

160622596: Chateaux of Caledon Town Square
Catchbasin (CB) Capture Analysis

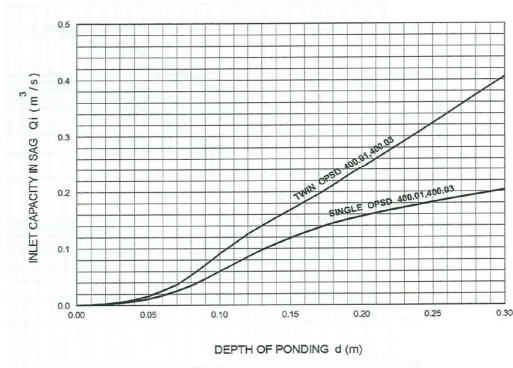
South Area (ha) 0.1593
 Tc min 10 (100 (mm/h) 196.54
 C coeff 0.75

CB ID	T/G Elv.	High Point Elv. (m)	Ponding Depth (m)	CB Qcap m3/s	CB Qcap 50% Blocked (m3/s)	Site Q100 m3/s
AD5	294.59	294.67	0.08	0.035	0.0175	0.065
AD6	294.59	294.67	0.08	0.035	0.0175	
AD7	294.51	294.56	0.05	0.01	0.005	
AD8	294.29	294.33	0.04	0.01	0.005	
AD9	294.17	294.25	0.08	0.035	0.0175	
AD10	294.09	294.11	0.02	0.005	0.0025	
Total Qcap (m3/s)				0.13	0.065	

Note:
 Qcap refers to CB capacity
 Q100 refers to 100yr flow generated from Site
 MTO Design Chart 4.19 used for determining CB capacity
 T/G is top of ground elevation

CBs able to capture Q100 with all CBs 50% Blocked.

Design Chart 4.19: Inlet Capacity at Road Sag



3.2.9. Meteorology

Town of Caledon intensity-duration frequency curves were originally derived from the rainfall data taken from the Guelph O.A.C. (Town Standard Drawing No. 105). The equations for these curves are as follows:

Return Period (Yrs.)	a	B	C
2	1070	0.8759	7.85
5	1593	0.8789	11
10	2221	0.9080	12
25	3158	0.9335	15
50	3886	0.9495	16
100	4688	0.9624	17

$$I = \frac{a}{(t + c)^b}$$

Where: a, b, c = above
 I = intensity (mm/hr)
 t = storm duration (min)