

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 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. 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.
5. RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR AS DIRECTED BY THE ENGINEER AT THE EXPENSE OF THE DEVELOPER.
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 SIGNING 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 SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
10. THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
11. ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, SHALL BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
12. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BEDDING OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH, AS SPECIFIED BY OPSD, IS EXCEEDED.
13. ALL PIPE / CULVERT / SECTION SIZES REFER TO INSIDE DIMENSIONS.
14. SHOULD DEEPLY BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE MUST BE NOTIFIED IMMEDIATELY.
15. STREET LIGHTING TO CITY OF OTTAWA STANDARDS.
16. ALL NECESSARY CLEARING AND GRUBBING SHALL BE COMPLETED BY THE CONTRACTOR, REVIEW WITH CONTRACT ADMINISTRATOR AND THE CITY OF OTTAWA PRIOR TO ANY TREE CUTTING.
17. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSS 410 AND OPSS 407. CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF ALL STORM AND SANITARY SEWERS. A COPY OF THE VIDEO AND INSPECTION REPORT SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW.
18. THE CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING NO. S8. THE SEALS SHOULD BE AT LEAST 15cm LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM THE FRONT WALL TO THE REAR WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FRONT LINE AND FULLY PENETRATE THE BEDDING, SUBBEDDING AND COVER MATERIAL. THE BARRIERS SHOULD CONSIST OF RELATIVELY DRY AND COMPACTABLE BROWN SILTY CLAY PLACED IN MAXIMUM 225mm THICK LOOSE LAYERS COMPACTED TO A MINIMUM OF 98% OF THE MATERIAL'S SPMOD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60m INTERVALS IN THE SERVICE TRENCHES.
19. ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT PG6165-1, REVISION 1, DATED OCTOBER 7, 2022, PREPARED BY PATERSON GROUP INC.
20. SLEEVES SHALL BE USED FOR HOUSE CONNECTIONS INSTALLED UNDER GARAGES. HOUSE CONNECTIONS UNDER GARAGES ARE ON AN EXCEPTION BASIS ONLY.

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. ALL STORM LATERALS SHALL BE PVC SDR 26, WHITE IN COLOR AND MARKED WITH A 50mm x 100mm WOODEN MARKER EXTENDING FROM THE INVERT TO 1.0m ABOVE GRADE PAINTED GREEN. HOUSE CONNECTIONS SHALL BE 2.0 m min. BELOW FINISHED GRADE AT STREET LINE WHERE POSSIBLE. SINGLE CONNECTIONS SHALL BE 100mm DIA..
5. STORM MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24.1 AND S25.
6. SAFETY PLATFORMS SHALL BE IN ACCORDANCE WITH OPSD 404.02.
7. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
8. STORM SEWER MANHOLES SERVING LOCAL 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.
9. SINGLE AND DOUBLE CATCHBASINS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S1.1 AND OPSD 705.020, RESPECTIVELY. FRAMES AND GRATE SHALL BE AS PER CITY OF OTTAWA STD. S19.1 FOR REAR LOT CATCHBASINS AND STREET CATCHBASINS.
10. CURB INLET TYPE CATCH BASIN (CIB) SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. S3. FRAME AND GRATE SHALL BE AS PER CITY OF OTTAWA STD. S22 AND S23, UNLESS OTHERWISE NOTED.
11. SINGLE AND DOUBLE CATCHBASIN LEADS SHALL BE 200mm and 250mm DIA (MIN.), RESPECTIVELY, AT 1.0% SLOPE (MIN.) UNLESS OTHERWISE NOTED. CB LEAD OUT INVERT TO BE SET 1.38m BELOW TOP OF GRATE ELEVATION UNLESS OTHERWISE NOTED.
12. ALL STREET CATCHBASINS/CATCHBASIN MANHOLES SHALL HAVE 600mm SUMPS, AND ALL REAR YARD CATCHBASINS OPSD 705.020 SHALL HAVE 300mm SUMPS UNLESS OTHERWISE NOTED. REAR YARD LANDSCAPE CATCHBASINS TO BE SUMPLESS.
13. CONTRACTOR SHALL ENSURE THAT CATCHBASINS ARE INSTALLED AT THE LOW POINT OF SAG CURB WORKS.
14. 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 HIS OWN EXPENSE AND SHALL ALSO BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT REPAIRS MADE NECESSARY BY THE WIDENED TRENCH.
15. THE MINIMUM DIAMETER FOR REAR LOT PERFORATED PIPE IS 250mm, REFER TO CITY STD. S29 FOR DETAIL, UNLESS OTHERWISE NOTED.
16. FOR TWO OR MORE REAR LOT CATCH BASINS CONNECTED IN SERIES, THE LEAD FROM THE LAST REAR LOT CB TO THE STORM SEWER SHALL BE SOLID PIPE.

1. ALL SANITARY SEWER INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS) AS AMENDED BY THE CITY OF OTTAWA.
2. ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED.
3. SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS 'B' BEDDING UNLESS OTHERWISE NOTED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
4. ALL SANITARY LATERALS ARE TO BE PVC SDR 28, IPEX "RING-TITE" (OR EQUIVALENT), AND MARKED WITH A 500mm WOODEN MARKER, EXTENDING FROM THE INVERT TO 1.0 m ABOVE GRADE. PAINTED RED. HOUSE CONNECTIONS SHALL BE 2.75m BELOW FINISHED GRADE AT STREET LINE WHERE POSSIBLE. SINGLE CONNECTIONS SHALL BE 135mm DIA.
5. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24 AND S25.
6. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02.
7. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA SPECIFICATIONS AND OPSD 1003.01.
8. SANITARY SEWER MANHOLES SHALL BE BENCHMARKED AS PER OPSD 701.021.
9. SANITARY MANHOLE FRAME AND COVERS SHALL BE AS PER CITY OF OTTAWA STD. S24 AND S25, EXCEPT FOR WHERE IN PONDING AREAS, WHERE WATERTIGHT FRAME AND COVERS SHALL BE EAST JORDAN COMPRESSION 41420049W01 AS PER CITY OF OTTAWA MS-22.15 (OR APPROVED EQUIVALENT)

1. ALL WATERMAIN INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARD DRAWINGS (OSPD) AND SPECIFICATIONS (OPSS) AS AMENDED BY THE CITY OF OTTAWA.
2. ALL PVC WATERMAINS SHALL BE EQUAL TO AWWA C-900 CLASS 150, SDR 18.
3. 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.
4. ALL PVC WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRANDED COPPER TWO OR RWJ TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STD. W36.
5. WATER SERVICES ARE TO BE TYPE K SOFT COPPER OR PEX AS PER CITY OF OTTAWA STD. W26 UNLESS OTHERWISE SPECIFIED. SINGLE SERVICES SHALL BE 19mm DIA. 50mm DIA. COPPER SHALL BE USED FOR PARK SERVICES. WATER SERVICES SHALL BE MARKED WITH A "50mm x 100mm", EXTENDING FROM THE INVERT TO 1.0m ABOVE GRADE PAINTED BLUE. CURB STOPS SHALL BE INSTALLED AT THE PROPERTY LINE.
6. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
7. CONTRACTOR TO SUPPLY HYDRANT EXTENSION TO ADJUST THE LENGTH OF HYDRANT BARREL AS REQUIRED TO ENSURE FLANGE IS ABOVE FINISHED GRADE PER CITY STD W19.
8. FIRE HYDRANTS SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W19, AND LOCATED AS PER CITY STD. W18.
9. VALVE IN BOXES SHALL BE INSTALLED AS PER CITY OF OTTAWA STD. W24.
10. 50mm DIAMETER WATERMAINS SHALL BE TYPE 'K' COPPER TUBING. WATERMAIN INSTALLATION IN CUL-DE-SAC TO BE INSTALLED AS PER CITY OF OTTAWA STD.W37
11. WATERMAIN IN FILL AREAS TO BE INSTALLED WITH RESTRAINED JOINTS AS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
12. THRUST BLOCKING OF WATERMAIN TO BE INSTALLED AS PER CITY OF OTTAWA STD. W25.3 AND W25.4.
13. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS AND BLOW-OFFS AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF THE WATERMAIN.
14. INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHOULD BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.
15. WHERE THE SEPARATION BETWEEN SERVICES AND MANHOLES IS LESS THAN 1.2m, WATER SERVICES ARE TO BE INSULATED AS PER CITY STD. W23.
16. AS PER MECP GUIDELINES, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.50m. 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 EQUITANT AND AS FAR AS POSSIBLE FROM THE SEWER.
17. FOR FIRE HYDRANT LATERALS WITH DEPTH OF 2.4m OR LESS, THERMAL INSULATION SHALL BE APPLIED AS PER CITY STANDARD DRAWING W23.
18. CATCH BASIN LEADS CROSSING ABOVE WATERMAINS SHALL HAVE A MINIMUM CLEARANCE OF 0.50m.
19. MINIMUM HORIZONTAL DISTANCE BETWEEN WATERMAINS AND SEWERS IS 2.5M (BARREL TO BARREL)

1. ALL TOPSOIL AND ORGANIC MATERIAL SHALL BE STRIPPED WITHIN THE ROAD ALLOWANCE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
2. CONCRETE CURB SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC1.1 (BARRIER CURB) AND SC1.3 (MOUNTABLE CURB). PROVISION SHALL BE MADE FOR CURB DEPRESSIONS AT SIDEWALKS AND DRIVEWAYS.
3. ROAD SUBDRAINS SHALL BE REFERENCE TO R1, AS SUGGESTED IN R64683-2, SUBDRAIN INVERTS TO BE APPROXIMATELY 300mm BELOW SUBGRADE LEVEL
4. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC3 AND SC1.4.
5. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10 AND OPS5 509.010, OPS3 310.
6. GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
7. ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
8. ASPHALT WEAR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS & NECESSARY REPAIRS HAVE BEEN CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT.
9. SUB-EXCAVATE SOFT AREAS AND FILL WITH GRANULAR "B" COMPACTED IN MAXIMUM 300 mm LIFTS
10. PEDESTRIAN CURB RAMP AND BOULEVARD SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. SC7.
11. PAVEMENT DESIGN TYPE:
 - ACCESS LANES & HEAVY DUTY TRUCK PARKING
 - 40mm SUPERPAVE 12.5 ASPHALTIC CONCRETE
 - 50mm SUPERPAVE 19.0 ASPHALTIC CONCRETE
 - 150mm OPS5 GRANULAR A CRUSHED STONE
 - 450mm OPS5 GRANULAR B TYPE II
 - SUBGRADE
 - DRIVEWAYS AND PARKING AREAS
 - 50mm HL-3 OR SUPERPAVE 12.5 ASPHALTIC CONCRETE
 - 150mm OPS5 GRANULAR A CRUSHED STONE
 - 300mm GRANULAR B TYPE II
 - SUBGRADE

1. A FLAT AREA HAVING A WIDTH OF 0.6m SHALL BE PROVIDED AT THE BOUNDARY LIMITS ADJACENT DEVELOPED PROPERTIES IN ORDER THAT THE EXISTING BOUNDARY ELEVATIONS SHALL BE MAINTAINED.
2. ALL ROOF DOWNSPOUTS SHALL DISCHARGE TO THE GROUND ONTO SPLASH PADS AND SHALL NOT BE CONNECTED TO THE STORM SEWER, OR THE BUILDING FOUNDATION DRAIN.
3. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS." THE GENERAL CONTRACTOR SHALL BE DESIGNATED AS THE CONSTRUCTOR AS DEFINED IN THE ACT.
4. PRIOR TO THE COMMENCEMENT OF THE SITE GRADING WORKS, ALL SILTATION CONTROL DEVICES SHALL BE INSTALLED AND OPERATIONAL. THE CONTRACTOR SHALL MAINTAIN ALL WORKS UNTIL SERVICING CONSTRUCTION IS COMPLETED TO THE SATISFACTION OF THE ENGINEER AND THE CITY OF OTTAWA.
5. ALL SWALES SHALL BE 0.15m DEEP WITH 3:1 SIDE SLOPES UNLESS OTHERWISE INDICATED. THE MINIMUM LONGITUDINAL SLOPE IS 1% AND 1.5% WITH INSTALLATION OF SUBDRAIN OR WITHOUT, RESPECTIVELY.
6. TOP OF GRATE (T/G) ELEVATIONS FOR ALL STREET CATCHBASINS SHOWN ON PLANS, REFER TO THE ELEVATIONS GUTTER OR EDGE OF PAVEMENT, WHERE APPLICABLE.

1. PRIOR TO TOPSOIL STRIPPING, EARTHWORKS, OR UNDERGROUND CONSTRUCTION, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
2. SEDIMENT CONTROL FENCE SHALL BE CLEANED AND MAINTAINED IN GOOD REPAIR BY CONTRACTOR.
3. SEDIMENT CONTROL FENCE TO REMAIN IN PLACE UNTIL THE WORKING AREA HAS BEEN STABILIZED AND REVEGETATED.
4. ACCUMULATED SEDIMENT TO BE REMOVED OFF SITE PRIOR TO THE REMOVAL OF SEDIMENT CONTROL FENCE.
5. CONTRACTOR TO INSTALL AND MAINTAIN MUD MAT AT CONSTRUCTION ACCESS IN ORDER TO PREVENT MUD TRACKING ONTO ADJACENT ROADS. MUD MAT TO BE MINIMUM 30m LONG AND 10.0m WIDE AND SHALL CONSIST OF 0.3m OF 50mm CLAY STONE.

1. ALL CONSTRUCTION EQUIPMENT SHALL BE REFUELED, MAINTAINED AND STORED NO LESS THAN 30 METERS FROM THE WATERCOURSES, STREAMS, CREEKS, WOODLOTS AND ANY ENVIRONMENTALLY SENSITIVE AREAS, OR AS OTHERWISE SPECIFIED.
2. THE CONTRACTOR MUST IMPLEMENT ALL NECESSARY MEASURES IN ORDER TO PREVENT LEAKS, DISCHARGES OR SPILLS OF POLLUTANTS, DELECTERIOUS MATERIALS, OR OTHER SUCH MATERIALS OR SUBSTANCES WHICH WOULD OR COULD CAUSE AN ADVERSE IMPACT TO THE NATURAL ENVIRONMENT.
3. IN THE EVENT OF A LEAK, DISCHARGE OR SPILL OF A POLLUTANT, DELECTERIOUS MATERIAL OR OTHER SUCH MATERIAL OR SUBSTANCE WHICH WOULD OR COULD CAUSE AN ADVERSE IMPACT TO THE NATURAL ENVIRONMENT, THE CONTRACTOR SHALL:
 - a) IMMEDIATELY NOTIFY THE APPROPRIATE FEDERAL, PROVINCIAL AND LOCAL GOVERNMENT MINISTRIES, DEPARTMENTS, AGENCIES AND AUTHORITIES OF THE INCIDENT IN ACCORDANCE WITH ALL CURRENT LAWS, LEGISLATION, ACTS, BY-LAWS, PERMITS, APPROVALS, ETC.
 - b) TAKE IMMEDIATE MEASURES TO CONTAIN THE MATERIAL OR SUBSTANCE, AND TO TAKE SUCH MEASURES AS THEY DEEM APPROPRIATE TO MITIGATE AGAINST THE ANY ADVERSE IMPACTS TO THE NATURAL ENVIRONMENT.
 - c) THE CONTRACT SHALL RESTORE THE AFFECTED AREA TO ORIGINAL CONDITION OR BETTER, ALL TO THE SATISFACTION OF THE AUTHORITIES HAVING JURISDICTION.

- GEOTECHNICAL INVESTIGATION REPORT NO. PG7460-1 REVISION 1 DATED MAY 28, 2025, PREPARED BY PATERSON GROUP INC.

INFORMATION PRESENTED ON THESE DRAWINGS HAS BEEN INTERPOLATED FROM THE GEOTECHNICAL REPORTS AND ACCURACY IS NOT GUARANTEED. CONTRACTORS ARE ADVISED TO READ THE GEOTECHNICAL REPORTS AND ASSUME THEIR OWN CONCLUSIONS.

CROSS _____

45° BEND _____

LATERAL _____

HYDRANT, VALVE & VB _____

TEE _____

VALVE & VC _____

VALVE & VB _____

22.5° BEND _____

11.25° BEND _____

REDUCER _____

CAP _____

SANITARY

WATERTIGHT MAINTENANCE HOLE _____

MAINTENANCE HOLE _____

CAP _____

STORM

STREET CATCHBASIN & LEAD _____

STREET CATCHBASIN _____

WITH CLOSED LID & LEAD _____

MAINTENANCE HOLE _____

CURB INLET CATCHBASIN & LEAD _____

CATCHBASIN / MAINTENANCE HOLE _____

INTERCONNECTED CATCH BASIN & LEADS _____

CAP _____

SINGLE SERVICE LOCATION (ST, SAN & WM) _____

SINGLE SERVICE LOCATION (SAN & WM) _____

SINGLE SERVICE LOCATION (ST, SAN & WM) _____

TEE CATCHBASIN _____

PERFORATED PIPE _____

ELBOW CATCHBASIN _____

DITCH AND CULVERT _____

CONCRETE SIDEWALK _____

ASPHALT SIDEWALK
CHAINLINK FENCE
(1.5m UNLESS OTHERWISE NOTED)
NOISE BARRIER
(3.0m UNLESS OTHERWISE NOTED)
DECORATIVE FENCE
(SEE LANDSCAPE DRAWINGS FOR DETAIL)
WOOD PRIVACY BARRIER
POST AND RAIL FENCE
PHASING LIMITS
PROPERTY BOUNDARY

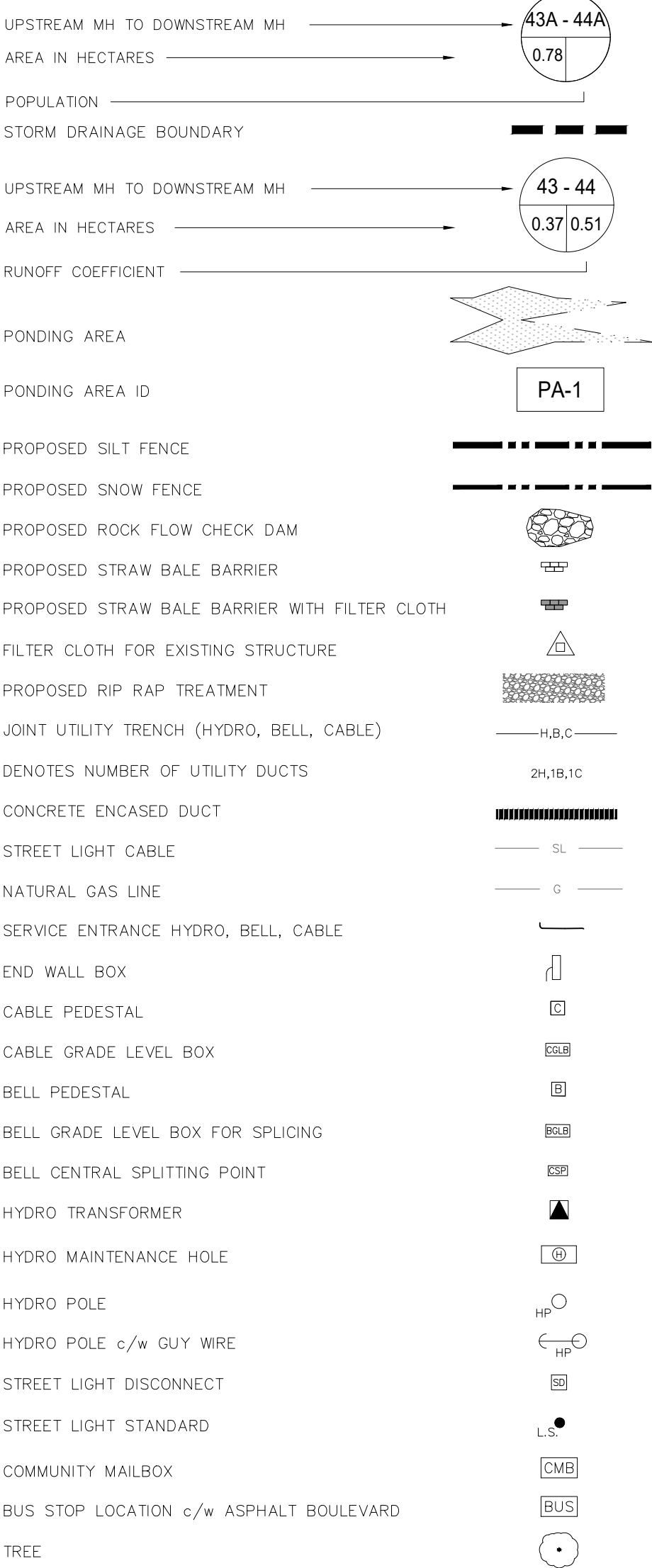
CONCEPTUAL WELL LOCATION]
CONTOUR
PROPOSED ELEVATION
EXISTING ELEVATION
TOP OF GRATE ELEVATION

SURFACE SLOPE
FLOW DIRECTION
MAJOR OVERLAND FLOW DIRECTION
TACTILE WALKING SURFACE INDICATOR
(AS PER CITY OF OTTAWA STD. SC6)

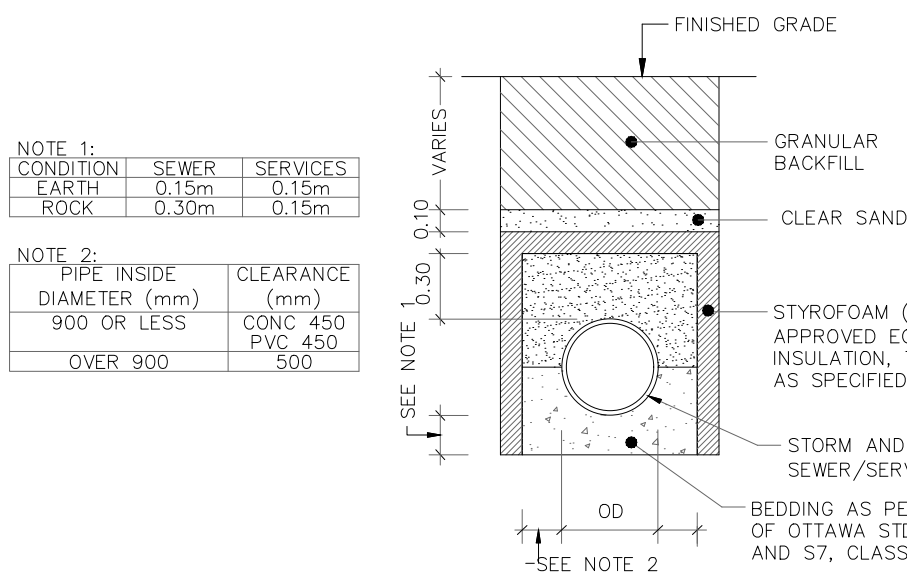
TOP OF FOUNDATION ELEVATION —————→ 20.55
FINISHED FLOOR ELEVATION —————→ 20.85
UNDERSIDE OF FOOTING ELEVATION —————→ 18.00

NUMBER OF RISERS —————→ 30
UNITS REQUIRING PRESSURE REDUCING VALVES —————→ 9/31
WALKOUT UNITS —————→ n/a
SLAB ON GRADE —————→ 505

SANITARY DRAINAGE BOUNDARY —————→



CITY OF OTTAWA					
SEWER AND WATERMAIN INSULATION					
CALCULATION OF THICKNESS OF INSULATION					
Depth (m)	Ti (mm)	Using Ti			
1.05	113	125		As per City Standard (W22):	
1.10	108	125		Ti= (2400 - H)	
1.15	104	125		12	
1.20	100	100			
1.25	96	100			
1.30	92	100	where:	Ti =	Thickness of Insulation (mm), 50mm min.
1.35	88	100		H =	H Depth of Cover above OD (mm)
1.40	83	100			
1.45	79	100			
1.50	75	75			
1.55	71	75			
1.60	67	75			
1.65	63	75			
1.70	58	75			
1.75	54	75			
1.80	50	50			
1.85	46	50			
1.90	42	50			
1.95	38	50			
2.00	33	50			
2.05	29	50			
2.10	25	50			
2.15	21	50			
2.20	17	50			
2.25	13	50			
2.30	8	50			



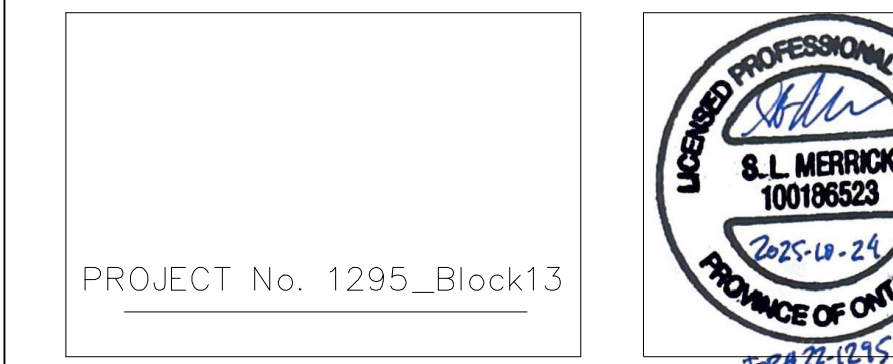
THERMAL INSULATION FOR STORM AND SANITARY SEWER/SERVICES IN SHALLOW TRENCHES

TOPOGRAPHIC INFORMATION PROVIDED BY ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
PROJECT NO. 21942-22 DATED SEPTEMBER 1, 2022

SITE PLAN PROVIDED BY SRN ARCHITECTS, DATED ON OCTOBER 20, 2025.

ELEVATIONS ARE GEODETIC AND ARE REFERRED TO THE CGVD28 GEODETIC DATUM, DERIVED FROM VERTICAL CONTROL MONUMENT NO. BM88U502.
ELEVATION = 106.039 m

2	S.L.M	2025-10-24	2nd SUBMISSION
1	S.L.M	2025-06-20	1st SUBMISSION
No.	BY	DATE	DESCRIPTION



Minto Group

BLOCK 13



GENERAL NOTES

DRAWN BY: E.D.	CHECKED BY: S.L.M.	1 OF
DESIGNED BY: E.D.	CHECKED BY: S.L.M.	
SCALE:	DATE: JUNE 2025	