WATERMAIN

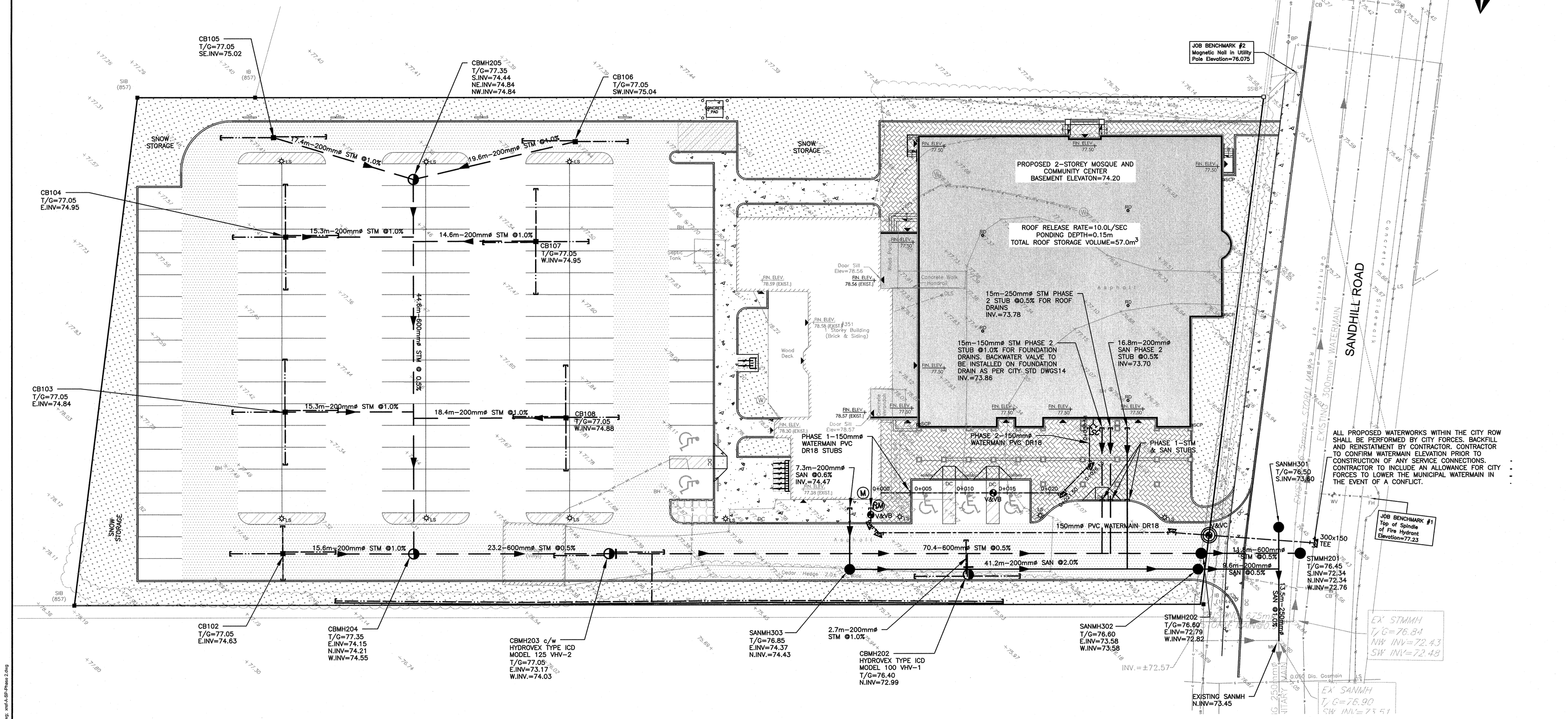
1. ALL WATERMAIN AND WATER SERVICE MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS.
2. ALL WATERMAIN TO BE INSTALLED AT MINIMUM COVER OF 2.4m. THERMAL INSULATION SHALL BE INSTALLED WHERE ADEQUATE SEPARATION CANNOT BE ACHIEVED AS PER CITY STANDARD W21, W22 AND W23.
3. ALL WATERMAIN WORK AND MATERIAL SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS. 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.
4. WATERMAIN IS TO BE PVC DR18 WITH TRACER WIRE AS PER CITY OF OTTAWA STANDARD W36 UNLESS OTHERWISE NOTED.
5. VALVE BOXES AS PER CITY OF OTTAWA DETAIL W24.
6. ALL FIRE HYDRANTS TO BE INSTALLED AS PER CITY STANDARD W19 AND LOCATED AS PER CITY STANDARD W18 AND/OR CITY STANDARD CROSS SECTIONS.
7. WATERMAIN BEDDING IS TO BE AS PER CITY OF OTTAWA DETAIL W17.
8. THRUST BLOCKS AND RESTRAINT AS PER CITY OF OTTAWA DWGS: W25.3, W25.4, W25.5 AND W25.6.
9. CATHODIC PROTECTION REQUIRED FOR ALL IRON FITTINGS PER CITY OF OTTAWA DWGS: W39, W40, W41.
10. IF WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS LESS THAN HALF THAT RECOMMENDED BY THE MANUFACTURER.
11. DISINFECTION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.
12. WATER SERVICES TO BE INSTALLED AS PER CITY OF OTTAWA STANDARD W26 AND W35.
13. WITHIN THE FROST ZONE, THE BACKFILL IN THE SERVICE TRENCHES SHOULD MATCH THE SOIL ON SIDES TO MINIMIZE DIFFERENTIAL FROST HEAVING IN THE SUBGRADE.
14. INSTALLATION OF WATER METER AND REMOTE RECEPTACLE SHALL BE IN ACCORDANCE WITH CITY OF OTTAWA STANDARDS.

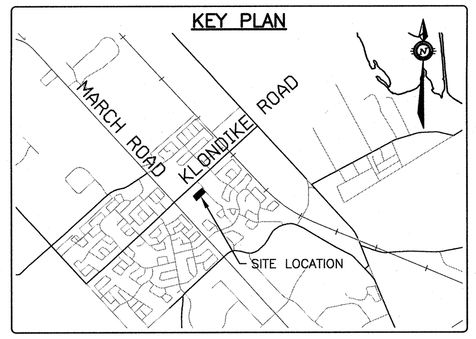
STORM AND SANITARY SEWERS

1. SANITARY AND STORM SEWER MATERIALS AND INSTALLATION SHALL CONFORM TO THE CURRENT CITY OF OTTAWA STANDARD DRAWINGS AND SPECIFICATIONS AND OPSS 407 AND 410.
2. SEWER BEDDING AS PER CITY STANDARD S6 & S7.
3. ALL SANITARY SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35.
4. ALL STORM SEWERS ARE TO BE THE SIZES INDICATED AND THE MATERIAL SHALL BE PVC SDR35 OR REINFORCED CONCRETE IN ACCORDANCE WITH CSA STANDARDS A257.2 AND A257.3 (JOINTS).
5. ALL MANHOLES, CATCHBASINS AND CATCHBASIN MANHOLES TO BE BACKFILLED WITH MIN. 0.3m HORIZONTAL THICKNESS GRANULAR 'A'.
6. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN TO WITHIN 1.0m OF BUILDING WALLS AND PROVIDE TEMPORARY CAPS.
7. THE CONTRACTOR SHALL CONDUCT INFILTRATION/EXFILTRATION (AS PER CURRENT OPSS) TESTING ON ALL NEWLY INSTALLED SANITARY SEWERS. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWER INSTALLATION AND SUPERVISED BY THE ENGINEER.
8. THE CONTRACTOR SHALL CONDUCT CCTV INSPECTION OF ALL NEWLY INSTALLED STORM AND SANITARY SEWERS AND EXISTING SEWERS CONNECTED TO. THE TEST SHALL BE PERFORMED IMMEDIATELY AFTER SEWERS INSTALLED AND SUPERVISED BY THE ENGINEER.
9. ALL SERVICE CONNECTIONS TO BE CONSTRUCTED AS PER CITY STANDARD S11 & S11.1.
10. ALL SANITARY BUILDING DRAINS TO BE EQUIPPED WITH SANITARY BACKWATER VALVES INSTALLED PER CITY OF OTTAWA STANDARD DRAWING S14.1.
11. MINIMUM SOIL COVER TO BE 2.0m TO PROTECT SEWERS FROM FROST DAMAGE. IN AREAS WHERE ADEQUATE COVER CANNOT BE ACHIEVED, THERMAL INSULATION TO BE INSTALLED AS PER OPSD 514.010.
12. SUBDRAINS LOCATED IN THE AREA OF PAVEMENT SHALL HAVE INVERTS APPROXIMATELY 300mm BELOW THE SUBGRADE LEVEL AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP DATED NOVEMBER 2018.
13. AN UNDERFLOOR DRAINAGE SYSTEM IS REQUIRED TO BE INSTALLED AS PER THE RECOMMENDATIONS OF THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PATERSON GROUP DATED NOVEMBER 2018.
14. PROPOSED PHASE 2 BUILDING ROOF DRAINS TO BE WATTS ACCUTROL MODEL# RD-200-A-ADJ.

WATERMAIN TABLE

STATION	FIN/GRADE	T/W GRADE	COMMENT
0+003.5	76.65	74.25	TIE INTO EXISTING WATERMAIN PHASE 1 STUB
0+010	76.63	74.23	TOP OF WATERMAIN
0+021.5	76.70	74.30	THRUST BLOCK
0+026.1	76.72	74.32	THRUST BLOCK
0+030.6	76.90	74.50	WM CAPPED





LEGEND

- SIB – STANDARD IRON BAR
- IB – IRON BAR
- CB – CATCH BASIN
- MH – MANHOLE
- WMH – WATER MANHOLE
- LS – LAMP STANDARD
- UP – UTILITY POLE
- WV – WATER VALVE
- FH – FIRE HYDRANT
- W – WELL
- – GUY WIRE AND ANCHOR
- –W– – WATERMAIN
- – OVERHEAD UTILITY WIRES
- –UH– – UNDERGROUND HYDRO
- –UB– – UNDERGROUND BELL
- –G– – GAS MAIN
- –C– – CABLE (ROGERS)
- –SL– – STREET LIGHT
- –ST– – STORM SEWER
- –S– – SANITARY SEWER
- – CURB
- – PROPOSED CURB
- – PROPOSED WATERMAIN
- – PROPOSED STORM SEWER
- – PROPOSED SANITARY SEWER
- – PROPOSED CLAY SEAL AT 60m INTERVALS
- – PROPOSED SANITARY MANHOLE
- – PROPOSED STORM MANHOLE
- – PROPOSED STORM CATCHBASIN MANHOLE
- – PROPOSED STORM CATCHBASIN
- – PROPOSED FIRE HYDRANT
- V&VB – PROPOSED VALVE & VALVE BOX
- V&VC – PROPOSED VALVE & VALVE CHAMBER
- M – PROPOSED WATER METER
- RM – PROPOSED REMOTE WATER METER
- LS – PROPOSED LIGHT STANDARD
- 76.40 – PROPOSED ELEVATION
- +77.27 – EXISTING ELEVATION
- – PROPOSED HEAVY DUTY PAVEMENT
- – PROPOSED LIGHT DUTY PAVEMENT
- – PROPOSED CONCRETE SIDEWALK
- – PROPOSED SUBDRAIN

CAUTION
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PRELIMINARY
NOT FOR CONSTRUCTION

NO.	REVISION DESCRIPTION	DATE	BY	APPD
6	REVISED AS PER CITY COMMENTS	19/02/19	AE	AA
5	REVISED AS PER CITY COMMENTS	02/11/18	AE	AA
4	ISSUED FOR COORDINATION	02/10/18	AE	AA
3	ISSUED FOR SITE APPROVAL	29/06/18	AE	AA
2	ISSUED FOR COORDINATION	06/06/18	ML	AA
1	ISSUED FOR COORDINATION	10/05/18	ML	AA

SCALE: 0 2m 4m 10m — HORIZONTAL 1:250
NORTH

DESIGNED BY

REVIEWED BY
LICENSED PROFESSIONAL ENGINEER M.A. ANSARI 19/2/2019 PROVINCE OF ONTARIO

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BASELPAN	ML
DESIGN	ML
CHECKED	AA
CAD	ML
PROJECT MANAGER	AA
APPROVED	AA

PROJECT
KMA MOSQUE AND COMMUNITY CENTRE
351 SANDHILL ROAD, OTTAWA, ON

TITLE
SITE SERVICING
PHASE 2

PROJECT No.	OTT-00238504-A0
SURVEY	F M & W
DATE	2016-12-09
DRAWING No.	SS-2

D07-12-17-0119

#17532

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Plot Scale: 1:1 Plot Offset: 0,0
References: xref-TOPO_ADO.dwg xref-Keyplan.dwg xref-LSP-Phase 2.dwg