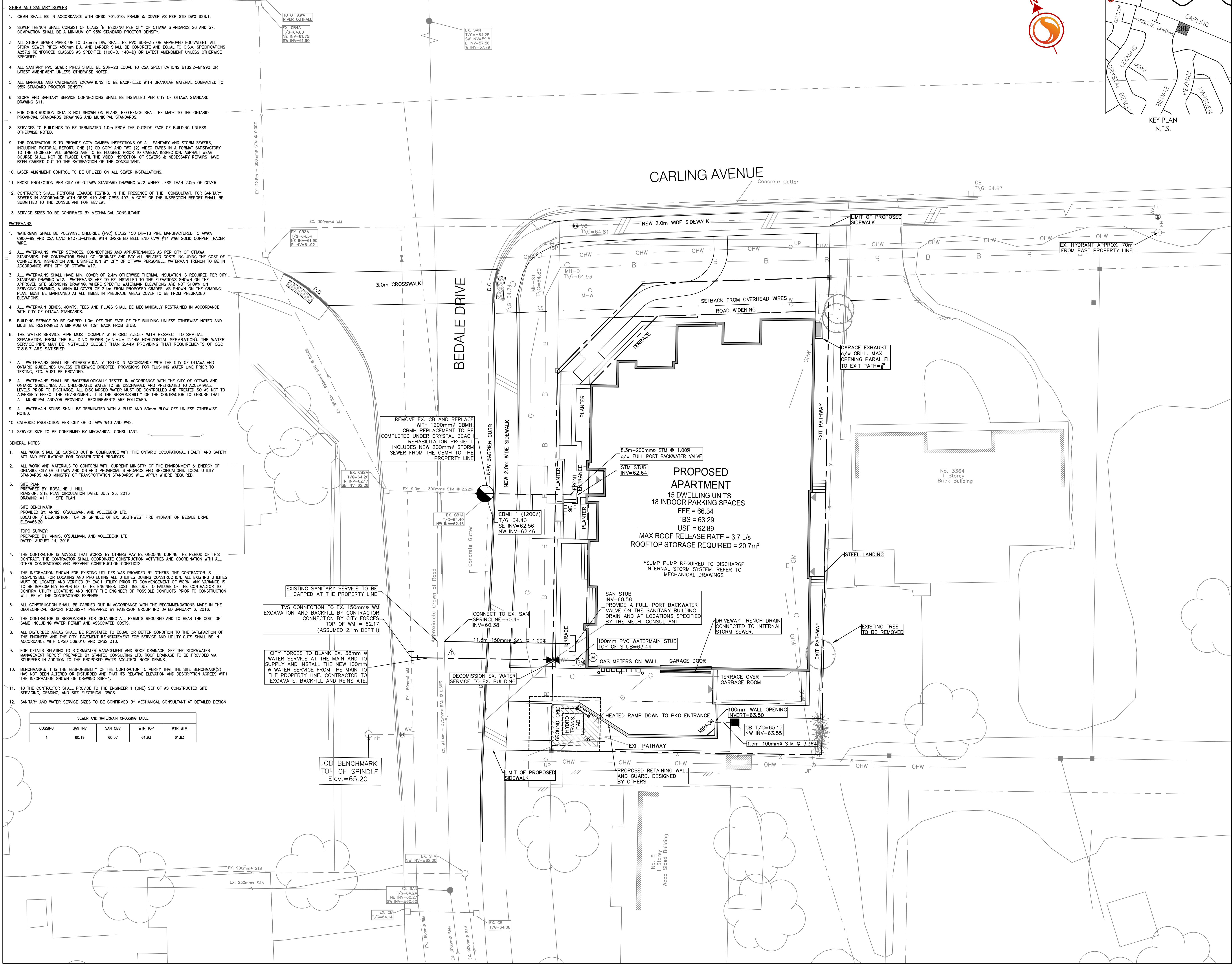


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Legend

- PROPOSED WATERMAIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED SANITARY SEWER
- PROPOSED STORM SEWER
- PROPOSED CATCHBASIN MANHOLE
- EXISTING WATERMAIN
- EXISTING VALVE AND VALVE BOX
- EXISTING VALVE CHAMBER
- EXISTING FIRE HYDRANT
- EXISTING SANITARY SEWER
- EXISTING STORM SEWER
- EXISTING CATCHBASIN
- WATER METER
- WATER REMOTE METER



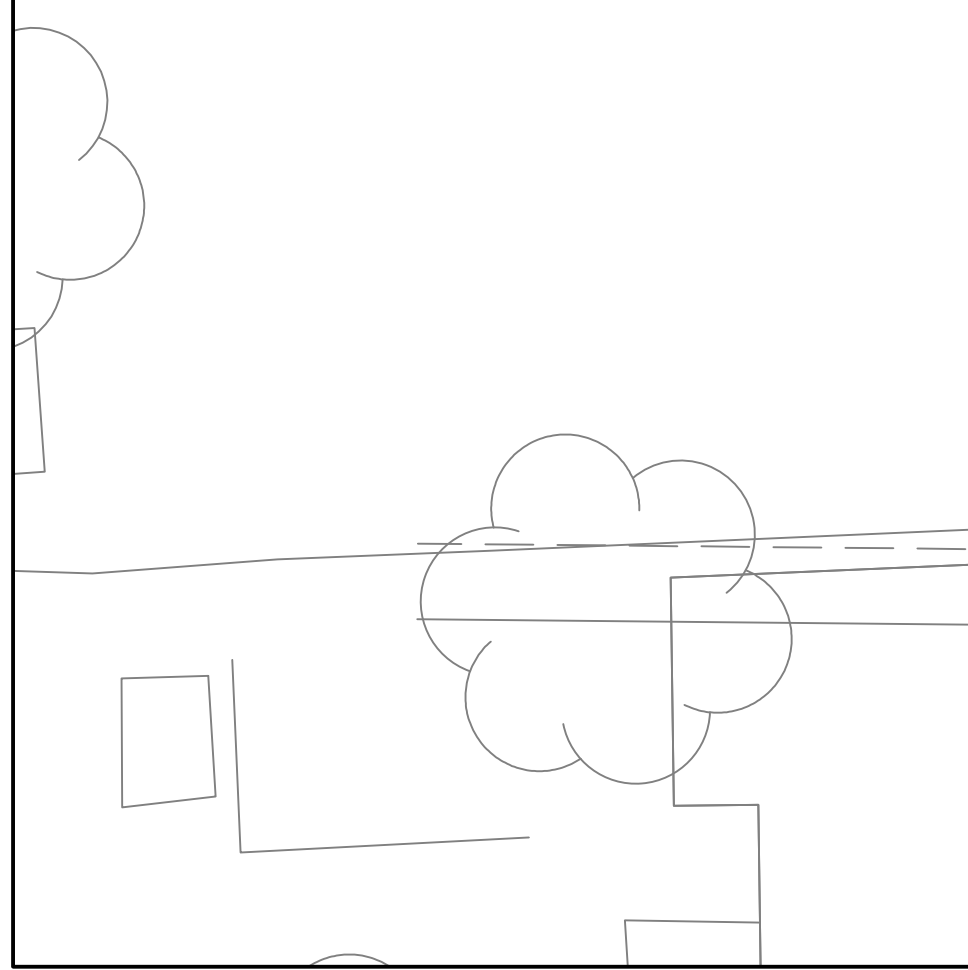
- STORM AND SANITARY SEWERS**
- CBM SHALL BE IN ACCORDANCE WITH OPSD 701.010; FRAME & COVER AS PER STD DWS 28.1.
  - SEWER TRENCH SHALL CONSIST OF CLASS 'B' BEDDING PER CITY OF OTTAWA STANDARDS S6 AND S7. CONSTRUCTION SHALL BE A MINIMUM OF 30% STANDARD PROCTOR DENSITY.
  - ALL STORM SEWER PIPES UP TO 375mm DIA. SHALL BE PVC SDR-35 OR APPROVED EQUIVALENT. ALL STORM SEWER PIPES 400mm DIA. AND LARGER SHALL BE CONCRETE AND EQUAL TO C.S.A. SPECIFICATIONS A257.2 REINFORCED CLASSES AS SPECIFIED (100-D, 140-D) OR LATEST AMENDMENT UNLESS OTHERWISE SPECIFIED.
  - ALL SANITARY PVC SEWER PIPES SHALL BE SDR-28 EQUAL TO CSA SPECIFICATIONS B182.2-M1990 OR LATEST AMENDMENT UNLESS OTHERWISE NOTED.
  - ALL MANHOLE AND CATCHBASIN EXCAVATIONS TO BE BACKFILLED WITH GRANULAR MATERIAL COMPACTED TO 90% STANDARD PROCTOR DENSITY.
  - STORM AND SANITARY SERVICE CONNECTIONS SHALL BE INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S11.
  - FOR CONSTRUCTION DETAILS NOT SHOWN ON PLANS, REFERENCE SHALL BE MADE TO THE ONTARIO PROVINCIAL STANDARDS DRAWINGS AND MUNICIPAL STANDARDS.
  - SERVICES TO BUILDINGS TO BE TERMINATED 1.0m FROM THE OUTSIDE FACE OF BUILDING UNLESS OTHERWISE NOTED.
  - THE CONTRACTOR IS TO PROVIDE CCTV CAMERA INSPECTIONS OF ALL SANITARY AND STORM SEWERS, INCLUDING PICTORIAL REPORT, ONE (1) CD COPY AND TWO (2) VIDEO TAPES IN A FORMAT SATISFACTORY TO THE ENGINEER. ALL SEWERS ARE TO BE FLUSHED PRIOR TO CAMERA INSPECTION. 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.
  - LASER ALIGNMENT CONTROL TO BE UTILIZED ON ALL SEWER INSTALLATIONS.
  - FROST PROTECTION PER CITY OF OTTAWA STANDARD DRAWING W22 WHERE LESS THAN 2.0m OF COVER.
  - CONTRACTOR SHALL PERFORM LEAKAGE TESTING, IN THE PRESENCE OF THE CONSULTANT, FOR SANITARY SEWERS IN ACCORDANCE WITH OPSD 410 AND OPSD 407. A COPY OF THE INSPECTION REPORT SHALL BE SUBMITTED TO THE CONSULTANT FOR REVIEW.
  - SERVICE SIZES TO BE CONFIRMED BY MECHANICAL CONSULTANT.

- WATERMANS**
- WATERMAIN SHALL BE POLYVINYL CHLORIDE (PVC) CLASS 150 DR-18 PIPE MANUFACTURED TO ANWA C900-89 AND CSA CAN3 B137.3-M1986 WITH GASKETED BELL END C/W #14 AWG SOLID COPPER TRACER WIRE.
  - ALL WATERMANS, WATER SERVICES, CONNECTIONS AND APPURTENANCES AS PER CITY OF OTTAWA STANDARDS. THE CONTRACTOR SHALL CO-ORDINATE AND PAY ALL RELATED COSTS INCLUDING THE COST OF CONNECTION, INSPECTION AND DISINFECTION BY CITY OF OTTAWA PERSONNEL. WATERMAIN TRENCH TO BE IN ACCORDANCE WITH CITY OF OTTAWA W17.
  - ALL WATERMANS SHALL HAVE MIN. COVER OF 2.4m OTHERWISE THERMAL INSULATION IS REQUIRED PER CITY STANDARD DRAWING W22. WATERMANS ARE TO BE INSTALLED TO THE ELEVATIONS SHOWN ON THE APPROVED SITE SERVICING DRAWING, WHERE SPECIFIC WATERMAIN ELEVATIONS ARE NOT SHOWN ON SERVICING DRAWING, A MINIMUM COVER OF 2.4m FROM PROPOSED GRADES, AS SHOWN ON THE GRADING PLAN, MUST BE MAINTAINED AT ALL TIMES. IN PRESENCE AREAS COVER TO BE FROM PROPOSED ELEVATIONS.
  - ALL WATERMAIN BENDS, JOINTS, TEES AND PLUGS SHALL BE MECHANICALLY RESTRAINED IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
  - BUILDING SERVICE TO BE CAPPED 1.0m OFF THE FACE OF THE BUILDING UNLESS OTHERWISE NOTED AND MUST BE RESTRAINED A MINIMUM OF 1.2m BACK FROM STUB.
  - THE WATER SERVICE PIPE MUST COMPLY WITH OBC 7.3.5.7 WITH RESPECT TO SPATIAL SEPARATION FROM THE BUILDING SEWER (MINIMUM 2.44M HORIZONTAL SEPARATION). THE WATER SERVICE PIPE MAY BE INSTALLED CLOSER THAN 2.44M PROVIDING THAT REQUIREMENTS OF OBC 7.3.5.7 ARE SATISFIED.
  - ALL WATERMANS SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES UNLESS OTHERWISE DIRECTED. PROVISIONS FOR FLUSHING WATER LINE PRIOR TO TESTING, ETC. MUST BE PROVIDED.
  - ALL WATERMANS SHALL BE BACTERIOLOGICALLY TESTED IN ACCORDANCE WITH THE CITY OF OTTAWA AND ONTARIO GUIDELINES. ALL CHLORINATED WATER TO BE DISCHARGED AND PRETREATED TO ACCEPTABLE LEVELS PRIOR TO DISCHARGE. ALL DISCHARGED WATER MUST BE CONTROLLED AND TREATED SO AS NOT TO ADVERSELY EFFECT THE ENVIRONMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL MUNICIPAL AND/OR PROVINCIAL REQUIREMENTS ARE FOLLOWED.
  - ALL WATERMAIN STUBS SHALL BE TERMINATED WITH A PLUG AND 50mm BLOW OFF UNLESS OTHERWISE NOTED.
  - CATHODIC PROTECTION PER CITY OF OTTAWA W40 AND W42.
  - SERVICE SIZE TO BE CONFIRMED BY MECHANICAL CONSULTANT.

- GENERAL NOTES**
- ALL WORK SHALL BE CARRIED OUT IN COMPLIANCE WITH THE ONTARIO OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS FOR CONSTRUCTION PROJECTS.
  - ALL WORK AND MATERIALS TO CONFORM WITH CURRENT MINISTRY OF THE ENVIRONMENT & ENERGY OF ONTARIO, CITY OF OTTAWA AND ONTARIO PROVINCIAL STANDARDS AND SPECIFICATIONS. LOCAL UTILITY STANDARDS AND MINISTRY OF TRANSPORTATION STANDARDS WILL APPLY WHERE REQUIRED.
  - SITE PLAN**  
PREPARED BY: ROSALINE J. HILL  
REVISION: SITE PLAN CIRCULATION DATED JULY 26, 2016  
DRAWING: A1.1 - SITE PLAN
  - SITE BENCHMARK**  
PROVIDED BY: ANNIS, O'SULLIVAN, AND VOLLEBECK LTD.  
LOCATION / DESCRIPTION: TOP OF SPINDLE OF EX. SOUTHWEST FIRE HYDRANT ON BEDALE DRIVE  
ELEV.=65.20
  - TOPO SURVEY**  
PREPARED BY: ANNIS, O'SULLIVAN, AND VOLLEBECK LTD.  
DATED: AUGUST 14, 2015
  - THE CONTRACTOR IS ADVISED THAT WORKS BY OTHERS MAY BE ONGOING DURING THE PERIOD OF THIS CONTRACT. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES AND COORDINATION WITH ALL OTHER CONTRACTORS AND PREVENT CONSTRUCTION CONFLICTS.
  - THE INFORMATION SHOWN FOR EXISTING UTILITIES WAS PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES DURING CONSTRUCTION. ALL EXISTING UTILITIES MUST BE LOCATED AND VERIFIED BY EACH UTILITY PRIOR TO COMMENCEMENT OF WORK. ANY VARIANCE IS TO BE IMMEDIATELY REPORTED TO THE ENGINEER. LOSS TIME DUE TO FAILURE OF THE CONTRACTOR TO CONFIRM UTILITY LOCATIONS AND NOTIFY THE ENGINEER OF POSSIBLE CONFLICTS PRIOR TO CONSTRUCTION WILL BE AT THE CONTRACTOR'S DISPOSE.
  - ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RECOMMENDATIONS MADE IN THE GEOTECHNICAL REPORT P3382-1 PREPARED BY PATRISON GROUP INC DATED JANUARY 6, 2016.
  - THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND TO BEAR THE COST OF SAME INCLUDING WATER PERMIT AND ASSOCIATED COSTS.
  - ALL DISTURBED AREAS SHALL BE REINSTATED TO EQUAL OR BETTER CONDITION TO THE SATISFACTION OF THE ENGINEER AND THE CITY. PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH OPSD 509.010 AND OPSD 310.
  - FOR DETAILS RELATING TO STORMWATER MANAGEMENT AND ROOF DRAINAGE, SEE THE STORMWATER MANAGEMENT REPORT PREPARED BY STANTEC CONSULTING LTD. ROOF DRAINAGE TO BE PROVIDED VIA SCUPPERS IN ADDITION TO THE PROPOSED WAITS ACCUTROL ROOF DRAINS.
  - BENCHMARKS: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THE SITE BENCHMARK(S) HAS NOT BEEN ALTERED OR DISTURBED AND THAT ITS RELATIVE ELEVATION AND DESCRIPTION AGREES WITH THE INFORMATION SHOWN ON DRAWING SSP-1.
  - TO THE CONTRACTOR SHALL PROVIDE TO THE ENGINEER 1 (ONE) SET OF AS CONSTRUCTED SITE SERVICING, GRADING, AND SITE ELECTRICAL DWGS.
  - SANITARY AND WATER SERVICE SIZES TO BE CONFIRMED BY MECHANICAL CONSULTANT AT DETAILED DESIGN.

SEWER AND WATERMAIN CROSSING TABLE

CROSSING	SAN INV	SAN OBY	WTR TOP	WTR BTM
1	60.19	60.57	61.93	61.83



Revision	By	Appr.	YY.MM.DD
2	WAJ	SGG	16.11.24
1	WAJ	SGG	16.01.29

File Name: 160401218-SSP

Permit/Seal	Drawn	Chkd.	Desgn.	YY.MM.DD
	WAJ	SGG	WAJ	16.01.08

Client/Project  
**CARDEL DEVELOPMENTS LTD**

3368 CARLING AVE  
OTTAWA, ON

Title  
**SITE SERVICING PLAN**

Project No. 160401218  
Scale 1:150

Drawing No. SSP-1  
Sheet 1 of 4

Revision 2

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