TOWN OF CALEDON
PLANNING
RECEIVED

Aug 29, 2025

APPENDIX H

PRELIMINARY LID SIZING

LID SUMMARY						Conceptual LID Design									Infiltration Rate					Achieved LID Water Balance	
LID Number	Description	Location	Type	Frost Cover Protection [1]	Distance to Water Table [2]	Length	Width	Area	Depth of Water in LID (m)	Porosity [3]	LID Volume	Drainage Area	Runoff 'C'	Rainfall Event Storage	Runoff Volume	Infiltration Rate [4]	Safety Correction Factor	Corrected Infiltration Rate	Drawdown Time [5]	Annual Rainfall Based on Event Storage	Annual Infiltration Volume
				(m)	(m)	(m)	(m)	(m^2)	(m^2)		(m^3)	(m^2)		(mm)	(m^3)			(mm/hr)	(hr)	(mm/yr)	(m^3/yr)
Public Infiltration Measures:																					
South Park	Public	Park	Infiltration Gallery	1.2	> 1m	90	40.0	3,600	0.6	0.4	864.0	350,900	0.70	2.5	614.1	12.5	2.5	5.0	48.0	204	50,109
North Park	Public	Park	Infiltration Gallery	1.2	> 1m	25	10.0	250	0.6	0.4	60.0	34,900	0.60	2.5	52.4	12.5	2.5	5.0	48.0	204	4,272
																				Public Total:	**54,380**
Backyard Infiltration Trench:																					
1	Private	Backyard	Infiltration Trench	1.2	> 1m	137	2.0	274	0.6	0.4	65.8	3,640	0.70	17.5	44.6	12.5	2.5	5.0	48.0	591	1,506
2	Private	Backyard	Infiltration Trench	1.2	> 1m	136	2.0	272	0.6	0.4	65.3	1,778	0.70	25.0	31.1	12.5	2.5	5.0	48.0	639	795
3	Private	Backyard	Infiltration Trench	1.2	> 1m	76	2.0	152	0.6	0.4	36.5	988	0.70	25.0	17.3	12.5	2.5	5.0	48.0	639	442
4	Private	Backyard	Infiltration Trench	1.2	> 1m	159	2.0	318	0.6	0.4	76.3	2,071	0.70	25.0	36.2	12.5	2.5	5.0	48.0	639	926
5	Private	Backyard	Infiltration Trench	1.2	> 1m	122	2.0	244	0.6	0.4	58.6	3,174	0.70	17.5	38.9	12.5	2.5	5.0	48.0	591	1,313
6	Private	Backyard	Infiltration Trench	1.2	> 1m	127	2.0	254	0.6	0.4	61.0	3,291	0.70	17.5	40.3	12.5	2.5	5.0	48.0	591	1,361
7	Private	Backyard	Infiltration Trench	1.2	> 1m	109	2.0	218	0.6	0.4	52.3	2,834	0.70	17.5	34.7	12.5	2.5	5.0	48.0	591	1,172
8	Private	Backyard	Infiltration Trench	1.2	> 1m	213	2.0	426	0.6	0.4	102.2	5,553	0.70	17.5	68.0	12.5	2.5	5.0	48.0	591	2,297
9	Private	Backyard	Infiltration Trench	1.2	> 1m	74	2.0	148	0.6	0.4	35.5	1,926	0.70	17.5	23.6	12.5	2.5	5.0	48.0	591	797
10	Private	Backyard	Infiltration Trench	1.2	> 1m	122	2.0	244	0.6	0.4	58.6	3,172	0.70	17.5	38.9	12.5	2.5	5.0	48.0	591	1,312
11	Private	Backyard	Infiltration Trench	1.2	> 1m	133	2.0	266	0.6	0.4	63.8	3,226	0.70	17.5	39.5	12.5	2.5	5.0	48.0	591	1,335
12	Private	Backyard	Infiltration Trench	1.2	> 1m	67	2.0	134	0.6	0.4	32.2	1,747	0.70	17.5	21.4	12.5	2.5	5.0	48.0	591	723
13	Private	Backyard	Infiltration Trench	1.2	> 1m	96	2.0	192	0.6	0.4	46.1	1,813	0.70	25.0	31.7	12.5	2.5	5.0	48.0	639	811
14	Private	Backyard	Infiltration Trench	1.2	> 1m	61	2.0	122	0.6	0.4	29.3	1,587	0.70	17.5	19.4	12.5	2.5	5.0	48.0	591	657
15	Private	Backyard	Infiltration Trench	1.2	> 1m	209	2.0	418	0.6	0.4	100.3	5,459	0.70	17.5	66.9	12.5	2.5	5.0	48.0	591	2,258
16	Private	Backyard	Infiltration Trench	1.2	> 1m	236	2.0	472	0.6	0.4	113.3	5,459	0.70	17.5	66.9	12.5	2.5	5.0	48.0	591	2,258
17	Private	Backyard	Infiltration Trench	1.2	> 1m	156	2.0	312	0.6	0.4	74.9	3,390	0.70	17.5	41.5	12.5	2.5	5.0	48.0	591	1,402
18	Private	Backyard	Infiltration Trench	1.2	> 1m	156	2.0	312	0.6	0.4	74.9	3,261	0.70	17.5	39.9	12.5	2.5	5.0	48.0	591	1,349
19	Private	Backyard	Infiltration Trench	1.2	> 1m	70	2.0	140	0.6	0.4	33.6	842	0.70	25.0	14.7	12.5	2.5	5.0	48.0	639	377
20	Private	Backyard	Infiltration Trench	1.2	> 1m	143	2.0	286	0.6	0.4	68.6	2,793	0.70	25.0	48.9	12.5	2.5	5.0	48.0	639	1,249
21	Private	Backyard	Infiltration Trench	1.2	> 1m	206	2.0	412	0.6	0.4	98.9	5,146	0.70	25.0	90.1	12.5	2.5	5.0	48.0	639	2,302
22	Private	Backyard	Infiltration Trench	1.2	> 1m	296	2.0	592	0.6	0.4	142.1	3,172	0.70	25.0	55.5	12.5	2.5	5.0	48.0	639	1,419
23	Private	Backyard	Infiltration Trench	1.2	> 1m	147	2.0	294	0.6	0.4	70.6	1,998	0.70	25.0	35.0	12.5	2.5	5.0	48.0	639	894
24	Private	Backyard	Infiltration Trench	1.2	> 1m	139	2.0	278	0.6	0.4	66.7	3,630	0.70	17.5	44.5	12.5	2.5	5.0	48.0	591	1,502
25	Private	Backyard	Infiltration Trench	1.2	> 1m	158	2.0	316	0.6	0.4	75.8	4,110	0.70	17.5	50.3	12.5	2.5	5.0	48.0	591	1,700
26	Private	Backyard	Infiltration Trench	1.2	> 1m	66	2.0	132	0.6	0.4	31.7	1,720	0.70	17.5	21.1	12.5	2.5	5.0	48.0	591	712
27	Private	Backyard	Infiltration Trench	1.2	> 1m	250	2.0	500	0.6	0.4	120.0	6,477	0.70	17.5	79.3	12.5	2.5	5.0	48.0	591	2,680
28	Private	Backyard	Infiltration Trench	1.2	> 1m	148	2.0	296	0.6	0.4	71.0	3,222	0.70	17.5	39.5	12.5	2.5	5.0	48.0	591	1,333
29	Private	Backyard	Infiltration Trench	1.2	> 1m	256	2.0	512	0.6	0.4	122.9	6,662	0.70	17.5	81.6	12.5	2.5	5.0	48.0	591	2,756
30	Private	Backyard	Infiltration Trench	1.2	> 1m	148	2.0	296	0.6	0.4	71.0	3,172	0.70	17.5	38.9	12.5	2.5	5.0	48.0	591	1,312
31	Private	Backyard	Infiltration Trench	1.2	> 1m	192	2.0	384	0.6	0.4	92.2	4,992	0.70	17.5	61.2	12.5	2.5	5.0	48.0	591	2,065
32	Private	Backyard	Infiltration Trench	1.2	> 1m	148	2.0	296	0.6	0.4	71.0	3,172	0.70	17.5	38.9	12.5	2.5	5.0	48.0	591	1,312
33	Private	Backyard	Infiltration Trench	1.2	> 1m	100	2.0	200	0.6	0.4	48.0	2,623	0.70	17.5	32.1	12.5	2.5	5.0	48.0	591	1,085
34	Private	Backyard	Infiltration Trench	1.2	> 1m	62	2.0	124	0.6	0.4	29.8	1,716	0.70	17.5	21.0	12.5	2.5	5.0	48.0	591	710
35	Private	Backyard	Infiltration Trench	1.2	> 1m	70	2.0	140	0.6	0.4	33.6	1,156	0.70	25.0	20.2	12.5	2.5	5.0	48.0	639	517
36	Private	Backyard	Infiltration Trench	1.2	> 1m	116	2.0	232	0.6	0.4	55.7	3,028	0.70	17.5	37.1	12.5	2.5	5.0	48.0	591	1,253
37	Private	Backyard	Infiltration Trench	1.2	> 1m	165	2.0	330	0.6	0.4	79.2	4,317	0.70	17.5	52.9	12.5	2.5	5.0	48.0	591	1,786
38	Private	Backyard	Infiltration Trench	1.2	> 1m	128	2.0	256	0.6	0.4	61.4	3,314	0.70	17.5	40.6	12.5	2.5	5.0	48.0	591	1,371
39	Private	Backyard	Infiltration Trench	1.2	> 1m	43	2.0	86	0.6	0.4	20.6	110	0.70	17.5	1.3	12.5	2.5	5.0	48.0	591	46
40	Private	Backyard	Infiltration Trench	1.2	> 1m	24	2.0	48	0.6	0.4	11.5	626	0.70	17.5	7.7	12.5	2.5	5.0	48.0	591	259
41	Private	Backyard	Infiltration Trench	1.2	> 1m	50	2.0	100	0.6	0.4	24.0	1,296	0.70	17.5	15.9	12.5	2.5	5.0	48.0	591	536
42	Private	Backyard	Infiltration Trench	1.2	> 1m	36	2.0	72	0.6	0.4	17.3	923	0.70	17.5	11.3	12.5	2.5	5.0	48.0	591	382
43	Private	Backyard	Infiltration Trench	1.2	> 1m	47	2.0	94	0.6	0.4	22.6	917	0.70	25.0	16.0	12.5	2.5	5.0	48.0	639	410
44	Private	Backyard	Infiltration Trench	1.2	> 1m	25	2.0	50	0.6	0.4	12.0	592	0.70	25.0	10.4	12.5	2.5	5.0	48.0	639	265
45	Private	Backyard	Infiltration Trench	1.2	> 1m	40	2.0	80	0.6	0.4	19.2	1,050	0.70	25.0	18.4	12.5	2.5	5.0	48.0	639	470
46	Private	Backyard	Infiltration Trench	1.2	> 1m	15	2.0	30	0.6	0.4	7.2	389	0.70	25.0	6.8	12.5	2.5	5.0	48.0	639	174
47	Private	Backyard	Infiltration Trench	1.2	> 1m	38	2.0	76	0.6	0.4	18.2	981	0.70	25.0	17.2	12.5	2.5	5.0	48.0	639	439
48	Private	Backyard	Infiltration Trench	1.2	> 1m	43	2.0	86	0.6	0.4	20.6	560	0.70	25.0	9.8	12.5	2.5	5.0	48.0	639	250
49	Private	Backyard	Infiltration Trench	1.2	> 1m	37	2.0	74	0.6	0.4	17.8	973	0.70	25.0	17.0	12.5	2.5	5.0	48.0	639	435
																				Private Total:	**54,715**
Total LIDs											**3,706**				**2,402**						**109,096**

Notes:

(1) Minimum 1.2m cover on Infiltration trench from post-development surface elevation for adequate frost cover

(2) Groundwater elevations provided by GEI, received on August 21, 2025.

(3) Porosity assumed to be 0.40 for 50mm clear stone, as per CVC LID Design Manual (v2010), pg 4-57

(4) Preliminary infiltration rate extracted from GEI Supplemental Test Pit Report (May 2025)

(5) Recommended drawdown time of 48hrs, as per CVC LID Design Manual (v2010), pg 4-57