



Policy Title: Directive 2-4 Sedimentation and Erosion Control

Responsible Office: Design & Construction

Last Revised Date: May 2019

Summary:

This Directive outlines Fund requirements for the design and selection of stormwater management practices and sedimentation / erosion control as required by the New York State (NYS) Department of Environmental Conservation (DEC).

Overview:

Designs, standards and specifications for stormwater management practices and controlling erosion / sedimentation on construction projects are found in the following publications and should be identified and shown in the stormwater management plans:

1. NYS Standards and Specifications for Erosion and Sediment Control.
2. NYS Stormwater Management Design Manual.
3. NYS DEC SPDES General Permit for Stormwater Discharges for Construction Activity, Permit No. GP-0-15-002 (or more current version, as applicable).
4. Erosion and sediment control is required on all Fund projects, regardless of limits of disturbance.
5. When applicable, coordinate design of stormwater management practices and erosion / sedimentation control with the United States Army Corps of Engineers (USACE). See Directive 1D-3, Governing Agency Submissions.

Responsibility:

The Consultant provides the design professional who provides the phase submissions, contract documents, including the drawings, specifications, and other information required for stormwater management practices and sedimentation / erosion control systems. The basic fee covers the design and construction administration of stormwater management practices and erosion / sedimentation controls

Procedures

- I. General
 - A. For all streams rated C(T) and greater by NYS DEC, stream crossing activities shall be in compliance with a permit issued pursuant to Article 15 of the Environmental Conservation Law, where applicable, and should be carried out in conformance with guidelines in DEC's Stream Corridor Management Manual and/or applicable USACE permit, or other applicable permits for state and/or federal wetlands. Apply for project specific permits as required in Directive 1D-3, Governing Agency Submissions.
 - B. For construction activities with less than one (1) acre of disturbance, the Consultant will be required to provide general sedimentation and erosion control information on the grading plan or other appropriate plan and within technical specifications. This plan shall set the minimum requirements for the contractor and shall reference the NYS Standards and Specifications for Erosion and Sediment Control.
 - C. For construction activities with disturbance of one (1) acre or greater, the Consultant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with NYS DEC

SPDES General Permit No. GP-0-15-002 (or more current version, as applicable). The SWPPP will include designs and narratives for both:

- 1) Erosion and Sediment Controls necessary for the project, and
 - 2) Post Construction Stormwater Management Practices required for the project [this may be omitted only for construction activities noted in Table 1 of Appendix B of Permit GP-0-15-002].
 - 3) The Consultant shall also be required to provide construction documents as detailed in the “Documentation” section of this Directive
- D. For construction activities requiring coverage under the NYS DEC SPDES General Permit, the Consultant shall prepare a Notice of Intent (NOI) with all necessary technical documentation and shall sign the NOI as the SWPPP Preparer. The NOI shall be submitted to Fund for final signature as Owner and the Fund will submit the NOI to NYSDEC and will pay any associated fees. The NOI shall include the associated SUCF project number in the title.
- E. Weekly inspections, or more frequent as required by permit, shall be conducted by a “qualified inspector”. Final determination to be made by the Fund Construction Coordinator, in coordination with the Fund Design Coordinator, prior to Bid, and the project manual (Division 1 General Requirements, Special Condition)s adjusted as necessary):
- 1) Third party consultant local to project (by ECA or purchase order)
 - 2) Project Civil Consultant (added by ECA)
 - 3) Construction Manager (as applicable)
 - 4) Contractor (to be included in Bid Price)
- F. Upon construction completion and site stabilization (as certified by the weekly inspections), a Notice of Termination (NOT) will be prepared and signed by the Consultant and the filed with the NYSDEC by the Fund. The Consultant also obtains the signature of the Campus and applicable MS4 on the NOT. The NOT shall be filed by the person(s) completing the weekly inspections during construction.
- G. Unless included in the lump sum fee or the Schedule B of the Consultant’s Agreement, the services and fees related to the SWPPP, NOI and NOT may be provided through extra compensation when approved by the Fund.
- II. Documentation: In general, the runoff reduction requirements contained within the most recent NYSDEC General Permit revisions necessitate that the Consultant initiate and plan for stormwater management practices earlier in the design. The following outlines the Fund’s expectations for the Consultant’s design efforts for each phase:
- A. The Concept Phase–Submission shall address to the following criteria:
- 1) Is total disturbance area near or over one acre?
 - 2) Is there an increase in impervious cover?
 - 3) What is the anticipated classification – Redevelopment, New Construction?
 - 4) Is there a need for a five acre waiver?

- B. The Schematic Phase submission shall include the following in the report and on drawings to demonstrate site planning strategies:
- 1) Overall Site Map – includes wetlands, waterways, soil types, characteristics, floodplains, bedrock, topography, forest and any other critical areas. This should also identify natural drainage points.
 - 2) Site Planning Exercise – demonstrate conserving natural areas, relocating development if appropriate, identifying limits of soil restoration required. Reduce Impervious Cover – building footprint, parking and sidewalk needs, etc.
 - 3) Total Disturbance Calculation – include all areas needed for utility relocation, staging, parking, dewatering for geothermal, etc. – if exposing subbase or stripping topsoil, it is considered ‘disturbed’.
 - 4) Identification of Karst Geology / Potential Hotspots, if applicable
 - 5) Overall Pre/Post Impervious Area Calculation
 - 6) Final Determination of New Construction vs. Redevelopment Project
 - 7) Initial Water Quality Volume Calculation
 - 8) Identification of Runoff Reduction Practices – Initial sizing for space requirements
 - 9) Provide options with maintenance requirements for each
- C. The Design Manual Phase Submission shall include the following in report form and on drawing to address layout and sizing of proposed practices as well as provide a Draft SWPPP and NOI:
- 1) Minutes of meetings with Fund and Campus to finalize agreements on all proposed practices.
 - 2) Obtain Fund concurrence if a 5-acre waiver will be necessary.
 - 3) Perform final layout and sizing computations for all quality and quantity controls. Show all proposed practices on Stormwater Management / Erosion Control plans.
 - 4) Document all efforts through Stormwater Management Report and/or SWPPP, as required. These reports should be submitted with Design Manual submission.
 - 5) Verify that all requirements of Permit are met. If justifications are provided for providing minimum RRvs (instead of full WQv), the Fund review agreement is required.
 - 6) Prepare draft NOI for review.
- D. The Pre-Bid Phase submission shall include the following:
- 1) Provide final SWPPP, Stormwater Management Report and NOI, addressing all Fund and/or Campus comments. SWPPP preparer should sign the NOI for this submission. The Fund will submit final signed NOI to NYS DEC and will pay all required fees.
 - 2) Provide final Stormwater Management / Erosion Control Plans and associated details in plan set. If soil restoration is required, this must be clearly identified on the grading plan as well as the sedimentation and erosion control plan.
 - 3) Provide Stormwater Management / Erosion Control Specifications. Attach completed SWPPP (report text only – forms and NOI not required) as an attachment to actual specification.
 - 4) Discuss with Fund Coordinator who will do weekly inspections during construction. Revise front end and technical specifications as necessary.
- E. See the SWPPP checklist and sample certifications on the following pages.

Owner's Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there are reporting requirements. I understand that as the Owner/Operator I must ensure compliance with the terms and conditions of the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities and that is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect, or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

By _____ Date: _____

Title: _____, State University Construction Fund

Consultant's Certification

I, _____, of _____, certify that this Stormwater Pollution Prevention Plan (SWPPP) has been prepared under my supervision and to the best of my knowledge and belief is in substantial accord with New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-0-10-001. Deviations from the Permit requirements are as noted in this Report and in Section VII of the Notice of Intent (NOI) form included herein as an Attachment.

By _____ Date: _____

Of _____

The Owner shall have each Contractor and Subcontractor sign a copy of the following certification statement, before they commence any construction activity which disturbs soil:

Contractor's Certification

I hereby certify that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan (SWPPP) and agree to implement any corrective actions identified by the Qualified Inspector during a site inspection. I also understand that the Owner/Operator must comply with the terms and conditions of the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activities and that is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect, or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

By _____ Date: _____

Of _____

Responsible for _____

SWPPP REQUIRED ELEMENTS CHECKLISTErosion and Sediment Control Component (Required for all SWPPPs)

- Site map / location map – show soil groups
- Phasing plan / sequence of operations
- Description / schedule / plans of erosion control practices
- Temporary / permanent soil stabilization requirements
- Inspection schedule for practices
- Pollution prevention measures to control litter, debris
- Location / containment of any discharges (i.e. Concrete plant on site)

Post-Construction Stormwater Management Component (if applicable – i.e., increased impervious area or protected watershed):

- Drawings, specs, details of each post-construction practice
- Identification of any elements of the design that are not in conformance with the NYSDEC Design Manual, including justifications (for run-off reduction).
- Hydrologic / hydraulic analysis for all structural components of the stormwater management system (i.e. stormwater modeling).
- Detailed summary (including calculations) of the sizing criteria used to design practices.
- O & M Plan that includes inspection schedules and actions for continuous and effective operation.
