Culvert and Catch Basin summary sheet

Note: Stationing is approximate

System 1 Structure	Station	Outlet Pipe Length (ft)	Inlet elev. (ft)	Outlet elev. (ft)	Size (in)		Flow to CB CFS	Spread ft	Depth in	Flow in Pipe CFS
CB2	81+22.5Rt	148	424.7	423.33	12		1.7	5.6	2.7	1.645
CB3	82+73.9Rt	58	423.33	423	15RCP		1.327	9	2.2	2.32
CB4	80+39.3Lt	72	425.05	424.7	12		1	7	1.7	1
CB6	81+15Lt	66	424.45	424.12	12		0.2			1.1
CB7	81+85Lt	111	423.87	423.3	12		0.5			1.4
CB9	83+00Lt	10	423.05	423	12		0.2			1.6
CB8	83+00Lt	96	422.5	422.01	18		0.9	5	2.4	4.37
CB10	84+00Lt	161	420.51 ?		18		Solid Cover			7.65
CB12	83+64.19R	94	422.51	422.04	12RCP		0.7	6.9	1.7	0.644
CB14	84+60.9Rt	37	422.04	421.85	12		0.285	5.2	1.3	0.886
CB15	85+02Rt	50	421.85	421.6	12RCP		0.139			1.93
CB16	85+50Rt	45	422.64	421.85	12		1.149	6.2	2.2	1
CB17	85+20Lt	119	421.35	420.76	15		1.36	6.1	2.9	3.53
CB17B	86+76Lt	149	423.09	421.6	12		0.169	2.4	1.2	0.561
CB17A	86+76Lt	12	423.4	423.34	12		0.5			0.426
System2										
CB18	88+96.9Rt	349	424	422.25	12		0.4	3.7	1.8	0.4
CB20	92+50Rt	397	422	420	12		1.53	6.4	3.1	1.7
CB22A	96+50.9	346	420	417.5	12	(+ stub pip	0.109	2.1	1	1.7
CB22	100+00Rt	36	416.5	416.25	18RCP		1.4	6.1	3	5.7
CB19	92+50Lt	746	422.25	418.5	12		1.7	6.6	3.2	1.6
CB21	100+00Lt	166	416	407	24		1.5	6.3	3	9.91
CB23	105+15Lt	507	419.8	417.25	12		0.7	4.7	2.3	2.04
CB23A	1002+93Lt	262	421.13	419.8	12		0.6	4.1	1.9	1.49
CB25	2000+45Rt	55	421.42	421.13	12RCP		0.248	2.4	1.2	1.014
CB26	107+94.2Lt	53	421.67	421.42	12		0.18	4	0.96	0.18
CB25A	2000+57.8	34	421.57	421.4	12RCP		0.404	2.9	1.4	0.621
CB24	2000+07.2	53	421.84	421.57	12		0.307	3.2	1.5	0.291
CB24A	105+50Rt	546	420.25	418.25	15		1.2	5.8	2.8	3.1
CB27	107+98Rt	230	421.75	420.5	12		1.7	5.1	3.7	2.32
F27A	107+98Rt	12	421.81	421.75	12		0.6			0.781
System 3										
CB29	133+50Lt	131	413.73	413.38	12		2.094	6.5	3.1	0.584
CB31	134+90Lt	28	413.18	413.1	18RCP		3.8	8.1	3.9	4.26
CB30	133+50Rt	136	413.7	413.3	12		1.335	5.5	2.6	0.962
CB32	134+90Rt	173	413.1	412.58	18		1.417	5.6	2.7	5.49
CB31A	134+90Lt	4	414	413.68	12	?				0.772
CB	137+15Lt	225	414.74	414.25	12	existing pr	0.7?			0.79
CB33	140+00Rt						1.1	5.1	2.4	1.88
Stub33	140+00Lt						1.3			1.38

WIN 17280.10 **Town** Fryeburg

					Rational												Regression											
					T =	10		T =	25		T =	50		T =	100		T =	10		T =	25		T =	50		T =	100	
Sta	Asset ID	A_{ws} (ac)	NWI (%)	C	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1	Q	$D_{1.5}$	D_1
81+22.4Rt	CB2	0.525138	0.0	0.8	1.7	10	12	2.0	11	13	2.3	11	13	2.6	12	14	0.4	6	7	0.5	6	8	0.6	7	8	0.7	7	8
81+22.4Rt	Stub2	??	0.0	0.8	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#######	######	#VALUE!	######	#####	#VALUE!	######	#####	#####	#####	#####	#VALUE!	######	######	#VALUE!	######	#####	#VALUE!	######	######
82+73.9Rt	CB3A	0.200987	0.0	0.9	0.9	8	9	1.2	9	10	1.3	9	11	1.5	9	11	0.2	4	5	0.2	5	6	0.3	5	6	0.3	5	6
80+39.3Lt	CB4	0.321396	0.0	0.7	1.0	8	10	1.3	9	10	1.5	9	11	1.6	10	12	0.3	5	6	0.4	6	6	0.4	6	7	0.5	6	7
			0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
81+14.7Lt	CB6	0.0861	0.0	0.4	0.2	5	5	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	4	4	0.1	4	5	0.2	4	5
81+84.9Lt	CB7	0.121	0.0	0.7	0.5	6	7	0.6	7	8	0.7	7	8	0.8	7	9	0.1	4	4	0.2	4	5	0.2	4	5	0.2	5	5
83+10Lt	CB8	0.170455	0.0	0.95	0.9	8	9	1.1	8	10	1.2	9	10	1.4	9	11	0.2	4	5	0.2	5	5	0.2	5	6	0.3	5	6
83+10Lt	CB9	0.118	0.0	0.3	0.2	5	5	0.3	5	6	0.3	5	6	0.3	5	6	0.1	4	4	0.2	4	5	0.2	4	5	0.2	5	5
84+00Lt	CB10	Solid Cover	0.0	0.95	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#######	######	#VALUE!	######	#####	#VALUE!	######	#####	#####	#####	#####	#VALUE!	######	######	#VALUE!	######	#####	#VALUE!	######	######
3+95/135L	CB10A	Solid Cover	0.0	0.8	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#######	######	#VALUE!	######	#####	#VALUE!	######	#####	#####	#####	#####	#VALUE!	######	######	#VALUE!	######	#####	#VALUE!	######	######
			0.0	0.7	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
83+70Rt	CB12	0.137741	0.0	0.95	0.7	7	9	0.9	8	9	1.0	8	10	1.2	9	10	0.1	4	5	0.2	4	5	0.2	5	5	0.2	5	6
		0	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	0	0	0.0	0	0	0.0	0	0	0.0	0	0
84+60Rt	CB14	0.057392	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	3	4	0.1	4	4	0.1	4	4
85+00Rt	CB15	0.037879	0.0	0.7	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	3	3	0.1	3	3	0.1	3	4	0.1	3	4
85+50Rt	CB16	0.285124	0.0	0.8	1.1	8	10	1.3	9	11	1.5	9	11	1.7	10	12	0.3	5	6	0.3	5	6	0.4	6	7	0.4	6	7
85+25Lt	CB17	0.408	0.0	0.7	1.2	9	10	1.5	9	11	1.7	10	12	1.9	10	12	0.3	5	6	0.4	6	7	0.5	6	7	0.6	7	8
96+45Rt	CB22A	0.021694	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	2	3	0.0	3	3	0.0	3	3	0.1	3	3
92+00Lt	CB19	0.412	0.0	0.95	1.7	10	12	2.0	11	13	2.3	11	13	2.6	12	14	0.3	5	6	0.4	6	7	0.5	6	7	0.6	7	8
92+00Rt	CB20	0.353	0.0	0.95	1.5	9	11	1.8	10	12	2.1	11	13	2.4	11	13	0.3	5	6	0.4	6	7	0.4	6	7	0.5	6	7
100+00Lt	CB21	0.43565	0.0	0.8	1.5	9	11	1.8	10	12	2.1	11	13	2.3	11	13	0.4	6	6	0.5	6	7	0.5	6	8	0.6	7	8
100+00Rt	CB22	0.473	0.0	0.7	1.4	9	11	1.7	10	12	1.9	10	12	2.1	11	13	0.4	6	7	0.5	6	7	0.6	7	8	0.7	7	8
105+10Lt	CB23	0.136	0.0	0.95	0.7	7	9	0.9	8	9	1.0	8	10	1.2	9	10	0.1	4	5	0.2	4	5	0.2	5	5	0.2	5	6
105+50Rt	CB24A	0.246	0.0	0.95	1.2	9	10	1.4	9	11	1.6	10	11	1.8	10	12	0.2	5	5	0.3	5	6	0.3	5	6	0.4	6	7
2000+55Lt	CB25A	0.0808	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	4	4	0.1	4	5	0.2	4	5
2000+45Rt	CB25	0.0624	0.0	0.7	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	3	4	0.1	4	4	0.1	4	4
107+95Lt	CB26	0.0489	0.0	0.7	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	3	0.1	3	4	0.1	3	4	0.1	4	4
107+95Rt	CB27	0.441	0.0	0.95	1.7	10	12	2.1	11	13	2.5	11	13	2.8	12	14	0.4	6	7	0.5	6	7	0.5	6	8	0.6	7	8
108+60Lt	F27	0.707	0.0	0.3	0.8	7	9	1.0	8	9	1.1	8	10	1.2	9	10	0.5	6	8	0.7	7	8	0.8	7	9	0.9	8	9
89+00Rt	CB18	0.0783	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	4	4	0.1	4	5	0.2	4	5
1003+00Lt	CB23A	0.126	0.0	0.8	0.6	7	8	0.7	7	8	0.8	7	9	0.9	8	9	0.1	4	5	0.2	4	5	0.2	4	5	0.2	5	5
86+75/20Lt	CB17B	0.033747	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.0	3	3	0.1	3	3	0.1	3	4	0.1	3	4
86+75/30Lt	CB17A	0.334	0.0	0.3	0.5	6	7	0.6	7	8	0.6	7	8	0.7	7	8	0.3	5	6	0.4	6	7	0.4	6	7	0.5	6	7
89+00Rt	CB18	0.0783	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	4	4	0.1	4	5	0.2	4	5
1003+95Rt	CB24	0.0581	0.0	0.95	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#####	#NUM!	#NUM!	#####	0.1	3	4	0.1	3	4	0.1	4	4	0.1	4	4

WIN 17280.10 **Town** Fryeburg

						T = 10							T = 25							T = 50							T = 100						
Sta	Asset ID	A_{ws} (ac)	NWI (%)	C	A (mi^2)	$P_{15\|T}$ (in)	T_L (hr)	T_c (min)	i_T (in/hr)	Q	$D_{1.5}$	D_1	$P_{15\|T}$ (in)	T_L (hr)	T_c (min)	i_T (in/hr)	Q	$D_{1.5}$	D_1	$P_{15\|T}$ (in)	T_L (hr)	T_c (min)	i_T (in/hr)	Q	$D_{1.5}$	D_1	$P_{15\|T}$ (in)	T_L (hr)	T_c (min)	i_T (in/hr)	Q	$D_{1.5}$	D_1
81+22.4Rt	CB2	0.525138	0	0.8	0.001	0.874	0.12	12.1	3.98	1.7	10	12	1.05	0.12	11.7	4.87	2.0	11	13	1.19	0.11	11.4	5.58	2.3	11	13	1.32	0.11	11.2	6.30	2.6	12	14
81+22.4Rt	Stub2	??	0	0.8	#VALUE!	0.874	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1.05	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#####	#####	1.19	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	#####	1.32	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	####
82+73.9Rt	CB3A	0.200987	0	0.9	0.000	0.874	0.08	7.6	5.22	0.9	8	9	1.05	0.07	7.4	6.39	1.2	9	10	1.19	0.07	7.2	7.31	1.3	9	11	1.32	0.07	7.1	8.23	1.5	9	11
80+39.3Lt	CB4	0.321396	0	0.7	0.001	0.874	0.10	9.6	4.58	1.0	8	10	1.05	0.09	9.3	5.62	1.3	9	10	1.19	0.09	9.0	6.45	1.5	9	11	1.32	0.09	8.9	7.28	1.6	10	12
0	0	0	0	0.95	0.000	0.874	0.00	0.0	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.00	0.0	#NUM!	#NUM!	#####	#####	1.19	0.00	0.0	#NUM!	#NUM!	####	#####	1.32	0.00	0.0	#NUM!	#NUM!	####	####
81+14.7Lt	CB6	0.0861	0	0.4	0.000	0.874	0.05	5.1	6.27	0.2	5	5	1.05	0.05	4.9	#NUM!	#NUM!	#####	#####	1.19	0.05	4.8	#NUM!	#NUM!	####	#####	1.32	0.05	4.7	#NUM!	#NUM!	####	####
81+84.9Lt	CB7	0.121	0	0.7	0.000	0.874	0.06	6.0	5.87	0.5	6	7	1.05	0.06	5.8	7.16	0.6	7	8	1.19	0.06	5.6	8.17	0.7	7	8	1.32	0.06	5.5	9.18	0.8	7	9
83+10Lt	CB8	0.170455	0	0.95	0.000	0.874	0.07	7.1	5.44	0.9	8	9	1.05	0.07	6.8	6.65	1.1	8	10	1.19	0.07	6.7	7.60	1.2	9	10	1.32	0.07	6.5	8.55	1.4	9	11
83+10Lt	CB9	0.118	0	0.3	0.000	0.874	0.06	5.9	5.90	0.2	5	5	1.05	0.06	5.7	7.19	0.3	5	6	1.19	0.06	5.6	8.21	0.3	5	6	1.32	0.05	5.5	9.22	0.3	5	6
84+00Lt	CB10	Solid Cover	0	0.95	#VALUE!	0.874	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1.05	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#####	#####	1.19	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	#####	1.32	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	####
3+95/135L	CB10A	Solid Cover	0	0.8	#VALUE!	0.874	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#VALUE!	1.05	#VALUE!	#VALUE!	#VALUE!	#VALUE!	#####	#####	1.19	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	#####	1.32	#VALUE!	#VALUE!	#VALUE!	#VALUE!	####	####
0	0	0	0	0.7	0.000	0.874	0.00	0.0	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.00	0.0	#NUM!	#NUM!	#####	#####	1.19	0.00	0.0	#NUM!	#NUM!	####	#####	1.32	0.00	0.0	#NUM!	#NUM!	####	####
83+70Rt	CB12	0.137741	0	0.95	0.000	0.874	0.06	6.4	5.71	0.7	7	9	1.05	0.06	6.2	6.97	0.9	8	9	1.19	0.06	6.0	7.96	1.0	8	10	1.32	0.06	5.9	8.95	1.2	9	10
0	0	0	0	0.95	0.000	0.874	0.00	0.0	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.00	0.0	#NUM!	#NUM!	#####	#####	1.19	0.00	0.0	#NUM!	#NUM!	####	#####	1.32	0.00	0.0	#NUM!	#NUM!	####	####
84+60Rt	CB14	0.057392	0	0.95	0.000	0.874	0.04	4.2	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.04	4.0	#NUM!	#NUM!	#####	#####	1.19	0.04	3.9	#NUM!	#NUM!	####	#####	1.32	0.04	3.9	#NUM!	#NUM!	####	####
85+00Rt	CB15	0.037879	0	0.7	0.000	0.874	0.03	3.4	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.03	3.3	#NUM!	#NUM!	#####	#####	1.19	0.03	3.2	#NUM!	#NUM!	####	#####	1.32	0.03	3.2	#NUM!	#NUM!	####	####
85+50Rt	CB16	0.285124	0	0.8	0.000	0.874	0.09	9.0	4.75	1.1	8	10	1.05	0.09	8.7	5.82	1.3	9	11	1.19	0.09	8.5	6.67	1.5	9	11	1.32	0.08	8.4	7.52	1.7	10	12
85+25Lt	CB17	0.408	0	0.7	0.001	0.874	0.11	10.7	4.27	1.2	9	10	1.05	0.10	10.4	5.24	1.5	9	11	1.19	0.10	10.1	6.01	1.7	10	12	1.32	0.10	9.9	6.78	1.9	10	12
96+45Rt	CB22A	0.021694	0	0.95	0.000	0.874	0.03	2.6	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.03	2.5	#NUM!	#NUM!	#####	#####	1.19	0.02	2.5	#NUM!	#NUM!	####	#####	1.32	0.02	2.4	#NUM!	#NUM!	####	####
92+00Lt	CB19	0.412	0	0.95	0.001	0.874	0.11	10.8	4.26	1.7	10	12	1.05	0.10	10.4	5.22	2.0	11	13	1.19	0.10	10.2	5.99	2.3	11	13	1.32	0.10	10.0	6.76	2.6	12	14
92+00Rt	CB20	0.353	0	0.95	0.001	0.874	0.10	10.0	4.46	1.5	9	11	1.05	0.10	9.7	5.47	1.8	10	12	1.19	0.09	9.5	6.27	2.1	11	13	1.32	0.09	9.3	7.08	2.4	11	13
100+00Lt	CB21	0.43565	0	0.8	0.001	0.874	0.11	11.1	4.19	1.5	9	11	1.05	0.11	10.7	5.14	1.8	10	12	1.19	0.10	10.5	5.89	2.1	11	13	1.32	0.10	10.3	6.65	2.3	11	13
100+00Rt	CB22	0.473	0	0.7	0.001	0.874	0.12	11.5	4.09	1.4	9	11	1.05	0.11	11.1	5.02	1.7	10	12	1.19	0.11	10.9	5.75	1.9	10	12	1.32	0.11	10.7	6.49	2.1	11	13
105+10Lt	CB23	0.136	0	0.95	0.000	0.874	0.06	6.3	5.73	0.7	7	9	1.05	0.06	6.1	6.99	0.9	8	9	1.19	0.06	6.0	7.98	1.0	8	10	1.32	0.06	5.9	8.97	1.2	9	10
105+50Rt	CB24A	0.246	0	0.95	0.000	0.874	0.08	8.4	4.95	1.2	9	10	1.05	0.08	8.1	6.06	1.4	9	11	1.19	0.08	7.9	6.94	1.6	10	11	1.32	0.08	7.8	7.82	1.8	10	12
2000+55Lt	CB25A	0.0808	0	0.95	0.000	0.874	0.05	4.9	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.05	4.8	#NUM!	#NUM!	#####	#####	1.19	0.05	4.6	#NUM!	#NUM!	####	#####	1.32	0.05	4.6	#NUM!	#NUM!	####	####
2000+45Rt	CB25	0.0624	0	0.7	0.000	0.874	0.04	4.3	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.04	4.2	#NUM!	#NUM!	#####	#####	1.19	0.04	4.1	#NUM!	#NUM!	####	#####	1.32	0.04	4.0	#NUM!	#NUM!	####	####
107+95Lt	CB26	0.0489	0	0.7	0.000	0.874	0.04	3.9	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.04	3.7	#NUM!	#NUM!	#####	#####	1.19	0.04	3.6	#NUM!	#NUM!	####	#####	1.32	0.04	3.6	#NUM!	#NUM!	####	####
107+95Rt	CB27	0.441	0	0.95	0.001	0.874	0.11	11.1	4.17	1.7	10	12	1.05	0.11	10.8	5.12	2.1	11	13	1.19	0.11	10.5	5.87	2.5	11	13	1.32	0.10	10.3	6.63	2.8	12	14
108+60Lt	F27	0.707	0	0.3	0.001	0.874	0.14	14.0	3.66	0.8	7	9	1.05	0.14	13.5	4.49	1.0	8	9	1.19	0.13	13.2	5.14	1.1	8	10	1.32	0.13	13.0	5.80	1.2	9	10
89+00Rt	CB18	0.0783	0	0.95	0.000	0.874	0.05	4.8	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.05	4.7	#NUM!	#NUM!	#####	#####	1.19	0.05	4.6	#NUM!	#NUM!	####	#####	1.32	0.04	4.5	#NUM!	#NUM!	####	####
1003+00Lt	CB23A	0.126	0	0.8	0.000	0.874	0.06	6.1	5.82	0.6	7	8	1.05	0.06	5.9	7.10	0.7	7	8	1.19	0.06	5.8	8.11	0.8	7	9	1.32	0.06	5.6	9.11	0.9	8	9
36+75/20Lt	CB17B	0.033747	0	0.95	0.000	0.874	0.03	3.2	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.03	3.1	#NUM!	#NUM!	#####	#####	1.19	0.03	3.1	#NUM!	#NUM!	####	#####	1.32	0.03	3.0	#NUM!	#NUM!	####	####
36+75/30Lt	CB17A	0.334	0	0.3	0.001	0.874	0.10	9.8	4.53	0.5	6	7	1.05	0.09	9.4	5.56	0.6	7	8	1.19	0.09	9.2	6.38	0.6	7	8	1.32	0.09	9.0	7.20	0.7	7	8
89+00Rt	CB18	0.0783	0	0.95	0.000	0.874	0.05	4.8	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.05	4.7	#NUM!	#NUM!	#####	#####	1.19	0.05	4.6	#NUM!	#NUM!	####	#####	1.32	0.04	4.5	#NUM!	#NUM!	####	####
1003+95Rt	CB24	0.0581	0	0.95	0.000	0.874	0.04	4.2	#NUM!	#NUM!	#NUM!	#NUM!	1.05	0.04	4.1	#NUM!	#NUM!	#####	#####	1.19	0.04	4.0	#NUM!	#NUM!	####	#####	1.32	0.04	3.9	#NUM!	#NUM!	####	####

Closed System Worksheet - Preliminary Design of Simple Systems

Start data entry from bottom; enter data in blue cells only.

Units: US (US or metric) **Portland** **Rainfall IDF Curve**

Design Event: 10 **-Year**

2/11/2019

Pin # 17280.10

Project: Fryeburg

Design of Closed System	Partial Flow	30	Time in Pipe Section	min	0.3	0.3	0.4	0.0		0.4	0.3	0.3		0.1		0.6	0.2	0.2	0.4	0.4	0.2			0.1	0.6
		29	Velocity (design) =V	ft/s	3.9	4.1	4.4	4.5		5.7	3.8	5.8		6.2		2.7	3.9	3.5	5.3	7.2	12.8			3.1	4.3
		28	Flow Depth (design)	in	4	5	5	6		5	9	9		3		4	4	8	10	10	8			3	3
		27	Flow Depth Fraction (design)		0.35	0.38	0.43	0.46		0.40	0.72	0.59		0.26		0.34	0.33	0.66	0.80	0.58	0.71			0.23	0.22
		26	Percent of Capcity Q_F		27	30	39	43		33	86	66		15		26	24	77	97	64	85			12	11
	Full Flow	25	Pipe-full Capacity Q_F	ft3/s	3.6	3.6	3.69	3.64		4.95	2.69	6.67		6.82		2.52	3.69	2.52	3.62	11.96	8.93			3.64	5.15
		24	Pipe-Full Velocity V_F	ft/s	4.6	4.6	4.7	4.6		6.3	3.4	5.4		8.7		3.2	4.7	3.2	4.6	6.8	11.4			4.6	6.6
		23	Hydraulic Radius	ft	0.25	0.25	0.25	0.25		0.25	0.25	0.31		0.25		0.25	0.25	0.25	0.25	0.38	0.25			0.25	0.25
		22	Pipe Area	ft2	0.79	0.79	0.79	0.79		0.79	0.79	1.23		0.79		0.79	0.79	0.79	0.79	1.77	0.79			0.79	0.79
	Pipe Design	21	***Pipe Diam (design)***	***in***	***12***	***12***	***12***	***12***		***12***	***12***	***15***		***12***		***12***	***12***	***12***	***12***	***18***	***12***			***12***	***12***
		20	Pipe Diam (exact)	in	7	8	8	9		8	11	13		6		7	7	11	12	15	11			5	5
		19	Flow Depth Fraction (nom)		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		18	Manning Roughness Coeff = n		0.009	0.009	0.009	0.009	0.013	0.009	0.013	0.009	0.013	0.009	0.013	0.013	0.009	0.013	0.009	0.009	0.009	0.013	0.013	0.009	0.009
Runoff Calculation		17	Runoff Total (design) Q_T	ft3/s	1.0	1.1	1.4	1.6		1.645	2.319	4.370		1.001		0.644	0.886	1.931	3.528	7.653	7.564			0.426	0.561
		16	Runoff Offsite = Q_{off}	ft3/s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0
		15	Runoff Direct Q = μCiA	ft3/s	1.0	1.1	1.4	1.6		1.645	2.319	4.370		1.001		0.644	0.886	1.931	3.528	7.653	7.564			0.426	0.561
		14	Rainfall Rate I	in/hr	4.3	4.2	4.2	4.1		3.9	3.9	3.8		4.4		4.9	4.8	4.4	4.1	3.8	3.8			4.3	4.2
		13	Cum Wt'ed C		0.70	0.64	0.65	0.59		0.80	0.83	0.74		0.80		0.95	0.95	0.85	0.66	0.71	0.71			0.30	0.36
		12	Total Area $=A_T$	ac	0.3	0.4	0.53	0.6460		0.5250	0.7260	1.5420		0.2850		0.1380	0.1950	0.5180	1.2937	2.8358	2.8368			0.3340	0.3677
		11	Total T_c (min)	min	9.60	9.91	10.18	10.60		12.10	12.54	12.79		9.00		6.40	6.98	9.00	10.70	12.79	13.16			9.80	9.86
		10	Incremental Rational Coeff=C		0.7	0.40	0.70	0.30		0.80	0.90	0.66		0.80		0.95	0.95	0.79	0.54	0.74	0.95			0.30	0.95
		9	Incremental Area A_I	ac	0.321	0.086	0.121	0.118		0.525	0.201	0.816		0.285		0.138	0.057	0.323	0.776	1.542	0.001			0.334	0.034
		8	Time of Conc T_c	min	9.6	5.1	6.0	5.9		12.1	7.6	10.6		9.0		6.4	5.0	9.0	10.7	12.8	5.0			9.8	5.0
System Topography		7	slope S	ft/ft	0.0049	0.0050	0.0051	0.0050		0.0093	0.0057	0.0051		0.0176		0.0050	0.0051	0.0050	0.0050	0.0062	0.0301			0.0050	0.0100
		6	Inv Elev Lower End	ft	424.700	424.120	423.300	423.000		423.330	423.000	422.010		421.850		422.040	421.850	421.600	420.760	419.700	415.000			423.340	421.60
		5	Inv Elev Upper End	ft	425.050	424.450	423.870	423.050		424.700	423.330	422.500		422.640		422.510	422.040	421.850	421.350	420.700	419.700			423.400	423.09
		4	Length (m)	ft	72.00	66.00	111.00	10.00	0.00	148.00	58.00	96.00	0.00	45.00	0.00	94.00	37.00	50.00	119.00	161.00	156.00	0.00	0.00	12.00	149.00
Location		3	To Station (lower)	ft	72	66	111	10		148	58	96		45		94	37	50	119	161	156			12	149
		2	From Station (upper)	ft	0	0	0	0		0	0	0		0	0	0	0	0	0	0	0	0		0	0
		1	Route/Street/Watershed		CB4	CB6	CB7	CB9		CB2	CB3	CB8		CB16		CB12	CB14	CB15	CB17	CB10	CB10A			CB17A	CB17B

Rainfall IDF Station	1
Event Return Period (yrs)	10

(Portland-1/Eastport-2/Rangely-3/ Presque Isle-4/Newport-5/Millinocket-6)

Units	US

(US or metric)

Closed System Worksheet - Preliminary Design of Simple Systems

Start data entry from bottom; enter data in blue cells only.

Units: US (US or metric) **Portland** **Rainfall IDF Curve**

Design Event: 10 **-Year**

2/11/2019

Pin # 17280.10

Project: Fryeburg

Design of Closed System	Partial Flow	30	Time in Pipe Section	min	1.9	1.4	1.1	0.1	0.2		2.8		0.1	0.8	2.0		0.3	0.2	0.3	1.0	1.8		0.4		0.8		0.7		1.4	0.0	0.1	0.6		0.2	0.1
		29	Velocity (design) =V	ft/s	3.0	4.6	5.2	5.3	17.0		4.5		3.5	5.1	4.5		2.8	2.7	3.0	4.4	4.8		2.4		2.7		3.2		2.7	9.8	3.5	5.0		3.3	4.7
		28	Flow Depth (design)	in	3	6	5	11	8		6		4	7	10		2	4	5	5	6		2		4		5		5	2	12	11		6	6
		27	Flow Depth Fraction (design)		0.22	0.48	0.44	0.59	0.69		0.46		0.33	0.56	0.82		0.19	0.34	0.44	0.44	0.53		0.15		0.32		0.41		0.39	0.16	0.64	0.59		0.53	0.51
		26	Percent of Capcity Q_F		11	47	39	66	83		44		24	61	100		8	25	41	41	56		5		22		34		33	5	74	66		55	52
	Full Flow	25	Pipe-full Capacity Q_F	ft3/s	3.6	3.7	4.37	8.75	11.98		3.65		3.32	3.79	3.11		3.67	2.52	2.50	3.67	3.65		3.67		2.66		2.79		2.40	14.56	5.72	8.32		2.52	3.64
		24	Pipe-Full Velocity V_F	ft/s	4.6	4.7	5.6	5.0	15.3		4.6		4.2	4.8	4.0		4.7	3.2	3.2	4.7	4.6		4.7		3.4		3.6		3.1	18.5	3.2	4.7		3.2	4.6
		23	Hydraulic Radius	ft	0.25	0.25	0.25	0.38	0.25		0.25		0.25	0.25	0.25		0.25	0.25	0.25	0.25	0.25		0.25		0.25		0.25		0.25	0.25	0.38	0.38		0.25	0.25
		22	Pipe Area	ft2	0.79	0.79	0.79	1.77	0.79		0.79		0.79	0.79	0.79		0.79	0.79	0.79	0.79	0.79		0.79		0.79		0.79		0.79	0.79	1.77	1.77		0.79	0.79
	Pipe Design	21	***Pipe Diam (design)***	***in***	***12***	***12***	***12***	***18***	***12***		***12***		***12***	***12***	***12***		***12***	***12***	***12***	***12***	***12***		***12***		***12***		***12***		***12***	***12***	***18***	***18***		***12***	***12***
		20	Pipe Diam (exact)	in	5	9	8	15	11		9		7	10	12		5	7	9	9	10		4		7		8		8	4	16	15		10	9
		19	Flow Depth Fraction (nom)		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		18	Manning Roughness Coeff = n		0.009	0.009	0.009	0.013	0.009	0.013	0.009	0.013	0.009	0.009	0.009	0.013	0.009	0.013	0.013	0.009	0.009	0.013	0.009	0.013	0.009	0.013	0.009	0.013	0.009	0.009	0.013	0.009	0.013	0.013	0.009
Runoff Calculation		17	Runoff Total (design) Q_T	ft3/s	0.4	1.7	1.7	5.7	9.910		1.604		0.781	2.316	3.103		0.291	0.621	1.014	1.488	2.036		0.180		0.584		0.962		0.789	0.772	4.257	5.486		1.377	1.879
		16	Runoff Offsite = Q_{off}	ft3/s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0						
		15	Runoff Direct Q = μCiA	ft3/s	0.4	1.7	1.7	5.7	9.910		1.604		0.781	2.316	3.103		0.291	0.621	1.014	1.488	2.036		0.180		0.584		0.962		0.789	0.772	4.257	5.486		1.377	1.879
		14	Rainfall Rate I	in/hr	5.3	4.2	4.0	3.6	3.6		4.1		3.7	3.7	3.6		5.3	5.2	5.1	5.0	4.8		5.3		4.0		4.1		2.6	2.6	2.4	2.4		2.5	2.5
		13	Cum Wt'ed C		0.95	0.95	0.95	0.70	0.76		0.95		0.30	0.55	0.62		0.95	0.86	0.79	0.79	0.84		0.70		0.30		0.60		0.10	0.10	0.22	0.26		0.15	0.19
		12	Total Area $=A_T$	ac	0.1	0.4	0.45	2.2830	3.6432		0.4120		0.7070	1.1470	1.3930		0.0581	0.1389	0.2502	0.3762	0.5122		0.0489		0.4900		0.3870		2.9990	3.0000	7.9800	8.7550		3.6800	3.8950
		11	Total T_c (min)	min	5.00	10.00	11.44	14.81	14.93		10.80		14.00	14.06	14.81		5.00	5.32	5.53	6.10	7.09		5.00		11.70		10.50		28.00	29.37	33.90	34.03		30.90	31.13
		10	Incremental Rational Coeff=C		0.95	0.95	0.95	0.64	0.86		0.95		0.30	0.95	0.95		0.95	0.80	0.70	0.80	0.95		0.70		0.30		0.60		0.10	0.95	0.30	0.68		0.15	0.95
		9	Incremental Area A_i	ac	0.078	0.353	0.022	1.830	1.360		0.412		0.707	0.440	0.246		0.058	0.081	0.111	0.126	0.136		0.049		0.490		0.387		2.999	0.001	4.980	0.775		3.680	0.215
		8	Time of Conc T_c	min	5.0	10.0	5.0	14.8	11.1		10.8		14.0	11.1	8.4		5.0	5.0	5.0	6.1	6.3		5.0		11.7		10.5		28.0	5.0	33.9	10.5		30.9	7.9
Topography	System	7	slope S	ft/ft	0.0050	0.0050	0.0072	0.0069	0.0542		0.0050		0.0042	0.0054	0.0037		0.0051	0.0050	0.0049	0.0051	0.0050		0.0051		0.0027		0.0029		0.0022	0.0800	0.0030	0.0030		0.0050	0.0050
		6	Inv Elev Lower End	ft	422.25	420.00	417.50	416.25	407.00		418.50		421.75	420.50	418.25		421.57	421.40	421.13	419.80	417.25		421.40		413.38		413.30		414.25	413.68	413.10	412.58		415.62	415.25
		5	Inv Elev Upper End	ft	424.00	422.00	420.00	416.50	416.00		422.25		421.80	421.75	420.25		421.84	421.57	421.40	421.13	419.80		421.67		413.73		413.70		414.74	414.00	413.18	413.10		415.85	415.37
		4	Length (m)	ft	349.00	397.00	346.00	36.00	166.00	0.00	746.00	0.00	12.00	230.00	546.00	0.00	53.00	34.00	55.00	262.00	507.00	0.00	53.00	0.00	131.00	0.00	136.00	0.00	225.00	4.00	27.00	173.00	0.00	46.00	24.00
Location		3	To Station (lower)	ft	349	397	346	36	166		746		12	230	546		53	34	55	262	507		53		131		136		225	4	27	173		46	24
		2	From Station (upper)	ft	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0		0	0	0		0		0	0	0	0		0	0
		1	Route/Street/Watershed		CB18	CB20	CB22A	CB22	CB21		CB19		F27A	CB27	CB24A		CB24	CB25A	CB25	CB23A	CB23		CB26		CB29		CB30		F DetentPo	CB31A	CB31	CB32		Stub33	CB33

Rainfall IDF Station	1
Event Return Period (yrs)	10

(Portland-1/Eastport-2/Rangely-3/ Presque Isle-4/Newport-5/Millinocket-6)

Units	US

(US or metric)

Hydraulic Analysis Report

Project Data

Project Title:
Designer:
Project Date: Monday, February 11, 2019
Project Units: U.S. Customary Units
Notes:

Curb and Gutter Analysis: CB2Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0075 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.5682 ft

Gutter Result Parameters

Design Flow: 1.7000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.6201 ft^2
Eo (Gutter Flow to Total Flow): 0.6952
Gutter Depth at Curb: 2.6727 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 1.2731 cfs
Bypass Flow: 0.4269 cfs
Approach Velocity: 2.7415 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.7489

Curb and Gutter Analysis: CB3Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0036 ft/ft
Cross-Slope of Pavement: 0.0200 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0200 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 8.9802 ft

Gutter Result Parameters

Design Flow: 1.3270 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.8064 ft^2
Eo (Gutter Flow to Total Flow): 0.4897
Gutter Depth at Curb: 2.1552 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1758 ft
Computed Width of Spread at Sag: 9.7909 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB4Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0075 ft/ft
Cross-Slope of Pavement: 0.0200 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0200 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 7.0379 ft

Gutter Result Parameters

Design Flow: 1.0000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.4953 ft^2
Eo (Gutter Flow to Total Flow): 0.5904
Gutter Depth at Curb: 1.6891 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1456 ft
Computed Width of Spread at Sag: 8.2798 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: offroadCB6Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.6928 ft

Gutter Result Parameters

Design Flow: 0.2000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1450 ft^2
Eo (Gutter Flow to Total Flow): 0.9733
Gutter Depth at Curb: 1.2925 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.0498 ft
Computed Width of Spread at Sag: 2.2448 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB8Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0036 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.0339 ft

Gutter Result Parameters

Design Flow: 0.9000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.5068 ft^2
Eo (Gutter Flow to Total Flow): 0.7413
Gutter Depth at Curb: 2.4163 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.7413 cfs
Bypass Flow: 0.1587 cfs
Approach Velocity: 1.7758 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8236

Curb and Gutter Analysis: SolidCoverCB10Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.9800 ft

Gutter Result Parameters

Design Flow: 0.2030 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1776 ft^2
Eo (Gutter Flow to Total Flow): 0.9487
Gutter Depth at Curb: 1.4304 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.1979 cfs
Bypass Flow: 0.0051 cfs
Approach Velocity: 1.1429 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9747

Curb and Gutter Analysis: CB17Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.0812 ft

Gutter Result Parameters

Design Flow: 1.3600 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.7396 ft^2
Eo (Gutter Flow to Total Flow): 0.6552
Gutter Depth at Curb: 2.9190 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1787 ft
Computed Width of Spread at Sag: 5.4680 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB12Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0040 ft/ft
Cross-Slope of Pavement: 0.0200 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0200 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.9269 ft

Gutter Result Parameters

Design Flow: 0.7000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.4798 ft^2
Eo (Gutter Flow to Total Flow): 0.5973
Gutter Depth at Curb: 1.6625 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1148 ft
Computed Width of Spread at Sag: 6.7392 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB14Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0200 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0200 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.2194 ft

Gutter Result Parameters

Design Flow: 0.2850 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.2724 ft^2
Eo (Gutter Flow to Total Flow): 0.7248
Gutter Depth at Curb: 1.2527 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.2361 cfs
Bypass Flow: 0.0489 cfs
Approach Velocity: 1.0462 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8286

Curb and Gutter Analysis: CB16Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0300 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0300 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.2090 ft

Gutter Result Parameters

Design Flow: 1.1490 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.5783 ft^2
Eo (Gutter Flow to Total Flow): 0.6458
Gutter Depth at Curb: 2.2352 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1597 ft
Computed Width of Spread at Sag: 6.3241 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB20Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.3558 ft

Gutter Result Parameters

Design Flow: 1.5300 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.8079 ft^2
Eo (Gutter Flow to Total Flow): 0.6354
Gutter Depth at Curb: 3.0508 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1933 ft
Computed Width of Spread at Sag: 5.8330 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB22Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.1476 ft

Gutter Result Parameters

Design Flow: 1.4000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.7559 ft^2
Eo (Gutter Flow to Total Flow): 0.6503
Gutter Depth at Curb: 2.9509 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1822 ft
Computed Width of Spread at Sag: 5.5552 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB24ACurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.8023 ft

Gutter Result Parameters

Design Flow: 1.2000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.6733 ft^2
Eo (Gutter Flow to Total Flow): 0.6765
Gutter Depth at Curb: 2.7851 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1644 ft
Computed Width of Spread at Sag: 5.1104 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB19Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.6119 ft

Gutter Result Parameters

Design Flow: 1.7000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.8744 ft^2
Eo (Gutter Flow to Total Flow): 0.6178
Gutter Depth at Curb: 3.1737 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.2074 ft
Computed Width of Spread at Sag: 6.1847 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB21Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.3088 ft

Gutter Result Parameters

Design Flow: 1.5000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.7960 ft^2
Eo (Gutter Flow to Total Flow): 0.6387
Gutter Depth at Curb: 3.0282 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1908 ft
Computed Width of Spread at Sag: 5.7696 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB23ACurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0390 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0390 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Design Flow: 0.6000 cfs

Gutter Result Parameters

Width of Spread: 4.1304 ft
Gutter Depression: 0.0000 in
Area of Flow: 0.3327 ft^2
Eo (Gutter Flow to Total Flow): 0.8293
Gutter Depth at Curb: 1.9330 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.5290 cfs
Bypass Flow: 0.0710 cfs
Approach Velocity: 1.8036 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8817

Curb and Gutter Analysis: CB23Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 4.7405 ft

Gutter Result Parameters

Design Flow: 0.7000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.4494 ft^2
Eo (Gutter Flow to Total Flow): 0.7685
Gutter Depth at Curb: 2.2754 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1148 ft
Computed Width of Spread at Sag: 3.8696 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB22ACurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.1446 ft

Gutter Result Parameters

Design Flow: 0.1090 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.0920 ft^2
Eo (Gutter Flow to Total Flow): 0.9993
Gutter Depth at Curb: 1.0294 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.1090 cfs
Bypass Flow: 0.0000 cfs
Approach Velocity: 1.1849 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9996

Curb and Gutter Analysis: Check_CB31Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 8.1233 ft

Gutter Result Parameters

Design Flow: 3.8000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 1.3198 ft^2
Eo (Gutter Flow to Total Flow): 0.5298
Gutter Depth at Curb: 3.8992 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 2.3058 cfs
Bypass Flow: 1.4942 cfs
Approach Velocity: 2.8793 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.6068

Curb and Gutter Analysis: CB32Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.6115 ft

Gutter Result Parameters

Design Flow: 1.4170 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.6298 ft^2
Eo (Gutter Flow to Total Flow): 0.6917
Gutter Depth at Curb: 2.6935 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 1.0823 cfs
Bypass Flow: 0.3347 cfs
Approach Velocity: 2.2500 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.7638

Curb and Gutter Analysis: CB30Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.4874 ft

Gutter Result Parameters

Design Flow: 1.3350 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.6022 ft^2
Eo (Gutter Flow to Total Flow): 0.7019
Gutter Depth at Curb: 2.6340 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.1765 ft
Computed Width of Spread at Sag: 5.4131 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: Check_CB29Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 6.4965 ft

Gutter Result Parameters

Design Flow: 2.0940 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.8441 ft^2
Eo (Gutter Flow to Total Flow): 0.6256
Gutter Depth at Curb: 3.1183 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.2383 ft
Computed Width of Spread at Sag: 6.9577 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: Check_CB31ACurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 0.3692 ft

Gutter Result Parameters

Design Flow: 0.0010 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.0027 ft^2
Eo (Gutter Flow to Total Flow): 1.0000
Gutter Depth at Curb: 0.1772 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.0010 cfs
Bypass Flow: 0.0000 cfs
Approach Velocity: 0.3667 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 1.0000

Curb and Gutter Analysis: CB18Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0039 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 3.6586 ft

Gutter Result Parameters

Design Flow: 0.4000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.2677 ft^2
Eo (Gutter Flow to Total Flow): 0.8790
Gutter Depth at Curb: 1.7561 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.3704 cfs
Bypass Flow: 0.0296 cfs
Approach Velocity: 1.4941 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9261

Curb and Gutter Analysis: CB24Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 3.1622 ft

Gutter Result Parameters

Design Flow: 0.3070 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.2000 ft^2
Eo (Gutter Flow to Total Flow): 0.9309
Gutter Depth at Curb: 1.5179 in

Inlet Input Parameters

Inlet Location: Inlet in Sag
Percent Clogging: 0.0000 %
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Perimeter: 6.0000 ft
Effective Perimeter: 6.0000 ft
Area: 1.4000 ft^2
Effective Area: 1.4000 ft^2
Depth at center of grate: 0.0663 ft
Computed Width of Spread at Sag: 2.6565 ft
Flow type: Weir Flow
Efficiency: 1.0000

Curb and Gutter Analysis: CB25ACurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0140 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.8898 ft

Gutter Result Parameters

Design Flow: 0.4040 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1670 ft^2
Eo (Gutter Flow to Total Flow): 0.9569
Gutter Depth at Curb: 1.3871 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.3903 cfs
Bypass Flow: 0.0137 cfs
Approach Velocity: 2.4189 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9660

Curb and Gutter Analysis: CB25Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0140 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.4065 ft

Gutter Result Parameters

Design Flow: 0.2480 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1158 ft^2
Eo (Gutter Flow to Total Flow): 0.9913
Gutter Depth at Curb: 1.1551 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.2464 cfs
Bypass Flow: 0.0016 cfs
Approach Velocity: 2.1411 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9935

Curb and Gutter Analysis: CB26Curb and Gutter Analysis 2

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0200 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0200 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 3.9919 ft

Gutter Result Parameters

Design Flow: 0.1800 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1594 ft^2
Eo (Gutter Flow to Total Flow): 0.8437
Gutter Depth at Curb: 0.9581 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.1616 cfs
Bypass Flow: 0.0184 cfs
Approach Velocity: 1.1295 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8977

Curb and Gutter Analysis: CB33Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.1031 ft

Gutter Result Parameters

Design Flow: 1.1000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.5208 ft^2
Eo (Gutter Flow to Total Flow): 0.7350
Gutter Depth at Curb: 2.4495 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.8828 cfs
Bypass Flow: 0.2172 cfs
Approach Velocity: 2.1120 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8025

Curb and Gutter Analysis: testmaxFlow137+00Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0050 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 4.0012 ft

Gutter Result Parameters

Design Flow: 0.5750 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.3202 ft^2
Eo (Gutter Flow to Total Flow): 0.8427
Gutter Depth at Curb: 1.9206 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.0000 in

Inlet Result Parameters

Intercepted Flow: 0.5130 cfs
Bypass Flow: 0.0620 cfs
Approach Velocity: 1.7958 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8921

Curb and Gutter Analysis: CB27Curb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0030 ft/ft
Cross-Slope of Pavement: 0.0600 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0600 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 5.1318 ft

Gutter Result Parameters

Design Flow: 1.7000 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.7901 ft^2
Eo (Gutter Flow to Total Flow): 0.7325
Gutter Depth at Curb: 3.6949 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 1.3960 cfs
Bypass Flow: 0.3040 cfs
Approach Velocity: 2.1517 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.8212

Curb and Gutter Analysis: CB17BCurb and Gutter Analysis

Notes:

Gutter Input Parameters

Longitudinal Slope of Road: 0.0062 ft/ft
Cross-Slope of Pavement: 0.0400 ft/ft
Depressed Gutter Geometry
Cross-Slope of Gutter: 0.0400 ft/ft
Manning's n: 0.0130
Gutter Width: 2.0000 ft
Width of Spread: 2.4280 ft

Gutter Result Parameters

Design Flow: 0.1690 cfs
Gutter Depression: 0.0000 in
Area of Flow: 0.1179 ft^2
Eo (Gutter Flow to Total Flow): 0.9903
Gutter Depth at Curb: 1.1655 in

Inlet Input Parameters

Inlet Location: Inlet on Grade
Inlet Type: Grate
Grate Type: Curved vane
Grate Width: 2.0000 ft
Grate Length: 2.0000 ft
Local Depression: 0.5000 in

Inlet Result Parameters

Intercepted Flow: 0.1680 cfs
Bypass Flow: 0.0010 cfs
Approach Velocity: 1.4333 ft/s
Splash-over Velocity: 5.9184 ft/s
Efficiency: 0.9942