

EROSION PREVENTION & SEDIMENT CONTROL PLAN

****From Warren ER-STP 013-4(36)**

xx. DESCRIPTION. This work shall consist of designing, furnishing, and submitting for acceptance an Erosion Prevention & Sediment Control Plan (hereinto known as the EPSC Plan), becoming a co-permittee with the Agency of Transportation, State of Vermont on associated permits, monitoring the EPSC Plan using an On-Site Plan Coordinator, and maintaining the erosion prevention and sediment control measures to ensure the effectiveness of the EPSC Plan.

xx. MATERIALS. Materials required for the field work maintenance of the EPSC Plan shall meet all requirements of the appropriate Section of the VAOT Standard Specifications for Construction.

Materials including manuals, checklists, forms, and other supporting documentation necessary to meet the requirements of these provisions and maintain compliance with associated permits shall be made available to the Engineer by the Contractor and maintained on site by the Contractor. Supporting documents associated with the requirements of General Permit 3-9020 are available upon request to ANR or from the ANR Stormwater web page. The *VTrans Erosion Prevention and Sediment Control Plan Checklist* and *EPSC Plan Inspection Report (Low Risk and Non-Jurisdictional)* are available from the VTrans Construction Environmental Engineer. Electronic files for the creation of EPSC Plan(s) will be made available to the Contractor by the Project Manager following award of the Contract.

xx. QUALIFICATIONS. The EPSC Plan shall be prepared and signed by a Licensed Professional Civil Engineer registered in the State of Vermont or a qualified professional in erosion prevention and sediment control, certified by EnviroCert International or equivalent, hereinafter called the "Preparer."

xx. EROSION PREVENTION & SEDIMENT CONTROL PLAN. The Preparer shall develop the EPSC Plan using a combination of structural, non-structural, and vegetative practices to adequately prevent erosion and control sedimentation, and to meet the requirements of the *VTrans Alternative Erosion Prevention and Sediment Control Plan Checklist* based on area of disturbance and risk.

The Contractor shall use the EPSC Plan throughout the duration of the project and modify it to describe changing conditions and illustrate how the criteria of the determined risk will be upheld. If a modification to the EPSC Plan alters any criteria of the determined risk, an updated Risk Evaluation shall be prepared as necessary.

The EPSC Plan sheet(s) shall convey the sequential nature and phases of construction activities and associated erosion prevention and sediment control measures; several plan sheets showing successive site conditions are recommended.

All work shown in the EPSC Plan shall be included in the Contractor's CPM Progress Schedule, as required by Subsection 108.03.

- xx. SUBMITTALS. Three sets of the EPSC Plan shall be submitted to the Construction Engineer as Construction Drawings in accordance with Section 105. If necessary, an updated Risk Evaluation shall be submitted with the EPSC Plan. Submittals shall occur after award of the Contract but not later than the Pre-Construction Conference to allow time for review by the Agency. An Acceptance Memo or comments will be provided to the Contractor within 2 business days.

The Contractor shall respond to comments as soon as possible, but not more than 2 business days after the date of VTrans initial correspondence. Agency review time for response to comments will be completed within an additional 2 business days. Modifications or additions to the EPSC Plan will not be considered as an acceptable delay of the work under Subsection 108.11.

All subsequent modifications to the EPSC Plan and updates to the Risk Evaluation will be reviewed and forwarded to the ANR by the Agency as appropriate.

Construction activities for EPSC Plan modifications that do not require authorization from the ANR shall commence only after the EPSC Plan has been accepted by the Agency. Construction activities for EPSC Plan modifications that do require authorization from the ANR shall commence only after that authorization has been granted.

- xx. MONITORING EROSION PREVENTION & SEDIMENT CONTROL PLAN. The Contractor shall designate a person (On-Site Plan Coordinator) who is directly responsible for the on-site implementation of the EPSC Plan. This person shall generally be on-site on a daily basis during active construction and have the authority to halt construction activities if necessary. The On-Site Plan Coordinator shall have demonstrated experience in construction practices as they relate to erosion prevention and sediment control as well as a general understanding of State and Federal environmental regulations and permits pertaining to the National Pollutant Discharge Elimination System Construction Program. The On-Site Plan Coordinator shall be proficient at reading and interpreting engineering and EPSC plans. Preference will be given to a Licensed Professional Civil Engineer registered in the State of Vermont or a qualified professional in erosion prevention and sediment control, certified by EnviroCert International or equivalent. The qualifications of the On-Site Plan Coordinator shall be included in the EPSC Plan. The Engineer, if not satisfied with the performance of this individual, may at any time request a replacement.

During active construction and periods of inactivity, the On-Site Plan Coordinator shall be responsible for inspections and reporting.

- (a) Active Construction. Inspections shall occur once every seven calendar days and within 24 hours of the end of a storm event that results in a discharge of stormwater from the site. During the winter construction season (October 15th to April 15th, inclusive), inspections at all sites shall occur daily.

Inspections shall be conducted using the Agency's *EPSC Plan Inspection Report (Non-Jurisdictional and Low Risk Projects)*.

Immediate action shall be taken to correct the discharges of sediment, including halting or reducing construction activities as necessary, until the discharge and/or the condition is fully corrected. Corrective actions shall be recorded on the monitoring reports and shown on the EPSC Plan. Each report shall be signed by the On-Site Plan Coordinator.

- (b) Inactive Construction. Periods such as shutdown during the winter season shall require inspection and reporting of erosion prevention and sediment control measures. The Contractor shall contact the Engineer prior to conducting any inspections. The inspections shall be conducted at least once every 30 days and within 24 hours of any storm or significant snow melt event that may cause stormwater runoff to leave the construction site. The Contractor shall provide, within 24 hours, the necessary personnel, equipment, and materials to repair or correct any deficiencies identified during inspection. All deficiencies and corrective measures taken shall be documented on the reports.

Copies of all reports shall be submitted to the Engineer within 24 hours of inspection or when corrective measures were taken. Copies of all reports shall be kept on site in the Contractor's project files.

- xx. MAINTENANCE OF EROSION PREVENTION & SEDIMENT CONTROL PLAN. This work shall consist of providing all labor and equipment necessary for field maintenance of erosion prevention and sediment control measures utilized in the EPSC Plan and its modifications. Erosion prevention and sediment control measures shall be maintained by the Contractor until removal as authorized by the Engineer. The Contractor shall establish vegetation in all areas disturbed during removal of the erosion prevention and sediment control measures. Any maintenance required due to the failure of the Contractor to follow the EPSC Plan in its accepted form shall be performed at no additional cost to the Agency.

- xx. METHOD OF MEASUREMENT. The quantity of Special Provision (EPSC Plan) to be measured for payment will be on a lump sum basis in the complete and accepted work.

The quantity of Special Provision (Monitoring EPSC Plan) will be measured to the nearest 1/4 hour for the actual number of authorized hours spent monitoring, reviewing, and reporting on the construction site(s), including waste, borrow and staging areas or other support activities, as it relates to the EPSC Plan. Travel time and other time not spent at the construction site(s) or time not authorized will not be measured for payment (i.e. travel expenses, clerical staff time, copying, miscellaneous expenses, overhead, etc.).

The quantity of Special Provision (Maintenance of EPSC Plan) will be on a dollar basis for all such field maintenance provided for in the Contract, excluding waste, borrow and staging areas or other support activities.

- xx. BASIS OF PAYMENT. The accepted quantity of Special Provision (EPSC Plan) will be paid for at the Contract lump sum price. Payment will be full compensation for initial preparation, submittals, modifications, resubmittals, and all incidentals necessary to complete the work.

9/20/2010

Subsequent modifications to the EPSC Plan during Construction will be considered incidental to Special Provision (EPSC Plan).

Partial payments will be made as follows:

- (a) The first payment of 50 percent of the lump sum price for Special Provision (EPSC Plan) will be paid for upon acceptance of the EPSC Plan for the entire project.
- (b) The second payment of 35 percent of the lump sum price for Special Provision (EPSC Plan) will be made on the first estimate following the completion of 50 percent of the project.
- (c) The third payment of 15 percent of the lump sum price for Special Provision (EPSC Plan) will be made when the project is substantially complete.

The accepted quantity of Special Provision (Monitoring EPSC Plan) will be paid for at the Contract unit price per hour. Payment will be full compensation for performing the work specified. Payment will not be made unless a report for the monitoring is submitted to and accepted by the Engineer.

The accepted quantity of Special Provision (Maintenance of EPSC Plan) will be paid for as specified for force account work in Subsection 109.06. To provide a common proposal for all bidders, the Agency has entered an amount in the proposal to become part of the Contractor's total bid. Maintenance related to material supply and disposal areas shall be performed in accordance with Subsection 105.29.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
900.615 Special Provision (Maintenance of EPSC Plan)(N.A.B.I.)	Dollar
900.630 Special Provision (Monitoring EPSC Plan)	Hour
900.645 Special Provision (EPSC Plan)	Lump Sum