

PROPOSED STORM SEWER SYSTEM
STORM SEWER DESIGN TABLE - RATIONAL METHOD

Job Information
Description: Sterling Mini Storage Depot
Reviewing Entity: -
Job #: 2019.01572
Date: 11/08/19

Design Parameters	
Design Storm:	10-yr
Intensity Calculation Method:	Entity Data
Invert Calculation Method:	Invert Drop
Drop Amount:	0.1

STR.	TO STR.	LENGTH	PIPE MATERIAL	FLOW								CHEN'S METHOD		ENTITY DATA		CASTING	INLET	PIPE DIAMETER	PIPE SLOPE	MANNING'S N	FULL PIPE CAPACITY	CAPACITY UTILIZATION	FULL FLOW VELOCITY	FLOW DEPTH	FLOW VELOCITY	TRAVEL TIME	RIM		INVERT		COVER																	
				DIRECT TO CASTING		DIRECT TO INLET		cA		INLET	CASTING	CUM. cA	Tc	Tcum	CASTING												INLET	CASTING	INLET	Q	CUM. Q	ELEV.	ELEV.	U.S.	D.S.													
				c	AREA	c	AREA	INLET	CASTING																											CUM. cA	Tc	Tcum	CASTING	INLET	CASTING	INLET	Q	CUM. Q	ELEV.	ELEV.	U.S.	D.S.
				(ft)	(acres)	(ft)	(acres)																																									
101A	101	33.5	RCP	-	-	-	-	-	-	1.01	5.00	5.00	-	-	6.97	6.97	-	7.04	18	0.50	0.013	7.43	95%	4.20	1.16	4.78	0.13	613.57	610.81	607.504	607.337	4.36	1.76															
101	102	38.1	RCP	0.53	0.58	-	-	0.31	0.31	1.32	5.00	5.13	-	-	6.97	6.93	2.14	9.13	18	0.85	0.013	9.68	94%	5.48	1.16	6.23	0.12	610.81	611.16	607.237	606.913	1.86	2.54															
102	123	117.7	RCP	0.95	0.16	-	-	0.15	0.15	1.46	5.00	5.25	-	-	6.97	6.89	1.03	10.09	18	0.95	0.013	10.24	99%	5.79	1.21	6.60	0.34	611.16	610.45	606.813	605.695	2.64	3.05															
103	104	114.0	RCP	0.95	0.31	-	-	0.29	0.29	0.29	5.00	5.00	-	-	6.97	6.97	2.05	2.05	12	0.60	0.013	2.76	74%	3.51	0.64	3.85	0.54	611.22	611.22	607.447	606.763	2.61	3.29															
104	105	114.0	RCP	0.95	0.31	-	-	0.29	0.29	0.59	5.00	5.54	-	-	6.97	6.80	2.05	4.00	15	0.45	0.013	4.33	92%	3.53	0.95	4.01	0.54	611.22	611.22	606.663	606.150	3.12	3.63															
105	106	114.0	RCP	0.95	0.31	-	-	0.29	0.29	0.88	5.00	6.08	-	-	6.97	6.63	2.05	5.85	18	0.35	0.013	6.21	94%	3.52	1.16	4.00	0.54	611.22	611.22	606.050	605.651	3.46	3.86															
106	107	114.0	RCP	0.95	0.31	-	-	0.29	0.29	1.18	5.00	6.62	-	-	6.97	6.46	2.05	7.60	18	0.65	0.013	8.47	90%	4.79	1.11	5.42	0.40	611.22	611.22	605.551	604.810	3.96	4.70															
107	108	67.6	RCP	0.95	0.17	-	-	0.16	0.16	1.33	5.00	7.02	-	-	6.97	6.33	1.09	8.45	24	0.25	0.013	11.31	75%	3.60	1.29	3.95	0.31	611.22	611.37	604.710	604.541	4.26	4.58															
108	114	56.0	RCP	0.84	0.42	-	-	0.35	0.35	1.69	5.00	7.33	-	-	6.97	6.23	2.46	10.52	24	0.30	0.013	12.39	85%	3.94	1.41	4.43	0.24	611.37	610.54	604.441	604.273	4.68	4.02															
109	110	114.0	RCP	0.95	0.14	-	-	0.14	0.14	0.14	5.00	5.00	-	-	6.97	6.97	0.95	0.95	12	0.60	0.013	2.76	35%	3.51	0.41	3.19	0.54	611.22	611.22	607.402	606.718	2.65	3.34															
110	111	114.0	RCP	0.95	0.15	-	-	0.14	0.14	0.28	5.00	5.54	-	-	6.97	6.80	0.97	1.87	12	0.60	0.013	2.76	68%	3.51	0.60	3.78	0.54	611.22	611.22	606.618	605.934	3.44	4.12															
111	112	114.0	RCP	0.95	0.15	-	-	0.14	0.14	0.41	5.00	6.08	-	-	6.97	6.63	0.97	2.74	15	0.45	0.013	4.33	63%	3.53	0.72	3.74	0.54	611.22	611.22	605.834	605.321	3.95	4.46															
112	113	114.0	RCP	0.95	0.15	-	-	0.14	0.14	0.55	5.00	6.62	-	-	6.97	6.45	0.97	3.57	15	0.45	0.013	4.33	82%	3.53	0.86	3.94	0.54	611.22	611.22	605.221	604.708	4.56	5.07															
113	114	67.0	RCP	0.95	0.12	-	-	0.11	0.11	0.66	5.00	7.16	-	-	6.97	6.28	0.77	4.17	15	0.50	0.013	4.57	91%	3.72	0.94	4.22	0.30	611.22	610.54	604.608	604.273	5.17	4.83															
114	123	76.0	RCP	0.95	0.16	-	-	0.15	0.15	2.50	5.00	7.57	-	-	6.97	6.15	1.06	15.41	27	0.30	0.013	16.96	91%	4.27	1.68	4.83	0.30	610.54	610.45	604.173	603.945	3.85	3.98															
115	116	65.0	RCP	0.95	0.16	-	-	0.16	0.16	0.16	5.00	5.00	-	-	6.97	6.97	1.09	1.09	12	0.60	0.013	2.76	39%	3.51	0.44	3.30	0.31	611.31	611.31	607.866	607.476	2.28	2.67															
116	117	40.0	RCP	0.95	0.08	-	-	0.07	0.07	0.23	5.00	5.31	-	-	6.97	6.87	0.50	1.57	12	0.60	0.013	2.76	57%	3.51	0.54	3.62	0.19	611.31	611.28	607.376	607.136	2.77	2.98															
117	118	104.6	RCP	0.95	0.05	-	-	0.05	0.05	0.28	5.00	5.50	-	-	6.97	6.81	0.35	1.90	12	0.60	0.013	2.76	69%	3.51	0.61	3.79	0.50	611.28	611.28	607.036	606.408	3.08	3.71															
118	119	86.9	RCP	0.95	0.07	-	-	0.07	0.07	0.34	5.00	5.99	-	-	6.97	6.65	0.46	2.29	12	0.60	0.013	2.76	83%	3.51	0.70	3.93	0.41	611.28	611.28	606.308	605.787	3.81	4.33															
119	120	93.1	RCP	0.95	0.06	-	-	0.06	0.06	0.40	5.00	6.41	-	-	6.97	6.52	0.38	2.61	12	0.60	0.013	2.76	95%	3.51	0.77	4.00	0.44	611.28	610.70	605.687	605.128	4.43	4.41															
120	121	112.9	RCP	0.95	0.19	-	-	0.18	0.18	0.58	5.00	6.85	-	-	6.97	6.38	1.26	3.70	15	0.45	0.013	4.33	85%	3.53	0.89	3.97	0.53	610.70	610.90	605.028	604.520	4.23	4.94															
121	122	115.1	RCP	0.95	0.17	-	-	0.16	0.16	0.74	5.00	7.38	-	-	6.97	6.21	1.13	4.61	15	0.60	0.013	5.00	92%	4.08	0.95	4.63	0.47	610.90	610.90	604.420	603.729	5.04	5.73															
122	123	124.1	RCP	0.95	0.17	-	-	0.16	0.16	0.91	5.00	7.85	-	-	6.97	6.06	1.14	5.49	18	0.35	0.013	6.21	88%	3.52	1.10	3.97	0.59	610.90	610.45	603.629	603.195	5.56	5.55															
123	124	56.2	RCP	0.95	0.23	-	-	0.22	0.22	5.09	5.00	8.44	-	-	6.97	5.88	1.50	29.91	36	0.21	0.013	30.57	98%	4.32	2.40	4.93	0.22	610.45	-	603.095	602.977	4.02	-															