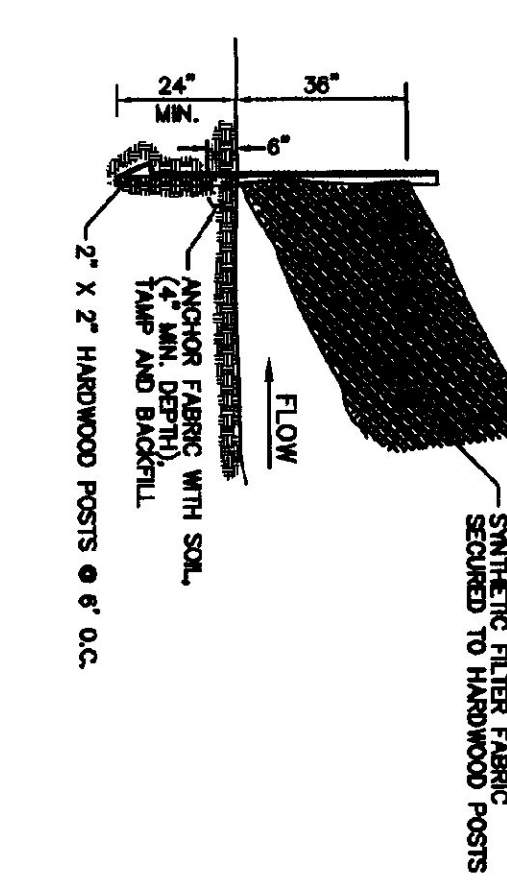
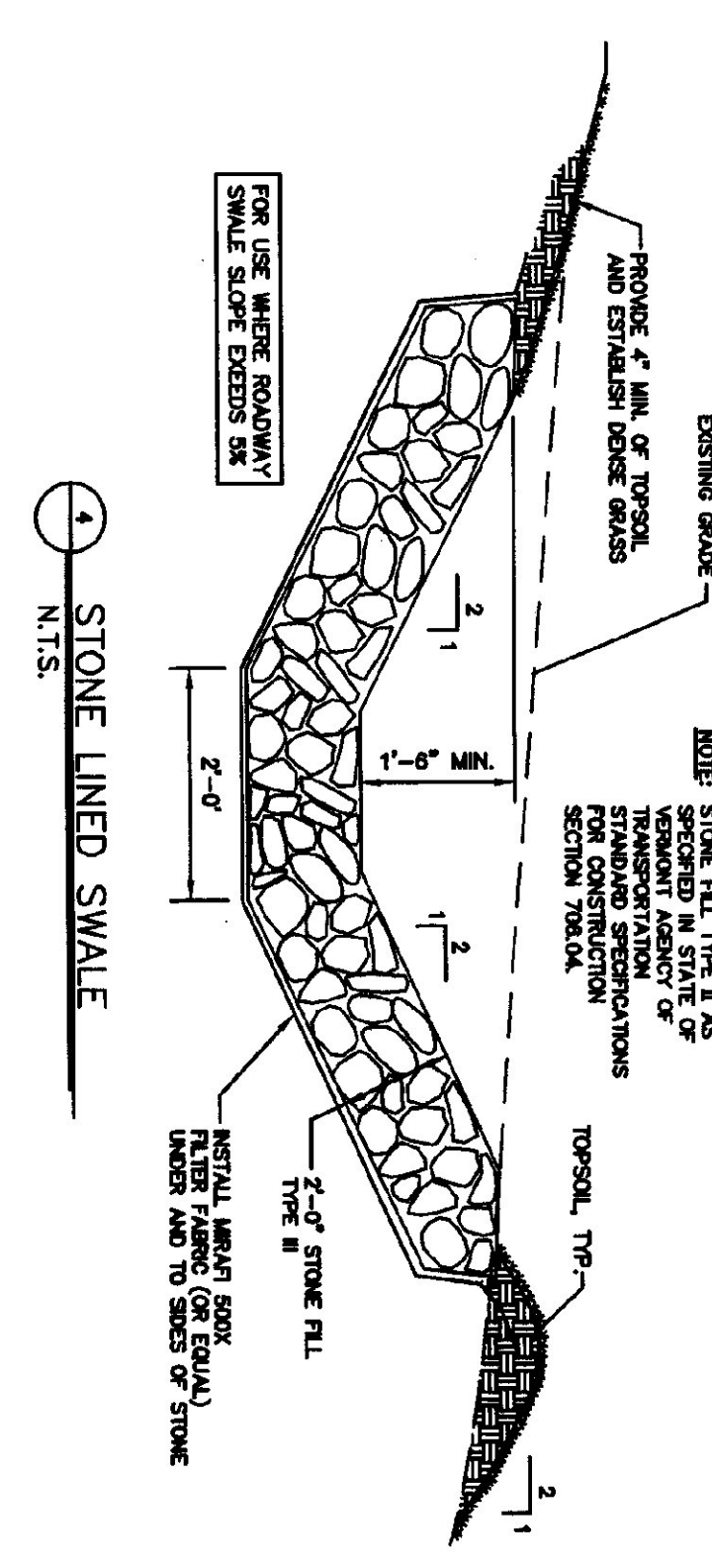


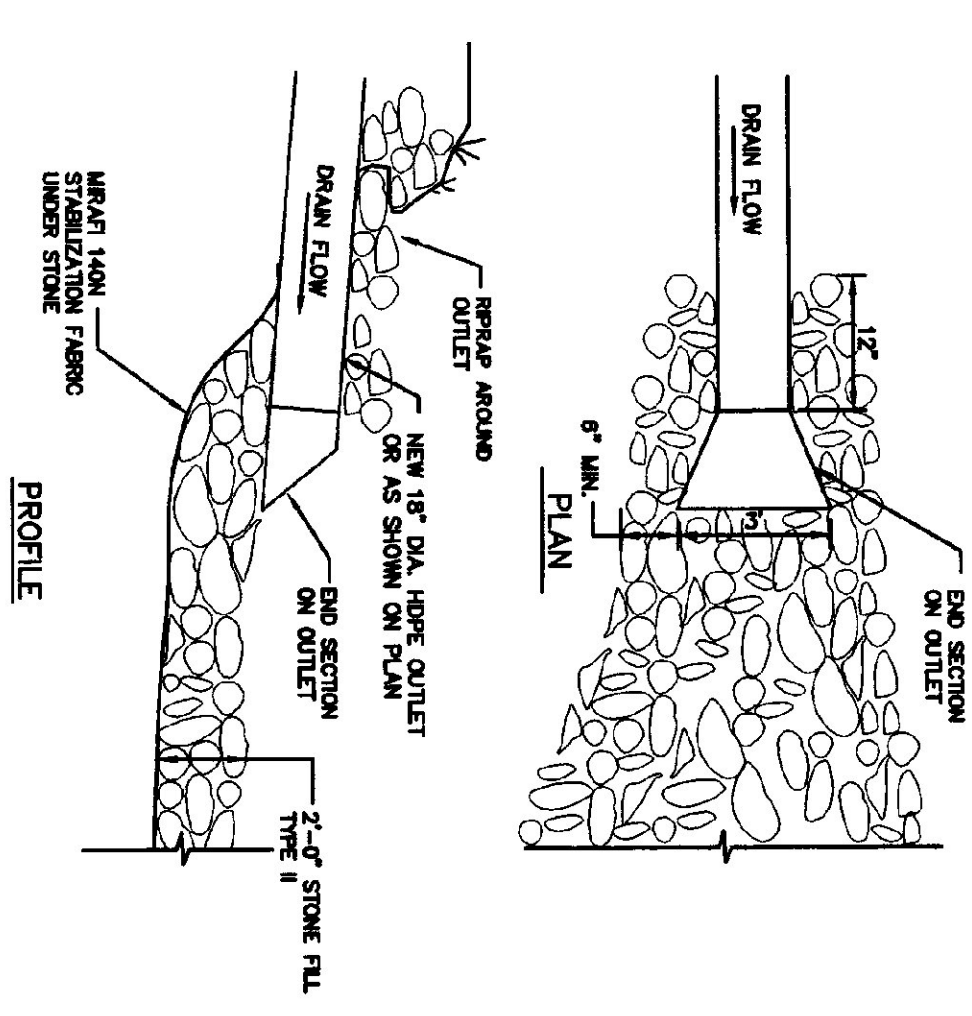
1 INLET PROTECTION
N.T.S.



2 SILT FENCE DETAIL
N.T.S.



3 STONE LINED SWALE
N.T.S.

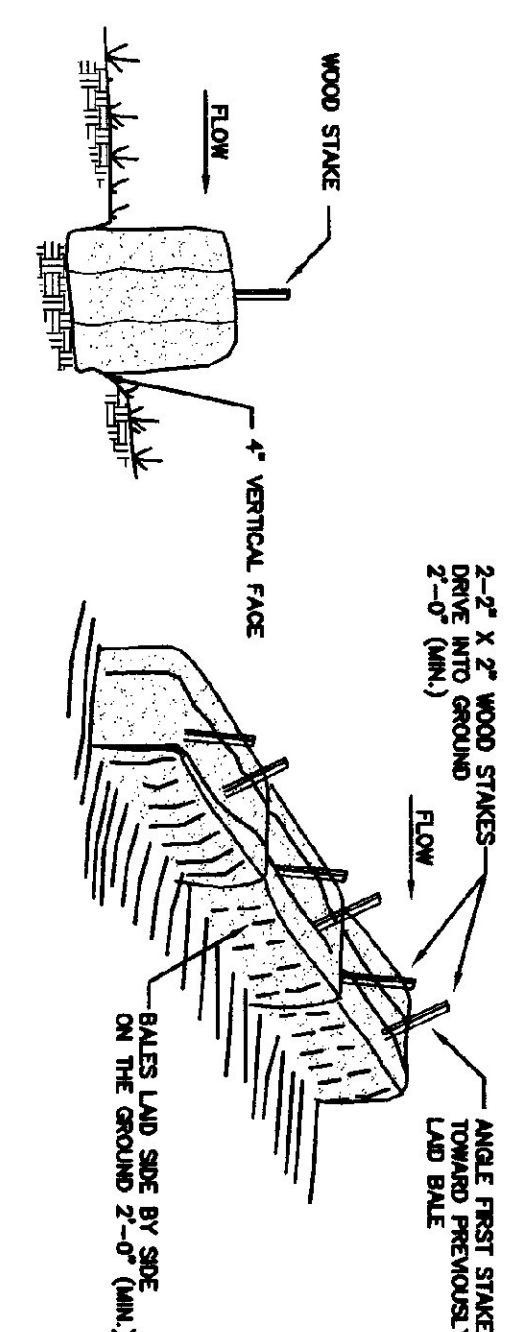


4 TYPICAL OUTLET DETAIL
N.T.S.

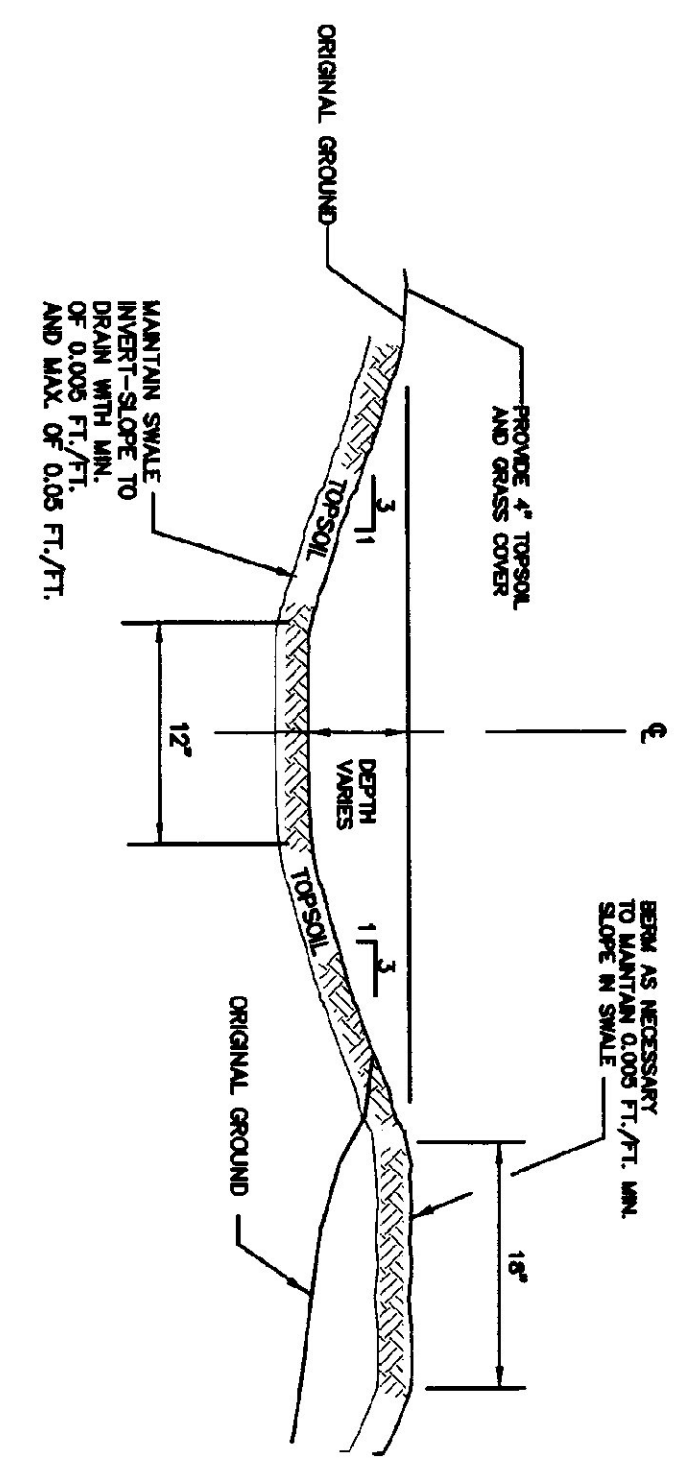
SEEDING SPECIFICATION

SEED WEIGHT PER ACRE	SEED TYPE	SEED SOURCE
37.5	GRASS	VERMONT RED FESCUE
37.5	LEGUME	WINTER HAYCOCK PERENNIAL RYE
100	SEEDING MIXTURE	VERMONT RED FESCUE (50%), WINTER HAYCOCK PERENNIAL RYE (50%)

5 SITE RESTORATION



5 BALED HAY EROSION CHECKS
N.T.S.



6 TYPICAL SHALLOW DIVERSION SWALE
N.T.S.

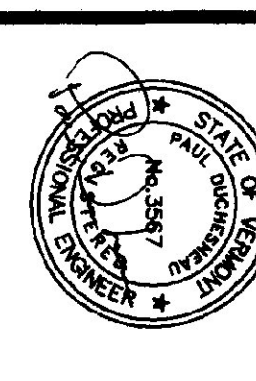
EROSION CONTROL

- General Notes
 - The Contractor shall construct and maintain all erosion control measures in accordance with the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites, Speedel Publication no. 5.
- Construction Sequence
 - The Contractor shall be responsible for establishing all erosion control measures determined on site plans and any additional measures that are necessary to minimize erosion. The Contractor shall provide all necessary equipment on site at all times.
 - Silt fences shall be installed along the base of the fill slopes. This shall remain in place until the slopes are stabilized. The Contractor shall be responsible for the maintenance of silt fences. Hay bales shall be removed when vegetation is established.
 - Dust shall be controlled through the application of sodium chloride or water.
 - Excavated material from earth excavation and ditch digging shall be disposed of offsite or used for project fill material if determined suitable by the Owner's Representative.
 - All temporary erosion control measures required for any proposed winter work shall be installed prior to October 1. These measures shall be in place prior to the commencement of any site work or earth-moving.
- Temporary Measures
 - Hay Bale Check-Dam and Inlet Protection** - Bales shall be placed in a row with ends tightly abutting the adjacent bales. Each bale shall be impaled in the soil a minimum of 12 inches. The bales shall be placed in a row with ends abutting and driven through the holes. The first bales in each row shall be driven toward the previously laid bales to force the bales together. Bales shall be repaired or replaced as needed. Once vegetation is established and the slopes are stabilized, the bales shall be removed and placed in an upland area where there is no danger of further erosion.
 - Silt Fences** - The silt fence shall be constructed in accordance with the construction detail. The fence shall be placed 10 feet from the toe of the slope or on a stream on the plan. The ends of the fence shall be placed uphill to form a horseshoe shape to trap all runoff. The silt fence shall be inspected periodically for damage or buildup of sediment. All damaged silt fences shall be repaired or replaced. Sediment deposits shall be removed from the fence as they accumulate and placed in an area where there is no danger of further erosion.
 - Erosion Matting** - Erosion matting shall be placed on all grass-lined swales with profile grades exceeding 5.0% and shall be placed and maintained in accordance with the Vermont Agency of Transportation Standard Specifications Sections 654 and 755.07. AASHTO M 144 or Sodium Chloride M 143 may be used.
 - Dust Control** - During construction, dust will be controlled with water distributed by a truck-mounted spray bar. At the direction of the Engineer, Calcium Chloride MASHTO M 144 or Sodium Chloride M 143 may be used.
 - All hydrophilic material (grass, hay, etc.) will have a hay bale pile or silt fence constructed around the perimeter. Seed and mulch stockpile material as soon as possible to prevent soil erosion and sedimentation of site. Loose stockpiles on the uphill side of disturbed areas, if possible. During windy conditions, stockpiled material shall be covered or watered appropriately to prevent wind erosion.
 - Slopes greater than 1:3 shall have erosion control matting installed to stabilize the slope and reduce the erosion potential. Install matting over mulched slopes so that all parts are in contact with the soil and mulch. Pin matting with wire staples 3 feet o.c. to ensure full bonding with soil surface.
- Permanent Measures
 - Grass Lined Swales** - All swales that are not stone-lined shall be topsoiled, seeded, fertilized, and mulched. The topsoil shall be applied at a rate of 800 pounds per acre depending on soil type. Fertilizer shall be applied at a rate of 800 pounds per acre depending on soil type. Mulch shall be applied to the topsoil to produce a soil PFI of approximately 5:0.
 - After the finished grade has been established and the fertilizer spread, plant the specific seed mixture and work firmly into the soil. Apply seed on the prepared surface. The seed shall be applied at a rate of 800 pounds per acre depending on soil type. The topsoil shall be applied at a rate of 800 pounds per acre depending on soil type. Fertilizer shall be applied at a rate of 800 pounds per acre depending on soil type. Mulch shall be applied to the topsoil to produce a soil PFI of approximately 5:0.
 - Restoration** - As soon as construction is completed in a given area, it shall be topsoiled, seeded, fertilized and mulched.
- Winter Construction
 - If due to the project schedule, construction during the winter months is necessary, the contractor shall follow the winter construction procedures outlined in the Vermont Handbook for Soil Erosion and Sediment Control on Construction Sites.
 - Minimize disturbance between October and May.
 - All erosion control measures shall be in place prior to the ground freezing.
 - Mulch shall be applied to all disturbed areas at a rate of 80 pounds per 1,000 square feet. The mulch shall be applied to all areas that are mulched until permanent vegetation can be established.
- Maintenance, Guarantees and Acceptance
 - The Contractor shall be responsible for the care and maintenance, including watering of seeded areas, until the seeding is inspected and accepted by the Owner.
 - Reseeding shall be done until all areas are completely covered with a mature stand of grass. An area shall be considered covered when the entire surface contains a permanent stand of grass. In the event of a permanent stand of grass, the contractor shall be responsible for the maintenance, watering, fertilizing and seeding in the manner specified previously, exercising caution not to cause damage to new or existing plant material.
 - Maintain and guarantee all seeded areas until acceptance.

REVISIONS

NO.	DATE	DESCRIPTION

CHAMPLAIN CONSULTING ENGINEERS
85 PRIM ROAD, P.O. BOX 453
COLCHESTER, VERMONT 05446
(802) 863-8060
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INTERSTATE 89 SOUTHBOUND
WILLISTON INFORMATION CENTER
EROSION CONTROL DETAILS
PROJECT # IM-BLDG(4) VERMONT

CSsb
DRAWN: OCE
CHECKED: PD
SCALE: NONE
DATE: 01/16/01
JOB NO.: 93114
SHEET: 19