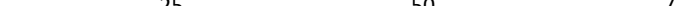


LEGEND

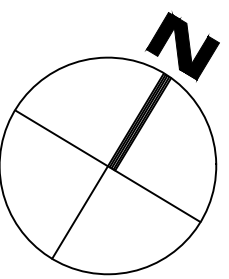
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Check and verify all dimensions before proceeding with the work	Do not scale drawings
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SCALE 1 : 750



0 25 50 75 Metres



Project:	

STRAW, OR

SITE SERVICING PLAN

Scale:	1:750	Project Number:	
Design By:			CO 25 1505

Drawn By: RP	CO-25-1505
Checked By: JP	Drawing Number:

JB	C102
Designed By: RP	

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. PER THE PROVIDED SURVEY ELEVATIONS ARE GEODETIC AND ARE REFERRED TO CITY OF OTTAWA BENCHMARK POINT 0019682138 HAVING A PUBLISHED ELEVATION OF 126.18 METRES (CGVD2011).
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 (OR SHOWN ON) REGISTERED PLAN 4M-300 PREPARED BY J.D. BARBER, APRIL 1991. THE CONTRACTOR IS ADVISED THAT THE CITY OF OTTAWA DOES NOT GUARANTEE 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 CONSTRUCTION. PROTECT AND ASSUME ALL RESPONSIBILITY FOR EXISTING UTILITIES WHETHER OR NOT SHOWN ON THESE DRAWINGS. IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER 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.
7. EXCAVATE AND DISPOSE OF ALL EXCESS EXCAVATED MATERIAL, SUCH AS ASPHALT, CURBED AND DEBRIS, OFF SITE AS DIRECTED BY THE ENGINEER AND THE CITY.
8. TOPSOIL TO BE STRIPPED AND STOCKPILED FOR REHABILITATION. CLEAN FILL TO BE PLACED IN FILL AREAS AND COMPACTED TO 95% STANDARD PROCTOR DENSITY.
9. CONTRACTOR TO MINIMIZE THE ACTUAL LIMITS OF REMOVALS AND REINSTATEMENT WHEREVER POSSIBLE, AND SHALL MAKE THEIR OWN JUDGEMENT AND ACCOUNT FOR ALL MATERIAL AND LABOUR REQUIRED FOR ADEQUATELY REINSTATING THE AREA TO ORIGINAL CONDITION OR BETTER, AND BEAR THE COST OF THE SAME. NO ADDITIONAL PAYMENT WILL BE MADE FOR REINSTATING WORK NOT SHOWN ON THE CONTRACT DRAWINGS AS A DIRECT RESULT FROM THE CONTRACT.
10. ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION OR BETTER UNLESS OTHERWISE SPECIFIED.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE GRADING, INSTALLATION, AND REMOVAL OF ALL NECESSARY SIGNAGE, DELINEATORS, MARKERS AND BARRIERS.
12. DO NOT ALTER GRADING OF THE SITE WITHOUT PRIOR APPROVAL OF THE ENGINEER/CITY.
13. 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.
14. 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 COMPLETION OF ANY ASPHALT, TOPSOIL, SEED & MULCH AND/OR SOD.
15. ALL DIMENSIONS AND INVERTS MUST BE VERIFIED PRIOR TO CONSTRUCTION, IF THERE IS ANY DISCREPANCY THE CONTRACTOR IS TO NOTIFY THE ENGINEER PROMPTLY.
16. ELECTRICAL, GAS, TELEPHONE AND TELEVISION SERVICE LOCATIONS ARE SUBJECT TO THE INDIVIDUAL AGENCY:
 - TELEPHONE SERVICE - BELL CANADA
 - GAS SERVICE - ENBRIDGE
 - TELEPHONE SERVICE - BELL CANADA
 - TELEVISION SERVICE - ROGERS
17. INSTALLATION TO BE IN ACCORDANCE WITH CURRENT CODES AND STANDARDS OF APPROVAL AGENCIES HYDRO OTTAWA, BELL AND THE CITY.
18. CONTRACTOR TO ENSURE ALL APPLICABLE OPS SPECIFICATIONS ARE FOLLOWED DURING CONSTRUCTION
19. FOR GEOTECHNICAL INFORMATION, REFER TO THE GEOTECHNICAL REPORT FOR 3145 CONROY ROAD, PREPARED BY OTHERS
19. ALL PROPOSED CURB TO BE CONCRETE BARRIER CURB UNLESS OTHERWISE SPECIFIED.

1. CONSTRUCT ALL SEWERS, CATCH BASINS, MANHOLES AND APPURTENANCES IN ACCORDANCE WITH OPSO STANDARDS AND SPECIFICATIONS, AS WELLER, CATS.
2. SEWER TRENCHING AND BEDDING SHALL CONFORM TO OPSO 802.010 AND 802.013 UNLESS NOTED OTHERWISE.
 - A. BEDDING SHALL BE A MINIMUM 150mm OF GRANULAR "A", COMPACTED TO MINIMUM 95% STANDARD PROCTOR DRY DENSITY. FINE SAND BEDDING SHALL NOT BE PERMITTED
 - B. SUB-BEDDING, IF REQUIRED SHALL CONSIST OF 450mm OF COMPACTED GRANULAR "B" TYPE I.
 - C. BEDDING MATERIAL AT LEAST 300mm ABOVE TOP OF PIPE WITH GRANULAR "A" OR GRANULAR "B" TYPE I.
 - D. TO MINIMIZE DIFFERENTIAL FROST HEAVING, TRENCH BACKFILL (FROM PAVEMENT SUBGRADE TO 2.0 METRES BELOW FINISHED GRADE) SHALL MATCH EXISTING SOIL CONDITIONS.
3. SEWERS AND CONNECTIONS 150mmØ AND SMALLER TO BE PVC SDR-26.
4. SEWERS AND CONNECTIONS 375mmØ AND SMALLER TO BE PVC SDR-35 OR APPROVED EQUIVALENT. BEDDING TO BE TYPE "B" EXCEPT AT RISERS, UNLESS NOTED OTHERWISE. SEWERS AND CONNECTIONS 450mmØ AND LARGER TO BE REINFORCED CONCRETE MINIMUM CLASS 65 OR GREATER.
5. SEWERS AND WATERMAINS LOCATED PARALLEL TO EACH OTHER SHOULD BE CONSTRUCTED IN SEPARATE TRENCHES. WHEN IT IS IMPRACTICABLE OR NOT PRACTICAL TO MAINTAIN VERTICAL AND/OR HORIZONTAL SEPARATION PER MCP STANDARDS, ALL SEWERS SHOULD BE CONSTRUCTED OF WATERMAIN QUALITY PIPE, PRESSURE TESTED IN PLACE AT A PRESSURE OF 350 kPa (50 psi) WITHOUT LEAKAGE. USE THE TESTING METHODOLOGY IN ONTARIO PROVINCIAL STANDARD SPECIFICATION 701 (OPS 701) OF THE OPS.
6. INSULATE ALL STORM AND SANITARY SEWERS/SERVICES THAT HAVE LESS THAN 2.0m OF COVER WITH THERMAL INSULATION AS PER CITY DETAIL SHEET OPTSO 701.
7. SEWER CONNECTIONS ARE TO BE MADE ABOVE THE SPRINGLINE OF THE SEWERMAN AS PER CITY OF OTTAWA STANDARD DRAWING S11, S11.1 & S11.2.
8. SUPPLY AND INSTALL ALL PIPING AND APPURTENANCES AS SHOWN AND DETAILED TO WITHIN 1.0m OF BUILDING. ALL ENDS OF SERVICES TO BE PROPERLY CAPED AND LOCATED WITH 2'x4"x8" LONG MARKER.
9. CONTRACTOR TO TELEPHONE (CCTV) ALL PROPOSED SEWERS IN SITE, OUTLET CONNECTED TO THE MAIN AND PIPES 150mmØ OR GREATER PRIOR TO BASE COURSE LAYDOWN. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.
10. DYE TESTING IS TO BE COMPLETED ON SANITARY SERVICE TO CONFIRM PROPER CONNECTION TO SANITARY SEWER MAIN.
11. CONTRACTOR TO PROVIDE SHOP DRAWINGS TO THE [AS WELL AS] FIELD CONSULTANT FOR ANY INFRASTRUCTURE TO BE INSTALLED IN ROW OR EASEMENTS.

2. CONSTRUCT ALL WATERMAINS AND APPURTENANCES IN ACCORDANCE WITH CITY STANDARDS AND SPECIFICATIONS.
3. WATERMAINS AND/OR WATER SERVICES ARE TO HAVE A MINIMUM COVER OF 2.4m. INSULATE ALL WATERMAINS AND SERVICES THAT HAVE LESS THAN 2.4m COVER WITH THERMAL INSULATION AS PER CITY DETAIL W2.
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 RECOMMENDED BY THE MANUFACTURER AND CITY OF OTTAWA STANDARDS W25 AND W25.2.
4. THERMAL INSULATION OF WATERMAINS AT OPEN STRUCTURES AS PER CITY DETAIL W23.
5. VALVES TO BE OPERATED BY CITY STAFF ONLY.
6. NO WORK SHALL COMMENCE UNLESS A CITY WATER WORKS INSPECTOR IS ON SITE, NO CONNECTION TO EXISTING WATER UTILITY UNTIL THE WATER PERMIT HAS OBTAINED FROM THE CITY. CONNECTIONS TO BE COMPLETED BY CITY FORCES, EXCAVATION, BACKFILLING AND REINSTATEMENT TO BE COMPLETED BY SITE SERVICES CONTRACTOR.
7. CONCRETE THURTS BLOCKS TO CONFORM TO CITY STANDARD W25.3.
8. WATERMAIN 100-300mm TO BE CLASS 150 OR 18-19VC OR APPROVED EQUIVALENT.
9. ALL PVC WATERMAIN SHALL BE INSTALLED WITH A GAUGE STRANDED COPPER TWO OR RWJ TRACER WIRE IN ACCORDANCE WITH CITY STANDARD W36.
10. FIRE HYDRANTS SHALL CONFORM TO CITY STANDARDS W15, W19, AND W20.
11. VALVE BOXES SHALL CONFORM TO CITY STANDARD W24.
12. 300mm VALVES AND SMALLER TO BE INSTALLED WITH VALVE BOXES AS PER CITY STANDARD W24. 400mm VALVES AND LARGER TO BE INSTALLED WITH BUTTERFLY VALVES AND VALVE CHAMBERS AS PER CITY STANDARD W24.
13. AS PER CITY GUIDELINE, THE MINIMUM VERTICAL CLEARANCE BETWEEN WATERMAIN AND SEWER/UTILITY IS 0.25m FOR CROSSING OVER, 0.3m FOR CROSSING UNDER, AND 0.4m FOR PARALLEL. THE MINIMUM VERTICAL CLEARANCE IS 0.5m AS PER CITY DETAIL W22; FOR CROSSING UNDER SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWERS IS REQUIRED TO PREVENT ANY DESTRUCTION OF THE SEWER 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.