EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF BRIDGE #34 AND ITS ABUTMENTS, AND SOME MINOR APPROACH WORK. BRIDGE #34 IS LOCATED IN THE TOWN OF CORINTH ON TH 50, APPROXIMATELY 0.4 KILOMETERS SOUTH OF THE INTERSECTION OF TH 50 AND TH 2. THE NEW BRIDGE WILL BE A SINGLE SPAN STEEL BEAM , 23.328 METERS IN LENGTH SPANNING THE SOUTH BRANCH OF THE WAITS RIVER. THE NEW BRIDGE WILL BE LOCATED ON THE SAME ALIGNMENT AND THEREFORE REQUIRE ONLY MINOR WORK TO THE APPROACHES.

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.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.146 HECTARES (0.36 ACRES).

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

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

THE PROPERTY SURROUNDING THE PROJECT SITE CONSISTS OF WELL ESTABLISHED VEGETATION WITH MODERATE SLOPES AT THE PROJECT SITE AND VERY STEEP SLOPES AT THE OUTER EDGES OF THE PROJECT LOCATION. THE SURROUNDING AREA OF THE PROJECT SITE IS MOSTLY GRASSLAND WITH WOODS IN THE DISTANCE. DUE TO THE NATURE OF THE SURROUNDING TERRAIN, RUNOFF WATER ENTERING THE CONSTRUCTION AREA WILL PRIMARILY BE LIMITED TO THAT WHICH IS CONVEYED ALONG ROADWAY DITCHES.

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

THE SOUTH BRANCH OF THE WAITS RIVER IS THE ONLY WATER SOURCE ON OR NEAR THE PROJECT LOCATION. THE RIVER IS CHARACTERIZED AS STRAIGHT, PROBABLY INCISED AND ALLUVIAL, NOT BRAIDED OR ANABRANCHED CONTAINING A STREAM BED OF GRAVEL, SOME SAND, AND COBBLES. THE RIVER HAS A TENDENCY TO RISE QUICKLY. THE TRIBUTARY AREA AT THE BRIDGE CROSSING IS 93.8 SQUARE KILOMETERS. THERE ARE CLASS III WETLANDS ON THE SOUTHWEST SIDE OF THE BRIDGE AND A DRAINAGE DITCH ON THE NORTHWEST SIDE OF THE BRIDGE. ALL DISTURBED SOILS ARE WITHIN 50 METERS OF RECEIVING WATERS.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE PROJECT SITE IS MOSTLY OPEN FIELDS WITH PATCHES OF WOODED AREAS.THE TERRAIN IS MOSTLY FLAT WITH SOME STEEP SPOTS IN THE DISTANCE. THERE IS ONE HOUSE LOCATED NEAR THE PROJECT SITE. TH 2, TH 50, AND TH 65 ARE IN OR NEAR THE PROJECT SITE.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASS. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE II AS SPECIFIED ON THE PLANS. 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 ORANGE, VERMONT. THE SOIL TYPES IDENTIFIED FOR THIS PROJECT ARE WINOOSKI VERY FINE SANDY LOAM AND HADLEY VERY FINE SANDY LOAM, WITH K-VALUES OF 0.49 EACH.

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: NO
PRIME AGRICULTURAL LAND: YES - USDA CLEARANCE 02/24/98
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: SOUTH BRANCH OF THE WAITS RIVER
WETLANDS: YES - CLASS III

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 AND APPROPRIATE DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT WHICH MAY INCLUDE BUT IS NOT LIMITED TO THE FOLLOWING.)

1.4.1 MARK SITE BOUNDARIES
PROJECT DEMARCATION FENCING, DENOTED -PDF- 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
SWALE (STORM WATER FROM STREET COLLECTIONS DRAINAGE SYSTEM)

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

1.4.7 CONSTRUCT PERMANENT CONTROLS
TYPE I, II, STONE FOR SLOPE LINING AND CHANNEL PROTECTION
SEED AND MULCH
DRAINAGE INLETS AND PIPING
SOIL RETENTION WALLS

STREAM BANK VEGETATION WILL BE INTRODUCED IN THE GRUBBING MATERIAL THAT IS TO BE PLACED OVER THE STREAM BANK STONE FILL.

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 (SEE LOW RISK HANDBOOK)

1.4.10 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.

1.4.11 DE-WATERING ACTIVITIES

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

PROJECT: CORINTH	PROJECT NO.: STP BRO 1447(22) (RE-ADVERTISED)
DESIGN FILE NAME: 93J042\Structures\s93J042erodetails.dgn	
IPARM FILE NAME: 93J042epscnarr.i	PLOT DATE: 16-JUL-2008
DESIGNED BY:	DRAWN BY: M.FESSEL
SQUAD LEADER: C.P. WILLIAMS	CHECKED BY:
EPSC NARRATIVE	SHEET: 28 OF 42