

PRELIMINARY STORMWATER POLLUTION PREVENTION PLAN

for

DELAWARE RIVER SOLAR, LLC SOLAR ENERGY FACILITY YELLOW MILLS ROAD

#466 Yellow Mills Road Town of Farmington, County of Ontario, New York

Prepared by Schultz Associates, Engineers & Land Surveyors, P.C.

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SECTION 1: PROJECT INFORMATION

- 1.1 Pre-Construction Meeting Agenda and Notes
 - A. Pre-Construction Meeting Agenda:

B.	Pre-Construction Meeting Notes:

1.2 Owner-Operator-SWPPP Contact-SWPPP Preparer Contact Information

A. Operator-SWPPP Contact:

Delaware River Solar, LLC

33 Irving Place

New York, NY 10003

Owner-SWPPP Contact:

Rodger & Carol Smith

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Contact: Peter Dolgos Phone: (646) 998-6495

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B. **SWPPP Preparer Contact:**

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1.3 Site Address, Scope of Project, Type and Size of Project

A. Site Address:

The following parcel is involved in this project:

• 466 Yellow Mills Road; Tax Account. Number: 010.000-01-037.11

B. Scope of Project:

The landowner plans to lease a portion of his agricultural land to the Applicant for the purpose of installing a 7⁺/- MW Solar Energy System Facility. The applicant intends to utilize approximately 38 acres (total area to be disturbed) of the 135.4 acre parcel. This project will have one main gravel access road from Fox Road, a town roadway. RG&E will require access roads to each of the interconnection points. The site plan shows improving the existing farm access to the west of RGE pole #57 to access this interconnection and an access from the main access road easterly to RGE pole #59. The solar arrays will be installed using posts driven into the ground with the solar panels mounted on racks supported by the posts. The arrays will be elevated with vegetation planted underneath, minimizing the new impervious area.

C. Type and Size of Project:

- Type: 7.0 MW Solar Energy System Facility.
- <u>Size:</u> The total land controlled by the owner is 156.6± acres. The area to be leased by the applicant will be approximately 37 acres. The area within the area of disturbance is approximately 38± acres, with about 2.6 acres of physical soil disturbance. The amount of ground based impervious area to be constructed is approximately 0.02± acres. The total area physically disturbed at one time will be kept under 5 acres.

SECTION 2: EXISTING AND PROPOSED MAPPING AND PLANS

2.1 Vicinity Map and Project Boundary

- A. <u>Vicinity Map:</u> The project site is located southwest of the intersection of Yellow Mills Road and Fox Road in the Town of Farmington, Ontario County, New York.
- B. Project Boundary: The project limits are depicted in Figure 2.1.

2.2 Existing and Proposed Topography

The proposed development is designed to minimize the impact to the existing topography. The solar arrays are installed with post in ground, therefore there is no mass grading is required for the installation. Proposed grading is restricted to the access road improvements, temporary construction areas and required landscaping and stormwater management facilities. Existing topography and proposed grading can be found on Sheets S-1 & S-2 of the included site plans for the project.

2.3 Location of Perennial and Intermittent Streams

There is an intermittent drainage swale runs along the western edge of the project parcel. This swale ultimately connects with Ganargua Creek 2.8 miles north of the project site. There are also State and Federal wetlands located within the project site, as shown in *Figure 2.3*.

2.4 Map and Description of Soils from USDA Soil Survey

As per the USDA Web Soil Survey, *Figure 2.4*, (http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm), the following soil types are present within the project location at the site:

- Ontario Loam, (Om): Hydrologic Soil Group "B"
- Phelps Gravelly Silt Loam, (Pk): Hydrologic Soil Group "B/D"
- Palmyra Cobbly Loam (Pb): Hydrologic Soil Groups "B"
- Argiaquolls Mucky Silt Loam, (Wd): Hydrologic Soil Group "D"

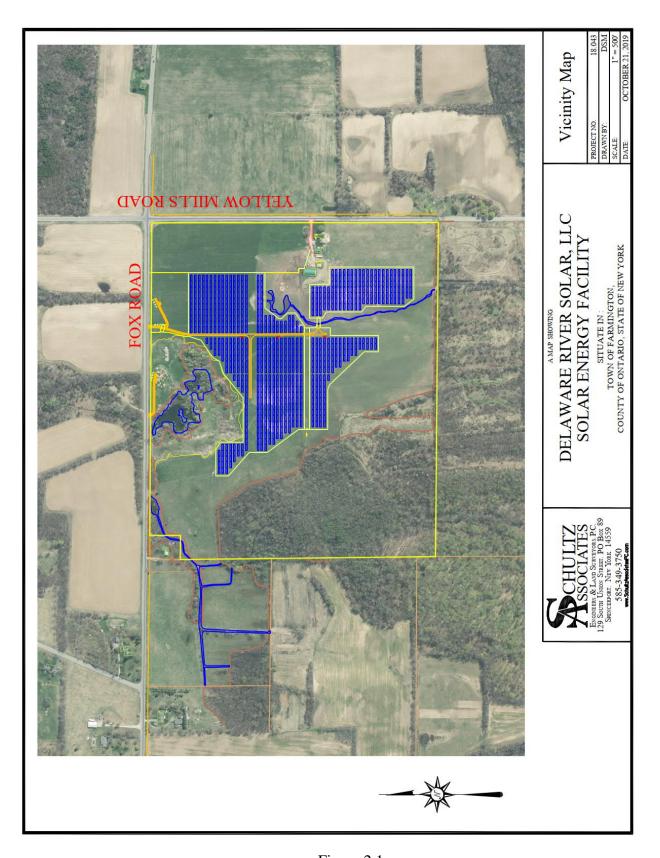


Figure 2.1

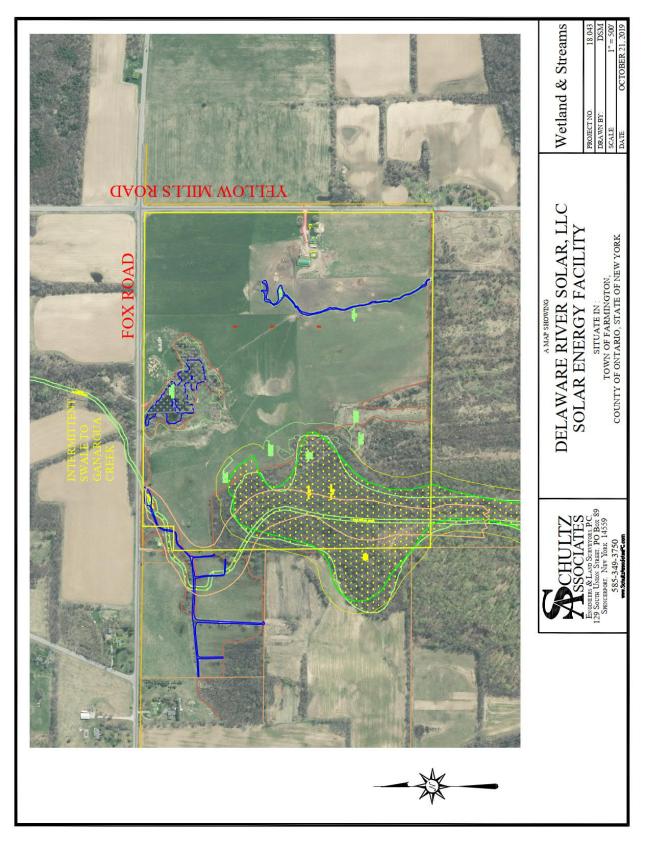


Figure 2.3

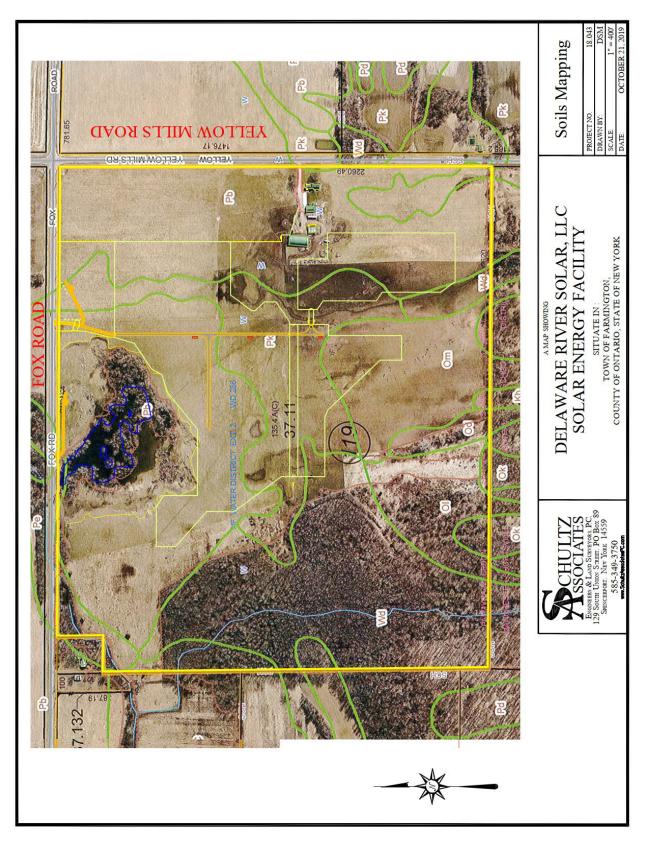


Figure 2.4

2.5 Boundaries of Existing Vegetation and Proposed Limits of Clearing

The site is currently active cattle pasture. There will be little to no clearing of existing vegetation required. Some existing trees may need to be trimmed back to avoid shading the system near the western portion of the system. The proposed landscape screen will add a significant amount of vegetation back to the site to offset any necessary clearing.

2.6 <u>Location and Boundaries of Resource Protection Areas such as Wetlands, Lakes, Ponds, etc.</u>

There are state and federally regulated wetlands located on the site. The existing wetlands were field delineated on April 30, 2018 by North Country Ecological Services, Inc. for this development and are shown on the included plan set.

2.7 Boundary and Acreage of Upstream Watershed

The proposed project site accepts upland drainage via from the south. This drainage is either directed west of the system into the wetland areas or ease of system #2 into wetland area #3 which naturally dissipates from behind the existing barn and eventually enters the pond along Fox Road.

2.8 Name and Locations of Receiving Waters

All runoff from the project site will ultimately enter Ganargua Creek, a tributary of which passes through the western portion of the parcel.

2.9 <u>Location of Existing and Proposed Roads, Lot Boundaries, Buildings and other Structures</u>

The locations of all relevant existing and proposed site features are indicated on Sheet S-1 of the included site plans.

A. Existing and Proposed Roads:

- Fox Road is an established town roadway.
- Yellow Mills Road is an established town roadway.
- The project will construct one new access road from Fox Road.
- The project will improve on existing farm access from Fox Road.

B. Existing and Proposed Lot Boundaries:

The project site is comprised of one existing parcel:

- 466 Yellow Mills Road; Tax Account. Number: 010.000-01-037.11
- Three new lots are proposed. Each project is required to be on a separate tax parcel.

C. Existing and Proposed Buildings and other Structures:

- The existing residential home and associated agricultural structures are shown on Sheet S-1 of the included plan set.
- There are no permanent structures planned for the site. All improvements installed as part of this project will be removed at the end of the projects life cycle.

2.10 <u>Location and Size of Staging Areas, Equipment Storage Areas, Borrow Pits, Waste Areas, and</u> Concrete Washout Areas

- A. <u>Staging Area:</u> The material lay down area is shown as 18,000 SF south of a temporary stone access drive between Project #1 and #2, as depicted on the plan set.
- B. <u>Equipment Storage Area:</u> The equipment storage area will be located just outside the main gates on the main access road.
- C. <u>Borrow Pit:</u> This project does not require a borrow pit.
- D. <u>Waste Area:</u> The waste area will be located adjacent to the access roadway, at the west end of the equipment storage area.
- E. <u>Concrete Washout Area:</u> The concrete washout area, if needed, will be located at the west end of the equipment storage area.

2.11 Existing and Proposed Utilities (Sewer, Water, Gas etc) and Easements

The locations of all existing and proposed utilities and easement are indicated on Sheets P-1 and S-1 of the included site plans. Regarding the locations of the existing underground utilities:

- Please note that the indicated locations of the underground utilities are approximate. All utilities shall be field staked before commencing work. The contractor is directed to notify Central Stakeout number 1-800-962-7962 for location of underground utilities prior to construction.
- Existing underground utilities shown on the site plans were plotted from field locations and/or utility company record plans. The contractor shall determine the exact location and elevation of underground utilities before commencing construction. The contractor shall make exploratory excavations to locate existing underground facilities sufficiently ahead of construction to permit revisions as required to meet existing conditions.

A. Utilities:

- 1. Existing: The site has access to public water, gas and electric at the roadsides.
- 2. <u>Proposed:</u> The proposed project will generate electricity and will be connected into the power grid at connection points located west the intersection of Yellow Mills Road and Fox Road as shown on the included plan set.

B. Easements:

- 1. Existing: The project location is not currently encumbered by any easements:
- 2. Proposed: The following easements are proposed:
 - Access Easement: The Lessee will require a private access easement to access the facility.

2.12 <u>Location and Flow Paths of Existing and Proposed Conveyance Systems, such as Channels,</u> Swales, Culverts, and Storm Drains

All storm water features are indicated on Sheets S-1 and S-2 of the included site plans.

2.13 <u>Location of Floodplain/Floodway Limits</u>

A portion of the project site is located in a Flood Zone as per Flood Insurance Rate Map Number 3612990010B, dated September 30, 1983. The proposed project will not impact the flood zone.

2.14 <u>Location and Dimensions of Proposed Channel Modifications, such as Bridge or Culvert Crossings</u>

This Section does not apply to this project.

2.15 <u>Location, Size, Maintenance Access and Limits of Disturbance of Proposed Temporary and Permanent Stormwater Management and Erosion and Sediment Control Practices, including timing and Duration of Temporary Practices</u>

- 1. <u>Location</u>: The location of the proposed permanent stormwater management and erosion and sediment control practices can be found on Sheet S-1 and S-2 of the plan set.
- 2. <u>Size & Maintenance</u>: The size and maintenance schedule for the proposed permanent stormwater management and erosion and sediment control practices can be found within the site plans on Sheets S-1 and S-2 of the plan set.
- 3. <u>Limits of Disturbance:</u> The proposed limits of disturbance can be found within the site plans on Sheet S-1 and S-2 of the plan set. The post development impervious cover consists of the racking systems mounting posts, the inverter pad, fence posts and access roadway. Due to the small increase in impervious cover, the hydraulic characteristics will not significantly change.

2.16 Solar Array: Impervious Surfaces

In order to limit the project's impact on stormwater runoff and eliminate the need for permanent stormwater management features the following constructions standards and practices will be utilized:

- 1. The solar arrays are pole mounted with vegetation to be established underneath the panels. The vegetation shall be a meadow seed mix to be maintained with a minimum of two mowing per year. Stormwater will fall onto the panels, sheet flow to a drip edge and fall to the vegetated ground surface below. The runoff will then be able to infiltrate into the equivalent unsaturated vegetated ground surface as it does in pre development conditions. The site is currently vegetated pastures and will be considered meadow in the post-construction calculations. There will be no increase to the CN value, rate and volume of stormwater run-off leaving the project site.
- 2. The proposed gravel access drives will be constructed as per the 'Pervious Access Road Section' detail on Sheet S-2. The access roads will be constructed with coarse (3" minus) washed stone and a woven geo-textile fabric meeting the specified requirements, including a tensile strength of 150 lbs, elongation of 50%, a CBR Puncture of 400 lbs and a minimum water flow rate of 120 GPM/SF. As Per the NYSDEC the pervious access road can use a CN of 90 as opposed to the typical impervious gravel driveway CN of 98.
- 3. The new impervious surfaces for this project will be the three 355 sf concrete pads where the inverter and other electrical equipment will be located. (1,065 SF in total)

SECTION 3: CONSTRUCTION EROSION AND SEDIMENT CONTROL PLANS, VEGETATIVE MEASURES & CONTROL OF NON-STORMWATER DISCHARGES

3.1 <u>Description of Temporary and Permanent Structural and Vegetative Measures</u>

A. General Erosion Control Measures:

- 1. Temporary Stabilization Soil stockpiles and disturbed portions of the site where construction activity has temporarily ceased will be stabilized with temporary seed and mulch, application of stabilization measures must be initiated by the end of the next business day and completed within 14 days for sites of 5 acres or less of active disturbed area, or within 7 days for sites over 5 acres of active disturbed area. The temporary seed shall be annual rye applied at the rate of 40 lbs. per acre. After seeding, each area shall be mulched with 2 tons per acre or 3 bales per 1000 square feet of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight. If other soil stabilization measures are to be used, please describe in this section. Areas of the site that are to be paved will be temporarily stabilized by applying geotextile and stone subbase until bituminous pavement can be applied.
- 2. Permanent Stabilization Disturbed portions of the site where construction activities have permanently ceased, application of stabilization measures must be initiated by the end of the next business day and completed within 14 days for sites of 5 acres or less of active disturbed area, or within 7 days for sites over 5 acres of active disturbed area. Lime and fertilizer will be applied as determined by soil tests. The contractor shall use the permanent seed mix as described in Section 3.10 of this report. After seeding, each area shall be mulched as described above. All slopes greater than 3H:1V shall have jute or other erosion control fabric applied.
- 3. Off-Site Vehicle Tracking A stabilized construction entrance will be provided to help reduce vehicle tracking of sediments. The paved street adjacent to the site entrance will be swept daily to remove any excess mud, dirt or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.
- 4. Dust Control Dust control will be implemented through the use of water, applied at effected locations in quantities and frequencies required to prevent nuisance to the surrounding area. A water truck shall be on-site through the duration of construction. Equipment will be properly maintained and idle time limited so as to minimize the amount of emissions.

B. Specific Erosion Control Measures:

- Stabilized Construction Entrance Stabilized Construction Entrances shall be installed at the intersection of the access roadways and Fox Road as specified by the Erosion & Sediment Control Plans.
- 2. Silt fence Silt fence is to be installed at the locations specified by the Site Plans.
- 3. Compost Filter Sock Compost filter sock may be substituted for silt fence where appropriate.
- 4. Concrete Washout Basin The concrete washout basin shall be installed at the eastern end of the equipment storage area as specified on the Erosion & Sediment Control Plans.

3.2	Material Specifications, Requirements for Erosion Refer to the details on the	and Sedimen	t Control Pra	Operations as	nd Maintenance

STANDARD AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ACCESS



Definition & Scope

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction access is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

Conditions Where Practice Applies

A stabilized construction access shall be used at all points of construction ingress and egress.

Design Criteria

See Figure 2.1 on page 2.31 for details.

Aggregate Size: Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

Thickness: Not less than six (6) inches.

Width: 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

Length: As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

Geotextile: To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impossible, a mountable berm with 5:1 slopes will be permitted.

Criteria for Geotextile: The geotextile shall be woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be

inert to commonly encountered chemicals, hydro-carbons, mildew, rot resistant, and conform to the fabric properties as shown:

Fabric Proper- ties ³	Light Duty ¹ Roads Grade Sub- grade	Heavy Duty ² Haul Roads Rough Graded	Test Meth- od
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 Modified
Equivalent	40-80	40-80	US Std Sieve
Opening Size			CW-02215
Aggregate Depth	6	10	-

¹Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Acceptable materials are Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.

²Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Trevira Spunbond 1135, Mirafi 600X, or equivalent.

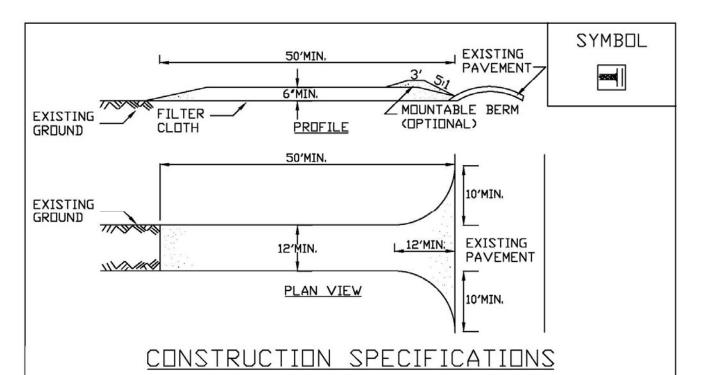
³Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

Maintenance

The access shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

Figure 2.1
Stabilized Construction Access



- 1. STONE SIZE USE 1-4 INCH STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2. LENGTH NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- 3. THICKNESS NOT LESS THAN SIX (6) INCHES.
- 4. WIDTH TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- 5, GEDTEXTILE WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE,
- 6. SURFACE WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CON-STRUCTION ACCESS SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 7. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE STABILIZED CONSTRUCTION ACCESS

STANDARD AND SPECIFICATIONS FOR SILT FENCE



Definition & Scope

A **temporary** barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil by temporarily ponding the sediment laden runoff allowing settling to occur. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

Conditions Where Practice Applies

A silt fence may be used subject to the following conditions:

- 1. Maximum allowable slope length and fence length will not exceed the limits shown in the Design Criteria for the specific type of silt fence used; and
- Maximum ponding depth of 1.5 feet behind the fence;
- 3. Erosion would occur in the form of sheet erosion; and
- 4. There is no concentration of water flowing to the barrier; and
- 5. Soil conditions allow for proper keying of fabric, or other anchorage, to prevent blowouts.

Design Criteria

- 1. Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff.
- 2. All silt fences shall be placed as close to the disturbed area as possible, but at least 10 feet from the toe of a slope steeper than 3H:1V, to allow for maintenance and

- roll down. The area beyond the fence must be undisturbed or stabilized.
- 3. The type of silt fence specified for each location on the plan shall not exceed the maximum slope length and maximum fence length requirements shown in the following table:

		Slope Length/Fence Length (ft.)			
Slope	Steepness	Standard	Reinforced	Super	
<2%	< 50:1	300/1500	N/A	N/A	
2-10%	50:1 to 10:1	125/1000	250/2000	300/2500	
10-20%	10:1 to 5:1	100/750	150/1000	200/1000	
20-33%	5:1 to 3:1	60/500	80/750	100/1000	
33-50%	3:1 to 2:1	40/250	70/350	100/500	
>50%	> 2:1	20/125	30/175	50/250	

Standard Silt Fence (SF) is fabric rolls stapled to wooden stakes driven 16 inches in the ground.

Reinforced Silt Fence (RSF) is fabric placed against welded wire fabric with anchored steel posts driven 16 inches in the ground.

Super Silt Fence (SSF) is fabric placed against chain link fence as support backing with posts driven 3 feet in the ground.

4. Silt fence shall be removed as soon as the disturbed area has achieved final stabilization.

The silt fence shall be installed in accordance with the appropriate details. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Butt joints are not acceptable. A detail of the silt fence shall be shown on the plan. See Figure 5.30 on page 5.56 for Reinforced Silt Fence as an example of details to be provided.

Criteria for Silt Fence Materials

 Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	110	ASTM D 4632
Elongation at Failure (%)	20	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751
Minimum UV Residual (%)	70	ASTM D 4355

- 2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.5 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot. Posts for super silt fence shall be standard chain link fence posts.
- 3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.
- 4. Prefabricated silt fence is acceptable as long as all material specifications are met.

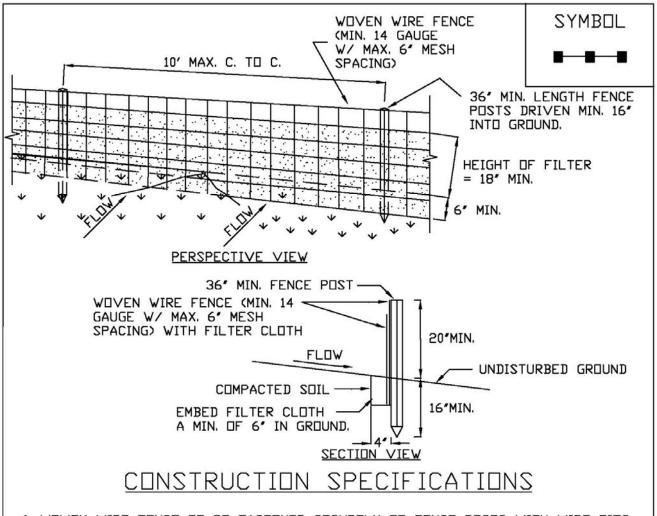
Reinforced Silt Fence



Super Silt Fence



Figure 5.30 Reinforced Silt Fence



- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES, POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
- 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 6" MAXIMUM MESH OPENING.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- 4. PREFABRICATED UNITS SHALL MEET THE MINIMUM REQUIREMENTS SHOWN.
- 5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE,

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS, NEW YORK STATE DEPARTMENT OF TRANSPORTATION, NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION, NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

REINFORCED SILT FENCE

STANDARD AND SPECIFICATIONS FOR COMPOST FILTER SOCK



Definition & Scope

A **temporary** sediment control practice composed of a degradable geotextile mesh tube filled with compost filter media to filter sediment and other pollutants associated with construction activity to prevent their migration offsite.

Condition Where Practice Applies

Compost filter socks can be used in many construction site applications where erosion will occur in the form of sheet erosion and there is no concentration of water flowing to the sock. In areas with steep slopes and/or rocky terrain, soil conditions must be such that good continuous contact between the sock and the soil is maintained throughout its length. For use on impervious surfaces such as road pavement or parking areas, proper anchorage must be provided to prevent shifting of the sock or separation of the contact between the sock and the pavement. Compost filter socks are utilized both at the site perimeter as well as within the construction areas. These socks may be filled after placement by blowing compost into the tube pneumatically, or filled at a staging location and moved into its designed location.

Design Criteria

- 1. Compost filter socks will be placed on the contour with both terminal ends of the sock extended 8 feet upslope at a 45 degree angle to prevent bypass flow.
- 2. Diameters designed for use shall be 12" 32" except that 8" diameter socks may be used for residential lots

- to control areas less than 0.25 acres.
- 3. The flat dimension of the sock shall be at least 1.5 times the nominal diameter.
- 4. The **Maximum Slope Length** (in feet) above a compost filter sock shall not exceed the following limits:

Dia (in)			S	lope %	ope %			
Dia. (in.)	2	5	10	20	25	33	50	
8	225*	200	100	50	20			
12	250	225	125	65	50	40	25	
18	275	250	150	70	55	45	30	
24	350	275	200	130	100	60	35	
32	450	325	275	150	120	75	50	
* Length in feet								



- The compost infill shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of manmade foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 -Compost Standards Table. Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Solid Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content. When using compost filter socks adjacent to surface water, the compost should have a low nutrient value.
- The compost filter sock fabric material shall meet the minimum requirements provided in Table 5.1 - Compost Sock Fabric Minimum Specifications Table.

- 7. Compost filter socks shall be anchored in earth with 2" x 2" wooden stakes driven 12" into the soil on 10 foot centers on the centerline of the sock. On uneven terrain, effective ground contact can be enhanced by the placement of a fillet of filter media on the disturbed area side of the compost sock.
- 8. All specific construction details and material specifications shall appear on the erosion and sediment control constructions drawings when compost filter socks are included in the plan.

Maintenance

- 1. Traffic shall not be permitted to cross filter socks.
- 2. Accumulated sediment shall be removed when it reaches half the above ground height of the sock and disposed of in accordance with the plan.

- 3. Socks shall be inspected weekly and after each runoff event. Damaged socks shall be repaired in the manner required by the manufacturer or replaced within 24 hours of inspection notification.
- 4. Biodegradable filter socks shall be replaced after 6 months; photodegradable filter socks after 1 year. Polypropylene socks shall be replaced according to the manufacturer's recommendations.
- 5. Upon stabilization of the area contributory to the sock, stakes shall be removed. The sock may be left in place and vegetated or removed in accordance with the stabilization plan. For removal the mesh can be cut and the compost spread as an additional mulch to act as a soil supplement.

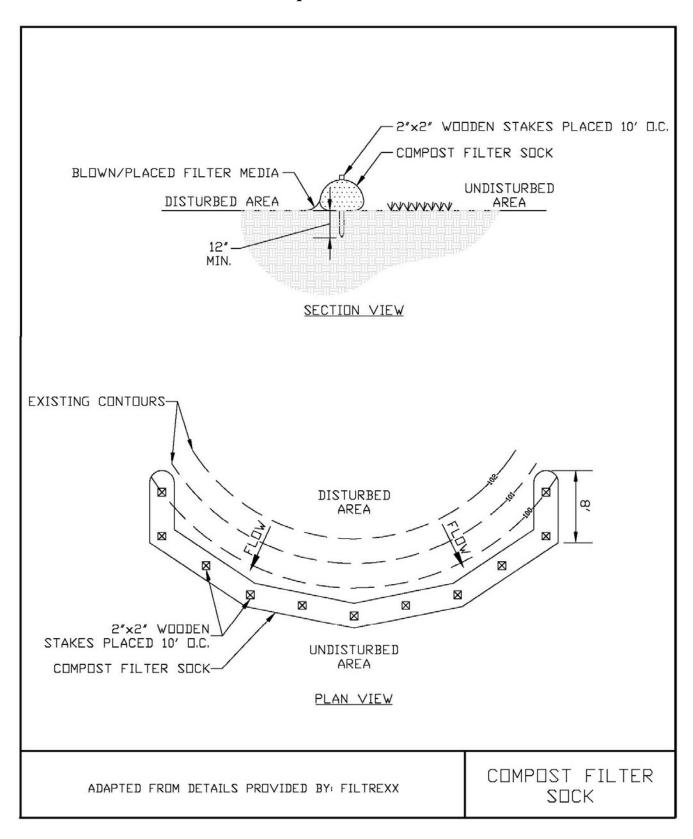
Table 5.1 - Compost Sock Fabric Minimum Specifications Table

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi- Filament Polypropylene (HDMFPP)
Material Character- istics	Photodegrada- ble	Photodegrada- ble	Biodegradable	Photodegrada- ble	Photodegradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years

Table 5.2 - Compost Standards Table

Organic matter content	25% - 100% (dry weight)
Organic portion	Fibrous and elongated
рН	6.0 - 8.0
Moisture content	30% - 60%
Particle size	100% passing a 2" screen and 10 - 50% passing a 3/8" screen
Soluble salt concentration	5.0 dS/m (mmhos/cm) maximum

Figure 5.2 Compost Filter Sock



STANDARD AND SPECIFICATIONS FOR CONCRETE TRUCK WASHOUT



Definition & Scope

A temporary excavated or above ground lined constructed pit where concrete truck mixers and equipment can be washed after their loads have been discharged, to prevent highly alkaline runoff from entering storm drainage systems or leaching into soil.

Conditions Where Practice Applies

Washout facilities shall be provided for every project where concrete will be poured or otherwise formed on the site. This facility will receive highly alkaline wash water from the cleaning of chutes, mixers, hoppers, vibrators, placing equipment, trowels, and screeds. Under no circumstances will wash water from these operations be allowed to infiltrate into the soil or enter surface waters.

Design Criteria

Capacity: The washout facility should be sized to contain solids, wash water, and rainfall and sized to allow for the evaporation of the wash water and rainfall. Wash water shall be estimated at 7 gallons per chute and 50 gallons per hopper of the concrete pump truck and/or discharging drum. The minimum size shall be 8 feet by 8 feet at the bottom and 2 feet deep. If excavated, the side slopes shall be 2 horizontal to 1 vertical.

Location: Locate the facility a minimum of 100 feet from drainage swales, storm drain inlets, wetlands, streams and other surface waters. Prevent surface water from entering the structure except for the access road. Provide appropriate access with a gravel access road sloped down to the structure. Signs shall be placed to direct drivers to the facility after their load is discharged.

Liner: All washout facilities will be lined to prevent

leaching of liquids into the ground. The liner shall be plastic sheeting with a minimum thickness of 10 mils with no holes or tears, and anchored beyond the top of the pit with an earthen berm, sand bags, stone, or other structural appurtenance except at the access point.

If pre-fabricated washouts are used they must ensure the capture and containment of the concrete wash and be sized based on the expected frequency of concrete pours. They shall be sited as noted in the location criteria.

Maintenance

- All concrete washout facilities shall be inspected daily.
 Damaged or leaking facilities shall be deactivated and repaired or replaced immediately. Excess rainwater that has accumulated over hardened concrete should be pumped to a stabilized area, such as a grass filter strip.
- Accumulated hardened material shall be removed when 75% of the storage capacity of the structure is filled. Any excess wash water shall be pumped into a containment vessel and properly disposed of off site.
- Dispose of the hardened material off-site in a construction/demolition landfill. On-site disposal may be allowed if this has been approved and accepted as part of the projects SWPPP. In that case, the material should be recycled as specified, or buried and covered with a minimum of 2 feet of clean compacted earthfill that is permanently stabilized to prevent erosion.
- The plastic liner shall be replaced with each cleaning of the washout facility.
- Inspect the project site frequently to ensure that no concrete discharges are taking place in non-designated areas.

3.3 <u>Construction Drawings Showing the Locations, Sizes, and Lengths for each Erosion and Sediment Control Practice</u>

Refer to Sheets S-1 and S-2 of the included site plans for this information.

3.4 <u>Identification of Design Elements not in Conformance with the New York State Standard and Specifications for Erosion and Sediment Control</u>

This Section does not apply to this project.

3.5 <u>Inspection and Maintenance Schedule of the Erosion and Sediment Control Practices</u>

A. Inspections by the Environmental Monitor (EM):

The project developer is required to hire an Environmental Monitor (EM) to oversee the construction, restoration and follow-up monitoring in agricultural fields. The EM is to be onsite whenever construction or restoration work is occurring. The EM is to coordinate the inspection schedule with the Ontario County Soil and Water Conservation District and/or the NYS Department of Agriculture and Markets.

B. <u>Schedule/Procedures:</u> According to SPDES General Permit GP-0-15-002, the following maintenance and inspection measures are required (*please note that references in this section refer to passages in the language of the permit itself*):

1. General Construction Site Inspection and Maintenance Requirements

- i. The *owner or operator* must ensure that all erosion and sediment control practices and all post-construction stormwater management practices identified in the SWPPP are maintained in effective operating condition at all times.
- ii. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

2. Owner or Operator Maintenance Inspection Requirements

- i. The *owner or operator* shall inspect, in accordance with the requirements in the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, the erosion and sediment controls identified in the SWPPP to ensure that they are being maintained in effective operating condition at all times.
- ii. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *owner or operator* can stop conducting the maintenance inspections. The *owner or operator* shall begin conducting the

maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

- iii. For construction sites where soil disturbance activities have been shut down with partial project completion, the *owner or operator* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.
- 3. Qualified Inspector Inspection Requirements The owner or operator shall have a qualified inspector conduct site inspections in conformance with the following requirements: [Note: The trained contractor identified in Part III.A.6. cannot conduct the qualified inspector site inspections unless they meet the qualified inspector qualifications included in Appendix A. In order to perform these inspections, the trained contractor would have to be a:
 - Licensed Professional Engineer,
 - Certified Professional in Erosion and Sediment Control (CPESC),
 - Registered Landscape Architect, or
 - Someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
 - i. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
 - (a) The construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - (b) The construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - (c) Construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
 - (d) Construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land.
 - ii. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:

- (a) For construction sites where soil disturbance activities are on going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
- (b) For construction sites where soil disturbance activities are on-going and the *owner* or operator has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
- (c) For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated*, *traditional land use control MS4*, the MS4 (provided the MS4 is not the *owner or operator* of the construction activity) in writing prior to reducing the frequency of inspections.
- (d) For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The owner or operator shall notify the Regional Office stormwater contact person (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the MS4 (provided the MS4 is not the owner or operator of the construction activity) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the owner or operator shall have the qualified inspector perform a final inspection and certify that all disturbed areas have achieved final stabilization, and all temporary, structural erosion and sediment control measures have been removed; and that all postconstruction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The owner or operator shall then submit the completed NOT form to the address in Part II.A.1.
- iii. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of discharge to natural surface water bodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of discharge from the construction site.

- iv. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
 - (a) Date and time of inspection;
 - (b) Name and title of person(s) performing inspection;
 - (c) A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
 - (d) A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
 - (e) A description of the condition of all natural surface water bodies located within, or immediately adjacent to, the property boundaries of the construction site that receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface water body;
 - (f) Identification of all erosion and sediment control practices that need repair or maintenance;
 - (g) Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
 - (h) Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;
 - (i) Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
 - (j) Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s); and
 - (k) Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
- v. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
- vi. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.C.2., the inspection reports shall be maintained on site with the SWPPP.

3.6 <u>Description of the Structural Practices to Divert Flows</u>

The project site is configured so that most of the offsite runoff is directed around the proposed project area. This drainage is either directed west of the system into the wooded wetland areas or east of system #2 into wetland area #3 which naturally dissipates from behind the existing barn and eventually enters the pond along Fox Road. The diversion of flows will not be required for this development.

3.7 Construction Phasing and Sequencing Plans

A. Sequence of Construction:

Yellow Mills Road - Solar Energy Facility:

- 1. Obtain all necessary local, state, and federal approvals and permits.
- 2. Submit notice of intent (NOI) form to NYSDEC at least 10 days before the start of construction in order to obtain coverage under General Permit No. GP-0-15-002.
- 3. Select an Environmental Monitor (EM) to oversee the construction, restoration and follow-up monitoring in agricultural fields. The EM is to coordinate the inspection schedule with the Ontario County Soil and Water Conservation District and/or the NYS Department of Agriculture and Markets.
- 4. Coordinate with the landowner to reconfigure the cattle pasture fences.
- 5. Notify the Town Code Enforcement Officer (CEO) at least 48 hours prior to starting construction.
- 6. Create Construction Entrances off of Fox Road.
- 7. Protect existing vegetation and sensitive environmental features (wetlands) with construction barriers. Install perimeter sediment controls.
- 8. Strip topsoil from access road areas and place erosion control measures at topsoil stockpiles. Stabilize with temporary seed and mulch.
- 9. Install Gravel Access Roads. Stabilize adjacent area with temporary seed and mulch.
- 10. Install perimeter fence.
- 11. Perform trench work for installation of underground utilities. Stabilize the area with temporary seed and mulch.
- 12. Install racking system, solar panels and electrical connections. Install inverter pad and auxiliary equipment.
- 13. Install landscape buffer.
- 14. Contractor shall maintain all erosion control measures until turf is established. Replace as required.
- 15. Remove temporary gravel areas.
- 16. Aerate the soil to decrease soil compaction through the area of disturbance.
- 17. Replace topsoil and seed all final graded areas and establish turf.
- 18. Once the site is completely stabilized according to NYSDEC and Town regulations, remove all temporary erosion & sediment control measures.
- 19. Once all requirements are met, submit Notice of Termination (NOT) form to NYSDEC to discontinue coverage of the project under GP-0-15-002.

3.8	Description	of	Pollution	Prevention	Measures	to	Control	Construction	Liter,	Construction
	Chemicals a	nd]	Debris							

A.		<u>llution Prevention Measures (from Construction-Phase Operations other than soil sturbance):</u>
		ote: Blanks to be filled in prior to the pre-construction meeting.
	1.	(site superintendent responsible for the day-to-day site operations) will be the spill prevention and cleanup coordinator.
	2.	Product Specific Practices: The following product specific practices will be followed onsite:
		 i. Petroleum Products: All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations. ii. Fertilizers: Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer and as described in part IV.A. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a scalable plactic bin to avoid spills.
		transferred to a sealable plastic bin to avoid spills. iii. Paints: All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed according to manufacturers' instructions or state and local regulations. iv. Concrete Trucks: Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.
		v. Waste Disposal: All waste materials will be collected and stored in a securely lidded metal dumpster rented from
		day site operations) will be responsible for seeing that these procedures are followed. vi. Hazardous Waste: All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices.
		vii. (Site superintendent responsible for the day-to-day site operations) will be responsible for seeing that these practices are followed.

mi lice ix. Re	nimum of three times per ensed sanitary waste mana cyclable Waste: All recycl	r w gen	waste will be collected from yeek bynent contractor.		, a	
rec	eycled.					
On-Site St	torage of Construction and	Wa	aste Materials			
-	Prevention Inventory: The tonsite during construction		aterials or substances listed be Check appropriate boxes)	lov	v are expected to be	
□ Co	oncrete		Detergents		Roofing shingles	
=	etal studs		Paints (enamel and latex)		Wood	
	troleum-based products		Fertilizers		Tar	
∐ M	asonry block		Cleaning solvents		Other (specify)	
be use	be used to reduce the risk of spills or other accidental exposure of materials and substances listed above to stormwater runoff:					
	•	Ū	inal containers unless they are all safety data sheets will be			
	important product inform				•	
	An effort will be made to	stc	ore only enough product require	ed t	to do the job.	
	All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure and/or on blacktop.					
	Products will be kept in their original containers with the original manufacturer's label.					
	Substances will not be mixed with one another unless recommended by the manufacturer.					
	Whenever possible, all of a product will be used up before disposing of the container.					
	Manufacturer's recomme	nda	ations for proper use and dispos	sal	will be followed.	
	The site superintendent w materials onsite.	ill/	inspect daily to ensure the pro	peı	use and disposal of	

B.

Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
All spills will be cleaned up immediately after discovery.
The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
Spills, of any size, of toxic or hazardous material will be reported to the appropriate State or local government agency.
The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

3.9 <u>Description and Location of any Stormwater Discharges Associated with Industrial Activity</u> other than Construction at the Site

This Section does not apply to this project.

3.10 Final Landscaping Plans

- A. Each of the areas within the facility shall be landscaped as described below:
 - 1. Sun and Partial Shade (Species % by Weight):

50% Kentucky Bluegrass Blend

20% Perennial Ryegrass

30% Creeping Red Fescue

2. Shade (Species % by Weight):

25% Kentucky Bluegrass Blend

20% Perennial Ryegrass

35% Creeping Red Fescue

20% Chewing Red Fescue

Seed should be applied at a rate of 5 to 6 pounds per 1,000 square feet. After seeding, each area shall be fertilized and maintained as described below.

Fertilizing (First Year) - Apply fertilizer as indicated by the soil test three to four weeks after germination (spring seedlings). If test results have not been obtained, apply 1 pound nitrogen/1,000 square feet using a complete fertilizer with a 2-1-1 or 4-1-3 ratio. Summer and early fall seedings, apply as above unless air temperatures are above 85°F for an extended period. Wait for cooler temperatures to fertilize. Late fall/ winter seedings, fertilize in spring. New seedlings should be protected from use for one full year to allow development of a dense sod with good root structure.

Maintaining Grasses - Maintain a pH of 6.0 - 7.0. Fertilize in late May to early June as follows with 10-10-10 analysis fertilizer at the rate of 10 lbs./1,000 sq. ft. and repeat in late August if sod density is not adequate. Avoid fertilizing when heat is greater than 85°F. Top dress weak sod annually in the spring, but at least once every 2 to 3 years. It is recommended to fertilize according to soil test analysis, after determining adequate topsoil depth exists. Aerate compacted or heavily used areas, like athletic fields, annually as soon as soil moisture conditions permit. Aerate area six to eight times using a spoon or hollow tine type aerator. Do not use solid spike equipment. Reseed bare and thin areas annually with original seed mix.

SECTION 4: DRAINAGE CALCULATIONS

4.1 Existing and Proposed Condition Analyses for time of Concentrations, Runoff Rates, Volumes, and Routing Showing Methodologies Used and Supporting Calculations

A. Scope of Analysis:

This SWPPP applies to the Delaware River Solar, LLC Solar Energy Facility project at 466 Yellow Mills Road dated July 3, 2018 with the most recent revision date of October 21, 2019. The Hydraulic Analysis was performed to compare the site discharges from pre-to-post development conditions.

B. Storm Water Management System Summary:

The installation of solar energy systems are not explicitly stated in Appendix B of GP-0-15-002. David Gasper of the NYSDEC has previously provided clarification on this type of installation. If the solar panels will be constructed on post / ballast (elevated off the ground surface), the panels are spaced apart so that rain water can flow down gradient of the panel and reach the ground and the ground surface below the panels is to be well established vegetated cover then the SWPPP for this portion of the project will typically just need to address erosion and sediment controls (Section 3 of this report). If the project includes the construction of any traditional impervious areas (buildings, substation pads, gravel access roads or parking areas) those areas will need to address post-construction stormwater management controls in the SWPPP. If the construction of the solar panels will include significant changes to the existing topography that alter the pre-development hydrology, the design may have to address quantity control sizing criteria for these areas. More recently, the NYSDEC has established that using coarse (3" minus) clean washed stone and woven geotextile fabric, the access roads may also be considered pervious. Utilizing these two determinations, the increase in impervious surfaces associated with this project will be equal to the square footage of the proposed concrete pads (1.065 sf = 0.024 acres).

There is no change in proposed to the existing grades of the site. The amount of excavation will be limited to stripping the topsoil from the access road, equipment storage, trench and concrete pad locations. The topsoil will be replaced in the temporary construction areas and the end of construction. The array and fence posts will generally be driven into the ground which will result in little to no excavated material.

Non-structural techniques like disconnecting impervious cover can be used to address stormwater management. When non-rooftop disconnection is used to treat runoff, the following factors are to be considered:

- 1. Vegetative surface must be equal to or greater than the length of the disconnected surface. The proposed solar panels have a horizontal profile of approximately 12' and the width of the rows between the panels is about 19'.
- 2. Runoff must sheet flow onto and across the vegetated areas. The panels are to be set generally level in order for the stormwater to even runoff the edge.
- 3. Disconnections should be located on gradual slopes (<= to 5%) to maintain sheet flow. A vast majority of the project site is less than 5% slopes. Some areas of the site are about

- 7.5%. These areas are relatively small in nature and are all hydraulically connected to areas that are less than 5%.
- 4. Disconnection of impervious surfaces works the best in undisturbed soils. Construction vehicles and equipment should avoid compacting the soil in the rows between the panels during construction.
- 5. Groundcover vegetation must be maintained in good condition in the areas receiving runoff. The permanent stabilization plan for this project includes a meadow vegetative mixture and a maintenance schedule. Areas are protected from future compaction by the perimeter fencing.

Part III.C. Appendix B Table 1 of the SPDES GP-0-15-002 states that construction activities that disturb more than one acre of land, creates minimal impervious surface and does not alter the hydrology from pre to post development conditions are required to prepare a SWPPP that only includes erosion and sediment control practices.

The impervious concrete pads account for 0.024 acres, or 0.06% of the project area. Each concrete pad is set on a bed of compacted stone that extends 12-inches from the edge of the concrete on all sides and is at least 36-inches deep along the edge. The minimal runoff from the concrete pad will flow onto the gravel and eventually into the surrounding vegetated area.

The use of runoff reduction techniques in conjunction with the proposed vegetative cover allows the project site to have no increase in the amount of stormwater runoff generated. See the following pages for the drainage calculations.

There is no permanent erosion and sediment control structures proposed for this project other the application of permanent stabilization to all disturbed non-gravel surfaces. The grass mixture should be maintained by mowing at least twice a year.

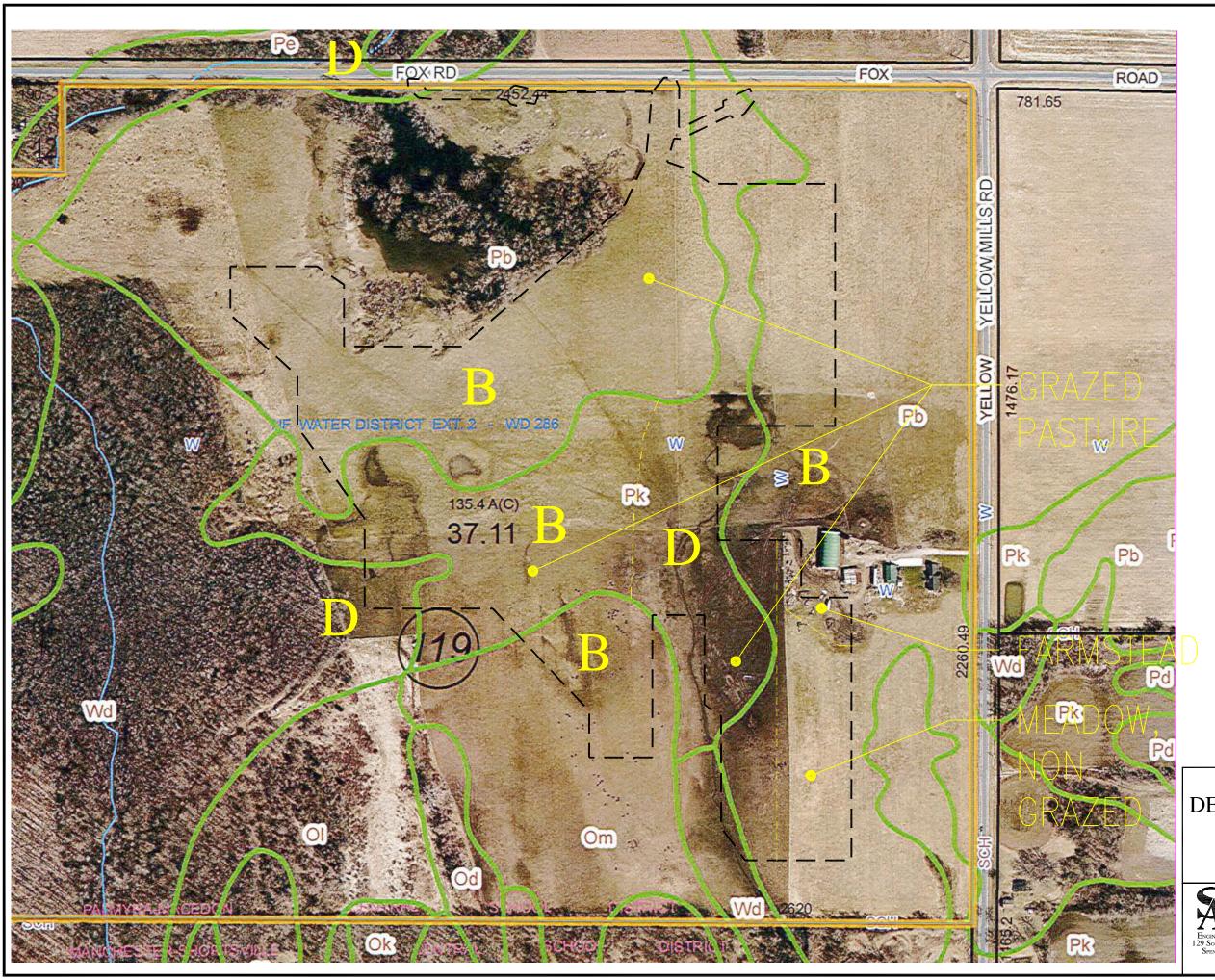
C. <u>Hydrological and Hydraulic Summary:</u>

The pre-development and post-development watersheds were modeled in the stormwater-modeling program HydroCad in order to determine runoff rates for both scenarios. The proposed project is designed to not alter the existing topography and/or hydrology.

- 1. <u>Pre-Development Condition:</u> The Pre-Development Model shows the project with a single subcatchment. All stormwater flow across the project site eventually exits the site via the culvert pipe under Fox Road near the existing pond. The project location is currently an active agricultural farm, with 91% cattle pasture, 8% hay field and 1% farmstead.
- 2. <u>Post-Development Condition</u>: The Post-Development Model adheres to the same basic layout that was used for the Pre-Development Model. Since there is minimal proposed grading the flow paths will be identical to the Pre-Development Condition. The areas of the solar arrays are described within the model as Meadow. The area under the arrays will continuously be low growing vegetation, generally mowed once or twice a year. The proposed access roads are modeled as pervious as described in Section 4.1.B with a CN value of 90.

D. Storm Water Model Results:

The following pages are the results produced by both the Pre-Development and Post-Development Conditions models.



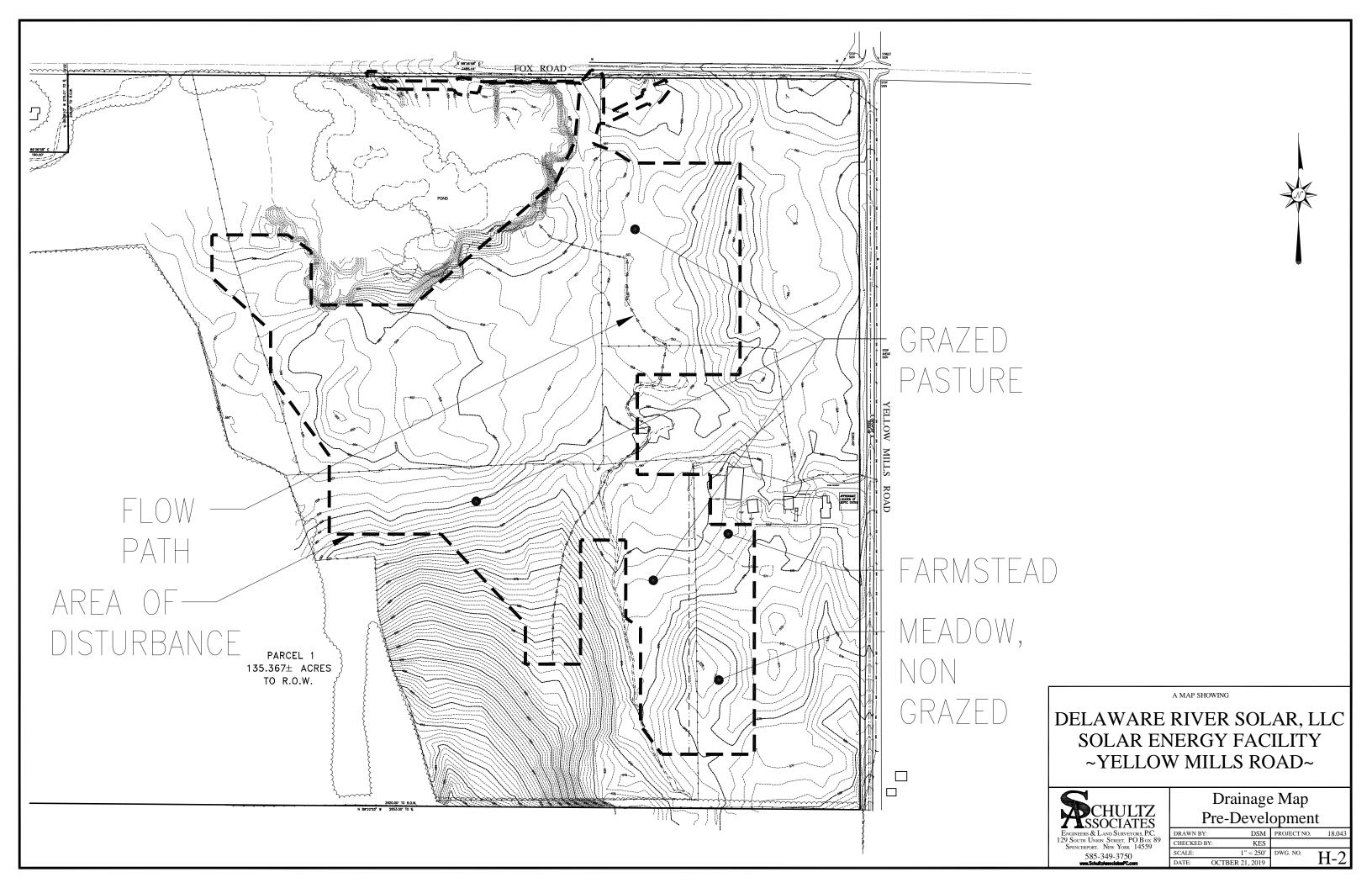


DELAWARE RIVER SOLAR, LLC SOLAR ENERGY FACILITY ~YELLOW MILLS ROAD~



Soil Classifications Pre-Development

ı				
	DRAWN BY:	DSM	PROJECT NO.	18.043
	CHECKED BY	Y: KES		
	SCALE:	1" = 250'	DWG. NO.	II 1
	DATE:	OCTBER 21, 2019		П-1



Page 1

Summary for Subcatchment 1S: Existing Conditions

Runoff = 5.04 cfs @ 12.54 hrs, Volume= 0.815 af, Depth> 0.26"

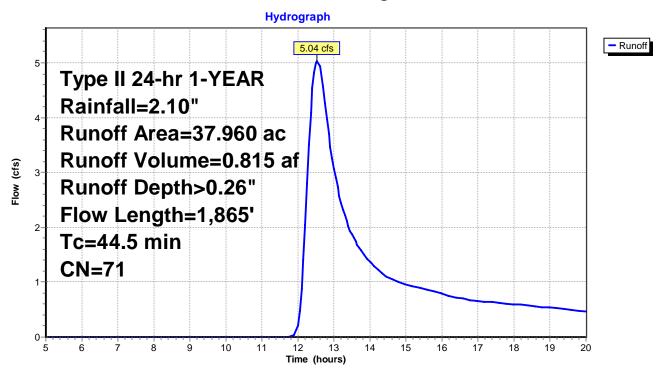
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 1-YEAR Rainfall=2.10"

Area ((ac) C	N Des	cription		
27.	742 6	9 Past	ure/grassl	and/range,	Fair, HSG B
6.0	686 8				Fair, HSG D
2.9	914 5	8 Mea	dow, non-	grazed, HS	GB
0.0	618 7	'4 Farn	nsteads, H	ISG B	
37.9	960 7	'1 Wei	ghted Avei	rage	
37.	960		rious Area	Ü	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
11.0	150	0.0400	0.23		Sheet Flow, Sheet Flow - Pasture
					Range n= 0.130 P2= 2.20"
4.6	420	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
					Short Grass Pasture Kv= 7.0 fps
3.2	530	0.0057	2.75	34.43	Channel Flow, Channel Flow
					Area= 12.5 sf Perim= 26.0' r= 0.48'
					n= 0.025 Earth, clean & winding
22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
					Short Grass Pasture Kv= 7.0 fps
3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
					Short Grass Pasture Kv= 7.0 fps
44.5	1,865	Total			

Page 2

Page 2

Subcatchment 1S: Existing Conditions



Page 3

Summary for Subcatchment 1S: Existing Conditions

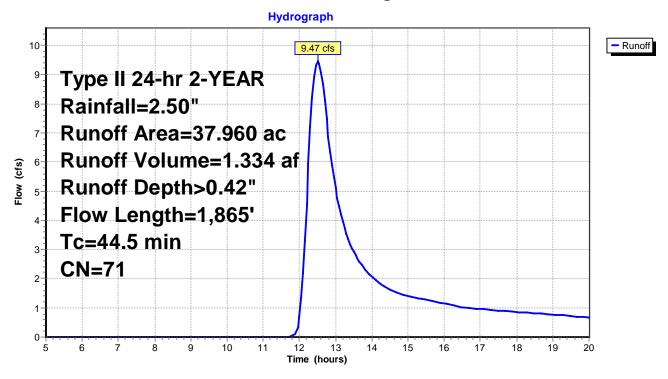
Runoff = 9.47 cfs @ 12.51 hrs, Volume= 1.334 af, Depth> 0.42"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 2-YEAR Rainfall=2.50"

Area	(ac) C	N Des	cription		
27.	.742 6	9 Past	ure/grassl	and/range,	Fair, HSG B
6	.686	34 Past	ure/grassl	and/range,	Fair, HSG D
2.	.914	58 Mea	dow, non-	grazed, HS	GB
0	.618	74 Farn	nsteads, H	ISG B	
37.	.960	71 Wei	ghted Avei	age	
37.	.960	Perv	ious Area		
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
11.0	150	0.0400	0.23		Sheet Flow, Sheet Flow - Pasture
					Range n= 0.130 P2= 2.20"
4.6	420	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
					Short Grass Pasture Kv= 7.0 fps
3.2	530	0.0057	2.75	34.43	Channel Flow, Channel Flow
					Area= 12.5 sf Perim= 26.0' r= 0.48'
					n= 0.025 Earth, clean & winding
22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
					Short Grass Pasture Kv= 7.0 fps
3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
					Short Grass Pasture Kv= 7.0 fps
44.5	1,865	Total			

Page 4

Subcatchment 1S: Existing Conditions



Page 5

Summary for Subcatchment 1S: Existing Conditions

Runoff = 27.54 cfs @ 12.46 hrs, Volume= 3.341 af, Depth> 1.06"

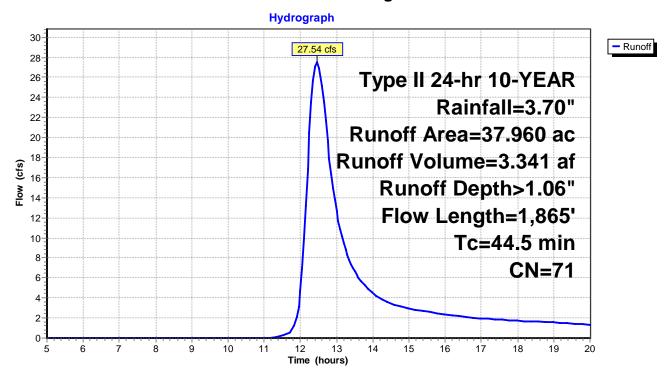
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 10-YEAR Rainfall=3.70"

Area	(ac) C	N Des	cription		
					Fair, HSG B
6.	.686 8			O '	Fair, HSG D
2.	.914	58 Mea	dow, non-	grazed, HS	GB
0.	.618	74 Farn	nsteads, H	ISG B	
37.	.960	71 Wei	ghted Avei	rage	
37.	.960	•	ious Area	Ü	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	'
11.0	150	0.0400	0.23	, ,	Sheet Flow, Sheet Flow - Pasture
		0.0.00	0.20		Range n= 0.130 P2= 2.20"
4.6	420	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
	0	0.0 0	1100		Short Grass Pasture Kv= 7.0 fps
3.2	530	0.0057	2.75	34.43	'
0.2	000	0.0007	2.70	01.10	Area= 12.5 sf Perim= 26.0' r= 0.48'
					n= 0.025 Earth, clean & winding
22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
22.1	000	0.0000	0.41		Short Grass Pasture Kv= 7.0 fps
3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
0.0	200	0.0200	1.11		Short Grass Pasture Kv= 7.0 fps
	1 065	Total			Chort Crace r actaire TV = 7.0 ipo
44.5	1,865	Total			

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Page 6

Subcatchment 1S: Existing Conditions



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Page 7

Summary for Subcatchment 1S: Existing Conditions

Runoff = 49.65 cfs @ 12.44 hrs, Volume= 5.799 af, Depth> 1.83"

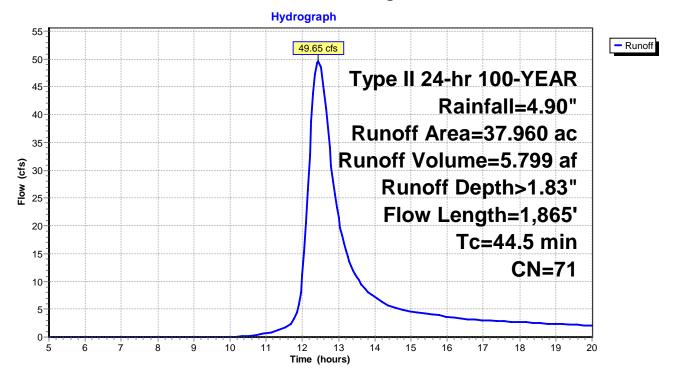
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 100-YEAR Rainfall=4.90"

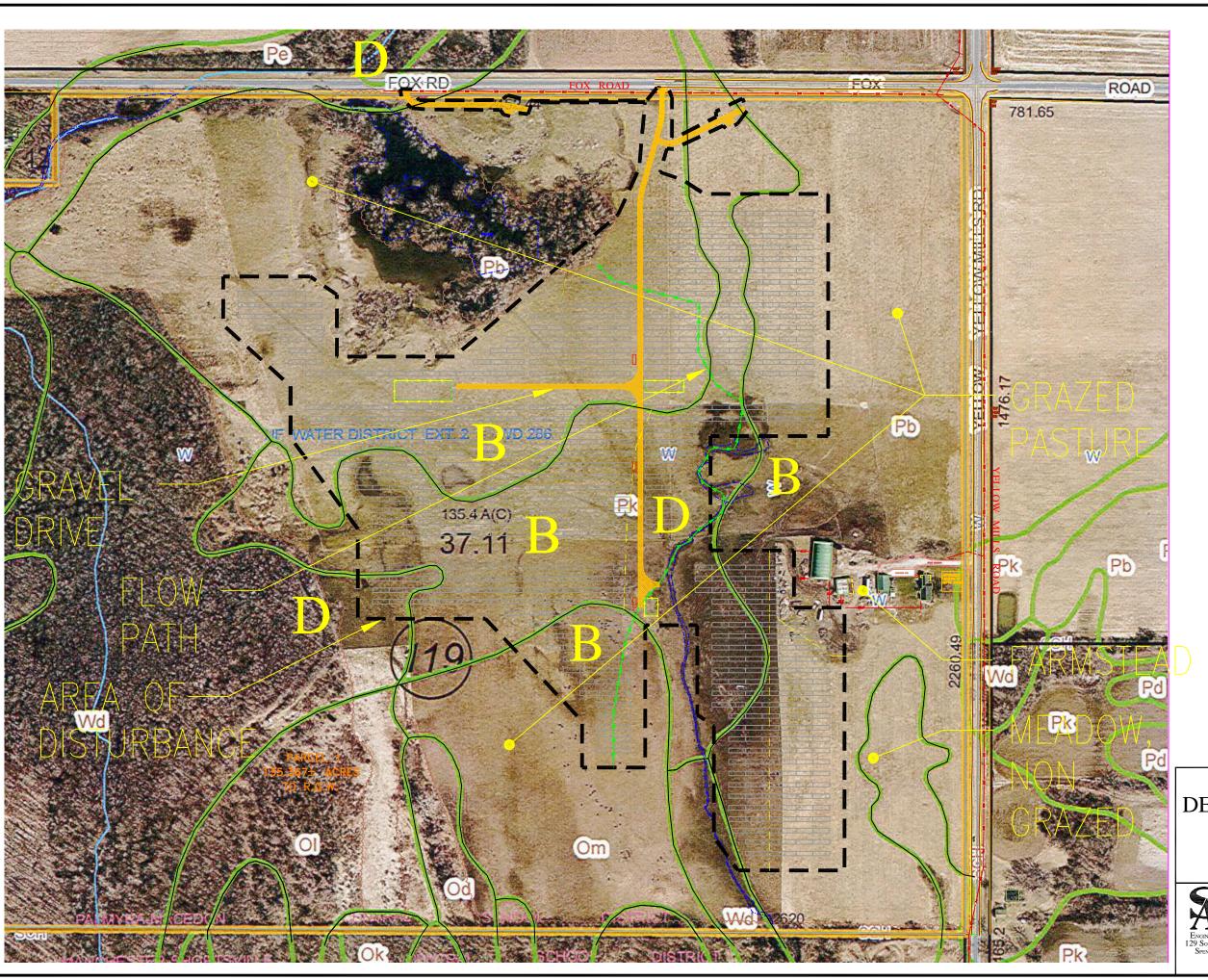
Area	(ac) C	N Des	cription		
27.	742 6	9 Past	ure/grassl	and/range,	Fair, HSG B
6.	686	34 Past	ure/grassl	and/range,	Fair, HSG D
2.	914 5	58 Mea	dow, non-	grazed, HS	GB
0.	618	74 Farn	nsteads, H	ISG B	
37.	960	71 Wei	ghted Avei	rage	
37.	960	Perv	ious Area	J	
Tc	Length	Slope	Velocity	Capacity	Description
(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	·
11.0	150	0.0400	0.23		Sheet Flow, Sheet Flow - Pasture
					Range n= 0.130 P2= 2.20"
4.6	420	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
					Short Grass Pasture Kv= 7.0 fps
3.2	530	0.0057	2.75	34.43	Channel Flow, Channel Flow
					Area= 12.5 sf Perim= 26.0' r= 0.48'
					n= 0.025 Earth, clean & winding
22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
					Short Grass Pasture Kv= 7.0 fps
3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
					Short Grass Pasture Kv= 7.0 fps
44.5	1,865	Total			

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Subcatchment 1S: Existing Conditions







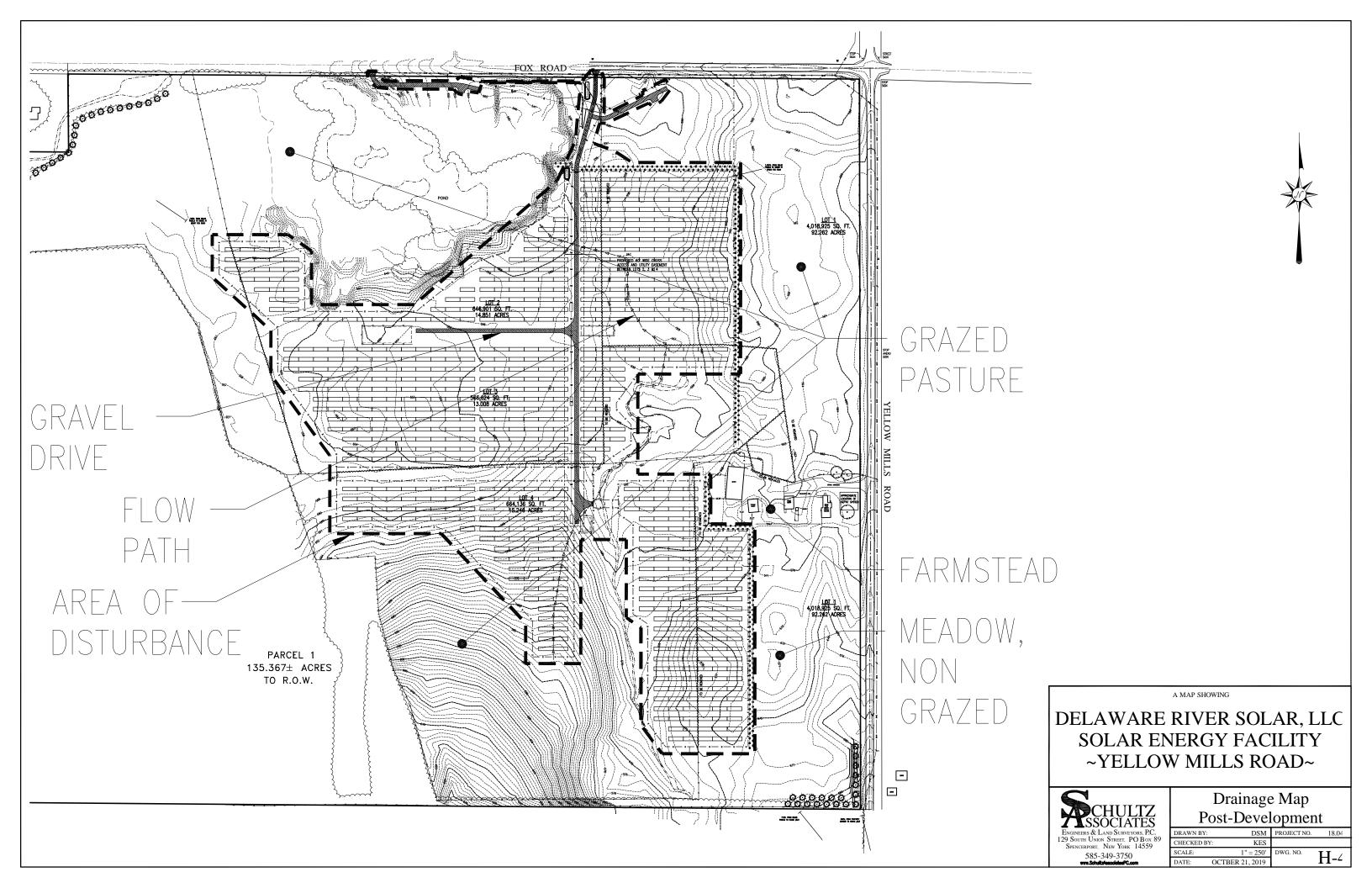
DELAWARE RIVER SOLAR, LLC SOLAR ENERGY FACILITY ~YELLOW MILLS ROAD~

A MAP SHOWING



Soil Classifications Post-Development

- 1				
	DRAWN BY:	DSM	PROJECT NO.	18.043
	CHECKED BY	: KES		
	SCALE:	1" = 250'	DWG. NO.	Ц2
	DATE:	OCTBER 21, 2019		n-3



42.0

1,865 Total

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Page 1

Summary for Subcatchment 2S: Post-Development Conditions

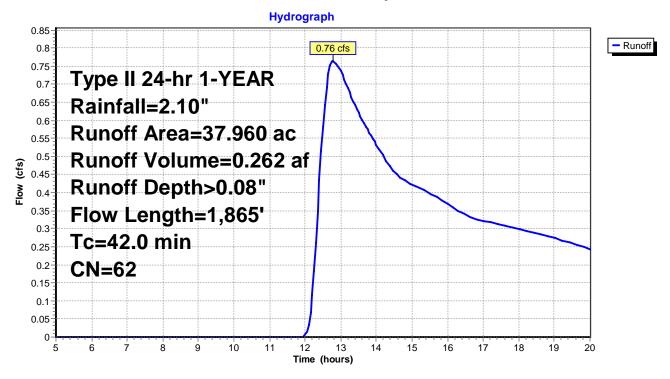
Runoff = 0.76 cfs @ 12.79 hrs, Volume= 0.262 af, Depth> 0.08"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 1-YEAR Rainfall=2.10"

	Area	(ac) C	N Des	cription		
	30.	722	58 Mea	dow, non-	grazed, HS	GB
	6.	449			grazed, HS	
*	0.			∕el roads, Ì	•	
*	0.			el roads, l		
				ed parking		
	37.	960	62 Wei	ghted Avei	rage	
	37.	936	Perv	vious Area		
	0.	024	Impe	ervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	8.0	100	0.0400	0.21		Sheet Flow, Sheet Flow - Pasture
						Range n= 0.130 P2= 2.20"
	5.1	470	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.2	530	0.0057	2.75	34.43	Channel Flow, Channel Flow
						Area= 12.5 sf Perim= 26.0' r= 0.48'
						n= 0.025 Earth, clean & winding
	22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
_						Short Grass Pasture Kv= 7.0 fps

Page 2

Subcatchment 2S: Post-Development Conditions



42.0

1,865 Total

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Page 3

Summary for Subcatchment 2S: Post-Development Conditions

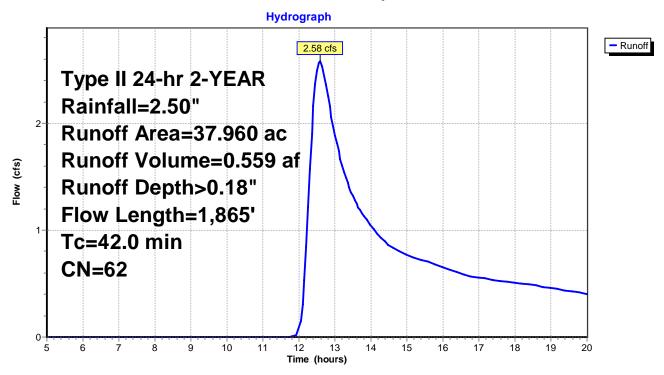
Runoff = 2.58 cfs @ 12.59 hrs, Volume= 0.559 af, Depth> 0.18"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 2-YEAR Rainfall=2.50"

	Area	(ac) C	N Des	cription		
	30.	722	58 Mea	dow, non-	grazed, HS	GB
	6.	449	78 Mea	dow, non-	grazed, HS	G D
*	0.	533	90 Grav	/el roads, l	HSG B	
*	0.	232	90 Grav	el roads, l	HSG D	
	0.	024	98 Pave	ed parking	& roofs	
	37.	960	62 Wei	ghted Avei	rage	
	37.	936	Perv	ious Area		
	0.	024	Impe	ervious Are	ea	
	Тс	Length	•	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	8.0	100	0.0400	0.21		Sheet Flow, Sheet Flow - Pasture
						Range n= 0.130 P2= 2.20"
	5.1	470	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.2	530	0.0057	2.75	34.43	,
						Area= 12.5 sf Perim= 26.0' r= 0.48'
						n= 0.025 Earth, clean & winding
	22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
_						Short Grass Pasture Kv= 7.0 fps

Page 4

Subcatchment 2S: Post-Development Conditions



Page 5

Summary for Subcatchment 2S: Post-Development Conditions

Runoff = 14.14 cfs @ 12.47 hrs, Volume= 1.932 af, Depth> 0.61"

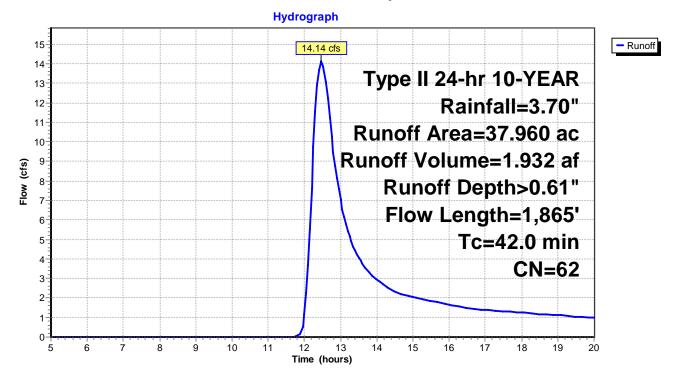
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 10-YEAR Rainfall=3.70"

_	Area	(ac)	CN	Desc	ription		
	30.	722	58	Mead	dow, non-g	grazed, HS	GB
	6.	449	78			grazed, HS	
*	0.	533	90	Grav	el roads, l	HSG B	
*	0.	232	90	Grav	el roads, l	HSG D	
	0.	024	98	Pave	ed parking	& roofs	
_	37.	960	62	Weig	hted Aver	rage	
		936	_		ious Area		
		024		Impe	rvious Are	ea	
				•			
	Tc	Length	n S	lope	Velocity	Capacity	Description
	(min)	(feet		(ft/ft)	(ft/sec)	(cfs)	'
	8.0	100	0.0	0400	0.21		Sheet Flow, Sheet Flow - Pasture
							Range n= 0.130 P2= 2.20"
	5.1	470	0.0	0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
							Short Grass Pasture Kv= 7.0 fps
	3.2	530	0.0	0057	2.75	34.43	Channel Flow, Channel Flow
							Area= 12.5 sf Perim= 26.0' r= 0.48'
							n= 0.025 Earth, clean & winding
	22.7	565	0.0	0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
							Short Grass Pasture Kv= 7.0 fps
	3.0	200	0.0	0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
_							Short Grass Pasture Kv= 7.0 fps
	42.0	1,865	то То	tal			

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Subcatchment 2S: Post-Development Conditions



42.0

1,865 Total

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Summary for Subcatchment 2S: Post-Development Conditions

Runoff = 31.89 cfs @ 12.44 hrs, Volume= 3.831 af, Depth> 1.21"

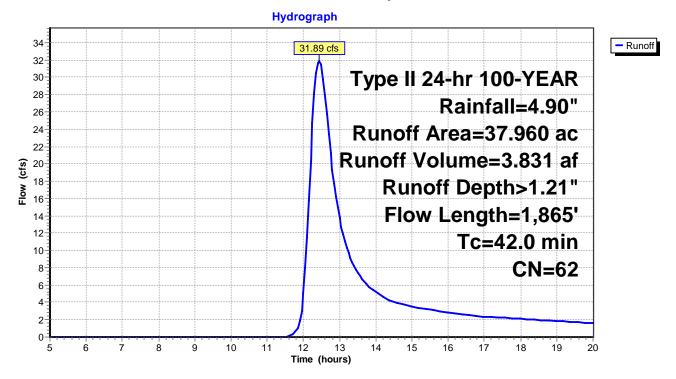
Runoff by SCS TR-20 method, UH=SCS, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs Type II 24-hr 100-YEAR Rainfall=4.90"

_	Area	(ac) (CN Des	cription		
	30.	722	58 Mea	dow, non-	grazed, HS	GB
	6.	449			grazed, HS	
*	0.	533	90 Grav	vel roads, i	HSG B	
*	0.	232	90 Grav	vel roads, l	HSG D	
	0.	024	98 Pav	ed parking	& roofs	
	37.	960	62 Wei	ghted Ave	rage	
	37.	936	Perv	ious Area	J	
	0.	024	Imp	ervious Are	ea	
	Tc	Length	Slope	Velocity	Capacity	Description
_	(min)	(feet)	(ft/ft)	(ft/sec)	(cfs)	
	8.0	100	0.0400	0.21		Sheet Flow, Sheet Flow - Pasture
						Range n= 0.130 P2= 2.20"
	5.1	470	0.0475	1.53		Shallow Concentrated Flow, Overland Flow - Hill Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.2	530	0.0057	2.75	34.43	,
						Area= 12.5 sf Perim= 26.0' r= 0.48'
						n= 0.025 Earth, clean & winding
	22.7	565	0.0035	0.41		Shallow Concentrated Flow, Overland - Flat Pasture
						Short Grass Pasture Kv= 7.0 fps
	3.0	200	0.0250	1.11		Shallow Concentrated Flow, Overland Flow - Pasture
_						Short Grass Pasture Kv= 7.0 fps

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Page 8

Subcatchment 2S: Post-Development Conditions



- 4.2 <u>Comparison Summary of Post-Development Stormwater Runoff Conditions with Pre-Development Conditions</u>
 - A. <u>HydroCad Model Results for the Pre-Development Conditions:</u>

Pre-Development Conditions					
	Peak Flow				
	(cfs)				
1-year storm	5.04				
2-year storm	9.47				
10-year storm	27.54				
100-year storm	49.56				

B. <u>HydroCad Model Results for the Post-Development Conditions:</u>

Post-Development Conditions		
	Peak Flow	
	(cfs)	
1-year storm	0.76	
2-year storm	2.58	
10-year storm	14.14	
100-year storm	31.89	

This model shows that the proposed development will not increase the amount of stormwater runoff leaving the site during all storm events. The transformation of the existing cattle pasture into a fully vegetated meadow will more than offset the increased CN associated with the proposed access drives and concrete pad.

SECTION 5: SPECIAL TOWN REQUIREMENTS

5.1 <u>Town Construction Notes</u>

- 1. This project will fall under the Town of Farmington Town Code Section 165-65.3 for Solar Photovoltaic (PV) Systems.
- 2. Large scale ground mounted solar PV systems require site plan approval and a special use permit.
- 3. Solar PV systems are subject to the minimum yard and setback requirements for the zoning district that they are located within.
- 4. Solar PV systems located within a residential district shall be set back an additional 120 feet from the minimum yard setback along all property lines which abut a lot or parcel of land located in the A-80 agricultural district or other residential district unless the land is being actively farmed, in this instance the setback will be 40 feet.
- 5. Systems located upon farmland classified as class 1 through 4 shall be allowed once it can be determined by the planning board that there is no feasible alternative.
- 6. The project sponsor is to hire an environmental monitor (EM) to oversee the construction, restoration and follow-up monitoring in agricultural fields.
- 7. Fencing and watering system associated with rotational grazing and reduction in farmland viability are to be assessed and mitigated to the greatest extent possible.
- 8. There shall be no cut and fill so as to reduce the risk of creating drainage problems by locating access roads along contours to the greatest extent possible. The surface of the access road shall be level with the adjacent field surface.
- 9. All topsoil within areas to be used for vehicle and equipment traffic, parking and equipment laydown shall be stripped.
- 10. No vehicles and equipment are to be allowed outside the work area without prior approval from the landowner and the EM. The work area shall be defined by the minimum area of disturbance possible within the proposed property lines.
- 11. When open trench is required for cable installation, topsoil stripping from the entire work area may be necessary. As a result, additional workspace may be required.
- 12. All topsoil stripped from work areas is to be stockpiled separately from excavated materials.
- 13. A maximum of 50 feet of temporary workspace is to be provided along open cut electric cable trenches for proper topsoil segregation. All topsoil shall be stockpiled immediately adjacent to the area where it was stripped and shall be used for restoration of the area.
- 14. Electric interconnect cables and transmission lines installed above ground shall be located outside field boundaries. All buried cables in cropland, hayland and improved pasture shall have a minimum depth of 48-inches of cover. At no time shall the depth of cover be less than 24-inches.
- 15. In pasture areas, it is necessary to construct temporary or permanent fences around the work areas to prevent livestock access.
- 16. Excess concrete used in the construction of the site shall not be buried or left on the surface in active agricultural areas.

5.2 Areas Disturbed by Construction / Restoration Notes

- 1. Agricultural areas disturbed by construction shall be decompacted to a depth of 18-inches with a deep ripper or heavy duty chisel plow. In areas where topsoil was stripped, soil decompaction should be conducted prior to topsoil replacement. Replace topsoil to original depth and restore contours. Remove all rocks 4-inches or greater from the surface. Subsoil decompaction and topsoil replacement shall be avoided after October 1 of each year. See Appendix C.
- 2. Regrade all access roads to allow farm equipment crossing and to restore original surface drainage patterns. Access roads within the proposed fence line are to be temporary and are to be removed after installation is complete.
- 3. Seed all restored agricultural areas with seed mix specified by the land owner. The entire area of the project within the fenceline will be seeded. The vegetation will either be mowed a few times a year or livestock, such as sheep, shall be employed to maintain the vegetation. The project during operation shall have full vegetative cover. The access roadway between the roadway and the fence shall remain and be removed upon decommissioning of the project.
- 4. All damaged surface or subsurface drainage structures are to be repaired to preconstruction conditions.
- 5. Following restoration remove all construction debris from the site.
- 6. The project sponsor is to provide a monitoring and remediation period of no less than two years. General conditions to be monitored include topsoil thickness, relative content of rock and large stones, trench settling, crop production, drainage and repair of severed drain lines.
- 7. All above ground solar array structures are to be removed and all areas previously used for agriculture production are to be restored and accepted by the landowner, the Soil and Water Conservation District and the State Department of Agriculture and Markets.
- 8. All concrete is to be removed to a depth of 48-inches below the soil surface. Underground electric lines are to be abandoned in place. Access roads in agricultural areas are to be removed unless otherwise specified by the landowner.

SECTION 6: MISCELLANEOUS REPORTS

6.1 <u>Logs of Borehole Investigations and Supporting Geotechnical Report (if applicable)</u>

A Geo-technical report was produced to determine the appropriate posts to use for the arrays. This report was previously provided to the town.

6.2 Post-Construction Maintenance Schedule

An Operation and Maintenance Plan has been submitted to the town for their review.

A. Responsible Party:

Delaware River Solar, LLC or future owner of the Solar Energy Facility shall be responsible for maintaining the functionality of the proposed facility, including the proper maintenance of the vegetation.

B. Operations and Maintenance Plan:

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SECTION 7: RECORD KEEPING

7.1 Copy of NOI Signed by SWPPP Preparer & NOI Acknowledgement Letter

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Status:

NOI for coverage under Stormwater General Permit for Construction Activity version 1.19

(Submission #: 3EE-46DX-4H5H, version 1)

PRINTED ON 10/23/2019

Summary

Submission #: 3EE-46DX-4H5H Date Submitted

Form: NOI for coverage under Stormwater General Permit for Construction Activity

version 1.19 (DRS - YELLOW MILLS ROAD SOLAR ENERGY FACILITY)

Applicant: DAVID MATT Active Steps:

Reference #:

Description: NOI for coverage under Stormwater General Permit for Construction Activity

Notes

There are currently no Submission Notes.

Details

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)

DELAWARE RIVER SOLAR, LLC - OPERATOR

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

DOLGOS

Owner/Operator Contact Person First Name

PETER

Owner/Operator Mailing Address

33 IRVING PLACE

City

NEW YORK CITY

State

NY

Zip

10003

Phone

646-998-6495

Email

peter.dolgos@delawareriversolar.com

Federal Tax ID

81-2311156

Project Location

Project/Site Name

DELAWARE RIVER SOLAR, LLC - SOLAR ENERGY FACILITY

Street Address (Not P.O. Box)

466 YELLOW MILLS ROAD

Side of Street

West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

TOWN OF FARMINGTON

State

NY

Zip

14522

County

ONTARIO

DEC Region

8

Name of Nearest Cross Street

FOX ROAD

Distance to Nearest Cross Street (Feet)

0

Project In Relation to Cross Street

South

Tax Map Numbers Section-Block-Parcel

010.000-01

Tax Map Numbers

037.11

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are: - Navigate to the project location on the map and obtain the XY coordinates. - The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates

43.01623059858576,-77.26124722767258

Project Details

2. What is the nature of this project?

New Construction

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse Pasture/Open Land
Post-Development Future Land Use Other
Other
SOLAR ARRAY
3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots. NONE PROVIDED
4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be area (acreage)within the disturbed area. *** ROUND TO THE NEAREST TENTH OF AN ACRE. ***
Total Site Area (acres) 135.4
Total Area to be Disturbed (acres) 1.8
Existing Impervious Area to be Disturbed (acres)
Future Impervious Area Within Disturbed Area (acres) 0.02
5. Do you plan to disturb more than 5 acres of soil at any one time? No
6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.
A (%) 0
B (%) 82
C (%) 0

D (%) 18
7. Is this a phased project? No
8. Enter the planned start and end dates of the disturbance activities.
Start Date 05/01/2020
End Date 10/01/2020
9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge. FEDERAL WETLAND
9a. Type of waterbody identified in question 9? Wetland/Federal Jurisdiction On Site (Answer 9b)
Other Waterbody Type Off Site Description NONE PROVIDED
9b. If "wetland" was selected in 9A, how was the wetland identified? Delineated by Consultant
10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002?
11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002?
12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
If No, skip question 13.
13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is USDA Soil Survey?
If Yes, what is the acreage to be disturbed?

NONE PROVIDED

- 14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
- 15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, Yes
- 16. What is the name of the municipality/entity that owns the separate storm sewer system? TOWN OF FARMINGTON
- 17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
- 18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
 Yes
- 19. Is this property owned by a state authority, state agency, federal government or local government?
- 20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Volunta No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with Specifications for Erosion and Sediment Control (aka Blue Book)?

Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction storm component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?

No

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction

- 23. Has the post-construction stormwater management practice component of the SWPPP been developed in conf Stormwater Management Design Manual?
- 24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

Other

Other

E.I.T. UNDER THE DIRECT SUPERVISION OF A P.E.

SWPPP Preparer

SCHULTZ ASSOCIATES, PC

Contact Name (Last, Space, First)

MATT DAVID

Mailing Address

129 SOUTH UNION STREET

City

SPENCERPORT

State

NY

Zip

14559

Phone

585-349-3750

Email

DMATT@SCHULTZPC.COM

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form: 1) Click on the link below to download certified SWPPP preparer should sign this form 3) Scan the signed form 4) Upload the scanned document

Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification - Attachment

NONE PROVIDED

Comment: NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?

Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

Construction Road Stabilization

Dust Control

Silt Fence

Stabilized Construction Entrance

Biotechnical

None

Vegetative Measures

Mulching

Protecting Vegetation

Seeding

Permanent Structural

None

Other

NONE PROVIDED

Post-Construction Criteria

* IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.

NONE PROVIDED

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6(" Manual (2010 version).

- 28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-fee NONE PROVIDED
- 29. Post-construction SMP Identification

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques (Volume with RRv Capacity that were used to reduce the Total WQv Required (#28). Identify the SMPs to be used by providing the to runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes provided impervious area that contributes runoff to the technique/practice. Note: Redevelopment projects shall use the Post-Conto identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce 1 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv ca (acre-feet)

NONE PROVIDED

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (ac NONE PROVIDED

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100 evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be including the including the processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs total WQv (=Total WQv Required in #28 - Total RRv Provided in #30). Also, provide the total impervious area that contribute: NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs question #29. (acre-feet)

NONE PROVIDED

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contrib provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).

NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv requi

If Yes, go to question 36. If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer mus criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a)
CPv Required (acre-feet) NONE PROVIDED
CPv Provided (acre-feet) NONE PROVIDED
36a. The need to provide channel protection has been waived because:
37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applic
Overbank Flood Control Criteria (Qp)
Pre-Development (CFS) NONE PROVIDED
Post-Development (CFS) NONE PROVIDED
Total Extreme Flood Control Criteria (Qf)
Pre-Development (CFS) NONE PROVIDED
Post-Development (CFS) NONE PROVIDED
37a. The need to meet the Qp and Qf criteria has been waived because:
38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s)
If Yes, Identify the entity responsible for the long term Operation and Maintenance NONE PROVIDED
39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv require space can also be used for other pertinent project information. THE PROJECT WILL CONSTRUCT A GROUND MOUNTED SOLAR PV SYSTEM ON 31.5 ACRES (FENCED AREA) OF A

10 of 16 10/23/2019, 11:57 AM

PARCEL. THE LAND IS CURRENTLY USED FOR CATTLE PASTURE AND HAY PRODUCTION. THE SYSTEM IS DESIGNE CONTINUED OPERATION OF THE FARMING OPERATIONS. ALL SURFACES WITHIN THE FENCED ENCLOSURE WILL

MEADOW SEED MIXTURE AND THE VEGETATION WILL BE MAINTAINED THROUGH THE LIFE OF THE SYSTEM. THE STORE DISCONNECTED ROOFTOP DRAINAGE AS PER NYSDEC GUIDANCE. THE PROPOSED GRAVEL ACCESS DRIVES AR GEOTEXTILE FABRIC AND WASHED 3" MINUS CLEAN STONE (NYSDOT ITEM 703-02) AND ARE TREATED AS PERVIC PADS USED FOR THE ELECTRICAL EQUIPMENT TOTAL 0.02 ACRES OF IMPERVIOUS SURFACE (0.02% OF THE TOTAL IN THE RUNOFF RATES AND VOLUMES FROM THE PRE TO POST DEVELOPMENT CONDITIONS. THE DEVELOPMENT IMPERVIOUS SURFACE AND WILL NOT ALTER THE HYDROLOGY.

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SN

Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each techniq Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious are technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)

NONE PROVIDED

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)

NONE PROVIDED

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)

NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)

NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)

NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)

NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)

NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)

NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)

NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)

NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)

NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)

NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)

NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)

NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)

NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)

NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)

NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)

NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)

NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)

NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)

NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)

NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)

NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)

NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)

NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)

NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)

NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)

NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)

NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)

NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)

NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic

NONE PROVIDED

Total Contributing Impervious Area for Wet Vault

NONE PROVIDED

Total Contributing Impervious Area for Media Filter

NONE PROVIDED

"Other" Alternative SMP?

NONE PROVIDED

Total Contributing Impervious Area for "Other"

NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to prequired and total WQv provided for the project.

Manufacturer of Alternative SMP

NONE PROVIDED

Name of Alternative SMP

NONE PROVIDED

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.

None

If SPDES Multi-Sector GP, then give permit ID

NONE PROVIDED

If Other, then identify

NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?

No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth

NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for construction activities, please indicate the former SPDES number assigned.

NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?

Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official NOI?

Yes

MS4 SWPPP Acceptance Form Download

Download form from the link below. Complete, sign, and upload.

MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload - Attachment

NONE PROVIDED

Comment: NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.

Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form * - Attachment

NONE PROVIDED

Comment: NONE PROVIDED

Attachments		
Date	Attachment Name	Context
None		

Status History Date	User	Processing Status	
None			

Processing Steps Step Name	Assigned To/Completed By	Date
Form Submitted		
Deemed Complete	Toni Cioffi	

CONTRACTORS' CERTIFICATION

The following individuals certify the following under penalty of law:

- 1. That they understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge stormwater.
- 2. That they also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (SPDES) general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards.
- 3. That, by signing below, they are agreeing to the following certification statement: "I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the owner or operator must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it 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."

1.	Name (please print):	
	Prime or genera	al contractor, President (or print title)
	Signature:	Date:
	For (Company Name and Addr	ess)
	Responsible For:	
2.	Name (please print):	
	Subcontra	actor, President (or print title)
	Signature:	Date:
	For (Company Name and Addr	ess)
	Pagnangihla For	

3.	Name (please print):	
	Subcont	ractor, President (or print title)
	Signature:	Date:
	F (C)	1
	For (Company Name and Adresponsible For:	
4.	Name (please print):Subcont	ractor, President (or print title)
	Signature:	· · · · · · · · · · · · · · · · · · ·
	Signature.	Date
	For (Company Name and Ad	dress)
	Responsible For:	
5.	Name (please print):	
	<u>Subcont</u>	ractor, President (or print title)
	Signature:	Date:
	F (C N 141	1
	For (Company Name and Ad-	
6.	Name (please print):	ractor, President (or print title)
		•
	Signature:	Date:
	For (Company Name and Ad	dress)
	Responsible For:	

7.3 Contractor/Subcontractors; Stormwater Training Cards and Numbers			

7.4 <u>Documentation from NYS-Historic Preservation Office</u>



ANDREW M. CUOMO

Governor

ROSE HARVEY
Commissioner

August 29, 2018

Mr. DAVID MATT PROJECT ENGINEER SCHULTZ ASSOCIATES, P.C. PO BOX 89 SPENCERPORT, NY 14559

Re: ERDA

DELAWARE RIVER SOLAR, LLC ENERGY FACILITY FOX ROAD at YELLOW MILLS ROAD, FARMINGTON, NY 18PR05606

Dear Mr. MATT:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the New York State Office of Parks, Recreation and Historic Preservation's opinion that your project will have no impact on archaeological and/or historic resources listed in or eligible for the New York State and National Registers of Historic Places.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Michael F. Lynch, P.E., AIA

Director, Division for Historic Preservation

7.5 MS4 SWPPP Acceptance Form (if Applicable)



NYS Department of Environmental Conservation Division of Water 625 Broadway, 4th Floor Albany, New York 12233-3505

MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance Form

for

Construction Activities Seeking Authorization Under SPDES General Permit *(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I.	Project Owner/Operator Information
1.	Owner/Operator Name:
2.	Contact Person:
3.	Street Address:
4.	City/State/Zip:
II.	Project Site Information
5.	Project/Site Name:
6.	Street Address:
7.	City/State/Zip:
III.	Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information
8.	SWPPP Reviewed by:
9.	Title/Position:
10	. Date Final SWPPP Reviewed and Accepted:
IV	. Regulated MS4 Information
11	. Name of MS4:
12	. MS4 SPDES Permit Identification Number: NYR20A
13	s. Contact Person:
14	. Street Address:
15	s. City/State/Zip:
16	i. Telephone Number:

MS4 SWPPP Acceptance Form - continued
V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative
I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.
Printed Name:
Title/Position:
Signature:
Date:
VI. Additional Information

(NYS DEC - MS4 SWPPP Acceptance Form - January 2015)

7.6 Revisions to SWPPP

7.7 Corrective Action Log

7.8 <u>Plans Stamped by a Qualified Professional</u> Refer to Appendix A – Maps.

SWPPP APPENDICES

Appendix A – Maps

SWPPP APPENDICES

Appendix B – Qualified Inspector Form

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES Standardized Qualified Inspector Form

Project Name and Location of Project:		Date:	Weather:
Municipality:		Permit #: NYR10	
Municipality: County:		Entry Time:	Exit Time:
Qualified Inspector:Qualified Inspector Title:			
5 Acre Waiver: □ Yes □ No Name of SPDES Permittee:			
Phone:Fax:_			
Name of Representative on Site:			

Qualified Inspector's Credentials & Certification

Qualified Inspector (QI) means a person that is knowledgeable in the principles and practices of erosion and sediment control (ESC). A person is considered qualified under the following conditions:

- 1. A licensed Professional Engineer; licensed Landscape Architect with documented training and education in the principles and practices of ESC;
- 2. An individual certified in ESC by CPESC, Incorporated or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources;
- 3. An individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect with documented training and education in the principles and practices of ESC and has completed the four (4) hour training program in the principles and practices of erosion and sediment control from either a Soil and Water Conservation District, CPESC or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources. This initial training must be completed no later than May 1, 2010. After receiving the initial training, an individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect must complete four (4) hours of training every three (3) years.
- 4. Any other individual endorsed by the NYS Department of Environmental Conservation by written documentation.
- 5. Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.1

Construction Form # 2 Rv. 8-18-2010

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES Standardized Qualified Inspector Form

Part I. CONSTRUCTION DURATION INSPECTIONS a. Other Permit Required Reporting	Page 2 of
Maintaining Water Quality -	
Describe the condition of runoff at all points of discharge.	
Is there an increase in turbidity causing a substantial visible contrast to natural condi	tions?
Is there residue from oil and floating substances, visible oil film, or globules or greas	
Is there evidence of silt deposition from project in a stream, wetland, or other water	body?
If yes, where?remedial measure needed? _	
Provide a description of the conditions of all natural water bodies within or immedia	tely adjacent to the project.
Area of Disturbance	
Total area of disturbance (as shown on sketch plan and not including areas that have stabilization measures applied)	
Are all disturbances within the limits of the SWPPP?	
Weather Conditions	
A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time	e of the inspection;
General Housekeeping	
Are facilities and equipment necessary for implementation of erosion and sediment c	ontrol in working order
and/or properly maintained?	
Is construction impacting the adjacent property?	
Is dust adequately controlled?	
Describe corrective action(s):	
Date correction needed:	
b. Runoff Controls- Direct runoff away from exposed soil surfaces and con	trol water that falls onto the site
$\underline{\text{Runoff conveyance systems}} \Box \text{ N A}$	
Are all runoff conveyance systems called for in the SWPPP installed, stabilized and v	_
If not, what specific areas need detailing?	With
minimum side slopes 2H:1V or flatter? Stabilized by geotextile fabric, seed	
occurring?Sediment-laden runoff directed to sediment trapping structure?	
Describe corrective action(s):	
Date correction needed:	
Runoff Control Structures N A	
Have all required runoff control structures (rock outlets and aprons) been installed a	and constructed per plan and
according to the Blue Book? Installed concurrently with pipe installa	ation?
Describe corrective action(s):	
Date correction needed:	
Temporary Stream or Channel Crossing □ N A	

Construction Form # 2 Rv. 8-18-2010

Have construction crossings at concentrated flow areas been culverted? Describe corrective action(s):

Date correction needed: _____

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES Standardized Qualified Inspector Form

Stone Check Dam ☐ N A			Page 3 of
Installed per standards?	channel stable (flow i	s not eroding soil un	derneath or around the
structure)does sedim			
Describe corrective action(s):			
Date correction needed:			
Excavation Dewatering N	A		
1. Flowing water \square N A – Upst and downstream berms are insta pumped to the downstream pool	led per plan?and	functioning? (clean v	vater from upstream pool is being
2. Sediment laden water from w	ork area 🗆 N A - Is being o	lischarged to a silt-tr	rapping device?
3. Groundwater from excavation	s □ N A - is being manage	d properly (sumps a	nd sediment control)?
Describe corrective action(s):			
Date correction needed:			
c. Soil Stabiliza	ion- Basic erosion control is	achieved by covering	all bare ground areas.
Topsoil and Spoil Stockpile Stabilized - sediment controls at Describe corrective action(s): Date correction needed:	downhill slope?		
Revegetation/Stabilization Has temporary or permanent see been inactive for 14 days or less Has soil preparation been applie all the necessary soil testing/fert Have rolled erosion control prod Describe corrective action(s): Date correction needed:	ding <i>and</i> mulch (as shown (or, inactive for 7 days if or as specified in the SWPPI dizer/lime, topsoil, decompands specified for steep slo	ver 5 acres disturbed P and in accordance action has been appli pes or channels been	with the Blue Book (Assure that ed)? installed?
d. Sediment Con	trols		
Stabilized Construction Ent. Stone is clean and all access are parking)?	s covered (entrances, cons racking onto public streets	is minimized and cle	eaned daily?
Silt Fence □ N A Installed on contour? not across At appropriate spacing intervals Fabric is tight, without rips or fr minimum?Any "bulg Describe: Date correction needed:	based on slope?Vayed areas?Pos	Vrapped ends for consts are stable?	ntinuous support? buried 6 inches

Construction Form # 2 Rv. 8-18-2010

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES Standardized Qualified Inspector Form

<u> Temporary Sediment Trap</u> □ N A	Page 4 of
Is outlet structure constructed properly?geotextile	fabric has been placed beneath rock
fill?Maintenance – depth of sediment in basin?	50% capacity?
Describe:	
Date correction needed:	
Temporary Sediment Basin □ N A	
Is basin and outlet structure constructed per the approved plan	
Are basin side slopes stabilized with seed/mulch?	
Maintenance – depth of sediment in basin? 509	
Describe:	
Date correction needed:	
Drop Inlet Protection □ N A	
Type(s) of inlet control?	
Installed per Blue Book specifications: drainage area (typically	1 acre)?
Appropriate for location?	
Describe:	
Date correction needed:	
e. Digital Color Photographs of Deficient color copies of the digital photographs to this inspection report of decondition of all practices that have been identified as needing corrections.	ricient BMPs with date stamp, that clearly show the
f. Digital Color Photographs of BMPs that inspector shall attach paper color copies of the digital photographs to stamp, that clearly show the condition of the practice(s) after the corresponding to the practice of the condition of the practice of the corresponding to the practice of t	this inspection report of corrected BMPs with date
g. Post-Construction Stormwater Managemust be taken to install, correct, repair, replace or maintain at the post-construction stormwater management practice(s). Representation stormwater management practice(s) and whether the install approved hydraulic design (e.g. the pond, the outlet structure, orifice the SWPPP):	ny deficiencies identified with the construction of fort the current phase of construction of all post- tallation appears to be geometrically consistent with the
h. Revisions to SWPPP-When the owner or operelevant facts, or submitted incorrect information in the NOI or in an the SWPPP (e.g. the scope of the project changes significantly, the transference of the project changes significantly and the project changes significantly and the project changes of the project changes significantly, the transference of the project changes of the projec	y other report, or have made substantive revisions to ype of post-construction stormwater management truction stormwater management practice, or there is ot reflected in the original NOI submitted to the r information. Failure of the owner or operator to

Page 5 of _____

Construction Form # 2

Rv. 8-18-2010

inspection report.

have been Stabilized (Temporary or Final) Since Last Inspection- Attach a map to this

Site Plan/Sketch of Areas Disturbed at the Time of Inspection and Areas that

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES Standardized Qualified Inspector Form

Inspection Notes and Signature Inspection Notes:	ure
k. Signature	
GP-0-10-001 Part VII.Q	
	nal Law provide for Criminal penalty of a fine and/or required by this permit.
Qualified Inspector (print name)	Date of Inspection
	Signature
	of his/her knowledge, all information provided on the forms is rate and complete.
Title:	Address:
Phone: Email:	
CPESC#:	
Stormwater Training Number for Trained In	ndividuals:
<u>Compli</u>	ance certification:
Received and reviewed by	Title:
The above signed acknow	ledges receipt of this inspection report

Construction Form # 2 Rv. 8-18-2010

SWPPP APPENDICES

Appendix C – Soil Restoration Specification

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STANDARD AND SPECIFICATIONS FOR SOIL RESTORATION



Definition & Scope

The decompaction of areas of a development site or construction project where soils have been disturbed to recover the original properties and porosity of the soil; thus providing a sustainable growth medium for vegetation, reduction of runoff and filtering of pollutants from stormwater runoff.

Conditions Where Practice Applies

Soil restoration is to be applied to areas whose heavy construction traffic is done and final stabilization is to begin. This is generally applied in the cleanup, site restoration, and landscaping phase of construction followed by the permanent establishment of an appropriate ground cover to maintain the soil structure. Soil restoration measures should be applied over and adjacent to any runoff reduction practices to achieve design performance.



Design Criteria

1. Soil restoration areas will be designated on the plan views of areas to be disturbed.

2. Soil restoration will be completed in accordance with Table 4.6 on page 4.53.

Specification for Full Soil Restoration

During periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following Soil Restoration steps applied:

1. Apply 3 inches of compost over subsoil. The compost shall be well decomposed (matured at least 3 months), weed-free, organic matter. It shall be aerobically composted, possess no objectionable odors, and contain less than 1%, by dry weight, of man-made foreign matter. The physical parameters of the compost shall meet the standards listed in Table 5.2 - Compost Standards Table. Note: All biosolids compost produced in New York State (or approved for importation) must meet NYS DEC's 6 NYCRR Part 360 (Solid Waste Management Facilities) requirements. The Part 360 requirements are equal to or more stringent than 40 CFR Part 503 which ensure safe standards for pathogen reduction and heavy metals content.



- 2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor mounted disc, or tiller, to mix and circulate air and compost into the subsoil.
- 3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site.
- 4. Apply topsoil to a depth of 6 inches.
- 5. Vegetate as required by the seeding plan. Use appropriate ground cover with deep roots to maintain the soil structure.
- 6. Topsoil may be manufactured as a mixture or a mineral component and organic material such as compost.

At the end of the project an inspector should be able to push a 3/8" metal bar 12 inches into the soil just with body weight. This should not be performed within the drip line of any existing trees or over utility installations that are within 24 inches of the surface.

Maintenance

Keep the site free of vehicular and foot traffic or other weight loads. Consider pedestrian footpaths.

Table 4.6 Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A&B	HSG C&D	D
	Apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	Protect area from any ongoing construction activities.
	HSG A&B	HSG C&D	
Areas of cut or fill	Aerate* and apply 6 inches of topsoil	Apply full Soil Restoration**	
Heavy traffic areas on site (especially in a zone 5-25 feet around buildings but not within a 5 foot perimeter around foundation walls)	Apply full Soil Restoration (decompaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area
Redevelopment projects	Soil Restoration is required on redevel- opment projects in areas where existing impervious area will be converted to pervious area.		

^{*} Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

** Per "Deep Ripping and De-compaction, DEC 2008".

SWPPP APPENDICES

Appendix D – General Permit GP-0-15-002



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-15-002

Issued Pursuant to Article 17, Titles 7, 8 and Article 70 of the Environmental Conservation Law

Effective Date: January 29, 2015 Expiration Date: January 28, 2020

1 / 12 / 15

Date

John J. Ferguson

Address:

Chief Permit Administrator

Authorized Signature

NYS DEC

Division of Environmental Permits

625 Broadway, 4th Floor Albany, N.Y. 12233-1750

PREFACE

Pursuant to Section 402 of the Clean Water Act ("CWA"), stormwater discharges from certain construction activities are unlawful unless they are authorized by a National Pollutant Discharge Elimination System ("NPDES") permit or by a state permit program. New York's State Pollutant Discharge Elimination System ("SPDES") is a NPDES-approved program with permits issued in accordance with the Environmental Conservation Law ("ECL").

This general permit ("permit") is issued pursuant to Article 17, Titles 7, 8 and Article 70 of the ECL. An *owner or operator* may obtain coverage under this permit by submitting a Notice of Intent ("NOI") to the Department. Copies of this permit and the NOI for New York are available by calling (518) 402-8109 or at any New York State Department of Environmental Conservation ("the Department") regional office (see Appendix G). They are also available on the Department's website at:

http://www.dec.ny.gov/

An owner or operator of a construction activity that is eligible for coverage under this permit must obtain coverage prior to the commencement of construction activity. Activities that fit the definition of "construction activity", as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a point source and therefore, pursuant to Article 17-0505 of the ECL, the owner or operator must have coverage under a SPDES permit prior to commencing construction activity. They cannot wait until there is an actual discharge from the construction site to obtain permit coverage.

*Note: The italicized words/phrases within this permit are defined in Appendix A.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

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(Part I)

I.

Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

This permit authorizes stormwater *discharges* to *surface waters of the State* from the following *construction activities* identified within 40 CFR Parts 122.26(b)(14)(x), 122.26(b)(15)(i) and 122.26(b)(15)(ii), provided all of the eligibility provisions of this permit are met:

- Construction activities involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a larger common plan of development or sale that will ultimately disturb one or more acres of land; excluding routine maintenance activity that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
- 2. Construction activities involving soil disturbances of less than one (1) acre where the Department has determined that a SPDES permit is required for stormwater discharges based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to surface waters of the State.
- Construction activities located in the watershed(s) identified in Appendix D
 that involve soil disturbances between five thousand (5,000) square feet
 and one (1) acre of land.
- **B.** Effluent Limitations Applicable to Discharges from Construction Activities Discharges authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.
 - 1. Erosion and Sediment Control Requirements The owner or operator must select, design, install, implement and maintain control measures to minimize the discharge of pollutants and prevent a violation of the water quality standards. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the owner or operator must include in the Stormwater Pollution Prevention Plan ("SWPPP") the reason(s) for the deviation or alternative design and provide information

(Part I.B.1)

which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
 - (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
 - (ii) Control stormwater *discharges* to *minimize* channel and streambank erosion and scour in the immediate vicinity of the *discharge* points;
 - (iii) Minimize the amount of soil exposed during construction activity;
 - (iv) *Minimize* the disturbance of *steep slopes*;
 - (v) Minimize sediment discharges from the site;
 - (vi) Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce pollutant discharges, unless infeasible;
 - (vii) Minimize soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted; and
 - (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover.
- b. Soil Stabilization. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that directly discharge to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of Temporarily Ceased.
- c. **Dewatering**. *Discharges* from dewatering activities, including *discharges*

(Part I.B.1.c)

from dewatering of trenches and excavations, must be managed by appropriate control measures.

- d. Pollution Prevention Measures. Design, install, implement, and maintain effective pollution prevention measures to *minimize* the discharge of pollutants and prevent a violation of the water quality standards. At a minimum, such measures must be designed, installed, implemented and maintained to:
 - Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;
 - (ii) Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use); and
 - (iii) Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. **Prohibited** *Discharges*. The following *discharge*s are prohibited:
 - (i) Wastewater from washout of concrete;
 - (ii) Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
 - (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
 - (iv) Soaps or solvents used in vehicle and equipment washing; and
 - (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion

at or below the outlet does not occur.

C. Post-construction Stormwater Management Practice Requirements

- 1. The owner or operator of a construction activity that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the performance criteria in the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices ("SMPs") are not designed in conformance with the performance criteria in the Design Manual, the owner or operator must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is equivalent to the technical standard.
- 2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

a. Sizing Criteria for New Development

- (i) Runoff Reduction Volume ("RRv"): Reduce the total Water Quality Volume ("WQv") by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual. The remaining portion of the total WQv

(Part I.C.2.a.ii)

- that cannot be reduced shall be treated by application of standard SMPs.
- (iii) Channel Protection Volume ("Cpv"): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
 - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
 - (2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
 - (1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
 - (1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that overbank control is not required.

b. Sizing Criteria for New Development in Enhanced Phosphorus Removal Watershed

- (i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be calculated in accordance with the criteria in Section 10.3 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or

(Part I.C.2.b.ii)

standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv shall be documented in the SWPPP. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 10.3 of the Design Manual. The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
 - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
 - (2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
 - (1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that overbank control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
 - (1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
 - (2) A downstream analysis reveals that overbank control is not required.
- c. Sizing Criteria for Redevelopment Activity

(Part I.C.2.c.i)

- (i) Water Quality Volume (WQv): The WQv treatment objective for redevelopment activity shall be addressed by one of the following options. Redevelopment activities located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other redevelopment activities shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
 - (1) Reduce the existing impervious cover by a minimum of 25% of the total disturbed, impervious area. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
 - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, impervious area by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, impervious area by the application of RR techniques or standard SMPs with RRv capacity., or
 - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
 - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

If there is an existing post-construction stormwater management practice located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1-4 above.

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the discharge rate from the project site.

(Part I.C.2.c.iv)

(iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

d. Sizing Criteria for Combination of Redevelopment Activity and New Development

Construction projects that include both *New Development* and *Redevelopment Activity* shall provide post-construction stormwater management controls that meet the *sizing criteria* calculated as an aggregate of the *Sizing Criteria* in Part I.C.2.a. or b. of this permit for the *New Development* portion of the project and Part I.C.2.c of this permit for *Redevelopment Activity* portion of the project.

D. Maintaining Water Quality

The Department expects that compliance with the conditions of this permit will control *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any discharge to either cause or contribute to a violation of *water quality standards* as contained in Parts 700 through 705 of Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York, such as:

- 1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;
- 2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and
- 3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

If there is evidence indicating that the stormwater *discharge*s authorized by this permit are causing, have the reasonable potential to cause, or are contributing to a violation of the *water quality standards*; the *owner or operator* must take appropriate corrective action in accordance with Part IV.C.5. of this general permit and document in accordance with Part IV.C.4. of this general permit. To address the *water quality standard* violation the *owner or operator* may need to provide additional information, include and implement appropriate controls in the SWPPP to correct the problem, or obtain an individual SPDES permit.

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharge*s authorized by this permit are causing or contributing to a violation of *water quality standards*, or

(Part I.D)

if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

E. Eligibility Under This General Permit

- 1. This permit may authorize all *discharges* of stormwater from *construction* activity to surface waters of the State and groundwaters except for ineligible discharges identified under subparagraph F. of this Part.
- 2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges* from *construction* activities.
- 3. Notwithstanding paragraphs E.1 and E.2 above, the following nonstormwater discharges may be authorized by this permit: discharges from firefighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated groundwater or spring water; uncontaminated discharges from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who discharge as noted in this paragraph, and with the exception of flows from firefighting activities, these discharges must be identified in the SWPPP. Under all circumstances, the owner or operator must still comply with water quality standards in Part I.D of this permit.
- 4. The owner or operator must maintain permit eligibility to discharge under this permit. Any discharges that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the owner or operator must either apply for a separate permit to cover those ineligible discharges or take steps necessary to make the discharge eligible for coverage.
- **F.** Activities Which Are Ineligible for Coverage Under This General Permit All of the following are <u>not</u> authorized by this permit:

(Part I.F)

- 1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;
- 2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
- 3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
- 4. Construction activities or discharges from construction activities that may adversely affect an endangered or threatened species unless the owner or operator has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.
- 5. Discharges which either cause or contribute to a violation of water quality standards adopted pursuant to the ECL and its accompanying regulations;
- 6. Construction activities for residential, commercial and institutional projects:
 - a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
 - b. Which disturb one or more acres of land with no existing *impervious cover*, and
 - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.
- 7. Construction activities for linear transportation projects and linear utility projects:
 - a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
 - b. Which disturb two or more acres of land with no existing *impervious cover*, and
 - c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.

- 8. Construction activities that have the potential to affect an historic property, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.C.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
 - a. Documentation that the construction activity is not within an archeologically sensitive area indicated on the sensitivity map, and that the construction activity is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
 - 1-5 acres of disturbance 20 feet
 - 5-20 acres of disturbance 50 feet
 - 20+ acres of disturbance 100 feet, or
 - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
 - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
 - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
 - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
 - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
 - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
 - (i) No Affect
 - (ii) No Adverse Affect

(Part I.F.8.c.iii)

- (iii) Executed Memorandum of Agreement, or
- d. Documentation that:
 - (i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.
- 9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. OBTAINING PERMIT COVERAGE

A.Notice of Intent (NOI) Submittal

1. An owner or operator of a construction activity that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed NOI form to the Department in order to be authorized to discharge under this permit. An owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (http://www.dec.ny.gov/). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address.

NOTICE OF INTENT NYS DEC, Bureau of Water Permits 625 Broadway, 4th Floor Albany, New York 12233-3505

2. An owner or operator of a construction activity that is subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have its SWPPP reviewed and accepted by the regulated, traditional land use control MS4 prior to submitting the NOI to the Department. The owner or operator shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department. An owner or operator shall use either the electronic (eNOI) or paper version of the NOI.

The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the address in Part II.A.1.

(Part II.A.2)

The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.E. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*.

- 3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
- 4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

B. Permit Authorization

- 1. An owner or operator shall not commence construction activity until their authorization to discharge under this permit goes into effect.
- 2. Authorization to *discharge* under this permit will be effective when the *owner* or operator has satisfied all of the following criteria:
 - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,
 - b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,
 - c. the final SWPPP has been prepared, and
 - d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
- 3. An owner or operator that has satisfied the requirements of Part II.B.2 above

(Part II.B.3)

will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

- a. For construction activities that are <u>not</u> subject to the requirements of a regulated, traditional land use control MS4:
 - (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for construction activities with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, for construction activities that require post-construction stormwater management practices pursuant to Part III.C.; or
 - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for construction activities with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for construction activities that require post-construction stormwater management practices pursuant to Part III.C., the performance criteria in the technical standard referenced in Parts III.B., 2 or 3, or;
 - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.
- b. For *construction activities* that are subject to the requirements of a regulated, traditional land use control MS4:
 - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed "MS4 SWPPP Acceptance" form, or
 - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed "MS4 SWPPP Acceptance" form.
- 4. The Department may suspend or deny an owner's or operator's coverage

(Part II.B.4)

under this permit if the Department determines that the SWPPP does not meet the permit requirements. In accordance with statute, regulation, and the terms and conditions of this permit, the Department may deny coverage under this permit and require submittal of an application for an individual SPDES permit based on a review of the NOI or other information pursuant to Part II.

5. Coverage under this permit authorizes stormwater discharges from only those areas of disturbance that are identified in the NOI. If an owner or operator wishes to have stormwater discharges from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The owner or operator shall not commence construction activity on the future or additional areas until their authorization to discharge under this permit goes into effect in accordance with Part II.B. of this permit.

C. General Requirements For Owners or Operators With Permit Coverage

- The owner or operator shall ensure that the provisions of the SWPPP are implemented from the commencement of construction activity until all areas of disturbance have achieved final stabilization and the Notice of Termination ("NOT") has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
- 2. The owner or operator shall maintain a copy of the General Permit (GP-0-15-002), NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form, inspection reports, and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved final stabilization and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
- 3. The owner or operator of a construction activity shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity). At a minimum, the owner or operator must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:
 - a. The *owner or operator* shall

(Part II.C.3.a)

have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

- b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005.
- c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
- d. The *owner or operator* shall install any additional site specific practices needed to protect water quality.
- e. The *owner or operator* shall include the requirements above in their SWPPP.
- 4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an owner's or operator's coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the owner or operator.
- 5. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4, the owner or operator shall notify the regulated, traditional land use control MS4 in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the regulated, traditional land use control MS4, the owner or operator shall have the SWPPP amendments or modifications reviewed and accepted by the regulated, traditional land use control MS4 prior to commencing construction of the post-construction stormwater management practice

(Part II.D)

D. Permit Coverage for Discharges Authorized Under GP-0-10-001

 Upon renewal of SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-10-001), an owner or operator of a construction activity with coverage under GP-0-10-001, as of the effective date of GP-0-15-002, shall be authorized to discharge in accordance with GP-0-15-002, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-15-002.

E. Change of *Owner or Operator*

2. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original owner or operator must notify the new owner or operator, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. Once the new owner or operator obtains permit coverage, the original owner or operator shall then submit a completed NOT with the name and permit identification number of the new owner or operator to the Department at the address in Part II.A.1. of this permit. If the original owner or operator maintains ownership of a portion of the construction activity and will disturb soil, they must maintain their coverage under the permit.

Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

(Part III)

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

- 1. A SWPPP shall be prepared and implemented by the owner or operator of each construction activity covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the commencement of construction activity. A copy of the completed, final NOI shall be included in the SWPPP.
- 2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
- All SWPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
- 4. The owner or operator must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the owner or operator shall amend the SWPPP:
 - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;
 - b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the *discharge* of *pollutants*; and
 - c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority.
- 5. The Department may notify the owner or operator at any time that the

(Part III.A.5)

SWPPP does not meet one or more of the minimum requirements of this permit. The notification shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.C.4. of this permit.

6. Prior to the commencement of construction activity, the owner or operator must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The owner or operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the trained contractor. The owner or operator shall ensure that at least one trained contractor is on site on a daily basis when soil disturbance activities are being performed.

The *owner or operator* shall have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before they commence any *construction activity*:

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *discharges* from *construction activities* and that it is unlawful for any person to cause or contribute to a violation of *water quality standards*. Furthermore, I am aware that there are significant penalties for submitting false information, that I do not believe to be true, including the possibility of fine and imprisonment for knowing violations"

In addition to providing the certification statement above, the certification page must also identify the specific elements of the SWPPP that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the

(Part III.A.6)

trained contractor responsible for SWPPP implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

B. Required SWPPP Contents

- 1. Erosion and sediment control component All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the owner or operator must demonstrate equivalence to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
 - a. Background information about the scope of the project, including the location, type and size of project;
 - b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the construction activity; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater discharge(s);
 - c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
 - d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other

(Part III.B.1.d)

activity at the site that results in soil disturbance;

- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each construction activity that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final* stabilization;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005;
- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
- k. A description and location of any stormwater discharges associated with industrial activity other than construction at the site, including, but not limited to, stormwater discharges from asphalt plants and concrete plants located on the construction site; and
- I. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated August 2005. Include the reason for the deviation or alternative design

(Part III.B.1.I)

- and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
- 2. Post-construction stormwater management practice component The owner or operator of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable sizing criteria in Part I.C.2.a., c. or d. of this permit and the performance criteria in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;
- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
 - Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
 - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
 - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
 - (iv) Summary table, with supporting calculations, which demonstrates

(Part III.B.2.c.iv)

- that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
- (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
- (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.
- 3. Enhanced Phosphorus Removal Standards All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable sizing criteria in Part I.C.2. b., c. or d. of this permit and the performance criteria, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a 2.f. above.

C. Required SWPPP Components by Project Type

Unless otherwise notified by the Department, *owners or operators* of *construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators* of the *construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

(Part IV)

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

- 1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
- 2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

- 1. The owner or operator of each construction activity identified in Tables 1 and 2 of Appendix B shall have a trained contractor inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.
- 2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the trained contractor can stop conducting the maintenance inspections. The trained contractor shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
- 3. For construction sites where soil disturbance activities have been shut down with partial project completion, the trained contractor can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

(Part IV.C)

The *owner or operator* shall have a *qualified inspector* conduct site inspections in conformance with the following requirements:

[Note: The *trained contractor* identified in Part III.A.6. and IV.B. of this permit **cannot** conduct the *qualified inspector* site inspections unless they meet the *qualified inspector* qualifications included in Appendix A. In order to perform these inspections, the *trained contractor* would have to be a:

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
- 1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
 - a. the construction of a single family residential subdivision with 25% or less impervious cover at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
 - b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E;
 - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
 - d. construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
- 2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
 - a. For construction sites where soil disturbance activities are on-going, the qualified inspector shall conduct a site inspection at least once every seven (7) calendar days.
 - b. For construction sites where soil disturbance activities are on-going and

(Part IV.C.2.b)

the *owner or operator* has received authorization in accordance with Part II.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

- c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days. The owner or operator shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to reducing the frequency of inspections.
- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the qualified inspector can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved final stabilization and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a regulated, traditional land use control MS4, the regulated, traditional land use control MS4 (provided the regulated, traditional land use control MS4 is not the owner or operator of the construction activity) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved final stabilization, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice" certification statements on the NOT. The owner or operator shall then submit the completed NOT form to the address in Part II.A.1 of this permit.
- e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall

(Part IV.C.2.e)

be separated by a minimum of two (2) full calendar days.

- 3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site, and all points of *discharge* from the construction site.
- 4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:
 - a. Date and time of inspection;
 - b. Name and title of person(s) performing inspection;
 - c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
 - d. A description of the condition of the runoff at all points of *discharge* from the construction site. This shall include identification of any *discharges* of sediment from the construction site. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
 - e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the construction site which receive runoff from disturbed areas. This shall include identification of any discharges of sediment to the surface waterbody;
 - f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
 - g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
 - Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;

(Part IV.C.4.i)

- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and
- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The qualified inspector shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
- 5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
- 6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.C.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

An owner or operator that is eligible to terminate coverage under this permit
must submit a completed NOT form to the address in Part II.A.1 of this
permit. The NOT form shall be one which is associated with this permit,
signed in accordance with Part VII.H of this permit.

(Part V.A.2)

- 2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
 - a. Total project completion All construction activity identified in the SWPPP has been completed; <u>and</u> all areas of disturbance have achieved final stabilization; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;
 - b. Planned shutdown with partial project completion All soil disturbance activities have ceased; <u>and</u> all areas disturbed as of the project shutdown date have achieved <u>final stabilization</u>; <u>and</u> all temporary, structural erosion and sediment control measures have been removed; <u>and</u> all postconstruction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
 - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.E. of this permit.
 - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
- 3. For construction activities meeting subdivision 2a. or 2b. of this Part, the owner or operator shall have the qualified inspector perform a final site inspection prior to submitting the NOT. The qualified inspector shall, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
- 4. For construction activities that are subject to the requirements of a regulated, traditional land use control MS4 and meet subdivision 2a. or 2b. of this Part, the owner or operator shall have the regulated, traditional land use control MS4 sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The regulated, traditional land use control MS4 official, by signing this statement, has determined that it is acceptable for the owner or operator to submit the NOT in accordance with the requirements of this Part. The regulated, traditional land use control MS4 can make this determination by performing a final site inspection themselves or by accepting the qualified inspector's final site inspection certification(s) required in Part V.A.3. of this permit.

(Part V.A.5)

- 5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
 - a. the post-construction stormwater management practice(s) and any rightof-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,
 - b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
 - c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner* or operator's deed of record,
 - d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the owner or operator has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

VI. Part VI. REPORTING AND RETENTION OF RECORDS

A. Record Retention

The owner or operator shall retain a copy of the NOI, NOI Acknowledgment Letter, SWPPP, MS4 SWPPP Acceptance form and any inspection reports that were prepared in conjunction with this permit for a period of at least five (5) years from the date that the Department receives a complete NOT submitted in accordance with Part V. of this general permit.

B. Addresses

With the exception of the NOI, NOT, and MS4 SWPPP Acceptance form (which must be submitted to the address referenced in Part II.A.1 of this permit), all written correspondence requested by the Department, including individual permit applications, shall be sent to the address of the appropriate DOW Water (SPDES) Program contact at the Regional Office listed in Appendix F.

(Part VII)

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water Act (CWA) and the ECL and is grounds for an enforcement action against the *owner or operator* and/or the contractor/subcontractor; permit revocation, suspension or modification; or denial of a permit renewal application. Upon a finding of significant non-compliance with this permit or the applicable SWPPP, the Department may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order shall be in writing, shall describe the non-compliance in detail, and shall be sent to the *owner or operator*.

If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE). *Construction activity* shall not resume until written permission to do so has been received from the RWE.

B. Continuation of the Expired General Permit

This permit expires five (5) years from the effective date. If a new general permit is not issued prior to the expiration of this general permit, an *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the terms and conditions of this general permit, if it is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, until a new general permit is issued.

C. Enforcement

Failure of the *owner or operator*, its contractors, subcontractors, agents and/or assigns to strictly adhere to any of the permit requirements contained herein shall constitute a violation of this permit. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines of up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for an *owner or operator* in an enforcement action that it would have been necessary to halt or reduce the *construction activity* in order to maintain compliance with the conditions of this permit.

(Part VII.E)

E. Duty to Mitigate

The *owner or operator* and its contractors and subcontractors shall take all reasonable steps to *minimize* or prevent any *discharge* in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

F. Duty to Provide Information

The *owner or operator* shall furnish to the Department, within a reasonable specified time period of a written request, all documentation necessary to demonstrate eligibility and any information to determine compliance with this permit or to determine whether cause exists for modifying or revoking this permit, or suspending or denying coverage under this permit, in accordance with the terms and conditions of this permit. The NOI, SWPPP and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five (5) business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

G. Other Information

When the *owner or operator* becomes aware that they failed to submit any relevant facts, or submitted incorrect information in the NOI or in any of the documents required by this permit, or have made substantive revisions to the SWPPP (e.g. the scope of the project changes significantly, the type of post-construction stormwater management practice(s) changes, there is a reduction in the sizing of the post-construction stormwater management practice, or there is an increase in the disturbance area or *impervious area*), which were not reflected in the original NOI submitted to the Department, they shall promptly submit such facts or information to the Department using the contact information in Part II.A. of this permit. Failure of the *owner or operator* to correct or supplement any relevant facts within five (5) business days of becoming aware of the deficiency shall constitute a violation of this permit.

H. Signatory Requirements

- 1. All NOIs and NOTs shall be signed as follows:
 - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (i) a president, secretary, treasurer, or vice-president of the

(Part VII.H.1.a.i)

- corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
- (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental laws environmental compliance with and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - (i) the chief executive officer of the agency, or
 - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- 2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
 - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named

(Part VII.H.2.b)

individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
- 3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
- 4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

I. Property Rights

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to commencing construction activity.

J. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

K. Requirement to Obtain Coverage Under an Alternative Permit

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to

(Part VII.K.1)

discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to discharge under a general SPDES permit for the same discharge(s), the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

L. Proper Operation and Maintenance

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

M. Inspection and Entry

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a construction site which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- 1. Enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- 2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and
- 3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
- 4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

(Part VII.N)

N. Permit Actions

This permit may, at any time, be modified, suspended, revoked, or renewed by the Department in accordance with 6 NYCRR Part 621. The filing of a request by the *owner or operator* for a permit modification, revocation and reissuance, termination, a notification of planned changes or anticipated noncompliance does not limit, diminish and/or stay compliance with any terms of this permit.

O. Definitions

Definitions of key terms are included in Appendix A of this permit.

P. Re-Opener Clause

- 1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
- 2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

In accordance with 6NYCRR Part 750-2.4 and 750-2.5, any person who knowingly makes any false material statement, representation, or certification in any application, record, report or other document filed or required to be maintained under this permit, including reports of compliance or noncompliance shall, upon conviction, be punished in accordance with ECL §71-1933 and or Articles 175 and 210 of the New York State Penal Law.

R. Other Permits

Nothing in this permit relieves the *owner or operator* from a requirement to obtain any other permits required by law.

APPENDIX A

Definitions

Alter Hydrology from Pre to Post-Development Conditions - means the post-development peak flow rate(s) has increased by more than 5% of the pre-developed condition for the design storm of interest (e.g. 10 yr and 100 yr).

Combined Sewer - means a sewer that is designed to collect and convey both "sewage" and "stormwater".

Commence (Commencement of) Construction Activities - means the initial disturbance of soils associated with clearing, grading or excavation activities; or other construction related activities that disturb or expose soils such as demolition, stockpiling of fill material, and the initial installation of erosion and sediment control practices required in the SWPPP. See definition for "Construction Activity(ies)" also.

Construction Activity(ies) - means any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

Direct Discharge (to a specific surface waterbody) - means that runoff flows from a construction site by overland flow and the first point of discharge is the specific surface waterbody, or runoff flows from a construction site to a separate storm sewer system and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

Discharge(s) - means any addition of any pollutant to waters of the State through an outlet or point source.

Environmental Conservation Law (ECL) - means chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law.

Equivalent (Equivalence) – means that the practice or measure meets all the performance, longevity, maintenance, and safety objectives of the technical standard and will provide an equal or greater degree of water quality protection.

Final Stabilization - means that all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other equivalent stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied

on all disturbed areas that are not covered by permanent structures, concrete or pavement.

General SPDES permit - means a SPDES permit issued pursuant to 6 NYCRR Part 750-1.21 and Section 70-0117 of the ECL authorizing a category of discharges.

Groundwater(s) - means waters in the saturated zone. The saturated zone is a subsurface zone in which all the interstices are filled with water under pressure greater than that of the atmosphere. Although the zone may contain gas-filled interstices or interstices filled with fluids other than water, it is still considered saturated.

Historic Property – means any building, structure, site, object or district that is listed on the State or National Registers of Historic Places or is determined to be eligible for listing on the State

or National Registers of Historic Places.

Impervious Area (Cover) - means all impermeable surfaces that cannot effectively infiltrate rainfall. This includes paved, concrete and gravel surfaces (i.e. parking lots, driveways, roads, runways and sidewalks); building rooftops and miscellaneous impermeable structures such as patios, pools, and sheds.

Infeasible – means not technologically possible, or not economically practicable and achievable in light of best industry practices.

Larger Common Plan of Development or Sale - means a contiguous area where multiple separate and distinct *construction activities* are occurring, or will occur, under one plan. The term "plan" in "larger common plan of development or sale" is broadly defined as any announcement or piece of documentation (including a sign, public notice or hearing, marketing plan, advertisement, drawing, permit application, State Environmental Quality Review Act (SEQRA) environmental assessment form or other documents, zoning request, computer design, etc.) or physical demarcation (including boundary signs, lot stakes, surveyor markings, etc.) indicating that *construction activities* may occur on a specific plot.

For discrete construction projects that are located within a larger common plan of development or sale that are at least 1/4 mile apart, each project can be treated as a separate plan of development or sale provided any interconnecting road, pipeline or utility project that is part of the same "common plan" is not concurrently being disturbed.

Minimize – means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer (MS4) - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters,

ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State:
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer, and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

National Pollutant Discharge Elimination System (NPDES) - means the national system for the issuance of wastewater and stormwater permits under the Federal Water Pollution Control Act (Clean Water Act).

New Development – means any land disturbance that does meet the definition of Redevelopment Activity included in this appendix.

NOI Acknowledgment Letter - means the letter that the Department sends to an owner or operator to acknowledge the Department's receipt and acceptance of a complete Notice of Intent. This letter documents the owner's or operator's authorization to discharge in accordance with the general permit for stormwater discharges from *construction activity*.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; and/or an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications.

Performance Criteria – means the design criteria listed under the "Required Elements" sections in Chapters 5, 6 and 10 of the technical standard, New York State Stormwater Management Design Manual, dated January 2015. It does not include the Sizing Criteria (i.e. WQv, RRv, Cpv, Qp and Qf) in Part I.C.2. of the permit.

Pollutant - means dredged spoil, filter backwash, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand and industrial, municipal, agricultural waste and ballast discharged into water; which may cause or might reasonably be expected to cause pollution of the waters of the state in contravention of the standards or guidance values adopted as provided in 6 NYCRR Parts 700 et seq.

Qualified Inspector - means a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or other Department endorsed individual(s).

It can also mean someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control. Training in the principles and practices of erosion and sediment control means that the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the individual working under the direct supervision of the licensed Professional Engineer or Registered Landscape Architect shall receive four (4) hours of training every three (3) years.

It can also mean a person that meets the *Qualified Professional* qualifications in addition to the *Qualified Inspector* qualifications.

Note: Inspections of any post-construction stormwater management practices that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

Qualified Professional - means a person that is knowledgeable in the principles and practices of stormwater management and treatment, such as a licensed Professional Engineer, Registered Landscape Architect or other Department endorsed individual(s). Individuals preparing SWPPPs that require the post-construction stormwater management practice component must have an understanding of the principles of hydrology, water quality management practice design, water quantity control design, and, in many cases, the principles of hydraulics. All components of the SWPPP that involve the practice of engineering, as defined by the NYS Education Law (see Article 145), shall be prepared by, or under the direct supervision of, a professional engineer licensed to practice in the State of New York..

Redevelopment Activity(ies) – means the disturbance and reconstruction of existing impervious area, including impervious areas that were removed from a project site within five (5) years of preliminary project plan submission to the local government (i.e. site plan, subdivision, etc.).

Regulated, Traditional Land Use Control MS4 - means a city, town or village with land use control authority that is required to gain coverage under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s).

Routine Maintenance Activity - means *construction activity* that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, including, but not limited to:

- Re-grading of gravel roads or parking lots,
- Stream bank restoration projects (does not include the placement of spoil material),
- Cleaning and shaping of existing roadside ditches and culverts that maintains the approximate original line and grade, and hydraulic capacity of the ditch,
- Cleaning and shaping of existing roadside ditches that does not maintain the approximate original grade, hydraulic capacity and purpose of the ditch if the changes to the line and grade, hydraulic capacity or purpose of the ditch are installed to improve water quality and quantity controls (e.g. installing grass lined ditch),
- Placement of aggregate shoulder backing that makes the transition between the road shoulder and the ditch or embankment,
- Full depth milling and filling of existing asphalt pavements, replacement of concrete pavement slabs, and similar work that does not expose soil or disturb the bottom six (6) inches of subbase material,
- Long-term use of equipment storage areas at or near highway maintenance facilities.
- Removal of sediment from the edge of the highway to restore a previously existing sheet-flow drainage connection from the highway surface to the highway ditch or embankment.
- Existing use of Canal Corp owned upland disposal sites for the canal, and
- Replacement of curbs, gutters, sidewalks and guide rail posts.

Site limitations – means site conditions that prevent the use of an infiltration technique and or infiltration of the total WQv. Typical site limitations include: seasonal high groundwater, shallow depth to bedrock, and soils with an infiltration rate less than 0.5 inches/hour. The existence of site limitations shall be confirmed and documented using actual field testing (i.e. test pits, soil borings, and infiltration test) or using information from the most current United States Department of Agriculture (USDA) Soil Survey for the County where the project is located.

Sizing Criteria – means the criteria included in Part I.C.2 of the permit that are used to size post-construction stormwater management control practices. The criteria include; Water Quality Volume (WQv), Runoff Reduction Volume (RRv), Channel Protection Volume (Cpv), Overbank Flood (Qp), and Extreme Flood (Qf).

State Pollutant Discharge Elimination System (SPDES) - means the system established pursuant to Article 17 of the ECL and 6 NYCRR Part 750 for issuance of permits authorizing discharges to the waters of the state.

Steep Slope – means land area with a Soil Slope Phase that is identified as an E or F, or

the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture ("USDA") Soil Survey for the County where the disturbance will occur.

Surface Waters of the State - shall be construed to include lakes, bays, sounds, ponds, impounding reservoirs, springs, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface waters), which are wholly or partially within or bordering the state or within its jurisdiction. Waters of the state are further defined in 6 NYCRR Parts 800 to 941.

Temporarily Ceased – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

Temporary Stabilization - means that exposed soil has been covered with material(s) as set forth in the technical standard, New York Standards and Specifications for Erosion and Sediment Control, to prevent the exposed soil from eroding. The materials can include, but are not limited to, mulch, seed and mulch, and erosion control mats (e.g. jute twisted yarn, excelsior wood fiber mats).

Total Maximum Daily Loads (TMDLs) - A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and nonpoint sources. It is a calculation of the maximum amount of a pollutant that a waterbody can receive on a daily basis and still meet *water quality standards*, and an allocation of that amount to the pollutant's sources. A TMDL stipulates wasteload allocations (WLAs) for point source discharges, load allocations (LAs) for nonpoint sources, and a margin of safety (MOS).

Trained Contractor - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

The trained contractor is responsible for the day to day implementation of the SWPPP.

Uniform Procedures Act (UPA) Permit - means a permit required under 6 NYCRR Part

621 of the Environmental Conservation Law (ECL), Article 70.

Water Quality Standard - means such measures of purity or quality for any waters in relation to their reasonable and necessary use as promulgated in 6 NYCRR Part 700 et seq.

APPENDIX B

Required SWPPP Components by Project Type

Table 1

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:

- Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not located</u> in one of the watersheds listed in Appendix C and <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E
- Construction of a barn or other agricultural building, silo, stock yard or pen.

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects
- Bike paths and trails
- Sidewalk construction projects that are not part of a road/ highway construction or reconstruction project
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Land clearing and grading for the purposes of creating vegetated open space (i.e. recreational parks, lawns, meadows, fields), excluding projects that alter hydrology from pre to post development conditions
- Athletic fields (natural grass) that do not include the construction or reconstruction of impervious area and do not alter hydrology from pre to post development conditions
- Demolition project where vegetation will be established and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with impervious cover
- Structural practices as identified in Table II in the "Agricultural Management Practices
 Catalog for Nonpoint Source Pollution in New York State", excluding projects that involve soil
 disturbances of less than five acres and construction activities that include the construction
 or reconstruction of impervious area

The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:

 All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

Table 2

CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

The following construction activities that involve soil disturbances of one (1) or more acres of land:

- Single family home located in one of the watersheds listed in Appendix C or directly discharging to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- · Amusement parks
- · Campgrounds
- Cemeteries that include the construction or reconstruction of impervious area (>5% of disturbed area) or alter the hydrology from pre to post development conditions
- · Commercial developments
- · Churches and other places of worship
- Construction of a barn or other agricultural building(e.g. silo) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious* area, excluding projects that involve soil disturbances of less than five acres.
- · Golf courses
- Institutional, includes hospitals, prisons, schools and colleges
- Industrial facilities, includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's and water treatment plants
- · Office complexes
- · Sports complexes
- · Racetracks, includes racetracks with earthen (dirt) surface
- Road construction or reconstruction
- Parking lot construction or reconstruction
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or alter the hydrology from pre to post development conditions
- · Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- All other construction activities that include the construction or reconstruction of impervious area or alter the hydrology from pre to post development conditions, and are not listed in Table 1

APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

Watersheds where *owners or operators* of construction activities identified in Table 2 of Appendix B must prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the technical standard, New York State Stormwater Management Design Manual ("Design Manual").

- Entire New York City Watershed located east of the Hudson River Figure 1
- Onondaga Lake Watershed Figure 2
- Greenwood Lake Watershed -Figure 3
- Oscawana Lake Watershed Figure 4
- Kinderhook Lake Watershed Figure 5

Figure 1 - New York City Watershed East of the Hudson

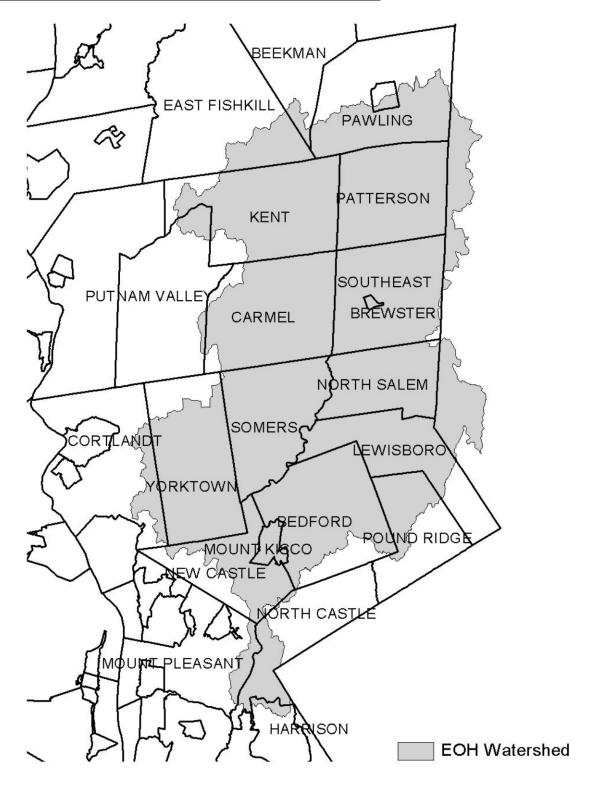


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

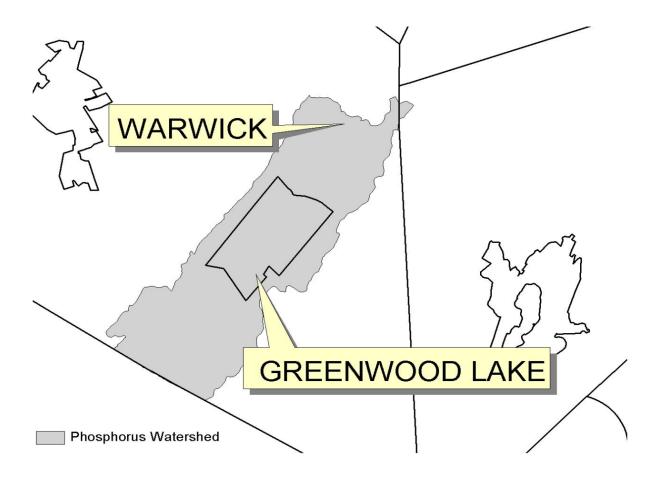
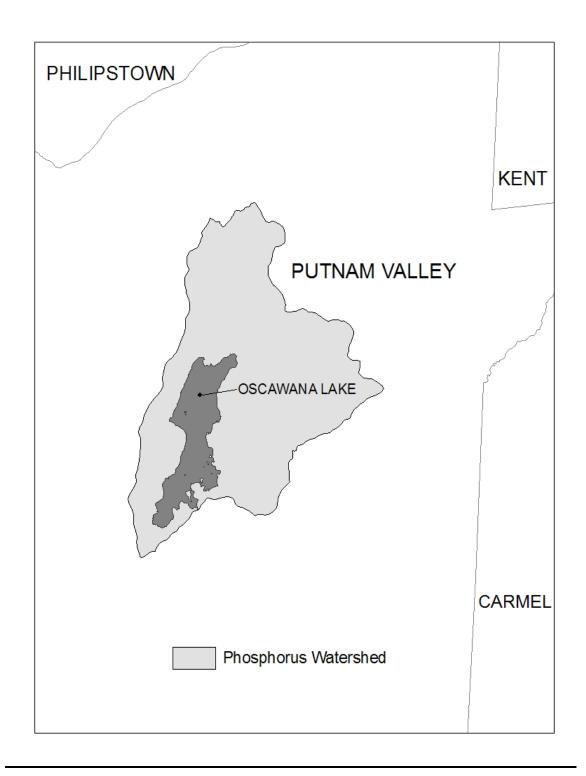


Figure 4 - Oscawana Lake Watershed



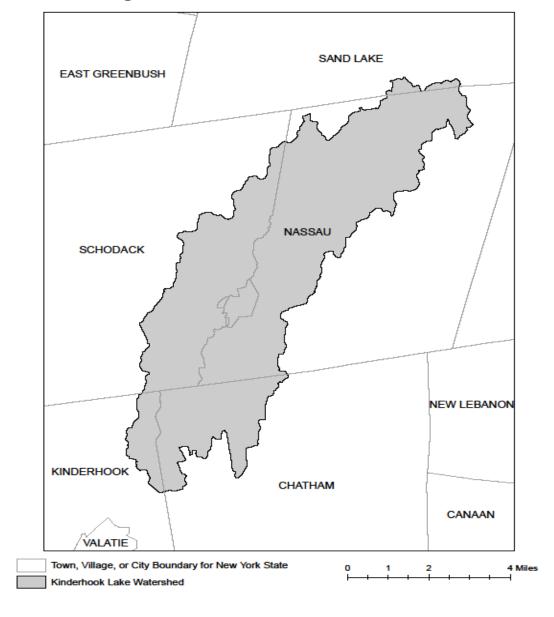


Figure 5: Kinderhook Lake Watershed

XI. APPENDIX D

Watersheds where *owners* or *operators* of construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land must obtain coverage under this permit.

Entire New York City Watershed that is located east of the Hudson River - See Figure 1 in Appendix C

APPENDIX E

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

		T		
COL	JNTY WATERBODY	COUNTY WATERBODY		
Albany	Ann Lee (Shakers) Pond, Stump Pond	Greene	Sleepy Hollow Lake	
Albany	Basic Creek Reservoir	Herkimer	Steele Creek tribs	
Allegheny	Amity Lake, Saunders Pond	Kings	Hendrix Creek	
Bronx	Van Cortlandt Lake	Lewis	Mill Creek/South Branch and tribs	
Broome	Whitney Point Lake/Reservoir	Livingston	Conesus Lake	
Broome	Fly Pond, Deer Lake	Livingston	Jaycox Creek and tribs	
Broome	Minor Tribs to Lower Susquehanna	Livingston	Mill Creek and minor tribs	
	(north)		Bradner Creek and tribs	
Cattaraugus	Allegheny River/Reservoir	Livingston	Christie Creek and tribs	
Cattaraugus	Case Lake	Monroe	Lake Ontario Shoreline, Western	
Cattaraugus	Linlyco/Club Pond	Monroe	Mill Creek/Blue Pond Outlet and tribs	
Cayuga	Duck Lake	Monroe	Rochester Embayment - East	
Chautauqua	Chautauqua Lake, North	Monroe	Rochester Embayment - West	
Chautauqua	Chautauqua Lake, South	Monroe	Unnamed Trib to Honeoye Creek	
Chautauqua	Bear Lake	Monroe	Genesee River, Lower, Main Stem	
Chautauqua	Chadakoin River and tribs	Monroe	Genesee River, Middle, Main Stem	
Chautauqua	Lower Cassadaga Lake	Monroe	Black Creek, Lower, and minor tribs	
Chautauqua	Middle Cassadaga Lake	Monroe	Buck Pond	
Chautauqua	Findley Lake	Monroe	Long Pond	
Clinton	Great Chazy River, Lower, Main Stem	Monroe	Cranberry Pond	
Columbia	Kinderhook Lake	Monroe	Mill Creek and tribs	
Columbia	Robinson Pond	Monroe	Shipbuilders Creek and tribs	
Dutchess	Hillside Lake	Monroe	Minor tribs to Irondequoit Bay	
Dutchess	Wappinger Lakes	Monroe	Thomas Creek/White Brook and tribs	
Dutchess	Fall Kill and tribs	Nassau	Glen Cove Creek, Lower, and tribs	
Erie	Green Lake	Nassau	LI Tribs (fresh) to East Bay	
Erie	Scajaquada Creek, Lower, and tribs	Nassau	East Meadow Brook, Upper, and tribs	
Erie	Scajaquada Creek, Middle, and tribs	Nassau	Hempstead Bay	
Erie	Scajaquada Creek, Upper, and tribs	Nassau	Hempstead Lake	
Erie	Rush Creek and tribs	Nassau	Grant Park Pond	
Erie	Ellicott Creek, Lower, and tribs	Nassau	Beaver Lake	
Erie	Beeman Creek and tribs	Nassau	Camaans Pond	
Erie	Murder Creek, Lower, and tribs	Nassau	Halls Pond	
Erie	South Branch Smoke Cr, Lower, and	Nassau	LI Tidal Tribs to Hempstead Bay	
	tribs	Nassau	Massapequa Creek and tribs	
Erie	Little Sister Creek, Lower, and tribs	Nassau	Reynolds Channel, east	
Essex	Lake George (primary county: Warren)	Nassau	Reynolds Channel, west	
Genesee	Black Creek, Upper, and minor tribs	Nassau	Silver Lake, Lofts Pond	
Genesee	Tonawanda Creek, Middle, Main Stem	Nassau	Woodmere Channel	
Genesee	Oak Orchard Creek, Upper, and tribs	Niagara	Hyde Park Lake	
Genesee	Bowen Brook and tribs	Niagara	Lake Ontario Shoreline, Western	
Genesee	Bigelow Creek and tribs	Niagara	Bergholtz Creek and tribs	
Genesee	Black Creek, Middle, and minor tribs	Oneida	Ballou, Nail Creeks	
Genesee	LeRoy Reservoir	Onondaga	Ley Creek and tribs	
Greene	Schoharie Reservoir	Onondaga	Onondaga Creek, Lower and tribs	

APPENDIX E

List of 303(d) segments impaired by pollutants related to construction activity, cont'd.

COUNTY	WATERBODY	COUNTY	WATERBODY		
Onondaga	Onondaga Creek, Middle and tribs	Suffolk	Great South Bay, West		
Onondaga	Onondaga Creek, Upp, and minor tribs	Suffolk	Mill and Seven Ponds		
Onondaga	Harbor Brook, Lower, and tribs	Suffolk	Moriches Bay, East		
Onondaga	Ninemile Creek, Lower, and tribs	Suffolk	Moriches Bay, West		
Onondaga	Minor tribs to Onondaga Lake	Suffolk	Quantuck Bay		
Onondaga	Onondaga Creek, Lower, and tribs	Suffolk	Shinnecock Bay (and Inlet)		
Ontario	Honeoye Lake	Sullivan	Bodine, Montgomery Lakes		
Ontario	Hemlock Lake Outlet and minor tribs	Sullivan	Davies Lake		
Ontario	Great Brook and minor tribs	Sullivan	Pleasure Lake		
Orange	Monhagen Brook and tribs	Sullivan	Swan Lake		
Orange	Orange Lake	Tompkins	Cayuga Lake, Southern End		
Orleans	Lake Ontario Shoreline, Western	Tompkins	Owasco Inlet, Upper, and tribs		
Oswego	Pleasant Lake	Ulster	Ashokan Reservoir		
Oswego	Lake Neatahwanta	Ulster	Esopus Creek, Upper, and minor		
Putnam	Oscawana Lake		tribs		
Putnam	Palmer Lake	Ulster	Esopus Creek, Lower, Main Stem		
Putnam	Lake Carmel	Ulster	Esopus Creek, Middle, and minor		
Queens	Jamaica Bay, Eastern, and tribs (Queens)		tribs		
Queens	Bergen Basin	Warren	Lake George		
Queens	Shellbank Basin	Warren	Tribs to L.George, Village of L		
Rensselaer	Nassau Lake		George		
Rensselaer	Snyders Lake	Warren	Huddle/Finkle Brooks and tribs		
Richmond	Grasmere, Arbutus and Wolfes Lakes	Warren	Indian Brook and tribs		
Rockland	Congers Lake, Swartout Lake	Warren	Hague Brook and tribs		
Rockland	Rockland Lake	Washington	Tribs to L.George, East Shr Lk		
Saratoga	Ballston Lake		George		
Saratoga	Round Lake	Washington	Cossayuna Lake		
Saratoga	Dwaas Kill and tribs	Washington	Wood Cr/Champlain Canal, minor		
Saratoga	Tribs to Lake Lonely		tribs		
Saratoga	Lake Lonely	Wayne	Port Bay		
Schenectady	Collins Lake	Wayne	Marbletown Creek and tribs		
Schenectady	Duane Lake	Westchester	Lake Katonah		
Schenectady	Mariaville Lake	Westchester	Lake Mohegan		
Schoharie	Engleville Pond	Westchester	Lake Shenorock		
Schoharie	Summit Lake	Westchester	Reservoir No.1 (Lake Isle)		
Schuyler	Cayuta Lake	Westchester	Saw Mill River, Middle, and tribs		
St. Lawrence	Fish Creek and minor tribs	Westchester	Silver Lake		
St. Lawrence	Black Lake Outlet/Black Lake	Westchester	Teatown Lake		
Steuben	Lake Salubria	Westchester	Truesdale Lake		
Steuben	Smith Pond	Westchester	Wallace Pond		
Suffolk	Millers Pond	Westchester	Peach Lake		
Suffolk	Mattituck (Marratooka) Pond	Westchester	Mamaroneck River, Lower		
Suffolk	Tidal tribs to West Moriches Bay	Westchester	Mamaroneck River, Upp, and tribs		
Suffolk	Canaan Lake	Westchester	Sheldrake River and tribs		
Suffolk	Lake Ronkonkoma	Westchester	Blind Brook, Lower		
Suffolk	Beaverdam Creek and tribs	Westchester	Blind Brook, Upper, and tribs		
Suffolk	Big/Little Fresh Ponds	Westchester	Lake Lincolndale		
Suffolk	Fresh Pond	Westchester	Lake Meahaugh		
Suffolk	Great South Bay, East	Wyoming	Java Lake		
Suffolk	Great South Bay, Middle	Wyoming	Silver Lake		
pto: The list shows identifies these waters from the final New York State "2014 Section 202(d) List of					

Note: The list above identifies those waters from the final New York State "2014 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy", dated January 2015, that are impaired by silt, sediment or nutrients.

APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

Region	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP)	DIVISION OF WATER (DOW)
		PERMIT ADMINISTRATORS	WATER (SPDES) PROGRAM
1	Nassau and Suffolk	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 Hunters Point Plaza, 47-40 21st St. Long Island City, Ny 11101-5407 Tel. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070