

INLET CONTROL DEVICE DATA TABLE - AREA A-5							
DESIGN EVENT	ICD TYPE (PLUG TYPE)	OUTLET STRUCTURE	DIAMETER OF OUTLET PIPE (mm)	PEAK DESIGN FLOW (L/s)	DESIGN HEAD (m)	WATER ELEVATION (m)	VOLUME (m³)
1.2 YR	CIRCULAR PLUG	1200mmØ STMH 204	250mmØ PVC	27.3	0.90	97.95	4.8
1.5 YR	CIRCULAR PLUG	1200mmØ STMH 204	250mmØ PVC	34.7	1.38	98.48	7.3
1-100 YR	CIRCULAR PLUG	1200mmØ STMH 204	250mmØ PVC	47.8	2.62	99.72	20.7

ESTIMATED QUANTITIES OF PROPOSED WORK IN DUN SKIPPER DRIVE RIGHT OF WAY

- 20m² OF CONCRETE SIDEWALK PER SC4

ESTIMATED QUANTITIES OF PROPOSED WORK IN CEDAR CREEK DRIVE RIGHT OF WAY

- 40m OF BARRIER CURB PER SC1.1

- 108m² OF CONCRETE SIDEWALK PER SC4

- 65m² OF HEAVY DUTY ASPHALT

- 13m OF 250mmØ WATERMAIN

ROOF DRAIN TABLE: AREA R-1 (FOR DRAINS RD 1 TO RD 8)							
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 1 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	10 cm	1.58 L/s	13 cm	
R-1	RD 2 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	10 cm	1.58 L/s	14 cm	
R-1	RD 3 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-1	RD 4 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-1	RD 5 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	11 cm	1.58 L/s	14 cm	
R-1	RD 6 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-1	RD 7 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-1	RD 8 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
TOTALS	-	-	8.53 L/s	-	10.24 L/s	-	-

ROOF DRAIN TABLE: AREA R-2 (FOR DRAINS RD 1 TO RD 6)							
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 1 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	10 cm	1.58 L/s	13 cm	
R-2	RD 2 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	10 cm	1.58 L/s	13 cm	
R-2	RD 3 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-2	RD 4 (RD-100-A-ADJ)	1/2 EXPOSED	0.95 L/s	10 cm	1.10 L/s	13 cm	
R-2	RD 5 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	10 cm	1.58 L/s	13 cm	
R-2	RD 6 (RD-100-A-ADJ)	FULLY EXPOSED	1.26 L/s	11 cm	1.58 L/s	14 cm	
TOTALS	-	-	6.94 L/s	-	8.52 L/s	-	-

* REFER TO THE SERVING AND STORMWATER MANAGEMENT REPORT (R-2024-129) PREPARED BY NOVATECH FOR DRAINAGE AREA IDENTIFIERS AND STORMWATER MANAGEMENT DETAILS.

LEGEND

	PROPERTY LINE
	PROPOSED CURB
	PROPOSED DEPRESSED CURB
	PROPOSED CAP
	PROPOSED SANITARY SEWER AND MANHOLE
	PROPOSED STORM SEWER AND MANHOLE
	PROPOSED CATCHBASIN MANHOLE
	PROPOSED CATCHBASIN
	PROPOSED WATER SERVICE
	PROPOSED HYDRANT c/w LEAD & VALVE
	PROPOSED VALVE AND VALVE BOX
	PROPOSED DISTRICT METER AREA CHAMBER PER CITY STANDARD W3.1
	PROPOSED WATER METER
	PROPOSED REMOTE METER
	APPROXIMATE LOCATION OF SUMP PUMP
	EXACT LOCATION TO BE COORDINATED WITH MECHANICAL
	PROPOSED BUILDING ENTRANCE
	DIRECTION OF FLOW
	PROPOSED RETAINING WALL
	EXISTING UTILITY POLE c/w GUY WIRES
	EXISTING WATERMAIN c/w VALVE & VALVE CHAMBER
	EXISTING HYDRANT c/w VALVE & LEAD
	EXISTING SANITARY MANHOLE & SEWER
	EXISTING STORM MANHOLE & SEWER
	EXISTING CATCHBASIN

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 PG262-21, DATED NOVEMBER 14, 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 ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO SERVING AND STORMWATER MANAGEMENT REPORT (R-2024-129) 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 TIO ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

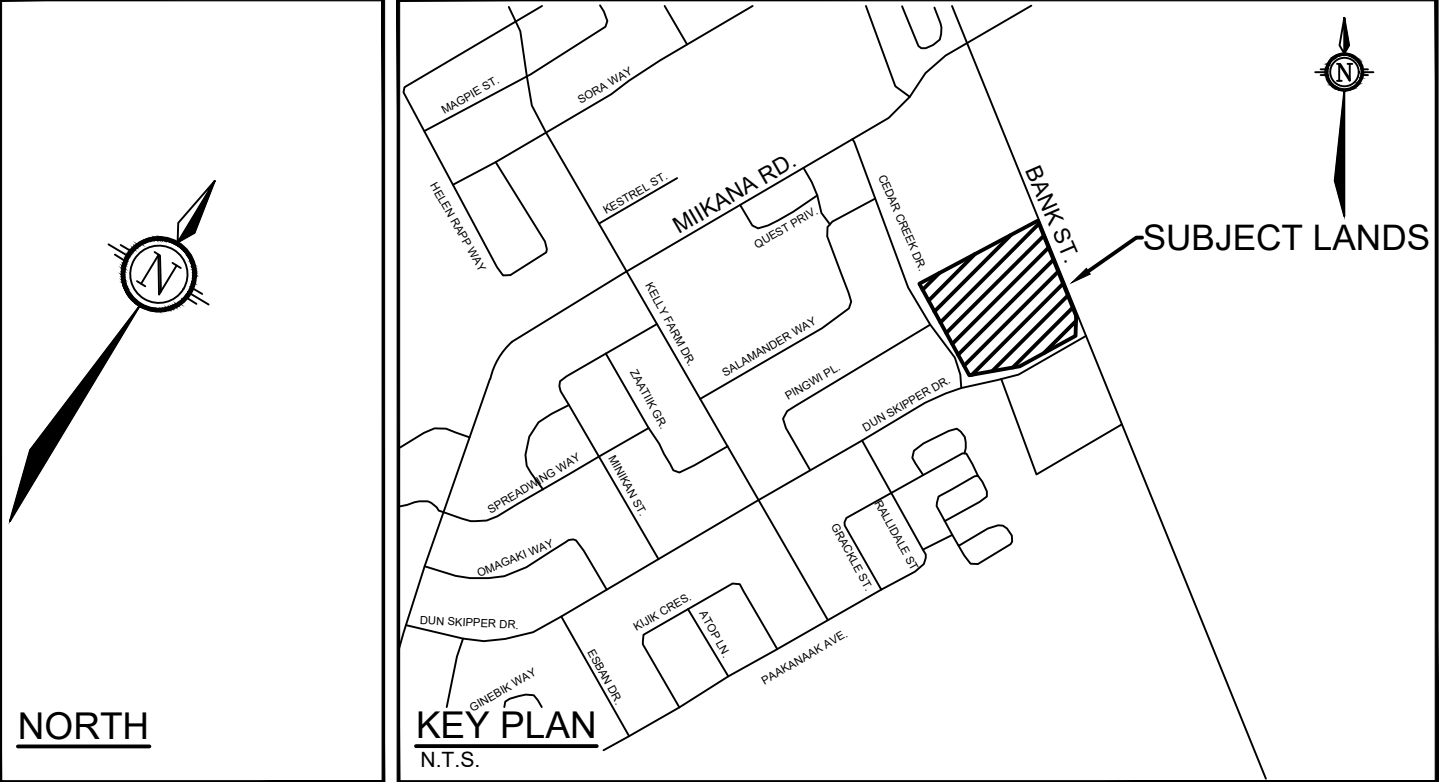
SEWER NOTES:

- 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 (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200mm)	701.010	OPSD
STORM / SANITARY MANHOLE (1500mm)	701.011	OPSD
STORM / SANITARY MANHOLE (1800mm)	701.012	OPSD
CB. FRAME & COVER	S19	CITY OF OTTAWA
STORM / SANITARY MH FRAME & COVER	401.010 - TYPE 'A'	OPSD
CATCHBASIN MANHOLE FRAME & COVER	401.010 - TYPE 'B'	OPSD
SEWER TRENCH	S6	CITY OF OTTAWA
PERFORATED PIPE (SUBDRAIN)	S29	CITY OF OTTAWA
CATCHBASIN TEE	S30	CITY OF OTTAWA
CATCHBASIN ELBOW	S31	CITY OF OTTAWA
INSULATION FOR SHALLOW SEWERS	S35	CITY OF OTTAWA
ALUMINUM SAFETY PLATFORM	404.020	OPSD
DROP STRUCTURE	1003.010	OPSD
STORM SEWER	PVC DR 35 / CONC 65-D	OPSD
CATCHBASIN LEAD	PVC DR 35	OPSD
- ALL STORM AND SANITARY SERVICE LATERALS SHALL BE EQUIPPED WITH BACKFLOW PREVENTION DEVICES AS PER THE CITY OF OTTAWA STANDARD DETAILS S14 AND S14.1 OR S14.2.
- INSULATE SANITARY AND STORM PIPES THAT HAVE LESS THAN 20cm COVER WITH H-40 INSULATION PER CITY OF OTTAWA STANDARD DETAIL S35.
- 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 KORU-SEAL, PSX, POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- 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 3.0m 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 WEEDING TILE CONNECTIONS TO BE MADE TO THE PROPOSED STORM SEWER SYSTEM DOWNSTREAM OF ANY INLET CONTROL DEVICES.
- ROOF DRAINAGE IS NOT PERMITTED TO BE CONNECTED TO THE BUILDING FOUNDATION DRAINAGE SYSTEM.
- CONTRACTOR TO TELETYPE (CCTV) ALL PROPOSED SEWERS, 200mmØ 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 TIO ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, TWM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

BENCHMARK NOTES:

- ELEVATIONS SHOWN ARE GEODETIC AND ARE REFERRED TO CITY OF OTTAWA 2016-0350, HAVING A PUBLISHED ELEVATION OF 84.947 METRES (CGVD2878).
- 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 44-1611, CITY OF OTTAWA, SURVEYED BY J.D. BARNES LIMITED.



WATERMAIN NOTES:

- SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
THERMAL INSULATION BY OPEN STRUCTURES	W23	CITY OF OTTAWA
CONCRETE THRUST BLOCKS (UNDER 400mmØ)	W23.4	CITY OF OTTAWA
THRUST BLOCK TABLE (UNDER 400mmØ)	W25	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25.2	CITY OF OTTAWA
WATERMAIN CROSSING ABOVE SEWER	W2.1	CITY OF OTTAWA
FLOW MONITORING CHAMBER	PVC DR 18	CITY OF OTTAWA
WATERMAIN (100mmØ AND LARGER)	TYPE K COPPER	
WATERMAIN (50mmØ AND SMALLER)		
- SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS. EXCAVATION, INSTALLATION, OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
- EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS. EXCAVATION, INSTALLATION, OF SERVICE, BACKFILL AND RESTORATION BY THE CONTRACTOR.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED, WHERE DEPTH OF COVER IS LESS THAN 2.4m. WATERMAIN SHALL BE INSULATED PER CITY OF OTTAWA STANDARD DETAIL W22. WATERMAIN SHALL BE INSULATED BY OPEN STRUCTURES PER W23.
- PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

250mmØ WATERMAIN TABLE				
CHAINAGE	FINISHED GRADE	TOP OF WATERMAIN	COMMENT	
5+000.0	100.93	98.81	CONNECT TO EXISTING WITH 22.5° VERT BEND	
5+000.9	100.92	98.35	22.5° VERTICAL BEND	
5+002.5	100.91	98.35	VALVE AND VALVE BOX	
5+004.1	100.89	98.35	250mm x 150mm CROSS CONNECTION	
5+004.9	100.87	98.35	VALVE AND VALVE BOX	
5+005.6	100.86	98.35	250mm x 150mm CROSS CONNECTION	
5+010.6	100.75	98.35	250mm x 250mm TEE CONNECTION	
5+014.8	100.75	98.35	TOP OF WATERMAIN ELEVATION	
5+031.5	100.30	97.90	TOP OF WATERMAIN ELEVATION	
5+056.5	100.02	96.46	TOP OF WATERMAIN ELEVATION	
5+060.5	98.48	96.51	VALVE AND VALVE BOX	
5+064.7	98.40	96.56	22.5° VERTICAL BEND	
5+068.5	98.08	95.68	250mm x 250mm TEE CONNECTION (ROTATED)	

250mmØ WATERMAIN TABLE *				
CHAINAGE	FINISHED GRADE	TOP OF WATERMAIN	COMMENT	
6+000.0	101.05	98.85	CONNECT TO EXISTING 250mmØ WATERMAIN	
6+013.0	101.32	98.66	VALVE AND VALVE BOX	
6+014.7	101.36	98.63	DISTRICT METER AREA CHAMBER (DMA)	
6+016.3	101.38	98.60	45° HORIZONTAL BEND	
6+021.6	101.16	98.50	WATER CROSSING (0.25m SEPARATION MIN)	
6+027.3	100.88	98.40	45° HORIZONTAL BEND	
6+029.0	100.75	98.35	CONNECT TO PROPOSED 250mmØ WATERMAIN	

SEWER PIPE CROSSING TABLE				
CROSSING	HIGHER PIPE	LOWER PIPE	CLEARANCE	
Ø	250mmØ WM BOTTOM=98.55	200mmØ SAN TOP=96.51	± 2.04m	
Ø	250mmØ WM BOTTOM=98.51	150mmØ STM TOP=96.24	± 2.27m	
Ø	150mmØ WM BOTTOM=99.05	250mmØ WM TOP=98.58	± 0.47m	
Ø	150mmØ WM BOTTOM=98.14	250mmØ WM TOP=98.51	± 0.63m	
Ø	250mmØ WM BOTTOM=98.21	200mmØ SAN TOP=97.76	± 0.45m	
Ø	250mmØ WM BOTTOM=98.17	200mmØ SAN TOP=97.74	± 0.43m	
Ø	250mmØ WM BOTTOM=98.09	200mmØ STM TOP=97.72	± 0.37m	
Ø	250mmØ WM BOTTOM=98.09	200mmØ SAN TOP=97.72	± 0.37m	
Ø	200mmØ STM BOTTOM=97.47	250mmØ SAN TOP=95.68	± 1.79m	
Ø	200mmØ SAN BOTTOM=95.78	900mmØ STM TOP=94.92	± 1.06m	
Ø	250mmØ WM BOTTOM=98.15	900mmØ STM TOP=94.91	± 3.24m	
Ø	150mmØ WM BOTTOM=98.00	900mmØ STM TOP=94.90	± 3.10m	
Ø	150mmØ WM BOTTOM=98.09	300mmØ SAN TOP=94.10	± 3.29m	
Ø	150mmØ WM BOTTOM=98.09	300mmØ SAN TOP=94.10	± 4.00m	
Ø	250mmØ STM BOTTOM=96.93	250mmØ SAN TOP=95.88	± 1.05m	
Ø	250mmØ STM BOTTOM=96.96	250mmØ WM TOP=96.46	± 0.50m	

[Signature]

GERALDINE WILDMAN
MANAGER, DEVELOPMENT REVIEW SOUTH
PLANNING, DEVELOPMENT AND BUILDING SERVICES
DEPARTMENT, CITY OF OTTAWA

APPROVED
By Geraldine Wildman at 7:03 pm, Dec 15, 2025

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.

REVISION			
No.	REVISION	DATE	BY
4	REVISED PER CITY COMMENTS	AUG 29/25	MS
3	REVISED PER CITY COMMENTS	MAY 30/25	MS
2	REVISED AS PER CITY COMMENTS	APR 10/25	MS
1	ISSUED FOR SPC APPLICATION	JAN 17/25	MS

SCALE	
1:400	
0 4 8 12 16	

FOR REVIEW ONLY	
DESIGN	MS / LSC
CHECKED	MS
DRAWN	LSC
CHECKED	MS
APPROVED	MS

GENERAL PLAN OF SERVICES	
LOCATION	CITY OF OTTAWA 150 DUN SKIPPER DRIVE
DRAWING NAME	124107
REV	REV # 4
DRAWING No.	124107-GP1

NOVATECH	
Engineers, Planners & Landscape Architects	Suite 200, 240 Michael Cowpland Drive Ottawa, Ontario, Canada K2M 1P6
Telephone	(613) 254-9643
Facsimile	(613) 254-5867
Website	www.novatech-eng.com

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