

INLET CONTROL DEVICE 1 DATA TABLE - AREA A-6							
DESIGN EVENT	ICD TYPE (PLUG TYPE)	OUTLET STRUCTURE	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME AVAILABLE STORAGE
1.2 YR	PEX TEMPEST VORTEX LMF ICD 105	1200mm \emptyset STMH 102	250mm \emptyset PVC	11.0	1.22	96.32	21.4
1.5 YR				14.7	2.18	97.28	28.9
1.100 YR				15.1	2.29	97.39	70.5

INLET CONTROL DEVICE 2 DATA TABLE - AREA A-7							
DESIGN EVENT	ICD TYPE (PLUG TYPE)	OUTLET STRUCTURE	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME AVAILABLE STORAGE
1.2 YR	CIRCULAR PLUG TYPE 91mm ORIFICE	1500mm \emptyset CBMH-3	250mm \emptyset PVC	25.8	2.08	97.20	39.4
1.5 YR				31.0	3.00	98.12	59.3
1.100 YR				31.7	3.14	98.26	137.6

INLET CONTROL DEVICE 3 DATA TABLE - AREA A-8							
DESIGN EVENT	ICD TYPE (PLUG TYPE)	OUTLET STRUCTURE	DIAMETER OF OUTLET PIPE (mm)	PEAK FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME AVAILABLE STORAGE
1.2 YR	CIRCULAR PLUG TYPE 226mm ORIFICE	1800mm \emptyset CBMH-6	300mm \emptyset PVC	92.0	0.70	96.14	28.7
1.5 YR				111.7	1.03	96.47	42.8
1.100 YR				109.5	2.96	98.40	89.4

ROOF DRAIN TABLE: AREA R-1 (FOR DRAINS RD A1 to RD A6)							
AREA ID	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1.100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH	
R-1	RD A1 (RD-100-A-ADJ)	3/4 EXPOSED	1.34 L/s	12 cm	1.58 L/s	15 cm	
R-1	RD A2 (RD-100-A-ADJ)	3/4 EXPOSED	1.10 L/s	11 cm	1.34 L/s	14 cm	
R-1	RD A3 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	11 cm	1.58 L/s	14 cm	
R-1	RD A4 (RD-100-A-ADJ)	3/4 EXPOSED	1.10 L/s	11 cm	1.34 L/s	14 cm	
R-1	RD A5 (RD-100-A-ADJ)	3/4 EXPOSED	1.10 L/s	11 cm	1.34 L/s	14 cm	
R-1	RD A6 (RD-100-A-ADJ)	FULLY EXPOSED	1.28 L/s	11 cm	1.89 L/s	14 cm	
TOTALS			7.16 L/s		9.07 L/s		

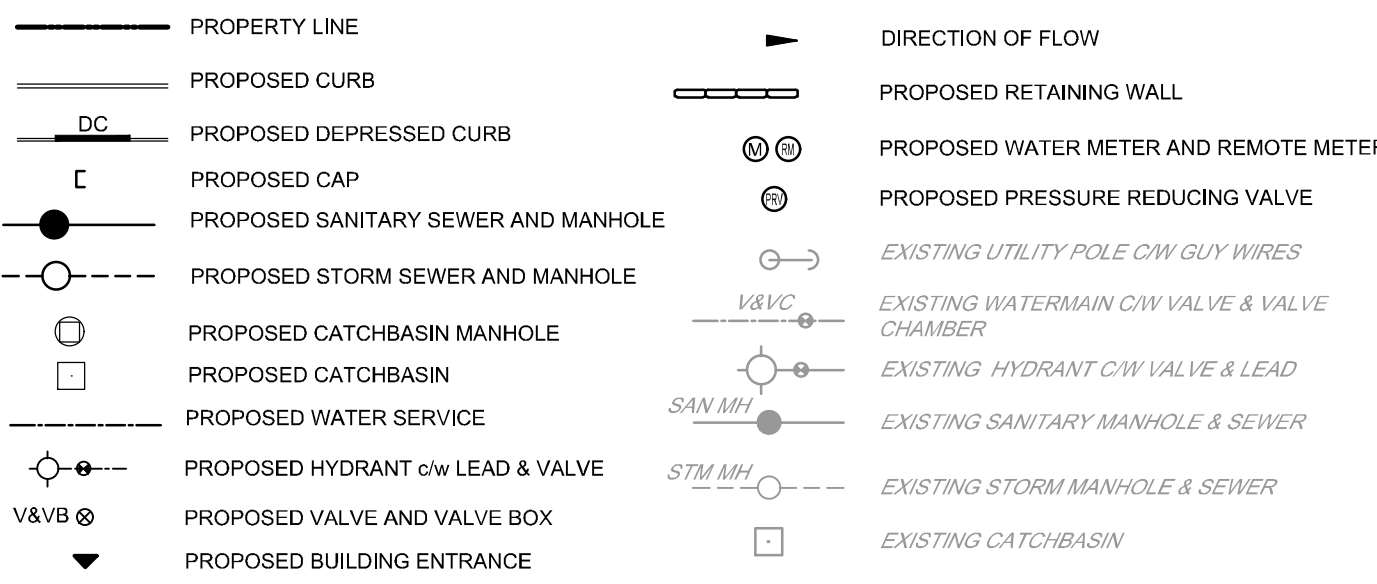
ROOF DRAIN TABLE: AREA R-2 (FOR DRAINS RD B1 to RD B3)							
AREA ID	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1.100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH	
R-2	RD B1 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	13 cm	
R-2	RD B2 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	13 cm	
R-2	RD B3 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	13 cm	
TOTALS			2.85 L/s		3.30 L/s		

ROOF DRAIN TABLE: AREA R-3 (FOR DRAINS RD C1 to RD C4)							
AREA ID	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1.100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH	
R-3	RD C1 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	14 cm	
R-3	RD C2 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	14 cm	
R-3	RD C3 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	13 cm	
R-3	RD C4 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	14 cm	
TOTALS			3.80 L/s		4.40 L/s		

ROOF DRAIN TABLE: AREA R-4 (FOR DRAINS RD D1 to RD D3)							
AREA ID	ROOF DRAIN No. (WATTS MODEL)	WEIR SETTING	1.5 YEAR RELEASE RATE	APPROX. 5 YR PONDING DEPTH	1.100 YEAR RELEASE RATE	APPROX. 100 YR PONDING DEPTH	
R-4	RD D1 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	11 cm	1.10 L/s	14 cm	
R-4	RD D2 (RD-100-A-ADJ)	1/4 EXPOSED	0.79 L/s	10 cm	0.87 L/s	13 cm	
R-4	RD D3 (RD-100-A-ADJ)	1/4 EXPOSED	0.95 L/s	11 cm	0.87 L/s	13 cm	
TOTALS			2.69 L/s		2.84 L/s		

* REFER TO THE SERVING AND STORMWATER MANAGEMENT REPORT (R-2024-074) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

LEGEND



GENERAL NOTES:

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT PG7262.2, DATED OCTOBER 01, 2024, PREPARED BY PATERSON GROUP, FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECTS AND LANDSCAPE ARCHITECTS DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO SERVING AND STORMWATER MANAGEMENT REPORT (R-2024-074) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE/PARKING PAINTING.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIG ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

SEWER NOTES:

- SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE MOST CURRENT CITY OF OTTAWA STANDARDS AND SPECIFICATIONS.
- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x900mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200mm \emptyset)	701.010	OPSD
STORM / SANITARY MANHOLE (1500mm \emptyset)	701.011	OPSD
STORM / SANITARY MANHOLE (1800mm \emptyset)	701.012	OPSD
CB FRAME & COVER	919	CITY OF OTTAWA
STORM / SANITARY MH FRAME & COVER	401.010 - TYPE 'B'	OPSD
CATCHBASIN MANHOLE FRAME & COVER	401.010 - TYPE 'B'	OPSD
SEWER TRENCH DROP STRUCTURE	1003.010	OPSD
STORM SEWER CATCHBASIN LEAD	PVC DR 35 / CONC 65-D PVC DR 35	
- ALL STORM AND SANITARY SEWER LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
- INSULATE ALL PIPES (SANITARY) THAT HAVE LESS THAN 20cm COVER WITH H-40 INSULATION PER INSULATION DETAIL FOR SHALLOW SEWERS. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KORAN-SEAL, PSX, POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.18, 410.07.18.04 AND 407.02.04. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- ALL STORM MANHOLES AND CATCHBASIN MANHOLES ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS ARE TO HAVE 600mm SUMPS UNLESS OTHERWISE INDICATED. ALL CATCHBASINS TO HAVE 30m OF FILTER-CLOTH WRAPPED 100mm PVC PERFORATED SUBDRAIN IN AN UPWARD DIRECTION PER GEOTECHNICAL RECOMMENDATIONS.
- ALL CATCHBASINS, MANHOLES AND/OR CATCHBASIN MANHOLES THAT ARE TO HAVE ICD'S INSTALLED WITHIN THEM ARE TO HAVE 600mm SUMPS.
- ALL WEeping TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER MAIN DOWNSTREAM OF ANY INLET CONTROL DEVICES.
- CONTRACTOR TO TELEPHONE (CTV) ALL PROPOSED SEWERS, 200mm \emptyset OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN. AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND TIG ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

UTILITY CROSSING TABLE						
CROSSING NO.	SANITARY INVERT	STORM INVERT	TOP OF 50mm \emptyset WATERMAIN	TOP OF 150mm \emptyset WATERMAIN	TOP OF 200mm \emptyset WATERMAIN	TOP OF 250mm \emptyset WATERMAIN
1	94.45	-	-	95.35	-	0.25
2	95.40	-	-	94.87	-	0.53
3	95.21	-	-	94.86	-	0.35
4	94.81	-	-	95.86	-	0.25
5	94.83	-	-	95.82	-	0.49
6	95.99	95.12	-	-	-	0.57
7	96.17	95.40	-	-	-	0.48
8	95.74	94.55	-	-	-	0.66
9	95.75	-	-	-	96.45	0.25
10	95.81	-	-	-	96.56	0.29
11	94.80	-	-	-	95.84	0.53
12	94.91	-	-	-	96.66	0.25
13	95.74	-	-	95.24	-	0.50
14	95.13	-	-	-	95.93	0.25
15	96.97	96.00	-	-	-	0.72
16	96.98	-	-	97.58	-	0.25
17	96.36	-	-	97.18	-	0.37
18	97.22	96.57	-	-	-	0.35

BENCHMARK NOTES:

- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO CITY OF OTTAWA 2016-0350, HAVING A PUBLISHED ELEVATION OF 64.947 METRES (GGV02878).
- IT IS THE RESPONSIBILITY OF THE USER OF THIS INFORMATION TO VERIFY THAT THE JOB BENCHMARK HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON THIS DRAWING.
- BENCHMARK WAS PROVIDED ON PLAN OF SURVEY BLOCK 241, REGISTERED PLAN M-111, CITY OF OTTAWA, SURVEYED BY J.D. BARNES LIMITED.

WATERMAIN NOTES:

- SPECIFICATIONS:

SPEC. No.	REFERENCE
W17	CITY OF OTTAWA
W22	CITY OF OTTAWA
W23	CITY OF OTTAWA
W23.5	CITY OF OTTAWA
W24	CITY OF OTTAWA
W25	CITY OF OTTAWA
W25.2	CITY OF OTTAWA
W25.4	CITY OF OTTAWA
W25.5	CITY OF OTTAWA
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W38	CITY OF OTTAWA
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W40.9	CITY OF OTTAWA
W41	CITY OF OTTAWA
W41.1	CITY OF OTTAWA
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