Stormwater Pollution Prevention Plan (SWPPP)

Prepared for Construction Activities At:

Edic to Princetown Segment of the Central East Energy Connect Project

Oneida, Herkimer, Montgomery, and Schenectady Counties, New York

SWPPP Prepared For:

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SWPPP Preparation Date:

April 2021 revised March 2022

Estimated Segment Start and End Dates:

January 2022 — December 2023

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Introduction

This SWPPP has been developed as required by the State Pollutant Discharge Elimination System (SPDES) General Permit (General Permit) for Discharges from Construction Activity (GP-0-20-001). This SWPPP was developed using the Department of Environmental Protection (DEP) SWPPP Template Version 1.0 and was developed under the direction and guidance of a Certified Professional in Erosion and Sediment Control (CPESC).

The Edic to Princetown segment (Segment), is a segment of a larger project called the Central East Energy Project (Project). This SWPPP only applies to this Segment of the larger Project. The entire Project is to be constructed in approximately 93 miles of existing utility-owned transmission line corridor. Other Project segments have been or will be completed concurrently and will have their own SWPPPs.

Regarding the applicability of regulations for Municipal Separate Storm Sewer Systems (MS4), the Project will not discharge to any MS4 and therefore will not impact any MS4 along the Project's route. Nonetheless, New York State Department of Environmental Conservation (NYSDEC) instructions direct all applicants for coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity - GP-0-20-001 to obtain an MS4 Acceptance Form from the applicable MS4 authorities. As such, this SWPPP is being submitted to the applicable MS4 authorities per NYSDEC instructions even though the Project will not impact any MS4.

Section 1: CONTACT INFORMATION/RESPONSIBILITIES

1.1 Contact Information/Responsibilities

Construction Stormwater Team		
Name, Organization, Position, Contact Information	Responsibilities	I have read and understand the applicable requirements of the State Pollutant Discharge Elimination System (SPDES) General Permit (General Permit) for Discharges from Construction Activity (GP-0-20-001)
LS Power Grid New York Corporation I Name: Casey Carroll Position: Assistant Vice President, Project Manager Phone number: 636-532-2200 Email: ccarroll@lspower.com Name: David Wilson Position: Senior Director, Environmental Manager Phone number: 636-532-2200 Email: dwilson@lspower.com	Owner; overseeing contractor compliance on the Segment.	Date
MYR Energy Services, Inc. Name: Bryan Vorwaller Position: Director of Field Operations Phone number: 801-201-6815 Email: bvorwaller@myrgroup.com Name: Joshua Allen Position: Superintendent Phone Number:804-387-7785 Email: jlallen@myrgroup.com	Overseeing compliance on the Segment. Segment superintendent responsible for day-to-day operations and oversight of subcontractors.	Date
Northern Clearing Name: Jeff Bristol Position: Project Superintendent-civil Phone number:715-292-7570 Email: jbristol@northernclearing.com	Ensuring compliance with SWPPP, installing, and maintaining BMPs.	Date

K2 Environmental LLC Maria Britton Lead Environmental Manager 541-788-3468 maria@k2-env.com	Environmental compliance, stormwater management, inspection, and reporting.	Date
Emergency 24-hour Maria Britton K2 Environmental LLC Lead Environmental Inspector 541-788-3468 maria@k2-env.com or Andrew Held LS Power Grid New York Environmental and ROW Field Lead 917-710-6323 aheld@lspower.com	24/7 availability to respond to storm water issues.	Date

1.2 Design Stormwater Team

The stormwater team is comprised of individuals who are responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the permit requirements. Each member of the stormwater team will have ready access to either an electronic or paper copy of the SWPPP.

Design Stormwater Team		
Name, company/org, position, and contact information	Responsibilities	I have read and understand the applicable requirements of the State Pollutant Discharge Elimination System (SPDES) General Permit (General Permit) for Discharges from Construction Activity (GP-0-20-001)
Bryan Vorwaller MYR Energy Services, Inc. Director of Field Operations 801-201-6815 bvorwaller@myrgroup.com	Developer, SWPPP review	Yes Date:
Jeff Montgomery K2 Environmental LLC CPESC 541-788-0331 jeff@k2-env.com	SWPPP Preparer/CPESC Review	Yes Date:
Maria Britton K2 Environmental LLC Lead Environmental Inspector 541-788-3468 maria@k2-env.com	SWPPP Preparer Inspection and Reporting	Yes Date:

LS Power & Grid New York Corporation I (Owner) is the Owner of the Project. MYR Energy Services, Inc. (MYR) will be the Operator for the Segment and will be responsible for the development and implementation of the Stormwater Pollution Prevention Plan (SWPPP) and compliance with the General Permit. Any subcontractor hired by the Operator will be required

to acknowledge understanding the contents of this SWPPP and State Pollutant Discharge Elimination System (SPDES) General Permit (General Permit) for Discharges from Construction Activity (GP-0-20-001), included in Attachment A. The SWPPP, NOI, and NOI Acknowledgement Letter will be kept onsite in a secure and accessible location. The Owner, Operator and Subcontractor(s) will sign the certification forms included in Attachment B.

The construction site personnel contact list for the Segment is provided in Attachment C. The listed construction site personnel have operational control of certain activities to ensure compliance with the SWPPP and the General Permit conditions. The duties of these personnel include one or more of the following:

- Implementation of the SWPPP,
- Oversee maintenance practices identified for BMPs in the SWPPP,
- Conduct or provide for inspection or monitoring activities,
- Identify other potential erosion, sediment and pollutant sources during construction and ensure they are appropriately addressed,
- Make any amendments to the SWPPP necessitated by field conditions and ensure they are implemented, and
- Document all activities associated with implementation of this SWPPP and supporting documents.

Section 2: SITE EVALUATION, ASSESSMENT, AND PLANNING

2.1 Project Site Information

Project Name and Address: Edic to Princetown Segment of the Central East Energy Project

Project Street Location: Between the existing Edic substation on Edic Road, Marcy, NY and the newly built Princetown substation on Reynolds Road, Princetown, NY.

State: New York

Zip Code: Marcy, NY 13403 and Princetown, NY 12056

DEC Region: 4 and 6

Business Days and hours for the project: Monday through Saturday 7am to 7pm

Project Latitude/Longitude (from GIS)

Latitude: 42° 50’ 20.961”N Longitude: 74° 6’ 0.418”W (Princetown/East end of ROW)

Latitude: 43° 9’ 25.222”N Longitude: 75° 13’ 31.3.99”W (Edic/West end of ROW)

Data Source: ArcGIS

Horizontal Reference Datum: D_North_American_1983 (NAD 1983)

Type of Construction Site: Linear Utility

Size of Property	1284 acres
Total Area Expected to be Disturbed by Construction Activities	640.5 acres
Maximum Area Expected to be Disturbed at Any One Time	The majority of work areas are less than ¾ of an acre in size. No work area disturbance exceeds 5 acres; the largest work area, associated with wire stringing activities is approximately 2 acres in size. Work will proceed in a linear fashion and multiple work areas will be active at any one time. Therefore, more than 5 acres of disturbance will occur at any one time. The Operator will request authorization from NYSDEC to allow disturbance of greater than 5 acres at any one time; disturbance greater than 5 acres will not occur until this authorization is received.

2.2 Nature of the Construction Activity

The Edic to Princetown segment (Segment), is a segment of a larger project called the Central East Energy Project (Project). The entire Project is to be constructed within approximately 93 miles of existing utility-owned transmission line corridor. Other segments will have their own SWPPPs.

The Edic to Princetown Segment involves upgrades to the existing Marcy and Edic substations, reconductoring, involving the replacement of two circuits of 230 kV transmission line with two circuits of 345 kV transmission line on existing structures, extending for approximately 13 miles from the Edic substation. The removal of two existing single circuit 230 kV transmission lines on H-frame structures, and replacement with a new 345 KV double circuit transmission line on steel monopoles, extending for approximately 55 miles (with the exception of up to two segments where the double circuit lines may split into single circuits). Temporary best management practices (BMPs) will be implemented during construction and until the site is stabilized. Construction and restoration activities in this segment are expected to be complete by December 2023.

This Segment of the Project is located in the towns of Marcy, Deerfield, Herkimer, and Princetown in the counties of Oneida, Herkimer, Montgomery, and Schenectady, New York.

The area of construction-related impacts is estimated to be approximately 640.5 acres due to soil disturbance from clearing, construction access, erosion and sediment control implementation, transmission line construction operations, spoil stockpiling and other construction-related disturbance.

The SWPPP has been prepared as part of the requirements for coverage under the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Discharges from Construction Activity (GP-0-20-001) since it will result in greater than 1 acre of soil disturbance. Construction will occur within the boundaries of the Towns of Marcy, Deerfield, Schuyler, Frankfort, Princetown, Rotterdam, Guilderland, and New Scotland. MS4 SWPPP acceptance forms for the towns of Marcy, Deerfield, Schuyler, and Frankfort will be requested. These will be included in Attachment A, along with the MS4 acceptance forms already obtained from the Towns of Rotterdam, Guilderland, and New Scotland.

A Notice of Intent (NOI) will be submitted to NYSDEC certifying that this Segment complies with the technical requirements of (GP-0-20-001) for a 5-day NYSDEC Review. Once the formal submittal is complete, a copy of the NOI will be included in Attachment A. The NOI has indicated that the Segment will disturb more than five acres, therefore written authorization from the NYSDEC will be required. The NOI Acknowledgement Letter from the NYSDEC will also be included in Attachment A.

The cultural resources investigations applicable to the Edic to Princetown Segment of the Project, including a historic architecture evaluation and a Phase IA/IB investigation, are

complete, and the resulting reports have been submitted to the Office of Parks, Recreation and Historic Preservation (OPRHP). The historic architecture report recommends that the Project will have no adverse effects to historic properties, and the Phase IA/IB investigation report concluded that no potentially significant archaeological sites, deposits, or features were identified in any of the Project disturbance areas. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has issued concurrence letters affirming these conclusions. As such, there are no applicable requirements for cultural resources avoidance or mitigation associated with this segment of the Project, and all applicable OPRHP requirements have been met.

As the Segment will be constructed within existing transmission corridors that have already been cleared and are maintained by the incumbent transmission owners, only minimal vegetative clearing will be needed to maintain electrical clearances and support access and work pads. Low growing vegetation may be removed as necessary prior to construction with mechanical methods such as brush hogging and mowing. The estimated total area of new tree clearing for Segment lll construction is approximately 0.5 acres. Trees will be cleared and disposed of in accordance with the clearing methods described in the Environmental Management & Construction Plan (EM&CP). Four types of clearing have been identified in the EM&CP. The majority of the clearing will be Type I clearing which consists of clearing all woody plants, including desirable species; this type of clearing will occur at access roads and work sites as needed to create a safe working environment. Additional clearing methods address the removal of undesirable species, tall growing species and selective removal and pruning, as necessary. Danger trees must also be removed if they pose a threat of falling onto the conductor or other component of the transmission line facility.

Removal of existing structures will take place in four stages: removal of the conductors and shield wires, removal of the structures, removal of the foundations, and site restoration. The conductors will be removed utilizing cranes, bucket lifts, and other land-based vehicles and equipment. The removed conductors will be taken offsite for recycling or disposal. After the conductors are removed, the existing structures will be disassembled, which may include cutting off sections of the existing structures and lowering them to the ground via crane. Once disassembled, the structures will be removed from the transmission line corridor for recycling or disposal. The structure foundations will then be removed to 48 inches below grade in agricultural areas and at least 18 inches below grade elsewhere. A typical 200-foot by 200-foot work pad will be established around each existing structure site to accommodate structure removal activities. Certain structure locations may dictate smaller or larger work areas due to site-specific factors, such as topography and the presence of environmental resources. Work areas are shown on the EM&CP Plan & Profile drawings.

After the existing structures are removed, the new transmission line structures will be erected. The erection of the structures generally takes place in a two-step process. First, structure foundations are completed; then the structures are erected atop the foundations. After the structures are installed, stringing of the conductors, shield wire, and OPGW will proceed.

Clean up and restoration of all work areas will follow immediately behind stringing operations. Where possible, clean-up will occur in areas not required for stringing operations to minimize the amount of disturbance open at any one time.

Additional details related to phasing of the Segment can be found in Section 3.2.

Existing Site Conditions

The proposed Segment consists of transmission line along approximately 90 miles of existing Right-of-Way (ROW) between the towns of Marcy and Princetown. The ROW falls within an existing transmission line corridor that has been maintained by the owners of the lines.

The ROW between the existing Edic substation and the newly built Princetown substation crosses generally flat to rolling hill terrain. Elevations in the area range from 440 feet AMSL on to approximately 1,300 feet AMSL.

Soil slopes along the Segment ROW vary but are generally shallow. The soil is primarily characterized as silty, sandy, or gravelly loam. There are some areas of exposed bedrock, alluvial soil, and lacustrine deposits. Certain soil characteristics can increase sensitivities to disturbances or make the soil less suitable for construction. The table below describes the soil units that exist on the Segment and their Hydrologic Soil Group (HSG). Soil types along the Segment alignment are also shown on the Segment Plan & Profile drawings.

Table 2.2. Soil Units Along Edic to Princetown Alignment

Unit Symbol	Map Unit Name	% on ROW	HSG Rating
Ae	Allis silt loam	0.3	D
AnA	Angola silt loam, 0 to 3 percent slopes	0.1	D
ArB	Arnot channer silt loam, 0 to 8 percent slopes	0.3	D
AZF	Arnot-rock outcrop, very steep	0.2	D
Br	Birdsall mucky silt loam	3.9	C/D
BuA	Burdett silt loam, 0 to 3 percent slopes	5.1	C/D
BuB	Burdett silt loam, 3 to 8 percent slopes	12.6	C/D
BuC	Burdett silt loam, 8 to 15 percent slopes	0.2	C/D

Unit Symbol	Map Unit Name	% on ROW	HSG Rating
BvA	Burdett-Scriba-channery silt loams, 3 to 8 percent slopes	0.4	C/D
BvB	Burdett-Scriba-channery silt loams, 3 to 8 percent slopes	4.8	C/D
BvC	Burdett-Scriba channery silt loams, 8 to 15 percent slopes	0.8	C/D
BXB	Burdett-Scriba association, extremely stony, gently sloping	0.4	C/D
CeA	Castile gravelly loam, 0 to 3 percent slopes	0.0	A/D
ChA	Chenango gravelly silt loam, loamy substratum, 0 to 3 percent slopes	1.9	A
ChB	Chenango gravelly silt loam, loamy substratum, 3 to 8 percent slopes	1.3	A
ChC	Chenango gravelly silt loam, loamy substratum, rolling	1.1	A
ChD	Chenango gravelly silt loam, loamy substratum, hilly	0.3	A
CkB	Chenango channery silt loam, fan, 3 to 8 percent slopes	0.1	A
FL	Fluvaquents, loamy	1.3	B/D
Fr	Fredon silt loam	0.7	B/D
Fx	Fluvaquents-Udifluvents complex, frequently flooded	0.8	A/D
HnB	Hornell silt loam, 3 to 8 percent slopes	1.2	D
HnC	Hornell silt loam, 8 to 15 percent slopes	0.1	D

Unit Symbol	Map Unit Name	% on ROW	HSG Rating
HoA	Hornell silt loam, 0 to 3 percent slopes	0.5	D
HoB	Hornell- silt loam, 3 to 8 percent slopes	0.3	D
HoC	Hornell silt loam, 8 to 15 percent slopes	0.1	D
HrB	Howard gravelly silt loam, 3 to 8 percent slopes	0.2	A
HrD	Howard gravelly silt loam, 15 to 25 percent slopes	0.1	A
HTF	Howard soils, very steep	0.7	A
HuB	Hudson silty clay loam, 3 to 8 percent slopes	0.1	C/D
HuC	Hudson silty clay loam, 8 to 15 percent slopes	1.7	C/D
HuD	Hudson silt loam, hilly	0.1	C/D
HuE	Hudson silt loam, 25 to 45 percent slopes	0.7	C/D
HVF	Hudson soils, very steep	0.2	C/D
IlA	Ilion silt loam, 0 to 3 percent slopes	1.8	C/D
IlB	Ilion silt loam, 3 to 8 percent slopes	1.6	C/D
In	Ilion silt loam	1.2	C/D
LoB	Lordstown gravelly silt loam, 3 to 8 percent slopes	1.1	C
LoC	Lordstown gravelly silt loam, 8 to 15 percent slopes	0.7	C
LoD	Lordstown- gravelly silt loam, 15 to 25 percent slopes	0.5	C
LrE	Lordstown-Arnot complex, 25 to 45 percent slopes, very rocky	0.2	C

Unit Symbol	Map Unit Name	% on ROW	HSG Rating
Ma	Madalin silt loam, 0 to 3 percent slopes	3.1	C/D
MbC	Manlius channery silt loam, 8 to 15 percent slopes	0.1	C
MbD	Manlius channery silt loam, 15 to 25 percent slopes	0.3	C
Mh	Medihemists and Hydraquents, ponded	0.9	A/D
MPE	Manlius Rock Outcrop, steep	0.1	C
NuB	Nunda silt loam, 3 to 8 percent slopes	4.3	C/D
NuC	Nunda channery silt loam, 8 to 15 percent slope	8.3	C/D
NuD	Nunda channery silt loam, 15 to 25 percent slope	5.0	C/D
NuE	Nunda silt loam, 25 to 35 percent slopes	1.9	C/D
NVF	Nunda soils, very steep	0.3	C/D
PpA	Phelps gravelly loam, 0 to 3 percent slopes	1.4	B/D
PpB	Phelps gravelly loam, 3 to 8 percent slopes	0.1	B/D
Ra	Raynham very fine sandy loam	2.5	C/D
RhA	Rhinebeck silty clay loam, 0 to 3 percent slopes	3.0	C/D
RhB	Rhinebeck silty clay loam, 3 to 8 percent slopes	1.1	C/D
RkB	Riverhead fine sandy loam, 3 to 8 percent slopes	0.6	A

Unit Symbol	Map Unit Name	% on ROW	HSG Rating
ScA	Scio silt loam, 0 to 3 percent slopes	1.8	B/D
ScB	Scio silt loam, 3 to 8 percent slopes	1.2	B/D
SuB	Sudbury fine sandy loam, 3 to 8 percent slopes	0.3	B
Te	Teel silt loam	0.4	B/D
TvA	Tuller-Brockport complex, 0 to 3 percent slope	1.9	D
TvB	Tuller-Brockport complex, 3 to 8 percent slope	0.7	D
Ur	Urban land	0.7	
VaB	Valois gravelly loam, 3 to 8 percent slopes	1.8	B
VaC	Valois gravelly loam, 8 to 15 percent slopes	1.2	B
VaD	Valois gravelly loam, 15 to 25 percent slopes	0.4	B
Wa	Wakeland silt loam	0.1	C
Wo	Wayland soils complex, non-calcareous substratum, 0 to 3 percent slopes, frequently flooded	0.6	B/D

The general percentages of each HSG crossed by the Segment are listed on page 3 of the NOI (Attachment A); HSG A=8%, B=11.2%, C=68.2% and D=5.7% of the project ROW.

2.3 Surface Waters and Wetlands

Waterbodies

The Segment will not directly discharge stormwater into any surface waters. Over 200 hundred drainages cross work areas or access roads; these drainages include intermittent, ephemeral, and perennial flow types. These drainages will be avoided, matted, or bridged to minimize disturbance. Waterbodies crossed or matted are documented in the Wetlands and Waterbodies Tables included in the EM&CP. The perennial waterbodies in this area include: Budlong Creek, unnamed tributary to Moyer Creek, unnamed tributary to Ferguson Creek, Ferguson Creek, unnamed tributary to Mohawk River, Moyer Creek, Mohawk River, Barge

Canal, Flat Creek, unnamed tributary to Fulmer Creek, Steele Creek, Day Creek, unnamed tributary to Steele Creek, unnamed tributary to Nowadaga Creek, unnamed tributary to Otsquago Creek, unnamed tributary to Ohisa Creek, Canajoharie Creek, unnamed tributary to Canojoharie Creek, Yatesville Creek, unnamed tributary to Lasher Creek, unnamed tributary to Flat Creek, Flat Creek, unnamed tributary to Schoharie Creek, unnamed tributary to Auries Creek, South Chuctanunda Creek, Schoharie Creek, unnamed tributary to Reall Creek, Reall Creek, unnamed tributary to Erie Canal, and an unnamed tributary to Gridley Creek. There are also numerous unnamed drainages and tributaries adjacent to the Segment area. Attachment G includes the Wetland delineation report for this segment of the project that describes the drainages that have been delineated for this Segment. These drainages are also shown on the Plan & Profile drawings. All delineated waterbodies that occur in temporary access roads or work areas will be matted to protect them from damage. No ground disturbance will occur to any of these waterbodies and no work will occur below the Ordinary High-Water Mark (OHWM).

Appendix E of the General Permit, the Final New York State 2016 303(d) List of Impaired Waters Requiring a TMDL/Other strategy was reviewed, along with an EPA map layer of impaired waters. No impaired waters listed in Appendix E of the permit occur near this portion of the project. The EPA map layer (EPA Office of Water geographic information system hosted service, called “303d Listed as Impaired Waters” published in 9/19/2018) indicated four (4) drainages listed as impaired and in need of total maximum daily loads (TMDL) in the 2012 Waterbody Quality Assessment Report. Table 2.2.a lists the impaired waters crossed by the project. Segment activities are not expected to impact these impaired waters as no direct discharge will occur into these waterbodies and all indirect discharge will be treated through BMPs to avoid sediment entering any tributaries that could lead to these waters.

Table 2.2.a Impaired Waterbodies

Waterbody	General Location	Impairment
Tributary to Mohawk River	1/6E-1/5E	Phosphorus, Organic Enrichment/Oxygen Depletion
Reall Creek	2/8E-2/7E	Phosphorus, Organic Enrichment/Oxygen Depletion
Tributary to Mohawk River	4/1E-3/7E	Nutrients, Sedimentation/Siltation and Toxicity
Budlong Creek	6/4E-6/3E	Nutrients, Sedimentation/Siltation and Toxicity
Erie Canal (NYs Barge Canal portion 7)	7/1E-6/7E	Flow Alteration, Nutrients, Oil and Grease, Organic Enrichment/Oxygen Depletion, Pathogens, Polychlorinated Biphenyls (PCBs), and Sedimentation/Siltation
Mohawk River	10/5-10/4, 8/7E-8/6E, 7/2E-7/1W	Sedimentation/Siltation, Nutrients, and Toxicity

Waterbody	General Location	Impairment
Steele Creek	17/1 E -16/8E (17/8W-16/4W 3 stems)	Sediment/Siltation
Fulmer Creek	24/5-24/3, 24/2 24/1, 22/3-22/1, 21/4-21/2, 20/7-20/5, 20/4-20/3 (2 stems) crossings	Flow Alteration and Sediment
Ohisa Creek	29/3 and 29/127/3 and 27/2, 26/6 – 26/5 and 26/1 – 25/6	
Canajoharie Creek	41/6 - 41/5 and 41/1 - 41/3 near NY10	Pathogens and Sediment
Flat Creek	45/3 and 45/2, 21/4 -21/1	Aesthetics, Nutrients and Organic Enrichment/Oxygen Demand
Schoharie Creek	59/1 and 59/2	Flow Alteration, Sedimentation/Siltation and Temperature
South Chuctanunda Creek	62/5 and HYW NY30	Nutrients and Sediment Siltation

Wetlands

Existing wetland and surface water resources within the existing electric transmission corridor that includes the Segment ROW were assessed as part of an intensive wetland delineation field effort conducted by Tetra Tech.

Nineteen (19) NYSDEC-regulated wetland exists within the Segment ROW. The wetland delineation report for this Segment can be found in Attachment G and provides information of all delineated wetlands including the NYSDEC regulated wetland traversed by the Segment. NYSDEC regulated wetlands are denoted in bold font. Table 2.2.b lists the wetlands crossed by this portion of the project and how each wetland may be impacted by project activities. Some portion of 173 wetlands will be timber matted for access and/or work areas. Most of the wetlands on the Segment are classified as shallow emergent marsh (PEM), as scrub shrub (PSS) or a combination PSS/PEM. Seven forested wetlands (PFO) occur within the Segment ROW. A small amount of clearing will occur at Princetown Substation (0.05 acre) in PEM wetlands. If danger trees are identified in areas along the right of way, these trees will be marked at least two weeks prior to construction for review and acceptance by DPS staff.

Table 2.2.b Delineated Wetlands

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM	B-WST-4	0.30	-	-
	PSS/PEM	B-WST-5	1.14	0.41	0.09
	PSS	B-WST-3	0.93	0.12	0.07
	PEM/PSS	A-WFR-1	0.46	0.21	0.03
	PEM/PSS	A-WFR-2	0.25		0.03

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM/PSS	A-WFR-3	0.26		0.03
	PEM/PSS	A-WFR-4	2.59	0.57	0.03
	PEM/PSS	A-WFR-6	3.21	0.60	0.03
	PEM	B-WFR-105	0.06	-	-
	PEM	B-WFR-106	0.07	0.03	
	PEM	B-WFR-107	0.09	-	-
	PEM	B-WFR-108	0.09	0.04	
	PEM	B-WFR-109	0.11	0.02	0.02
	PEM	B-WFR-110	0.61	0.02	0.13
	PSS	B-WFR-7	1.33	-	-
	PEM	B-WFR-6	0.11	-	-
	PEM	B-WFR-4	2.15	0.17	0.03
	PEM	B-WFR-5	0.09	-	-
	PSS	B-WFR-2	0.35	-	-
	PEM	B-WFR-3	0.49	-	-
	PSS/PEM	B-WFR-1	1.66	0.14	0.01
	PEM/PSS	A-WFR-7	0.15		0.02
	PEM	B-WFR-9	0.45	0.03	
	PEM	A-WFR-13	2.22	1.58	0.03
	PEM/PSS	A-WFR-12	7.40	1.09	0.11
	PSS	B-WFR-12	0.01	-	-
	PSS	A-WFR-11	0.82	-	-
	PSS	A-WFR-10	1.91	0.26	0.18
	PEM/PSS	A-WFR-9	4.06	0.79	0.37
	PEM	A-WFR-8	4.08	0.28	0.13
	PEM	B-WFR-10	0.67	0.08	
	PSS	B-WFR-8	1.00	0.20	0.04
	PFO/PSS/PEM	B-WFR-11	6.78	0.54	0.16
	PEM	B-WFR-19	0.06	-	-
	PEM	B-WFR-18	0.08	-	-
	PEM	B-WFR-17	0.08		0.04
	PEM	B-WFR-16	1.62	0.18	0.16
	PEM	B-WFR-15	1.13	0.17	0.09
	PEM	B-WFR-14	1.24	0.04	0.08
	PEM	B-WFR-13	0.51	0.04	
	PEM	B-WFR-100	0.16	0.10	
	PEM	B-WFR-101	0.10	0.001	0.02
	PEM	B-WFR-102	0.12		0.02
	PEM	B-WFR-103	0.11	-	-

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM	B-WFR-104	0.05	0.005	
	PEM/PSS	A-WFR-5	0.71	0.25	0.03
	PSS/PEM	A-WFR-14	0.83	0.09	0.01
	PSS/PEM	A-WFR-15	1.19	0.07	
	PSS/PEM	A-WFR-16	0.36	-	-
	PEM	B-WGF-1	0.40	-	-
	PEM	B-WGF-2	0.37	0.16	
	PEM	B-WGF-3	1.84	0.28	0.09
	PEM	B-WGF-4	0.32	0.05	0.04
	PEM/PSS	A-WGF-1	0.41	0.04	0.05
	PEM	B-WGF-9	0.14	0.04	
	PEM	B-WGF-8	0.06	0.03	
	PEM	B-WGF-7	0.04	-	-
	PEM	B-WGF-6	0.07	-	-
	PEM	B-WGF-5	0.09		0.01
	PEM	B-WGF-10	0.10	-	-
	PEM	B-WGF-11	0.91	0.14	0.09
	PEM	A-WGF-2	0.36	0.009	0.05
	PEM/PSS	A-WGF-3	10.95	3.15	0.71
	PEM	B-WGF-100	0.33	0.04	
	PEM	B-WGF-101	0.81	0.04	
	PEM	B-WGF-102	0.06	0.04	
	PEM/PSS	A-WLF-5	0.87	0.05	0.07
	PEM/PSS	A-WLF-6	0.86	0.07	0.07
	PEM/PSS	A-WLF-7	0.09	0.02	0.02
	PEM/PSS	A-WLF-8	0.15	0.03	0.02
	PEM	A-WLF-4	2.05	0.60	0.20
	PEM/PSS	A-WLF-4B	1.03	0.37	0.07
	PEM/PSS	A-WLF-1	0.15	0.10	
	PEM	A-WLF-2	0.15	0.05	
	PSS	A-WLF-3	0.33	-	-
	PSS/PEM	A-WSC-1	1.43	0.06	
	PSS/PEM	A-WSC-2	0.59	-	-
X	PEM	B-WFR-20-DD	21.35	2.69	0.80
	PFO	A-WST-2	0.59		0.03
	PEM/PSS	A-WST-3	1.00	0.06	0.07
	PEM	B-WST-2	0.01	-	-
	PSS/PEM	B-WST-1	6.17	0.66	0.18
	PEM/PSS	A-WST-1	1.29		0.10

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM/PSS	A-WST-4	0.22		0.02
	PSS/PEM	B-WST-8	0.49	0.28	0.02
	PEM	B-WST-10	0.19	-	-
	PEM	B-WST-7	0.61	0.19	0.06
	PSS/PEM	B-WST-6	2.54	0.46	0.19
	PSS/PEM	B-WST-13	6.72	2.58	0.63
	PSS/PEM	B-WST-14	0.10	-	-
	PEM	B-WST-11	3.05	1.37	0.02
	PSS/PEM	B-WST-9	4.16	0.64	0.27
	PSS/PEM	B-WST-12	2.43	1.56	0.13
X	PEM	B-WCA-3	1.95	0.41	0.02
X	PFO/PSS/PEM	B-WCA-1	0.36		0.04
X	PSS	A-W15-CA	9.95	2.47	0.78
X	PSS/PEM	A-W16-CA	1.37	0.31	0.10
	PEM	A-W14-RO	3.78	1.34	0.20
	PEM	B-WCA-2	0.17	-	-
	PSS/PEM	B-WCA-6	0.32	0.22	
	PEM	B-WCA-5	0.83	0.75	
	PEM	B-WCA-4	1.08	0.15	
	PSS	A-WCH-7	3.03	1.31	0.12
	PEM	A-WCH-1	0.56	0.02	0.02
	PEM	A-WCH-2	0.53	0.05	0.12
	PSS	A-WCH-3	1.34	0.04	0.26
	PEM	B-WCH-1	0.16		0.03
	PSS	B-WCH-2	0.60	0.06	0.09
	PSS/PEM	B-WCH-3	0.98	0.17	0.19
	PSS/PEM	B-WCH-4	0.15	0.08	0.02
	PSS/PEM	B-WCH-5	0.63		0.13
	PEM	B-WCH-6	2.01	0.28	0.21
	PEM	A-WCH-4	0.91	0.21	0.07
	PSS	A-WCH-5	0.91	0.09	0.07
	PEM	A-WCH-6	0.34	0.04	
	PEM	B-WCH-100	0.06	0.03	
	PEM	B-WCH-101	0.03	0.02	
	PEM	B-WCH-102	0.48	0.18	0.06
	PSS	WFL-5	0.27	0.20	0.04
	PSS	WFL-4	9.30	2.71	0.65
	PSS	WFL-6	0.75	0.12	0.12
	PSS	WFL-7	0.81	0.02	0.09

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM	WFL-1A	0.56		0.18
	PEM	WFL-1B	0.30		0.13
	PSS	WFL-3	0.64	0.09	0.11
	PSS	WFL-2	1.12	0.44	0.10
	PEM	B-WGL-2	1.54	0.20	0.15
	PSS	B-WGL-3	0.19	0.28	0.09
	PSS/PEM	B-WGL-12	2.53	0.79	0.17
	PSS	B-WGL-8	0.04	-	-
	PSS	B-WGL-9	0.11		0.04
	PSS	B-WGL-10	0.00	-	-
	PSS	BWGL-11	6.68		
	PFO/PSS	B-WGL-5	6.12	1.35	0.50
	PSS	B-WGL-7	0.52	0.14	
	PSS	B-WGL-6	2.25	3.76	0.55
	PEM	B-WGL-100	0.31	0.22	
	PEM	B-WGL-101	0.03	0.02	
	PEM	B-WGL-102	1.11	0.03	0.17
	PEM/PSS	B-WGL-103	0.18		0.02
	PEM	B-WGL-1	5.06	1.39	0.53
	PSS	B-WGL-4	11.35	2.51	0.88
	PSS/PEM	B-WMI-1	4.46	1.11	0.44
	PSS	B-WMI-3	0.30		0.04
	PEM/PSS	A-W1-MI	2.48	0.78	0.15
	PEM/PSS	A-W2-MI	4.92	1.18	0.39
	PEM/PSS	A-W3-MI	0.54		0.04
	PEM/PSS	A-W4-MI	1.86	0.46	
	PFO/PSS/PEM	B-WMI-4	1.33		0.08
	PEM	B-WMI-5	0.86	0.38	0.02
	PEM	B-WMI-7	0.42		0.03
	PEM	B-WMI-6	0.58	0.38	0.02
	PSS	B-WMI-8	0.14	-	-
	PSS	B-WMI-2	3.43	0.94	1.52
X	PEM	A-W1-RO	0.51	2.75	0.64
X	PEM	A-W2-RO	0.50	0.006	
X	PFO	A-W3-RO	0.39	0.20	0.02
X	PEM	A-W4-RO	0.17		0.02
X	PSS/PEM	B-WRO-3	8.25	2.77	0.64
X	PSS/PEM	B-WRO-4	0.67	0.33	0.03
X	PEM	A-W6-RO	0.71	-	-

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
X	PEM	A-W7-RO	2.20	1.30	0.05
X	PEM/PSS	A-W11-RO	0.24	1.84	0.72
X	PEM/PSS	A-W12-RO	0.16	-	-
X	PEM	A-W5-RO	0.53	0.07	0.05
	PSS/PEM	B-RO-2	4.18	1.18	0.30
	PEM	A-W8-RO	0.07	-	-
	PEM	A-W9-RO	0.71	0.12	0.05
	PEM	A-W10-RO	0.09		0.004
	PEM/PSS	A-W13-RO	0.27	0.33	0.22
	PSS/PEM	A-WDE-5	13.71	3.55	0.68
	PSS/PEM	A-WDE-3	10.25	0.36	0.03
	PSS	A-WDE-2	1.65	-	-
	PSS/PEM	A-WDE-1	3.03	0.26	0.26
	PEM	B-WDE-6	0.09	-	-
	PSS/PEM	B-WDE-5	2.12		0.09
	PSS	B-WDE-4	0.34	0.02	
	PEM	B-WDE-3	0.88	0.22	0.04
	PEM	B-WDE-2	0.54		0.03
	PEM	B-WDE-7	0.81	-	-
	PEM	B-WDE-8	0.24	-	-
	PEM	B-WDE-9	0.29	-	-
	PSS	B-WDE-10	0.19	-	-
	PEM	B-WDE-11	0.74	-	-
	PSS	B-WDE-12	0.41	-	-
	PEM	B-WDE-13	2.62	0.12	
	PSS/PEM	B-WDE-15	1.68	-	-
	PSS/PEM	B-WDE-14	2.77	-	-
	PEM	B-WDE-16-DD	0.31	-	-
	PSS	B-WDE-17-DD	1.34	-	-
	PSS	B-WDE-18-DD	2.33	0.34	0.05
	PFO	A-WDE-4	1.94	0.21	0.07
	PEM	B-WDE-1	1.94	0.02	0.05
	PEM	B-WMA-7	2.18	0.48	0.15
	PEM	B-WMA-1	6.17	3.09	
	PEM	B-WMA-12	11.18	4.11	
	PEM	B-WMA-13	23.11	-	-
	PSS/PEM	B-WMA-10	8.50	2.67	
	PEM	B-WMA-11	2.24	1.94	
	PEM	B-WMA-14	0.08	-	-

NYSDEC Wetland	Cowardin Class	Wetland ID	Area w/in ROW (acres)	Matted Work Area (acres)	Matted Road (feet)
	PEM	B-WMA-16	2.93	-	-
	PEM	B-WMA-6	1.28	0.21	0.10
	PSS	B-WMA-8	0.26	-	-
	PEM	B-WMA-9	0.31	-	-
	PEM	B-WMA-4	0.46	-	-
	PEM	B-WMA-5	0.47	-	-
	PEM	B-WMA-3	3.09	0.86	0.03
	PEM	B-WMA-15	1.97	-	-
	PEM	B-WMA-2	2.76	0.92	
	PEM	WPR-10	0.26		0.02
	PSS	WPR-11	1.58	0.22	0.10
	PEM	WPR-12	1.05		0.10
	PSS	WPR-13	0.41		0.14
	PEM	WPR-14	2.41	1.32	0.08
	PSS/PEM	WPR-6	0.06	0.12	0.12
	PEM	WPR-7	2.22	0.40	0.16
	PSS/PEM	WPR-8	0.25	0.03	0.03
	PSS	WPR-9	0.74	0.18	0.09
	PSS	WPR-15	1.18	0.21	0.11
	PSS	WPR-16	0.50	0.28	0.02
	PSS	WPR-17	0.22	0.14	0.03
	PSS/PEM	WPR-18	0.77	0.13	0.04
	PSS	WPR-19	0.18	0.01	0.01
	PSS/PEM	WPR-20	0.65	-	-
	PEM	WPR-21	1.09	0.43	0.13
	PEM	A-WPR-22	0.21	0.07	0.02
X	PSS/PEM	WPR-4	1.41	0.04	
X	PSS	WPR-5	2.80	0.05	
X	PSS/PEM	WPR-3	0.48	0.03	0.04
	PSS	A-WPR-13B	1.20		0.12
	PSS	A-WPR-13A	1.24	-	-
	PSS	A-WPR-15	3.19	-	-

2.4 Other SPDES discharges

Part of the construction work involves replacing old structures with new structures requiring new foundations. Concrete will be used at each structure site to build the foundations. Concrete washout will be a potential pollutant but will be mitigated with the use of designated concrete washout areas. These areas will have a lined containment structure and will be monitored frequently to ensure they are maintained as needed. In addition, personnel

responsible for concrete delivery will be trained on the requirements related to concrete handling.

Construction Support Activities

During construction, this portion of the Segment will use two existing yard facility to provide space for material storage, staging, assembly, and other activities supporting construction. All yards will be secured with chain link construction fencing. Only upland areas will be used for laydown space and these previously disturbed areas do not require grading or recontouring. Gravel may be laid down in areas where the existing gravel has been lost, but at this time no additional grading or enhancements are expected.

Material storage may include fuels and other potentially hazardous materials. All materials will be stored in compliance with local, state, and federal regulations and will be clearly labeled. A detailed site map of the yard is included with the site maps.

Contact information for construction support activity:

Name: Scott Thiel
Phone Number: (804) 387-8848
Email: sthiel@myrgroup.com
Address of Yard(s): 5850 Depot Road, Altamont, NY; 112 Rock Road, Cobleskill, NY

2.5 Allowable Non-Stormwater Discharges

The following authorized non-stormwater discharges may be present at the construction site:

- Water used to control dust.
- Uncontaminated, non-turbid discharges of ground water or spring water.
- Discharges from construction de-watering operations.

Section 3 EROSION AND SEDIMENT CONTROLS

Erosion and sediment controls will be used throughout construction to manage stormwater on the Segment. The following sections describes the controls that may be used.

3.1 Practices

3.1.1 General ESC Practices

The contractor will have a qualified stormwater staff onsite throughout the duration of construction. They will be responsible for ensuring that BMPs are installed correctly and functioning properly. In addition, they will conduct regular inspections as described in Section 4 of this SWPPP and will identify any issues related to stormwater management. They will work closely with construction personnel to ensure all BMPs are maintained and will document all SWPPP activities through inspection reports.

Since the Project is an overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with impervious cover, only erosion controls for construction activities are required to be included in this SWPPP per Table 1 of Appendix B of the General Permit. New culverts may be installed in the approved work areas and access roads. New Permanent culverts or culvert replacements within jurisdictional waters will be installed per the U.S. Army Corps of Engineer specifications. Existing stormwater structures or conveyances such as culverts and roadside ditches will be protected during construction through matting, as necessary. If culverts are damaged during construction, they will be repaired to their previous condition. Culverts will be inspected regularly for maintenance. Permanent seeding will occur to stabilize the construction site and to meet the final stabilization requirement as stated in the General Permit. The temporary measures that may be employed during construction are identified below, including a brief description. Initial BMPs have been identified on the Plan & Profile drawings.

3.1.2 Best Management Practices

Based on observed site conditions during the site investigation, as well as anticipated construction activities, such as grading, the following summarizes the likely BMPs that would be appropriate and necessary to address erosion and sediment control during construction. BMPs will be selected based on site conditions and may be modified throughout construction. All erosion control fabric or netting must be 100% biodegradable natural product (but not including photodegradable materials), excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock.

- Exclusion fence: Exclusion fence will be used to prohibit construction activities from encroaching into sensitive areas such as waterbodies or wetlands. Exclusion fencing will be installed using metal t-posts and yellow poly rope. Signs will be installed along this fencing clearly stating, “NO PROJECT ACCESS”. Exclusion fencing will be installed along the edge of the approved work areas to protect sensitive areas. Exclusion fencing may include breaks for existing access roads, hiking trails, etc.

- Temporary access roads: The stabilization of temporary construction access routes, on-site vehicle transportation routes, and construction parking areas to control erosion on temporary construction routes and parking areas.

- Stabilized construction entrances: 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 ROW, street, alley, sidewalk, or parking area. This is used to reduce or eliminate the tracking of sediment onto public ROW or streets.

- Equipment matting: Timber matting will be installed in delineated wetland areas. Work areas in agricultural fields will be matted with timber mats or with tight deck 3-ply wooden matting as further detailed in the “Agricultural Land – Related Requirements and Restrictions” section of the EM&CP Plan & Profile drawing notes. The type of matting used will be in accordance with the EM&CP Plan & Profile drawings. The mats allow for distribution of the load and the least disturbance to the root zone of existing vegetation.

- Silt Fence: 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. Three types of silt fence (standard, reinforced, super) may be installed based on steepness and length of slope. The Environmental Inspector will determine the appropriate silt fence to be installed. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

- Compost Filter Sock: 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.

- Straw Bale Dike: A temporary barrier of straw, or similar material, used to intercept sediment laden runoff from small drainage areas of disturbed soil to reduce runoff velocity and effect deposition of the transported sediment load. Straw bale dikes have an estimated design life of three months. Use of hay bales is strictly prohibited.

- Construction Ditch: A temporary excavated drainage way to intercept sediment laden water and divert it to a sediment trapping device or to prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet.

- Temporary Access Bridge: A temporary access bridge is placed across a waterway to provide access for construction purposes for a period of less than one year. Temporary bridges shall not be utilized to maintain traffic for the general public. The temporary access bridge will provide safe, environmentally sound access across a waterway for construction equipment.

- Culverts: Culverts conveying jurisdictional waters will be installed per the U.S. Army Corps of Engineer specifications for culvert installation. Materials used will also conform with the applicable NYS Blue Book specifications for culvert installation. Inlet and outlet protection will be utilized in accordance with the applicable NYS Blue Book Specifications.

- Check dams: A check dam is a small dam constructed across a drainage ditch, swale, or channel to lower the velocity of concentrated flow to reduce erosion and gully formation and allow sediments and other pollutants to settle out. Check dams will be temporary for this Segment.

- Perimeter Dike/Swale: A temporary ridge of soil formed by excavating an adjoining swale located along the perimeter of the site or disturbed area. Its purpose is to prevent off-site storm run-on from entering a disturbed area and to prevent sediment laden storm runoff from leaving the construction site or disturbed area.

- Water Bar: A permanent or temporary ridge, ridge and channel, a structural channel, or flow deflector, constructed diagonally across a sloping road or utility right-of-way that is subject to erosion to limit the accumulation of erosive velocity of water by diverting surface runoff at pre-designed intervals. Soil or rubber water bars may be used on this Segment.

- Sediment Trap: A temporary basin with a barrier or dam constructed across a drainage way or at other suitable locations to intercept sediment-laden runoff and reduce the amount of sediment leaving the disturbed area in order to protect drainageways, properties, and rights-of-way below the sediment basin.

- Lined Waterway: In areas of significant grading, a lined waterway may be used to divert runoff from areas of disturbance. Rock may line the channel in these areas during construction, but the channel may be removed after construction is complete.

- Blind (French) Drain: A type of drain consisting of an excavated trench refilled with pervious materials, such as coarse sand, gravel, or crushed stone, where water percolates through the voids and flows toward an outlet. May or may not include a perforated pipe.

- Anchored Matting: Appropriate erosion matting may be used to stabilize slopes 2:1 or greater. All matting will be biodegradable and intended for steeper slopes.

- Earth Dike: A temporary berm or ridge of compacted soil, located in such a manner as to channel water to a desired location. Its purpose is to direct runoff to a sediment trapping device, thereby reducing the potential for erosion and off-site sedimentation. Earth dikes can also be used for diverting clean water away from disturbed areas.

- Dust control: The control of dust resulting from land disturbing activities, to prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems. Water quality must be considered when materials are selected for dust control. Water is the only dust control proposed for this Segment.

- Concrete Washouts: 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. All concrete washout stations will be located at least 300 feet from any wetland or waterbody; if a concrete washout cannot be located 300 feet away, that area will be identified on the approved Plan & Profile drawings.

- Cleaning Stations: A designated area where vehicles and equipment remove any material (e.g., mud, vegetation, etc.) that has the potential to spread invasive species.

- Surface Roughening: Roughening a bare soil surface whether through creating horizontal grooves across a slope, stair-stepping, or tracking with construction equipment to aid the establishment of vegetative cover from seed, to reduce runoff velocity and increase infiltration, and to reduce erosion and provide for trapping of sediment.

- Armored Slope Stabilization: In areas where some cut and fill slopes are required, riprap may be used to stabilize these slopes and protect them from erosion. A fabric blanket will be used under appropriately sized riprap for the proposed grade.

- Riprap or Rock Outlet Protection: Riprap or rock outlets may be installed to diffuse runoff prior to entering a well vegetated area. These may be placed out the outlet of diversion berms or construction ditches.

- Topsoiling: Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

- Mulching: Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch can also be used alone for temporary stabilization in non-growing months.

- Seeding: Providing temporary and/or permanent erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

The above listed BMPs will be implemented during construction, as appropriate. Not all BMPs may be required during construction or additional BMPs may be needed based on site conditions. The SWPPP will be updated regularly as BMPs are installed. A detailed description of each BMP can be found in Attachment F.

3.2 Construction Phasing and Sequence of Operations

The Segment will proceed in a linear progression and activities will follow this general sequence: ROW marking and identification, BMP installation, clearing, access road and work pad development, foundations, structure assembly and erection, removal of existing structures, stringing, and clean up and reclamation. The following describes the five phases of major construction activities along with the BMPs that will be employed.

Sequence and Timing of Construction Activities

Construction is scheduled to begin in January 2022 and finish by December 2023. The Segment will follow general transmission line construction phasing; the tables below describe each phase and the BMPs that will be employed during each phase. The work will be managed as to ensure it is conducted in a manner to minimize the amount of active disturbance and all areas are restored in a timely manner. Clean up and restoration of the Segment will be completed as quickly behind construction as possible. Areas that will be inactive for a period of 14 days and are not subject to construction traffic will be temporarily stabilized. Construction of the Segment requires the following steps:

- Establishing of laydown and storage areas
- Material delivery
- Staking and flagging the ROW and environmental protection areas
- Installation of BMPs erosion and sediment controls
- Access road improvement and mat installation
- Clearing the ROW and off-ROW access areas
- Foundation installation

- Assembly and erection of structures
- Removal of existing structures
- Conductor stringing
- Clean up and restoration, including seeding
- Removal of BMPs and erosion and sediment controls
- Demobilization and Segment closeout

Transmission line construction will begin with the installation of the appropriate BMPs to mitigate for wetland, waterbody, agricultural, residential, or other sensitive resource impacts. Because the Segment will be constructed within existing transmission corridors, access to those transmission corridors will be provided by existing roads to the maximum extent practicable. The Segment will improve existing access roads and construct new roads where sufficient access does not exist. In wetlands, agricultural areas and across intermittent streams and drainage ditches, equipment matting access roads will be installed. Temporary mat bridges will be installed for access across streams and drainage ditches. Minor grading and leveling is required for some access and work areas along the ROW. For areas that require more extensive grading or cut and fill, site-specific grading plans will be developed. As site-specific grading plans are developed, they will be included in Attachment F.

Since the Segment will be constructed within existing transmission corridors that have already been cleared and are maintained by the incumbent transmission owners, only minimal vegetative clearing will be needed to maintain electrical clearances and support access and work pads. Low growing vegetation may be removed as necessary prior to construction with mechanical methods such as brush hogging and mowing.

The estimated total area of new tree clearing for Segment construction is expected to be approximately 2.3 acres. Trees will be cleared and disposed of in accordance with the clearing methods described in the Environmental Management & Construction Plan (EM&CP). Four types of clearing have been identified in the EM&CP. The majority of the clearing will by Type I clearing which consists of clearing all woody plants, including desirable species; this type of clearing will occur at access roads and work sites as needed to create a safe working environment. Additional clearing methods address the removal of undesirable species, tall growing species and selective removal and pruning, as necessary. Danger trees must also be removed if they pose a threat of falling onto the conductor or other component of the transmission line facility.

Removal of existing structures will take place in four stages: removal of the conductors and shield wires, removal of the structures, removal of the foundations, and site restoration. The conductors will be removed utilizing cranes, bucket lifts, and other land-based vehicles and equipment. The removed conductors will be taken offsite for recycling or disposal. After the conductors are removed, the existing structures will be disassembled, which may include cutting off sections of the existing structures and lowering them to the ground via crane. Once disassembled, the structures will be removed from the transmission line corridor for recycling or disposal. Once the existing structures are removed, the structure foundations will be

removed to 48 inches below grade in agricultural areas and at least 18 inches below grade elsewhere. A typical 200-foot by 200-foot work pad will be established around each existing structure site to accommodate structure removal activities. Certain structure locations may dictate smaller or larger work areas due to site-specific factors, such as topography and the presence of environmental resources.

After the existing structures are removed, the new transmission line structures will be erected. The erection of the structures generally takes place in a two-step process. First, structure foundations are completed; then the structures are erected atop the foundations. After the structures are installed, stringing of the conductors, shield wire, and OPGW will proceed.

Project plans include four options for structure foundations to be implemented as appropriate based on site-specific geotechnical conditions and other design considerations: direct embedment, drilled pier, helical pile, and micropile/rock anchor. Only drilled pier foundations will be used on this Segment. Construction of a drilled pier foundation begins with drilling or excavating a hole into the soil to a specified depth and diameter. This results in the generation of a larger volume of spoils relative to direct embedded foundations. Spoils may be spread at the site, recycled as structural fill, or properly disposed. If the excavation becomes unstable, the hole is kept open by either inserting a permanent or temporary steel casing or filling the hole with a polymer slurry. Next, a reinforcing steel cage and anchor bolt cage is lowered into the hole via crane, and concrete forms are placed at the surface to allow for the final desired pier height above ground level. Concrete is then poured into the hole and forms. Any slurry exiting the hole is collected, treated, discharged, and solids retained for disposal. After the concrete cures, the transmission structure can then be secured to the anchor bolts embedded into the finished foundation.

Excavated soils will be stockpiled at designated work areas at a safe distance from wetlands or waterbodies. Excavated wetland topsoil will be stockpiled on equipment matting. Topsoil will be stored separately from subsoil and all spoil piles will be protected with BMPs. Excess subsoil will be re-spread in upland areas prior to returning topsoil. Subsoil will not be spread in a manner that may affect drainage patterns or cause erosion. Excess subsoil may be hauled off and disposed of properly if necessary. Topsoil will be returned once reclamation is complete and prior to any required seeding.

During construction, materials will be delivered to designated storage areas along the ROW. From the storage areas they will be transported to the work areas within the ROW. Pole delivery will occur directly to the structure pad where possible.

Structures will either be fully assembled on the ground and lifted onto the foundations or assembled in sections in the air. The structures are placed and secured to the foundations utilizing bolts.

After the structures are erected, the conductor, shield wire, and OPGW will be strung between the structures using helicopters, land-based vehicles and equipment, or a combination thereof.

After construction is completed, the temporarily disturbed areas of the transmission line corridor areas will be restored. Restoration will include decompacting any areas of compacted soil, grading the transmission line corridor areas back to original grade where practicable or otherwise providing appropriate, stabilized conditions, and sowing appropriate seed mixes. For temporary access road, the graveled roadbed will be decompacted and the topsoil placed back over the road. Temporary roads will be seeded as necessary for stabilization. Additional details regarding clean up and restoration are provided in Appendix H of the EM&CP.

The following is a general description of the BMPs that may be used during each phase of construction.

Phase I

Right of Way Preparation			
Activity (In order of construction)	**Erosion and sediment control practice**	**When will practice be installed**	**Maintenance, replacement, and removal of ESCs**
Staking and flagging/marking construction limits (ROW, work areas, access roads)	Flagging work areas, delineating disturbance limits, and installing any resource protection fencing or signage.	Prior to disturbance	Staking and flagging will be replaced as needed during construction. All fencing, staking, flagging will be removed during final clean up.
Marking Utilities	Flagging work areas	Prior to disturbance	Utility markings will be refreshed as needed during construction.
Installation of erosion and sediment control measures	Compost Sock and Silt Fence	Before or concurrent with access road improvements	All BMPs will be inspected on a weekly basis, in anticipation of a storm event and/or after 0.5-inches of rain. BMPs will be maintained within 48 hours of identification or immediately if there is an anticipated storm event.

Phase II

Access Road and Work Pad Preparation			
Activity (In order of construction)	**Erosion and sediment control practice**	**When will practice be installed**	**How long is practice expected to be in place**
Access Points	Stabilized Construction Entrance	During access road improvements	Throughout construction
Access road improvements, grading, shaping, adding gravel	Water bars, check dams, rock outlet protection	During access road improvements	Throughout construction
Equipment Matting	Wetland matting, agricultural matting, temporary mat bridges	During access road improvements	Throughout construction, matting will be removed as soon as possible but no later than immediately prior to final reclamation activities.
Work Pad Development	Compost sock, silt fence	During access road and work pad improvements	Throughout construction

Phase III

Structure removal and installation			
Activity (In order of construction)	**Erosion and sediment control practice**	**When will practice be installed**	**How long is practice expected to be in place**
Delivery of materials	Agricultural and wetland matting	Prior to delivery of materials to ROW	Throughout construction
Foundation installation	Concrete washout	Before excavation	Concrete washout locations will be identified in the field. They will be monitored regularly and maintained as needed.

Structure removal and installation			
Setting structures and installation of above-ground structure components	Same BMPs as Phase II	During access road and work pad improvements	BMPs will be in place and maintained throughout construction.
Removal of existing structures	Same BMPs as Phase II	During access road and work pad improvements	BMPs will be in place and maintained throughout construction.

Phase IV

Wire Pulling			
Activity (In order of construction)	**Erosion and sediment control practice**	**When will practice be installed**	**How long is practice expected to be in place**
Conductor pulling	Same BMPs as Phase II	During access road and work pad improvements	BMPs will be in place and maintained throughout construction.

Phase V

Restoration			
Activity (In order of construction)	**Erosion and sediment control practice**	**When will practice be installed**	**How long is practice expected to be in place**
Temporary Stabilization	Temporary seeding, mulching	Within 1 day of activities ceasing in an area, and complete within 7 days	Until activities resume or until final stabilization occurs.
Restoration of access roads	Decompaction, topsoil placement	During reclamation activities	No permanent controls are expected to be used. Permanent seeding will be monitored for vegetative success.
Removal of temporary erosion and sediment controls and	Surface roughening, armored slope, seeding, mulching	During reclamation activities	No permanent controls are expected to be used. Permanent

Restoration			
restoration of works areas			seeding will be monitored for vegetative success including percent cover.

3.3 POLLUTION PREVENTION AND GOOD HOUSEKEEPING PRACTICES

The following section describes the measures that will be implemented to avoid or minimize the potential for non-sediment pollutants to enter storm water.

3.3.1 Construction Site Pollutants

Materials such as fuels, oils, solvents, and chemicals used in operations and maintenance, solid waste products, and contaminated soils and water encountered or generated on the construction site will be managed so as not to create hazards or pollution prior to, during, and after construction. The Environmental Inspector will ensure that the practices being used to contain, segregate, store, and dispose of solid wastes are consistent with state and local statutes and ordinances controlling solid waste disposal.

3.3.2 Spill Prevention and Response

As specified in the General Permit, all potential pollutants, aside from sediment, will be used and disposed of in a manner that will not cause contamination of stormwater. Potential pollutants that may be present on site include: Petroleum products (fuel, equipment lubricants, hydraulic fluid, oil), cement, solid waste, and trash. These materials, and any other materials used on site that have the potential to cause contamination, will be stored, used, managed, and disposed of in a manner that minimizes the potential for exposure to the environment, specifically to stormwater.

General Spill Prevention and Handling Practices

The contractor will take all necessary precautions to ensure that sediment, debris, petroleum products, chemicals, cementaceous materials, or other contaminants do not enter the wetlands and flowing or dry watercourses. All potential pollutants will be stored in a manner consistent with the manufacturer's recommendations. All potential pollutants will be stored in a secure location, away from storm drain inlets, sedimentation ponds, detention ponds and other waterbodies. Whenever possible, potential pollutants will be stored in a covered area with

secondary containment. Incompatible chemicals will be stored in separate areas to prevent violent reactions should a spill occur.

At work sites, the layout of all materials, products, equipment storage areas, and sanitary facilities will be approved by the Environmental Inspector. The contractor will keep appropriate spill containment and cleanup materials readily available in construction equipment, at staging areas, and at work sites. Disposal of potential pollutants will be in accordance with the manufacturer's recommendations and all local, state, and federal regulations.

Materials no longer being used onsite will be removed as soon as practicable. Disposal of contaminated absorbent pads, plastic, soils, contaminated vegetation, etc. should be removed as soon as possible and disposed of properly in an approved landfill or contaminated materials facility. At all times, the contractor will keep construction areas clean and orderly. Garbage, debris, and spoils resulting from construction activities will be removed from the site and disposed of in a legal manner on a regular basis and upon completion of this Segment.

The following measures will be taken to prevent the accidental release of pollutants.

- Tanks and equipment containing oil, fuel or chemicals will be checked regularly by the Environmental Inspector for drips or leaks and will be maintained to prevent spills onto the ground or into state waters.
- Drums of diesel and gasoline, small containers of diesel, gasoline, oils, hydraulic fluid, and decontamination/cleaning solutions will be stored on weather-resistant spill containment pallets or specifically constructed spill containment enclosures. Spill containment pallets or enclosure containment will be able to hold 110% of the largest container.
- Hazardous materials and chemicals will be clearly labeled and segregated based on compatibility. Hazardous materials and fuel storage areas will be in areas that can be secured at the end of each workday. All products will be clearly labeled, and lids securely fastened.
- All storage tanks will be kept off the ground. Appropriate ground and bonding requirements will be observed. Material Safety Data Sheets (MSDS) sheets will be kept on-site at the storage area.
- Chemicals, including liquids, water treatment products and fuels will be covered, contained, and maintained to prevent vandalism.
- No on-site water withdrawals from any surface waterbody for any purpose will be allowed unless appropriate permits are obtained.
- No emulsifiers, dispersants, soaps, detergents, or surfactants will be allowed to enter the stormwater system.
- All personnel responsible for the handling of materials will have the appropriate training.

3.3.3 Fueling and Maintenance of Equipment or Vehicles

Equipment may be fueled in approved construction yards, at commercial facilities or on the right-of-way. Large equipment remaining on the right-of-way will be fueled by bulk tanks and/or a fuel/maintenance vehicle. Stationery fuel tanks and hazardous chemical storage shall be a minimum of 300 feet from streams, waterbodies, and wetlands.

In general, to the extent practicable, chemicals and petroleum products will not be stored, mixed, or loaded, nor will equipment be refueled, within 100 feet of any watercourse or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances as identified below.

a. Refueling of hand equipment will be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of handheld equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.

b. Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. All refueling of equipment within 100 feet of wetlands or streams will be conducted under the direct supervision of the Environmental Inspector. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a wetland or stream will have sufficient spill containment equipment available to provide prompt control and cleanup in the event of a release. Refueling of construction equipment will be required throughout the duration of the Segment.

3.3.4 Washing of Equipment and Vehicles

Vehicles and equipment will be cleaned at commercial facilities or in a designated area within the construction yard. All vehicles and equipment will be cleaned before entering the ROW and as needed to prevent the spread of invasive plants and trackout.

3.3.5 Storage, Handling, and Disposal of Construction Products, Materials, and Wastes

The storage yard will have designated dumpsters on site for disposing of or recycling construction debris. In addition, smaller trash bins will be located throughout the yard for personal trash. Construction debris (wire, cardboard, packaging, etc.) in the yard will be cleaned up daily. Crews will be required to keep all work areas clean and free of personal trash.

Portable toilets will be located in the construction yard and along the ROW as needed for construction crews. All portable toilets will be located away from waterbodies and wetlands and will be secured to avoid tipping and potential spills. All toilets will be serviced regularly by an approved vendor and all waste will be properly transported and disposed.

3.3.5.1 Building Products

Concrete will be mixed offsite by a vendor and trucked to the jobsite for the foundation work. No concrete mix is expected to be stored on site. Designated concrete washout locations have been identified and will be marked in the field.

Gravel may be stockpiled at the construction yard or in approved work areas along the ROW. Clean gravel will used on the Segment; if there is a concern with runoff, BMPs such as compost socks or silt fence will be used to prevent runoff.

3.3.5.2 Pesticides, Herbicides, Insecticides, Fertilizers, and Landscape Materials

In areas where tree clearing is required, stumps will be cut as close to ground level as practicable and the stumps treated with the appropriate herbicide where necessary to prevent re-sprouting ("cut and treat" method). Herbicides will be applied by certified herbicide applicator(s), who will utilize only registered herbicides. All herbicide applications will be made in compliance with ECL Article 33, NYSDEC rules and regulations, SPDES General Permit for Point Source Discharges to Surface Waters of New York State from Pesticide Applications Permit No. GP-0- 16-005, the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard 29 CFR 1910.1200, and label instructions. All herbicide applications will be made in accordance with the following specifications:

- Water will not be pumped directly from a water source into the spray tank.
- Herbicide concentrate will not be transported on a vehicle used for supplying water to foliar spray equipment.
- Each vehicle used for herbicide application or for transportation of herbicide concentrate on the ROW will be equipped with a shovel and absorptive material for containing and controlling spills. All herbicide spills will be reported immediately to the Applicant and applicable agencies as specified by the Applicant's Spill/Release Cleanup and Reporting Guidelines.

The herbicide applicator will take the following precautions to protect equipment and materials from vandalism and unauthorized use when left unattended on the ROW or on Project property not within a locked fence:

- Spray equipment will be emptied or stored in locked compartments.
- Ignition keys will be removed for all vehicles used for herbicide treatment, vehicles containing herbicide concentrate, or herbicide solution.
- Containers carrying herbicide concentrate will be securely locked or bolted to spray units or other vehicles used to transport herbicide concentrate.
- Valves or barrel pumps on containers carrying herbicide concentrate will be securely locked or removed and replaced with threaded plugs. Threaded plugs will be mechanically tightened to prevent removal by hand.
- The pressure control valve will be closed.

Typical herbicide mixing rates for the cut and treat method described above are provided in the following table.

Table 3.3 Herbicide Information

Season/Area	**Herbicide Mixing Rates**
Growing Season	Glyphsophate/Rodeo 30%, Arsenal 3%, Propylene Glycol 10%, Clean Water 57%
Dormant Season	Garlon 4 1 gal, Stalker 4 oz, Basil Oil 3 gal
Wetland Areas	Rodeo/Glyphosate 50%, Propylene Glycol 10%, Clean Water 40%

3.3.5.3 Diesel Fuel, Oil, Hydraulic Fluids, Other Petroleum Products, and Other Chemicals

Various petroleum products may be present on site to support construction activities. All products will be properly stored and labeled.

The following illustrate examples of materials which may be onsite:

- Small quantities of gasoline for power equipment such as chain saws; 5-gallon container (or less) in Conex at yard or in mechanic's truck.
- Diesel or gas fuel contained in approved slip tanks in work vehicles; bulk storage of fuel will be at the yards.
- Hydraulic oil and engine oil; quart, gallon and 5-gallon plastic containers in Conex at yard and mechanic's truck (inside containment), 55-gallon steel drums in Conex at offsite yard.
- Used oil; 55-gallon steel drums in Conex at offsite yard.

- Antifreeze; 5-gallon containers in Conex at offsite yard or in mechanic's truck.
- Lubricants/grease; cases of individual tubes in Conex at offsite yard or in mechanic's truck.
- Herbicides as discussed above.
- Miscellaneous; may include gear oil, brake cleaner, fuel additives, cutting oil, glass cleaner, thread sealant, silicone lubricant, etc.

The Operator and the stormwater inspectors will conduct regular inspections of the yard to ensure that all materials are being handled correctly and to check for spills or leaks.

All equipment will be cleaned and checked for leaks prior to mobilization to the Segment. All equipment arriving onsite will be inspected and a log will be kept of those inspections and included in Attachment D. Equipment will also be inspected prior to moving into sensitive areas such as wetlands.

Spill kits and material will be available at all work areas and at the yard. Spill kits will be maintained to ensure adequate materials is available to handle spills.

3.3.5.4 Hazardous or Toxic Waste

No toxic waste is expected to be generated from this Project. The Contractor shall keep local fire department and emergency management teams apprised of onsite hazardous chemicals and waste. All hazardous chemicals and waste shall be secured in a locked and controlled area.

3.3.6 Washing of Applicators and containers used for Paint, Concrete, or Other Materials

No container washing, including herbicide container washing, is expected on the Segment with the exception of concrete trucks as noted above. All empty containers will be disposed of properly as required by local, state, and federal laws.

3.3.7 Other Pollution Prevention Practices

No other pollutants have been identified at this time. If new pollutants are identified, appropriate prevention practices will be developed and the SWPPP updated.

Section 4: CONSTRUCTION INSPECTION

4.1 Inspection Personnel and Procedures

Table 4-1: Inspection frequency and Qualified Inspector(s)

Standard Frequency:	
☒ Every 7 days	
Increased Frequency (if applicable):	
Since more than 5 acres of disturbance will occur at one time, SWPPP inspections will include 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.	
Temporary Shutdown Frequency:	
Notification of temporary shutdown must be submitted in writing to DOW Water (SPDES) Program Contact or the applicable regulated, traditional land use control MS4 prior to reduced inspection frequency. ☐ Once every 30 days	
Qualified Inspector	
TRC Companies Phillip London 518-944-7305 plondon@trccompanies.com All areas of construction	TRC Companies TBD All areas of construction

Inspection Report Forms

All inspection report forms can be found in Attachment D. Other documents included in this attachment include:

- Equipment inspection logs

- Spill reports
- Noncompliance reports

4.2 Trained Contractor List

The following table will document all trained personnel associated with the Segment and responsible for conducting SWPPP inspections.

Table 4-2: Documentation for Completion of Training

Contractor	Name of Trained Contractor	NYS DEC Erosion and Sediment Control Training Certificate Number	Expiration Date
K2 Environmental LLC	Maria Britton	SWT# 060T-1302021-68	1/30/2024
K2 Environmental LLC	Denise Garcia	SWT# 060T-11162020-214	11/19/2024
Northern Clearing	RJ Gieger	SWT# 060T-1132021-30	1/13/2024
Contractor Name	INSERT NAME OF PERSONNEL	INSERT CERTIFICATE NUMBER	Click or tap to enter a date.
Contractor Name	INSERT NAME OF PERSONNEL	INSERT CERTIFICATE NUMBER	Click or tap to enter a date.
Contractor Name	INSERT NAME OF PERSONNEL	INSERT CERTIFICATE NUMBER	Click or tap to enter a date.

Section 5: POST CONSTRUCTION STORMWATER CONTROLS

N/A-No post construction stormwater controls are required for this Segment.

SECTION 6: CERTIFICATION AND NOTIFICATION

All required certifications and notifications can be found in the following attachments:

Attachment A	Notice of Intent, copy of NYSDEC Construction General Permit, NYSDEC Acknowledgment of SWPPP, MS4 SWPPP Acknowledgment
Attachment B	Owner and Contractor Certification Forms

Reports and other Segment documents can be found in the following attachments:

Attachment C	SWPPP Contact List
Attachment D	Inspection Reports
Attachment E	Amendments to the SWPPP
Attachment F	Best Management Practices
Attachment G	Resource Reports
Attachment H	EM&CP Plan & Profile Drawings

The SWPPP maps for the Segment are included in the EM&CP Plan & Profile drawings.

SECTION 7: RETENTION OF RECORDS

The following documents will be retained by the owner at the site and for a period of five years from the date the site is finally stabilized:

1. SWPPP
2. Stormwater inspections and maintenance reports
3. Contractor Certification
4. SWPPP Certification Statement of Satisfactory Completion
5. Correspondence regarding stormwater practices

SECTION 8: SEGMENT MAPS

A copy of the Plan & Profile maps, project location map and construction yard map are included under separate cover. These maps will be updated on a regular basis and will be kept with the SWPPP at all times. They will be available for review as requested.

EDIC TO PRINCETOWN SEGMENT -CENTRAL
ENERGY EAST PROJECT SWPPP

ATTACHMENT A

NOTICE OF INTENT, NYSDEC ACKNOWLEDGEMENT LETTER, COPY OF GENERAL PERMIT, COPY OF MS4 ACKNOWLEDGEMENT FORMS

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505
P: (518) 402-8111 F: (518) 402-9029
www.dec.ny.gov

10/28/2021

MYR Energy Services, Inc.
Bryan Vorwaller
1301 Mountain Road
Glen Allen, Virginia 23060

RE: ACKNOWLEDGMENT of NOTICE OF INTENT for Coverage Under SPDES General Permit for Storm Water Discharges from CONSTRUCTION ACTIVITY – General Permit No. GP-0-20-001

Dear Prospective Permittee:

This is to acknowledge that the New York State Department of Environmental Conservation (Department) has received a complete Notice of Intent (NOI) for coverage under General Permit No. GP-0-20-001 for the construction activities located at:

Central East Energy Connect-Segments III and IV
5850 Depot Road
See list in Box 39, NY 12009 **County:**

Pursuant to Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and ECL Article 70, discharges in accordance with GP-0-20-001 from the above construction site will be authorized **5** business days from **10/23/2021,** which is the date we received your final NOI, unless notified differently by the Department.

The permit identification number for this site is: **NYR11I949**. Be sure to include this permit identification number on any forms or correspondence you send us. When coverage under the permit is no longer needed, you must submit a Notice of Termination to the Department.

This authorization is conditioned upon the following:

1. The information submitted in the NOI received by the Department on **10/23/2021** is accurate and complete.

2. You have developed a Stormwater Pollution Prevention Plan (SWPPP) that complies with GP-0-20 -001 which must be implemented as the first element of construction at the above-noted construction site.

3. Activities related to the above construction site comply with all other requirements of GP-0-20-001.

4. Payment of the annual $110 regulatory fee, which is billed separately by the Department in the late fall. The regulatory fee covers a period of one calendar year. In addition, since September 1, 2004, construction stormwater permittees have been assessed an initial authorization fee which is now $110 per acre of land disturbed and $675 per acre of future impervious area. The initial authorization fee covers the duration of the authorized disturbance.

5. Your SWPPP has been reviewed by the regulated, traditional land use control MS4 where your project is located and has been determined to be in substantive conformance with the requirements in the SPDES General Permit for Stormwater Discharges from MS4s.

6. Before disturbing greater than 5 acres of soil at any one time, you have obtained written authorization from the regulated, traditional land use control MS4 that has jurisdiction over the project.

7. When applicable, project review pursuant to the State Environmental Quality Review Act (SEQRA) has been satisfied.

8. You have obtained all necessary Department permits subject to the Uniform Procedures Act (UPA). You should check with your Regional Permit Administrator for further information.

***Note: Construction activities cannot commence until project review pursuant to SEQRA has been satisfied, when SEQRA is applicable; and, where required, all necessary Department permits subject to the UPA have been obtained.**

Please be advised that the Department may request a copy of your SWPPP for review.

Should you have any questions regarding any aspect of the requirements specified in GP-0-20-001, please contact Dave Gasper at (518) 402-8114.

Sincerely,

David Gasper

David Gasper
Environmental Engineer

cc: RWE -
SWPPP Preparer
K2 Environmental LLC
Britton Maria
62545 Erickson Road
Bend, Oregon 97701

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

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:	MYR Energy Services, Inc.
2. Contact Person:	Josh L. Allen
3. Street Address:	1301 Mountain Road
4. City/State/Zip:	Glen Allen, Virginia 23060
II. Project Site Information	
5. Project/Site Name:	Central East Energy Connect Project
6. Street Address:	5850 Depot Road
7. City/State/Zip:	Vorheesville, NY 12186
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:	Town of Schuyler
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	Anthony Lucenta
14. Street Address:	2590 Route 5
15. City/State/Zip:	Utica, NY 13502
16. Telephone Number:	(315) 733-7458

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:	Anthony Lucenti
Title/Position:	Town Supervisor
Signature:	
Date:	8-25-21

VI. Additional Information

None provided @@

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

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

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

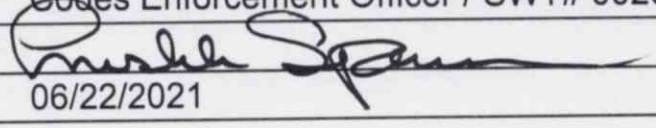
*(NOTE: Attach Completed Form to Notice Of Intent and Submit to Address Above)

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Operator - MYR Energy Services, Inc.
2. Contact Person:	Bryan Vorwaller
3. Street Address:	1301 Mountain Road
4. City/State/Zip:	Glen Allen, Virginia 23060
II. Project Site Information	
5. Project/Site Name:	Marcy to New Scotland Upgrade Project-Segment III
6. Street Address:	Town boundary near Mohawk River and Dyke road on the west; town boundary near Barringer Road to the east.
7. City/State/Zip:	Frankfort, NY
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	Mishele Spaman
9. Title/Position:	Code Enforcement Officer
10. Date Final SWPPP Reviewed and Accepted:	6/22/2021
IV. Regulated MS4 Information	
11. Name of MS4:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Contact Person:	
14. Street Address:	
15. City/State/Zip:	
16. 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:	Mishele Spaman
Title/Position:	Codes Enforcement Officer / SWT# 002038
Signature:	
Date:	06/22/2021

VI. Additional Information

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

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP- 0-20-001

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator

1-23-20

Authorized Signature

Date

Address: 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 administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7, 8 and Article 70.

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 ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. The *owner or operator* 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 1. 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:

1. *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.*

3. *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

*Discharge*s 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 November 2016, 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 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 discharge*s;

   (ii) Control stormwater *discharge*s, including both peak flowrates and total stormwater volume, 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 *discharge*s from the site;

   (vi) Provide and maintain *natural buffer*s around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharge*s, 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;

   (viii) Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

   (ix) *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of pollutants that could be discharged from the site.

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**. *Discharge*s from *dewatering* activities, including *discharge*s 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:

(i) *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, hazardous and toxic 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 *Discharge*s.** 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 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 discharges 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 discharges 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 discharges 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 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

(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.

(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 if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharge*s 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 *discharge*s; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "Discharges from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharge*s from *construction site* de-watering operations. All non-stormwater 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 **not** authorized by this permit:

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.D.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 are undertaken on land with no existing *impervious cover*; and

   c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

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 are undertaken on land with no existing *impervious cover*; and

   c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name is inclusive of slopes greater than 25%), or Soil Slope Phase "E" or "F" (regardless of the map unit name), or a combination of the three designations.

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.D.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
(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. PERMIT COVERAGE

A. How to Obtain Coverage

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 Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.

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 the 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.

3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control 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.F. (Change of *Owner or Operator*) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4* . This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

B. Notice of Intent (NOI) Submittal

1. Prior to December 21, 2020, 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. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.

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.

C. 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), or the equivalent from another New York State agency, 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.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:

   a. For *construction activities* that are not 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. 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.C. of this permit.

D. General Requirements For Owners or Operators With Permit Coverage

1. 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-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor's or subcontractor's certification statement (see Part III.A.6.), 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 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 November 2016.

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 or consistent with Part VII.K..

5. 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*.

6. 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.

E. Permit Coverage for Discharges Authorized Under GP-0-15-002

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of *a construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, 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-0-20-001.

F. Change of Owner or Operator

1. 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. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4,* the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.

2. 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.B.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.

3. 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. 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*.

3. All SWPPPs 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, including construction drawings:

    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*;

c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* the Department or other regulatory authority; and

d. to document the final construction conditions.

5. The Department may notify the *owner or operator* at any time that the 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.D.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 *discharge*s 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 *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 November 2016. 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 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 November 2016, 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;

i. 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 November 2016;

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

l. 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 November 2016. Include the reason for the deviation or alternative design 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:
   (i) 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 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. 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

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),
- New York State Erosion and Sediment Control Certificate Program holder
- 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 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 (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 the *owner or operator* has received authorization in accordance with Part II.D.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.B.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 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;

h. 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;

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

l. 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.D.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

1. 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.B.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.

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; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and 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; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; 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. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. 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.

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 right-of-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.

Part VI. REPORTING AND RETENTION 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.B.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. 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.

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 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 compliance with environmental laws 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 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 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.

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 – Acronyms and Definitions

Acronyms

APO – Agency Preservation Officer
BMP – Best Management Practice
CPESC – Certified Professional in Erosion and Sediment Control
Cpv – Channel Protection Volume
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)
DOW – Division of Water
EAF – Environmental Assessment Form
ECL - Environmental Conservation Law
EPA – U. S. Environmental Protection Agency
HSG – Hydrologic Soil Group
MS4 – Municipal Separate Storm Sewer System
NOI – Notice of Intent
NOT – Notice of Termination
NPDES – National Pollutant Discharge Elimination System
OPRHP – Office of Parks, Recreation and Historic Places
Qf – Extreme Flood
Qp – Overbank Flood
RRv – Runoff Reduction Volume
RWE – Regional Water Engineer
SEQR – State Environmental Quality Review
SEQRA - State Environmental Quality Review Act
SHPA – State Historic Preservation Act
SPDES – State Pollutant Discharge Elimination System
SWPPP – Stormwater Pollution Prevention Plan
TMDL – Total Maximum Daily Load
UPA – Uniform Procedures Act
USDA – United States Department of Agriculture
WQv – Water Quality Volume

Definitions

All definitions in this section are solely for the purposes of this permit.

Agricultural Building – a structure designed and constructed to house farm implements, hay, grain, poultry, livestock or other horticultural products; excluding any structure designed, constructed or used, in whole or in part, for human habitation, as a place of employment where agricultural products are processed, treated or packaged, or as a place used by the public.

Agricultural Property –means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

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.

Construction Site – means the land area where *construction activity(ies)* will occur. See definition for "*Commence (Commencement of) Construction Activities"* and "*Larger Common Plan of Development or Sale" also.*

Dewatering – means the act of draining rainwater and/or groundwater from building foundations, vaults or excavations/trenches.

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*.

Embankment –means an earthen or rock slope that supports a road/highway.

Endangered or Threatened Species – see 6 NYCRR Part 182 of the Department's rules and regulations for definition of terms and requirements.

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).

Natural Buffer –means an undisturbed area with natural cover running along a surface water (e.g. wetland, stream, river, lake, etc.).

New Development – means any land disturbance that does not meet the definition of Redevelopment Activity included in this appendix.

New York State Erosion and Sediment Control Certificate Program – a certificate program that establishes and maintains a process to identify and recognize individuals who are capable of developing, designing, inspecting and maintaining erosion and sediment control plans on projects that disturb soils in New York State. The certificate program is administered by the New York State Conservation District Employees Association.

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*.

Nonpoint Source - means any source of water pollution or pollutants which is not a discrete conveyance or *point source* permitted pursuant to Title 7 or 8 of Article 17 of the Environmental Conservation Law (see ECL Section 17-1403).

Overbank –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

Owner or Operator - means the person, persons or legal entity which owns or leases the property on which the *construction activity* is occurring; an entity that has operational control over the construction plans and specifications, including the ability to make modifications to the plans and specifications; and/or an entity that has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions.

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.

Point Source - means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, or landfill leachate collection system from which *pollutants* are or may be discharged.

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, New York State Erosion and Sediment Control Certificate Program holder 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 authorized to discharge under New York State DEC's

SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

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,
- 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 stabilizes 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 designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name is inclusive of slopes greater than 25%) , or Soil Slope Phase E or F, (regardless of the map unit name), or a combination of the three designations.

Streambank – as used in this permit, means the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

Stormwater Pollution Prevention Plan (SWPPP) – means a project specific report, including construction drawings, that among other things: describes the construction activity(ies), identifies the potential sources of pollution at the *construction site*; describes and shows the stormwater controls that will be used to control the pollutants (i.e. erosion and sediment controls; for many projects, includes post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions of the permit. See Part III of the permit for a complete description of the information that must be included in the SWPPP.

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 source*s. 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 source*s, 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, New York State Erosion and Sediment Control Certificate Program holder, 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 not located in one of the watersheds listed in Appendix C or not *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 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
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.

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.

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
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover
- Cross-country ski trails and walking/hiking trails
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path or walking path.
- Slope stabilization projects
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics

Table 1 (Continued) 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:

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) 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 greater than five acres and construction activities that include the construction or reconstruction of impervious area
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary impervious areas that will be restored to pre-construction conditions once the construction activity is complete

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 home that disturbs five (5) or more acres of land
- 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 duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- 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 development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW’s, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

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:

- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- 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
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction 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 Requiring Enhanced Phosphorus Removal

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

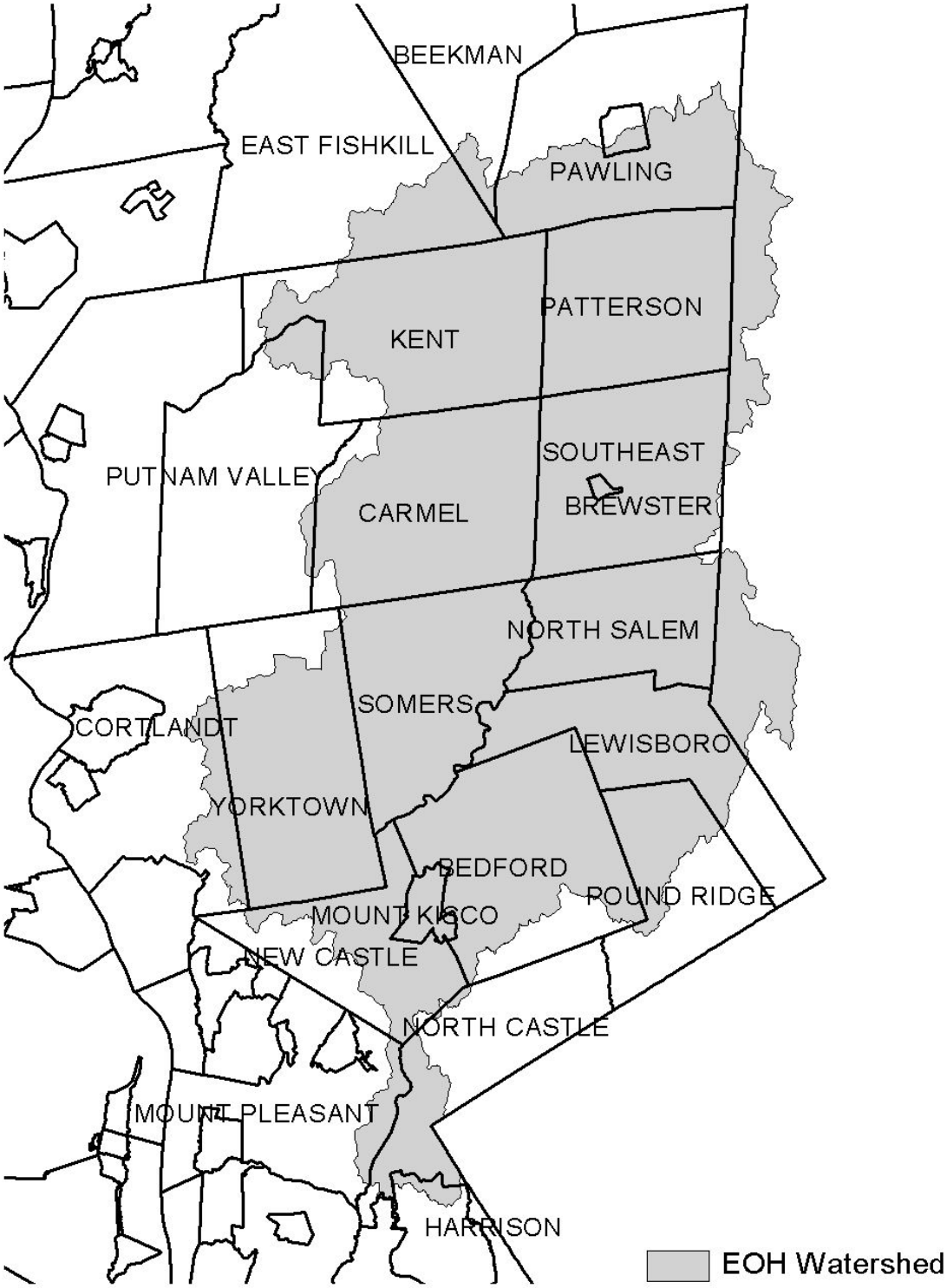


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

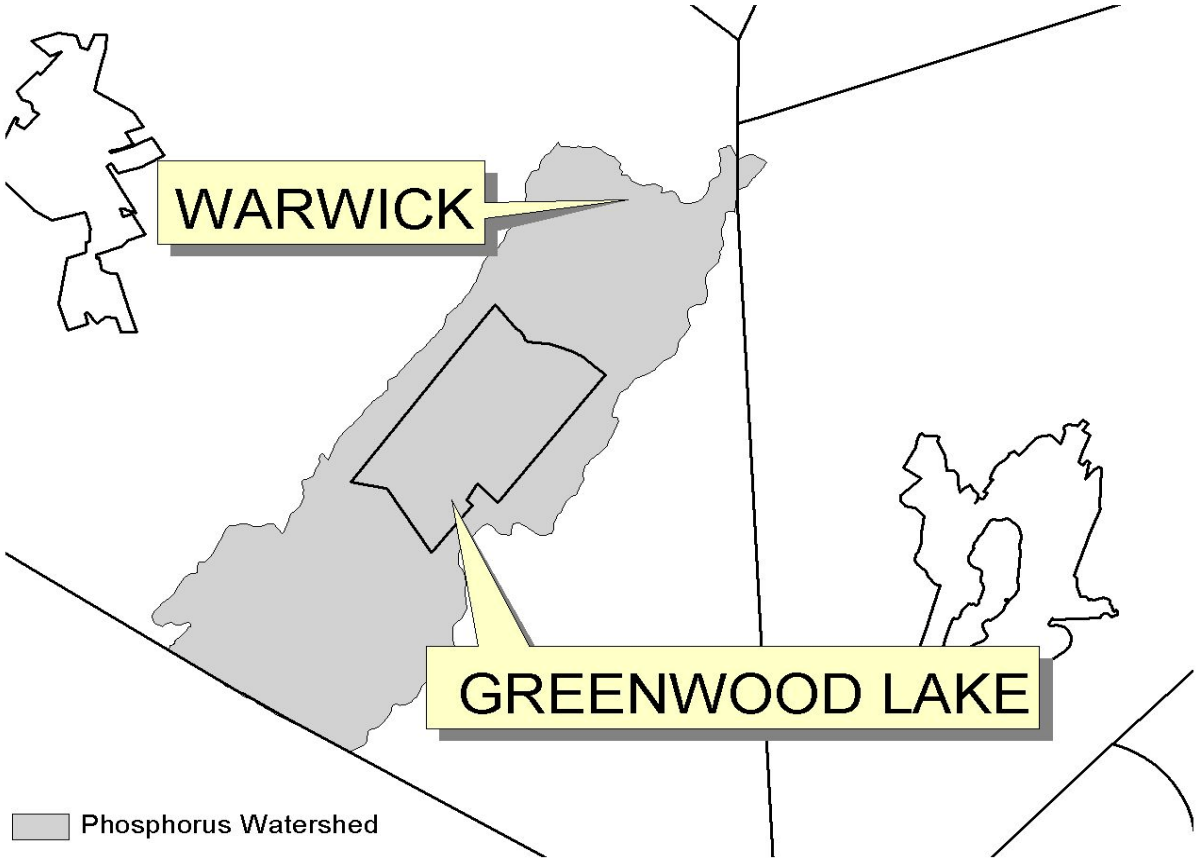


Figure 4 - Oscawana Lake Watershed

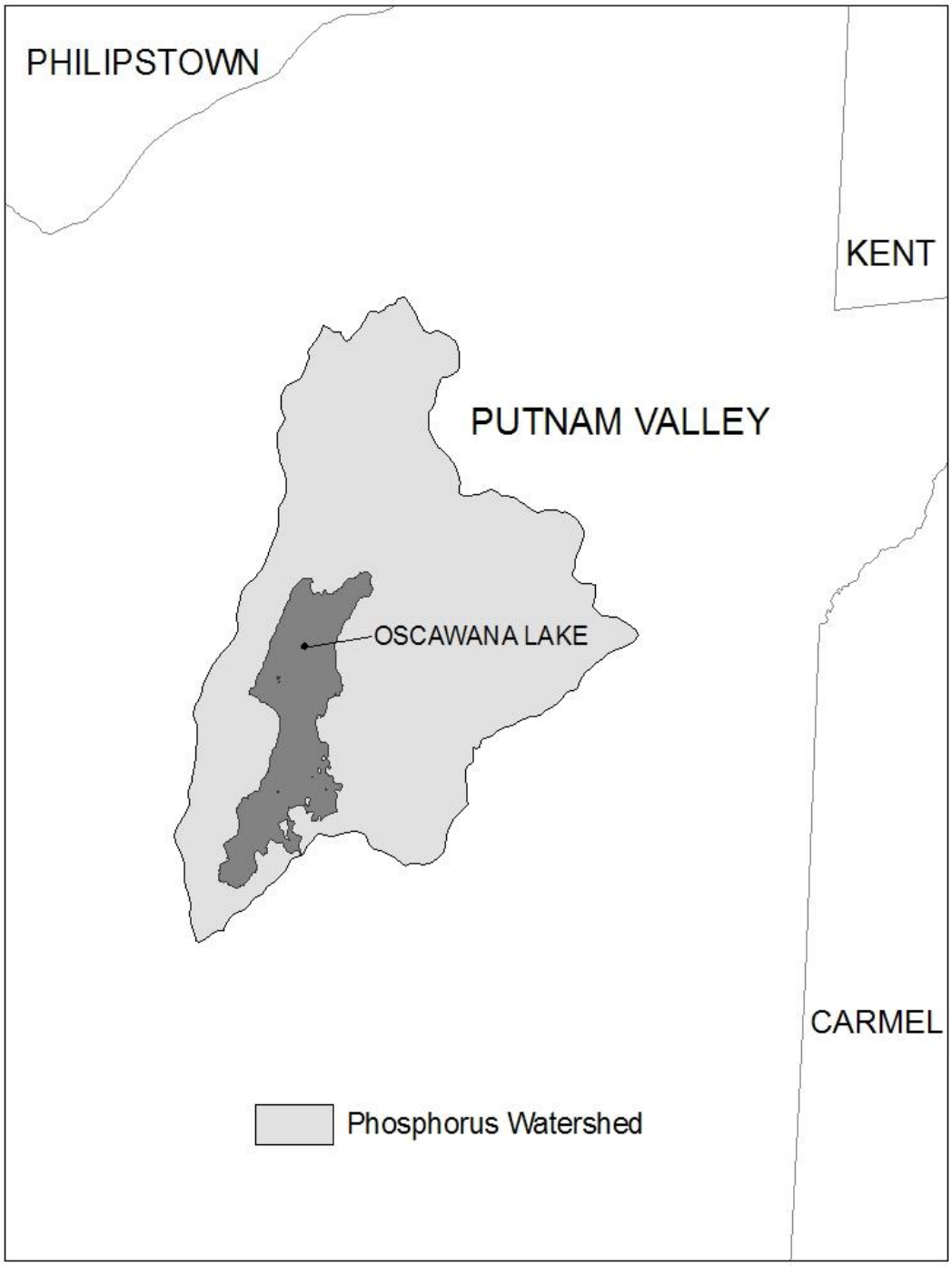
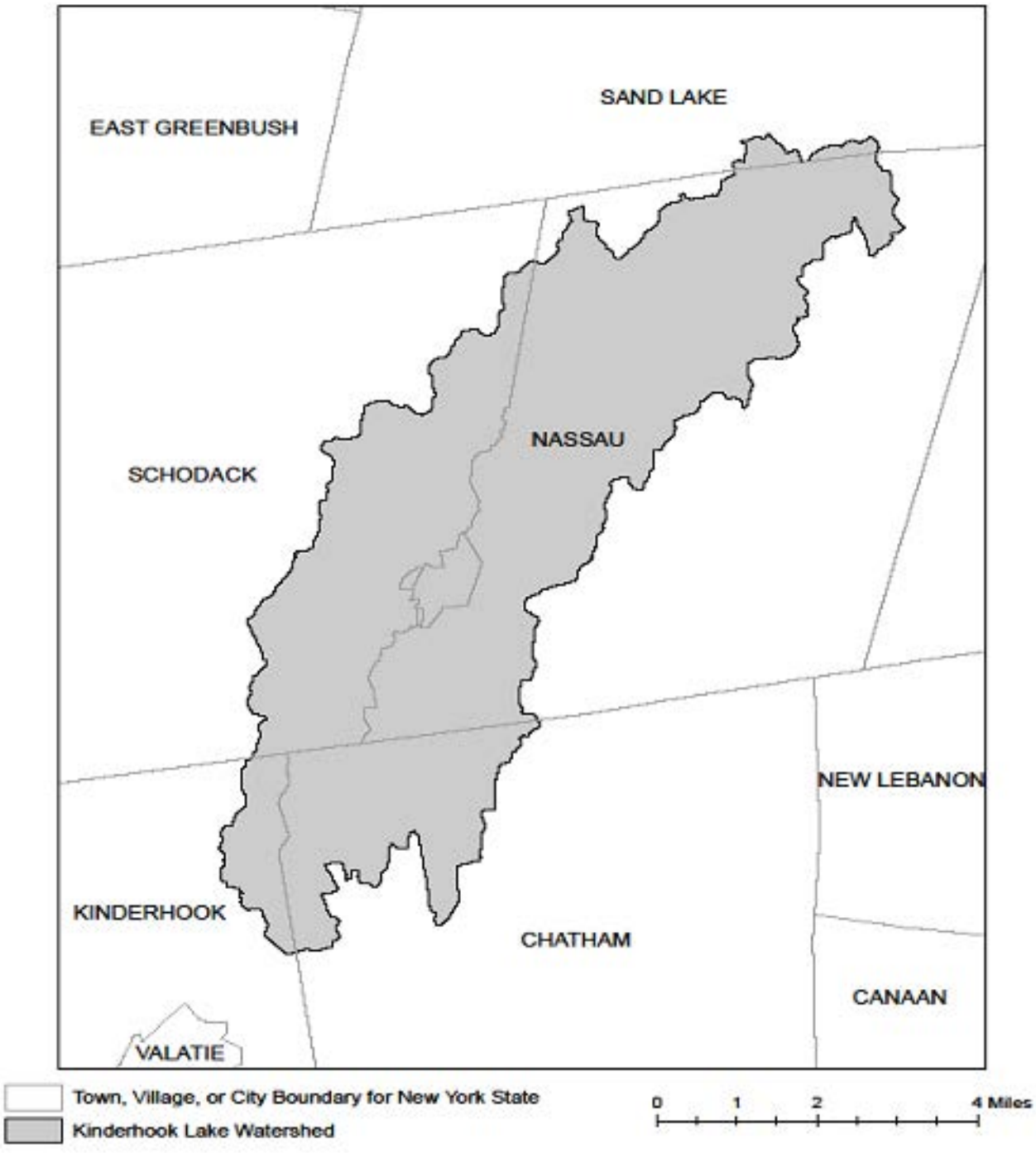


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Watersheds with Lower Disturbance Threshold

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 – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *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.

COUNTY	WATERBODY	POLLUTANT
Albany	Ann Lee (Shakers) Pond, Stump Pond	Nutrients
Albany	Basic Creek Reservoir	Nutrients
Allegany	Amity Lake, Saunders Pond	Nutrients
Bronx	Long Island Sound, Bronx	Nutrients
Bronx	Van Cortlandt Lake	Nutrients
Broome	Fly Pond, Deer Lake, Sky Lake	Nutrients
Broome	Minor Tribs to Lower Susquehanna (north)	Nutrients
Broome	Whitney Point Lake/Reservoir	Nutrients
Cattaraugus	Allegheny River/Reservoir	Nutrients
Cattaraugus	Beaver (Alma) Lake	Nutrients
Cattaraugus	Case Lake	Nutrients
Cattaraugus	Linlyco/Club Pond	Nutrients
Cayuga	Duck Lake	Nutrients
Cayuga	Little Sodus Bay	Nutrients
Chautauqua	Bear Lake	Nutrients
Chautauqua	Chadakoin River and tribs	Nutrients
Chautauqua	Chautauqua Lake, North	Nutrients
Chautauqua	Chautauqua Lake, South	Nutrients
Chautauqua	Findley Lake	Nutrients
Chautauqua	Hulburt/Clymer Pond	Nutrients
Clinton	Great Chazy River, Lower, Main Stem	Silt/Sediment
Clinton	Lake Champlain, Main Lake, Middle	Nutrients
Clinton	Lake Champlain, Main Lake, North	Nutrients
Columbia	Kinderhook Lake	Nutrients
Columbia	Robinson Pond	Nutrients
Cortland	Dean Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Dutchess	Fall Kill and tribs	Nutrients
Dutchess	Hillside Lake	Nutrients
Dutchess	Wappingers Lake	Nutrients
Dutchess	Wappingers Lake	Silt/Sediment
Erie	Beeman Creek and tribs	Nutrients
Erie	Ellicott Creek, Lower, and tribs	Silt/Sediment
Erie	Ellicott Creek, Lower, and tribs	Nutrients
Erie	Green Lake	Nutrients
Erie	Little Sister Creek, Lower, and tribs	Nutrients
Erie	Murder Creek, Lower, and tribs	Nutrients
Erie	Rush Creek and tribs	Nutrients
Erie	Scajaquada Creek, Lower, and tribs	Nutrients
Erie	Scajaquada Creek, Middle, and tribs	Nutrients
Erie	Scajaquada Creek, Upper, and tribs	Nutrients
Erie	South Branch Smoke Cr, Lower, and tribs	Silt/Sediment
Erie	South Branch Smoke Cr, Lower, and tribs	Nutrients
Essex	Lake Champlain, Main Lake, South	Nutrients
Essex	Lake Champlain, South Lake	Nutrients
Essex	Willsboro Bay	Nutrients
Genesee	Bigelow Creek and tribs	Nutrients
Genesee	Black Creek, Middle, and minor tribs	Nutrients
Genesee	Black Creek, Upper, and minor tribs	Nutrients
Genesee	Bowen Brook and tribs	Nutrients
Genesee	LeRoy Reservoir	Nutrients
Genesee	Oak Orchard Cr, Upper, and tribs	Nutrients
Genesee	Tonawanda Creek, Middle, Main Stem	Nutrients
Greene	Schoharie Reservoir	Silt/Sediment
Greene	Sleepy Hollow Lake	Silt/Sediment
Herkimer	Steele Creek tribs	Silt/Sediment
Herkimer	Steele Creek tribs	Nutrients
Jefferson	Moon Lake	Nutrients
Kings	Hendrix Creek	Nutrients
Kings	Prospect Park Lake	Nutrients
Lewis	Mill Creek/South Branch, and tribs	Nutrients
Livingston	Christie Creek and tribs	Nutrients
Livingston	Conesus Lake	Nutrients
Livingston	Mill Creek and minor tribs	Silt/Sediment
Monroe	Black Creek, Lower, and minor tribs	Nutrients
Monroe	Buck Pond	Nutrients
Monroe	Cranberry Pond	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Monroe	Lake Ontario Shoreline, Western	Nutrients
Monroe	Long Pond	Nutrients
Monroe	Mill Creek and tribs	Nutrients
Monroe	Mill Creek/Blue Pond Outlet and tribs	Nutrients
Monroe	Minor Tribs to Irondequoit Bay	Nutrients
Monroe	Rochester Embayment - East	Nutrients
Monroe	Rochester Embayment - West	Nutrients
Monroe	Shipbuilders Creek and tribs	Nutrients
Monroe	Thomas Creek/White Brook and tribs	Nutrients
Nassau	Beaver Lake	Nutrients
Nassau	Camaans Pond	Nutrients
Nassau	East Meadow Brook, Upper, and tribs	Silt/Sediment
Nassau	East Rockaway Channel	Nutrients
Nassau	Grant Park Pond	Nutrients
Nassau	Hempstead Bay	Nutrients
Nassau	Hempstead Lake	Nutrients
Nassau	Hewlett Bay	Nutrients
Nassau	Hog Island Channel	Nutrients
Nassau	Long Island Sound, Nassau County Waters	Nutrients
Nassau	Massapequa Creek and tribs	Nutrients
Nassau	Milburn/Parsonage Creeks, Upp, and tribs	Nutrients
Nassau	Reynolds Channel, west	Nutrients
Nassau	Tidal Tribs to Hempstead Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Nutrients
Nassau	Tribs (fresh) to East Bay	Silt/Sediment
Nassau	Tribs to Smith/Halls Ponds	Nutrients
Nassau	Woodmere Channel	Nutrients
New York	Harlem Meer	Nutrients
New York	The Lake in Central Park	Nutrients
Niagara	Bergholtz Creek and tribs	Nutrients
Niagara	Hyde Park Lake	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Niagara	Lake Ontario Shoreline, Western	Nutrients
Oneida	Ballou, Nail Creeks and tribs	Nutrients
Onondaga	Harbor Brook, Lower, and tribs	Nutrients
Onondaga	Ley Creek and tribs	Nutrients
Onondaga	Minor Tribs to Onondaga Lake	Nutrients
Onondaga	Ninemile Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Lower, and tribs	Nutrients
Onondaga	Onondaga Creek, Middle, and tribs	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Onondaga	Onondaga Lake, northern end	Nutrients
Onondaga	Onondaga Lake, southern end	Nutrients
Ontario	Great Brook and minor tribs	Silt/Sediment
Ontario	Great Brook and minor tribs	Nutrients
Ontario	Hemlock Lake Outlet and minor tribs	Nutrients
Ontario	Honeoye Lake	Nutrients
Orange	Greenwood Lake	Nutrients
Orange	Monhagen Brook and tribs	Nutrients
Orange	Orange Lake	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Orleans	Lake Ontario Shoreline, Western	Nutrients
Oswego	Lake Neatahwanta	Nutrients
Oswego	Pleasant Lake	Nutrients
Putnam	Bog Brook Reservoir	Nutrients
Putnam	Boyd Corners Reservoir	Nutrients
Putnam	Croton Falls Reservoir	Nutrients
Putnam	Diverting Reservoir	Nutrients
Putnam	East Branch Reservoir	Nutrients
Putnam	Lake Carmel	Nutrients
Putnam	Middle Branch Reservoir	Nutrients
Putnam	Oscawana Lake	Nutrients
Putnam	Palmer Lake	Nutrients
Putnam	West Branch Reservoir	Nutrients
Queens	Bergen Basin	Nutrients
Queens	Flushing Creek/Bay	Nutrients
Queens	Jamaica Bay, Eastern, and tribs (Queens)	Nutrients
Queens	Kissena Lake	Nutrients
Queens	Meadow Lake	Nutrients
Queens	Willow Lake	Nutrients
Rensselaer	Nassau Lake	Nutrients
Rensselaer	Snyders Lake	Nutrients
Richmond	Grasmere Lake/Bradys Pond	Nutrients
Rockland	Congers Lake, Swartout Lake	Nutrients
Rockland	Rockland Lake	Nutrients
Saratoga	Ballston Lake	Nutrients
Saratoga	Dwaas Kill and tribs	Silt/Sediment
Saratoga	Dwaas Kill and tribs	Nutrients
Saratoga	Lake Lonely	Nutrients
Saratoga	Round Lake	Nutrients
Saratoga	Tribs to Lake Lonely	Nutrients

303(d) Segments Impaired by Construction Related Pollutant(s)

Schenectady	Collins Lake	Nutrients
Schenectady	Duane Lake	Nutrients
Schenectady	Mariaville Lake	Nutrients
Schoharie	Engleville Pond	Nutrients
Schoharie	Summit Lake	Nutrients
Seneca	Reeder Creek and tribs	Nutrients
St.Lawrence	Black Lake Outlet/Black Lake	Nutrients
St.Lawrence	Fish Creek and minor tribs	Nutrients
Steuben	Smith Pond	Nutrients
Suffolk	Agawam Lake	Nutrients
Suffolk	Big/Little Fresh Ponds	Nutrients
Suffolk	Canaan Lake	Silt/Sediment
Suffolk	Canaan Lake	Nutrients
Suffolk	Flanders Bay, West/Lower Sawmill Creek	Nutrients
Suffolk	Fresh Pond	Nutrients
Suffolk	Great South Bay, East	Nutrients
Suffolk	Great South Bay, Middle	Nutrients
Suffolk	Great South Bay, West	Nutrients
Suffolk	Lake Ronkonkoma	Nutrients
Suffolk	Long Island Sound, Suffolk County, West	Nutrients
Suffolk	Mattituck (Marratooka) Pond	Nutrients
Suffolk	Meetinghouse/Terrys Creeks and tribs	Nutrients
Suffolk	Mill and Seven Ponds	Nutrients
Suffolk	Millers Pond	Nutrients
Suffolk	Moriches Bay, East	Nutrients
Suffolk	Moriches Bay, West	Nutrients
Suffolk	Peconic River, Lower, and tidal tribs	Nutrients
Suffolk	Quantuck Bay	Nutrients
Suffolk	Shinnecock Bay and Inlet	Nutrients
Suffolk	Tidal tribs to West Moriches Bay	Nutrients
Sullivan	Bodine, Montgomery Lakes	Nutrients
Sullivan	Davies Lake	Nutrients
Sullivan	Evens Lake	Nutrients
Sullivan	Pleasure Lake	Nutrients
Tompkins	Cayuga Lake, Southern End	Nutrients
Tompkins	Cayuga Lake, Southern End	Silt/Sediment
Tompkins	Owasco Inlet, Upper, and tribs	Nutrients
Ulster	Ashokan Reservoir	Silt/Sediment
Ulster	Esopus Creek, Upper, and minor tribs	Silt/Sediment
Warren	Hague Brook and tribs	Silt/Sediment

303(d) Segments Impaired by Construction Related Pollutant(s)

Warren	Huddle/Finkle Brooks and tribs	Silt/Sediment
Warren	Indian Brook and tribs	Silt/Sediment
Warren	Lake George	Silt/Sediment
Warren	Tribs to L.George, Village of L George	Silt/Sediment
Washington	Cossayuna Lake	Nutrients
Washington	Lake Champlain, South Bay	Nutrients
Washington	Tribs to L.George, East Shore	Silt/Sediment
Washington	Wood Cr/Champlain Canal and minor tribs	Nutrients
Wayne	Port Bay	Nutrients
Westchester	Amawalk Reservoir	Nutrients
Westchester	Blind Brook, Upper, and tribs	Silt/Sediment
Westchester	Cross River Reservoir	Nutrients
Westchester	Lake Katonah	Nutrients
Westchester	Lake Lincolndale	Nutrients
Westchester	Lake Meahagh	Nutrients
Westchester	Lake Mohegan	Nutrients
Westchester	Lake Shenorock	Nutrients
Westchester	Long Island Sound, Westchester (East)	Nutrients
Westchester	Mamaroneck River, Lower	Silt/Sediment
Westchester	Mamaroneck River, Upper, and minor tribs	Silt/Sediment
Westchester	Muscoot/Upper New Croton Reservoir	Nutrients
Westchester	New Croton Reservoir	Nutrients
Westchester	Peach Lake	Nutrients
Westchester	Reservoir No.1 (Lake Isle)	Nutrients
Westchester	Saw Mill River, Lower, and tribs	Nutrients
Westchester	Saw Mill River, Middle, and tribs	Nutrients
Westchester	Sheldrake River and tribs	Silt/Sediment
Westchester	Sheldrake River and tribs	Nutrients
Westchester	Silver Lake	Nutrients
Westchester	Teatown Lake	Nutrients
Westchester	Titicus Reservoir	Nutrients
Westchester	Truesdale Lake	Nutrients
Westchester	Wallace Pond	Nutrients
Wyoming	Java Lake	Nutrients
Wyoming	Silver Lake	Nutrients

APPENDIX F – List of NYS DEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) 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 ROADAVON, 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 AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7070

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EDIC TO PRINCETOWN SEGMENT-CENTRAL EAST ENERGY PROJECT SWPPP

ATTACHMENT B

CERTIFICATION FORMS

All certification forms will be signed when the entire SWPPP is complete

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: Central East Energy Project

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☑ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Owner/Operator Certification Form

SPDES General Permit For Stormwater Discharges From Construction Activity (GP-0-20-001)

Project/Site Name: Edic to Princetown Segment -Central East Energy Project

eNOI Submission Number: _____

eNOI Submitted by: ☐ **Owner/Operator** ☑ **SWPPP Preparer** ☐ **Other**

Certification Statement - Owner/Operator

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Owner/Operator First Name M.I. Last Name

_____

Signature

_____

Date

Contractors' Certifications

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the **Edic to Princetown Segment of the Central East Energy Project** 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 *discharge*s 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"

_____

1) Name of Construction Company

_____

Address Telephone

_____

Signature of Authorized Representative Print Name

_____

Date

_____

2) Name of Construction Company

_____

Address Telephone

_____

Signature of Authorized Representative Print Name

_____

Date

EDIC TO PRINCETOWN SEGMENT - CENTRAL EAST ENERGY PROJECT SWPPP

ATTACHMENT C

SWPPP CONTACT LIST

Edic to Princetown Segment - Central East Energy Project SWPPP

Contact List

Company	Name	Position	Phone	Email
LS Power Grid New York Corporation I	Casey Carroll	Project Manager	(636) 532-2200	ccarroll@lspower.com
LS Power Grid New York Corporation I	Dave Wilson	Environmental Manager	(636) 532-2200	dwilson@lspower.com
LS Power Grid New York Corporation I	Jonathan Heffner	Construction Manager	(806) 477-9911	jheffner@lspower.com
MYR Energy Services, Inc.	Bryan Vorwaller	Director of Field Operations	(801) 201-6815	bvorwaller@myrgroup.com
MYR Energy Services, Inc.	Josh Allen	Project Manager	(804) 387-7785	jlallen@myrgroup.com
MYR Energy Services, Inc.	Scott Thiel	Construction Superintendent	(804) 387-8848	sthiel@myrgroup.com
MYR Energy Services, Inc.	Jeff Carpenter	Safety Manager	(385) 303-8644	jcarpenter@myrgroup.com
Northern Clearing	Jeff Bristol	Clearing Superintendent	(715) 292-7570	jbristol@northernclearing.com
K2 Environmental LLC	Maria Britton	Lead Environmental Inspector	(541) 788-3468	maria@k2-env.com
K2 Environmental LLC	Denise Garcia	Environmental Inspector	(541) 728-1827	denise@k2-env.com
K2 Environmental LLC	Jeffrey Montgomery	CPESC	(541) 788-0331	jeff@k2-env.com

EDIC TO PRINCETOWN SEGMENT-CENTRAL EAST
ENERGY PROJECT SWPPP

ATTACHMENT D

INSPECTION REPORTS

EXAMPLE FORMS

INSPECTION FORMS

SPILL LOG

EQUIPMENT INSPECTION FORMS

General Project Information					
Project Name:	Marcy to New Scotland Upgrade Project (Segment 2) Princetown to New Scotland				
SPDES Permit Number:	NYR11H792			**Type of Construction Activities Being Completed:**	Active Construction
Date of Inspection:	3-18-21				
Inspector's Name:	Phil London				
Time On Site:	7:00AM			**Inspection Type:**	7-Day Inspection
Time Off Site:	5:30PM				
General Project Notes:	Week 2 of Segment II, Project SWPPP is available for review at: 5850 Depot Road, Guilderland, NY				
SWPPP Amendment Required:	☐ Yes	☒ No	**If yes, describe:**		

Weather Information		
Has there been a storm event since the last inspection?	☐Yes	☒ No
If yes, what was the approx. amount of precipitation (inches) since the last inspection: (Since the start of construction)	0.00	
Weather conditions at the time of inspection?	Temperature:	36°F
☐ Clear ☒ Cloudy ☐ Rain ☐ Sleet ☐ Snow ☐ Fog ☐ High Winds		
Does the Project Site discharge to natural surface waterbodies located within or immediately adjacent to the Project area?	☒ Yes	☐ No
If yes, describe: Refer to Segment Maps in the Project SWPPP		
Were there any discharges observed at the time of inspection?	☐ Yes	☒ No
If yes, were sediment laden discharges observed?	☐ Yes	☒ No
Describe:		
If yes, was erosion or sedimentation observed at the discharge location?	☐ Yes	☒ No
Describe:		
Soil Condition: Snow is in patches and has been plowed. Ground has thawed with warmer temperatures.		
Were areas of soil disturbance observed at the time of inspection?	☒ Yes	☐ No
If yes, describe: Active soil disturbing activities (i.e., timber mat installation, topsoil segregation/topsoiling) off Reynolds Road between structure nos. 1/4 to 1/6.		

Maintaining Water Quality

Water Quality Observations	Yes	No	N/A
Is there an increase in turbidity causing a substantial visual contrast to natural conditions?	☐	☒	☐
Is there residue from oil and floating substances, visible oil film, or grease or globules?	☐	☒	☐
Are all disturbances within the approved limits, as outlined on the plans?	☒	☐	☐
Have receiving waterbodies and/or wetland been impacted by the Project?	☐	☒	☐
Are the concrete washout facilities located a minimum of 100 feet from sensitive areas and properly maintained?	☐	☐	☒
Comments: No concrete washout facilities have been installed on Segment 2.			

General Housekeeping

Site Conditions	Yes	No	N/A
Is construction site litter and debris appropriately managed?	☒	☐	☐
Are facilities and equipment necessary for implementation of erosion and sediment controls in working and/or properly maintained?	☒	☐	☐
Is construction impacting adjacent properties?	☐	☒	☐
Is dust adequately controlled?	☒	☐	☐
Comments:			

Runoff Control Practices

Temporary Stream Crossings	Yes	No	N/A
Are the maximum necessary diameter pipes installed to span stream without dredging?	☐	☐	☒
Is non-woven geotextile fabric installed beneath the approaches?	☐	☐	☒
Is fill composed of aggregate (no earthen or soil material)?	☐	☐	☒
Is the rock on approaches clean enough to remove mud/sediment from vehicles and prevent sediment from entering the stream during high flows?	☐	☐	☒
Comments: No streams have been bridged.			

Excavation Dewatering	Yes	No	N/A
Are upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per the Construction Drawings?	☐	☐	☒
Is clean water from the upstream pool being pumped to the downstream pool?	☐	☐	☒
Is sediment laden water from the work area being discharged to a sediment trapping device?	☐	☐	☒
Is the water discharging from the sediment trapping device clear and free of sediment?	☐	☐	☒
Does the constructed upstream berm have a minimum of one-foot freeboard?	☐	☐	☒
Comments: Dewatering has not occurred.			

Flow Spreader(s)	Yes	No	N/A
Is the flow spreader installed per the Construction Drawings?	☐	☐	☒
Was the flow spreader constructed on undisturbed soil, not on fill?	☐	☐	☒
Does the flow spreader receive only clear, non-sediment laden flows?	☐	☐	☒
Does the discharge from the flow spreader sheet flow out of the spreader without erosion downstream?	☐	☐	☒
Comments: Project has not required the installation of a flow spreader.			

Interceptor Dikes and Swales	Yes	No	N/A
Is the dike/swale installed per the Construction Drawings?	☐	☐	☒
Has the dike/swale been stabilized by geotextile fabric, seed, and/or mulch?	☐	☐	☒
Was erosion observed within the dike/swale?	☐	☐	☒
Is sediment-laden runoff directed to a sediment trapping device?	☐	☐	☒
Comments: Project has not required the installation of inceptor dikes or swales.			

Stone Check Dam(s)	Yes	No	N/A
Are the check dams in good condition (rocks in place and no ponding behind the dams)?	☐	☐	☒
Has geotextile fabric been placed beneath the rock fill?	☐	☐	☒
Was sediment accumulation greater than 50% of the design capacity?	☐	☐	☒
Was erosion observed within the channel?	☐	☐	☒
Comments: Project has not required the installation of stone check dams.			

Rock Outlet Protection	Yes	No	N/A
Is the rock outlet protection installed per approved plans?	☐	☐	☒
Was the outlet protection installed concurrently with pipe installation?	☐	☐	☒
Have the rocks been displaced?	☐	☐	☒
Is the sediment accumulation 50% of the design capacity?	☐	☐	☒
Comments: Project has not required the installation of rock outlet protection			

Soil Stabilization

Topsoil and Spoil Stockpiles	Yes	No	N/A
Are stockpiles properly stabilized and contained?	☒	☐	☐
Are sediment control installed at the toe of the slope?	☐	☒	☐
Are idle soil stockpiles are stabilized with vegetation and/or mulch?	☒	☐	☐
Comments: Work pad #2/4 off Weast Road has two topsoil stockpiles that have been mulched. Recommend that filter sock be installed along the southwestern toe of each stockpile, which is in proximity to an off-site wetland feature.			

Revegetation	Yes	No	N/A
Has temporary seed and mulch been applied to idle areas?	☒	☐	☐
Has a minimum of 4 inches of topsoil been applied under permanent seeding areas?	☐	☐	☒
Comments: Straw mulch has been applied to idle areas (seeding has not been observed).			

Sediment Control Practices

Stabilized Construction Entrance(s)	Yes	No	N/A
Is the entrance installed per the Construction Drawings?	☒	☐	☐
Is the stone clean enough to effectively remove mud/sediment from vehicle tires?	☒	☐	☐
Does all traffic enter and exit the site at the stabilized construction entrance(s)?	☒	☐	☐
Is adequate drainage provided to prevent ponding at the entrance(s)?	☒	☐	☐
Comments: A stabilized construction entrance has been installed off of Weast Road. This SCE is maintained in good working condition.			

Linear Sediment Control Barriers	Yes	No	N/A
Are the sediment controls installed along the contour, 10 feet from toe of slope and not within conveyance channels?	☐	☐	☒
Are silt fence joints constructed by wrapping the two ends together for continuous support?	☐	☐	☒
Is the silt fence fabric is buried a minimum of 6 inches?	☐	☐	☒
Are the posts stable and the fabric is tight and without rips/frayed areas?	☐	☐	☒
Does the compost filter sock have good contact with the soil?	☒	☐	☐
Is the sediment accumulation greater than 50% of the design capacity?	☐	☒	☐
Comments: No sediment barriers have been installed.			

Storm Drain Inlet Protection	Yes	No	N/A
Is the inlet protection installed in accordance with the Construction Drawings?	☐	☐	☒
Is the inlet protection structurally sound?	☐	☐	☒
Are the posts stable and the fabric is tight and without rips/frayed areas?	☐	☐	☒
Is the sediment accumulation greater than 50% of the design capacity?	☐	☐	☒
Comments: Inlet protection has not been required.			

Temporary Sediment Basin	Yes	No	N/A
Is the basin and outlet structure constructed per the Construction Drawings?	☐	☐	☒
Are the basin side slopes stabilized?	☐	☐	☒
Was the drainage structure flushed and basin surface restored upon removal of the sediment basin facility?	☐	☐	☒
Is the sediment basin dewatering at an appropriate rate?	☐	☐	☒
Is the sediment accumulation greater than 50% of the design capacity?	☐	☐	☒
Comments: Temporary sediment basin has not been required.			

Temporary Sediment Trap	Yes	No	N/A
Is the outlet structure constructed per the Construction Drawings?	☐	☐	☒
Has geotextile fabric been placed beneath the rock fill?	☐	☐	☒
Are the sediment trap slopes and disturbed areas are stabilized?	☐	☐	☒
Is the sediment accumulation greater than 50% of the design capacity?	☐	☐	☒
Comments: Temporary sediment trap has not been required.			

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design. All practices shall be maintained in accordance with their respective standards.

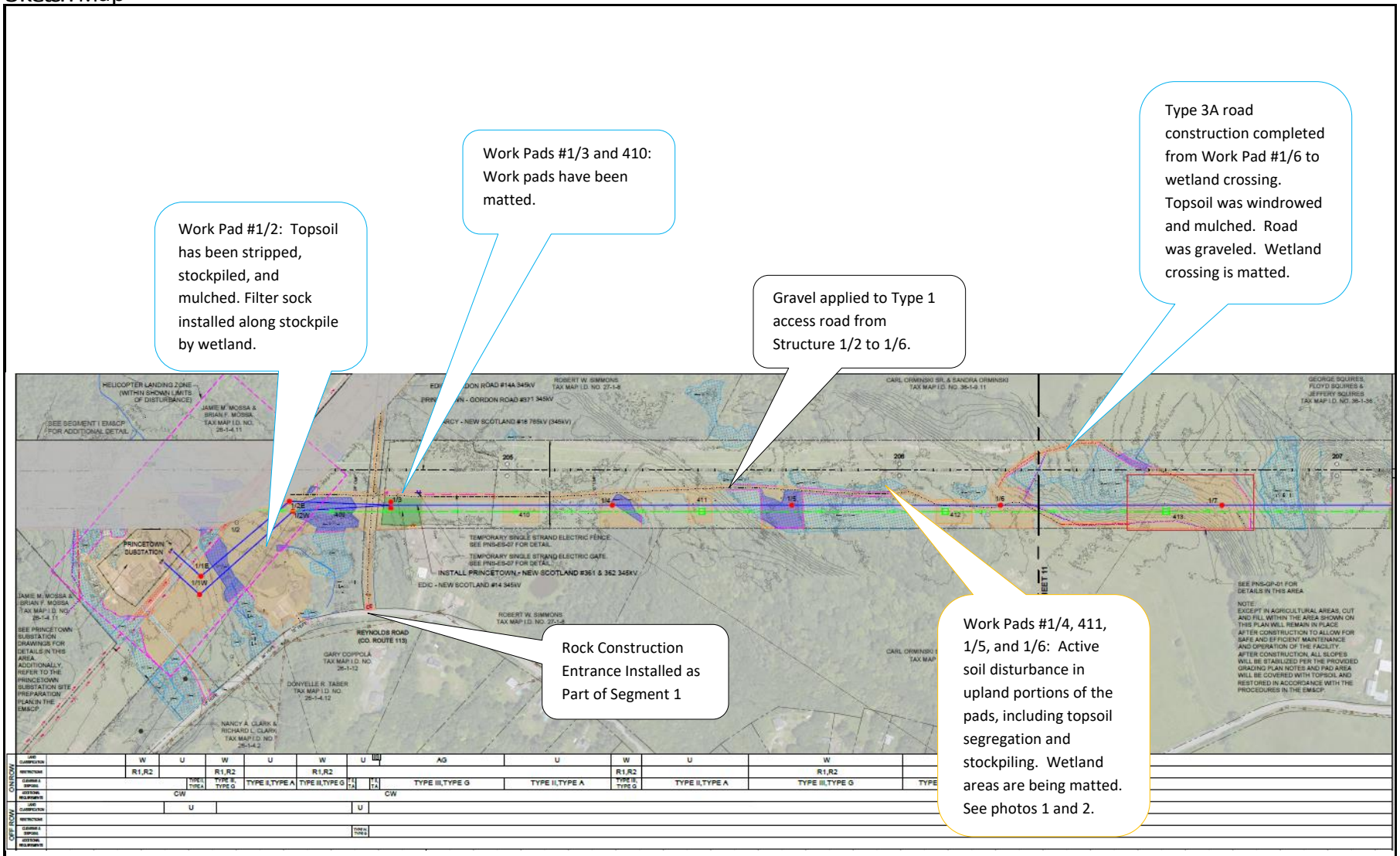
Philip M. London

Qualified Inspector

Qualified Inspector Signature

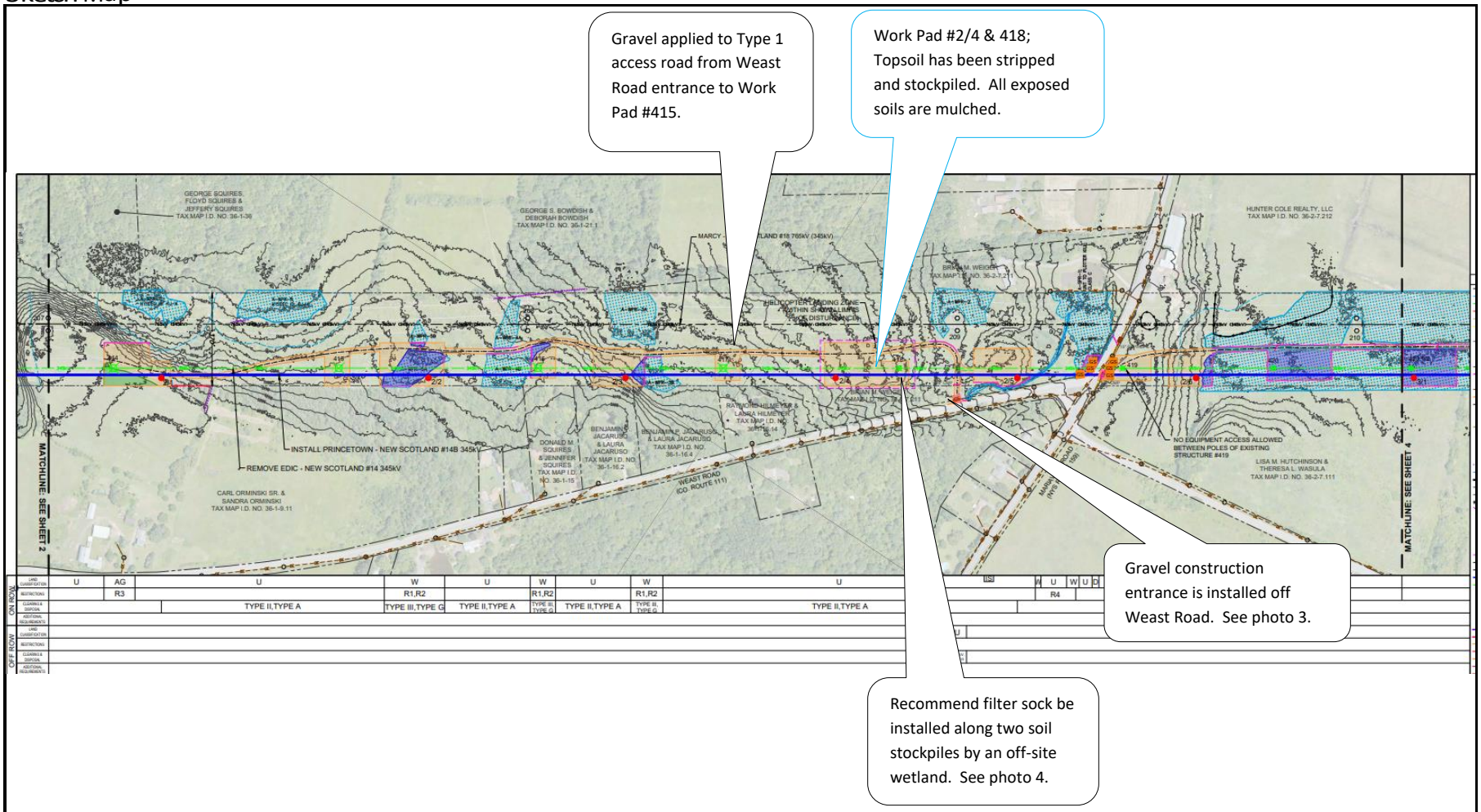
The above signed acknowledges that, to the best of his/her knowledge, all information provided in this report is accurate and complete. If there are any questions, comments, or concerns regarding the contents of this report, feel free to contact Inspector's Name at 518-944-7305 or email at Plondon@Trccompanies.com.

Sketch Map



Legend:				
		Area of Active Soil Disturbance		Area has been Temporary Stabilization
		Area of Inactive Soil Disturbance		Area has Achieved Final Stabilization

Sketch Map



Legend:				
		Area of Active Soil Disturbance		Area has been Temporary Stabilization
		Area of Inactive Soil Disturbance		Area has Achieved Final Stabilization

	
1 Observation- Work Pad #411 (off Reynolds Road)	**2** Observation- Work Pad #1/5 (off Reynolds Road)
Topsoil has been stripped and stockpiled at work pad.	Timber mats are being installed in wetland portion of this work pad.

	
3 Observation- Construction Entrance off Weast Road	**4** Action Item- Work Pad #2/4 (off Weast Road)
Gravel entrance is intact and functioning.	Recommend that filter sock be installed along the southwestern toe of each stockpile, which is in proximity to an off-site wetland feature. Stockpiles and disturbed ground are mulched.

Princetown to Gordon Road Spill Report

Project	Princetown to Gordon Road
ID	148701
Survey Date	05/09/2021
User	Maria Britton
Report Type	Final Report

1. The quantity is known to be less than 5 gallons	Yes
2. The spill is contained and under the control of the spiller.	Yes
3. The spill has not and will not reach the State's water or any land.	Yes
4. The spill is cleaned up within 2 hours of discovery.	Yes
Log Prepared By	Maria Britton
Log Prepared Date	05/09/2021

LS Power Representative Notified

Date	05/09/2021
Time	09:02 AM
Name	Andrew Held
Title	Environmental and ROW Inspector
Routing	text message
Comments	Texted Andrew Held and Shawn Mock (LSPGNY) and Josh Allen (MYRE) after I received a call from Chris Mercer (MYRE) about a spill on the Princetown to Gordon Road Segment.

Location of the spill

Facility	Segment l, Structure 15
Facility Address Available?	

Specific Spill Information

Date of Spill	05/09/2021
Time of Spill	08:30 AM
Material Spilled	Hydraulic Fluid
Quantity Spilled	16 ounces

Equip. Info	Elliot Crane
Comments	The L.E. Myers crew showed up to a spill under the Elliott Crane at structure 15.
Cause of the Spill	Loose hose fitting.
Extent of the Spill	The spill was contained to the timber mats at structure 15.
Potential threat of surface and/or groundwater; human health	None, the nearest wetland is 350 feet away.
Response and cleanup actions taken	L.E. Myers crews cleaned up the spill immediately. Once I was in the area later in the day, I confirmed clean up.

Regulatory Notifications 1

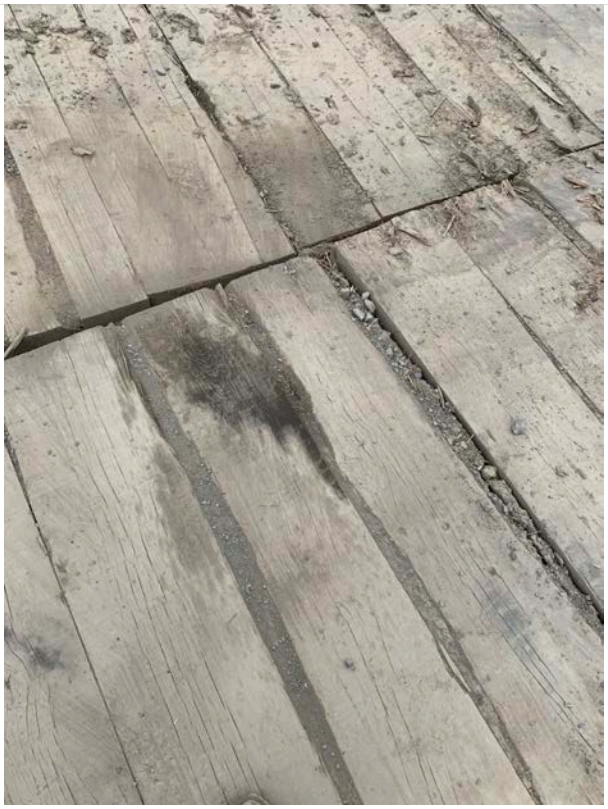
Person	Andrew Held
Regulatory Agency	NYSDEC
Date	05/09/2021
Time	07:38 AM
Name of Contact	NYSDEC
Phone #	
Report Number	2101189
Cleanup Verification Report	Spill has been adequately cleaned up. The mats are stained.
Attach copy	None

Phone Log 1

Date	
Time	
Phone #	
By Whom	
To/From	
Reason	

Photo(s)

spill



clean up

Photo Description

Princetown to Gordon Equipment Inspection

Project	Princetown to Gordon Road
ID	138344
Survey Date	03/29/2021
User	Maria Britton

Inspection 1

Date	03/29/2021
Location	Depot Road Yard
Company	MYR
Equipment	Forklift
Equipment ID/number	None
Cleaning Required	No
Notes	Equipment is clean and free of leaks, no cleaning required.

Photo

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EDIC TO PRINCETOWN SEGMENT -CENTRAL EAST ENERGY PROJECT SWPPP

ATTACHMENT E

AMENDMENTS TO SWPPP

SWPPP Amendment Log

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by (Name(s) and Title)

EDIC TO PRINCETOWN SEGMENT -CENTRAL EAST ENERGY PROJECT SWPPP

ATTACHMENT F

BEST MANAGEMENT PRACTICES

STANDARD AND SPECIFICATIONS FOR WATER BAR

Definition & Scope

A **permanent** or **temporary** ridge, ridge and channel, a structural channel, or flow deflector, constructed diagonally across a sloping road or utility right-of-way that is subject to erosion to limit the accumulation of erosive velocity of water by diverting surface runoff at pre-designed intervals.

Conditions Where Practice Applies

Where runoff protection is needed to prevent erosion from increased concentrated flow on narrow, steep access roads, driveways, and entrance ways to lot parcels as well as utility access right-of-ways generally up to 100 feet in width

Design Criteria

Design computations are not required.

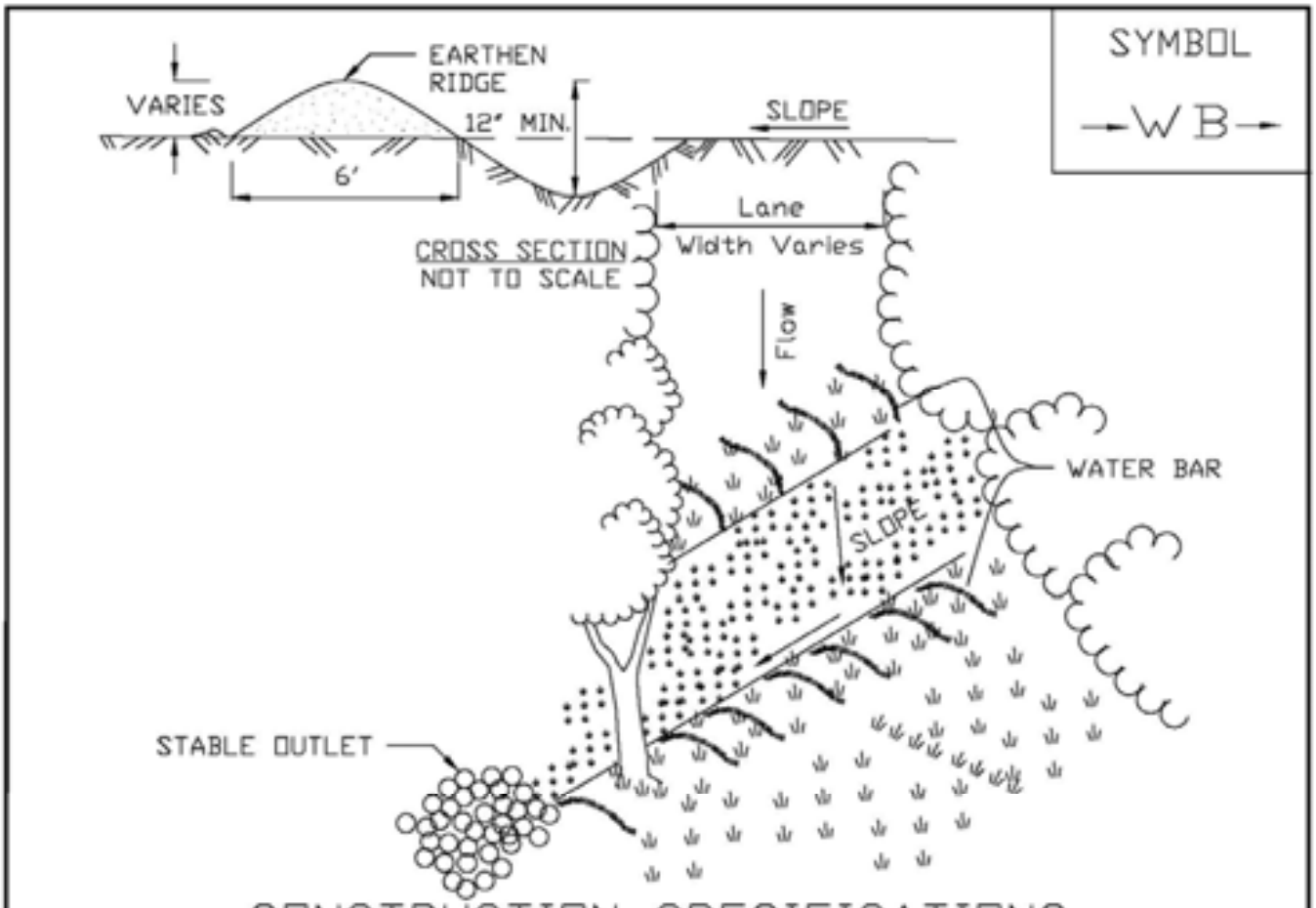
1. The design height shall be minimum of 12 inches measured from channel bottom to ridge top.
2. The side slopes shall be 2:1 or flatter, a minimum of 4:1 where vehicles cross.
3. The base width of the ridge shall be six feet minimum.
4. The spacing of the water bars shall be as follows (Site spacing may need to be adjusted for field conditions to use the most suitable areas for water disposal):

Slope (%)	Spacing (ft.)
<5	125
5 TO 10	100
10 TO 20	75
20 TO 35	50
>35	25

5. The positive grade of the water bar shall not exceed 2%. A crossing angle of approximately 60 degrees is preferred.
6. Once diverted, water must be conveyed to a stable system (i.e. vegetated swale or storm sewer system). Water bars should have stable, unrestricted outlets, either natural or constructed.

See Figure 3.22 on page 3.53 for details.

Figure 3.22
Water Bar Detail

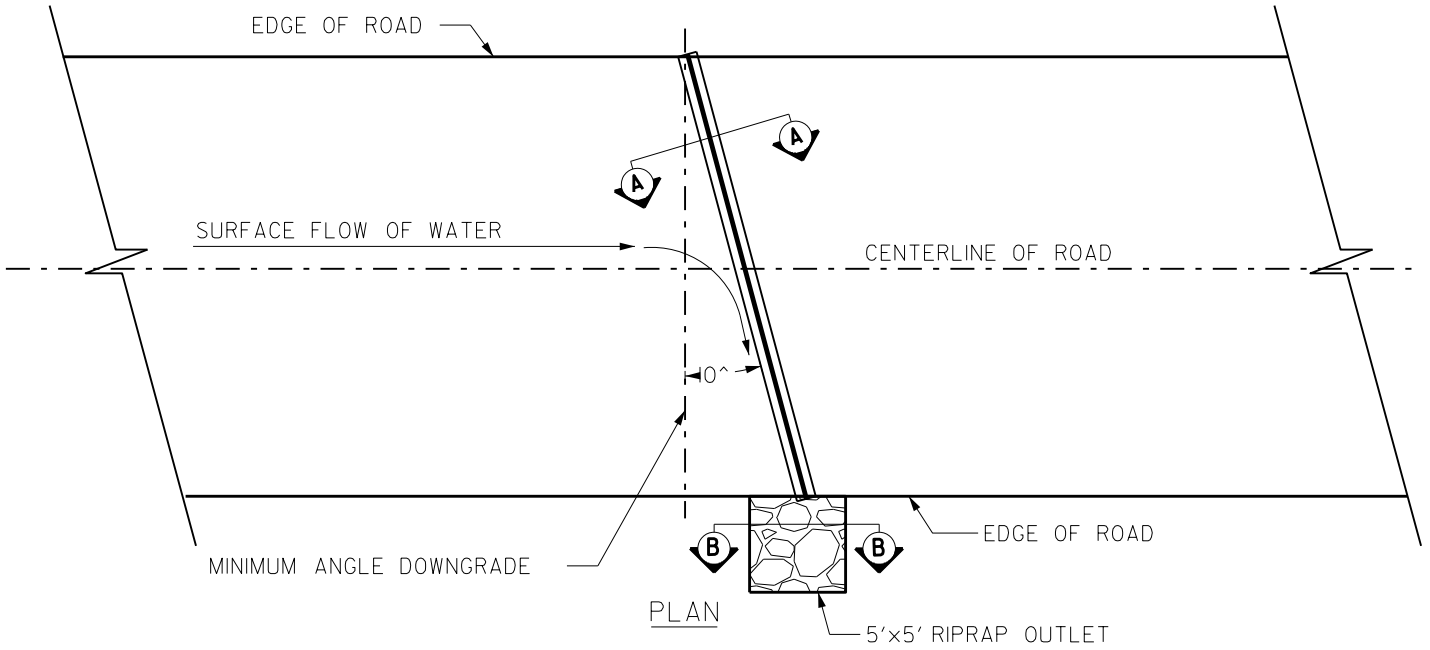


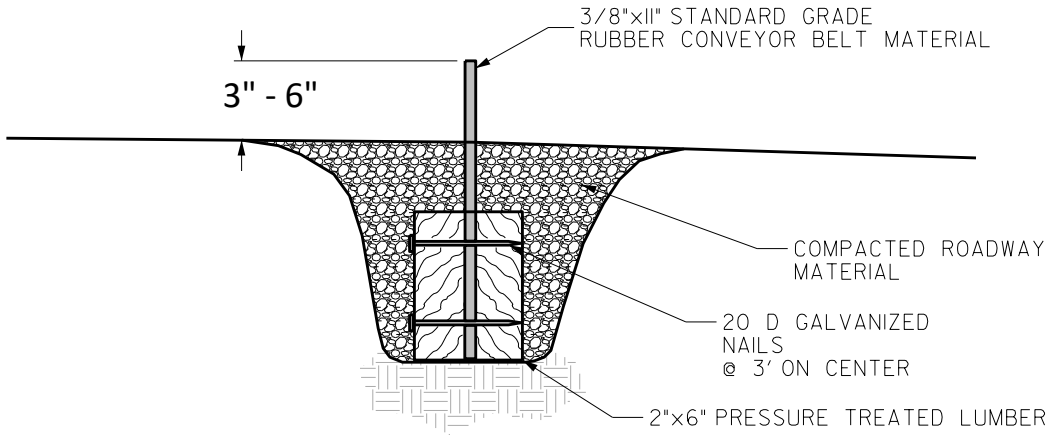
CONSTRUCTION SPECIFICATIONS

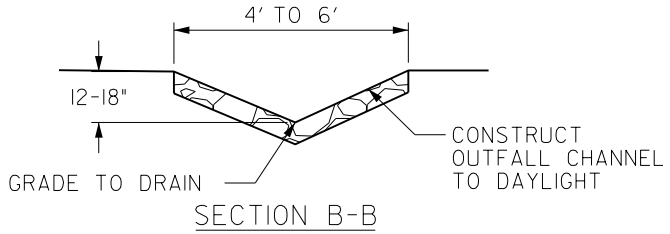
1. INSTALL THE WATER BAR AS SOON AS THE RIGHT OF WAY IS CLEARED AND GRADED.
2. DISK OR STRIP THE SOD FROM THE BASE FOR THE CONSTRUCTED RIDGE BEFORE PLACING FILL.
3. TRACK THE RIDGE TO COMPACT IT TO THE DESIGN CROSS SECTION.
4. THE UNRESTRICTED OUTLET SHALL BE LOCATED ON AN UNDISTURBED AREA. FIELD SPACING WILL BE ADJUSTED TO USE THE MOST STABLE OUTLET AREAS. OUTLET PROTECTION WILL BE PROVIDED WHEN NATURAL AREAS ARE NOT ADEQUATE.
5. VEHICLE CROSSING SHALL BE STABILIZED WITH GRAVEL. EXPOSED AREAS SHALL BE SEEDED AND MULCHED WITHIN 2 DAYS.
6. PERIODICALLY INSPECT WATER BARS FOR EROSION DAMAGE AND SEDIMENT. CHECK OUTLET AREAS AND MAKE REPAIRS AS NEEDED TO RESTORE OPERATION.

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

WATER BARS







Rubber Water Bar

STANDARD AND SPECIFICATIONS FOR TOPSOILING

Definition & Scope

Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

Conditions Where Practice Applies

Topsoil is applied to subsoils that are droughty (low available moisture for plants), stony, slowly permeable, salty or extremely acid. It is also used to backfill around shrub and tree transplants. This standard does not apply to wetland soils.

Design Criteria

1. Preserve existing topsoil in place where possible, thereby reducing the need for added topsoil.

2. Conserve by stockpiling topsoil and friable fine textured subsoils that must be stripped from the excavated site and applied after final grading where vegetation will be established. Topsoil stockpiles must be stabilized. Stockpile surfaces can be stabilized by vegetation, geotextile or plastic covers. This can be aided by orientating the stockpile lengthwise into prevailing winds.

3. Refer to USDA Natural Resource Conservation Service soil surveys or soil interpretation record sheets for further soil texture information for selecting appropriate design topsoil depths.

Site Preparation

1. As needed, install erosion and sediment control practices such as diversions, channels, sediment traps, and stabilizing measures, or maintain if already installed.

2. Complete rough grading and final grade, allowing for depth of topsoil to be added.

3. Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent. Areas that have been overly compacted shall be decompacted in accordance with the Soil Restoration Standard.

4. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.

Topsoil Materials

1. Topsoil shall have at least 6 percent by weight of fine textured stable organic material, and no greater than 20 percent. Muck soil shall not be considered topsoil.

2. Topsoil shall have not less than 20 percent fine textured material (passing the NO. 200 sieve) and not more than 15 percent clay.

3. Topsoil treated with soil sterilants or herbicides shall be so identified to the purchaser.

4. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter, trash, noxious weeds such as nut sedge and quackgrass, and will have less than 10 percent gravel.

5. Topsoil containing soluble salts greater than 500 parts per million shall not be used.

6. Topsoil may be manufactured as a mixture of a mineral component and organic material such as compost.

Application and Grading

1. Topsoil shall be distributed to a uniform depth over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water puddles.

2. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched, and stabilized by “tracking” with suitable equipment.

3. Apply topsoil in the amounts shown in Table 4.7 below:

Table 4.7 - Topsoil Application Depth		
Site Conditions	**Intended Use**	**Minimum Topsoil Depth**
1. Deep sand or loamy sand	Mowed lawn	6 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	1 in.
2. Deep sandy loam	Mowed lawn	5 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	none
3. Six inches or more: silt loam, clay loam, loam, or silt	Mowed lawn	4 in.
	Tall legumes, unmowed	1 in.
	Tall grass, unmowed	1 in.

STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING

Definition & Scope

Providing temporary erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

Conditions Where Practice Applies

Temporary seedings may be necessary on construction sites to protect an area, or section, where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seedings are likely to fail due to mid-summer heat and drought. The intent is to provide temporary protective cover during temporary shutdown of construction and/or while waiting for optimal planting time.

Criteria

Water management practices must be installed as appropriate for site conditions. The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

IF: Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

Any seeding method may be used that will provide uniform application of seed to the area and result in relatively good soil to seed contact.

Mulch the area with hay or straw at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturers' specification. Caution is advised when using nylon or other synthetic products. They may be difficult to remove prior to final seeding and can be a hazard to young wildlife species.

Princetown to Gordon Road Segment General Erosion Control Seed Mixes

Upland Seed Mix

Scientific Name	**Common Name**	**Percent Live Seed (PLS)**
Lolium perenne	Perennial Ryegrass	45
Lolium multiflorum	Annual Ryegrass	25
Festuca arundinacea	Tall Fescue	20
Trifolium repens	Ladino Clover	5
Poa pratensis	Kentucky Bluegrass	5
Application Rate: 50 lbs./acre broadcast		

Wetland Seed Mix

Scientific Name	**Common Name**	**Percent Live Seed (PLS)**
Agrostis stolonifera	Creeping bentgrass	63
Poa trivialis	Rough bluegrass	17
Alopecurus arundinaceus	Meadow Foxtail	11
Lolium multiflorum	Annual Ryegrass	4.5
Panicum clandestimum	Deertongue	4.5
Application Rate: 30 lbs./acre broadcast		

STANDARD AND SPECIFICATIONS FOR TEMPORARY ACCESS WATERWAY CROSSING

Definition & Scope

A temporary access waterway crossing is a structure placed across a waterway to provide access for construction purposes for a period of less than one year. Consideration should be given to stream flow capacity and velocity anticipated during the period of time that the temporary structures will be in place. Temporary access crossings shall not be utilized to maintain traffic for the general public. The purpose of the temporary access waterway crossing is to provide safe, environmentally sound access across a waterway for construction equipment by establishing minimum standards and specifications for the design, construction, maintenance, and removal of the structure. This standard and specification may represent a channel constriction, thus, the temporary nature of waterway access crossing must be stressed. They should be planned to be in service for the shortest practical period of time and removed as soon as their function is completed.

Conditions Where Practice Applies

This standard and specification for temporary access waterway crossings is applicable in non-tidal waterways. It provides designs based on waterway geometry rather than the drainage area contributing to the point of crossing.

The principal consideration for development of the standard and specifications is concern for erosion and sediment control, tracking soil into waterways, blocking fish passage and destruction of aquatic habitat. Structural utility and safety must also be considered when designing temporary access waterway crossings to withstand expected loads.

The three types of standard temporary access waterway crossings are bridges, culverts, and fords.

General Requirements

1. In-Stream Excavation: In-Stream excavation shall be limited to only that necessary to allow installation of the standard methods as presented in Subsection "Temporary Access Waterway Crossing Methods."

2. Elimination of Fish Migration Barriers: Of the two basic methods presented in Subsection "Temporary Access Waterway Crossing Methods," bridges pose the least potential for creating barriers to aquatic migration. The construction of any specific crossing method as presented in Subsection "Temporary Access Waterway Crossing Methods," shall not cause a significant water level difference between the upstream and downstream water surface elevations. Fish spawning or migration within waterways generally occurs between October 1 to May 31 for water classified for trout and from March 15 to July 15 for other streams. Fish spawning or migration dates can vary across New York and restrictions imposed by the NYS Department of Environmental Conservation may vary and must be checked.

3. Crossing Alignment: The temporary waterway crossing shall be at right angles to the stream. Where approach conditions dictate, the crossing may vary 15 degrees from a line drawn perpendicular to the centerline of the stream at the intended crossing location.

4. Road Approaches: The centerline of both roadway approaches shall coincide with the crossing alignment centerline for a minimum distance of 50 feet from each bank of the waterway being crossed. If physical or right-of-way restraints preclude the 50 feet minimum, a shorter distance may be provided. All fill materials associated with the roadway approach shall be limited to a maximum height of 2 feet above the existing flood plain elevation.

5. Surface Water Diverting Structure: A water diverting structure such as a swale shall be constructed (across the roadway on both roadway approaches) 50 feet (maximum) on either side of the waterway crossing. This will prevent roadway surface runoff from directly entering the waterway. The 50 feet is measured from the top of the waterway bank. Design criteria for this diverting structure shall be in accordance with the "Standard and Specification" for

the individual design standard of choice. If the roadway approach is constructed with a reverse grade away from the waterway, a separate diverting structure is not required.

6. Road Width: All crossings shall have one traffic lane. The minimum width shall be 12 feet with a maximum width of 20 feet.

7. Time of Operation: All temporary crossing shall be removed within 14 calendar days after the structure is no longer needed. Unless prior written approval is obtained, all structures shall be removed within one year from the date of the installation.

8. Materials

A. Aggregate: There shall be no earth or soil materials used for construction within the waterway channel. NYS DOT specifications for coarse aggregate designation No. 4 (2" to 4"), also referenced as AASHTO designation No. 1, shall be the minimum acceptable aggregate size for temporary crossings. Larger aggregates will be allowed.

B. Filter Cloth: Filter cloth is a fabric consisting of either woven or nonwoven plastic, polypropylene, or nylon used to distribute the load, retain fines, allow increased drainage of the aggregate and reduce mixing of the aggregate with the subgrade soil. The designer shall specify the appropriate filter fabric/cloth for a specific use.

Temporary Access Waterway Crossing Methods

The following criteria for erosion and sediment control shall be considered when selecting a specific temporary access waterway crossing standard method:

1. Site aesthetics: Select a standard design method that will least disrupt the existing terrain of the stream reach. Consider the effort that will be required to restore the area after the temporary crossing is removed.

2. Site location: Locate the temporary crossing where there will be the least disturbance to the soils of the existing waterway banks. When possible, locate the crossing at a point receiving minimal surface runoff.

3. Physical site constraints: The physical constraints of a site may preclude the selection of one or more of the standard methods.

4. Time of year: The time of year may preclude the selection of one or more of the standard methods due to fish spawning or migration restrictions.

5. Vehicular loads and traffic patterns: Vehicular loads, traffic patterns, and frequency of crossing should be considered in choosing a specific method.

6. Maintenance of crossing: The standard methods will require various amounts of maintenance. The bridge method should require the least maintenance, whereas the ford method will probably require more intensive maintenance.

7. Removal of the Structure: Ease of removal and subsequent damage to the waterway should be primary factors in considering the choice of a standard method.

Temporary Access Bridge (Figure 2.2 on page 2.36)

A temporary access bridge is a structure made of wood, metal, or other materials, which provides access across a stream or waterway.

Considerations:

1. This is the preferred method for temporary access waterway crossings. Normally, bridge construction causes the least disturbance to the waterway bed and banks when compared to the other access waterway crossings.

2. Most bridges can be quickly removed and reused.

3. Temporary access bridges pose the least chance for interference with fish migration when compared to the other temporary access waterway crossings.

4. Span width will be limited by the length of the bridging material and weight of equipment that will drive over the temporary bridge. Spans of over 10 feet are difficult to construct.

5. Restrictions and Permits: A permit from the New York State Department of Environmental Conservation, Division of Environmental Permits, Regional Permit Administrator, will be needed to install and remove temporary access culverts in streams with a classification of C(T) and higher. Installation and removal may not be permitted during the period of time from the start of trout spawning until the eggs have hatched. In some instances, restrictions may also be applied to bass spawning waters.

Construction Specifications:

1. Restriction: Construction, use, or removal of a temporary access bridge will not normally have any time of year restrictions if construction, use, or

removal does not disturb the stream or its banks.

2. Bridge Placement: A temporary bridge structure shall be constructed at or above bank elevation to prevent the entrapment of floating materials and debris.

3. Abutments: Abutments shall be placed parallel to and on stable banks.

4. Bridge Span: Bridges shall be constructed to span the entire channel. If a footing, pier, or bridge support is constructed within the waterway, a stream- disturbance permit may be required.

5. Stringers: Stringers shall either be logs, saw timber, pre-stressed concrete beams, metal beams, or other approved materials.

6. Deck Material: Decking shall be of sufficient strength to support the anticipated load. All decking members shall be placed perpendicular to the stringers, butted tightly, and securely fastened to the stringers. Decking materials must be butted tightly to prevent any soil material tracked onto the bridge from falling into the waterway below.

7. Run Planks (optional): Run planking shall be securely fastened to the length of the span. One run plank shall be provided for each track of the equipment wheels. Although run planks are optional, they may be necessary to properly distribute loads.

8. Curbs or Fenders: Curbs or fenders may be installed along the outer sides of the deck. Curbs or fenders are an option, which will provide additional safety.

9. Bridge Anchors: Bridges shall be securely anchored at only one end using steel cable or chain. Anchoring at only one end will prevent channel obstruction in the event that floodwaters float the bridge. Acceptable anchors are large trees, large boulders, or driven steel anchors. Anchoring shall be sufficient to prevent the bridge from floating downstream and possibly causing an obstruction to the flow.

10. Stabilization: All areas disturbed during installation shall be stabilized within 14 calendar days of that disturbance in accordance with the Standard and Specification for Temporary Construction Area Seeding on page 4.58.

Bridge Maintenance Requirements

1. Inspection: Periodic inspection shall be performed by the user to ensure that the bridge, streambed, and streambanks are maintained and not damaged.

2. Maintenance: Maintenance shall be performed, as needed to ensure that the structure complies with the standard and specifications. This shall include removal and disposal of any trapped sediment or debris. Sediment shall be disposed of outside of the floodplain and stabilized.

Bridge Removal and Clean-Up Requirements

1. Removal: When the temporary bridge is no longer needed, all structures including abutments and other bridging materials shall be removed within 14 calendar days. In all cases, the bridge materials shall be removed within one year of installation.

2. Final Clean-Up: Final clean-up shall consist of removal of the temporary bridge from the waterway, protection of banks from erosion, and removal of all construction materials. All removed materials shall be stored outside the waterway floodplain.

3. Method: Removal of the bridge and clean-up of the area shall be accomplished without construction equipment working in the waterway channel.

4. Final Stabilization: All areas disturbed during removal shall be stabilized within 14 calendar days of that disturbance in accordance with the Standard and Specifications for Permanent Construction Area Planting on page 4.42.

Temporary Access Culvert (Figure 2.3 on page 2.37)

A temporary access culvert is a structure consisting of a section(s) of circular pipe, pipe arches, or oval pipes of reinforcing concrete, corrugated metal, or structural plate, which is used to convey flowing water through the crossing.

Considerations

1. Temporary culverts are used where a) the channel is too wide for normal bridge construction, b) anticipated loading may prove unsafe for single span bridges, or c) access is not needed from bank to bank.

2. This temporary waterway crossing method is normally preferred over a ford type of crossing, since disturbance to the waterway is only during construction and removal of the culvert.

3. Temporary culverts can be salvaged and reused.

Construction Specifications

1. Restrictions and Permits: A permit from the New York State Department of Environmental

Conservation, Division of Environmental Permits, Regional Permit Administrator, will be needed to install and remove temporary access culverts in streams with a classification of C(T) and higher. Installation and removal may not be permitted during the period of time from the start of trout spawning until the eggs have hatched. In some instances, restrictions may also be applied to bass spawning waters.

2. Culvert Strength: All culverts shall be strong enough to support their cross sectional area under maximum expected loads.

3. Culvert Size: The size of the culvert pipe shall be the largest pipe diameter that will fit into the existing channel without major excavation of the waterway channel or without major approach fills. If a channel width exceeds 3 feet, additional pipes may be used until the cross sectional area of the pipes is greater than 60 percent of the cross sectional area of the existing channel. The minimum size culvert that may be used is 12-inch diameter pipe.

4. Culvert Length: The culvert(s) shall extend a minimum of one foot beyond the upstream and downstream toe of the aggregate placed around the culvert. In no case shall the culvert exceed 40 feet in length.

5. Filter Cloth: Filter cloth shall be placed on the streambed and streambanks prior to placement of the pipe culvert(s) and aggregate. The filter cloth shall cover the streambed and extend a minimum six inches and a maximum one foot beyond the end of the culvert and bedding material. Filter cloth reduces settlement and improves crossing stability.

6. Culvert Placement: The invert elevation of the culvert shall be installed on the natural streambed grade to minimize interference with fish migration (free passage of fish).

7. Culvert Protection: The culvert(s) shall be covered with a minimum of one foot of aggregate. If multiple culverts are used, they shall be separated by at least 12 in. of compacted aggregate fill. At the minimum, the bedding and fill material used in the construction of the temporary access culvert crossings shall conform with the aggregate requirements cited in the General Requirements subsection.

8. Stabilization: All areas disturbed during culvert installation shall be stabilized within 14 calendar days of the disturbance in accordance with the Standard for Permanent Construction Area Plantings.

Culvert Maintenance Requirements

1. Inspection: Periodic inspection shall be performed to ensure that the culverts, streambed, and streambanks are not damaged, and that sediment is not entering the stream or blocking fish passage or migration.

2. Maintenance: Maintenance shall be performed, as needed in a timely manner to ensure that structures are in compliance with this standard and specification. This shall include removal and disposal of any trapped sediment or debris. Sediment shall be disposed of and stabilized outside the waterway flood plain.

Culvert Removal and Clean-Up Requirements

1. Removal: When the crossing has served its purpose, all structures, including culverts, bedding, and filter cloth materials shall be removed within 14 calendar days. In all cases, the culvert materials shall
be removed within one year of installation. No structure shall be removed during the spawning season (generally October 1 through May 31 for trout waters and March 15 through July 15 for other waters).

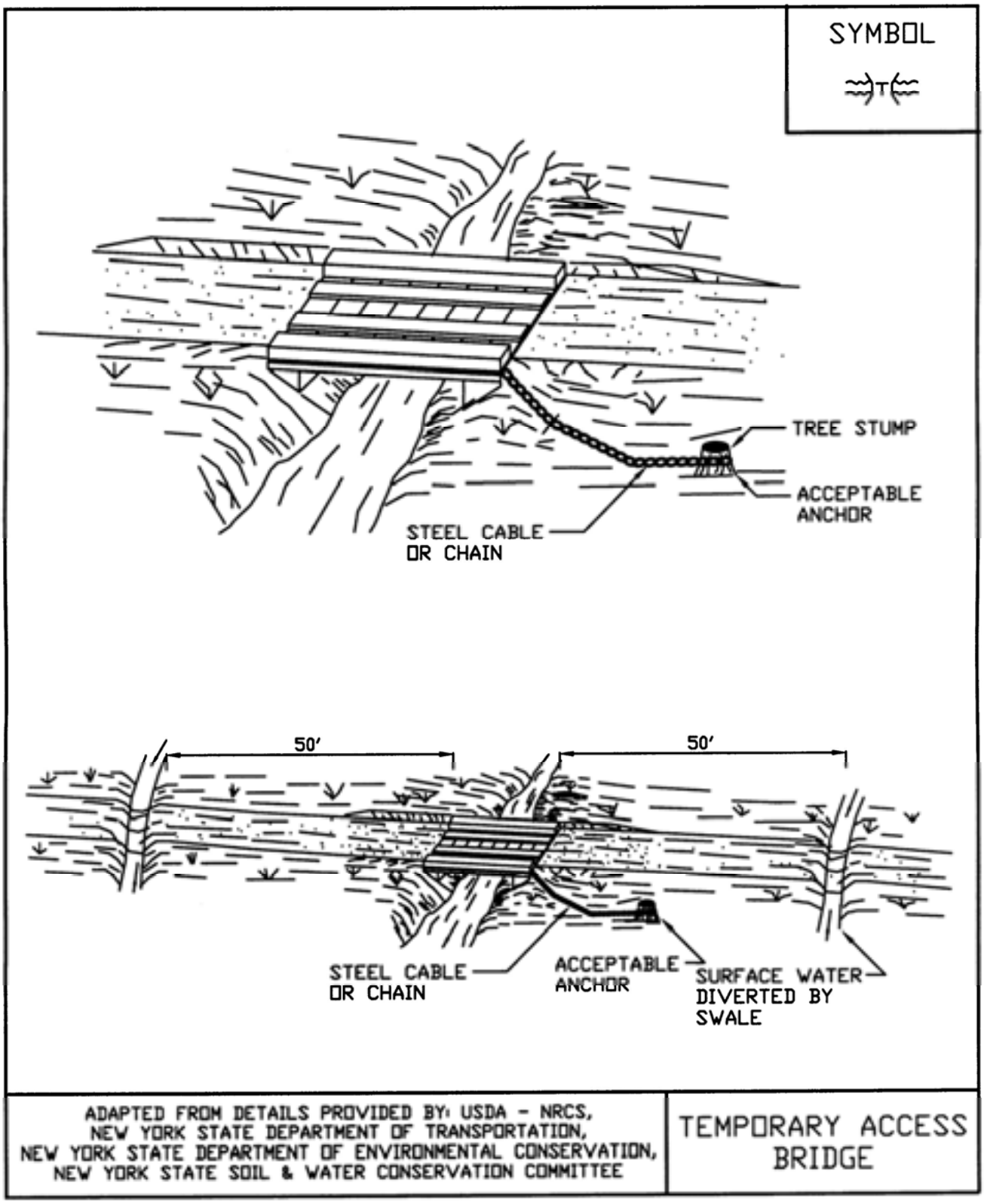
2. Final Clean-Up: Final clean-up shall consist of removal of the temporary structure from the waterway, removal of all construction materials, restoration of original stream channel cross section, and protection of the streambanks from erosion. Removed material shall be stored outside of the waterway floodplain.

3. Method: Removal of the structure and clean-up of the area shall be accomplished without construction equipment working in the waterway channel.

4. Final Stabilization: All areas disturbed during culvert removal shall be stabilized within 14 calendar days of the disturbance in accordance with the Standard for Permanent Construction Area Plantings.

NOTE: Any temporary access crossing shall conform to the technical requirements of this Standard and Specifications as well as any specific requirement imposed by the New York State Department of Environmental Conservation and the US Army Corps of Engineers. Permits may be required for streambank disturbance.

Figure 2.2
Temporary Access Bridge



STANDARD AND SPECIFICATIONS FOR SURFACE ROUGHENING

Definition & Scope

Roughening a bare soil surface whether through creating horizontal grooves across a slope, stair-stepping, or tracking with construction equipment to aid the establishment of vegetative cover from seed, to reduce runoff velocity and increase infiltration, and to reduce erosion and provide for trapping of sediment.

Conditions Where Practice Applies

All construction slopes require surface roughening to facilitate stabilization with vegetation, particularly slopes steeper than 3:1.

Design Criteria

There are many different methods to achieve a roughened soil surface on a slope. No specific design criteria is required. However, the selection of the appropriate method depends on the type of slope. Methods include tracking, grooving, and stair-stepping. Steepness, mowing requirements, and/or a cut or fill slope operation are all factors considered in choosing a roughening method.

Construction Specifications

1. Cut Slope, No mowing.

   A. Stair-step grade or groove cut slopes with a gradient steeper than 3:1 (Figure 4.18).

   B. Use stair-step grading on any erodible material soft enough to be ripped with a bulldozer. Slopes of soft rock with some soil are particularly suited to stair-step grading.

   C. Make the vertical cut distance less than the horizontal distance, and slightly slope the horizontal position of the "step" to the vertical wall.

   D. Do not make vertical cuts more than 2 feet in soft materials or 3 feet in rocky materials.

Grooving uses machinery to create a series of ridges and depressions that run perpendicular to the slope following the contour. Groove using any appropriate implement that can be safely operated on the slope, such as disks, tillers, spring harrows, or the teeth of a front-end loader bucket. Do not make the grooves less than 3 inches deep or more than 15 inches apart.

2. Fill Slope, No mowing

   A. Place fill to create slopes with a gradient no steeper than 2:1 in lifts 9 inches or less and properly compacted. Ensure the face of the slope consists of loose, uncompacted fill 4 to 6 inches deep. Use grooving as described above to roughen the slope, if necessary.

   B. Do not back blade or scrape the final slope face.

3. Cuts/Fills, Mowed Maintenance

   A. Make mowed slopes no steeper than 3:1.

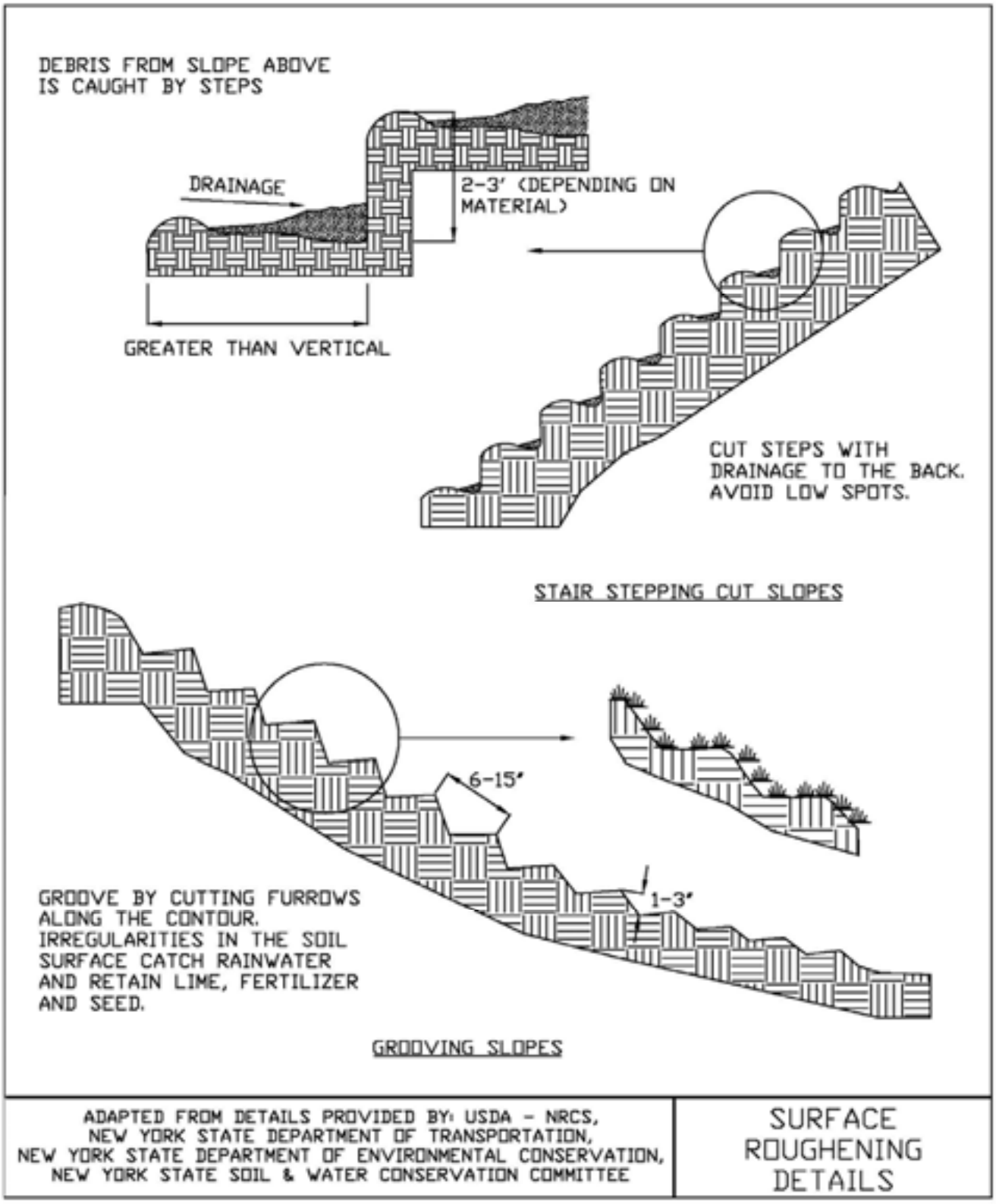
   B. Roughen these areas to shallow grooves by normal tilling, disking, harrowing, or use of cultipacker-seeder. Make the final pass of such tillage equipment on the contour.

   C. Make grooves at least 1 inch deep and a maximum of 10 inches apart.

   D. Excessive roughness is undesirable where mowing is planned.

Tracking should be used primarily in sandy soils to avoid undue compaction of the soil surface. Tracking is generally not as effective as the other roughening methods described. (It has been used as a method to track down mulch.) Operate tracked machinery up and down the slope to leave horizontal depressions in the soil. Do not back-blade during the final grading operation.

Figure 4.18
Surface Roughening



STANDARD AND SPECIFICATIONS FOR STRAW BALE DIKE

Definition & Scope

A **temporary** barrier of straw, or similar material, used to intercept sediment laden runoff from small drainage areas of disturbed soil to reduce runoff velocity and effect deposition of the transported sediment load. Straw bale dikes have an estimated design life of three (3) months.

Condition Where Practice Applies

The straw bale dike is used where:

1. No other practice is feasible.
2. There is no concentration of water in a channel or other drainageway above the barrier.
3. Erosion would occur in the form of sheet erosion.
4. Length of slope above the straw bale dike does not exceed the following limits with the bale placed 10 feet from the toe of the slope:

Constructed Slope	Percent Slope	Slope Length (ft.)
2:1	50	25
3:1	33	50
4:1	25	75

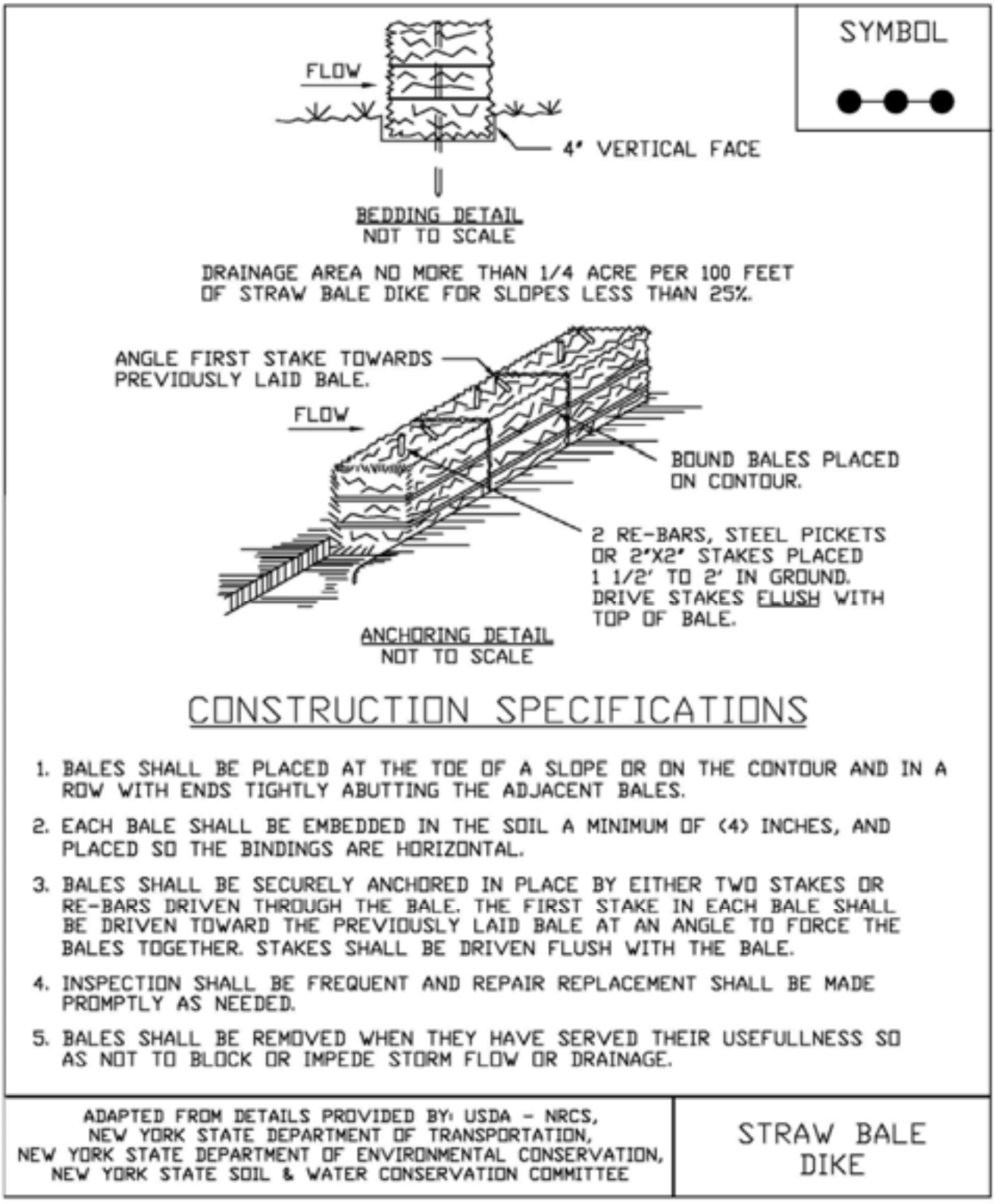
Where slope gradient changes through the drainage area, steepness refers to the steepest slope section contributing to the straw bale dike.

The practice may also be used for a single family lot if the slope is less than 15 percent. The contributing drainage areas in this instance shall be less than one quarter of an acre per 100 feet of dike and the length of slope above the dike shall be less than 100 feet.

Design Criteria

The above table is adequate, in general, for a one-inch rainfall event. Larger storms could cause failure of this practice. Use of this practice in sensitive areas for longer than one month should be specifically designed to store expected runoff. All bales shall be placed on the contour with cut edge of bale adhering to the ground. See Figure 5.34 on page 5.64 for details.

Figure 5.34
Straw Bale Dike



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 Properties[3]	Light Duty[1] Roads Grade Subgrade	Heavy Duty[2] Haul Roads Rough Graded	Test Method
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	-

[1]Light 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.

[2]Heavy 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.

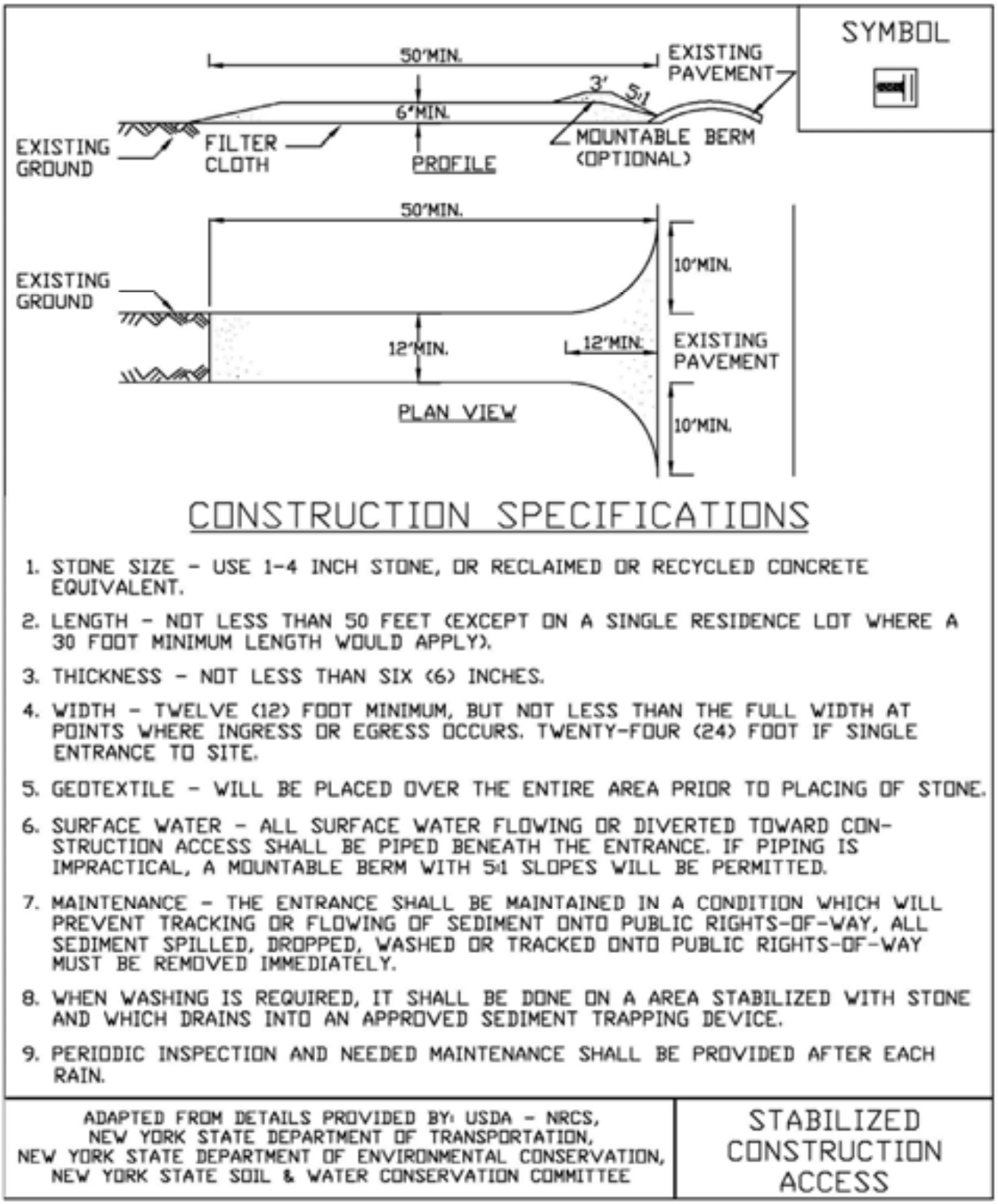
[3]Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

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



CONSTRUCTION SPECIFICATIONS

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. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION 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
2. Maximum ponding depth of 1.5 feet behind the fence; and
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

1. 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.

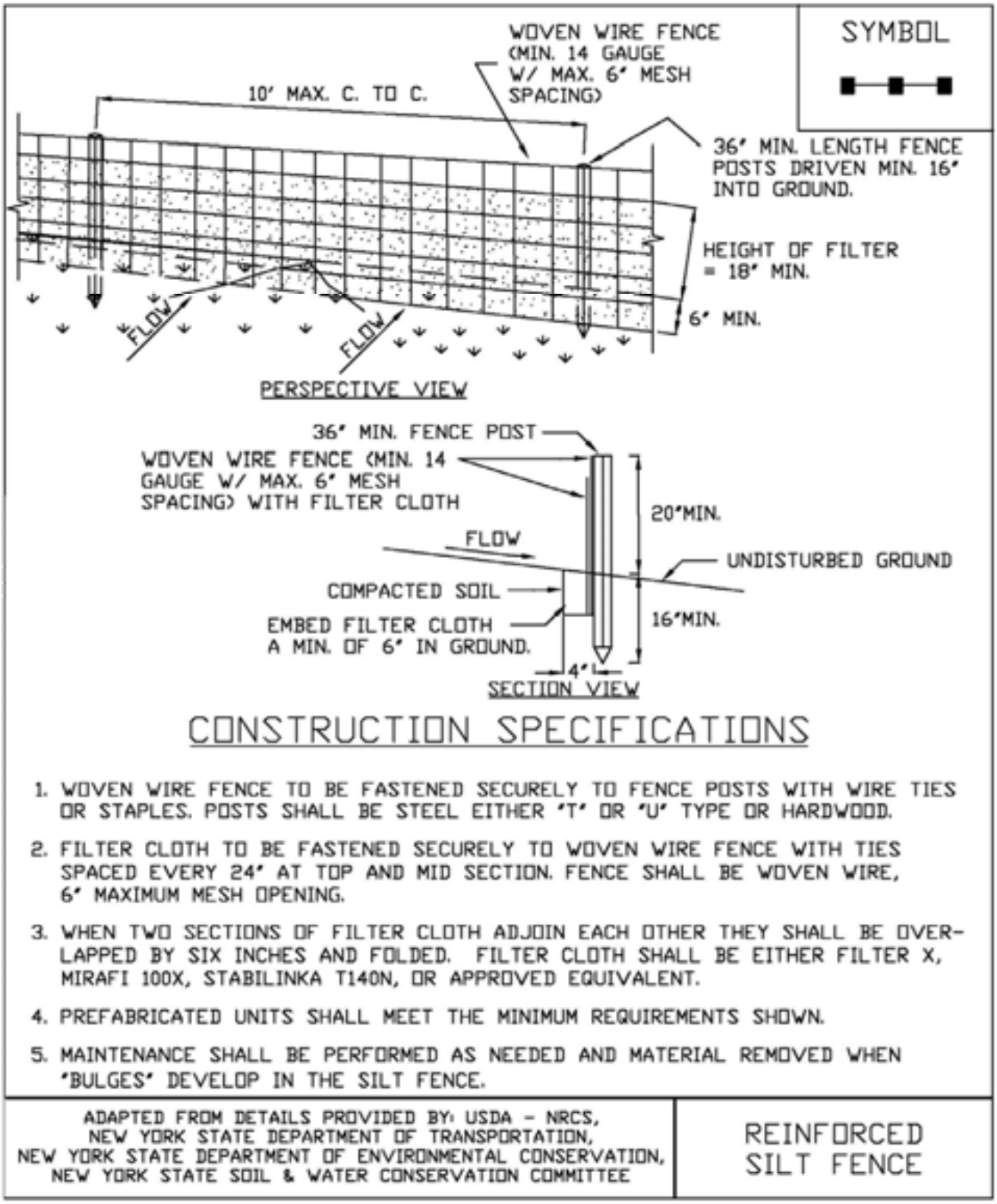
3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.

4. Prefabricated silt fence is acceptable as long as all material specifications are met.

Super Silt Fence

Reinforced Silt Fence

Figure 5.30
Reinforced Silt Fence



STANDARD AND SPECIFICATIONS FOR PERIMETER DIKE/SWALE

Definition & Scope

A **temporary** ridge of soil formed by excavating an adjoining swale located along the perimeter of the site or disturbed area. Its purpose is to prevent off site storm run-on from entering a disturbed area and to prevent sediment laden storm runoff from leaving the construction site or disturbed area.

Conditions Where Practice Applies

Perimeter dike/swale is constructed to divert flows from entering a disturbed area, or along tops of slopes to prevent flows from eroding the slope, or along base of slopes to direct sediment laden flows to a trapping device.

The perimeter dike/swale shall remain in place until the disturbed areas are permanently stabilized.

Design Criteria

See Figure 3.14 on page 3.36 for details.

The perimeter dike/swale shall not be constructed outside property lines or setbacks without obtaining legal easements from affected adjacent property owners. A design is not required for perimeter dike/swale. The following criteria shall be used:

Drainage area – Less than 2 acres (for drainage areas larger than 2 acres but less than 10 acres, see earth dike or construction ditch; for drainage areas larger than 10 acres, see standard and specifications for diversion).

Height – 18 inches minimum from bottom of swale to top of dike evenly divided between dike height and swale depth.

Bottom width of dike – 2 feet minimum.

Width of swale – 2 feet minimum.

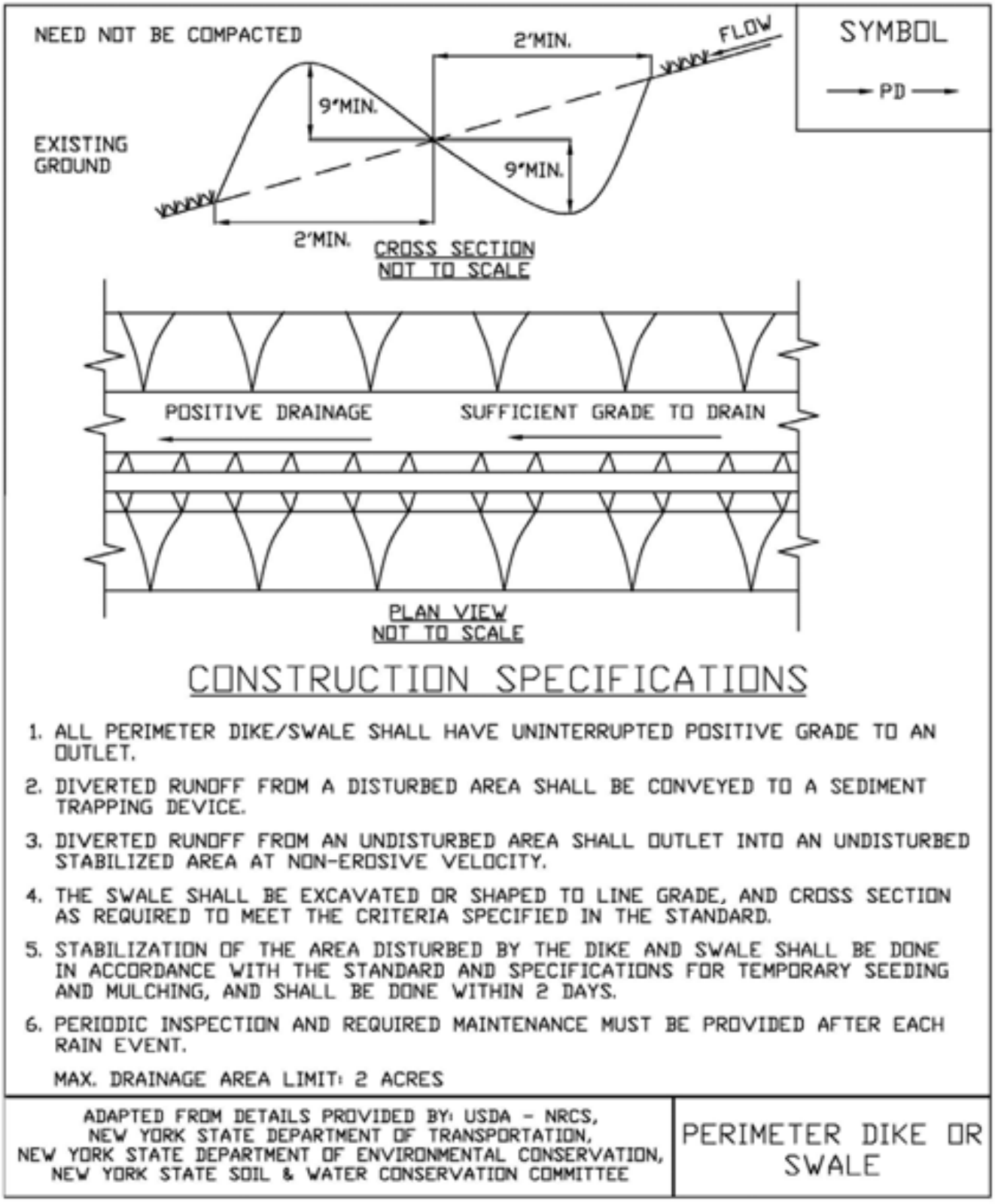
Grade – Dependent upon topography, but shall have positive drainage (sufficient grade to drain) to an adequate outlet. Maximum allowable grade not to exceed 8 percent.

Stabilization – The disturbed area of the dike and swale shall be stabilized within 2 days of installation, in accordance with the standard and specifications for construction ditch (page 3.4).

Outlet

1. Perimeter dike/swale shall have a stabilized outlet.
2. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area.
3. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap, sediment basin, or to an area protected by any of these practices.
4. The on-site location may need to be adjusted to meet field conditions in order to utilize the most suitable outlet.

Figure 3.14
Perimeter Dike/Swale Detail



CONSTRUCTION SPECIFICATIONS

1. ALL PERIMETER DIKE/SWALE SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED IN THE STANDARD.
5. STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SWALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATIONS FOR TEMPORARY SEEDING AND MULCHING, AND SHALL BE DONE WITHIN 2 DAYS.
6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

MAX. DRAINAGE AREA LIMIT: 2 ACRES

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

PERIMETER DIKE OR SWALE

STANDARD AND SPECIFICATIONS FOR EARTH DIKE

Definition & Scope

A **temporary** berm or ridge of compacted soil, located in such a manner as to channel water to a desired location. Its purpose is to direct runoff to a sediment trapping device, thereby reducing the potential for erosion and off site sedimentation. Earth dikes can also be used for diverting clean water away from disturbed areas.

Conditions Where Practice Applies

Earth dikes are often constructed across disturbed areas and around construction sites such as graded parking lots and subdivisions. The dikes shall remain in place until the disturbed areas are permanently stabilized.

Design Criteria

See Figure 3.5 on page 3.15 for details.

General

	Dike A	Dike B
Drainage Area	<5 Ac	5-10 Ac
Dike Height	18 in.	36 in.
Dike Width	24 in.	36 in.
Flow Width	4 ft.	6 ft.
Flow Depth in Channel	8 in.	15 in.
Side Slopes	2:1 or flatter	2:1 or flatter
Grade	0.5% Min. 10% Max.	0.5% Min. 10% Max.

For drainage areas larger than 10 acres, refer to the Standard and Specifications for Diversion on page 3.9.

Stabilization

Stabilization of the dike shall be completed within 2 days of installation in accordance with the standard and specifications for seed and straw mulch or straw mulch only if not in seeding season. The flow channel shall be stabilized as per the following criteria:

Type of Treatment	Channel Grade[1]	Flow Channel	
		A (<5 Ac.)	B (5-10 Ac.)
1	0.5-3.0%	Seed & Straw Mulch	Seed & Straw Mulch
2	3.1-5.0%	Seed & Straw Mulch	Seed and cover with RECP, sod, or lined with plastic or 2" stone
3	5.1-8.0%	Seed and cover with RECP, Sod, or line with plastic or 2 in. stone	Line with 4-8 in. rip-rap or, geotextile
4	8.1-10%	Line with 4-8 in. rip-rap or geotextile	Site Specific Design

1 In highly erodible soils, as defined by the local approving agency, refer to the next higher slope grade for type of stabilization.

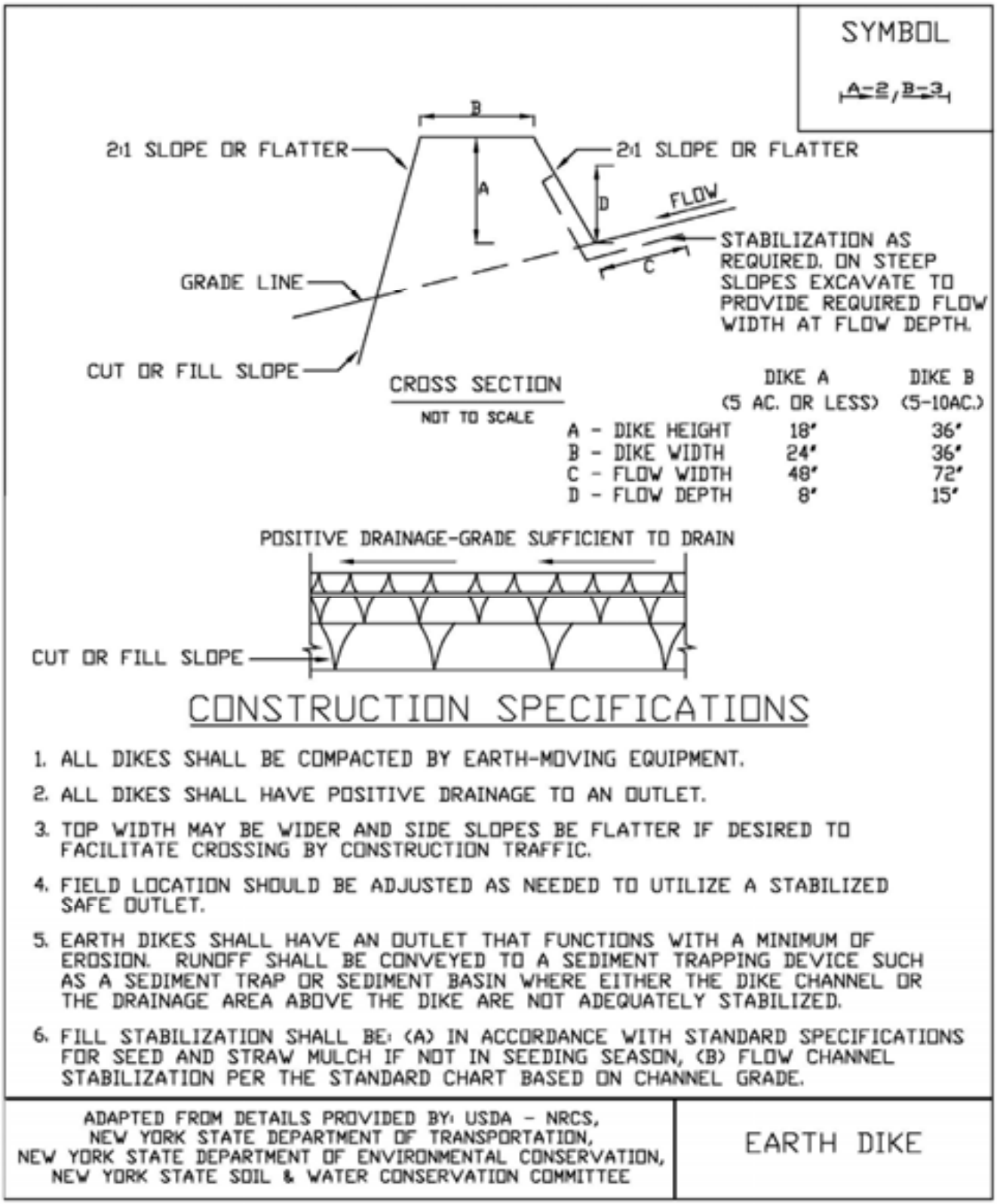
Outlet

Earth dikes shall have an outlet that functions with a minimum of erosion.

Runoff shall be conveyed to a sediment trapping device until the drainage area above the dike is adequately stabilized.

The on-site location may need to be adjusted to meet field conditions in order to utilize the most suitable outlet.

Figure 3.5
Earth Dike Detail



STANDARD AND SPECIFICATIONS FOR DUST CONTROL

Definition & Scope

The control of dust resulting from land-disturbing activities, to prevent surface and air movement of dust from disturbed soil surfaces that may cause off-site damage, health hazards, and traffic safety problems.

Conditions Where Practice Applies

On construction roads, access points, and other disturbed areas subject to surface dust movement and dust blowing where off-site damage may occur if dust is not controlled.

Design Criteria

Construction operations should be scheduled to minimize the amount of area disturbed at one time. Buffer areas of vegetation should be left where practical. Temporary or permanent stabilization measures shall be installed. No specific design criteria is given; see construction specifications below for common methods of dust control.

Water quality must be considered when materials are selected for dust control. Where there is a potential for the material to wash off to a stream, ingredient information must be provided to the NYSDEC.

No polymer application shall take place without written approval from the NYSDEC.

Construction Specifications

A. **Non-driving Areas** – These areas use products and materials applied or placed on soil surfaces to prevent airborne migration of soil particles.

Vegetative Cover – For disturbed areas not subject to traffic, vegetation provides the most practical method of dust control (see Section 3).

Mulch (including gravel mulch) – Mulch offers a fast effective means of controlling dust. This can also include rolled erosion control blankets.

Spray adhesives – These are products generally composed of polymers in a liquid or solid form that are mixed with water to form an emulsion that is sprayed on the soil surface with typical hydroseeding equipment. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations for the specific soils on the site. In no case should the application of these adhesives be made on wet soils or if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators and others working with the material.

B. **Driving Areas** – These areas utilize water, polymer emulsions, and barriers to prevent dust movement from the traffic surface into the air.

Sprinkling – The site may be sprayed with water until the surface is wet. This is especially effective on haul roads and access route to provide short term limited dust control.

Polymer Additives – These polymers are mixed with water and applied to the driving surface by a water truck with a gravity feed drip bar, spray bar or automated distributor truck. The mixing ratios and application rates will be in accordance with the manufacturer's recommendations. Incorporation of the emulsion into the soil will be done to the appropriate depth based on expected traffic. Compaction after incorporation will be by vibratory roller to a minimum of 95%. The prepared surface shall be moist and no application of the polymer will be made if there is a probability of precipitation within 48 hours of its proposed use. Material Safety Data Sheets will be provided to all applicators working with the material.

Barriers – Woven geo-textiles can be placed on the driving surface to effectively reduce dust throw and particle migration on haul roads. Stone can also be used for construction roads for effective dust control.

Windbreak – A silt fence or similar barrier can control air currents at intervals equal to ten times the barrier height. Preserve existing wind barrier vegetation as much as practical.

Maintenance

Maintain dust control measures through dry weather periods until all disturbed areas are stabilized.

STANDARD AND SPECIFICATIONS FOR CONSTRUCTION ROAD STABILIZATION

Definition & Scope

The stabilization of temporary construction access routes, on-site vehicle transportation routes, and construction parking areas to control erosion on temporary construction routes and parking areas.

Conditions Where Practice Applies

All traffic routes and parking areas for temporary use by construction traffic.

Design Criteria

Construction roads should be located to reduce erosion potential, minimize impact on existing site resources, and maintain operations in a safe manner. Highly erosive soils, wet or rocky areas, and steep slopes should be avoided. Roads should be routed where seasonal water tables are deeper than 18 inches. Surface runoff and control should be in accordance with other standards.

Road Grade – A maximum grade of 12% is recommended, although grades up to 15% are possible for short distances.

Road Width – 12 foot minimum for one-way traffic or 24 foot minimum for two-way traffic.

Side Slope of Road Embankment – 2:1 or flatter.

Ditch Capacity – On-site roadside ditch and culvert capacities shall be the 10 yr. peak runoff.

Composition – Use a 6-inch layer of NYS DOT sub-base Types 1,2,3, 4 or equivalent as specified in NYSDOT Standard Specifications.

Construction Specifications

1. Clear and strip roadbed and parking areas of all vegetation, roots, and other objectionable material.

2. Locate parking areas on naturally flat areas as available. Keep grades sufficient for drainage, but not more than 2 to 3 percent.

3. Provide surface drainage and divert excess runoff to stabilized areas.

4. Maintain cut and fill slopes to 2:1 or flatter and stabilized with vegetation as soon as grading is accomplished.

5. Spread 6-inch layer of sub-base material evenly over the full width of the road and smooth to avoid depressions.

6. Provide appropriate sediment control measures to prevent offsite sedimentation.

Maintenance

Inspect construction roads and parking areas periodically for condition of surface. Top dress with new gravel as needed. Check ditches for erosion and sedimentation after rainfall events. Maintain vegetation in a healthy, vigorous condition. Areas producing sediment should be treated immediately.

STANDARD AND SPECIFICATIONS FOR CONSTRUCTION DITCH

Definition & Scope

A **temporary** excavated drainage way to intercept sediment laden water and divert it to a sediment trapping device or to prevent runoff from entering disturbed areas by intercepting and diverting it to a stabilized outlet.

Conditions Where Practice Applies

Construction ditches are constructed:

1. to divert flows from entering a disturbed area.
2. intermittently across disturbed areas to shorten overland flow distances.
3. to direct sediment laden water along the base of slopes to a trapping device.
4. to transport offsite flows across disturbed areas such as rights-of-way.

Ditches collecting runoff from disturbed areas shall remain in place until the disturbed areas are permanently stabilized.

Design Criteria

See Figure 3.2 on page 3.6 for details.

General

	Ditch A	Ditch B
Drainage Area	<5 Ac	5-10 Ac
Bottom Width of Flow Channel	4 ft.	6 ft.
Depth of Flow Channel	1 ft.	1 ft.
Side Slopes	2:1 or flatter	2:1 or flatter
Grade	0.5% Min. 10% Max.	0.5% Min. 10% Max.

For drainage areas larger than 10 acres, refer to the Standard and Specification for Grassed Waterways on page 3.23 and 3.24.

Stabilization

Stabilization of the ditch shall be completed within 2 days of installation in accordance with the appropriate standard and specifications for vegetative stabilization or stabilization with mulch as determined by the time of year. The flow channel shall be stabilized as per the following criteria:

The seeding for vegetative stabilization shall be in accordance with the standard on Page 4.78. The seeded area will be mulched in accordance with the standard on Page 4.39.

Type of Treatment	Channel Grade[1]	Flow Channel	
		A (<5 Ac.)	B (5-10 Ac.)
1	0.5-3.0%	Seed & Straw Mulch	Seed & Straw Mulch
2	3.1-5.0%	Seed & Straw Mulch	Seed and cover with RECP[2], Sod, or lined with plastic or 2" stone
3	5.1-8.0%	Seed and cover with RECP[2], Sod, or line with plastic or 2 in. stone	Line with 4-8 in. rip-rap or, geotextile
4	8.1-10%	Line with 4-8 in. rip-rap or geotextile	Site Specific Design

1 In highly erodible soils, as defined by the local approving agency, refer to the next higher slope grade for type of stabilization.
2 Rolled Erosion Control Product.

Outlet

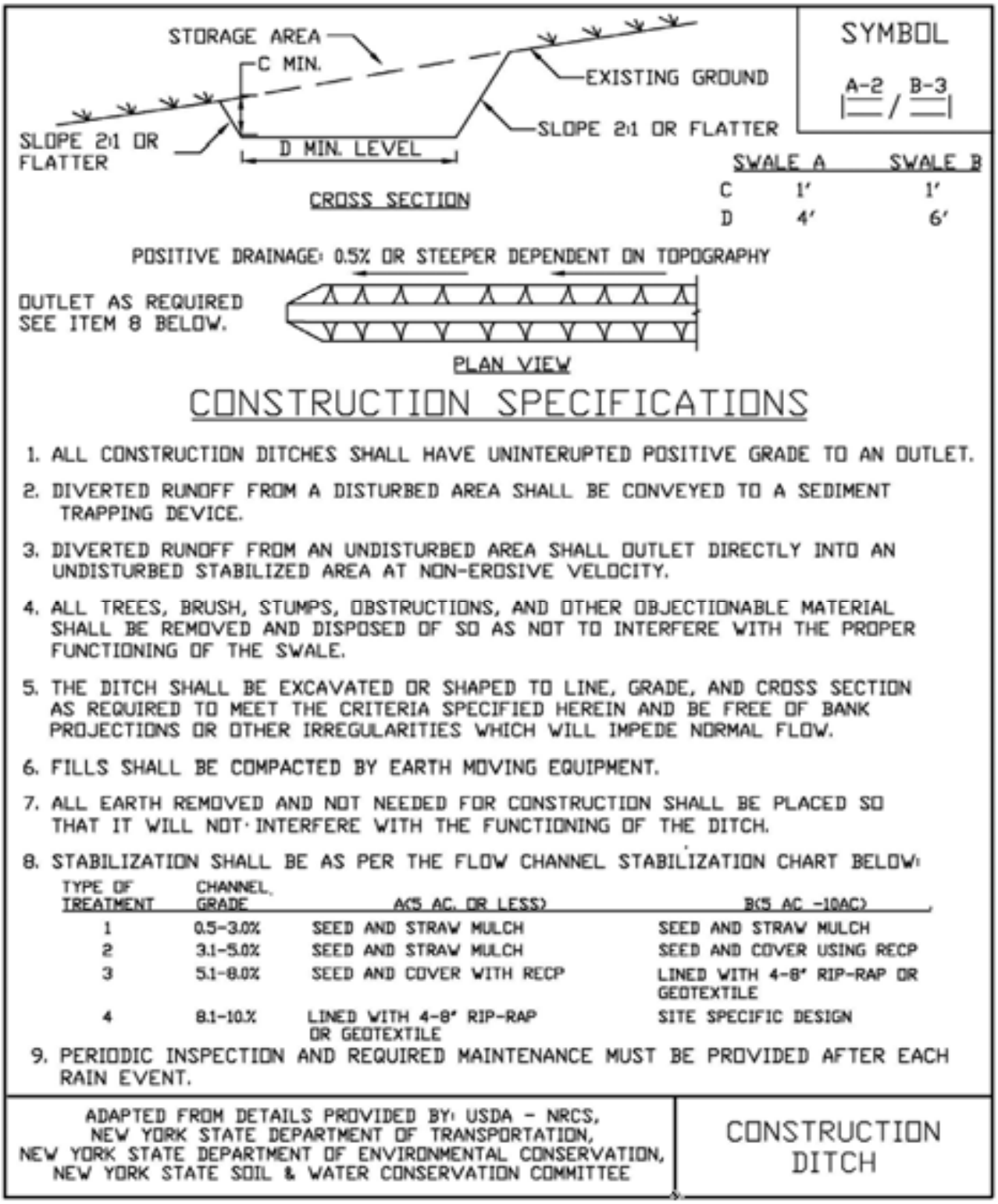
Ditch shall have an outlet that functions with a minimum of erosion, and dissipates runoff velocity prior to discharge off the site.

Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin until the drainage area above the ditch is adequately stabilized.

The on-site location may need to be adusted to meet field conditions in order to utilize the most suitable outlet condition.

If a ditch is used to divert clean water flows from entering a disturbed area, a sediment trapping device may not be needed.

Figure 3.2
Construction Ditch Detail



CONSTRUCTION SPECIFICATIONS

1. ALL CONSTRUCTION DITCHES SHALL HAVE UNINTERUPTED POSITIVE GRADE TO AN OUTLET.
2. DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
3. DIVERTED RUNOFF FROM AN UNDISTURBED AREA SHALL OUTLET DIRECTLY INTO AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
4. ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
5. THE DITCH SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
7. ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DITCH.
8. STABILIZATION SHALL BE AS PER THE FLOW CHANNEL STABILIZATION CHART BELOW:

TYPE OF TREATMENT	CHANNEL GRADE	A(5 AC. OR LESS)	B(5 AC -10AC)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH	SEED AND COVER USING RECP
3	5.1-8.0%	SEED AND COVER WITH RECP	LINED WITH 4-8" RIP-RAP OR GEOTEXTILE
4	8.1-10.%	LINED WITH 4-8" RIP-RAP OR GEOTEXTILE	SITE SPECIFIC DESIGN

9. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

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

CONSTRUCTION DITCH

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.

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.)	Slope %						
	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							

5. 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 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. When using compost filter socks adjacent to surface water, the compost should have a low nutrient value.**

6. The compost filter sock fabric material shall meet the

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.

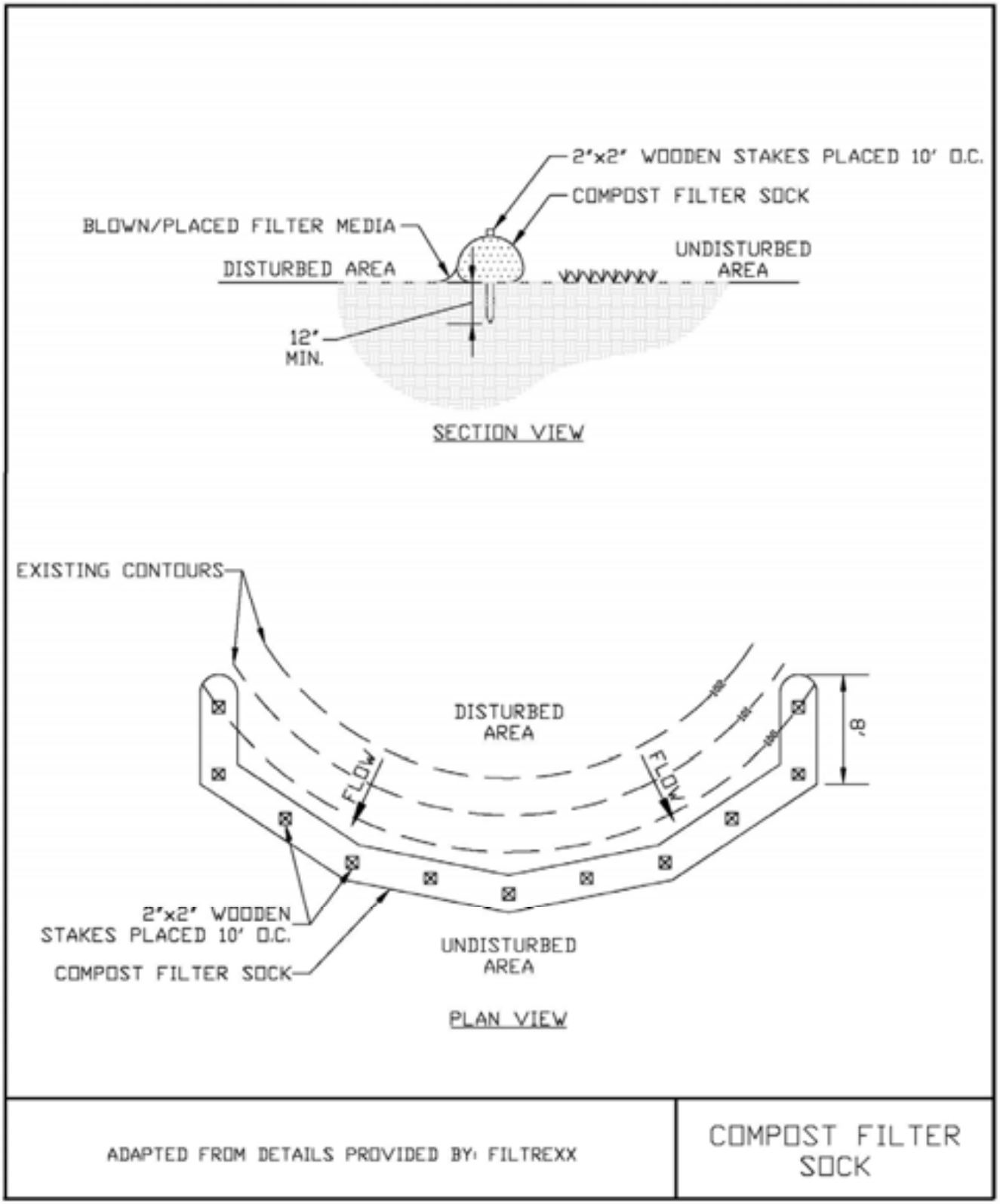
Table 5.1 - Compost Sock Fabric Minimum Specifications Table

Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photodegradable	Photodegradable	Biodegradable	Photodegradable	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
pH	6.0 – 8.0
Moisture content	30% - 60%
Particle size	100% passing a 1" 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 CHECK DAM

Definition & Scope

Small barriers or dams constructed of stone, bagged sand or gravel, or other durable materials across a drainageway to reduce erosion in a drainage channel by reducing the velocity of flow in the channel.

Conditions Where Practice Applies

This practice is used as a **temporary** and, in some cases, a **permanent** measure to limit erosion by reducing velocities in open channels that are degrading or subject to erosion or where permanent stabilization is impractical due to short period of usefulness and time constraints of construction.

Design Criteria

Drainage Area: Maximum drainage area above the check dam shall not exceed two (2) acres.

Height: Not greater than 2 feet. Center shall be maintained 9 inches lower than abutments at natural ground elevation.

Side Slopes: Shall be 2:1 or flatter.

Spacing: The check dams shall be spaced as necessary in the channel so that the crest of the downstream dam is at the elevation of the toe of the upstream dam. This spacing is equal to the height of the check dam divided by the channel slope.

Therefore: $$S = \frac{h}{s}$$

Where: S = spacing interval (ft.)
h = height of check dam (ft.)
s = channel slope (ft./ft.)

Example:

For a channel with a 4% slope and 2 ft. high stone check dams, they are spaced as follows:

$$S = \frac{2\ \text{ft}}{0.04\ \frac{\text{ft}}{\text{ft}}} = 50\ \text{ft}$$

For stone check dams: Use a well graded stone matrix 2 to 9 inches in size (NYS – DOT Light Stone Fill meets these requirements).

The overflow of the check dams will be stabilized to resist erosion that might be caused by the check dam. See Figure 3.1 on page 3.3 for details.

Check dams should be anchored in the channel by a cutoff trench 1.5 ft. wide and 0.5 ft. deep and lined with filter fabric to prevent soil migration.

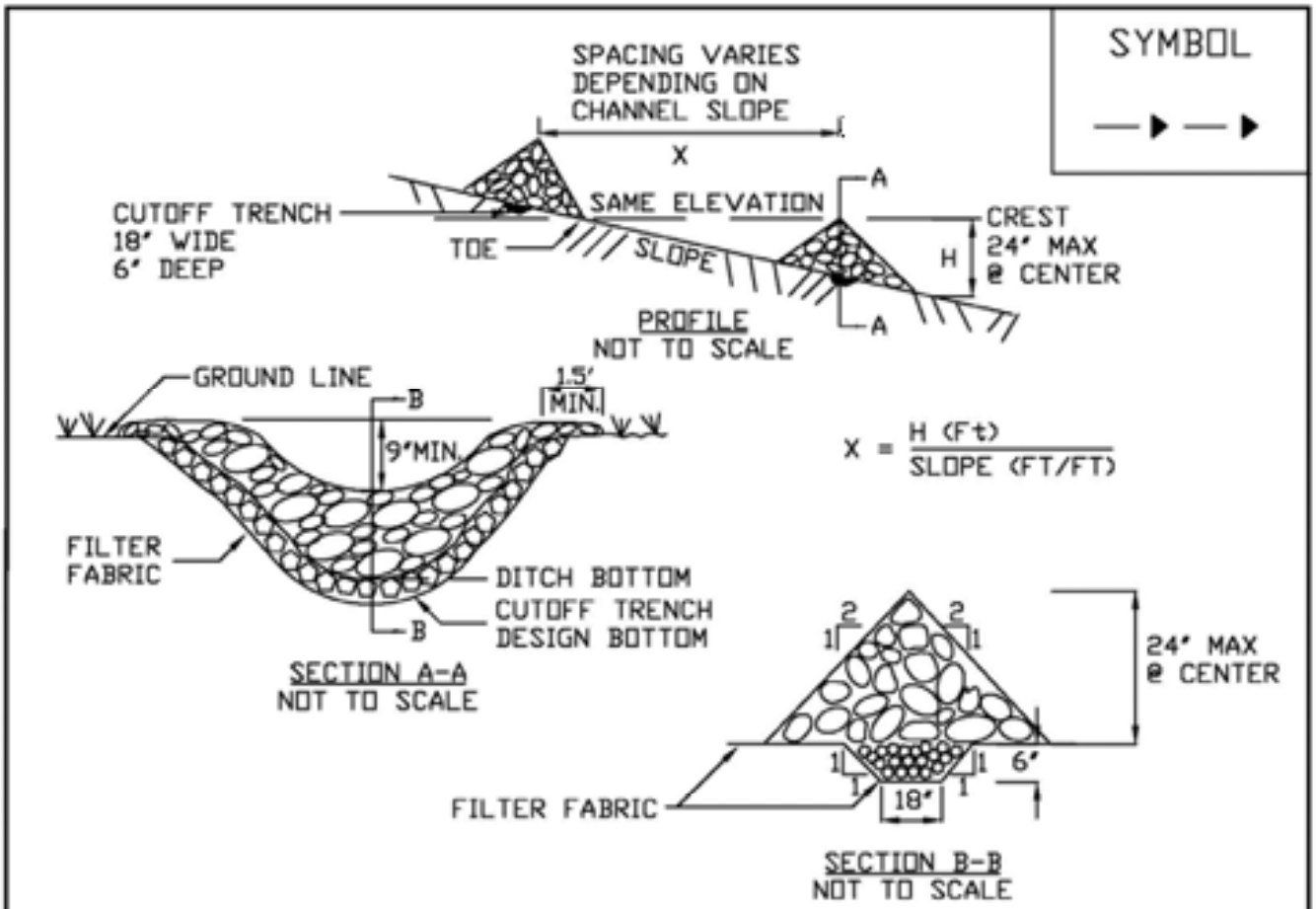
For filter sock or fiber roll check dams: The check dams will be anchored by staking the dam to the earth contact surface. The dam will extend to the top of the bank. The check dam will have a splash apron of NYS DOT #2 crushed stone extending a minimum 3 feet downstream from the dam and 1 foot up the sides of the channel. The compost and materials for a filter sock check dam shall meet the requirements shown in the standard for Compost Filter Sock on page 5.7.

Maintenance

The check dams should be inspected after each runoff event. Correct all damage immediately. If significant erosion has occurred between structures, a liner of stone or other suitable material should be installed in that portion of the channel or additional check dams added.

Remove sediment accumulated behind the dam as needed to allow channel to drain through the stone check dam and prevent large flows from carrying sediment over the dam.

Figure 3.1
Stone Check Dam Detail



CONSTRUCTION SPECIFICATIONS

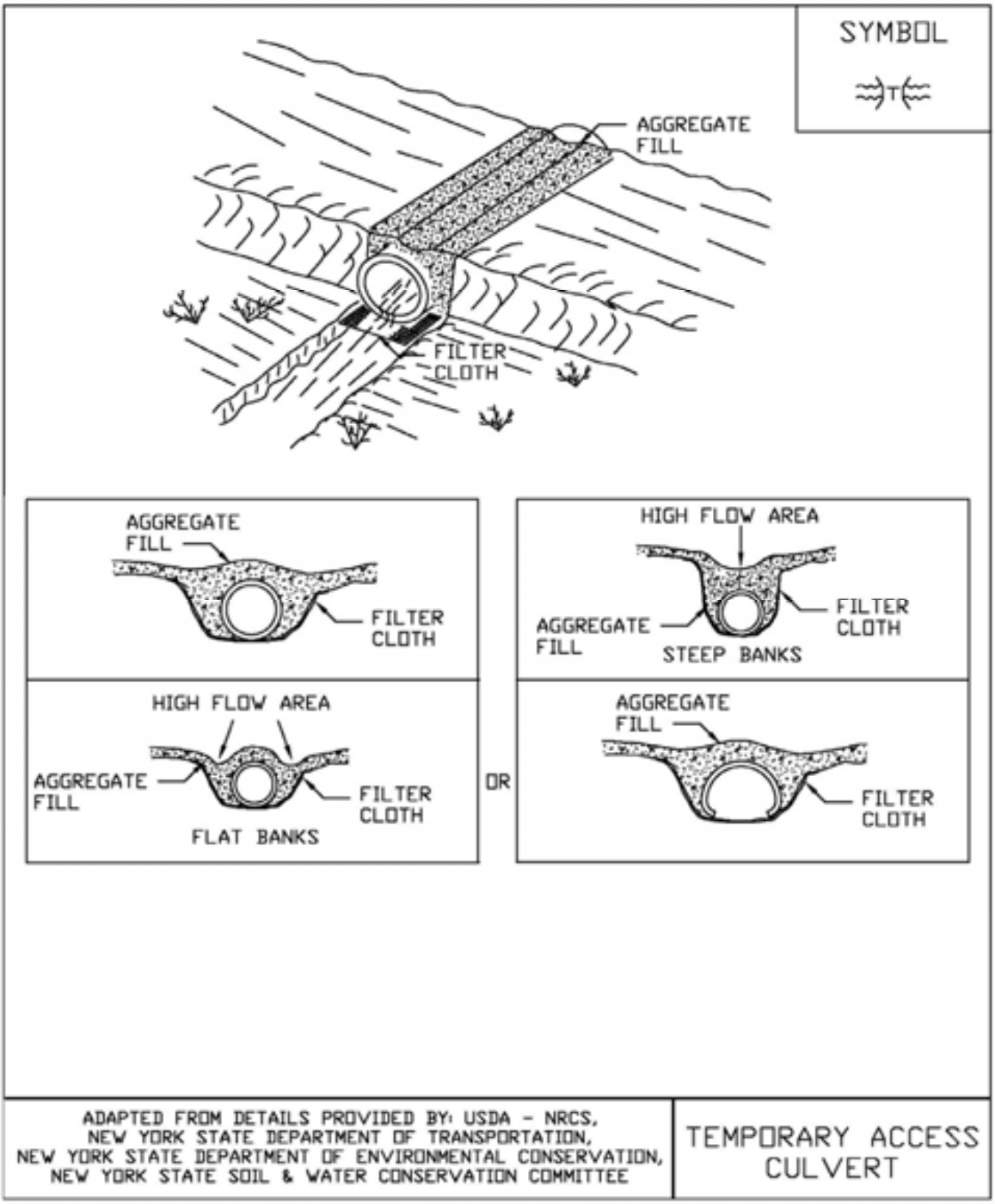
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

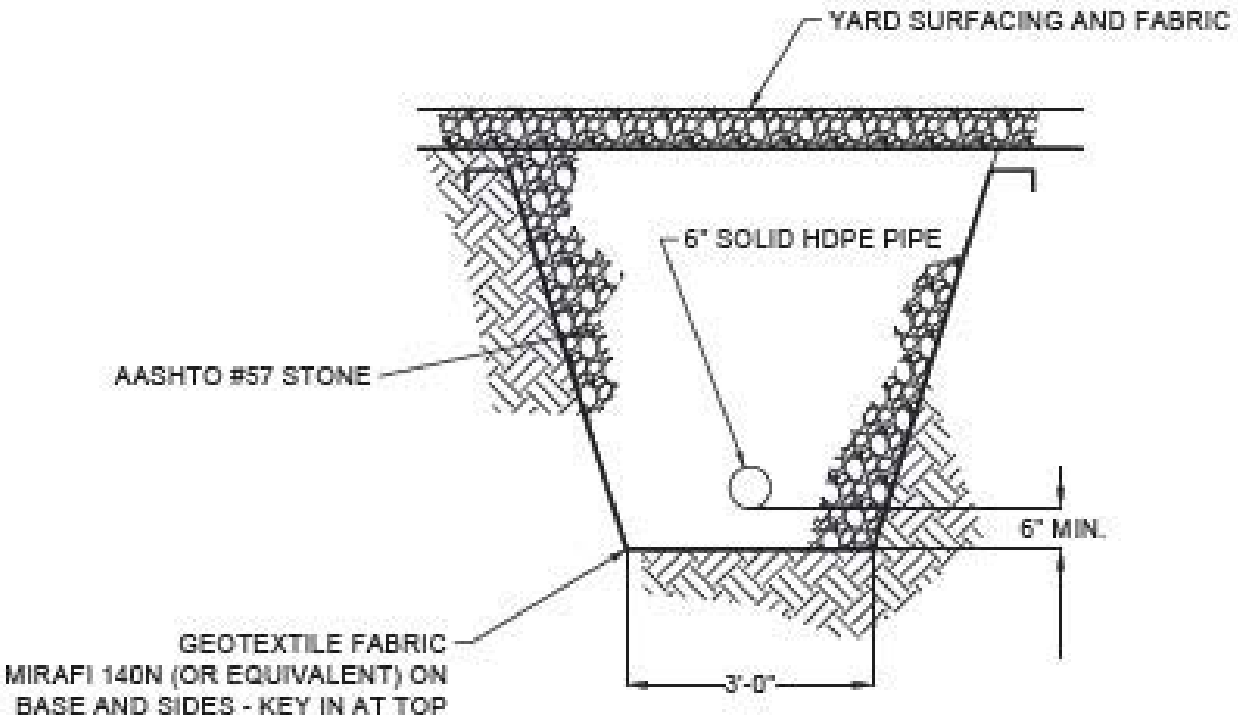
MAXIMUM DRAINAGE AREA 2 ACRES.

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

STONE CHECK DAM

Figure 2.3
Temporary Access Culvert





CROSS SECTION
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. DEPTH OF FRENCH DRAIN IS VARIES PER APPLICATION.
2. DRAIN PIPE SHALL BE SLOPED A MINIMUM OF 0.5%
3. GEOTEXTILE FABRIC SHALL BE 6 OZ. MINIMUM NON-WOVEN.
4. MAINTAIN AT LEAST 12" OF COVER FOR THE 6" HDPE DRAIN PIPE.
5. DRAIN SHALL, IN GENERAL, FOLLOW THE DIRECTION OF THE SURFACE DRAIANGE AREAS OUTLINED ON THE GRADING PLAN.

FRENCH DRAIN
DETAIL

STANDARD AND SPECIFICATIONS FOR GEOTEXTILE FILTER BAG

Definition & Scope

A **temporary** portable device through which sediment laden water is pumped to trap and retain sediment prior to its discharge to drainageways or off-site.

Condition Where Practice Applies

On sites where space is limited such as urban construction or linear projects (e.g. roads and utility work) where rights-of-way are limited and larger de-silting practices are impractical.

Design Criteria

1. Location - The portable filter bag should be located to minimize interference with construction activities and pedestrian traffic. It should also be placed in a location that is vegetated, relatively level, and provides for ease of access by heavy equipment, cleanout, disposal of trapped sediment, and proper release of filtered water.

   The filter bag shall also be placed at least 50 feet from all wetlands, streams or other surface waters.

2. Size - Geotextile filter bag shall be sized in accordance with the manufacturers recommendations based on the pump discharge rate.

Materials and Installation

1. The geotextile material will have the following attributes:

Minimum Grab Tensile Strength	200 lbs.
Minimum Grab Tensile Elongation	50 %
Minimum Trapezoid Tear Strength	80 lbs.
Mullen Burst Strength	380 psi
Minimum Puncture Strength	130 lbs
Apparent Opening Size	40 - 80 US sieve
Minimum UV Resistance	70%
Minimum Flow Thru Rate	70 gpm/sq ft

2. The bag shall be sewn with a double needle machine using high strength thread, double stitched “Joe” type capable of minimum roll strength of 100 lbs/inch (ASTM D4884).

3. The geotextile filter bag shall have an opening large enough to accommodate a 4 inch diameter discharge hose with an attached strap to tie off the bag to the hose to prevent back flow.

4. The geotextile shall be placed on a gravel bed 2 inches thick, a straw mat 4 inches thick, or a vegetated filter strip to allow water to flow out of the bag in all directions.

Maintenance

1. The geotextile filter bag is considered full when remaining bag flow area has been reduced by 75%. At this point, it should be replaced with a new bag.

2. Disposal may be accomplished by removing the bag to an appropriate designated upland area, cut open, remove the geotextile for disposal, and spread sediment contents and seeded and mulched according to the vegetative plan.

EDIC TO PRINCETOWN SEGMENT -CENTRAL EAST ENERGY PROJECT SWPPP

ATTACHMENT G

RESOURCE REPORTS

UNDER SEPARTE COVER

AVAILABLE UPON REQUEST

EDIC TO PRINCETOWN SEGMENT-CENTRAL EAST
ENERGY PROJECT SWPPP

ATTACHMENT H

EDIC TO PRINCETOWN

PLAN & PROFILE DRAWINGS

SEGMENTS lll AND lV

CURRENTLY IN DEVELOPMENT SEE DRAFT EM&CP MAPS FOR REFERENCE