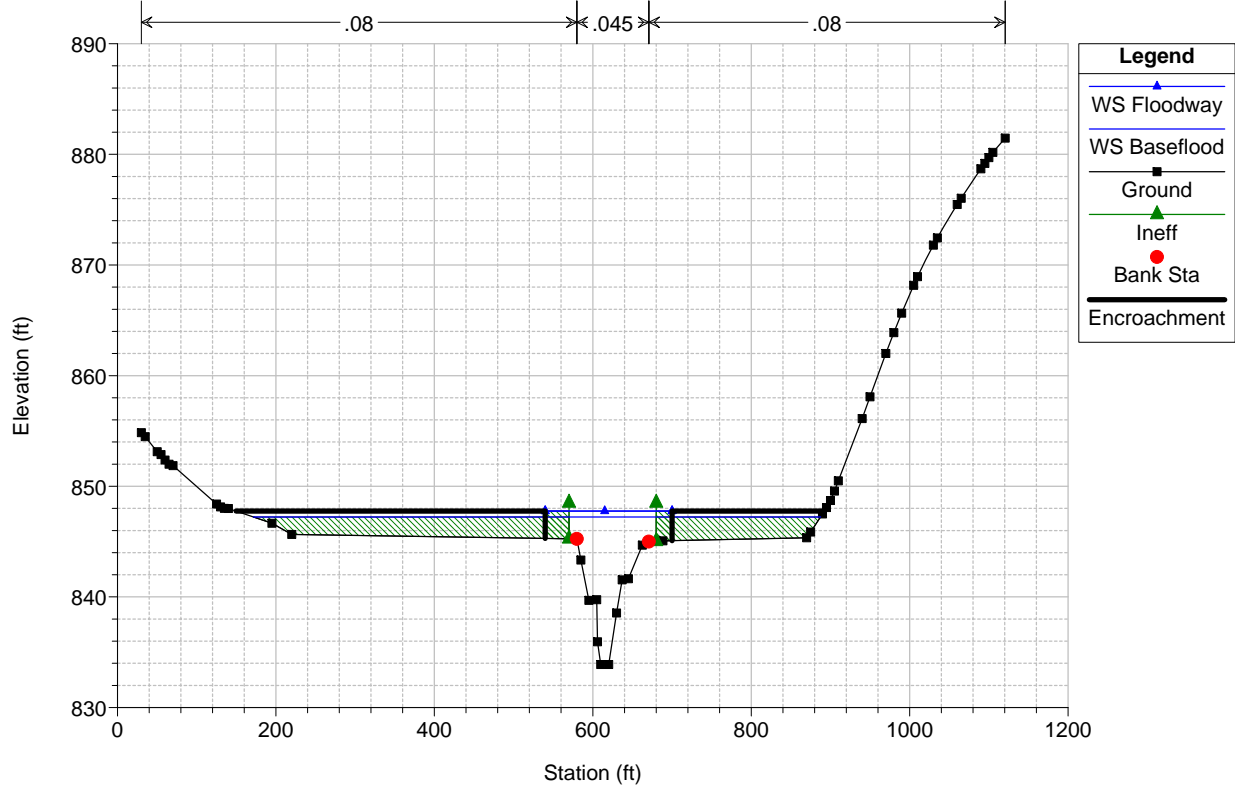
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive



Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24277.44 BR Honbarrier Drive

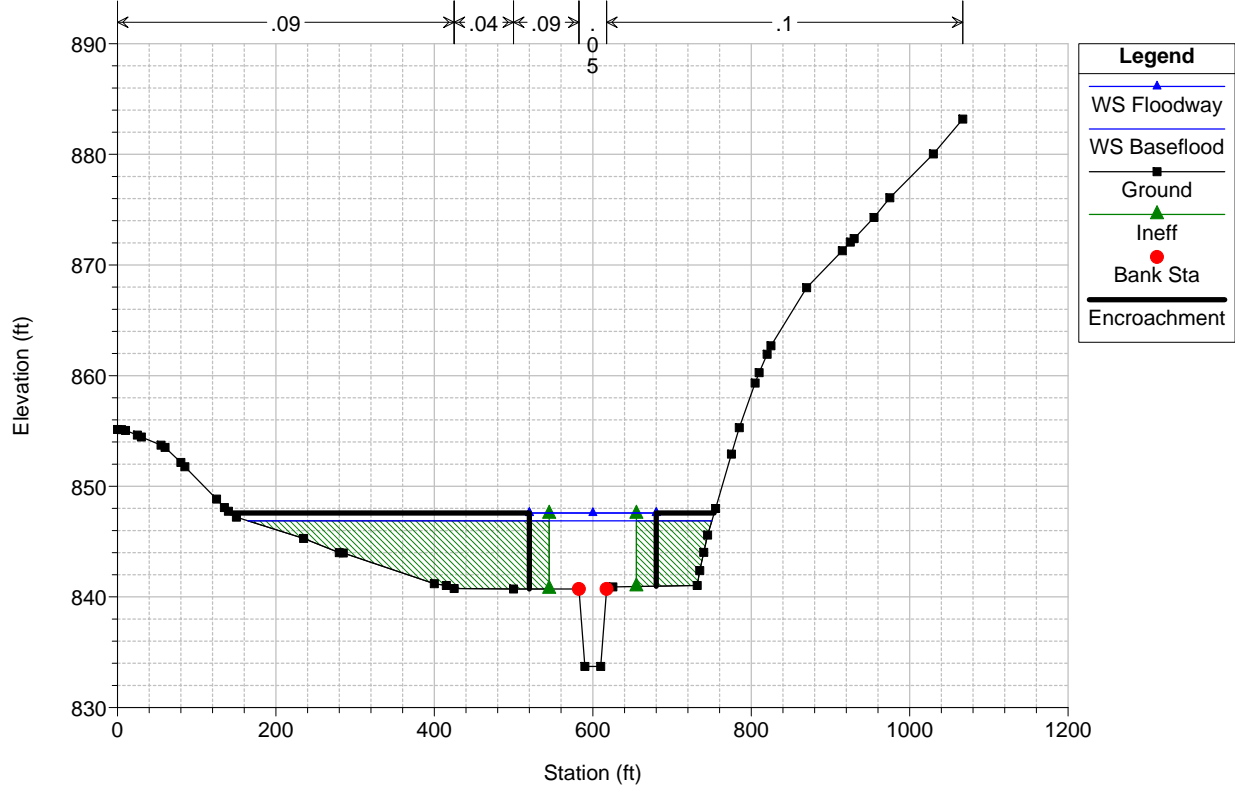


Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019  
 River = MAIN Reach = REACH 2 RS = 24240.48 MS69-D/S Honbarrier Drive



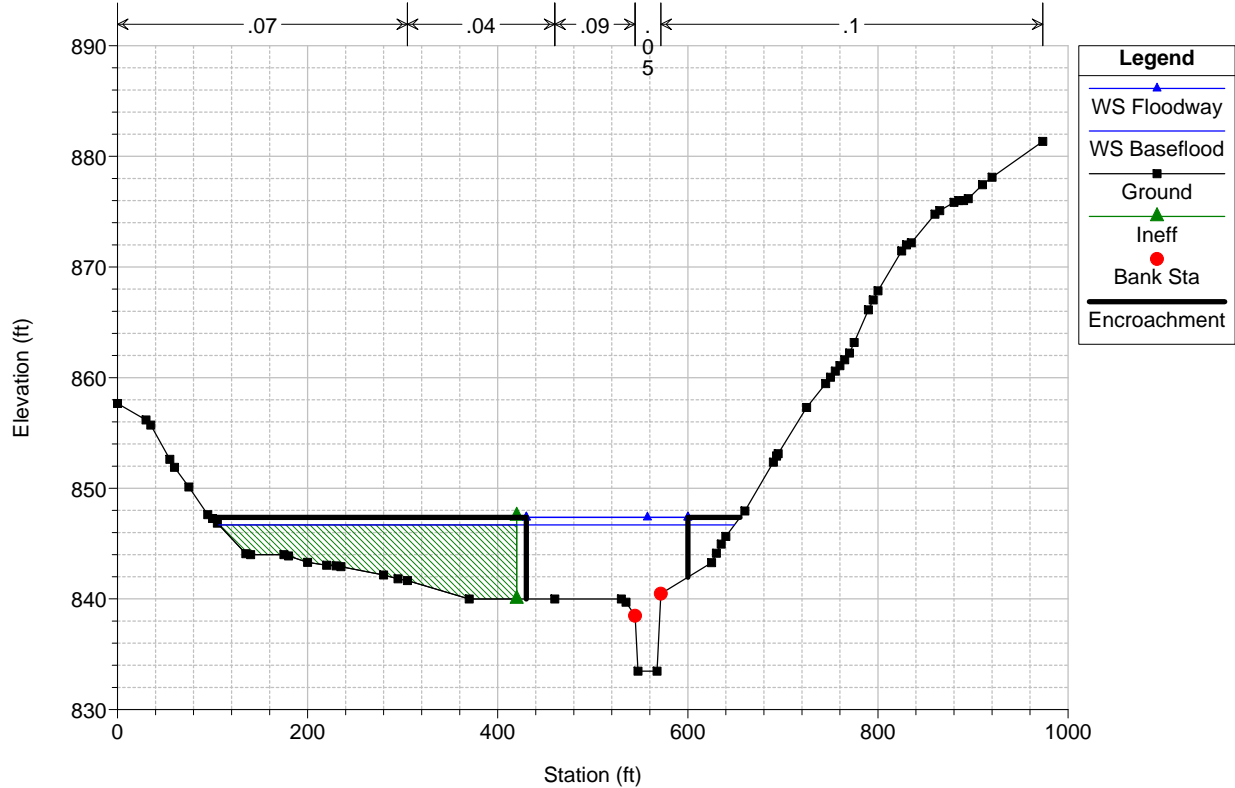
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 24156 MS68



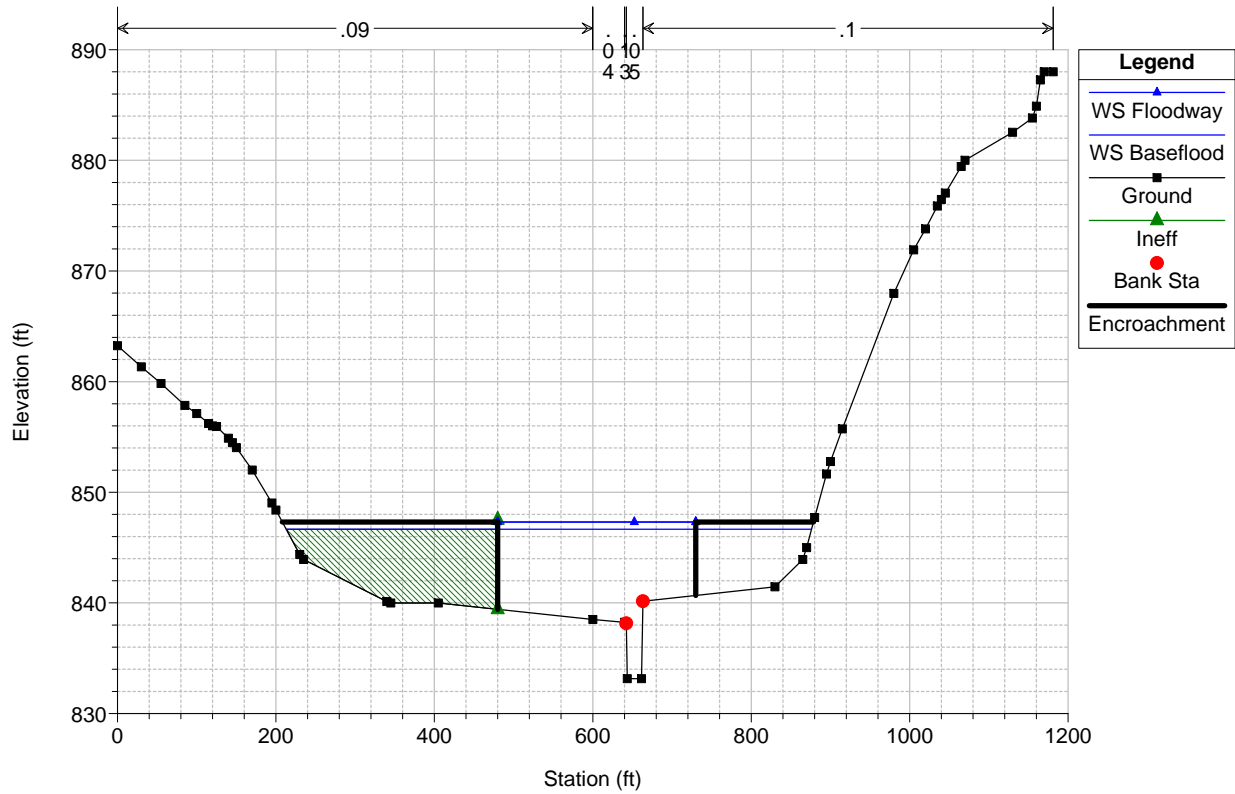
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 24029.28 MS67



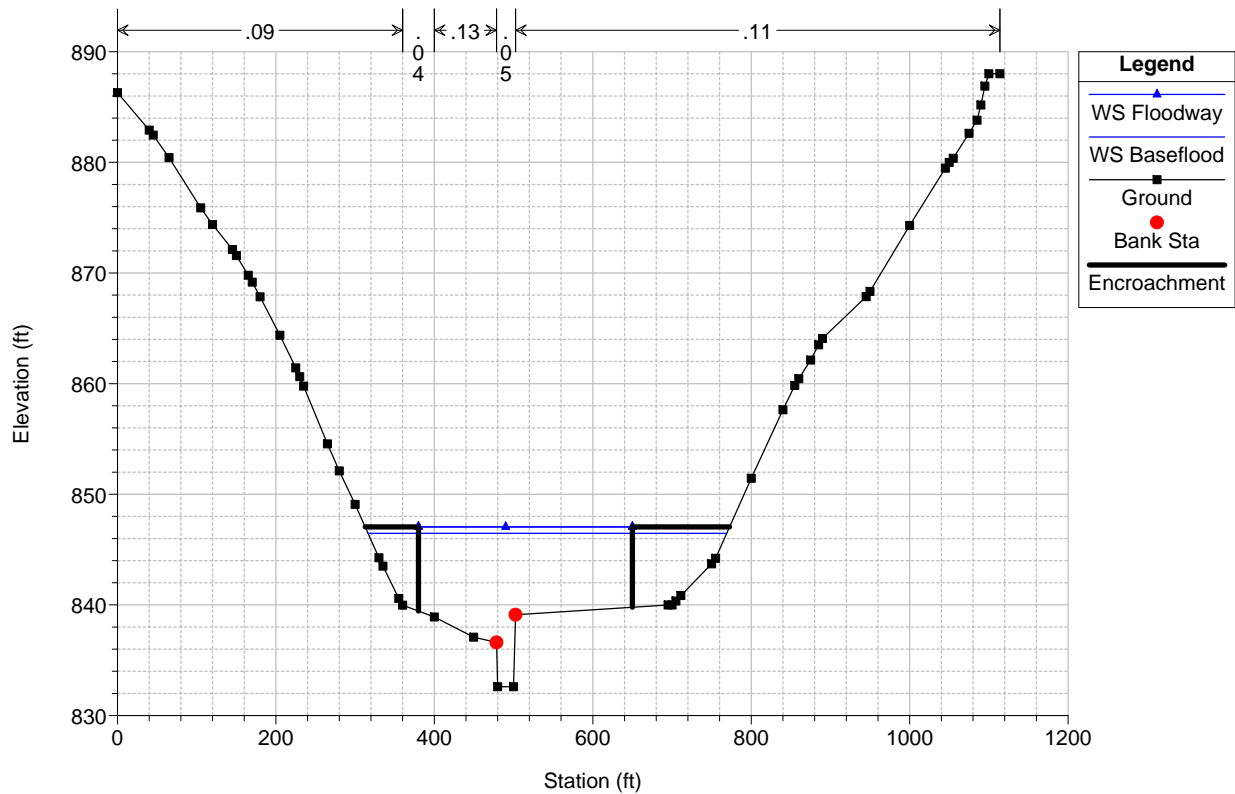
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23860.32 MS66



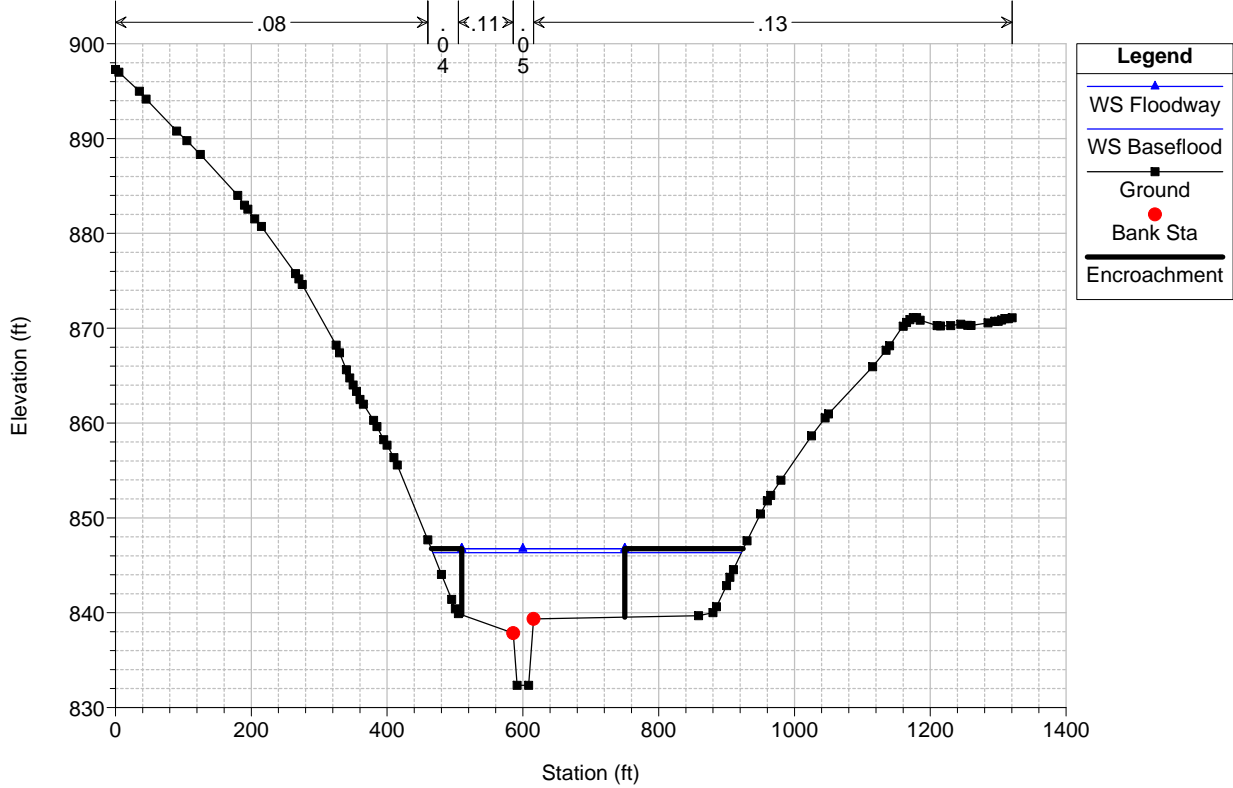
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23596.32 MS65



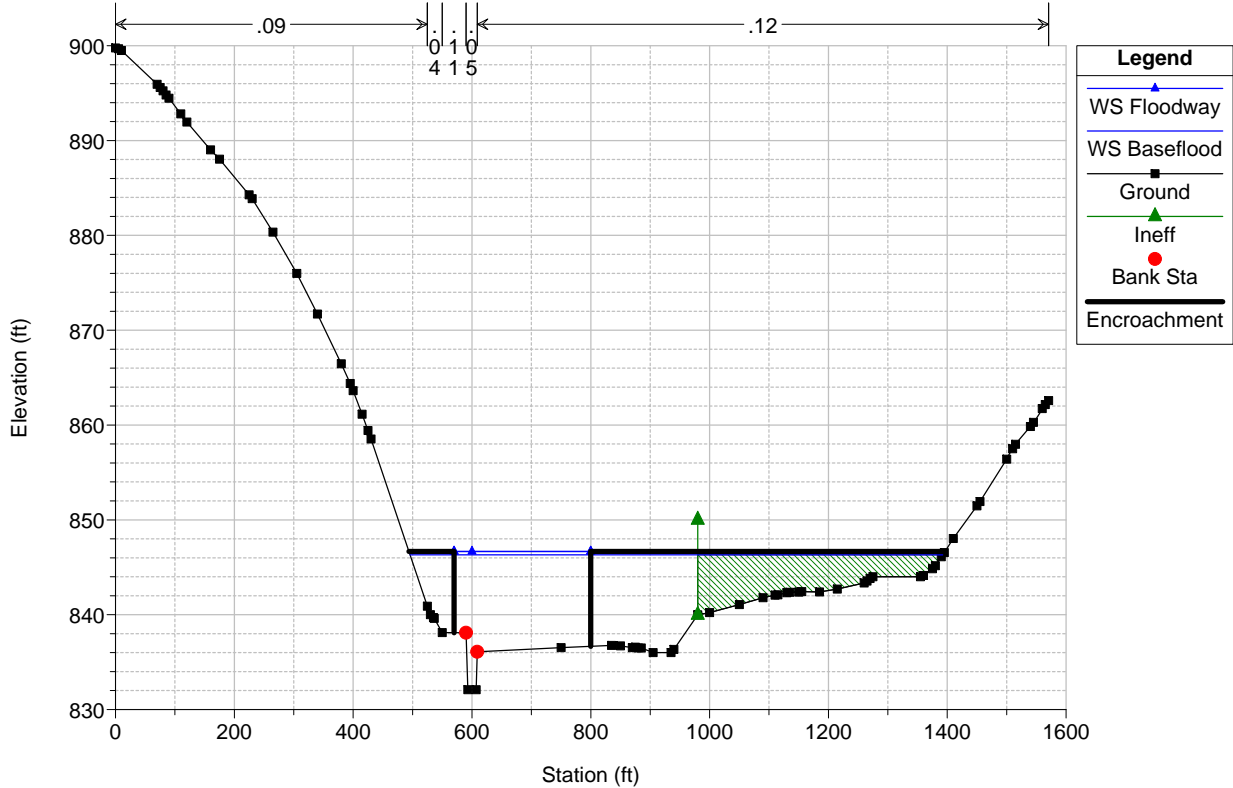
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23453.76 MS64



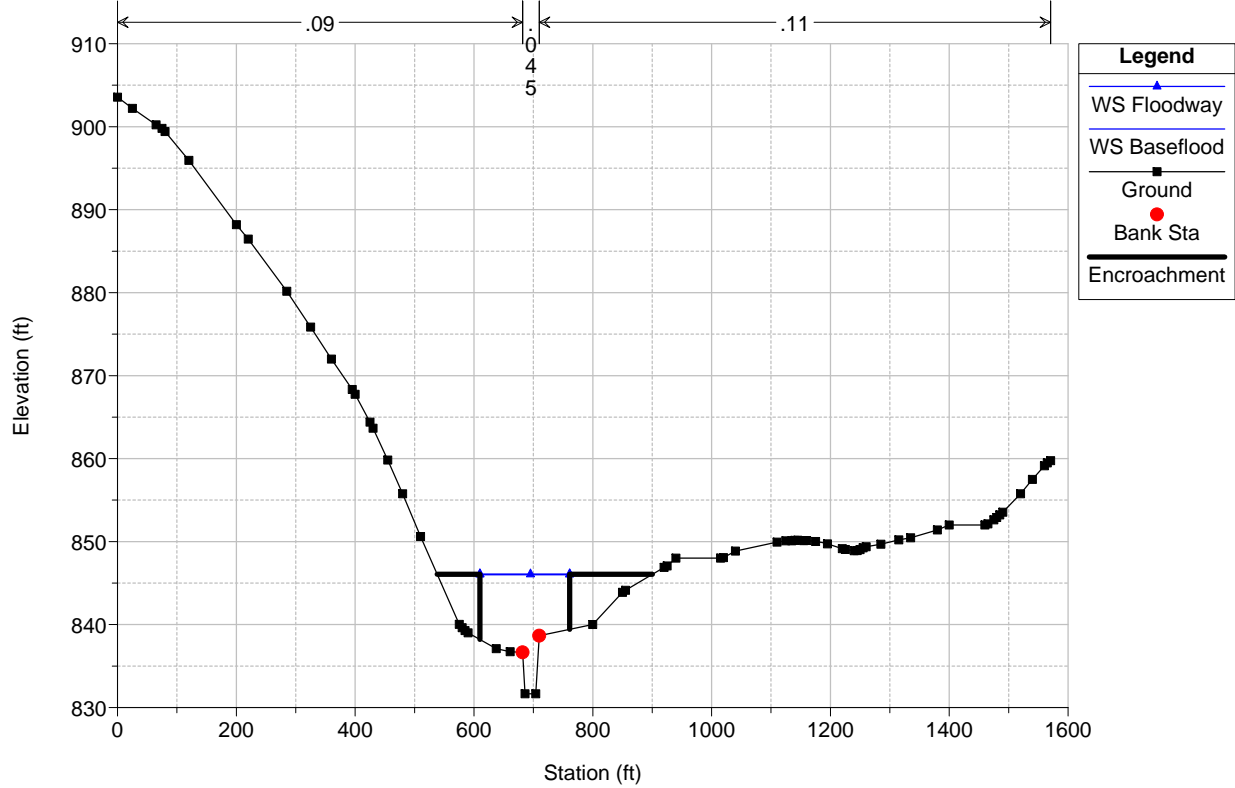
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23327.04 MS63



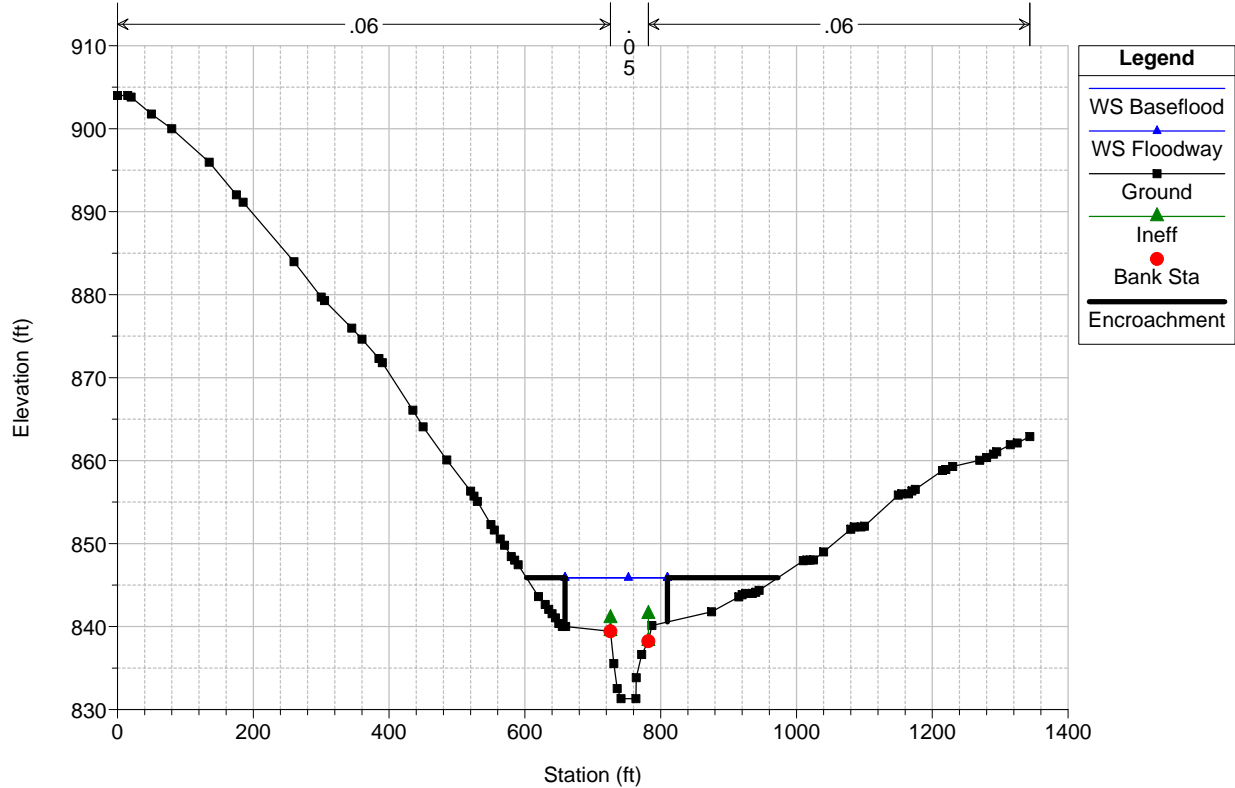
Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 23110.56 MS62



Rocky Creek\_CLOMR Plan: Proposed Floodway 1/18/2019

River = MAIN Reach = REACH 2 RS = 22946.88 MS61-U/S Garlington Road



HEC-RAS Plan: Proposed Flo River: MAIN Reach: REACH 2

Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	29985.12	Baseflood	860.62		861.56	436.47	917.91	3691.44	215.15		700.00	745.00	
REACH 2	29985.12	Floodway	861.09	0.48	862.00	180.00	928.78	3746.30	149.41	600.00	700.00	745.00	780.00
REACH 2	29958.72BR U	Baseflood	860.62		861.56	309.37	1194.11	2999.45	640.66		700.00	745.00	
REACH 2	29958.72BR U	Floodway	861.09	0.48	862.00	133.71	922.72	3603.57	299.22	600.00	700.00	745.00	780.00
REACH 2	29958.72BR D	Baseflood	860.62		861.56	309.38	1194.11	2999.45	640.66		700.00	745.00	
REACH 2	29958.72BR D	Floodway	861.09	0.48	862.00	83.71	922.72	3603.57	299.22	620.00	700.00	745.00	750.00
REACH 2	29927.04	Baseflood	858.29		859.62	413.57	881.09	3462.03	481.38		700.00	745.00	
REACH 2	29927.04	Floodway	858.69	0.39	860.42	130.00	848.22	3921.99	54.29	620.00	700.00	745.00	750.00
REACH 2	29700	Baseflood	858.53		858.66	558.77	2760.88	1139.00	924.62		540.80	578.80	
REACH 2	29700	Floodway	859.23	0.70	859.35	400.00	2819.61	1103.09	901.80	380.00	540.80	578.80	780.00
REACH 2	29573.28	Baseflood	858.48		858.56	677.44	3006.82	777.90	1039.78		554.50	585.50	
REACH 2	29573.28	Floodway	859.21	0.73	859.27	528.94	3240.23	738.55	845.72	250.00	554.50	585.50	780.00
REACH 2	29362.08	Baseflood	858.37		858.41	671.89	2812.49	823.19	1188.82		514.89	542.50	
REACH 2	29362.08	Floodway	859.03	0.66	859.13	350.00	2240.40	1167.37	1416.73	300.00	514.89	542.50	650.00
REACH 2	29203.68	Baseflood	858.21		858.29	525.79	2715.39	1363.50	745.61		533.41	575.31	
REACH 2	29203.68	Floodway	858.79	0.58	858.94	300.00	2140.14	1762.53	921.83	360.00	533.41	575.31	660.00
REACH 2	28944.96	Baseflood	857.55		857.78	320.85	3163.17	1593.14	68.20		476.44	505.73	
REACH 2	28944.96	Floodway	858.31	0.76	858.48	295.00	3293.56	1465.92	65.02	220.00	476.44	505.73	515.00
REACH 2	28707.36	Baseflood	857.41		857.51	449.51	2420.32	826.26	1577.92		329.00	351.00	
REACH 2	28707.36	Floodway	858.15	0.74	858.28	305.00	2822.73	887.35	1114.42	180.00	329.00	351.00	485.00
REACH 2	28570.08	Baseflood	857.37		857.43	547.92	1449.12	929.36	2446.03		328.68	356.68	
REACH 2	28570.08	Floodway	858.14	0.77	858.20	430.00	1508.75	933.74	2382.02	220.00	328.68	356.68	650.00
REACH 2	28374.72	Baseflood	857.14		857.26	471.40	925.27	1056.57	2842.66		299.50	320.50	
REACH 2	28374.72	Floodway	857.73	0.59	858.01	235.00	800.20	1491.29	2533.01	275.00	299.50	320.50	510.00
REACH 2	28216.32	Baseflood	856.45		856.88	278.55	1245.89	1890.37	1688.23		328.00	352.00	
REACH 2	28216.32	Floodway	856.64	0.19	857.40	155.00	732.26	2402.46	1689.79	300.00	328.00	352.00	455.00
REACH 2	27999.84	Baseflood	854.60		855.65	188.39	1505.08	2689.80	629.62		315.32	344.32	
REACH 2	27999.84	Floodway	855.27	0.67	856.12	155.00	1580.44	2558.04	686.02	250.00	315.32	344.32	405.00
REACH 2	27809.76	Baseflood	854.02		854.67	230.30	1376.51	2540.58	907.42		301.50	333.50	
REACH 2	27809.76	Floodway	854.60	0.58	855.35	155.00	1406.55	2768.50	649.46	235.00	301.50	333.50	390.00
REACH 2	27572.16	Baseflood	853.50		853.96	352.49	1662.06	2159.19	1003.25		299.78	331.78	
REACH 2	27572.16	Floodway	854.20	0.69	854.67	215.00	1744.14	2242.27	838.09	220.00	299.78	331.78	435.00
REACH 2	27339.84	Baseflood	853.37		853.48	470.23	1790.41	1085.34	1948.76		394.50	420.50	
REACH 2	27339.84	Floodway	853.87	0.50	854.12	230.00	1620.20	1592.80	1611.50	305.00	394.50	420.50	535.00
REACH 2	27155.04	Baseflood	853.12		853.31	410.38	2231.75	1473.71	1119.04		479.50	505.50	
REACH 2	27155.04	Floodway	853.67	0.55	853.89	270.00	2489.20	1607.79	727.50	280.00	479.50	505.50	550.00
REACH 2	27091.68		Culvert										
REACH 2	27033.6	Baseflood	852.51		852.90	336.03	1870.68	2548.07	405.76		473.08	514.08	
REACH 2	27033.6	Floodway	852.79	0.28	853.15	270.00	1926.81	2487.48	410.21	280.00	473.08	514.08	550.00
REACH 2	26806.56	Baseflood	852.25		852.41	476.51	1309.13	1049.68	2465.69		351.50	373.50	
REACH 2	26806.56	Floodway	852.46	0.21	852.74	270.00	1138.03	1296.63	2389.84	200.00	351.50	373.50	470.00
REACH 2	26574.24	Baseflood	852.20		852.28	436.30	3062.08	479.80	1282.62		338.00	357.00	
REACH 2	26574.24	Floodway	852.43	0.23	852.55	270.00	3188.80	575.45	1060.26	160.00	338.00	357.00	430.00
REACH 2	26400	Baseflood	851.93		852.16	480.17	1505.20	1996.54	1322.76		669.00	701.00	
REACH 2	26400	Floodway	852.19	0.26	852.41	350.00	1635.88	1984.59	1204.03	450.00	669.00	701.00	800.00
REACH 2	26220.48	Baseflood	851.97		852.03	429.21	3713.26	317.81	793.44		720.80	744.97	
REACH 2	26220.48	Floodway	852.13	0.16	852.26	250.00	3432.87	479.15	912.48	550.00	720.80	744.97	800.00
REACH 2	26083.2	Baseflood	851.92		851.99	410.13	2901.17	564.99	1358.34		736.12	759.94	
REACH 2	26083.2	Floodway	851.94	0.02	852.16	165.00	2403.87	927.58	1493.06	650.00	736.12	759.94	815.00
REACH 2	25893.12	Baseflood	851.83		851.93	445.73	3979.04	736.07	109.40		767.93	794.06	
REACH 2	25893.12	Floodway	851.90	0.07	852.03	270.00	3931.06	778.00	115.44	550.00	767.93	794.06	820.00
REACH 2	25687.2	Baseflood	851.80		851.87	511.18	2815.26	1752.75	390.99		1945.00	2010.00	
REACH 2	25687.2	Floodway	851.88	0.08	851.96	313.51	2988.77	1846.58	123.65	1620.00	1945.00	2010.00	2040.00
REACH 2	25549.36	Baseflood	851.27		851.73	250.00	19.79	4133.89	805.32		1945.00	2015.00	
REACH 2	25549.36	Floodway	851.38	0.11	851.82	231.52	21.21	4073.67	864.12	1690.00	1945.00	2015.00	2170.00
REACH 2	25460.16BR U	Baseflood	851.39		851.60	195.43	3205.98	1537.55	215.47		2095.98	2135.98	
REACH 2	25460.16BR U	Floodway	851.50	0.10	851.69	195.84	3213.26	1528.89	216.85	1690.00	2095.98	2135.98	2170.00
REACH 2	25460.16BR D	Baseflood	851.32		851.50	195.14	3239.62	1511.42	207.96		2055.98	2095.98	
REACH 2	25460.16BR D	Floodway	851.43	0.11	851.60	195.57	3246.07	1503.60	209.33	1670.00	2055.98	2095.98	2170.00

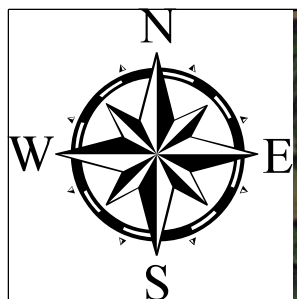


HEC-RAS Plan: Proposed Flo River: MAIN Reach: REACH 2 (Continued)

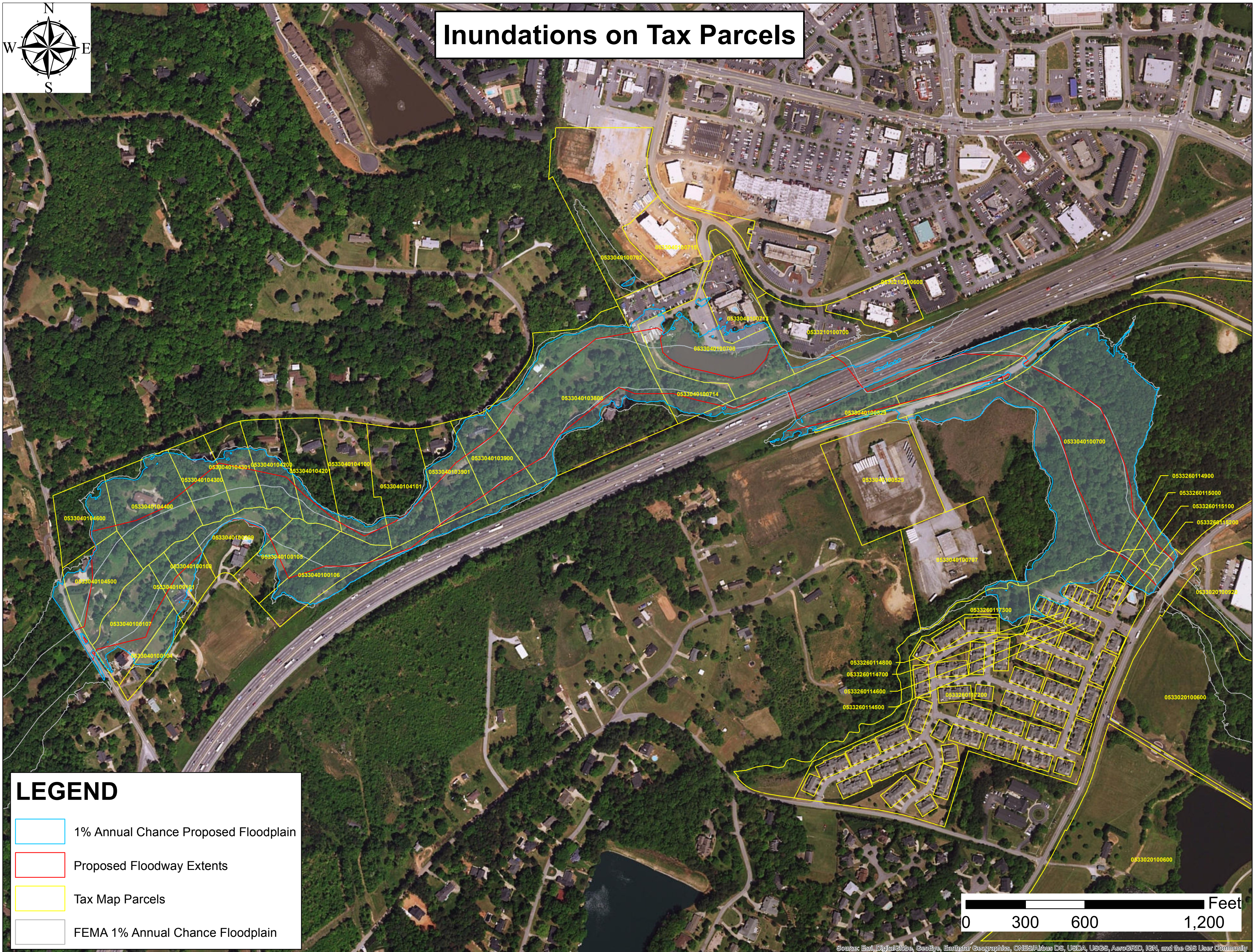
Reach	River Sta	Profile	W.S. Elev (ft)	Prof Delta WS (ft)	E.G. Elev (ft)	Top Width Act (ft)	Q Left (cfs)	Q Channel (cfs)	Q Right (cfs)	Enc Sta L (ft)	Ch Sta L (ft)	Ch Sta R (ft)	Enc Sta R (ft)
REACH 2	25370.96	Baseflood	851.23		851.48	217.15	1163.90	3726.12	68.98		1945.00	2052.00	
REACH 2	25370.96	Floodway	851.34	0.11	851.58	220.88	1172.84	3711.75	74.40	1670.00	1945.00	2052.00	2170.00
REACH 2	24668.16	Baseflood	849.95		850.41	198.81	2759.81	2199.19			1727.16	1764.16	
REACH 2	24668.16	Floodway	850.22	0.27	850.62	160.00	2887.46	2071.54		1604.16	1727.16	1764.16	1764.16
REACH 2	24541.44	Baseflood	849.53		849.92	221.78	3014.84	1942.94	1.22		1638.50	1670.50	
REACH 2	24541.44	Floodway	849.88	0.35	850.22	160.00	3094.17	1864.83		1510.50	1638.50	1670.50	1670.50
REACH 2	24314.4	Baseflood	848.26		849.04	210.00	104.53	4762.02	92.46		584.00	669.00	
REACH 2	24314.4	Floodway	848.84	0.59	849.51	160.00	121.73	4747.13	90.14	540.00	584.00	669.00	700.00
REACH 2	24277.44BR U	Baseflood	848.26		849.04		134.86	4673.73	141.41		584.00	669.00	
REACH 2	24277.44BR U	Floodway	848.84	0.59	849.51	160.00	117.59	4761.21	81.53	540.00	584.00	669.00	700.00
REACH 2	24277.44BR D	Baseflood	848.26		849.04		134.86	4673.73	141.41		580.00	670.83	
REACH 2	24277.44BR D	Floodway	848.84	0.59	849.51	160.00	117.59	4761.21	81.53	540.00	580.00	670.83	700.00
REACH 2	24240.48	Baseflood	847.23		848.13	110.00	38.66	4877.63	42.72		580.00	670.83	
REACH 2	24240.48	Floodway	847.76	0.53	848.52	110.00	50.46	4854.83	53.71	540.00	580.00	670.83	700.00
REACH 2	24156	Baseflood	846.88		847.73	110.00	790.74	3490.13	678.13		582.50	617.50	
REACH 2	24156	Floodway	847.58	0.70	848.03	160.00	1108.50	2898.16	952.34	520.00	582.50	617.50	680.00
REACH 2	24029.28	Baseflood	846.69		846.95	229.04	2731.43	1808.91	418.66		544.58	571.58	
REACH 2	24029.28	Floodway	847.37	0.68	847.65	170.00	2654.95	1995.65	308.40	430.00	544.58	571.58	600.00
REACH 2	23860.32	Baseflood	846.65		846.73	396.13	2783.82	889.51	1285.67		642.25	663.25	
REACH 2	23860.32	Floodway	847.31	0.66	847.42	250.00	3307.55	1027.59	623.86	480.00	642.25	663.25	730.00
REACH 2	23596.32	Baseflood	846.48		846.55	452.81	1971.09	1142.17	1845.74		478.48	502.48	
REACH 2	23596.32	Floodway	847.06	0.58	847.18	270.00	1737.43	1485.47	1736.10	380.00	478.48	502.48	650.00
REACH 2	23453.76	Baseflood	846.33		846.44	454.43	1198.71	1586.67	2173.63		585.78	615.78	
REACH 2	23453.76	Floodway	846.75	0.42	847.00	240.00	1169.51	2224.29	1565.20	510.00	585.78	615.78	750.00
REACH 2	23327.04	Baseflood	846.32		846.34	484.18	764.68	631.43	3562.88		590.00	609.00	
REACH 2	23327.04	Floodway	846.66	0.35	846.78	230.00	242.47	1191.91	3524.61	570.00	590.00	609.00	800.00
REACH 2	23110.56	Baseflood	846.01		846.21	360.76	1939.84	1984.84	1034.31		681.83	709.83	
REACH 2	23110.56	Floodway	846.06	0.05	846.47	151.00	1757.13	2524.19	677.68	610.00	681.83	709.83	761.00
REACH 2	22946.88	Baseflood	845.89		846.05	370.64	1172.74	2752.44	1066.72		726.00	782.00	
REACH 2	22946.88	Floodway	845.89	0.00	846.21	151.00	1132.09	3466.29	393.52	659.00	726.00	782.00	810.00

**APPENDIX I**  
**INUNDATION MAPPING**







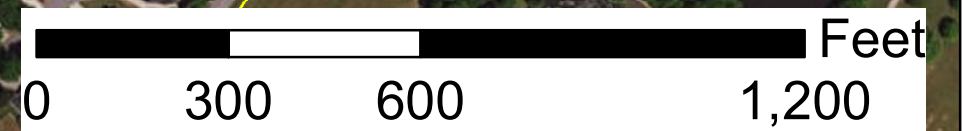


# Inundations on Tax Parcels



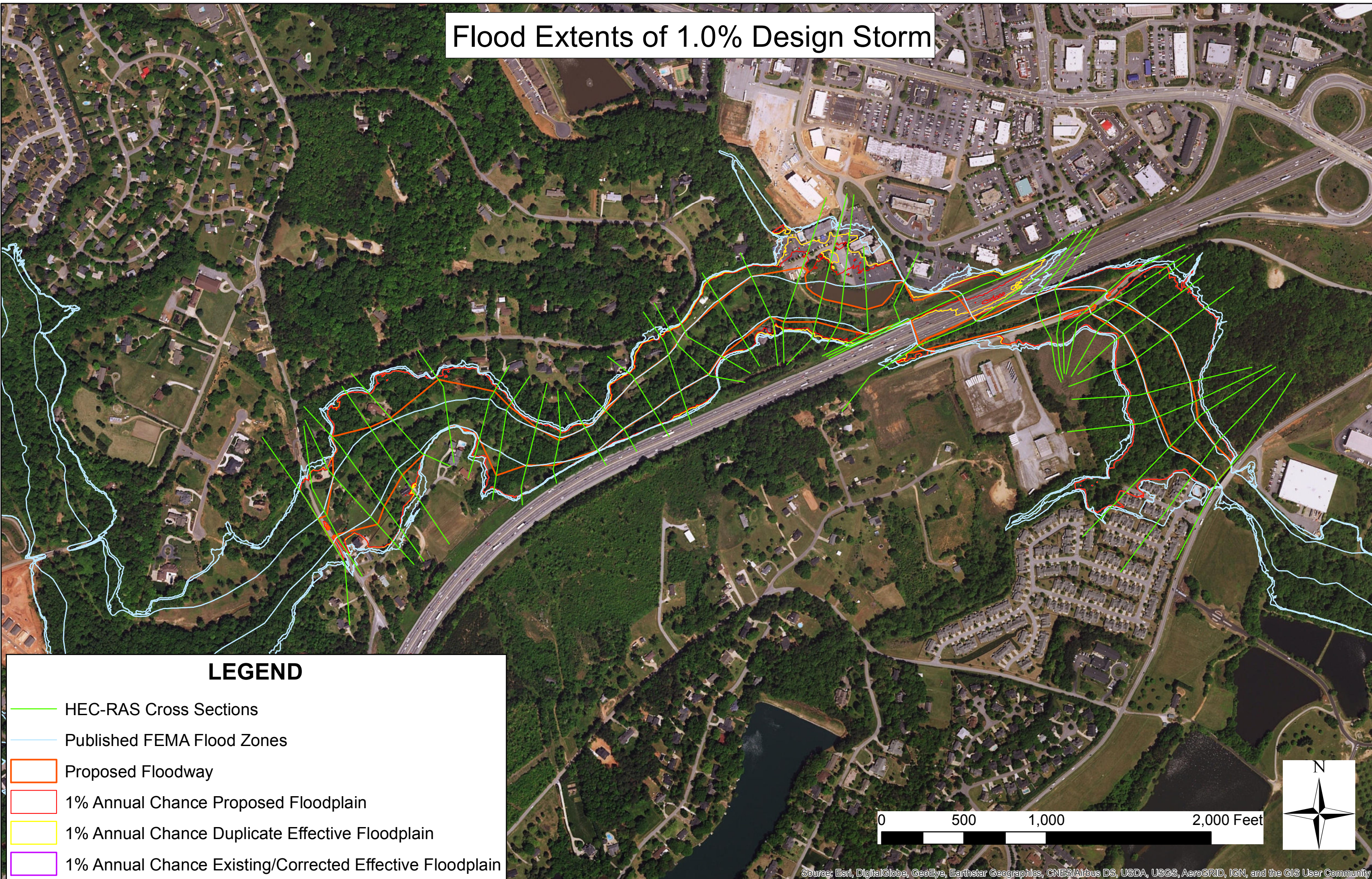
## LEGEND

-  1% Annual Chance Proposed Floodplain
-  Proposed Floodway Extents
-  Tax Map Parcels
-  FEMA 1% Annual Chance Floodplain





# Flood Extents of 1.0% Design Storm



**LEGEND**

- HEC-RAS Cross Sections
- Published FEMA Flood Zones
- Proposed Floodway
- 1% Annual Chance Proposed Floodplain
- 1% Annual Chance Duplicate Effective Floodplain
- 1% Annual Chance Existing/Corrected Effective Floodplain

