

**GENERAL NOTES AND SPECIFICATIONS**

- ALL MATERIALS AND CONSTRUCTION METHODS TO BE IN ACCORDANCE WITH OPS AND CITY OF OTTAWA STANDARD SPECIFICATIONS AND DRAWINGS AND OPSD SUPPLEMENT. ONTARIO PROVINCIAL STANDARDS WILL APPLY WHERE NO CITY STANDARDS ARE AVAILABLE.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
- SERVICE AND UTILITY LOCATIONS ARE APPROXIMATE. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF EXISTING SERVICES AND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING LOCATES FROM ALL UTILITY COMPANIES TO LOCATE EXISTING UTILITIES PRIOR TO EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTION AND REINSTATEMENT.
- ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE ENGINEER & THE CITY. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSD 509.010 AND OPS 310.
- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE "OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATION FOR CONSTRUCTION PROJECTS". THE GENERAL CONTRACTOR SHALL BE DEEMED TO BE THE CONSTRUCTOR AS DEFINED IN THE ACT.
- THE CONTRACTOR SHALL SUBMIT AN EROSION AND SEDIMENTATION CONTROL PLAN THAT WILL IMPLEMENT BEST MANAGEMENT PRACTICES TO PROVIDE PROTECTION FOR RECEIVING STORM SEWERS OR DRAINAGE DURING CONSTRUCTION ACTIVITIES. THIS PLAN SHALL INCLUDE BUT NOT BE LIMITED TO CATCH BASINS, INSERTS, STRAW BALE CHECK DAMS AND SEDIMENT CONTROLS AROUND ALL DISTURBED AREAS. DEWATERING SHALL BE PUMPED INTO SEDIMENT TRAPS.
- SITE PLAN PREPARED BY ROSALINE J. HILL ARCHITECT INC. DATED OCTOBER 2018. DRAWING TITLED - SITE PLAN
- TOPOGRAPHIC SURVEY SUPPLIED BY ANNIS, O'SULLIVAN, VOLLEBECK LTD. PROJECT No. 16280-17. PART OF LOT 6, CONCESSION 4 (OTTAWA FRONT), GEOGRAPHIC TOWNSHIP OF GLOUCESTER, CITY OF OTTAWA.
- REFER TO LANDSCAPE ARCHITECTURE PLAN FOR ALL LANDSCAPING FEATURES (i.e. TREES, WALKWAYS, PARK DETAILS, NOISE BARRIERS, FENCES etc.)
- GEOLOGICAL INVESTIGATION 2597327 ONTARIO LTD. GEOTECHNICAL INVESTIGATION. PREPARED BY EXP. DATED MAY 18, 2018. REPORT No. OTT-00240646-01. GEOTECHNICAL INFORMATION PRESENTED ON THESE DRAWINGS MAY BE INTERPOLATED FROM THE ORIGINAL REPORT. REFER TO ORIGINAL GEOTECHNICAL REPORT FOR ADDITIONAL DETAILS AND TO VERIFY ASSUMPTIONS MADE HEREIN.
- STREET LIGHTING TO CITY OF OTTAWA STANDARDS.
- ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE STATED. DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED IMMEDIATELY TO ENGINEER.
- THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS PRIOR WRITTEN APPROVAL BY THE CONTRACT ADMINISTRATOR AND DIRECTOR OF ENGINEERING HAS BEEN OBTAINED.
- HERITAGE OPERATIONS UNIT OF THE ONTARIO MINISTRY OF CULTURE TO BE NOTIFIED IF DEEPLY BURIED ARCHAEOLOGICAL REMAINS ARE FOUND ON THE PROPERTY DURING CONSTRUCTION ACTIVITIES.

**WATER SUPPLY SERVICING**

- THE CONTRACTOR SHALL CONSTRUCT WATERMAIN, WATER SERVICES, CONNECTIONS & APPURTENANCES AS PER CITY OF OTTAWA SPECIFICATIONS & SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION, SWABBING, CHLORINATION, CONTINUITY TESTING TO VERIFY PROPER INSTALLATION OF TRACER WIRE & DISINFECTION BY CITY PERSONNEL.
- WATERMAIN PIPE MATERIAL SHALL BE PVC CL150 DR18. DEFLECTION OF WATERMAIN PIPE IS NOT TO EXCEED 1/2 OF THAT SPECIFIED BY THE MANUFACTURER. PVC WATERMANS TO BE INSTALLED WITH TRACER WIRE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W08.
- WATER SERVICES ARE TO BE TYPE K SOFT COPPER AS PER CITY OF OTTAWA STANDARD W08 (UNLESS OTHERWISE NOTED). WATER SERVICE TO EXTEND 1.0M BEYOND PROPERTY LINE. STAND POST TO BE INSTALLED AT PROPERTY LINE.
- FIRE HYDRANTS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W16 AND W19.
- WATER VALVES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W24.
- WATERMAIN TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W17 UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL TO BE SPECIFIED BY PROJECT GEOTECHNICAL CONSULTANT.
- SERVICE CONNECTIONS SHALL BE INSTALLED A MINIMUM OF 2400mm FROM ANY CATCHBASIN, MANHOLE OR OBJECT THAT MAY CONTRIBUTE TO FREEZING. THERMAL INSULATION SHALL BE INSTALLED ON ALL PROPOSED CBS ON THE W/M STREET SIDE WHERE 2400mm SEPARATION CANNOT BE ACHIEVED (AS PER CITY OF OTTAWA W2 & W23)
- CATHODIC PROTECTION TO BE SUPPLIED ON METALLIC FITTINGS AS PER CITY OF OTTAWA W40 AND W42.
- THRUST BLOCKS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS W25.3 AND W25.4.
- WATERMAIN TO HAVE MIN. 2.4m COVER. WHERE WATERMAIN COVER IS LESS THAN 2.4m, INSULATION TO BE SUPPLIED IN ACCORDANCE WITH CITY STANDARD W22.
- WATERMAIN CROSSINGS ABOVE AND BELOW SEWERS TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W25 AND W25.2.
- PRESSURE REDUCING VALVES (PRVs) IF REQUIRED, TO BE INSTALLED AS PER ONTARIO PLUMBING CODE.

**STORM AND SANITARY SEWERS**

- SANITARY SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35. SANITARY SEWERS LARGER THAN 375mm SHALL BE CONCRETE CSA A 297.2 CLASS 100-D AS PER OPSD 807.010
- STORM SEWERS 375mm DIA. OR SMALLER SHALL BE PVC DR35. STORM SEWERS LARGER THAN 375mm DIA. SHALL BE CONCRETE CSA A 297.2 CLASS 100-D AS PER OPSD 807.010
- ALL STORM AND SANITARY SEWER BEDDING SHALL BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S6 AND S7. CLASS "B" BEDDING, UNLESS OTHERWISE NOTED. SUITABLE BEDDING AND COVER MATERIAL TO BE SPECIFIED BY GEOTECHNICAL CONSULTANT.
- STORM AND SANITARY MANHOLES SHALL BE 1200mm DIAMETER IN ACCORDANCE WITH OPSD-701.01 (UNLESS OTHERWISE NOTED) c/w FRAME

- APPLICABLE. CATCH BASIN MANHOLE FRAME AND COVERS PER S19, S28, AND S28.1 WHERE APPLICABLE. ALL STORM MANHOLES WITH SEWERS 900mm DIA SEWERS AND OVER IN SIZE SHALL BE BENCHMARKED. ALL OTHER STORM MANHOLES SHALL BE COMPLETED WITH 300mm SUMPS AS PER CITY STANDARDS. SANITARY MANHOLES SHALL NOT HAVE SUMPS.
- ALL SEWERS CONSTRUCTED WITH GRADES 0.50% OR LESS, TO BE INSTALLED WITH LASER AND CHECKED WITH LEVEL INSTRUMENT PRIOR TO BACKFILLING.
- FOR STORM SEWER INSTALLATION (EXCLUDING CB LEADS) THE MINIMUM DEPTH OF COVER OVER THE CROWN OF THE SEWER IS 2.0m. FOR SANITARY SEWERS THE MINIMUM DEPTH OF COVER IS 1.5m OVER PIPE OVERT.
- ALL STORM AND SANITARY SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES.
- STORM AND SANITARY SERVICE LATERALS TO BE SDR 28 INSTALLED AT MIN. 1.0% SLOPE.
- CATCH BASINS SHALL BE INSTALLED IN ACCORDANCE WITH CITY STANDARDS S1, S2, S3 c/w FRAME AND GRATE AS PER S19.1. CURB INLET FRAME AND GRATE PER S22 AND S23. CATCH BASIN MANHOLES FRAME AND GRATE AS PER S19. PROVIDE 150mm ADJUSTED SPACERS. ALL CATCH BASINS SHALL HAVE SUMPS (600mm DEEP). STREET CATCH BASIN LEADS SHALL BE 200mm DIA. (MIN) PVC DR 35 AT 1.0% GRADE WHERE NOT OTHERWISE SHOWN ON PLAN. CATCH BASINS WILL BE INSTALLED WITH INLET CONTROL DEVICES (ICD) AS PER ICD SCHEDULE ON STORM DRAINAGE PLAN.
- STREET CATCH BASINS TO BE INSTALLED c/w SUBDRAINS 3m LONG IN FOUR ORTHOGONAL DIRECTIONS OR LONGITUDINALLY WHEN PLACED ALONG A CURB, AND AT AN ELEVATION OF 300mm BELOW SUBGRADE LEVEL.
- REAR LOT PERFORATED PIPE TO BE INSTALLED AS PER CITY OF OTTAWA STANDARDS S28. REAR LOT STRUCTURES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W63 AND W61.
- CLAY SEALS TO BE INSTALLED AS PER CITY STANDARD DRAWING S8. THE SEALS SHOULD BE AT LEAST 1.5m LONG (IN THE TRENCH DIRECTION) AND SHOULD EXTEND FROM TRENCH WALL TO TRENCH WALL. GENERALLY, THE SEALS SHOULD EXTEND FROM THE FROST 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 95% OF THE MATERIAL'S SPREAD. THE CLAY SEALS SHOULD BE PLACED AT THE SITE BOUNDARIES AND AT STRATEGIC LOCATIONS AT NO MORE THAN 60m INTERVALS IN THE SERVICE TRENCHES. FOR DETAILS REFER TO GEOTECHNICAL INVESTIGATION.
- GRANULAR "A" SHALL BE PLACED TO A MINIMUM THICKNESS OF 300 mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA AND COMPACTED TO A MINIMUM OF 98% STANDARD PROCTOR DENSITY.
- CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT. FOR SANITARY SEWERS IN ACCORDANCE WITH OPS 410 AND OPS 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.
- ANY SEWER ABANDONMENT TO BE CONDUCTED ACCORDING TO CITY OF OTTAWA STANDARD S114
- SEWERS WITH LESS THAN 1.5m COVER TO BE INSULATED IN ACCORDANCE WITH CITY STANDARD W22.

200mmØ WATERMAIN 'A'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+00.0	77.70	75.30a	200mm TEE CONNECTION TO EX. 200mmØ WATERMAIN
0+01.0	77.80	75.40	200mmØ VALVE AND VALVE BOX
0+015.1	77.83	75.430	11"± HORIZONTAL BEND
0+020	77.91	75.510	TOP OF PIPE
0+040	78.22	75.820	TOP OF PIPE
0+048.6	78.37	75.970	45" HORIZONTAL BEND
0+051.6	78.45	76.050	45" HORIZONTAL BEND
0+060	78.46	76.060	TOP OF PIPE
0+076.8	77.31	74.910	CROSSING STORM AND SAN SEWERS
0+081.1	77.25	74.850	200mmØ x 100mmØ TEE
0+087.1	77.21	74.810	200mmØ VALVE AND VALVE BOX
0+096.2	77.15	74.750	11"± HORIZONTAL BEND
0+102.2	77.07	74.670	45" HORIZONTAL BEND
0+102.6	77.06	74.660	11"± HORIZONTAL BEND
0+110.6	77.03	74.630	22"± HORIZONTAL BEND
0+120	76.97	74.570	TOP OF PIPE
0+140	76.82	74.420	CROSSING CS LEAD
0+143.7	76.87	74.470	200mmØ VALVE AND VALVE BOX
0+145.2	76.86	74.460	11"± HORIZONTAL BEND
0+154	76.86	74.46a	200mm TEE CONNECTION TO EX. 200mmØ WATERMAIN

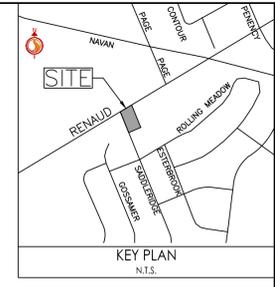
  

200mmØ WATERMAIN 'B'			
STATION	FINISHED GRADE	TOP OF W/M	ITEM
0+000	77.25	74.850	200mmØ x 100mmØ TEE
0+006	77.33	74.930	100mmØ VALVE AND VALVE BOX
0+010.9	77.35	74.950	11"± HORIZONTAL BEND
0+020	77.29	74.890	TOP OF PIPE
0+032	77.21	74.810	100mmØ CAP AND THRUST BLOCK

SEWER AND WATERMAIN CROSSING TABLE						
CROSSING	STM INV	STM OBV	SAN INV	SAN OBV	WTR TOP	WTR BTM
▲	74.61	74.81	73.52	73.72	74.42	74.22
▲	74.64	74.84	73.59	73.79	74.14	73.94
▲	73.61	73.91	74.01	74.21	74.21	74.21
▲	73.62	73.92	74.01	74.21	74.91	74.71
▲	74.55	74.85	76.09	76.29		

\* BRACKETS DENOTE ADJUSTED VALUE WITH CONCRETE PIPE THICKNESS

SCHEDULE OF INLET CONTROL DEVICES				
DRAINAGE AREA ID	STRUCTURE ID	ICD TYPE	100% RELEASE RATE (L/s)	
L104B	CBMH 501	IPX TEMPEST LMF 60	4.8	
L104A	CBMH 501	83mm ORRICE	20.3	
L107A	CBMH 503	94mm ORRICE	25.6	
L109A	CB 504	IPX TEMPEST LMF 65	4.0	

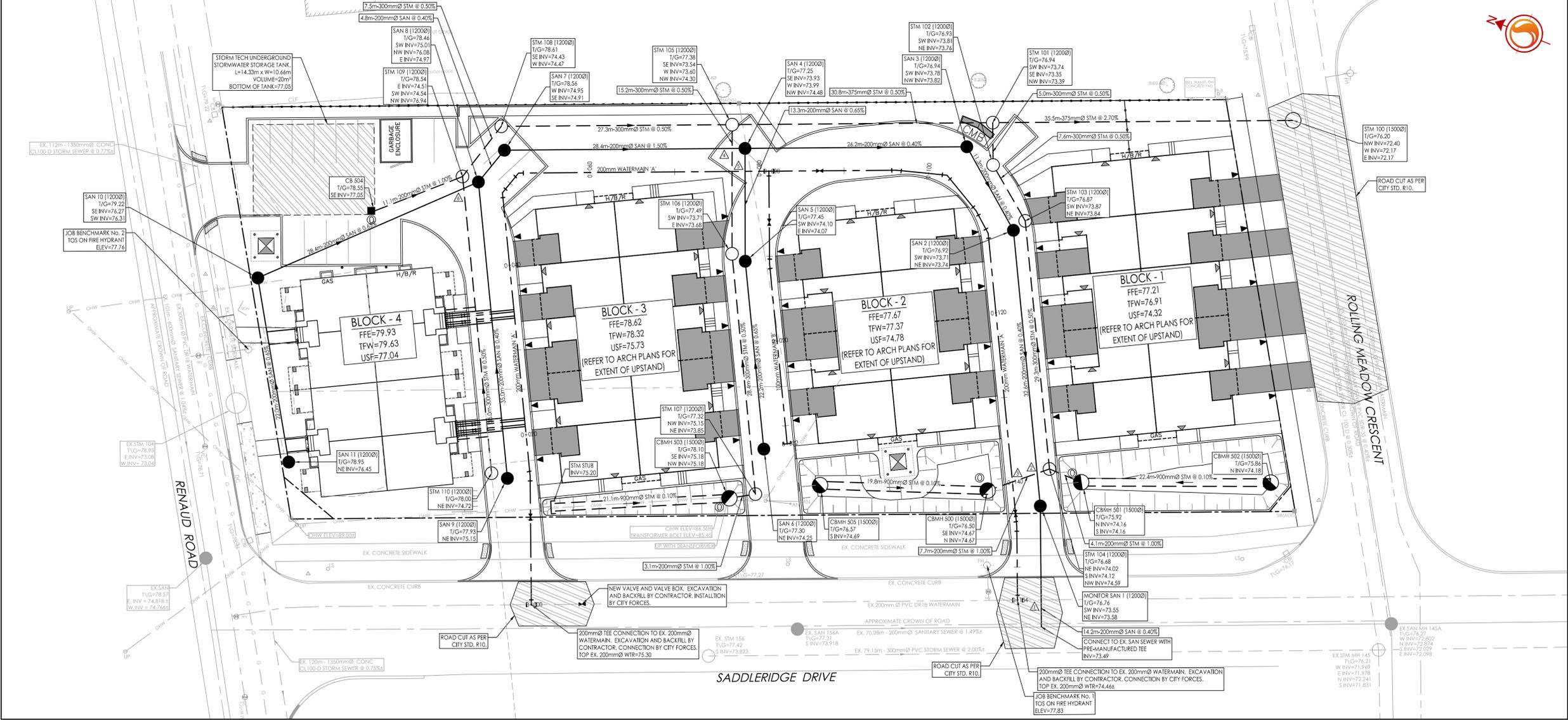


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**Legend**

- PROPOSED WATERMAIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED WATER METER
- PROPOSED REMOTE WATER METER
- PROPOSED SANITARY SEWER
- PROPOSED MH AND STORM SEWER
- PROPOSED CATCHBASIN
- PROPOSED CBMH AND STORM SEWER
- EXISTING WATERMAIN
- EXISTING VALVE AND VALVE BOX
- EXISTING VALVE CHAMBER
- EXISTING REDUCER
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING CATCHBASIN MANHOLE
- EXISTING CATCHBASIN
- PROPOSED DEPRESSED CURB LOCATIONS
- THERMAL INSULATION AS PER CITY STD W22
- PROPOSED TRANSFORMER LOCATION
- BACK TO BACK TOWN HOUSE SERVICING
- 100mm STORM SERVICE PVC SDR 28 @ 1% MIN
- 150mm SANITARY SERVICE PVC SDR 28 @ 1% MIN
- 19mm PEX TUBING WATER SERVICE C/W CURB STOP AND SERVICE POST
- BACK TO BACK STACKED HOME SERVICES
- 200mm STORM SERVICE PVC SDR 28 @ 1% MIN
- 150mm SANITARY SERVICE PVC SDR 28 @ 1% MIN
- 19mm PEX TUBING WATER SERVICE C/W CURB STOP AND SERVICE POST
- PROPOSED COMMUNITY MAILBOX LOCATIONS



**Notes**

Revision	By	Appd.	Y/M/DD
1	MJS	KJK	19.08.01

File Name: 160401467-DB  
MJS DT MJS 19.01.15  
Dwn. Chkd. Dgnr. Y/M/DD

Permit-Seal

Client/Project  
1702599 ONTARIO INC  
308 Rue De La Melodie  
CHAPEL HILL HOUSING  
6102 RENAUD ROAD  
OTTAWA, ONTARIO

Title  
SITE SERVICING PLAN

Project No. 160401467  
Drawing No. SSP-1  
Scale 1:250  
Sheet 2 of 6  
Revision 1