

ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISION OF THE STANDARDS AND SPECIFICATIONS FOR THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (PSSD) AND SPECIFICATIONS (PSSS), WHERE APPLICABLE. LOCAL UTILITY STANDARDS AND REGULATIONS SHALL BE OBTAINED FROM THE APPROPRIATE AGENCIES.

THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL EXISTING UTILITIES WITHIN THE SITE AND ADJACENT WORK AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM ALL AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES.

ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITIES LOCATIONS AND NOTIFY ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTORS EXPENSE.

ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO MATCH SURROUNDING AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY AREAS DISTURBED DURING CONSTRUCTION.

THE RELOCATION OF EXISTING SERVICES AND/OR UTILITIES SHALL BE AS SHOWN ON THE DRAWINGS OR DIRECTED BY THE ENGINEER AT THE TIME OF CONSTRUCTION.

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 "CONTRACTOR" AS DEFINED IN THE ACT.

THE CONTRACTOR SHALL CONFORM TO THE MINISTRY OF TRANSPORTATION OF ONTARIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR LATEST AMENDMENT.

THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THESE OTHERS TO AVOID INTERFERENCE WITH THEIR WORK.

ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE SPECIFIED.

REPAIRS TO EXISTING UTILITIES SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURERS WRITTEN APPROVAL IF RECEIVED FROM THE ENGINEER.

ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOLOGICAL REPORT.

FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE REFER TO THE SITE SERVING AND STORMWATER MANAGEMENT PLAN.

ALL SEWERS CONSTRUCTED WITH GRADES LESS THAN 1.0% SHALL BE INSTALLED USING LASER ALIGNMENT AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.

THE CONTRACTOR IS REQUESTED FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF THE SAME.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL BIDDING, OR ADDITIONAL STRENGTH PIPE IF THE MAXIMUM TRENCH WIDTH WAS NOT ANTICIPATED.

ALL PIPE / CURB/LEIST SECTION SIZES REFER TO INSIDE DIMENSIONS.

SHOULD DEEPER BURIED ARCHAEOLOGICAL REMAINS BE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES, THE HERITAGE OFFICIALS SHALL BE NOTIFIED IMMEDIATELY.

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 / REMOVAL.

THE CONTRACTOR SHALL PROVIDE THE CONNECTION TO THE ARCHITECTURAL SITE PLAN.

THE CONTRACTOR SHALL PROVIDE THE PROJECT ENGINEER ONE SET OF AS CONSTRUCTED SITE SERVICING AND GRADING DRAWINGS.

BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS/HAVE NOT BEEN ALTERED OR MOVED SINCE THE DATE OF INSTALLATION.

2. ALL WATERMAIN INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE CITY OF OTTAWA AND THE ONTARIO PROVINCIAL STANDARDS.
3. ALL P.V.C. WATERMAINS SHALL BE AWWA C-900 CLASS 150, SD 18R OR APPROVED EQUIVALENT.
4. WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W77, UNLESS SPECIFIED OTHERWISE. BEDDING AND JOINT MATERIAL SPECIFICATIONS SHALL BE SPECIFIED BY THE CONTRACTOR.
5. ALL P.V.C. WATERMAINS SHALL BE INSTALLED WITH A 10 GAUGE STRIPPED COPPER TWO OR RW TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W77.
6. CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS PER CITY OF OTTAWA STD. W40 AND W42.
7. VALVE COCKS SHALL BE INSTALLED PER CITY OF OTTAWA STD. W24.
8. WATERMAIN CROSSINGS ARE TO BE INSTALLED WITH RESTRAINED JOINTS PER CITY OF OTTAWA STD. W25.5 AND W25.6.
9. THRUST BLOCKING OF WATERMAINS TO BE INSTALLED PER CITY OF OTTAWA STD. W25.3 AND W25.4.
10. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY CAPS, PLUGS, BLOW-OFFS, AND NOZZLES REQUIRED FOR TESTING AND DISINFECTION OF WATERMAINS.
11. WATERMAIN CROSSING OVER AND BELOW SEWERS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25, RESPECTIVELY.
12. WATERMAINS ARE TO BE INSULATED PER CITY STD. W23 WHERE SEPARATION BETWEEN SERVICES AND MAINTENANCE HOLES ARE LESS THAN 2.4m.
13. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER / UTILITY IS 0.50m PER WOE GUIDELINES. FOR CROSSING UNDER WATERMAINS, THE MINIMUM VERTICAL CLEARANCE SHALL BE 0.75m PER WOE GUIDELINES. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN SHALL BE CENTRED AT THE POINT OF CROSSING SUCH THAT THE JOINTS WILL BE EQUIVALENT AND AS CLOSE TO THE CENTER OF THE WATER PIPE AS POSSIBLE.
14. ALL WATERMAINS SHALL HAVE A MINIMUM COVER OR R/W 24". OTHERWISE, THERMAL INSULATION IS REQUIRED AS PER STD W22.
15. WATERMAIN PLANT TO UTILITY ELEVATION SHALL BE PER STD W22.
16. FIRE HYDRANT SHALL BE INSTALLED PER STD W19. OTHER TYPES OF HYDRANT FLANGE ELEVATIONS TO BE INSTALLED 0.10m ABOVE PROPOSED FINISHED GRADE AT HYDRANT; FIRE HYDRANT LOCATION SHALL BE PER STD W19 UNLESS OTHERWISE NOTED.
17. ALL WATERMAINS SHALL BE HYDROSTATICALLY TESTED AND THE PROCEEDURE SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA AND ONTARIO GUIDELINES UNLESS OTHERWISE DIRECTED. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED.
18. ALL WATERMAINS SHALL BE BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES. ALL WATERMAINS SHALL BE DISINFECTED AND FLUSHED TO PROTECT THE PUBLIC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING AND SHALL BE CONTROLLED AND TREATED SO AS NOT TO ADVERSELY EFFECT THE ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL NECESSARY MINIMUM REQUIRED PERMITS FROM THE CITY OF OTTAWA.
19. ALL WATERMAIN STUBS SHALL BE TERMINATED WITH A PLUG AND 50cm blow off UNLESS OTHERWISE NOTED.

**GENERAL**

- 1. LASER ALIGNMENT CONTROL TO UTILIZED ON ALL SEWER INSTALLATIONS.
- 2. CATCH SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING SB. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. THE SEALS SHOULD EXTEND FROM THE FRONT LINE AND FULL DEPTH OF THE EXCAVATION. THE SEALS SHOULD CONFORM TO THE FOLLOWING SPECIFICATIONS:
  - A. BROWN SLIT CLAY PLACED IN MAXIMUM 225mm LIFTS AND COMPACTED TO A MINIMUM OF 95% SDPM.
  - B. THE SEAL IS TO BE 10mm THICK.
- 3. SERVICES TO BUILDINGS TO BE TERMINATED 1.0m FROM THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
- 4. ALL MAINTENANCE STRUCTURE AND CATCH BASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 98% STANDARD PROCTOR DENSITY.
- 5. "WOODLODGE" OR APPROVED PRE-CAST MAINTENANCE STRUCTURE AND CATCH BASIN ADJUSTERS TO BE USED IN LIEU OF BRICKWORK, PARGOLITE OR OTHER MATERIALS.
- 6. SAFETY PLATFORMS SHALL BE AS PER OPSD 404.02.
- 7. DROP STRUCTURES SHALL BE IN ACCORDANCE WITH OPSD 1003.01 AND 1003.02, IF APPLICABLE.
- 8. RECORDING SHALL BE DONE BY THE ENGINEER OR HIS ASSISTANT. THE RECORDS SHALL INCLUDE THE FOLLOWING:
  - (A) VIDEO RECORDING OF THE WORK AREAS.
  - (B) PHOTOGRAPHS OF THE WORK AREAS.
  - (C) VIDEO RECORDINGS IN A FORMAT ACCEPTABLE TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED prior to CANON CAMERA INSPECTION.
- 9. ASPHALT REPAIR COURSE SHALL NOT BE PLACED UNTIL THE VIDEO INSPECTION OF SEWERS AND NECESSARY REPAIRS HAVE BEEN COMPLETED.
- 10. CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH THE STANDARD REQUIREMENTS OF THE CITY OF CHICAGO. THE RESULTS OF THE TESTING SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF WEAR COURSE ASPHALT.
- 11. THE RECORDING REQUIRED FOR THE PROJECT SHALL BE PROVIDED TO THE CITY OF CHICAGO AND SANITARY SEWERS WITH LESS THAN 1.8m FROM GROUND SURFACE TO PIPE OVERTOP TO BE PROVIDED BY GEOTECHNICAL ENGINEER.

12. ALL SANITARY GRAVITY SEWER SHALL BE PVC STD 35, IP EX "RING-ITE" (OR APPROVED EQUIVALENT) PER CSA STANDARD B182.2 Q LATEST AMENDMENT, UNLESS SPECIFIED OTHERWISE.

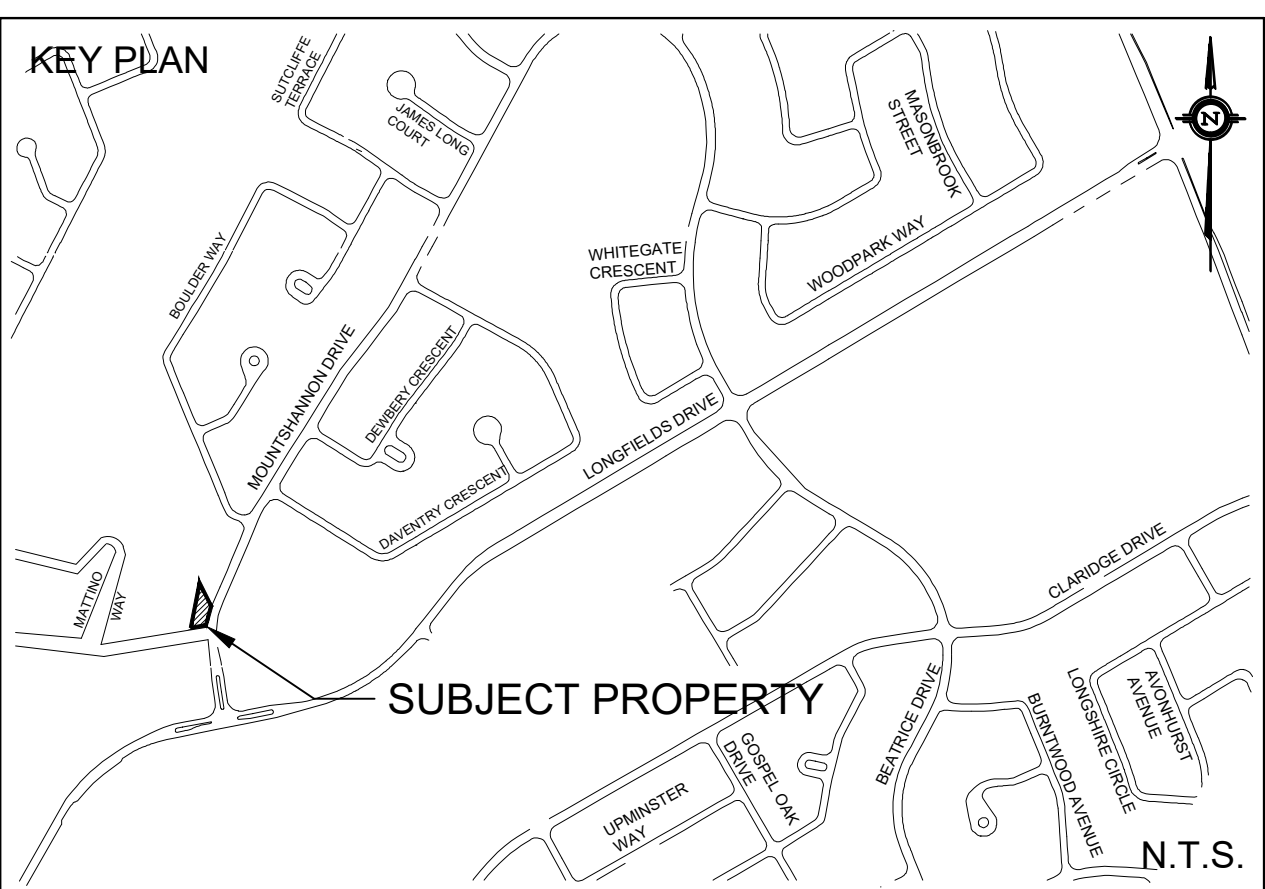
13. EXISTING MAINTENANCE STRUCTURES TO BE RE-BENCHED WHERE A NEW CONNECTION IS MADE.

14. SANITARY GRAVITY SEWER TRENCH AND BEDDING SHALL BE PER CITY OF OTTAWA STD. 56 AND 57, CLASS 'B' BEDDING, UNLESS SPECIFIED OTHERWISE.

15. SANITARY MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD. S24 AND S25.

16. SANITARY MAINTENANCE STRUCTURES SHALL BE BENCHED PER OFSD 701.021.

17. NON-REINFORCED CONCRETE STORM PIPE SHALL BE IN ACCORDANCE WITH AASHTO A257.1, OR LATEST AMENDMENT. PIPE SHALL BE JOINED WITH RUBBER GASKETS AS PER AASHTO A257.3, OR LATEST AMENDMENT.
18. CATCH BASIN SHALL BE CONSTRUCTED TO MEET THE REQUIREMENTS OF THE CITY OF OTTAWA STD. 56 AND 57 CLASS "B" UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOLOGICAL ENGINEER.
19. ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER AASHTO A312.92 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
20. CATCH BASIN SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
  - 20.1 CATCH BASIN LEADS SHALL BE 200MM DIA. AT 1% SLOPE (MIN) UNLESS SPECIFIED OTHERWISE.
  - 20.2 ALL CATCH BASIN SLOPE SHALL HAVE 600MM SUMP, UNLESS SPECIFIED OTHERWISE.
  - 20.3 ALL CATCH BASIN LEAD INVERTS TO BE 1.5m BELOW FINISHED GRADE UNLESS SPECIFIED OTHERWISE.
21. IF THE STORM SEWER SYSTEM HAS BEEN DESIGNATED AS A TRENCH SYSTEM, THE TRENCH DEPTH SPECIFIED ABOVE, WHERE THE SPECIFIED TRENCH WIDTH IS EXCEEDED, THE CONTRACTOR IS REQUIRED TO PROVIDE AND SHALL BE RESPONSIBLE FOR EXTRA TEMPORARY AND/OR PERMANENT SHIELDING TO PROTECT THE EXISTING UTILITY.
22. REINFORCED SUBGRAN FOR ROAD AND PARKING LOT CATCH BASIN SHALL BE INSTALLED PER CITY STD R1 AND GEOTECHNICAL RECOMMENDATIONS UNLESS OTHERWISE NOTED.
23. PERMANENT SUBGRAN FOR REAR YARD AND LANDSCAPING APPLICATIONS SHALL BE INSTALLED PER CITY STD S29, S30, AND S31, WHERE APPLICABLE.
24. RIP-RAP TREATMENT FOR SEWER AND CULVERT OUTLETS PER OPSD 810.010.
25. ALL STORM SEWER SHALL BE INSTALLED WITH PROTECTED TRENCH PER OPSD 803.031 WHERE APPLICABLE.
26. STORM MAINTENANCE STRUCTURE FRAME AND COVERS SHALL BE PER CITY OF OTTAWA STD S25 AND S24.1, UNLESS OTHERWISE NOTED.
27. CATCH BASIN FRAME AND COVER SHALL BE PER OPSD 400.02 AND CITY STD S19.1, UNLESS OTHERWISE NOTED.



	PROPERTY LINE		PROPOSED WATER METER
	PROPOSED WATERMAIN		PROPOSED STORM MANHOLE
	PROPOSED SANITARY SEWER		PROPOSED FOUNDATION MANHOLE (WATERIGHT COVER PER OFSD 401.030)
	PROPOSED STORM SEWER		PROPOSED SANITARY MANHOLE
	PROPOSED PERFORATED SUBDRAIN		
	PROPOSED FOUNDATION SEWER		
	<b>REDUCER</b> PROPOSED REDUCER		PROPOSED CATCH BASIN
	PROPOSED CURB STOP		PROPOSED CB "1" OR CB "1.1"

CONTRACTOR TO CONFIRM ELEVATIONS AND LOCATIONS OF EXISTING UNDERGROUND SERVICES AND UTILITIES WITHIN THE RIGHT OF WAY PRIOR TO INSTALLATION OF SITE SERVICING INFRASTRUCTURE.

*NOT FOR CONSTRUCTION*

TOPOGRAPHIC INFORMATION PROVIDED BY STANTEC  
PROJ. NO. 161613770-111  
DATED APRIL 23, 2018

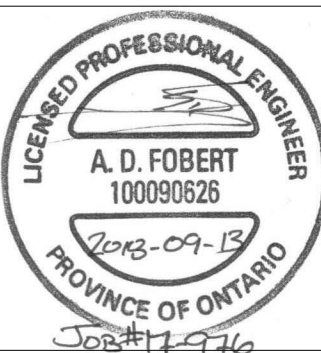
SITE PLAN PROVIDED BY PIERRE J. TABEL ARCHITECT  
 PROJ. NO.  
 DATED JULY 26, 2018

GEOTECHNICAL RECOMMENDATIONS PROVIDED BY PATERSON GROUP  
 PROJ. NO. PG2306-1  
 DATED JANUARY 31, 2013

SERVICING AND STORMWATER MANAGEMENT RECOMMENDATIONS PROVIDED BY DSEL  
 PROJ. NO. 17-976  
 DATED SEPTEMBER 2018

TOP OF GRADE LOCATED ACROSS FROM THE SOUTHWEST CORNER OF THE SITE  
ELEV=93.57

No.	A.J.G.	18.09.13	ISSUED FOR MUNICIPAL REVIEW
No.	BY	YY.MM.DD	DESCRIPTION



REVIEWED BY

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DRAWN BY:	C.M.K.	CHECKED BY:	R.D.F.	DRAWING NO.	SHEET NO.
DESIGNED BY:	C.M.K.	CHECKED BY:	A.D.F.	SSP-1	3 of 4
SCALE:	1:200	DATE:	SEPTEMBER 2018		