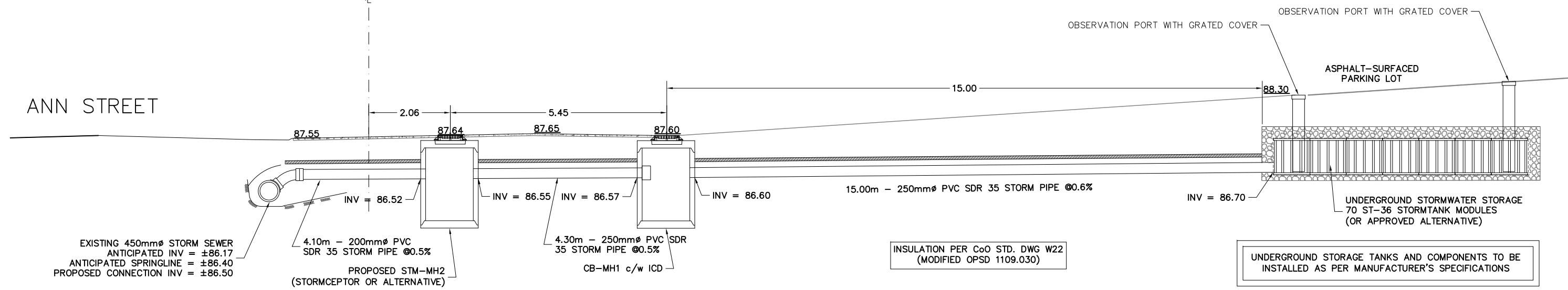
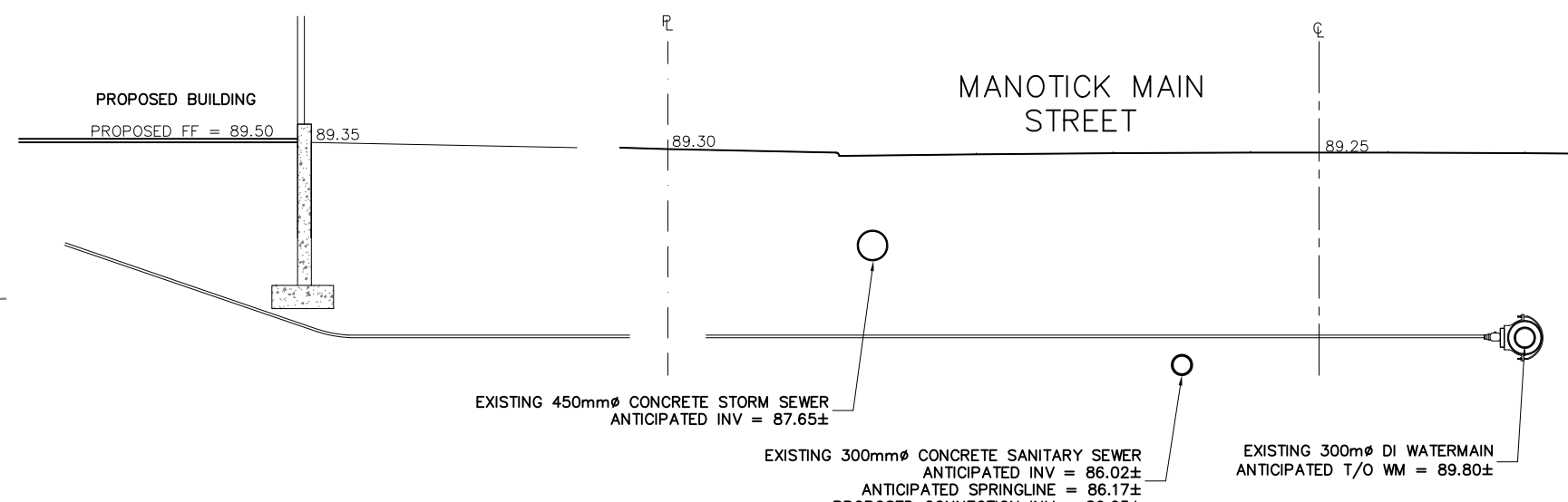


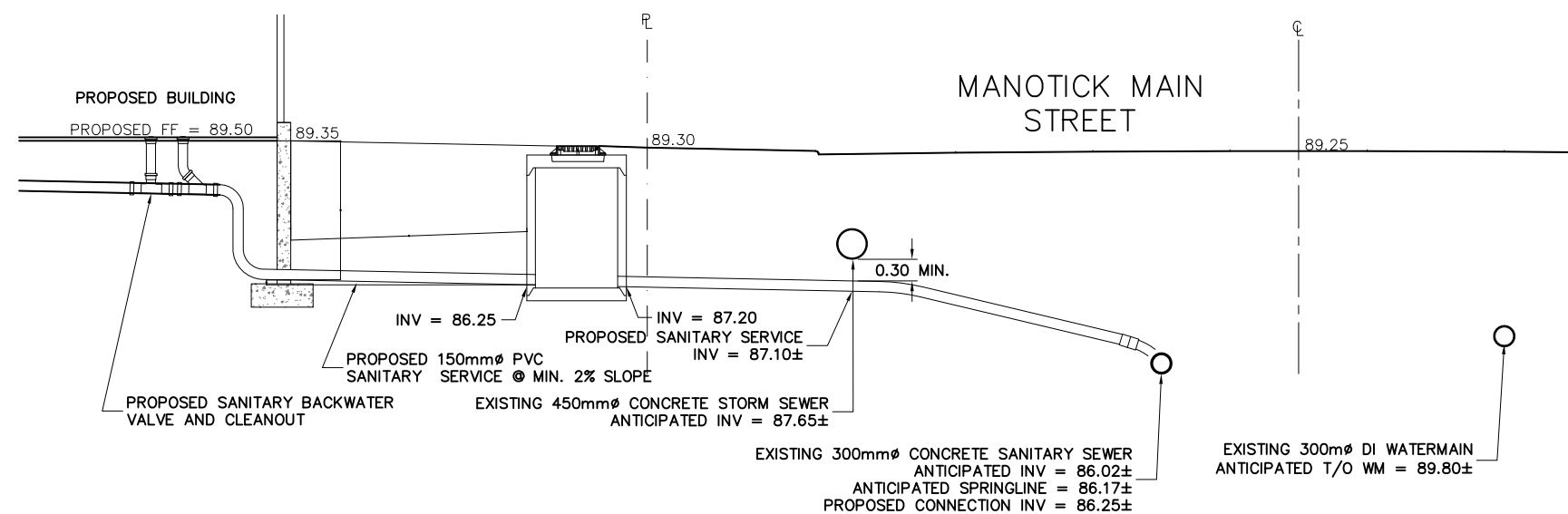
SITE SERVICING PLAN  
SCALE 1:200



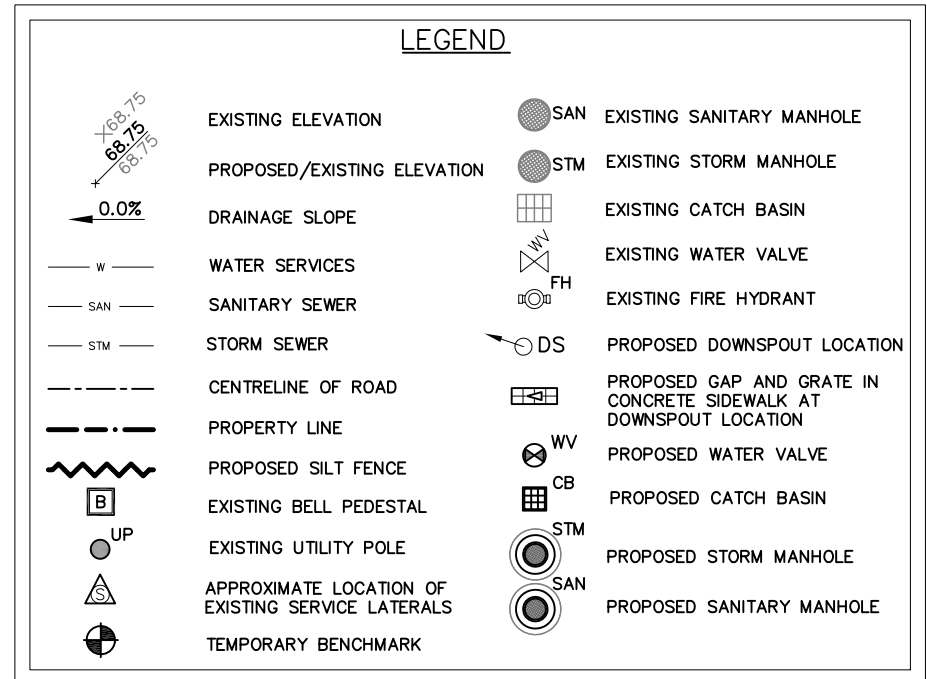
STORM SERVICE CONNECTION DETAIL  
NOT TO SCALE



WATER SERVICE CONNECTION DETAIL  
NOT TO SCALE



SANITARY SERVICE CONNECTION DETAIL  
NOT TO SCALE



SERVICING NOTES:

1. A 0.3-METRE CLEARANCE BETWEEN WATERMAIN AND THE SANITARY AND STORM LATERALS IS TO BE PROVIDED.
2. ALL SERVICES ARE TO BE INSTALLED AT CURRENT CITY OF OTTAWA STANDARDS.
3. SERVICE LATERALS ARE TO HAVE A MINIMUM CLEARANCE OF 2 METRES FROM EXISTING UTILITIES POLES.
4. ALL BENDS IN THE SERVICE LATERALS ARE TO BE A MAXIMUM OF 2 @ 22.5' AND WITHIN THE PROPERTY.
5. EXACT LOCATION AND STATUS OF EXISTING LATERALS ARE UNKNOWN. IF SERVICE LATERALS ARE TO BE RE-USED, IT IS RECOMMENDED THAT THEY BE EXCAVATED AND INSPECTED. IF NOT BEING RE-USED, EXISTING SEWER SERVICES ARE TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY'S SEWER OPERATIONS. ABANDONED WATER SERVICE TO BE TO BE BLANKED AT THE MAIN TO THE SATISFACTION OF CITY'S WATER OPERATIONS.

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:

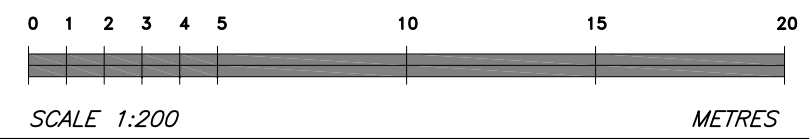
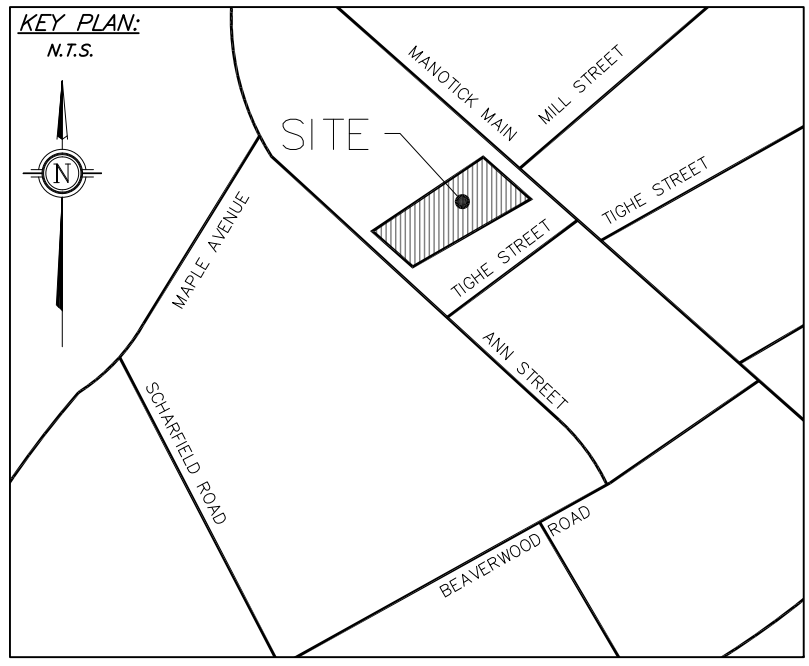
ITEM	SPEC. NO.	CITY STD. DWG. No.
SEWER SERVICE CONNECTION		S11 & S11.1
SEWER TRENCH		S6 & S7
SANITARY BENCHING	OPSD 701.021	
INSULATION	OPSD 1109.030	
3. INSULATE SEWER SERVICE CONNECTIONS THAT HAVE LESS THAN 2m COVER WITH THERMAL INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
4. PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY.
5. FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTION PIPES TO MANHOLES (FOR EXAMPLE KOR-N-SEAL, PSX: POSITIVE SEAL AND DURASEAL). SANITARY RUBBER GASKET TYPE JOINTS SHALL CONFORM TO CSA (8-182.2,3,4).
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 OPSD 410.0716, 410.0718.04 AND 407.0724. 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. 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 TO MUNICIPAL SATISFACTION.
8. WHERE THE SANITARY SEWER CROSSES ABOVE THE WATERMAIN, THE CONTRACTOR IS TO PROVIDE A MINIMUM OF 0.50m 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:

ITEM	SPEC. No.	City Std. Dwg. No.
WATERMAIN BEDDING AND BACKFILL	OPSD 802.010/802.031	W17 (trench detail)
CATHODIC PROTECTION	OPSD 1109.010	W40
PRESSURE TESTING	AWWA C-605-5	
CHLORINATION	AWWA C-651-05	
WATERMAIN MATERIAL	PVC DR18 (CLASS 150)	
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 WATERMANS AND ALL UTILITIES AND SEWERS. IN LOCATIONS WHERE THIS IS NOT ACHIEVABLE, MUST FOLLOW PROCEDURE F-6-1 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 8.28.
7. EXISTING WATERMAIN INFORMATION SHOWN ON THORNCLIFF PLACE 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 V&VB 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 AWWA C900, C905 AND C907 AND ASTM F1674-11. JOINT RESTRAINERS SHOULD BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
10. ALL CONNECTORS, RODS 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.

DRAWING No: 190117-SER



GENERAL NOTES:

1. All dimensions are in metres; all elevations are in metres and are geodetic.
2. TBM=Spike in utilities pole. Elevation=89.55 (geodetic).
3. This is not a legal survey. Boundary and topographic information is derived from HAKEN SHIPMAN SURVEYING LTD. File No. 18-11497.
4. Contractor is responsible for location and protection of utilities.
5. All dimensions to be verified on site by contractor prior to construction.
6. Any changes made to this plan must be verified and approved by Kollaard Associates Inc.
7. Client is responsible for acquiring all necessary permits. This drawing is not for construction until a building permit has been granted.
8. Existing services shown are based on best current information. Contractor to verify exact location of services and report any discrepancies to Kollaard Associates Inc.
9. 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 manhole/catchbasin lids to prevent sediments from entering structures and install and maintain a light duty silt fence barrier as required.
10. The contractor shall implement best management practices, to provide for protection of the area drainage system and the receiving watercourse, during construction activities. The contractor acknowledges that failure to implement appropriate erosion and sediment control measures may be subject to penalties imposed by any applicable regulatory agency.
11. All materials and construction to be in accordance with City of Ottawa standards and Ontario Provincial Standards and Specifications.
12. Reference to Kollaard File #190117 for Storm Water Management Design, Servicing Brief Report and Geotechnical Report.

No.	REVISION	DATE	BY
0	ISSUED FOR SITE PLAN CONTROL APPROVAL	JULY 23, 2019	ML

**Kollaard Associates**  
Engineers  
(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:  
ROYAL LEPAGE TEAM REALTY  
101-555 LEGGET DRIVE  
KANATA ON K2K 2X3  
ATTN: JASON RALPH

PROJECT:  
PROPOSED COMMERCIAL BUILDING

LOCATION:  
5536 MANOTICK MAIN STREET  
CITY OF OTTAWA,  
ONTARIO

DESIGNED BY: SD  
DRAWN BY: ML  
DATE: MARCH 22, 2019  
PROJECT NUMBER:  
190117

DRAWING No: 190117-SER

DRAWING NAME: SITE SERVICING PLAN