

CONSTRUCTION NOTES:

1.0 GENERAL

- 1.1 DRAWINGS ARE NOT TO BE SCALED.
- 1.2 ACCESS TO THE SITE SHALL BE CO-ORDINATED WITH THE OWNER.
- 1.3 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FOR REQUIRED WORK AND PAY ALL FEES.
- 1.4 WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, NFPA REGULATIONS, ONTARIO ELECTRICAL CODE AND THE LOCAL AUTHORITY HAVING JURISDICTION, WHERE APPLICABLE.
- 1.5 VERIFY UNDERGROUND UTILITIES AND SERVICES PRIOR TO CONSTRUCTION. ALL UTILITIES MAY NOT BE SHOWN ON DRAWINGS. CONTRACTOR RESPONSIBLE FOR LOCATING AND VERIFYING ALL UTILITIES PRIOR TO CONSTRUCTION.
- 1.6 VERIFY ALL DIMENSIONS AND ELEVATIONS AND REPORT ANY DISCREPANCY TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 1.7 RESTORE DISTURBED AREAS TO EXISTING CONDITIONS OR BETTER.
- 1.8 PROTECT PROPERTY BARS DURING CONSTRUCTION. ENGAGE SERVICE OF AN O.L.S. TO REPLACE DAMAGED OR REMOVED BARS.
- 1.9 CARRY OUT DEWATERING TO OPSS.MUNI 517 TO MAINTAIN ALL TRENCHES IN A DRY CONDITION. OBTAIN MECP PERMIT IF REQUIRED.
- 1.10 ALL TESTING AND QUALITY CONTROL TO BE THE RESPONSIBILITY AND AT THE EXPENSE OF THE CONTRACTOR. TESTING TO BE CONDUCTED BY AN INDEPENDENT QUALIFIED FIRM APPROVED BY ENGINEER AND SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATION. FAILED TESTS SHALL BE REPEATED AT THE EXPENSE OF THE CONTRACTOR.
- 1.11 ALL EXISTING FEATURES INCLUDING BUT NOT LIMITED TO SIGNS, ELECTRICAL OUTLETS, LIGHT STANDARDS, ETC... DAMAGED/REMOVED DUE TO CONSTRUCTION, TO BE REPLACED/REINSTALLED, UPON COMPLETION OF WORKS, TO EXISTING LOCATIONS OR AS OTHERWISE INDICATED.
- 1.12 ALL EXISTING FEATURES REMAINING IN PLACE DURING CONSTRUCTION TO BE PROPERLY PROTECTED AND SUPPORTED.
- 1.13 CONTRACTOR MUST NOTIFY THE HOSPITAL IN ADVANCE OF ANY POTENTIAL ACCESS OR TRAFFIC DISRUPTIONS AND MUST TAKE ALL REASONABLE STEPS TO MINIMIZE THEIR DURATION AND IMPACT. ACCESS TO EITHER THE AMBULANCE TRANSFER BAY OR EMERGENCY PARKING AREA MUST BE PROVIDED AT ALL TIMES.

2.0 ROAD & PARKING AREA

- 2.1 REFER TO SPECIFICATIONS
- 2.2 CONTRACTOR TO MAINTAIN TRAFFIC CONTROL MEASURES AT ALL TIMES FOR WORKS ON EXISTING ROADWAYS TO THE SATISFACTION OF THE TOWNSHIP AND/OR OWNERS REPRESENTATIVE. THE EXPENSE OF THE ERECTION, MAINTENANCE AND REMOVAL OF ALL SIGNS, DELINEATORS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE AT THE FULL EXPENSE OF THE CONTRACTOR.
- 2.3 ROAD RESTORATION AND PARKING AREA RESTORATION TO MATCH EXISTING LINES AND GRADES. COMPLETE A PRE-CONSTRUCTION SURVEY TO VERIFY GRADES.
- 2.4 EXCAVATION TO OPSS. MUNI 206 FOR GRADING.
- 2.5 THE SUB-GRADE SHALL BE COMPACTED WITH SUITABLE MECHANICAL COMPACTION EQUIPMENT AS REQUIRED TO PRODUCE A SOLID BASE FOR THE ROAD BASE. ALL IDENTIFIED SOFT AND WEAK SPOTS SHALL BE EXCAVATED AND BACKFILLED WITH GRANULAR 'A' MATERIAL.
- 2.6 THE GRANULAR BASE SHALL BE LAID ON DRY, SMOOTH, PROPERLY GRADED SUB-GRADE.
- 2.7 THE GRANULAR MATERIAL SHALL BE THOROUGHLY COMPACTED TO 98% SPMD IN LAYERS NO GREATER THAN 150mm.
- 2.8 NO GRANULAR BASE SHALL BE PLACED UNTIL THE GRADE ON WHICH IT IS TO BE LAID HAS BEEN INSPECTED AND APPROVED BY THE OWNERS REPRESENTATIVE.
- 2.9 ALL GRANULAR CONSTRUCTION SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATION OPSS. MUNI 314.
- 2.10 IMMEDIATELY UPON COMPLETION OF GRANULAR BASE IT SHALL BE THOROUGHLY COMPACTED AND SHAPED AND THE BASE COURSE ASPHALT PLACED. ASPHALT WORK SHALL CONFORM IN ALL RESPECTS TO ONTARIO PROVINCIAL STANDARD SPECIFICATIONS OPSS. MUNI 310.
- 2.11 THE ASPHALT COMPONENTS SHOULD BE COMPACTED TO 92% TO 96.5% OF MAXIMUM RELATIVE DENSITY IN ACCORDANCE WITH OPSS. MUNI 310.
- 2.12 ALL SERVICES, MANHOLES, VALVES, ETC. ARE TO BE INSTALLED TO MATCH FINISHED GRADE.
- 2.13 ALL STREET SIGNS DAMAGED/REMOVED DUE TO CONSTRUCTION TO BE REPLACED/REINSTALLED UPON COMPLETION OF WORKS AT EXISTING LOCATION.

3.0 SANITARY SEWER

- 3.1 REFER TO SPECIFICATIONS
- 3.2 CONFIRM ALL EXISTING INVERT ELEVATIONS AT CONNECTION POINTS PRIOR TO CONSTRUCTION.
- 3.3 IDENTIFICATION OF EXISTING PIPING MATERIAL NOTED ON THE CONTRACT DRAWINGS IS FOR GENERAL INFORMATION PURPOSE ONLY AND IS BASED UPON THE BEST INFORMATION AVAILABLE AT THIS TIME. NO GUARANTEE OF MATERIAL TYPE, LOCATION OR EXTENT TO BE ENCOUNTERED DURING CONSTRUCTION IS IMPLIED.
- 3.4 UNLESS DIRECTED OR APPROVED BY THE CONTRACT ADMINISTRATOR, ALL PIPING TO BE LAID TO THE LINES AND GRADES AS SHOWN ON THE CONTRACT DRAWINGS OR AS IDENTIFIED IN THE CONTRACT DOCUMENTS.
- 3.5 CONTRACTOR TO REPLACE/RECONNECT ALL REMOVED/DAMAGED SECTIONS OF SANITARY SEWER SERVICES ALONG SEWER MAIN AND INTO SANITARY MANHOLES USING NEW PVC SDR 35 PIPING AS PER THE CONTRACT DOCUMENTS.
- 3.6 NEW SEWER TO BE INSTALLED VIA OPEN-CUT OR HORIZONTAL DIRECTIONAL DRILLING (HDD): PIPE MATERIALS: OPEN CUT: PVC SDR 35. HDD: DR17 HDPE.
- 3.7 ALL MANHOLES TO OPSS STANDARDS. REFER TO SPECIFICATIONS AND DWGS.
- 3.8 CONTRACTOR TO MAINTAIN SANITARY FLOW FOR THE DURATION OF THE PROJECT. PUMP AS REQUIRED.

4.0 SEDIMENT & EROSION CONTROLS

- 4.1 ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN FULLY STABILIZED. MEASURES MUST BE SATISFACTORY TO THE OWNER'S REPRESENTATIVE AND MAY INCLUDE, BUT ARE NOT LIMITED TO, THE INSTALLATION OF GEOTEXTILE SILT FENCE. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING SITE CONDITIONS AND IMPLEMENTING APPROPRIATE CONTROLS TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA, PARTICULARLY IN PROXIMITY TO THE NEARBY WATERCOURSE. CONTROLS SHALL BE MAINTAINED, MONITORED AND ADJUSTED AS NECESSARY TO ENSURE ONGOING EFFECTIVENESS THROUGHOUT THE DURATION OF THE PROJECT.
- 4.2 THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE ON-SITE TO REPAIR SEDIMENT & EROSION CONTROL MEASURES IN THE EVENT OF UNFORESEEN CONDITIONS: HIGHWATER, EXTREME RAINFALL EVENTS, ETC.
- 4.3 NO MAINTENANCE OR REPAIR WORK ON CONSTRUCTION EQUIPMENT IS ALLOWED WITHIN 30m OF AN EXISTING WATERCOURSE OR DITCH.

5.0 EXCESS SOILS REMOVAL

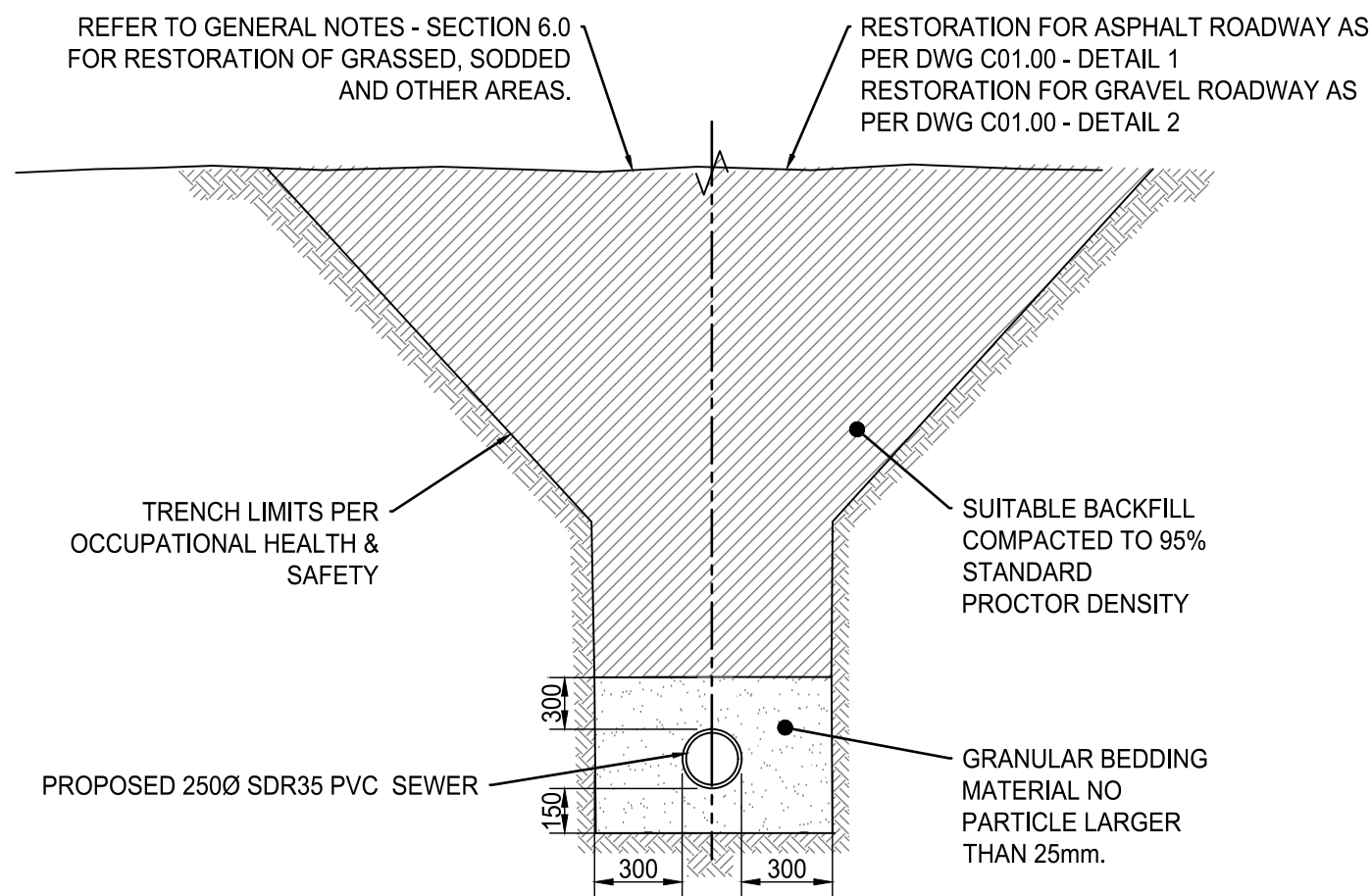
- 5.1 CONTRACTOR TO ABIDE BY O.REG 406/19: ON-SITE EXCESS SOIL MANAGEMENT AND ANY AMENDMENTS. ANY AND ALL COSTS ASSOCIATED WITH ABIDING BY THE REGULATION, INCLUDING TESTING, SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
- 5.2 MANAGEMENT OF EXCESS SOILS TO BE IN ACCORDANCE WITH O.REG 406/19 AND OPSS.MUNI 180.

6.0 RESTORATION

- 6.1 WHERE RESTORATION IS REQUIRED, THE CONTRACTOR SHALL COMPLETE RESTORATION WORK TO EQUIVALENT OR BETTER CONDITION THAN PRE-CONSTRUCTION CONDITIONS. RESTORATION ITEMS WILL BE COMPLETED TO THE FOLLOWING MINIMUM REQUIREMENTS:
 - i. SODDED AREAS: 75MM TOPSOIL (AFTER COMPACTION) AND SOD
 - ii. GRASSED AREAS: 100MM TOPSOIL (AFTER COMPACTION) AND SEED AND MULCH
 - iii. ASPHALT AREAS (EXCLUDING ROADWAY): 150MM GRANULAR 'A' - 50MM HL3 C/W COAL TAR EPOXY SEAL IF EXISTING DRIVEWAY IS SEALED
 - iv. ROADWAY: AS PER DETAILS 1 AND 2 ON C01.00
 - v. CONCRETE AREAS: MATCH EXISTING
 - vi. GRANULAR AREAS: 150MM GRANULAR 'A' AND 450MM GRANULAR 'B'
- 6.2 AREAS THAT HAVE MATERIALS OTHER THAN HAVE BEEN NOTED WILL BE RESTORED TO MATCH EXISTING CONDITIONS.
- 6.3 RESTORATION TO MATCH EXISTING LINES, GRADES AND LIMITS TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

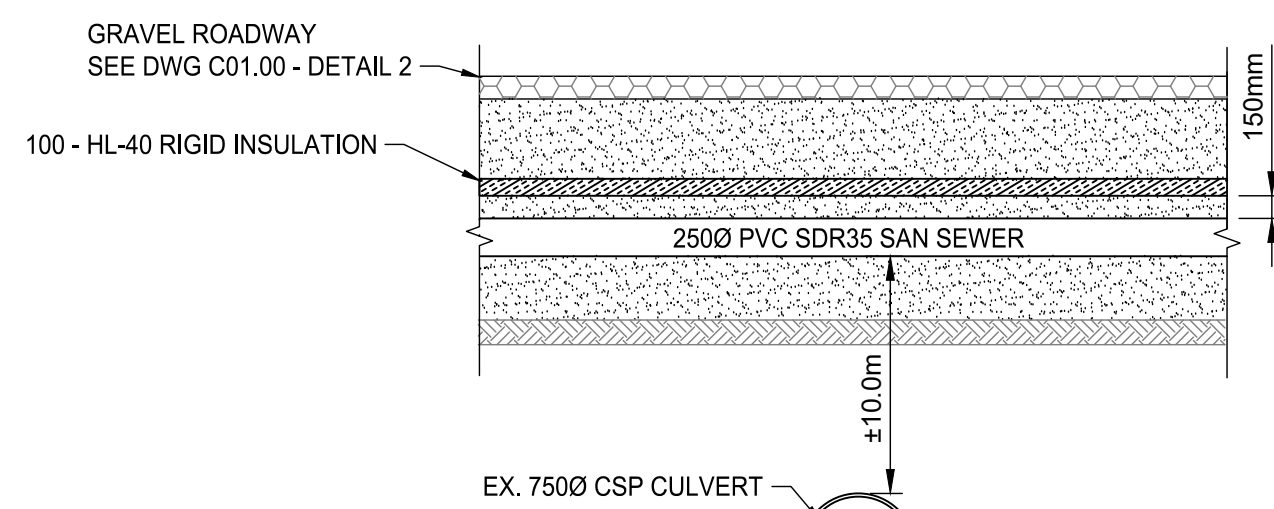
I.D.	STATION	NORTHING	EASTING	T/O GRATE	OPSD
NEW MH#1	1+356	5429893.996	407026.962	225.20m	701.010
NEW MH#2	1+274	5429892.992	406945.144	225.34m	701.010
NEW MH#3	1+192	5429892.082	406862.987	225.36m	701.010
NEW MH#4	1+107	5429891.958	406777.491	226.46m	701.010
NEW MH#5	1+011	5429887.679	406777.661	228.14m	701.010
EXIST. MH#7	1+000	5429889.948	406785.239	228.02m	701.010

STRUCTURE INFORMATION CHART



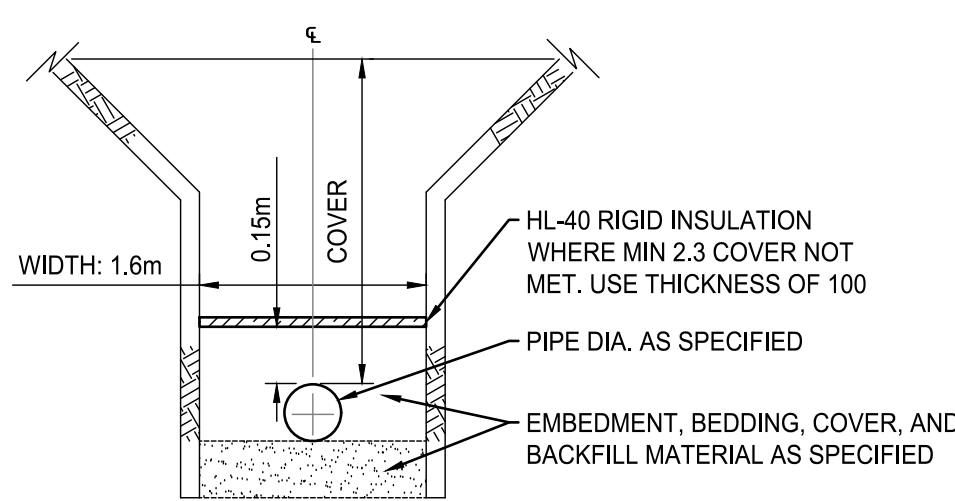
SEWER PIPE TRENCH DETAIL IN EARTH (TYP.)

SCALE: NTS



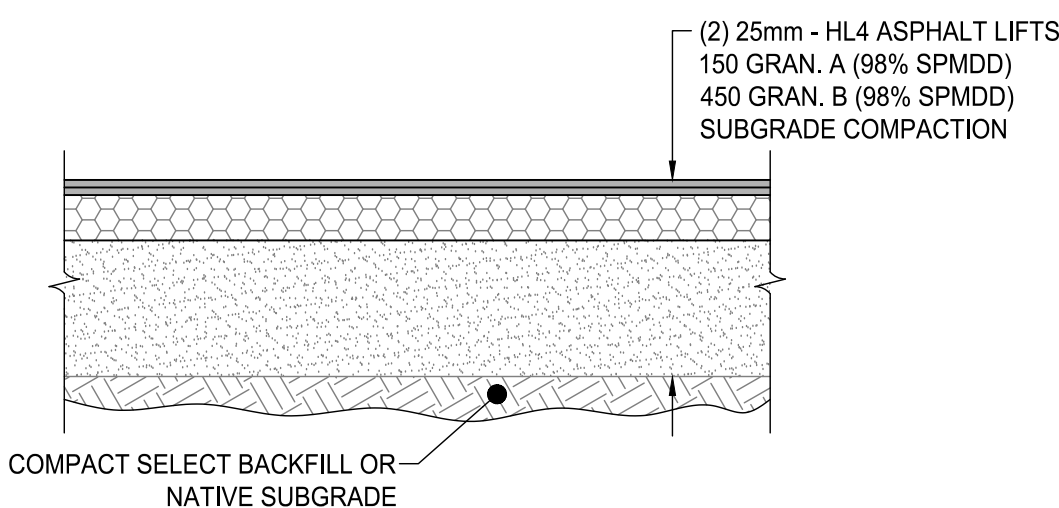
A CULVERT SECTION DETAIL

SCALE: 1:50



PVC WATERMAIN & SANITARY SEWER FROST PROTECTION REQUIREMENTS

SCALE: N.T.S.



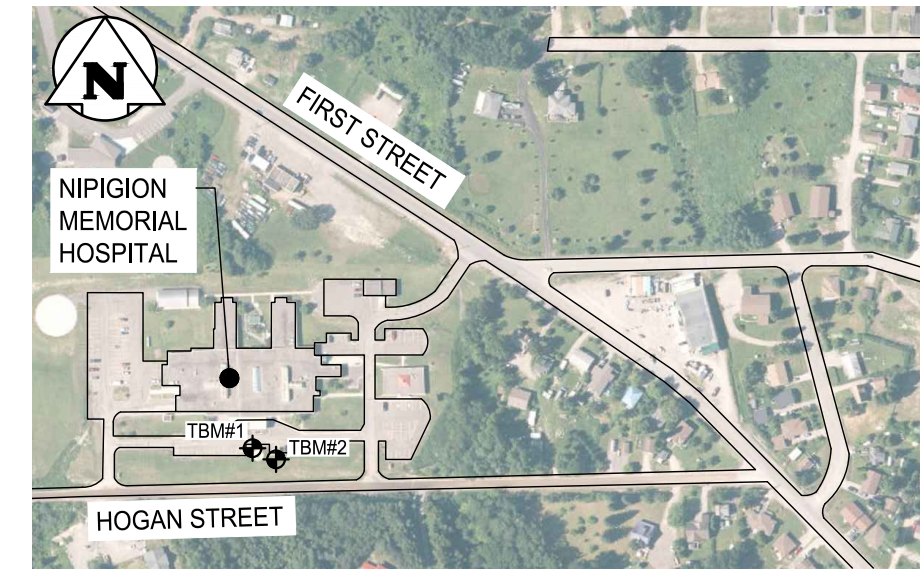
1 ASPHALT - PAVEMENT SECTION

SCALE: 1:25

TBM#1 - SCRIBE LOCATED ON CONCRETE SLAB WITH FLAG POLE SOUTH SIDE OF NIPIGION MEMORIAL HOSPITAL.
ELEVATION = 228.64m
NORTHING = 5429911.40
EASTING = 406708.48

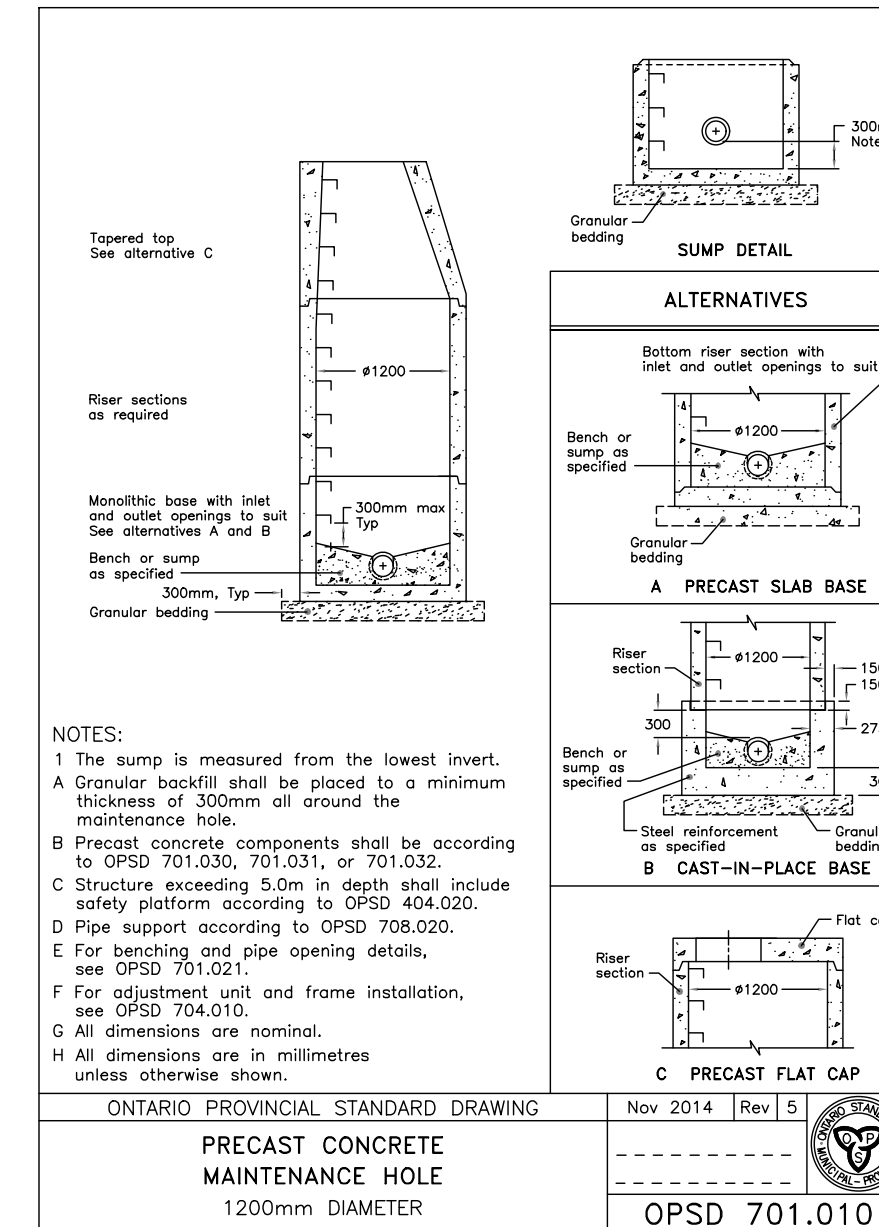
TBM#2 - NAIL LOCATED CORNER OF SOUTH SIDE PARKING LOT OF NIPIGION MEMORIAL HOSPITAL.
ELEVATION = 228.77m
NORTHING = 5429912.69
EASTING = 406713.25

CONTROL POINT INFORMATION

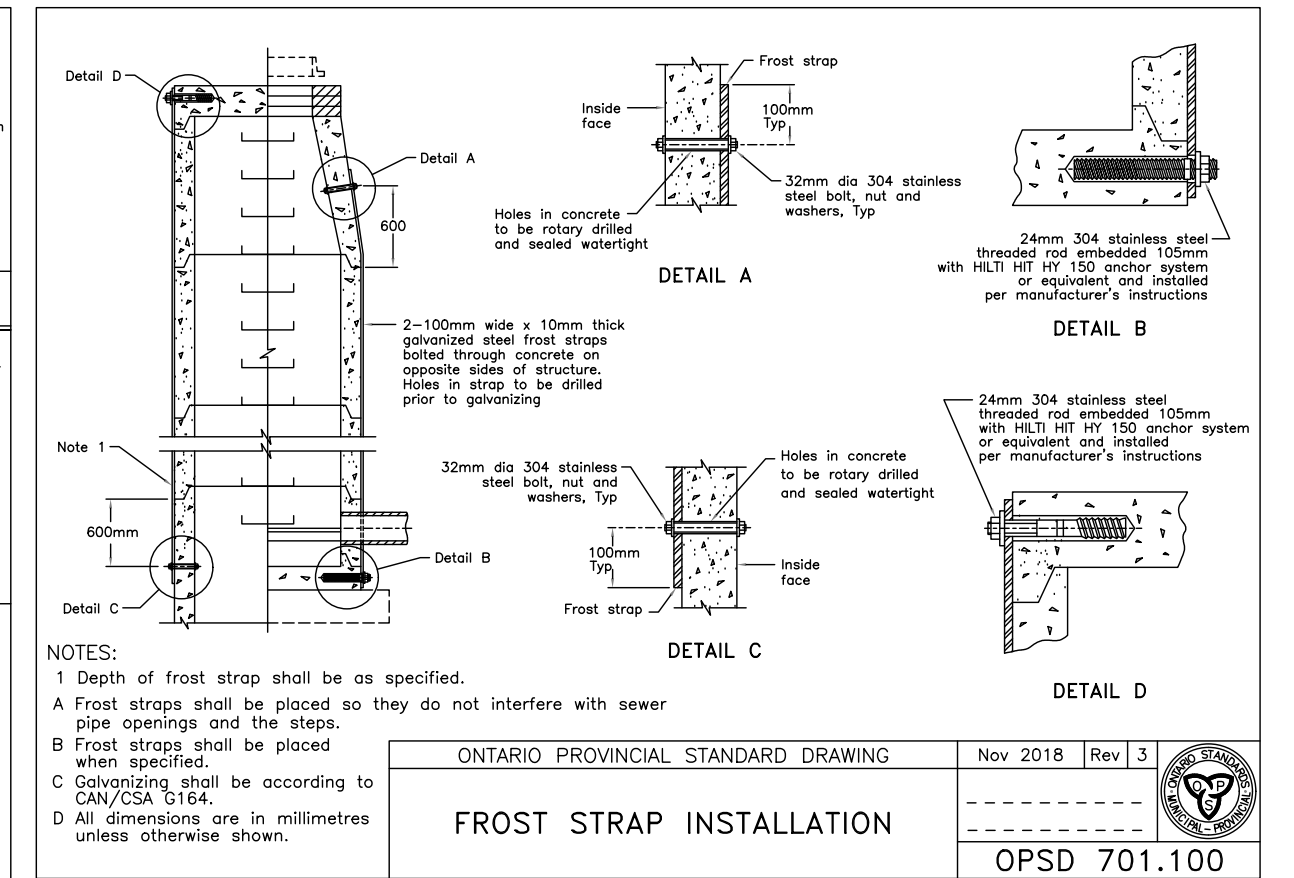


CONTROL POINT KEY PLAN

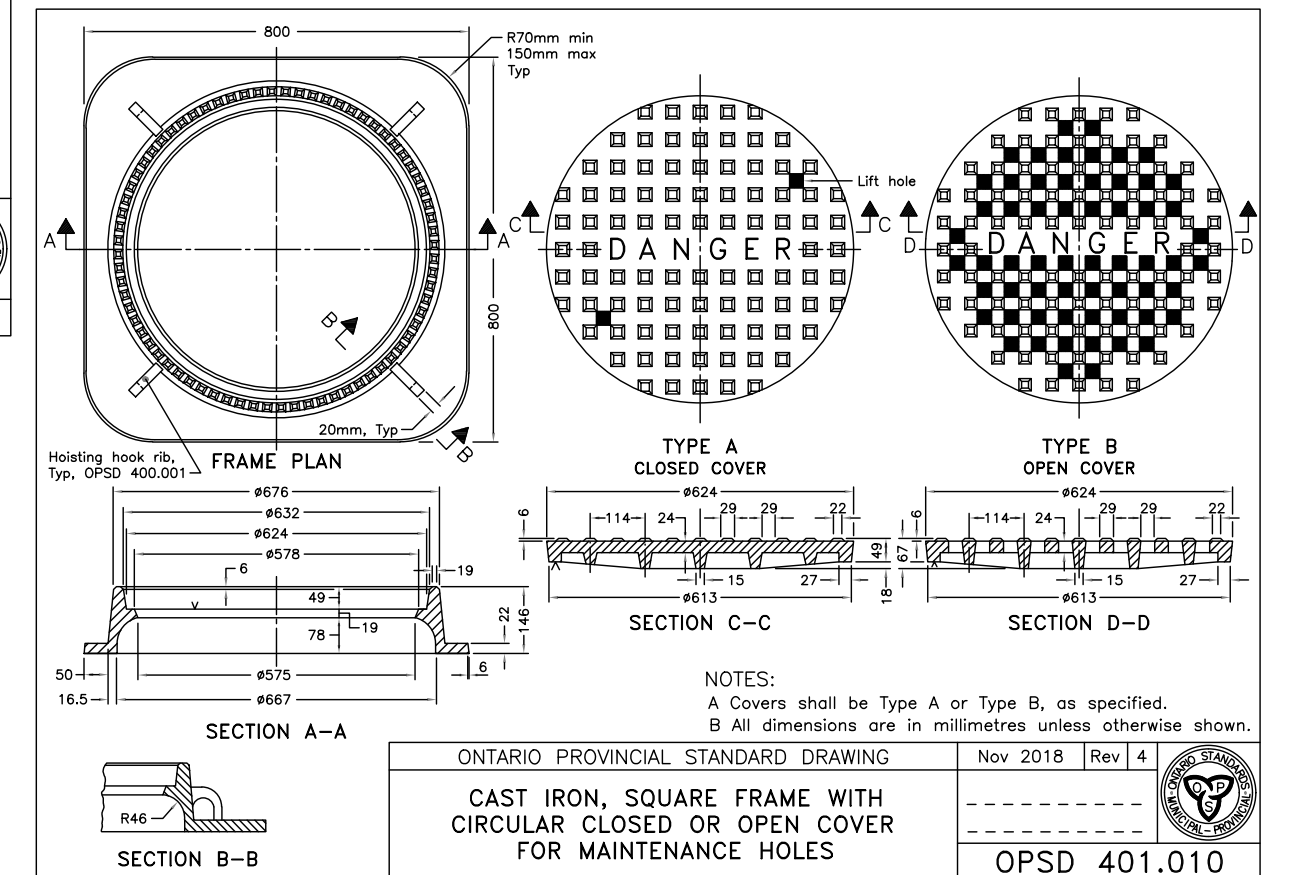
SCALE: N.T.S.



ONTARIO PROVINCIAL STANDARD DRAWING
PRECAST CONCRETE MAINTENANCE HOLE
1200mm DIAMETER
OPSD 701.010



ONTARIO PROVINCIAL STANDARD DRAWING
FROST STRAP INSTALLATION
OPSD 701.100



ONTARIO PROVINCIAL STANDARD DRAWING
CAST IRON, SQUARE FRAME WITH CIRCULAR CLOSED OR OPEN COVER FOR MAINTENANCE HOLES
OPSD 401.010

PROPERTY LIMITS DELINEATION
DELINEATION OF PROPERTY LIMITS AS SHOWN ON THIS DWG DOES NOT REPRESENT A "LEGAL SURVEY". KGS GROUP MAKES NO REPRESENTATION OR WARRANTY AS TO THE ACCURACY OF PROPERTY LIMITS DELINEATED ON THIS DWG. NOR ON THE DIMENSIONAL ACCURACY OF DWG FEATURES RELATIVE TO THOSE PROPERTY LIMITS.

NOTE:
LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

WARNING

1. NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.
2. TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.
3. SEE PROVINCIAL REGULATION 210/01 FOR DETAILS.

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

0	26/05/06	ISSUED FOR TENDER		
NO.	YYMMDD	DESCRIPTION	DESIGN BY	DESIGN CHECK
REVISIONS / ISSUE				
CLIENT:				
PROJECT:				
NIPIGION MEMORIAL DISTRICT HOSPITAL SEWER REALIGNMENT				
DWG DESCRIPTION:				
GENERAL NOTES AND DETAILS				
AUTHENTICATION FOR CURRENT REVISION				
ENG. STAMP	DESIGN BY:	MVP / JK	DATE (YYMMDD):	25/05/13
	DESIGN CHECK:		DATE:	26/04/28
	DRAWN BY:	NY	DATE:	25/05/13
	DWG CHECK:		DATE:	26/04/28
DWG. NO.	26-0847-001	C01.00	REV.	0