

EROSION PREVENTION AND SEDIMENT CONTROL NARRATIVE FOR THE WEATHERSFIELD TH 3 9514 BRIDGE REPLACEMENT PROJECT

THE PURPOSE OF THIS PROJECT IS TO REPLACE AN EXISTING BRIDGE LOCATED ON A GRAVEL CLASS 3 TOWN HIGHWAY LOCALLY KNOWN AS THE TARBELL HILL ROAD. THE BRIDGE IS LOCATED APPROXIMATELY 1.29 KM WESTERLY OF THE TOWN HIGHWAYS INTERSECTION WITH VT106. THE ROAD WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION WITH A PEDESTRIAN BRIDGE PROVIDED JUST DOWNSTREAM OF THE NEW BRIDGE CONSTRUCTION. THE NEW BRIDGE WILL BE CONSTRUCTED ON THE SAME HORIZONTAL ALIGNMENT AS THE EXISTING BRIDGE AND THE ROADWAY AND BRIDGE FINISH GRADE WILL BE APPROXIMATELY 0.3 METERS HIGHER THAN EXISTING IN THE IMMEDIATE AREA OF THE BRIDGE AND WILL TAPER BACK TO THE EXISTING ROAD GRADE WITHIN 50 METERS EACH SIDE OF THE BRIDGE. THE NEW BRIDGE WILL BE APPROXIMATELY 2.5 METERS WIDER THAN THE EXISTING BRIDGE. THE TOTAL AREA OF DISTURBANCE NECESSARY TO CONSTRUCT THIS PROJECT IS ESTIMATED TO BE 1400 SQ. METERS (0.14 HECTARES), THE MAJORITY BEING IN THE RESHAPING OF THE GRAVEL ROAD SURFACE WITH APPROXIMATELY 200 SQ. METERS OF IMPERVIOUS AREA BEING ADDED TO THE EXISTING GRAVELED AREA.

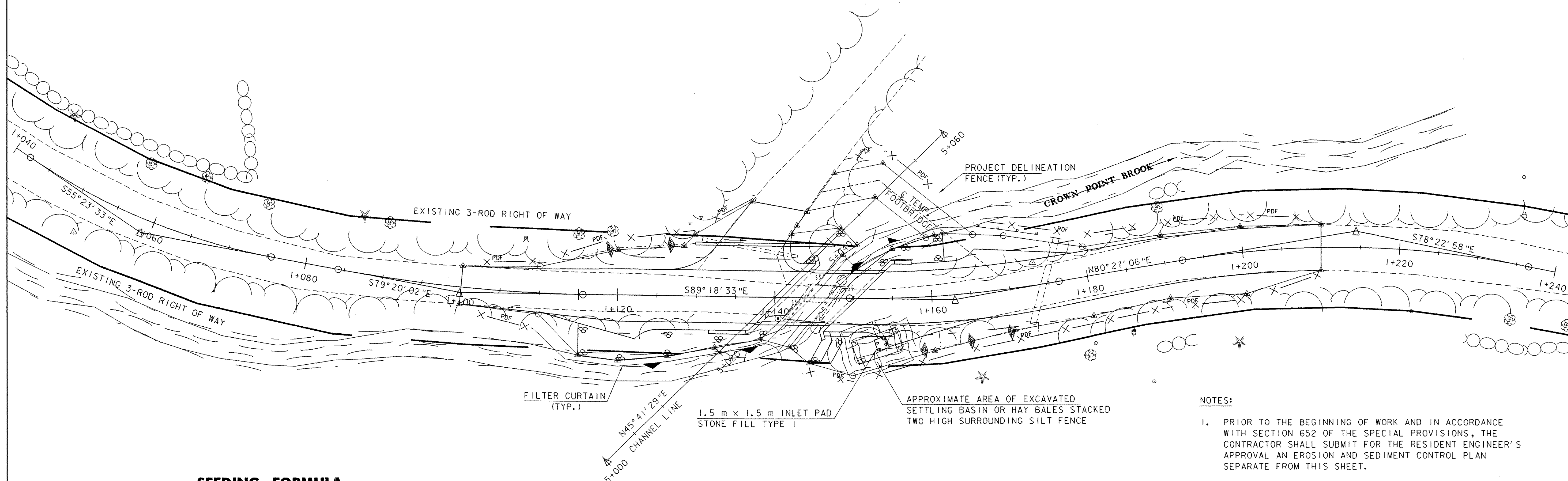
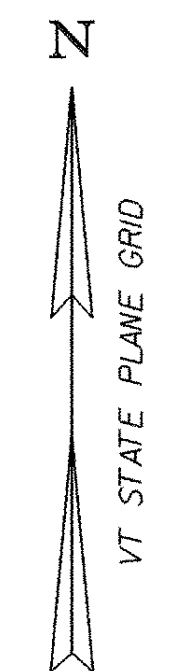
THE PROJECT IS SITED IN A FAIRLY NARROW VALLEY WITH STEEP HEAVILY FORESTED SLOPES TO THE SOUTH AND NORTHEAST AND A GRAVEL DRIVE TO THE NORTHWEST. THE SOILS ARE DESCRIBED AS A MARLOW FINE SANDY LOAM ON THE SOIL SURVEY MAP DISTRIBUTED BY THE WINDSOR COUNTY NATURAL RESOURCES CONSERVATION SERVICE AND LIE ON 35 TO 60% SLOPES. BORINGS TAKEN FOR THE PROJECT INDICATE SANDY GRAVELLY SOILS MIXED WITH BOULDERS. IF VEGETATION IS REMOVED, THE TYPE AND SLOPE OF THESE SOILS PRESENT A HIGH EROSION POTENTIAL.

CROWN POINT BROOK PARALLELS THE ROAD WEST OF THE BRIDGE TURNING ABRUPTLY AT THE BRIDGE CROSSING AND DIVERGES FROM THE ROAD AS IT FLOWS TO THE EAST. BOTH THE ROAD AND THE STREAM IN THE PROJECT AREA ARE ON RELATIVELY STEEP GRADIENTS OF APPROXIMATELY 7%. CROWN POINT BROOK IS LISTED AS A CLASS B STREAM BY THE VERMONT AGENCY OF NATURAL RESOURCES WATER QUALITY DIVISION AND FLOWS YEAR ROUND WITH AN AVERAGE DAILY FLOW OF 0.1 CUBIC METERS PER SECOND.

VEGETATION IN THE PROJECT AREA IS MOSTLY GRASSES AND A FEW SAPPLINGS IN THE 3 INCH CALIPER RANGE. ALL OF THE DISTURBED AREAS OUTSIDE THE LIMITS OF THE BRIDGE AND ROADWAY WILL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED IN ACCORDANCE WITH THE SEED FORMULA LISTED IN THE PLANS. BECAUSE OF THE CONFINED AREA, THE TREES WILL NOT BE REPLACED.

SENSITIVE RESOURCES IDENTIFIED IN THE PRELIMINARY STAGES OF THIS PROJECT ARE THE BROOK TROUT POPULATION IN THE CROWN POINT BROOK AND A DEER WINTERING RANGE ALONG THE NORTHERN EDGE OF TH3.

THE ONLY PERMANENT EROSION AND SEDIMENT CONTROL MEASURES REQUIRED ARE THE LINING OF THE CHANNEL SLOPES IN THE IMMEDIATE VICINITY OF THE BRIDGE WITH STONE FILL AND GRUBBING MATERIAL AND THE NORMAL SEEDING AND MULCHING OF THESE AND OTHER DISTURBED AREAS.



SEEDING FORMULA RURAL AREAS

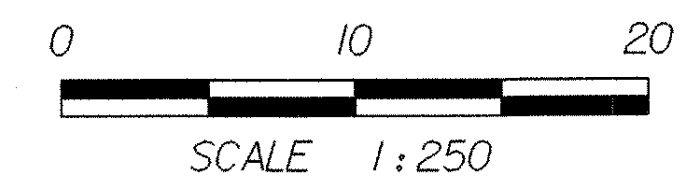
% WT.	kg/ha	NAME	PUR %	GERM %
37.5	26.0	CREEPING RED FESCUE	98	85
37.5	26.0	TALL FESCUE	95	90
5.0	4.0	RED TOP	95	90
15.0	10.0	BIRDSFOOT TREFOIL	98	85
5.0	4.0	ANNUAL RYE GRASS	95	85
100.0	70.0			

GENERAL NOTES

- SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- SEED: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.
- FERTILIZER: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA).
- AGRICULTURAL LIMESTONE: TO BE APPLIED AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.
- HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 4500 kg/ha, OR AS DIRECTED BY THE ENGINEER.
- TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.

LEGEND

- FILTER CURTAIN
- SILT FENCE
- HAY BALES
- DITCH WITH STONE CHECK DAMS
- PROJECT DELINEATION FENCE



NOTES:

- PRIOR TO THE BEGINNING OF WORK AND IN ACCORDANCE WITH SECTION 652 OF THE SPECIAL PROVISIONS, THE CONTRACTOR SHALL SUBMIT FOR THE RESIDENT ENGINEER'S APPROVAL AN EROSION AND SEDIMENT CONTROL PLAN SEPARATE FROM THIS SHEET.
- SPECIAL CONSIDERATION MUST BE GIVEN TO THE FIRST PUMP-DOWN OF THE COFFERDAMS. THIS WILL CONTAIN THE GREATEST VOLUME OF WATER WITH A HIGH SEDIMENT LOAD. THE CONTRACTOR MAY BE REQUIRED TO PROVIDE ADDITIONAL SEDIMENT TRAPS WITHIN THE RIGHT-OF-WAY OR CONTROL THE RATE OF DRAW-DOWN. ADDITIONAL SEDIMENT TRAPS MUST BE APPROVED BY THE RESIDENT ENGINEER.
- AS SOON AS POSSIBLE FOLLOWING COMPLETION OF THE SUBSTRUCTURE, THE SEDIMENT IN THE TRAPS SHALL BE REMOVED AND THE GROUND RESTORED TO ITS ORIGINAL SLOPES OR GRADED AS SHOWN ON THE CONSTRUCTION DRAWINGS.
- THE CONTRACTOR WILL USE OTHER TEMPORARY OR PERMANENT EROSION CONTROL MEASURES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION AND AS DIRECTED BY THE RESIDENT ENGINEER. SEE SECTION 105.23 OF THE VERMONT AOT STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2001.

PROJECT NAME: WEATHERSFIELD	PLOT DATE: 12-FEB-2004
PROJECT NUMBER: TH3 9514	DRAWN BY: J. LACROIX
FILE NAME: /str3/95j284/sj284ec.i	CHECKED BY: S. SCRIBNER
PROJECT LEADER: R. WHITCOMB	SHEET 13 OF 31
DESIGNED BY: J. LACROIX	
EROSION CONTROL SHEET	