1 EPSC NARRATIVE

1.1 PROJECT DESCRIPTION

THE PROPOSED PROJECT AREA IS LOCATED APPROXIMATELY 750 FT SOUTH OF VT. ROUTE 140 BETWEEN WALDO LANE AND THE WALLINGFORD TOWN PARK IN THE TOWN OF WALLINGFORD, RUTLAND COUNTY VERMONT. THIS PROJECT WILL INVOLVE THE INSTALLATION OF A REHABILITATED HISTORIC PONY TRUSS BRIDGE FOR USE AS A NEW PEDESTRIAN CROSSING OVER THE OTTER CREEK CONNECTING WALDO LANE WITH THE TOWN PARK. THE GENERAL WORK TO BE PERFORMED UNDER THIS PROJECT WILL INCLUDE THE REHABILITATION OF THE HISTORIC TRUSS BRIDGE OFF SITE, CONSTRUCTION OF NEW CONCRETE SUBSTRUCTURES AND APPROACHES ON SITE, THE PLACEMENT OF THE HISTORIC TRUSS BRIDGE ON THE NEW SUBSTRUCTURE AND THE CONSTRUCTION OF A NEW SHARED USE PATH CONNECTING THE HISTORIC TRUSS BRIDGE TO WALDO LANE AND THE TOWN PARK. IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.3 ACRES INCLUDING THE IMPACTS ASSOCIATED WITH THE VEHICLE ACCESS ROUTE NECESSARY TO CONSTRUCT THIS BRIDGE.

1.2 SITE INVENTORY

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

WEST OF THE PROJECT AREA IS A STEEP, WOODED HILL THAT SLOPES DOWN TOWARD THE OTTER CREEK. ON THE EAST SIDE OF THE PROJECT AREA IS A MODERATELY FLAT GRASSED AREA THAT IS USED AS RECREATION FIELDS BY THE TOWN OF WALLINGFORD. ALL STORMWATER RUNOFF IN THE VICINITY OF THE PROJECT AREA FLOWS OVERLAND INTO THE OTTER CREEK.

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

THE OTTER CREEK IS THE ONLY NATURAL WATER SOURCE LOCATED WITHIN THE VICINITY OF THE PROJECT SITE. THERE ARE NO OTHER DRAINAGE OR WATER FEATURES LOCATED WITHIN THE VICINITY OF THE PROJECT AREA.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE EXISTING TOPOGRAPHY WITHIN THE PROJECT AREA PRIMARILY CONSISTS OF A MIXED VEGETATED LANDSCAPE OF A STEEPLY SLOPED DENSELY WOODED AREA ON THE WEST AND FAIRLY LEVEL SLOPED RECREATIONAL FIELDS ON THE EAST WHICH ARE SEPARATED BY THE OTTER CREEK.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA PRIMARILY CONSISTS OF A DENSELY FORESTED AREA TO THE WEST AND A RESIDENTIAL AREA WITH GRASSED RECREATIONAL FIELDS TO THE EAST. THERE IS ALSO A GRAVEL ROAD KNOWN AS WALDO LANE LOCATED ON THE WESTERN SIDE OF THE PROJECT AREA. THE IMPACTS TO EXISTING VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE PLACEMENT OF THE HISTORIC TRUSS BRIDGE AND SHARED USE PATH CONSTRUCTION.

1.2.5 SOILS

THE U.S. DEPARTMENT OF AGRICULTURE'S NATIONAL RESOURCE CONSERVATION SERVICE (NRCS) HAS IDENTIFIED AND MAPPED TWO SOIL TYPES WITHIN THE PROJECT AREA, ONE ON EACH SIDE OF THE OTTER CREEK. THE SOIL TYPE LOCATED TO THE WEST OF THE PROJECT AREA HAS NOT BEEN RATED FOR EROSION SUSCEPTIBILITY BUT THE SOIL TYPE LOCATED ON THE EASTERN SIDE OF THE PROJECT HAS BEEN CLASSIFIED AS POTENTIALLY HIGHLY ERODIBLE. THE FOLLOWING LIST DEPICTS THE ERODIBILITY PROPERTIES FOR THE TWO TYPES OF SOILS LOCATED WITHIN THE PROJECT AREA.

MAP UNIT TYPE*	DESCRIPTION	SLOPES (%)	ERODIBILITY	ERODIBILITY FACTOR (k)
13B	HINCKLEY GRAVELY LOAMY FINE SAND	0-8	POTENTIALY HIGHLY ERODIBLE	0.17
96	UDIPSAMMENTS	NEARLY LEVEL	NOT RATED	0.10

*MAP UNIT TYPE IS FROM THE NRCS SOIL SURVEY MAP FOR RUTLAND COUNTY, VERMONT. SEE SHEET 10 FOR LOCATIONS OF MAPPED SOILS.

IN ADDITION, MAP UNIT TYPE 13B HAS BEEN CLASSIFIED BY THE NRCS AS PRIME FARMLAND OF STATEWIDE IMPORTANCE.

1.2.6 SENSITIVE RESOURCE AREAS

THERE ARE NO KNOWN OCCURRENCES OF CRITICAL HABITATS, THREATENED AND ENDANGERED SPECIES, OR HISTORICAL OR ARCHEOLOGICAL SITES LOCATED WITHIN THE LIMITS OF THE PROJECT AREA. HOWEVER, THE MAJORITY OF THE PROJECT AREA LIES WITHIN THE HINCKLEY GRAVELY LOAMY FINE SAND SOIL TYPE THAT IS CLASSIFIED AS FARMLAND OF STATEWIDE IMPORTANCE BY THE NRCS. IN ADDITION, THERE ARE NO KNOWN WETLANDS OR IMPAIRED WATERWAYS LOCATED WITHIN THE PROJECT AREA, BUT THE OTTER CREEK RECEIVING WATERS ADJACENT TO THE PROJECT AREA IS CONSIDERED A SENSITIVE RESOURCE. THE CONTRACTOR SHALL EMPLOY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES THROUGHOUT THE DURATION OF THE PROJECT TO PROTECT THE WATER QUALITY OF THE OTTER CREEK AS OUTLINED IN THE EPSC PLANS FOR THIS PROJECT'S LOCATION. THE CONTRACTOR SHOULD NOTE THAT THERE IS A 50' RIPARIAN BUFFER ZONE ASSOCIATED WITH THE OTTER CREEK. THIS RIPARIAN BUFFER IS ILLUSTRATED ON THE PROJECT PLANS.

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 PREVENTION AND SEDIMENT 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 PREVENTION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE. THEREFORE, STABILIZE ALL DISTURBED AREAS AS SOON AS PRACTICAL BUT NO MORE THAN TWO DAYS AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION, USE, AND REMOVAL OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES WITH CONSTRUCTION ACTIVITIES TO ASSURE ECOLOGICAL, EFFECTIVE, AND CONTINUOUS EROSION PREVENTION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES AS CONSTRUCTION PROCEEDS.

THE CONTRACTOR SHALL INSTALL ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES AS SHOWN IN THE EPSC PLANS OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. DO NOT MODIFY THE TYPE, SIZE, OR LOCATION OF ANY CONTROL OR PRACTICE WITHOUT APPROVAL FROM THE ON-SITE PLAN COORDINATOR.

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.

CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO PREVENT ANY DAMAGE TO THE WATERS OF THE UNITED STATES FROM POLLUTION BY DEBRIS, SEDIMENT, OR OTHER FOREIGN MATERIAL, OR FROM MANIPULATION OF EQUIPMENT AND/OR MATERIALS IN OR NEAR THE WATERS OF THE UNITED STATES. THE CONTRACTOR SHALL NOT RETURN DIRECTLY TO THE WATERS OF THE UNITED STATES ANY WATER WHICH HAS BEEN USED FOR WASH PURPOSES OR OTHER SIMILAR OPERATIONS WHICH WOULD CAUSE THIS WATER TO BECOME POLLUTED WITH SAND, SILT, CEMENT, OIL OR OTHER IMPURITIES. IF THE CONTRACTOR USES WATER FROM THE WATERS OF THE UNITED STATES, THE CONTRACTOR SHALL CONSTRUCT AN INTAKE OR TEMPORARY DAM TO PROTECT AND MAINTAIN STREAM WATER QUALITY. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE OR LEACHATE SHALL BE ALLOWED TO ESCAPE INTO THE WATERS OF THE UNITED STATES, NOR SHALL WASHING FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER ANY WETLANDS OR WATERS OF THE UNITED STATES.

(REFER TO THE LOW RISK SITE HANDBOOK 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

PROJECT DEMARCATION FENCING AND BARRIER FENCING WILL BE USED TO DELINEATE THE LIMITS IN WHICH THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION EQUIPMENT AND PERSONNEL. THESE MEASURES WILL LIMIT THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION. THE CONTRACTOR SHALL INSTALL THE PERIMETER CONTROLS PRIOR TO STARTING ANY WORK WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL NOT ALLOW ANY CONSTRUCTION EQUIPMENT TO OPERATE OR ACCESS ON THE DOWN SLOPE SIDE OF ANY PERIMETER CONTROL MEASURE. THE CONTRACTOR SHALL NOT ALLOW ANY CROSSING OF A FLOWING STREAM OR DISTURBANCE OF THE EXISTING STREAM BANKS BY CONSTRUCTION EQUIPMENT EXCEPT AS AUTHORIZED BY THE ON-SITE PLAN COORDINATOR.

1.4.2 LIMIT DISTURBANCE AREA

EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES (PHASING) AS CONSTRUCTION ACTIVITIES PROCEED. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. IN GENERAL, PRESERVE EXISTING VEGETATION, TREES AND SHRUBS WHEN POSSIBLE, AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.3 STABILIZE CONSTRUCTION EXIT

THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE ALONG WITH AN ACCESS PATH AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL NOT ALLOW CONSTRUCTION VEHICLES TO TRACK SEDIMENT OFFSITE OF THE PROJECT LIMITS. THE CONSTRUCTION ENTRANCE SHALL BE REMOVED AND THE AREA RESTORED IMMEDIATELY FOLLOWING COMPLETION OF THE PROJECT.

1.4.4 INSTALL WOVEN WIRE REINFORCED SILT FENCE

WOVEN WIRE REINFORCED SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK AS SHOWN ON THE PLANS AS NECESSARY OR AS DIRECTED BY THE ON-SITE COORDINATOR.

1.4.5 DIVERT UPLAND RUNOFF

CONTROL ONLY SEDIMENT LADEN RUNOFF GENERATED FROM THE PROJECT SITE. IT IS NOT ANTICIPATED THAT TEMPORARY DRAINAGE SWALES WILL BE NEEDED TO DIVERT UPLAND RUNOFF AWAY FROM THE PROJECT. HOWEVER, IF SITE CONDITIONS CHANGE, THE CONTRACTOR SHALL CONSTRUCT TEMPORARY DIVERSION DIKES OR SWALES PER THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

IT IS NOT ANTICIPATED THAT THE CONTRACTOR WILL ENCOUNTER CHANNELIZED RUNOFF DURING THE CONSTRUCTION OF THIS PROJECT. HOWEVER, IF SITE CONDITIONS CHANGE, THE CONTRACTOR SHALL INSTALL TEMPORARY CHECK DAMS TO HELP SLOW DOWN AND CONTROL CHANNELIZED RUNOFF PER THE VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION'S LOW RISK SITE HANDBOOK FOR EROSION PREVENTION AND SEDIMENT CONTROL AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

1.4.7 CONSTRUCT PERMANENT CONTROLS

THE CONSTRUCTION OF THIS PROJECT WILL NOT REQUIRE THE USE OF PERMANENT CONTROLS UPON COMPLETION OF THE PROJECT. ALL EXPOSED SLOPES SHALL BE STABILIZED PRIOR TO THE COMPLETION OF THIS PROJECT.

1.4.8 STABILIZE EXPOSED SOILS

THE CONTRACTOR SHALL GRADE AND TRIM ALL SLOPES AS THE EXCAVATION PROGRESSES AND STABILIZE ALL SLOPES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. 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. THE CONTRACTOR SHALL HAVE A HYDRO SEEDER AND/OR MULCHING MACHINE AVAILABLE ON THE PROJECT SITE OR AVAILABLE AT ONE WEEK'S NOTICE (MAXIMUM) UNTIL PERMANENT SEEDING IS COMPLETED.

1.4.9 WINTER STABILIZATION

IF CONSTRUCTION ACTIVITIES INVOLVING EARTH DISTURBANCE CONTINUE PAST OCTOBER 15 OR BEGIN BEFORE APRIL 15, EPSC WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LOW RISK HANDBOOK FOR WINTER CONSTRUCTION.

1.4.10 STABILIZE SOIL AT FINAL GRADE

STONE FILL SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1-3 AS SHOWN IN THE PLANS. ALL OTHER EXPOSED SOIL SURFACES SHALL BE STABILIZED WITH SEED AND MULCH. THESE SLOPES SHALL BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

1.4.11 DE-WATERING ACTIVITIES

NO DE-WATERING ACTIVITIES ARE ANTICIPATED AS PART OF THIS PROJECT.

1.4.12 INSPECT YOUR SITE

INSPECTION OF EROSION PREVENTION AND SEDIMENT CONTROL MEASURES USED WITHIN THE PROJECT SITE SHALL BE INSPECTED ON A DAILY BASIS AND AFTER EVERY STORM GREAT ENOUGH TO CAUSE WATER TO LEAVE THE CONSTRUCTION SITE OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR. REPAIRS SHALL BE MADE AS NEEDED WHEN DAMAGE TO MEASURES ARE DISCOVERED AND SEDIMENT SHALL BE REMOVED WHEN THE STORAGE CAPACITY OF A SEDIMENT CONTROL MEASURE APPROACHES ONE HALF OF ITS INTENDED CAPACITY OR AS DIRECTED BY THE ON-SITE PLAN COORDINATOR.

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