GENERAL NOTES:

1. COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
2. 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.
3. OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
4. 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.
5. 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.
6. 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.
7. ALL ELEVATIONS ARE GEODETIC.
8. REFER TO GEOTECHNICAL REPORT (No. PG7178-1, DATED JULY 2, 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.
9. REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARD SURFACE AREAS AND DIMENSIONS.
10. REFER TO STORMWATER MANAGEMENT REPORT(R-2024-123) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
11. SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
12. PROVIDE LINE/PARKING PAINTING.
13. CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVICING 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/WM ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

SEWER NOTES:

1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
CATCHBASIN (600x600mm)	705.010	OPSD
STORM / SANITARY MANHOLE (1200Ø)	701.010	OPSD
CB, FRAME & COVER	400.020	OPSD
STORM / SANITARY MH FRAME & COVER	401.010	OPSD
SEWER TRENCH - BEDDING (GRANULAR A)		
COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)		
STORM SEWER	PVC DR 35	
SANITARY SEWER	PVC DR 35	
CATCHBASIN LEAD	PVC DR 35	

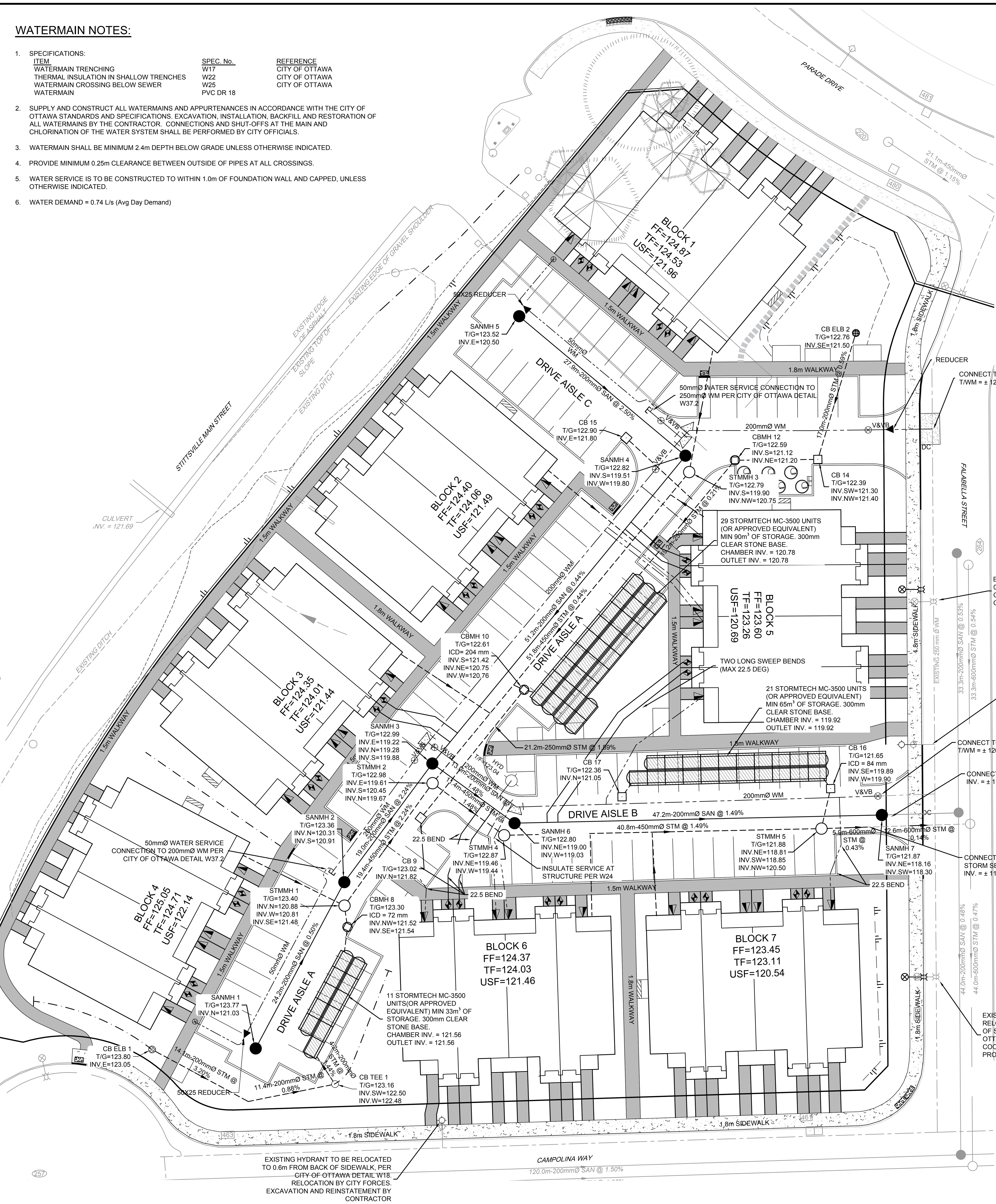
2. INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mmX1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
3. SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0% WITH A MAX OF TWO 22.5 DEG BENDS.
4. PIPE BEDDING, COVER AND 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.
5. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
6. THE OWNER SHALL REQUIRE THAT THE SITE SERVICING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPSS 410.07.16, 410.07.16.04 AND 407.07.24. 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.
7. STORM MANHOLES AND CBMHS ARE TO HAVE 300mm SUMPS UNLESS OTHERWISE INDICATED.
8. CONTRACTOR TO TELEVISE (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.

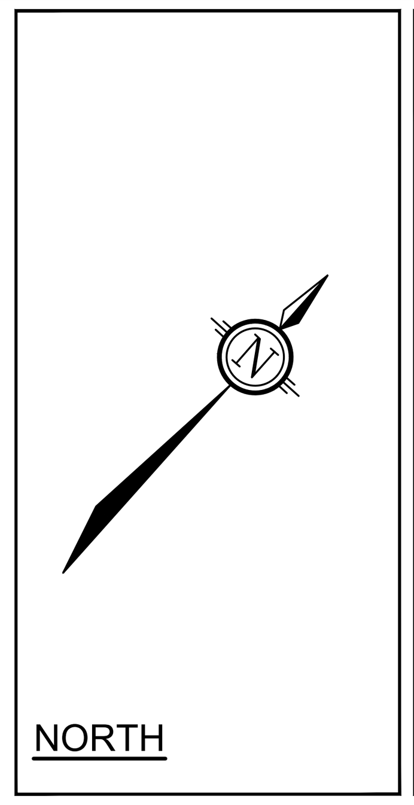
WATERMAIN NOTES:

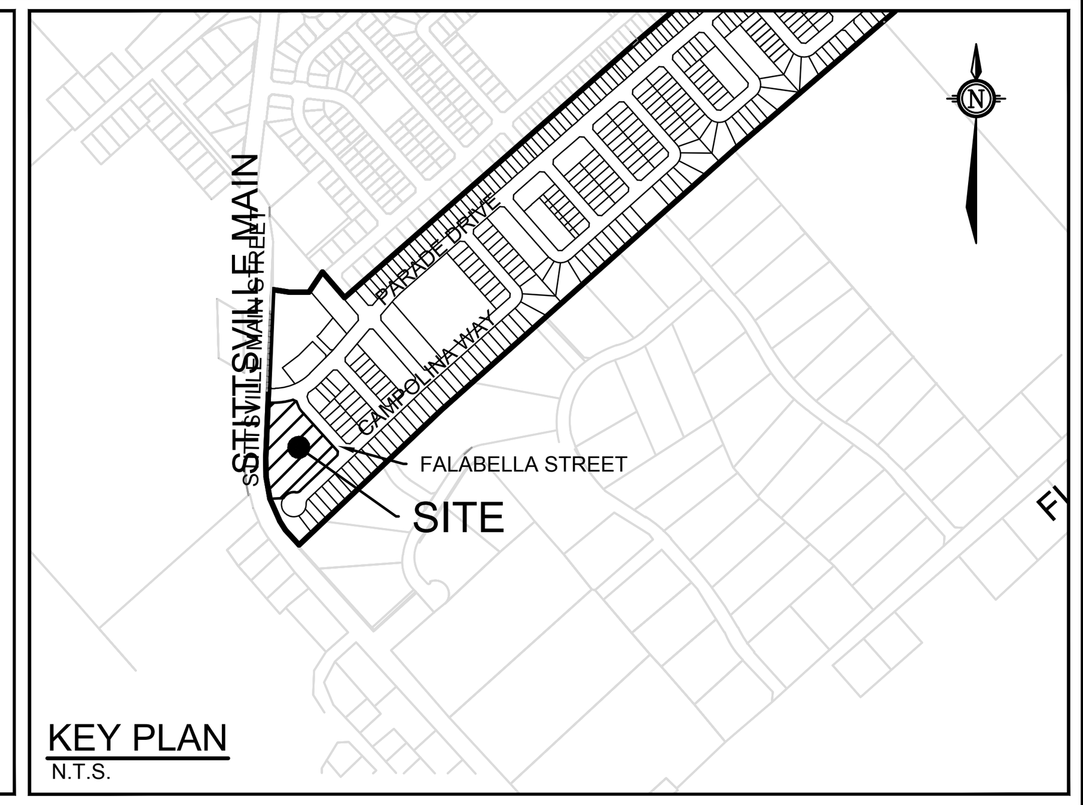
1. SPECIFICATIONS:

ITEM	SPEC. No.	REFERENCE
WATERMAIN TRENCHING	W17	CITY OF OTTAWA
THERMAL INSULATION IN SHALLOW TRENCHES	W22	CITY OF OTTAWA
WATERMAIN CROSSING BELOW SEWER	W25	CITY OF OTTAWA
WATERMAIN	PVC DR 18	

2. SUPPLY AND CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMAINS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
4. PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
5. WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.
6. WATER DEMAND = 0.74 L/s (Avg Day Demand)







LEGEND

200mmØ WM	PROPOSED WATERMAIN
	PROPOSED VALVE LOCATION
V&VB	VALVE & VALVE BOX
HYD	PROPOSED HYDRANT C/W VALVE & LEAD
T/F=98.45	PROPOSED TOP OF BOTTOM FLANGE
BEND	PROPOSED BEND AND THRUSTBLOCK 11.25°, 22.5°, 45° or TEE
	PROPOSED SANITARY MH & SEWER
	PROPOSED STORM MH & SEWER
CBMH	PROPOSED CATCHBASIN MANHOLE
CB	PROPOSED ROAD CATCHBASIN
CB ELB	PROPOSED LANDSCAPE ELBOW CATCHBASIN
CB TEE	PROPOSED LANDSCAPE TEE CATCHBASIN
	PROPOSED WATER SERVICE (3 x 25mm SERVICES)
	PROPOSED SANITARY SERVICE (1 x 125mm SERVICE)
	EXISTING SANITARY MH & SEWER
	EXISTING STORM MH & SEWER

200mmØ WATERMAIN TABLE (DRIVE AISLE A)

STATION	ELEVATION	TOP OF WATERMAIN	DESCRIPTION
0+000	123.75	121.35	50mmØ X 25mmØ REDUCER
0+023.0	123.32	120.92	200mmØ WATERMAIN CAP
0+023.5	123.30	120.90	50mmØ WATERMAIN CONNECTION
0+042	122.99	120.59	VALVE AND VALVE BOX
0+044.5	122.95	120.55	TEE CONNECTION / 250mmØ WATERMAIN CONNECTION
0+054.60	122.67	120.27	VERTICAL BEND
0+075	122.69	120.29	TOP OF WATERMAIN
0+078.90	122.98	120.58	VERTICAL BEND
0+085.50	122.88	120.48	VALVE AND VALVE BOX
0+090.00	122.80	120.40	TEE CONNECTION
0+100.00	122.72	120.32	TOP OF WATERMAIN
0+105.20	122.53	120.13	VERTICAL BEND
0+112.90	122.56	120.16	VALVE AND VALVE BOX
0+115.10	122.56	120.16	REDUCER
0+121.1	122.42	120.22	CONNECT TO EXISTING 250mmØ WATERMAIN

200mmØ WATERMAIN TABLE (DRIVE AISLE C)

STATION	ELEVATION	TOP OF WATERMAIN	DESCRIPTION
0+000	123.50	121.10	50mmØ X 25mmØ REDUCER
0+020.91	120.90	120.42	200mmØ WATERMAIN CAP
0+021.41	120.90	120.42	50mmØ WATERMAIN CONNECTION
0+023.26	122.92	120.52	VALVE AND VALVE BOX
0+026.70	120.90	120.42	TEE CONNECTION

200mmØ WATERMAIN TABLE (DRIVE AISLE C)

STATION	ELEVATION	TOP OF WATERMAIN	DESCRIPTION
0+000	123.50	121.10	50mmØ X 25mmØ REDUCER
0+020.91	120.90	120.42	200mmØ WATERMAIN CAP
0+021.41	120.90	120.42	50mmØ WATERMAIN CONNECTION
0+023.26	122.92	120.52	VALVE AND VALVE BOX
0+026.70	120.90	120.42	TEE CONNECTION

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, 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
8.	REVISED AND RE-ISSUED FOR REVIEW	JUN 24/25	BHB
7.	ISSUED FOR COORDINATION	MAY 28/25	ARM
6.	RE-ISSUED FOR SITE PLAN APPLICATION	APR 11/25	DJC
5.	REVISED PER CITY COMMENTS	JAN 23/25	ARM
4.	ISSUED FOR COORDINATION	NOV 21/24	ARM
3.	ISSUED WITH SERVICING & SWM REPORT	OCT 22/24	ARM
2.	ISSUED FOR COORDINATION	OCT 9/24	ARM
1.	ISSUED FOR COORDINATION	SEP 11/24	ARM

SCALE 1:300

1:300 — 0 3 6 9 12

DESIGN	MNP
CHECKED	ARM
DRAWN	MNP
CHECKED	ARM
APPROVED	ARM

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER
A.R. MCAULEY
100141256
June 24, 2025
PROVINCE OF ONTARIO

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Website www.novatech-eng.com

LOCATION
CITY OF OTTAWA
BLOCK 349

DRAWING NAME
GENERAL PLAN

PROJECT No. 124097

REV
REV # 8

DRAWING No.
124097-GP