

# **GENERAL NOTES**

- 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.
- ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
- SATISFACTION OF THE CITY AUTHORITIES.
- THE CITY.
- PROCTOR DENSITY.
- 9. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
- SUPPLY, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
- CONTRACTOR IS TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING.
- MULCH AND/OR SOD.
- ENGINEER PROMPTLY.
- 15. 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.

- 17. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
- OTHERWISE SPECIFIED.

## **SEWER NOTES:**

CITY.

### 2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSD 802.010 AND 802.013 UNLESS NOTED OTHERWISE. 2.1. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% 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. 2.3. BACKFILL TO AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE 1. MATCH EXISTING SOIL CONDITIONS.
- 3. SANITARY SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-28.
- EXCEPT AT RISERS, UNLESS NOTED OTHERWISE.

WATERMAIN NOTES

RECOMMENDED BY THE MANUFACTURER.

5. VALVES TO BE OPERATED BY CITY STAFF ONLY.

WORKS PRIOR TO INITIATING CONSTRUCTION.

12. ALL WATERMAIN TO BE EQUIPPED WITH TRACER WIRE.

DESCRIPTION

PROP. 203mmØ WTR INV =82.12

PROP. 300mmØ SAN OBV = 81.62

SEPARATION = 0.50m EX. 203mmØ WTR OBV =81.85

PROP. 250mmØ STM INV = 82.56

SEPARATION = 0.71m PROP 300mmØ SAN OBV =81.60

PROP. 250mmØ STM INV = 82.51

EX. 203mmØ WTR OBV =82.60

SEPARATION = 0.50m

300mmØ SAN OBV =81.54

PROP. 300mmØ STM INV = 82.06

SEPARATION = 0.52m

EX. 203mmØ WTR INV =82.50

PROP. 150mmØ SAN OBV = 82.25

FINISHED TOP OF

GRADE PIPE

0+100.00 84.20 82.20 2.00

0+102.88 84.24 81.84 2.40

0+109.90 84.48 82.38 2.40

0+110.40 84.80 82.40 2.40

0+100.00 85.00 82.65 2.35

0+108.85 85.14 82.74 2.40

0+106.97 85.20 82.80 2.40

COVER

SEPARATION = 0.25m

WATER COVER TABLE

REFER TO PLAN C201 FOR STATION AND ELEVATION INFORMAT

PROPOSED 200mmØ WATERMAIN WITHIN HILLIARD AVE.

STATION

LOCATION

45° H BEND

VALVE

BUILDING

VALVE

PROP. 300mmØ STM INV = 83.10

SEPARATION = 0.91m

8. ALL WATERMAINS SHALL BE EQUIPPED GATE VALVES AS PER W3.

11. ALL WATERMAIN TO BE CLASS 150 DR-18 OR APPROVED EQUIVALENT.

10. CONCRETE THRUST BLOCKS TO CONFORM TO OPSD 1103.010 AND OPSD 1103.020.

- PROPERLY CAPPED AND LOCATED WITH 2"x4"X8' LONG MARKER.

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.

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 DENIS SURVEYING LTD. (FILE No.26-23) AND CANNOT BE RELIED UPON 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.

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

6. RESTORE ALL TRENCHES AND SURFACES OF PUBLIC ROAD ALLOWANCES TO CONDITION EQUAL OR BETTER THAN ORIGINAL CONDITION AND TO THE

7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBING AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND

8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD, INCLUDING THE

11. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.

12. ALL ROADWAY, PARKING LOT, AND GRADING WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS. THE

13. 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 &

14. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE

16. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO ONE, BELL AND THE CITY.

18. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB PER CITY SC1.1 UNLESS OTHERWISE SPECIFIED. ALL PROPOSED SIDEWALK PER CITY SC1.4 UNLESS

19. THIS PLAN MUST BE READ IN CONJUNCTION WITH THE GEOTECHNICAL INVESTIGATION COMPLETED BY EXP, JOB NO. OTT-21011499-CO.

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

2.4. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL

4. SEWERS AND CONNECTIONS 200mm-375mm Ø AND TO BE PVC SDR-35. SEWERS LARGER THAN 375mmØ TO BE CONCRETE. BEDDING TO BE TYPE "B"

5. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER S35. 6. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAIN AS PER CITY OF OTTAWA STANDARD DRAWING \$11, \$11.1 & \$11.2.

7. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE

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 & APPURTENANCE 9. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.

10. ASPHALT AREAS DISTURBED WITHIN MUNICIPAL RIGHTS-OF-WAY TO BE RESTORED PER CITY OF OTTAWA STANDARD R10.

1. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH OPSD STANDARDS AND SPECIFICATIONS, AS WELL AS CITY STANDARDS. 2. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. OTHERWISE THERMAL INSULATION IS REQUIRED AS PER CITY STANDARDS W22.

4. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY STANDARDS W33.

3. 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

6. 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

7. 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

9. ALL FIRE HYDRANTS, VALVE AND VALVE BOX SHALL CONFORM TO W18 AND W19.

SAN STRUCTURE TABLE NAME RIM ELEV. | INVERT IN | INVERT OUT DESCRIPTION STRUC OPSD 701.010 FRAME CITY S25 MH1A 84.47 NW81.820 SW81.760 **COVER CITY S24** STRUC OPSD 701.010 84.50 NW81.141 SE81.090 MH1B FRAME CITY S25 COVER CITY S24 STRUC OPSD 701.010 S81,180 MH1C 84.78 E80.921 FRAME CITY S25 NW80.990 COVER CITY S24 STRUC OPSD 701.011 W80.640 MH1D 84.20 NW80.582 FRAME CITY S25 SE80.650 COVER CITY S24 NE81.690 SE81.350 EXISTING MH MHSA46203 84.24 SW81.360 S81.280 EXISTING MH MHSA46208 85.10 N81.270 SW81.300 MHSA50442 84.30 SE80.510 N80.500 EX.MH

SAN-PARKLAND STRUCTURE TABLE				
NAME	RIM ELEV.	INVERT IN	INVERT OUT	DESCRIPTION
MH2A	85.21	NE82.360	SW82.300	STRUC OPSD 701.010 FRAME CITY S25 COVER CITY S24



#19019