



DRAINAGE AREAS

AREA	sq.m.	SURFACE TYPE
A	1,196	UNCONTROLLED LANDSCAPE
B	186	UNCONTROLLED PAVEMENT
C	2,733	UNCONTROLLED LANDSCAPE
D	182	UNCONTROLLED PAVEMENT
E	1,054	UNCONTROLLED LANDSCAPE
F	116	UNCONTROLLED LANDSCAPE
G	374	UNCONTROLLED LANDSCAPE
H	45	UNCONTROLLED PAVEMENT
I	484	UNCONTROLLED LANDSCAPE
	48,861	CONTROLLED PAVEMENT
	10,136	CONTROLLED BUILDINGS
	65,367	TOTAL SITE AREA

SURFACE PONDING VOLUME

AREA	CB NO.	PONDING DEPTH (mm)	INCREMENTAL PONDING VOLUME (m³)										TOTAL			
			91.8-91.9	91.9-92.0	92.0-92.1	92.1-92.2	92.2-92.3	92.3-92.4	92.4-92.5	92.5-92.6	92.6-92.7	92.7-92.8				
1	300						1.1	4.6	13.0	18.7						
2	300							1.1	4.6	13.0	18.7					
3	300								2.4	10.0	24.0	38.4				
4	300								2.1	11.4	31.6	45.1				
5	150								2.4	10.0	24.0	38.4				
6	300								2.1	11.4	31.6	45.1				
7	300								1.4	7.1	20.1	28.5				
8	300								1.1	4.6	13.0	18.7				
9	300								4.0	20.1	51.4	75.5				
10	300								4.2	21.6	56.6	82.4				
11	300								4.4	22.3	59.2	86.9				
12	300								2.7	13.2	34.9	50.8				
13	300								2.8	14.1	38.7	55.6				
14	300								2.8	14.1	38.7	55.6				
15	300								2.8	14.1	38.7	55.6				
16	300								2.9	14.7	39.6	56.5				
17	300								2.8	14.0	39.2	56.0				
18	300								4.9	24.7	65.1	94.7				
19	300								4.1	21.1	56.9	81.1				
20	300								4.6	23.4	61.4	89.4				
21	300								4.8	24.4	64.1	93.3				
22	700								48.9	244.4	618.9	916.2				
23	700								43.5	222.2	565.2	830.9				
24	700								48.9	244.4	618.9	916.2				
25	700								43.5	222.2	565.2	830.9				
TOTAL									3.8	14.7	33.2	56.1	146.5	419.7	969.3	1643.1

STORM WATER MANAGEMENT SUMMARY TABLE

SITE AREA SUMMARY		sq.m.
CONTROLLED PAVED	48,861	
CONTROLLED LANDSCAPED	0	
CONTROLLED ROOF	10,136	
UNCONTROLLED PAVED	413	
UNCONTROLLED LANDSCAPED	5,957	
TOTAL SITE AREA	65,367	

ROOF DRAINAGE SYSTEM

TOTAL CONTROLLED ROOF AREA	10,136 sq.m.
PEAK OUTFLOW RATE	50.3 l/s
TOTAL NO. OF WEIRS	33
REQUIRED ROOF STORAGE	404.9 cu.m.
AVAILABLE ROOF STORAGE	686.5 cu.m.

SITE DRAINAGE SYSTEM - 100 YEAR

ORIFICE DIAMETER	450 mm
MAXIMUM PONDING ELEV.	92.50 m
MAXIMUM PARKING LOT PONDING DEPTH	0.30 m
ORIFICE INVERT	88.15
MAXIMUM LOADING DOCK PONDING DEPTH	0.70 m
ORIFICE RELEASE RATE	887.1 l/sec.
UNCONTROLLED RELEASE RATE	205.2 l/sec.
TOTAL RELEASE RATE	1092.3 l/sec.
ALLOWABLE RELEASE RATE	1377.0 l/sec.
REQUIRED SITE STORAGE	993 cu.m.
AVAILABLE SITE STORAGE	2005 cu.m.

LOCAL BENCHMARK:
CUT CROSS IN CONCRETE TRAFFIC ISLAND AT THE NORTH-EAST CORNER OF EARL ARMSTRONG ROAD AND LIMEBANK ROAD AS ESTABLISHED BY ANNIS, O'SULLIVAN, VOLLEBEEK LTD, O.L.S.

ELEVATION 92.87

No.	Date	REVISION	Checked
10.	D.S. Nov 21/16	SITE PLAN REVISIONS/CITY COMMENTS	O.B.C.
9.	D.S. Aug 26/16	REVISED AS PER CITY COMMENTS	O.B.C.
8.	D.S. Aug 14/16	SITE PLAN REVISIONS	O.B.C.
7.	D.S. Jun 28/16	REVISED AS PER CITY COMMENTS	O.B.C.
6.	C.R.M. Jan 28/15	REVISED AS PER CITY COMMENTS	O.B.C.
5.	J.H. Aug 27/14	SITE PLAN REVISION	O.B.C.
4.	J.H. Jun 19/14	ISSUED FOR SECOND SUBMISSION	O.B.C.
3.	J.H. Jun 14/14	SITE PLAN REVISION	O.B.C.
2.	J.H. May 20/14	REVISED AS PER CITY COMMENTS	O.B.C.
1.	C.R.M. Apr 30/14	ISSUED FOR SITE PLAN APPROVAL	O.B.C.
No.	By	Date	Revision

APPROVED AS TO FORM IN RELIANCE UPON THE PROFESSIONAL SKILL AND JUDGEMENT OF URBAN ECOSYSTEMS LIMITED AS TO DESIGN AND SPECIFICATION.

Director of Engineering _____ Date _____

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RIVERSIDE SOUTH
CITY OF OTTAWA

MORGUARD INVESTMENTS LTD.
55 CITY CENTER DRIVE
MISSISSAUGA, ONTARIO

FILE No D07-12-14-0067

SWM DRAINAGE PLAN

Designed By	O.B.C.	Date	APR 2014	Checked By	R.S.
Drawn By	J.H.	Project No.	12007	Approved By	
Scale:	1:500	Drawing No.	3 of 8		