

APPENDIX F5

Hydraulic Structures

Hydraulic Structures

Elfrida Subwatershed Study

Structure ID	Reach Name	HEC-RAS Cross-section ID	Opening Characteristics								
			Shape and Material	Span (m)	Rise (m)	Length (m)	Upstream Invert (m)	Downstream Invert (m)	Standing Water? (YES/NO)	Sediment Accumulation? (YES/NO)	Depth Blocked (m)
STC #1	Stoney Creek, Reach 1	440.5	Concrete Box	4.96	0.76	10.88	202.03	202.35	YES	YES, noted on downstream end	0.34
STC #2	Stoney Creek, Reach 1	600.5	Circular CSP		1.25	5.98	202.38	202.28	No information available	YES	0.03
STC #3	Stoney Creek, Reach 1	1400.5	Concrete Box	2.85	1.00	12.18	203.42	203.34	YES	YES	0.14
STC #4	Stoney Creek, Reach 1	1620.5	Circular CSP		1.48	12.11	203.20	203.15	No information available	YES	0.64
STC #5	Stoney Creek, Reach 1	1740.5	Circular CSP		1.79	10.25	203.10	203.23	No information available	YES	0.70
STC #6	Stoney Creek, Reach 1	1790.5	Circular CSP		0.84	9.72	204.06	204.12	No information available	NO	-
STC #7	Stoney Creek, Reach 3	90.5	Circular CSP		0.50	5.85	206.39	206.35	No information available	YES	0.06
STC #8	Stoney Creek, Reach 3	185	Circular CSP		0.90	18.30	206.94	206.66	NO	YES	-
STC #9	Stoney Creek, Reach 3	185	Circular CSP		0.80	15.06	207.49	207.29	YES	YES	-
STC #10	Stoney Creek, Reach 7	10.5	Circular CSP		0.50	19.10	207.13	207.06	No information available	YES	0.06
STC #11	Stoney Creek, Reach 7	35.5	Circular CSP		0.40	6.04	207.24	207.23	No information available	YES	0.05
STC #12	Stoney Creek, Reach 7	70.5	Circular CSP		0.40	11.90	207.49	207.46	No information available	NO	-
STC #13	Stoney Creek, Reach 7	120.5	Circular CSP		0.60	8.38	207.74	207.63	No information available	NO	-
STC #14	Stoney Creek, Reach 8	30.5	Circular CSP		0.50	9.05	208.38	208.36	No information available	No information available	-
STC #15	Stoney Creek, Reach 9	260.5	Circular CSP		0.50	21.10	208.07	207.90	NO	YES	-
SHC #1	Sinkhole Creek - Main, Reach 2	820	Concrete Box	6.14	1.92	18.22	203.80	203.62	YES	YES	0.30
SHC #2	Sinkhole Creek - Main, Reach 2	740	Circular CSP		1.00	5.83	203.75	203.82	No information available	YES	0.31
SHC #3	Sinkhole Creek - Main, Reach 2	1320	Circular Concrete		1.30	7.38	204.39	204.52	No information available	NO	-
SHC #4	Sinkhole Creek - Main, Reach 5	560	Concrete Box	2.44	1.22	22.00	207.74	207.55	NO	YES	-
SHC #5	Sinkhole Creek - Main, Tributary 2	560	Circular CSP		2.30	23.06	207.41	207.18	NO	YES	0.76
SHC - T #1	Sinkhole Creek - Tributary	257	Concrete Box	1.10	1.10	32.00	206.81	206.78	No information available	No information available	-
SHC - T #2	Sinkhole Creek - Tributary	339	Circular CSP		1.10	6.40	206.72	206.66	No information available	No information available - Assumed to be partially blocked (to the approximate ground level).	0.80
SHC - T #3	Sinkhole Creek - Tributary	377	Circular CSP		1.10	7.55	207.10	206.98	No information available	No information available - Assumed to be partially blocked (to the approximate ground level).	0.50
SHC - T #4	Sinkhole Creek - Tributary	429	Circular CSP		1.10	11.65	207.17	207.12	YES	YES	-
20MC - E #1	Twenty Mile Creek - East	260	Concrete Box	3.52	0.91	10.87	204.15	204.35	NO	YES	0.28
20MC - E #2	Twenty Mile Creek - East	415	Circular CSP		1.20	12.00	204.66	204.57	No information available	No information available	-
20MC - E #3	Twenty Mile Creek - East	680	Circular CSP		1.80	11.80	205.90	205.81	No information available	No information available	-
20MC - E #4	Twenty Mile Creek - East	699	Twin Circular CSP		0.90	3.00	206.17	206.12	No information available	NO	-
20MC - E #5	Twenty Mile Creek - East	770	Concrete Box	1.50	1.05	21.00	206.69	206.68	NO	YES	-
20MC - W #1	Twenty Mile Creek - West, Reach 3	500	Concrete Box	2.98	1.17	6.92	206.88	206.81	YES	YES	0.45
20MC - W #2	Twenty Mile Creek - West, Reach 3	785	Concrete Box	2.39	0.55	9.70	207.76	207.59	YES	YES	0.29
20MC - W #3	Twenty Mile Creek - West, Reach 1	435	Concrete Culvert - Extended/Lined with a Circular CSP		0.75	6.15	209.02	209.16	No information available	NO	-

Legend:

	Information taken from survey data and field photos
	Information based on field photos
	Information taken from survey data
	Information assumed (based on available data such as aerial imagery and street view)
	No survey data available for the structures Sizes assumed to be consistent with the upstream structure Lengths measured from aerial imagery Inverts generally selected to keep the slope consistent with the upstream structures or with the ground slope Shape and material assumed based on aerial imagery and street view or consistent with the upstream structure where no information is available