

GENERAL NOTES

- 1. THE ORIGINAL TOPOGRAPHY, GROUND ELEVATION AND SURVEY DATA SHOWN ARE SUPPLIED FOR INFORMATION PURPOSES ONLY, AND IMPLY NO GUARANTEE OF ACCURACY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL INFORMATION SHOWN.
- 2. THIS PLAN IS NOT A CADASTRAL SURVEY SHOWING LEGAL PROPERTY BOUNDARIES AND EASEMENTS. THE PROPERTY BOUNDARIES SHOWN HEREON HAVE BEEN DERIVED INFORMATION SUPPLIED BY FARLEY, SMITH AND DENNIS SURVEYING LTD. (JOB NO. 432-22) AND CANNOT BE RELIED LIPON TO BE ACCURATE OR COMPLETE THE PRECISE LOCATION OF THE CURRENT PROPERTY BOUNDARIES AND EASEMENTS CAN ONLY BE DETERMINED BY AN UP-TO-DATE LAND TITLES SEARCH AND A SUBSEQUENT CADASTRAL SURVEY PERFORMED AND CERTIFIED BY AN ONTARIO LAND SURVEYOR.
- 3. THE CONTRACTOR IS TO OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY BEFORE COMMENCING CONSTRUCTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR ALL LAYOUT. 5. THE CONTRACTOR IS TO DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION, PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY
- PROMPTLY. 6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE SATISFACTION OF THE CITY AUTHORITIES.

DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER

- . EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
- 8. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL

SEWER NOTES:

1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY.

OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE. 2.1. BEDDING SHALL BE A MINIMUM 150mm OF

- STANDARD PROCTOR DRY DENSITY. CLEAR STONE BEDDING SHALL NOT BE PERMITTED.
- 2.2. SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE 1.
- BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE 2.3. WITH GRANULAR "A" OR GRANULAR "B" TYPE 1. 2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING,
- TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
- 3. SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- 4. SEWERS AND CONNECTIONS 200mmØ-375mmØ TO BE PVC SDR-35. SEWER AND CONNECTIONS GREATER THAN 450mmØ TO BE CONCRETE. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.
- 5. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER OPSD 1109.030.
- 6. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
- AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER
- 8. CONTRACTOR TO TELEVISE (CCTV) ALL PROPOSED SEWERS ON SITE, OUTLET CONNECTION TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
- 9. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

- SEWER TRENCHING AND BEDDING SHALL CONFORM TO GRANULAR "A". COMPACTED TO MINIMUM 95%
- 7. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES

- CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED. 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS,
- MARKERS AND BARRIERS. 10. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR
- APPROVAL OF THE ENGINEER/CITY. 11. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- 12. CONTACT THE CITY FOR INSPECTION OF ROUGH GRADING OF PARKING LOTS, ROADWAYS AND LANDSCAPED AREAS PRIOR TO PLACEMENT OF ASPHALT AND TOPSOIL. ALL DEFICIENCIES NOTED SHALL BE RECTIFIED TO THE CITY'S SATISFACTION PRIOR TO PLACEMENT OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
- 13. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- 14. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY: • ELECTRICAL SERVICE - HYDRO OTTAWA, GAS SERVICE - ENBRIDGE, • TELEPHONE SERVICE - BELL CANADA, TELEVISION SERVICE - ROGERS.
- 16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
- 17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
- 18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB PER CITY SC1.1 UNLESS OTHERWISE SPECIFIED. ALL PROPOSED SIDEWALK PER SC1.4 UNLESS OTHERWISE SPECIFIED.
- 19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY EXP, PROJECT NUMBER: OTT23005035-A0

WATERMAIN NOTES

- 1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS.
- 2 INDUSTRIAL/COMMERCIAL SERVICE CONNECTIONS TO BE 50mm COPPER PIPING AND SHALL CONFORM TO ASTM B88 TYPE 'K' SOFT.
- 3. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARD W22.
- 4. IF THE WATERMAIN MUST BE DEFLECTED TO MEET ALIGNMENT, ENSURE THAT THE AMOUNT OF DEFLECTION USED IS EQUAL TO OR LESS THAN THAT WHICH IS RECOMMENDED BY THE MANUFACTURER.
- THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY STANDARD W23.
- 6. VALVES TO BE OPERATED BY CITY STAFF ONLY. 7. NO CONNECTION TO EXISTING WATER NETWORK SHALL BE COMPLETED UNTIL A WATER PERMIT IS OBTAINED FROM THE CITY. CITY TO BE PRESENT FOR WATERMAIN CONNECTION. CONNECTION, EXCAVATION, BACKFILLING AND
- REINSTATEMENT TO BE COMPLETED BY CONTRACTOR. 8. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM ANY WATERMAIN CONNECTION(S) REQUIRED. THIS SHALL BE COMPLETED IN THE PRESENCE OF A DESIGNATED MUNICIPAL WATER OPERATOR AND THE SELECTED CONTRACTOR SHALL PROVE TO THE SATISFACTION OF THE CITY THAT THEY ARE COMPETENT TO PERFORM THE
- WORKS PRIOR TO INITIATING CONSTRUCTION. 9. ALL WATERMAINS SHALL BE EQUIPPED GATE VALVES AS PER OPSD 1100.011.
- 10. ALL FIRE HYDRANTS, VALVE AND VALVE BOX HSALL CONFORM TO W18 AND 19.
- 11. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020
- 12. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED
- EQUIVALENT 13. ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.
- 14. AS PER CITY GUIDELINES. THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER THE SEWER, AS PER CITY DETAIL W25.2 FOR CROSSING UNDER SEWER, THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W25. FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING. THE LENGTH OF WATER PIPE SHALL BE CENTERED AT THE POINT OF CROSSING SO THAT THE JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE SEWER.

PROPOSED STRUCTURE TABLE								
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION				
MH1A	68.65	SE65.024	NW65.000	STRUC OPSD 701.010 FRAME CITY S25 COVER CITY S24				
OGS1	68.65	S66.780	N66.770	STORMCEPTOR EF04 OR APPR. EQV.				

CROSSING CONFLICT TABLE

LOCATION	DESCRIPTION	SEPARATION	
1	250mmØ SAN SEWER OBV 64.98 300mmØ STM SEWER INV 66.60	1.62	
2	300Ø WTR MAIN OBV 66.00	0.64	
	300mmØ STM SEWER INV 66.64 200mmØ SAN SERVICE OBV 65.11		
	300mmØ WTR SERVICE INV 65.79		

WATER COVER TABLE								
LOCATION	STATION	FINISHED GRADE	TOP OF PIPE	COVER				
A - 300 X 200 TEE	0+000.00	68.42	66.02	2.40				
45.00° BEND	0+005.91	68.50	66.10	2.40				
VALVE	0+013.69	68.58	66.18	2.40				
BUILDING	0+017.63	68.90	66.50	2.40				
B - 300 X 200 TEE	0+000.00	68.42	66.10	2.40				
45.00° BEND	0+005.42	68.50	66.10	2.40				
VALVE	0+012.56	68.60	66.20	2.40				
BUILDING	0+015.53	68.90	66.50	2.40				

