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# The Benefits of Establishing a SWPPP Sequence of Construction

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Within New York State, construction projects that meet specific soil disturbance parameters are required to obtain SPDES (State Pollutant Discharge Elimination System) Permit approval by the New York State Department of Environmental Conservation (NYSDEC) prior to soil disturbance activity. The permit includes the applicant's Notice of Intent (NOI) letter, the NYSDEC's NOI acknowledgment letter, as well as the MS4 acceptance form, if applicable to the project. Requisite to the SPDES permit, a Stormwater Pollution Prevention Plan (SWPPP) is designed primarily to manage stormwater and limit discharge of pollutants that may result in water quality violations. One of the elements that must be incorporated into a SWPPP is the construction sequence.

The construction sequence outlines the predetermined order of operations that must take place in planning for and executing a successful SWPPP. Steps in the sequence can range from "permit submission and acceptance" prior to the start of the project to "removal of temporary stormwater controls" when permanent stabilization has been achieved following completion of the project. The various steps within the sequence act as a guide for the maintenance, timing, and installation/removal of various controls based on what phase of the project is being executed. The New York State Standards and Specifications for Erosion and Sediment Control, Section 2, provides the list of necessary components to be included in the construction sequence (Lake, 2016<sup>1</sup>).

For projects that disturb 5 acres or more at any given time, a phasing plan must be developed. Each phase will

## **The sequence of construction, at a minimum, must include the following:**

- Schedule a pre-construction meeting with appropriate permitting authority
- Delineate resources to protect
- Establish staging area, construction entrance, topsoil stockpiles, and concrete truck washout areas
- Protect post-construction practice areas during construction to preserve native soil permeability; install Stormwater Management Practices (SMPs) only after site is stabilized
- Clearing and grubbing as necessary for the installation of perimeter controls
- Establish method of spoils disposal (on-site or off)
- Construction and stabilization of perimeter controls
- Install initial runoff controls and stabilization
- Remaining clearing and grubbing within perimeter
- Road grading
- Grading for the remainder of the site or phase
- Utility installation and connections
- Construction of buildings, roads, and other construction
- Installation of permanent stormwater management measures
- Conduct soil restoration
- Final fine grading, landscaping, and stabilization
- Removal of temporary erosion and sediment controls
- Restore and stabilize any disturbed areas remaining upon removal of temporary Erosion and Sediment Control (ESC) measures

*New York State Standards and Specifications for  
Erosion and Sediment Control (Lake, 2016)*

<sup>1</sup> Donald W. Lake Jr., November 2016, *New York State Standards and Specifications for Erosion and Sediment Control: Erosion Control Planning and Site Management*, p. 2.31-2.39

contain a construction sequence. Working in phases reduces the amount of area disturbed at one time and makes erosion and sediment control more manageable. Typically, the construction sequence of a given phase is categorized into “Pre-Construction”, “Construction”, and “Stabilization and Monitoring” sections.

A detailed construction sequence is designed to establish the order in which different aspects of the SWPPP are to be implemented. The construction sequence also serves as an important reference for stormwater inspectors, as erosion and sediment controls may be installed during different stages of a project. A construction sequence is a valuable component to any SWPPP and adherence to it reduces potential impacts from construction-generated pollutants.

If you have a project that includes a Construction General Permit for Stormwater, ATL, a WBE certified company, has Qualified Inspectors, working under the direct supervision of ATL’s Licensed Professional Engineers, located throughout New York State to perform SWPPP Inspections as dictated by your General Permit.



*Proper Construction Sequence: Silt fence installation adjacent to wetland prior to soil disturbance activities*

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