

# **Full SWPPP Information**

### TOWN OF ITHACA- STORMWATER MANAGEMENT PROGRAM

215 North Tioga Street • Ithaca, NY 14850 • 607-273-1747 • www.town.ithaca.ny.us

#### Purpose

Sedimentation is one of the leading pollutants in Cayuga Lake, which is listed as an impaired water body by the New York State Department of Environmental Conservation (NYS DEC). For construction projects it is important to include temporary erosion and sediment control measures during construction to reduce sedimentation. Development often creates additional impermeable features such as roads and buildings which increases stormwater runoff and pollutant concentrations. To reduce the impacts of development, it is necessary for large developments to provide water quantity and quality control using permanent stormwater structures. The Town of Ithaca requires sites with any of the following conditions to submit a Full Stormwater Pollution Prevention Plan (SWPPP):

- Land development activity disturbing more than 1 acre that will directly discharge a pollutant of concern to an impaired water body or watershed.
- Land development activity, other than one-or two-family houses, disturbing 1 acres or more.
- Land development activity that creates 10,000 square feet or more of impervious cover, other than one- or two-family houses.
- Land development activity that is part of a larger common plan of development that meets or exceeds these thresholds.

A Full SWPPP must be prepared and signed by a licensed Professional Engineer who is knowledgeable in the principles and practices of erosion and sediment control and stormwater management. The Full SWPPP must contain all the information listed in the Full SWPPP Checklist, available from the Town of Ithaca.

Technical specifications are available from the Town of Ithaca for common erosion and sediment control practices that may be incorporated into your Full SWPPP. Additional specifications for erosion and sediment control practices can be found in the New York State Standards and Specifications for Erosion and Sediment Control. Permanent stormwater practices should be designed using the New York State Stormwater Management Design Manual. Both documents are available through the New York State Department of Environmental Conservation (NYS DEC).

#### **Inspections**

A Full SWPPP requires a Qualified Inspector or someone working directly under the direct supervision of the Qualified Inspector to conduct site inspections and document the effectiveness of all erosion and sediment control practices every 7 days or after a rain event of 0.5-inches or more. Inspection reports shall be signed by the Qualified Inspector and submitted to the Town within one week of the inspection date. The report shall include the name and contact information of, and be signed by, the Qualified Inspector. Also, an initial inspection report is required before any land disturbance activity. Example SWPPP inspection forms are available from the Town of Ithaca.

#### Permanent Structures

A Full SWPPP may require permanent stormwater control structures or practices. These practices shall be installed and maintained as required. These structures will also require Operation and Maintenance Agreements approved by the Town.

#### **Stormwater Credits**

The NYS DEC has identified nonstructural Stormwater Management Practices which qualify as Stormwater Credits that can reduce the water quality treatment volume and the water quantity/stream channel protection volume required for a project. The Town encourages use of such nonstructural practices which are described in the DEC's "The Use and Implementation of Stormwater Credits." Proposed Stormwater Credits are to be reviewed and approved by the Town.

#### **Better Site Design Requirements**

The Town requires any project with a Full SWPPP to incorporate a minimum of 2 of the DEC's "Better Site Design Practices." Many of these practices will overlap with Stormwater Credits and possibly reduce water quality and quantity treatment volumes.



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# Full SWPPP Checklist

The Town of Ithaca Stormwater Management & Erosion and Sediment Control Law requires property owners and/or contractors to complete a Full Stormwater Pollution Prevention Plan (SWPPP) for larger construction projects. The purpose of the Full SWPPP is to ensure that proper water quality and quantity treatment and erosion control measures will be implemented for your project to prevent pollutants and sediment from entering our streams, wetlands, and Cayuga Lake.

When submitting a Full SWPPP please make sure to include the following information along with this checklist:

#### Mark submitted items with an X: OFFICE USE ONLY 1. 1. Attached SWPPP Applicant Information Sheet 2. Written description of the project, including existing site conditions 2. 3. Site maps and construction drawings showing: 3. a. General location map at scale no smaller than 1"=100' а b. Total site area b. c. All proposed development elements including structures and roads C.\_\_ d. \_\_\_\_\_Areas of land disturbance d e. \_\_\_\_Areas of land that will not be disturbed f. f. \_\_\_\_\_Areas of pre-existing and proposed vegetative cover g. \_\_\_\_\_Delineation of pre-and post development watershed boundaries and outlets g.\_\_\_ h. \_\_\_\_\_Locations of on-site and adjacent off-site surface waters, drainage area h. stormwater flow path, and affected municipal drainage system flows i. \_\_\_\_\_Wetlands and drainage patterns that could be affected by the land development activity j. \_\_\_\_\_Areas of existing and proposed final slopes k. <u>Locations of off-site material, waste, borrow or equipment storage areas</u> I.\_\_\_\_\_Locations and size of erosion and sediment control practices (1"=50' or larger scale) m. Locations and size of Stormwater Management Practices (1"=50' or larger scale) m. 4. \_\_\_\_\_Description of existing soils present at the site, existing vegetative surface cover, 4. and existing impervious cover 5. \_\_\_\_\_Landscaping vegetation plan describing woody and herbaceous vegetation 5. to be preserved and installed Type, quantities, size of, and disposal methods for construction and waste 6. \_\_\_\_ 6.\_\_\_ materials stored on-site

		OFFICE USE ONLY
7	Description of pollution prevention measures that will be used to control litter, construction chemicals, and debris	7
8	Temporary and permanent structural and vegetative measures to prevent erosion and sedimentation	8
9	Dimensions, material specifications, and installation details for erosion and sediment control practices	9
10	Maintenance and operating procedures and schedules of erosion and sediment control practices	10
11	Description of structural practices designed to divert flows away from exposed soils	11
12	Name or location of any surface waters that will receive stormwater runoff from proposed project site	12
13	List of each stormwater control facility that will be converted from temporary to permanent to permanent control measures.	13
14	Land development plan describing the intended sequence of construction activities (including clearing and grubbing, excavation and grading, utility and infrastructure installation, etc. Not more than 3 acres shall be disturbed at any one time)	14
15	Implementation schedule for staging and sequencing of temporary erosion and sediment control practices, including timing of initial placement and duration that each practice will remain in place	15
16	For each phase of development, submission of a separate and distinct plan for stormwater erosion and sediment control, including sequencing plan	16
17	Pre- and Post-development stormwater runoff conditions including:	17
	a Evaluation of design storm frequency, intensity, and duration for the 2, 10, 25, 50, and 100-year storm events	a
	bCurve Number and Time of Concentration calculations	b
	cPeak Runoff Rates and Runoff Volumes for each watershed area, including offsite upstream contributing areas	C
	dInfiltration rates	d
	eFlow velocities and culvert capacities	e
	fData on increase in rate and volume of all runoff for the specified design storms	f
	gDocumentation of sources for all computation methods and field test results	g
18	Hydrologic and Hydraulic analysis for all structural components of stormwater system	18
19	Calculations for sizing Stormwater Management Facilities and Practices using "Unified Stormwater Sizing Criteria" as described in the New York State Department of Environmental Conservation's "Stormwater Management Design Manual"	19
	aWater Quality Volume	a
	bStream Channel Protection Volume Requirements	b

	OFFICE USE ONLY
cOverbank Flood Control Criteria	C
dExtreme Flood Control Criteria	d
20Description of each permanent post-construction Stormwater Management Practice including material specifications and installation details	20
21Description of the non-structural measures (minimum of 2) from the New York State Department of Environmental Conservation's "Better Site Design" manual	21
22Description and calculations for the use and implementation of any Stormwater Credits	22
23Maintenance and Operating procedures and schedules for each Stormwater Management Practice	23
24Developer and Contractor Certification certifying compliance with the terms and conditions of the submitted SWPPP under penalty of law	24
25Location map and erosion & sediment control details of any offsite fill or excavation related to the project. Include trucking route details and final grading plan	25

Initials