

VTrans Erosion Prevention and Sediment Control Plan Designer Checklist

This checklist is intended to assist the designer in developing a conceptual Erosion Prevention and Sediment Control (EPSC) Plan that satisfies the requirements of the VT DEC's Construction General Permit and *The Vermont Standards and Specifications for Erosion Prevention and Sediment Control*.

A complete EPSC Plan consists of a Narrative, Location Map, Pre-Construction Plan (Existing Conditions), Construction Plan, Stabilization Plan (Final Conditions), and EPSC detail sheets. On smaller, less complex projects, the Existing Conditions, Construction Plan, and Final Conditions Plan sheets may be combined. For more complicated projects, a Phasing Plan may need to be included to convey more detailed design intent. The designer shall consult with the Environmental Specialist to determine the appropriate level of plan detail needed for a given project. The Construction Environmental Engineer may also provide input upon request. The result will be the contract Erosion Prevention and Sediment Control Plan.

- 1. Narrative** – The EPSC Plan Narrative consists of a detailed project and site description along with notes that provide direction on the EPSC measures being used for the project, including use of off-site areas, winter requirements, and inspection and maintenance.

An *EPSC Plan Narrative Template* has been prepared that includes directions and example language. A copy can be found at the following link:

Designers: T:\CADD\WorkSpace\Projects\English\dgn\details\Erosion\EPSC_2020

Consultants: https://vtrans.vermont.gov/sites/aot/files/highway/documents/environmental/EnviroEPSC_NarrativeExample.pdf

- 2. Location Map** – For the purposes of complying with this permit application requirement, the project's Title Sheet may be used as a location map.
- 3. Existing Conditions / Pre-Construction Plan-** Include all of the following
 - 3.1. Limits of Construction Site – *Indicate the limits of disturbance with the method of demarcation in the field, typically Project Demarcation Fence (PDF) or Barrier Fence (BF), if located within 100' of a sensitive resource. Show limits 6-10 ft beyond toe/top of slope or as needed for working room using project demarcation fence and barrier fence. Decrease in sensitive areas to extent buildable. May coincide with silt fence location or just outside.*
 - 3.2. Existing topographic contours (5 feet or smaller interval)- *Recommend 2' intervals but use judgment. Be sure to label the contours. Slope indicators may be used to illustrate grades in lieu of contours if clarity is a problem.*
 - 3.3. Drainage ways, water features- *Label all including wetland class. Show flow directions in all conveyances.*
 - 3.4. General vegetative cover types (e.g. field, hardwood forest, grass, etc.)- *Label all vegetative types in proposed disturbance areas and areas receiving and treating runoff from the construction site.*
 - 3.5. Resource areas- *Include information from the resource identification map supplied by the Environmental Unit. Label all resource areas (riparian buffer, buffer for Class II wetlands, T&E, arch, soils, waterways, etc).*
 - 3.6. Existing structures, roads, utilities
 - 3.7. North arrow
 - 3.8. Scale
 - 3.9. Legend
- 4. Construction Site Plan**
 - 4.1. Limits of soil disturbance- *(See 3.1 above.)*
 - 4.2. Drainage ways, water features and limits of riparian zone - *Show 50' riparian zone and label. Impacts within the zone shall be minimized.*

- 4.3. Location of all EPSC measures - *Use symbols and line styles to show EPSC measures consistent with each detail drawing. When the plan becomes too cumbersome to include all measures on one plan sheet it may be beneficial to show phases of construction on multiple plan sheets. Indicating measures using stationing where it is inappropriate to show measures on the Plan is acceptable. Include notes for timeframe for stabilization and indicate restrictions on disturbed area if applicable.*
- 4.4. Proposed structures, roads, utilities
- 4.5. Dewatering areas
- 4.6. Location of proposed stockpiles and staging areas, if known
- 4.7. North arrow
- 4.8. Scale

5. Final Conditions / Stabilization Plan

- 5.1. Proposed topographic contours and/or cross sections- *If cross sections are to be used to show changes in contours, a note referencing that fact shall be included. On linear projects along existing alignment, slope indicators may be used to illustrate grades in lieu of contours if clarity is a problem.*
- 5.2. Toe of fill and top of cuts- *Include cut and fill lines*
- 5.3. Revegetation areas – *These areas shall be shaded to indicate that they are to be revegetated*
- 5.4. Rolled Erosion Control Product – *Areas to be protected and stabilized with RECP (erosion matting) shall be shown with a hatched pattern. These include slopes greater than 1:3 or other areas where mulch will not be sufficient to temporarily protect disturbed surfaces, such as interstate roadsides that experience greater windthrow.*
- 5.5. Other stabilization methods – *The plan should depict any other stabilization methods that will be used on the project, such as surface roughening or stone-fill.*
- 5.6. Proposed structures, roads, utilities
- 5.7. Boundaries for riparian zone - *Show 50' zone and label.*
- 5.8. North arrow
- 5.9. Scale

6. EPSC Detail Sheets

Include all EPSC detail drawings or Standard Drawings for measures included in the EPSC Plan Narrative and shown on the Plan. Three detail drawings will fit on one layout sheet.

6.1. Detail Sheet Resources

6.1.1. VTrans Designers can find the detail drawings at the following location:

T:\CADD\WorkSpace\Projects\English\dgn\details\Erosion\EPSC_2020

6.1.2. Consultant Designers can find the detail drawings at the following location:

<https://vtrans.vermont.gov/cadd/downloads/details/erosion-and-sediment-control>

- 6.2. *The symbol for each measure is shown in the upper right of each detail drawing. This should match the legend and symbology shown on the EPSC Plan sheets.*
- 6.3. *The seeding formula information should be included in this section of the plans. A detail drawing has been created to fit with the EPSC detail drawings.*
- 6.4. *Each detail drawing includes at the bottom how the measure is intended to be paid for. If measures will not be paid for directly then the detail drawing must convey that. In some cases measures have multiple pay items and they may not be applicable. For example for erosion matting, if only one type of matting is going to be used then clip out or line through the other erosion matting pay item.*