

DETAILED HYDRAULIC RESULTS FOR REACH 3 MAINTAINED CONDITION (SEDIMENT REMOVED)

HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach

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	8438.736	100-year	6700.00	45.96	59.54	56.00	59.85	0.004002	4.43	1511.62	315.59	0.36
Reach	8438.736	50-year	4500.00	45.96	58.05	54.16	58.33	0.005540	4.26	1056.06	294.82	0.40
Reach	8438.736	25-year	3100.00	45.96	57.10	52.79	57.34	0.006478	3.94	786.34	272.61	0.41
Reach	8438.736	10-year	1500.00	45.96	54.38	50.75	54.64	0.004115	4.10	365.97	69.71	0.32
Reach	8438.736	5-year	730.00	45.96	51.80	49.35	52.00	0.004357	3.56	205.24	54.87	0.32
Reach	8438.736	2-year	220.00	45.96	49.13	47.86	49.25	0.004806	2.77	79.28	39.39	0.34
Reach	7999.449	100-year	6700.00	43.99	57.67	54.66	58.42	0.002563	5.52	1090.66	272.17	0.35
Reach	7999.449	50-year	4500.00	43.99	55.93	53.04	56.45	0.003346	5.31	804.96	252.28	0.38
Reach	7999.449	25-year	3100.00	43.99	54.61	52.08	55.03	0.004297	5.22	595.95	229.53	0.42
Reach	7999.449	10-year	1500.00	43.99	52.30	49.36	52.64	0.005050	4.63	323.78	93.92	0.44
Reach	7999.449	5-year	730.00	43.99	49.83	47.76	50.14	0.004054	4.46	163.69	44.32	0.41
Reach	7999.449	2-year	220.00	43.99	47.24	46.03	47.41	0.003669	3.35	65.60	30.81	0.41
Reach	7654.838	100-year	6700.00	42.81	55.59	53.01	57.00	0.006666	9.54	706.38	148.49	0.58
Reach	7654.838	50-year	4500.00	42.81	53.71	51.44	54.78	0.007023	8.29	543.60	120.53	0.57
Reach	7654.838	25-year	3100.00	42.81	52.27	50.19	53.09	0.007260	7.28	423.72	114.49	0.55
Reach	7654.838	10-year	1500.00	42.81	49.76	48.11	50.35	0.008915	6.15	244.01	63.83	0.55
Reach	7654.838	5-year	730.00	42.81	47.82	46.55	48.13	0.008904	5.71	127.89	44.48	0.59
Reach	7654.838	2-year	220.00	42.81	45.04	44.84	45.56	0.008281	5.81	37.86	25.24	0.84
Reach	7312.272	100-year	6700.00	40.02	52.56	50.58	54.43	0.008171	11.03	626.59	132.44	0.66
Reach	7312.272	50-year	4500.00	40.02	50.80	48.96	52.17	0.008062	9.40	480.98	107.16	0.63
Reach	7312.272	25-year	3100.00	40.02	49.41	47.54	50.44	0.008162	8.15	380.36	102.50	0.61
Reach	7312.272	10-year	1500.00	40.02	46.81	45.34	47.54	0.007488	6.86	218.81	53.98	0.60
Reach	7312.272	5-year	730.00	40.02	44.57	43.73	45.21	0.008091	6.42	113.76	39.70	0.67
Reach	7312.272	2-year	220.00	40.02	41.99	41.99	42.70	0.008345	6.73	32.70	23.11	1.00
Reach	6915.590	100-year	6700.00	36.38	50.39	47.18	51.63	0.005409	8.99	753.72	124.99	0.52
Reach	6915.590	50-year	4500.00	36.38	48.73	45.61	49.59	0.004816	7.44	608.43	109.81	0.47
Reach	6915.590	25-year	3100.00	36.38	47.37	44.29	47.98	0.004413	6.26	495.88	105.01	0.44
Reach	6915.590	10-year	1500.00	36.38	44.79	41.79	45.18	0.004486	4.98	301.26	68.06	0.42
Reach	6915.590	5-year	730.00	36.38	42.48	40.10	42.76	0.004485	4.26	171.49	44.86	0.38
Reach	6915.590	2-year	220.00	36.38	39.44	38.28	39.64	0.004555	3.60	61.14	27.97	0.43
Reach	6558.071	100-year	6700.00	35.28	45.33	45.33	47.94	0.023858	13.11	519.96	177.00	0.92
Reach	6558.071	50-year	4500.00	35.28	43.87	43.87	46.07	0.026434	11.93	383.21	93.00	0.91
Reach	6558.071	25-year	3100.00	35.28	42.27	42.27	44.38	0.035457	11.66	265.96	63.07	1.00
Reach	6558.071	10-year	1500.00	35.28	40.12	40.12	41.72	0.029913	10.14	147.99	46.40	1.00
Reach	6558.071	5-year	730.00	35.28	38.77	38.57	39.76	0.019603	7.99	91.34	37.40	0.90
Reach	6558.071	2-year	220.00	35.28	37.44	36.95	37.77	0.005969	4.66	47.24	28.97	0.64

HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (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	6219.816	100-year	6700.00	35.10	40.69	41.75	45.08	0.003918	16.81	399.42	84.87	1.31
Reach	6219.816	50-year	4500.00	35.10	39.40	40.28	42.92	0.004421	16.05	298.91	75.91	1.34
Reach	6219.816	25-year	3100.00	35.10	38.61	39.18	41.21	0.004155	12.92	239.94	73.54	1.26
Reach	6219.816	10-year	1500.00	35.10	37.44	37.65	38.88	0.003801	9.63	155.79	70.03	1.14
Reach	6219.816	5-year	730.00	35.10	36.69	36.69	37.46	0.003277	7.01	104.11	67.78	1.00
Reach	6219.816	2-year	220.00	35.10	35.84	35.82	36.17	0.003838	4.63	47.47	65.22	0.96
Reach	5882.329	100-year	6700.00	33.89	41.63	40.49	43.71	0.001306	11.60	591.33	107.62	0.77
Reach	5882.329	50-year	4500.00	33.89	38.61	39.06	41.45	0.003240	13.51	333.02	78.01	1.15
Reach	5882.329	25-year	3100.00	33.89	37.68	37.96	39.66	0.003213	11.87	261.25	74.99	1.12
Reach	5882.329	10-year	1500.00	33.89	36.31	36.44	37.65	0.003409	9.29	161.51	70.65	1.08
Reach	5882.329	5-year	730.00	33.89	35.40	35.48	36.25	0.003898	7.39	98.78	67.78	1.08
Reach	5882.329	2-year	220.00	33.89	34.66	34.61	34.97	0.003298	4.42	49.75	65.45	0.89
Reach	5622.132	100-year	6700.00	32.96	41.80	39.69	43.29	0.000721	9.90	708.06	125.44	0.61
Reach	5622.132	50-year	4500.00	32.96	37.02	38.16	40.57	0.003372	13.79	320.35	76.89	1.18
Reach	5622.132	25-year	3100.00	32.96	36.66	37.04	38.98	0.003485	12.21	253.85	74.11	1.16
Reach	5622.132	10-year	1500.00	32.96	35.35	35.51	36.73	0.003569	9.44	158.91	70.16	1.11
Reach	5622.132	5-year	730.00	32.96	34.53	34.55	35.32	0.003419	7.10	102.75	67.72	1.02
Reach	5622.132	2-year	220.00	32.96	33.70	33.68	34.03	0.003906	4.66	47.22	65.21	0.96
Reach	5354.010	100-year	6700.00	32.01	41.92	38.73	43.01	0.000457	8.54	831.88	130.21	0.49
Reach	5354.010	50-year	4500.00	32.01	38.17	37.28	39.71	0.001256	10.00	464.28	114.83	0.75
Reach	5354.010	25-year	3100.00	32.01	35.70	36.09	38.03	0.003535	12.27	252.67	74.06	1.17
Reach	5354.010	10-year	1500.00	32.01	34.41	34.55	35.78	0.003495	9.38	159.95	70.20	1.09
Reach	5354.010	5-year	730.00	32.01	33.56	33.60	34.37	0.003606	7.22	101.07	67.64	1.04
Reach	5354.010	2-year	220.00	32.01	32.80	32.73	33.09	0.003133	4.36	50.50	65.36	0.87
Reach	5027.002	100-year	6700.00	30.84	41.98	37.57	42.81	0.000320	7.45	971.52	156.78	0.41
Reach	5027.002	50-year	4500.00	30.84	38.24	36.07	39.25	0.000685	8.11	575.18	113.16	0.55
Reach	5027.002	25-year	3100.00	30.84	36.28	34.92	37.27	0.001026	8.00	387.85	84.57	0.65
Reach	5027.002	10-year	1500.00	30.84	33.65	33.39	34.63	0.002063	7.94	188.90	71.43	0.86
Reach	5027.002	5-year	730.00	30.84	32.40	32.43	33.20	0.003489	7.15	102.12	67.69	1.03
Reach	5027.002	2-year	220.00	30.84	31.56	31.56	31.91	0.004200	4.76	46.18	65.16	1.00
Reach	4717.032	100-year	6700.00	29.73	42.02	36.50	42.68	0.000225	6.57	1063.56	162.16	0.35
Reach	4717.032	50-year	4500.00	29.73	38.29	34.92	39.00	0.000414	6.77	675.58	121.66	0.44
Reach	4717.032	25-year	3100.00	29.73	36.30	33.81	36.94	0.000545	6.43	482.53	89.99	0.48
Reach	4717.032	10-year	1500.00	29.73	33.66	32.28	34.14	0.000685	5.53	271.11	74.80	0.51
Reach	4717.032	5-year	730.00	29.73	32.24	31.32	32.53	0.000716	4.36	167.40	70.52	0.50

HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (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	4717.032	2-year	220.00	29.73	30.77	30.45	30.93	0.001249	3.29	66.92	66.11	0.58
Reach	4850	Bridge										
Reach	4581.172	100-year	6700.00	29.24	34.69	35.71	41.57	0.006716	21.04	318.45	58.38	1.59
Reach	4581.172	50-year	4500.00	29.24	36.74	34.94	38.37	0.001172	10.28	437.94	79.03	0.67
Reach	4581.172	25-year	3100.00	29.24	35.47	33.68	36.80	0.000950	8.52	363.80	58.38	0.60
Reach	4581.172	10-year	1500.00	29.24	33.25	31.98	33.89	0.000886	6.41	234.16	58.38	0.56
Reach	4581.172	5-year	730.00	29.24	30.69	30.94	31.84	0.005592	6.62	84.71	58.38	1.26
Reach	4581.172	2-year	220.00	29.24	30.12	30.00	30.40	0.002658	4.30	51.17	58.38	0.81
Reach	4376.043	100-year	6700.00	28.51	38.62	35.89	40.12	0.001119	9.90	712.80	153.75	0.58
Reach	4376.043	50-year	4500.00	28.51	38.94	34.26	37.99	0.000885	8.25	556.99	138.44	0.53
Reach	4376.043	25-year	3100.00	28.51	35.56	33.06	36.32	0.000724	6.98	444.79	121.91	0.50
Reach	4376.043	10-year	1500.00	28.51	33.24	31.36	33.68	0.000599	5.31	282.51	66.81	0.46
Reach	4376.043	5-year	730.00	28.51	30.45	30.29	31.16	0.002642	6.79	107.58	58.43	0.88
Reach	4376.043	2-year	220.00	28.51	29.32	28.32	28.72	0.004216	5.04	43.00	55.00	1.00
Reach	4067.964	100-year	6700.00	27.41	38.95	34.39	39.72	0.000371	7.11	1003.66	171.88	0.40
Reach	4067.964	50-year	4500.00	27.41	37.14	32.73	37.68	0.000333	5.90	799.15	171.88	0.36
Reach	4067.964	25-year	3100.00	27.41	35.68	31.60	36.07	0.000310	4.99	633.68	170.61	0.34
Reach	4067.964	10-year	1500.00	27.41	33.31	30.03	33.52	0.000182	3.66	410.39	79.18	0.28
Reach	4067.964	5-year	730.00	27.41	30.58	29.05	30.77	0.000358	3.54	206.13	70.28	0.36
Reach	4067.964	2-year	220.00	27.41	28.26	28.16	28.54	0.002643	4.21	52.29	62.74	0.81
Reach	3930.989	100-year	6700.00	26.92	38.84	34.38	39.65	0.000466	7.28	938.77	145.27	0.41
Reach	3930.989	50-year	4500.00	26.92	37.07	32.86	37.62	0.000407	5.97	764.53	145.27	0.37
Reach	3930.989	25-year	3100.00	26.92	35.63	31.44	36.02	0.000372	5.01	622.09	145.27	0.34
Reach	3930.989	10-year	1500.00	26.92	33.27	29.71	33.49	0.000265	3.70	405.58	100.71	0.30
Reach	3930.989	5-year	730.00	26.92	30.54	28.66	30.72	0.000279	3.46	210.82	72.04	0.33
Reach	3930.989	2-year	220.00	26.92	27.72	27.70	28.09	0.003917	4.91	44.83	56.73	0.97
Reach	3928.989	100-year	6700.00	26.91	38.84	34.38	39.65	0.000466	7.27	939.77	145.27	0.41
Reach	3928.989	50-year	4500.00	26.91	37.07	32.85	37.62	0.000407	5.96	765.53	145.27	0.37
Reach	3928.989	25-year	3100.00	26.91	35.63	31.43	36.02	0.000372	5.01	623.08	145.27	0.34
Reach	3928.989	10-year	1500.00	26.91	33.27	29.71	33.48	0.000265	3.69	406.43	100.80	0.30
Reach	3928.989	5-year	730.00	26.91	30.54	28.64	30.72	0.000280	3.45	211.45	72.10	0.33
Reach	3928.989	2-year	220.00	26.91	27.89	27.89	28.08	0.004159	5.00	44.01	56.71	1.00
Reach	3786.09	100-year	6700.00	24.10	38.63	35.11	39.50	0.003918	8.50	1086.51	195.57	0.44
Reach	3786.09	50-year	4500.00	24.10	36.84	33.39	37.48	0.003432	7.14	863.46	195.57	0.40

HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (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	3786.09	25-year	3100.00	24.10	35.40	31.32	35.89	0.003084	6.12	682.33	195.08	0.37
Reach	3786.09	10-year	1500.00	24.10	33.10	28.92	33.39	0.002188	4.48	414.07	107.60	0.30
Reach	3786.09	5-year	730.00	24.10	30.42	27.38	30.63	0.002218	3.73	195.92	40.58	0.30
Reach	3786.09	2-year	220.00	24.10	26.83	25.86	27.01	0.004544	3.41	64.47	32.21	0.43
Reach	3762.202	100-year	6700.00	23.90	38.52	35.01	39.40	0.003955	8.52	1082.01	195.57	0.43
Reach	3762.202	50-year	4500.00	23.90	36.76	33.25	37.40	0.003436	7.14	861.09	195.57	0.39
Reach	3762.202	25-year	3100.00	23.90	35.33	31.11	35.82	0.003048	6.10	681.49	194.73	0.36
Reach	3762.202	10-year	1500.00	23.90	33.06	28.71	33.34	0.002094	4.41	417.51	107.29	0.29
Reach	3762.202	5-year	730.00	23.90	30.38	27.17	30.58	0.002027	3.61	202.35	40.65	0.28
Reach	3762.202	2-year	220.00	23.90	26.75	25.66	26.91	0.003819	3.21	68.51	32.84	0.39
Reach	3493.546	100-year	6700.00	21.68	38.02	34.58	38.47	0.002455	6.10	1291.50	216.10	0.32
Reach	3493.546	50-year	4500.00	21.68	36.13	33.32	36.52	0.002801	5.76	956.62	216.10	0.33
Reach	3493.546	25-year	3100.00	21.68	34.58	31.20	34.95	0.003197	5.66	697.11	183.60	0.35
Reach	3493.546	10-year	1500.00	21.68	32.30	28.34	32.65	0.003245	4.91	340.55	147.95	0.34
Reach	3493.546	5-year	730.00	21.68	29.63	26.15	29.82	0.002951	4.30	169.86	34.50	0.34
Reach	3493.546	2-year	220.00	21.68	26.00	24.08	26.16	0.002127	3.21	68.80	22.38	0.32
Reach	3236.080	100-year	6700.00	19.14	37.41	33.10	37.77	0.002765	5.19	1409.59	211.76	0.27
Reach	3236.080	50-year	4500.00	19.14	35.45	32.21	35.74	0.003004	4.82	1071.38	177.98	0.27
Reach	3236.080	25-year	3100.00	19.14	33.80	31.31	34.07	0.003469	4.75	803.29	175.54	0.28
Reach	3236.080	10-year	1500.00	19.14	31.32	27.27	31.82	0.004850	4.76	407.83	152.67	0.32
Reach	3236.080	5-year	730.00	19.14	28.55	24.86	28.86	0.006061	4.45	163.97	31.99	0.35
Reach	3236.080	2-year	220.00	19.14	25.39	21.68	25.51	0.002907	2.81	78.17	21.30	0.26
Reach	3183.288	100-year	6700.00	19.00	37.22	33.13	37.62	0.003257	6.01	1434.84	210.30	0.31
Reach	3183.288	50-year	4500.00	19.00	35.24	31.99	35.57	0.003363	5.49	1097.89	181.05	0.30
Reach	3183.288	25-year	3100.00	19.00	33.55	29.52	33.88	0.003747	5.31	814.37	179.03	0.31
Reach	3183.288	10-year	1500.00	19.00	31.05	26.46	31.38	0.004306	4.84	404.04	158.85	0.32
Reach	3183.288	5-year	730.00	19.00	28.34	23.93	28.59	0.003896	4.03	181.13	33.31	0.30
Reach	3183.288	2-year	220.00	19.00	25.33	21.43	25.41	0.001132	2.30	95.80	22.19	0.19
Reach	3063.726	100-year	6700.00	19.49	36.99	32.13	37.29	0.001915	5.06	1568.45	273.75	0.29
Reach	3063.726	50-year	4500.00	19.49	34.99	30.98	35.23	0.002041	4.55	1196.72	252.24	0.27
Reach	3063.726	25-year	3100.00	19.49	33.30	28.86	33.52	0.002030	4.46	905.81	206.61	0.26
Reach	3063.726	10-year	1500.00	19.49	30.79	25.68	30.99	0.002121	3.96	491.31	185.45	0.26
Reach	3063.726	5-year	730.00	19.49	28.03	23.61	28.25	0.002035	3.80	192.12	54.98	0.28
Reach	3063.726	2-year	220.00	19.49	25.26	21.56	25.32	0.000446	1.97	111.63	25.59	0.17
Reach	2632.288	100-year	6700.00	18.00	35.82	31.89	36.23	0.003172	6.14	1446.17	215.82	0.33

HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (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	2632.288	50-year	4500.00	18.00	33.68	30.14	34.05	0.003683	5.82	1058.95	200.10	0.34
Reach	2632.288	25-year	3100.00	18.00	31.77	28.47	32.20	0.004841	5.98	726.66	196.39	0.38
Reach	2632.288	10-year	1500.00	18.00	28.82	25.07	29.40	0.007340	6.13	244.75	79.51	0.45
Reach	2632.288	5-year	730.00	18.00	26.86	22.53	27.14	0.003341	4.28	170.51	48.38	0.33
Reach	2632.288	2-year	220.00	18.00	25.09	20.22	25.14	0.000400	1.84	119.59	24.35	0.15
Reach	2513.412	100-year	6700.00	18.84	35.57	30.48	35.93	0.001892	6.08	1738.88	214.82	0.30
Reach	2513.412	50-year	4500.00	18.84	33.44	29.28	33.73	0.001823	5.33	1350.87	193.76	0.29
Reach	2513.412	25-year	3100.00	18.84	31.54	27.69	31.82	0.001908	5.03	1008.98	191.17	0.29
Reach	2513.412	10-year	1500.00	18.84	28.46	24.29	28.84	0.002734	5.08	369.17	153.26	0.33
Reach	2513.412	5-year	730.00	18.84	26.65	22.34	26.84	0.001647	3.47	211.53	74.33	0.25
Reach	2513.412	2-year	220.00	18.84	25.06	20.54	25.09	0.000344	1.42	154.87	45.19	0.12
Reach	2376.699	100-year	19000.00	18.50	34.56	27.93	35.49	0.003441	6.12	2496.51	340.69	0.32
Reach	2376.699	50-year	13100.00	18.50	32.80	26.33	33.39	0.002571	4.77	2161.68	313.61	0.27
Reach	2376.699	25-year	9000.00	18.50	31.18	25.08	31.55	0.001928	3.78	1863.90	308.09	0.23
Reach	2376.699	10-year	4200.00	18.50	28.44	24.50	28.59	0.001080	2.35	1370.40	299.38	0.16
Reach	2376.699	5-year	2200.00	18.50	26.63	24.50	26.70	0.000875	1.56	1049.22	294.13	0.12
Reach	2376.699	2-year	680.00	18.50	24.14	22.28	24.69	0.012679	5.94	114.39	268.69	0.53
Reach	2282.69	100-year	19000.00	17.99	34.15	29.90	35.11	0.003596	8.86	2903.92	387.14	0.43
Reach	2282.69	50-year	13100.00	17.99	32.41	27.80	33.08	0.003001	7.36	2402.01	381.52	0.38
Reach	2282.69	25-year	9000.00	17.99	30.81	26.24	31.30	0.002589	6.18	1942.41	375.54	0.35
Reach	2282.69	10-year	4200.00	17.99	28.19	23.29	28.44	0.001627	4.27	1252.38	255.86	0.27
Reach	2282.69	5-year	2200.00	17.99	26.48	21.78	26.61	0.000995	3.00	880.58	202.05	0.21
Reach	2282.69	2-year	680.00	17.99	24.42	20.20	24.45	0.000316	1.41	510.71	148.66	0.11
Reach	2181.926	100-year	19000.00	18.50	33.98	28.89	34.57	0.003976	7.16	3332.95	418.99	0.37
Reach	2181.926	50-year	13100.00	18.50	32.22	27.72	32.64	0.003551	6.06	2752.57	414.02	0.34
Reach	2181.926	25-year	9000.00	18.50	30.61	26.77	30.92	0.003269	5.21	2228.02	364.51	0.32
Reach	2181.926	10-year	4200.00	18.50	27.99	25.01	28.17	0.002932	3.92	1409.35	318.08	0.28
Reach	2181.926	5-year	2200.00	18.50	26.28	24.03	26.42	0.003106	3.25	892.46	297.75	0.28
Reach	2181.926	2-year	680.00	18.50	24.30	22.68	24.36	0.002541	2.10	390.89	214.41	0.23
Reach	1969.374	100-year	19000.00	18.00	32.92	28.94	33.75	0.004623	6.65	2921.67	328.70	0.45
Reach	1969.374	50-year	13100.00	18.00	31.35	27.61	31.93	0.003878	7.23	2445.98	315.29	0.40
Reach	1969.374	25-year	9000.00	18.00	29.86	26.12	30.29	0.003329	6.18	2005.91	307.66	0.36
Reach	1969.374	10-year	4200.00	18.00	27.42	23.86	27.67	0.002420	4.48	1307.01	280.23	0.29
Reach	1969.374	5-year	2200.00	18.00	25.84	21.99	25.98	0.001743	3.33	876.61	238.91	0.24
Reach	1969.374	2-year	680.00	18.00	24.13	20.29	24.17	0.000501	1.58	518.27	177.77	0.13

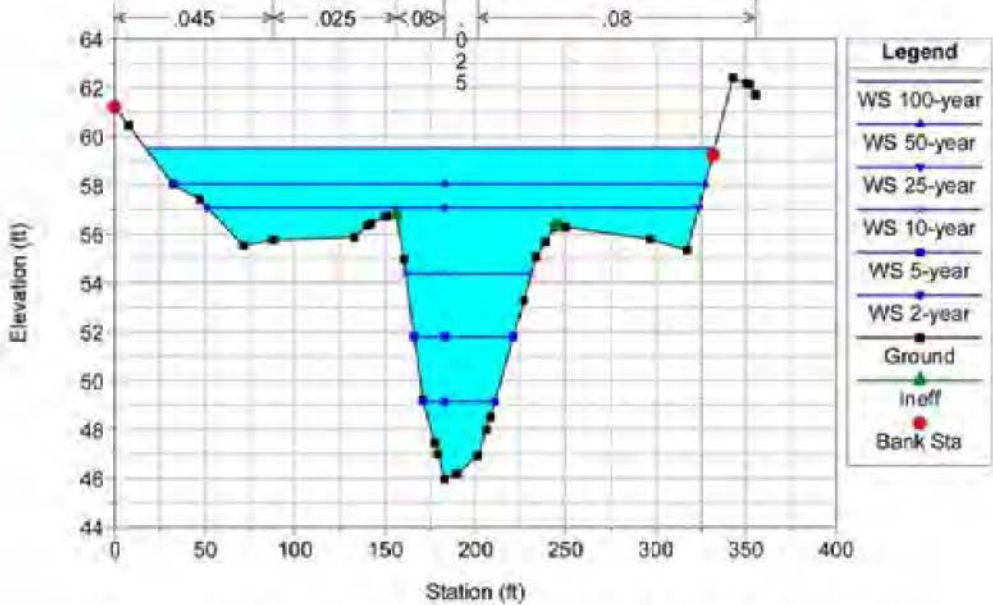
HEC-RAS Plan VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (Continued)

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	1828.694	100-year	19000.00	17.25	32.08	28.65	33.01	0.005347	9.09	2908.70	404.77	0.46
Reach	1828.694	50-year	13100.00	17.25	30.56	27.25	31.28	0.004873	7.95	2342.57	382.70	0.43
Reach	1828.694	25-year	9000.00	17.25	29.22	25.78	29.75	0.003999	6.67	1912.07	303.82	0.38
Reach	1828.694	10-year	4200.00	17.25	27.05	22.82	27.31	0.002436	4.51	1295.25	278.92	0.29
Reach	1828.694	5-year	2200.00	17.25	25.61	21.22	25.75	0.001511	3.16	904.50	239.89	0.22
Reach	1828.694	2-year	680.00	17.25	24.08	19.57	24.11	0.000362	1.37	577.72	185.39	0.11
Reach	1585.63	100-year	19000.00	17.00	31.21	27.71	31.77	0.004283	7.56	3733.19	560.78	0.38
Reach	1585.63	50-year	13100.00	17.00	29.75	26.54	30.18	0.003777	6.53	3041.94	547.58	0.35
Reach	1585.63	25-year	9000.00	17.00	28.50	25.55	28.82	0.003308	5.62	2455.44	532.53	0.32
Reach	1585.63	10-year	4200.00	17.00	26.55	22.67	26.73	0.002251	3.98	1583.83	420.54	0.25
Reach	1585.63	5-year	2200.00	17.00	25.26	21.06	25.37	0.001560	2.93	1066.81	382.38	0.21
Reach	1585.63	2-year	680.00	17.00	23.99	19.38	24.01	0.000436	1.33	606.09	333.63	0.10
Reach	1442.275	100-year	19000.00	16.64	30.61	27.65	31.13	0.004611	8.03	4058.02	590.27	0.40
Reach	1442.275	50-year	13100.00	16.64	29.19	26.70	29.61	0.004244	7.11	3253.25	575.63	0.37
Reach	1442.275	25-year	9000.00	16.64	27.87	25.79	28.32	0.003830	6.28	2308.51	507.86	0.35
Reach	1442.275	10-year	4200.00	16.64	26.14	22.71	26.37	0.002780	4.66	1592.57	528.76	0.29
Reach	1442.275	5-year	2200.00	16.64	24.97	20.98	25.12	0.001902	3.48	1013.14	454.57	0.23
Reach	1442.275	2-year	680.00	16.64	23.92	19.21	23.95	0.000421	1.47	586.78	307.14	0.11
Reach	1386.102	100-year	19000.00	16.74	30.68	26.58	30.85	0.001706	4.19	6058.35	838.99	0.23
Reach	1386.102	50-year	13100.00	16.74	29.22	25.81	29.36	0.001702	3.79	4858.82	826.12	0.22
Reach	1386.102	25-year	9000.00	16.74	27.97	25.14	28.08	0.001758	3.49	3831.22	819.04	0.22
Reach	1386.102	10-year	4200.00	16.74	26.08	22.66	26.19	0.002011	3.32	2082.35	734.53	0.23
Reach	1386.102	5-year	2200.00	16.74	24.92	21.01	25.00	0.001525	2.67	1356.31	680.11	0.20
Reach	1386.102	2-year	680.00	16.74	23.90	19.18	23.93	0.000375	1.36	618.54	580.77	0.11
Reach	972.2879	100-year	19000.00	17.86	29.98	24.98	30.15	0.001570	4.11	6047.60	755.04	0.23
Reach	972.2879	50-year	13100.00	17.86	28.58	24.40	28.70	0.001390	3.51	4988.39	755.04	0.21
Reach	972.2879	25-year	9000.00	17.86	27.36	23.93	27.45	0.001264	3.03	4065.82	755.04	0.19
Reach	972.2879	10-year	4200.00	17.86	25.56	22.59	25.61	0.000947	2.22	2719.15	739.76	0.16
Reach	972.2879	5-year	2200.00	17.86	24.56	21.07	24.58	0.000646	1.65	1985.11	723.15	0.13
Reach	972.2879	2-year	680.00	17.86	23.78	19.46	23.79	0.000283	1.05	841.97	682.05	0.09
Reach	615.5682	100-year	19000.00	19.90	29.12	24.76	29.40	0.002827	4.94	4656.90	616.16	0.32
Reach	615.5682	50-year	13100.00	19.90	27.86	24.01	28.05	0.002408	4.11	3878.20	616.16	0.29
Reach	615.5682	25-year	9000.00	19.90	26.73	23.93	26.87	0.002122	3.46	3183.17	616.16	0.27
Reach	615.5682	10-year	4200.00	19.90	25.13	23.65	25.20	0.001422	2.36	2204.76	604.65	0.22
Reach	615.5682	5-year	2200.00	19.90	24.29	23.35	24.32	0.000840	1.60	1702.27	590.97	0.16
Reach	615.5682	2-year	680.00	19.90	23.58	21.97	23.61	0.001091	1.62	581.76	560.86	0.18

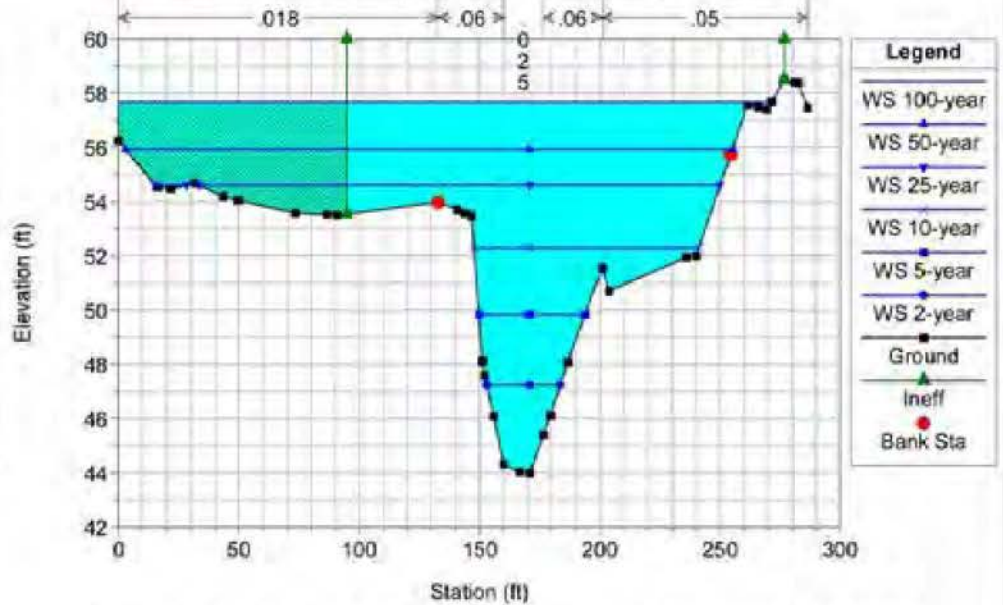
HEC-RAS Plan: VegSecRemRe3ONLY River: Soledad Canyon Reach: Reach (Continued)

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	555.0848	100-year	19000.00	21.19	28.77	25.11	29.13	0.004265	5.71	4091.99	603.81	0.39
Reach	555.0848	50-year	13100.00	21.19	27.56	24.34	27.82	0.003786	4.71	3379.06	603.81	0.36
Reach	555.0848	25-year	9000.00	21.19	26.47	23.93	26.65	0.003564	3.93	2732.31	603.81	0.33
Reach	555.0848	10-year	4200.00	21.19	24.95	23.90	25.04	0.002679	2.61	1842.33	590.78	0.27
Reach	555.0848	5-year	2200.00	21.19	23.86	23.35	24.15	0.017532	5.14	554.73	548.36	0.65
Reach	555.0848	2-year	680.00	21.19	22.97	22.78	23.40	0.031132	5.23	129.93	493.81	0.80
Reach	335.8184	100-year	19000.00	20.47	27.83	24.61	28.22	0.004342	5.54	3928.28	609.87	0.38
Reach	335.8184	50-year	13100.00	20.47	26.74	23.86	27.01	0.003784	4.59	3267.11	609.87	0.35
Reach	335.8184	25-year	9000.00	20.47	25.68	23.35	25.88	0.003669	3.92	2621.75	609.87	0.33
Reach	335.8184	10-year	4200.00	20.47	24.41	22.42	24.50	0.002446	2.55	1846.45	608.65	0.26
Reach	335.8184	5-year	2200.00	20.47	23.17	21.72	23.28	0.004191	2.50	823.71	555.06	0.32
Reach	335.8184	2-year	680.00	20.47	22.05	20.86	22.08	0.002287	1.21	450.37	423.51	0.21
Reach	30.31517	100-year	19000.00	18.32	24.15	23.41	25.39	0.029698	12.31	2294.00	528.92	0.98
Reach	30.31517	50-year	13100.00	18.32	22.60	22.58	24.01	0.056143	13.16	1498.55	565.79	1.26
Reach	30.31517	25-year	9000.00	18.32	22.08	22.08	23.07	0.048952	10.99	1237.03	500.09	1.14
Reach	30.31517	10-year	4200.00	18.32	21.40	21.40	22.40	0.055242	10.04	558.86	481.87	1.17
Reach	30.31517	5-year	2200.00	18.32	20.73	20.67	21.34	0.050036	7.83	378.89	462.00	1.06
Reach	30.31517	2-year	680.00	18.32	19.86	19.85	20.20	0.050017	5.77	163.66	371.09	0.98

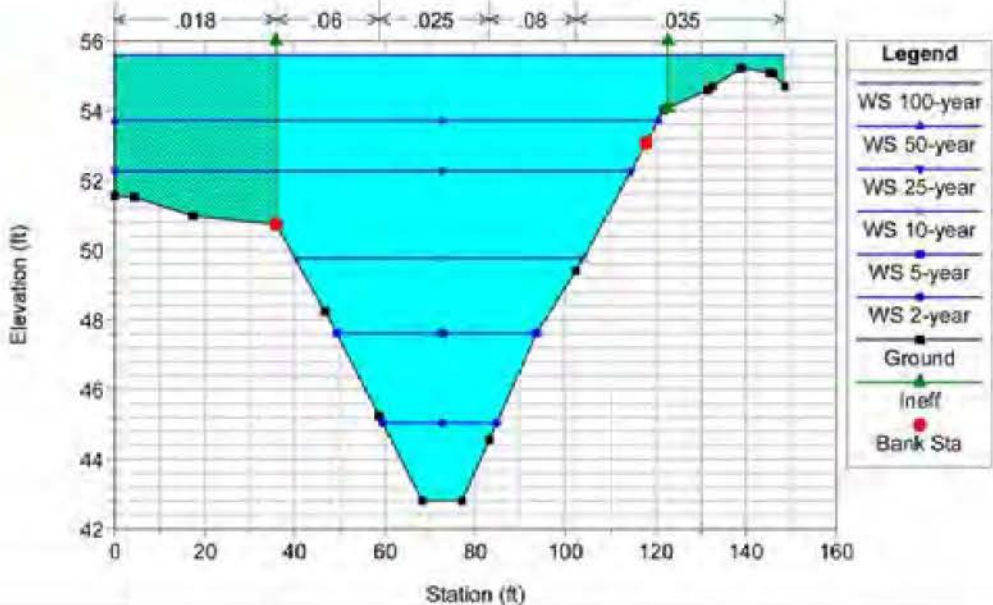
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 8438.736



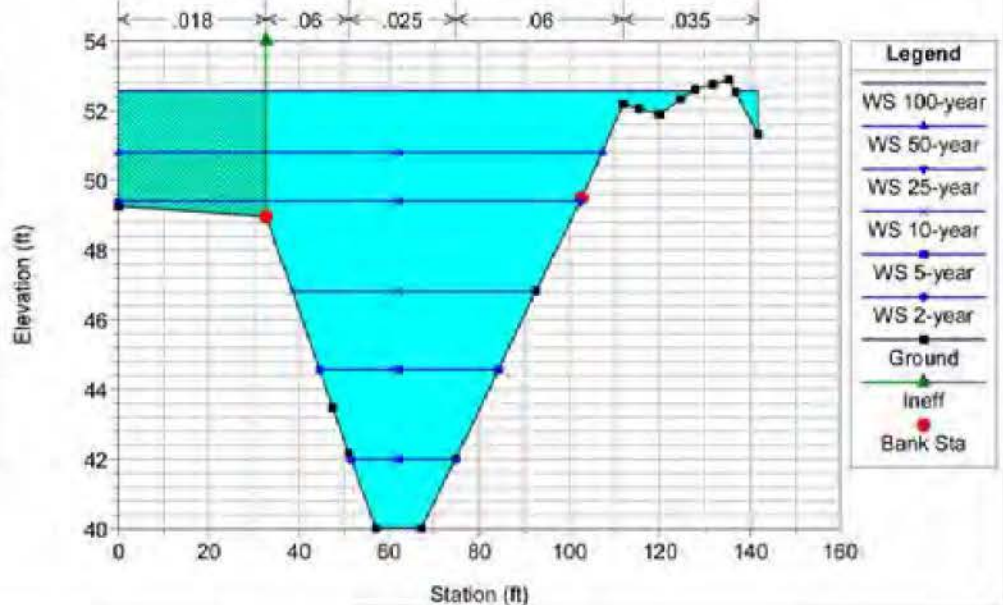
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 7999.449



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 7654.838



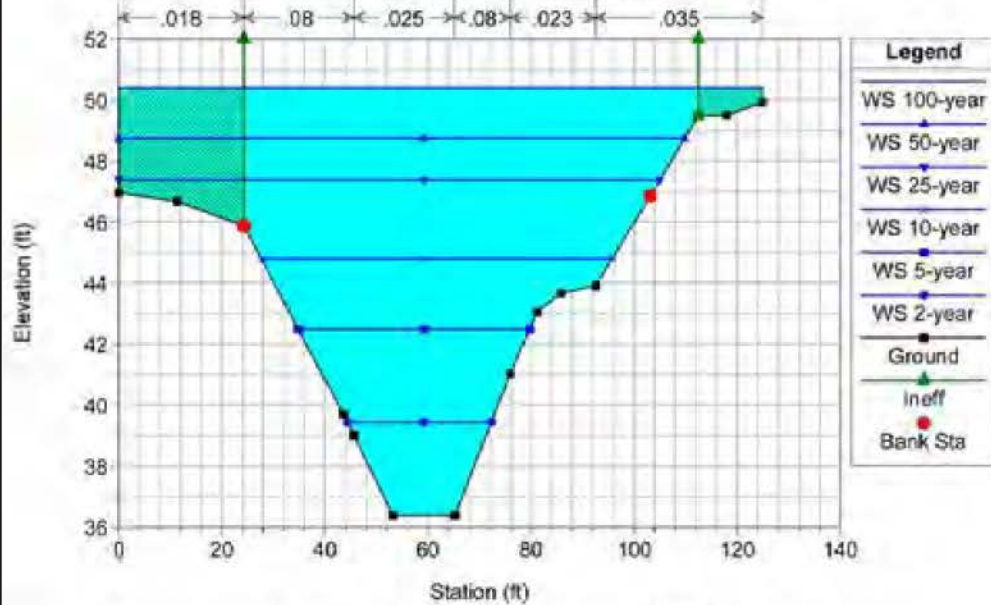
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 7312.272



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

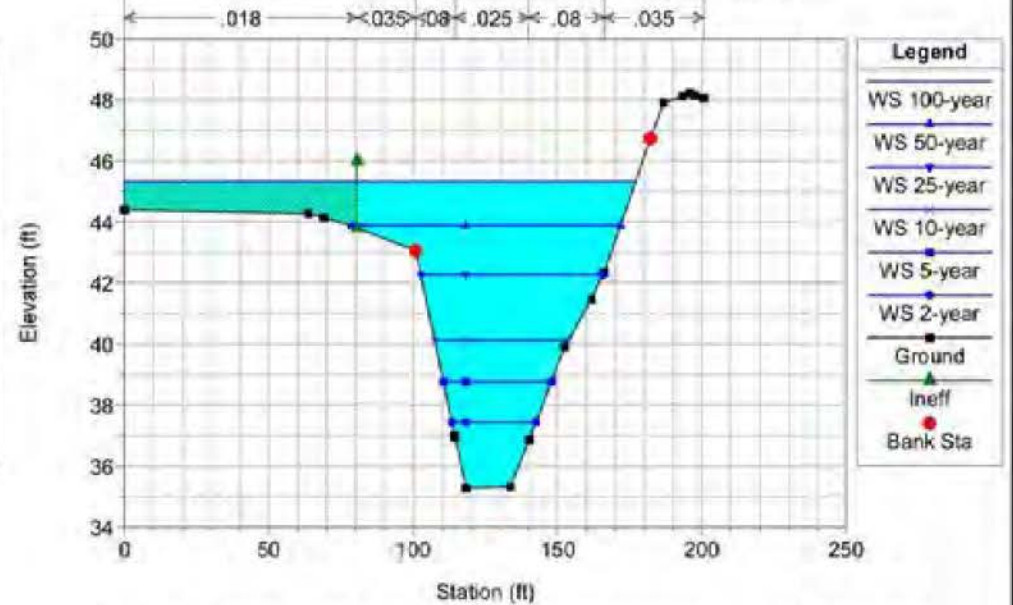
River = Soledad Canyon Reach = Reach RS = 6915.590



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

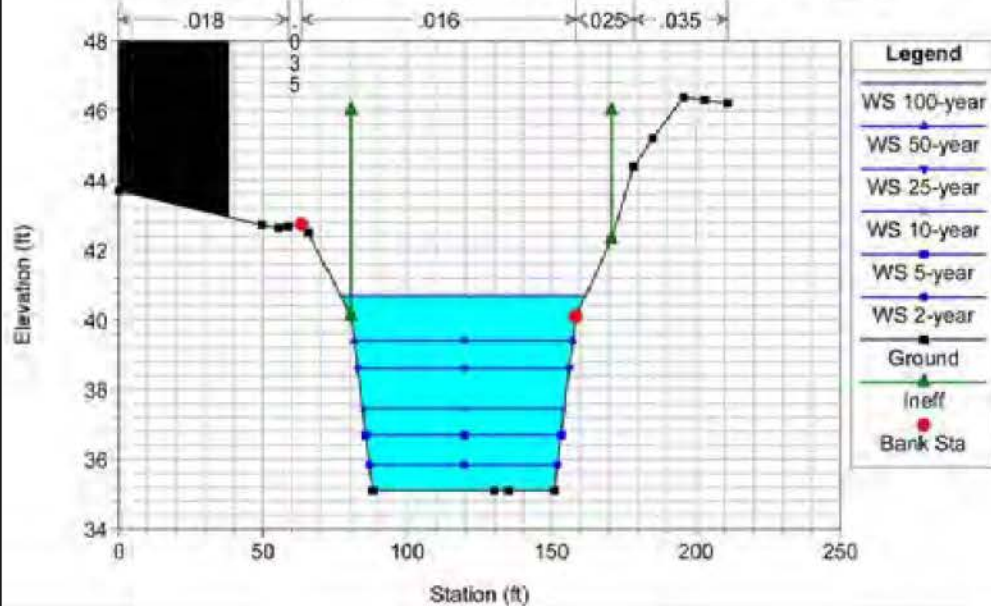
River = Soledad Canyon Reach = Reach RS = 6558.071



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

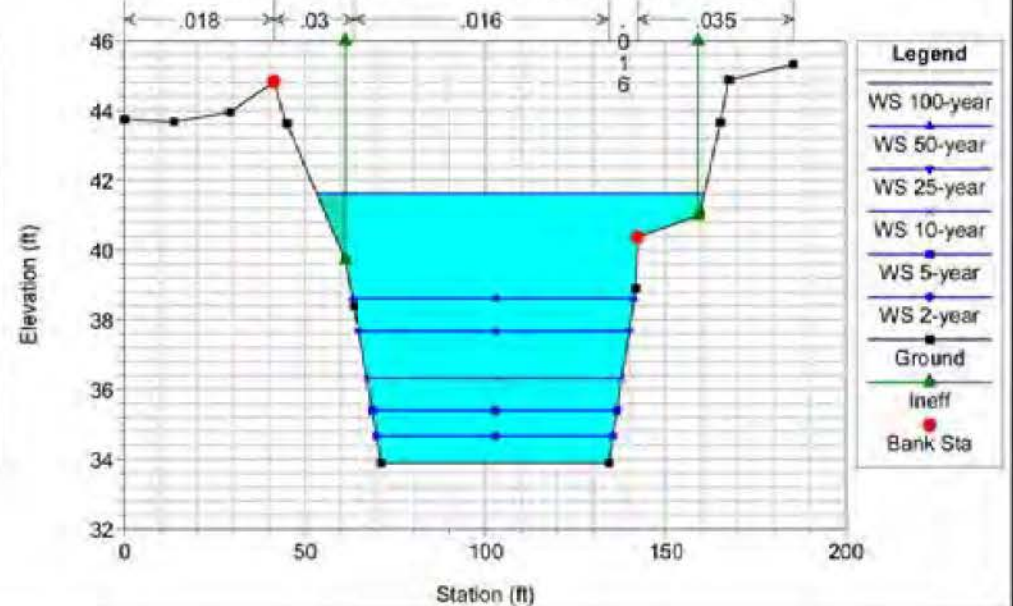
River = Soledad Canyon Reach = Reach RS = 6219.818 U/S end of concrete channel



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

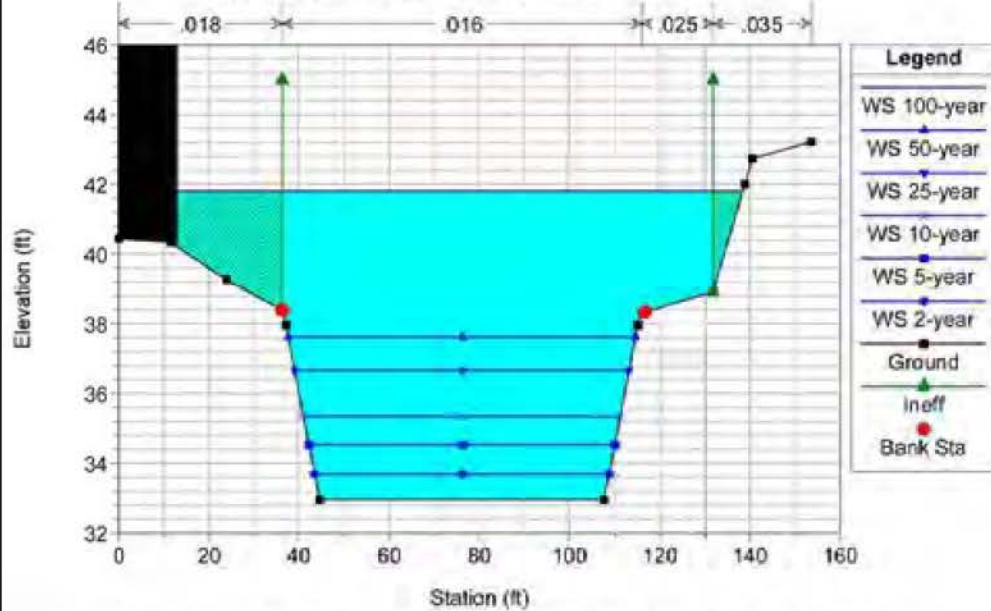
River = Soledad Canyon Reach = Reach RS = 5882.329



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

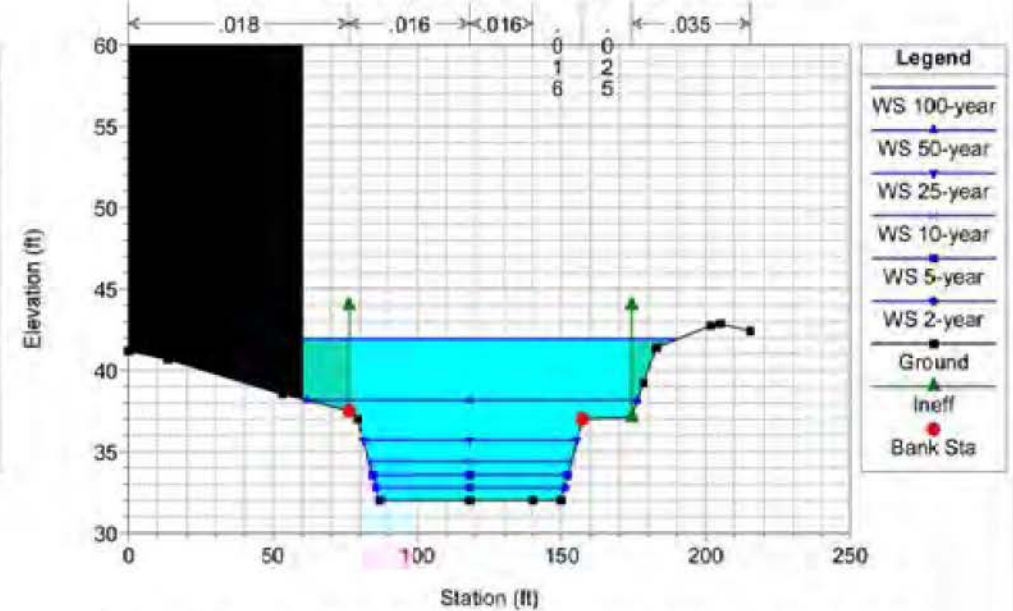
River = Soledad Canyon Reach = Reach RS = 5622.132



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

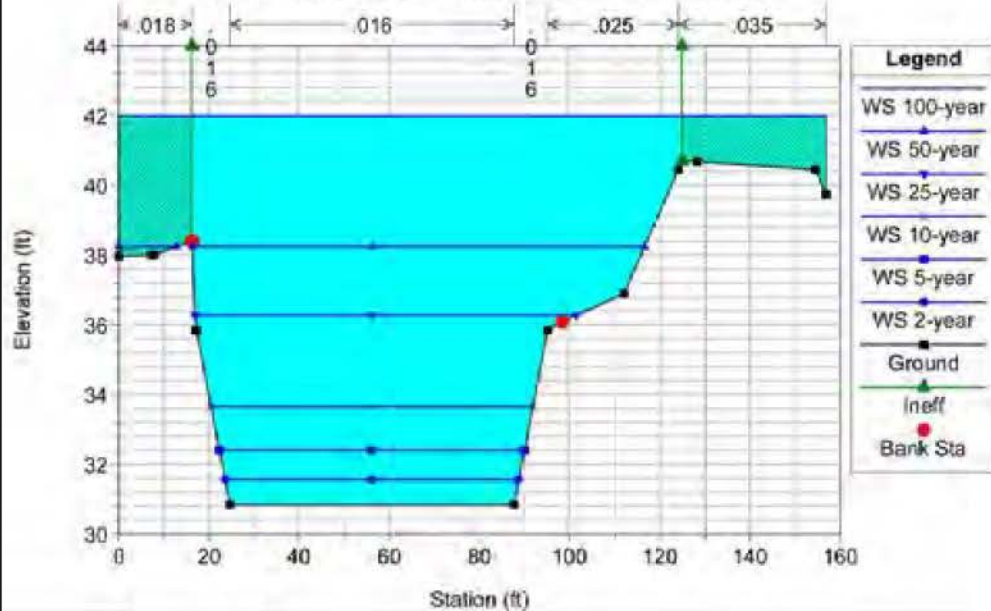
River = Soledad Canyon Reach = Reach RS = 5354.010



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

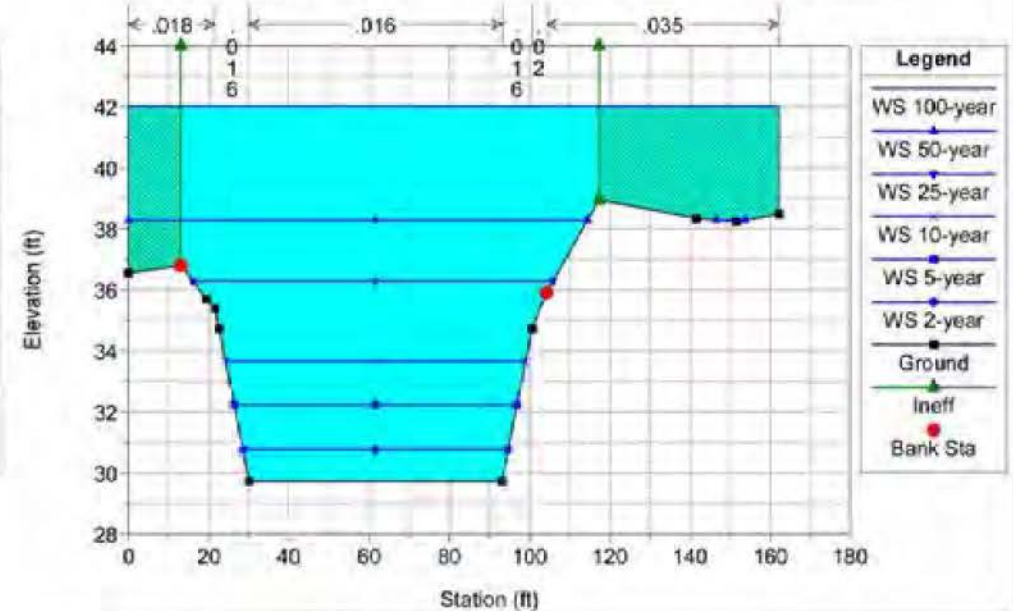
River = Soledad Canyon Reach = Reach RS = 5027.002



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

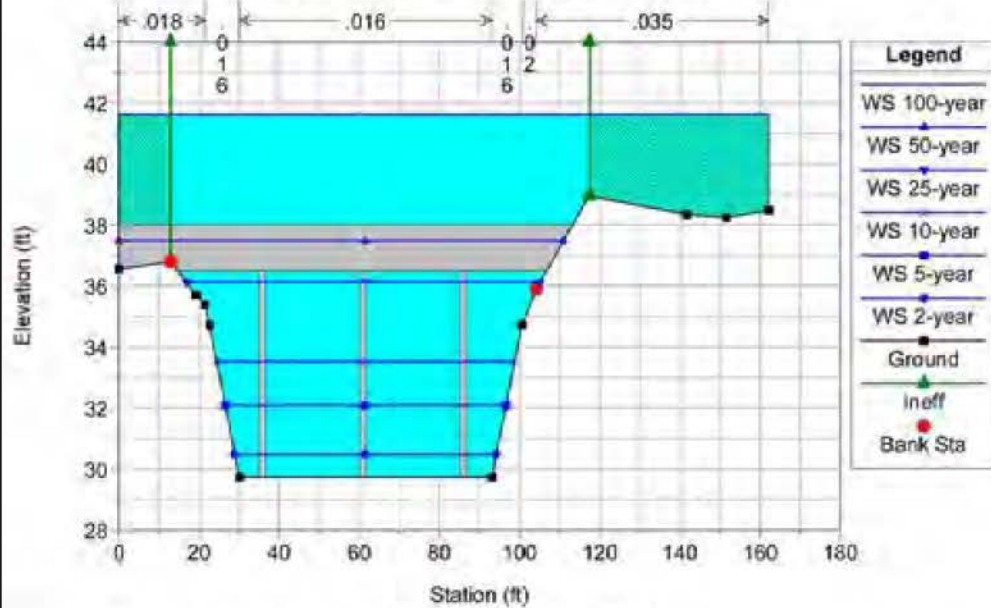
River = Soledad Canyon Reach = Reach RS = 4717.032 Upstream side of bridge at Sorrento Valley Blvd



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

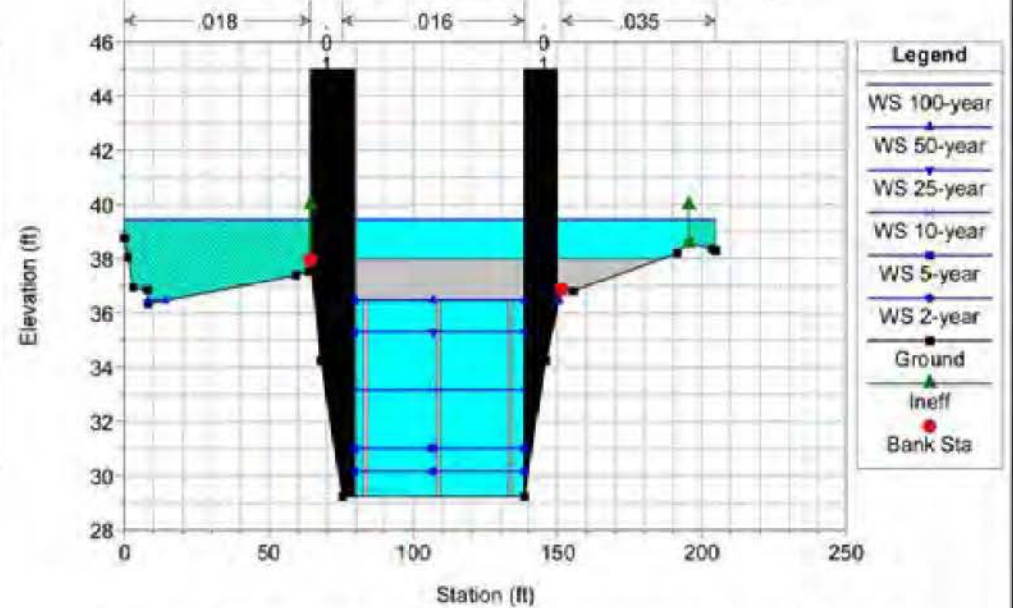
River = Soledad Canyon Reach = Reach RS = 4650 BR



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

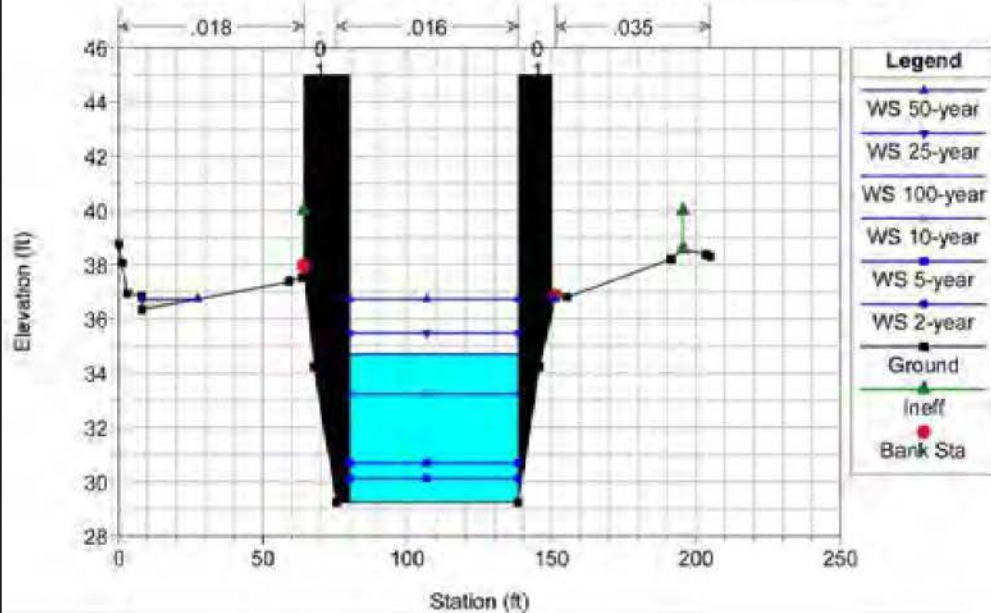
River = Soledad Canyon Reach = Reach RS = 4650 BR



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

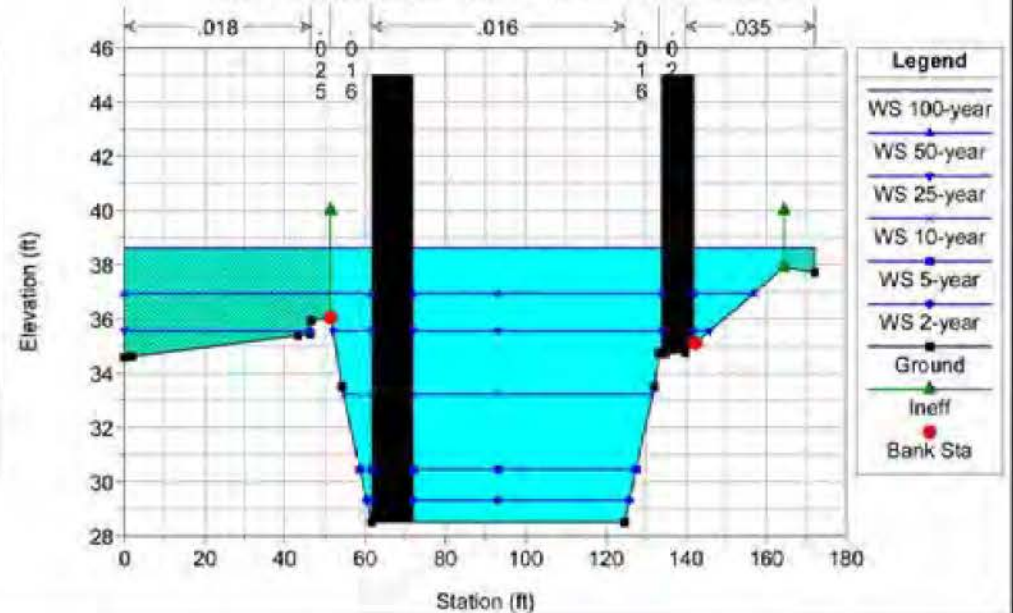
River = Soledad Canyon Reach = Reach RS = 4581.172 Downstream side of bridge at Sorrento Valley Blvd



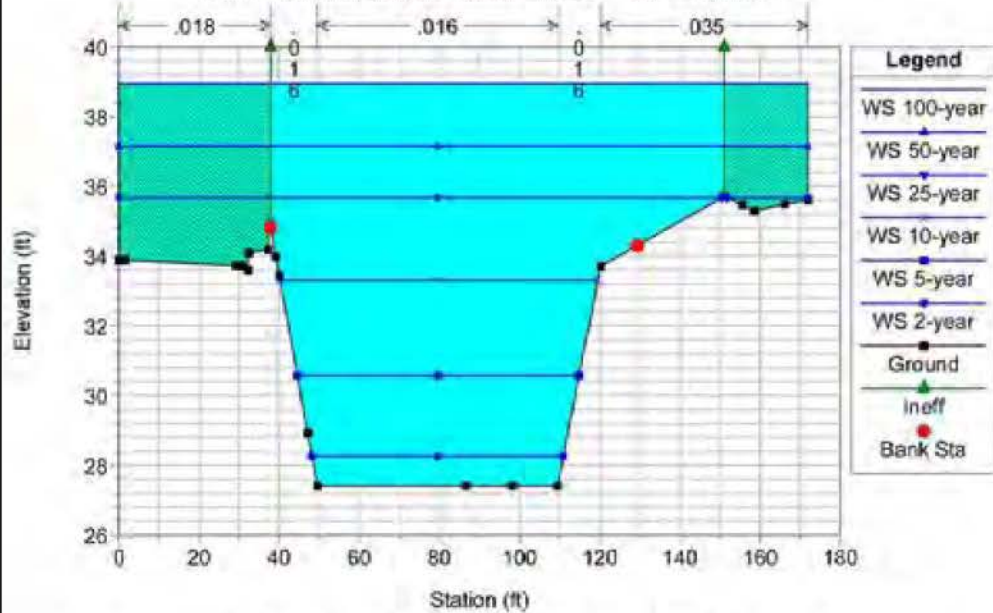
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

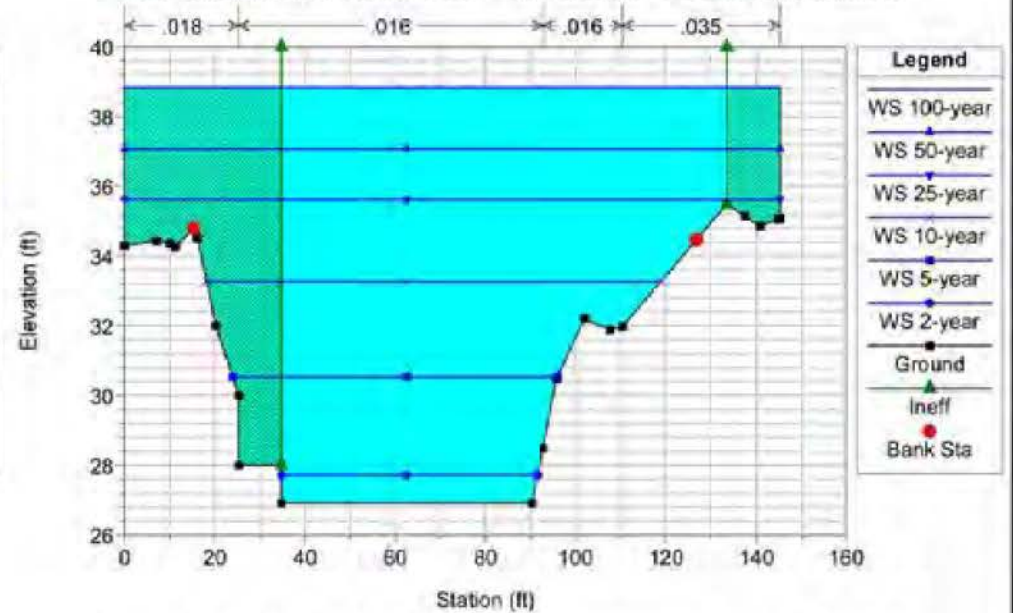
River = Soledad Canyon Reach = Reach RS = 4376.043



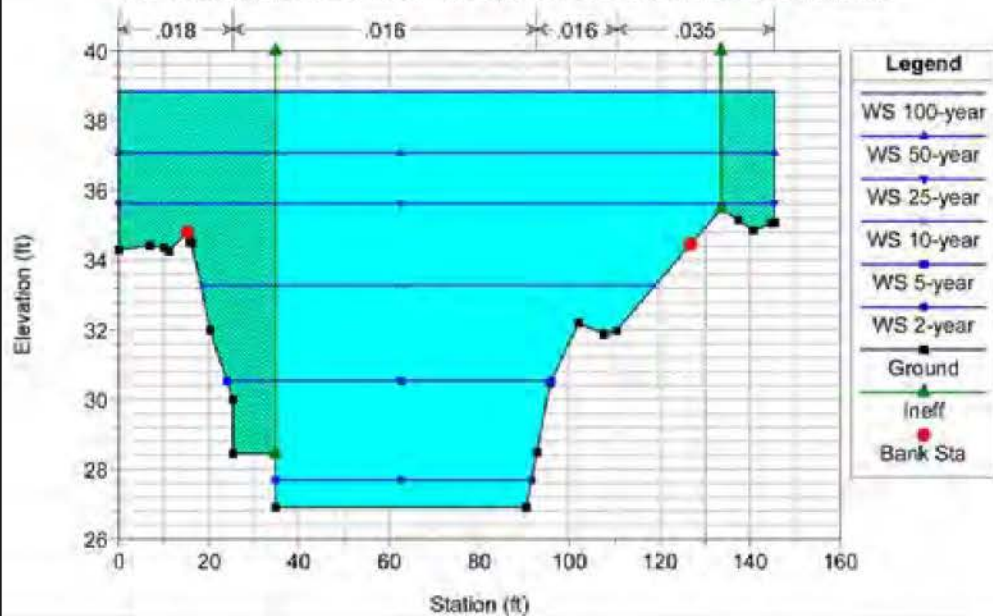
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 4067.964



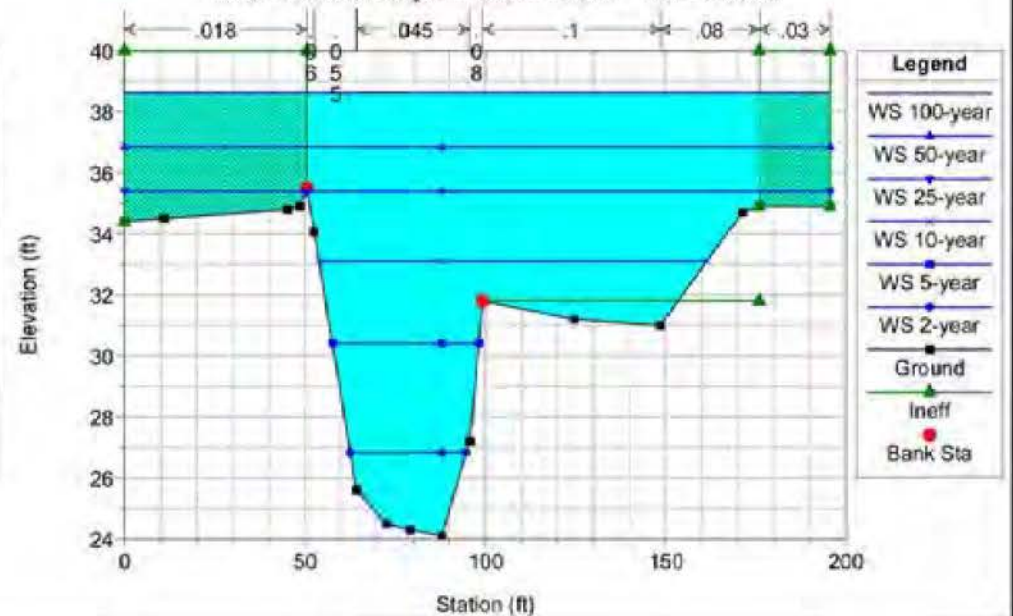
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 3930.969 D/S End of concrete channel



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 3928.989 D/S End of concrete channel - Additional XS



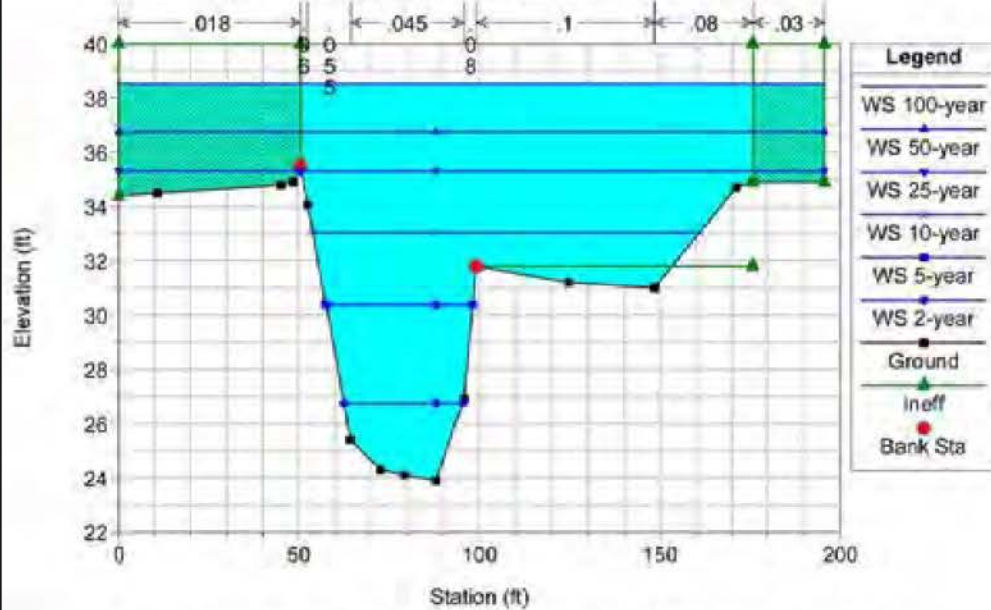
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 3786.09



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

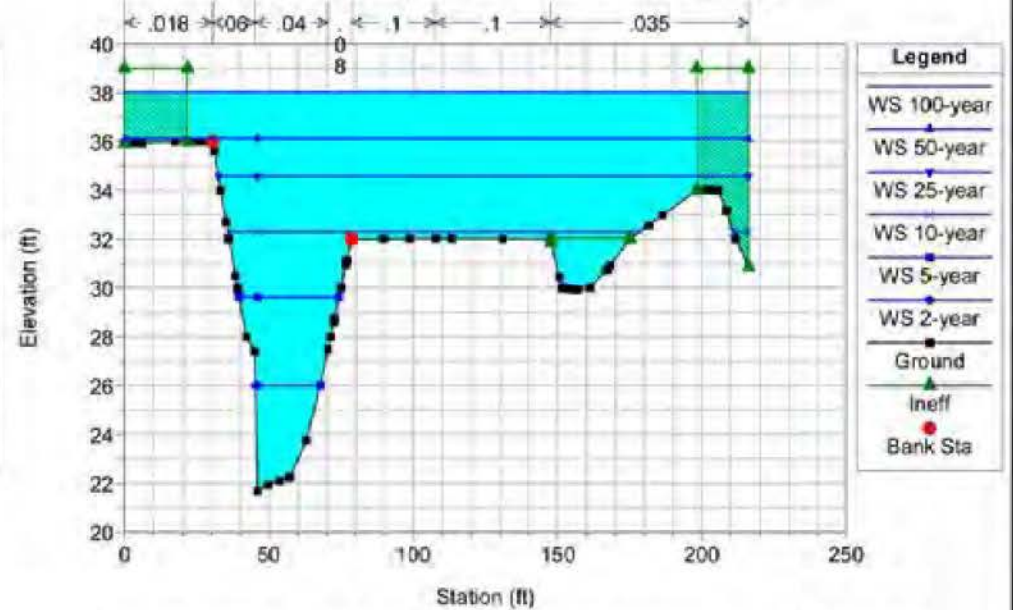
River = Soledad Canyon Reach = Reach RS = 3762.202



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

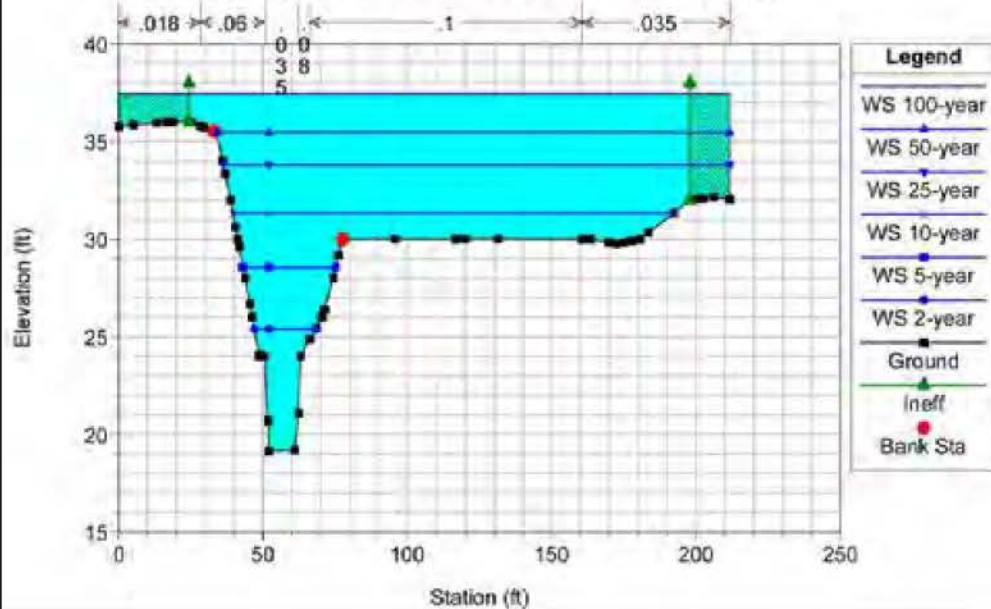
River = Soledad Canyon Reach = Reach RS = 3493.546



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

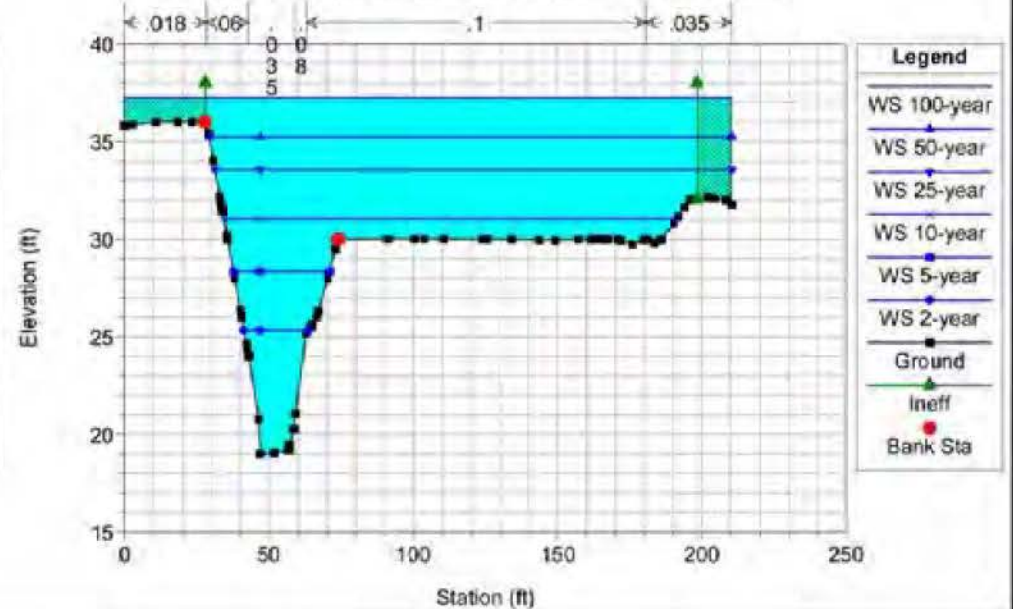
River = Soledad Canyon Reach = Reach RS = 3236.080



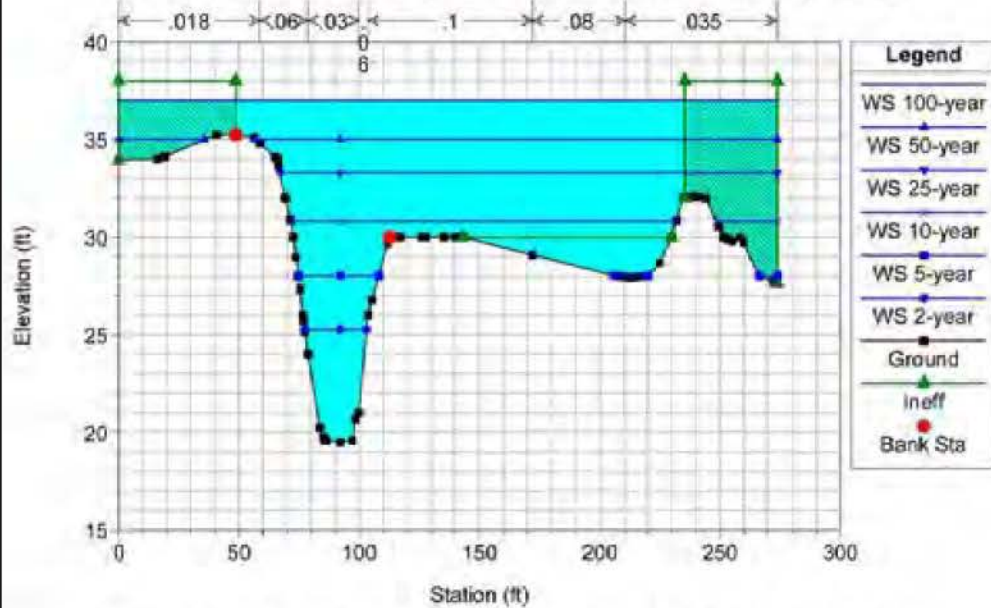
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

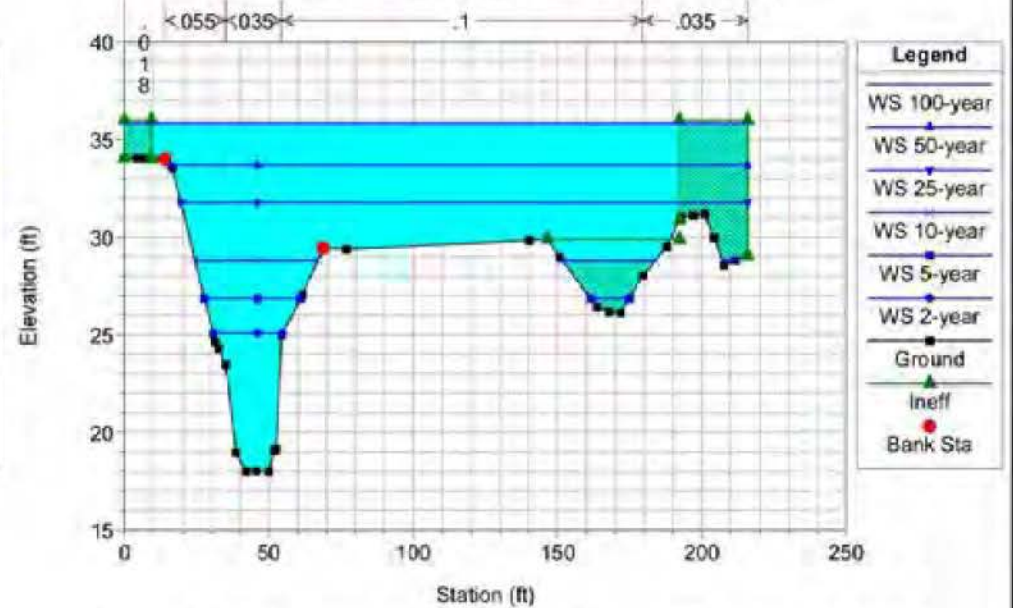
River = Soledad Canyon Reach = Reach RS = 3183.288



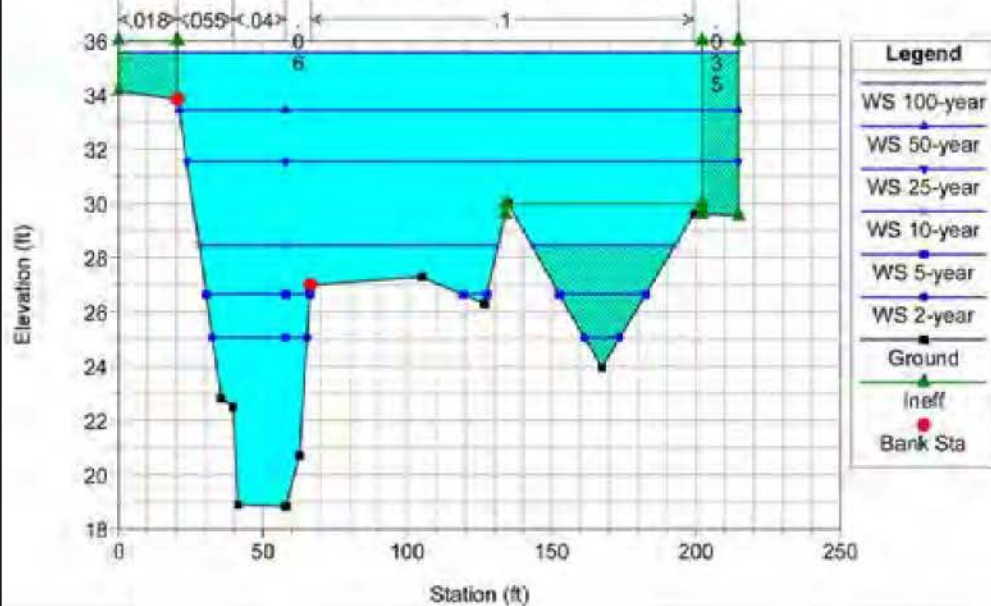
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 3063.726 Dunhill-Roselle confluence



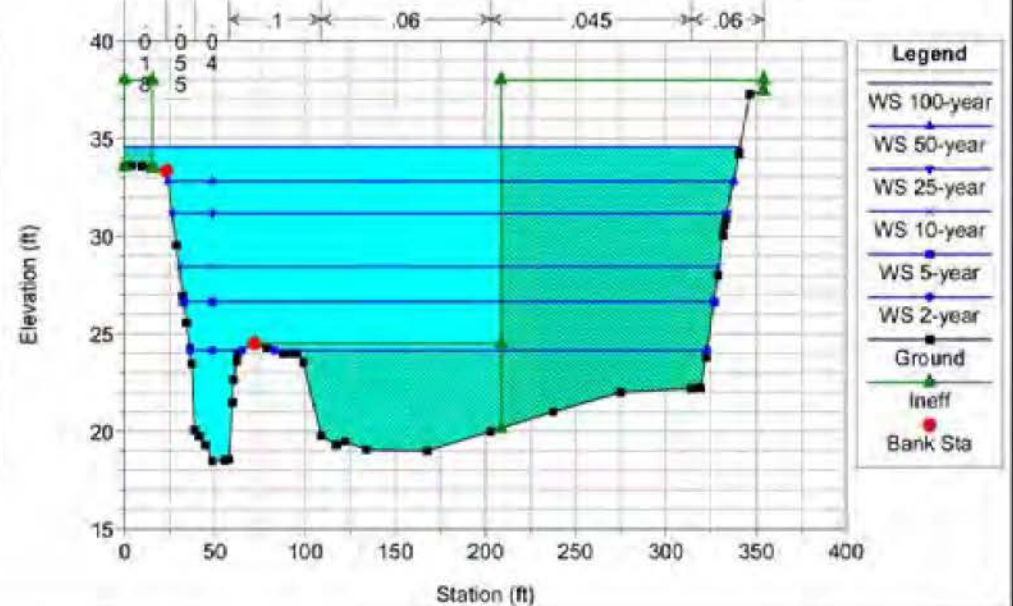
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 2632.288



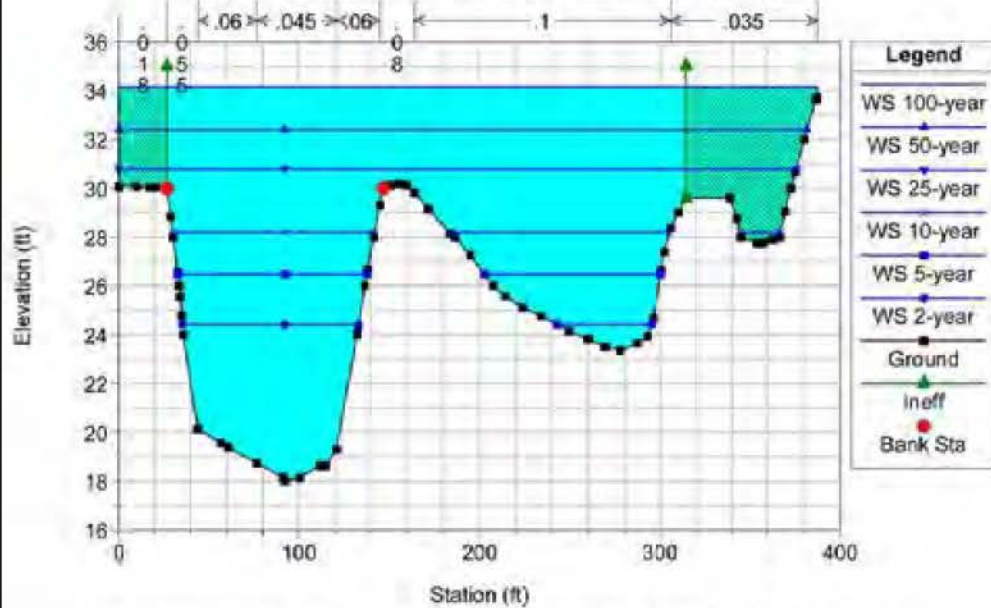
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 2513.412



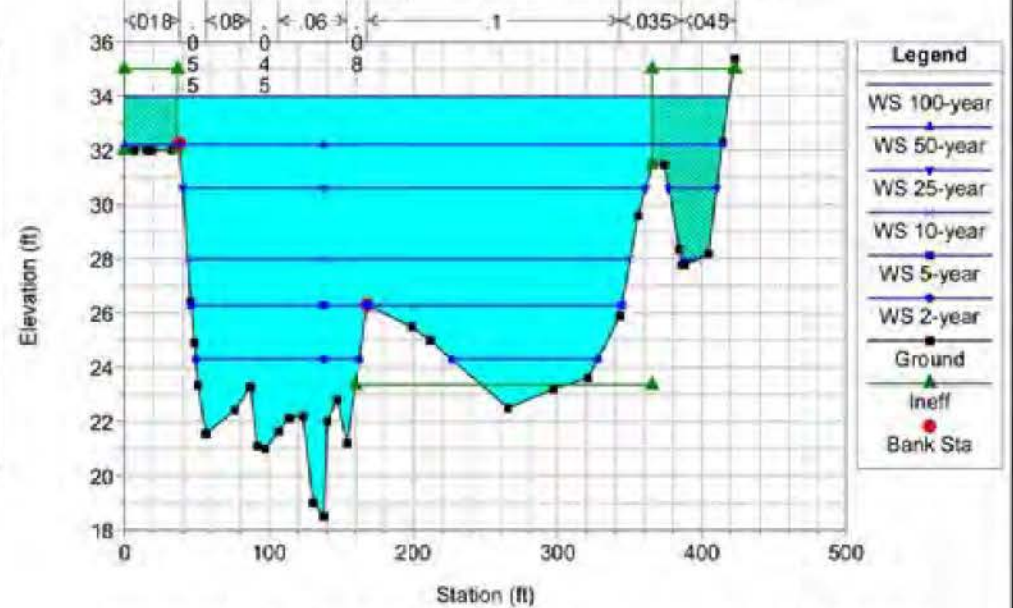
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 2376.699 FinSide Street Channel-Los Penasquitos Canyon and SoledadCorr



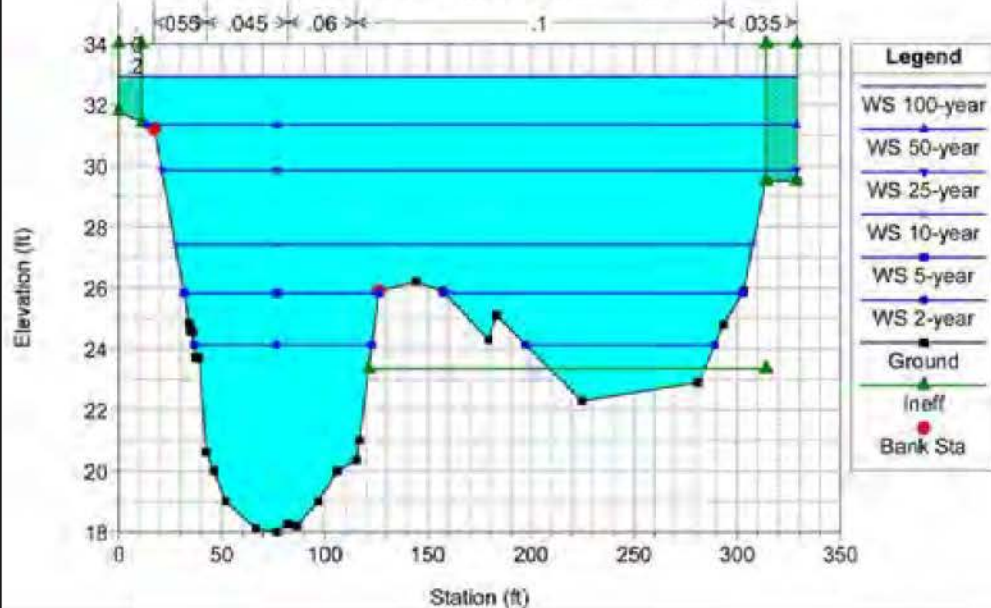
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 2282.69



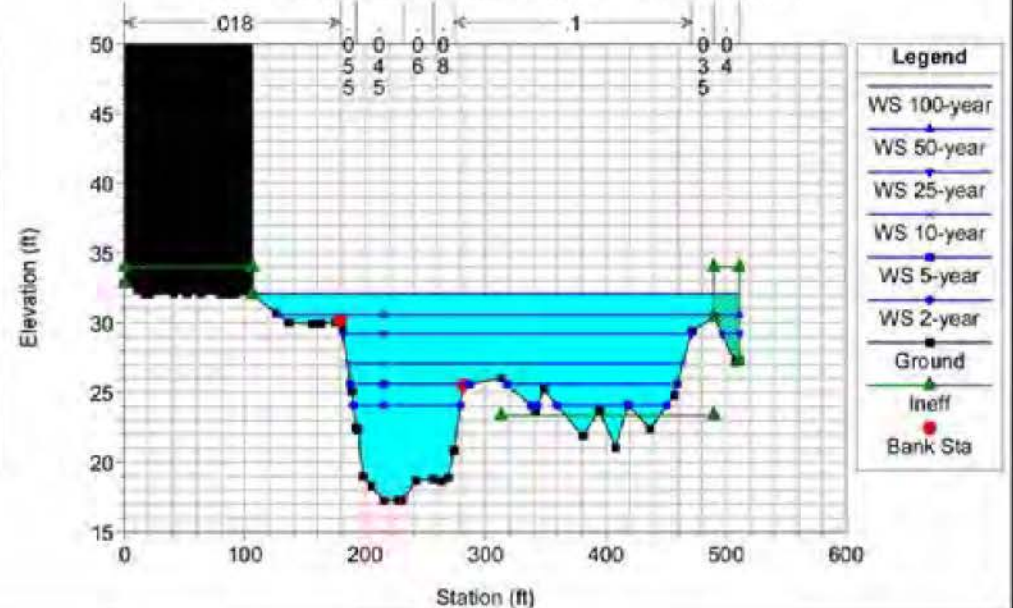
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 2161.926



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 1969.374



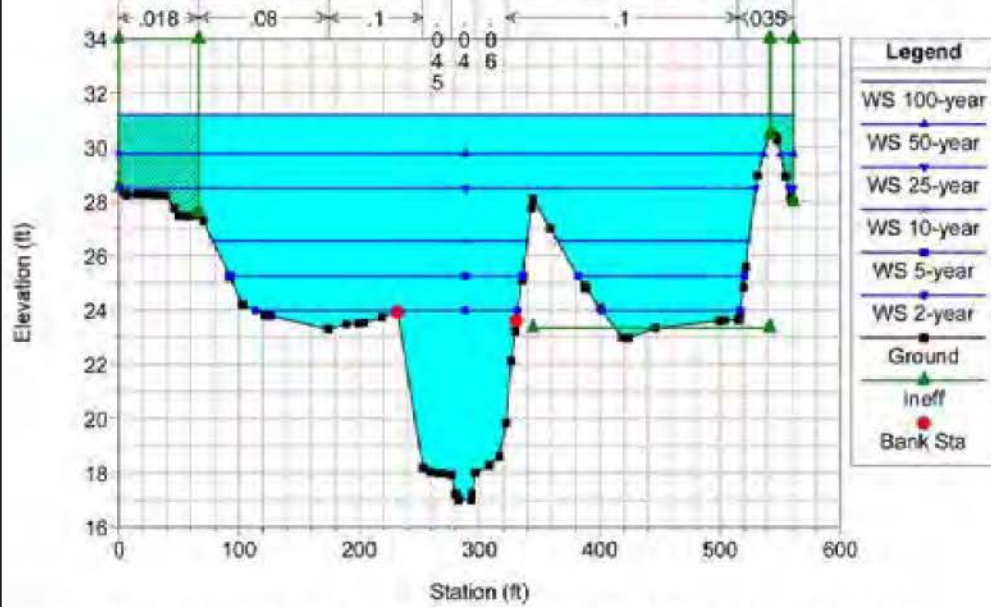
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 1828.694



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

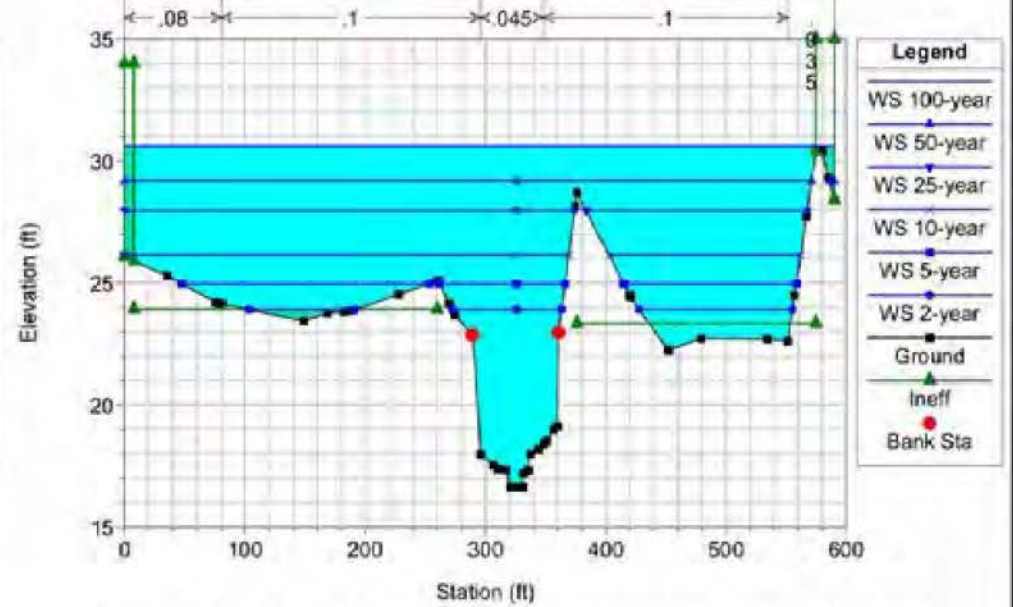
River = Soledad Canyon Reach = Reach RS = 1585.63



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

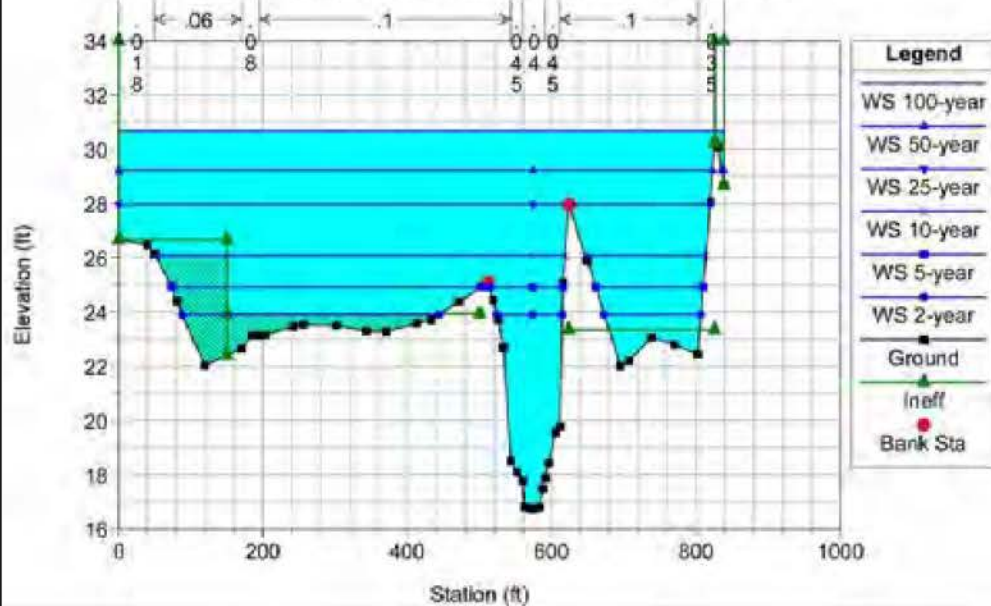
River = Soledad Canyon Reach = Reach RS = 1442.275



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

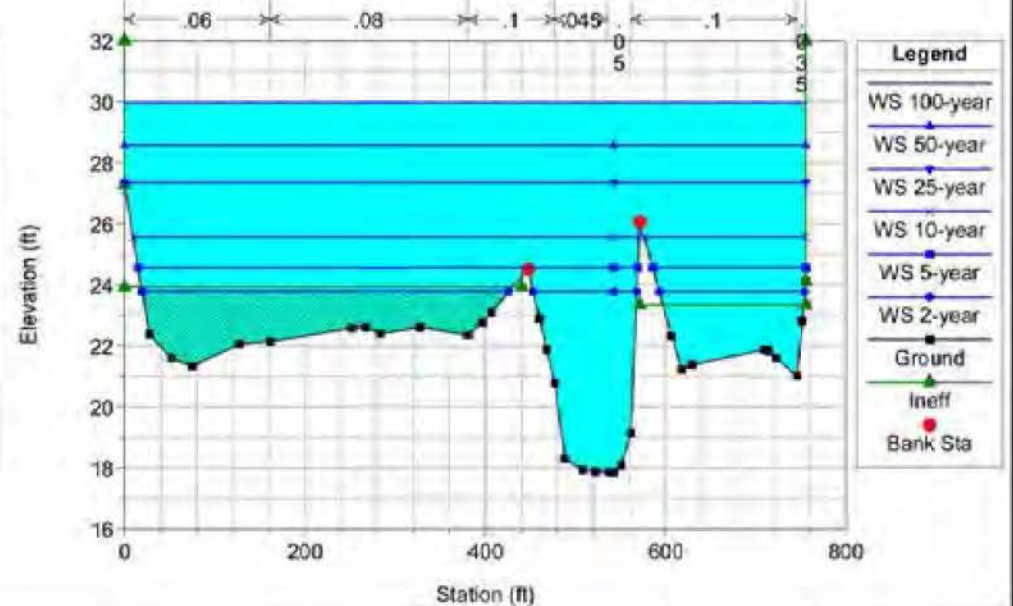
River = Soledad Canyon Reach = Reach RS = 1386.102



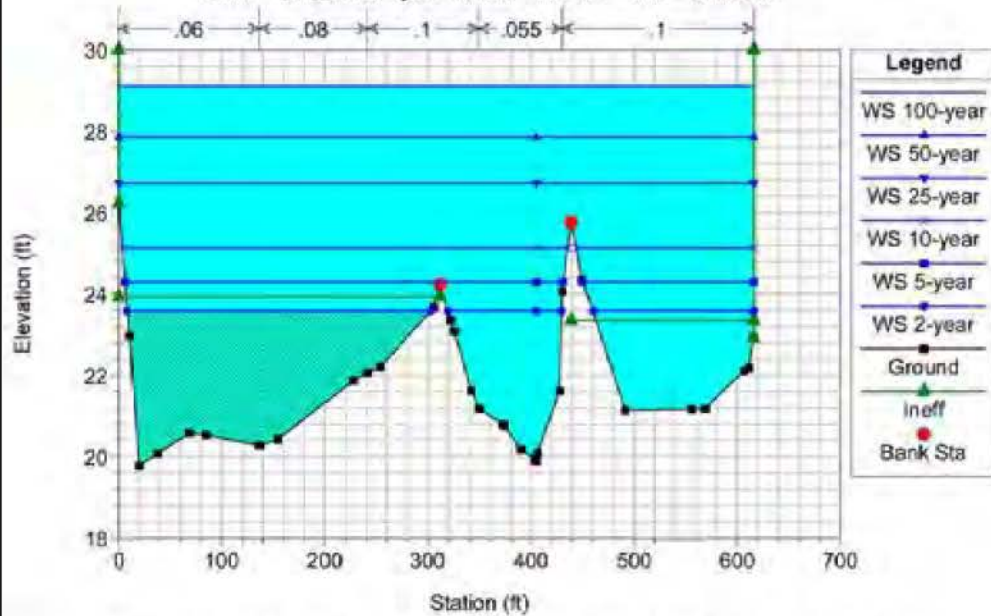
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA

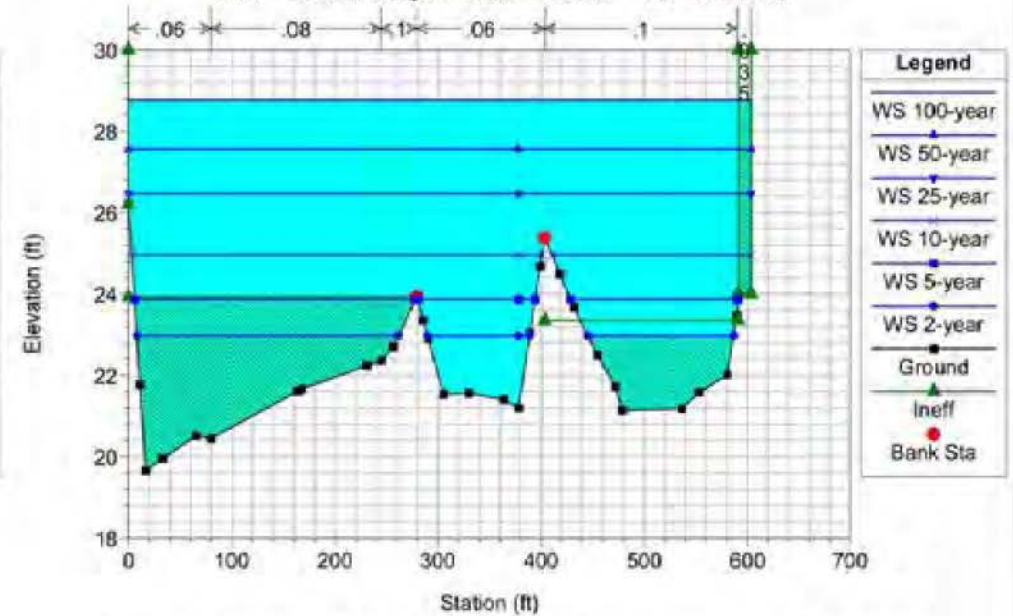
River = Soledad Canyon Reach = Reach RS = 972.2879



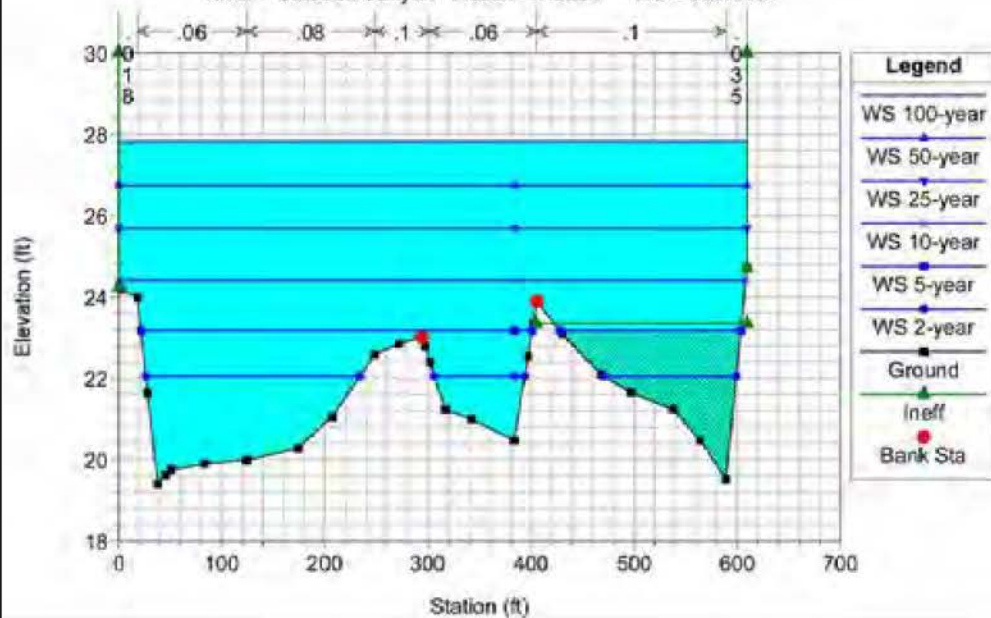
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 615.5682



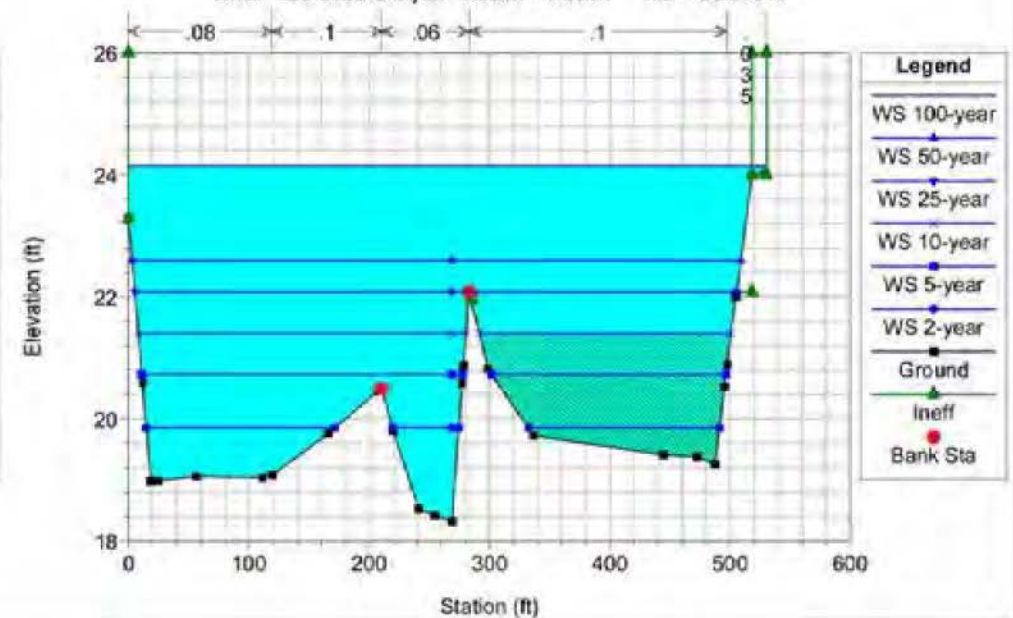
Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 555.0848



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 335.8184



Sorrento-Soledad Plan: URSMaintd Veg-Sed Remd-Reach 3 ONLY 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA
 River = Soledad Canyon Reach = Reach RS = 30.31517

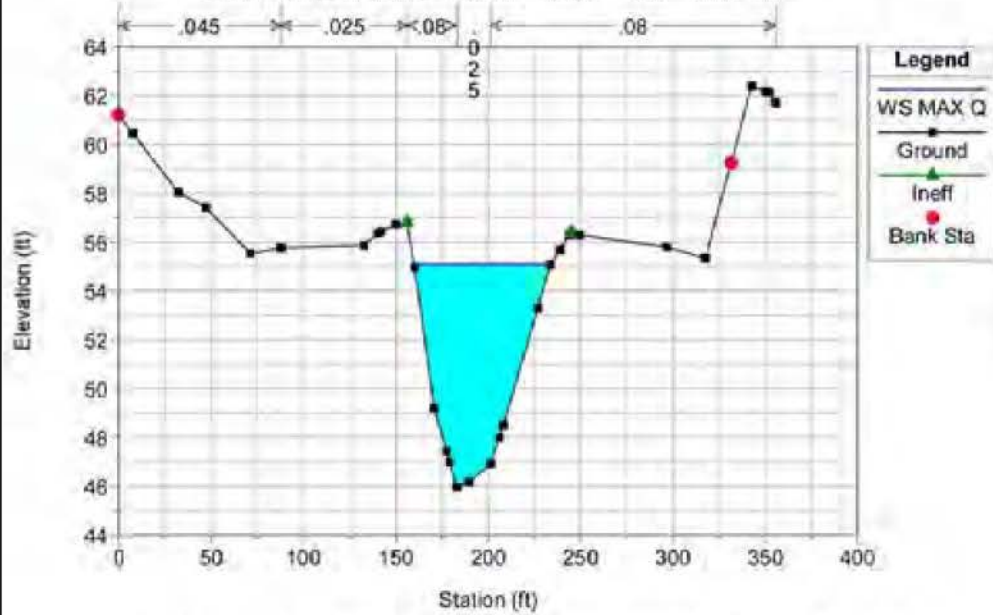


DETAILED HYDRAULIC RESULTS FOR REACH 3 MAINTAINED CONDITION (SEDIMENT REMOVED), MAXIMUM FLOW

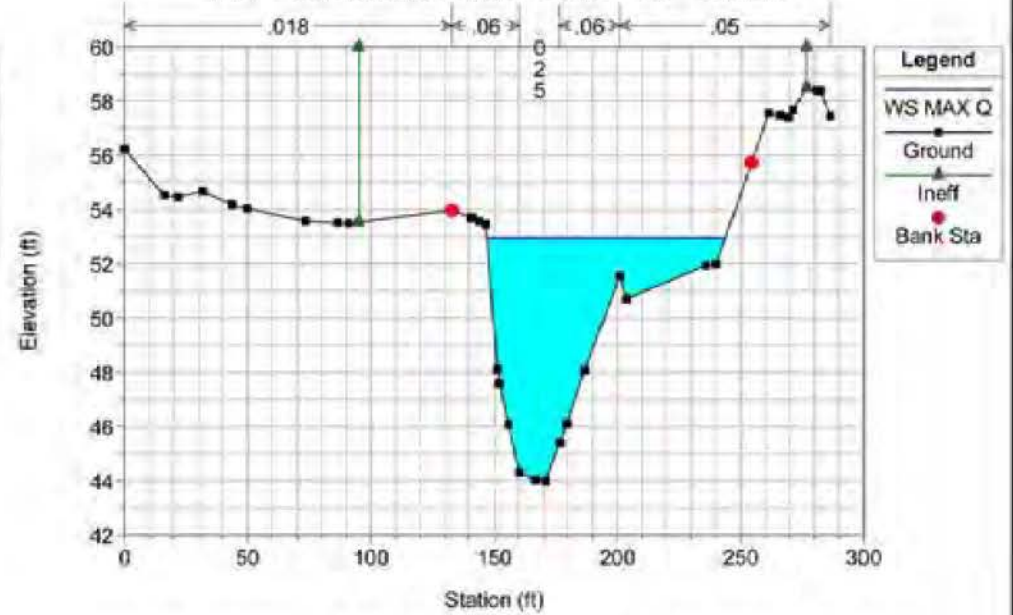
HEC-RAS Plan VegSecRemMAXQ River: Soledad Canyon Reach: Reach Profile: MAX Q

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	8438.736	MAX Q	1900.00	45.96	55.09	51.33	55.41	0.004722	4.56	416.94	73.90	0.34
Reach	7999.449	MAX Q	1900.00	43.99	52.96	50.01	53.33	0.004737	4.92	385.91	96.95	0.43
Reach	7654.838	MAX Q	1900.00	42.81	50.54	48.74	51.18	0.008397	6.42	295.94	70.47	0.55
Reach	7312.272	MAX Q	1900.00	40.02	47.64	45.97	48.44	0.007557	7.15	265.74	59.39	0.60
Reach	6915.590	MAX Q	1900.00	36.38	45.62	42.48	46.05	0.004499	5.28	359.80	73.62	0.42
Reach	6558.071	MAX Q	1900.00	35.28	40.77	40.77	42.51	0.032346	10.58	179.62	51.69	1.00
Reach	6219.818	MAX Q	1900.00	35.10	37.75	38.08	39.53	0.004031	10.70	177.49	70.95	1.19
Reach	5882.329	MAX Q	1900.00	33.89	36.74	36.86	38.25	0.003159	9.89	192.11	72.01	1.07
Reach	5622.132	MAX Q	1900.00	32.96	35.69	35.94	37.36	0.003637	10.36	183.36	71.20	1.14
Reach	5354.010	MAX Q	1900.00	32.01	34.78	34.99	36.40	0.003454	10.19	186.37	71.32	1.11
Reach	5027.002	MAX Q	1900.00	30.84	34.44	33.81	35.37	0.001433	7.71	246.59	73.81	0.74
Reach	4717.032	MAX Q	1900.00	29.73	34.47	32.70	34.98	0.000569	5.72	332.18	77.21	0.49
Reach	4650		Bridge									
Reach	4581.172	MAX Q	1900.00	29.24	34.00	32.44	34.73	0.000829	6.64	277.82	58.38	0.55
Reach	4376.043	MAX Q	1900.00	28.51	34.01	31.83	34.51	0.000581	5.67	334.98	68.61	0.45
Reach	4067.964	MAX Q	1900.00	27.41	34.08	30.47	34.33	0.000246	4.01	473.24	119.28	0.30
Reach	3836.888	MAX Q	1900.00	26.82	34.04	30.18	34.28	0.000312	4.03	471.76	107.01	0.31
Reach	3928.989	MAX Q	1900.00	26.91	34.04	30.17	34.29	0.000312	4.02	472.67	107.10	0.31
Reach	3786.09	MAX Q	1900.00	24.10	33.84	29.59	34.18	0.002386	4.92	495.91	113.19	0.32
Reach	3762.202	MAX Q	1900.00	23.90	33.79	29.39	34.13	0.002309	4.87	498.41	112.80	0.31
Reach	3493.546	MAX Q	1900.00	21.68	33.05	29.18	33.41	0.003189	5.14	451.51	159.71	0.34
Reach	3236.080	MAX Q	1900.00	19.14	32.23	28.15	32.47	0.003839	4.52	550.12	173.40	0.29
Reach	3183.288	MAX Q	1900.00	19.00	31.98	27.37	32.27	0.003694	4.79	553.13	164.21	0.30
Reach	3063.726	MAX Q	1900.00	19.49	31.76	26.60	31.94	0.001828	3.90	648.75	193.20	0.25
Reach	2632.288	MAX Q	1900.00	18.00	29.78	26.19	30.45	0.007927	6.58	302.09	163.49	0.46
Reach	2513.412	MAX Q	1900.00	18.84	29.47	25.05	29.86	0.002638	5.31	475.91	168.04	0.33
Reach	2376.699	MAX Q	5600.00	18.50	29.39	24.50	29.60	0.001350	2.81	1540.33	301.96	0.18
Reach	2282.69	MAX Q	5600.00	17.99	29.08	24.35	29.42	0.001995	4.95	1470.58	282.26	0.30
Reach	2181.926	MAX Q	5600.00	18.50	28.89	25.54	29.10	0.003013	4.34	1685.24	335.01	0.30
Reach	1969.374	MAX Q	5600.00	18.00	28.26	24.70	28.56	0.002733	5.06	1542.87	284.95	0.32
Reach	1828.694	MAX Q	5600.00	17.25	27.80	24.02	28.14	0.002939	5.23	1506.20	288.94	0.32
Reach	1585.63	MAX Q	5600.00	17.00	27.22	24.38	27.45	0.002631	4.55	1872.27	440.49	0.28
Reach	1442.275	MAX Q	5600.00	16.64	26.77	24.52	27.04	0.003168	5.23	1920.38	538.74	0.31
Reach	1386.102	MAX Q	5600.00	16.74	26.75	24.35	26.84	0.001653	3.15	2842.51	797.49	0.21
Reach	972.2879	MAX Q	5600.00	17.86	26.23	23.39	26.29	0.001016	2.45	3217.32	749.07	0.17
Reach	615.5692	MAX Q	5600.00	19.90	25.76	23.93	25.84	0.001566	2.67	2585.50	614.58	0.23
Reach	555.0848	MAX Q	5600.00	21.19	25.56	23.93	25.68	0.002762	2.96	2199.97	602.15	0.28
Reach	335.8164	MAX Q	5600.00	20.47	25.02	22.85	25.12	0.002454	2.87	2213.87	609.87	0.27
Reach	30.31517	MAX Q	5600.00	18.32	21.88	21.84	23.04	0.051031	10.77	689.14	494.60	1.16

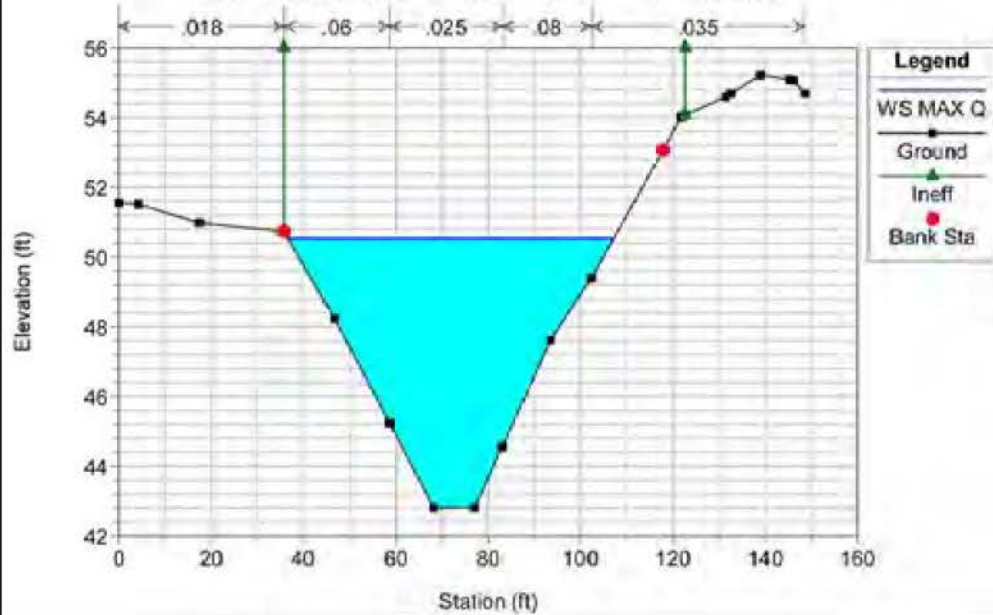
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 8438.736



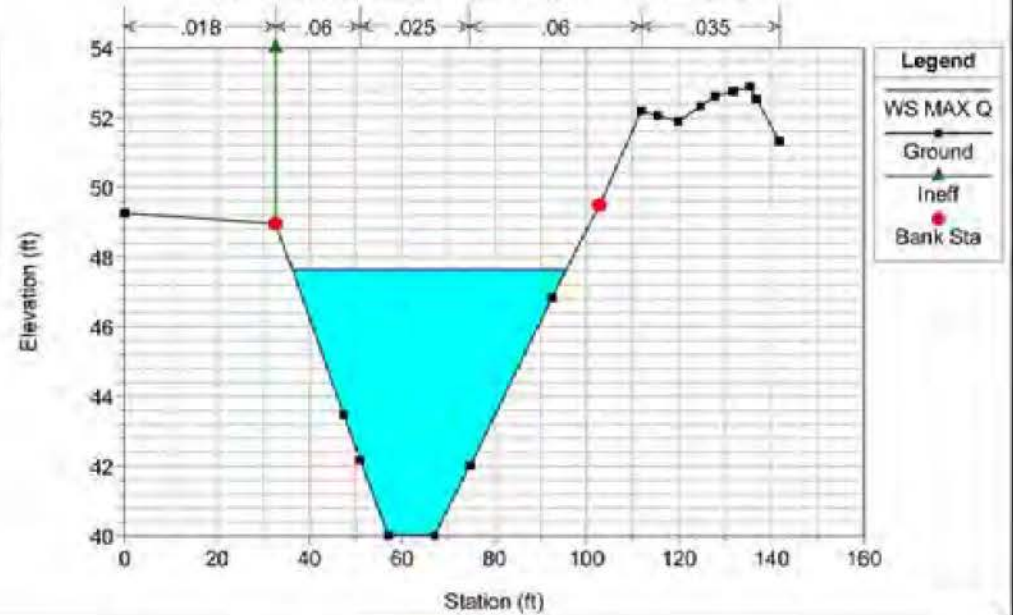
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 7999.449



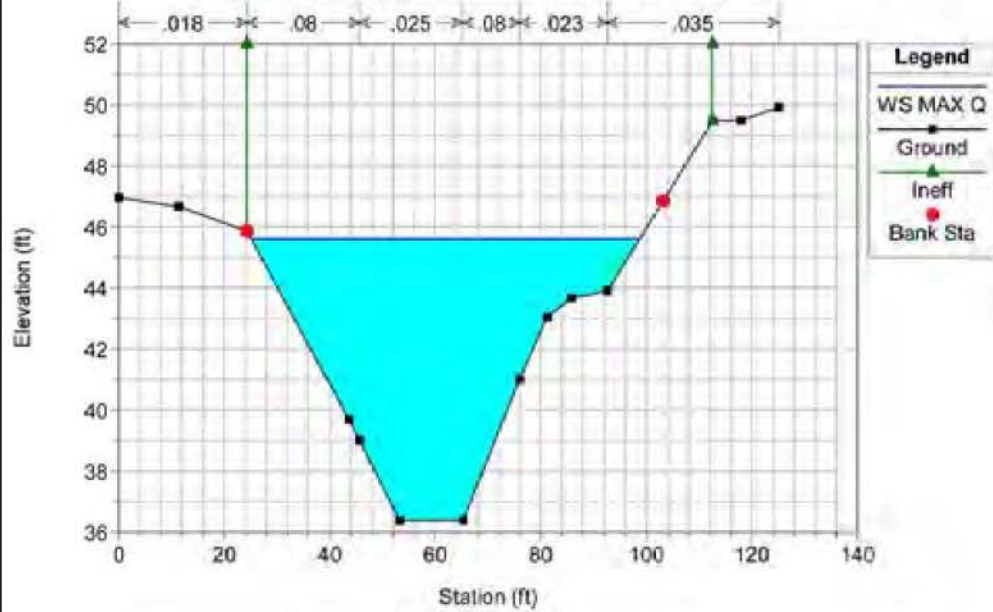
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 7654.838



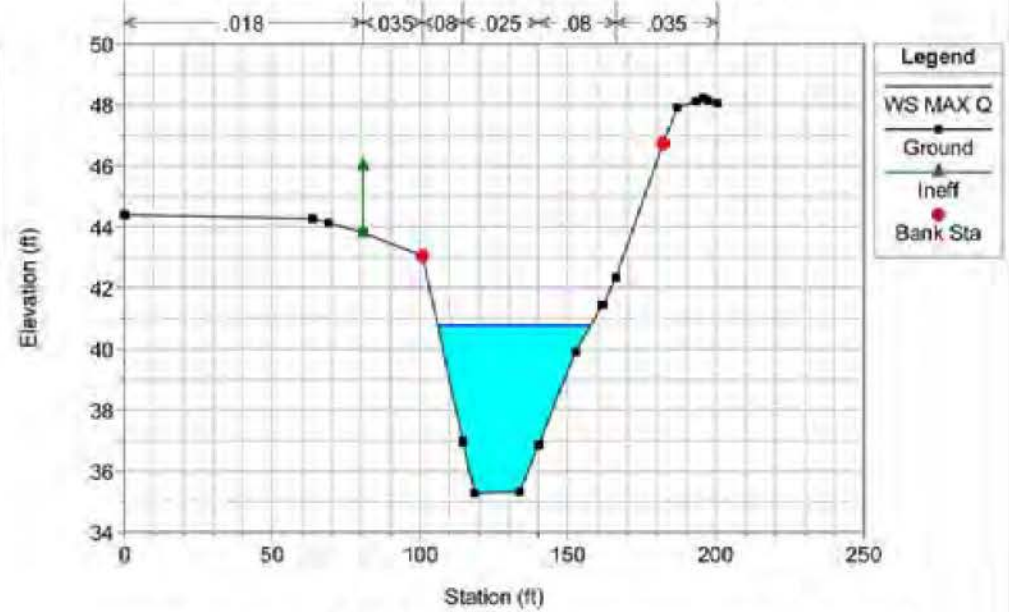
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 7312.272



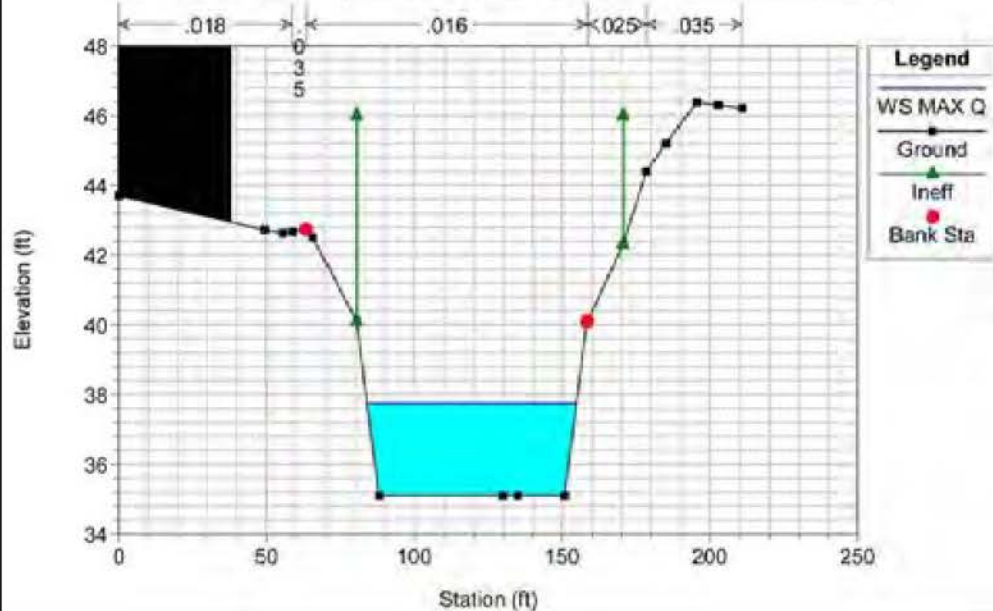
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 6915.590



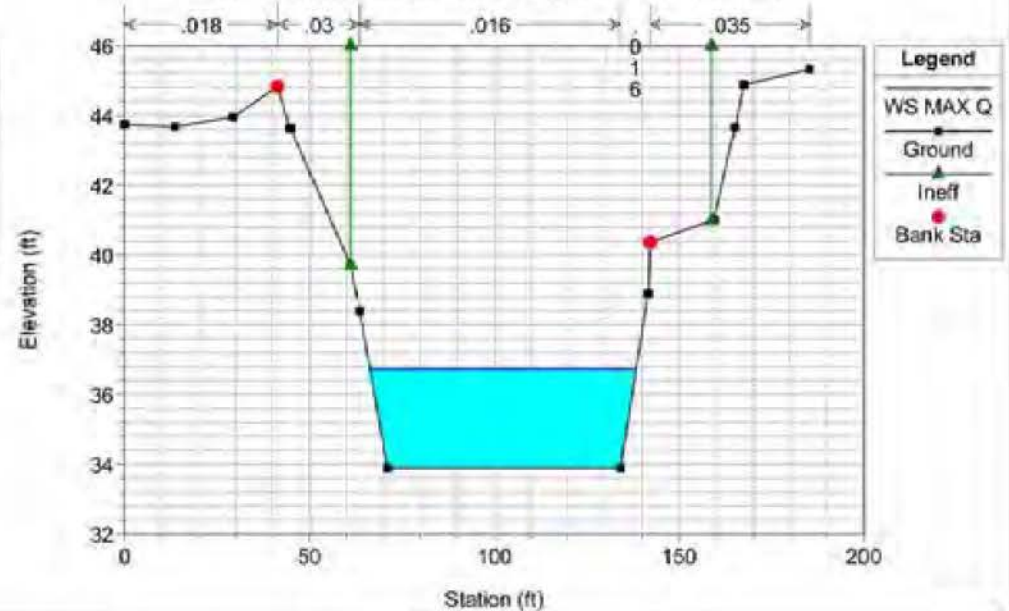
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 6558.071



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 6219.816 U/S end of concrete channel



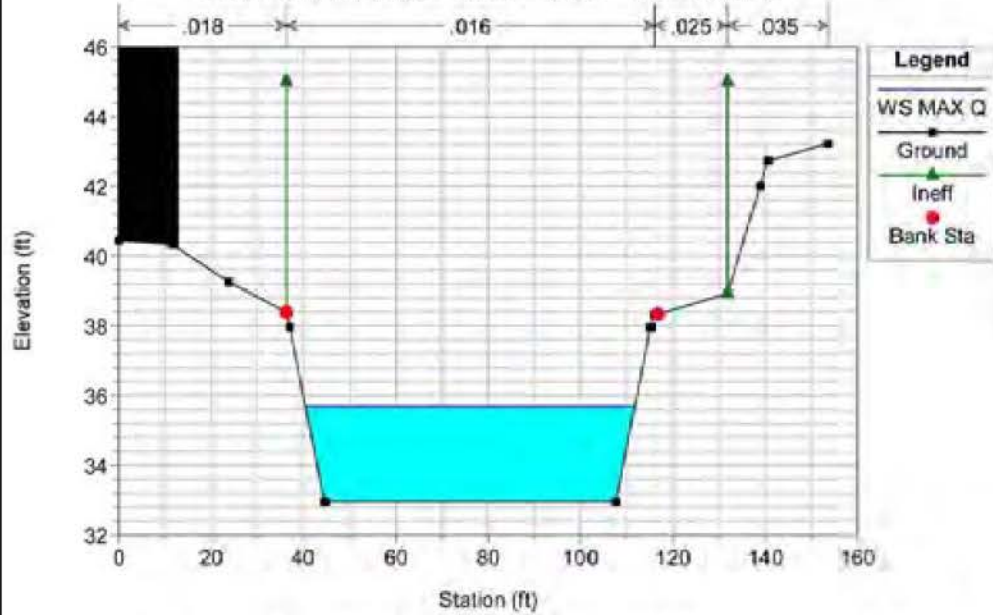
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 5882.329



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

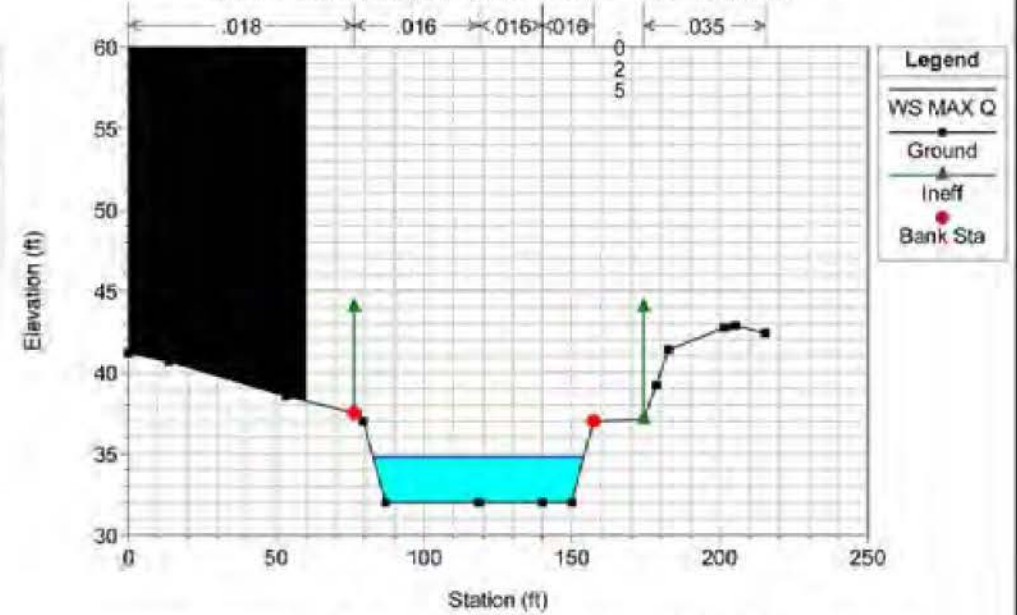
River = Soledad Canyon Reach = Reach RS = 5622.132



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

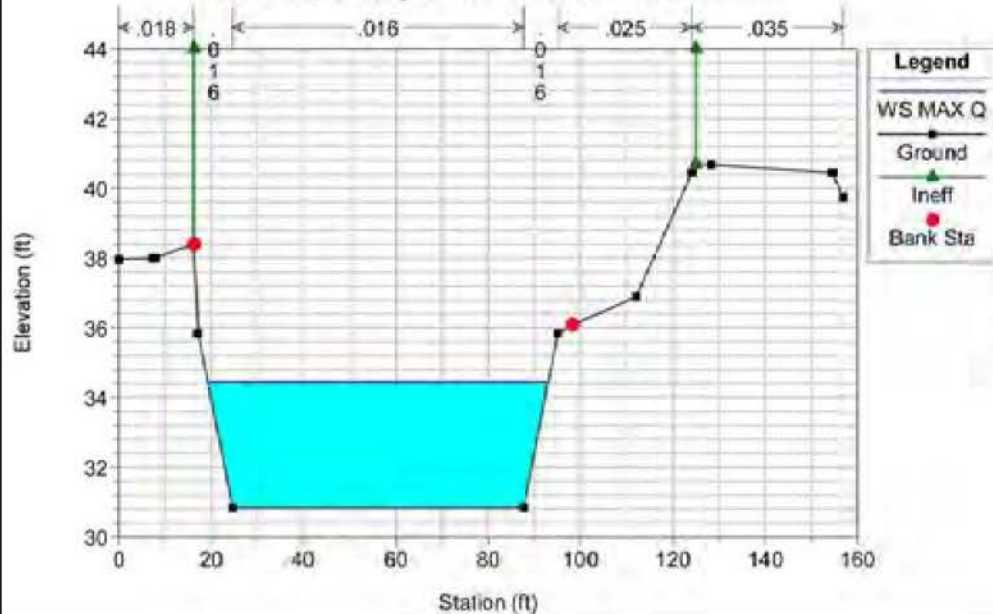
River = Soledad Canyon Reach = Reach RS = 5354.010



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

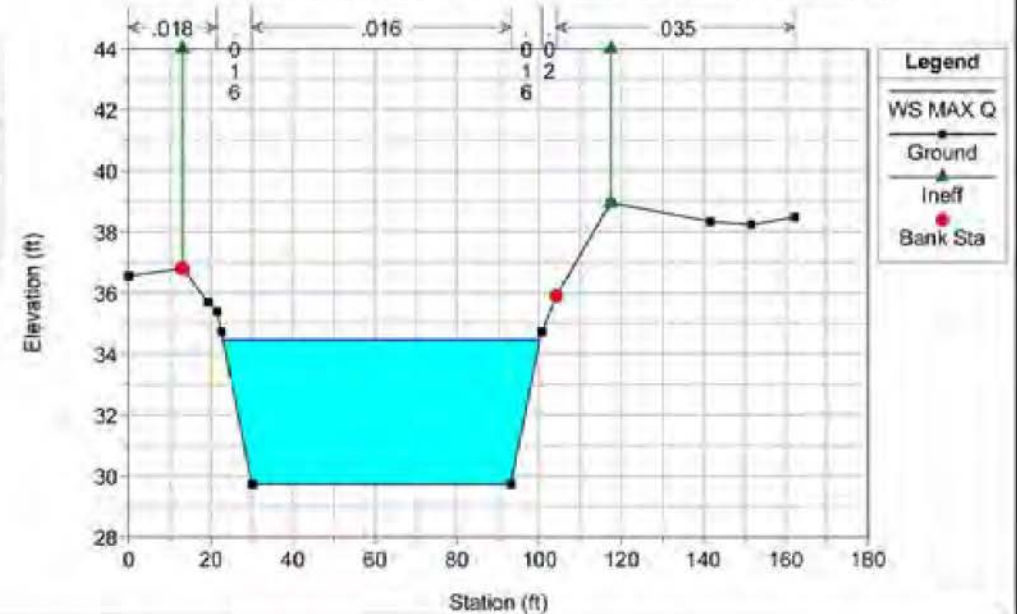
River = Soledad Canyon Reach = Reach RS = 5027.002



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

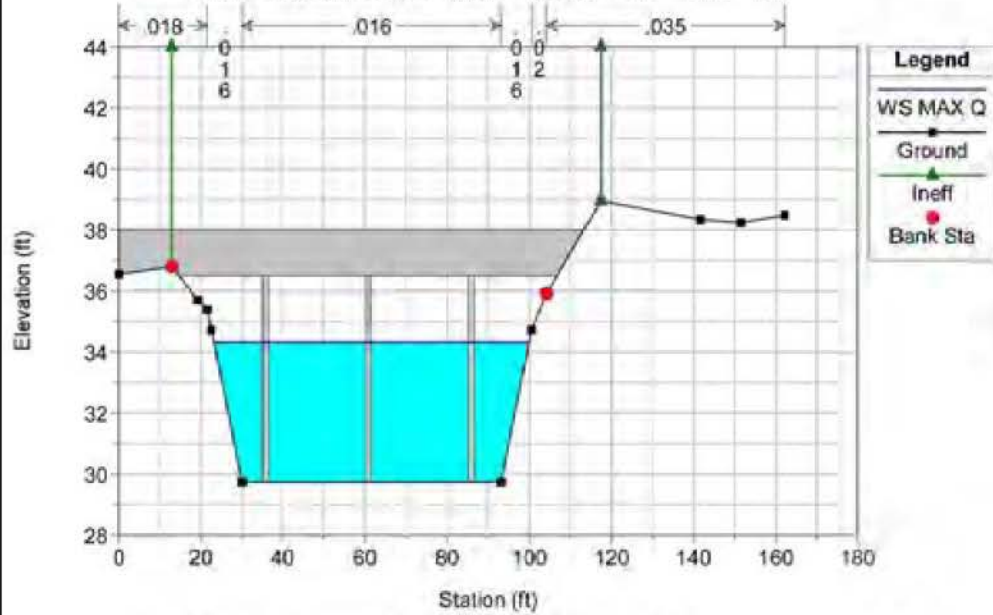
River = Soledad Canyon Reach = Reach RS = 4717.032 Upstream side of bridge at Sorrento Valley Blvd



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

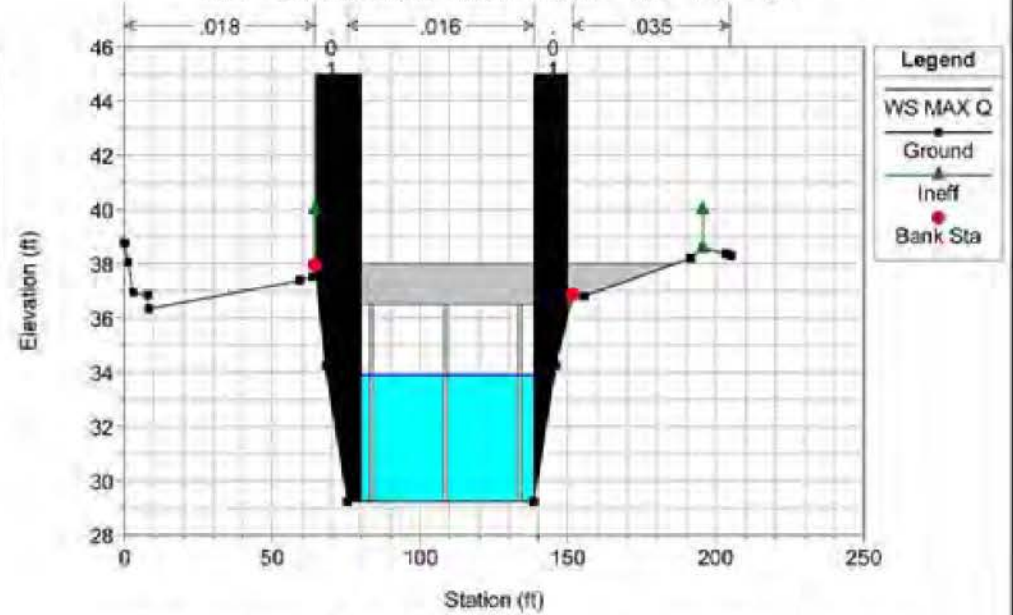
River = Soledad Canyon Reach = Reach RS = 4650 BR



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

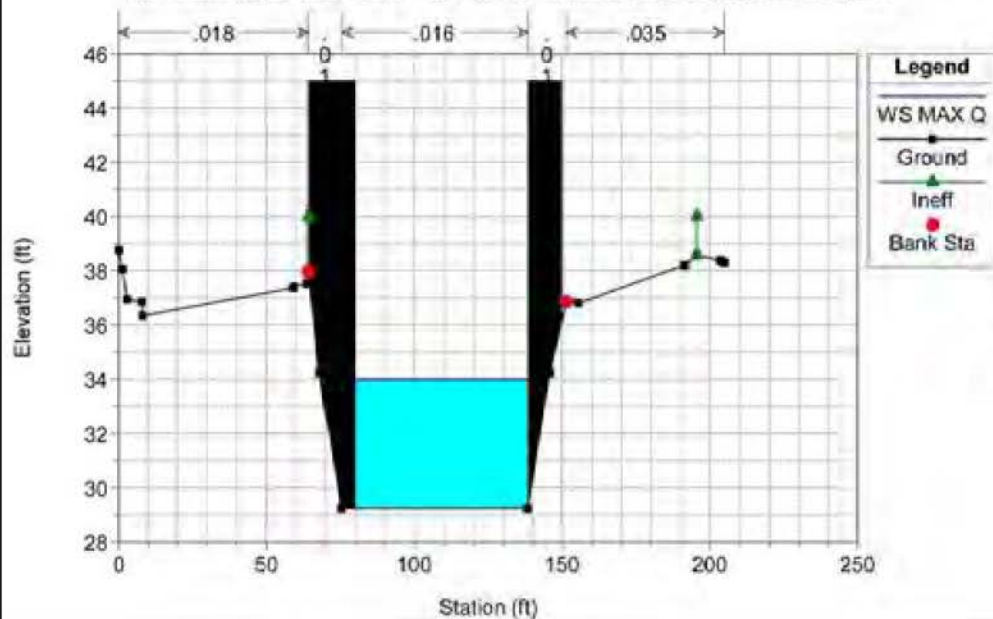
River = Soledad Canyon Reach = Reach RS = 4650 BR



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

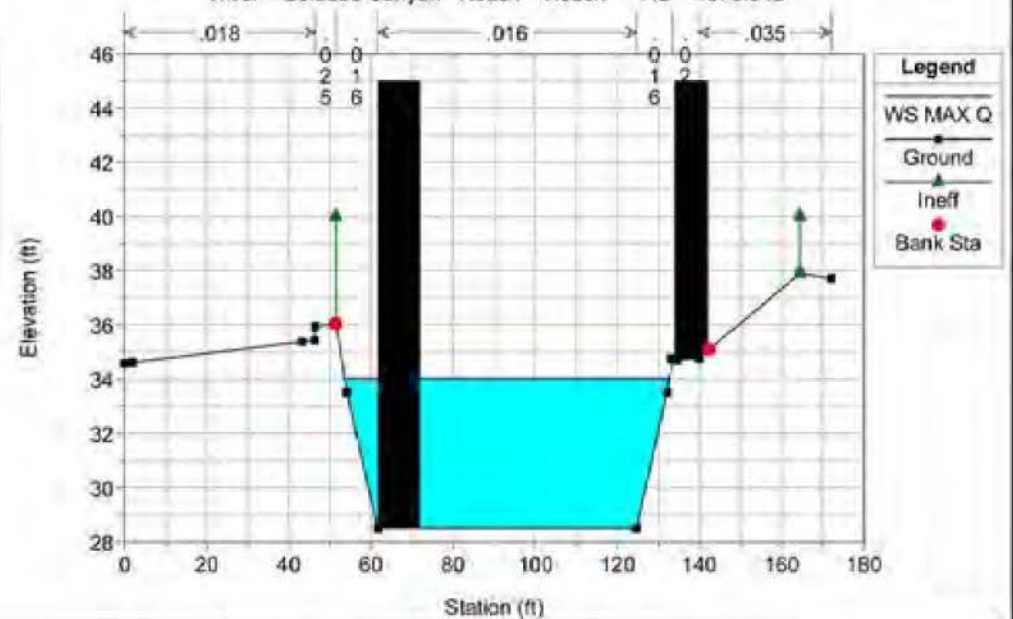
River = Soledad Canyon Reach = Reach RS = 4581.172 Downstream side of bridge at Sorrento Valley Blvd



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

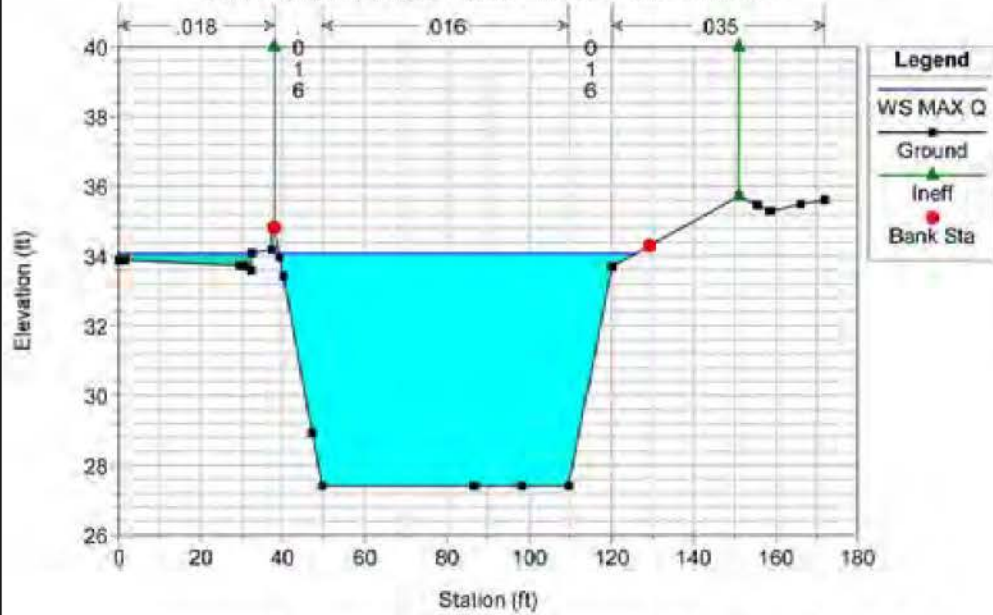
River = Soledad Canyon Reach = Reach RS = 4376.043



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

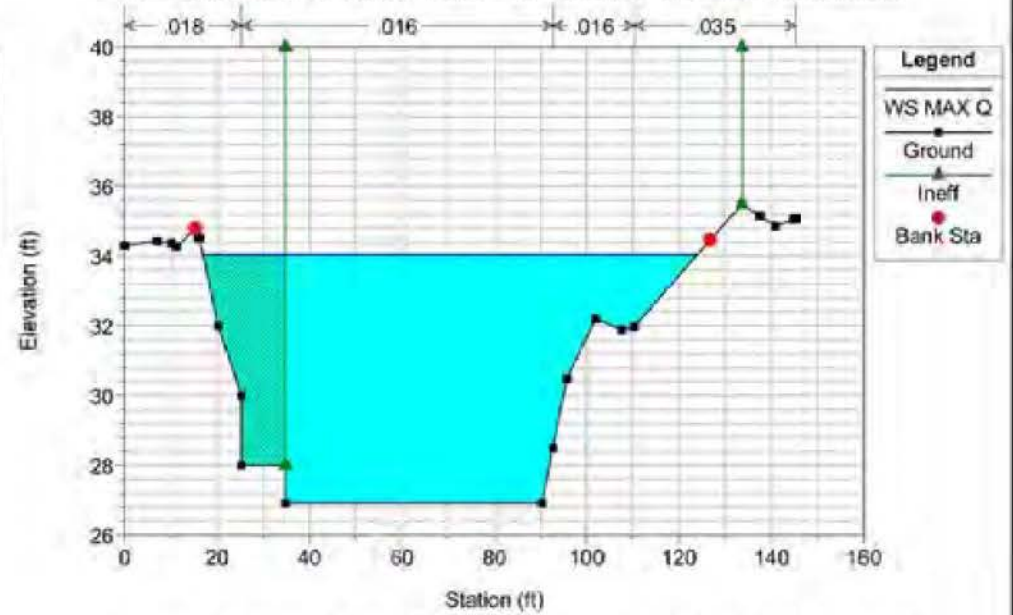
River = Soledad Canyon Reach = Reach RS = 4067.964



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

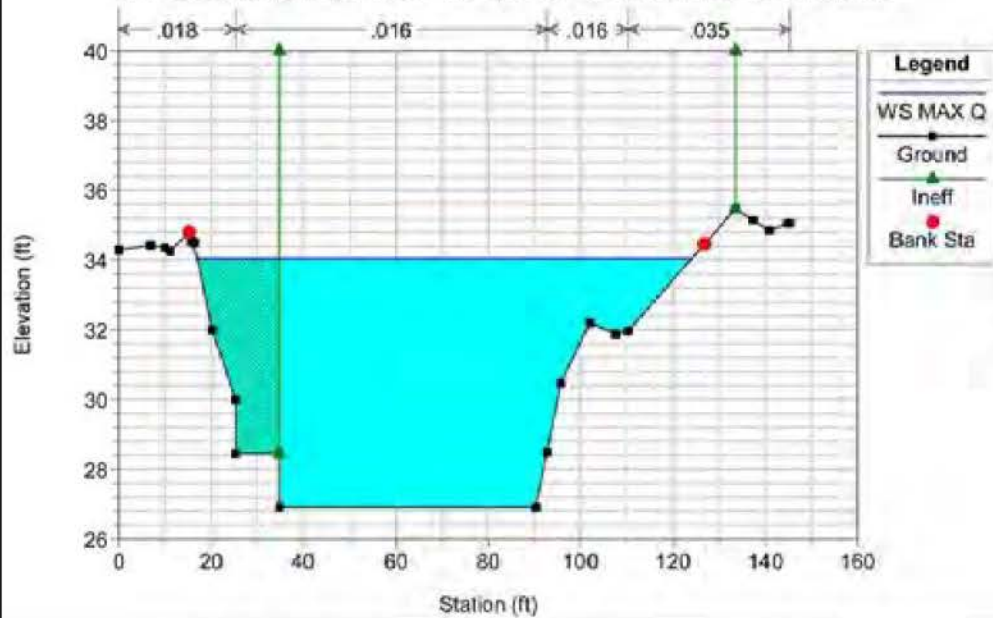
River = Soledad Canyon Reach = Reach RS = 3930.989 D/S End of concrete channel



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

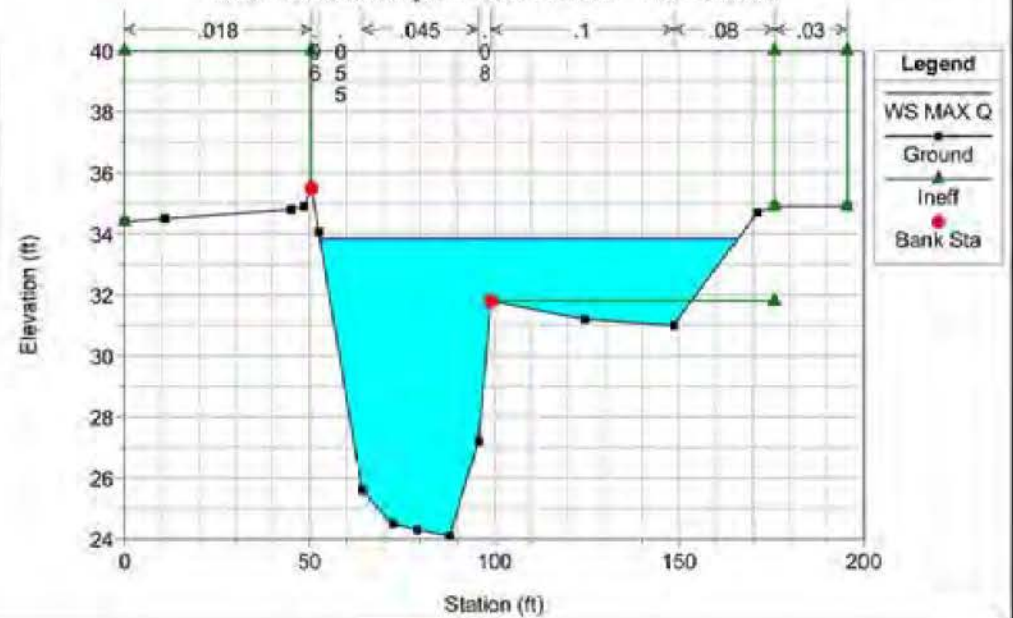
River = Soledad Canyon Reach = Reach RS = 3928.989 D/S End of concrete channel - Additional XS



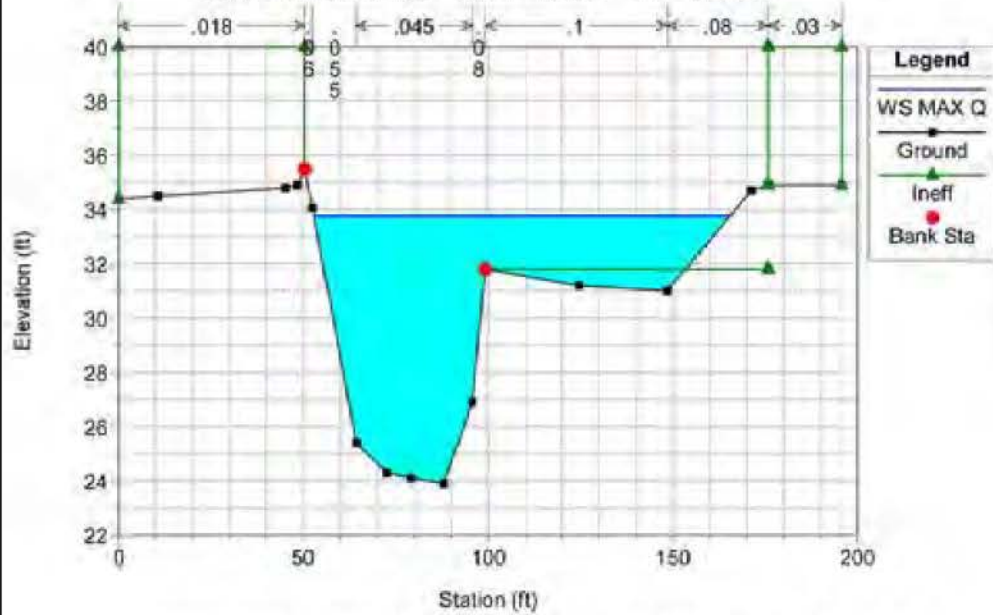
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

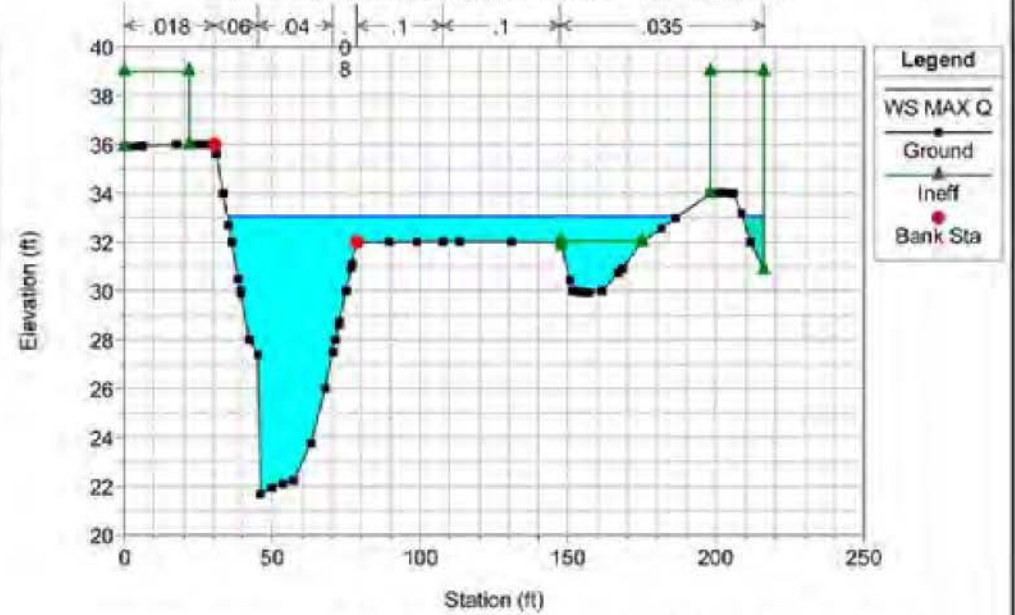
River = Soledad Canyon Reach = Reach RS = 3786.09



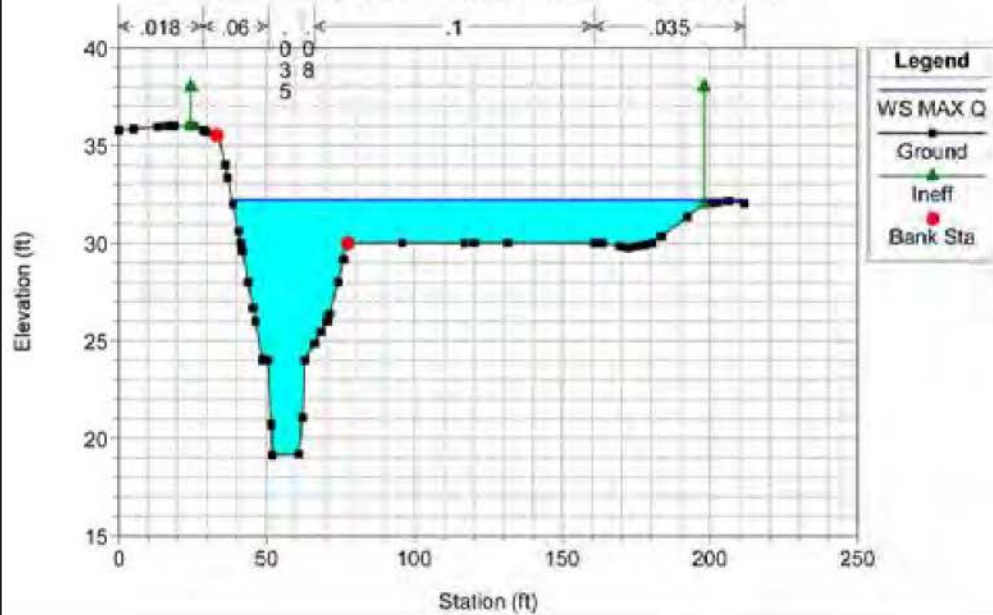
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 3762.202



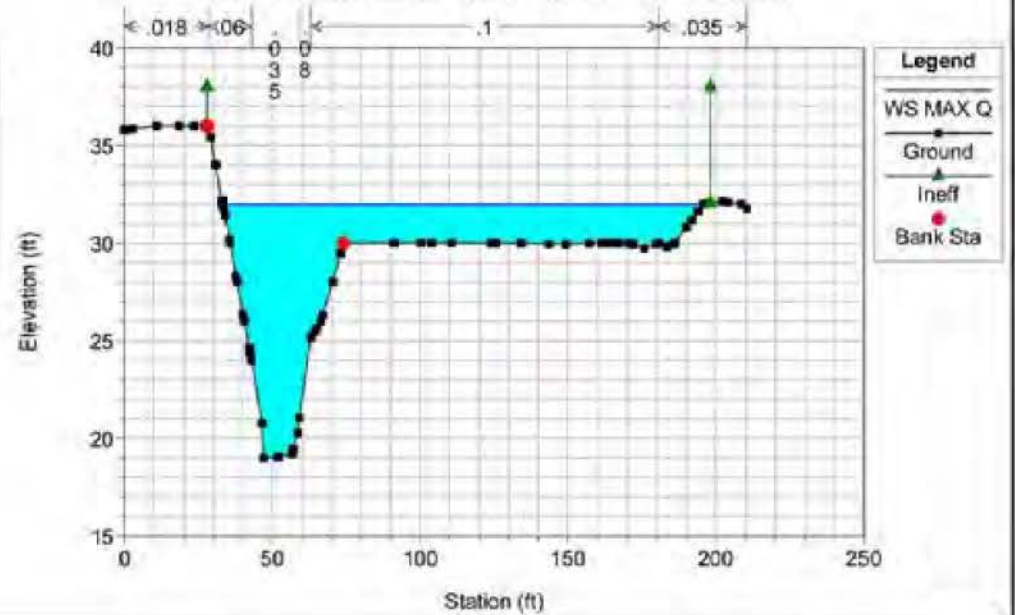
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 3493.546



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 3236.080



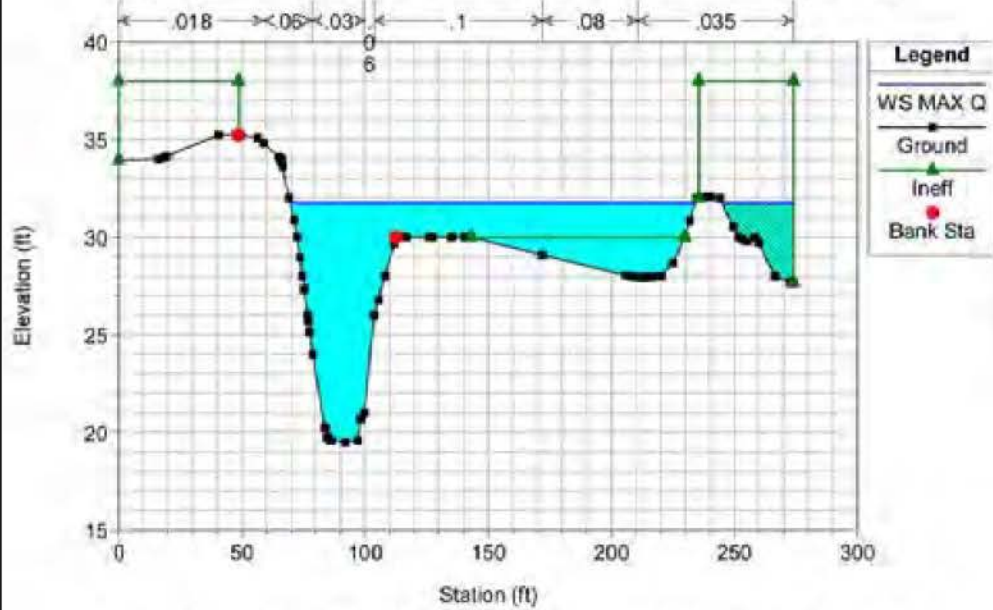
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 3183.288



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

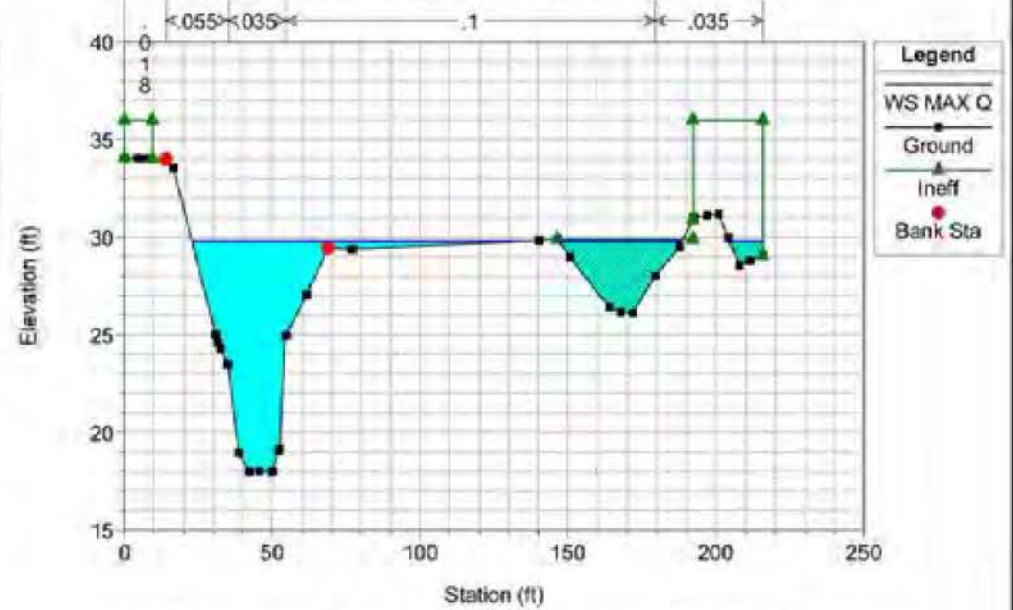
River = Soledad Canyon Reach = Reach RS = 3063.726 Dunhill-Roselle confluence



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

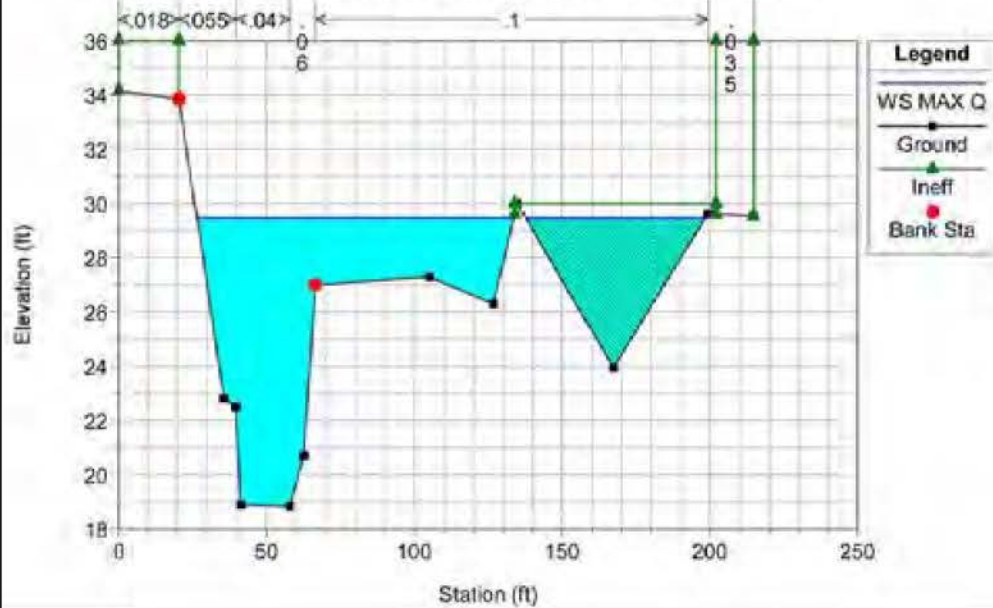
River = Soledad Canyon Reach = Reach RS = 2632.288



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

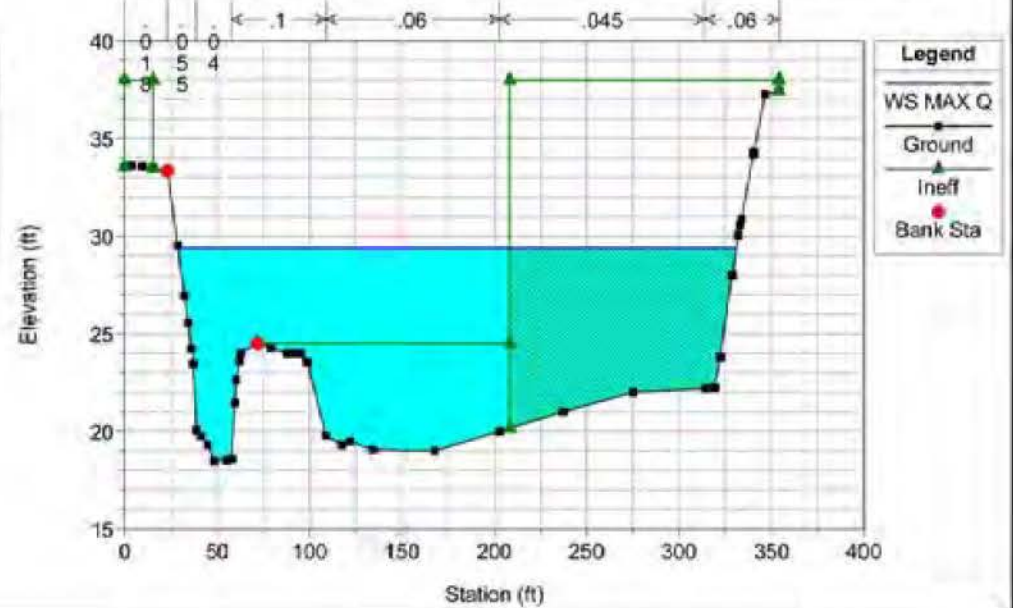
River = Soledad Canyon Reach = Reach RS = 2513.412



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

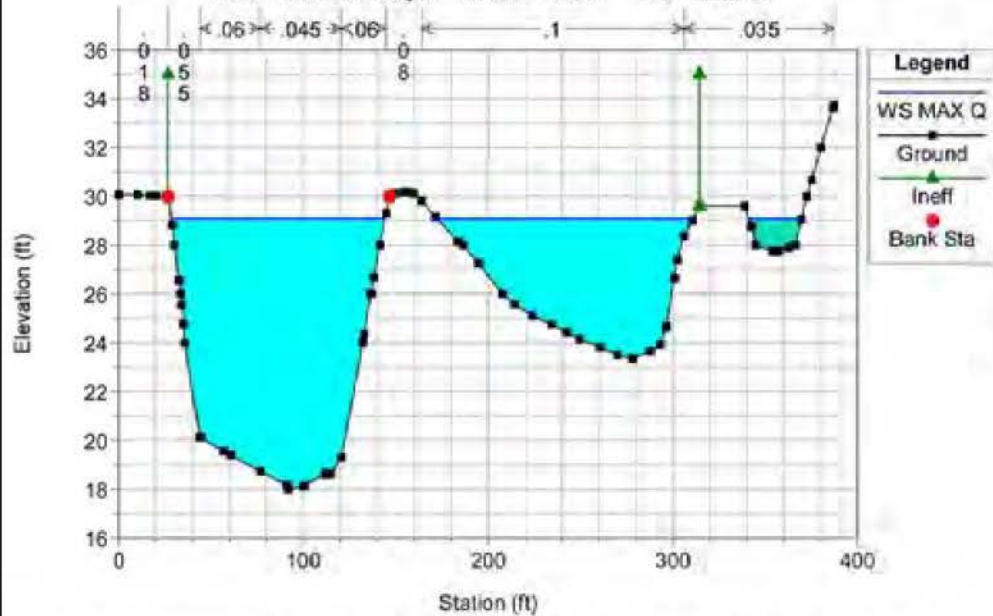
River = Soledad Canyon Reach = Reach RS = 2376.699 Pinhole Street Channel-Los Penasquitos Canyon and SoledadCry



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

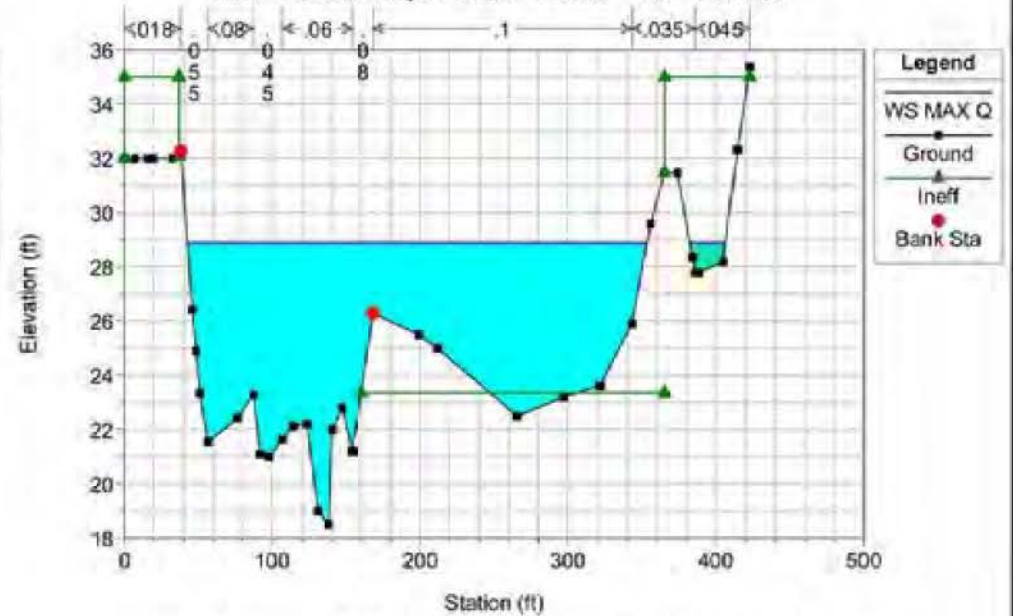
River = Soledad Canyon Reach = Reach RS = 2282.69



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

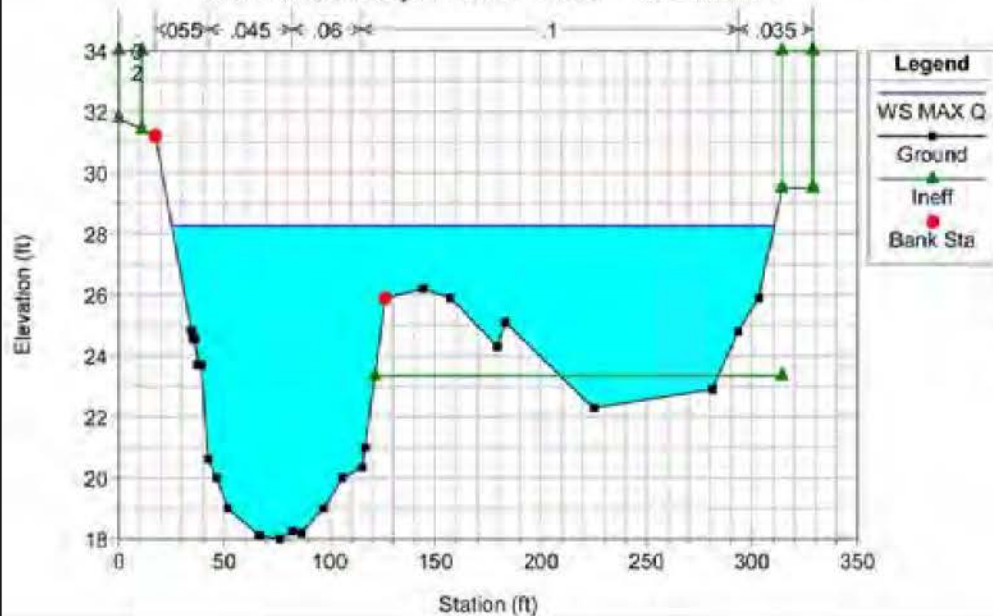
River = Soledad Canyon Reach = Reach RS = 2161.926



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

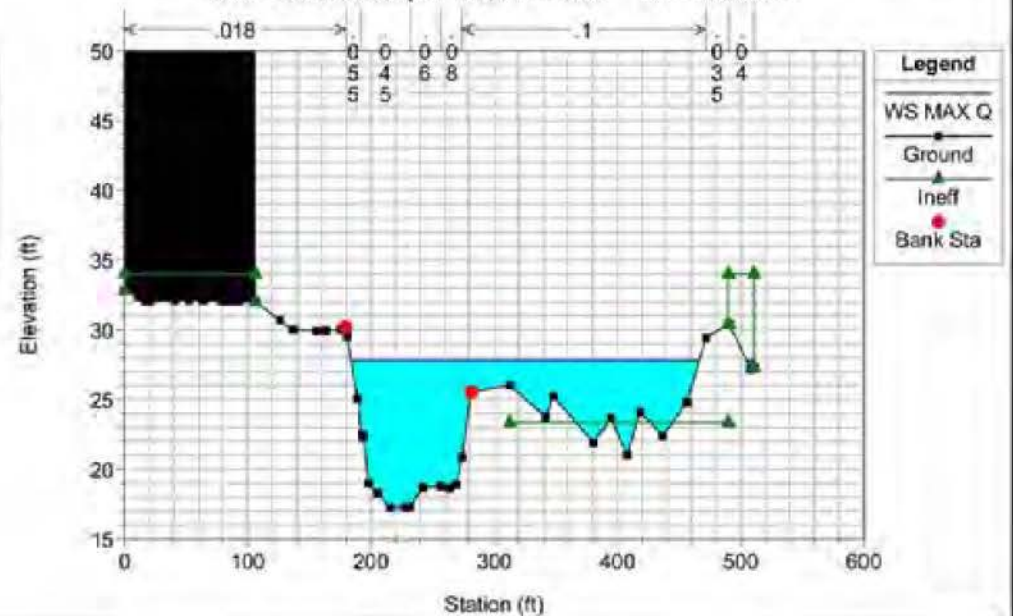
River = Soledad Canyon Reach = Reach RS = 1969.374



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

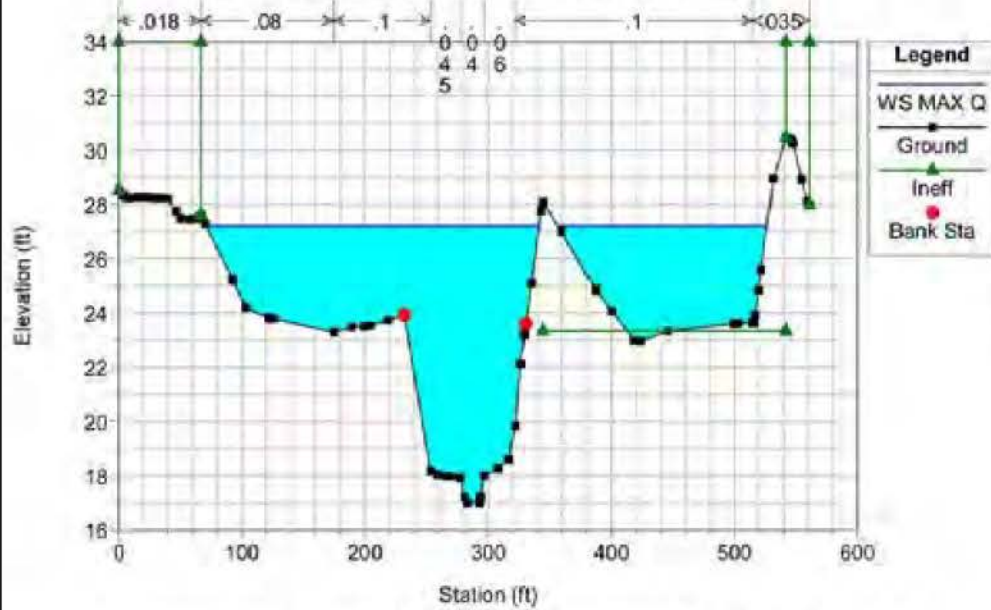
River = Soledad Canyon Reach = Reach RS = 1828.694



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

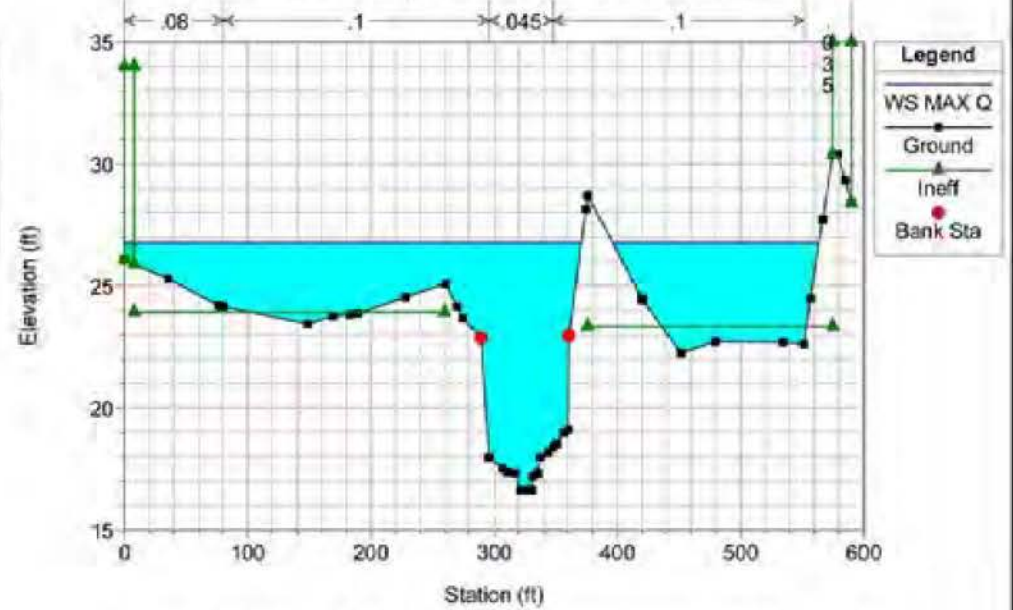
River = Soledad Canyon Reach = Reach RS = 1585.63



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

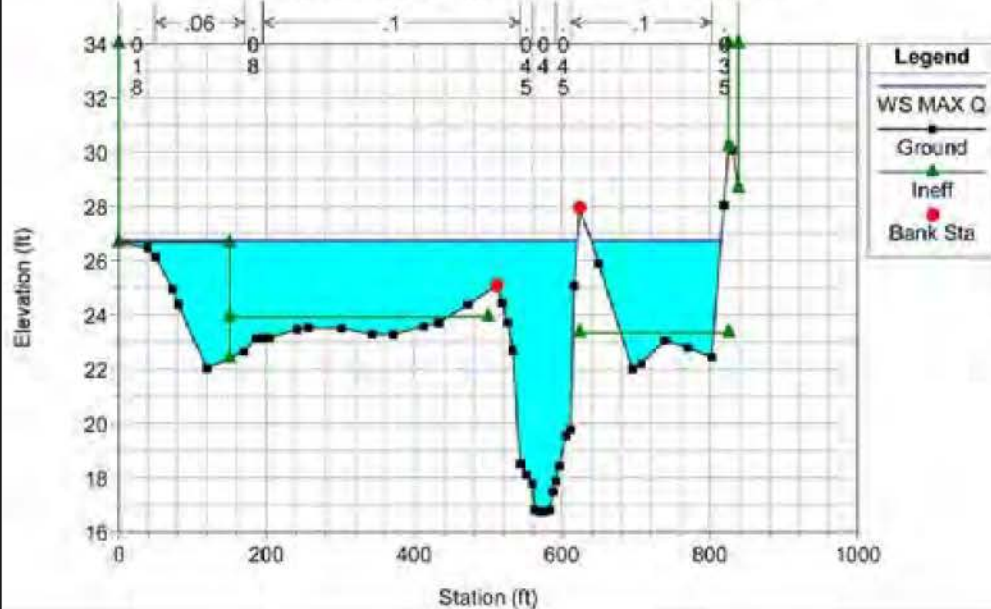
River = Soledad Canyon Reach = Reach RS = 1442.275



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

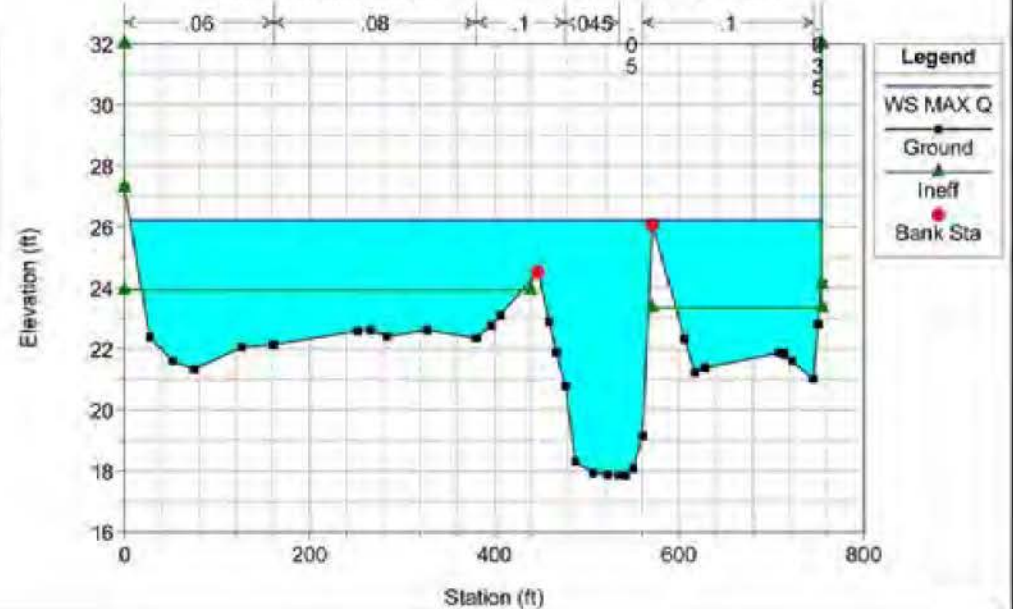
River = Soledad Canyon Reach = Reach RS = 1386.102



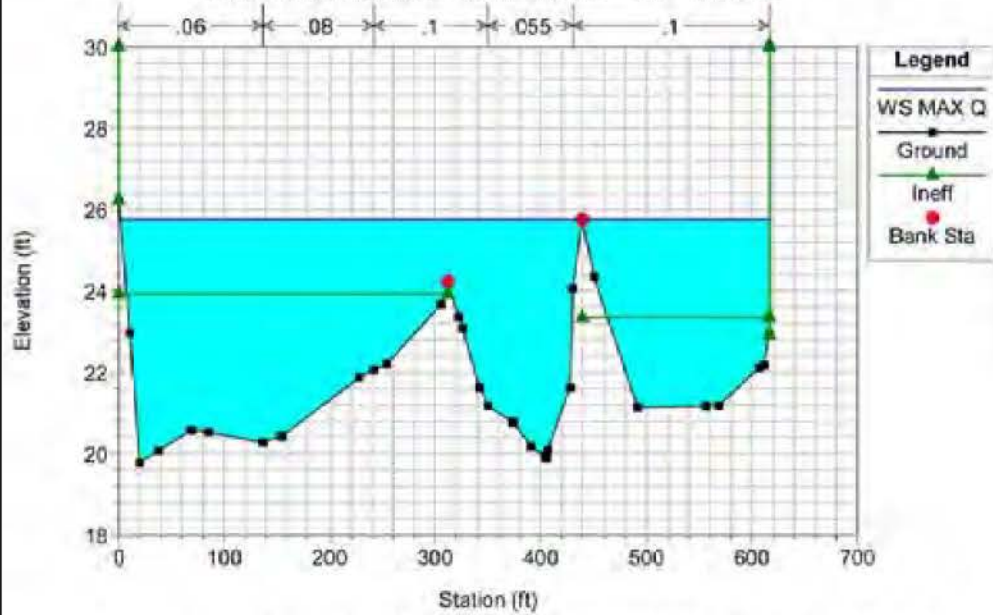
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013

Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ

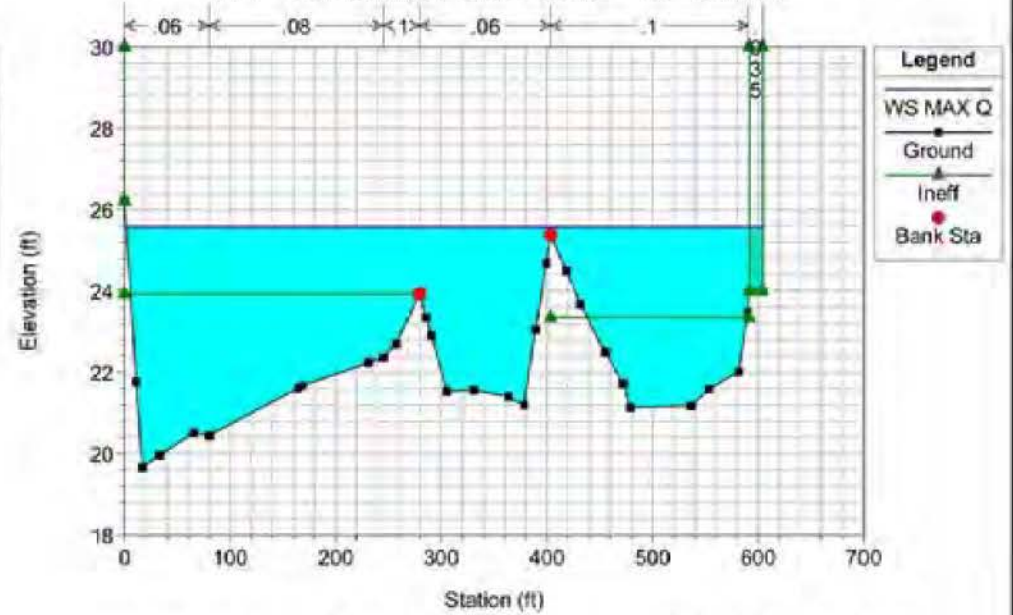
River = Soledad Canyon Reach = Reach RS = 972.2879



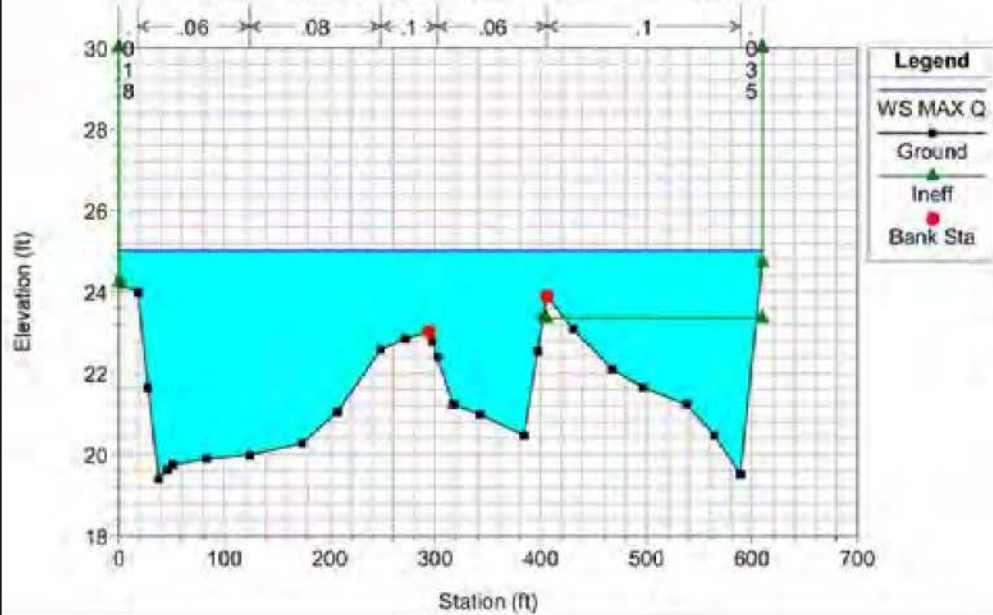
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 615.5682



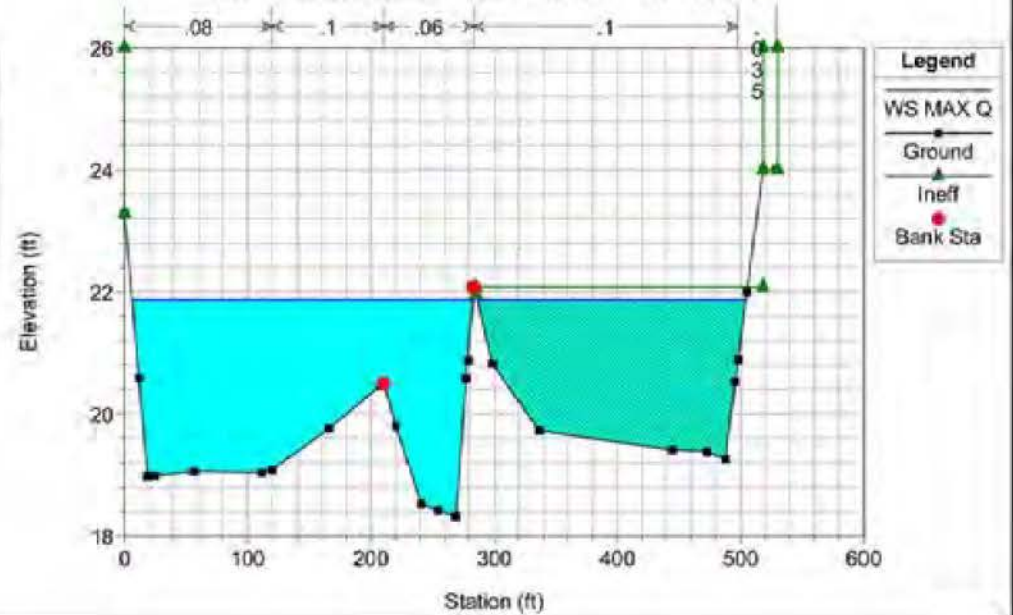
Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 555.0848



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 335.8184



Sorrento-Soledad Plan: URSMaintdVegSedRemd-R3-MAXQ 5/7/2013
 Geom: URSMaintd Veg-Sed Remd-Reach 3 ONLY Flow: Current_FEMA_MAXQ
 River = Soledad Canyon Reach = Reach RS = 30.31517



**LOG-LOG PROBABILITY GRAPH – REACH 1, 2, AND 3 MAINTAINED CONDITION
(SEDIMENT REMOVED) MAXIMUM FLOW**

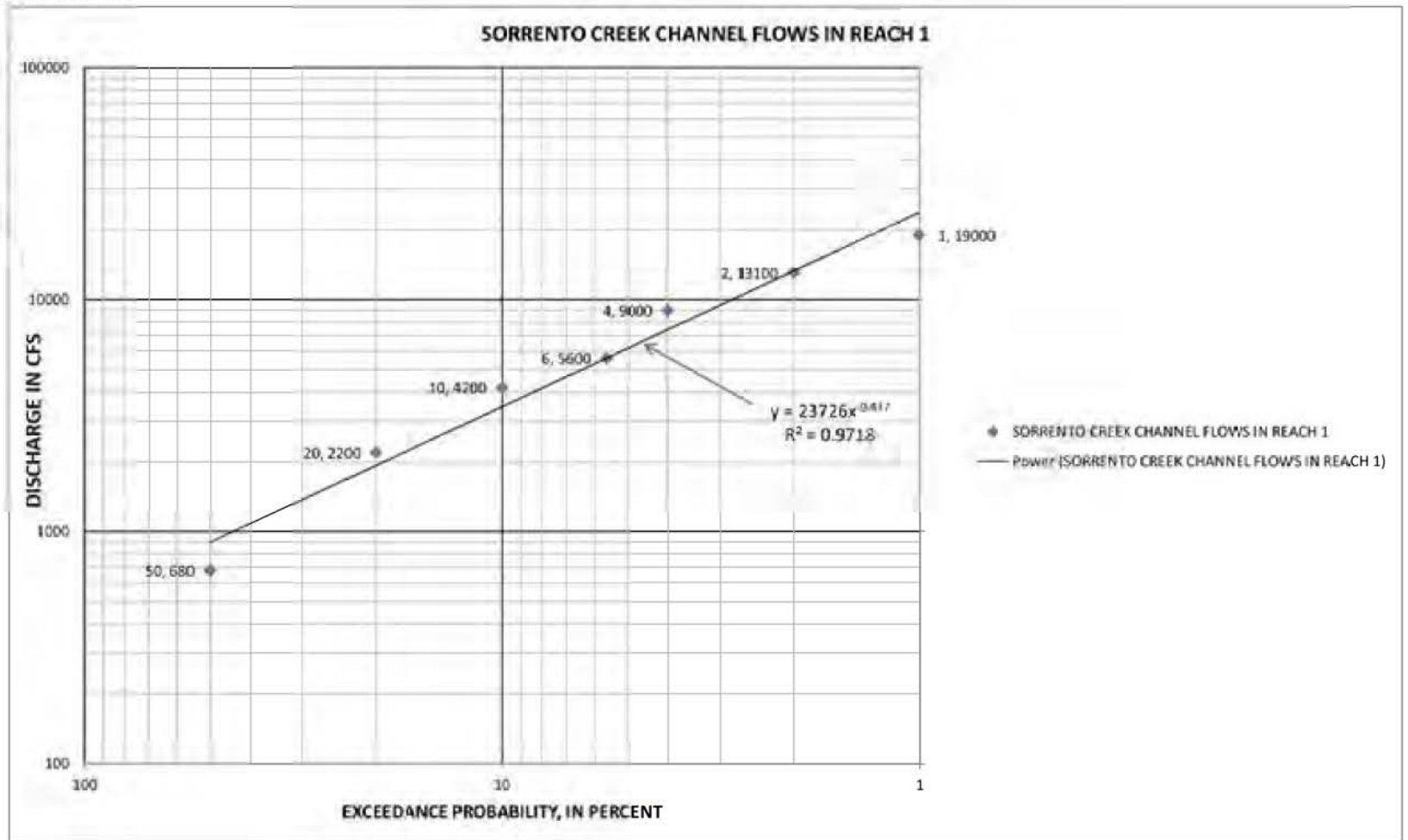
SORRENTO CREEK CHANNEL FLOWS IN REACH 1

STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	680
5	20	2200
10	10	4200
25	4	9000
50	2	13100
100	1	19000
18	6	5600

Q = 5600 CFS IN REACH 1
 5600 CFS IS THE FLOW RESPONSE
 DUE TO THE 18-YEAR STORM
 EVENT, APPROXIMATELY.

ASSUMPTIONS:

1. REACH 1 AND 2 ARE UNMAINTAINED
2. REACH 3 IS MAINTAINED



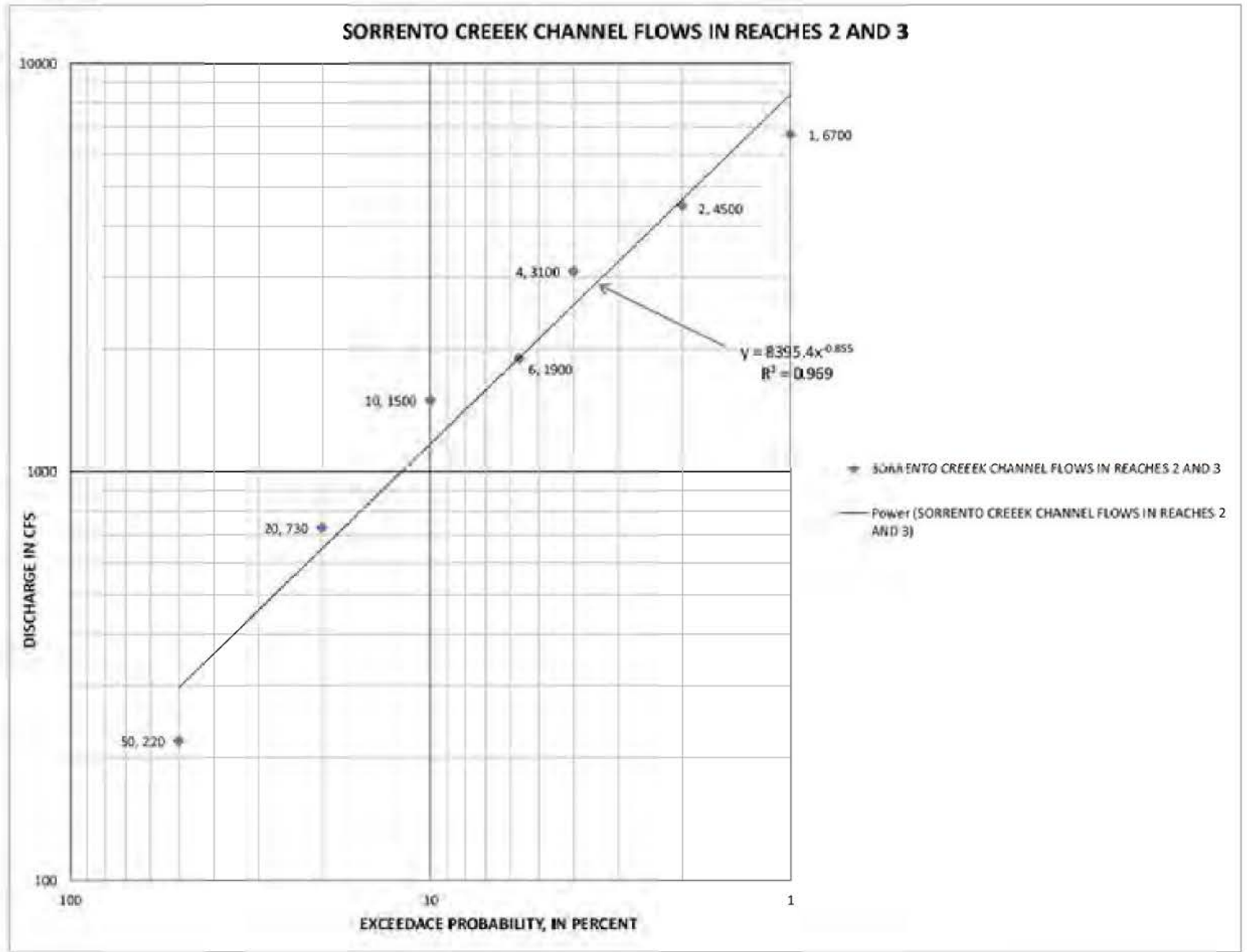
SORRENTO CREEK CHANNEL FLOWS IN REACHES 2 AND 3

STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	220
5	20	730
10	10	1500
25	4	3100
50	2	4500
100	1	6700
18	6	1900

MAXIMUM FLOW, Q_{MAX}, THAT REACH 3 CAN CONVEY:
 Q_{MAX} = 1900 CFS
 1900 CFS IS THE FLOW RESPONSE DUE TO THE 18-YEAR STORM EVENT, APPROXIMATELY.

ASSUMPTIONS:

1. 1 FT OF FREEBOARD
2. REACH 1 AND 2 ARE UNMAINTAINED
3. REACH 3 IS MAINTAINED



ATTACHMENT 4 – HYDRAULIC PROFILES AND DETAILED RESULTS FOR REACH 7

HYDRAULIC PROFILES FOR REACH 7 CURRENT VEGETATED CONDITON

FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geos: Current Vegetated Condition, Flow, Storms-Current

FLINTKOTE FLINTKOTE CL

Legend	
WS 100-YR	WS 5-YR
WS 50-YR	WS 2-YR
WS 25-YR	Ground
WS 10-YR	LDB
	ROB

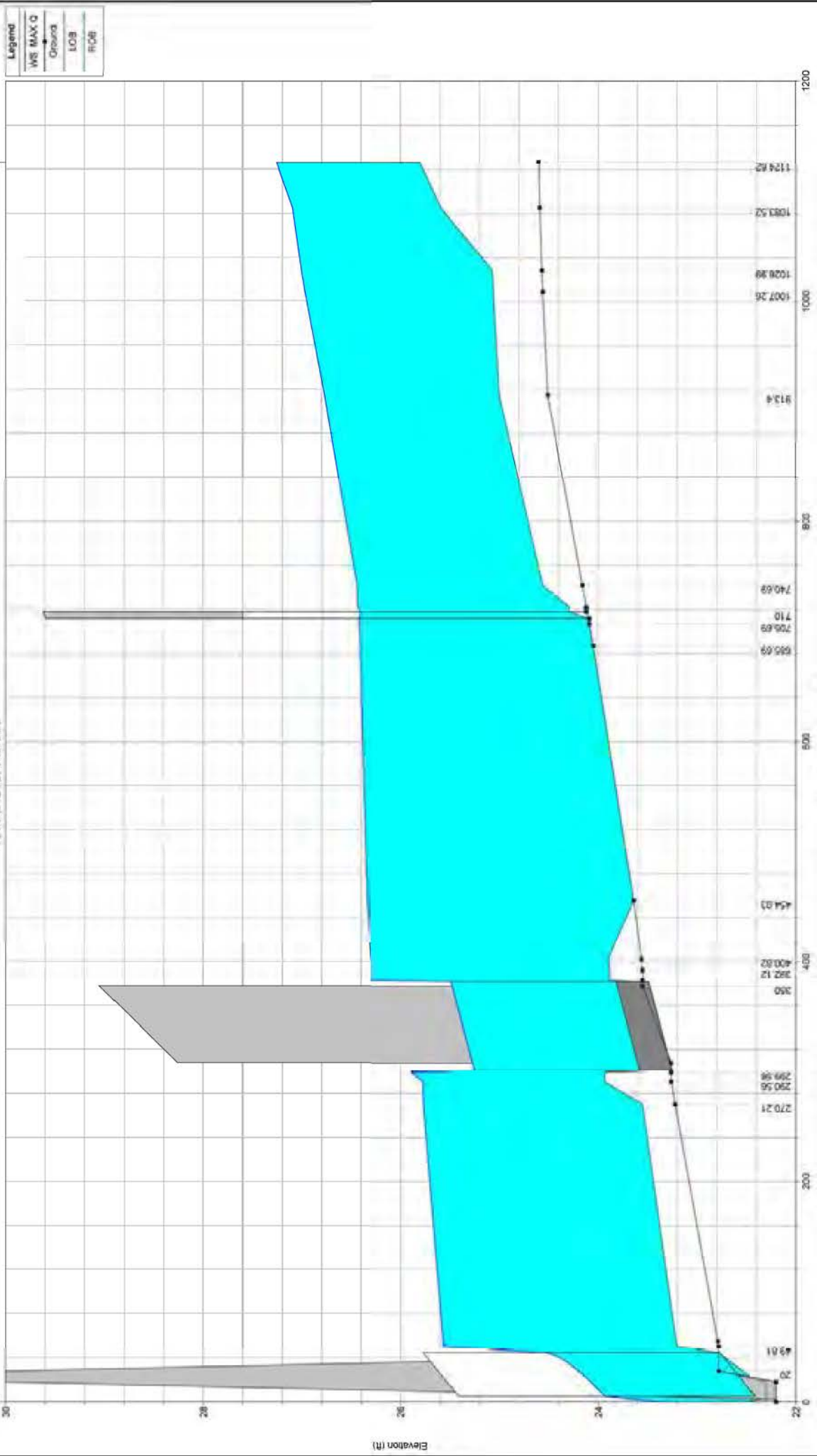


HYDRAULIC PROFILES FOR REACH 7 CURRENT VEGETATED CONDITON (MAXIMUM FLOW)

FLINTKOTE CHANNEL Plan: Current Veg Condition-SortCurrent-MAXQ 5/7/2013

Color: Burned/Vegetated Condition Flow: MAX Q in Fittsale Current

FLINTKOTE FLINTKOTE CL



Legend
WS MAX Q
Channel
LOB
ROB

HYDRAULIC PROFILES FOR REACH 7 ULTIMATE VEGETATED CONDITON

FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013
 Geom: Ultimate Vegetated Condition - Flse: Sorrento-Current
 FLINTKOTE.FLINTKOTE CL

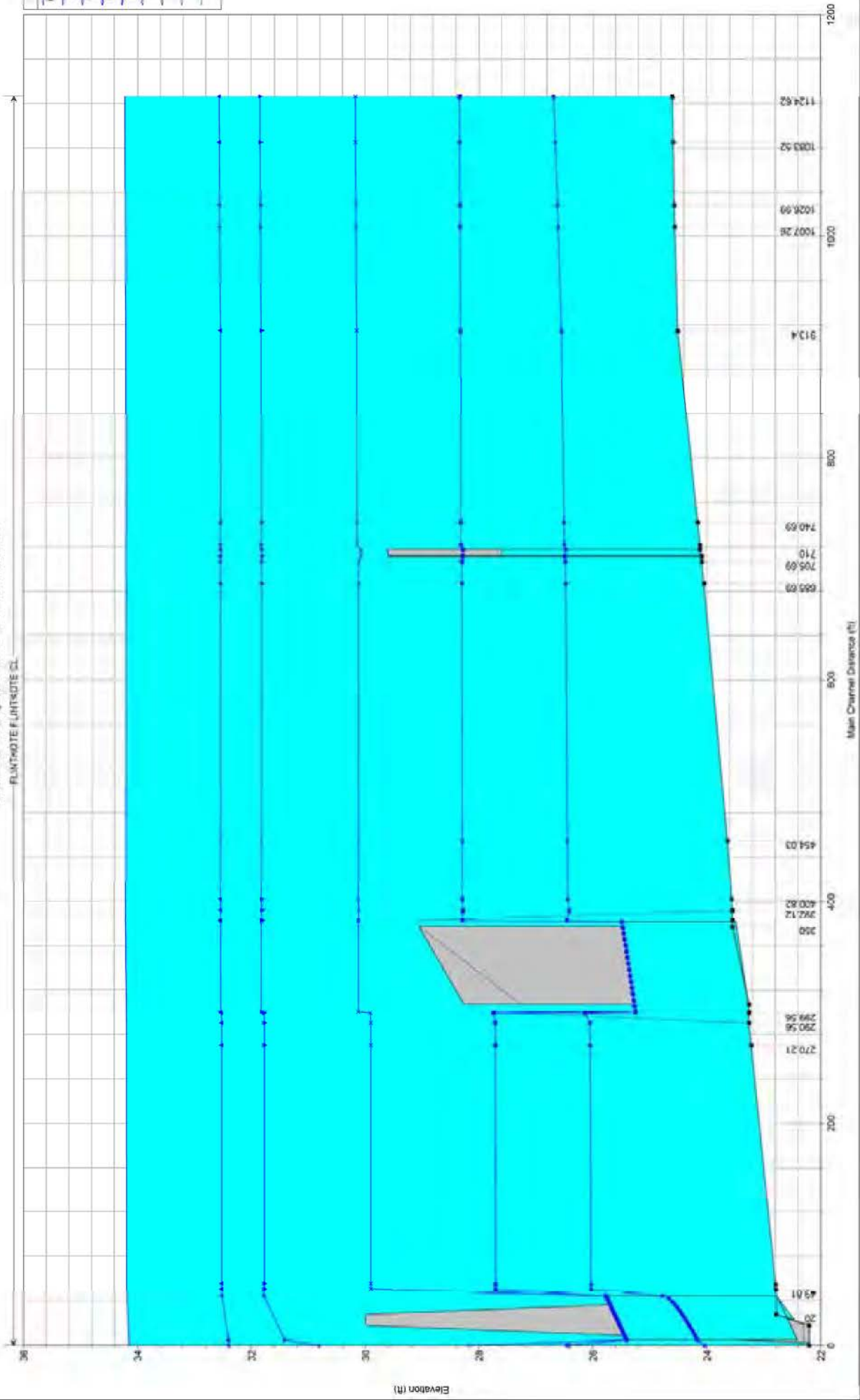
Legend	
WS 100-YR	WS 5-YR
WS 50-YR	WS 2-YR
WS 25-YR	Ground
WS 10-YR	LDB
	ROB



**HYDRAULIC PROFILES FOR REACH 7 MAINTAINED CONDITON (SEDIMENT
REMOVED)**

FLINTKOTE CHANNEL Plan Maintained Veg-Sed Removed-Current 9/7/2013
 Geom Maintained Veg-Sed Removed Flow Scenario-Current
 FLINTKOTE FLINTKOTE CL

Legend	
WS 100-YR	WS 5-YR
WS 50-YR	WS 2-YR
WS 25-YR	Ground
WS 10-YR	LDB
	ROB

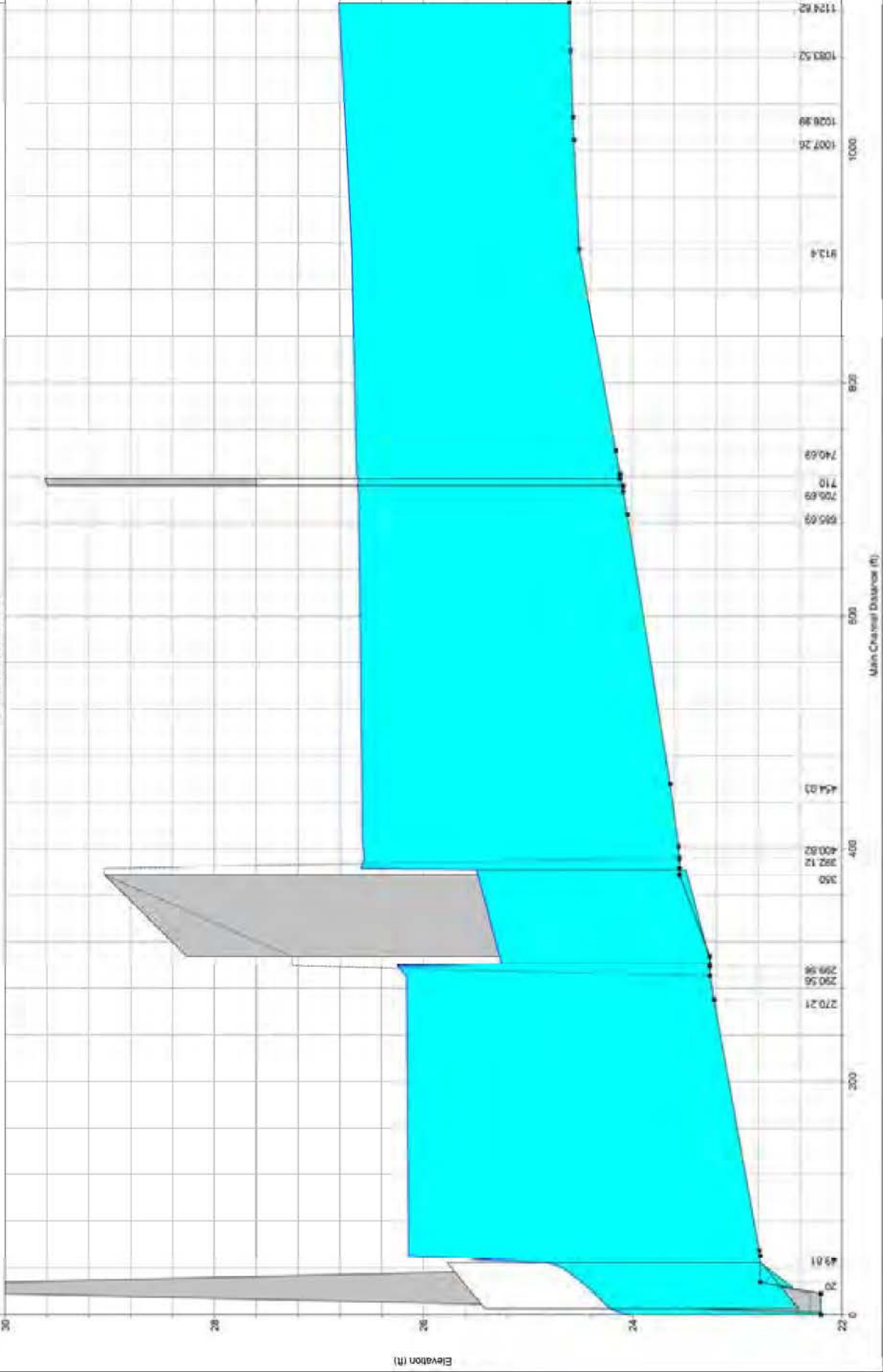


**HYDRAULIC PROFILES FOR REACH 7 MAINTAINED CONDITON (SEDIMENT
REMOVED), MAXIMUM FLOW**

FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Ramd-ScrCurrent:MAXQ 6/7/2013

Geom: Maintained Veg-Sed Removed Floor: Mantve|SedRem|MAXQ-ScrCur

FLINTKOTE FLINTKOTE LL



DETAILED HYDRAULIC RESULTS FOR REACH 7 CURRENT VEGETATED CONDITION

HEC-RAS Plan Sorrento-Current River FLINTKOTE Reach: FLINTKOTE CL

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
FLINTKOTE CL	1124.62	100-YR	140.00	25.80	34.21	27.49	34.21	0.000006	0.37	283.76	44.06	0.02
FLINTKOTE CL	1124.62	50-YR	131.00	25.80	32.57	27.41	32.58	0.000013	0.47	211.89	44.04	0.03
FLINTKOTE CL	1124.62	25-YR	120.00	25.80	31.86	27.32	31.87	0.000018	0.52	180.46	44.03	0.04
FLINTKOTE CL	1124.62	10-YR	101.00	25.80	30.31	27.17	30.32	0.000062	0.80	112.15	44.02	0.07
FLINTKOTE CL	1124.62	5-YR	87.00	25.80	29.05	27.04	29.09	0.000420	1.67	56.85	44.00	0.16
FLINTKOTE CL	1124.62	2-YR	69.00	25.80	27.57	26.87	27.73	0.003311	3.13	21.51	13.94	0.41
FLINTKOTE CL	1083.52	100-YR	140.00	25.59	34.20	27.31	34.21	0.000006	0.43	258.11	39.06	0.03
FLINTKOTE CL	1083.52	50-YR	131.00	25.59	32.57	27.24	32.57	0.000014	0.55	194.20	39.04	0.04
FLINTKOTE CL	1083.52	25-YR	120.00	25.59	31.86	27.15	31.87	0.000019	0.60	166.50	39.03	0.04
FLINTKOTE CL	1083.52	10-YR	101.00	25.59	30.30	26.99	30.32	0.000060	0.87	105.88	39.02	0.07
FLINTKOTE CL	1083.52	5-YR	87.00	25.59	29.04	26.86	29.07	0.000337	1.68	56.38	39.00	0.16
FLINTKOTE CL	1083.52	2-YR	69.00	25.59	27.46	26.68	27.61	0.002491	3.04	22.16	13.73	0.39
FLINTKOTE CL	1026.99	100-YR	140.00	25.07	34.20	26.90	34.21	0.000007	0.51	235.43	34.06	0.03
FLINTKOTE CL	1026.99	50-YR	131.00	25.07	32.57	26.82	32.57	0.000015	0.64	179.67	34.04	0.04
FLINTKOTE CL	1026.99	25-YR	120.00	25.07	31.86	26.73	31.87	0.000020	0.69	155.52	34.03	0.05
FLINTKOTE CL	1026.99	10-YR	101.00	25.07	30.30	26.56	30.32	0.000055	0.95	102.80	34.02	0.07
FLINTKOTE CL	1026.99	5-YR	87.00	25.07	29.02	26.42	29.06	0.000227	1.60	59.12	34.00	0.14
FLINTKOTE CL	1026.99	2-YR	69.00	25.07	27.39	26.24	27.50	0.001193	2.57	26.32	13.65	0.30
FLINTKOTE CL	1007.26	100-YR	140.00	25.06	34.20	26.89	34.21	0.000007	0.50	235.76	34.06	0.03
FLINTKOTE CL	1007.26	50-YR	131.00	25.06	32.57	26.81	32.57	0.000015	0.63	180.01	34.04	0.04
FLINTKOTE CL	1007.26	25-YR	120.00	25.06	31.86	26.72	31.86	0.000020	0.69	155.85	34.03	0.05
FLINTKOTE CL	1007.26	10-YR	101.00	25.06	30.30	26.55	30.31	0.000055	0.95	102.90	34.02	0.07
FLINTKOTE CL	1007.26	5-YR	87.00	25.06	29.02	26.41	29.05	0.000225	1.59	59.31	34.00	0.14
FLINTKOTE CL	1007.26	2-YR	69.00	25.06	27.37	26.23	27.48	0.001224	2.59	26.10	13.62	0.30
FLINTKOTE CL	913.4	100-YR	140.00	25.00	34.19	26.82	34.21	0.000027	0.97	146.29	18.05	0.06
FLINTKOTE CL	913.4	50-YR	131.00	25.00	32.55	26.75	32.57	0.000046	1.11	116.67	18.04	0.07
FLINTKOTE CL	913.4	25-YR	120.00	25.00	31.84	26.65	31.86	0.000055	1.13	103.85	18.03	0.08
FLINTKOTE CL	913.4	10-YR	101.00	25.00	30.28	26.48	30.31	0.000101	1.30	75.71	18.02	0.10
FLINTKOTE CL	913.4	5-YR	87.00	25.00	28.99	26.35	29.03	0.000237	1.64	52.45	18.00	0.14
FLINTKOTE CL	913.4	2-YR	69.00	25.00	27.24	26.17	27.35	0.001381	2.70	25.10	13.46	0.32
FLINTKOTE CL	740.69	100-YR	140.00	24.56	34.19	26.40	34.20	0.000023	0.93	153.35	18.06	0.05
FLINTKOTE CL	740.69	50-YR	131.00	24.56	32.54	26.33	32.56	0.000038	1.05	123.67	18.05	0.07
FLINTKOTE CL	740.69	25-YR	120.00	24.56	31.83	26.23	31.85	0.000044	1.06	110.83	18.04	0.07
FLINTKOTE CL	740.69	10-YR	101.00	24.56	30.27	26.06	30.29	0.000077	1.19	82.58	18.02	0.09
FLINTKOTE CL	740.69	5-YR	87.00	24.56	28.96	25.93	28.99	0.000161	1.45	59.05	18.01	0.12
FLINTKOTE CL	740.69	2-YR	69.00	24.56	27.06	25.74	27.15	0.000937	2.39	28.24	13.80	0.27

HEC-RAS Plan Sorrento-Current River FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	720.69	100-YR	140.00	24.29	34.20	26.20	34.20	0.000004	0.58	294.53	50.97	0.03
FLINTKOTE CL	720.69	50-YR	131.00	24.29	32.55	26.12	32.56	0.000011	0.79	211.18	50.26	0.05
FLINTKOTE CL	720.69	25-YR	120.00	24.29	31.84	26.03	31.85	0.000014	0.86	175.54	49.71	0.05
FLINTKOTE CL	720.69	10-YR	101.00	24.29	30.27	25.85	30.29	0.000043	1.29	97.47	49.61	0.09
FLINTKOTE CL	720.69	5-YR	87.00	24.29	28.96	25.71	28.99	0.000066	1.55	60.73	17.68	0.13
FLINTKOTE CL	720.69	2-YR	69.00	24.29	27.06	25.51	27.14	0.000411	2.38	30.72	13.87	0.25
FLINTKOTE CL	710		Bridge									
FLINTKOTE CL	705.69	100-YR	140.00	24.09	34.19	26.06	34.20	0.000004	0.63	297.30	50.97	0.03
FLINTKOTE CL	705.69	50-YR	131.00	24.09	32.55	25.98	32.55	0.000009	0.84	213.75	50.26	0.05
FLINTKOTE CL	705.69	25-YR	120.00	24.09	31.83	25.88	31.84	0.000012	0.91	177.88	49.72	0.06
FLINTKOTE CL	705.69	10-YR	101.00	24.09	30.23	25.69	30.26	0.000035	1.34	98.62	49.61	0.10
FLINTKOTE CL	705.69	5-YR	87.00	24.09	28.92	25.55	28.96	0.000066	1.59	61.96	17.65	0.13
FLINTKOTE CL	705.69	2-YR	69.00	24.09	27.04	25.35	27.12	0.000282	2.33	32.31	13.90	0.24
FLINTKOTE CL	685.69	100-YR	140.00	24.05	34.19	26.01	34.20	0.000007	0.82	231.92	36.47	0.05
FLINTKOTE CL	685.69	50-YR	131.00	24.05	32.54	25.93	32.55	0.000013	1.03	172.16	35.77	0.06
FLINTKOTE CL	685.69	25-YR	120.00	24.05	31.83	25.83	31.84	0.000016	1.06	146.67	35.22	0.07
FLINTKOTE CL	685.69	10-YR	101.00	24.05	30.23	25.65	30.25	0.000034	1.33	90.66	35.11	0.09
FLINTKOTE CL	685.69	5-YR	87.00	24.05	28.92	25.51	28.95	0.000066	1.57	62.68	17.73	0.13
FLINTKOTE CL	685.69	2-YR	69.00	24.05	27.04	25.31	27.11	0.000269	2.30	32.83	13.98	0.23
FLINTKOTE CL	454.03	100-YR	140.00	23.64	34.19	25.59	34.19	0.000004	0.49	320.24	50.97	0.03
FLINTKOTE CL	454.03	50-YR	131.00	23.64	32.54	25.51	32.55	0.000008	0.65	236.33	50.29	0.04
FLINTKOTE CL	454.03	25-YR	120.00	23.64	31.83	25.41	31.83	0.000011	0.72	200.29	50.25	0.04
FLINTKOTE CL	454.03	10-YR	101.00	23.64	30.23	25.23	30.24	0.000029	1.01	120.95	49.64	0.07
FLINTKOTE CL	454.03	5-YR	87.00	23.64	28.91	25.08	28.94	0.000066	1.31	70.01	18.54	0.10
FLINTKOTE CL	454.03	2-YR	69.00	23.64	26.99	24.89	27.05	0.000250	1.88	38.12	14.72	0.18
FLINTKOTE CL	400.82	100-YR	140.00	23.90	34.19	25.78	34.19	0.000004	0.41	321.20	50.97	0.02
FLINTKOTE CL	400.82	50-YR	131.00	23.90	32.54	25.71	32.55	0.000009	0.55	237.24	50.30	0.03
FLINTKOTE CL	400.82	25-YR	120.00	23.90	31.83	25.62	31.83	0.000013	0.61	201.19	50.25	0.04
FLINTKOTE CL	400.82	10-YR	101.00	23.90	30.23	25.44	30.24	0.000037	0.88	121.79	49.64	0.06
FLINTKOTE CL	400.82	5-YR	87.00	23.90	28.91	25.31	28.93	0.000092	1.19	68.47	18.68	0.09
FLINTKOTE CL	400.82	2-YR	69.00	23.90	26.97	25.11	27.03	0.000405	1.81	36.05	14.81	0.18
FLINTKOTE CL	392.12	100-YR	155.00	23.88	34.19	25.90	34.19	0.000004	0.39	325.53	50.97	0.02
FLINTKOTE CL	392.12	50-YR	145.00	23.88	32.54	25.82	32.55	0.000013	0.59	205.61	50.97	0.04
FLINTKOTE CL	392.12	25-YR	133.00	23.88	31.82	25.72	31.83	0.000017	0.65	177.64	50.97	0.04

HEC-RAS Plan Sorrento-Current River FLINTKOTE Reach: FLINTKOTE CL (Continued)

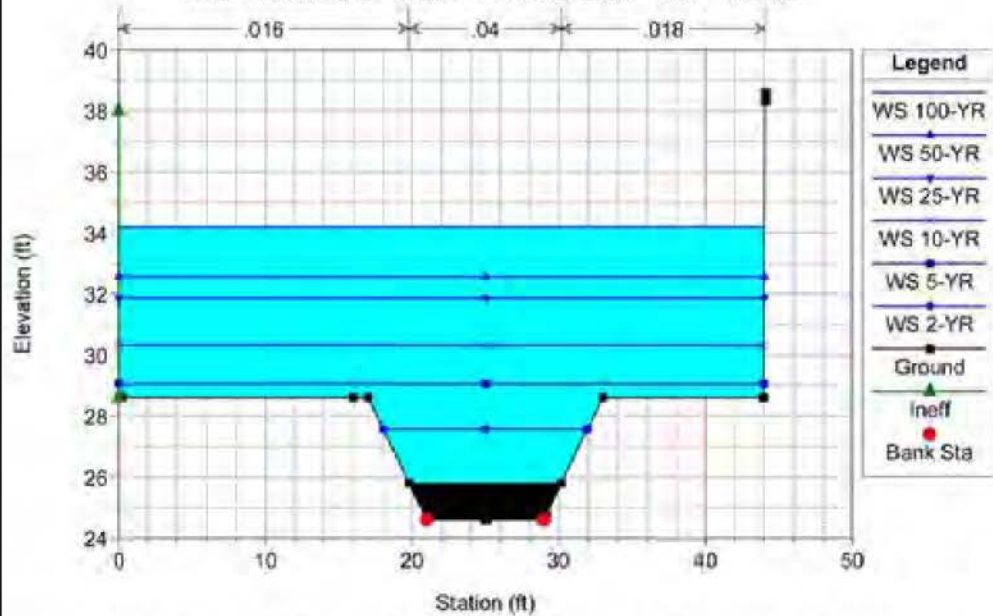
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
FLINTKOTE CL	392.12	10-YR	112.00	23.88	30.23	25.54	30.24	0.000052	0.96	115.39	50.97	0.07
FLINTKOTE CL	392.12	5-YR	97.00	23.88	28.90	25.40	28.93	0.000125	1.28	88.62	18.70	0.10
FLINTKOTE CL	392.12	2-YR	76.00	23.88	26.95	25.18	27.02	0.000549	1.94	35.99	14.80	0.19
FLINTKOTE CL	383.12	100-YR	155.00	23.88	34.19	25.24	34.19	0.000005	0.42	347.44	50.97	0.02
FLINTKOTE CL	383.12	50-YR	145.00	23.88	32.54	25.18	32.55	0.000015	0.64	227.53	50.97	0.04
FLINTKOTE CL	383.12	25-YR	133.00	23.88	31.82	25.11	31.83	0.000019	0.68	199.57	50.97	0.04
FLINTKOTE CL	383.12	10-YR	112.00	23.88	30.23	24.98	30.24	0.000043	0.88	137.33	50.97	0.06
FLINTKOTE CL	383.12	5-YR	97.00	23.88	28.90	24.87	28.92	0.000092	1.10	90.60	18.95	0.09
FLINTKOTE CL	383.12	2-YR	76.00	23.88	26.97	24.73	27.00	0.000293	1.42	54.58	18.24	0.14
FLINTKOTE CL	350		Culvert									
FLINTKOTE CL	299.56	100-YR	155.00	23.93	34.18	25.45	34.19	0.000011	0.62	225.99	56.33	0.03
FLINTKOTE CL	299.56	50-YR	145.00	23.93	32.53	25.39	32.54	0.000021	0.75	182.88	56.21	0.05
FLINTKOTE CL	299.56	25-YR	133.00	23.93	31.78	25.30	31.79	0.000026	0.78	163.34	56.16	0.05
FLINTKOTE CL	299.56	10-YR	112.00	23.93	28.91	25.18	28.93	0.000000	1.00	114.48	26.04	0.07
FLINTKOTE CL	299.56	5-YR	97.00	23.93	27.77	25.04	27.81	0.000306	1.68	59.98	21.13	0.15
FLINTKOTE CL	299.56	2-YR	76.00	23.93	26.29	24.88	26.36	0.001000	2.19	35.22	15.51	0.25
FLINTKOTE CL	290.56	100-YR	155.00	23.93	34.18	25.91	34.19	0.000008	0.52	217.65	56.33	0.03
FLINTKOTE CL	290.56	50-YR	145.00	23.93	32.52	25.83	32.53	0.000015	0.63	174.31	56.21	0.04
FLINTKOTE CL	290.56	25-YR	133.00	23.93	31.78	25.73	31.79	0.000019	0.67	154.96	56.16	0.04
FLINTKOTE CL	290.56	10-YR	112.00	23.93	29.91	25.55	29.92	0.000046	0.87	106.05	26.04	0.06
FLINTKOTE CL	290.56	5-YR	97.00	23.93	27.74	25.42	27.80	0.000298	1.65	51.13	20.86	0.15
FLINTKOTE CL	290.56	2-YR	76.00	23.93	26.19	25.22	26.33	0.001447	2.56	26.20	13.86	0.30
FLINTKOTE CL	270.21	100-YR	155.00	23.55	34.18	25.55	34.19	0.000007	0.58	221.73	56.33	0.03
FLINTKOTE CL	270.21	50-YR	145.00	23.55	32.52	25.48	32.53	0.000013	0.67	178.39	56.22	0.04
FLINTKOTE CL	270.21	25-YR	133.00	23.55	31.78	25.38	31.79	0.000017	0.70	159.04	56.16	0.04
FLINTKOTE CL	270.21	10-YR	112.00	23.55	29.91	25.20	29.92	0.000039	0.91	110.12	26.05	0.06
FLINTKOTE CL	270.21	5-YR	97.00	23.55	27.74	25.05	27.79	0.000221	1.64	55.00	21.24	0.14
FLINTKOTE CL	270.21	2-YR	76.00	23.55	26.19	24.84	26.29	0.000887	2.41	29.76	13.93	0.26
FLINTKOTE CL	54.81	100-YR	155.00	23.21	34.18	25.23	34.19	0.000007	0.50	232.17	56.36	0.03
FLINTKOTE CL	54.81	50-YR	145.00	23.21	32.52	25.14	32.53	0.000012	0.59	188.79	56.25	0.03
FLINTKOTE CL	54.81	25-YR	133.00	23.21	31.78	25.04	31.79	0.000014	0.61	169.41	56.20	0.04
FLINTKOTE CL	54.81	10-YR	112.00	23.21	29.90	24.86	29.91	0.000031	0.77	120.38	56.07	0.05
FLINTKOTE CL	54.81	5-YR	97.00	23.21	27.71	24.72	27.75	0.000164	1.37	63.44	25.21	0.11
FLINTKOTE CL	54.81	2-YR	76.00	23.21	26.02	24.51	26.11	0.000731	2.11	32.78	14.47	0.22

HEC-RAS Plan Sorrento-Current River FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	49.81	100-YR	155.00	23.20	34.18	25.20	34.19	0.000007	0.50	232.44	56.36	0.03
FLINTKOTE CL	49.81	50-YR	145.00	23.20	32.52	25.14	32.53	0.000012	0.59	189.05	56.25	0.03
FLINTKOTE CL	49.81	25-YR	133.00	23.20	31.78	25.03	31.79	0.000014	0.61	169.67	56.20	0.04
FLINTKOTE CL	49.81	10-YR	112.00	23.20	29.90	24.85	29.91	0.000031	0.77	120.64	56.07	0.05
FLINTKOTE CL	49.81	5-YR	97.00	23.20	27.71	24.71	27.75	0.000162	1.36	83.68	25.31	0.11
FLINTKOTE CL	49.81	2-YR	76.00	23.20	26.02	24.50	26.11	0.000724	2.10	32.87	14.48	0.22
FLINTKOTE CL	20		Culvert									
FLINTKOTE CL	0	100-YR	155.00	22.50	34.15	24.08	34.16	0.000026	0.97	160.19	40.00	0.05
FLINTKOTE CL	0	50-YR	145.00	22.50	32.40	24.01	32.42	0.000039	1.07	136.13	40.00	0.06
FLINTKOTE CL	0	25-YR	133.00	22.50	30.81	23.92	30.83	0.000058	1.16	114.26	40.00	0.07
FLINTKOTE CL	0	10-YR	112.00	22.50	28.17	23.77	28.20	0.000148	1.44	77.96	40.00	0.11
FLINTKOTE CL	0	5-YR	97.00	22.50	26.44	23.66	26.49	0.000373	1.79	54.18	40.00	0.16
FLINTKOTE CL	0	2-YR	76.00	22.50	24.04	23.49	24.24	0.005249	3.59	21.18	40.00	0.51

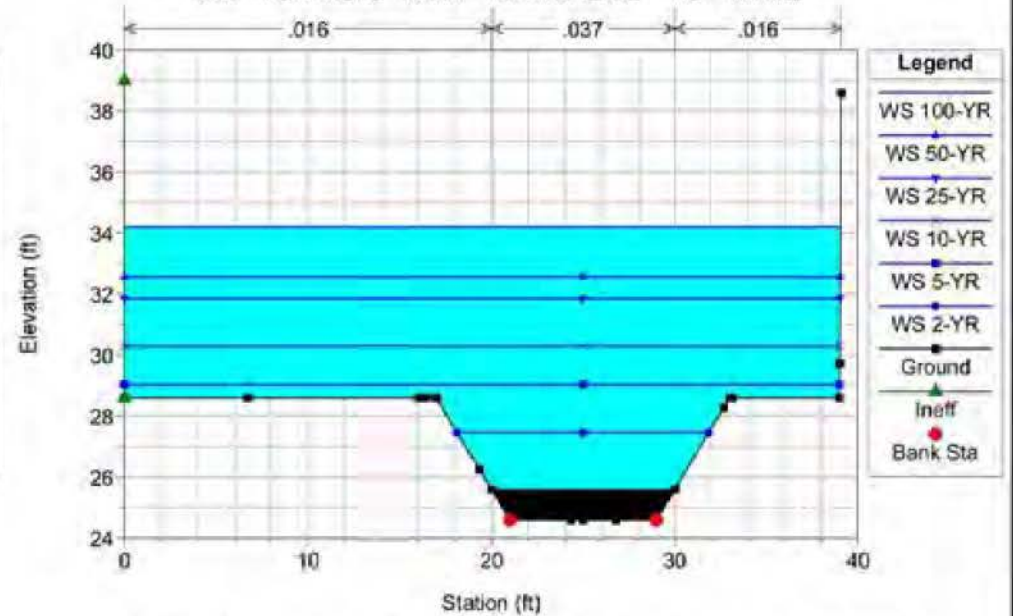
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1124.62



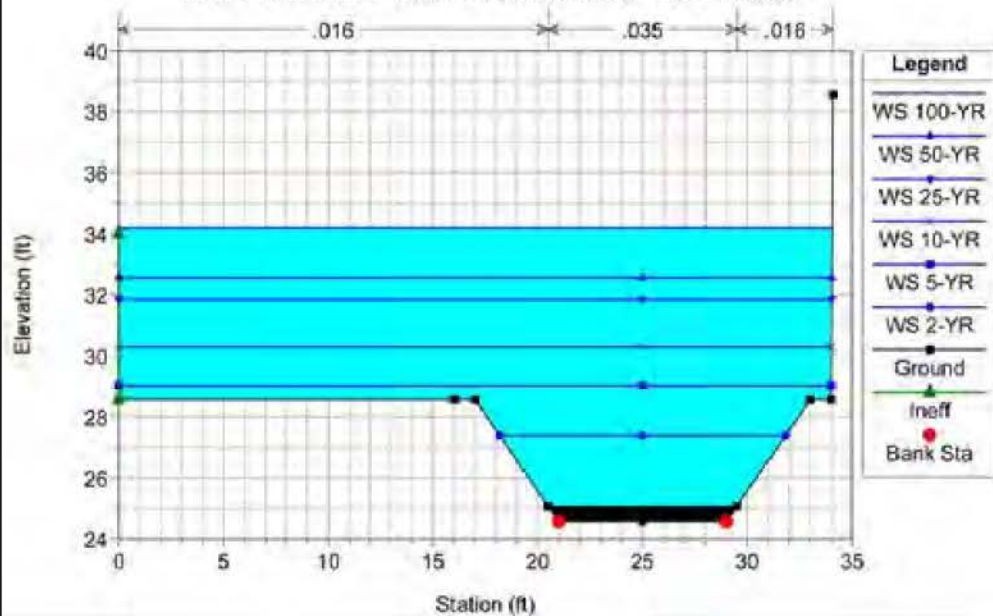
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1083.52



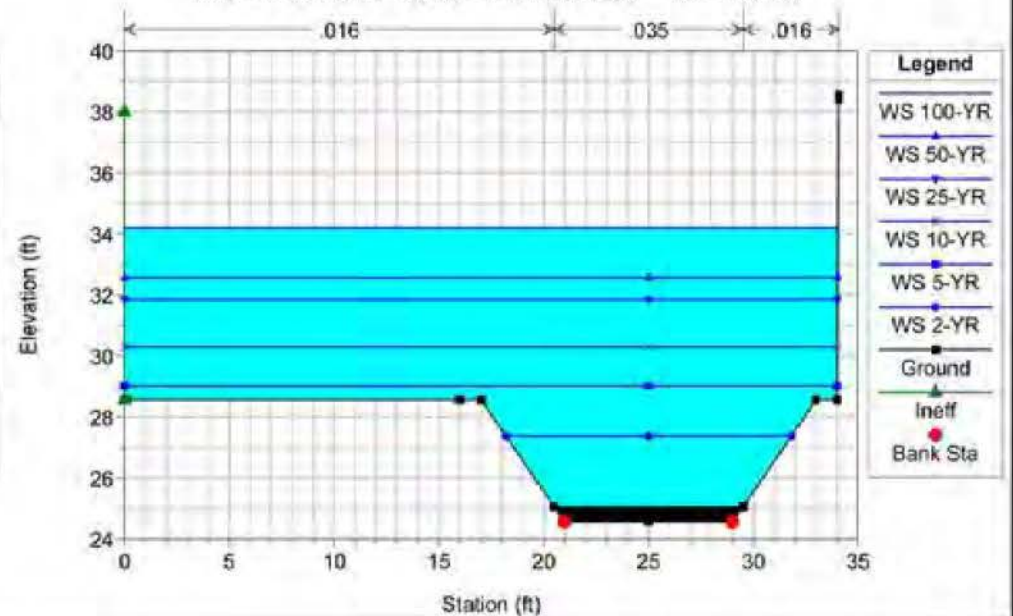
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1026.99



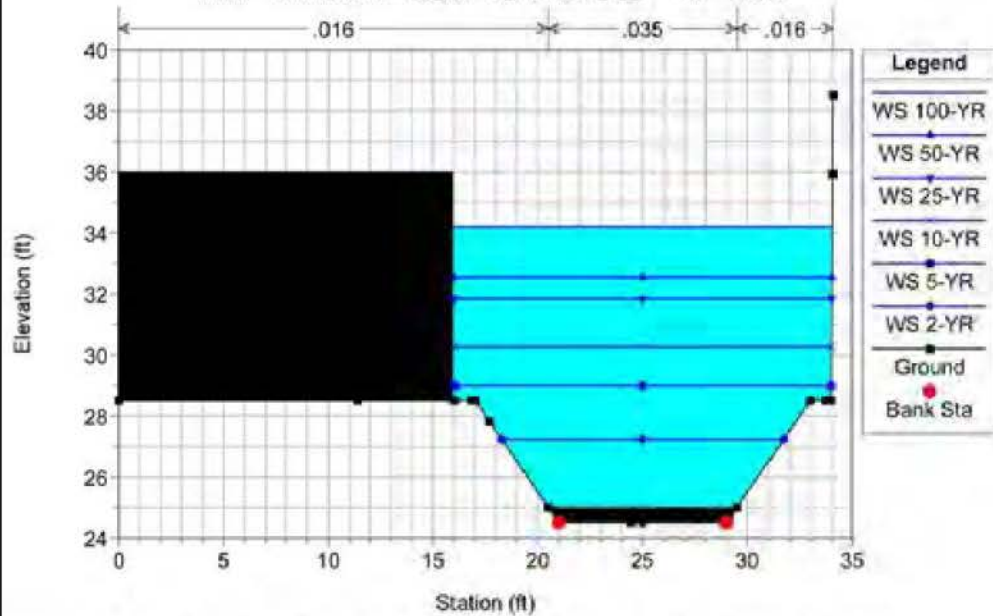
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1007.26



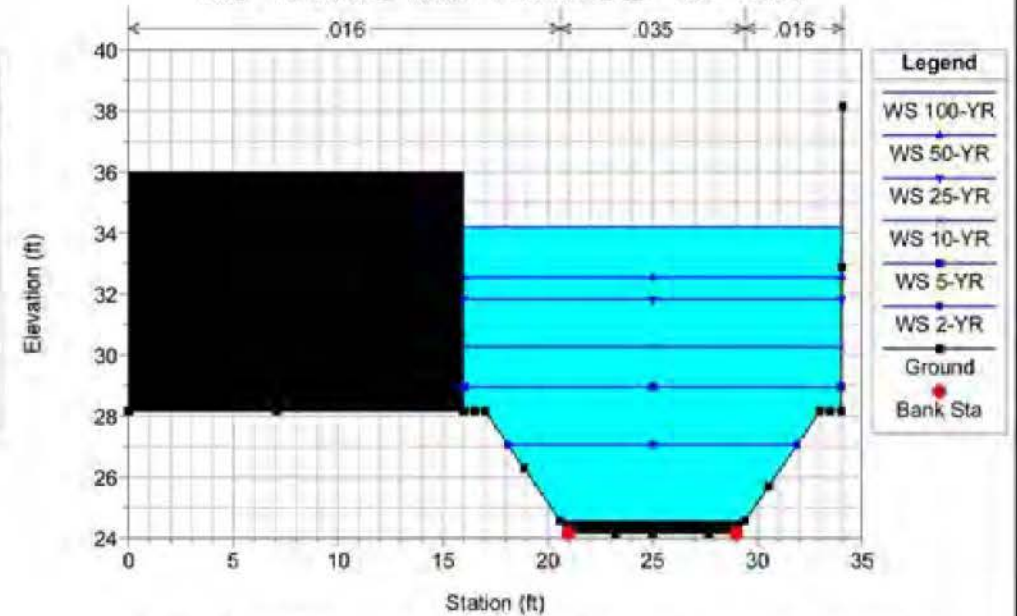
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 913.4



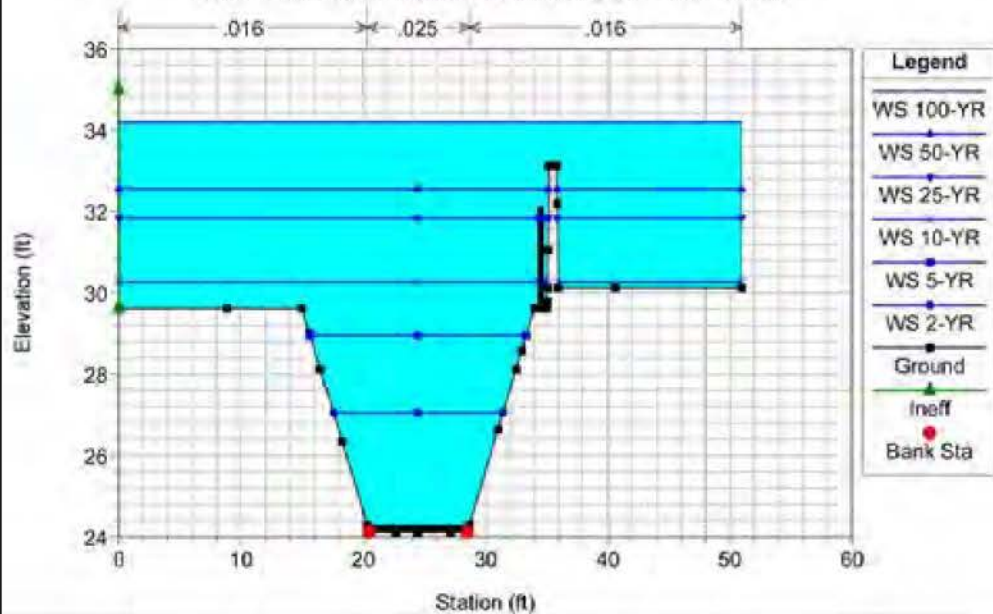
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 740.69



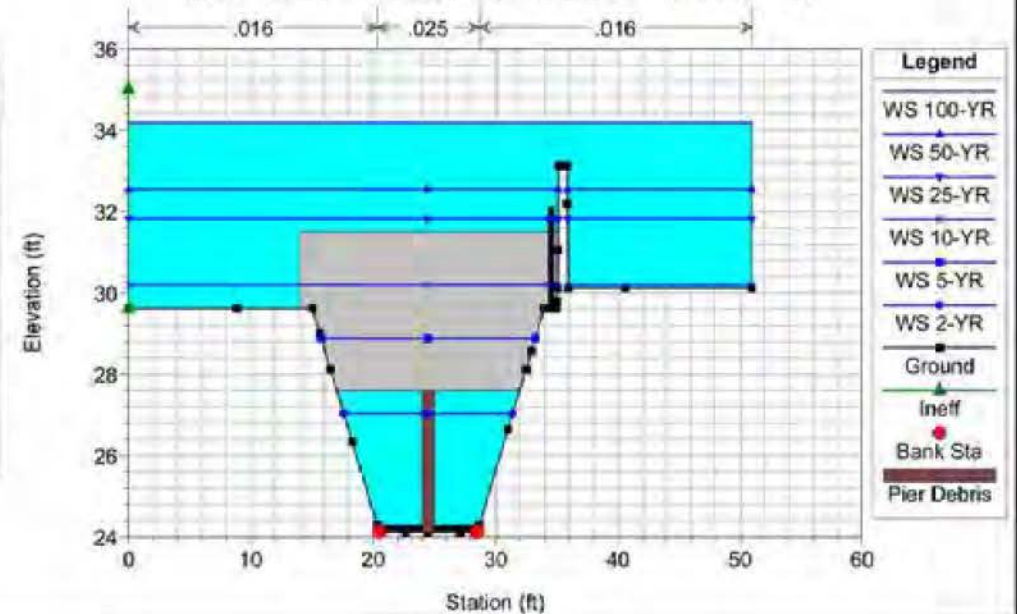
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 720.69



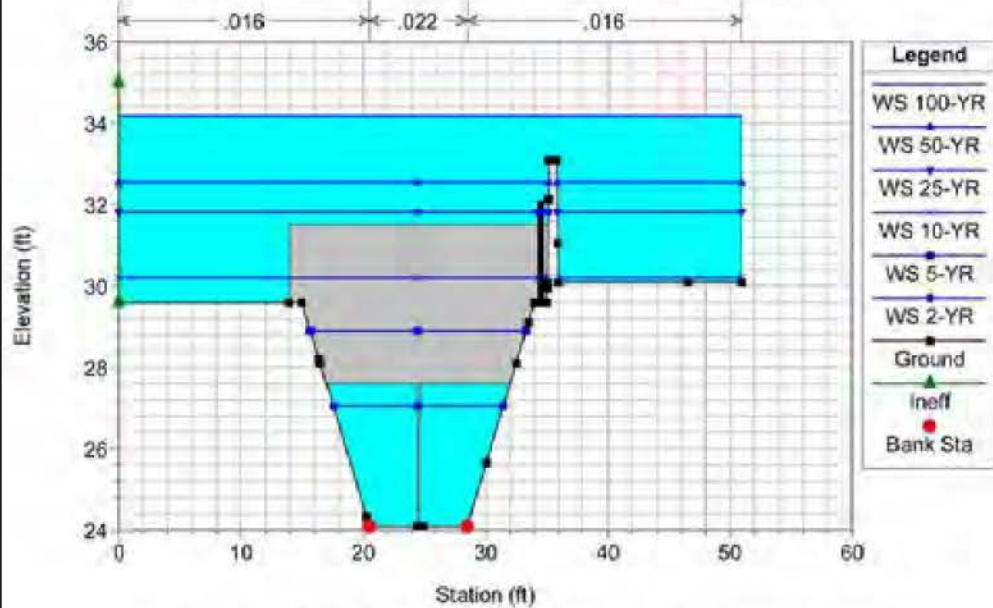
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



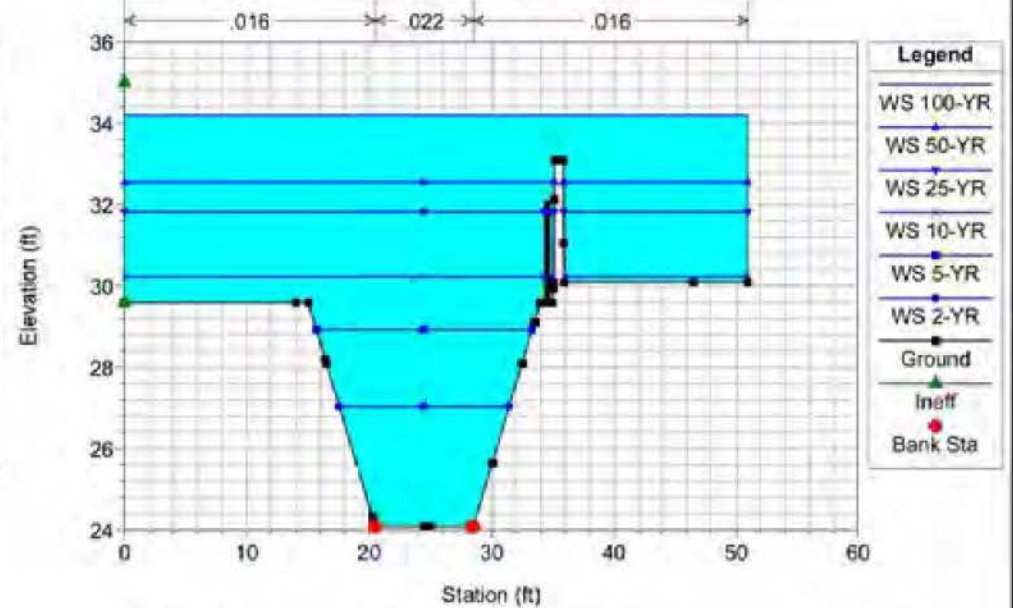
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



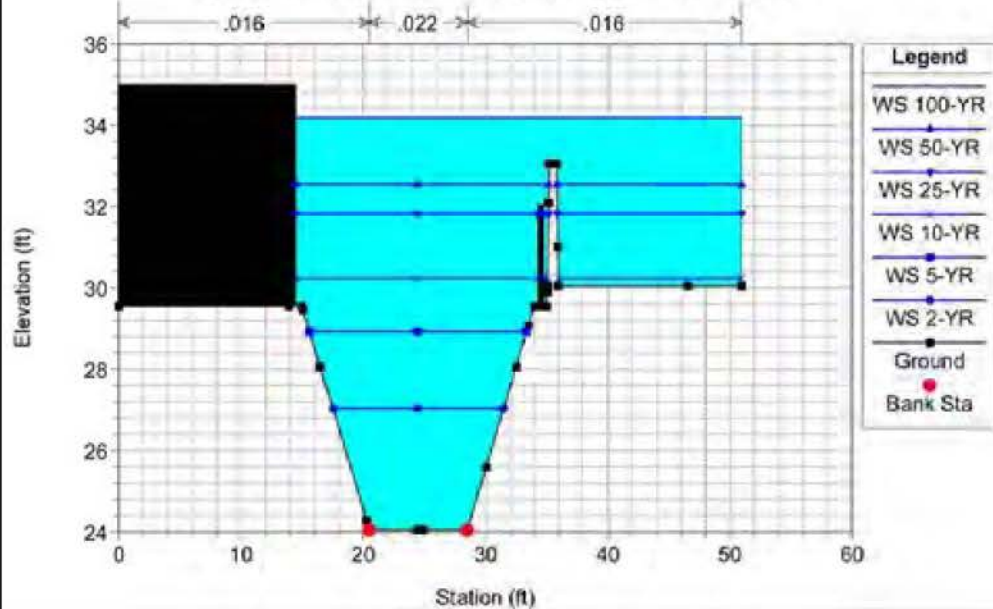
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 705.69



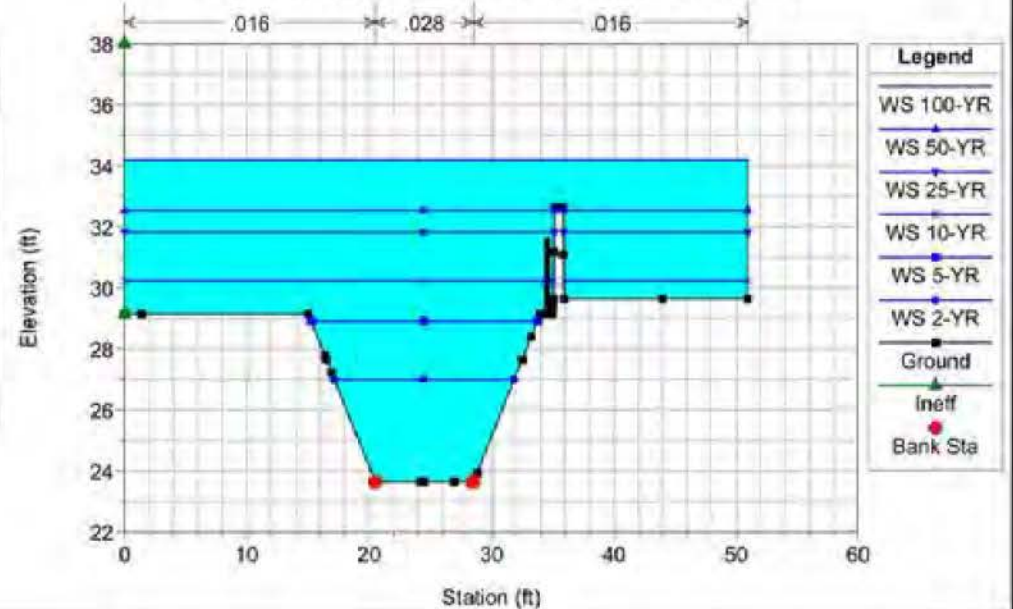
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 685.69



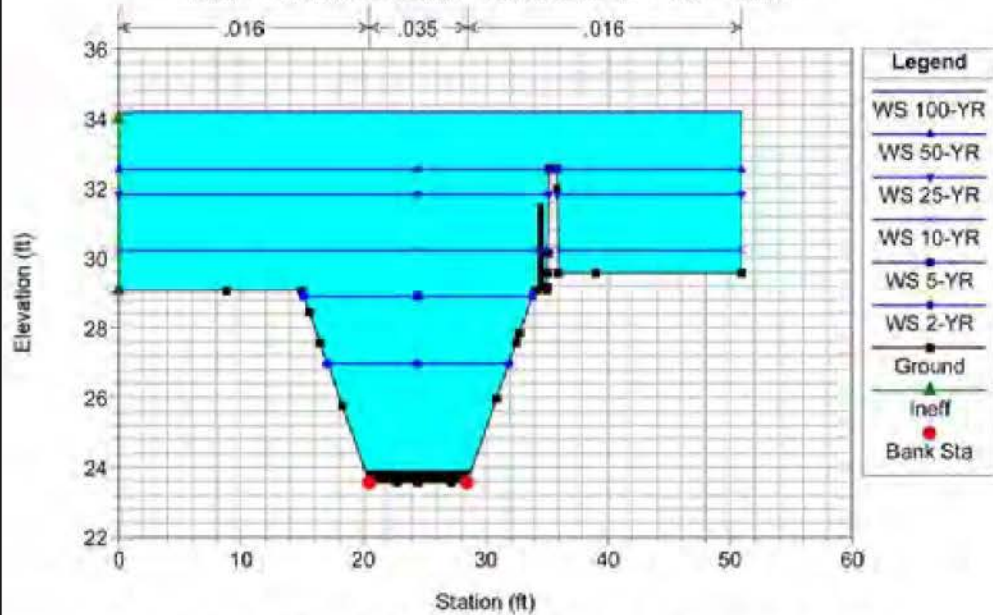
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 454.03



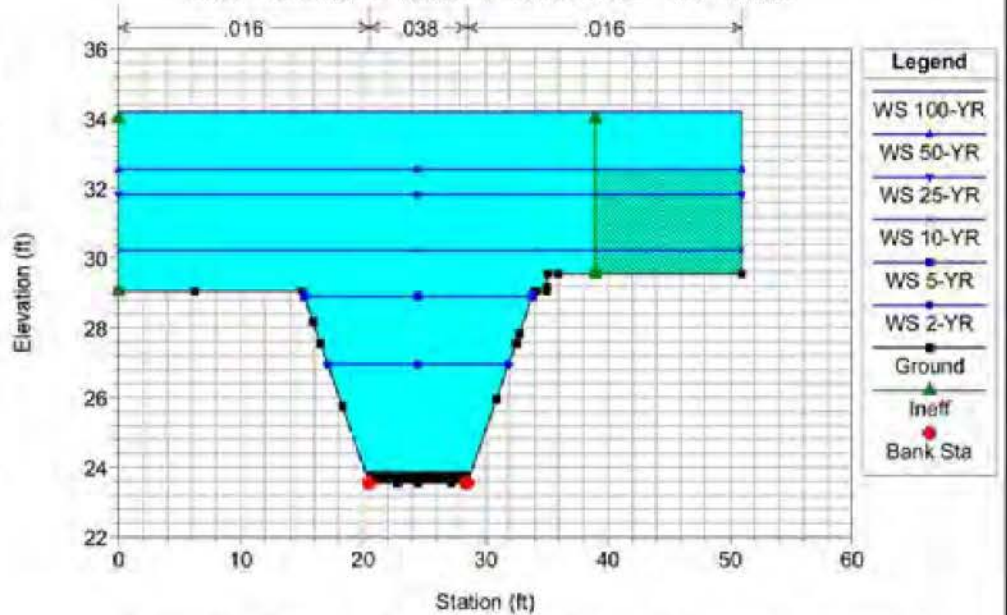
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 400.82



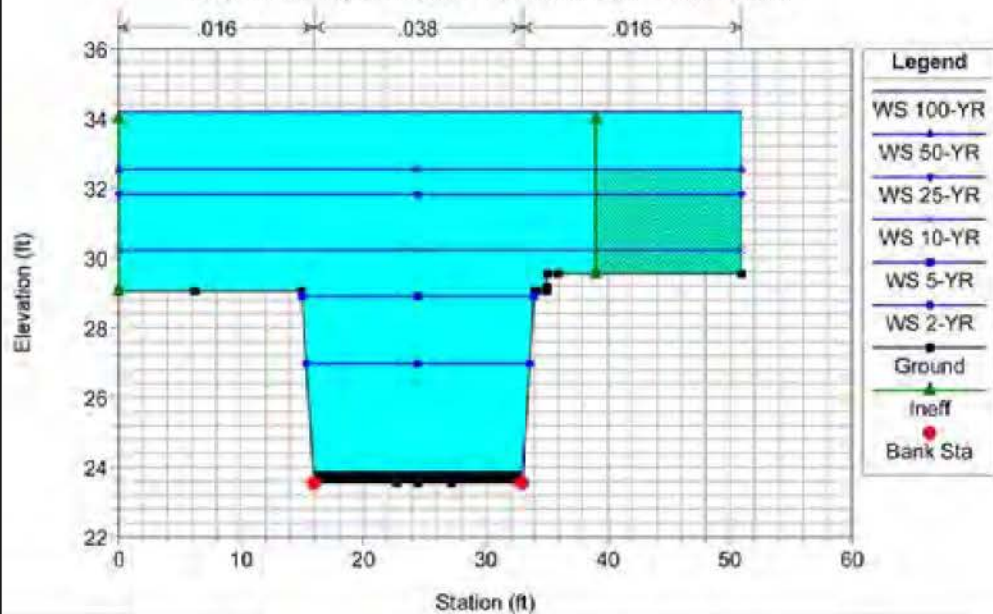
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 392.12



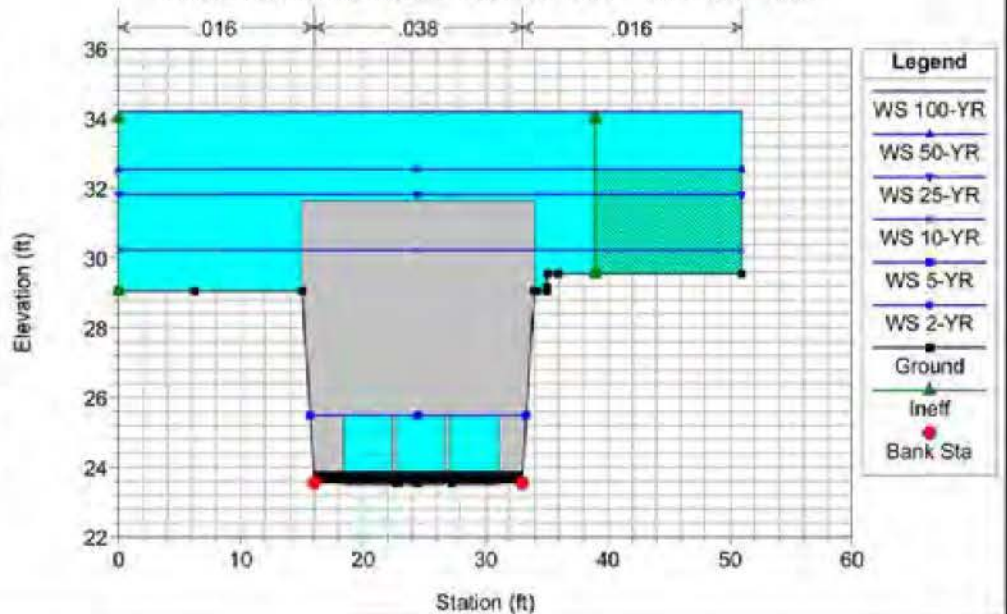
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 383.12



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

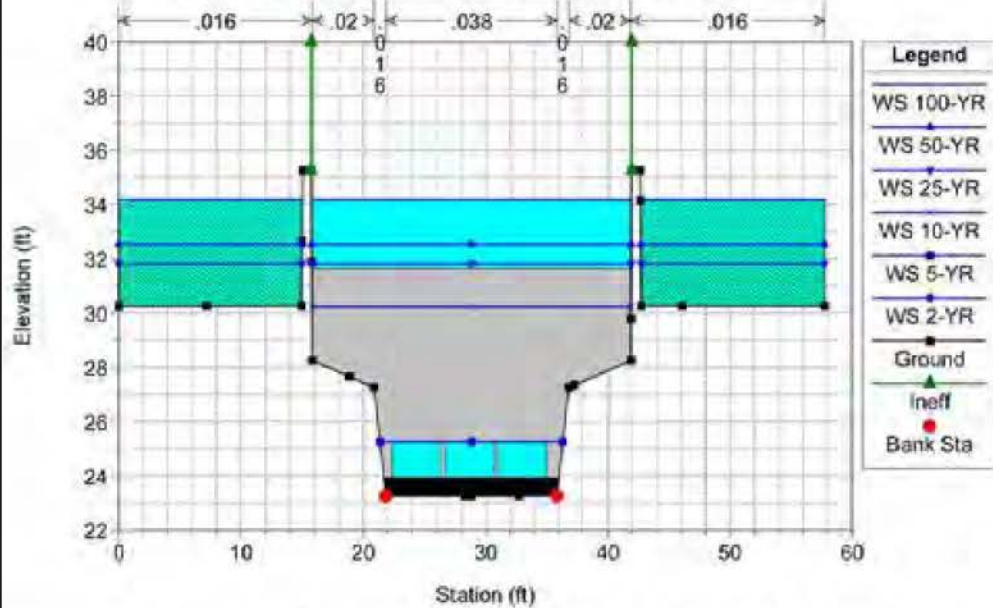
Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current

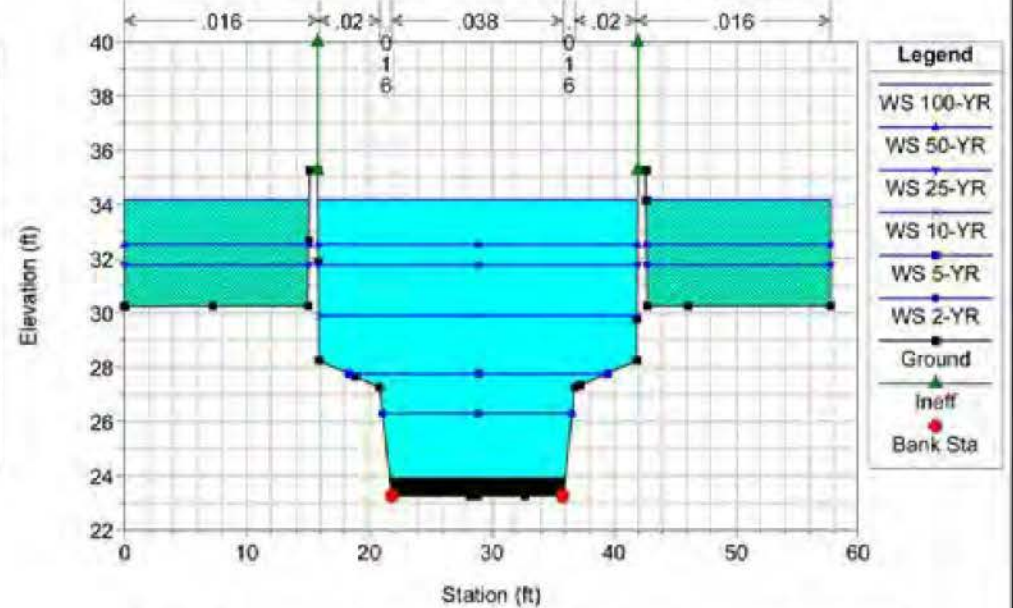
River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current

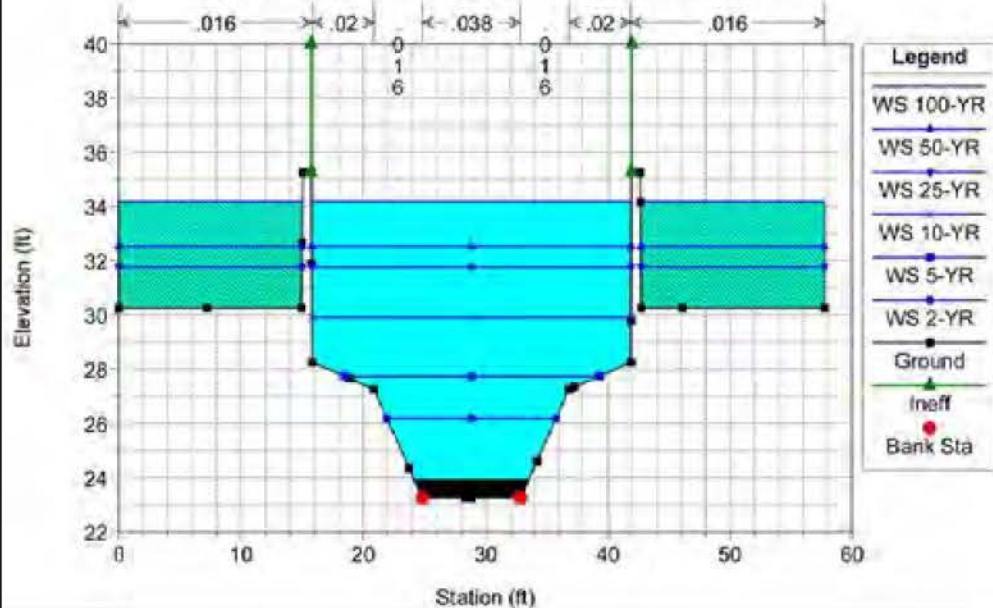
River = FLINTKOTE Reach = FLINTKOTE CL RS = 299.56



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current

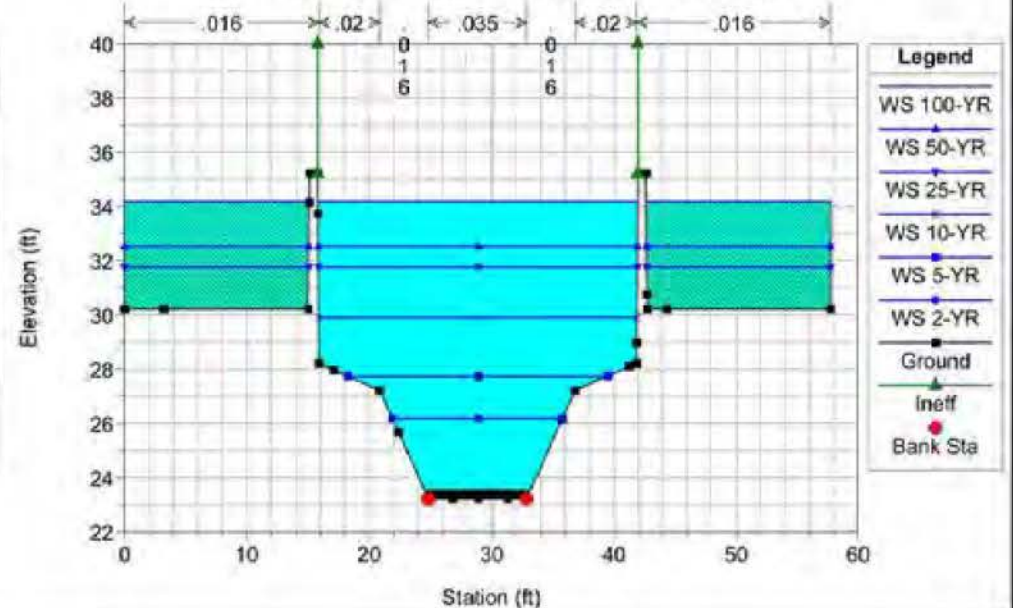
River = FLINTKOTE Reach = FLINTKOTE CL RS = 290.56



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

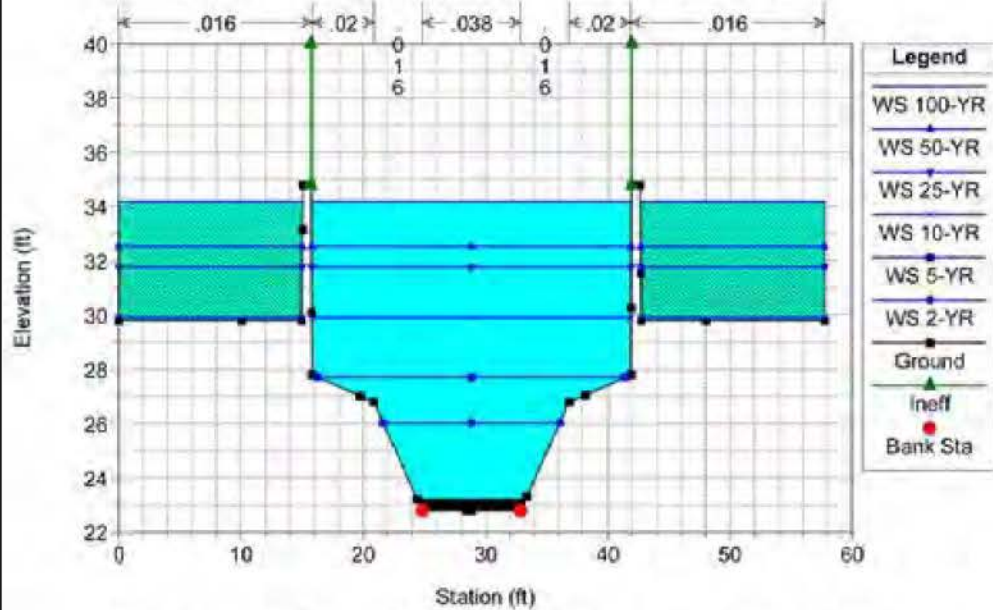
Geom: Current Vegetated Condition Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 270.21



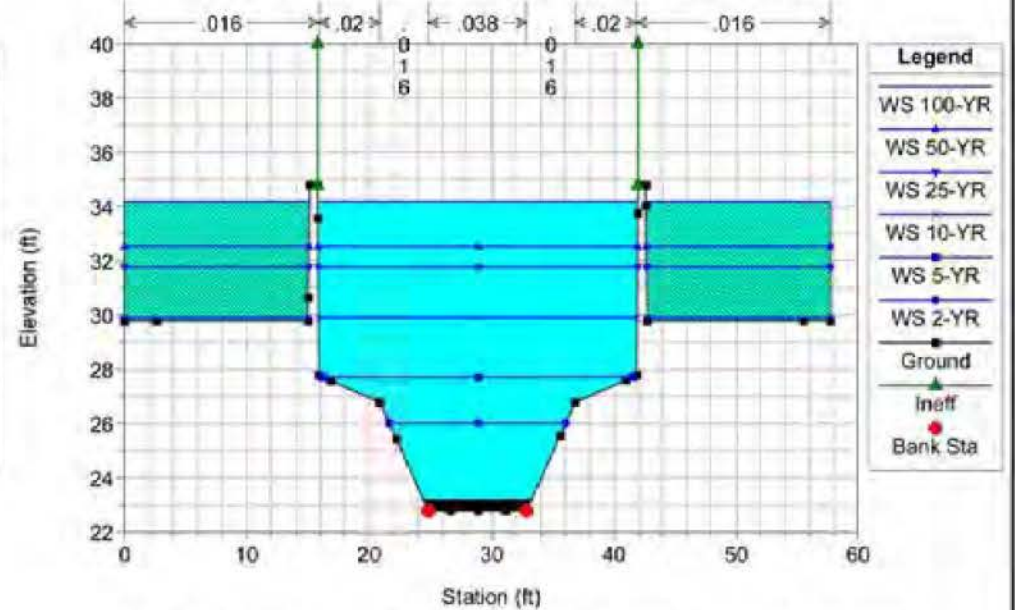
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 54.81



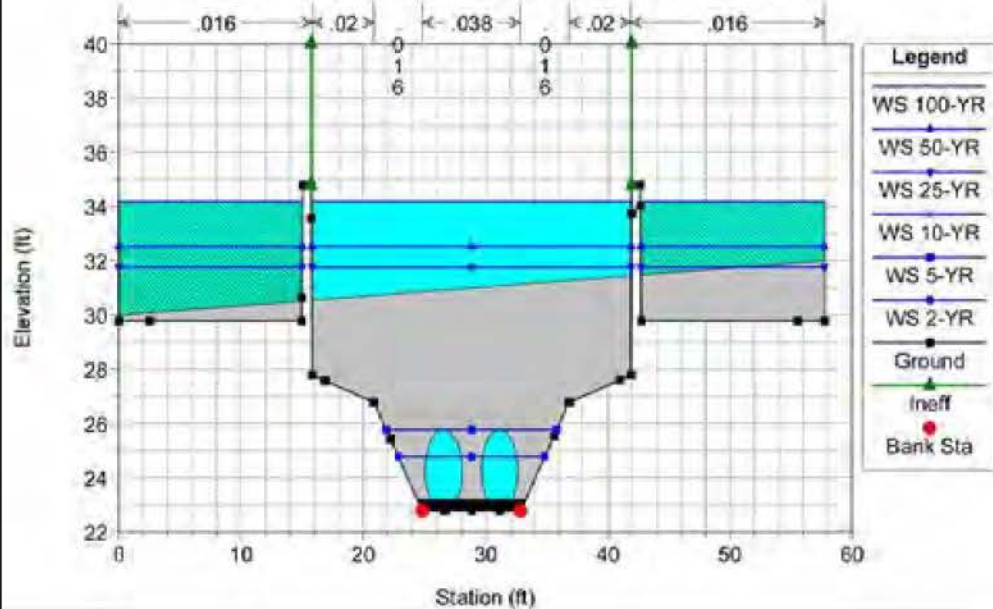
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 49.81



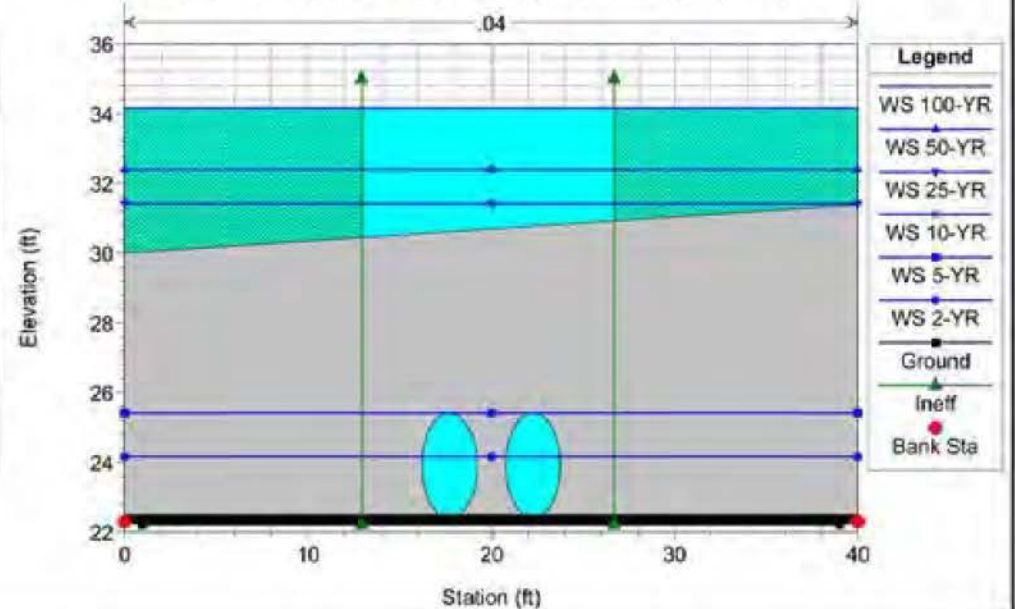
FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

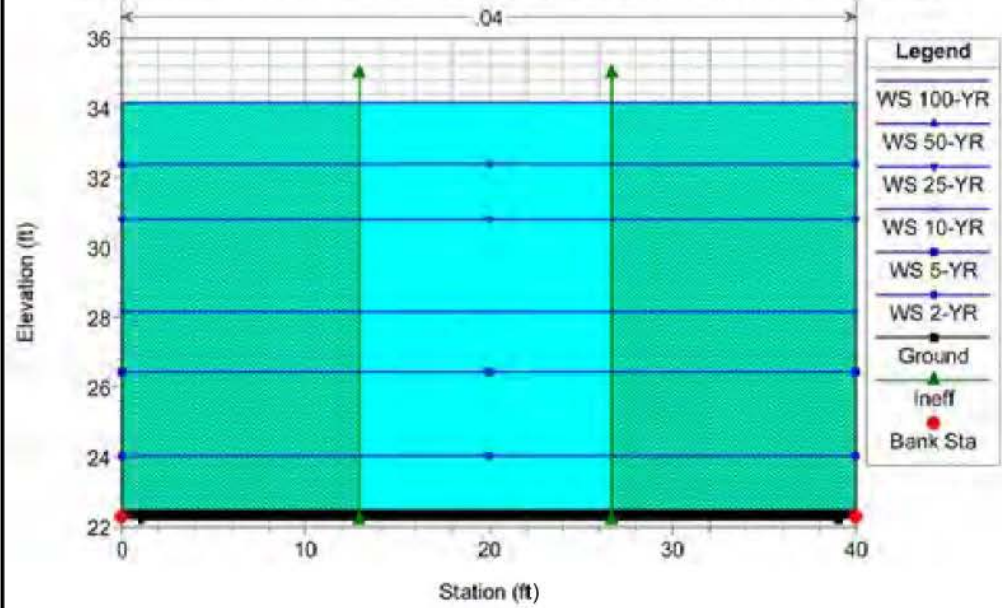
Geom: Current Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Current Vegetated Condition-Current 5/7/2013

Geom: Current Vegetated Condition Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 0 FLINTKOTE CHANNEL OUTFALL



**DETAILED HYDRAULIC RESULTS FOR REACH 7 CURRENT VEGETATED CONDITION
(MAXIMUM FLOW)**

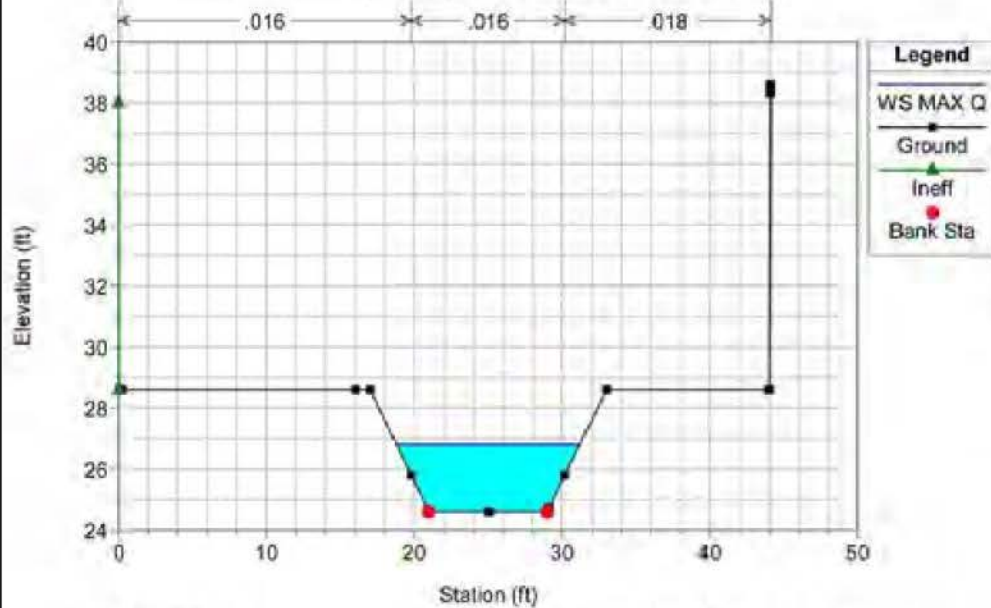
HEC-RAS Plan: MaxQ-ScmCurrent River: FLINTKOTE Reach: FLINTKOTE CL Profile: MAX Q

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
FLINTKOTE CL	1124.62	MAX Q	56.00	25.80	27.26	26.74	27.42	0.004384	3.16	17.31	13.32	0.46
FLINTKOTE CL	1083.52	MAX Q	56.00	25.59	27.10	26.55	27.26	0.003589	3.16	17.35	13.02	0.45
FLINTKOTE CL	1026.99	MAX Q	56.00	25.07	27.01	26.09	27.12	0.001553	2.60	21.19	12.87	0.33
FLINTKOTE CL	1007.26	MAX Q	56.00	25.06	26.97	26.08	27.08	0.001630	2.64	20.86	12.82	0.34
FLINTKOTE CL	913.4	MAX Q	56.00	25.00	26.77	26.02	26.91	0.002165	2.89	19.07	12.53	0.38
FLINTKOTE CL	740.89	MAX Q	56.00	24.56	26.44	25.59	26.56	0.001794	2.74	20.10	12.56	0.35
FLINTKOTE CL	720.89	MAX Q	56.00	24.29	26.44	25.36	26.53	0.000693	2.60	22.51	12.63	0.31
FLINTKOTE CL	710		Bridge									
FLINTKOTE CL	705.89	MAX Q	56.00	24.09	26.42	25.20	26.51	0.000447	2.51	24.03	12.65	0.29
FLINTKOTE CL	685.89	MAX Q	56.00	24.05	26.41	25.15	26.50	0.000423	2.46	24.47	12.72	0.28
FLINTKOTE CL	454.03	MAX Q	56.00	23.64	26.34	24.74	26.40	0.000378	2.00	28.91	13.41	0.21
FLINTKOTE CL	400.82	MAX Q	56.00	23.90	26.30	24.96	26.37	0.000685	1.99	26.56	13.47	0.23
FLINTKOTE CL	392.12	MAX Q	60.00	23.88	26.28	25.01	26.36	0.000886	2.09	26.50	13.45	0.24
FLINTKOTE CL	383.12	MAX Q	60.00	23.88	26.30	24.60	26.33	0.000414	1.43	42.47	18.00	0.16
FLINTKOTE CL	350		Culvert									
FLINTKOTE CL	299.56	MAX Q	60.00	23.93	25.89	24.74	25.96	0.001167	2.09	29.04	15.31	0.26
FLINTKOTE CL	280.06	MAX Q	60.00	23.93	25.77	25.04	25.92	0.001907	2.37	26.02	15.03	0.33
FLINTKOTE CL	270.21	MAX Q	60.00	23.55	25.77	24.66	25.87	0.001061	2.35	24.13	13.10	0.28
FLINTKOTE CL	54.81	MAX Q	60.00	23.21	25.57	24.33	25.65	0.000892	2.07	26.41	13.56	0.24
FLINTKOTE CL	49.81	MAX Q	60.00	23.20	25.56	24.32	25.65	0.000883	2.06	26.49	13.57	0.24
FLINTKOTE CL	20		Culvert									
FLINTKOTE CL	0	MAX Q	60.00	22.50	23.34	23.34	23.76	0.024937	5.21	11.51	40.00	1.00

FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

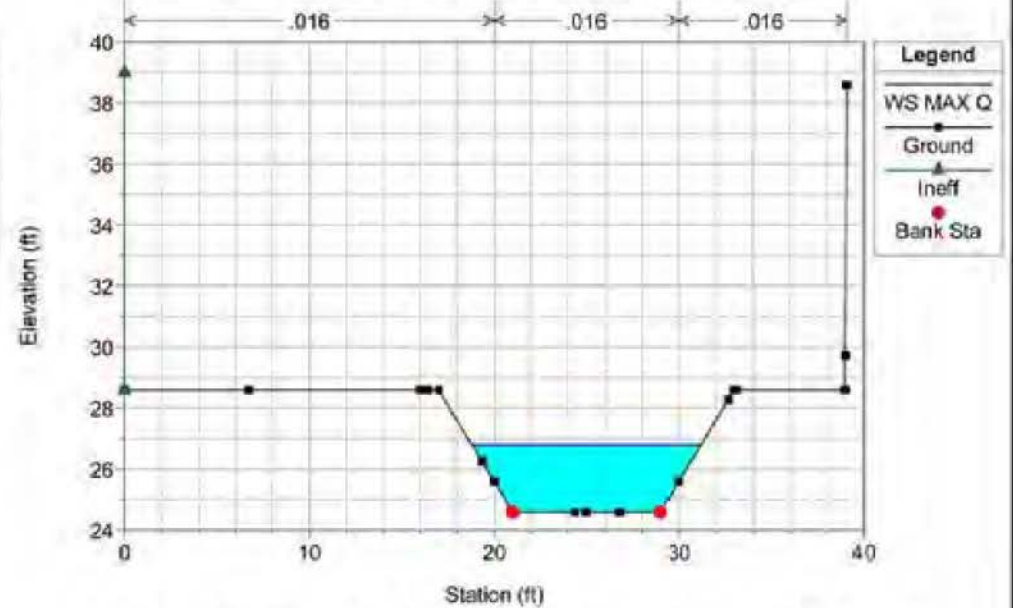
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1124.62



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

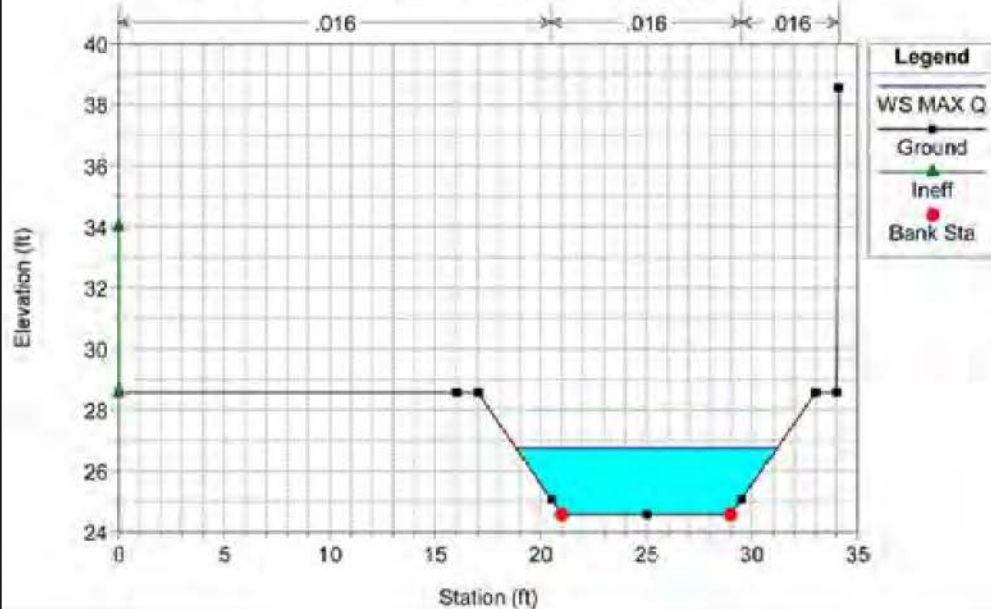
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1083.52



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

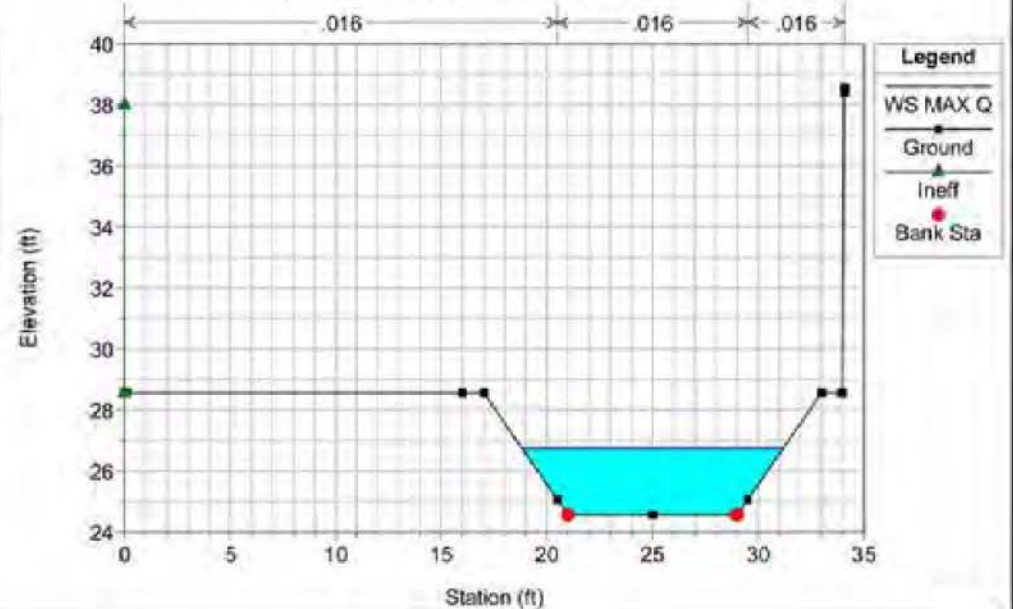
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1026.99



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

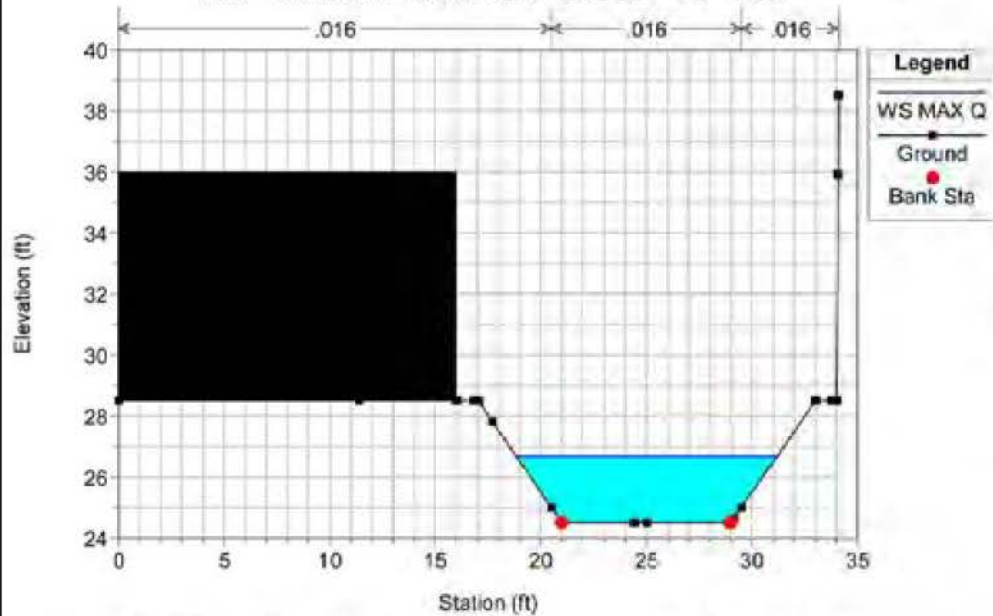
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1007.26



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

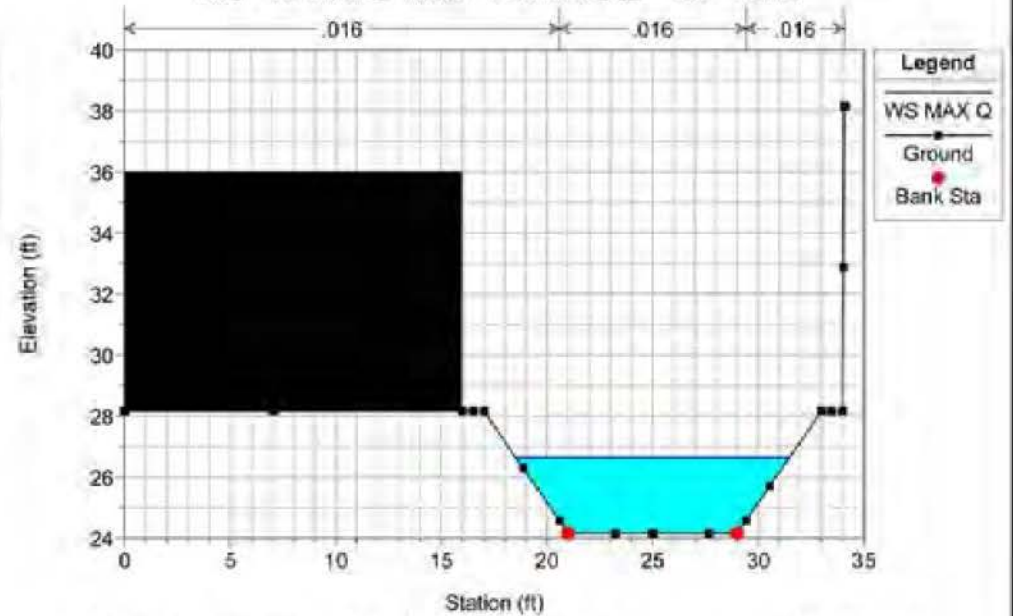
River = FLINTKOTE Reach = FLINTKOTE CL RS = 913.4



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

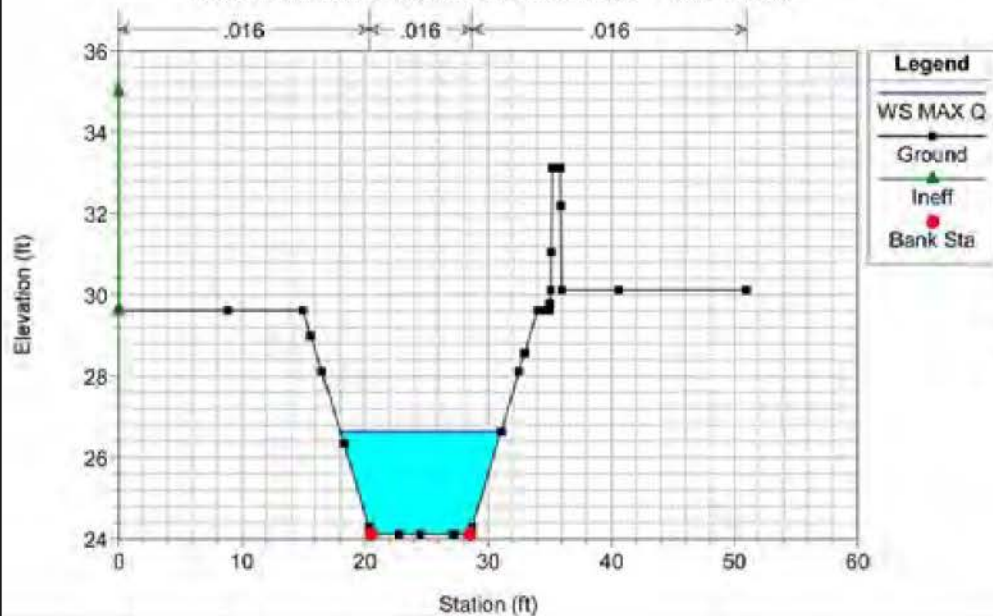
River = FLINTKOTE Reach = FLINTKOTE CL RS = 740.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

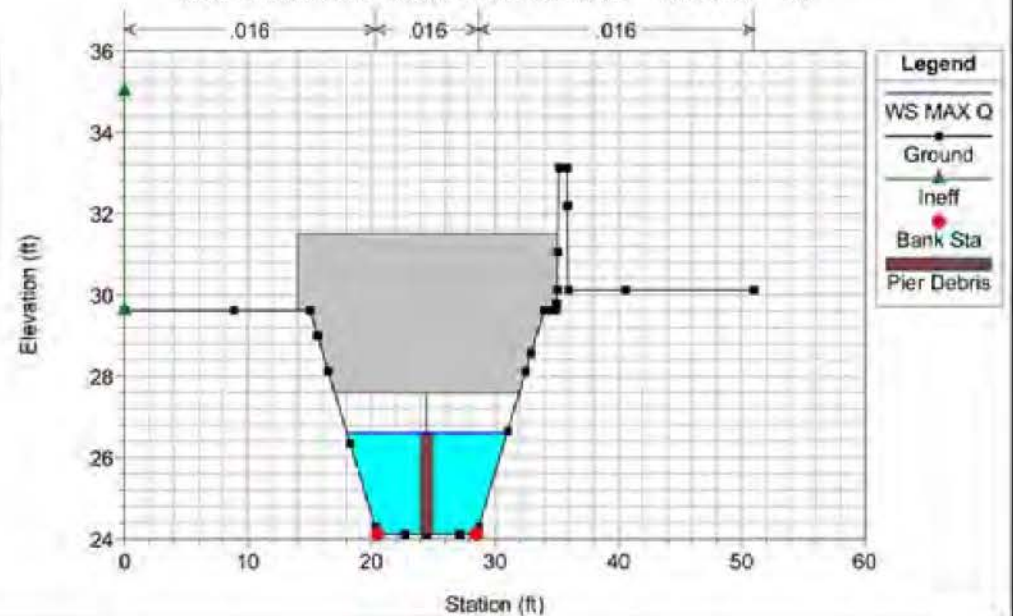
River = FLINTKOTE Reach = FLINTKOTE CL RS = 720.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

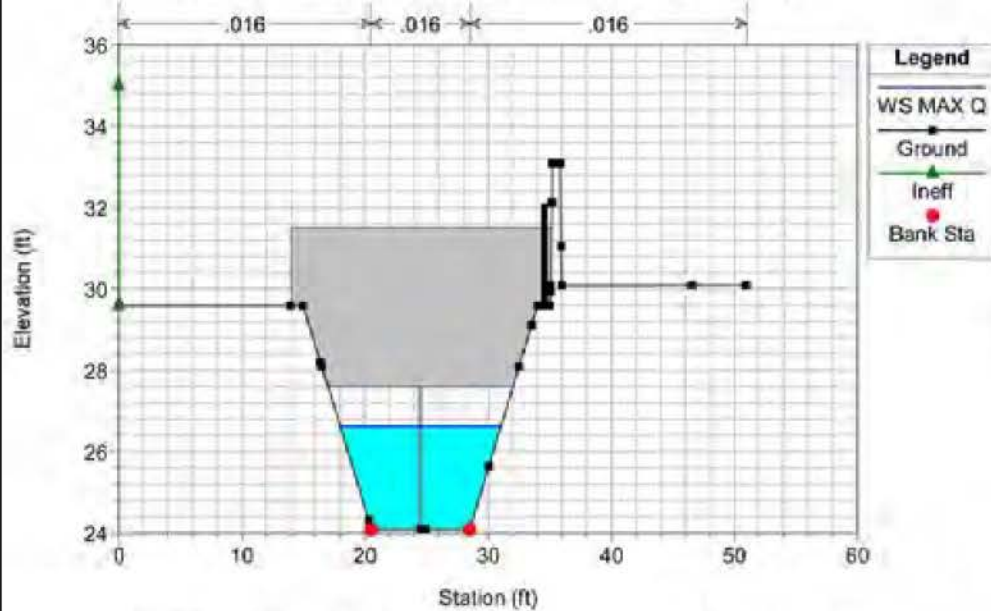
River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

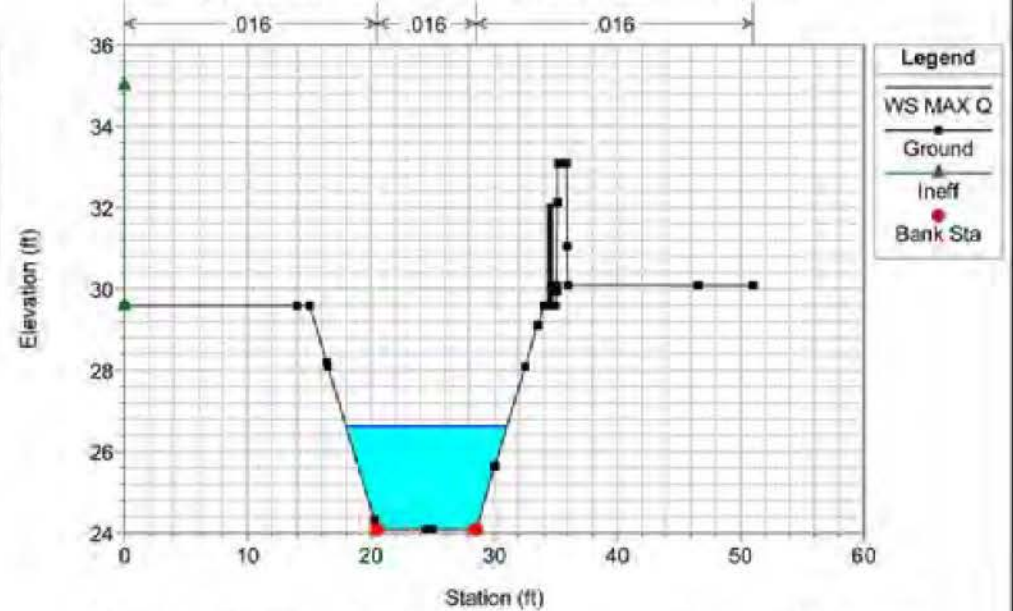
River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

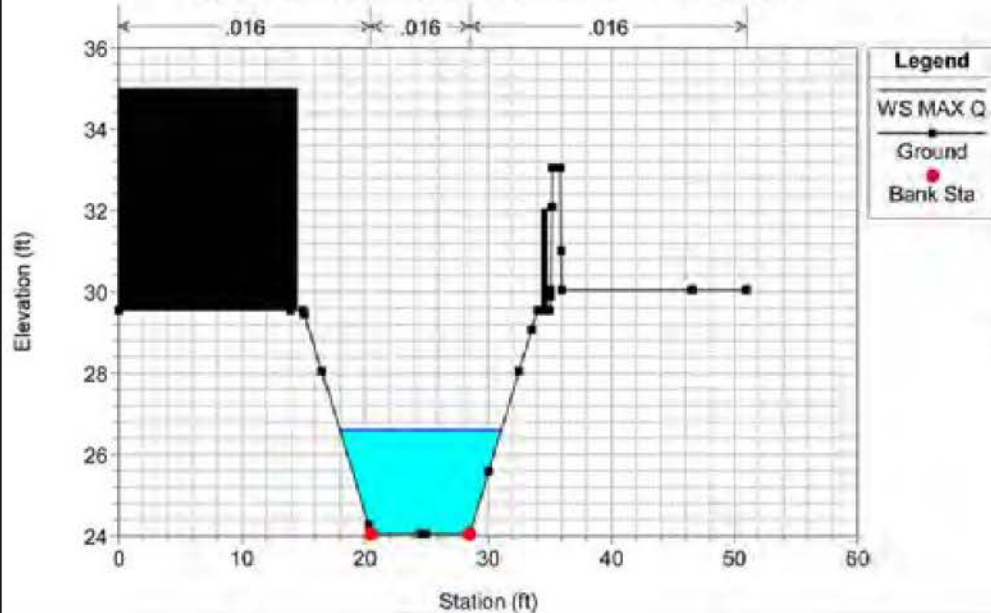
River = FLINTKOTE Reach = FLINTKOTE CL RS = 705.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

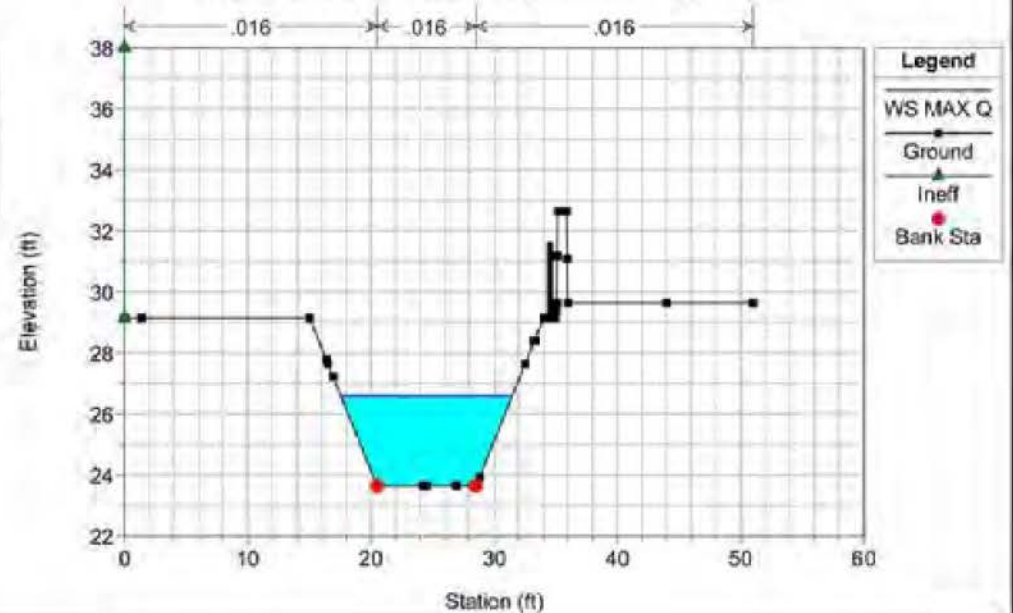
River = FLINTKOTE Reach = FLINTKOTE CL RS = 685.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

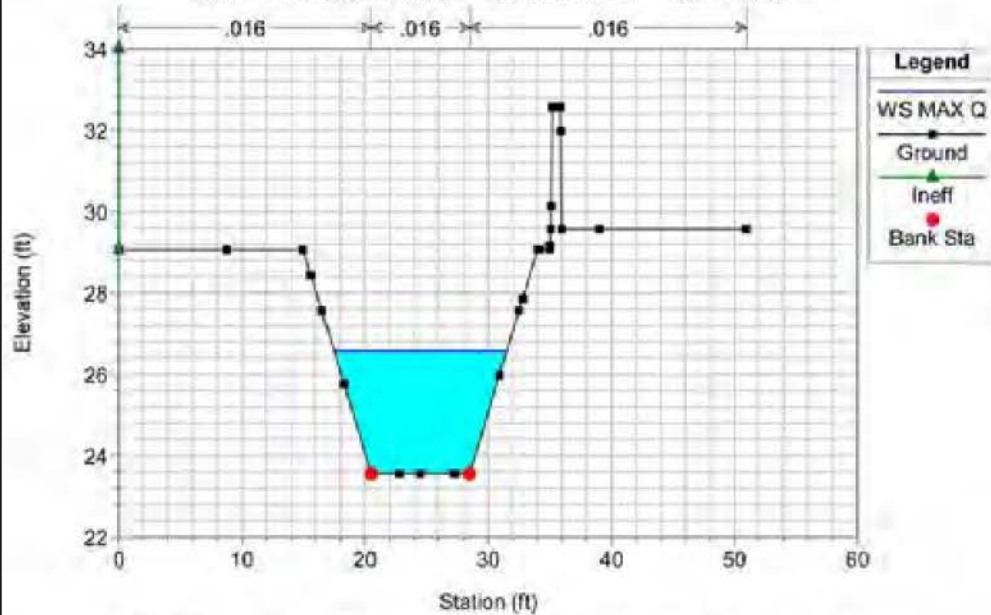
River = FLINTKOTE Reach = FLINTKOTE CL RS = 454.03



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

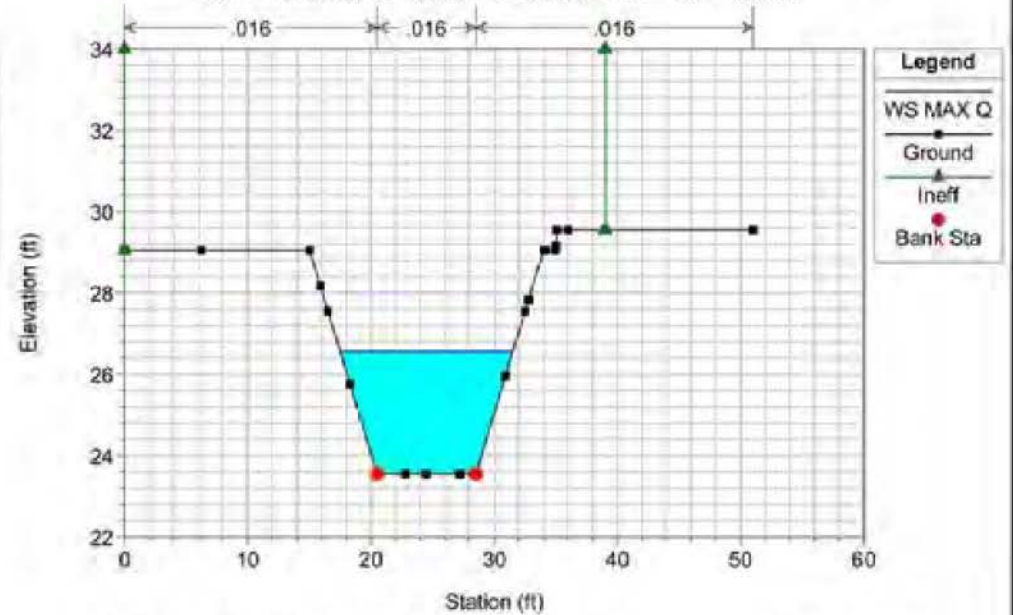
River = FLINTKOTE Reach = FLINTKOTE CL RS = 400.82



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

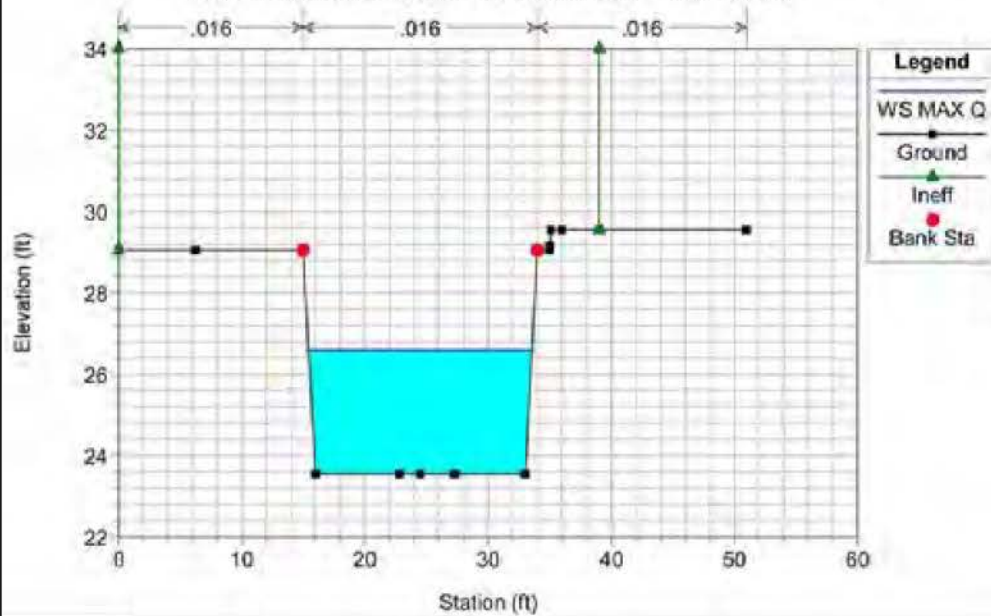
River = FLINTKOTE Reach = FLINTKOTE CL RS = 392.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

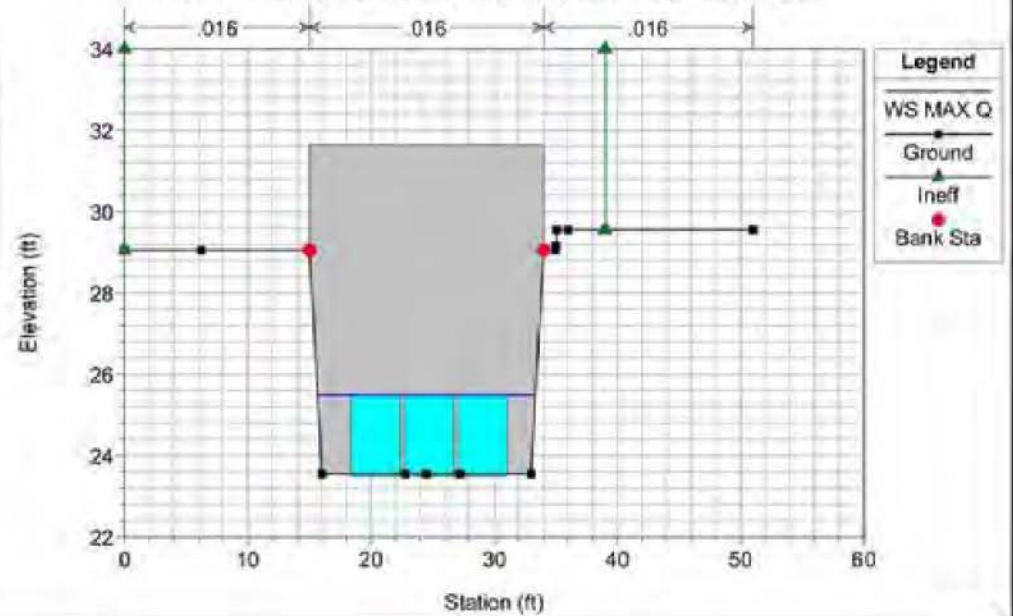
River = FLINTKOTE Reach = FLINTKOTE CL RS = 383.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

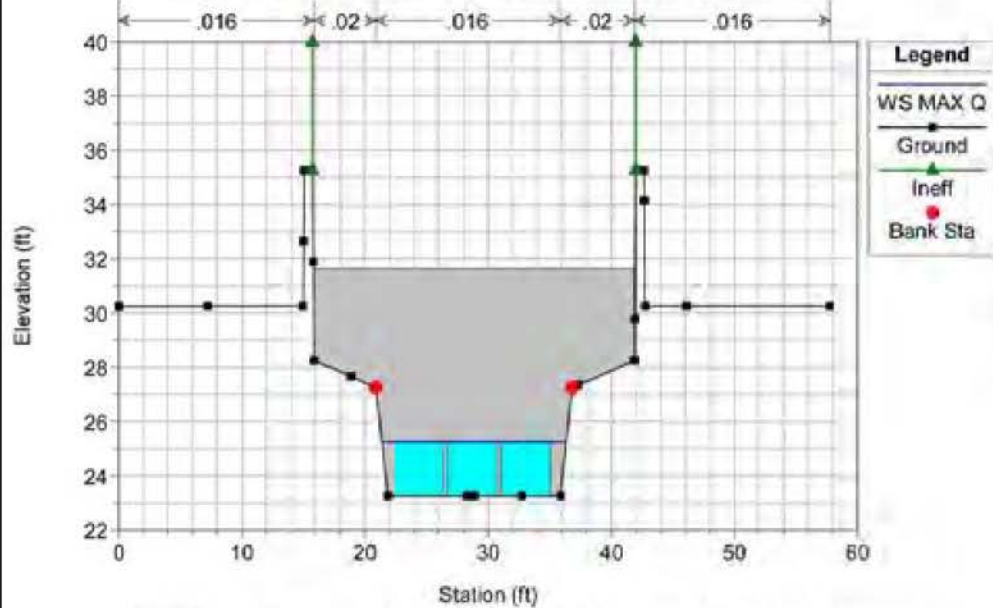
River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

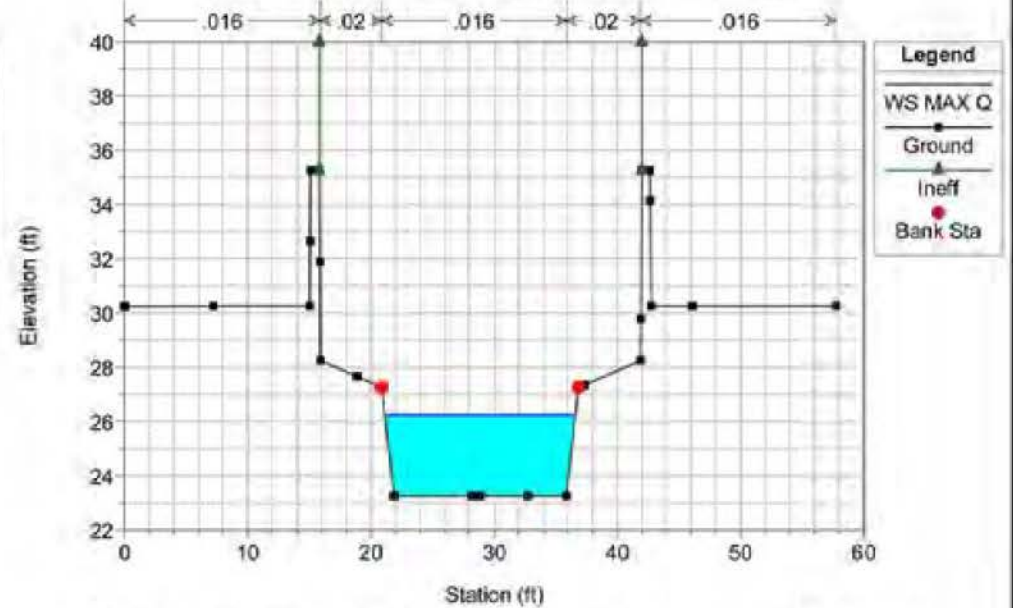
River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

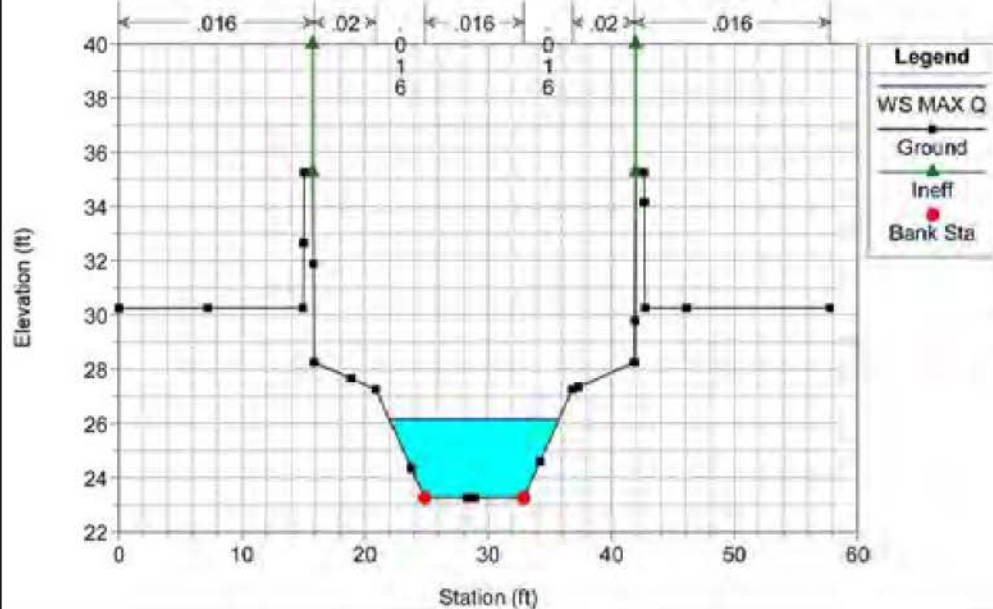
River = FLINTKOTE Reach = FLINTKOTE CL RS = 299.56



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

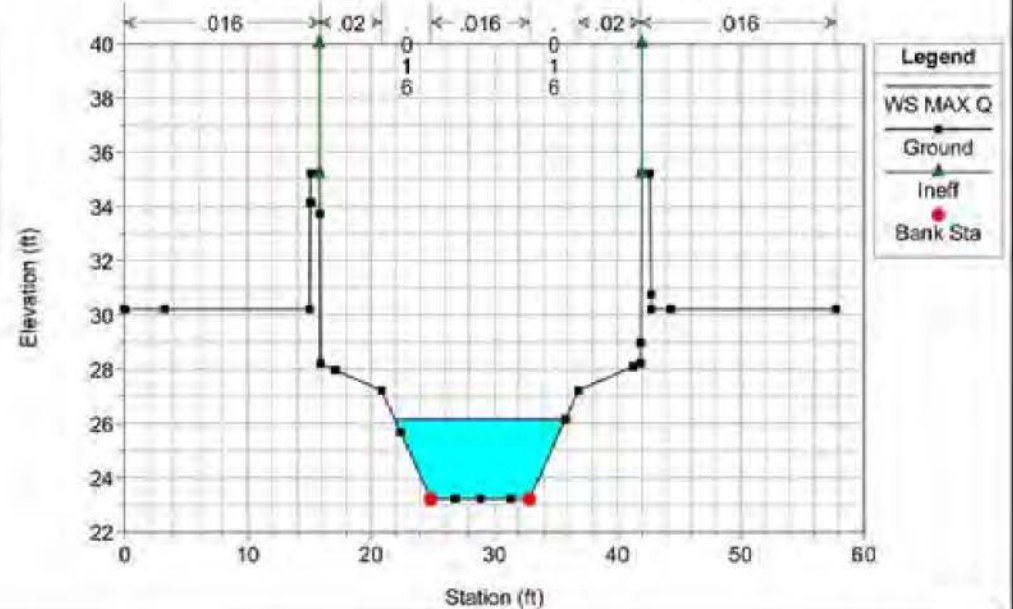
River = FLINTKOTE Reach = FLINTKOTE CL RS = 290.56



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

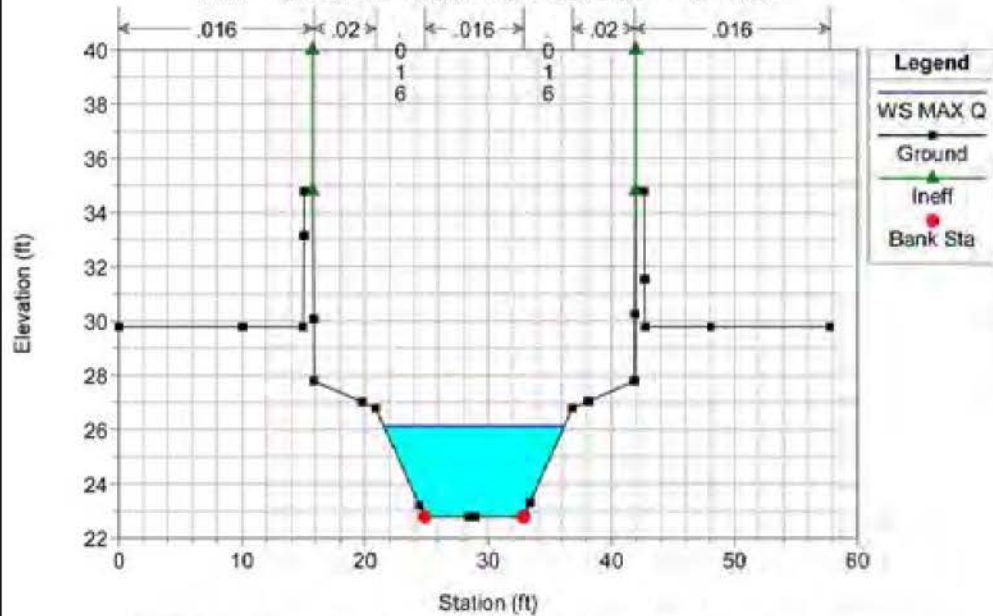
River = FLINTKOTE Reach = FLINTKOTE CL RS = 270.21



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

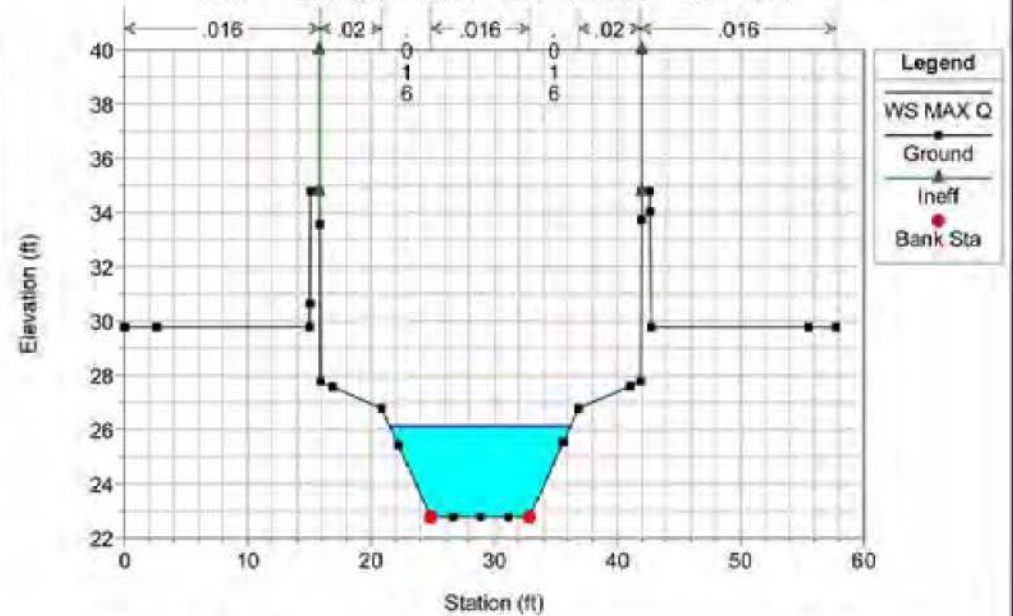
River = FLINTKOTE Reach = FLINTKOTE CL RS = 54.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

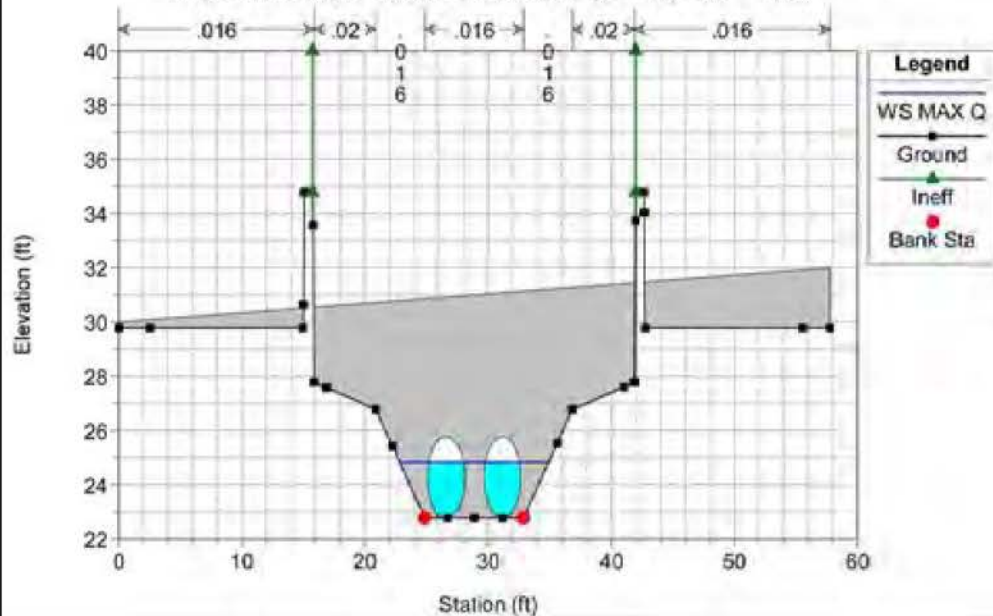
River = FLINTKOTE Reach = FLINTKOTE CL RS = 49.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

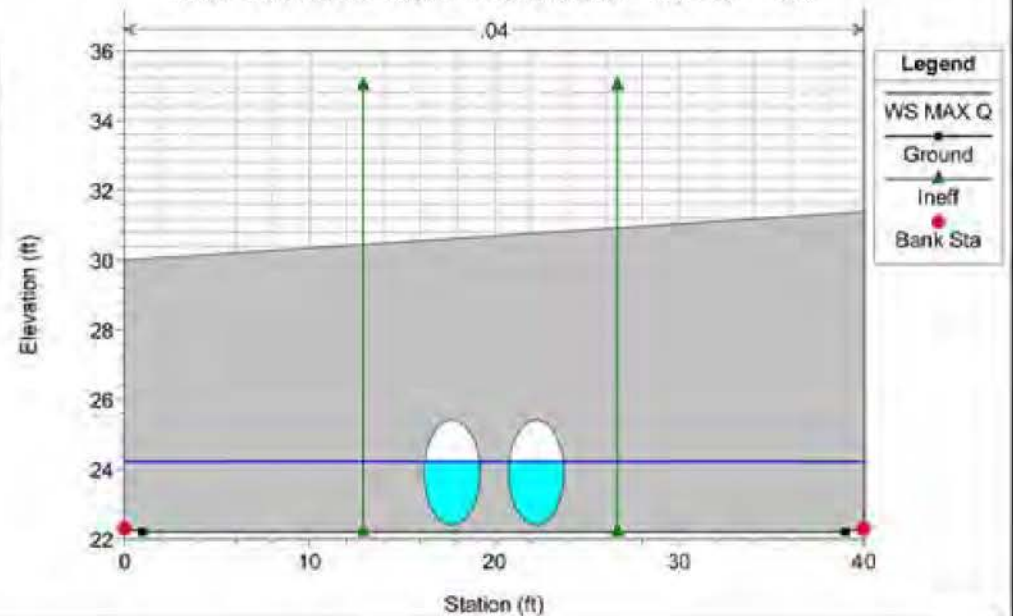
River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

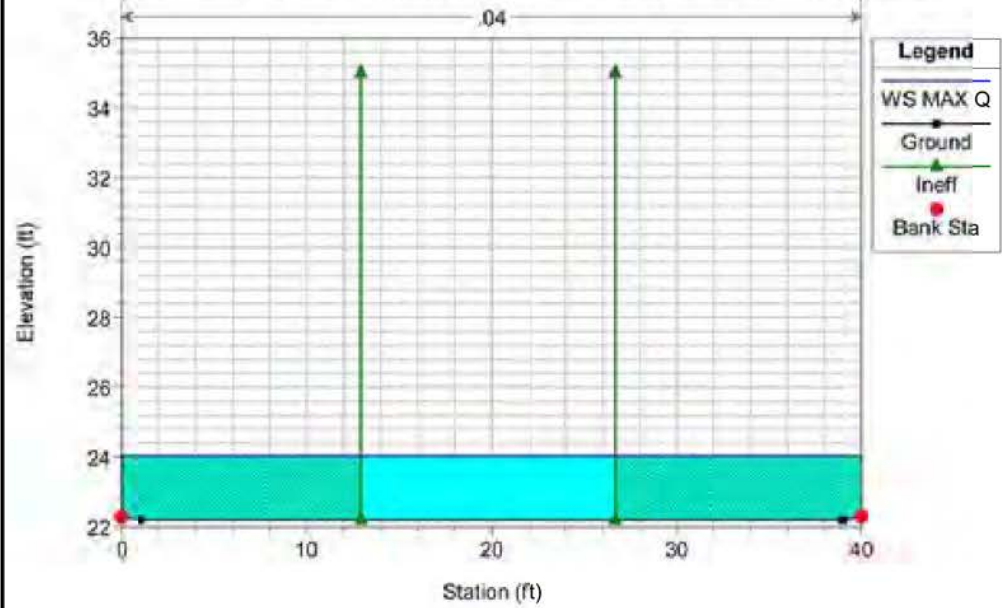
River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorrCurr

River = FLINTKOTE Reach = FLINTKOTE CL RS = 0 FLINTKOTE CHANNEL OUTFALL



**LOG-LOG PROBABILITY GRAPH – REACH 7 CURRENT VEGETATED CONDITION
(MAXIMUM FLOW)**

FLINTKOTE CHANNEL FLOWS AT ROSELLE CULVERT

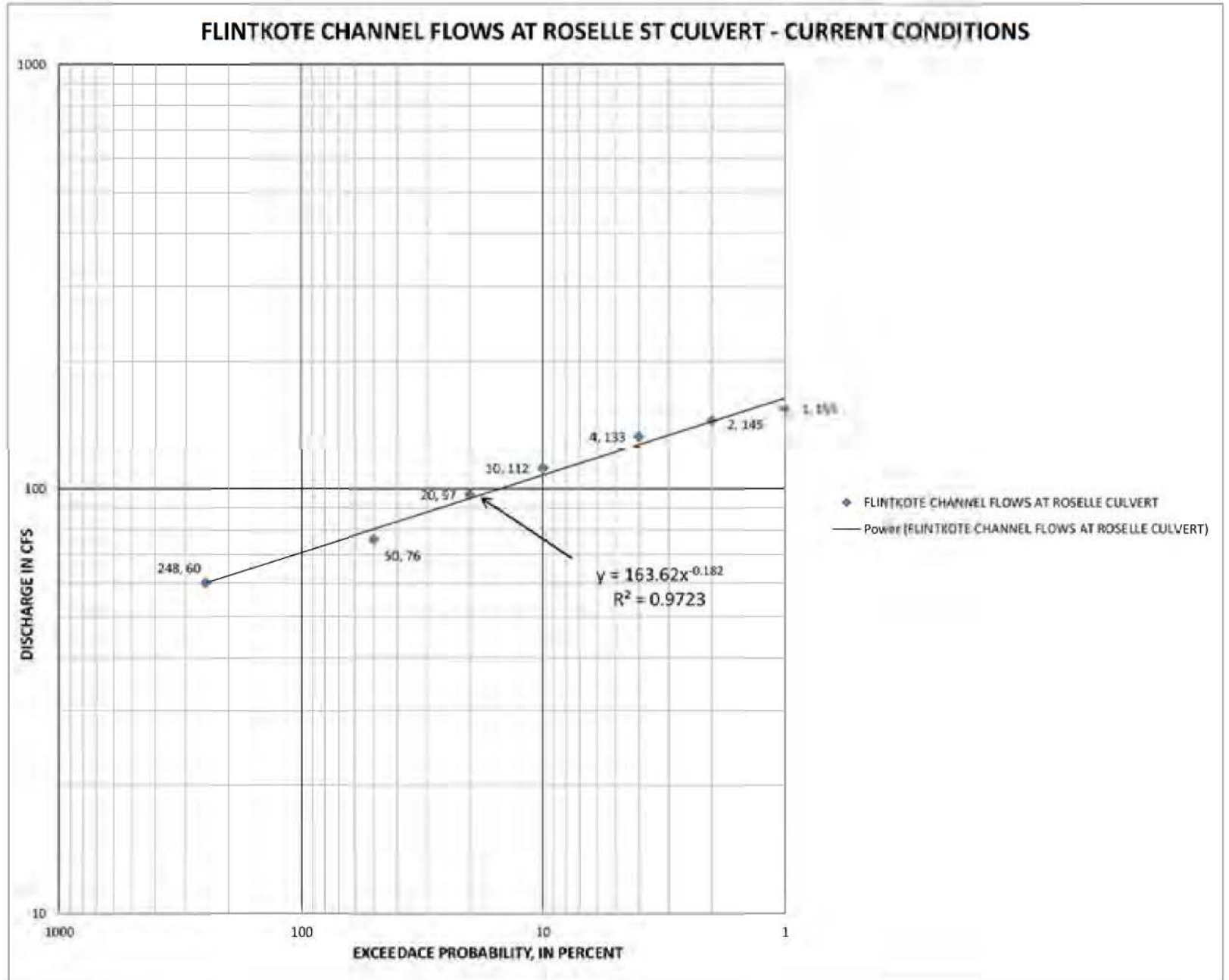
STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	76
5	20	97
10	10	112
25	4	133
50	2	145
100	1	155
0.40	248	60

MAXIMUM FLOW, QMAX, THAT CAN BE CONVEYED BY THE CHANNEL AND RCB CULVERT AT ROSELLE STREET WITHOUT BACKING UP ONTO THE ROADWAY:

QMAX = 60 CFS

ASSUMPTIONS:

1. FLINTKOTE CHANNEL UNMAINTAINED
2. ROSELLE ST CULVERT UNMAINTAINED



FLINTKOTE CHANNEL FLOWS AT ROSELLE CULVERT

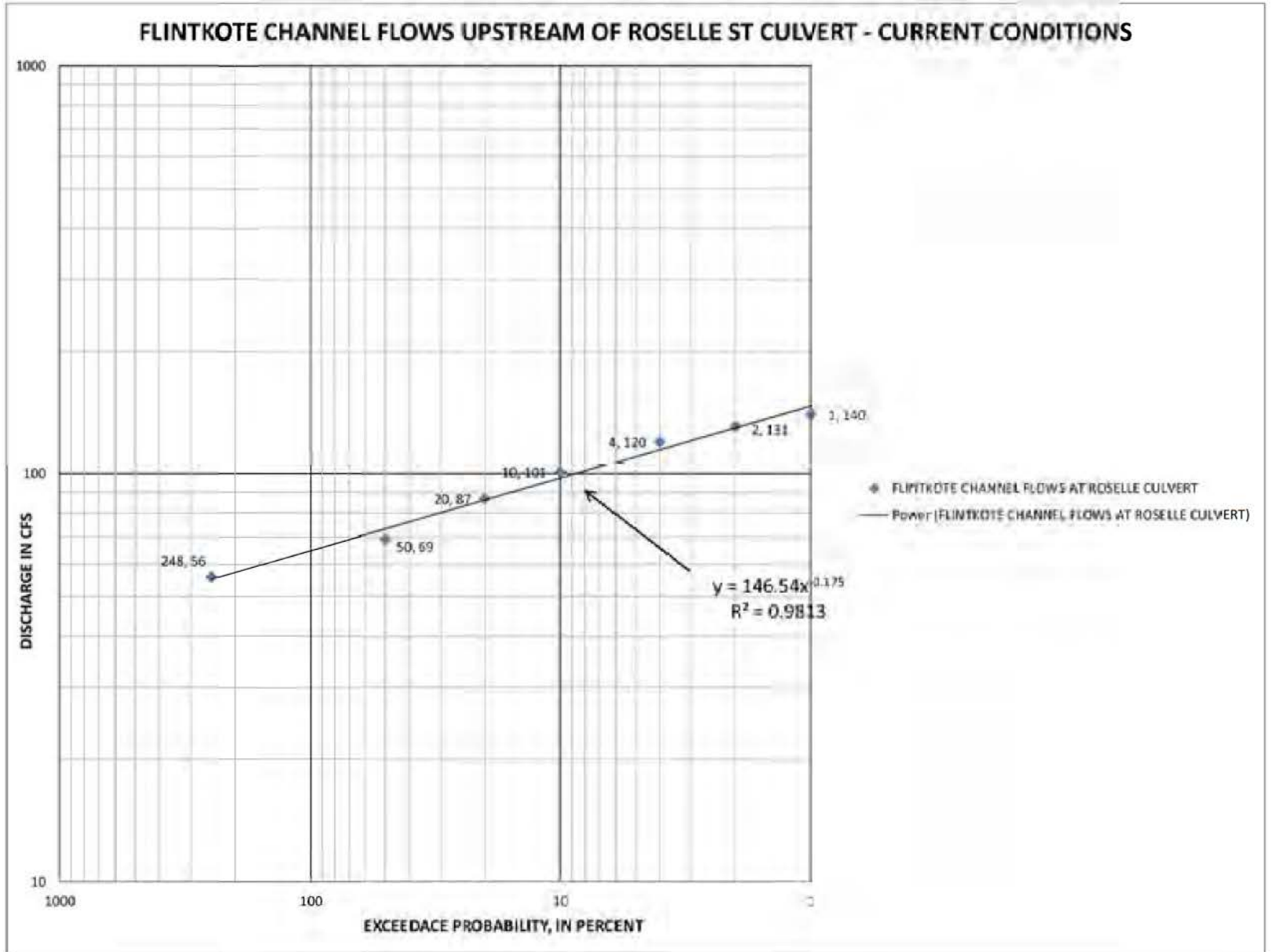
STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	69
5	20	87
10	10	101
25	4	120
50	2	131
100	1	140
0.40	248	56

MAXIMUM FLOW, QMAX, THAT CAN BE CONVEYED BY THE CHANNEL UPSTREAM OF RCB CULVERT AT ROSELLE STREET WITHOUT BACKING UP ONTO THE ROADWAY.

QMAX = 56 CFS

ASSUMPTIONS:

1. FLINTKOTE CHANNEL UNMAINTAINED
2. ROSELLE ST CULVERT UNMAINTAINED



DETAILED HYDRAULIC RESULTS FOR REACH 7 ULTIMATE VEGETATED CONDITION

HEC-RAS Plan: Ultim-SorCurrent River: FLINTKOTE Reach: FLINTKOTE CL

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
FLINTKOTE CL	1124.62	100-YR	140.00	25.80	34.22	27.57	34.23	0.000008	0.17	284.59	44.06	0.01
FLINTKOTE CL	1124.62	50-YR	131.00	25.80	32.60	27.49	32.61	0.000017	0.22	213.12	44.04	0.02
FLINTKOTE CL	1124.62	25-YR	120.00	25.80	31.88	27.40	31.89	0.000025	0.25	181.54	44.03	0.02
FLINTKOTE CL	1124.62	10-YR	101.00	25.80	30.48	27.23	30.49	0.000080	0.37	119.51	44.02	0.03
FLINTKOTE CL	1124.62	5-YR	87.00	25.80	29.60	27.08	29.63	0.000265	0.59	81.16	44.01	0.05
FLINTKOTE CL	1124.62	2-YR	69.00	25.80	28.46	26.90	28.55	0.002476	1.42	34.76	15.72	0.15
FLINTKOTE CL	1083.52	100-YR	140.00	25.59	34.22	27.45	34.23	0.000009	0.19	258.81	39.06	0.01
FLINTKOTE CL	1083.52	50-YR	131.00	25.59	32.60	27.37	32.61	0.000020	0.25	195.42	39.04	0.02
FLINTKOTE CL	1083.52	25-YR	120.00	25.59	31.88	27.26	31.89	0.000029	0.27	167.41	39.03	0.02
FLINTKOTE CL	1083.52	10-YR	101.00	25.59	30.47	27.08	30.49	0.000087	0.40	112.31	39.02	0.03
FLINTKOTE CL	1083.52	5-YR	87.00	25.59	29.59	26.93	29.62	0.000265	0.61	78.01	39.01	0.05
FLINTKOTE CL	1083.52	2-YR	69.00	25.59	28.35	26.73	28.45	0.002063	1.33	35.43	15.55	0.14
FLINTKOTE CL	1026.99	100-YR	140.00	25.07	34.22	27.18	34.23	0.000011	0.22	235.99	34.06	0.01
FLINTKOTE CL	1026.99	50-YR	131.00	25.07	32.59	27.09	32.61	0.000024	0.28	180.67	34.04	0.02
FLINTKOTE CL	1026.99	25-YR	120.00	25.07	31.88	26.97	31.89	0.000034	0.31	156.23	34.03	0.02
FLINTKOTE CL	1026.99	10-YR	101.00	25.07	30.46	26.75	30.48	0.000090	0.43	108.08	34.02	0.03
FLINTKOTE CL	1026.99	5-YR	87.00	25.07	29.57	26.59	29.60	0.000233	0.62	77.89	34.01	0.05
FLINTKOTE CL	1026.99	2-YR	69.00	25.07	28.28	26.35	28.37	0.001224	1.13	39.16	15.42	0.11
FLINTKOTE CL	1007.26	100-YR	140.00	25.06	34.22	27.17	34.23	0.000011	0.22	236.33	34.06	0.01
FLINTKOTE CL	1007.26	50-YR	131.00	25.06	32.59	27.07	32.61	0.000024	0.28	181.00	34.04	0.02
FLINTKOTE CL	1007.26	25-YR	120.00	25.06	31.88	26.96	31.89	0.000033	0.31	156.55	34.03	0.02
FLINTKOTE CL	1007.26	10-YR	101.00	25.06	30.46	26.74	30.48	0.000089	0.43	108.36	34.02	0.03
FLINTKOTE CL	1007.26	5-YR	87.00	25.06	29.57	26.57	29.60	0.000231	0.62	78.07	34.01	0.05
FLINTKOTE CL	1007.26	2-YR	69.00	25.06	28.25	26.34	28.34	0.001250	1.14	38.92	15.39	0.11
FLINTKOTE CL	913.4	100-YR	140.00	25.00	34.20	27.11	34.22	0.000086	0.54	146.46	18.05	0.03
FLINTKOTE CL	913.4	50-YR	131.00	25.00	32.57	27.02	32.60	0.000116	0.62	116.99	18.04	0.04
FLINTKOTE CL	913.4	25-YR	120.00	25.00	31.85	26.90	31.86	0.000140	0.63	103.99	18.03	0.04
FLINTKOTE CL	913.4	10-YR	101.00	25.00	30.42	26.68	30.47	0.000249	0.72	78.25	18.02	0.05
FLINTKOTE CL	913.4	5-YR	87.00	25.00	29.51	26.52	29.57	0.000413	0.82	61.93	18.01	0.07
FLINTKOTE CL	913.4	2-YR	69.00	25.00	28.12	26.28	28.22	0.001380	1.18	37.82	15.23	0.12
FLINTKOTE CL	740.89	100-YR	140.00	24.56	34.19	26.74	34.21	0.000056	0.51	153.42	18.06	0.03
FLINTKOTE CL	740.89	50-YR	131.00	24.56	32.55	26.64	32.58	0.000095	0.58	123.81	18.05	0.04
FLINTKOTE CL	740.89	25-YR	120.00	24.56	31.83	26.52	31.86	0.000112	0.59	110.75	18.04	0.04
FLINTKOTE CL	740.89	10-YR	101.00	24.56	30.39	26.30	30.43	0.000185	0.65	84.76	18.02	0.05
FLINTKOTE CL	740.89	5-YR	87.00	24.56	29.46	26.12	29.51	0.000288	0.73	68.06	18.01	0.06
FLINTKOTE CL	740.89	2-YR	69.00	24.56	27.93	25.89	28.01	0.001008	1.06	40.99	15.54	0.10

HEC-RAS Plan: Ultim-SorCurrent River: FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	720.89	100-YR	140.00	24.62	34.20	27.04	34.21	0.000008	0.19	292.07	50.97	0.01
FLINTKOTE CL	720.89	50-YR	131.00	24.62	32.57	26.94	32.57	0.000022	0.25	209.01	50.26	0.02
FLINTKOTE CL	720.89	25-YR	120.00	24.62	31.84	26.82	31.85	0.000032	0.32	172.78	49.72	0.02
FLINTKOTE CL	720.89	10-YR	101.00	24.62	30.39	26.61	30.42	0.000136	0.56	100.91	49.62	0.04
FLINTKOTE CL	720.89	5-YR	87.00	24.62	29.45	26.44	29.50	0.000258	0.65	66.75	18.65	0.05
FLINTKOTE CL	720.89	2-YR	69.00	24.62	27.89	26.20	27.99	0.000890	0.98	40.13	15.54	0.10
FLINTKOTE CL	710		Bridge									
FLINTKOTE CL	705.69	100-YR	140.00	24.59	34.20	27.12	34.21	0.000008	0.19	293.45	50.97	0.01
FLINTKOTE CL	705.69	50-YR	131.00	24.59	32.56	27.03	32.57	0.000021	0.27	210.14	50.27	0.02
FLINTKOTE CL	705.69	25-YR	120.00	24.59	31.83	26.91	31.84	0.000031	0.31	173.56	49.72	0.02
FLINTKOTE CL	705.69	10-YR	101.00	24.59	30.30	26.70	30.33	0.000140	0.56	97.88	49.61	0.04
FLINTKOTE CL	705.69	5-YR	87.00	24.59	29.30	26.52	29.36	0.000263	0.65	64.53	18.41	0.05
FLINTKOTE CL	705.69	2-YR	69.00	24.59	27.81	26.29	27.92	0.000852	0.95	39.29	15.43	0.09
FLINTKOTE CL	685.69	100-YR	140.00	24.55	34.20	27.07	34.21	0.000017	0.28	227.93	36.47	0.02
FLINTKOTE CL	685.69	50-YR	131.00	24.55	32.55	26.98	32.57	0.000041	0.38	168.30	35.77	0.02
FLINTKOTE CL	685.69	25-YR	120.00	24.55	31.82	26.86	31.84	0.000051	0.40	142.24	35.22	0.03
FLINTKOTE CL	685.69	10-YR	101.00	24.55	30.29	26.65	30.33	0.000143	0.57	88.43	35.12	0.04
FLINTKOTE CL	685.69	5-YR	87.00	24.55	29.30	26.48	29.35	0.000254	0.67	65.22	18.49	0.05
FLINTKOTE CL	685.69	2-YR	69.00	24.55	27.79	26.24	27.90	0.000823	0.93	39.69	15.49	0.09
FLINTKOTE CL	454.03	100-YR	140.00	24.14	34.20	26.67	34.20	0.000006	0.17	316.30	50.97	0.01
FLINTKOTE CL	454.03	50-YR	131.00	24.14	32.55	26.58	32.56	0.000015	0.24	232.50	50.29	0.01
FLINTKOTE CL	454.03	25-YR	120.00	24.14	31.82	26.46	31.83	0.000023	0.28	195.64	50.25	0.02
FLINTKOTE CL	454.03	10-YR	101.00	24.14	30.28	26.24	30.30	0.000076	0.43	119.12	49.64	0.03
FLINTKOTE CL	454.03	5-YR	87.00	24.14	29.25	26.08	29.29	0.000259	0.71	73.71	34.52	0.06
FLINTKOTE CL	454.03	2-YR	69.00	24.14	27.65	25.84	27.74	0.000586	0.83	43.93	16.02	0.08
FLINTKOTE CL	400.82	100-YR	140.00	24.06	34.20	26.58	34.20	0.000006	0.17	320.11	50.97	0.01
FLINTKOTE CL	400.82	50-YR	131.00	24.06	32.55	26.50	32.56	0.000014	0.23	236.24	50.30	0.01
FLINTKOTE CL	400.82	25-YR	120.00	24.06	31.82	26.38	31.83	0.000021	0.27	199.35	50.25	0.02
FLINTKOTE CL	400.82	10-YR	101.00	24.06	30.28	26.17	30.29	0.000069	0.42	122.69	49.65	0.03
FLINTKOTE CL	400.82	5-YR	87.00	24.06	29.24	26.00	29.28	0.000233	0.68	76.01	34.53	0.05
FLINTKOTE CL	400.82	2-YR	69.00	24.06	27.62	25.76	27.71	0.000553	0.82	44.70	16.11	0.08
FLINTKOTE CL	392.12	100-YR	155.00	24.05	34.20	26.72	34.20	0.000006	0.17	324.34	50.97	0.01
FLINTKOTE CL	392.12	50-YR	145.00	24.05	32.55	26.63	32.56	0.000019	0.27	204.35	50.97	0.02
FLINTKOTE CL	392.12	25-YR	133.00	24.05	31.81	26.51	31.83	0.000027	0.30	175.71	50.97	0.02

HEC-RAS Plan: Ultim-SorCurrent River: FLINTKOTE Reach: FLINTKOTE CL (Continued)

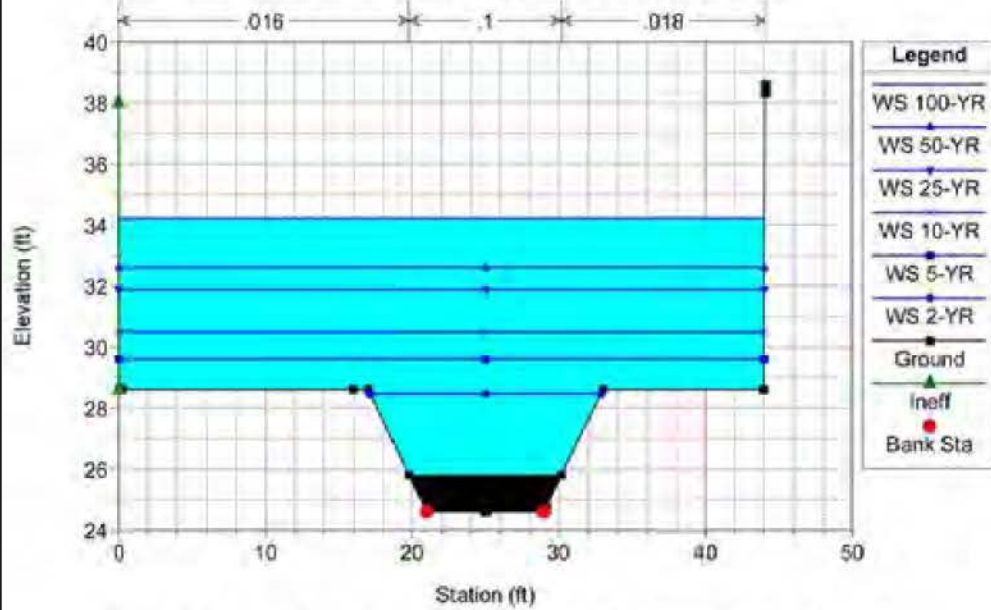
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
FLINTKOTE CL	382.12	10-YR	112.00	24.05	30.27	26.28	30.29	0.000094	0.49	115.56	50.97	0.03
FLINTKOTE CL	382.12	5-YR	97.00	24.05	29.23	26.11	29.27	0.000300	0.77	76.12	35.04	0.06
FLINTKOTE CL	382.12	2-YR	76.00	24.05	27.59	25.84	27.70	0.000666	0.90	44.44	16.09	0.08
FLINTKOTE CL	383.12	100-YR	155.00	24.05	34.20	25.43	34.20	0.000011	0.23	344.77	50.97	0.01
FLINTKOTE CL	383.12	50-YR	145.00	24.05	32.55	25.37	32.56	0.000043	0.40	224.81	50.97	0.02
FLINTKOTE CL	383.12	25-YR	133.00	24.05	31.81	25.30	31.82	0.000062	0.48	196.20	50.97	0.03
FLINTKOTE CL	383.12	10-YR	112.00	24.05	30.27	25.17	30.29	0.000192	0.70	136.16	50.97	0.05
FLINTKOTE CL	383.12	5-YR	97.00	24.05	29.24	25.07	29.25	0.000501	1.00	97.03	35.04	0.08
FLINTKOTE CL	383.12	2-YR	76.00	24.05	27.63	24.92	27.65	0.001127	1.17	63.79	18.48	0.11
FLINTKOTE CL	350		Culvert									
FLINTKOTE CL	299.56	100-YR	155.00	23.93	34.18	25.58	34.19	0.000028	0.37	225.82	56.33	0.02
FLINTKOTE CL	299.56	50-YR	145.00	23.93	32.52	25.52	32.54	0.000055	0.46	182.46	56.21	0.03
FLINTKOTE CL	299.56	25-YR	133.00	23.93	31.78	25.43	31.80	0.000072	0.50	163.12	56.16	0.03
FLINTKOTE CL	299.56	10-YR	112.00	23.93	28.91	25.26	28.93	0.000216	0.71	114.44	26.04	0.05
FLINTKOTE CL	299.56	5-YR	97.00	23.93	27.87	25.16	27.91	0.001531	1.45	62.06	22.08	0.13
FLINTKOTE CL	299.56	2-YR	76.00	23.93	26.73	24.99	26.79	0.003325	1.70	42.04	15.73	0.18
FLINTKOTE CL	290.56	100-YR	155.00	23.93	34.18	26.57	34.19	0.000012	0.24	217.55	56.33	0.01
FLINTKOTE CL	290.56	50-YR	145.00	23.93	32.52	26.47	32.54	0.000023	0.30	174.18	56.21	0.02
FLINTKOTE CL	290.56	25-YR	133.00	23.93	31.78	26.35	31.80	0.000029	0.31	154.83	56.16	0.02
FLINTKOTE CL	290.56	10-YR	112.00	23.93	29.90	26.13	29.93	0.000078	0.43	105.90	26.04	0.03
FLINTKOTE CL	290.56	5-YR	97.00	23.93	27.75	25.96	27.88	0.000640	0.92	51.27	20.93	0.08
FLINTKOTE CL	290.56	2-YR	76.00	23.93	26.44	25.70	26.70	0.002496	1.36	29.70	14.35	0.15
FLINTKOTE CL	270.21	100-YR	155.00	23.72	34.18	26.39	34.19	0.000012	0.24	220.12	56.33	0.01
FLINTKOTE CL	270.21	50-YR	145.00	23.72	32.52	26.30	32.54	0.000022	0.30	176.75	56.22	0.02
FLINTKOTE CL	270.21	25-YR	133.00	23.72	31.78	26.18	31.80	0.000028	0.32	157.39	56.16	0.02
FLINTKOTE CL	270.21	10-YR	112.00	23.72	29.90	25.95	29.93	0.000074	0.43	108.44	26.05	0.03
FLINTKOTE CL	270.21	5-YR	97.00	23.72	27.74	25.78	27.86	0.000582	0.91	53.51	21.24	0.08
FLINTKOTE CL	270.21	2-YR	76.00	23.72	26.41	25.52	26.64	0.002181	1.34	31.39	14.37	0.14
FLINTKOTE CL	54.81	100-YR	155.00	23.29	34.18	25.97	34.19	0.000010	0.23	231.35	56.36	0.01
FLINTKOTE CL	54.81	50-YR	145.00	23.29	32.51	25.86	32.53	0.000018	0.27	187.92	56.25	0.02
FLINTKOTE CL	54.81	25-YR	133.00	23.29	31.77	25.74	31.79	0.000022	0.29	168.53	56.20	0.02
FLINTKOTE CL	54.81	10-YR	112.00	23.29	29.89	25.52	29.91	0.000053	0.36	119.40	56.07	0.03
FLINTKOTE CL	54.81	5-YR	97.00	23.29	27.67	25.35	27.75	0.000374	0.77	81.68	24.78	0.06
FLINTKOTE CL	54.81	2-YR	76.00	23.29	25.86	25.09	26.12	0.002604	1.42	29.77	14.15	0.16

HEC-RAS Plan: Ultim-SorCurrent River: FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	49.81	100-YR	155.00	23.28	34.17	25.95	34.19	0.000010	0.23	231.62	56.36	0.01
FLINTKOTE CL	49.81	50-YR	145.00	23.28	32.51	25.96	32.53	0.000016	0.27	188.18	56.25	0.02
FLINTKOTE CL	49.81	25-YR	133.00	23.28	31.77	25.74	31.79	0.000022	0.29	168.79	56.20	0.02
FLINTKOTE CL	49.81	10-YR	112.00	23.28	29.89	25.51	29.91	0.000052	0.38	119.66	56.07	0.03
FLINTKOTE CL	49.81	5-YR	97.00	23.28	27.67	25.34	27.75	0.000370	0.77	61.88	24.87	0.06
FLINTKOTE CL	49.81	2-YR	76.00	23.28	25.85	25.07	26.11	0.002617	1.43	29.73	14.14	0.16
FLINTKOTE CL	20		Culvert									
FLINTKOTE CL	0	100-YR	155.00	22.50	34.15	24.08	34.16	0.000026	0.97	160.19	40.00	0.05
FLINTKOTE CL	0	50-YR	145.00	22.50	32.40	24.01	32.42	0.000039	1.07	136.13	40.00	0.06
FLINTKOTE CL	0	25-YR	133.00	22.50	30.81	23.92	30.83	0.000058	1.16	114.26	40.00	0.07
FLINTKOTE CL	0	10-YR	112.00	22.50	28.17	23.77	28.20	0.000148	1.44	77.96	40.00	0.11
FLINTKOTE CL	0	5-YR	97.00	22.50	26.44	23.66	26.49	0.000373	1.79	54.18	40.00	0.16
FLINTKOTE CL	0	2-YR	76.00	22.50	24.04	23.49	24.24	0.005249	3.59	21.18	40.00	0.51

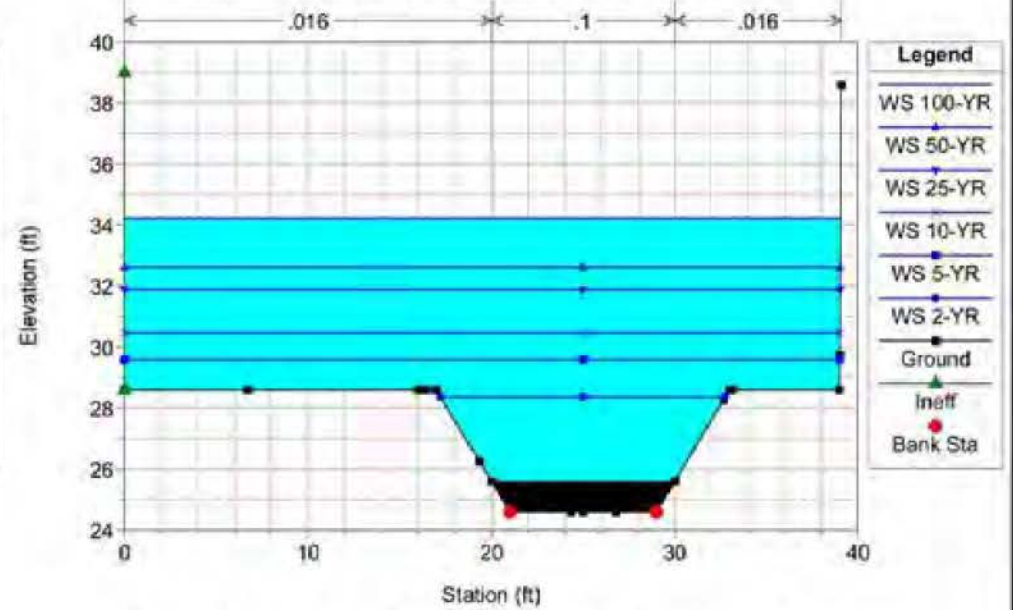
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1124.62



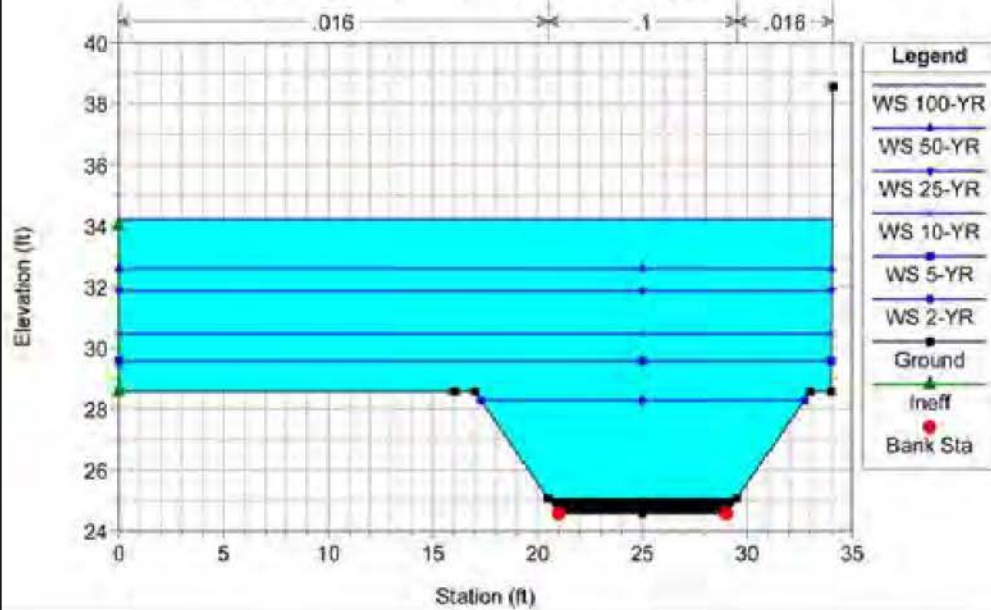
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1083.52



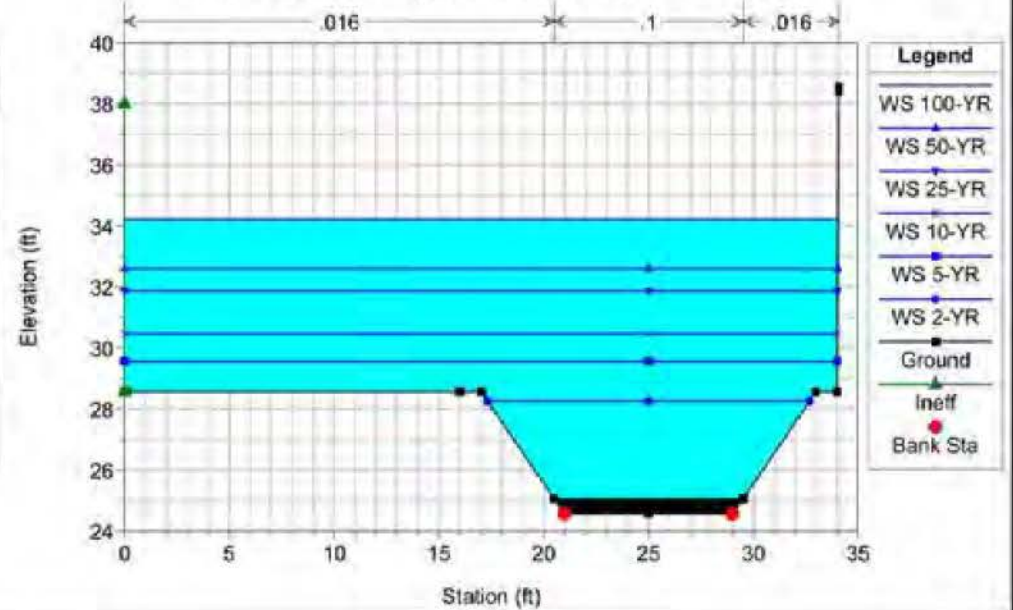
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1026.99



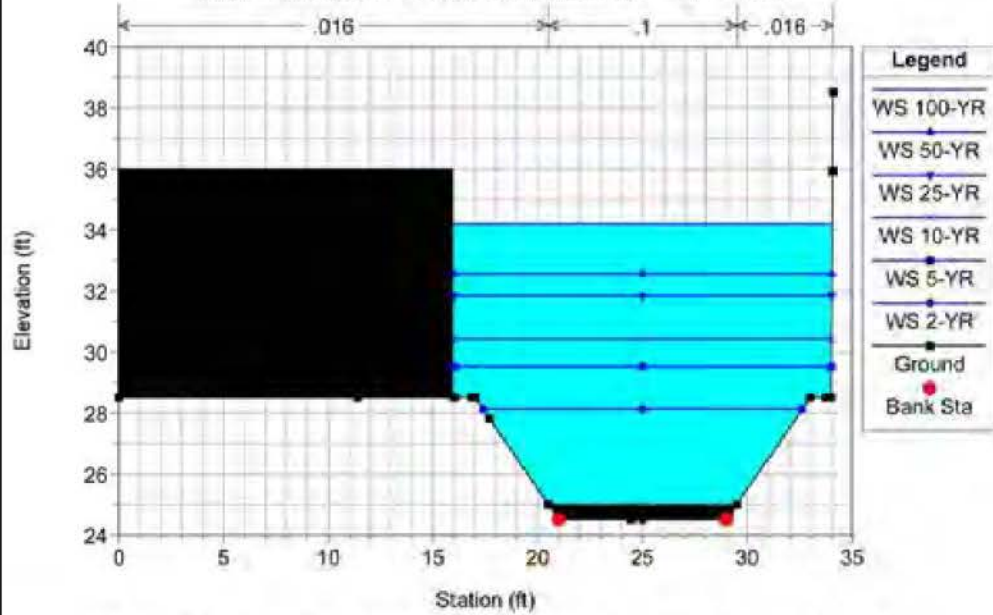
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1007.26



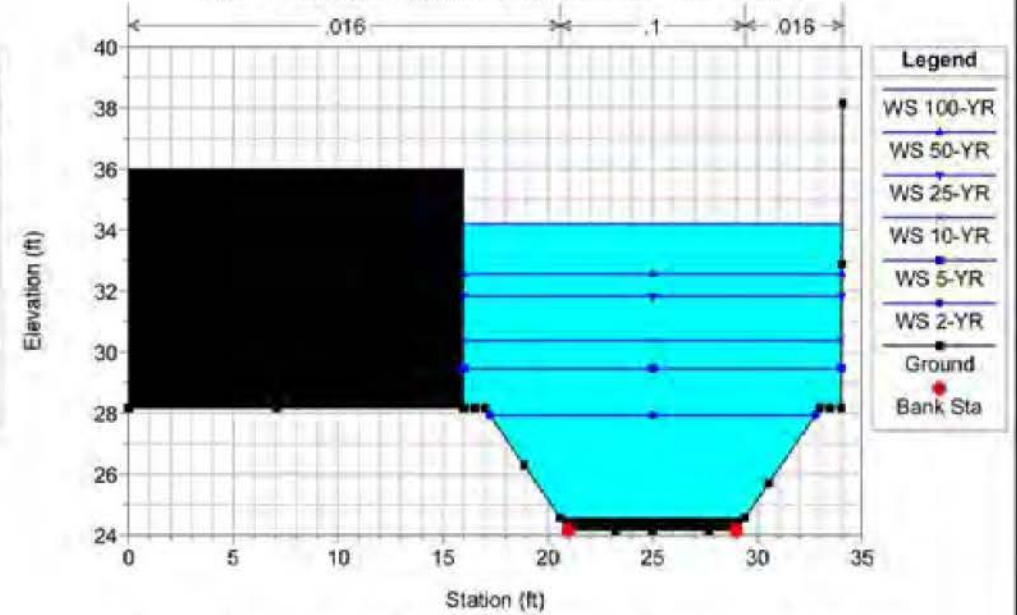
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 913.4



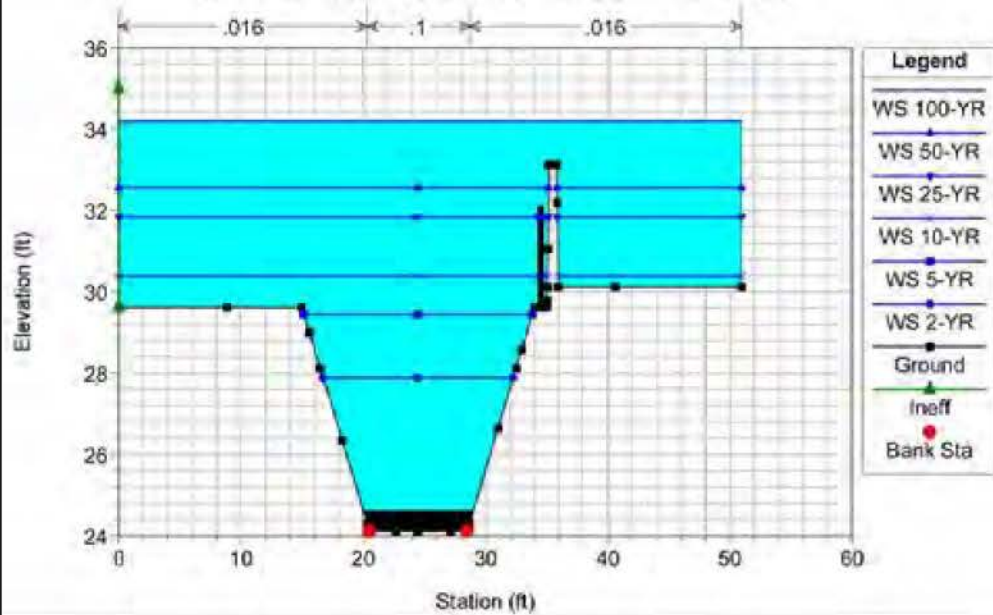
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 740.69



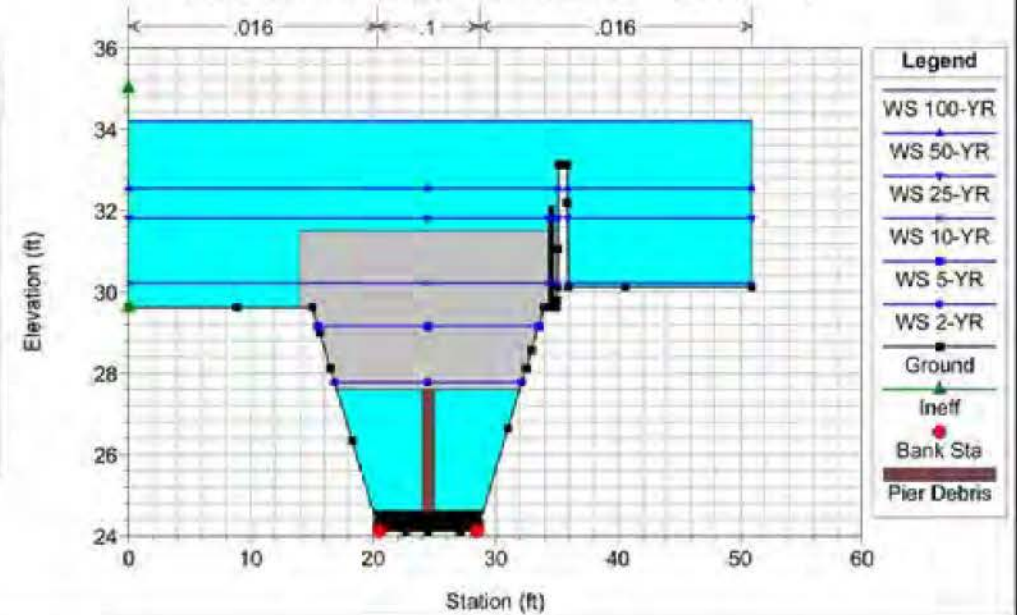
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 720.69



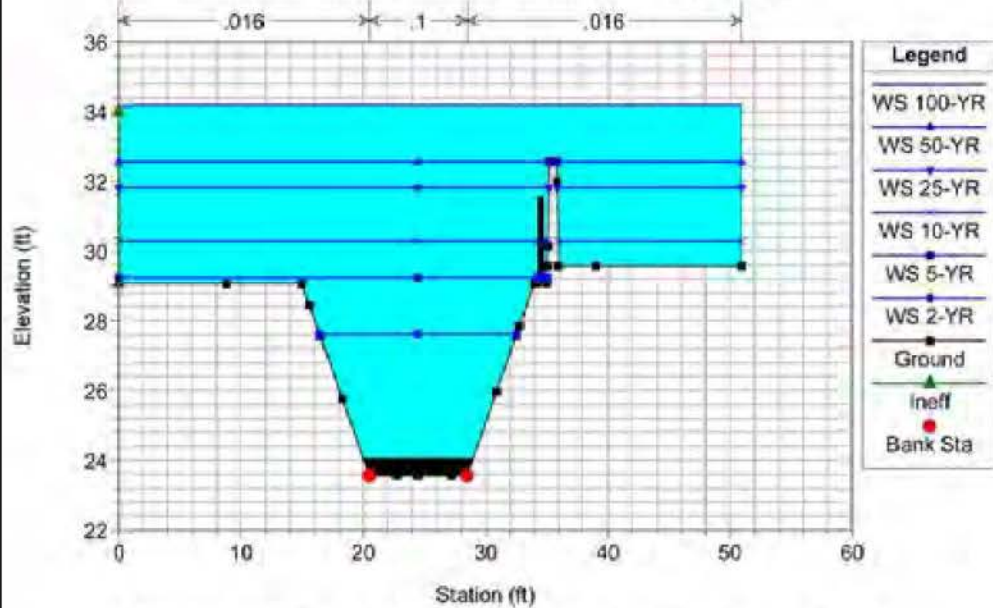
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



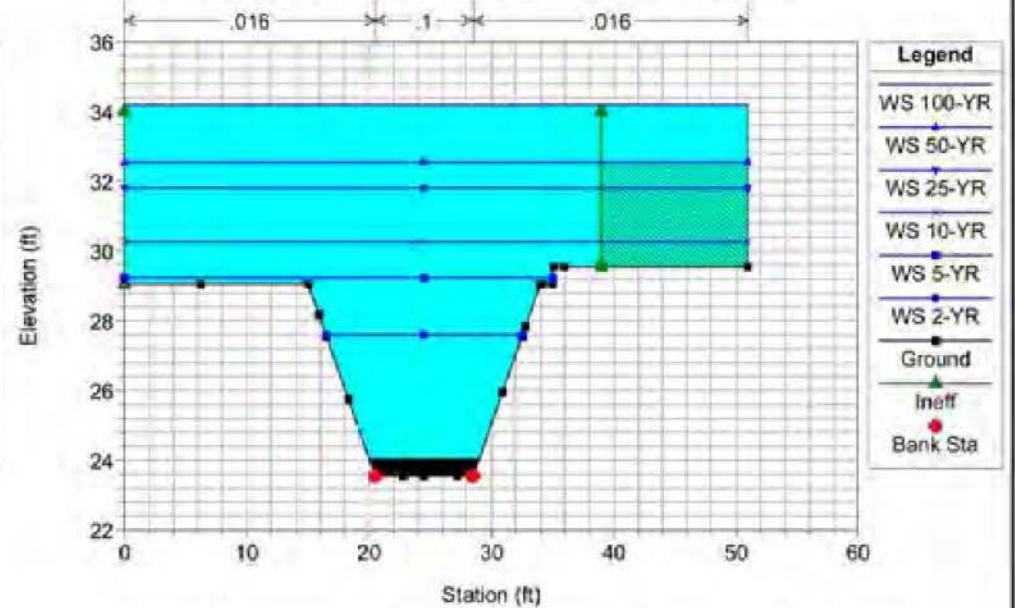
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 400.82



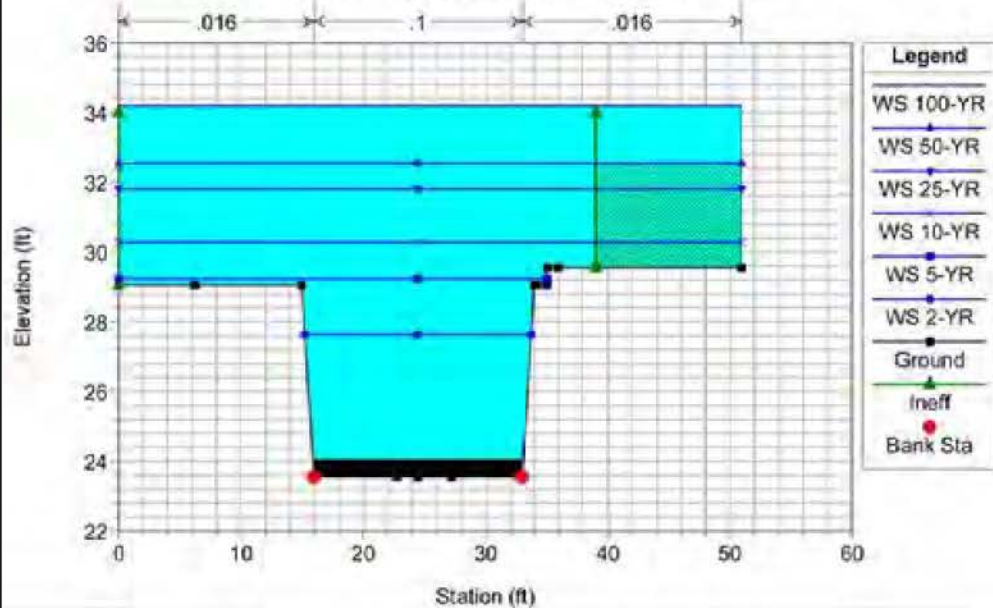
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 392.12



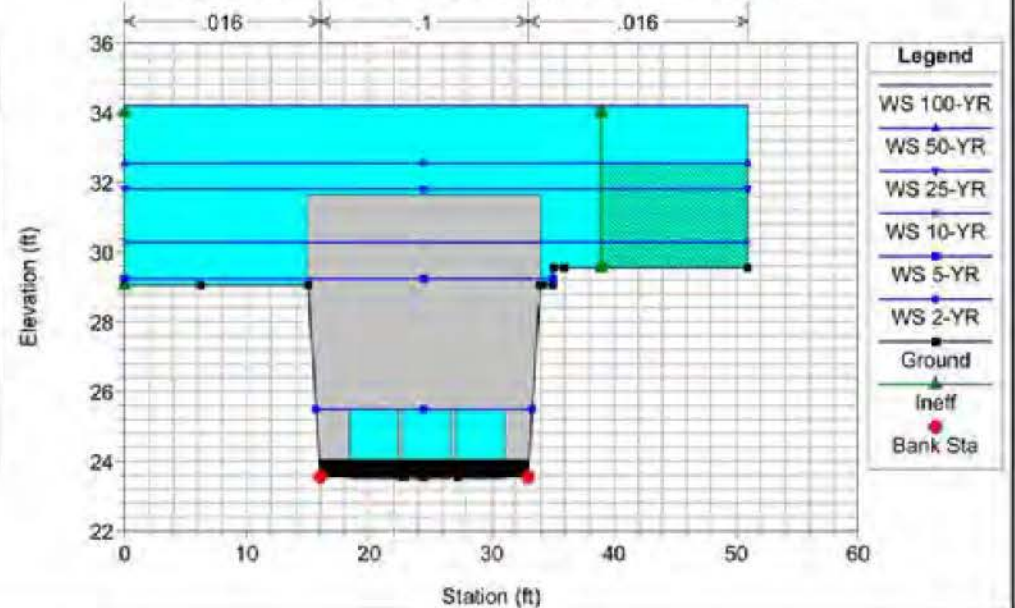
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

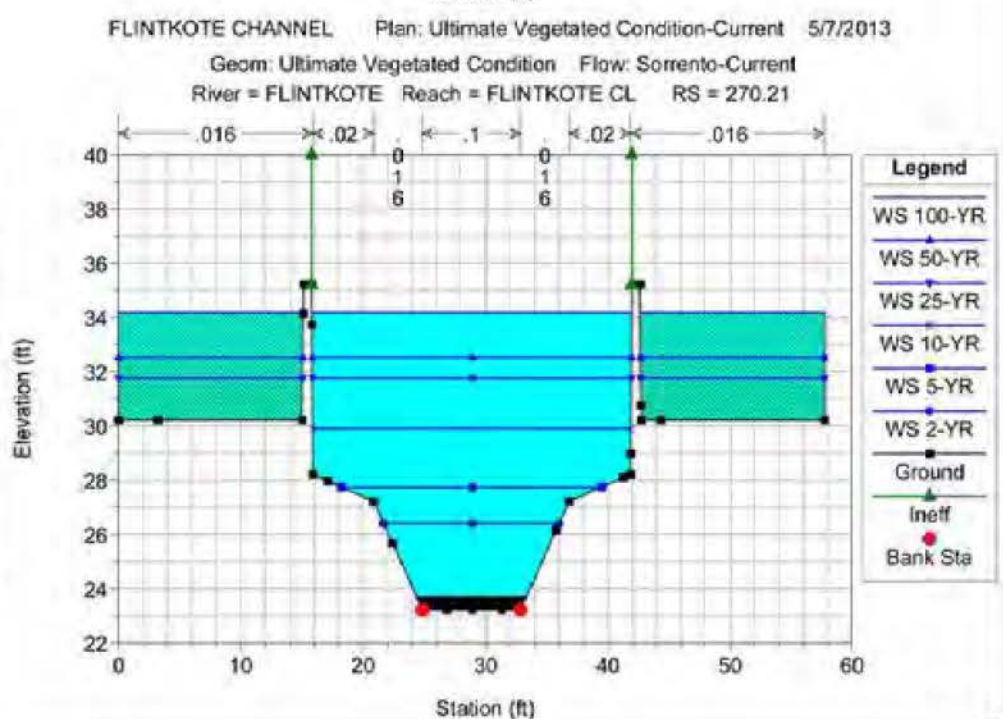
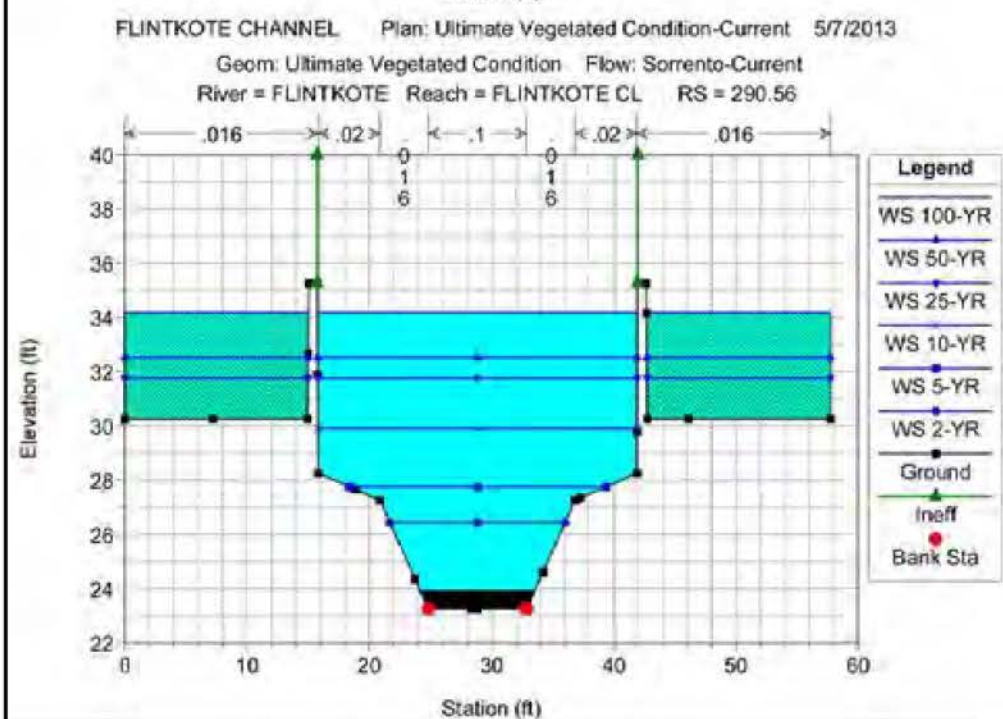
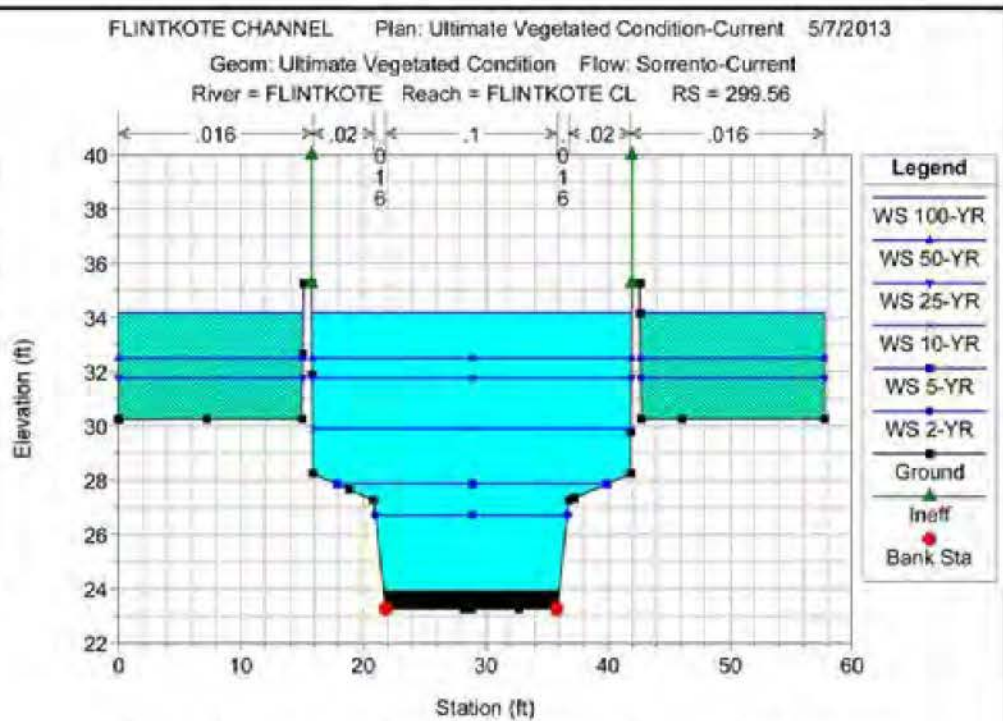
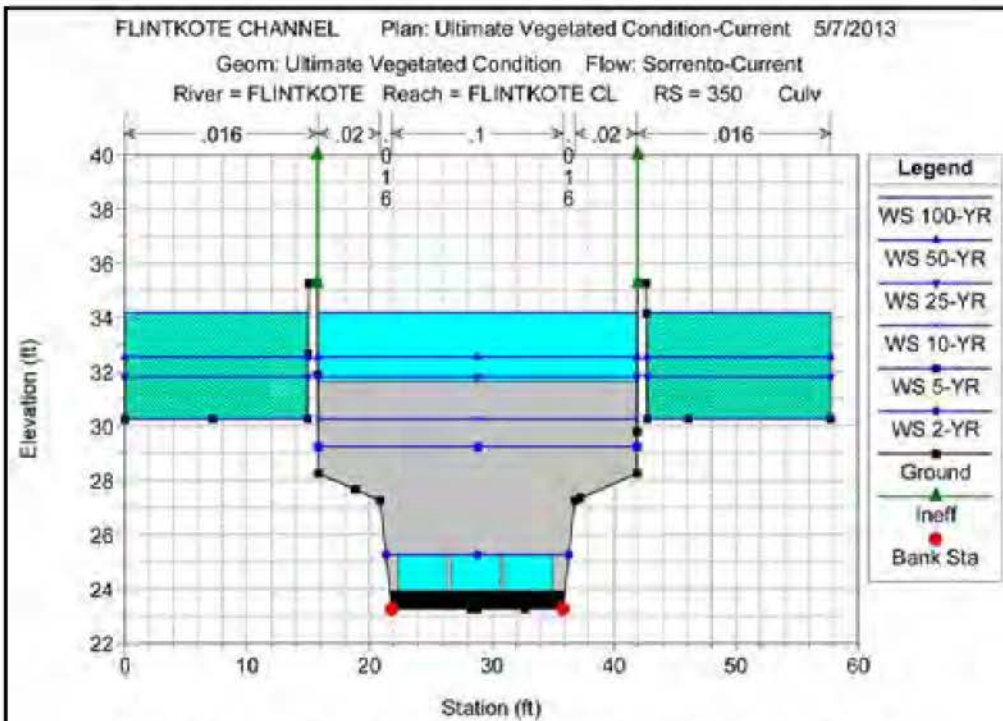
Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 383.12



FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

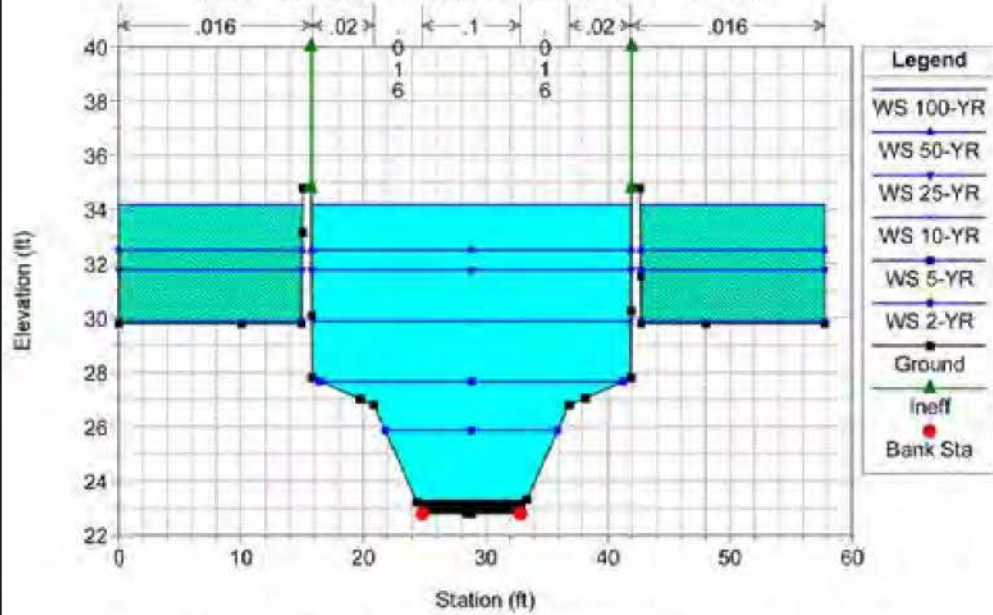
Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv





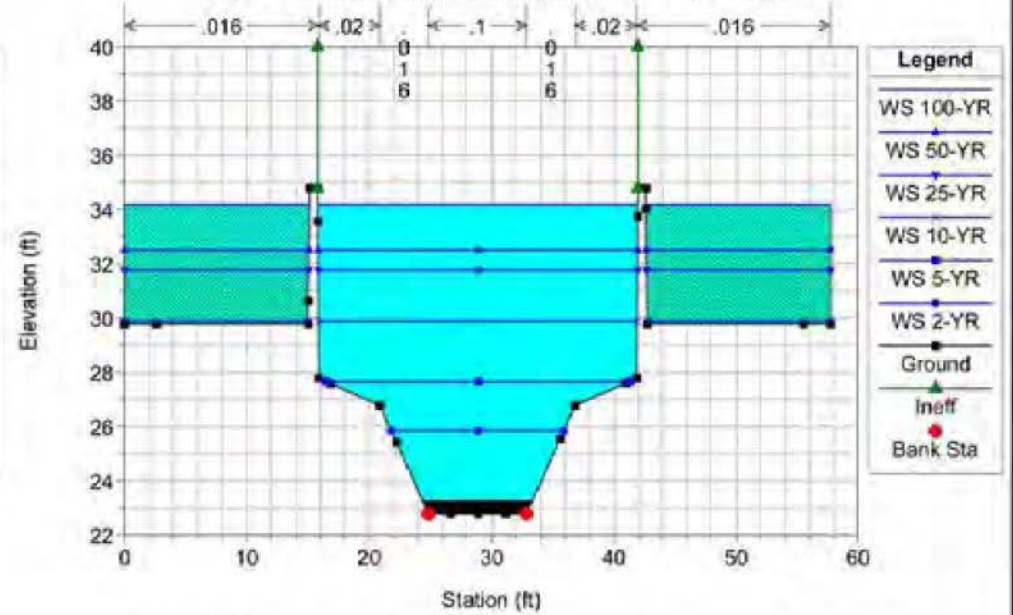
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 54.81



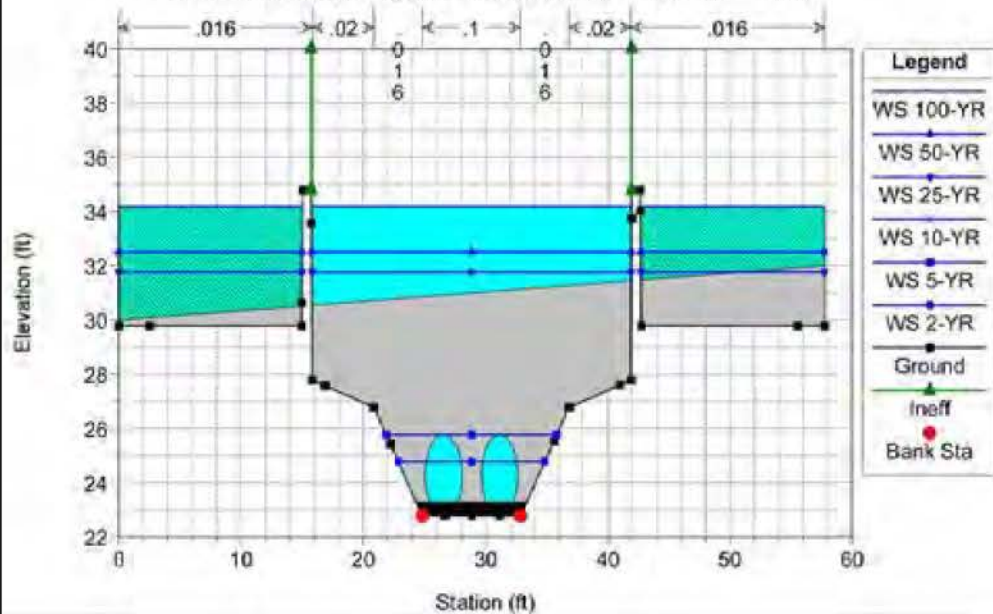
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 49.81



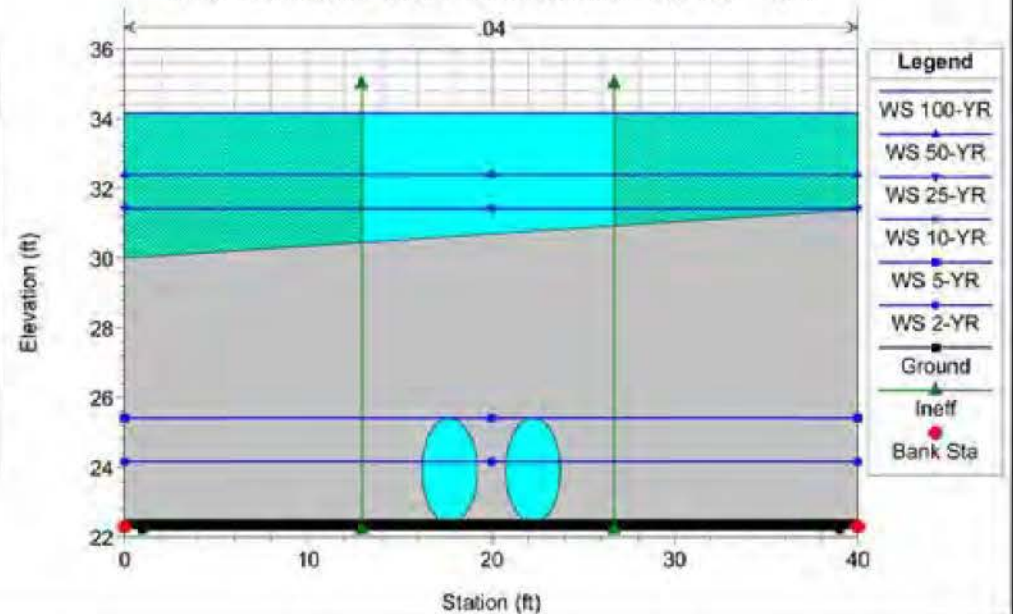
FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

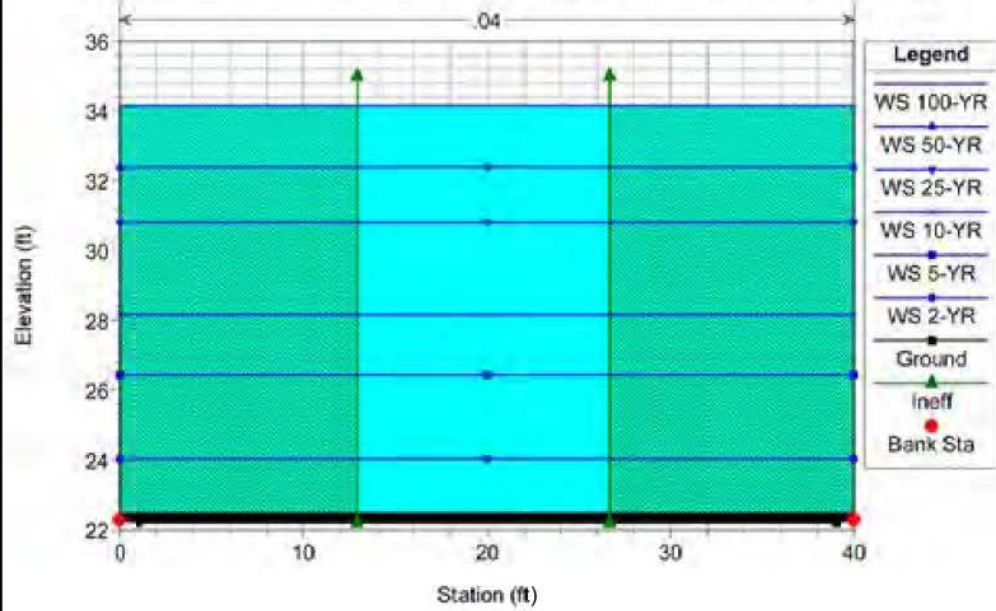
Geom: Ultimate Vegetated Condition Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Ultimate Vegetated Condition-Current 5/7/2013

Geom: Ultimate Vegetated Condition Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 0 FLINTKOTE CHANNEL OUTFALL



DETAILED HYDRAULIC RESULTS FOR REACH 7 MAINTAINED CONDITION (SEDIMENT REMOVED)

HEC-RAS Plan: Maint-ScrCurrent River: FLINTKOTE Reach: FLINTKOTE CL

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
FLINTKOTE CL	1124.62	100-YR	140.00	24.60	34.21	26.59	34.22	0.000003	0.70	295.10	44.06	0.04
FLINTKOTE CL	1124.62	50-YR	131.00	24.60	32.56	26.51	32.57	0.000006	0.87	222.31	44.04	0.05
FLINTKOTE CL	1124.62	25-YR	120.00	24.60	31.84	26.40	31.85	0.000007	0.93	190.68	44.03	0.06
FLINTKOTE CL	1124.62	10-YR	101.00	24.60	30.17	26.23	30.19	0.000020	1.29	117.14	44.02	0.10
FLINTKOTE CL	1124.62	5-YR	87.00	24.60	28.34	26.08	28.41	0.000107	2.31	43.94	15.48	0.21
FLINTKOTE CL	1124.62	2-YR	69.00	24.60	26.69	25.88	26.87	0.000564	3.60	21.04	12.17	0.44
FLINTKOTE CL	1083.52	100-YR	140.00	24.59	34.21	26.57	34.22	0.000003	0.75	267.37	39.06	0.04
FLINTKOTE CL	1083.52	50-YR	131.00	24.59	32.56	26.49	32.57	0.000006	0.92	202.83	39.04	0.06
FLINTKOTE CL	1083.52	25-YR	120.00	24.59	31.84	26.39	31.85	0.000008	0.98	174.79	39.03	0.06
FLINTKOTE CL	1083.52	10-YR	101.00	24.59	30.17	26.21	30.19	0.000021	1.33	109.58	39.01	0.10
FLINTKOTE CL	1083.52	5-YR	87.00	24.59	28.34	26.06	28.41	0.000106	2.31	44.03	15.50	0.21
FLINTKOTE CL	1083.52	2-YR	69.00	24.59	26.66	25.87	26.85	0.000580	3.63	20.84	12.14	0.45
FLINTKOTE CL	1026.99	100-YR	140.00	24.57	34.21	26.55	34.22	0.000004	0.82	239.90	34.06	0.05
FLINTKOTE CL	1026.99	50-YR	131.00	24.57	32.56	26.47	32.57	0.000007	1.00	183.59	34.04	0.06
FLINTKOTE CL	1026.99	25-YR	120.00	24.57	31.84	26.37	31.85	0.000009	1.06	159.13	34.03	0.07
FLINTKOTE CL	1026.99	10-YR	101.00	24.57	30.16	26.18	30.19	0.000023	1.40	102.22	34.02	0.10
FLINTKOTE CL	1026.99	5-YR	87.00	24.57	28.33	26.04	28.40	0.000106	2.31	44.24	15.52	0.21
FLINTKOTE CL	1026.99	2-YR	69.00	24.57	26.62	25.84	26.81	0.000605	3.69	20.61	12.10	0.45
FLINTKOTE CL	1007.26	100-YR	140.00	24.56	34.21	26.55	34.22	0.000004	0.82	240.24	34.06	0.05
FLINTKOTE CL	1007.26	50-YR	131.00	24.56	32.56	26.46	32.57	0.000007	1.00	183.93	34.04	0.06
FLINTKOTE CL	1007.26	25-YR	120.00	24.56	31.84	26.36	31.85	0.000009	1.06	159.47	34.03	0.07
FLINTKOTE CL	1007.26	10-YR	101.00	24.56	30.16	26.17	30.19	0.000023	1.39	102.55	34.02	0.10
FLINTKOTE CL	1007.26	5-YR	87.00	24.56	28.33	26.03	28.40	0.000105	2.31	44.36	15.54	0.21
FLINTKOTE CL	1007.26	2-YR	69.00	24.56	26.61	25.83	26.80	0.000608	3.69	20.58	12.10	0.45
FLINTKOTE CL	913.4	100-YR	140.00	24.51	34.20	26.48	34.21	0.000009	1.25	150.52	18.05	0.07
FLINTKOTE CL	913.4	50-YR	131.00	24.51	32.54	26.41	32.56	0.000015	1.42	120.62	18.04	0.09
FLINTKOTE CL	913.4	25-YR	120.00	24.51	31.82	26.30	31.85	0.000017	1.44	107.66	18.03	0.09
FLINTKOTE CL	913.4	10-YR	101.00	24.51	30.15	26.12	30.18	0.000031	1.63	77.53	18.02	0.12
FLINTKOTE CL	913.4	5-YR	87.00	24.51	28.32	25.97	28.39	0.000101	2.28	45.03	15.62	0.21
FLINTKOTE CL	913.4	2-YR	69.00	24.51	26.55	25.78	26.75	0.000615	3.71	20.50	12.09	0.46
FLINTKOTE CL	740.69	100-YR	140.00	24.16	34.20	26.14	34.21	0.000008	1.21	156.83	18.06	0.07
FLINTKOTE CL	740.69	50-YR	131.00	24.16	32.54	26.06	32.56	0.000013	1.36	126.91	18.05	0.08
FLINTKOTE CL	740.69	25-YR	120.00	24.16	31.82	25.95	31.84	0.000014	1.37	113.95	18.04	0.09
FLINTKOTE CL	740.69	10-YR	101.00	24.16	30.15	25.77	30.18	0.000025	1.53	83.79	18.02	0.11
FLINTKOTE CL	740.69	5-YR	87.00	24.16	28.31	25.62	28.37	0.000075	2.08	50.78	18.00	0.18
FLINTKOTE CL	740.69	2-YR	69.00	24.16	26.51	25.43	26.65	0.000375	3.18	24.27	12.69	0.37

HEC-RAS Plan: Maint-ScrCurrent River: FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	720.89	100-YR	140.00	24.12	34.20	26.11	34.21	0.000003	0.74	297.61	50.97	0.04
FLINTKOTE CL	720.89	50-YR	131.00	24.12	32.55	26.03	32.56	0.000006	0.97	213.58	50.26	0.06
FLINTKOTE CL	720.89	25-YR	120.00	24.12	31.83	25.93	31.84	0.000009	1.06	177.42	50.21	0.07
FLINTKOTE CL	720.89	10-YR	101.00	24.12	30.15	25.74	30.18	0.000025	1.53	93.11	50.10	0.11
FLINTKOTE CL	720.89	5-YR	87.00	24.12	28.31	25.59	28.37	0.000072	2.05	51.15	16.39	0.18
FLINTKOTE CL	720.89	2-YR	69.00	24.12	26.50	25.39	26.64	0.000359	3.14	24.72	12.76	0.36
FLINTKOTE CL	710		Bridge									
FLINTKOTE CL	705.69	100-YR	140.00	24.09	34.20	26.09	34.21	0.000003	0.76	297.78	50.97	0.04
FLINTKOTE CL	705.69	50-YR	131.00	24.09	32.54	26.00	32.55	0.000007	1.00	213.60	50.26	0.06
FLINTKOTE CL	705.69	25-YR	120.00	24.09	31.82	25.90	31.83	0.000009	1.07	177.44	49.72	0.07
FLINTKOTE CL	705.69	10-YR	101.00	24.09	30.12	25.72	30.15	0.000025	1.54	92.85	49.60	0.11
FLINTKOTE CL	705.69	5-YR	87.00	24.09	28.30	25.57	28.35	0.000072	2.05	51.30	16.40	0.18
FLINTKOTE CL	705.69	2-YR	69.00	24.09	26.48	25.37	26.62	0.000356	3.14	24.81	12.77	0.36
FLINTKOTE CL	685.69	100-YR	140.00	24.05	34.20	26.04	34.21	0.000005	0.96	232.23	36.47	0.05
FLINTKOTE CL	685.69	50-YR	131.00	24.05	32.54	25.96	32.55	0.000009	1.18	172.02	35.77	0.07
FLINTKOTE CL	685.69	25-YR	120.00	24.05	31.82	25.86	31.83	0.000011	1.21	146.34	35.22	0.08
FLINTKOTE CL	685.69	10-YR	101.00	24.05	30.12	25.67	30.15	0.000024	1.51	86.63	35.10	0.11
FLINTKOTE CL	685.69	5-YR	87.00	24.05	28.30	25.52	28.35	0.000069	2.03	51.97	16.49	0.17
FLINTKOTE CL	685.69	2-YR	69.00	24.05	26.48	25.32	26.61	0.000339	3.09	25.29	12.85	0.35
FLINTKOTE CL	454.03	100-YR	140.00	23.64	34.20	25.63	34.21	0.000002	0.70	320.72	50.97	0.04
FLINTKOTE CL	454.03	50-YR	131.00	23.64	32.54	25.55	32.55	0.000005	0.90	236.20	50.29	0.05
FLINTKOTE CL	454.03	25-YR	120.00	23.64	31.82	25.45	31.83	0.000007	0.98	199.88	50.25	0.06
FLINTKOTE CL	454.03	10-YR	101.00	23.64	30.12	25.27	30.14	0.000017	1.32	115.34	49.63	0.09
FLINTKOTE CL	454.03	5-YR	87.00	23.64	28.29	25.11	28.33	0.000049	1.81	58.87	17.30	0.15
FLINTKOTE CL	454.03	2-YR	69.00	23.64	26.45	24.91	26.54	0.000200	2.61	30.34	13.62	0.28
FLINTKOTE CL	400.82	100-YR	140.00	23.56	34.20	25.56	34.20	0.000002	0.68	325.78	50.97	0.04
FLINTKOTE CL	400.82	50-YR	131.00	23.56	32.54	25.48	32.55	0.000005	0.86	241.22	50.30	0.05
FLINTKOTE CL	400.82	25-YR	120.00	23.56	31.82	25.36	31.83	0.000006	0.93	204.90	50.25	0.06
FLINTKOTE CL	400.82	10-YR	101.00	23.56	30.12	25.18	30.14	0.000016	1.28	119.58	50.14	0.09
FLINTKOTE CL	400.82	5-YR	87.00	23.56	28.29	25.04	28.33	0.000046	1.78	60.14	17.44	0.14
FLINTKOTE CL	400.82	2-YR	69.00	23.56	26.44	24.83	26.53	0.000183	2.54	31.29	13.75	0.26
FLINTKOTE CL	392.12	100-YR	155.00	23.55	34.20	25.67	34.20	0.000003	0.72	328.78	50.97	0.04
FLINTKOTE CL	392.12	50-YR	145.00	23.55	32.54	25.59	32.55	0.000006	1.01	208.28	50.97	0.06
FLINTKOTE CL	392.12	25-YR	133.00	23.55	31.82	25.48	31.83	0.000008	1.08	180.09	50.97	0.07

HEC-RAS Plan: Maint-ScrCurrent River: FLINTKOTE Reach: FLINTKOTE CL (Continued)

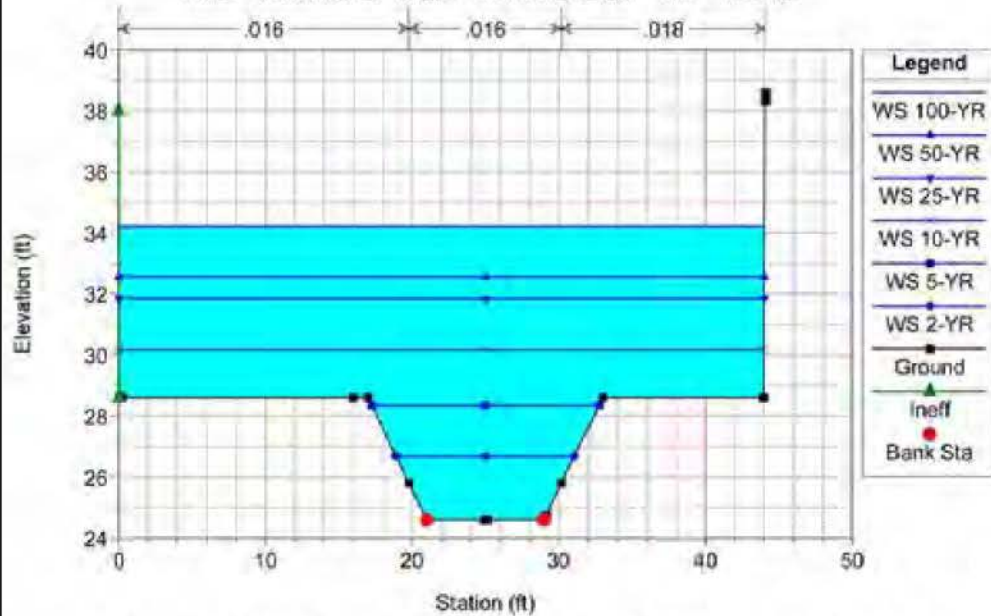
Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit WS (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
FLINTKOTE CL	382.12	10-YR	112.00	23.55	30.11	25.29	30.14	0.000020	1.45	113.70	50.97	0.10
FLINTKOTE CL	382.12	5-YR	97.00	23.55	28.28	25.13	28.33	0.000057	1.98	60.15	17.46	0.16
FLINTKOTE CL	382.12	2-YR	76.00	23.55	26.41	24.90	26.52	0.000226	2.81	31.11	13.72	0.29
FLINTKOTE CL	383.12	100-YR	155.00	23.55	34.20	24.92	34.20	0.000002	0.52	353.58	50.97	0.03
FLINTKOTE CL	383.12	50-YR	145.00	23.55	32.54	24.86	32.55	0.000005	0.70	233.12	50.97	0.04
FLINTKOTE CL	383.12	25-YR	133.00	23.55	31.82	24.78	31.82	0.000007	0.73	204.95	50.97	0.05
FLINTKOTE CL	383.12	10-YR	112.00	23.55	30.12	24.66	30.13	0.000013	0.89	138.70	50.97	0.06
FLINTKOTE CL	383.12	5-YR	97.00	23.55	28.29	24.55	28.31	0.000033	1.15	84.71	18.72	0.09
FLINTKOTE CL	383.12	2-YR	76.00	23.55	26.45	24.40	26.49	0.000089	1.49	50.84	18.05	0.16
FLINTKOTE CL	350		Culvert									
FLINTKOTE CL	299.56	100-YR	155.00	23.26	34.19	24.81	34.19	0.000004	0.71	235.59	56.33	0.04
FLINTKOTE CL	299.56	50-YR	145.00	23.26	32.52	24.74	32.53	0.000007	0.82	192.06	56.21	0.05
FLINTKOTE CL	299.56	25-YR	133.00	23.26	31.78	24.66	31.79	0.000008	0.84	172.77	56.16	0.05
FLINTKOTE CL	299.56	10-YR	112.00	23.26	29.91	24.51	29.92	0.000016	0.99	125.87	26.04	0.07
FLINTKOTE CL	299.56	5-YR	97.00	23.26	27.74	24.39	27.77	0.000059	1.43	68.91	20.86	0.12
FLINTKOTE CL	299.56	2-YR	76.00	23.26	26.14	24.22	26.19	0.000146	1.80	42.33	15.44	0.19
FLINTKOTE CL	290.56	100-YR	155.00	23.26	34.18	25.39	34.19	0.000004	0.90	223.55	56.33	0.05
FLINTKOTE CL	290.56	50-YR	145.00	23.26	32.52	25.30	32.53	0.000007	1.06	179.98	56.21	0.06
FLINTKOTE CL	290.56	25-YR	133.00	23.26	31.78	25.19	31.79	0.000008	1.09	160.68	56.16	0.07
FLINTKOTE CL	290.56	10-YR	112.00	23.26	29.90	24.99	29.92	0.000016	1.33	111.68	26.04	0.09
FLINTKOTE CL	290.56	5-YR	97.00	23.26	27.71	24.84	27.77	0.000070	2.10	56.24	20.53	0.18
FLINTKOTE CL	290.56	2-YR	76.00	23.26	26.05	24.51	26.16	0.000246	2.90	30.10	13.58	0.31
FLINTKOTE CL	270.21	100-YR	155.00	23.22	34.18	25.35	34.19	0.000004	0.89	224.57	56.33	0.05
FLINTKOTE CL	270.21	50-YR	145.00	23.22	32.52	25.26	32.53	0.000007	1.05	180.99	56.22	0.06
FLINTKOTE CL	270.21	25-YR	133.00	23.22	31.78	25.15	31.79	0.000008	1.08	161.69	56.16	0.07
FLINTKOTE CL	270.21	10-YR	112.00	23.22	29.90	24.95	29.92	0.000016	1.32	112.67	26.05	0.09
FLINTKOTE CL	270.21	5-YR	97.00	23.22	27.71	24.80	27.76	0.000068	2.08	57.01	20.89	0.17
FLINTKOTE CL	270.21	2-YR	76.00	23.22	26.05	24.57	26.16	0.000237	2.86	30.58	13.65	0.30
FLINTKOTE CL	54.81	100-YR	155.00	22.79	34.18	24.92	34.19	0.000003	0.85	235.82	56.36	0.04
FLINTKOTE CL	54.81	50-YR	145.00	22.79	32.52	24.83	32.53	0.000005	0.99	192.22	56.25	0.06
FLINTKOTE CL	54.81	25-YR	133.00	22.79	31.78	24.72	31.79	0.000006	1.01	172.91	56.20	0.06
FLINTKOTE CL	54.81	10-YR	112.00	22.79	29.90	24.52	29.91	0.000012	1.20	123.87	56.07	0.08
FLINTKOTE CL	54.81	5-YR	97.00	22.79	27.71	24.37	27.75	0.000046	1.83	68.86	25.16	0.15
FLINTKOTE CL	54.81	2-YR	76.00	22.79	26.03	24.15	26.11	0.000144	2.44	36.39	14.48	0.24

HEC-RAS Plan: Maint-ScrCurrent River: FLINTKOTE Reach: FLINTKOTE CL (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
FLINTKOTE CL	49.81	100-YR	155.00	22.78	34.18	24.91	34.19	0.000003	0.85	236.09	56.36	0.04
FLINTKOTE CL	49.81	50-YR	145.00	22.78	32.52	24.81	32.53	0.000005	0.98	192.49	56.25	0.06
FLINTKOTE CL	49.81	25-YR	133.00	22.78	31.78	24.71	31.79	0.000006	1.01	173.17	56.20	0.06
FLINTKOTE CL	49.81	10-YR	112.00	22.78	29.90	24.51	29.91	0.000012	1.20	124.13	56.07	0.08
FLINTKOTE CL	49.81	5-YR	97.00	22.78	27.71	24.36	27.75	0.000046	1.82	67.12	25.27	0.14
FLINTKOTE CL	49.81	2-YR	76.00	22.78	26.03	24.13	26.11	0.000143	2.43	36.53	14.50	0.24
FLINTKOTE CL	20		Culvert									
FLINTKOTE CL	0	100-YR	155.00	22.20	34.15	23.78	34.16	0.000024	0.94	164.31	40.00	0.05
FLINTKOTE CL	0	50-YR	145.00	22.20	32.40	23.71	32.42	0.000035	1.03	140.25	40.00	0.06
FLINTKOTE CL	0	25-YR	133.00	22.20	30.81	23.62	30.83	0.000052	1.12	118.39	40.00	0.07
FLINTKOTE CL	0	10-YR	112.00	22.20	28.17	23.47	28.20	0.000125	1.36	82.09	40.00	0.10
FLINTKOTE CL	0	5-YR	97.00	22.20	26.44	23.36	26.48	0.000292	1.66	58.30	40.00	0.14
FLINTKOTE CL	0	2-YR	76.00	22.20	24.04	23.19	24.18	0.002900	3.00	25.30	40.00	0.39

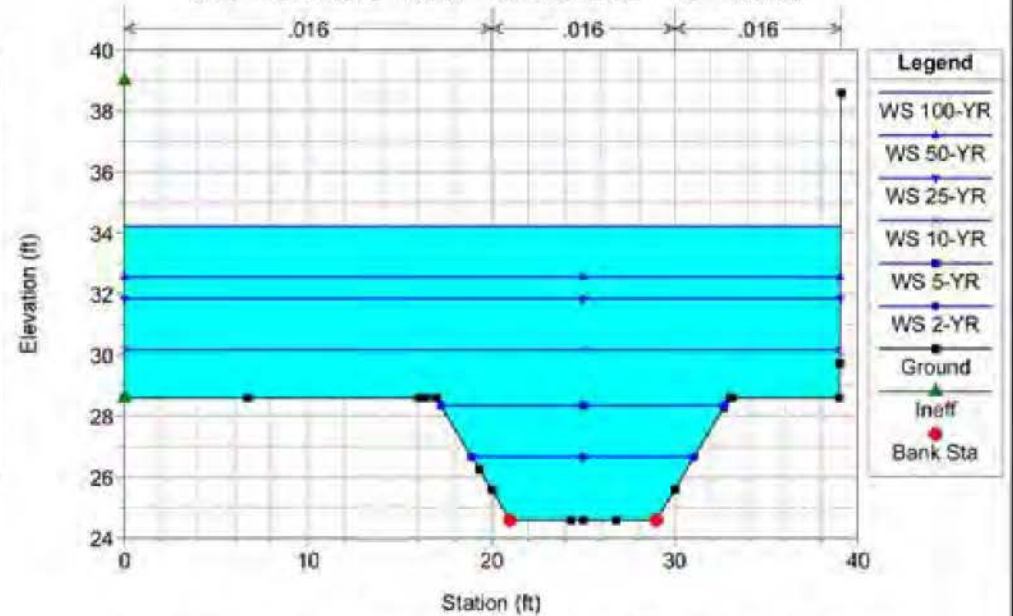
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1124.62



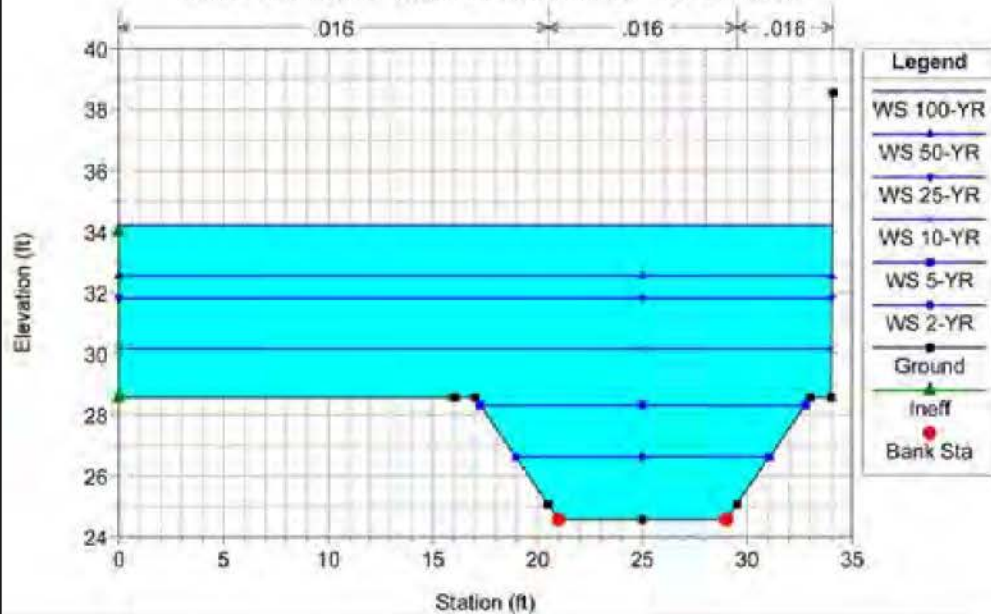
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1083.52



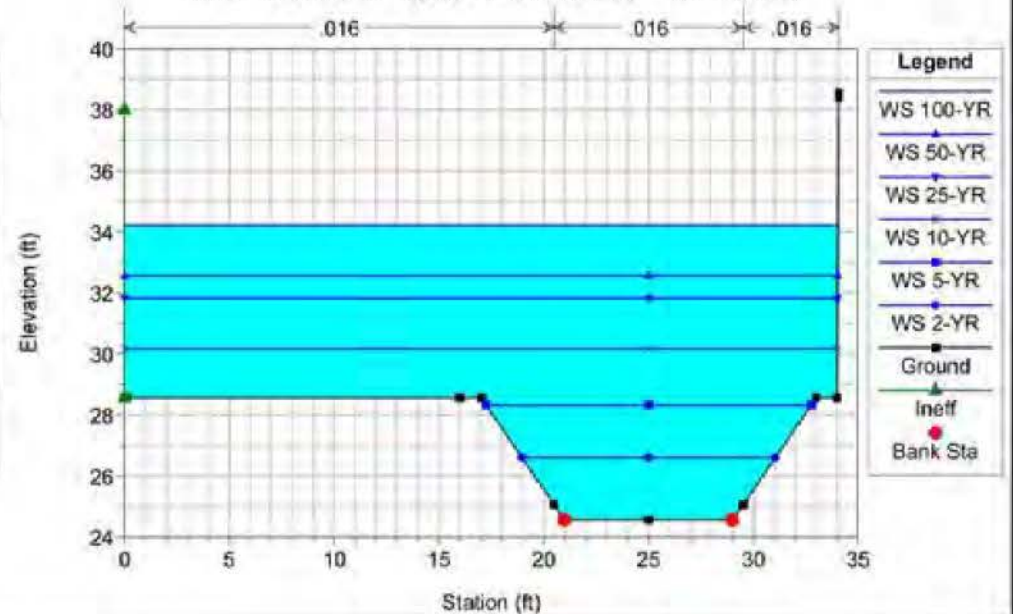
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1026.99



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

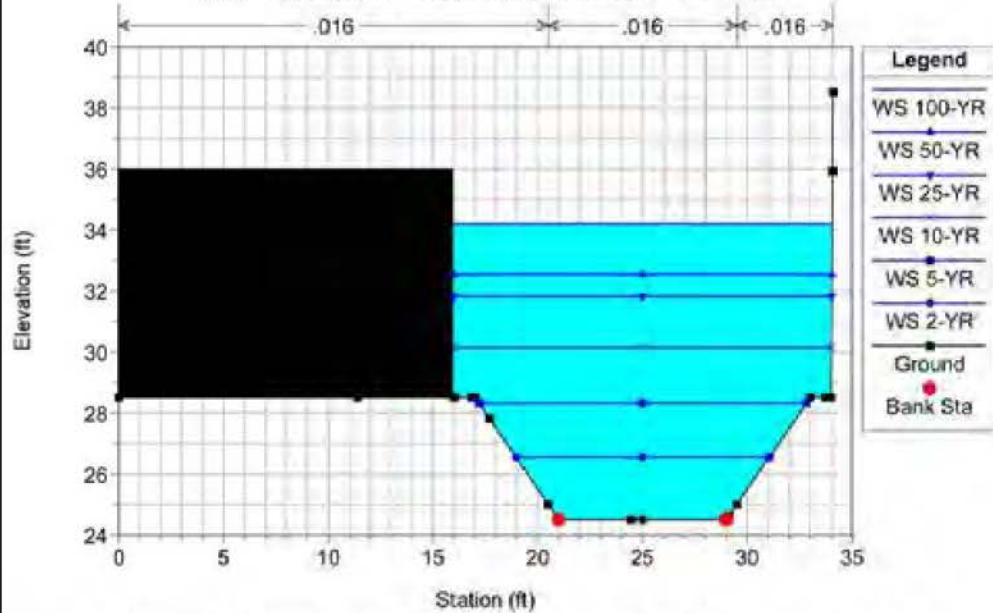
Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1007.26



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

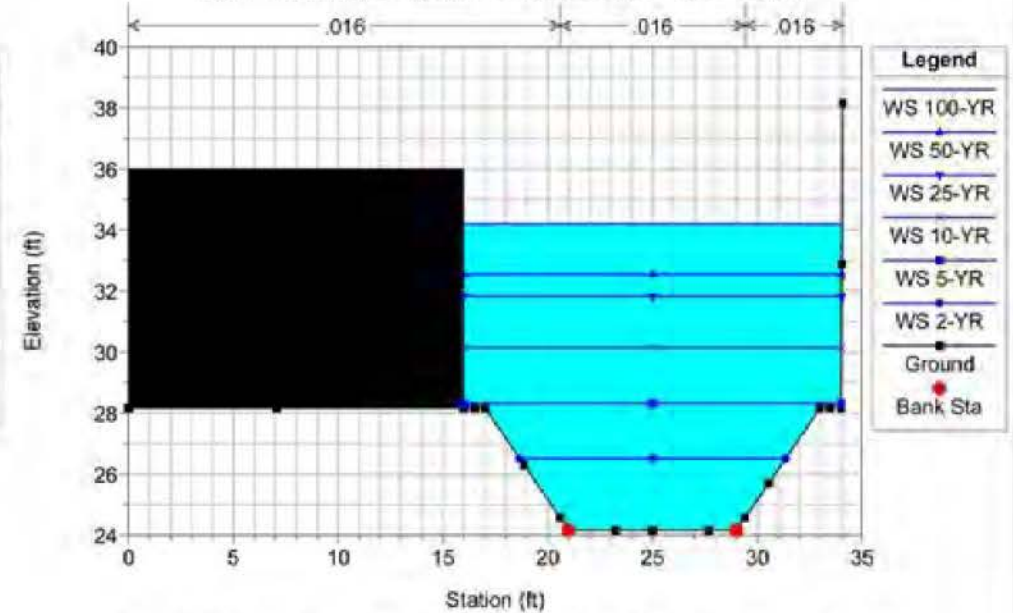
River = FLINTKOTE Reach = FLINTKOTE CL RS = 913.4



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

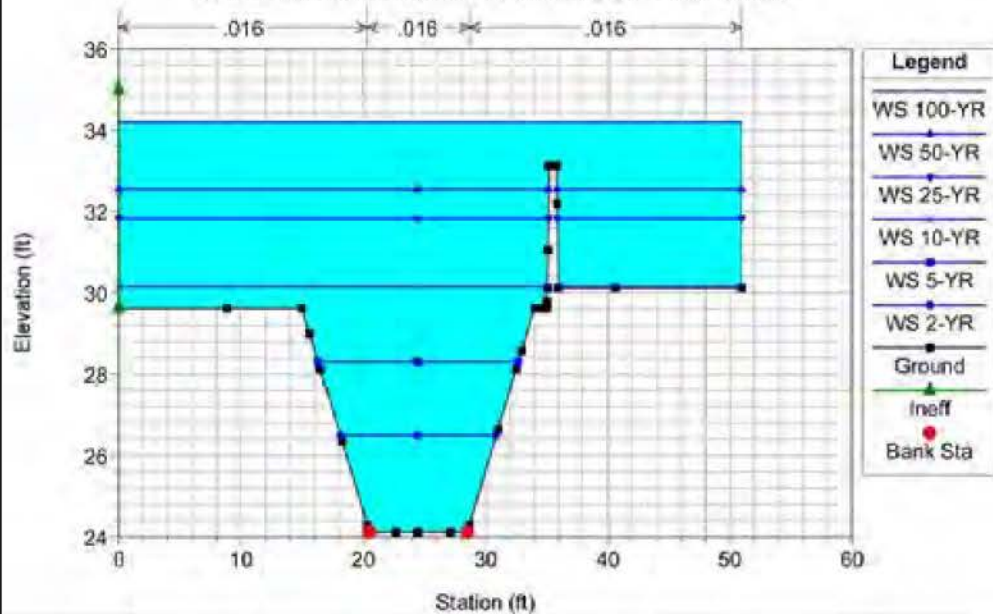
River = FLINTKOTE Reach = FLINTKOTE CL RS = 740.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

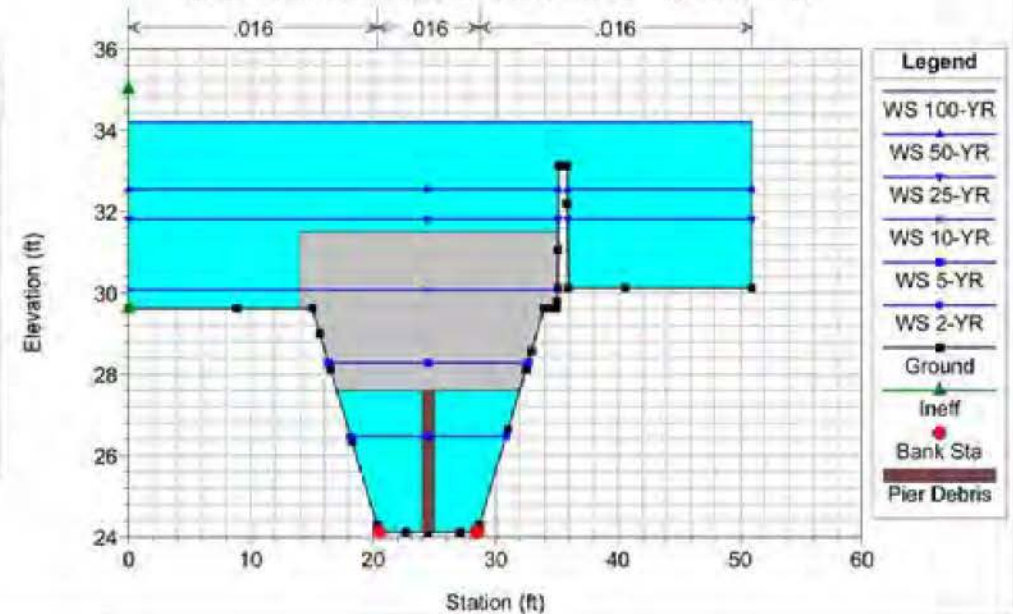
River = FLINTKOTE Reach = FLINTKOTE CL RS = 720.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

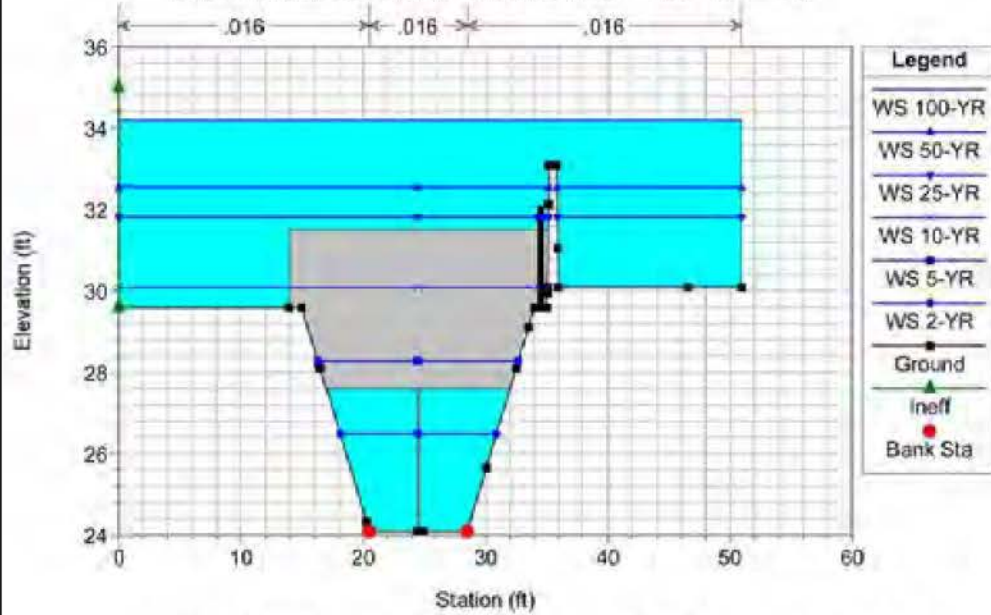
Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



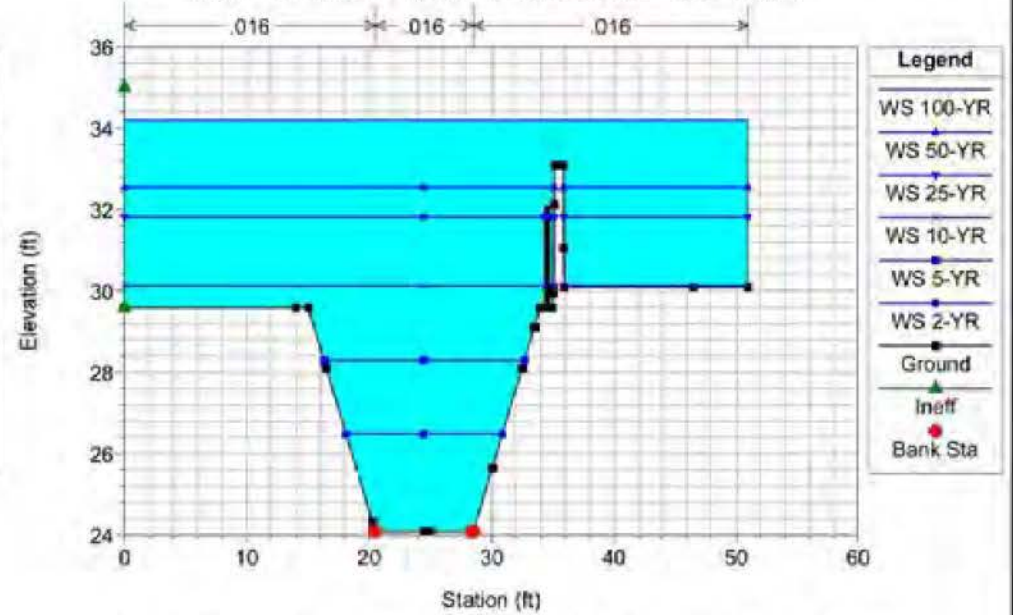
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



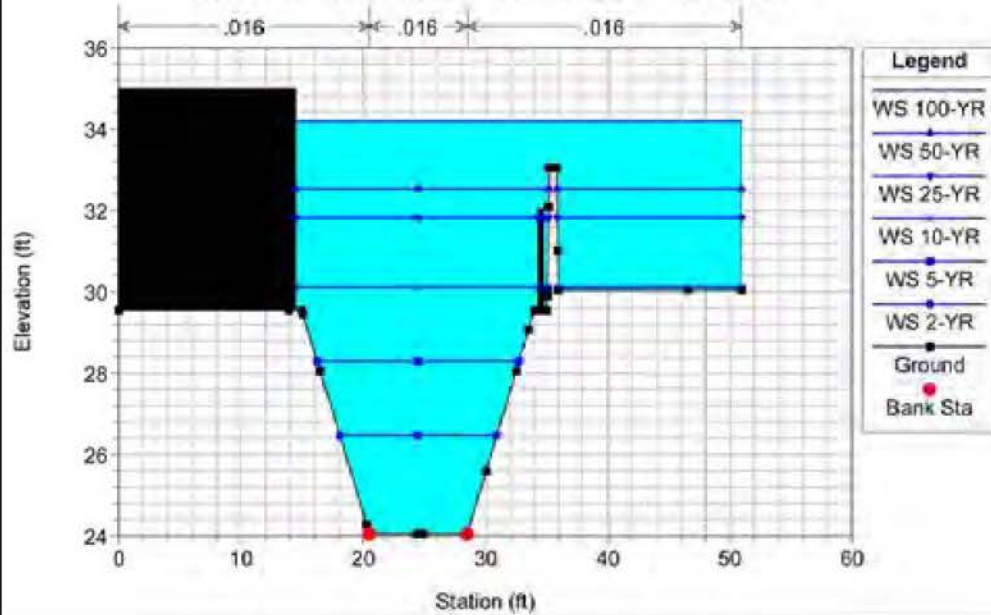
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 705.69



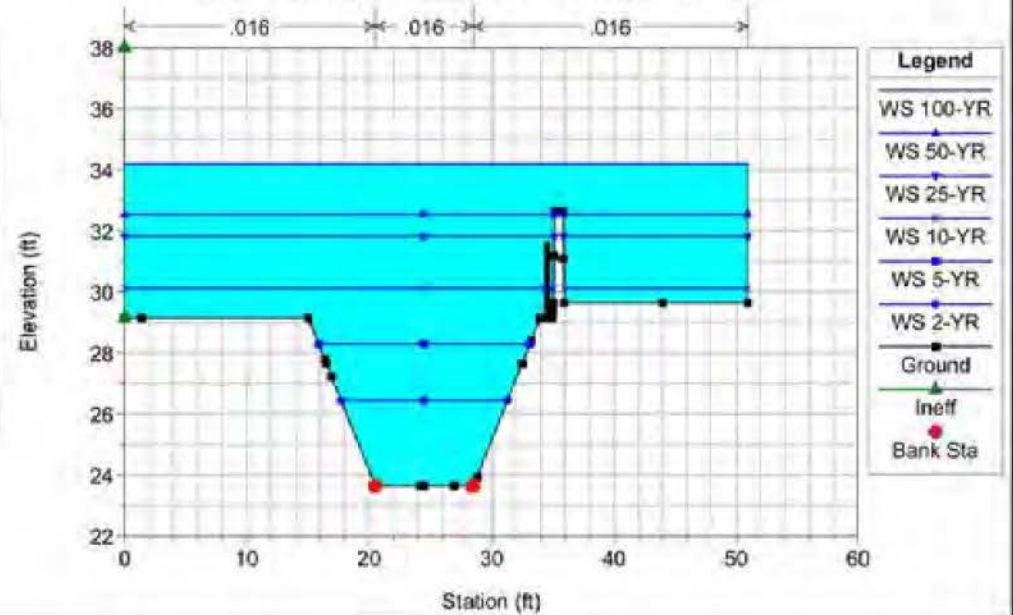
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 685.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

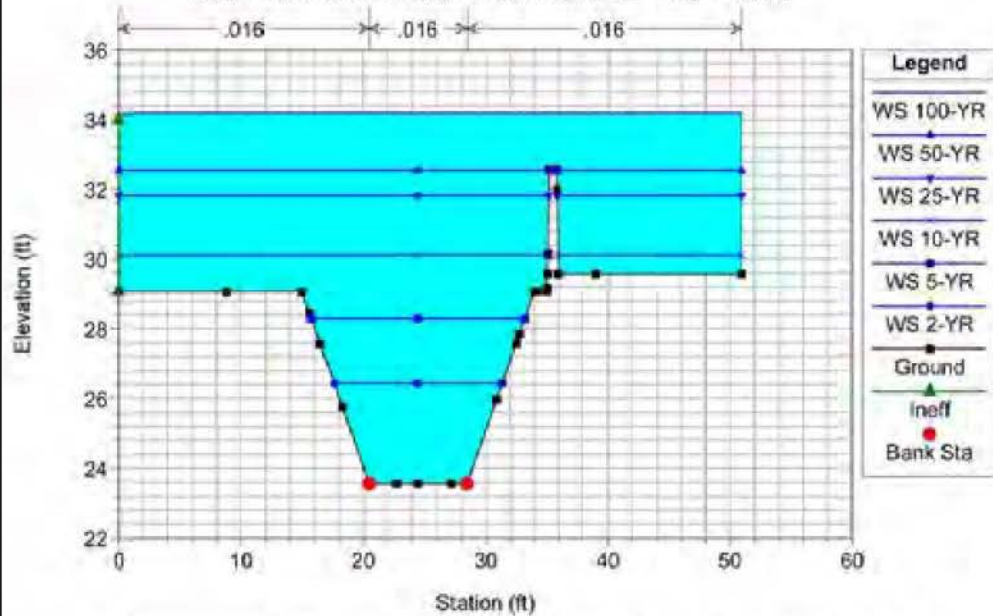
Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
River = FLINTKOTE Reach = FLINTKOTE CL RS = 454.03



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

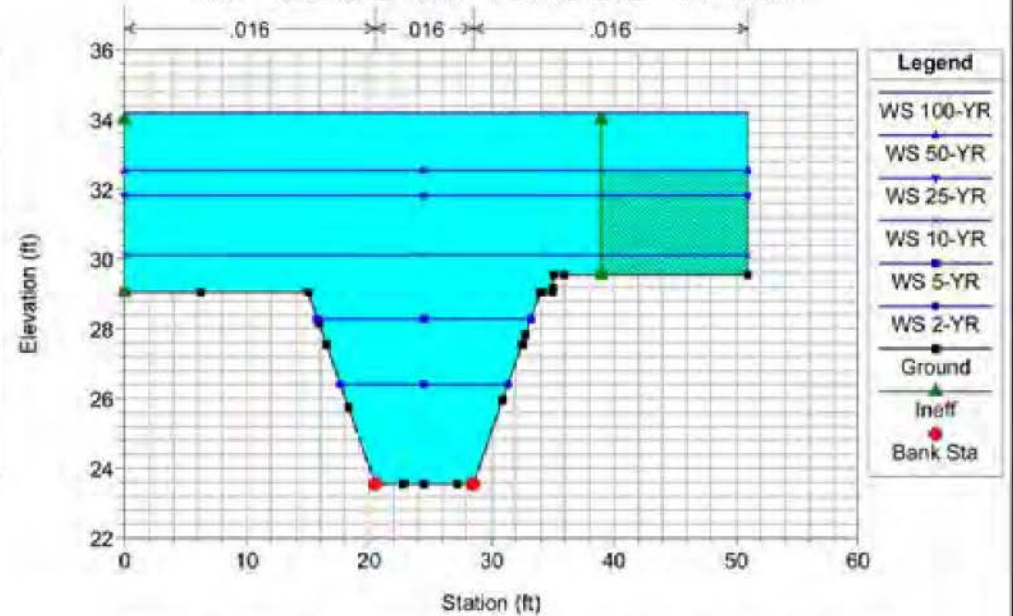
River = FLINTKOTE Reach = FLINTKOTE CL RS = 400.82



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

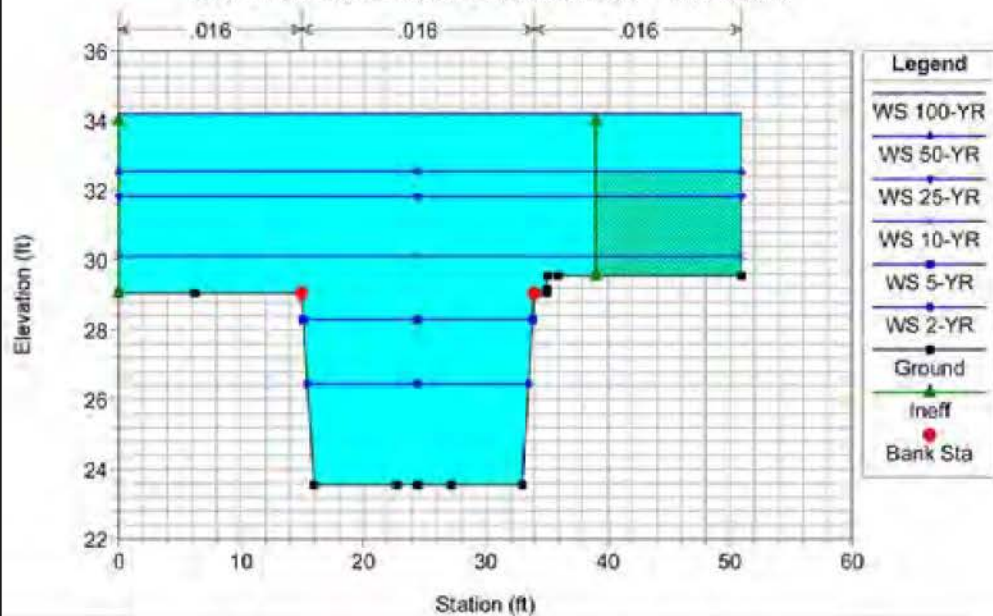
River = FLINTKOTE Reach = FLINTKOTE CL RS = 392.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

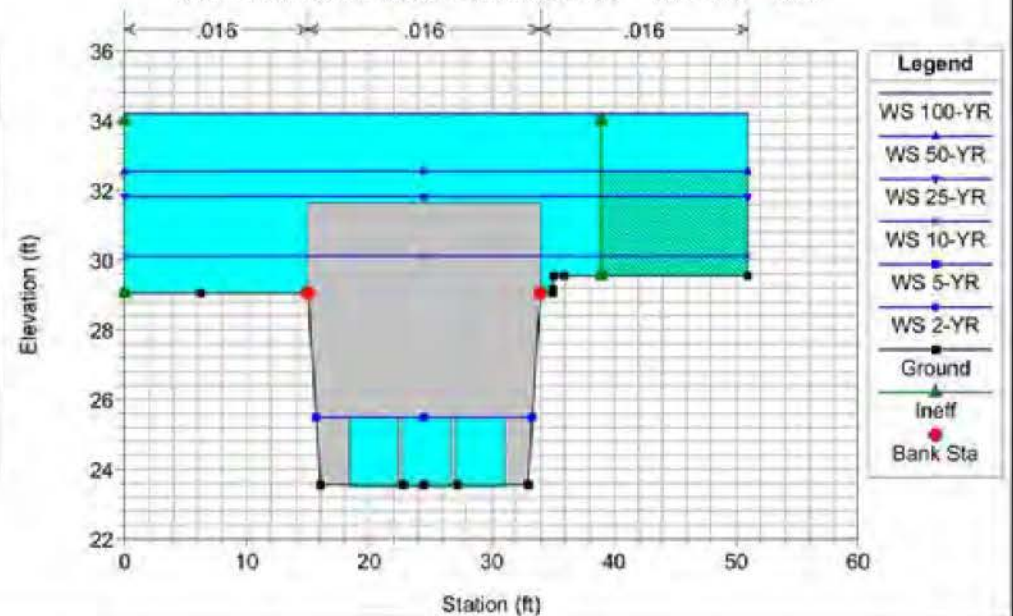
River = FLINTKOTE Reach = FLINTKOTE CL RS = 383.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

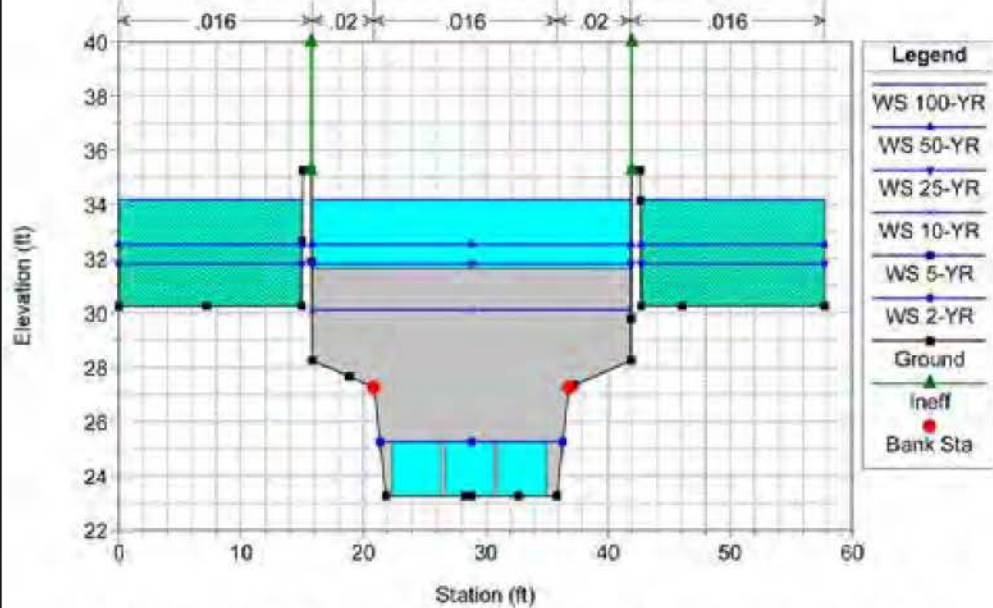
Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



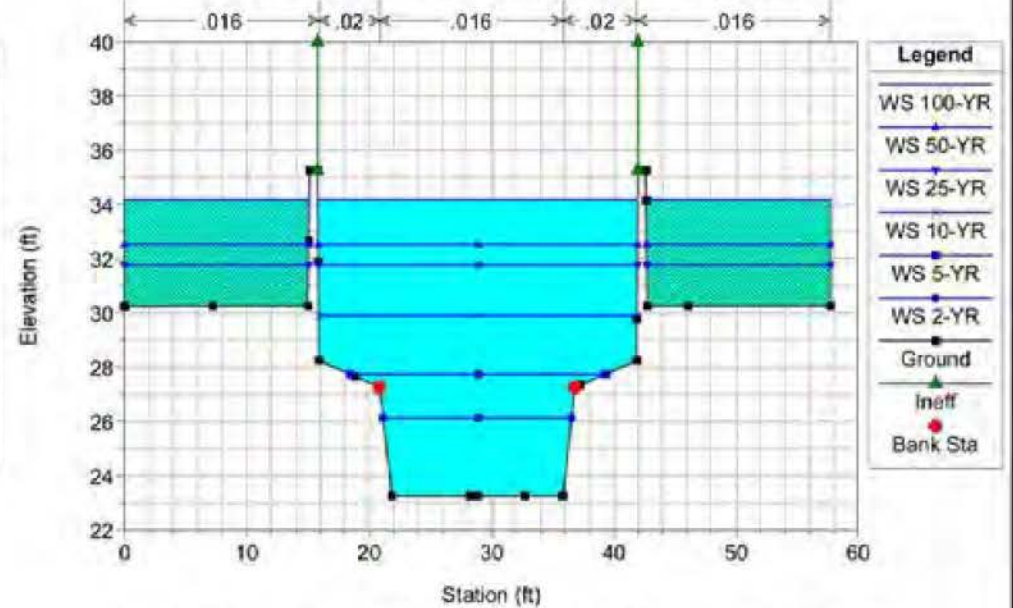
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



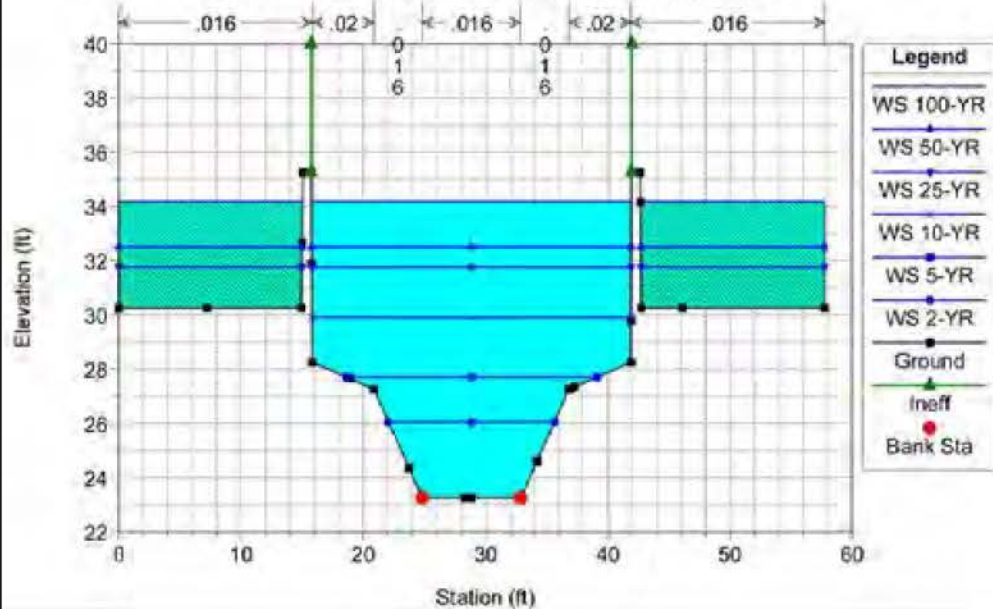
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 299.56



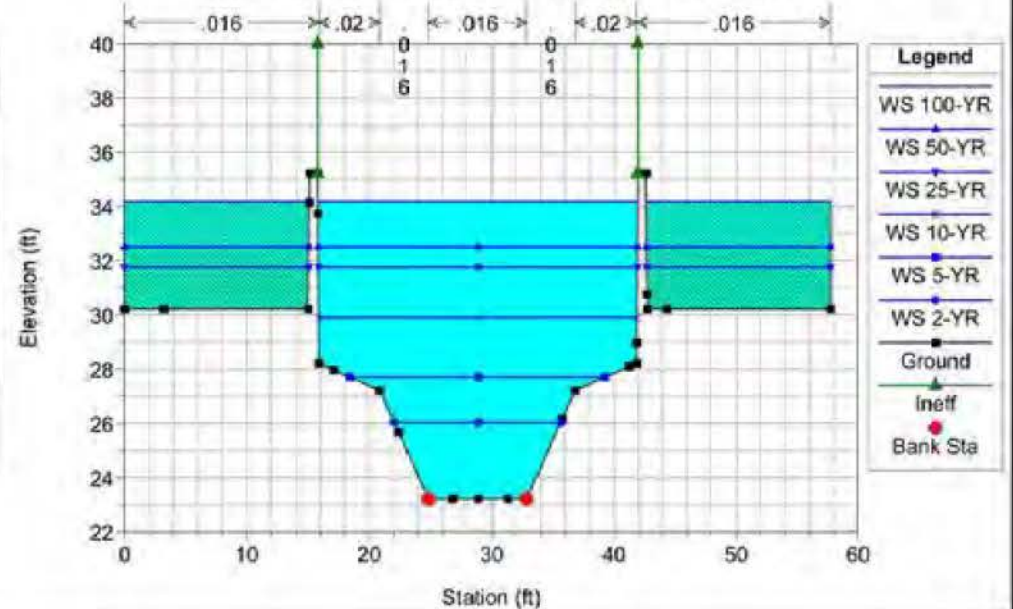
FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 290.56



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

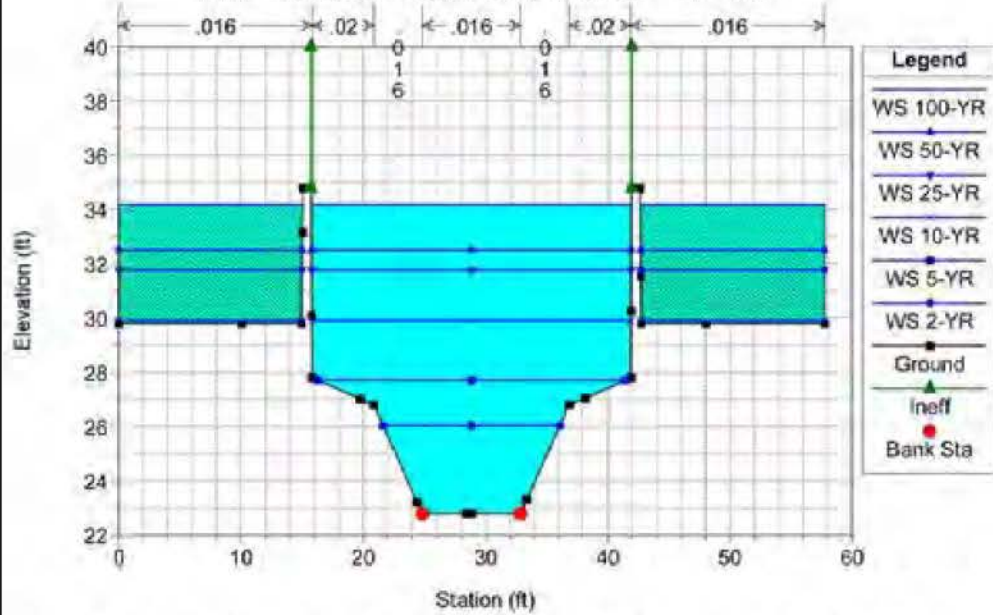
Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current
 River = FLINTKOTE Reach = FLINTKOTE CL RS = 270.21



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

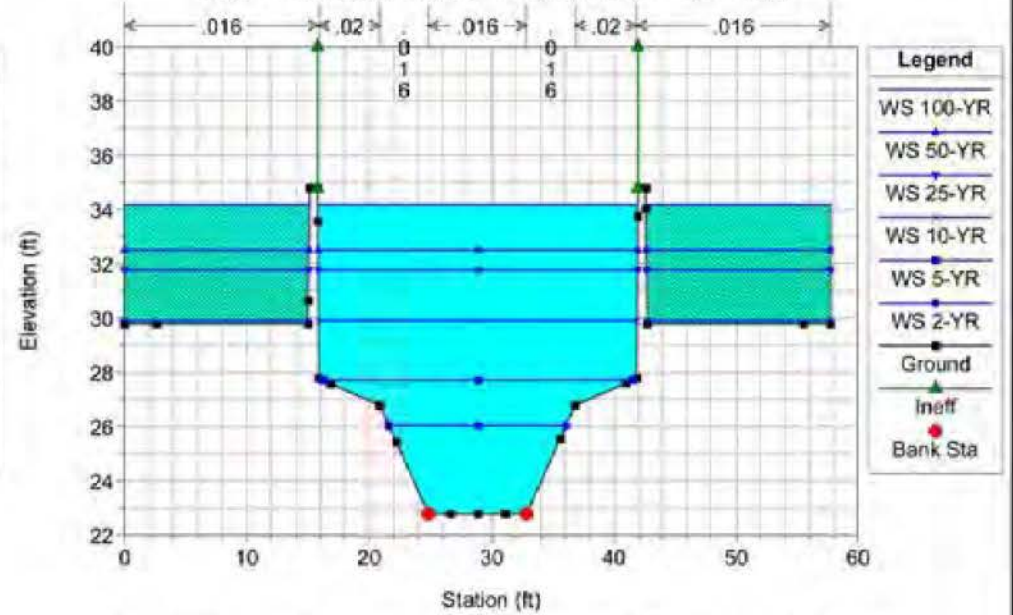
River = FLINTKOTE Reach = FLINTKOTE CL RS = 54.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

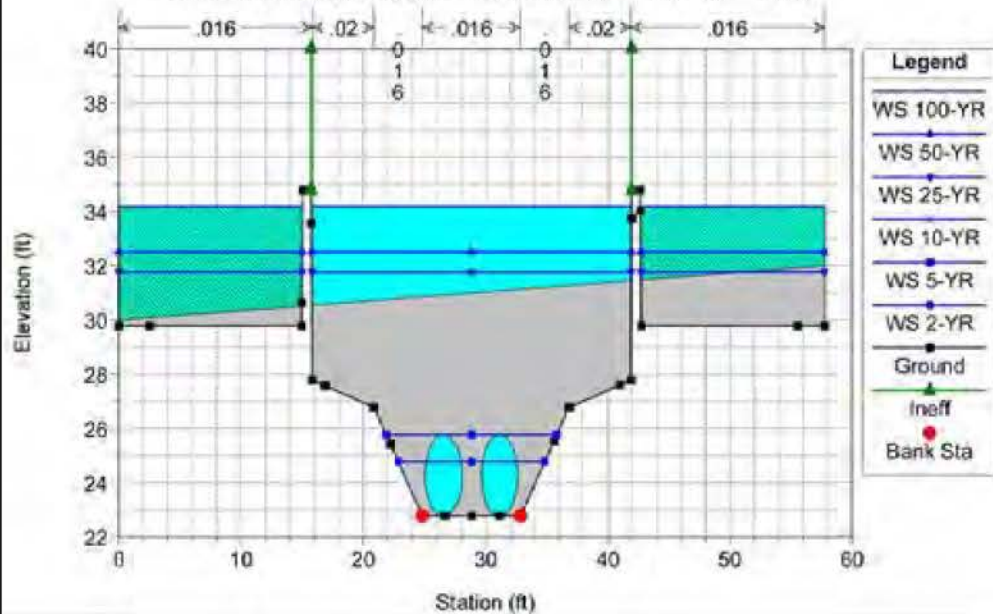
River = FLINTKOTE Reach = FLINTKOTE CL RS = 49.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

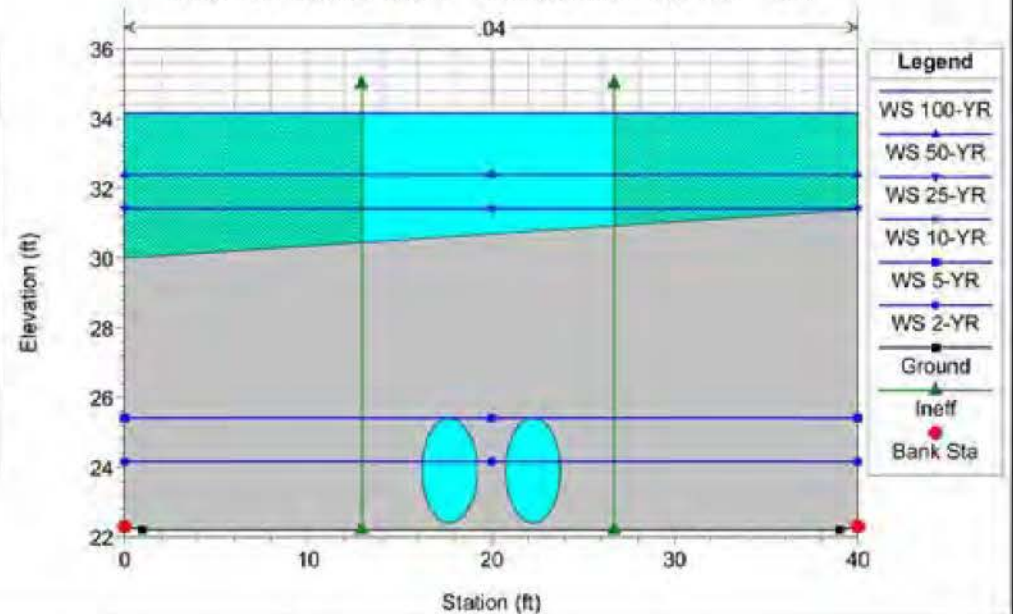
River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Removed-Current 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: Sorrento-Current

River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



DETAILED HYDRAULIC RESULTS FOR REACH 7 MAINTAINED CONDITION (SEDIMENT REMOVED), MAXIMUM FLOW

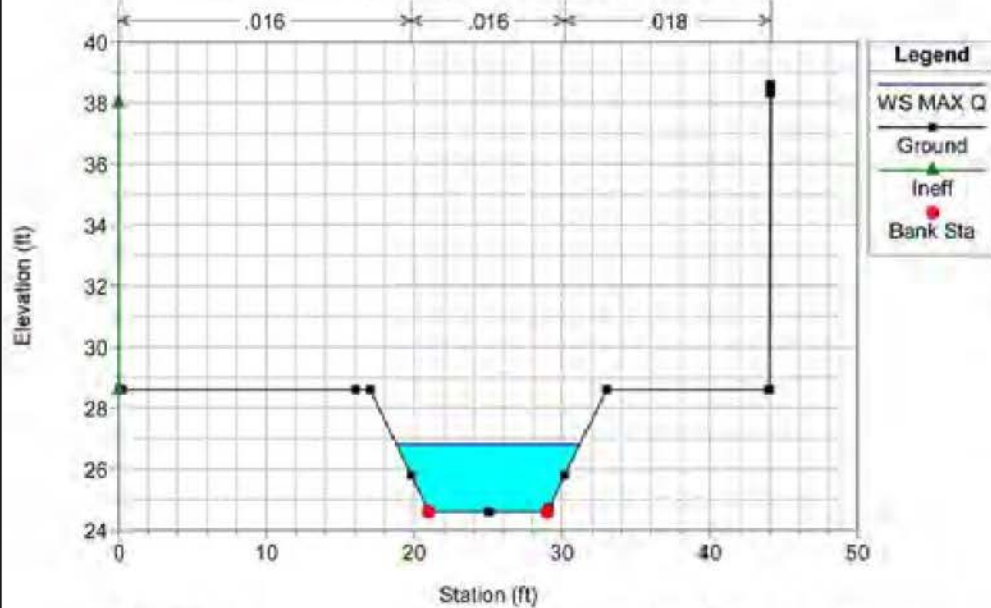
HEC-RAS Plan: MantVegSedRmMAXQ River: FLINTKOTE Reach: FLINTKOTE CL Profile: MAX Q

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit WS (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Ctl
FLINTKOTE CL	1124.62	MAX Q	74.00	24.60	26.81	25.94	26.99	0.000527	3.62	22.57	12.42	0.43
FLINTKOTE CL	1083.52	MAX Q	74.00	24.59	26.79	25.92	26.97	0.000539	3.64	22.39	12.39	0.43
FLINTKOTE CL	1026.99	MAX Q	74.00	24.57	26.75	25.89	26.94	0.000560	3.69	22.19	12.36	0.44
FLINTKOTE CL	1007.26	MAX Q	74.00	24.56	26.74	25.89	26.93	0.000561	3.70	22.18	12.36	0.44
FLINTKOTE CL	913.4	MAX Q	74.00	24.51	26.69	25.83	26.88	0.000562	3.70	22.16	12.36	0.44
FLINTKOTE CL	740.89	MAX Q	74.00	24.16	26.65	25.48	26.79	0.000350	3.19	26.07	12.97	0.36
FLINTKOTE CL	720.89	MAX Q	74.00	24.12	26.64	25.44	26.78	0.000336	3.18	26.53	13.04	0.35
FLINTKOTE CL	710		Bridge									
FLINTKOTE CL	705.89	MAX Q	74.00	24.09	26.62	25.42	26.76	0.000335	3.16	26.63	13.05	0.35
FLINTKOTE CL	685.89	MAX Q	74.00	24.05	26.62	25.38	26.75	0.000318	3.10	27.13	13.13	0.34
FLINTKOTE CL	454.03	MAX Q	74.00	23.64	26.59	24.97	26.69	0.000192	2.65	32.32	13.91	0.27
FLINTKOTE CL	400.82	MAX Q	74.00	23.56	26.58	24.89	26.67	0.000176	2.56	33.29	14.04	0.26
FLINTKOTE CL	392.12	MAX Q	80.00	23.55	26.56	24.95	26.67	0.000208	2.79	33.18	14.02	0.28
FLINTKOTE CL	383.12	MAX Q	80.00	23.55	26.60	24.43	26.63	0.000085	1.49	53.52	18.11	0.15
FLINTKOTE CL	350		Culvert									
FLINTKOTE CL	299.56	MAX Q	80.00	23.26	26.25	24.26	26.30	0.000146	1.82	44.03	15.49	0.19
FLINTKOTE CL	280.06	MAX Q	80.00	23.26	26.16	24.66	26.28	0.000235	2.82	31.61	13.86	0.30
FLINTKOTE CL	270.21	MAX Q	80.00	23.22	26.16	24.62	26.27	0.000228	2.88	32.11	13.87	0.30
FLINTKOTE CL	54.81	MAX Q	80.00	22.79	26.14	24.19	26.22	0.000141	2.47	38.02	14.70	0.24
FLINTKOTE CL	49.81	MAX Q	80.00	22.78	26.14	24.18	26.22	0.000139	2.46	38.16	14.72	0.24
FLINTKOTE CL	20		Culvert									
FLINTKOTE CL	0	MAX Q	80.00	22.20	24.04	23.22	24.20	0.003213	3.16	25.30	40.00	0.41

FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

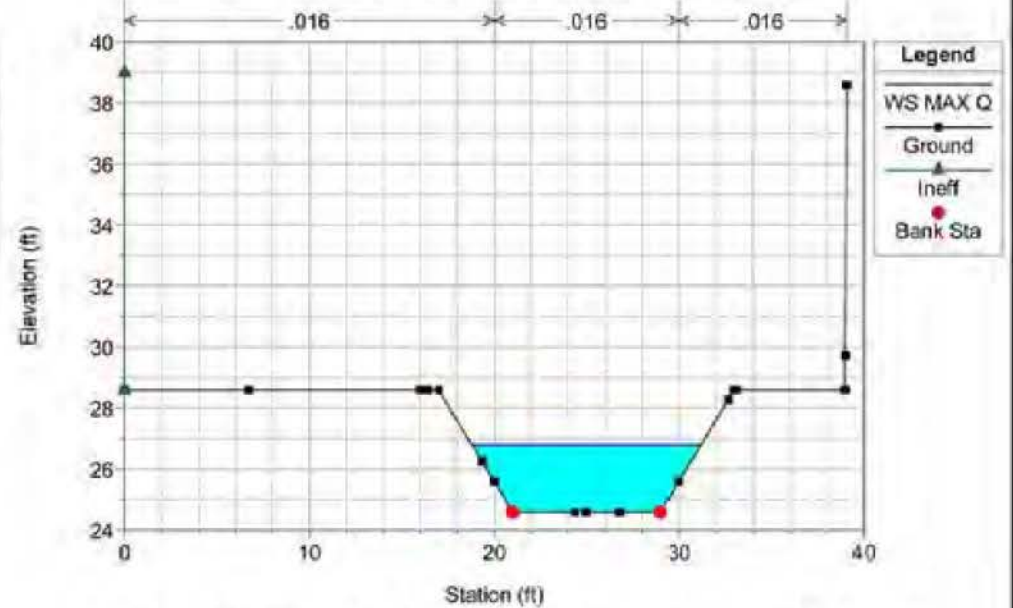
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1124.62



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

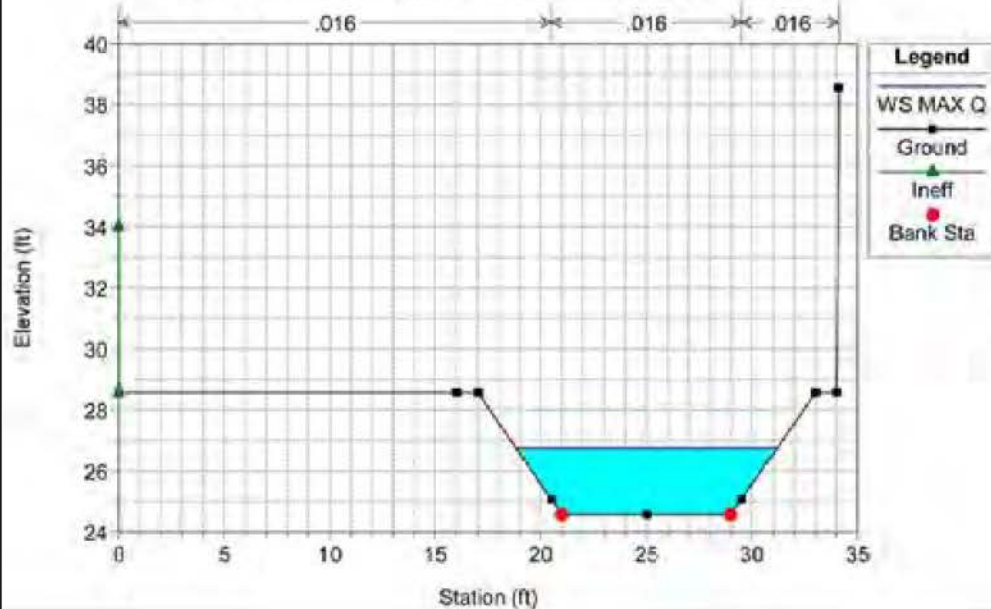
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1083.52



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

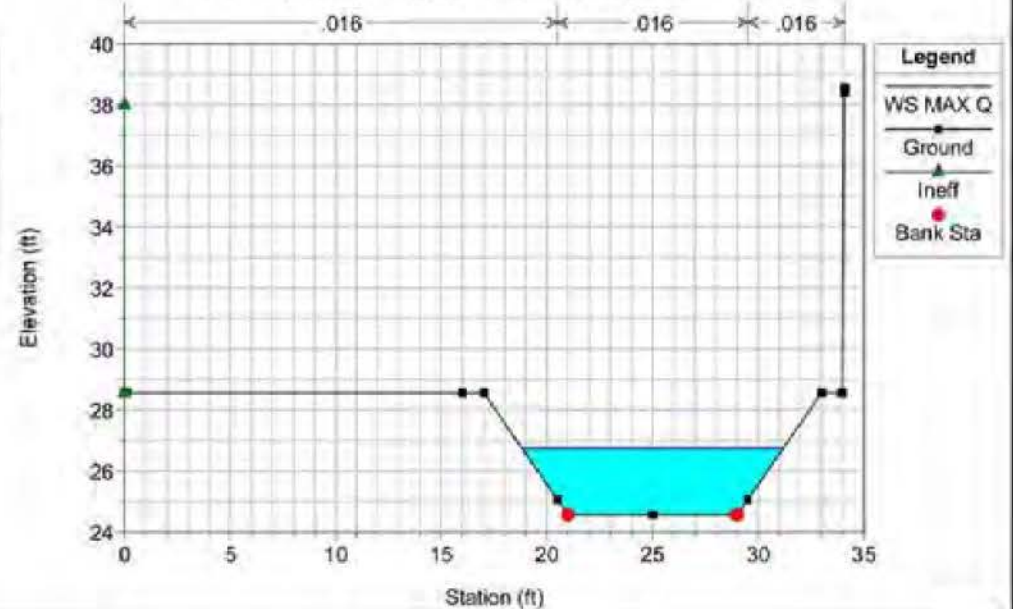
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1026.99



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

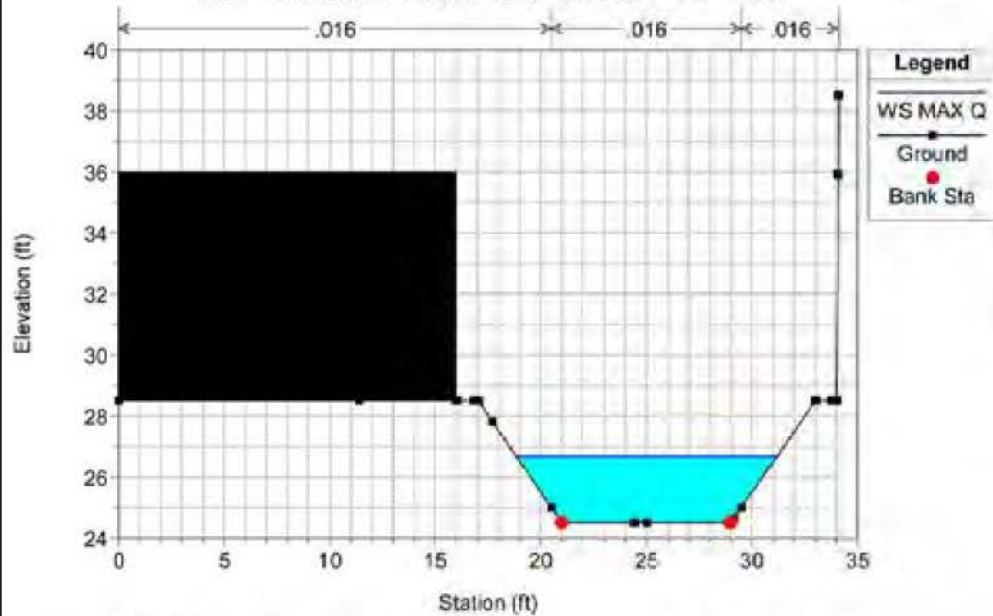
River = FLINTKOTE Reach = FLINTKOTE CL RS = 1007.26



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

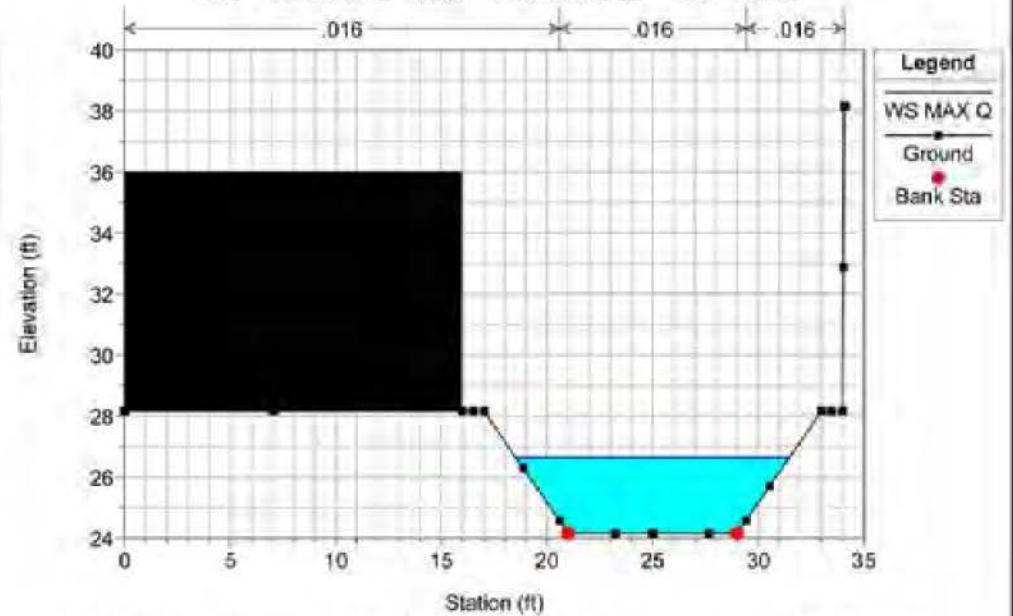
River = FLINTKOTE Reach = FLINTKOTE CL RS = 913.4



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

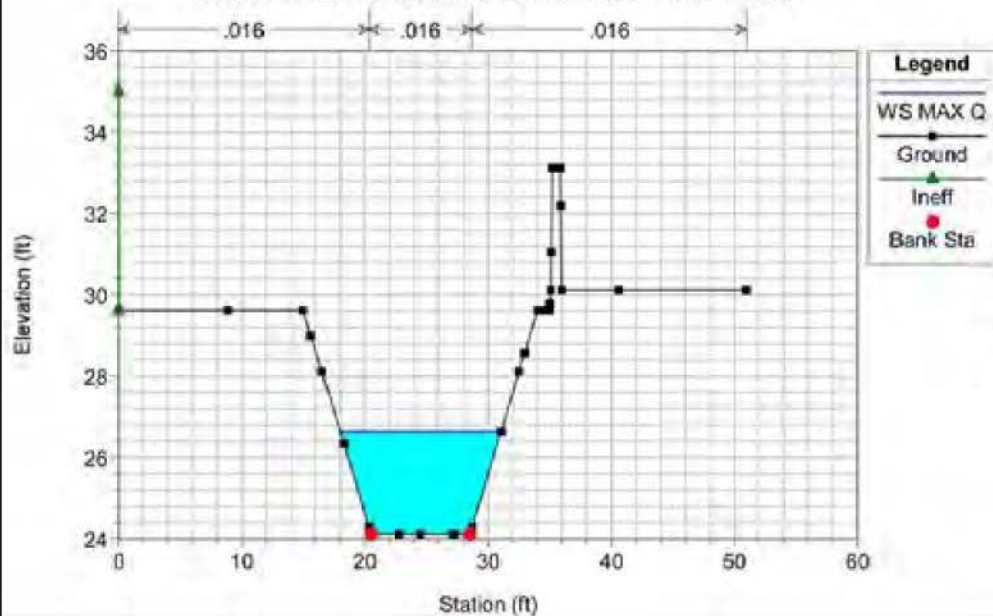
River = FLINTKOTE Reach = FLINTKOTE CL RS = 740.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

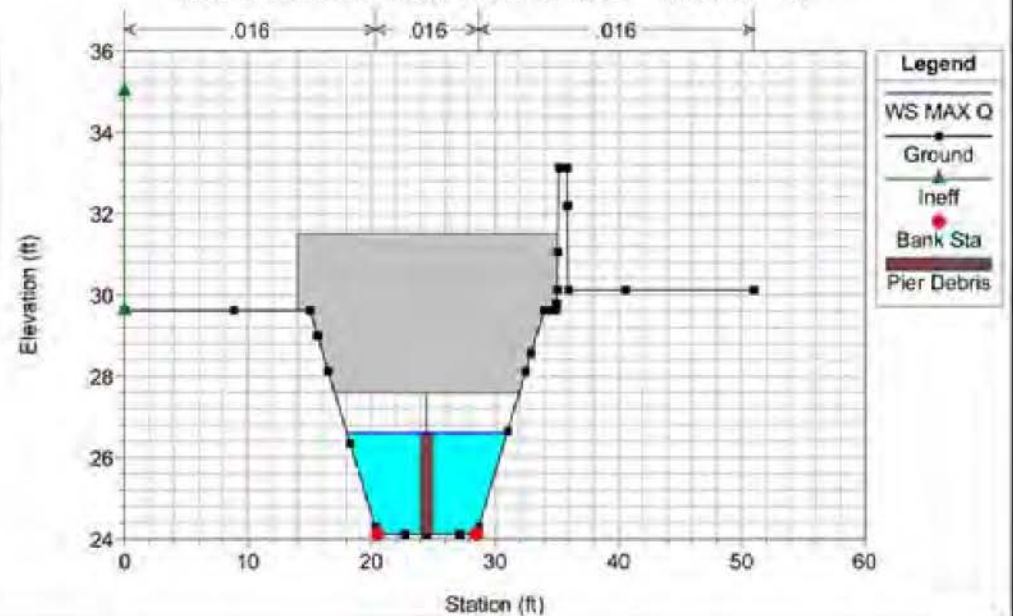
River = FLINTKOTE Reach = FLINTKOTE CL RS = 720.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

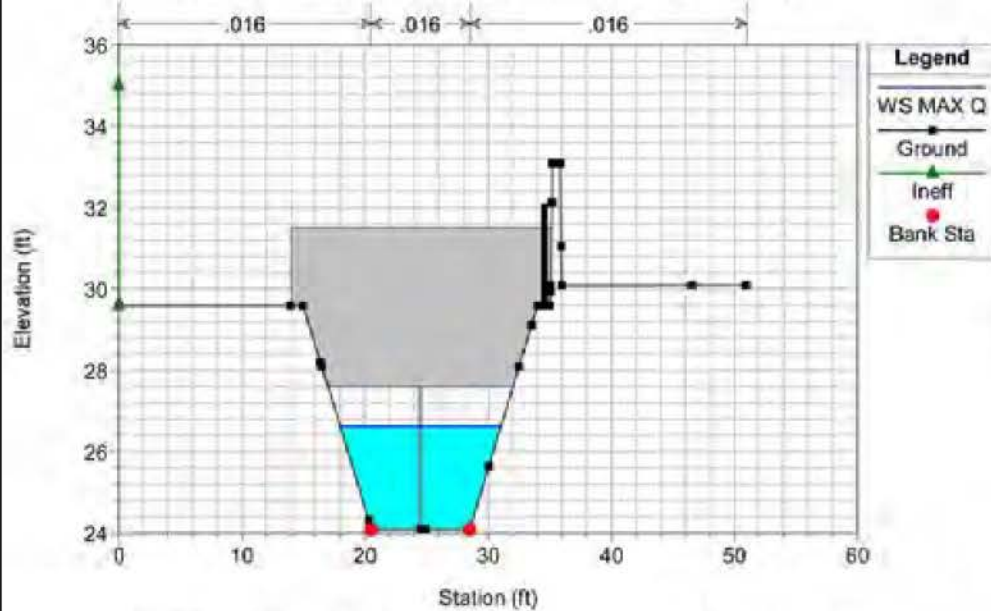
River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

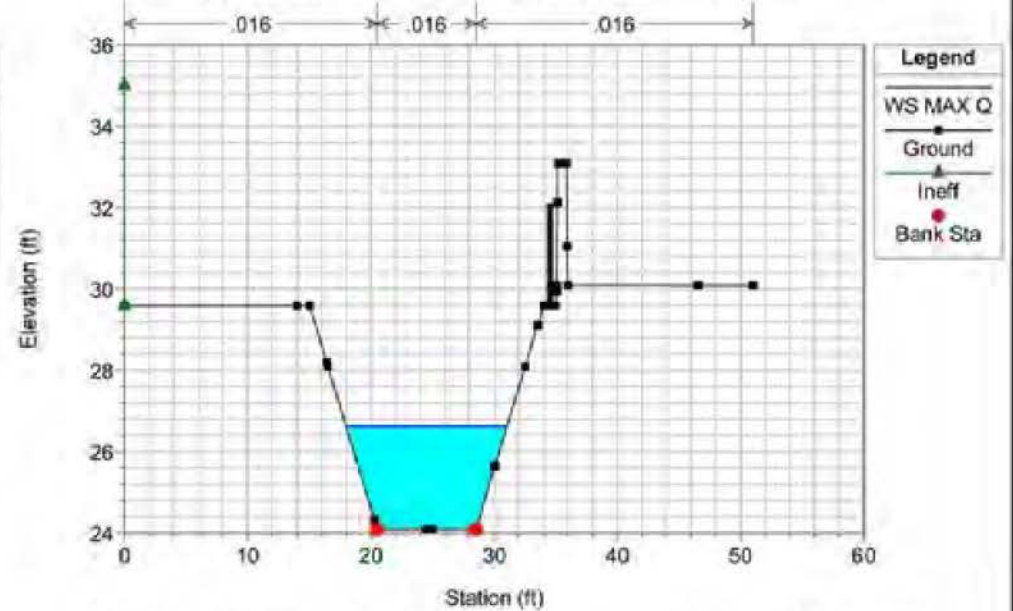
River = FLINTKOTE Reach = FLINTKOTE CL RS = 710 BR



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

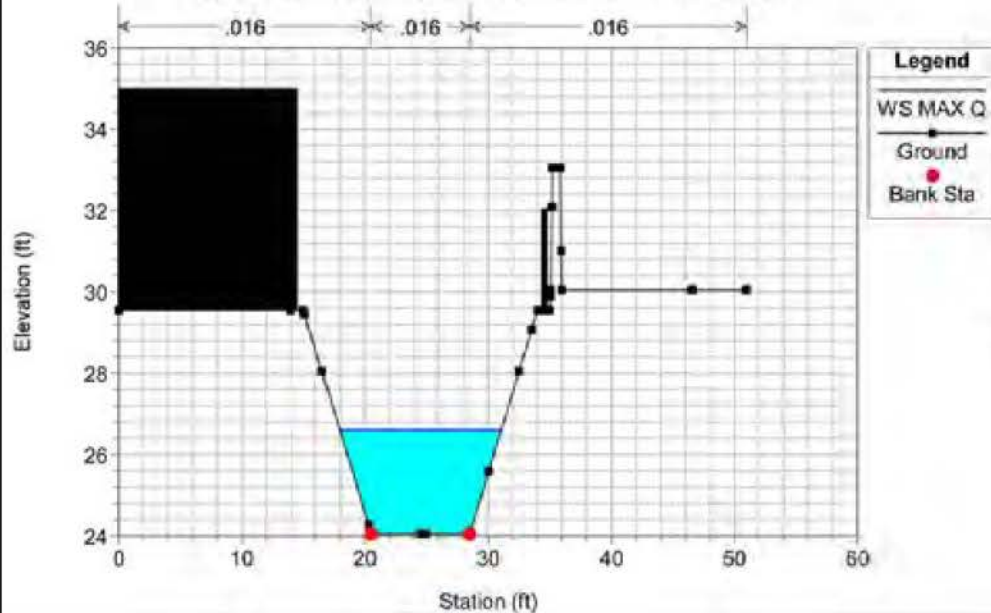
River = FLINTKOTE Reach = FLINTKOTE CL RS = 705.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

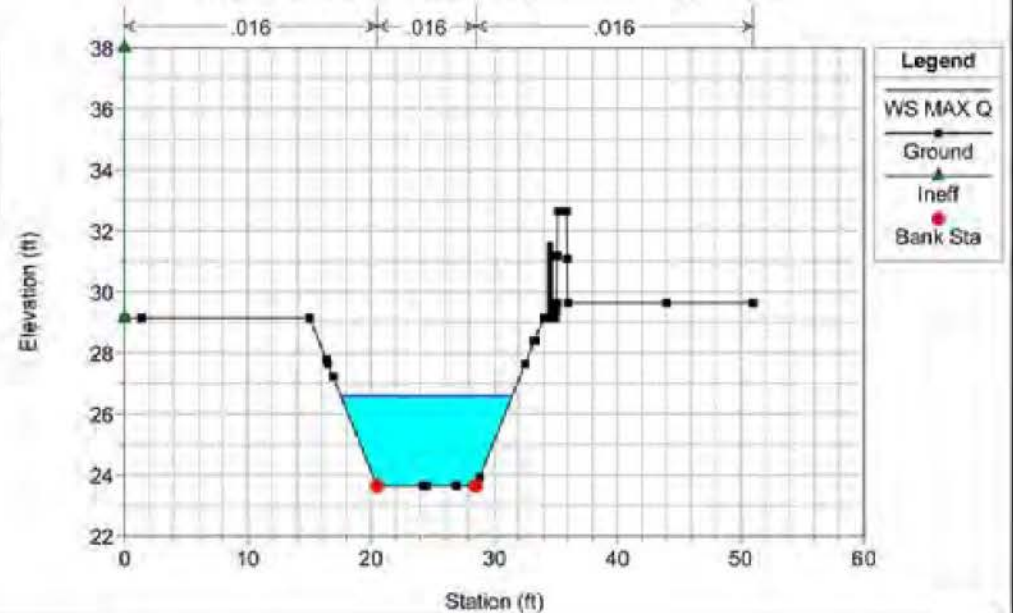
River = FLINTKOTE Reach = FLINTKOTE CL RS = 685.69



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

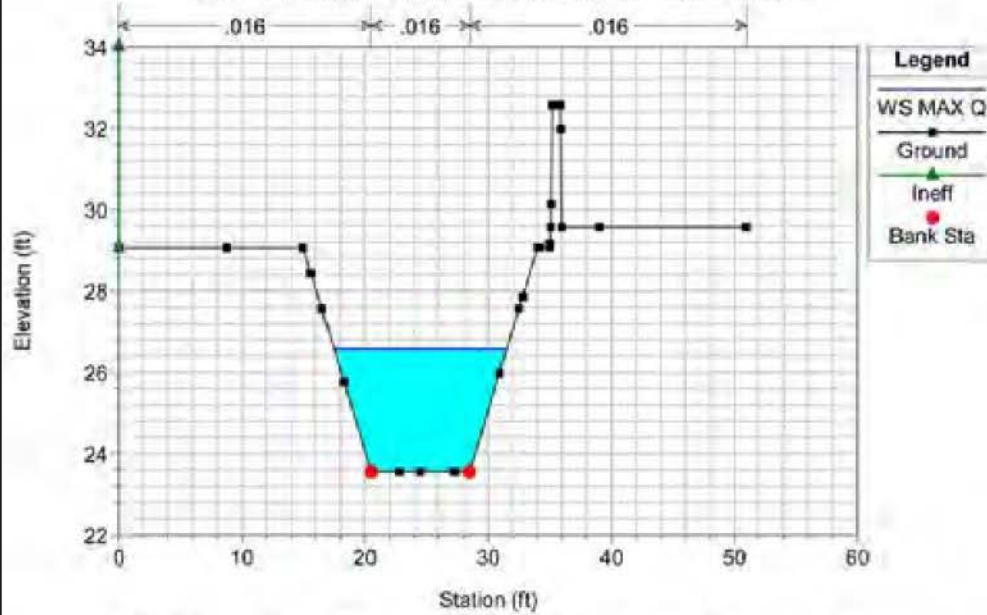
River = FLINTKOTE Reach = FLINTKOTE CL RS = 454.03



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

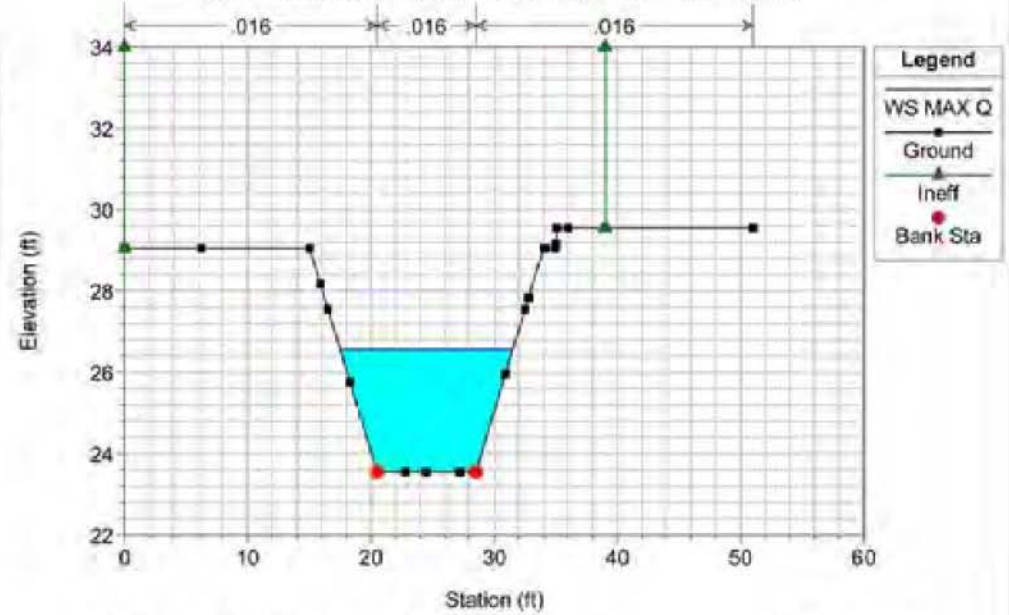
River = FLINTKOTE Reach = FLINTKOTE CL RS = 400.82



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

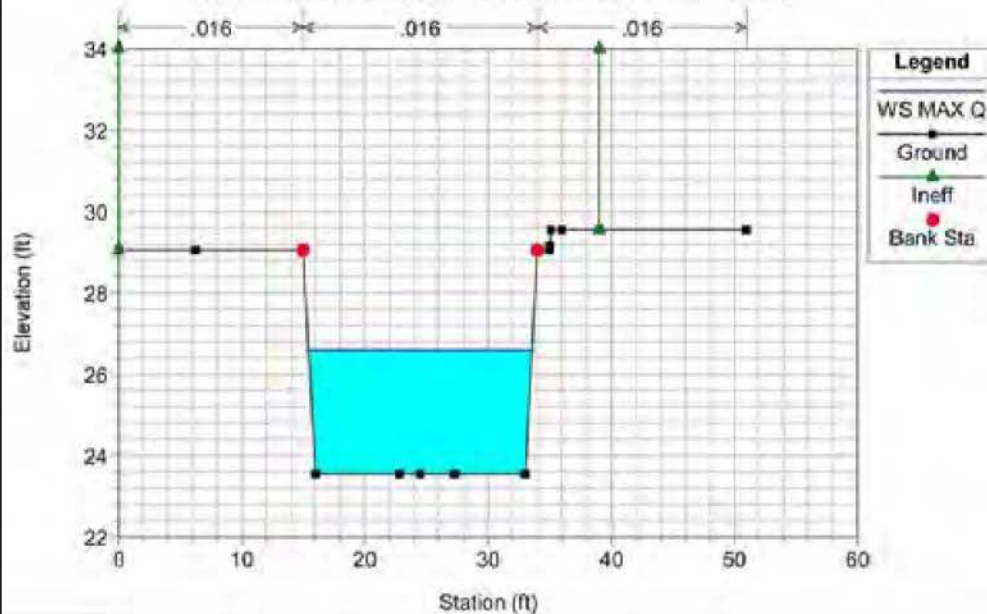
River = FLINTKOTE Reach = FLINTKOTE CL RS = 392.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

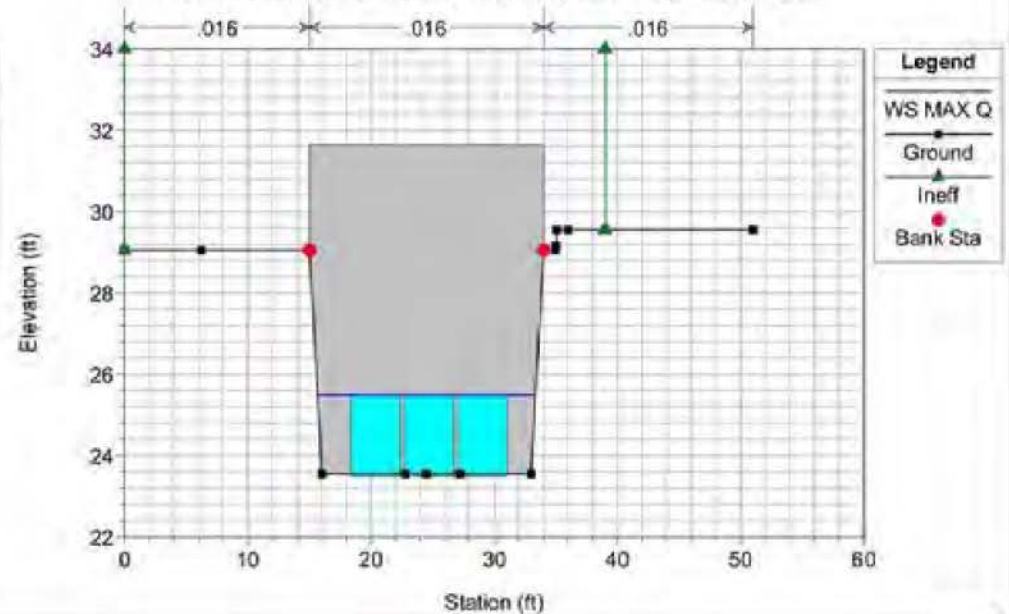
River = FLINTKOTE Reach = FLINTKOTE CL RS = 383.12



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

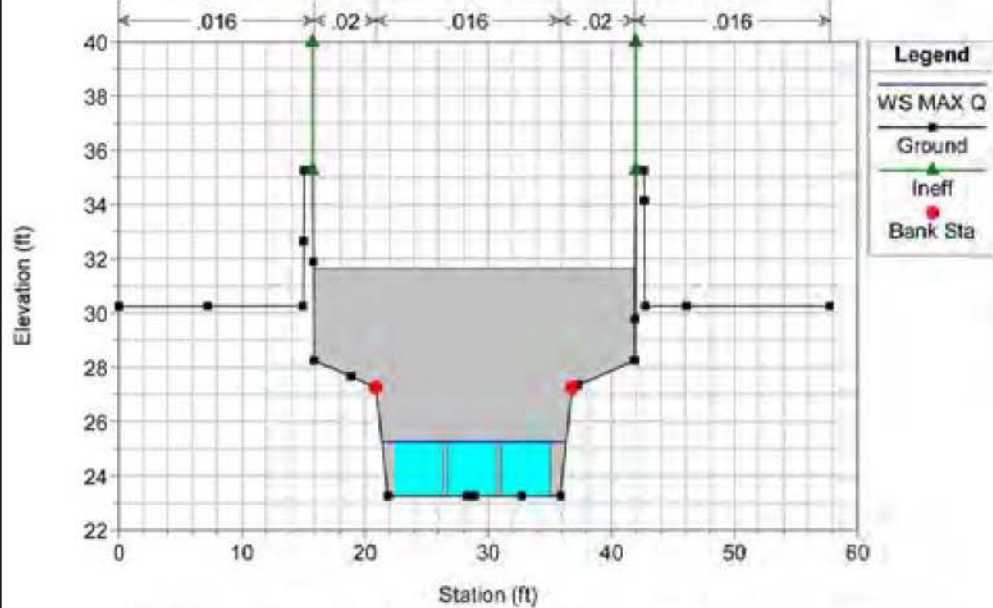
River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

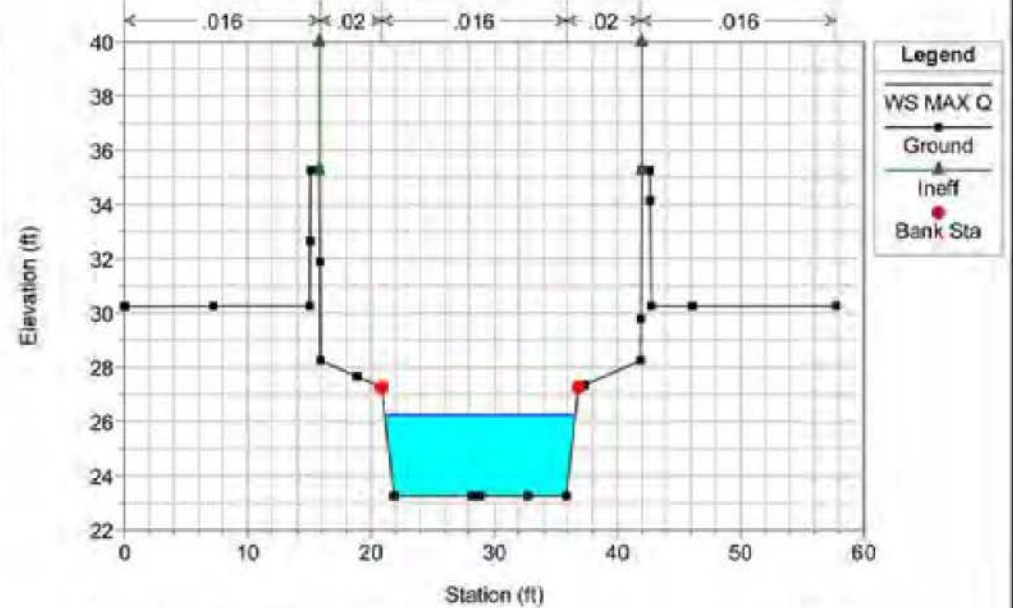
River = FLINTKOTE Reach = FLINTKOTE CL RS = 350 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

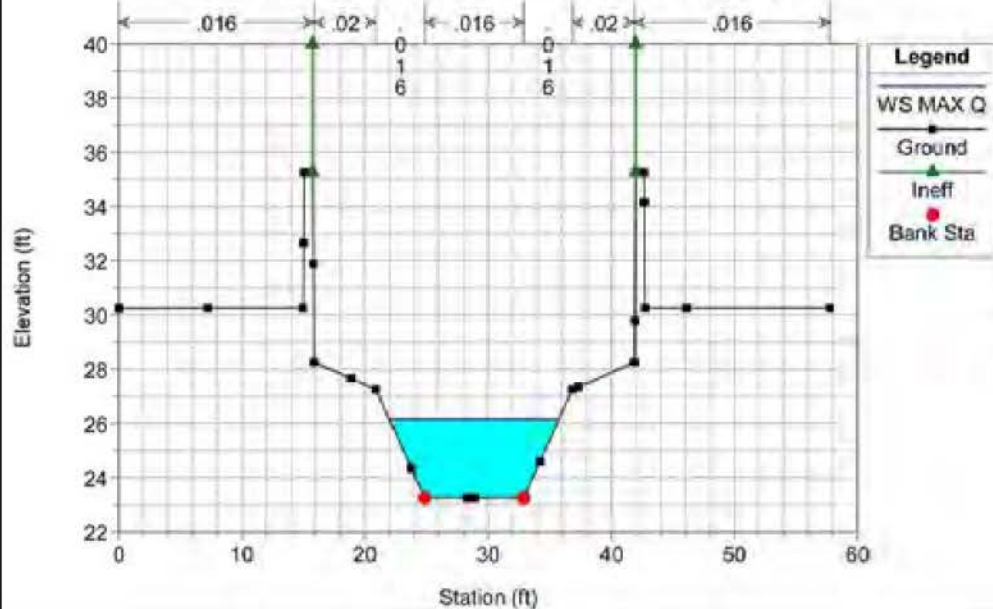
River = FLINTKOTE Reach = FLINTKOTE CL RS = 299.56



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

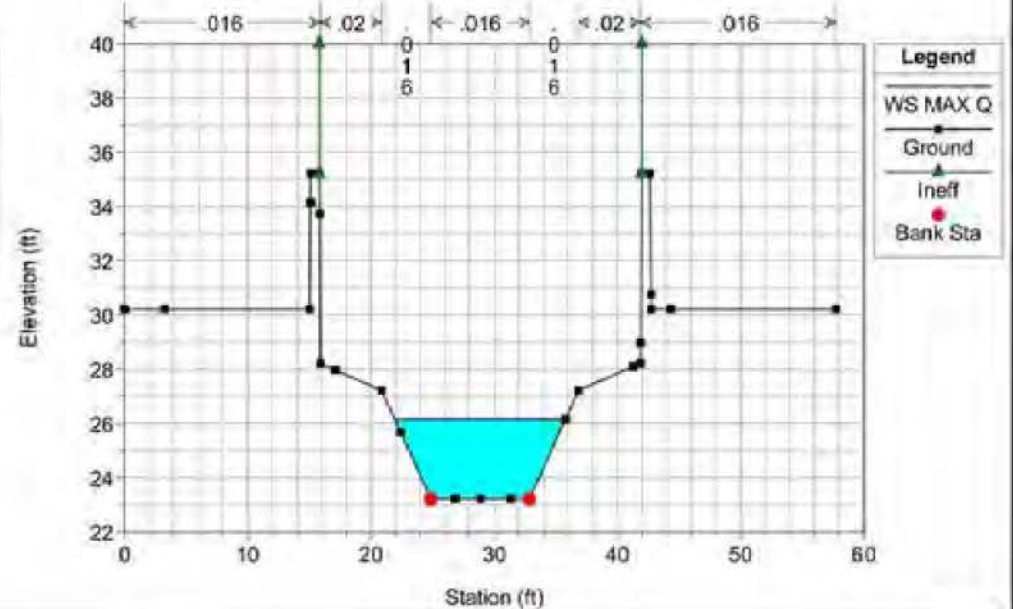
River = FLINTKOTE Reach = FLINTKOTE CL RS = 290.56



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

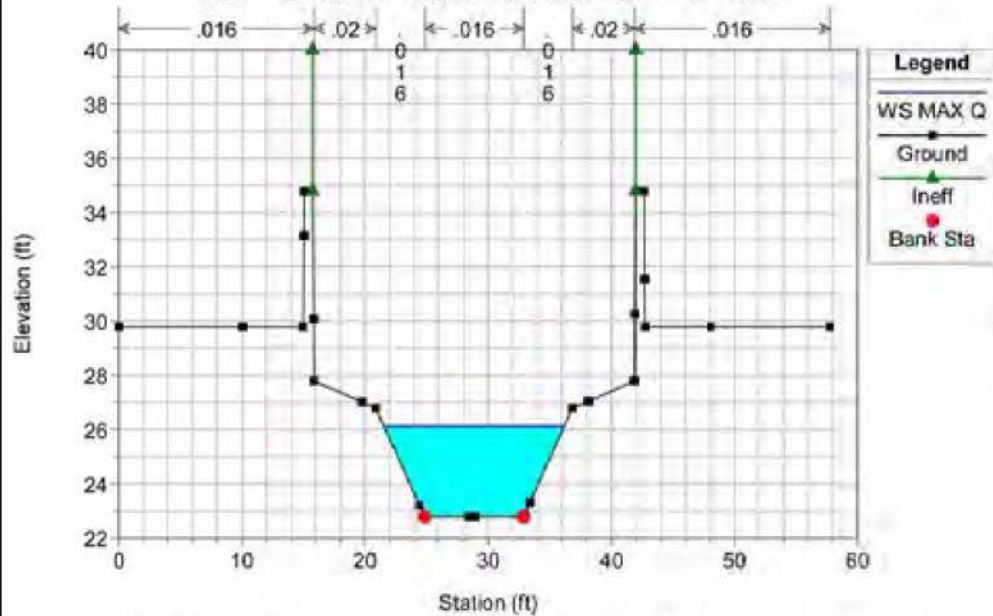
River = FLINTKOTE Reach = FLINTKOTE CL RS = 270.21



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

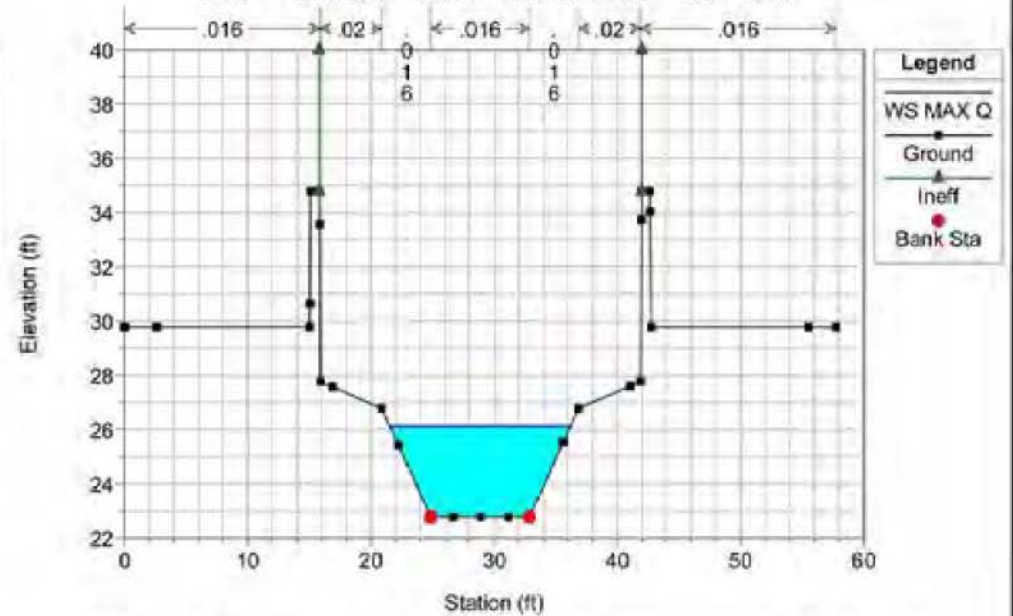
River = FLINTKOTE Reach = FLINTKOTE CL RS = 54.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

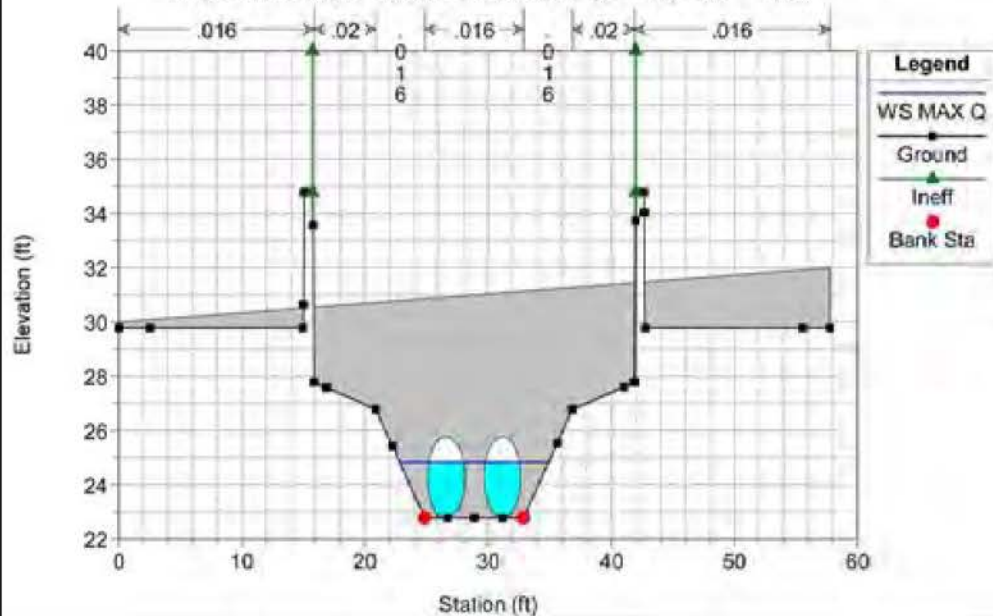
River = FLINTKOTE Reach = FLINTKOTE CL RS = 49.81



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

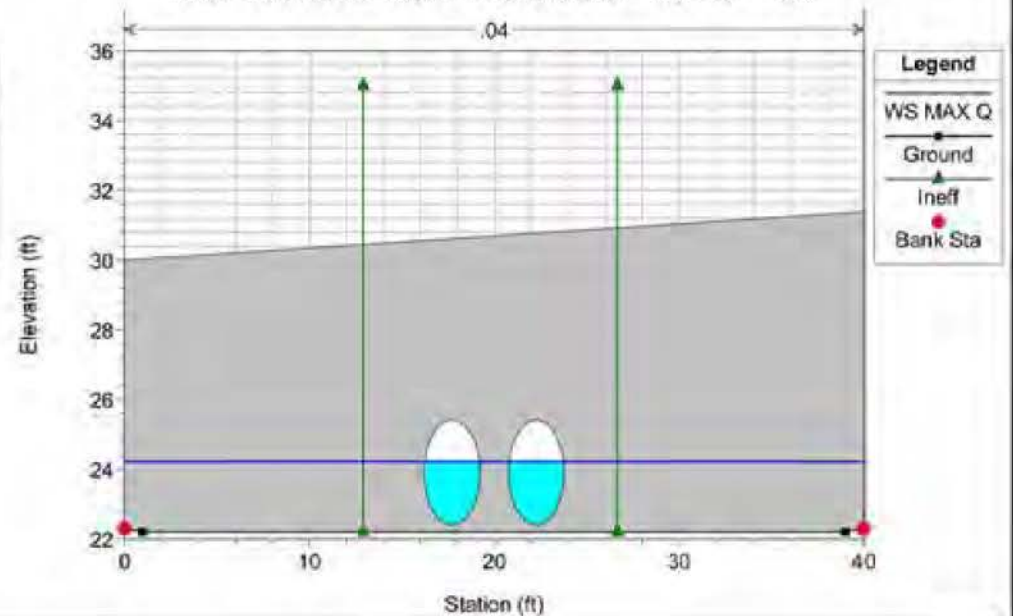
River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorCurr

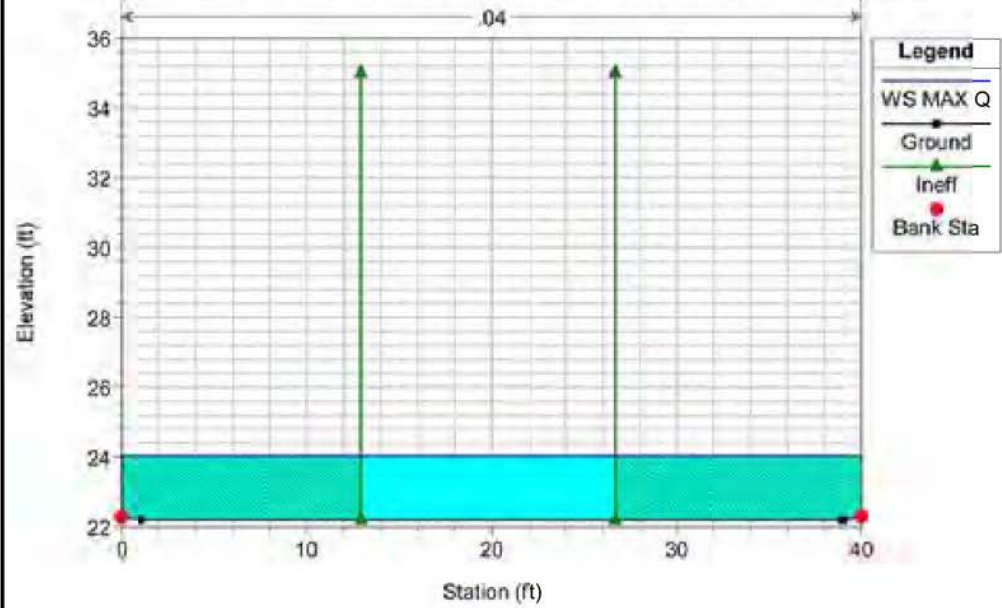
River = FLINTKOTE Reach = FLINTKOTE CL RS = 20 Culv



FLINTKOTE CHANNEL Plan: Maintained Veg-Sed Remd-SorrCurrent-MAXQ 5/7/2013

Geom: Maintained Veg-Sed Removed Flow: MaintVegSedRemMAXQ-SorrCurr

River = FLINTKOTE Reach = FLINTKOTE CL RS = 0 FLINTKOTE CHANNEL OUTFALL



LOG-LOG PROBABILITY GRAPH – REACH 7 MAINTAINED CONDITION (SEDIMENT REMOVED), MAXIMUM FLOW

FLINTKOTE CHANNEL FLOWS AT ROSELLE CULVERT

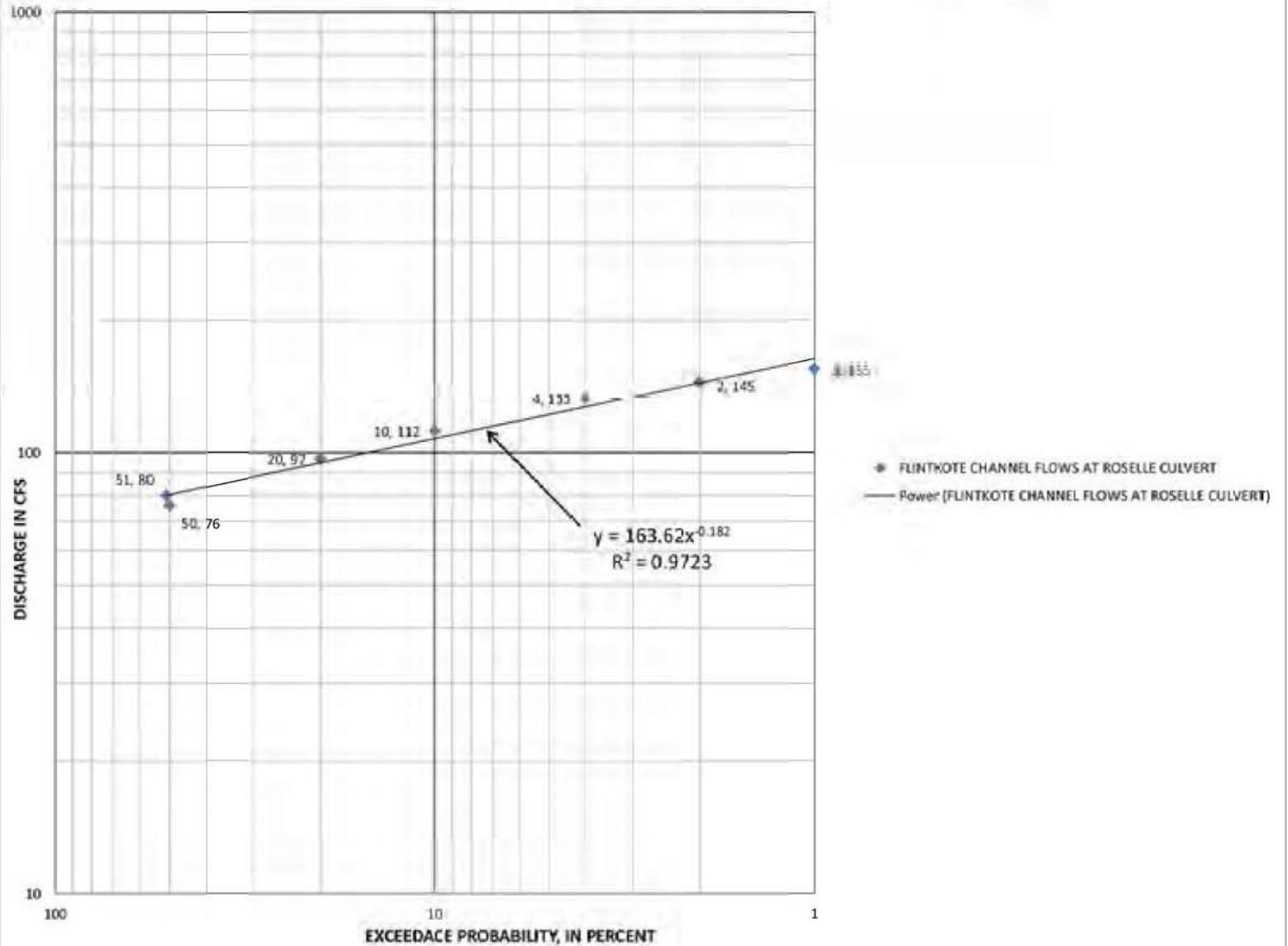
STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	76
5	20	97
10	10	112
25	4	133
50	2	145
100	1	155
2	51	80

MAXIMUM FLOW, QMAX, THAT CAN BE CONVEYED BY THE CHANNEL AND RCB CULVERT AT ROSELLE STREET WITHOUT BACKING UP ONTO THE ROADWAY.
 QMAX = 80 CFS

ASSUMPTIONS:

1. FLINTKOTE CHANNEL MAINTAINED
2. ROSELLE ST CULVERT MAINTAINED

FLINTKOTE CHANNEL FLOWS AT ROSELLE ST CULVERT - MAINTAINED - SEDIMENT REMOVED CONDITIONS



FLINTKOTE CHANNEL FLOWS AT ROSELLE CULVERT

STORM EVENT (YR)	EXCEEDANCE PROBABILITY (%)	FLOW (CFS)
2	50	69
5	20	87
10	10	101
25	4	120
50	2	131
100	1	140
2	51	74

MAXIMUM FLOW, QMAX, THAT CAN BE CONVEYED BY THE CHANNEL UPSTREAM OF ROSELLE CULVERT AT ROSELLE STREET WITHOUT BACKING UP ONTO THE ROADWAY.

QMAX = 74 CFS

ASSUMPTIONS:

1. FLINTKOTE CHANNEL MAINTAINED
2. ROSELLE ST CULVERT MAINTAINED

