GENERAL NOTES:

1. ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), AS AMENDED BY THE CITY OF OTTAWA.
2. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION, TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
3. ALL DIMENSIONS AND ELEVATIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
4. DESIGN ELEVATIONS GIVEN ARE TO BE ADHERED TO WITH NO CHANGES WITHOUT PRIOR WRITTEN APPROVAL BY ROBINSON LAND DEVELOPMENT.
5. ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
6. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
7. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
8. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
9. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
10. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR. REVIEW WITH THE CITY OF OTTAWA PRIOR TO AND TREE CUTTING.
11. REFER TO GEOTECHNICAL INVESTIGATION PREPARED BY PATERSON GROUP, DATED FEBRUARY 11, 2026.
12. THE CONTRACTOR IS RESPONSIBLE FOR AND SHALL PROVIDE FOR DEWATERING, SUPPORT AND PROTECTION OF EXCAVATIONS AND TRENCHING AS WELL AS RELEASE OF ANY PUMPED GROUNDWATER IN A CONTROLLED AND APPROVED MANNER.
13. DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
14. CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT FOR CONSTRUCTION PURPOSES.
15. CLAY SEALS SHALL BE INSTALLED WITHIN SEWER TRENCHES THAT ARE 4.0m OR GREATER BELOW FINISHED GRADE. CLAY SEALS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARD S8.
16. MOVEMENT OF MATERIAL ON AND/OR OFF SITE SHALL BE IN ACCORDANCE WITH ONTARIO EXCESS SOIL REGULATION O.REG. 406/19.
17. THE CONTRACTOR SHALL COMPLETE A CCTV INSPECTION OF ALL NEW SANITARY AND STORM SEWERS. A COPY OF THE VIDEO INSPECTION SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW.

STORM SEWERS:

1. ALL REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.2 (LATEST AMENDMENT). ALL NON-REINFORCED CONCRETE STORM SEWER PIPE SHALL BE IN ACCORDANCE WITH CSA A257.1 (LATEST AMENDMENT). PIPE SHALL BE JOINTED WITH STD. RUBBER GASKETS AS PER CSA A257.3 (LATEST AMENDMENT).
2. ALL STORM SEWER TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S6 AND S7 CLASS 'B' UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
3. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
4. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1.
5. CATCH BASIN MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S28.1.
6. STORM SEWER MANHOLES SERVING SEWERS LESS THAN 900mm SHALL BE CONSTRUCTED WITH A 300mm SUMP. FOR STORM SEWERS 900mm AND OVER USE BENCHING IN ACCORDANCE WITH OPSD 701.021.
7. THE STORM SEWER CLASSES HAVE BEEN DESIGNED BASED ON BEDDING CONDITIONS SPECIFIED ABOVE. 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 THEIR OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
8. ALL STORM MANHOLES SHALL BE 1200mm DIAMETER AS PER OPSD 701.010 UNLESS OTHERWISE NOTED.
9. ALL CATCH BASINS SHALL BE 600mm X 600mm AS PER OPSD 705.010 UNLESS OTHERWISE NOTED.

SANITARY SEWERS:

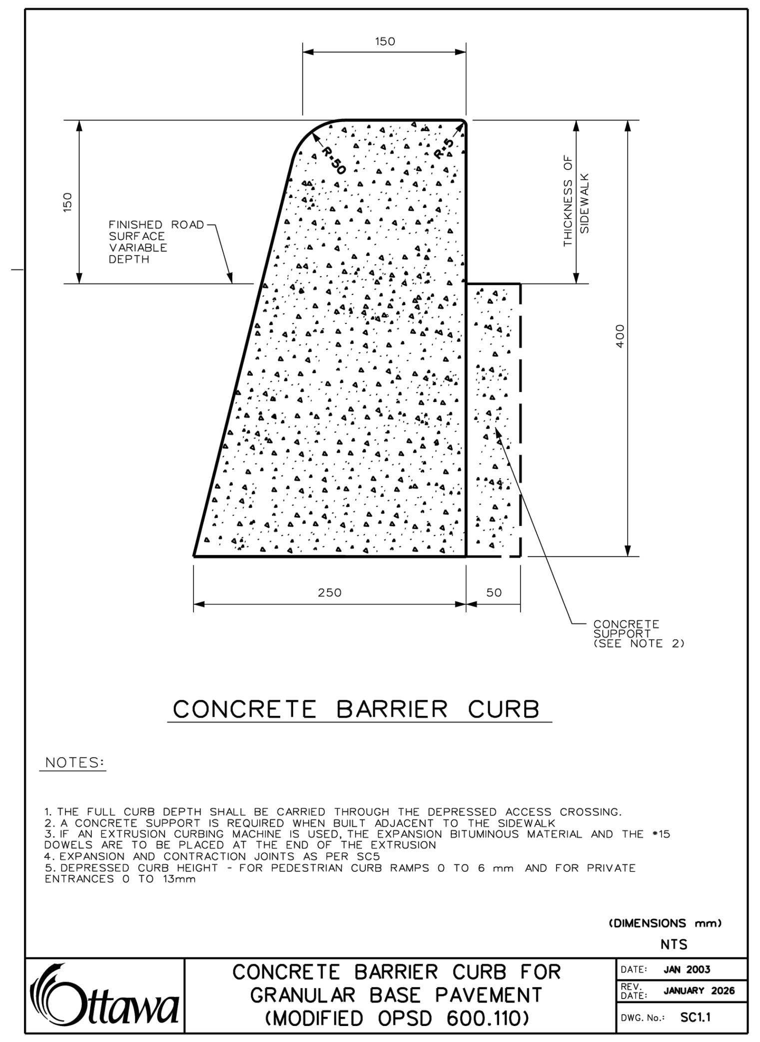
1. ALL SANITARY SEWERS 200mm IN DIAMETER (OR GREATER) SHALL BE PVC SDR 35, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
2. ALL SANITARY SERVICES 135mm IN DIAMETER SHALL BE PVC SDR 38, IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
3. ALL SANITARY SEWERS/SERVICES WITH LESS THAN 2.5m HORIZONTAL SEPARATION TO WATERMAINS SHALL BE CONSTRUCTED USING SEWER PIPE IN ACCORDANCE WITH OPSS 1841, WITH JOINTS CAPABLE OF 345 kPa MINIMUM, CONFORMING TO PSM PVC, CSA B182.2/CSA 182.7 OR CSA B137.3 OR AWWA 302.
4. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED.
5. ALL SANITARY SERVICES ARE TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
6. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.
7. SANITARY SEWER MANHOLES SHALL BE BENCHED AS PER OPSD 701.021.
8. FOR SANITARY MANHOLES, DEPENDING ON THE ELEVATION OF THE GROUNDWATER TABLE, AND BASED ON THE RECOMMENDATION OF THE PROJECT GEOTECHNICAL CONSULTANT, CRETEX SEALS, OR A SIMILAR PRODUCT, SHALL BE INSTALLED IN THE PRE-CAST MANHOLE SECTION TO JUST BELOW THE MANHOLE FRAME TO PREVENT INFILTRATION.
9. CONTRACTOR SHALL PERFORM EXFILTRATION TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR ALL SANITARY SEWERS IN ACCORDANCE WITH OPSS 410.

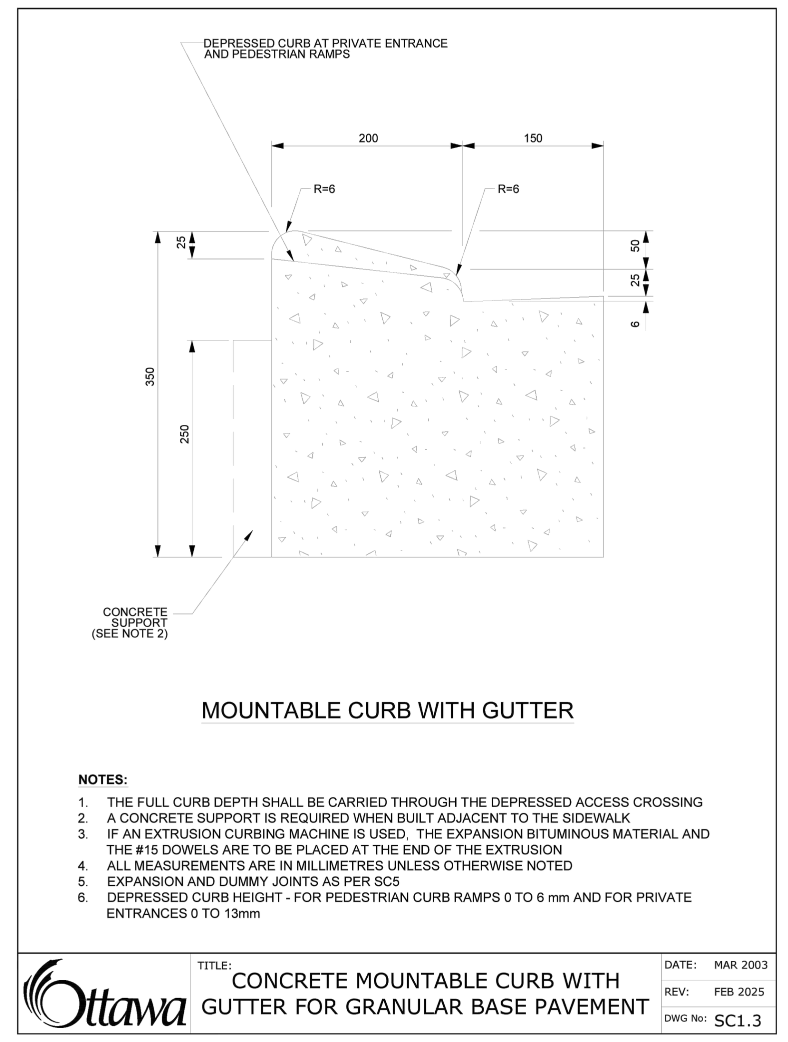
WATER SUPPLY:

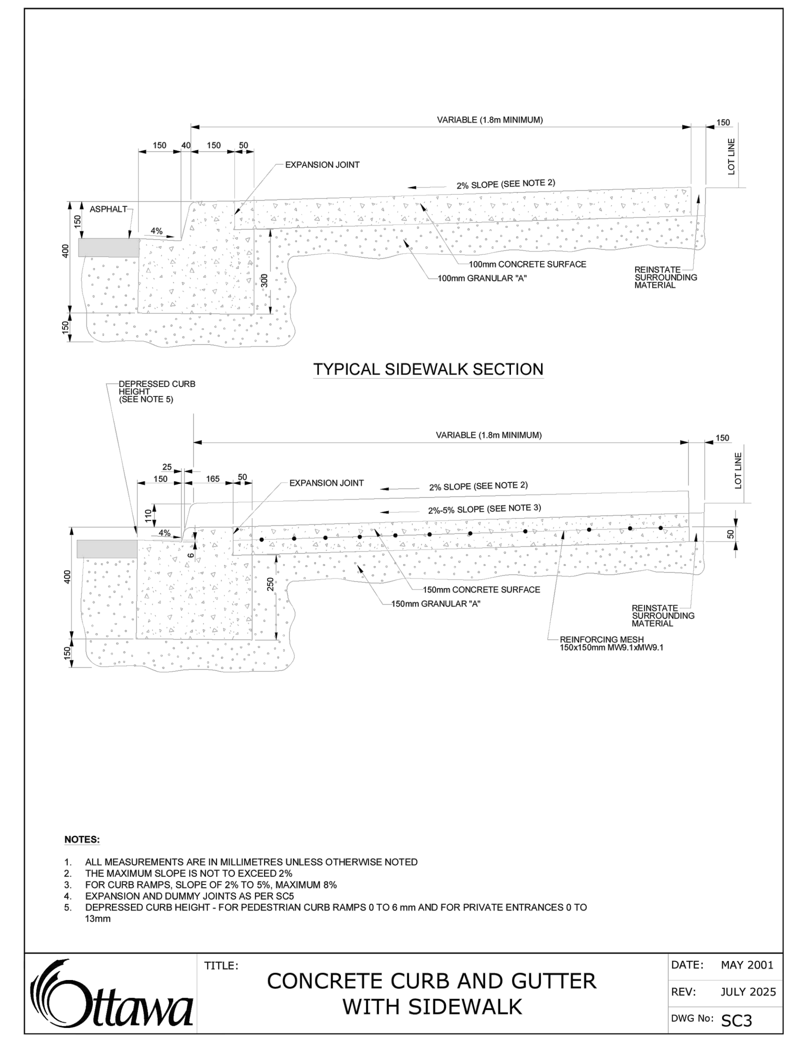
1. ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18, OR APPROVED EQUAL.
2. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
3. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWU OR RWU TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
4. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
5. CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL IF REQUIRED.
6. FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18.
7. VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W24.
8. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
9. THRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
11. WATERMAINS CROSSING OVER SEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2. BARREL TO BARREL SEPARATION SHALL BE 500mm MINIMUM.
12. WATERMAINS CROSSING BELOW SEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25. BARREL TO BARREL SEPARATION SHALL BE 500mm MINIMUM.
13. WATERMAINS SHALL HAVE A MINIMUM COVER DEPTH OF 2.4m MEASURED FROM FINISHED GRADE. WHERE SUFFICIENT COVER CANNOT BE ACHIEVED, PROVIDE THERMAL INSULATION IN ACCORDANCE WITH CITY OF OTTAWA STD. W22.
14. CONNECTION TO EXISTING WATERMAIN TO BE PERFORMED BY CITY FORCES. CONTRACTOR TO PROVIDE EXCAVATION, MATERIAL, BACKFILL AND ASSISTANCE AS REQUIRED.
15. SWABBING, DISINFECTION, AND HYDROSTATIC TESTING TO BE CONDUCTED AS PER CITY OF OTTAWA STANDARDS IN THE PRESENCE OF A CITY INSPECTOR AND/OR CONSULTANT.

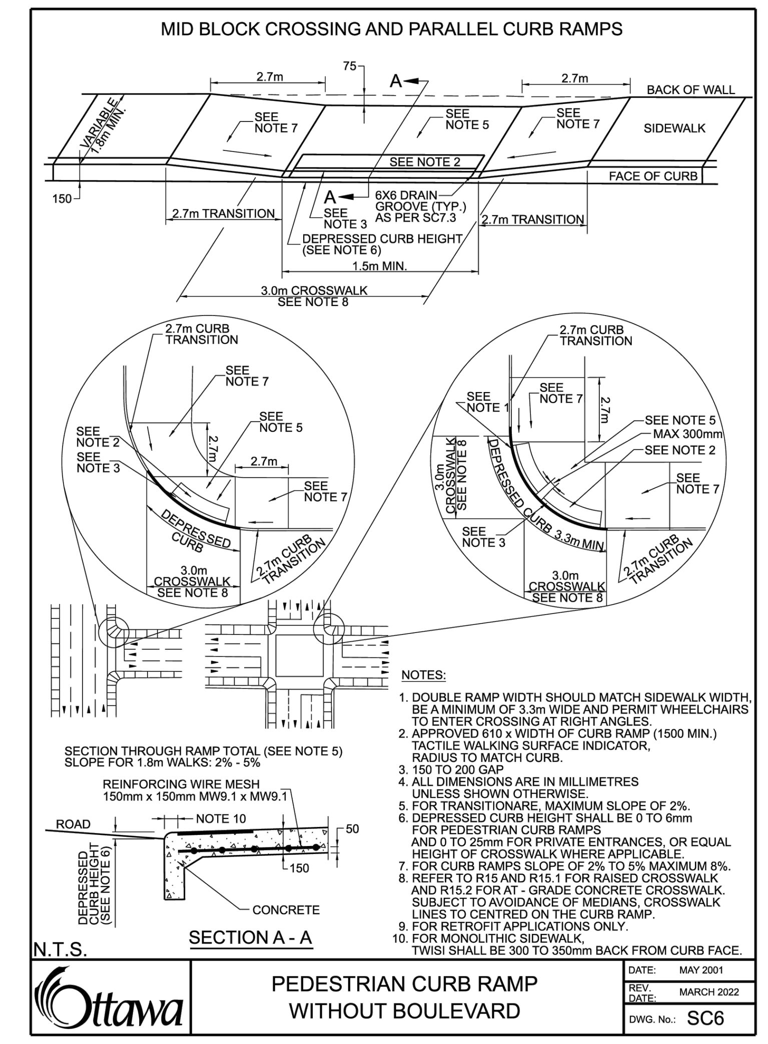
ROADWORK SPECIFICATIONS:

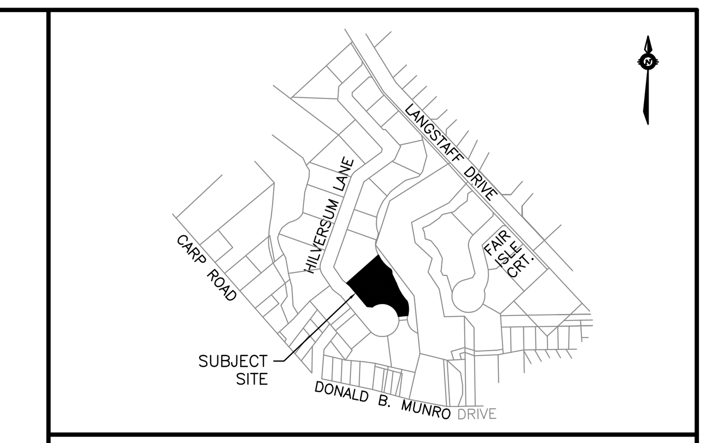
1. CONCRETE BARRIER CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1.
2. CONCRETE MOUNTABLE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.3.
3. ALL BARRIER CURB TO BE 150mm ABOVE FINISHED ASPHALT GRADE UNLESS OTHERWISE NOTED.
4. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC3.
5. TWSIs SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF OTTAWA STD. SC7.3.
6. ANY PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10.
7. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
8. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
9. SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR 'B' COMPACTED IN MAXIMUM 300mm LIFTS.
10. ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW-CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW ASPHALT.
11. REFER TO GEOTECHNICAL INVESTIGATION FOR PARKING GARAGE RAMP STRUCTURE DETAIL.



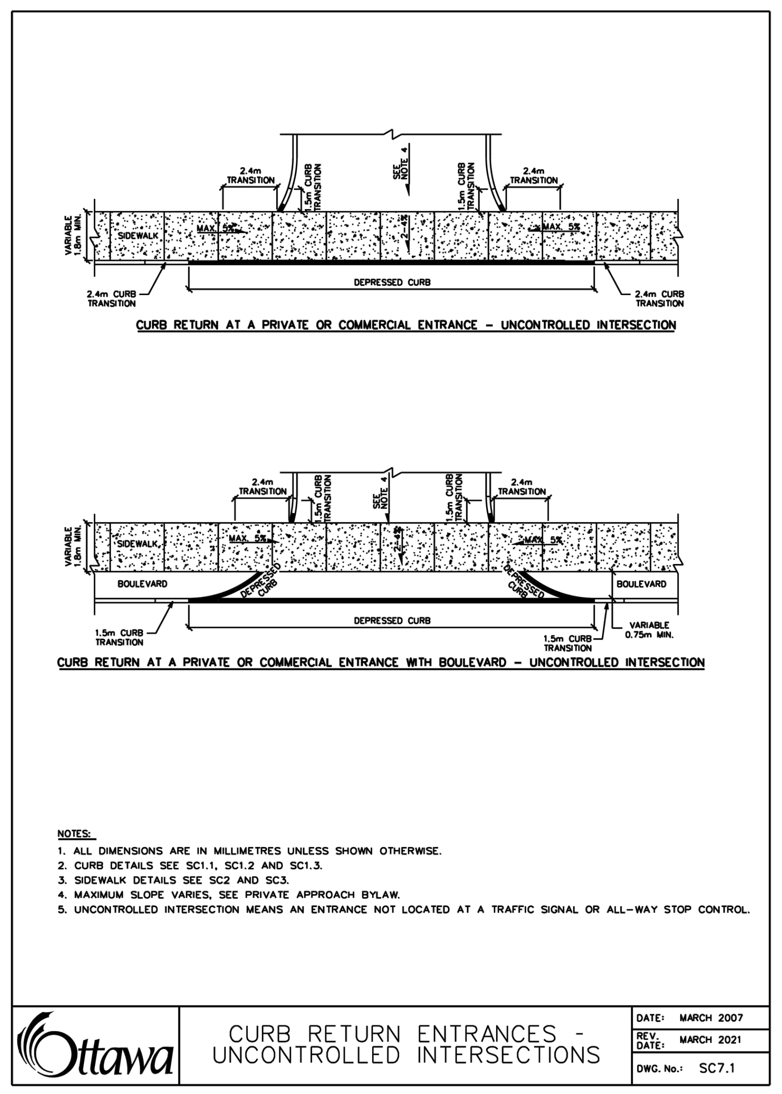


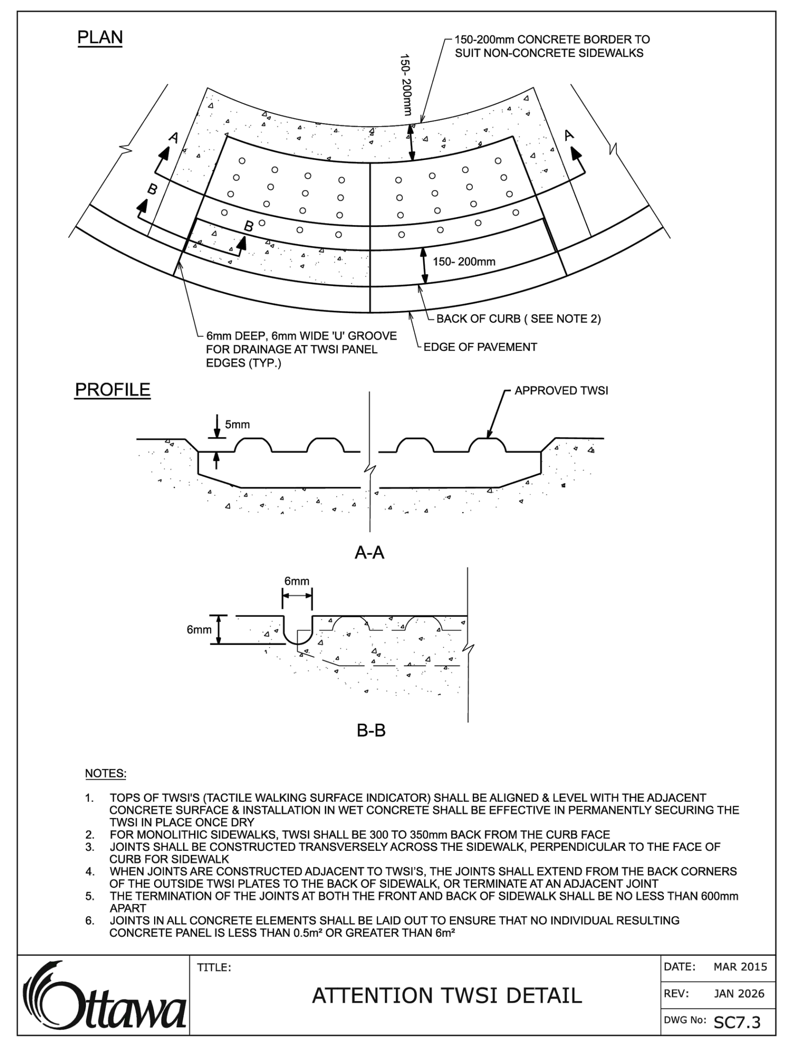


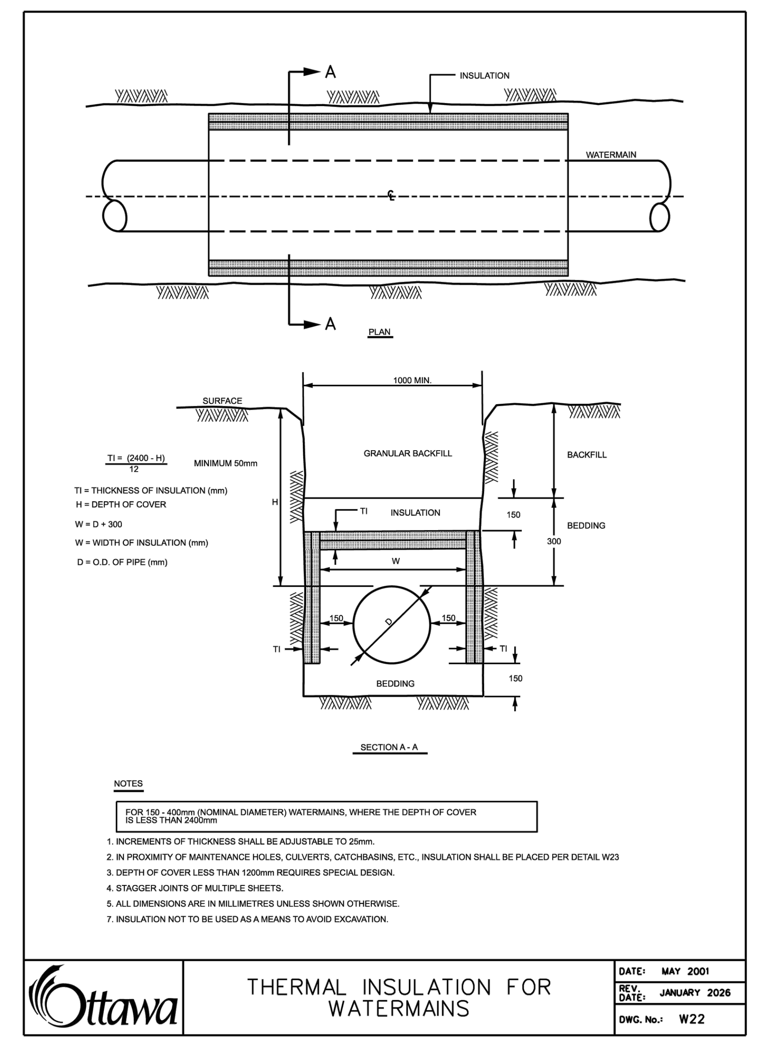


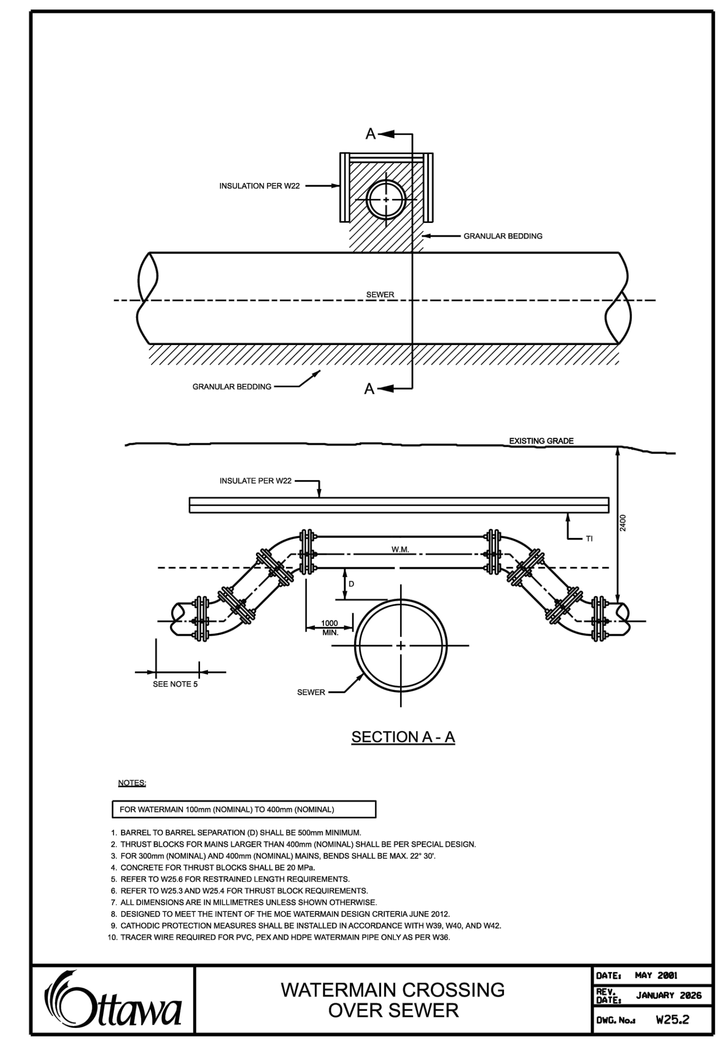


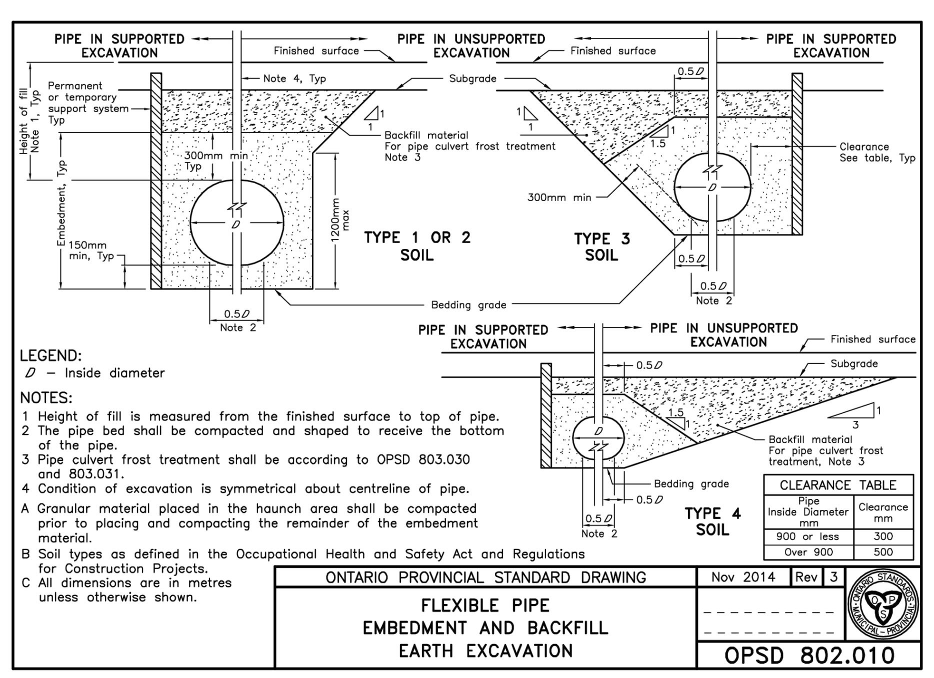
KEY PLAN











NOT FOR CONSTRUCTION

NOTES

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.

GEODETIC SURVEY DERIVED FROM COSINE STATION 0011968U054. LOCATION DESCRIPTION: OLD HIGHWAY 17 BRIDGE OVER CARP RIVER ON CARP-STITTSVILLE ROAD, 0.2 KM SOUTH OF C.N.R. CROSSING IN VILLAGE OF CARP, TABLET IN TOP OF WEST WALL, 30 CM FROM NORTH END, 24 CM FROM WEST EDGE. VERTICAL CONTROL DATA, DATUM: CGVD28:78, FIRST ORDER, ELEVATION: 93.861. COORDINATE SYSTEM: MTM ZONE 9; NAD 83 DATUM (CAN83-9)

NO.	REVISION DESCRIPTION	DATE	BY
3	REVISED PER CITY/MVCA COMMENTS	08/04/26	BLM
2	REVISED PER CITY COMMENTS	12/02/26	BLM
1	ISSUED FOR REVIEW	21/11/25	BLM

SCALE

LICENSED PROFESSIONAL ENGINEER
B. L. MACKECHNIE
100199554
8 Apr. '26
PROVINCE OF ONTARIO

Robinson Land Development
2936 Baseline Road, Suite 200, Ottawa, ON K2H 1B3
(613) 592-6060 rcii.com

DESIGN	BLM
CHECKED	SG
DRAWN	BLM
CHECKED	SG
APPROVED	BLM

INVERNESS HOMES
38 AURIGA DRIVE, SUITE 200
OTTAWA, ON K2E 8A6

391 HILVERSUM LANE
CARP, ON

NOTES & DETAILS

PROJECT No.	25094
SURVEY	ROBINSON CONSULTANTS
DATED	APRIL 2026
DWG. No:	25094-N1

FILE No. D07-12-25-0155 PLAN No. 19436