

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

WORK AT BRIDGE 36 SHALL CONSIST OF REPLACING THE EXISTING WOODEN BRIDGE WITH A SINGLE SPAN CONCRETE BRIDGE WHICH CARRIES TH 81 OVER THE WASHINGTON COUNTY RAILROAD (CONNECTICUT RIVER DIVISION).

WORK AT BRIDGE 38 CONSISTS OF REHABILITATION OF THE HISTORIC SINGLE SPAN STEEL PONY TRUSS BRIDGE WHICH CARRIES TH 29 OVER THE WASHINGTON COUNTY RAILROAD (CONNECTICUT RIVER DIVISION).

NOTE: AREA OF DISTURBANCE SHALL INCLUDE LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, INCLUDING ANY WASTE, STAGING AND BORROW AREAS WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS.

THE AREA OF DISTURBANCE FOR BRIDGE 36 IS APPROXIMATELY 0.22 ACRES. THE AREA OF DISTURBANCE FOR BRIDGE 38 IS APPROXIMATELY 0.24 ACRES. THE TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.46 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

1.2 SITE INVENTORY

1.2.1 OFF SITE DRAINAGE CHARACTERISTICS (UP AND DOWN-GRADIENT)

BOTH BRIDGES ARE LOCATED IN RESIDENTIAL NEIGHBORHOODS. THE WATER RUNOFF SHOULD BE MINIMAL AND BE LIMITED TO THE PROJECT AREAS DUE TO THE NATURE OF THE SURROUNDING TERRAIN.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE AREA IS RELATIVELY FLAT, WITH STEEP SLOPES OCCURRING ONLY AT SIDE SLOPES OF EXISTING RAILROAD BED.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF MOSTLY OPEN LAWN AREAS WITH PATCHES OF TREES AND OTHER VEGETATION. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE PROPOSED PROJECT.

DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.5 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS IN THE PROJECT SITE ARE AS FOLLOWS:

5E WINDSOR, LOAMY FINE SAND, 25 - 60% SLOPES, "K FACTOR" = 0.49

32B URBAN LAND, WINDSOR-AGAWAM COMPLEX. 0 - 8% SLOPES, "K FACTOR" = 0.49

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL; 0.24-0.36 = MODERATE EROSION POTENTIAL; 0.37 AND HIGHER = HIGH EROSION POTENTIAL.

1.2.6 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES, SEE GENERAL NOTES FOR DETAILS
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NO
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT 3-9020 BASED ON THE PROJECT IMPACT AREA. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION CONTROLS.

PREVENTING INITIAL SOIL EROSION IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION. (REFER TO THE LOW RISK SITE HANDBOOK FOR THE MOST UP TO DATE EROSION CONTROL DETAILS SEE WWW.AGT.STATE.VT.US/CADDHELP FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING.)

1.4.1 **MARK SITE BOUNDARIES**
PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO DELINEATE THE LIMITS THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION EQUIPMENT. THIS MEASURE LIMITS THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION. PDF SHALL BE INSTALLED WHERE NECESSARY AND AT A MAXIMUM DISTANCE OF TEN FEET FROM THE CUT/FILL LIMITS

1.4.2 **LIMIT DISTURBANCE AREA**
IT IS RECOMMENDED TO EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES (PHASING) AS CONSTRUCTION PROCEEDS. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ENGINEER.

1.4.3 **STABILIZE CONSTRUCTION EXIT**
STABILIZED CONSTRUCTION ENTRANCES SHALL BE UTILIZED AS NECESSARY.

1.4.4 **INSTALL SILT FENCE**
SILT FENCE SHALL BE INSTALLED PRIOR TO ANY SLOPE WORK AS NECESSARY.

1.4.5 **DIVERT UPLAND RUNOFF**

1.4.6 **SLOW DOWN CHANNELIZED RUNOFF**
CHECK DAMS SHALL BE UTILIZED AS NECESSARY.

1.4.7 **STABILIZE EXPOSED SOILS**
SEED AND MULCH
EROSION MATTING

TRACKING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, WILL BE UTILIZED ON A REGULAR BASIS. SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF FORECASTED RAIN. SEEDING, MULCHING AND BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING INTERMITTENT PHASES OF CONSTRUCTION.

1.4.8 **WINTER STABILIZATION**
VARIOUS MEASURES SPECIFIC TO WINTER (SEE LOW RISK HANDBOOK)

1.4.9 **STABILIZE SOIL AT FINAL GRADE**
SEED AND MULCH
EROSION MATTTING

SEEDING, MULCHING AND BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

1.4.10 **INSPECT YOUR SITE**
INSPECT SITE BASED ON PERMIT AUTHORIZATION OR SPECIAL PROVISION REQUIREMENTS.

% WEIGHT	BROAD
37.5%	
37.5%	
5.0%	
15.0%	
5.0%	
100%	

% WEIGHT	BROAD
42.5%	
10.0%	
42.5%	
5.0%	
100%	

% WEIGHT	BROAD
1	
5	

1. RURAL SEED MIX: ESTABLISHED UPL
2. URBAN SEED MIX: ESTABLISHED LAW
3. ALL SEED MIXTURE WEIGHT AND SHALL BE DIRECTED BY THE
4. FERTILIZER AND
5. HAY MULCH: TO ACHIEVE 90% GROW
6. TOPSOIL: TO BE DIRECTED BY THE
7. HYDROSEEDING: AND THE TYPE OF TYPES OF SOIL A
8. TURF ESTABLISHM TO SEPTEMBER 15, GROWTH OF GRASS

ADAPTED FROM VTRAK ROADWAYS AND