



**1.0 ONSITE SEWAGE SYSTEM NOTES :**

**GENERAL**

- PROPOSED SEWAGE SYSTEM CONSTRUCTION TO BE UNDERTAKEN IN ACCORDANCE WITH THE ONTARIO BUILDING CODE, ONTARIO MINISTRY OF ENVIRONMENT AND THE MANUFACTURER'S RECOMMENDATIONS.
- INSTALLATION OF ALL COMPONENTS OF THE SEWAGE SYSTEM TO BE COMPLETED BY A LICENSED AND REGISTERED ON SITE SEWAGE SYSTEM INSTALLER IN THE PROVINCE OF ONTARIO.
- THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL NECESSARY INSPECTIONS WITH THE TOWN AND OTHER AUTHORITIES PERTAINING TO THE INSTALLATION OF THEIR WORK.
- CONTRACTOR TO LOCATE ALL UNDERGROUND UTILITIES AND EXISTING SEWAGE WORKS PRIOR TO CONSTRUCTION.
- ALL COMPONENT LOCATIONS SHALL BE FIELD VERIFIED WITH THE ENGINEER PRIOR TO INSTALLATION.
- ALL EARTHWORKS, INCLUDING PLACEMENT OF FILL ARE TO BE UNDERTAKEN WITH TRACK MOUNTED EQUIPMENT TO KEEP COMPACTION TO A MINIMUM. KEEP ALL TRAFFIC IN THE AREA OF THE PROPOSED LEACHING BED TO A MINIMUM.
- ALL TOPSOIL AND ORGANIC TO BE REMOVED FROM LEACHING BED AREA.
- IF HIGH GROUNDWATER CONDITIONS ARE EVIDENT AT THE TIME OF CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. ALL VERTICAL CLEARANCE DISTANCES ARE REQUIRED BY THE ONTARIO BUILDING CODE MUST BE MAINTAINED.
- GRAVITY SEWERS TO HAVE MINIMUM 0.6m COVER AND SHALL BE INSULATED WHERE LESS THAN 1.0m COVER IS PROVIDED. FORCEMAIN SHALL BE INSULATED WHERE LESS 1.5m IS PROVIDED. BEDDING, COVER AND BACKFILL TO BE IN ACCORDANCE WITH OPS5.
- UNLESS OTHERWISE NOTED PE FORCEMAIN TO BE HDPE SERIES 100 OR DR 13.5 PE AND PVC FORCEMAIN TO BE SCHEDULE 40. GRAVITY SEWERS TO BE SDR-35. FORCEMAIN TO BE PROVIDED WITH TRACES WIRE, SECURED TO THE TOP OF THE PIPE WITH WATER PROOF TAPE OR ZIP TIES.
- ALL PIPE SUBJECT TO VEHICULAR TRAFFIC SHALL BE ADEQUATELY PROTECTED.
- ALL METAL IN TANKS OR PUMP CHAMBERS TO BE GALVANIZED OR STAINLESS STEEL.
- ALL JOINTS BELOW THE HIGH WATER LEVEL IN PRECAST TANKS TO BE SEALED WITH MASTIC SEALANT IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS FOR WATER TIGHT SEAL. ALL TANK INLETS AND OUTLETS TO BE EQUIPPED WITH CAST IN RUBBER BOOT FOR WATER TIGHT SEAL. UNLESS OTHERWISE NOTED ALL TANK INLETS AND OUTLETS TO BE EQUIPPED WITH TEES.
- ALL TANKS TO BE PROVIDED WITH PRECAST CONCRETE OR PVC ACCESS RISERS TO GRADE. HATCHES TO BE BOLTED AND GASKETED AND ACCESSIBLE AT GRADE. ALL CIRCULAR HATCHES TO BE 600 mm DIAMETER POLYLOK RISER WITH CAST IN ADAPTOR. ALL SQUARE ACCESS OPENINGS TO BE EQUIPPED WITH CONCRETE RISERS. VENTED HATCHES TO BE PROVIDED ON TANKS CONTAINING PUMPS.
- A TANK SHALL NOT BE COVERED BY SOIL OR LEACHING BED FILL HAVING A DEPTH GREATER THAN THE MAXIMUM BURIAL THAT THE TANK IS DESIGNED TO WITHSTAND.
- EXISTING SOILS SHALL BE SCARIFIED AT A RIGHT ANGLE TO THE DIRECTION OF LATERAL SEWAGE FLOW IN THE LEACHING BED PRIOR TO IMPORTING FILL OR INSTALLING DISTRIBUTION PIPE STONE LAYER.
- WHEN THE IMPORTATION OF FILL IS REQUIRED, FILL SHOULD BE END-DUMPED AND GRADED PROGRESSIVELY OVER THE PREPARED SITE AREA WITH TRACK MOUNTED EQUIPMENT.
- ALL ELEVATION PRIOR TO BACKFILL.
- ALL FILL MATERIAL PLACED BENEATH TANKS TO BE COMPACTED 95%.
- ALL DISTURBED AREAS TO BE TOPSOILED (100mm MINIMUM) AND SEEDED COMPLETE WITH FERTILIZER AND MULCH IN ACCORDANCE WITH OPS5.
- THE CONTRACTOR SHALL COORDINATE AND PAY FOR ALL NECESSARY INSPECTIONS WITH THE TOWN AND OTHER AUTHORITIES PERTAINING TO THE INSTALLATION OF THEIR WORK.
- IF HIGH GROUNDWATER CONDITIONS ARE EVIDENT AT THE TIME OF CONSTRUCTION, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY. THE DISPOSAL BED SHALL BE A MINIMUM 0.6m ABOVE THE HIGH GROUNDWATER TABLE.
- CONTRACTOR TO ADHERE TO ALL RELEVANT REQUIREMENTS OF THE ONTARIO BUILDING CODE (2012) FOR THE INSTALLATION OF THE SEPTIC DISPOSAL BED AND TREATMENT UNITS.
- ACCESS OPENINGS SHALL BE LOCATED TO FACILITATE THE PUMPING OF ALL COMPARTMENTS AND THE SERVICING OF THE INLET AND OUTLET OF EACH COMPARTMENT NOT ACCESSIBLE BY THE TANK TOP OR PART OF IT.
- TANKS SHALL NOT BE COVERED BY SOIL OR LEACHING BED FILL HAVING A DEPTH GREATER THAN THE MAXIMUM DEPTH OF BURIAL THAT THE TANK IS DESIGNED TO WITHSTAND.
- IF RISERS ARE USED, THEY SHALL CONFORM TO THE REQUIREMENTS OF CSA B66, AND BE LOCATED AT GRADE OR NO MORE THAN 300mm BELOW GRADE TO FACILITATE ACCESS AND MAINTENANCE.
- CONTRACTOR TO DIG TEST PIT IN LOCATION OF SEPTIC BED TO VERIFY GROUNDWATER CONDITIONS AND ELEVATION.

**TREATMENT UNITS**

- UNLESS OTHERWISE NOTED, ALL "TERTIARY" TREATMENT UNITS SHALL BE PROVIDED FROM A MANUFACTURER THAT IS CERTIFIED BY CAN/BNO 3680-600 TO PROVIDE A LEVEL OF TREATMENT IN ACCORDANCE WITH OBC TABLE 8.6.2.2, WHERE THE TREATMENT UNIT IS CLASSIFIED AS LEVEL IV, PROVIDING AN EFFLUENT CRITERIA OF 10mg/L SUSPENDED SOLIDS, AND 10mg/L OF CBOD5.
- ALL TREATMENT UNITS THAT CONTAIN MECHANICAL COMPONENTS SHALL BE EQUIPPED WITH AN AUDIBLE AND VISUAL WARNING ALARM, LOCATED TO WARN THE OCCUPANTS OF THE BUILDING SERVED OR THE OPERATOR OF THE TREATMENT UNIT OF A MALFUNCTION IN THE OPERATION OF THE TREATMENT UNIT.
- THE CONTRACTOR WILL ENSURE THAT EVERY OPERATOR OF A TREATMENT UNIT SHALL OBTAIN, FROM THE MANUFACTURER OR DISTRIBUTOR OF THE TREATMENT UNIT, LITERATURE THAT DESCRIBES THE UNIT IN DETAIL AND PROVIDES COMPLETE INSTRUCTIONS REGARDING THE OPERATION, SERVICING, AND MAINTENANCE REQUIREMENTS OF THE UNIT AND ITS RELATED COMPONENTS NECESSARY TO ENSURE THE CONTINUED PROPER OPERATION IN ACCORDANCE WITH THE ORIGINAL DESIGN AND SPECIFICATIONS.

**LEACHING BED**

- CLEARANCE DISTANCES FROM PROPERTY LINES, STRUCTURES, WELLS, AND SURFACE WATER WILL ADHERE TO THE REQUIREMENTS OF OBC 8.2.1.6.A
- A LEACHING BED SHALL NOT BE LOCATED ON AN AREA WITH A SLOPE OF GREATER THAN 4 UNITS HORIZONTALLY TO 1 UNIT VERTICALLY.
- THE HEADER LINE, DISTRIBUTION PIPES AND LEACHING BED SHALL BE EQUIPPED WITH MEANS OF DETECTION AS REQUIRED BY OBC 8.7.2.2. (2). LIGHT COLOURED PLASTIC COATED 14 GAUGE TRACER WIRE OR EPOXY COATED, 10m REBAR LAID HORIZONTALLY AT EACH CORNER OF THE BED IS ACCEPTABLE.
- ALL IMPORTED SAND FILL TO HAVE A T-TIME OF 6 TO 10 MIN/CM AND SHALL BE VERIFIED IN WRITING BY A SOIL TESTING FIRM AND APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.

**PUMPS**

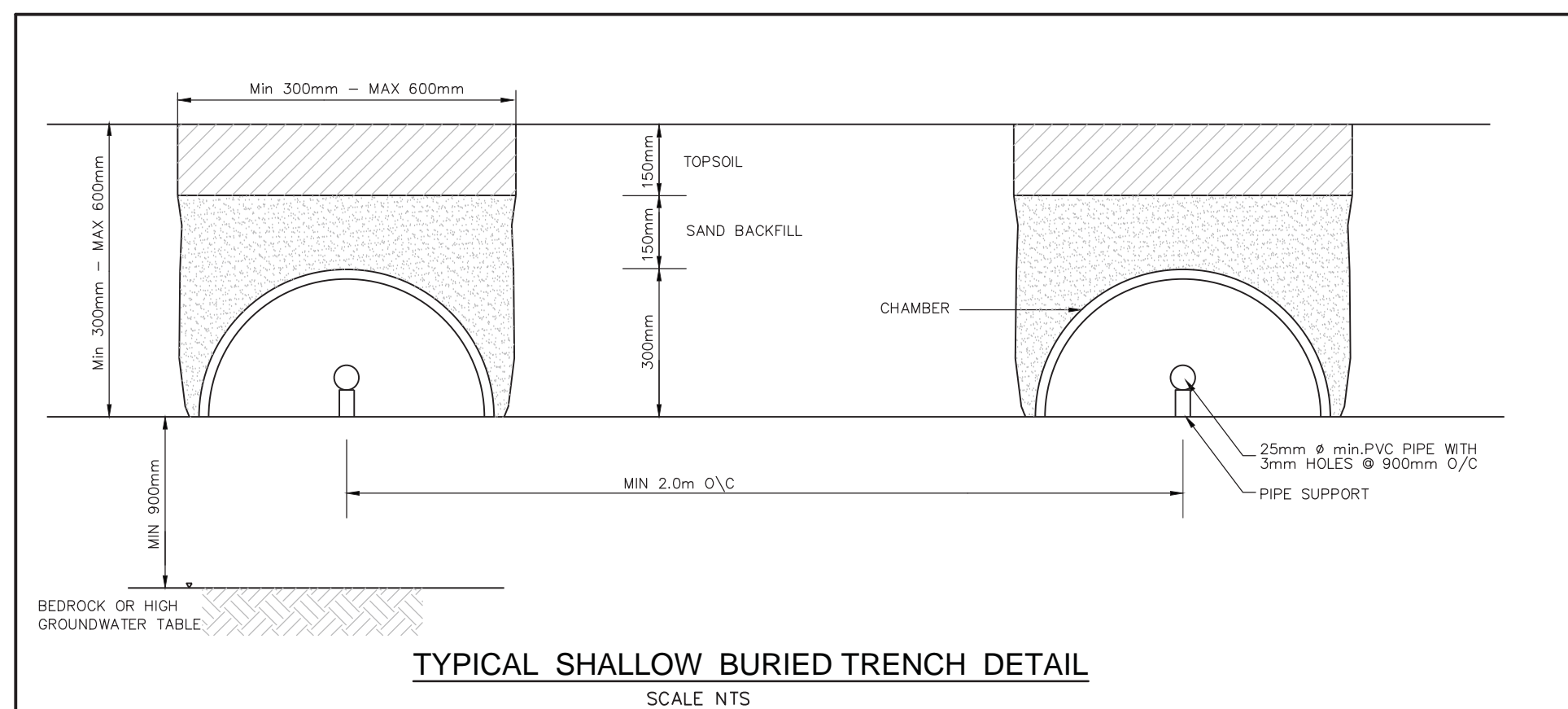
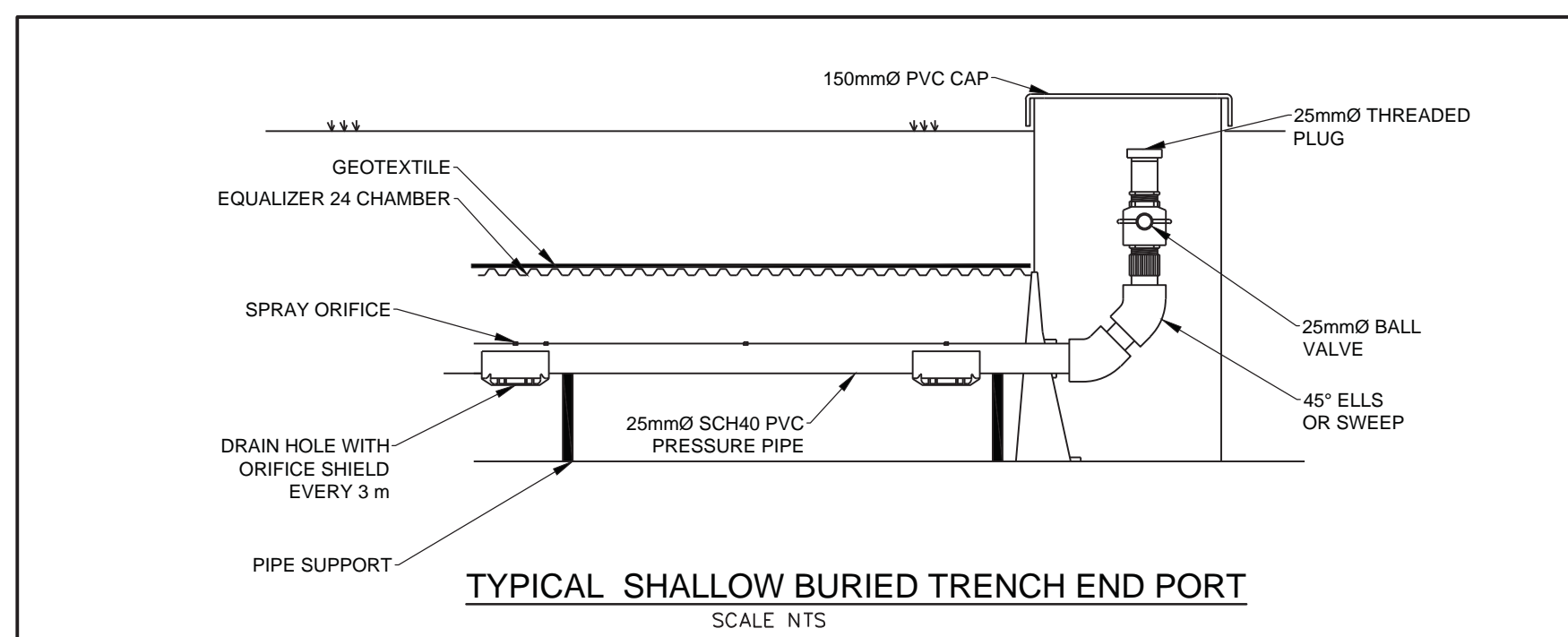
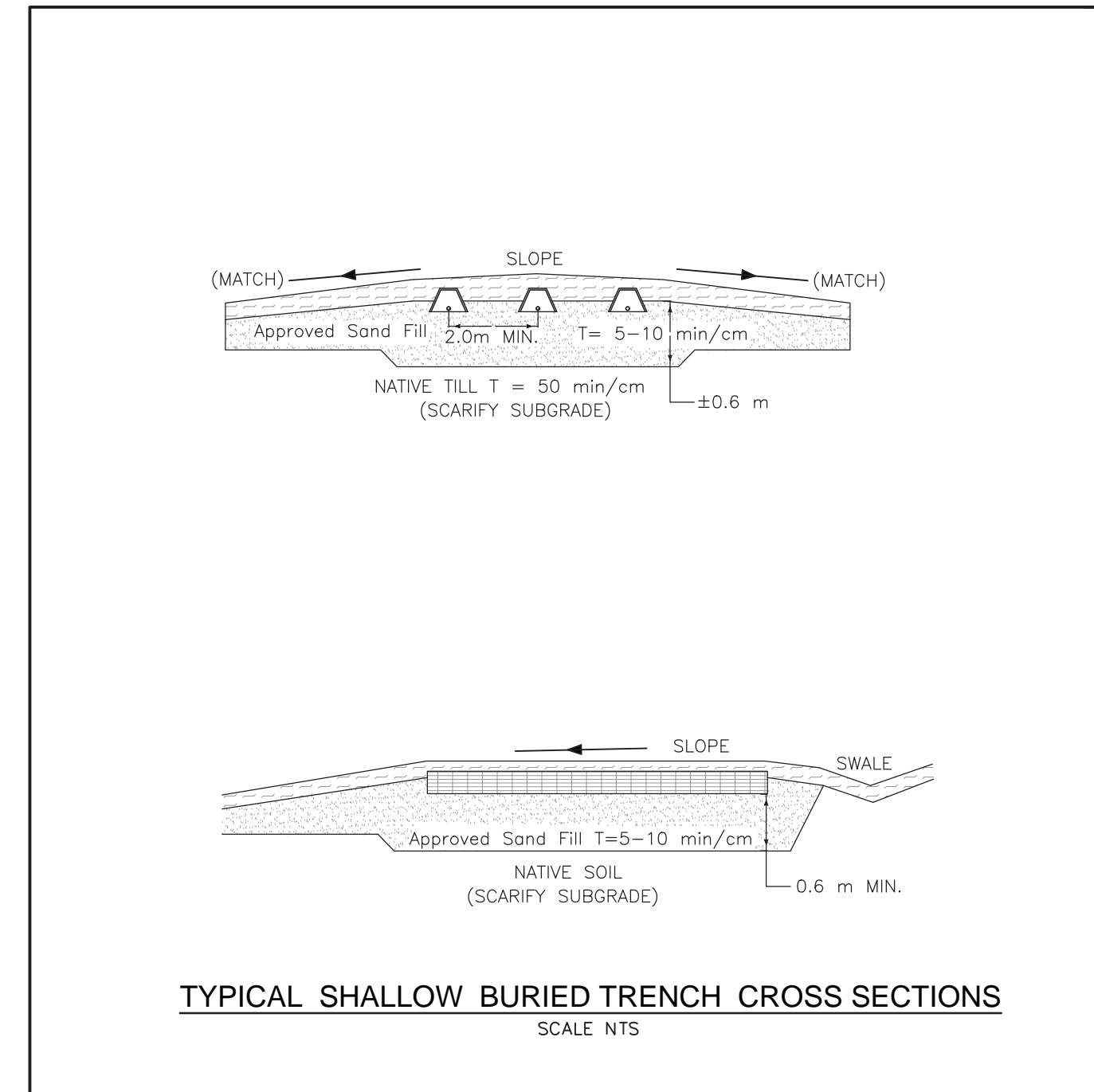
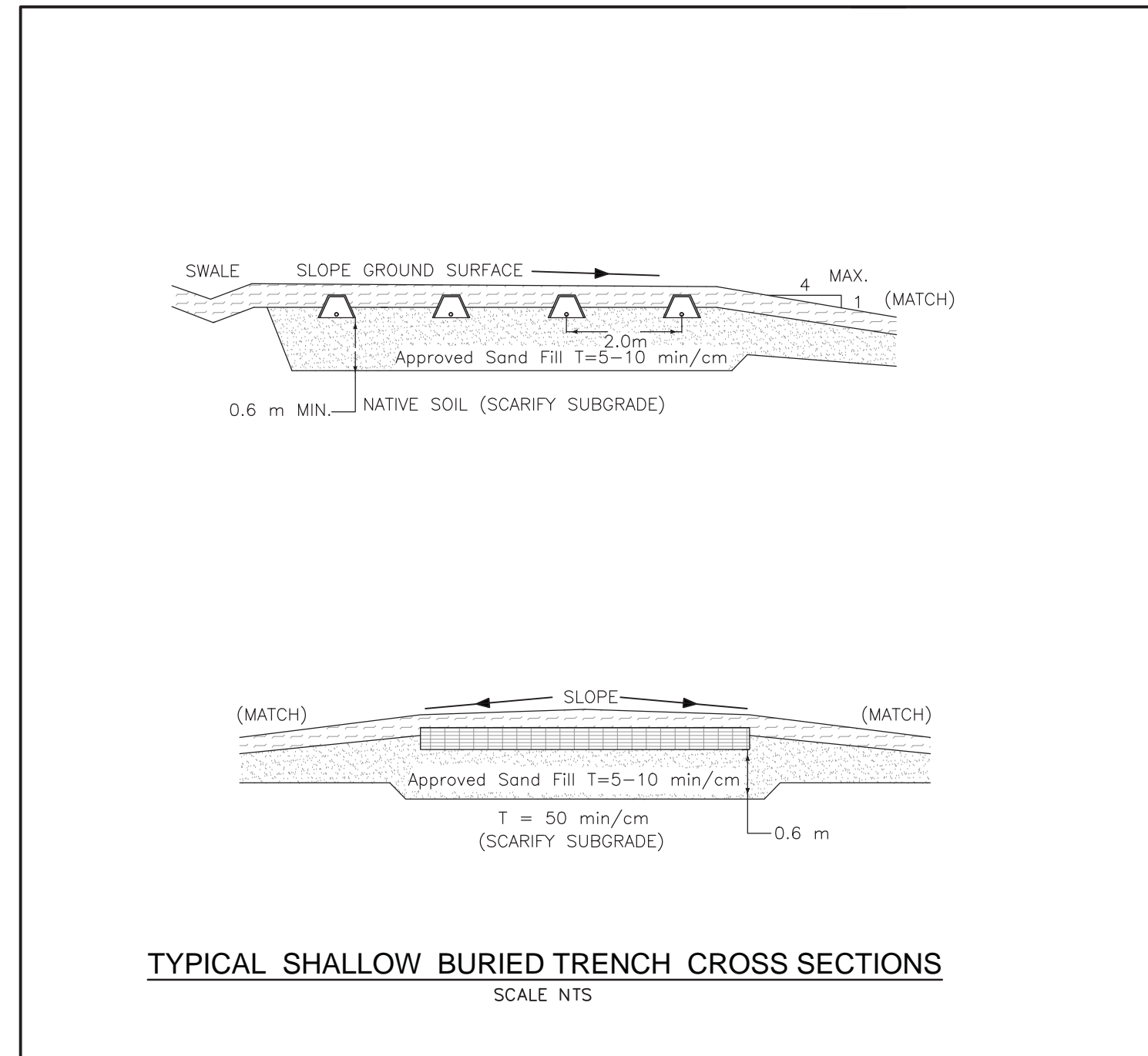
- WHERE A PUMP OR SIPHON IS REQUIRED, THE PUMP OR SIPHON SHALL BE DESIGNED TO DISCHARGE A DOSE OF AT LEAST 75% OF THE INTERNAL VOLUME OF THE DISTRIBUTION PIPE WITHIN A TIME PERIOD NOT EXCEEDING FIFTEEN MINUTES.
- THE PUMP CHAMBER SHALL BE SIZED TO PROVIDE SUFFICIENT STORAGE VOLUME SO THAT THE EFFLUENT IS EVENLY DOSED ON AN HOURLY BASIS OVER A 24-HOUR PERIOD. CONSULT WITH ENGINEER.
- PUMP SYSTEM SHALL BE DESIGNED BY SUPPLIER TO MEET SITE CONDITIONS INCLUDING ELEVATION, DISTANCE, FLOWS AND PIPE DIAMETER.

**INSTALLATION**

- ALL TOPSOIL AND ORGANICS TO BE REMOVED FROM DISPOSAL BED AREA.
- EXISTING SOILS SHALL BE SCARIFIED AT A RIGHT ANGLE TO THE DIRECTION OF LATERAL SEWAGE FLOW IN THE LEACHING BED PRIOR TO IMPORTING FILL OR INSTALLING DISTRIBUTION PIPE STONE LAYER.
- WHEN THE IMPORTATION OF FILL IS REQUIRED, FILL SHOULD BE END-DUMPED AND GRADED PROGRESSIVELY OVER THE PREPARED SITE AREA UNTIL THE TOP LEVEL OF THE TRENCH IS REACHED.
- THE INSTALLER OF THE SEPTIC SYSTEM MUST HAVE A CURRENT "B.C.I.N." REGISTRATION NUMBER AND BE APPROVED FOR INSTALLATION BY THE MANUFACTURER OF THE TREATMENT SYSTEM.

**WARRANTY AND MAINTENANCE**

- THE CONTRACTOR WILL ENSURE THAT EVERY OPERATOR OF A "TERTIARY" (LEVEL IV) TREATMENT UNIT SHALL OBTAIN FROM THE MANUFACTURER OF THE TREATMENT UNIT, LITERATURE THAT DESCRIBES THE UNIT IN DETAIL AND PROVIDES COMPLETE INSTRUCTIONS REGARDING THE OPERATION, SERVICING, AND MAINTENANCE REQUIREMENTS OF THE UNIT IF APPLICABLE.
- NO PERSON SHALL OPERATE A TREATMENT UNIT OTHER THAN A SEPTIC TANK UNLESS THE PERSON HAS ENTERED INTO AN AGREEMENT WHEREBY SERVICING AND MAINTENANCE OF THE TREATMENT UNIT AND ITS RELATED COMPONENTS WILL BE CARRIED OUT BY A PERSON WHO IS AUTHORIZED BY THE MANUFACTURER TO SERVICE AND MAINTAIN THAT TYPE OF TREATMENT UNIT.
- SAMPLING SHALL BE CONDUCTED BY A QUALIFIED AND AUTHORIZED PERSON IN ACCORDANCE WITH OBC 8.9.2.4, WHERE A SHALLOW BURIED TRENCH, TYPE A DISPOSAL BED, OR TYPE B DISPOSAL BED IS INSTALLED.
- WHERE THE SEPTIC SYSTEM IS PRESSURIZED, THE PRESSURE HEAD AT THE FURTHEST POINT FROM THE PUMP IN ALL DISTRIBUTION PIPES SHALL BE CHECKED FOR COMPLIANCE WITH OBC 8.7.6.1., OBC 8.7.8.2. AND THE DESIGN SPECIFICATION AT LEAST EVERY 36 MONTHS.



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| No. | ISSUE / REVISION          | YYYY/MMM/DD |

**ELEVATION NOTE:**  
ELEVATIONS SHOWN ON THIS PLAN ARE DERIVED FROM THE CITY OF MISSISSAUGA BENCHMARK No. 075023031  
ELEVATION = 169.073m

**SURVEY NOTES:**  
SURVEY COMPLETED BY SPEIGHT, VAN NOSTRAND & GIBSON LMD. (2018/APR/22)  
REFERENCE No.: 1-RCP 1542 PEEL  
BEARINGS ARE UTM GRID, DERIVED FROM RTN OBSERVATIONS  
UTM ZONE 17, NAD83 (GRS) (2010.0)  
DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.9996781

**SITE PLAN NOTES:**  
DESIGN ELEMENTS ARE BASED ON SITE PLAN BY COMPANY NICOLAS CARAGIANIS ARCHITECT INC.  
DRAWING No.: A-100, REV.26 (2020/NOV/18)  
PROJECT No.: 2018.0020

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THIS DRAWING IS TO BE READ AND UNDERSTOOD IN CONJUNCTION WITH ALL OTHER PLANS AND DOCUMENTS APPLICABLE TO THIS PROJECT. DO NOT SCALE THIS DRAWING.  
ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO CONSTRUCTION.

Project  
**DYMON GROUP OF COMPANIES**  
**3855-3915 DUNDAS STREET EAST**  
**CITY OF MISSISSAUGA**

Drawing  
**ONSITE SEWAGE SYSTEM NOTES AND STANDARD DETAILS**

**NOT FOR CONSTRUCTION**

Stamp

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| Check | J.L. | Check  | A.S.   | Scale       | NTS               |
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