

GRADING NOTES

- ALL EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE STARTING ANY GRADING WORKS.
- THE CONTRACTOR IS TO VERIFY THE EXISTENCE AND LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION WORKS.
- THE SITE SHALL BE GRUBBED AND CLEARED OF ALL ROCKS AND OTHER DETACHED STONES, TREES, BRUSH, DEADFALL, GRASS AND ALL DEBRIS.
- STUMP HOLES AND OTHER HOLES FROM WHICH OBSTRUCTIONS ARE REMOVED, SHALL BE BACKFILLED WITH SUITABLE MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER IN 200mm LIFTS AND COMPACTED TO AT LEAST 98% OF THE MATERIALS STANDARD PROCTOR MAXIMUM DRY DENSITY.
- NO MATERIAL OR DEBRIS SHALL BE DISPOSED OF WITHIN THE PROJECT LIMITS. ALL WASTE MATERIAL AND SURPLUS TOPSOIL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH LOCAL JURISDICTION.
- IN THE AREAS DESIGNATED FOR FILL, SUITABLE MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER SHALL BE USED AND PLACED IN 200mm LIFTS AND COMPACTED TO 100% OF ITS STANDARD PROCTOR MAXIMUM DRY DENSITY.
- FILL MATERIAL SHALL NOT BE PLACED WHEN THE MATERIAL IS FROZEN, NOR SHALL SNOW, ICE OR FROZEN EARTH BE INCORPORATED INTO THE FILL.
- THE ELEVATIONS SHOWN ARE AT FINISHED GRADE.
- THE CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL DAMAGED AND/OR DISTURBED PROPERTY WITHIN AND ADJACENT TO THE CONSTRUCTION AREA.
- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS IN THIS SET PREPARED BY PARKER CONSULTING ENGINEERS LTD.

SERVICING NOTES

- SOLID STORM SEWERS TO BE PVC SDR-35 CERTIFIED TO CSA-B-182.2 AND CSA-B-182.4 OR HDPE PIPE AASHTO M294-CAN/CSA182 WITH INTEGRAL BELL AND SPIGOT UTILIZING FLEXIBLE ELASTOMERIC SEALS OR ADEQUATE APPROVED BY THE DESIGN ENGINEER.
- STORM SEWER INSTALLATION METHODS SHALL CONFORM TO OPSS 404 SUPPORT SYSTEMS AND OPSS 410 SEWER PIPE INSTALLATION IN OPEN CUT. FLEXIBLE PIPE BEDDING AND COVER MATERIAL PIPES SHALL BE GRANULAR 'A' COMPACTED TO 98% STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD) AS PER OPSS 802.010, AND OPSS 401. ALL TRENCH BACKFILL SHALL BE SELECT NATIVE MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER COMPACTED IN 200mm THICK LIFTS COMPACTED TO 98% SPMDD, WHERE SELECT NATIVE MATERIAL IS NOT SUITABLE FOR TRENCH BACKFILL GRANULAR 'B' SHALL BE USED.
- THE SUBDRAIN TO BE PERFORATED HDPE STORM SEWER PIPE OF 320KPA WITH SPLIT COUPLE JOINING SYSTEM CONFORMING TO CSA 182.8-02, OPSS 1840 BY ARMETEC OR EQUIVALENT APPROVED BY ENGINEER.
- ALL PIPE ELEVATIONS ARE GIVEN TO INVERT, UNLESS OTHERWISE SPECIFIED.
- DIMENSIONAL TOLERANCES FOR BURIED PIPE LOCATION AND ELEVATION IS +/- 10mm.
- CAP OPEN ENDS OF UNDERDRAINAGE.
- GEOTEXTILE TO BE ARMETEC OR EQUIVALENT APPROVED BY ENGINEER.

MATERIAL COMPACTION NOTES

THE FOLLOWING SCHEDULE SHALL BE USED FOR THE PLACEMENT AND COMPACTION OF THE PROPOSED MATERIALS AS PER THE GEI CONSULTANTS SUBSURFACE INVESTIGATION AND GEOTECHNICAL REPORT, ALMONTE-BATTERY ENERGY STORAGE SYSTEM, 6299 COUNTY ROAD 29, MISSISSIPPI MILLS, ONTARIO, DATED FEBRUARY 28, 2024.

EXTERNAL GRAVEL ACCESS ROADS:
 - 200mm THICK GRANULAR A (OPSD.MUNI 1010) COMPACTED TO 100% SPMDD
 - 400mm THICK GRANULAR B TYPE I OR II (OPSD.MUNI 1010) COMPACTED TO 100% SPMDD

THE FOLLOWING SCHEDULE SHALL BE USED FOR THE PLACEMENT AND COMPACTION OF THE PROPOSED MATERIALS AS PER THE EMAIL FROM ALEXANDER WINKELMANN AT GEI CONSULTANTS, RE: ALMONTE ROAD DESIGN - GEO SPECIFICATIONS, DATED JUNE 28, 2024.

INTERNAL GRAVEL ACCESS ROADS:
 - 150mm THICK GRANULAR A (OPSD.MUNI 1010) COMPACTED TO 100% SPMDD
 - 300mm THICK GRANULAR B TYPE II (OPSD.MUNI 1010) COMPACTED TO 100% SPMDD

GRAVEL PAD AREAS:
 - 150mm THICK WASHED CRUSHED STONE, 3,000 ohm-m, LOOSLY COMPACTED
 - 300mm THICK GRANULAR B TYPE II (OPSD.MUNI 1010) COMPACTED TO 100% SPMDD

GRANULAR SUB BASE:
 - COMPACTED TO 100% SPMDD

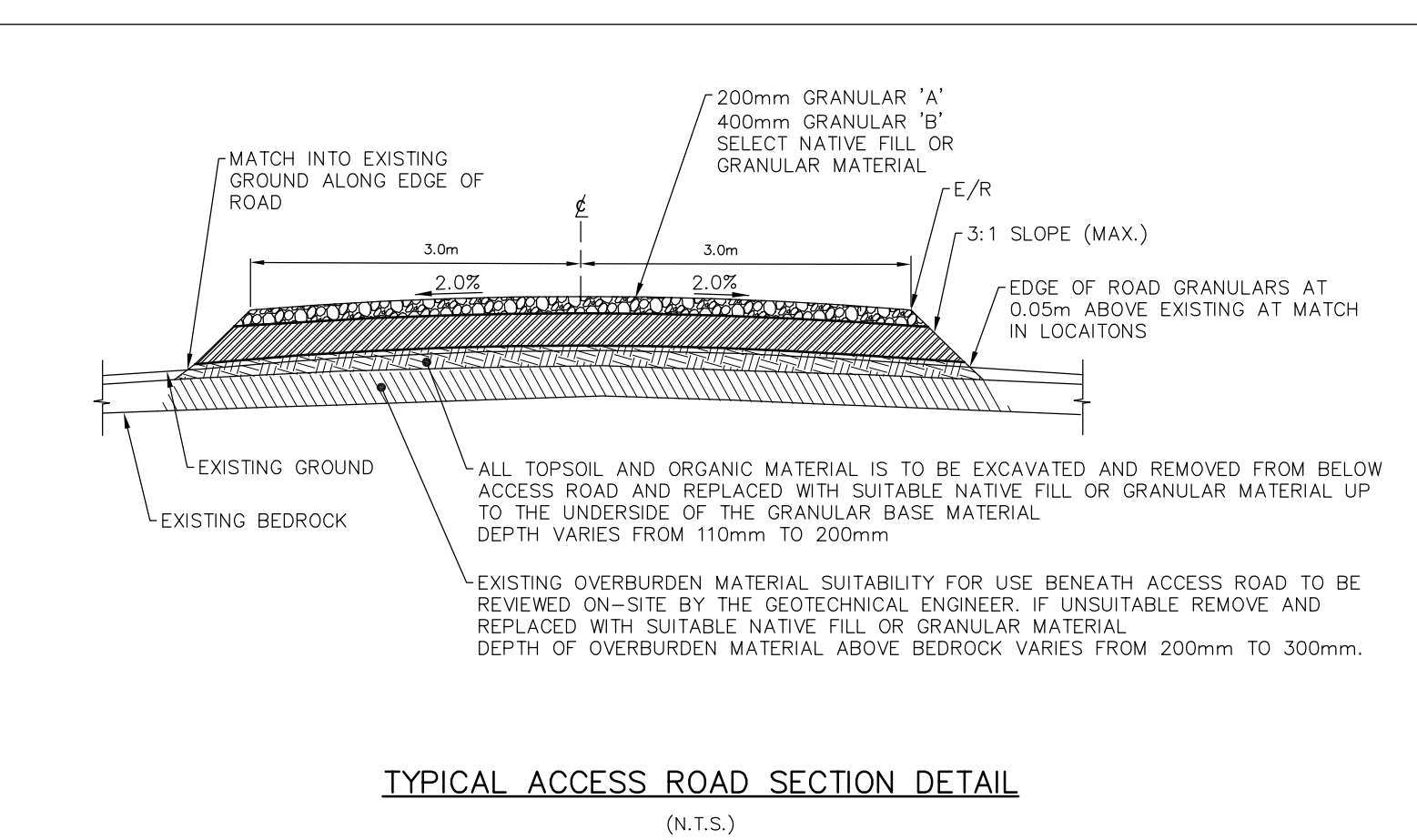
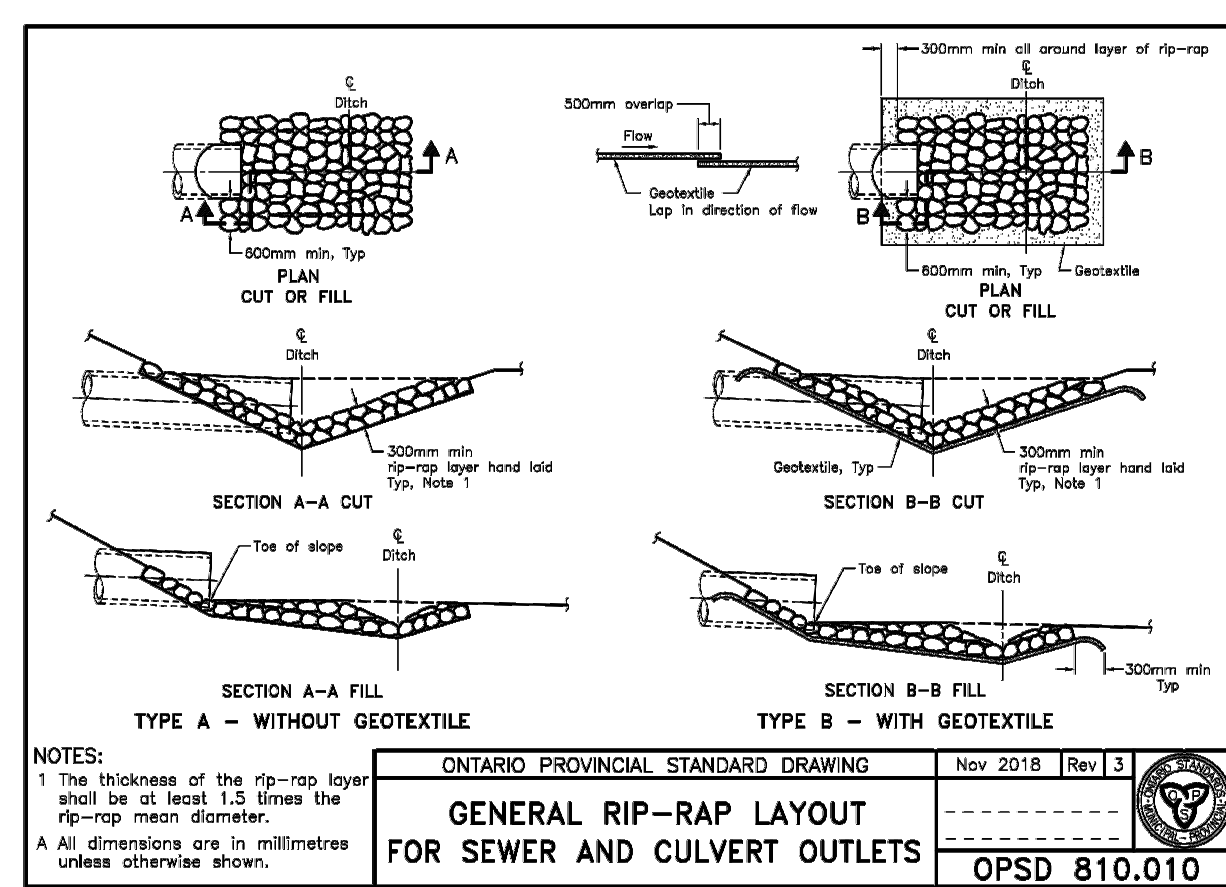
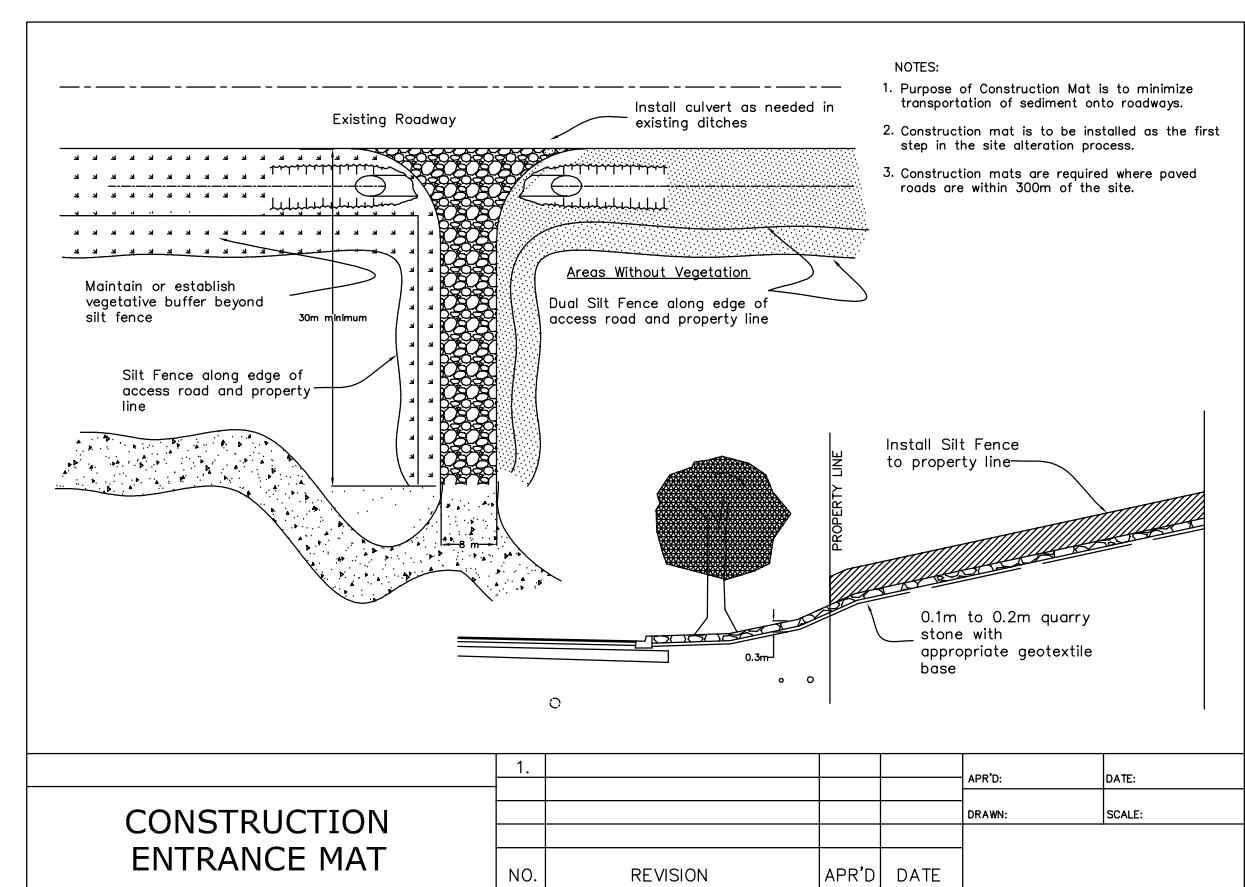
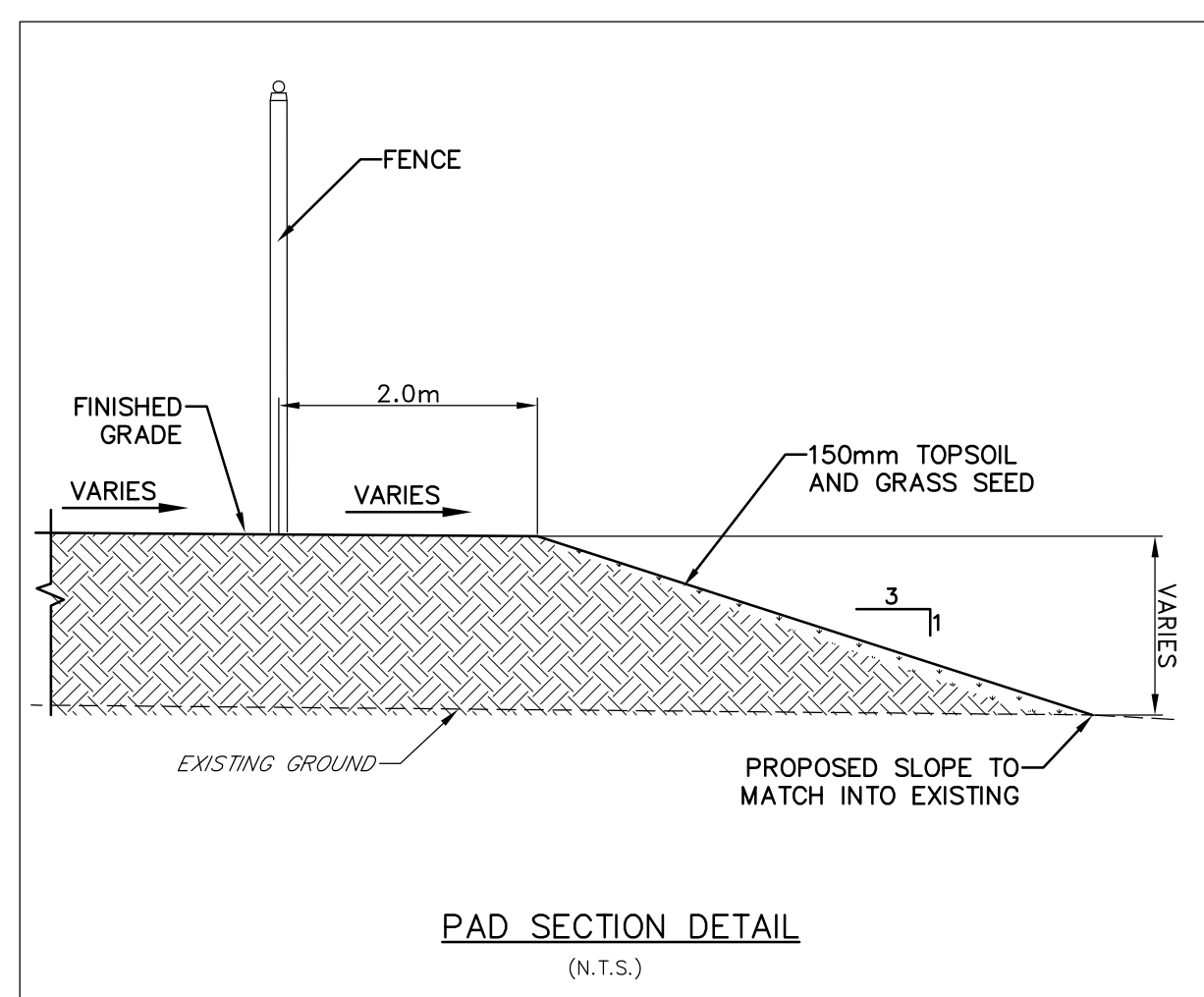
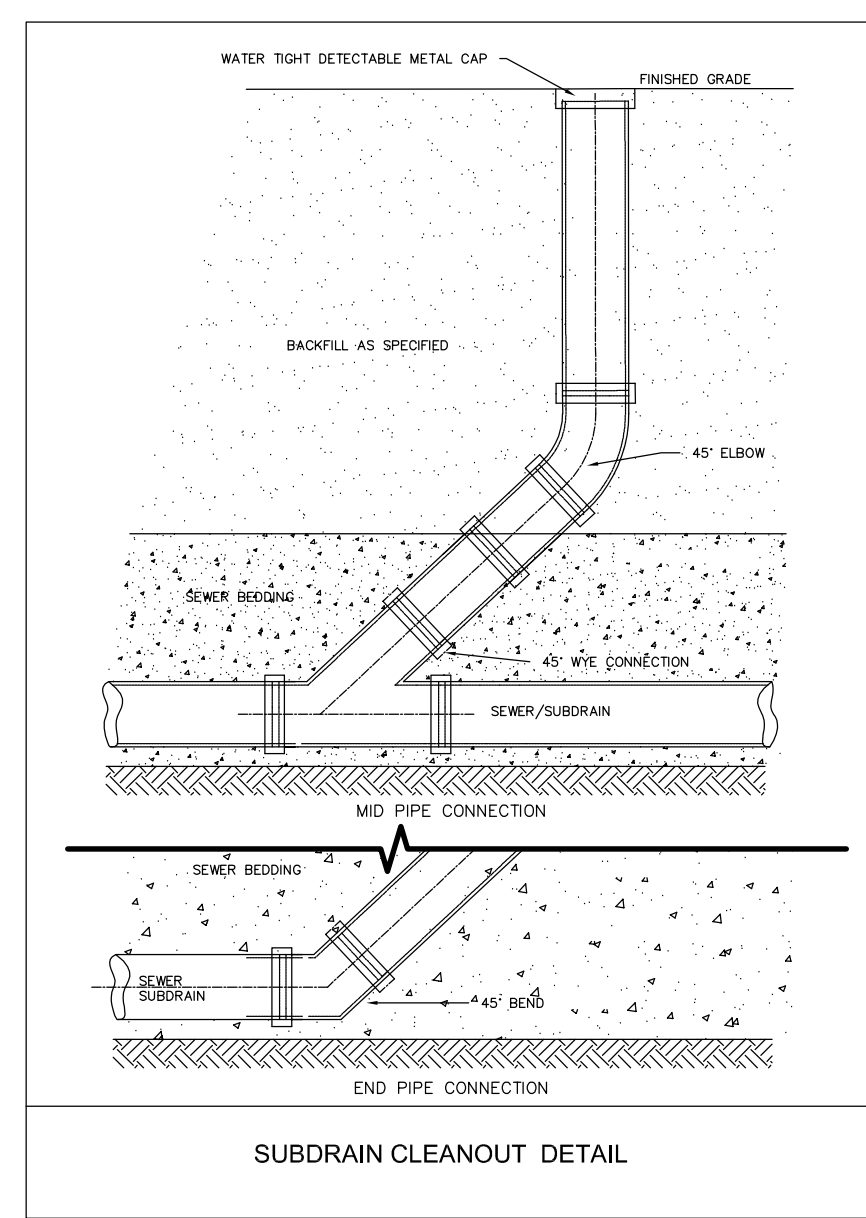
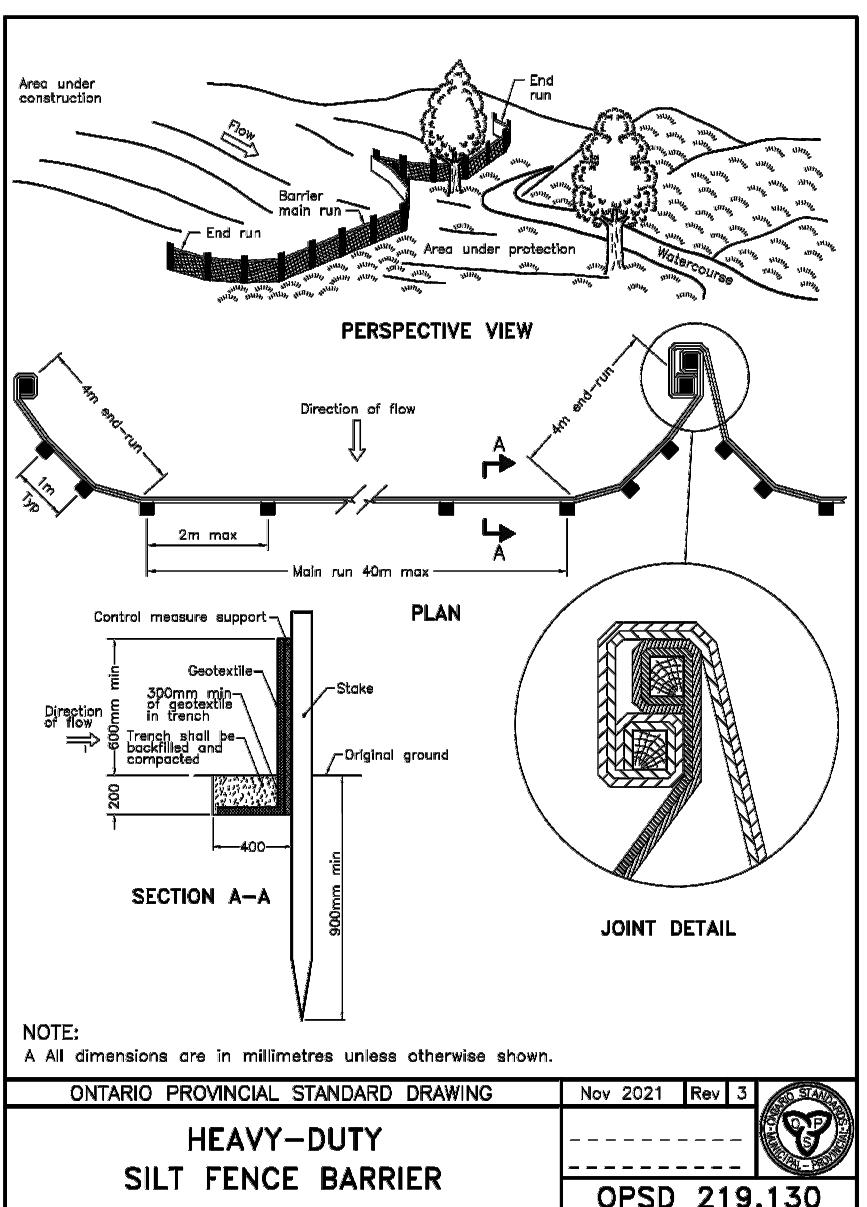
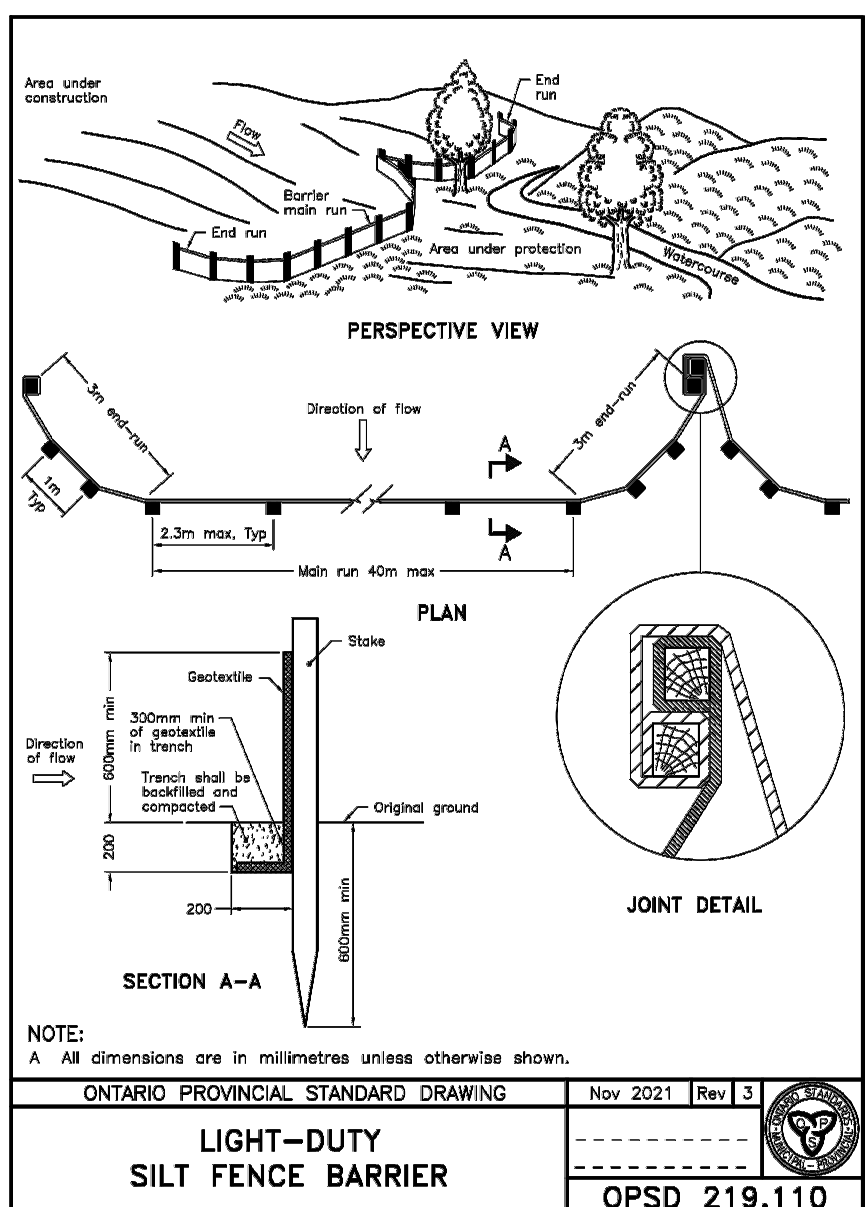
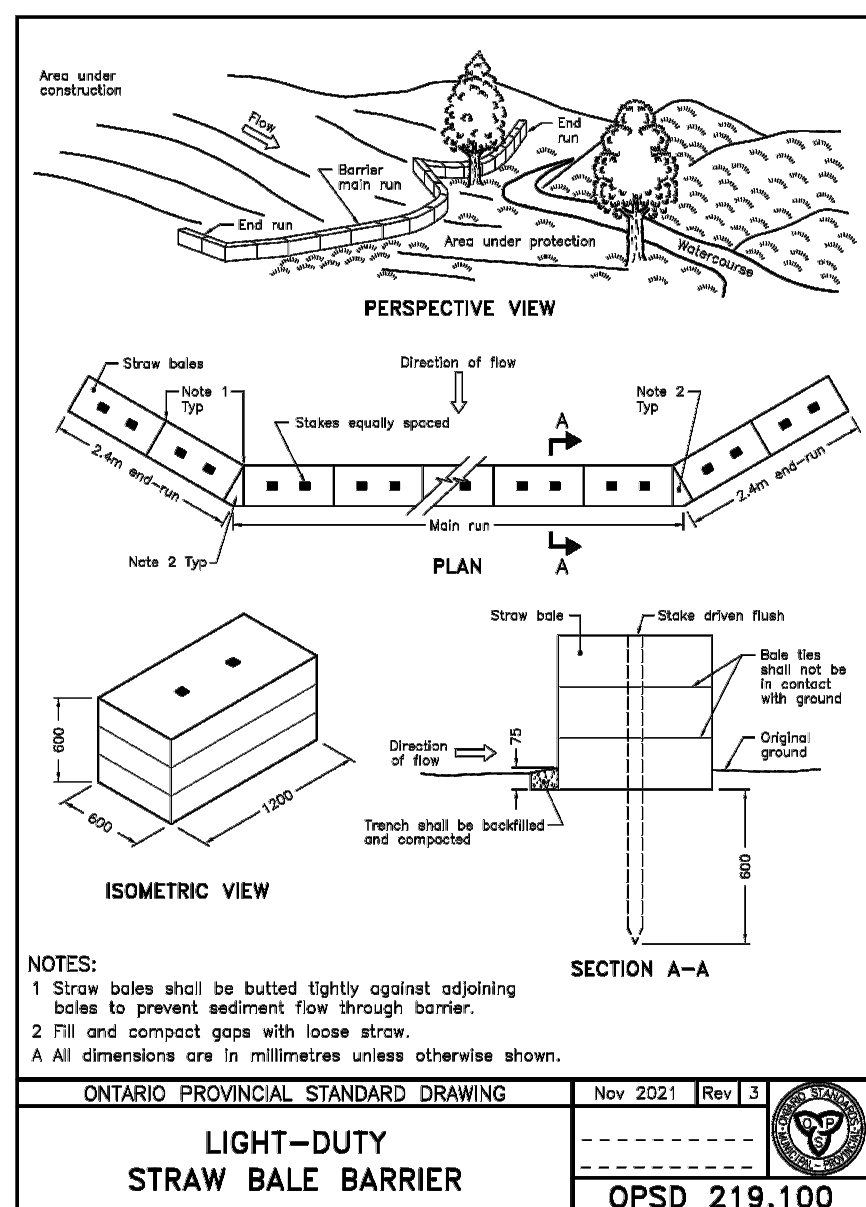
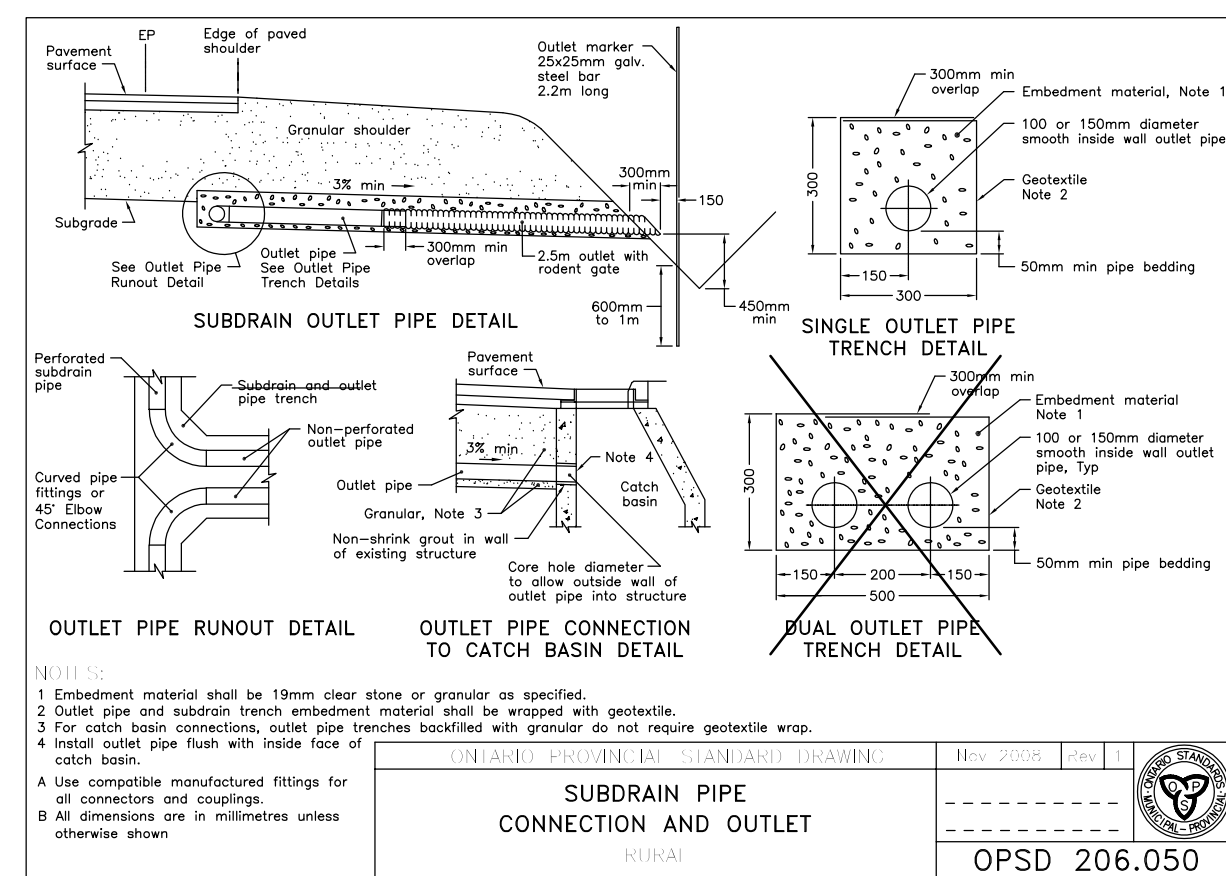
GRASSED AREAS:
 - GRASS SEED / 500
 - 150mm THICK TOPSOIL

CONSTRUCTION NOTES

- THE FOREGOING DESIGN ASSUMES THAT CONSTRUCTION IS CARRIED OUT DURING DRY PERIODS AND THE SUB-GRADE IS STABLE UNDER THE LOAD OF THE CONSTRUCTION EQUIPMENT. IF CONSTRUCTION IS CARRIED OUT DURING WET WEATHER AND HEAVING OR ROLLING OF THE SUB-GRADE IS EXPERIENCED ADDITIONAL THICKNESS OF GRANULAR MATERIAL MAY BE REQUIRED.
- THE LONG-TERM PERFORMANCE OF THE ROAD BASE STRUCTURE IS HIGHLY DEPENDENT UPON THE SUB-GRADE STABILITY CONDITIONS. STRINGENT CONSTRUCTION CONTROL PROCEDURES SHOULD BE MAINTAINED TO ENSURE THAT UNIFORM SUB-GRADE MOISTURE AND DENSITY CONDITIONS ARE ACHIEVED. IF GOOD MATERIAL IS EXPERIENCED DURING THE EXCAVATION PROCESS, A GRAIN SIZE ANALYSIS MUST BE COMPLETED TO DETERMINE IF THE MATERIAL CAN BE LEFT IN PLACE AND ALLOW A REDUCTION IN THE FINISHED GRANULAR SURFACE. THE UNDERLYING SUB-GRADE WILL BE FREE OF DEPRESSIONS IS TO BE SLOPED TO PROVIDE POSITIVE SURFACE DRAINAGE. SURFACE WATER IS NOT BE ALLOWED TO POND ADJACENT TO THE OUTSIDE EDGES.
- AS PART OF THE SUB-GRADE PREPARATION, PROPOSED ROADWAYS SHALL BE STRIPPED OF TOPSOIL AND THE OBVIOUSLY UNSUITABLE MATERIAL FILL REQUIRED TO RAISE THE GRADES TO DESIGN ELEVATIONS SHALL BE ORGANIC-FREE AND AT THE MOISTURE CONTENT WHICH WILL PERMIT COMPACTION TO THE DENSITIES INDICATED. THE SUB-GRADE SHALL BE PROPERLY SHAPED, CROWNED, AND THAN PROOF-ROLLED IN THE FULL-TIME PRESENCE OF THE GEOTECHNICAL CONSULTANT. SOFT OR SPONGY SUB-GRADE AREAS SHALL BE SUBEXCAVATED AND PROPERLY REPLACED WITH A SUITABLE APPROVED BACKFILL.

TOPOGRAPHICAL SURVEY NOTE

THE TOPOGRAPHICAL SURVEY INFORMATION HAS BEEN PROVIDED BY OTHERS AND PARKER CONSULTING ENGINEERS LTD. CANNOT BE HELD LIABLE FOR ANY DAMAGES AS A RESULT OF THE USE OF THE DATA. THE CONTRACTOR IS TO CONFIRM THE EXISTING SITE CONDITIONS AND ADVISE PARKER CONSULTING ENGINEERS LTD. OF ANY DISCREPANCIES.



- NOTES:**
- ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE NOTED.
 - THE TOPOGRAPHICAL AND LEGAL SURVEY INFORMATION HAS BEEN TAKEN FROM THE PLAN ILLUSTRATING TOPOGRAPHICAL INFORMATION ON PART OF LOT 8 CONCESSION 8, GEOGRAPHIC TOWNSHIP OF RAMSAY, MUNICIPALITY OF MISSISSIPPI MILLS, COUNTY OF LANARK, PROVIDED BY GEORGE N. BRACKEN, ONTARIO LAND SURVEYOR, REFERENCE No. 24-2281.
 - ELEVATIONS SHOWN HEREON ARE GEODETIC (CGVD-1928: 1978) AND ARE DERIVED FROM THE CANNET VRS NETWORK STATION CARLETON PLACE, ELEVATION = 144.53m
 - SURVEY BENCHMARK
 - MAG NAIL IN ROOT OF 0.40m BASSWOOD TREE HAVING AN ELEVATION OF 140.03m
 - MAG NAIL IN 0.60m OAK TREE HAVING AN ELEVATION OF 139.82m
 - THE STATION INFORMATION HAS BEEN TAKEN FROM THE ALMONTE 4.99 MW BESS SITE LAYOUT PLAN, PREPARED BY CHIMAX INC., DRAWING No. 2350-E01.



REV.	ISSUED FOR CONSTRUCTION	DATE	DRAWN	CHECKED	APPROVED
0	ISSUED FOR CONSTRUCTION	29/07/2024	PCEL CAD	JP	JP

ISSUED FOR CONSTRUCTION



Black & McDonald

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COMPASS ENERGY ALMONTE BESS

ALMONTE 4.99 mw BESS GRADING DETAILS

CLIENT DRAWING NUMBER

DRAWING NUMBER 2350-C206 REVISION 0 SHEET 1

DATE 04/04/2024 DRAWN: PCEL CAD CHECKED: JP APPROVED: JP SCALE: NTS



ENG. SEAL

PARKER CONSULTING ENGINEERS LTD.

Chimax Inc.
 Engineering Company