GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

The Erosion Control plans are intended as a guide for preventing soil erosion and controlling sediment. The work outlined in this narrative consists of applying measures throughout the duration of the project to control erosion and minimizes the sedimentation of the receiving waters.

A Temporary erosion control plan will be submitted by the contractor for approval by the Agency of Transportation.

The contractor will use other temporary or permanent erosion control devices as necessitated by the sequence of construction and as directed by the Resident Engineer. See Section 105.23 of the 2001 Vermont Standard Specifications for Construction.

The contractor shall coordinate the installation, use, and removal of erosion and sediment control measures with construction activities to assure economical, effective, and continuous erosion and sediment control. The contractor shall employ temporary stabilization practices in incremental stages as construction activities proceed.

The Resident Engineer may direct the installation of certain erosion control measures in order to forestall or mitigate potential or existing erosion problems, or to respond to storm events or damage by construction operations.

The contractor shall install erosion and sediment control measures as sequenced on the Erosion Control Plan, or as directed by the Resident Engineer. The type, size, and location of any erosion control device shall not be changed unless prior approval is obtained from the Resident Engineer. Any approved changes shall be noted on the Erosion Control plans and discussed in the weekly report. The contractor shall inspect all erosion control measures daily and after each rainfall event. The contractor shall repair all damaged erosion control measures immediately. All erosion control measures that trap sediment, such as sediment basins and silt fences, shall be cleaned out when their capacity reaches 50%.

The Resident Engineer's approval should be obtained prior to installing any erosion controls not specified in the Erosion Control Plans. However, in emergency situations where the Resident Engineer is not immediately available, the contractor should repair or install the erosion controls as he/she deems necessary and report the incident to the Resident Engineer as soon as it is practical.

The contractor shall control all sediment-laden runoff within the project site. Clean runoff from outside the project site shall be routed through the project site using diversion berms, diversion channels, and temporary or permanent culverts.

Construction equipment will not be allowed to operate on the outside of the perimeter control measures.

Construction equipment will not be allowed to cross a flowing stream, or disturb the existing stream banks, unless authorized by the Resident Engineer.

All in-stream construction must take place in a dry channel between June 1st and October 1st.

In general, preserve existing vegetation, shrubs, and trees whenever possible.

Silt fence shall be placed at the toes of all fill slopes and shall be constructed so that flows cannot bypass the ends. Areas directly below (downhill) of the silt fences must be un-disturbed and vegetated.

As construction progresses, implementation of additional erosion control measures may be required as deemed necessary by the On-Site Coordinator and as approved by the Resident Engineer.

The project completion date has been set for November 30th to ensure all final erosion control measures for the establishment of permanent vegetation will take place during the growing season. Therefore, winter stabilization methods will need to be shown on the plans or described in the narrative.

INFORMATION REQUIRED BY THE CONTRACTOR

Much of the erosion control information shown on the erosion control plans and described in this narrative is general in nature. More site specific information is not yet available as a contractor has not yet been selected. The following list outlines some of the specific information that is not included in the erosion control plans and described in this narrative;

1. The location of stabilized construction entrances.
2. The location of stockpiles, staging areas, and disposal areas.
3. A specific timetable of construction and earthwork activities.
4. The name, title, qualifications, and contact information for the on-site project coordinator.
5. The sequencing of construction activities and specific measures that will be implemented in conjunction with these activities.

DESCRIPTION OF PROJECT

This project involves reconstruction of bridge # 11 over the Stevens Branch of the Winooski River on Granite Street in the City of Barre. The Stevens Branch is characterized as a meandering river partially bounded by retaining walls and buildings with a streambed consisting of Sand, Gravel, and Cobbles. The total drainage area is 86.0 square miles.

Features of concern with respect to erosion control include embankments immediately adjacent to the project, and several existing drainage structures that are being replaced. A new single span bridge will be constructed on the existing alignment. Traffic will be maintained with an off project detour. A significant portion of the project footprint will be impervious. The construction limits do not approach any buildings or any other structures outside the project limits. Overhead utility lines will be relocated as indicated on the project plans.

DESCRIPTION OF EXISTING SOILS

A detailed description of the soil types expected to be encountered in the project area is unavailable at this time. For the purpose of this narrative we are using the boring logs to classify the soils expected to be encountered.

The soils in the first five feet of the boring logs are mostly sand with small amounts of silt. This soil exhibits a high percolation rate that results in low erodability.

In the area of Abutment Two, contaminated soils have been located. The exact location of the contamination is unknown, but is believed to be outside of the excavation limits. The results of the subsurface exploration are contained in the project plans and special provisions.

DESCRIPTION OF EXISTING VEGETATIVE COVER

In the immediate vicinity of Granite Street, the existing ground cover is mostly open and grassy with intermittent deciduous shrubs and few trees, as depicted on the plans by the area survey.

DESCRIPTION OF SLOPES

The existing shape of the project area can be seen by looking at the erosion control existing conditions sheet where the existing contours are shown. The contours are shown in two line styles. The Major Contours lines are solid lines (with elevations) at two foot intervals while the Minor Contour Lines are dashed and depict the half foot interval between the Major Contour lines.

EXISTING SLOPES

Generally speaking, the project impacts steep but short slopes.

PROPOSED SLOPES

Fill slopes that are 1-2 (50%) or flatter will be seeded and mulched, 1-1.5 slopes will be sodded or lined with stone fill. These slopes will be protected until they are fully vegetated. The slopes along the channel banks will be lined with heavy stone and are at 1-1.5 (67%) slope.

EROSION CONTROL NOTES PAGE 1

PROJECT NAME:	BARRE CITY
PROJECT NUMBER:	HDP 9281(1)

FILE NAME: /str5/92J099/sj099erobdr.d	PLOT DATE: 16-JUN-2004
PROJECT LEADER: C. S. KELLER	DRAWN BY: J. REED
DESIGNED BY: K. RUTTER	CHECKED BY: T. SUMNER
	SHEET 39 OF 10