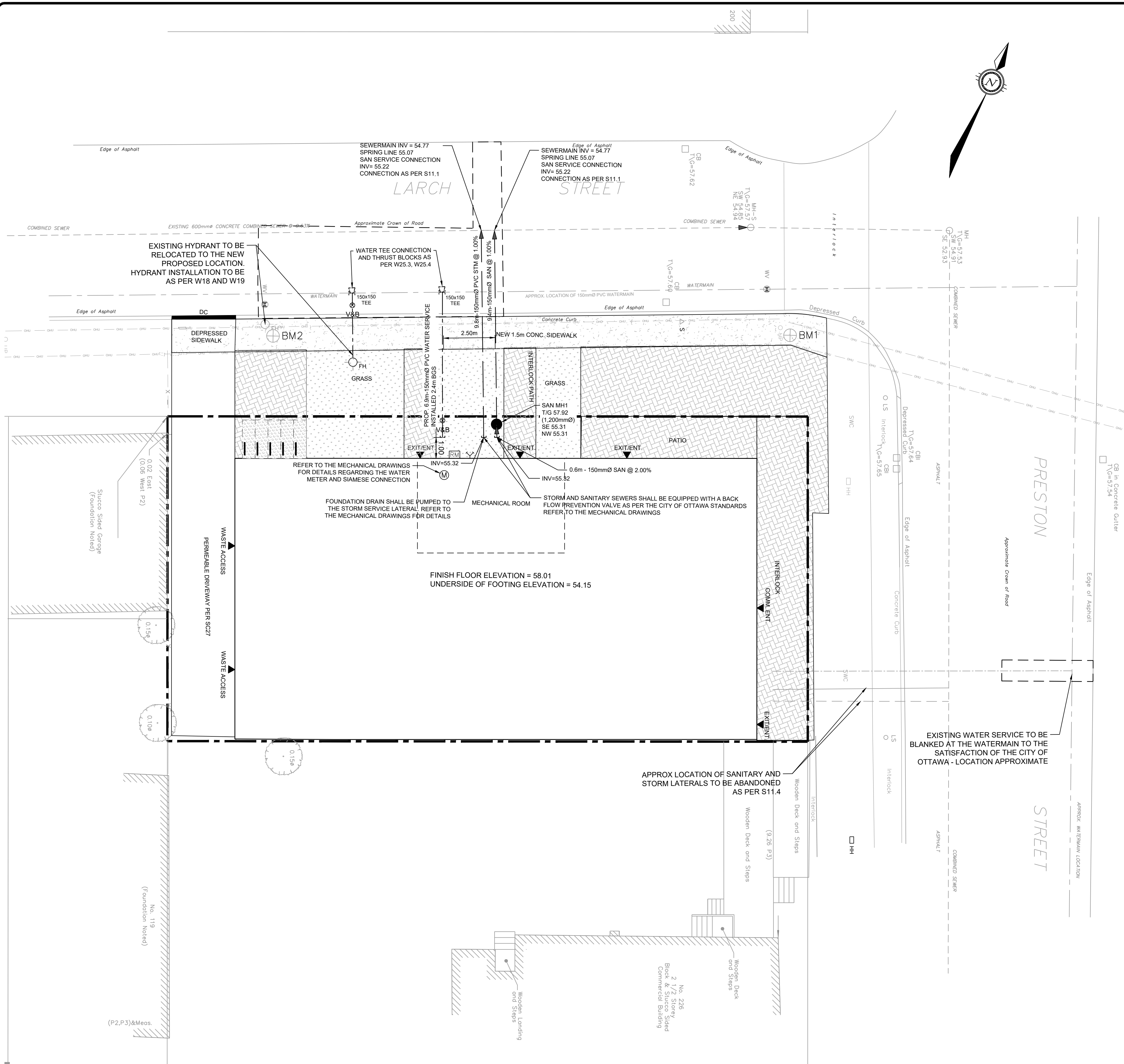


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DRAWING No. Servicing



Site Benchmark #1
Nail and Washer
in Utility Pole
Top of Washer
Elevation=58.26

Site Benchmark #2
Fire Hydrant
Top of Spindle
Elevation=58.75

BALSAM STREET
(FORMERLY LACHLIN STREET INST. 12228)

Area #	Number of Roof Drains	Roof Drain Model	Roof Drain Opening Setting	Controlled Flow per Drain L/s		Ponding Depth (mm)		Storage Volume (m3)		Max Available Storage m3	
				5-Yr	100-Yr	5-Yr	100-Yr	5-Yr	100-Yr		
A1	1	Watts RD-100 with Accutrol ADJ	3-1/4 open	0.80	0.91	105	140	3.63	4.84	5.2	
A2	1	Watts RD-100 with Accutrol ADJ	3-1/4 open	0.79	0.90	99	135	2.56	3.48	3.9	
A3	1	Watts RD-100 with Accutrol ADJ	2-Closed	0.32	0.32	60	112	0.23	0.43	0.6	
A4	1	Watts RD-100 with Accutrol ADJ	3-1/4 open	0.66	0.71	59	74	0.18	0.23	0.5	
A5	1	Watts RD-100 with Accutrol ADJ	3-1/4 open	0.66	0.71	60	74	0.14	0.17	0.4	
A6	2	Watts RD-100 with Accutrol ADJ	3-1/4 open	0.74	0.86	86	122	1.24	1.76	2.2	
								Total	7.98	10.92	12.6

REFER TO THE ROOF DRAINAGE PLAN FOR THE ROOF AREA BREAKDOWN

SANITARY SEWER NOTES

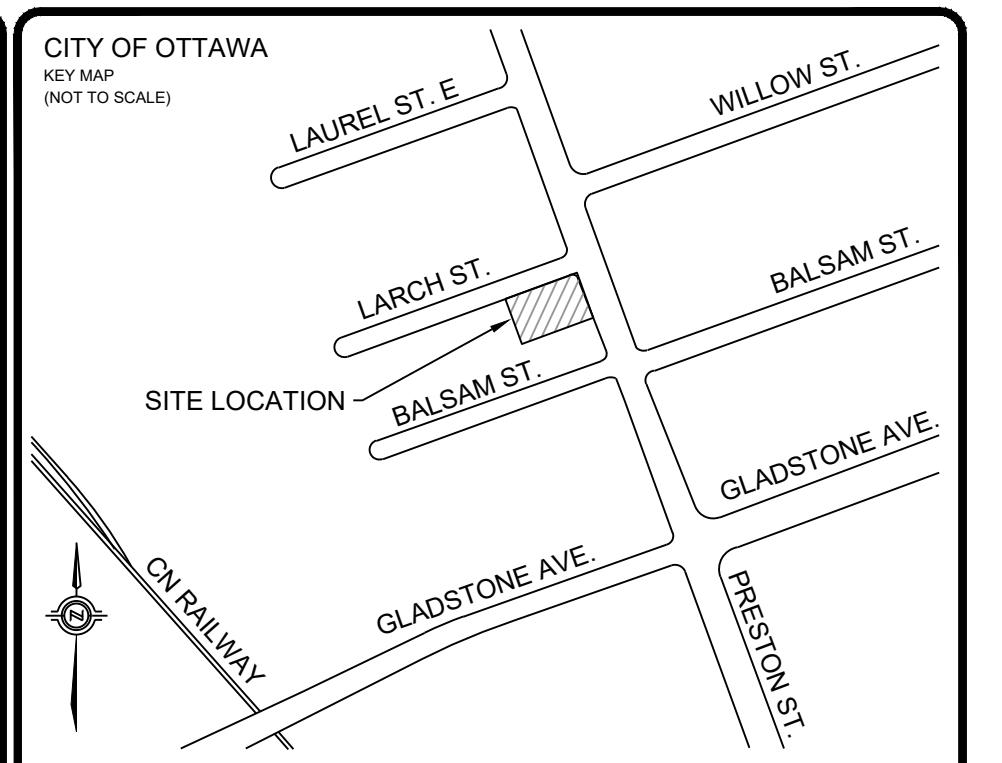
- ALL SANITARY SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD 6182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED.
- SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED.
- ALL SANITARY LATERALS ARE TO BE PVC SDR 28, IPEX "RING-TITE" (OR EQUIVALENT), ANY COLOR EXCEPT WHITE.
- SEWER BEDDING AS PER OPSD 802.010. GRANULAR 'A' BEDDING TO BE INCREASED TO 300MM WHERE SEWERS ARE BELOW THE GROUNDWATER TABLE.
- SANITARY SEWER MANHOLES SHALL BE BENCHMARKED AS PER OPSD 701.021. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER OPSD 401.010. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.020.
- THE CONTRACTOR SHALL CONDUCT INFILTRATION/EXFILTRATION (AS PER CURRENT OPSS) TESTING ON ALL NEWLY INSTALLED SANITARY SEWERS. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWER INSTALLATION AND VIEWED BY THE ENGINEER.
- THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.
- ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER OPSD 1006.010.
- THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE SANITARY SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMD.
- ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.
- WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
- MINIMUM SOIL COVER TO BE 2.5m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE FROST COVER CANNOT BE ACHIEVED, EQUIVALENT THERMAL INSULATION TO BE INSTALLED AS PER OPSD S14.010.

STORM SEWER NOTES

- ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- SEWER BEDDING AS PER CITY STANDARD S6 & S7.
- ALL STORM LATERALS SHALL BE PVC SDR 35, GREEN IN COLOR.
- ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER OPSD 1006.010.
- WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
- MINIMUM SOIL COVER TO BE 2.0M TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE FROST COVER CANNOT BE ACHIEVED, EQUIVALENT THERMAL INSULATION TO BE INSTALLED AS PER OPSD S14.010.
- ALL STORM SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
- THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED. WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ADDITIONAL BEDDING, A DIFFERENT TYPE OF BEDDING OR A HIGHER PIPE STRENGTH AT HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
- THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.

WATERMAIN NOTES

- ALL WATERMAIN MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- NO WORK SHALL COMMENCE UNLESS A MUNICIPAL WATER WORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
- WATERMANS TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH OPSD 802.010, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
- WATER SERVICES ARE TO BE PVC DR18 AS PER THE CITY OF OTTAWA STANDARDS.
- CATHODIC PROTECTION IS REQUIRED ON ALL PVC FITTINGS AS PER OPSD 1109.011.
- VALVE BOXES SHALL BE INSTALLED AS PER OPSD 1101.020.
- ALL WATERMANS TO BE INSTALLED AT MINIMUM COVER OF 2.4m.
- DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
- WATER METERS TO BE INSTALLED AS PER CITY OF OTTAWA STD. W32 FOR WATER SERVICES OR AS DESCRIBED IN THE MECHANICAL DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
- WHERE THE SEPARATION BETWEEN SERVICES AND MANHOLES IS LESS THAN 1.2m, WATER SERVICES ARE TO BE INSULATED AS PER OPSD 1109.030.
- AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.25M FOR CROSSING OVER THE SEWER, AS PER OPSD 1006.010. FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.50M AS PER OPSD 1006.010. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.



LEGEND

	PROPERTY LINE
	EXISTING OVERHEAD UTILITY
	EXISTING WATERMAIN
	PROPOSED WATERMAIN
	PROPOSED STORM SEWER
	PROPOSED SANITARY SEWER
	ROW SAWCUT AND REINSTATEMENT LIMIT PER R10 DETAIL
	PROPOSED VALVE AND VALVE BOX
	PROPOSED SANITARY MAINTENANCE HOLE
	PROPOSED STORM MAINTENANCE HOLE
	SITE BENCHMARK
	EXISTING UTILITY POLE
	EXISTING LIGHT STANDARD
	PROPOSED BUILDING ENTRANCE
	PROPOSED REMOTE WATER METER
	PROPOSED SIAMESE CONNECTION
	PROPOSED WATER METER
	PROPOSED CAP

REVISIONS

No.	Description	Date	By	App.
4	RE-ISSUED PER CITY COMMENTS	JUN 2024	A.D.	B.T.
3	RE-ISSUED PER CITY COMMENTS	FEB. 2024	Y.A.	B.T.
2	RE-ISSUED PER CITY COMMENTS	OCT. 2023	Y.A.	B.T.
1	ISSUED FOR SITE PLAN CONTROL APPROVAL	APR. 2023	Y.A.	Y.A.



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 www.exp.com

- BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
- INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •

Owner/Client:
224 ON PRESTON INC.

Location:
**224 PRESTON STREET
OTTAWA, ONTARIO**

Title:
SITE SERVICING PLAN

Designed By: Y.A. | Drawn By: B.P. | Checked By: C.C.
 Scale: 1:100 | Date: APR, 2023 | Drawing No.: **C100**
 Project No.: OTT-22019695-AO

DOT-12-23-0060

#18968