

LEGEND

	SITE BOUNDARY
	PROPOSED CURB
	PROPOSED SANITARY MANHOLE & SEWER
	PROPOSED STORM MANHOLE & SEWER
	PROPOSED WATERMAIN
	PROPOSED DIRECTION OF FLOW
	PROPOSED VALVE & VALVE BOX LOCATION
	PROPOSED STAND POST LOCATION
	PROPOSED SERVICE LOCATION
	SAN - 135mm PVC DR28 @ 2.0% (1.0% MIN)
	STM - 100mm PVC DR28 @ 2.0% (1.0% MIN)
	WATER - 19mm PEX
	PROPOSED SERVICE LOCATION C/W SLEEVE
	SAN - 135mm PVC DR28 @ 2.0% (1.0% MIN)
	STM - 100mm PVC DR28 @ 2.0% (1.0% MIN)
	WATER - 19mm PEX
	PROPOSED SERVICE LOCATION C/W SLEEVE
	SAN - 135mm PVC DR28 @ 2.0% (1.0% MIN)
	WATER - 19mm PEX
	EXISTING SANITARY MANHOLE & SEWER
	EXISTING STORM MANHOLE AND SEWER
	EXISTING WATERMAIN
	EXISTING VALVE AND VALVE BOX
	EXISTING FIRE HYDRANT C/W LEAD
	EXISTING CATCHBASIN
	PROPOSED ROAD CUT LIMITS

SAN MANHOLE TABLE

MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)
413	1200mm	65.14	SW=62.44
415 ¹	1200mm	64.76	NE=62.02 SW=61.21
417	1200mm	64.81	SW=62.10
419 ¹	1200mm	64.52	NE=61.70 SW=61.03
421	1200mm	64.54	S=61.82
423	1200mm	64.09	N=61.38 S=60.95

STM MANHOLE TABLE

MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)
408	1200mm	65.30	SW=62.98
410	1200mm	64.76	NE=62.56 SW=62.49 SE=63.45
412	1200mm	64.56	S=62.28
414	1200mm	64.27	N=61.93 S=61.90 E=62.77

CATCHBASIN TABLE

CB ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)	ICD DIA (mm)	100yr CAPTURE RATE (%)
CB-2	610 x 610 CB	64.84	W=63.64	LMF 60	3.9
CB-6	610 x 610 CB	64.71	NW=63.51	LMF 105	12.1
CB-8	610 x 610 CB	64.04	W=62.83	83mm	16.6
CBMH-7	1,200 mm dia CBMH	64.45	SW=63.25	83mm	16.2

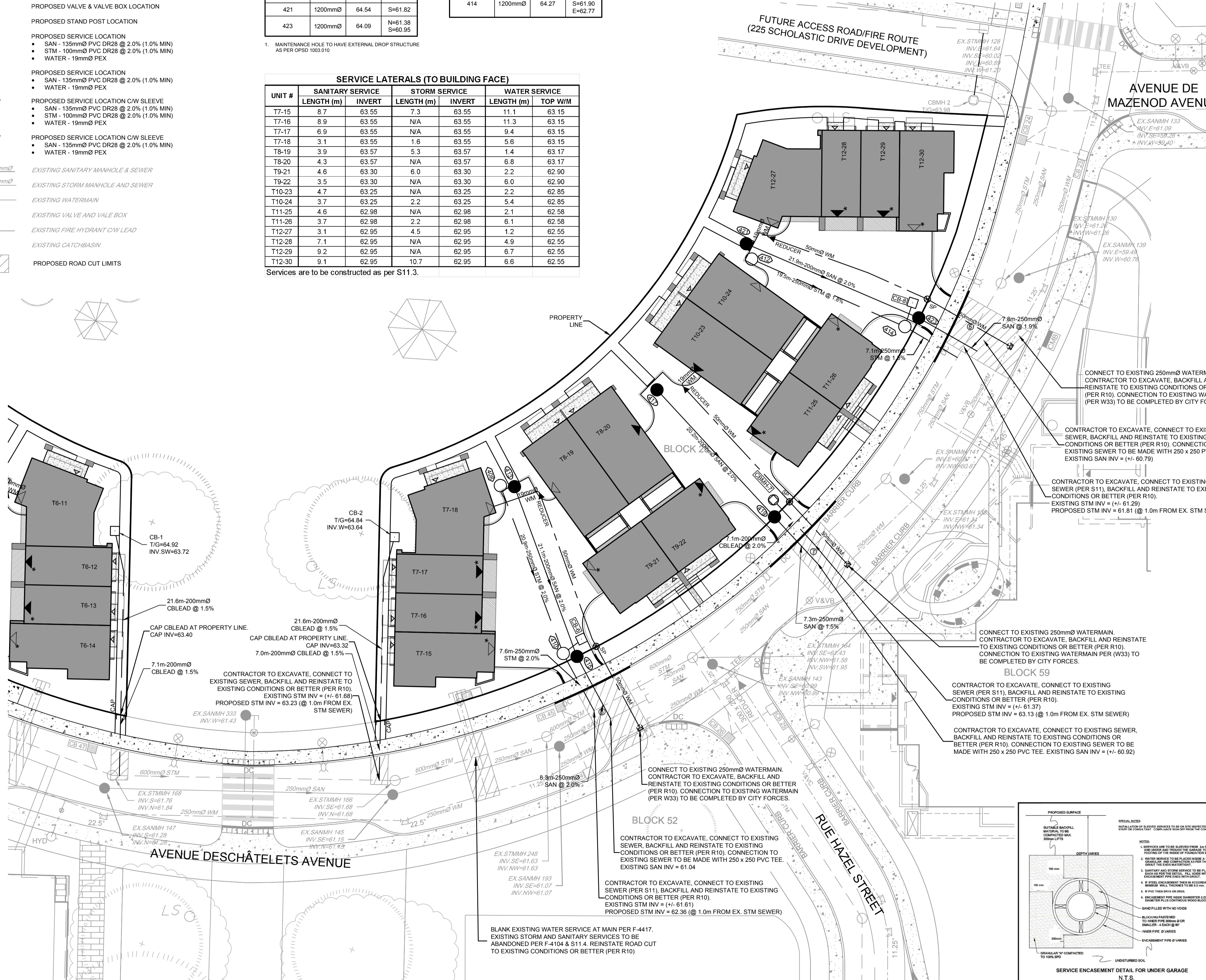
CRITICAL PIPE CROSSING TABLE

ID	250mm SAN OBV=61.32	600mm STM INV=61.61	PROPOSED SEPARATION
⑥	250mm SAN OBV=61.32	600mm STM INV=61.61	SAN-STM=0.29m
⑦	250mm SAN OBV=61.20	750mm STM INV=61.38	SAN-STM=0.18m
⑧	250mm SAN OBV=61.07	750mm STM INV=61.28	SAN-STM=0.21m

SERVICE LATERALS (TO BUILDING FACE)

UNIT #	SANITARY SERVICE		STORM SERVICE		WATER SERVICE	
	LENGTH (m)	INVERT	LENGTH (m)	INVERT	LENGTH (m)	TOP W/M
T7-15	8.7	63.55	7.3	63.55	11.1	63.15
T7-16	8.9	63.55	N/A	63.55	11.3	63.15
T7-17	6.9	63.55	N/A	63.55	9.4	63.15
T7-18	3.1	63.55	1.6	63.55	5.6	63.15
T8-19	3.9	63.57	5.3	63.57	1.4	63.17
T8-20	4.3	63.57	N/A	63.57	6.8	63.17
T9-21	4.6	63.30	6.0	63.30	2.2	62.90
T9-22	3.5	63.30	N/A	63.30	6.0	62.90
T10-23	4.7	63.25	N/A	63.25	2.2	62.85
T10-24	3.7	63.25	2.2	63.25	5.4	62.85
T11-25	4.6	62.98	N/A	62.98	2.1	62.58
T11-26	3.7	62.98	2.2	62.98	6.1	62.58
T12-27	3.1	62.95	4.5	62.95	1.2	62.55
T12-28	7.1	62.95	N/A	62.95	4.9	62.55
T12-29	9.2	62.95	N/A	62.95	6.7	62.55
T12-30	9.1	62.95	10.7	62.95	6.6	62.55

Services are to be constructed as per S11.3.



SOURCE REFERENCE:
 TOPOGRAPHIC PLAN OF SURVEY OF PART OF LOT "H" CONCESSION "D" (RIDEAU FRONT), PREPARED BY ANNIS, O-SULLIVAN, VOLLEBEK LTD. ON DECEMBER 15, 2017.
TOPOGRAPHIC INFORMATION:
 HORIZONTAL DATUM: NAD 83 (ORIGINAL), MTM - ZONE 9
 VERTICAL DATUM: CGVD2878
 1. ANNIS, O-SULLIVAN, VOLLEBEK LTD'S TOPOGRAPHIC PLAN OF SURVEY
 2. NOVATECH TOPOGRAPHIC SURVEY, APRIL 2024

GENERAL NOTES:

- DIMENSIONS AND LAYOUT INFORMATION SHALL BE CONFIRMED PRIOR TO START OF CONSTRUCTION.
- THE ORIGINAL TOPOGRAPHY AND GROUND ELEVATIONS, SERVICING AND SURVEY INFORMATION SHOWN ON THIS PLAN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF ALL INFORMATION OBTAINED FROM THIS PLAN. PRIOR TO COMMENCING ANY ON-SITE SERVICING THE CONTRACTOR SHALL VERIFY THE ELEVATIONS OF THE EXISTING SEWERS, WATERMANS AND UTILITIES IN THE OBLATS AVENUE AND DESCHATELETS AVENUE RIGHT OF WAY.
- CO-ORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- BEFORE COMMENCING CONSTRUCTION, PROVIDE PROOF OF COMPREHENSIVE ALL RISK AND OPERATIONAL LIABILITY INSURANCE. INSURANCE POLICY TO NAME THE OWNER, ENGINEER AND THE CITY AS CO-INSURED.
- CONNECT TO EXISTING SYSTEMS AS DETAILED, INCLUDING ALL RESTORATION WORK NECESSARY TO REINSTATE SURFACES TO EXISTING CONDITIONS OR BETTER.
- 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 THESE DRAWINGS.
- OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS BEFORE COMMENCING CONSTRUCTION.
- RESTORE ALL TRENCHES AND SURFACE FEATURES TO EXISTING CONDITIONS OR BETTER AND TO THE SATISFACTION OF MUNICIPAL AUTHORITIES.
- REMOVE FROM SITE ALL DEBRIS AND EXCESS EXCAVATED MATERIAL UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS.
- REFER TO STRUCTURAL PLANS FOR UNDERSIDE OF FOOTING AND TOP OF FOUNDATION INFORMATION.
- REFER TO GEOTECHNICAL INVESTIGATION P6846-1 (DATED FEBRUARY 1, 2024), PREPARED BY PATERSON GROUP.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A MARKED UP COPY OF THE 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 T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/W ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.
- ALL WORK TO BE CONSTRUCTED TO CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS.

SEWER NOTES:

- ITEM SPEC. No. REFERENCE
 - CATCHBASIN (600x600mm) 735.010 OPSD CITY OF OTTAWA
 - STORM / SANITARY MAINTENANCE HOLE (1200mm) 701.010 OPSD CITY OF OTTAWA
 - STORM / SANITARY MH FRAME & COVER PVC SDR 35
 - SANITARY SEWER PVC SDR 35
 - CATCHBASIN LEAD PVC SDR 35
 - SEWER TRENCH PVC SDR28 (S11.3) CITY OF OTTAWA
 - SANITARY AND STORM SERVICES S25 & S28.1 CITY OF OTTAWA
 - CB FRAME & COVER S19 & S28.1 CITY OF OTTAWA
- ALL CATCHBASIN AND CATCHBASIN MAINTENANCE LEADS ARE TO BE 200mm DIA. PVC SDR 35 AT 2% SLOPE UNLESS OTHERWISE SPECIFIED ON THE DRAWING.
- INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 2.0m COVER AS PER THE INSULATION DETAIL FOR SHALLOW SEWERS AS PER DETAIL S35.
- SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM BUILDING FACE AT 2.0% SLOPE (1.0% MINIMUM). SERVICES TO BE CONNECTED TO MAINLINE SEWER AS PER CITY OF OTTAWA S11.1.
- PIPE BEDDING AND COVER ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE COVER MATERIAL SHALL CONSIST OF OPSS GRANULAR 'A' AND SHOULD EXTEND FROM THE SPRING LINE OF THE PIPE TO AT LEAST 300mm ABOVE THE OVERTOP OF THE PIPE.
- SANITARY PIPE TO BE IPEX SDR 35 OR EQUIVALENT WITH JOINT PRESSURE RATING OF 345kPa MINIMUM. WHERE PRIVATE SANITARY SEWER DOES NOT HAVE 2.5m CLEARANCE TO THE WATERMAIN, THE CONTRACTOR SHALL COMPLETE PRESSURE TESTING OF THE SANITARY SEWER TO CONFIRM THE 345kPa (min.) PRESSURE RATING OF THE SANITARY PIPE. TESTING TO BE COMPLETED PRIOR TO SANITARY LATERAL INSTALLATIONS.
- THE SITE SERVICING CONTRACTOR SHALL PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSD 410.07.15 AND 407.07.24. DYE TESTING IS TO BE COMPLETED ON ALL SANITARY AND STORM SERVICES TO CONFIRM PROPER CONNECTION TO THE SEWER MAINS. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE ENGINEER.
- STORM MAINTENANCE HOLES SHALL HAVE 300mm SLUMPS AND CATCHBASIN MAINTENANCE HOLES SHALL HAVE 600mm SLUMPS UNLESS OTHERWISE INDICATED.
- CONTRACTOR TO TELEVIEW (CCTV) ALL PROPOSED SEWERS, 200mm OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- CONTRACTOR SHALL OBTAIN A VIDEO INSPECTION OF THE CITY SEWER SYSTEM WITHIN OBLATS AVENUE AND DESCHATELETS AVENUE RIGHT OF WAY UPON COMPLETION OF CONSTRUCTION TO DETERMINE IF THE CITY SEWER SYSTEM SUSTAINED ANY DAMAGES AS A RESULT OF CONSTRUCTION ON THE LANDS.

WATERMAIN NOTES:

- GENERAL:
 - ITEM DETAIL No. REFERENCE
 - WATERMAIN TRENCHING W17 CITY OF OTTAWA
 - THERMAL INSULATION IN SHALLOW TRENCHES W25 / W25.2 CITY OF OTTAWA
 - WATERMAIN CROSSING BELOW SEWER / OVER SEWER W26 / W26.2 CITY OF OTTAWA
 - WATER SERVICE: 19mm PEX SUBRCTS W28 CITY OF OTTAWA
 - WATERMAIN: 50mm PEX SUBRCTS W33 CITY OF OTTAWA
- 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 SHALL BE PERFORMED BY CITY OFFICIALS.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. CONTRACTOR TO SUPPLY AND INSTALL INSULATION AS PER W22 FOR ALL WATERMAIN LESS THAN 2.4m BELOW GRADE.
- PROVIDE MINIMUM CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS PER W25 (0.50m) AND W25.2 (0.25m).
- WATER SERVICES ARE TO BE INSTALLED 1.0m FROM THE BUILDING FACE, WITH 15m OF PIPE LEFT COILED.
- CURB STOPS ARE TO BE LOCATED 2.0m FROM THE FOUNDATION WALL WHEREVER POSSIBLE.
- WATERMANS LOCATED WITHIN 2.4m FROM OPEN STRUCTURES ARE TO BE INSULATED AS PER CITY OF OTTAWA STANDARD DETAIL W23

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.

REVISIONS

No.	REVISION	DATE	BY
4.	REVISED PER CITY COMMENTS	NOV 29/24	TJM
3.	RE-ISSUED FOR SITE PLAN APPROVAL	OCT 17/24	TJM
2.	ISSUED FOR SITE PLAN APPROVAL	AUG 14/24	TJM
1.	ISSUED FOR DISCUSSION	APR 26/24	TJM

SCALE

1:250

DESIGN

DESIGN	SAM
CHECKED	TJM
DRAWN	SAM
CHECKED	TJM
APPROVED	TJM



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LOCATION
 CITY OF OTTAWA
 GREYSTONE VILLAGE

DRAWING NAME
 BLOCK 28
 GENERAL PLAN OF SERVICES

PROJECT No. 114025
REV # 4
DRAWING No. 114025-FT-GP2
#19191

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