

GENERAL NOTES

- ALL WORKS AND MATERIALS SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS), WHERE APPLICABLE.
- THE LOCATION OF UTILITIES IS APPROXIMATE ONLY, AND THE EXACT LOCATION SHOULD BE DETERMINED BY CONSULTING THE MUNICIPAL AUTHORITIES AND UTILITY COMPANIES CONCERNED. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE THE LOCATION AND STATUS OF UTILITIES AND SHALL BE RESPONSIBLE FOR ADEQUATE PROTECTION OF PLANT AND EQUIPMENT FROM DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT OF ANY SERVICES OR UTILITIES DISTURBED DURING CONSTRUCTION. TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION.
- THE CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING SERVICES PRIOR TO ANY CONSTRUCTION. THE CONTRACTOR SHALL CONFIRM LOCATIONS AND ELEVATIONS OF EXISTING SERVICES AND STRUCTURES TO BE CONNECTED TO AND EXISTING SERVICES THAT MAY BE DAMAGED OR CAUSE CONFLICTS PRIOR TO CONSTRUCTION OF ANY NEW SEWER, WATER AND/OR STORM WATER WORKS. ALL DIMENSIONS SHALL BE CHECKED AND VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES, INTERPRETATIONS, CHANGES AND ADDITIONS TO THESE DRAWINGS MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER, WHEN NOTED AND BEFORE PROCEEDING WITH CONSTRUCTION WORKS. DO NOT CONTINUE CONSTRUCTION IN AREAS WHERE DISCREPANCIES APPEAR UNTIL SUCH DISCREPANCIES HAVE BEEN RESOLVED.
- ALL ELEVATIONS ARE GEODETIC AND UTILIZE METRIC UNITS. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED. ALL DRAWINGS SHOULD NOT BE SCALED BY THE CONTRACTOR. ANY MISSING OR QUESTIONABLE DIMENSIONS ARE TO BE CONFIRMED WITH THE ENGINEER IN WRITING.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED AND BEAR COST OF THE SAME.
- 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.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION, BACKFILL AND REINSTATEMENT OF ALL AREAS DISTURBED DURING CONSTRUCTION TO THE SATISFACTION OF THE ENGINEER, THE CITY OF OTTAWA AND THE AUTHORITY HAVING JURISDICTION.
- ANY AREAS BEYOND THE LIMIT OF THE SITE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL COMPLY WITH THE CITY OF OTTAWA REQUIREMENTS FOR TRAFFIC CONTROL WHEN WORKING ON CITY STREETS. ALL CONSTRUCTION SIGNAGE MUST CONFORM TO THE M.T.O. MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (LATEST AMENDMENT).
- THE SUPPORT OF ALL UTILITIES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
- THERE WILL BE NO SUBSTITUTION OF MATERIALS UNLESS WRITTEN APPROVAL BY THE ENGINEER HAS BEEN OBTAINED.
- EXCESS EXCAVATED MATERIAL SHALL BE REMOVED FROM THE SITE.
- THE SITE LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR. AS-BUILT SITE SERVICING & GRADING DRAWINGS SHALL BE MAINTAINED ON SITE BY THE CONTRACTOR.
- ALL EDGES OF DISTURBED PAVEMENT SHALL BE SAW CUT TO FORM A NEAT AND STRAIGHT LINE PRIOR TO PLACING NEW PAVEMENT.
- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP, DATED JULY 18, 2017, REPORT NO. PG 4164-1.
- THE CONTRACTOR SHALL APPRAISE HIS/HERSELF OF ALL SURFACE AND SUBSURFACE CONDITIONS TO BE ENCOUNTERED AND SHALL CARRY OUT THEIR OWN TEST PITS AS REQUIRED TO MAKE THEIR OWN INDEPENDENT ASSESSMENT OF GROUND CONDITIONS. THE CONTRACTOR SHALL NOT MAKE ANY CLAIM FOR ANY EXTRA COST DUE TO ANY SUCH GROUND CONDITIONS VARYING FROM THOSE ANTICIPATED BY THE CONTRACTOR.
- DO NOT CONSTRUCT USING DRAWINGS THAT ARE NOT MARKED "ISSUED FOR CONSTRUCTION".
- FOR TOPOGRAPHICAL INFORMATION REFER TO PLAN PREPARED BY FARLEY, SMITH & DENIS SURVEYING LTD. DATED MARCH 16, 2018.
- CIVIL DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, STRUCTURAL, LANDSCAPE AND LEGAL DRAWINGS.

SANITARY SEWER NOTES:

- ALL SANITARY SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- ALL SANITARY SEWERS SHALL BE PVC SDR 35, IPEX "RING-TITE" (OR EQUIVALENT), AS PER CSA STANDARD B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE NOTED.
- SANITARY SEWER TRENCH AND BEDDING SHALL BE AS PER CITY OF OTTAWA STD. S6 AND S7, CLASS B BEDDING UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.
- THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE SANITARY SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013 DURING CONSTRUCTION. THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMD.
- ALL ABANDONED EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER OPERATIONS.
- ALL SANITARY BUILDING CONNECTIONS TO BE EQUIPPED WITH A SANITARY BACKWATER VALVE. REFER TO MECHANICAL DRAWINGS.
- WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
- ALL UNDERGROUND PARKING FLOOR DRAINAGE IS TO BE DIRECTED TO THE SANITARY SEWER AS PER THE CITY OF OTTAWA SEWER DESIGN GUIDE LINES, CLAUSE 6.1.10.

STORM SEWER NOTES:

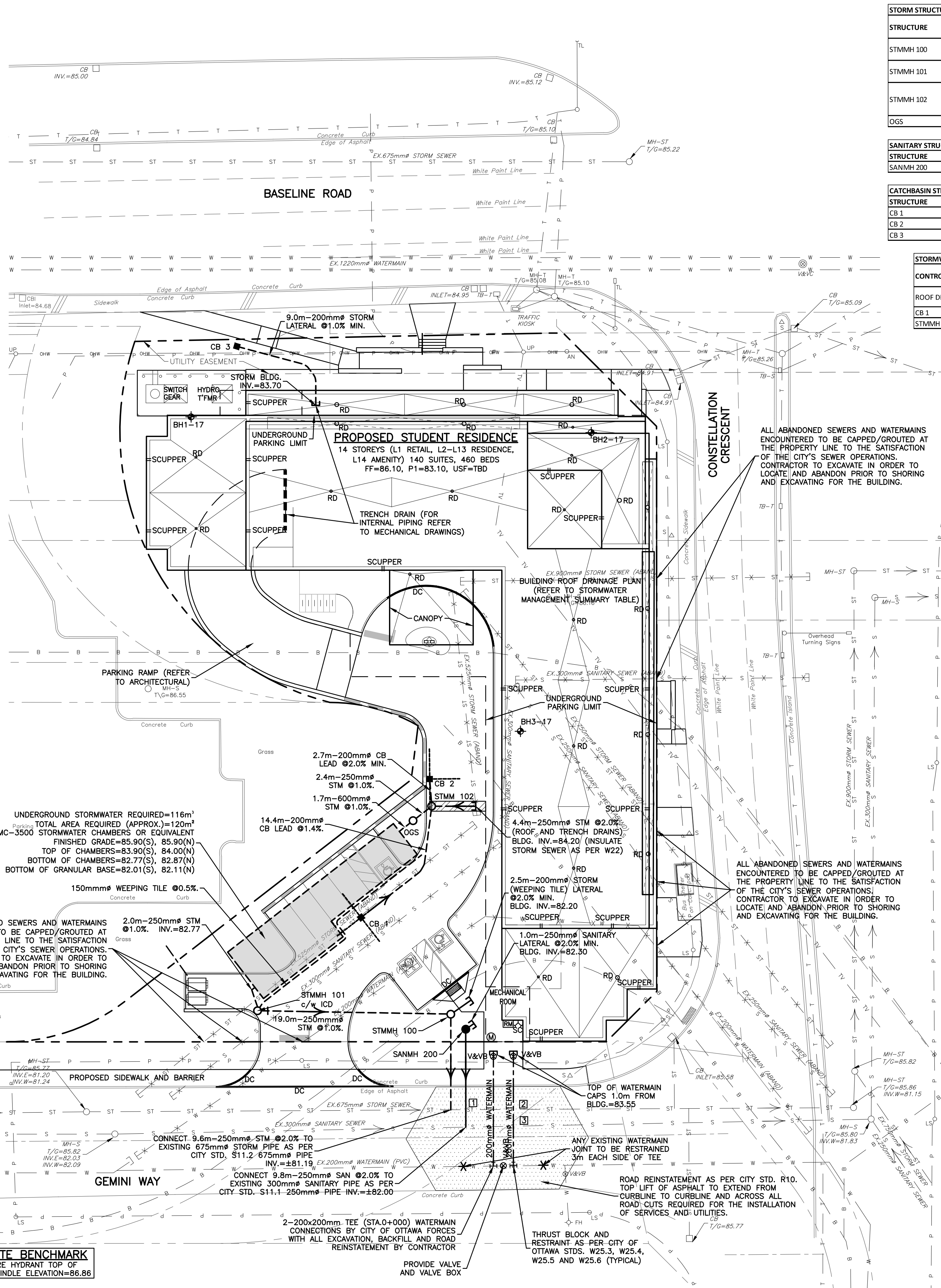
- ALL STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- ALL PVC STORM SEWERS ARE TO BE SDR 35 APPROVED PER C.S.A. B182.2 OR LATEST AMENDMENT, UNLESS OTHERWISE SPECIFIED.
- THE CONTRACTOR SHALL CONSTRUCT FLEXIBLE STORM SEWERS IN ACCORDANCE WITH OPSD 802.010 AND 802.013. DURING CONSTRUCTION THE CONTRACTOR SHALL PROTECT THE PIPES FROM HEAVY CONSTRUCTION EQUIPMENT. BEDDING AND BACKFILL SHALL BE COMPACTED TO A MINIMUM OF 95% SPMD.
- SEWER BEDDING AS PER CITY STANDARD S6 & S7.
- ALL ABANDONED EXISTING SEWERS TO BE CAPPED AT THE PROPERTY LINE TO THE SATISFACTION OF THE CITY OF OTTAWA'S SEWER OPERATIONS.
- WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
- ALL STORM SERVICES TO BE EQUIPPED WITH APPROVED BACKWATER VALVES. REFER TO MECHANICAL DRAWINGS.
- THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM SEWERS AND EXISTING SEWERS CONNECTED TO THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED.

WATERMAIN NOTES:

- ALL WATERMAIN MATERIALS AND INSTALLATION SHALL CONFORM TO THE LATEST REVISIONS OF THE STANDARDS AND SPECIFICATIONS OF THE CITY OF OTTAWA, ONTARIO PROVINCIAL STANDARD DRAWINGS (OPSD) AND SPECIFICATIONS (OPSS).
- NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE. WATERMAIN CONNECTIONS BY CITY OF OTTAWA FORCES WITH ALL EXCAVATION BACKFILL AND ROAD REINSTATEMENT BY CONTRACTOR.
- WATERMAINS TRENCH AND BEDDING SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARD W17, UNLESS OTHERWISE SPECIFIED. BEDDING AND COVER MATERIAL SHALL BE SPECIFIED BY PROJECT GEOTECHNICAL ENGINEER.
- CATHODIC PROTECTION IS REQUIRED ON ALL METALLIC FITTINGS AS PER CITY OF OTTAWA STD. W40 AND W42.
- ALL WATERMAINS TO BE INSTALLED AT MINIMUM COVER OF 2.4m.
- IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
- DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
- WATER METER TO BE INSTALLED AS PER W32.
- INSULATION FOR WATERMAIN CROSSING OVER AND BELOW SEWER SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. W25.2 AND W25.2, RESPECTIVELY, WHERE WATERMAIN COVER IS LESS THAN 2.4m.

ROAD NOTES:

- PAVEMENT REINSTATEMENT FOR SERVICE AND UTILITY CUTS SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STD. R10 AND OPSD 509.010, OPS 310.
- GRANULAR 'A' SHALL BE PLACED TO A MINIMUM THICKNESS OF 300mm AROUND ALL STRUCTURES WITHIN PAVEMENT AREA.
- ALL GRANULAR FOR ROADS SHALL BE COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.
- PAVEMENT STRUCTURE:**
PARKING AREAS:
- 50mm SUPERPAVE 12.5 ASPHALTIC CONCRETE
- 150mm GRANULAR 'A' CRUSHED LIMESTONE (OPSS 1010)
- 300mm GRANULAR 'B' TYPE II (OPSS 1010)
PAVEMENT DESIGN TYPE:
ACCESS LANES AND HEAVY DUTY AREA:
- 40mm SUPERPAVE 12.5 ASPHALTIC CONCRETE
- 50mm SUPERPAVE 19.0 ASPHALTIC CONCRETE
- 150mm GRANULAR 'A' CRUSHED LIMESTONE (OPSS 1010)
- 450mm GRANULAR 'B' TYPE II (OPSS 1010)



STORM STRUCTURE TABLE

STRUCTURE	TOP ELEV (m)	INVERT IN (m)	INVERT OUT (m)	STRUCTURE TYPE	FRAME & COVER
STMMH 100	85.75	82.12 E 82.26 W	82.06 S	1200mm, OPSD.701.010	S24.1
STMMH 101	85.78	82.51 NE 84.00 S	82.45 S	1200mm, OPSD.701.010	S24.1
STMMH 102	85.72	84.10 E 84.00 N	83.00SW	1200mm, OPSD.701.010	S24.1
OGS	85.90	82.95 N 82.92 E		STC 750 or Approved Equal	S24.1

SANITARY STRUCTURE TABLE

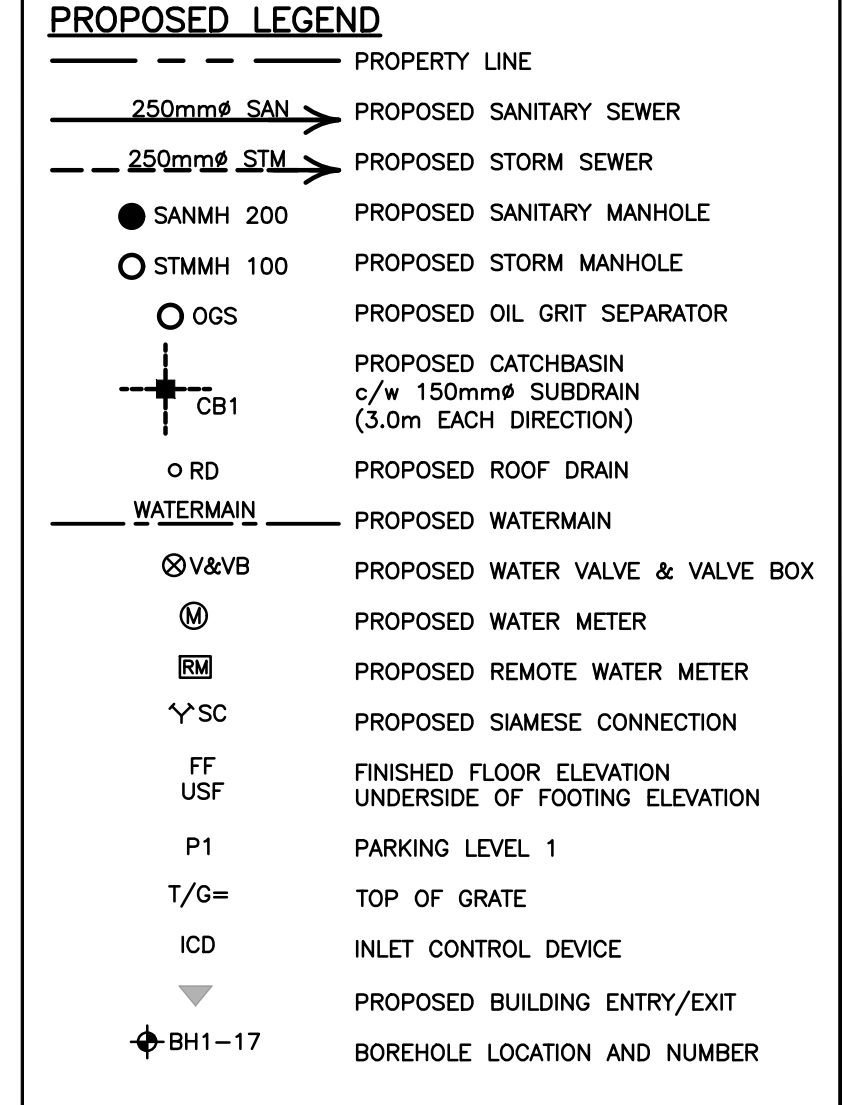
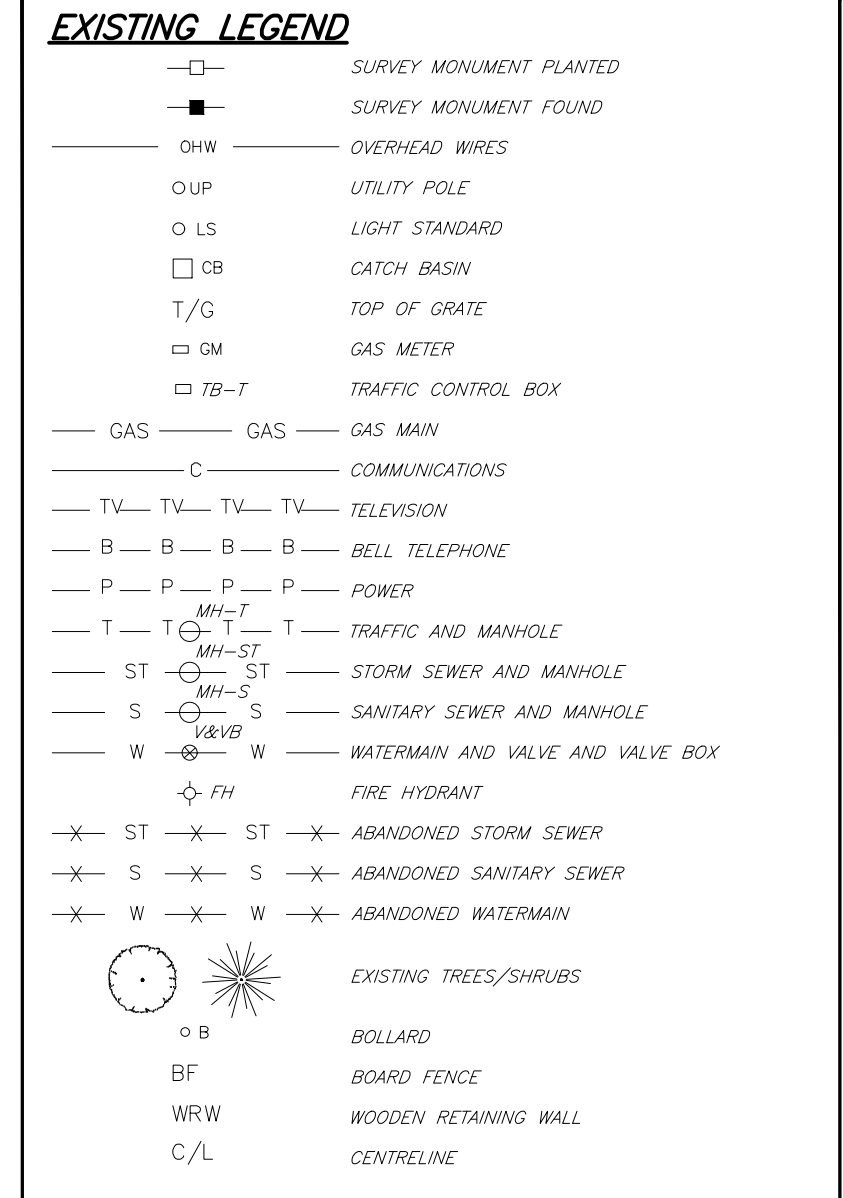
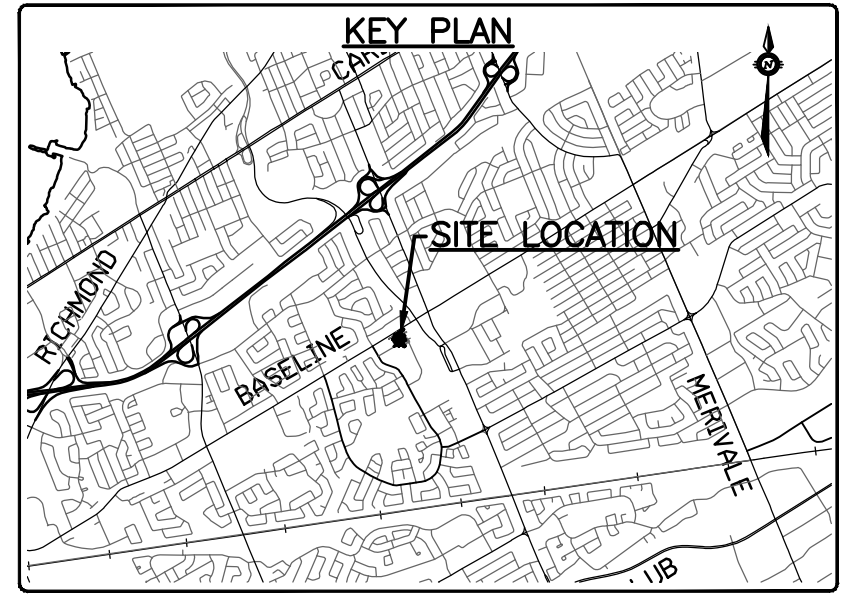
STRUCTURE	TOP ELEV (m)	INVERT IN (m)	INVERT OUT (m)	STRUCTURE TYPE	FRAME & COVER
SANMH 200	85.91	82.2	82.26	1200mm, OPSD.701.010	S24

CATCHBASIN STRUCTURE TABLE

STRUCTURE	TOP ELEV (m)	INVERT IN (m)	INVERT OUT (m)	STRUCTURE TYPE	FRAME & COVER
CB 1	85.60	84.20	84.20	600x600, OPSD.705.010	S19.1
CB 2	85.70	84.30	84.30	600x600, OPSD.705.010	S19.1
CB 3	85.20	83.80	83.80	600x600, OPSD.705.010	S19

STORMWATER MANAGEMENT SUMMARY

CONTROL LOCATION	100 YEAR FLOW (L/s)	100 YEAR STORAGE REQUIRED (m³)	MAX HEAD (m)	ICD MANUFACTURER
ROOF DRAINS (22)	16.10	37.40	0.15	1 WEIR PER DRAIN, ALL SET AT 50% OPEN
CB 1	4.00		0.25	
STMMH 101	6.60	116.00	1.13	IPEX TEMPEST LMF-85



WATERMAIN TABLE

STATION	DESCRIPTION	FINISHED GRADE (m)	TOP OF WATERMAIN ELEVATION (m)	AS-BUILT ELEVATION (m)
D-00	2-200x200 TEE CONNECTION TO EXISTING C/W 200mm VALVE & VALVE BOX IN BETWEEN	85.73	83.33	
D-004	CROSSING SANITARY SEWER	85.74	83.34	
D-005.5	CROSSING STORM SEWER	85.74	83.34	
D-011	2- VALVE AND VALVE BOXES	85.95	83.55	
D-011.5	CAP	85.95	83.55	

WATERMAIN / SEWER CROSSING TABLE

LOCATION	FINISHED GRADE		SANITARY SEWER		STORM SEWER		WATERMAIN		CLEARANCES, COMMENTS (mm)			
	Invert Elev.	Obvert Elev.	Invert Elev.	Obvert Elev.	Invert Elev.	Obvert Elev.	Invert Elev.	Obvert Elev.				
1	85.73	82.02	250	83.26	81.18	81.18	ex. 675	81.86	83.24	160mm (Sanitary Above)		
2	85.73		250		81.18	81.18	ex. 675	81.86	83.24	200	83.45	1380mm (Watermain Above)
3	89.43	81.93	ex. 300	82.24					83.24	200	83.45	1000mm (Watermain Above)



REV	REVISION DESCRIPTION	DATE	BY	APPD
3	RE-ISSUED FOR SITE PLAN APPROVAL	18/12/18	SAB	BMT
2	ISSUED FOR SITE PLAN APPROVAL	24/05/18	SAB	BMT
1	ISSUED FOR CLIENT REVIEW	23/05/18	SAB	BMT

CLIENT
BASELINE CONSTELLATION PARTNERSHIP INC.
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OTTAWA, ON. K1Z 5L5

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REVIEWED BY
SAB
JLF
BMT

PROJECT
OTTAWA STUDENT RESIDENCE
2140 BASELINE ROAD
OTTAWA, ONTARIO.

PROJECT NO.
OTT-00245012-AD

SURVEY
FSD

DATE
APRIL 2018

TITLE
SITE SERVICING PLAN

DRAWING NO.
C1

APPROVED BY
BMT

LEGEND
• BUILDINGS • EARTH & ENVIRONMENT • ENERGY •
• INDUSTRIAL • INFRASTRUCTURE • SUSTAINABILITY •