CANDEVCON GROUP INC.
CONSULTING ENGINEERS & PLANNERS

GTA WEST OFFICE
9358 GOREWAY DRIVE
BRAMPTON, ONTARIO L6P 0M7
T: (905) 794-0600 F: (905) 794-0611

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April 2, 2025 CDC File No. W25000

Town of Caledon

Subject: Servicing and Stormwater Management Brief
Temporary truck and Trailer parking
13291 Airport Road
Caledon

This Servicing and Stormwater Management Brief has been prepared in support of the Site Plan Application for a proposed temporary truck and trailer parking facility located at 13291 Airport Road in the Town of Caledon The work consists of the construction of a gravel parking lot for the temporary storage of transport trucks and trailers.

This report should be read in conjunction with the proposed Grading and Servicing Plan prepared by Candevcon Group Inc., as well as the Site Plan prepared by Humphries Planning Group.

1.0 EXISTING CONDITIONS

The site is consists of approximately 19.4 ha that is currently used for agricultural purposes and is surrounded on all sides by existing agricultural land uses with the exception of some residential units along the frontage of airport Road. The northern portion of the site is bounded by a tributary of Salt Creek. The site generally drains east to west toward the creek.

2.0 PROPOSED DEVELOPMENT

The proponent is planning to construct a 9.6ha temporary gravel parking lot with parking for up to 677 trucks and or trailers.

3.0 SERVICING

3.1 Watermain

There is no existing municipal water supply on Airport Road and the proponent is not proposing a water service to the site.

3.2 Sanitary

There is no existing municipal sanitary sewers on Airport Road and the proponent is not proposing a sanitary service to the site.

4.0 STORMWATER MANAGEMENT

4.1 General

As noted earlier the site borders a tributary of Salt Creek and currently drains to the creek.

4.2 Design Criteria

The storm water management criteria for the site is as follows

a. Quantity Control – pre to post controls for up to the 100 year storm
b. Runoff Volume Reduction – Retention of 5mm rainfall runoff over impervious areas.
c. Quality Control – Minimum treatment of 80% total suspended solids removal (TSS Removal).

4.3 Quantity Control

As illustrated on Figure 2 attached to this report, the proposed site alterations will result in an ultimate runoff coefficient of 0.57 for the entire site. The ultimate development runoff coefficient calculations summary will be as follows:

Table 1: Post-Development Runoff Coefficients

Surface Type	**Surface Area (ha)**	**Post-Development Runoff Coefficient**
Landscape	9.8	0.25
Impervious	9.6	0.90
Total	**19.4**	**0.57**

Accordingly, we have as well calculated the pre-development runoff coefficients for the site, as illustrated on Figure 1, and as summarized in the following Table 2:

Table 2: Pre-Development Runoff Coefficients

Surface Type	**Surface Area (sqm)**	**Post-Development Runoff Coefficient**
Landscape	19.4	0.25
Impervious	0	0.90
Total	**19.4**	**0.25**

In order to meet the post-development to pre-development stormwater flow targets, the catch basins will be equipped with inlet control devices (ICDs). These inlet control devices will be installed at the catchbasin lead pipe invert.

A Modified Rational (Volume Control) method has been utilized to estimate the required stormwater storage volume under the post-development to pre-development conditions, and the detailed calculations are attached to this report.

Storage volume will be provided on the surface of the parking lot to a maximum depth of 0.3m.

Please refer to drawing SG-1 Site Servicing and Grading Plan for details of the stormwater sewer system and flow control system.

4.4 Quality Control

Storm water quality control will be provided by the installation of a oil and grit separator

4.5 Runoff Volume Reduction

As noted the site will be constructed with a granular parking surface. Given the porous nature of the surface no additional infiltration facilities are proposed.

4.6 Culvert Sizing

The proposed entrance to the site is connected to Airport Road and includes a creek crossing which will be provided via 2 – 1500mm diameter culverts. The culvert sizing calculations are included in Appendix A for reference.

5.0 SUMMARY AND COMPLIANCE

1. No municipal sewer or water is required for the site
2. The post-development stormwater flows will be controlled to levels of pre-development, for the storm frequencies 100-yr to 2-yr respectively.
3. Quality control will be provided via an oil and grit separator
4. The drainage of the adjacent lands will not be adversely affected by the proposed site grading
5. Erosion and sediment control measures will be implemented and maintained at various stages of construction until adequate ground cover is established.

Prepared by:

CANDEVCON GROUP INC.

APPENDIX A

CULVERT SIZING

Plan: Prop-2-pipe-culvert Salt TribN Reach1 RS: 50.22 Culv Group: Culvert #1 Profile: 100 Year

Q Culv Group (m3/s)	2.33	Culv Full Len (m)	
# Barrels	1	Culv Vel US (m/s)	2.33
Q Barrel (m3/s)	2.33	Culv Vel DS (m/s)	2.48
E.G. US. (m)	256.20	Culv Inv El Up (m)	254.96
W.S. US. (m)	256.19	Culv Inv El Dn (m)	254.88
E.G. DS (m)	255.46	Culv Frctn Ls (m)	0.08
W.S. DS (m)	255.38	Culv Exit Loss (m)	0.52
Delta EG (m)	0.74	Culv Entr Loss (m)	0.14
Delta WS (m)	0.81	Q Weir (m3/s)	
E.G. IC (m)	256.11	Weir Sta Lft (m)	
E.G. OC (m)	256.20	Weir Sta Rgt (m)	
Culvert Control	Outlet	Weir Submerg	
Culv WS Inlet (m)	255.79	Weir Max Depth (m)	
Culv WS Outlet (m)	255.67	Weir Avg Depth (m)	
Culv Nml Depth (m)	0.83	Weir Flow Area (m2)	
Culv Crt Depth (m)	0.79	Min El Weir Flow (m)	256.48

HEC-RAS Plan: Prop-2-pipe-culvert River: Salt TribN Reach: Reach1

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach1	393.46	Regional	13.75	257.23	258.03		258.04	0.003276	0.43	32.53	91.52	0.20
Reach1	393.46	2 Year	0.13	257.23	257.41		257.41	0.000662	0.07	1.80	17.48	0.07
Reach1	393.46	5 Year	0.25	257.23	257.53		257.53	0.000215	0.05	4.03	21.41	0.04
Reach1	393.46	10 Year	2.65	257.23	257.83		257.83	0.000774	0.17	16.09	68.70	0.09
Reach1	393.46	25 Year	3.45	257.23	257.87		257.87	0.000904	0.17	18.92	75.44	0.10
Reach1	393.46	50 Year	4.06	257.23	257.88		257.88	0.001156	0.20	19.50	76.52	0.11
Reach1	393.46	100 Year	4.67	257.23	257.89		257.90	0.001321	0.22	20.64	78.55	0.12
Reach1	387.58	Regional	13.75	257.10	258.02	257.83	258.03	0.002528	0.48	35.00	92.67	0.19
Reach1	387.58	2 Year	0.13	257.10	257.39	257.29	257.40	0.011143	0.42	0.31	19.71	0.31
Reach1	387.58	5 Year	0.25	257.10	257.51	257.34	257.52	0.006756	0.46	0.58	22.25	0.27
Reach1	387.58	10 Year	2.65	257.10	257.82	257.70	257.83	0.002265	0.32	11.27	73.89	0.16
Reach1	387.58	25 Year	3.45	257.10	257.86	257.78	257.87	0.002239	0.34	13.73	77.96	0.16
Reach1	387.58	50 Year	4.06	257.10	257.87	257.79	257.87	0.002920	0.39	14.03	78.44	0.19
Reach1	387.58	100 Year	4.67	257.10	257.88	257.79	257.89	0.003287	0.42	14.88	79.78	0.20
Reach1	382.84 hum_719		Culvert									
Reach1	367.28	Regional	13.75	256.95	257.73	257.55	257.73	0.001481	0.34	47.96	110.41	0.14
Reach1	367.28	2 Year	0.13	256.95	257.09	257.04	257.09	0.015110	0.32	0.39	7.10	0.33
Reach1	367.28	5 Year	0.25	256.95	257.14	257.07	257.15	0.015155	0.41	0.59	8.61	0.35
Reach1	367.28	10 Year	2.65	256.95	257.34	257.34	257.50	0.088646	1.79	1.48	79.09	0.99
Reach1	367.28	25 Year	3.45	256.95	257.40	257.40	257.60	0.085610	1.97	1.75	86.58	1.00
Reach1	367.28	50 Year	4.06	256.95	257.45	257.45	257.67	0.082135	2.08	1.95	91.45	1.00
Reach1	367.28	100 Year	4.67	256.95	257.49	257.49	257.73	0.079528	2.18	2.14	94.94	0.99
Reach1	347.74	Regional	13.75	256.67	257.58	257.43	257.65	0.017436	1.18	12.39	96.94	0.48
Reach1	347.74	2 Year	0.13	256.67	256.88	256.79	256.89	0.008182	0.26	0.49	4.31	0.25
Reach1	347.74	5 Year	0.25	256.67	256.94	256.84	256.95	0.007607	0.32	0.75	4.54	0.25
Reach1	347.74	10 Year	2.65	256.67	257.28	257.18	257.30	0.014138	0.68	4.53	78.27	0.39
Reach1	347.74	25 Year	3.45	256.67	257.32	257.21	257.34	0.013488	0.72	5.51	80.51	0.38
Reach1	347.74	50 Year	4.06	256.67	257.35	257.24	257.37	0.013368	0.75	6.16	81.97	0.39
Reach1	347.74	100 Year	4.67	256.67	257.37	257.25	257.40	0.013239	0.78	6.76	83.30	0.39
Reach1	290.86	Regional	13.75	256.12	257.12		257.14	0.005185	0.67	27.76	82.93	0.27
Reach1	290.86	2 Year	0.13	256.12	256.37		256.38	0.009991	0.31	0.41	3.27	0.28
Reach1	290.86	5 Year	0.25	256.12	256.44		256.45	0.010496	0.37	0.66	4.15	0.30
Reach1	290.86	10 Year	2.65	256.12	256.78		256.79	0.006089	0.45	7.25	36.44	0.26
Reach1	290.86	25 Year	3.45	256.12	256.82		256.83	0.006397	0.49	8.65	41.51	0.27
Reach1	290.86	50 Year	4.06	256.12	256.85		256.86	0.006450	0.52	9.78	45.48	0.27
Reach1	290.86	100 Year	4.67	256.12	256.87		256.88	0.006550	0.54	10.85	48.11	0.28
Reach1	247.17	Regional	13.75	255.83	256.90	256.53	256.92	0.004780	0.73	24.71	71.74	0.26
Reach1	247.17	2 Year	0.13	255.83	256.04	255.94	256.05	0.005669	0.26	0.49	3.36	0.22
Reach1	247.17	5 Year	0.25	255.83	256.13	255.98	256.14	0.005255	0.30	0.87	5.88	0.22
Reach1	247.17	10 Year	2.65	255.83	256.40	256.25	256.42	0.012201	0.61	5.19	26.43	0.36
Reach1	247.17	25 Year	3.45	255.83	256.45	256.32	256.46	0.011422	0.64	6.38	28.40	0.35
Reach1	247.17	50 Year	4.06	255.83	256.47	256.34	256.49	0.011594	0.68	7.12	29.56	0.36
Reach1	247.17	100 Year	4.67	255.83	256.50	256.35	256.52	0.011409	0.71	7.92	30.79	0.36
Reach1	201.33	Regional	13.75	255.56	256.82	256.16	256.83	0.001077	0.39	44.01	94.63	0.13
Reach1	201.33	2 Year	0.13	255.56	255.81	255.68	255.82	0.004213	0.24	0.53	3.23	0.19
Reach1	201.33	5 Year	0.25	255.56	255.91	255.71	255.92	0.004387	0.23	1.26	18.87	0.19
Reach1	201.33	10 Year	2.65	255.56	256.18	255.99	256.19	0.002666	0.29	10.20	40.83	0.17
Reach1	201.33	25 Year	3.45	255.56	256.22	256.01	256.23	0.002807	0.33	11.90	42.22	0.18
Reach1	201.33	50 Year	4.06	255.56	256.27	256.02	256.27	0.002474	0.33	13.80	43.72	0.17
Reach1	201.33	100 Year	4.67	255.56	256.32	256.03	256.33	0.002047	0.33	16.13	45.48	0.16
Reach1	137.37	Regional	13.75	255.25	256.78		256.78	0.000508	0.32	69.21	146.97	0.09
Reach1	137.37	2 Year	0.13	255.25	255.58		255.58	0.003423	0.18	0.70	5.50	0.16
Reach1	137.37	5 Year	0.25	255.25	255.64		255.64	0.004050	0.23	1.08	7.60	0.18
Reach1	137.37	10 Year	2.65	255.25	255.88		255.89	0.009829	0.60	5.33	25.66	0.33
Reach1	137.37	25 Year	3.45	255.25	256.02		256.03	0.003578	0.45	9.76	37.79	0.21
Reach1	137.37	50 Year	4.06	255.25	256.12		256.12	0.002036	0.39	13.88	45.34	0.16
Reach1	137.37	100 Year	4.67	255.25	256.21		256.22	0.001324	0.35	18.82	58.85	0.14
Reach1	103.1	Regional	13.75	255.00	256.77		256.77	0.000095	0.16	101.15	93.00	0.04
Reach1	103.1	2 Year	0.13	255.00	255.22	255.22	255.23	0.122033	0.52	0.30	13.50	0.81
Reach1	103.1	5 Year	0.25	255.00	255.24	255.24	255.25	0.103272	0.54	0.59	20.69	0.77
Reach1	103.1	10 Year	2.65	255.00	255.87		255.87	0.000134	0.11	28.78	62.93	0.04
Reach1	103.1	25 Year	3.45	255.00	256.01		256.01	0.000102	0.11	37.96	67.76	0.04
Reach1	103.1	50 Year	4.06	255.00	256.11		256.11	0.000088	0.11	44.91	71.74	0.04
Reach1	103.1	100 Year	4.67	255.00	256.21		256.21	0.000078	0.11	52.08	78.20	0.03
Reach1	99.27	Regional	13.75	254.84	256.77		256.77	0.000056	0.14	111.77	81.17	0.03
Reach1	99.27	2 Year	0.13	254.84	255.15		255.15	0.000010	0.02	8.61	38.66	0.01
Reach1	99.27	5 Year	0.25	254.84	255.22		255.22	0.000015	0.02	11.60	41.26	0.01
Reach1	99.27	10 Year	2.65	254.84	255.87		255.87	0.000031	0.07	46.78	65.53	0.02
Reach1	99.27	25 Year	3.45	254.84	256.01		256.01	0.000030	0.07	56.12	67.36	0.02
Reach1	99.27	50 Year	4.06	254.84	256.11		256.11	0.000029	0.08	62.92	68.80	0.02
Reach1	99.27	100 Year	4.67	254.84	256.21		256.21	0.000028	0.08	69.58	70.37	0.02

HEC-RAS Plan: Prop-2-pipe-culvert River: Salt TribN Reach: Reach1 (Continued)

Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(m3/s)	(m)	(m)	(m)	(m)	(m/m)	(m/s)	(m2)	(m)	
Reach1	77.32	Regional	13.75	254.71	256.77		256.77	0.000072	0.17	97.66	68.40	0.04
Reach1	77.32	2 Year	0.13	254.71	255.15		255.15	0.000004	0.01	10.89	37.58	0.01
Reach1	77.32	5 Year	0.25	254.71	255.22		255.22	0.000008	0.02	13.75	39.00	0.01
Reach1	77.32	10 Year	2.65	254.71	255.87		255.87	0.000030	0.07	43.46	52.95	0.02
Reach1	77.32	25 Year	3.45	254.71	256.01		256.01	0.000032	0.08	51.02	54.71	0.02
Reach1	77.32	50 Year	4.06	254.71	256.11		256.11	0.000032	0.08	56.56	56.27	0.02
Reach1	77.32	100 Year	4.67	254.71	256.21		256.21	0.000033	0.09	62.04	58.12	0.02
Reach1	60.12	Regional	13.75	254.75	256.77	255.61	256.77	0.000158	0.23	76.75	69.49	0.06
Reach1	60.12	2 Year	0.13	254.75	255.14	254.80	255.14	0.000252	0.08	1.64	19.94	0.05
Reach1	60.12	5 Year	0.25	254.75	255.22	254.83	255.22	0.000438	0.11	2.24	21.98	0.07
Reach1	60.12	10 Year	2.65	254.75	255.86	255.17	255.87	0.000905	0.35	7.52	40.54	0.12
Reach1	60.12	25 Year	3.45	254.75	256.00	255.21	256.01	0.000958	0.40	8.66	44.41	0.12
Reach1	60.12	50 Year	4.06	254.75	256.10	255.24	256.11	0.000986	0.43	9.46	48.12	0.13
Reach1	60.12	100 Year	4.67	254.75	256.19	255.27	256.20	0.001006	0.46	10.23	51.67	0.13
Reach1	50.22 hum_720		Culvert									
Reach1	43.99	Regional	13.75	254.11	255.81	255.52	256.03	0.033960	2.11	6.52	6.38	0.67
Reach1	43.99	2 Year	0.13	254.11	254.64	254.33	254.64	0.001232	0.17	0.77	3.04	0.11
Reach1	43.99	5 Year	0.25	254.11	254.70	254.39	254.70	0.002317	0.25	0.97	3.30	0.15
Reach1	43.99	10 Year	2.65	254.11	255.23	254.82	255.27	0.008698	0.86	3.07	5.04	0.33
Reach1	43.99	25 Year	3.45	254.11	255.30	254.90	255.36	0.010970	1.02	3.39	5.20	0.37
Reach1	43.99	50 Year	4.06	254.11	255.34	254.95	255.41	0.012958	1.14	3.57	5.29	0.41
Reach1	43.99	100 Year	4.67	254.11	255.38	255.00	255.46	0.014897	1.25	3.74	5.38	0.44
Reach1	33.94	Regional	13.75	254.48	255.86		255.87	0.001766	0.58	29.00	42.36	0.17
Reach1	33.94	2 Year	0.13	254.48	254.55	254.55	254.58	0.166961	0.69	0.19	4.68	0.99
Reach1	33.94	5 Year	0.25	254.48	254.64		254.65	0.014320	0.37	0.70	6.37	0.34
Reach1	33.94	10 Year	2.65	254.48	255.19		255.20	0.002817	0.41	7.30	21.22	0.19
Reach1	33.94	25 Year	3.45	254.48	255.27		255.27	0.002790	0.45	8.94	24.03	0.19
Reach1	33.94	50 Year	4.06	254.48	255.31		255.32	0.002889	0.48	9.97	25.63	0.20
Reach1	33.94	100 Year	4.67	254.48	255.35		255.36	0.002907	0.50	11.05	27.12	0.20

Plan: Prop-2-pipe-culvert Salt TribN Reach1 RS: 50.22 Culv Group: Culvert #1 Profile: Regional

Q Culv Group (m3/s)	4.28	Culv Full Len (m)	
# Barrels	1	Culv Vel US (m/s)	2.82
Q Barrel (m3/s)	4.28	Culv Vel DS (m/s)	3.14
E.G. US. (m)	256.77	Culv Inv El Up (m)	254.96
W.S. US. (m)	256.77	Culv Inv El Dn (m)	254.88
E.G. DS (m)	256.03	Culv Frctn Ls (m)	0.10
W.S. DS (m)	255.81	Culv Exit Loss (m)	0.43
Delta EG (m)	0.74	Culv Entr Loss (m)	0.20
Delta WS (m)	0.96	Q Weir (m3/s)	5.20
E.G. IC (m)	256.72	Weir Sta Lft (m)	35.89
E.G. OC (m)	256.77	Weir Sta Rgt (m)	96.16
Culvert Control	Outlet	Weir Submerg	0.00
Culv WS Inlet (m)	256.16	Weir Max Depth (m)	0.31
Culv WS Outlet (m)	255.96	Weir Avg Depth (m)	0.14
Culv Nml Depth (m)	1.50	Weir Flow Area (m2)	8.27
Culv Crt Depth (m)	1.08	Min El Weir Flow (m)	256.48

APPENDIX B

STORMWATER MANAGEMENT CALCULATIONS

ON-SITE DETENTION DESIGN SHEET **100 Year Post Storage Calculations** **Candevcon Group Inc.**

Project Name:	Truck Parking
Project No.	W25000
Date.	2025-04-02
File:	

Catchment / Subarea > **Outlet to Creek**

Description > Overland Flow to Creek

100 Year Storm Intensity i =4688/(T+17)^(0.962) T=time of concentration (hrs)

Drainage Area (hectares)=	19.4
Runoff Coefficient, C =	0.57
Allowable Discharge (L/s)=	2648

Max Storage 2242.6 m3

Rainfall Duration (min)	Rainfall Intensity (mm/hr)	Peak Rate of Runoff, Q (L/s)	Runoff Volume (cu.m)	Outflow Volume (cu.m)	Storage Volume (cu.m)
1	290.7	8929.4	535.8	158.9	376.9
2	275.9	8476.9	1017.2	317.8	699.5
3	262.7	8068.7	1452.4	476.6	975.7
4	250.6	7698.8	1847.7	635.5	1212.2
5	239.6	7361.8	2208.5	794.4	1414.1
6	229.6	7053.7	2539.3	953.3	1586.0
7	220.4	6770.7	2843.7	1112.2	1731.5
8	211.9	6510.0	3124.8	1271.0	1853.7
9	204.1	6268.9	3385.2	1429.9	1955.3
10	196.8	6045.4	3627.2	1588.8	2038.4
11	190.0	5837.5	3852.8	1747.7	2105.1
12	183.7	5643.8	4063.5	1906.6	2157.0
13	177.8	5462.7	4260.9	2065.4	2195.5
14	172.3	5293.1	4446.2	2224.3	2221.8
15	167.1	5133.8	4620.5	2383.2	2237.3
16	162.2	4984.1	4784.7	2542.1	2242.6
17	157.7	4843.0	4939.9	2701.0	2238.9
18	153.3	4709.8	5086.6	2859.8	2226.7
19	149.2	4583.9	5225.6	3018.7	2206.9
20	145.3	4464.6	5357.6	3177.6	2180.0
21	141.7	4351.6	5483.0	3336.5	2146.5
22	138.2	4244.2	5602.3	3495.4	2106.9
23	134.8	4142.0	5716.0	3654.2	2061.8
24	131.7	4044.8	5824.5	3813.1	2011.4
25	128.7	3952.1	5928.2	3972.0	1956.2
26	125.8	3863.7	6027.3	4130.9	1896.4
27	123.0	3779.2	6122.2	4289.8	1832.5
28	120.4	3698.3	6213.2	4448.6	1764.6
29	117.9	3621.0	6300.5	4607.5	1692.9
30	115.5	3546.8	6384.3	4766.4	1617.9

PROJECT NUMBER: **W25000**

Pre-development

To Be Controlled Drainage to Creek

Surface Type	Area (ha)	C-value		Area	Runoff Co-efficient	Intensity (@ Tc=10min) mm/hr	Predevelopment Site Discharge Rate (m3/s)	L/s
Ex. Site	19.4000	0.25	2yr					
			5yr					
			10yr					
			25yr					
Total	***19.4000***	***0.25***	100yr	19.4000	0.25	196.54	**2.648**	**2,648**

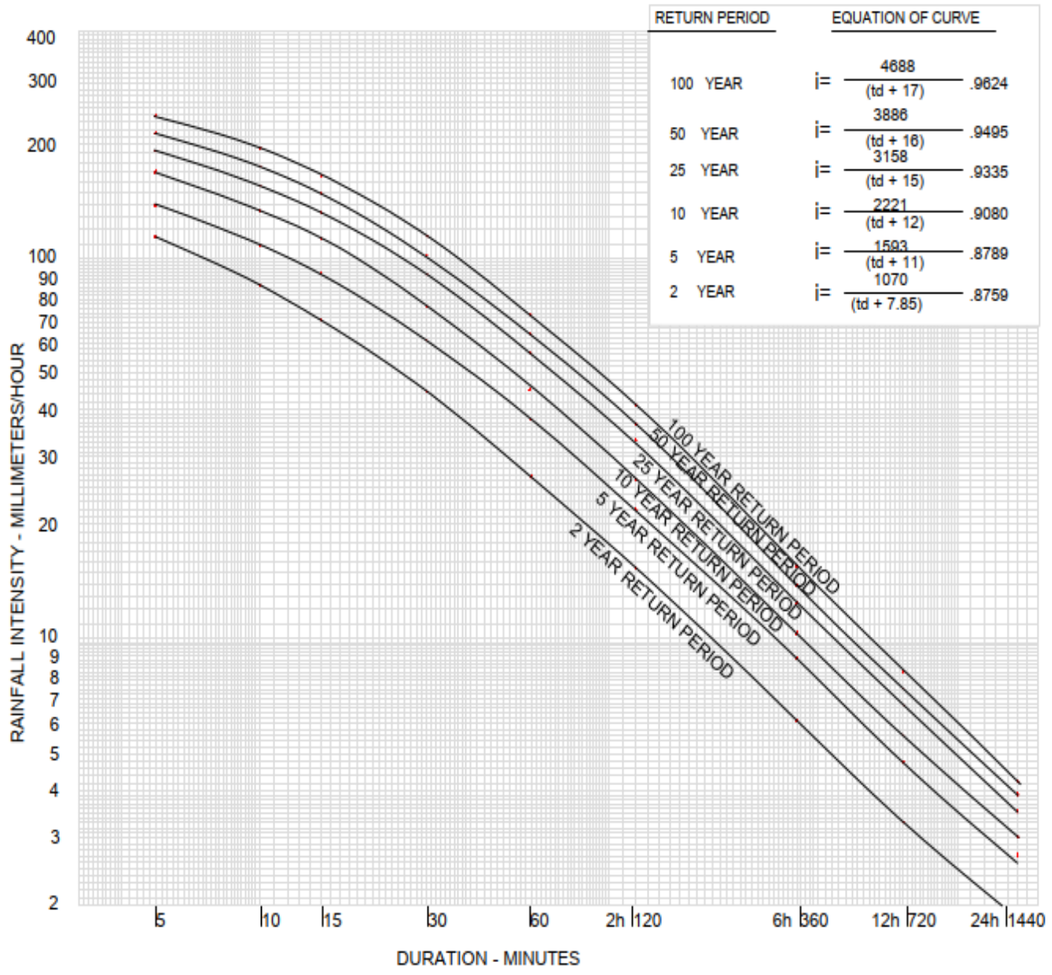
100yr IDF	
A	4688
B	17
C	0.962

insert into modified rational method

Post-development

Drainage to Creek

Surface Type	Area (ha)	C-value		Area	Runoff Co-efficient	Intensity (@ Tc=10min) mm/hr	Postdevelopment Site Discharge Rate (m3/s)	
Asphalt & Gravel Parking Lot	9.6000	0.90	2yr					
			5yr					
Landscaped Areas	9.8000	0.25	10yr					
Total	***19.4000***	***0.57***	25yr					
			100yr	19.4000	0.57	196.54	**6.05**	**6,054**



RETURN PERIOD	EQUATION OF CURVE	
100 YEAR	$i = \frac{4688}{(td + 17)}$	.9624
50 YEAR	$i = \frac{3886}{(td + 16)}$	.9495
25 YEAR	$i = \frac{3158}{(td + 15)}$	.9335
10 YEAR	$i = \frac{2221}{(td + 12)}$	.9080
5 YEAR	$i = \frac{1593}{(td + 11)}$	.8789
2 YEAR	$i = \frac{1070}{(td + 7.85)}$	.8759

INLET TIMES

SUBURBAN RESIDENTIAL	
(ROOF DRAINS UNCONNECTED)	15 min
(ROOF DRAINS CONNECTED)	10 min
SUBURBAN, COMMERCIAL, INDUSTRIAL MULTIPLE FAMILY	10 min
DOWNTOWN COMMERCIAL, HIGH DENSITY APARTMENTS, EXPRESSWAYS	5 min

RUNOFF COEFFICIENT

COMMERCIAL	
- DOWNTOWN & SUBURBAN SHOPPING	0.90
INDUSTRIAL	
- DOWNTOWN	0.90
- SUBURBAN INDUSTRIAL PARKS	0.75
RESIDENTIAL	
- APARTMENTS	0.75
- ROW DWELLINGS	0.70
- DUPLEX DWELLINGS	0.70
- SEMIDETACHED - DOWNTOWN	0.60
- SINGLE FAMILY - DOWNTOWN	0.60
- SEMIDETACHED - SUBURBAN	0.50
- SINGLE FAMILY - SUBURBAN	0.40
SCHOOLS, CHURCHES, HOSPITALS	0.75
PARKS, CEMETERIES, RAIL YARDS	
(OVER 4 Ha)	0.20
(UNDER 4 Ha)	0.25
PARKING LOTS	
ASPHALT & GRAVEL	0.90

TOWN OF CALEDON

RAINFALL INTENSITY CURVES

NO.	REVISION	APR'D	DATE
3	ADDITION OF TEXT		APR 19
2	STANDARD 104 NOW 103		JAN 08
1	STANDARD 112.01 NOW 104		JUNE 08

APR'D: C.C. DATE: FEB 2000

DRAWN: BJM SCALE: N.T.S.

STANDARD No. 103

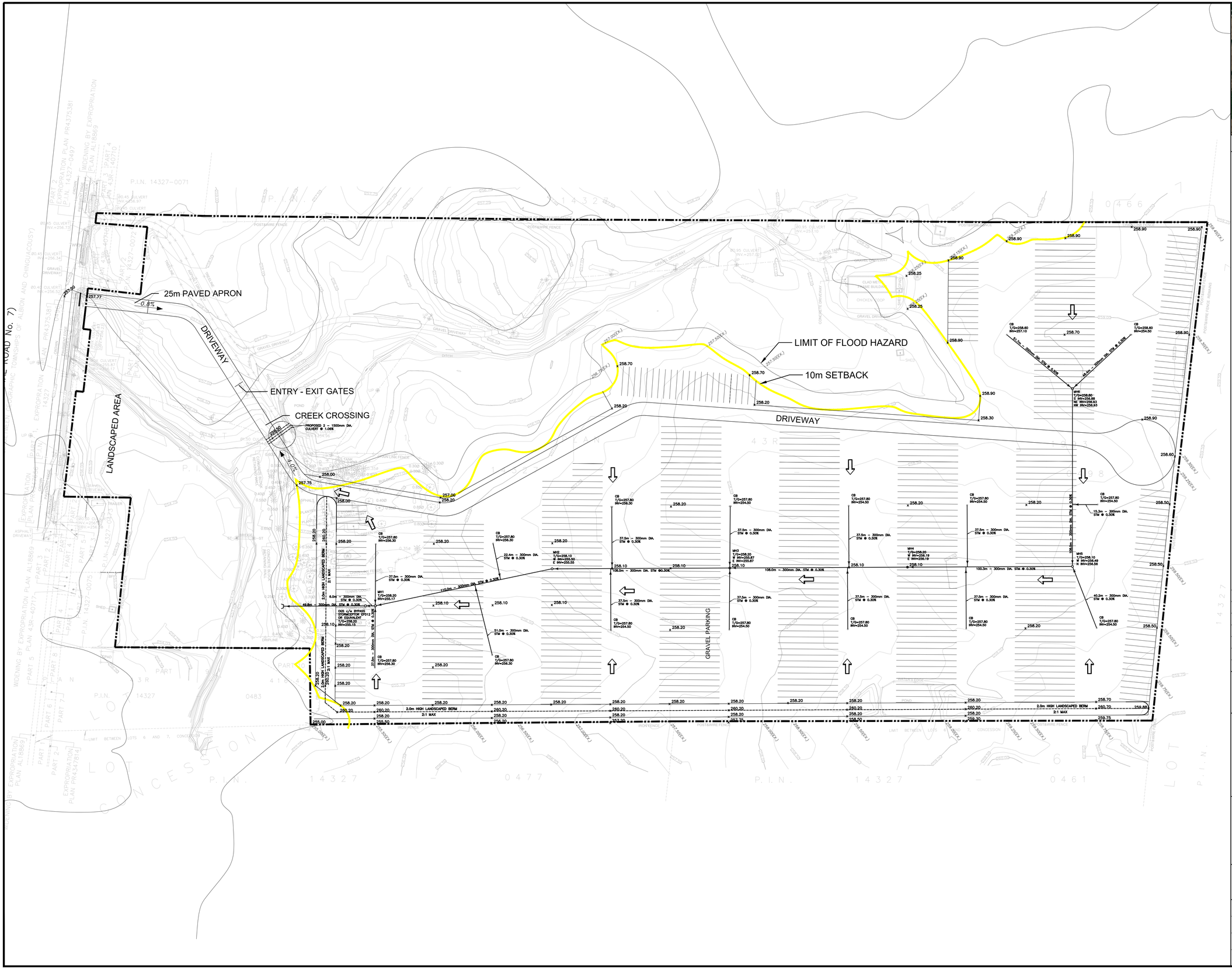
DRAWINGS & FIGURES

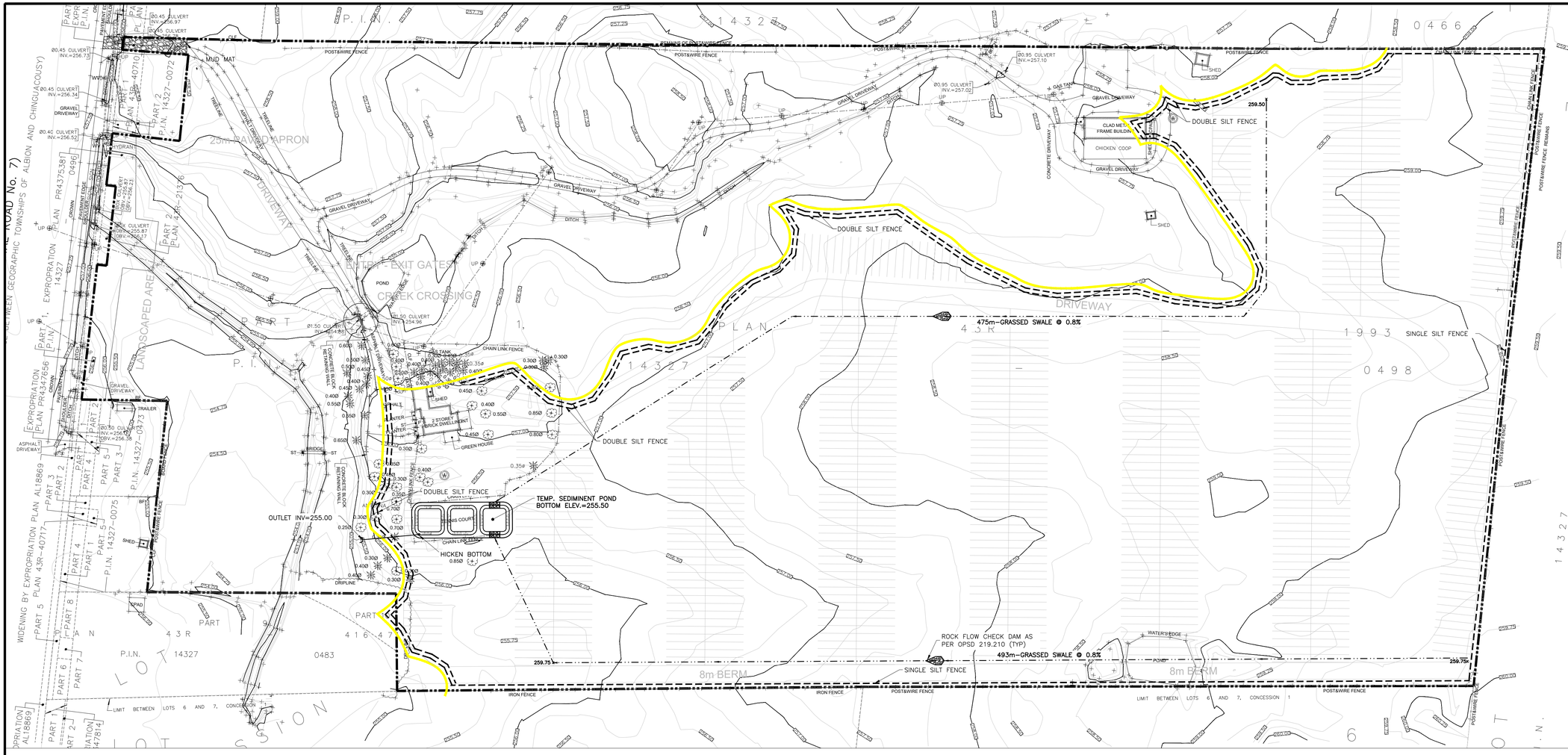
SG-1 – SITE SERVICING AND GRADING PLAN

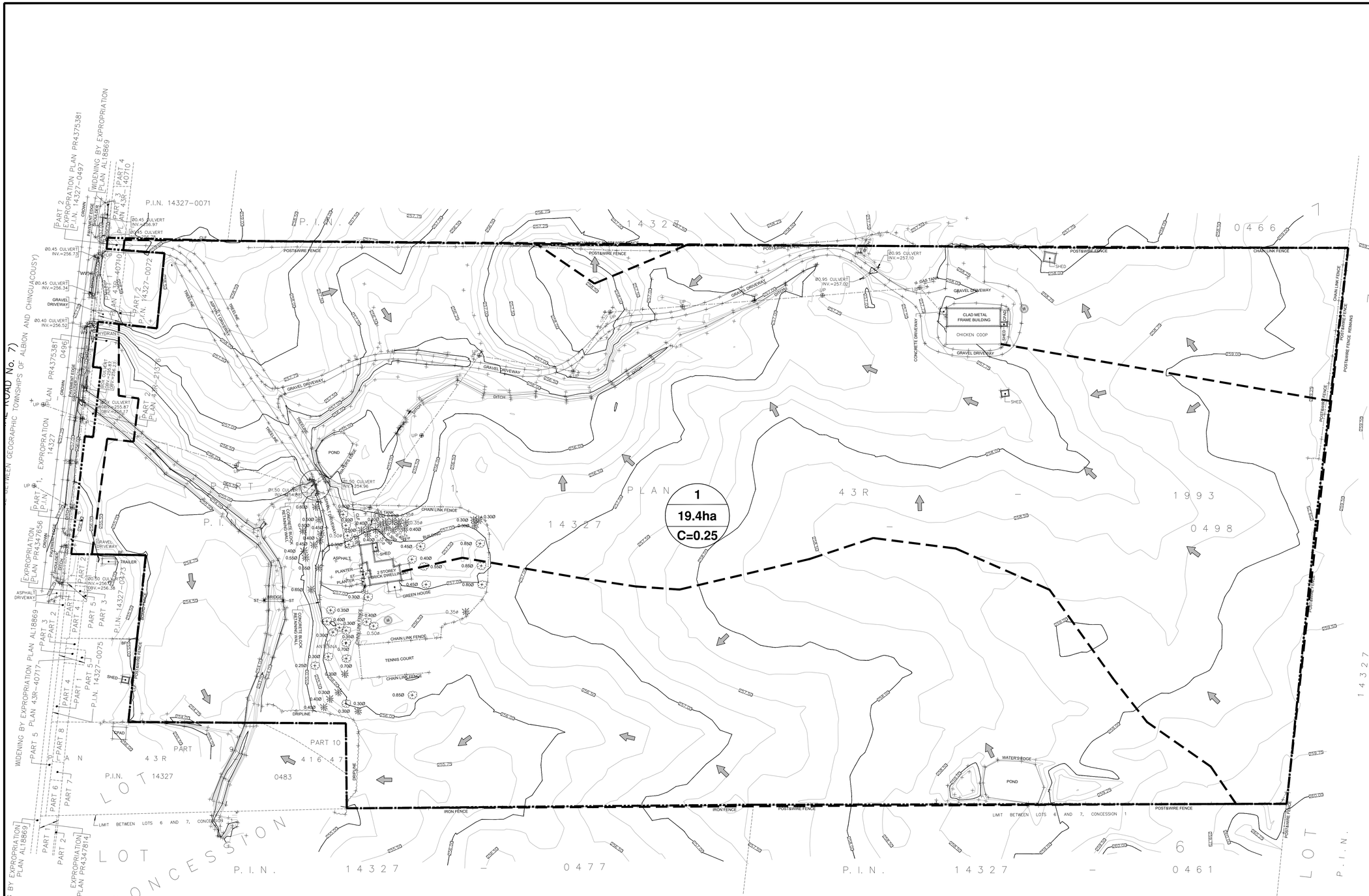
ESC-1 – EROSION AND SEDIMENT CONTROL PLAN

FIGURE 1 – PRE-DEVELOPMENT DRAINAGE AREA PLAN

FIGURE 2 – POST-DEVELOPMENT DRAINAGE AREA PLAN


25m PAVED APRON
DRIVEWAY
ENTRY - EXIT GATES
CREEK CROSSING
LANDSCAPED AREA
LIMIT OF FLOOD HAZARD
10m SETBACK
DRIVEWAY
GRAVEL PARKING
2.0m HIGH LANDSCAPED BERM
2:1 MAX
PROPOSED 2 - 1500mm DIA. CULVERT @ 1.00%
0.8%
4.0%
2.2%
P.I.N. 14327-0071
P.I.N. 14327 - 0477
P.I.N. 14327 - 0461
P.I.N. 14327 - 0466
P.I.N. 14327 - 0483
LOT 6 CONCESSION
LOT 7 CONCESSION
LIMIT BETWEEN LOTS 6 AND 7, CONCESSION III
WIDENING BY EXPROPRIATION PLAN AL1869
EXPROPRIATION PLAN PR437538
EXPROPRIATION PLAN PR437781
EXPROPRIATION PLAN 43R-40717
EXPROPRIATION PLAN 43R-40710
EXPROPRIATION PLAN 43R-14327
(FORMERLY THE TOWNSHIP OF ALBION AND CHINGUACOUSY)
(FORMERLY THE TOWNSHIP OF CHINGUACOUSY)
(FORMERLY THE TOWNSHIP OF ALBION)


P.I.N. 14327
0466
0498
0483
0496
0497
0499
CREEK CROSSING
DRIVEWAY
ENTRY / EXIT GATES
LANDSCAPED AREA
POND
TEMP. SEDIMINENT POND BOTTOM ELEV.=255.50
OUTLET INV=255.00
HICKEN BOTTOM
CHAIN LINK FENCE
DOUBLE SILT FENCE
SINGLE SILT FENCE
475m-GRASSED SWALE @ 0.8%
493m-GRASSED SWALE @ 0.8%
ROCK FLOW CHECK DAM AS PER OPSD 219.210 (TYP)
CLAD METAL FRAME BUILDING
CHICKEN COOP
SHED
GREEN HOUSE
2 STOREY BRICK DWELLING
TRAILER
GAS TANK
GRAVEL DRIVEWAY
ASPHALT DRIVEWAY
CONCRETE DRIVEWAY
POST&WIRE FENCE
IRON FENCE
HYDRANT FENCE
WATER'S EDGE
8m BERM
259.50
259.75
LIMIT BETWEEN LOTS 6 AND 7, CONCESSION 1
WIDENING BY EXPROPRIATION PLAN ALI8869
EXPROPRIATION PLAN PR437656
EXPROPRIATION PLAN PR437538
PLAN 43R-40710
PLAN 43R-40717
PLAN 43R-21376
PLAN 43R-21377
P.I.N. 14327-0072
P.I.N. 14327-0073
P.I.N. 14327-0075
P.I.N. 14327-0076
P.I.N. 14327-0077
P.I.N. 14327-0078
P.I.N. 14327-0079
P.I.N. 14327-0080
P.I.N. 14327-0081
P.I.N. 14327-0082
P.I.N. 14327-0083
P.I.N. 14327-0084
P.I.N. 14327-0085
P.I.N. 14327-0086
P.I.N. 14327-0087
P.I.N. 14327-0088
P.I.N. 14327-0089
P.I.N. 14327-0090
P.I.N. 14327-0091
P.I.N. 14327-0092
P.I.N. 14327-0093
P.I.N. 14327-0094
P.I.N.



KEY PLAN

LEGEND:

- PRE DEVELOPMENT DRAINAGE AREA BOUNDARY
- EXISTING DRAINAGE FLOW ROUTE
- 1 / 0.83ha / C=0.70 — DENOTES DRAINAGE NODE; DENOTES AREA IN HECTARES; DENOTES DRAINAGE COEFFICIENT

NO.	DESCRIPTION	DATE	BY
5			
4			
3			
2			
1			

REVISIONS

CANDEVCON GROUP INC.
CONSULTING ENGINEERS AND PLANNERS
9358 GOREWAY DRIVE, BRAMPTON ON. L6P-0M7
TEL (905) 794-0600
FAX (905) 794-0611

REGISTERED PROFESSIONAL ENGINEER S. D. LANG April 3, 2025 PROVINCE OF ONTARIO

CONSTRUCTION NORTH

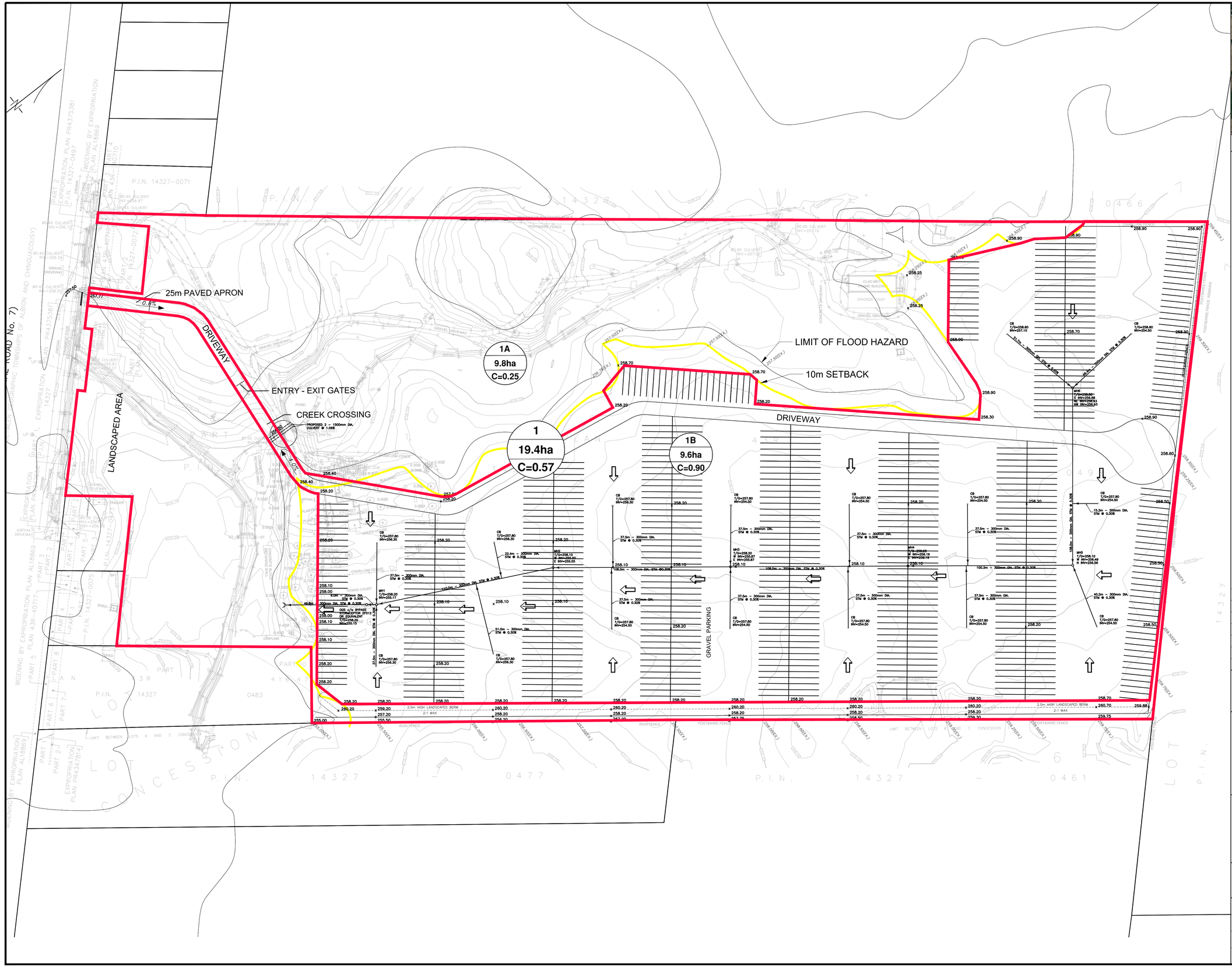
GIAMPAOLO INVESTMENTS LIMITED

13291 AIRPORT ROAD
CALEDON, ONTARIO

FILE NO.:

SHEET TITLE:
PRE-DEVELOPMENT DRAINAGE AREA PLAN

DRAWN BY: R.V.M	PROJECT No. W25000
CHECKED BY: S.D.L	DRAWING No. FIG.1
SCALE: 1:1000	
DATE: MARCH 26, 2025	



KEY PLAN

LEGEND:

- STORM DRAINAGE AREA BOUNDARY
- OVERLAND FLOW ROUTE
- 1 / 0.83ha / C=0.70 — DENOTES DRAINAGE NODE; DENOTES AREA IN HECTARES; DENOTES DRAINAGE COEFFICIENT
- PROPOSED STORM SEWER

NO.	DESCRIPTION	DATE	BY
5			
4			
3			
2			
1			

REVISIONS

CANDEVCON GROUP INC.
CONSULTING ENGINEERS AND PLANNERS
9358 GOREWAY DRIVE, BRAMPTON ON. L6P.0M7
TEL (905) 794-0630
FAX (905) 794-0611

REGISTERED PROFESSIONAL ENGINEER S. D. LANG PROVINCE OF ONTARIO April 3, 2025

CONSTRUCTION NORTH

GIAMPAOLO INVESTMENTS LIMITED

13291 AIRPORT ROAD
CALEDON, ONTARIO

FILE NO.:

SHEET TITLE:
POST DEVELOPMENT DRAINAGE AREA PLAN

DRAWN BY: R.V.M	PROJECT No.: W25000
CHECKED BY: S.D.L	DRAWING No.: FIG.2
SCALE: 1:1000	
DATE: MARCH 26, 2025	