SCHEDULE "A" - DRAWING D

GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS

1. GENERAL NOTES

1.1. THESE PLANS ARE NOT FOR CONSTRUCTION UNTIL SIGNED AND SEALED BY ENGINEER AND APPROVED BY THE TOWN OF ST. MARYS.

1.2. ALL CONSTRUCTION WORK TO BE COMPLETED IN ACCORDANCE WITH ALL APPLICABLE (MOST RECENT) STANDARDS.

1.3. THIS PLANS PREPARED BY GRIT ENGINEERING INC. ARE NOT TO BE USED FOR CONSTRUCTION UNTIL SIGNED BY THE ENGINEER AND ACCEPTED BY THE APPROVING AGENCY. THESE PLANS ARE NOT TO BE REPRODUCED IN WHOLE OR IN PART WITHOUT THE PERMISSION OF GRIT ENGINEERING INC.

1.4. CHANGES TO DRAWINGS ARE NOT PERMITTED UNTIL REVISED AND APPROVED BY THE ENGINEER AND ACCEPTED BY THE APPROVING AUTHORITY.

1.5. CONTRACTOR TO VERIFY THAT THE DRAWINGS BEING USED FOR THE CONSTRUCTION ARE THE MOST RECENT VERSION.

1.6. UTILITY LOCATES AND ALL APPLICABLE PERMITS ARE TO BE OBTAINED PRIOR TO THE START OF CONSTRUCTION AND INSPECTION BEING COMPLETED.

1.7. THE CONTRACTOR IS TO VERIFY THE EXISTING CONDITION OF THE SITE. THE VERIFICATION INCLUDES AND NOT LIMITED TO THE SERVICE LOCATION, SERVICE ELEVATIONS, UTILITY CONFLICTS AND BENCHMARK ELEVATIONS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER IMMEDIATELY AND PRIOR TO THE CONTINUATION OF CONSTRUCTION.

1.8. LEGAL INFORMATION AND EXISTING TOPOGRAPHIC INFORMATION TAKEN FROM PLAN PREPARED BY NA GEOMATICS, RECEIVED NOVEMBER 9, 2021.

1.9. THE CONTRACTOR IS TO OBTAIN CONSENT FROM THE ENGINEER IN THE FORM OF WRITTEN CORRESPONDENCE GRANTING PERMISSION TO ENTER INTO THE PROPERTY TO COMPLETE ANY CONSTRUCTION ACTIVITY. THE WRITTEN CONSENT IS TO BE PROVIDED TO THE APPROVING AUTHORITY PRIOR TO THE CONTINUATION OF WORK FOR APPROVAL. THE CONTRACTOR WILL ASSUME LIABILITY FOR ALL WORKS IF FAILURE TO COMPLY.

1.10. THIS DRAWING IS TO BE READ COMBINATION WITH THE FOLLOWING:
1.10.1. STORMWATER MANAGEMENT REPORT, DECEMBER 20TH, 2021.

1.11. DURING THE CONSTRUCTION, THE CONTRACTOR ASSUMES ALL LIABILITY FOR DAMAGE TO ALL EXISTING FEATURES AND STRUCTURES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESTORATION AND RESTORED TO EXISTING CONDITION OR BETTER.

1.12. THESE PLANS ARE TO BE USED FOR SERVICING AND GRADING ONLY. ANY OTHER INFORMATION SHOWN IS FOR ILLUSTRATION PURPOSES ONLY. THESE PLANS MUST NOT BE USED TO SITE THE PROPOSED BUILDING.

1.13. THE CONTRACTOR SHALL ASSUME ALL LIABILITY FOR ANY DAMAGE TO EXISTING WORKS. THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN THE MUNICIPAL RIGHT-OF-WAY TO THE APPROVING AGENCY STANDARDS.

1.14. ALL UNDERGROUND SERVICES ARE TO BE CONSTRUCTED IN FULL COMPLIANCE WITH THE ONTARIO PROVINCIAL BUILDING CODE (PART 7, PLUMBING), THE ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) AND THE REQUIREMENTS OF THE TOWN OF ST.MARYS, WHICH CODES AND REGULATIONS SHALL SUPERSEDE ALL OTHERS.

1.15. SITE SERVICING CONTRACTOR TO TERMINATE ALL SERVICES 1 METRE FROM FOUNDATION WALL.

1.16. FILTER FABRIC TO BE TERRAFIX 270R OR APPROVED EQUAL.

1.17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC AND SAFETY MEASURES DURING THE CONSTRUCTION PERIOD INCLUDING THE SUPPLY, INSTALLATION AND REMOVAL OF ALL NECESSARY SIGNALS, DELINEATORS, MARKERS, AND BARRICADES. ALL SIGNS, ETC SHALL CONFORM TO THE STANDARDS OF THE TOWN OR AT MARYS AND THE MTO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

1.18. THE POSITION OF POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND, WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, THE CONTRACTOR SHALL INFORM HIMSELF OF THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND SHALL ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

1.19. FOLLOWING COMPLETION OF PROPOSED WORKS AND PRIOR TO OCCUPANCY INSPECTION, ALL STORM SEWERS ARE TO BE FLUSHED, AND ALL CATCHBASIN AND CATCHBASIN MANHOLE SUMPS ARE TO BE CLEANED OF DEBRIS AND SILT.

2. INSPECTION AND CERTIFICATION

2.1. GRIT ENGINEERING INC. REQUIRES A MINIMUM OF 24 HOURS NOTICE PRIOR TO THE REQUIRED INSPECTION BE REQUESTED. INSPECTIONS ARE REQUIRED TO VERIFY: PIPE INSTALLATION (MATERIALS, SIZE, LOCATION AND ELEVATION), STRUCTURE PLACEMENT, SURFACE MATERIAL AND FINISHED GRADING.

2.1.1. CONSTRUCTION WORKS WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRE FULL TIME INSPECTION.

2.1.2. CONSTRUCTION WORKS WITHIN PRIVATE LANDS ARE REQUIRED ON A PART TIME AND AS NEEDED BASIS.

2.2. FAILURE TO COMPLY WITH GRIT ENGINEERING INC. INSPECTION REQUIREMENTS, WILL RESULT IN ADDITIONAL CONSTRUCTION INSPECTION AND VERIFICATION AT THE EXPENSE OF THE CONTRACTOR.

3. STORM SEWERS AND SERVICING

3.1. PIPE BEDDING FOR RIGID PIPE TO BE CLASS 'B' AS PER OPSD 802.030, 802.031, OR 802.032. PIPE BEDDING FOR FLEXIBLE PIPE TO BE AS PER OPSD 802.010. BEDDING MATERIAL AND COVER MATERIAL TO BE GRANULAR 'A'. TRENCH BACKFILL TO BE NATIVE MATERIAL REPLACED IN 300mm LIFTS AND COMPACTED TO 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

3.2. STORM SEWERS 200mm Ø TO 450mm Ø SHALL BE POLYVINYL CHLORIDE (PVC) PIPE DR35 ASTM D3034 OR R3660 PVC SEWER PIPE CSA B182.4:M80 ASTM F794 WITH INTEGRAL BELL AND SPIGOT UTILIZING FLEXIBLE ELASTOMERIC SEALS. RIBBED PVC NOT TO BE USED WITHIN RIGHT-OF-WAY.

3.3. MAINTENANCE HOLES AND MAINTENANCE HOLE CATCHBASINS TO BE 1200mmØ PRECAST WITH ALUMINUM STEPS AT 300mm CENTRES AS PER OPSD 701.010 UNLESS OTHERWISE SPECIFIED.

3.4. MAINTENANCE HOLES TO BE BENCHED PER OPSD 701.021.

3.5. CATHBASIN STRUCTURES 600mmx600mm PER OPSD 705.010

3.6. DITCHINLET CATCHBASIN STRUCTURES 600mmx1200mm PER OPSD 705.030 (TYPE B)

3.7. DOUBLE CATCHBASIN STRUCTURES 600mmx2400mm PER OPSD 705.020

3.8. OIL GRIT SEPARATOR TO BE ADS MODEL FD-4HC OR APPROVED EQUIVALENT
RAINFALL DATA: STRATFORD
CATCHMENT AREA: 1.38 Ha
CATCHMENT IMPERVIOUS PERCENTAGE: 80.0%
QUALITY LEVEL: ENHANCED
FLOW RATE: 9.8 L/s

3.9. CATCHBASIN MAINTENANCE HOLES, CATCHBASINS AND DITCH INLET CATCHBASINS TO HAVE A MINIMUM 600mm DEEP SUMP.

3.10. MAINTENANCE HOLE AND CATCHBASIN, FRAMES, GRATES, CARTHOOD AND LIDS TO BE QUALITY GREY IRON ASTM A48 CLASS 30B.

3.11. STORM MAINTENANCE HOLE LIDS TO BE PER OPSD 401.010 - TYPE 'A' CATCHBASIN AND CATCHBASIN MAINTENANCE HOLE GRATES TO BE PER OPSD 400.100.

3.12. STORM SEWERS AND SERVICES TO HAVE MINIMUM 1.2m COVER TO TOP OF PIPE WHERE COVER TO TOP OF PIPE IS DEFICIENT, CONTRACTOR SHALL INSTALL SHALLOW SEWERS/ SEWER PIPE PER DETAIL THIS SHEET OR OTHER ENGINEERS APPROVED EQUIVALENT.

4. WATER SUPPLY SERVICES

4.1. DRY HYDRANTS TO BE INSTALLED IN ACCORDANCE TO NFPA 1142.

4.2. MAIN SHALL BE TO BE 200mmØ GALVANIZED STEEL SCHEDULE 80 OR APPROVED EQUIVALENT.

4.3. FIRE MAIN PIPE BEDDING TO BE CLASS 'B' AS PER OPSD 802.030. PIPE BEDDING AND COVER MATERIAL TO BE GRANULAR 'A' OR APPROVED EQUIVALENT. TRENCH BACKFILL TO BE APPROVED NATIVE MATERIAL AND PLACED IN 300mm THICK LIFTS COMPACTED TO A MINIMUM OF 95% STANDARD PROCTOR MAXIMUM DRY DENSITY.

5. EROSION AND SEDIMENT CONTROL

5.1. PRIOR TO THE START OF ANY CONSTRUCTION THE CONTRACTOR IS TO INSTALL THE EROSION AND SEDIMENT CONTROLS IN ACCORDANCE TO THE APPROVED PLAN.

5.2. NO ALTERNATE EROSION AND SEDIMENT CONTROLS ARE PERMITTED WITHOUT APPROVAL FROM THE ENGINEER AND APPROVING AUTHORITY.

5.3. ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE REQUIRED AS THE CONSTRUCTION PROGRESSES. THE CONTRACTOR TO INSTALL ADDITIONAL MEASURES AS REQUIRED BY THE ENGINEER AND APPROVING AUTHORITY.

5.4. THE CONTRACTOR IS TO PERFORM REGULAR MAINTENANCE, REPAIRS AND REPLACEMENT ON ALL CONTROLS TO ENSURE PROPER FUNCTIONING UNTIL PROJECT IS COMPLETE.

5.5. EROSION CONTROL FENCING TO BE INSTALLED AROUND BASE OF ALL STOCKPILES. ALL STOCKPILES TO BE KEPT 2.0m MINIMUM FROM PROPERTY LINE.

5.6. EROSION PROTECTION TO BE PROVIDED AROUND ALL STORM AND SANITARY MHs AND CBs.

5.7. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS SITE DEVELOPMENT PROGRESSES. CONTRACTOR TO PROVIDE ALL ADDITIONAL EROSION CONTROL STRUCTURES.

5.8. CONTRACTOR TO CLEAN ROADWAY AND SIDEWALK OF SEDIMENTS RESULTING FROM CONSTRUCTION TRAFFIC FROM THE SITE EACH DAY.

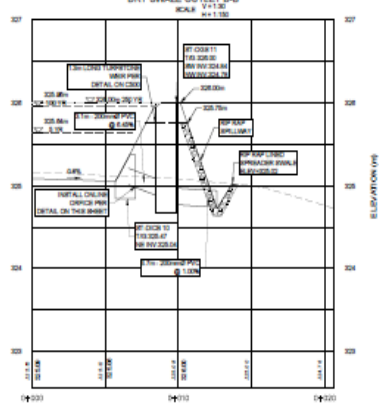
5.9. THE CONTRACTOR IS TO REMOVE ALL EROSION AND SEDIMENT CONTROLS UNTIL DEVELOPMENT IS COMPLETE AND VEGETATION PROPAGATED HAND SURFACE MATERIALS ARE INSTALLED AND VEGETATION IS ESTABLISHED WITH MATURE GROWTH.

6. MAINTENANCE RECOMMENDATIONS

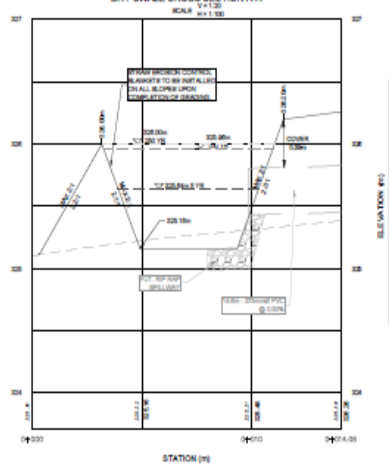
6.1. EROSION CONTROL STRUCTURES TO BE MONITORED REGULARLY AND ANY DAMAGE REPAIRED IMMEDIATELY. SEDIMENTS TO BE REMOVED WHEN ACCUMULATION REACH A MAXIMUM OF 1/3 THE HEIGHT OF THE FENCE.

6.2. OWNERS REPRESENTATIVE TO MONITOR EROSION CONTROL STRUCTURES TO ENSURE FENCING IS INSTALLED AND MAINTENANCE IS PERFORMED TO MUNICIPALITY REQUIREMENTS.

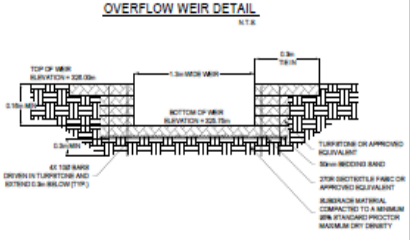
DRY SWALE OUTLET B-B



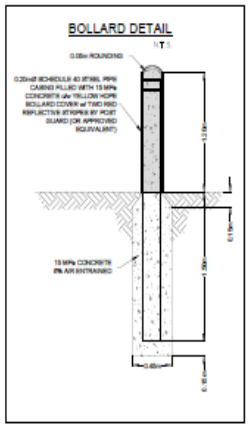
DRY SWALE CROSS SECTION A-A



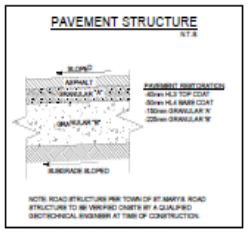
OVERFLOW WEIR DETAIL



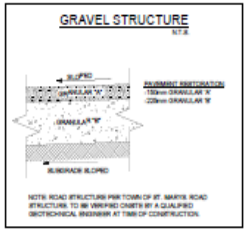
BOLLARD DETAIL



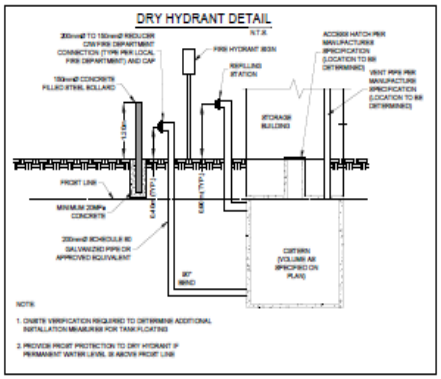
PAVEMENT STRUCTURE



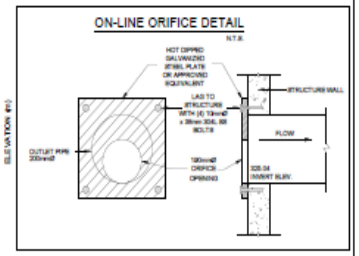
GRAVEL STRUCTURE



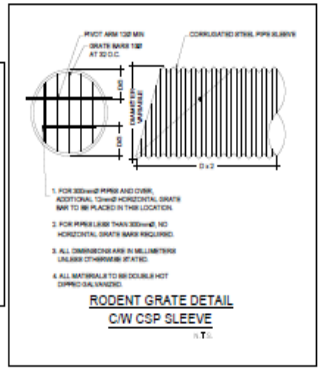
DRY HYDRANT DETAIL



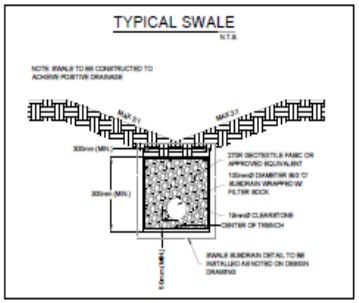
ON-LINE ORIFICE DETAIL



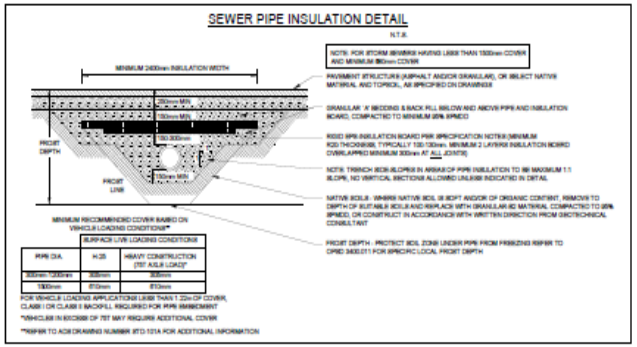
RODENT GRATE DETAIL C/W CSP SLEEVE



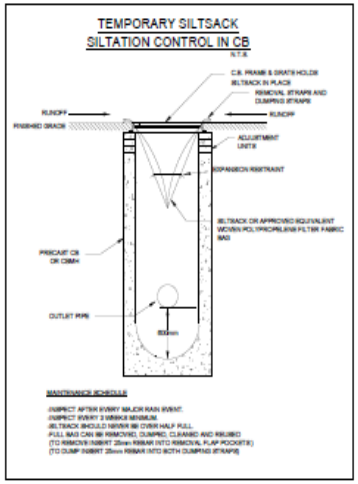
TYPICAL SWALE



SEWER PIPE INSULATION DETAIL

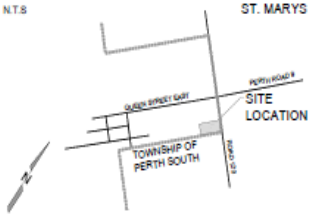


TEMPORARY SILTSACK SILTATION CONTROL IN CB



KEY PLAN

N.T.S



CONTRACTOR NOTES:

CONTRACTOR MUST CHECK AND VERIFY ALL DIMENSIONS AND REPORT ANY ERRORS TO THE ENGINEER PRIOR TO COMMENCEMENT OF WORK.

ALL DRAWINGS SHALL REMAIN THE PROPERTY OF THE ENGINEER AND SHALL NOT BE REUSED WITHOUT THE ENGINEER'S WRITTEN PERMISSION.

DRAWING SHOULD NOT BE SCALED FOR DIMENSIONS PURPOSES.

BENCHMARK

ELEVATIONS ARE RELATED TO TOP BRIDLE OF FIRE HYDRANT ON THE NORTH SIDE OF QUEEN STREET AT THE CORNER OF QUEEN AND 120 ROAD.

ELEVATION: 235.88m

No.	ISSUED DESCRIPTION	DATE
1	ISSUED FOR CLIENT REVIEW	2021-11-12
2	ISSUED FOR SITE PLAN APPROVAL	2021-11-16
3	REVISED PER MUNICIPAL COMMENTS	2021-12-20
4		
5		

GRIT ENGINEERING INC.

LICENSED PROFESSIONAL ENGINEER
M.E. WILSON
100198472
PROVINCE OF ONTARIO

ROAD 120
SELF STORAGE UNITS

PROJECT INFORMATION: 60 ROAD 120, ST. MARYS, ONTARIO

C & C MANAGEMENT

CLIENT INFORMATION

DRAWING NAME: NOTES AND DETAILS

PROJECT No: GE021-21

SCALE: AS SHOWN

DRAWING No: C500

SHEET SET No: 4 OF 4