

GENERAL NOTES:

- 1. All dimensions are in metres, all elevations are in metres and are geodetic. TBM = top of spindle of existing fire hydrant on Trailedge Way, Elevation = 85.68. Geodetic datum reference: CGD-1928/1978.
2. This is not a legal survey. Boundary and topographic information were derived from FARLEY, SMITH & DENIS SURVEYING LTD FI no. 25-1-17.
3. Contractor is responsible for location and protection of utilities.
4. All dimensions to be verified on site by contractor prior to construction.
5. Any changes made to this plan must be verified and approved by Kollaard Associates Inc.
6. Client is responsible for acquiring all necessary permits. This drawing is not for construction until a building permit has been granted.
7. The proposed grades have been set and verified for site grading control only. The grade rates at the building location should be verified with regard to subsurface conditions by qualified geotechnical personnel after completion of the excavation.
8. The underside of footing elevation has been set based on the information available and may not have accounted for actual ground water conditions at the exact house location and should be verified by qualified geotechnical personnel upon completion of the excavation.
9. A geotechnical engineer should be retained to provide recommendations with respect to the sub-grade conditions prior to footing installation.
10. The owner agrees to prepare and implement an erosion and sediment control plan to the satisfaction of the City of Ottawa, appropriate to the site conditions, prior to undertaking any site alterations (filling, grading, removal of vegetation, etc.) and during all phases of site preparation and construction in accordance with the current Best Management Practices for Erosion and Sediment Control such as, and not limited to installing filter cloths across manholes/catchbasin lids to prevent sediments from entering structures and install and maintain a light duty silt fence barrier as required.
11. All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications: sewer and watermain material types, classification, provide minimum 2.4 metres of cover for water services, cathodic protection. City of Ottawa insulation specifications for watermain, pipe bedding, reinstatement of disturbed areas and leakage testing.
12. Reference to Kollaard File No. 190867 for Servicing and Stormwater Management Design and Geotechnical Reports.

Table with 4 columns: No., REVISION, DATE, BY. Contains a list of revisions from 1 to 7, including dates from 2020 to 2023.

Kollaard Associates Engineers logo and contact information: (613) 860-0923, info@kollaard.ca, P.O. BOX 189, 210 PRESCOTT ST. KEMPTVILLE, ONTARIO K0G 1J0 FAX (613) 258-0475 http://www.kollaard.ca

CLIENT: TEAK DEVELOPMENTS, 31 WOODVIEW CRESCENT OTTAWA, ON K1B 3B1

PROJECT: PROPOSED RESIDENTIAL DEVELOPMENT

LOCATION: 6173 RENAUD ROAD, CITY OF OTTAWA, ON K1W 0K9

Table with 2 columns: DESIGNED BY, CHECKED BY, DRAWN BY, APPROVED BY. Shows SD for all roles.

Professional Engineer seal for S.E. deWitt, License No. 100079612, dated 06 FEB 2023. Includes date NOV. 11, 2019 and Kollaard File Number 190867.

DRAWING NUMBER: 190867-SER

DRAWING NAME: SITE SERVICING PLAN

#18196

LEGEND: Symbols for existing and proposed elevations, curbs, drainage, watermain, sanitary sewer, storm sewer, catch basins, manholes, valves, and other infrastructure.

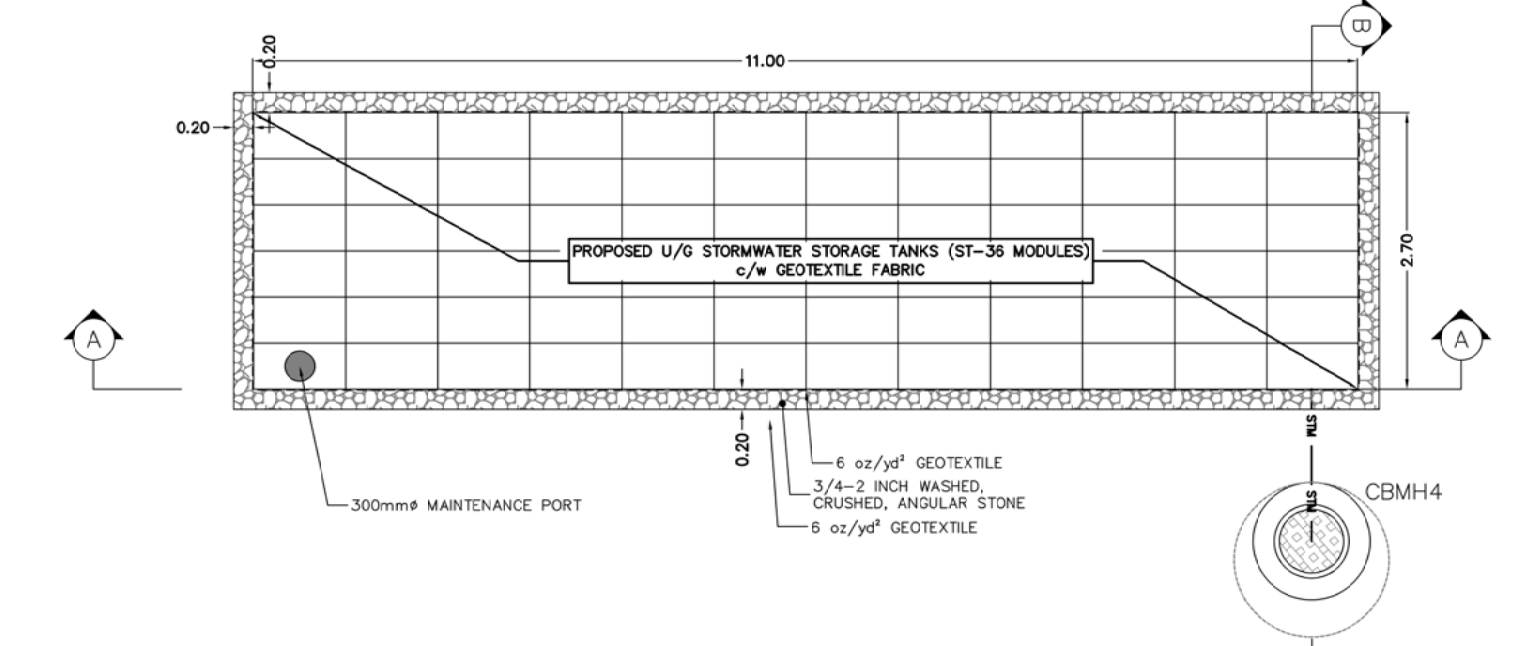
WATER CROSSING TABLE: Table with 2 columns: Triangle symbol, Description. Lists watermain and sanitary sewer crossings with elevations and depths.

INLET CONTROL DEVICE TABLE: Table with 2 columns: STRUCTURE, MODEL. Lists STM-MH1, HYDROVEX 100-SWHV-2, etc.

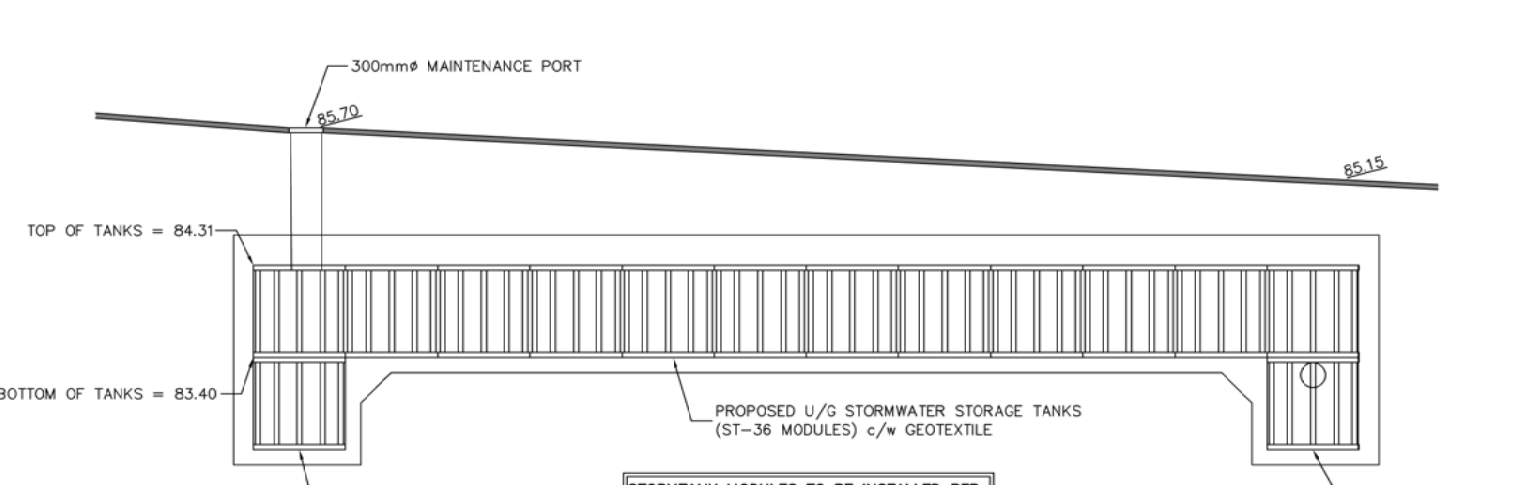
- SEWER NOTES: 1. SUPPLY AND CONSTRUCT ALL SEWERS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS AND ONTARIO PROVINCIAL STANDARDS FOR ROADS AND PUBLIC WORKS.
2. SPECIFICATIONS: Table with 3 columns: ITEM, SPEC. No., CITY STD. Dwg. No. Lists catch basins, manholes, bedding, etc.
3. INSULATE ALL SEWER PIPES THAT HAVE LESS THAN 2m COVER WITH THERMAL INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
4. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
5. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTION PIPES TO MANHOLES (FOR EXAMPLE KOR-NEE-SEAL, PEX, POSITIVE SEAL AND DURASEAL). SANITARY RUBBER GASKET TYPE JOINTS SHALL CONFORM TO CSA (B-182.2,3,4).
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 OPS 410.07.16, 410.07.14 AND 410.07.24. 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 CATCHES ARE TO HAVE 300mm SUMPS (AS PER SUMP DETAIL ON OPS 701.010), UNLESS OTHERWISE INDICATED.
8. BUILDING CONTRACTOR TO PROVIDE TEMPORARY ADDITIONAL GRANULAR BACKFILL ABOVE SHALLOW CULVERTS AND STORM SEWERS TO SUPPORT HEAVY CONSTRUCTION EQUIPMENT.
9. CONTRACTOR TO TELETYPE (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 TO MUNICIPAL SATISFACTION.
10. WHERE THE SANITARY SEWER CROSSES ABOVE THE WATERMAIN, THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 150mm VERTICAL SEPARATION. ADEQUATE STRUCTURAL SUPPORT OF THE SEWER TO PREVENT SETTLING AND EXCESSIVE JOINT DEFLECTION AND ENSURE THAT THE LENGTH OF THE WATER PIPE BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS ARE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

- WATERMAIN NOTES: 1. CITY TO SUPPLY, INSTALL & DISINFECT THE WATER SERVICE; CONTRACTOR TO EXCAVATE, BACKFILL AND REINSTATE THE ROADWAY AS PER STD DWG R10.
2. SPECIFICATIONS: Table with 3 columns: ITEM, SPEC. No., CITY STD. Dwg. No. Lists bedding, cathodic protection, pressure testing, chlorination, material.
3. WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED. WHERE LESS THAN 2.4m COVER, THERMAL INSULATION IS TO BE PROVIDED AS PER CITY STD DWG W22 (in shallow trenches), W23 (At open structures).
4. A MINIMUM OF 0.5m VERTICAL CLEARANCE IS REQUIRED BETWEEN THE WATERMAIN AND ALL UTILITIES AND SEWERS. IN LOCATIONS WHERE THIS IS NOT ACHIEVABLE, MUST FOLLOW PROCEDURE F-1-1, SEC. 5.2 OF THE ONTARIO DRINKING WATER RESOURCES ACT.
5. METALLIC WARNING TAPE SHALL BE USED OVER ALL WATERMANS.
6. INSTALL AND TEST TRACER WIRE FOR ALL PROPOSED WATERMAIN IN ACCORDANCE WITH THE CITY OF OTTAWA DESIGN STANDARDS AS SPECIFIED IN SECTION 8.2B.
7. EXISTING WATERMAIN INFORMATION SHOWN IS BASED ON BEST CURRENT INFORMATION. CONTRACTOR TO VERIFY EXACT LOCATION OF WATERMAIN AND REPORT ANY DISCREPANCIES TO KOLLAARD ASSOCIATES INC.
8. WATER SHUTOFF VALVE AND VALVE BOX TO BE WITHIN THE ROAD ALLOWANCE AND LOCATED A MINIMUM OF 1.0 METRES FROM THE BUILDING FOUNDATION. TYPICAL PRIVATE SERVICE AS PER STD. DWG. W50 (with the exception that the WVBs are to be located 1.0 m minimum from the foundation wall); VALVE BOX ASSEMBLY AS PER STD. DWG. W24.
9. CONNECTIONS AT ELBOWS AND TEES IN WATER MAINS SHOULD BE MADE WITH THE USE OF JOINT RESTRAINERS DESIGNED FOR WATERMAIN APPLICATION. JOINT AND PIPE RESTRAINERS SHOULD MEET THE REQUIREMENTS OF ANMA C300, C205 AND C207 AND ASTM F1874-11. JOINT RESTRAINERS SHOULD BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
10. ALL CONNECTORS, ROOFS AND VALVE BOLTS SHALL BE STAINLESS STEEL.
11. VALVES ARE TO BE OPERATED BY CITY OF OTTAWA STAFF ONLY.
12. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY OF OTTAWA AND CITY OF OTTAWA FORCES ARE ON HAND TO MAKE THE CONNECTION.

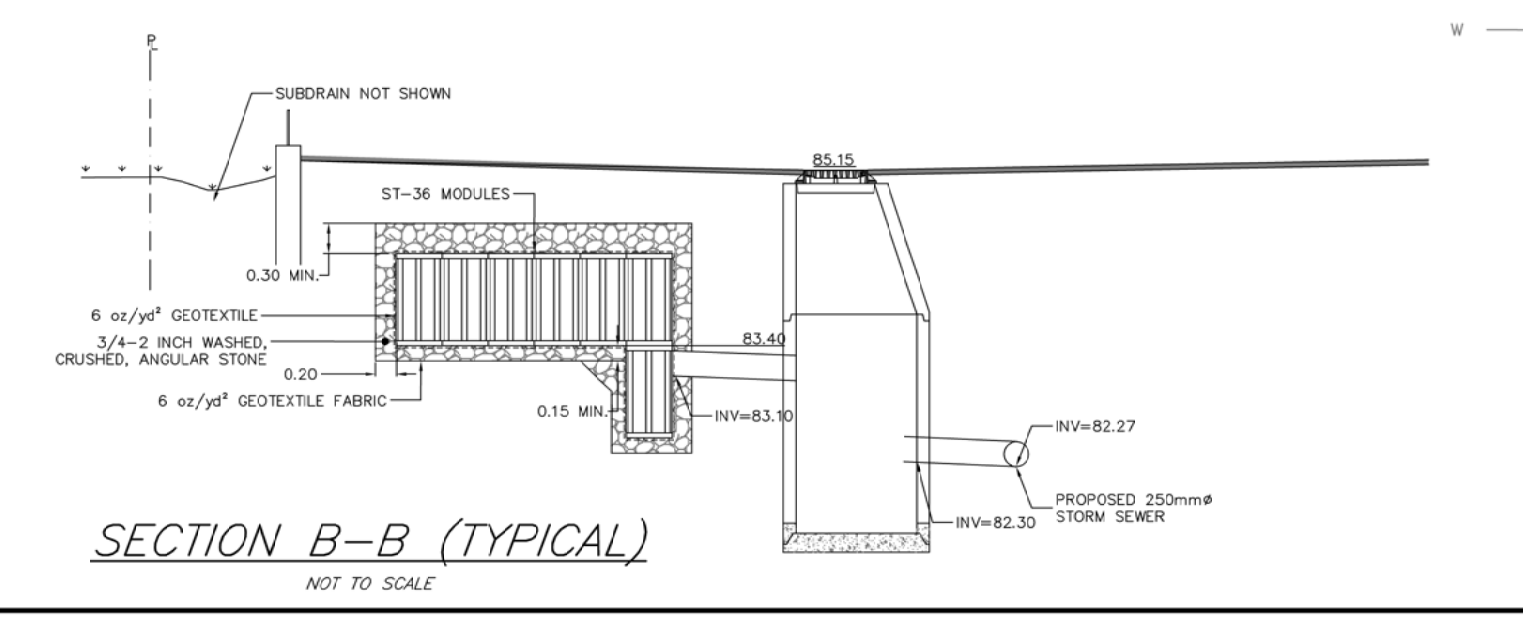
ANDREW MCCREIGHT, MANAGER (A), DEVELOPMENT REVIEW CENTRAL PLANNING, REAL ESTATE & ECONOMIC DEVELOPMENT DEPARTMENT, CITY OF OTTAWA. Includes signature and date: APPROVED By Andrew McCreight at 8:29 am, Aug 10, 2023.



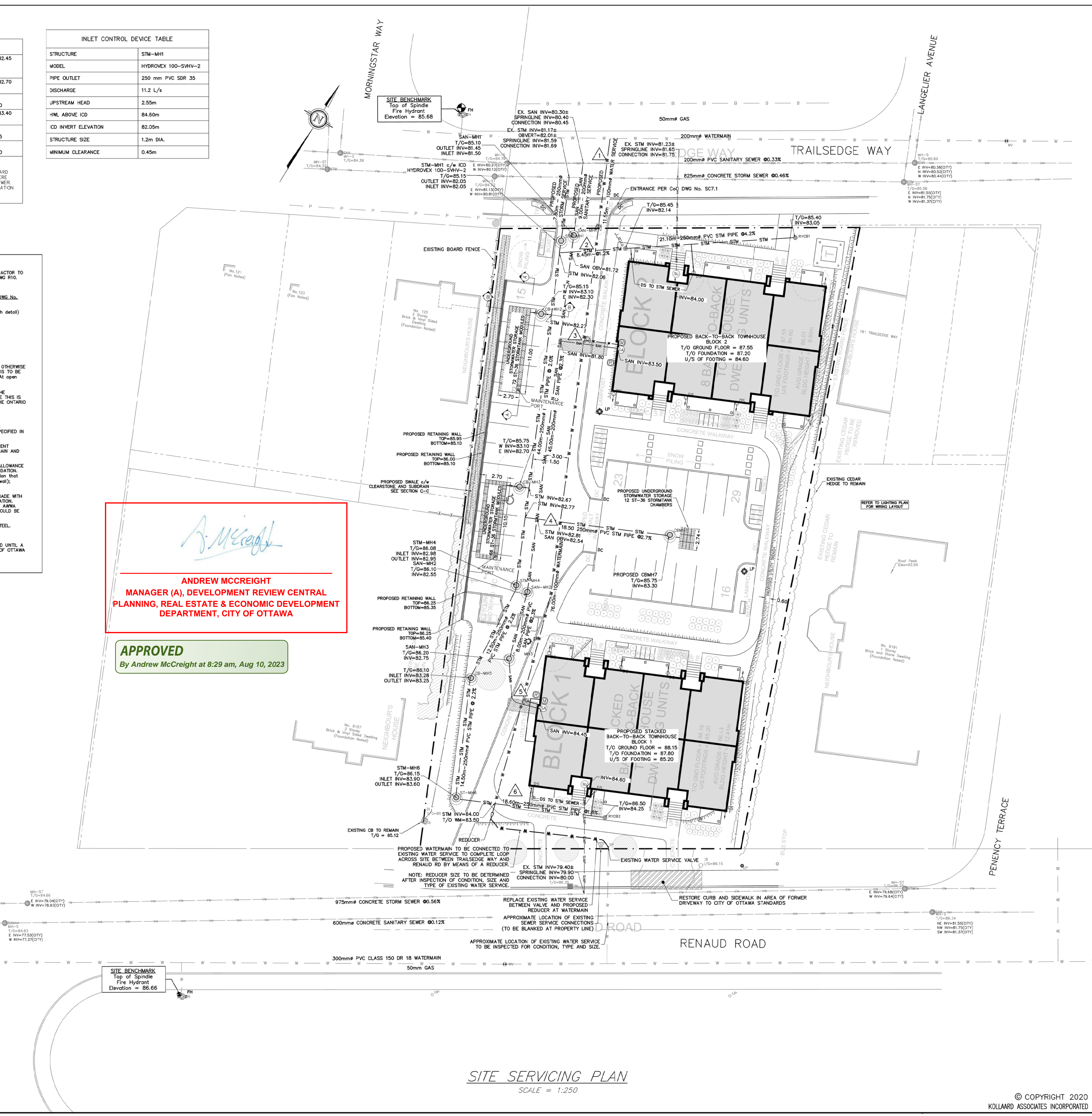
STORMWATER STORAGE TANKS PLAN VIEW (TYPICAL) NOT TO SCALE



SECTION A-A (TYPICAL) NOT TO SCALE



SECTION B-B (TYPICAL) NOT TO SCALE



SITE SERVICING PLAN SCALE = 1:250

D07-12-20-0094