

Computations For Sewers of Drainage System

Project Name Brelie Gear

Project Location Waukesha, WI

Date 02/15/19

CJE Job No. CJE1841 Designed By CAJ

Checked By \_\_\_\_\_ Sheet 1 of 1

Location of Sewer			Drainage Area			Rainfall and Runoff Data					Total Runoff	Design Computations									Time of Flow in Sewer		Remarks	
In	From	To	a	A	C	Ca	Σ Ca	Rainfall Frequency Curve Used (years)	Initial Time of Concentration (min.)	Rainfall Intensity in. per hr. = I	Q	Length of Sewer (ft)	Inside Size of Sewer (in)	Inside Size of Sewer (ft)	Necessary Drop in Length Given (ft)	Actual Drop in Length Given (ft)	Mannings Roughness Coefficient	Flow Diameter (ft)	Piers Full for Actual Drop	Velocity ft. per sec. for Actual Drop	Time of Flow in Section (min.)	Total Elapsed Time at End of Section (min.)	Invert (In)	Invert (Out)
			Individual Area in Acres	Accumulated Area in Acres	Individual Impervious Coefficient	Individual Ca	Accumulated Ca																	
	1	2	0.96	0.96	0.4	0.38	0.38	10	10.0	5.14	1.98	54	12	1.00	0.12	0.17	0.011	0.70	0.70	3.37	0.5	10.3	830.4	830.23
	2	3	1.09	2.05	0.4	0.44	0.82	10	10.3	5.09	4.17	96	15	1.25	0.29	0.30	0.011	1.00	0.80	3.96	0.4	10.7	830.2	829.90
	3	6		2.05	0.4		0.82	10	10.7	5.02	4.11	320	15	1.25	0.92	0.96	0.011	1.01	0.81	3.88	1.4	12.1	829.86	828.90
	4	5	0.84	0.84	0.9	0.76	0.76	10	10.0	5.14	3.89	38	12	1.00	0.32	0.50	0.011	0.68	0.68	6.84	0.1	10.1	831.75	831.25
	5	6	0.14	0.98	0.8	0.11	0.87	10	10.1	5.13	4.45	133	12	1.00	2.06	2.10	0.013	0.81	0.81	6.49	0.3	10.4	831	828.90
	6	7	0.02	3.05	0.8	0.02	1.70	10	12.1	4.78	8.15	28.5	18	1.50	0.17	1.14	0.013	0.65	0.43	11.13	0.0	12.1	828.8	827.66
	8	9	3.97	3.97	0.5	1.99	1.99	10	10.0	5.14	10.21	32	18	1.50	0.30	1.75	0.013	0.67	0.45	13.24	0.0	10.0	830	828.25