

## **EROSION CONTROL NARRATIVE**

### **1.1 PROJECT DESCRIPTION**

THE BRIDPORT VERMONT ROUTE 125 CULVERT REMOVAL PROJECT INCLUDES WORK TO BE PERFORMED AT MILE MARKER 7.48 ON VERMONT ROUTE 125 IN THE TOWN OF BRIDPORT, COUNTY OF ADDISON.

THE PROJECT SHALL CONSIST OF THE FILLING AND PARTIAL REMOVAL OF APPROXIMATELY 56 FEET OF A 72" DIAMETER CORRUGATED METAL PLATE PIPE LOCATED UNDER VERMONT ROUTE 125 AND RELATED ROADWAY AND GUARDRAIL RECONSTRUCTION.

THE PROJECT SHALL FILL AND PARTIALLY REMOVE A CORRUGATED METAL PLATE PIPE THAT WAS ONCE USED AS A CATTLE PASS THAT IS NOW IN POOR CONDITION. DISTURBED EARTH ASSOCIATED WITH THIS WORK IS A RESULT OF EXCAVATION. THE TOTAL AREA OF DISTURBANCE IS 0.14 ACRES, INCLUDING BOTH ON-SITE AND CONTIGUOUS WASTE, BORROW AND STAGING.

### **1.2 SITE INVENTORY AND ANALYSIS**

#### **1.2.1 BODIES OF WATER AND ON-SITE/OFFSITE DRAINAGE CHARACTERISTICS**

THE PROPERTY SURROUNDING THE PROJECT SITE IS GENTLY ROLLING AND PREDOMINANTLY FARM LAND. THE CULVERT WAS ORIGINALLY INSTALLED FOR USE AS A CATTLE PASS. THERE IS A VEGETATED HILLSIDE UPSTREAM OF THE CULVERT. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE VERY MINIMAL RUNOFF.

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

SEEING AS THIS CULVERT IS A CATTLE PASS, THE ONLY WATER SOURCE LOCATED ON THE PROJECT SITE IS A ROADSIDE DITCH LEADING TO CULVERT #7, LOCATED TO THE EAST OF THE PROJECT SITE ON VERMONT ROUTE 125. THE TRIBUTARY AREA AT THE CULVERT CATTLE PASS IS 0.017 SQUARE MILES.

#### **1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES**

THE TOPOGRAPHY OF THE AREA IS GENTLY ROLLING AND PREDOMINANTLY FARM LAND. VERMONT ROUTE 125 IS WITHIN THE PROJECT SITE. THERE IS A FARM WITH MULTIPLE BUILDINGS LOCATED TO THE WEST OF THE PROJECT SITE. THERE ARE UNDERGROUND UTILITIES THAT ARE TO BE MAINTAINED THROUGHOUT CONSTRUCTION.

#### **1.2.4 VEGETATION**

THE VEGETATION IN THE PROJECT AREA CONSISTS OF LONG GRASS WITH SMALL SCATTERED TREES. FORESTED AREAS ARE LOCATED OUTSIDE THE PROJECT LIMITS AND THEREFORE SHOULD NOT BE AFFECTED BY THE PROJECT. THE IMPACT WILL BE LIMITED TO THAT WHICH IS RELATED TO THE EXCAVATION OF THE EXISTING CATTLE PASS. UPON COMPLETION, DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

#### **1.2.5 SOILS**

SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE NATIONAL RESOURCES CONSERVATION SERVICE FOR THE COUNTY OF ADDISON, VERMONT.

THE SOIL ON THE PROJECT SITE IS VERGENNES CLAY WITH 25 TO 50 PERCENT SLOPES. K VALUE = 0.49. THIS SOIL TYPE IS GENERALLY FOUND IN TERRACES. THE SOIL IS CONSIDERED HIGHLY ERODIBLE DUE TO THE HIGH K VALUE.

#### **1.2.6 SENSITIVE RESOURCE AREAS**

CRITICAL HABITATS: NO  
HISTORICAL OR ARCHEOLOGICAL AREAS: NO  
PRIME AGRICULTURAL LAND: NO  
THREATENED AND ENDANGERED SPECIES: NO  
WATER RESOURCE: NONE, CATTLE PASS  
WETLANDS: CLASS 3 WETLANDS ARE PRESENT AT THE CULVERT INLET AND OUTLET.

### **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 EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. 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 EROSION PREVENTION AND SEDIMENT CONTROL" AND APPROPRIATE DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING.)

#### **1.4.1 MARK SITE BOUNDARIES**

BARRIER FENCE, DENOTED -BF- ON THE PLANS, IS 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.

#### **1.4.2 LIMIT DISTURBANCE AREA**

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 ENTRANCE SHALL BE UTILIZED AS NECESSARY.

#### **1.4.4 INSTALL SILT FENCE**

SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK AS SHOWN ON THE PLANS OR AS NECESSARY.

#### **1.4.5 DIVERT UPLAND RUNOFF**

NOT APPLICABLE.

#### **1.4.6 SLOW DOWN CHANNELIZED RUNOFF**

CHECK DAMS SHALL BE UTILIZED AS NECESSARY.

#### **1.4.7 CONSTRUCT PERMANENT CONTROLS**

TYPE I STONE FOR DITCH PROTECTION  
SEED AND MULCH

#### **1.4.8 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.

#### **1.4.9 WINTER STABILIZATION**

VARIOUS MEASURES SPECIFIC TO WINTER, OCTOBER 15<sup>TH</sup> THROUGH APRIL 15<sup>TH</sup> (SEE LOW RISK HANDBOOK).

#### **1.4.10 STABILIZE SOIL AT FINAL GRADE**

SEED AND MULCH

EROSION MATTING

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.

#### **1.4.11 DE-WATERING ACTIVITIES**

SEDIMENT BASINS FOR DEWATERING OF TRENCH OR OTHER DEEP EXCAVATIONS SHALL BE USED AS NECESSARY AND FEASIBLE.

#### **1.4.12 INSPECT YOUR SITE**

INSPECT SITE BASED ON PERMIT AUTHORIZATION OR SPECIAL PROVISION REQUIREMENTS.



PROJECT NAME: BRIDPORT  
PROJECT NUMBER: STP CULV(2I)

FILE NAME: ...\\13-erosion control\narrative.dgn PLOT DATE: 10/7/2010  
PROJECT LEADER: G. BOGUE DRAWN BY: E. ALLING  
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EPSC NARRATIVE SHEET 7 OF 14