

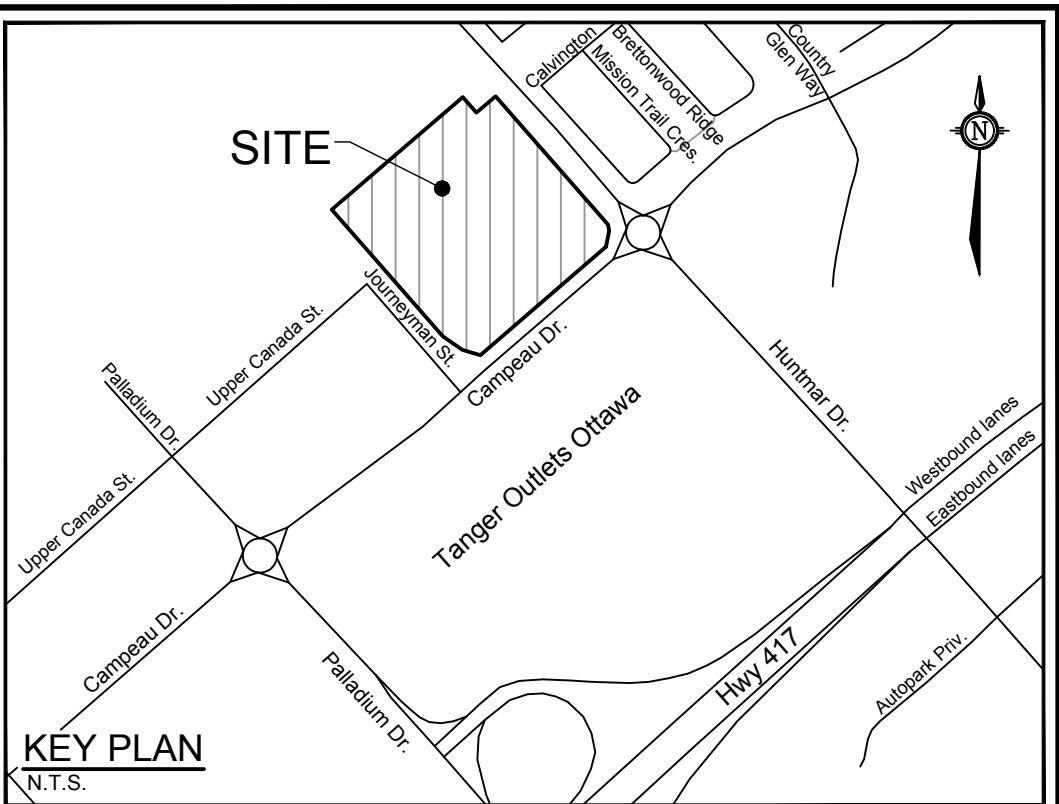
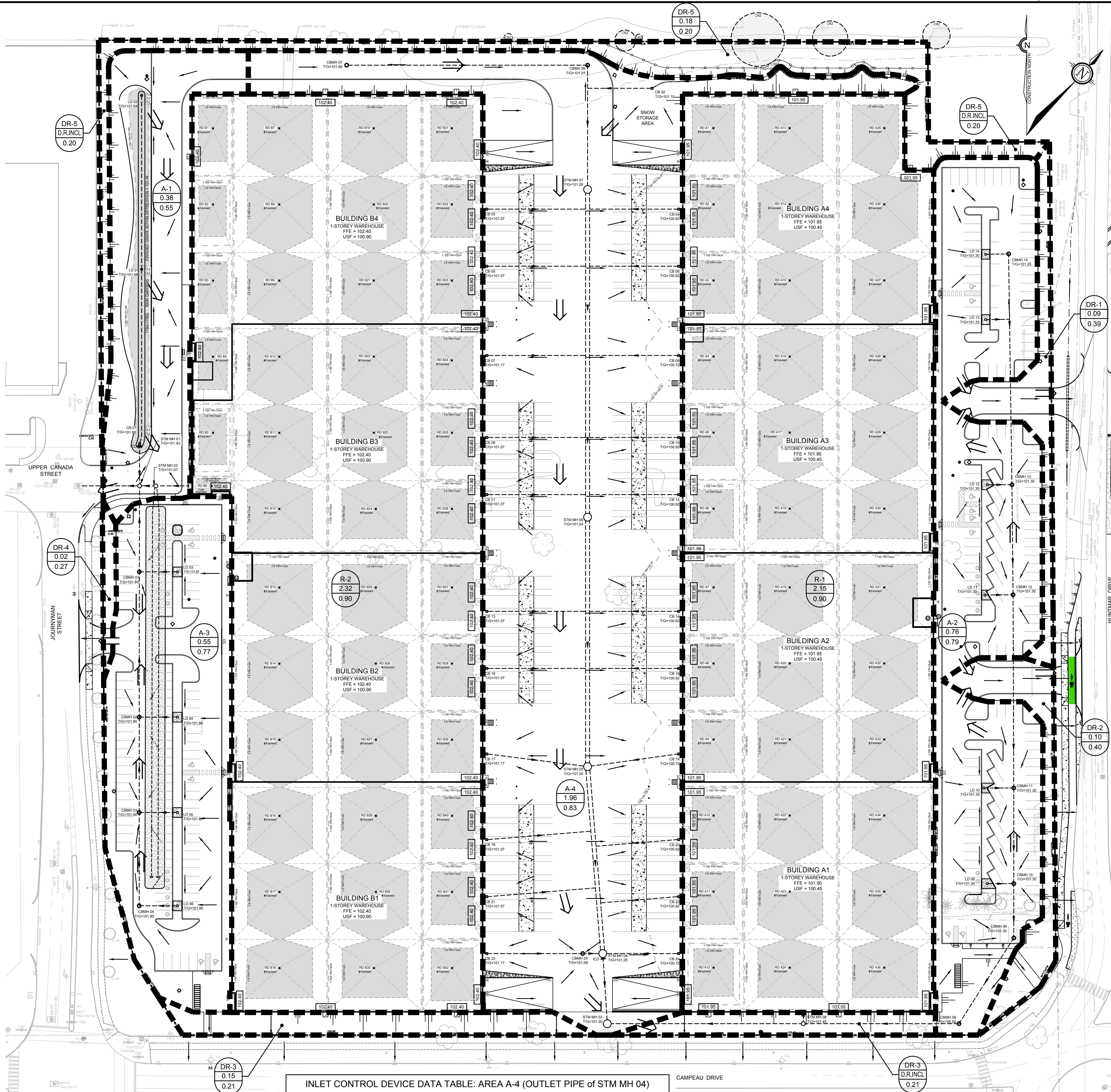
BUILDING 'A' ROOF DRAIN TABLE: AREA R-1 (ROOF DRAINS A1 TO A36)						
AREA ID	ROOF DRAIN NO. (WATTS MODEL)	ROOF DRAIN OPENING SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1-100 YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
R-1	RD 1 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 2 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 3 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 4 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 5 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 6 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm
R-1	RD 7 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 8 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 9 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 10 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 11 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 12 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm
R-1	RD 13 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 14 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 15 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 16 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 17 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 18 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 19 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 20 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 21 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 22 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 23 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 24 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 25 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 26 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 27 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 28 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 29 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 30 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 31 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 32 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 33 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 34 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-1	RD 35 (RD-100-A-ADJ)	1/4 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-1	RD 36 (RD-100-A-ADJ)	1/2 EXPOSED	0.87 L/s	11 cm	1.26 L/s	15 cm

* REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-209) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.
 ** ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDINGS TO BE WATTS 'ADJUSTABLE ACCUTROL' ROOF DRAINS.

INLET CONTROL DEVICE DATA TABLE: AREA A-1 (OUTLET PIPE OF CB 01)								
DESIGN EVENT	ICD TYPE (PLUG TYPE)	DIAMETER OF OUTLET PIPE (mm)	PEAK DESIGN FLOW (L/s)	PEAK DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m ³)	AVAILABLE STORAGE
1:2 YR	CIRCULAR	250mmØ PVC DR35	67.2	30.6	0.94	101.95	8.9	> 120 m ³
1:5 YR	ORIFICE PLUG		62.8	21.4	0.99	101.90	17.5	
1:100 YR	ORIFICE PLUG		65.6	32.8	1.08	101.69	55.7	

BUILDING 'B' ROOF DRAIN TABLE: AREA R-2 (ROOF DRAINS B1 TO B42)						
AREA ID	ROOF DRAIN NO. (WATTS MODEL)	ROOF DRAIN OPENING SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1-100 YEAR RELEASE RATE	APPROX. 100-YR PONDING DEPTH
R-2	RD 1 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 2 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm
R-2	RD 3 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm
R-2	RD 4 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm
R-2	RD 5 (RD-100-A-ADJ)	FULLY EXPOSED	0.79 L/s	6 cm	0.95 L/s	8 cm
R-2	RD 6 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 7 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 8 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 9 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 10 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 11 (RD-100-A-ADJ)	1/4 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 12 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 13 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 14 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 15 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 16 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 17 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 18 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 19 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 20 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 21 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 22 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 23 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 24 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 25 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 26 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 27 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 28 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 29 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 30 (RD-100-A-ADJ)	1/2 EXPOSED	1.10 L/s	11 cm	1.26 L/s	15 cm
R-2	RD 31 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 32 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 33 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 34 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 35 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 36 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 37 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 38 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 39 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 40 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 41 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm
R-2	RD 42 (RD-100-A-ADJ)	1/4 EXPOSED	0.87 L/s	11 cm	0.95 L/s	15 cm

* REFER TO THE 'DEVELOPMENT SERVICING STUDY AND STORMWATER MANAGEMENT REPORT' (R-2022-209) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.
 ** ALL CONTROLLED FLOW ROOF DRAINS FOR THE PROPOSED BUILDINGS TO BE WATTS 'ADJUSTABLE ACCUTROL' ROOF DRAINS.



Allanlin

ALLISON HAMLIN
 MANAGER (A), DEVELOPMENT REVIEW WEST
 PLANNING, REAL ESTATE & ECONOMIC DEVELOPMENT
 DEPARTMENT, CITY OF OTTAWA

APPROVED
 By Allison Hamlin at 2:57 pm, Oct 13, 2023

INLET CONTROL DEVICE DATA TABLE: AREA A-4 (OUTLET PIPE OF STM MH 04)								
DESIGN EVENT	ICD TYPE (PLUG TYPE)	DIAMETER OF OUTLET PIPE (mm)	PEAK DESIGN FLOW (L/s)	PEAK DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m ³)	AVAILABLE STORAGE
1:2 YR	CIRCULAR	375mmØ PVC DR35	109.4	54.7	1.32	99.15	230	> 1,100 m ³
1:5 YR	ORIFICE PLUG		145.0	72.5	2.32	100.15	311	
1:100 YR	ORIFICE PLUG		167.0	83.5	3.08	100.91	721	

NOTE:
 THE POSITION OF ALL POLE LINES, CONDUITS, WATERMANS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

No.	REVISION	DATE	BY

SCALE		FOR REVIEW ONLY		
1:750		DESIGN	SM / BM / DDB	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; width: fit-content; margin: auto;"> <p>PROFESSIONAL ENGINEER License No. 100122737 D. D. BLAIR 04/15/2013 PROVINCE OF ONTARIO</p> </div>
<div style="display: flex; justify-content: center; gap: 10px;"> <div style="border-bottom: 1px solid black; width: 100px;"></div> <div style="border-bottom: 1px solid black; width: 100px;"></div> </div>		CHECKED	DDB	
		DRAWN	SM	
<div style="display: flex; justify-content: center; gap: 10px;"> <div style="border-bottom: 1px solid black; width: 100px;"></div> <div style="border-bottom: 1px solid black; width: 100px;"></div> </div>		CHECKED	BM / DDB	
		APPROVED	DDB	

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LOCATION
 CITY OF OTTAWA
 405 HUNTMAR DRIVE - WAREHOUSE DEVELOPMENT

DRAWING NAME
 POST-DEVELOPMENT
 STORMWATER MANAGEMENT PLAN

PROJECT No. 122151
 REV # 5
 DRAWING No. 122151-SWM