The Ashokan Rail Trail

Towns of Hurley and Olive
Ulster County, New York

Phase 2:
Stormwater Pollution Prevention Plan

February 2018
(Revision 1 - 2/26/2018)

Barton & Loguidice

Ashokan Rail Trail

Towns of Hurley and Olive
Ulster County, New York

Phase 2:
Stormwater Pollution Prevention Plan

February 2018

Prepared For:

Ulster County
244 Fair Street
Kingston, NY 12402

Prepared By:

Barton & Loguidice, D.P.C.
Engineers • Environmental Scientists • Planners • Landscape Architects
10 Airline Drive
Suite 200
Albany, NY 12205

Table of Contents

Table of Contents – Continued

Table of Contents – Continued

Appendices

1.0 Site Evaluation, Assessment, and Planning

1.1 Project/Site Information

Project/Site Name: Ashokan Rail Trail

Project Street/Location: Basin Road to NY Route 28A

City/State/Zip: Towns of Hurley, Olive and Woodstock, Ulster County, New York

County: Ulster

Latitude/Longitude Latitude: 41°58' N
Longitude: 74°11' W

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: _____)
☐ NYSDEC Web Site
☐ GPS
☒ Other (please specify): ESRI ArcMap 10.2

Is the project/site located on Indian country lands, or located on a property of religious or cultural significance to an Indian tribe? ☐ Yes ☒ No

If yes, provide the name of the Indian tribe associated with the area of Indian country (including the name of Indian reservation if applicable), or if not in Indian country, provide the name of the Indian tribe associated with the property_____

Are you applying for permit coverage as a "federal operator" as defined in Appendix A of the 2012 CGP? ☐ Yes ☒ No

SPDES permit number: _____ (fill in number upon receipt of NYSDEC Acknowledgement letter)

1.2 Contact Information/Responsable Parties

Owner:	Ulster County Commissioner of Public Works 313-317 Shamrock Lane Kingston, NY Phone: (845) 340-3100
Project Manager:	Chris White Deputy Director Ulster County Planning Department 244 Fair Street, PO Box 1800 Kingston, NY 12402 Phone: (845) 340-3338
Stormwater Manager and SWPPP Contact:	Thomas C. Baird, P.E. Barton & Loguidice, D.P.C. 10 Airline Drive Suite 200 Albany, New York 12205 Phone: (518) 218-1801 Fax: (518) 218-1805 Email: tbaird@bartonandloguidice.com
Emergency 24-Hour Contact:	Ulster County Commissioner of Public Works 313-317 Shamrock Lane Kingston, NY Phone: (845) 340-3100

1.3 Nature, Description, and Sequence of Construction Activity

Introduction:

The proposed project will construct a recreational trail along the former Ulster & Delaware ("U&D") Railroad corridor extending 11.5 miles from approximately Basin Road in the Town of Hurley to NYS Route 28A in the Town of Olive (the "Ashokan Rail Trail"). The corridor is contains brush and low level vegetation and includes steel rail and deteriorated railroad ties and other miscellaneous railroad infrastructure that is still in place.

This Stormwater Pollution and Prevention Plan (SWPPP) has been revised to include **Phase 2** of the Ashokan Rail Trail Project. The Phase 1 discussions remain for reference and the Phase 2 information builds upon Phase 1. Phase 2 includes the construction phase, including the construction of the Boiceville Trestle, Butternut Cove Culvert, and the trail.

Phase 1

Ulster County has procured a contractor to perform the removal of the existing steel rails, ties, other track materials ("OTM") and trees from the corridor (Phase 1). The engineering consultant will also perform part time construction oversite typically 2 to 3 days a week during this process. A pre-construction meeting was held on November 20, 2017 where details of the construction operations were discussed and NYCDEP pre-construction meeting is scheduled for December 26, 2017. The contractor's sequence of construction consists of the removal of the steel rails and OTM, followed by the tree felling and removals, and finally, the railroad tie removal and minor grading of the existing stone ballast just to fill-in the voids created by removal of the ties. This work entails a maximum disturbance width of 12' centered on the tracks and is within the limits of the existing ballast and 8' wide ties. The exception is that sensitive areas near water resources will not have the ties removed until all permits are in place (see below for more information).

Rail removal will not result in any clearing and the rail will be removed mechanically by specialized construction equipment designed specifically for this operation. The equipment is a wedge shaped device designed to hold down the ties while separating the track from the ties leaving the ties and ballast in place and undisturbed.

Important to note is that in certain sensitive areas, only the rails will be removed until all permits are in place. These areas were identified by DEP and are as follows:

Station 131+00 to Station 140+00 - B&L Wetland O, DEP Wetland G, H, I
Station 181+00 to Station 196+00 - DEP Stream 16, DEP Wetland D
Station 237+00 to Station 270+00 - DEP Streams 11,12,13,15, B&L Wetlands K, L,M,N; NYS Wetland AS20
Station 464+00 to Station 471+00 - DEP Streams 3 and 4

After rail removal, the felling and removal of strategic trees will commence. The County and B&L determined what should be removed to construct the trail and bridges and also to fell trees that may pose a hazard to construction crews and future trail users. There will be no ground clearing with the tree removals. The only clearing under Phase 1 will be the area from the edge-of-ballast to the edge-of-ballast for a total width of 12' or less. Understory vegetation was mowed during the summer of 2017 and will not take place under Phase 1, only ancillary growth located within the limits of the ballast, and ties will be removed. Re-aligned portions of the trail and areas required for construction of the bridges under Phase 2 encompass 1.9 acres of additional tree felling. These areas will have the trees removed and the stumps flush cut in order to retain the existing soil, brush, vegetation, and root systems that anchor the soil.

In many segments, woodchips and sections of felled trees will be left on site to decompose naturally in areas highlighted on the Tree Removal Plans. All tree debris and remains will be completely removed from near wetland and all other sensitive areas.

After rail and tree removal, the ties and other track materials will be scooped with a "grasping" type bucket with screens sized to retain tie fragments and then placed in a truck bed. Captured organics, spikes, ballast, etc. will be disposed of with the ties as "tie waste" and not sorted on site. A magnetic device will pick up the remaining iron based materials and lastly workers will hand pick remaining tie fragments as described in the construction plans and SWPPP. Disturbance will be limited to the width of the ties and no more than 2' from each edge of the ties (within the ballast limits) for a total width of 12'.

It is expected that all permits will be in place prior to the beginning of this operation, however, if they are not, the sensitive areas listed above will not be disturbed until the permits are in place.

Access during Phase 1 of the project will be from the existing DEP reservoir and sportsman access gates designated on the Tree and Track Removal Plans, and from the two proposed trailhead locations near the Woodstock Dike, and Shokan Station (Jones Cove) along Route 28. These trailheads are being designed by DEP and will be constructed separately. The use of the future trailhead locations will be for parking of equipment and vehicles for the workers in areas already utilized for parking. There will be no ground disturbance or clearing activities at the trailheads and all access will be from already established access points. No new points of access or paths will be created. The procured contractor has indicated that stockpiling will be contained in the transport vessels (trailer beds, truck beds, etc.) and does not intend to stockpile materials on the ground. However, if stockpiling occurs, it is limited to the future trailhead areas at Shokan and Woodstock Dike. The stockpile and access roadways will be monitored and assessed the same as the trail corridor and will conform to the applicable Erosion and Sediment Control details outlined in the plans and Chapter 2 of this SWPPP.

Access roads at the Woodstock Dike, Shokan and Route 28A will require a stabilized stone construction entrance. No other temporary improvements or stone course stabilization is expected at these three locations. The remaining five (5) access points will require stabilization along most of their entire length during the progression of Phase 1. B&L and the County's contractor discussed each of these locations, reviewed photos, expected loads (Steel, ties, wood chips), equipment to be used and other variables such as weather. It was determined that the existing wheel paths in these access roads will require a layer of geotextile material (pervious) with a layer of stone placed on the geotextile to level out the roadway and build up any ruts as they develop. The work not encroach outside the existing disturbed access road corridor. These access roads will be utilized during Phase 2 of the project therefore, any stone and geotextile placed will remain in-place and not be removed after Phase 1. Please refer to Appendix R that includes figures displaying the access roads and where geotextile and stone stabilization will occur.

During Spring 2018, it is expected that the DEP will coordinate internally to determine which, if any, of these roadways they would desire to be retained as emergency access corridors at the end of the project (Phase 2). If these decisions are made prior to the installation of stone, it may be possible to stabilize the roadway during construction to also best suit the long term functionality needs.

Construction will begin with the removal of the steel rails at the Basin road overpass and continue west. This starting location is approximately 3 miles east of the nearest sensitive watercourse area. ***At least one week prior*** to the contractor performing any operations adjacent to sensitive areas, B&L will delineate these areas as they are identified on the plans and in the SWPPP. DEP will have the reasonable opportunity to review the delineations prior to construction activities beyond milepost K12. The use of colored tape (surveyors flagging) and stakes will be utilized for delineation during Phase 1 and they will be spaced every 12' clearly above the existing snow cover. The stakes will also be supplemented by flagging on adjacent trees at an optimal height of 6' above the ground to call attention to the sensitive areas. The contractor has already been instructed to not disturb these areas and is committed to preserving resources. During the Phase 1 removal tasks, construction vehicles will remain within the existing railroad ballast footprint and there will be no filling, clearing, grubbing, or excavation activities adjacent to these flagged areas. After the ties are removed, the surface of the ballast will be minimally graded to fill the voids left from the tie removal within the limits of the existing ballast. This will help minimize tripping hazards and ponding. It is during Phase 2 of this project that minor grading, minor stone placements, and excavation activities will encroach on the boundaries of the sensitive areas and will require orange construction fencing for delineation and as a barrier.

At a minimum, weekly inspections by a certified Erosion and Sediment Control inspector or a Professional Engineer will be held to ensure that these areas remain undisturbed. Erosion and Sediment Control measures will always be on site and at the ready for the contractor to deploy at a moment's notice. See Chapter 2 of this SWPPP for the required Erosion and Sediment Control Practices. Phase 1 is expected to begin in December 2017 and continue to early June of 2018.

Requirements for Wetland Mitigation

The project is expected to be covered under a US Army Corps of Engineers (USACOE) Nationwide Permit. As of this writing, the USACOE is reviewing applicability of the specific NWP to be utilized under the Joint Application for Permit (JAP) submission.

Included below is a summary of Total Wetland/Resource Impacts in Phase 1 once all permits are in place including grading of ballast.

Resource Location	Description	Impact Area Phase 1
A131+00 to A141+50	1,050 Linear Feet (B&L Wetland O)	500 SF (0.012 ac)
A145+00 to 169+00	Wetland AS19 approx. 2400'	0 SF
A181+00 to A196+00	1,500 Linear Feet (DEP Stream #16)	0 SF
A229+10 to A253+75	2,465 Linear Feet (DEP Streams #14 & #15)	2000 SF (0.046 ac)
A253+75 to A255+75	200 Linear Feet (B&L Wetland M & N)	1000 SF (0.023 ac)
Reservoir Road Bridge separates these resources		
A257+50 to A258+40	90 Linear Feet (DEP Stream #12)	720 SF (0.017 ac)
A261+50 to A270+00	850 Linear Feet (B&L Wetland K & L, DEC Wetland AS-20)	2400 SF (0.055 ac)
A340+75 to A341+25	50 Linear Feet (B&L Wetland F)	0 SF
A468+00 to A471+00	300 Linear Feet (DEP Streams #3 & #4)	2400 SF (0.055 ac)

Phase 2

Phase 2 of the Ashokan Rail Trail project will consist of the construction of the trail, including bridges spanning the Butternut Creek and Esopus Creek, drainage rehabilitation, and site amenities such as benches, fencing, and historical interpretation elements. The trail will be constructed along the same alignment as the former railroad tracks with only one major exception; where the trail will be re-routed approximately 800 ft. to the north to avoid Wetland O. To minimize disturbances and impacts to sensitive watercourses (streams and wetlands) the trail was reduced in width from 12 ft. to 10 ft. and also shifted from 1 ft. to 4 ft. from the track centerline in several locations to minimize and avoid impacts to sensitive watercourses. Shoulders typically provided as per AASHTO guidelines were eliminated in all sensitive areas and reduced throughout the remainder of the corridor. The trail will utilize the remaining in-place ballast as a base course with additional stone added (typically 8 in. thick) and spread and leveled to provide the desired base course thickness and a top course for the trail.

Throughout the project corridor, a total of 16 wetlands (Wetlands A through P) and 17 observed streams (streams 1 through 17) were identified and delineated by B&L within and adjacent to the project corridor as part of the environmental field investigation. In addition to the resources identified by B&L staff, New York City Department of Environmental Protection has provided the boundaries of 10 wetlands (labeled Wetlands Q through Z) in the vicinity of the project area based on delineations they previously conducted for forest management projects. DEP also provided the locations of 20 Watercourses (labeled streams 18 through 37). These watercourses ultimately connect to tributaries of the Ashokan Reservoir, and as such, are believed to be jurisdictional features. A summary of these features are displayed in Appendix Q. Additional details and the Wetland Delineation Report can be found in Appendix H. The total wetland impacts have been significantly reduced by the complete avoidance of wetland O, achieved by rerouting the trail off of the existing railroad alignment to the north of the wetland, reduction of the total trail width (trail and structural back-up) from greater than 14 ft. to 12 ft. through wetlands M and N, and the installation of a boardwalk system to completely span a 250 ft. length of wetland AS-20. In addition, strategic shifts in the alignment and profile of the trail throughout the corridor have resulted in the elimination of several impacts to delineated watercourses.

Drainage patterns and characteristics will remain the same as the pre-construction conditions. Minor improvements and rehabilitation will be made to the existing system to restore positive drainage flow. This rehabilitation work includes the installation of stone aprons at culvert outlets and swale outlets which will be provided in select areas prone, and expected to be prone, to erosion and higher velocities during significant rain events. This rehabilitation work also includes repairs to the corridor's network of existing concrete, cast iron, and steel culverts, which will typically remain "as-is" except for cleaning and structural repairs. One culvert has completely failed and will be replaced completely with a new, larger culvert to better handle higher stormwater flows. A few additional culverts will be removed and reset to correct sagging and separation of the pipes. These culverts to be repaired and replaced consist of culverts that are shallow when compared to the trail surface (approximately 5 ft. or less below the trail.) Stone aprons designed to reduce stormwater energy and velocity and dissipate runoff into a sheet flow condition will be installed as needed at the outlet and in some cases the inlet of the culverts. The stone aprons will also fill in scour holes that have formed over the years and will reduce the likelihood of a catastrophic culvert failure such as has previously occurred at the Butternut Creek culvert. This work is detailed in the Final Trail Construction Plans in Appendix N of this SWPPP.

In addition to culvert rehabilitation, the existing swales will be rehabilitated in non-sensitive areas to convey stormwater to existing culverts or outflow areas and to prevent ponding of stormwater adjacent to the trail. Debris accumulated in the form of fallen trees and logs will be extracted from the existing swales and minor sediment deposits within the swales will be graded flat to restore stormwater flow. Grading activities shall only be performed in select locations agreed upon by the Engineer and Contractor in the field to restore positive flow within the swale. Few areas throughout the project corridor require an entirely new swale to be excavated to convey stormwater flow. Swale rehabilitation within the designated sensitive watercourses will consist of woody tree debris extraction only. No grading or sediment removal or deposition is permitted within a designated sensitive watercourse, unless specifically noted on the contract plans in Appendix N.

In order to perform the small culvert work in dry conditions, dewatering procedures will be performed as necessary to perform all in-stream work in dry conditions. Under no circumstances will work be allowed to take place within flowing or standing water of a stream. Dewatering procedures shall consist of stacking sandbags to divert flows around the work area to form a cofferdam. In locations where the entire

culvert needs to be blocked off for a period of time, a temporary diversion system consisting of a cofferdam and a waterway diversion will need to be installed. This diversion may consist of a pump and outlet hose system, or by simply running a smaller diameter pipe through the existing culvert to protect the flowing water while providing dry conditions for the contractor to work in. This will reduce impacts created by diverting the stream to an upland location and will allow the contractor to complete the work as detailed in the construction plans. For the location of the small culverts, see the general plans (PL-1 through PL-88) and for culvert specific rehabilitation details and Erosion and Sediment Control practices, see drawing CD-1 through CD-10 in Appendix N. Dewatering Procedures shall conform to New York State Standards and Specifications for Erosion and Sediment Control located in Appendix O and the notes and details on drawing ESCD-4 in Appendix N.

Construction access during Phase 2 of the project will utilize the access roads installed under Phase 1 of the project with the addition of a staging area at Route 28A as shown on the plans (Drawings AP-1 through AP-7). This staging area will serve as the construction access and staging area of the new Boiceville Bridge. The stockpile areas, laydown, and access roadways will be monitored and assessed the same as the trail corridor and will conform to the applicable Erosion and Sediment control details outlined in the plans and Chapter 2 of this SWPPP. Upon completion of the project, sportsman and emergency access to the corridor will remain at these access points.

Laydown and stockpile areas are located at specifically designated locations within the corridor in the non-, or less-sensitive areas as discussed with NYCDEP during the design and Phase 1 process. Stockpiling of materials or equipment laydown outside of the designated areas is prohibited. These areas are identified on the construction plans (drawings AP-1 through AP-7) and details in Appendix N. Concrete washout areas shall only be installed at the designated laydown and stockpile areas, as discussed on drawing ESCD-2 in Appendix N. Stockpiling of materials (such as soils and stone) shall conform to the appropriate sections of this SWPPP and the details included on drawing ESCD-2, located in Appendix N. The contractor will also have the option to install construction vehicle passing areas throughout the project. These areas will consist of stabilized stone areas where construction vehicles will be able to pass one another along the corridor. Due to the narrow width of the trail and disturbance limits, construction vehicles such as dump trucks or excavators will not be able to pass one another unless in one of these

designated locations. The locations have been detailed on drawings PL-1 through PL-88 and on drawing MD-7 in Appendix N.

Fiberlogs have been chosen as the primary sediment barrier practice for this project. This is a linear project where work is expected to occur in specific areas for short durations of time before final stabilization and establishment is achieved. As such, the fiberlogs provide several benefits over silt fence for this type of project;

- Fiberlogs allow stormwater to filter through the log, rather than trapping or impounding stormwater.
- Fiberlogs can be reused in a different area once final stabilization and establishment has been achieved for the work area.
- Fiberlogs can be set up quickly and repaired much faster than when compared to a silt fence.

Once the project is completed or the fiber log reaches the end of its service life, the log can be cut open and spread out to decompose in place, thereby reducing the amount of trash generated and potentially left in place post construction. Sediment barrier is required to be installed at the downslope of all fill areas where soil will be exposed. In addition, a sediment barrier shall be installed along both sides of the causeways in the western basin, where the trail corridor traverses adjacent to the reservoir on both sides, within 100 ft. of delineated streams, and adjacent to the sensitive streams and wetlands. See drawings ESCP-1 through ESCP-88, and AP-1 through AP-7 in appendix N for specific fiber log placement locations.

Phase 2 will include the removal of the Butternut Creek Culvert and construction of a new bridge in its place, and the removal and construction of a new bridge crossing at the Esopus Creek at the site of the destroyed Boiceville Trestle. The existing Butternut Creek Culvert will be removed completely and replaced with an approximately 75' long pre-fabricated truss bridge placed on short abutments. This configuration will allow the Butternut Creek to be "daylighted," which will restore the natural flow of the creek and significantly increase the hydraulic capacity of the crossing. The destroyed four-span Boiceville Railroad Trestle will be replaced with a three-span steel girder bridge that will be rated for trail use and emergency vehicle use only. The bridge design will be such that the 50 year flood event will pass under the bridge with two (2) additional feet of clearance (freeboard), and will be able to withstand the 100 year storm event without overtopping.

During construction, Butternut Creek will be diverted by use of a temporary cofferdam through a temporary 4 ft. diameter culvert pipe installed adjacent to the

existing concrete culvert while crews remove the existing concrete. This temporary pipe has been sized to convey the 5 year storm, also known as the 20% storm. The contractor will be required to set up and maintain a system capable of preventing the migration and settlement of concrete dust onto the surrounding project site during concrete removals. All concrete dust generated from cutting, jackhammering, or breaking of concrete shall be collected, removed from the project site, and disposed of in an appropriate disposal facility. Once the concrete culvert has been removed, the new stream banks will be established and the temporary culvert will be removed while the new bridge is constructed.

During construction of the Boiceville Bridge in the Esopus Creek, a temporary causeway will be constructed within the stream to allow construction crews access to remove the existing bridge segments and to construct the new piers and to set the new steel girders. This temporary causeway will likely consist of steel sheeting cofferdam driven into the streambed to divert stream flows around the causeway and protect the causeway, workers, and equipment. This cofferdam is one of 7 proposed for the construction of the new bridge in order to ensure dry working conditions during the construction of the Bridge piers, abutments, and removals of the existing segments of the bridge. Upon completion of the new bridge abutments and piers, heavy stone fill will be placed within the disturbed sections of the stream to prevent against scour and erosion of the new bridge. During placement of the fill required to elevate the new bridge at the north and south abutment, fiber logs, temporary and permanent seeding and mulching, and rolled erosion control product will be the primary practices used to prevent erosion and sediment migration during construction. See drawings PL-3 and PL-4, ESCP-3 and ESCP-4, and BV-1 and BV-2 for the specific practices and details to be used by the contractor.

During Phase 2 there is a minimal volume of soil to be removed from the project site. Soil excavation will take place at the bridge sites and then most will be retained for use on site, specifically at the North end of the Boiceville Bridge where the trail will be raised approximately 7' to meet the new bridge. Demolition debris and soil that includes invasive plants that may need to be removed from the site will be removed and deposited in a landfill in accordance with the Invasive Species Control Plan in Appendix R.

Phase 2 is expected to begin in the early summer of 2018 and extend into the spring of 2019. In addition to this project, separate projects sponsored by NYCDEP will consist of the construction of the permanent trailheads at Boiceville (western

terminus), Shokan Station (midway of trail) and at the Woodstock Dike (eastern terminus). The Ashokan Rail trail project has continuously coordinated with the DEP on their project to help minimize disturbances and re-utilize stockpile and staging areas. Included below is a summary of Total Wetland/Resource **Impacts in Phase 2** once all permits are in place.

The Proposed activities included as part of Phase 2 of this project will result in an permanent impact of 0.09 acres of wetlands. Wetland impacts will not exceed 0.1 acres, therefore, mitigation is not expected to be required.

Wetland Impacts							
Wetland designation	Plan Sheet	Area of Wetland within project Boundary (sf)	Direct Permanent Impacts (ft^2)	Impacts (acre)	100 Ft. Buffer Impacts (ft^2)	Volume of Fill in wetland (CY)	Volume of Fill in 100 ft. buffer (CY)
AS-20	PL-36 to 38	3,178	3,178	0.07	14,200	150	250
AS-19	PL-20 to 22	0	0	0	31,000	0	485
B&L Wetland M	PL-35 to 36	500	500	0.01	N/A	N/A	N/A
B&L Wetland N	PL-35 to 36	250	250	0.01	N/A	N/A	N/A
B&L Wetland O	PL-18 to 19	0	0	0.00	N/A	0	N/A
		TOTAL	3,928	0.09	45,200	150	735
Note 1: Wetlands not listed in this table are outside of the limits of the trail boundary and will not be impacted Note 2: The project boundary line is coinceident with the limits of cut/fill through wetland areas							

The Following Tables Identify Each Stream and any impacts

B&L Delineated Stream Impacts												
Stream Number	DEC Mapped	STA.	Culvert Number	Plan sheet	Length of Stream within Project Boundary (LF)	Stream Width (ft.)	Area of Stream within Project Boundary (SF)	Temporary Stream Disturbance (LF)	Permanent Stream Disturbance (LF)	Permanent Stream Disturbance (SF)	Permanent Stream Disturbance (CY below OHWM)	Notes
1	-	A 516+92	3	PL-73	70	8	560	60	0	0	0.0	Surface repairs to concrete culvert
2	-	A 506+05	4	PL-71	90	3	270	60	40	200	4.0	Repair/replace concrete headwall and install stone apron at inlet and outlet
3	H-171-P 848-12	A 494+75	5	PL-70	180	10	1,800	100	24	80	10.0	Repair cracked concrete, surface repairs to culvert and install stone apron at outlet of culvert
4	-	A 459+06	7	PL-65	105	8	840	100	20	200	20.0	Repair cracked concrete, surface repairs to culvert, repair/replace concrete headwall and
5	-	A 436+60	9	PL-61	75	2	150	30	24	72	3.3	install stone aprons at inlet and outlet
6	H-171-P 848-11	A 409+25	12	PL-58	110	3	330	120	0	0	0.0	Repair cracked concrete and surface repairs to concrete
7	-	A 345+64	19	PL-48	120	3	360	50	20	100	5.0	Repair cracked concrete and install stone apron at outlet of culvert.
8	-	A 341+50	-	-	135	2	270	0	0	0	-	No in-stream work
9	-	A 315+00	21	PL-44	175	2	350	30	24	72	3.3	Install stone apron at inlet and outlet
10	H-171-P 848-10	A 291+08	22	PL-41	50	15	750	100	0	0	0.0	Repair cracked concrete
11	-	A 285+04	23	PL-40	80	15	1,200	20	0	0	0.0	Repair cracked concrete and surface repairs to concrete
-	Wetland AS-20	A 262+17	24	PL-37	35	10	350	40	0	0	0.0	Repair cracked concrete
12	H-171-P 848-9A	A 229+00	25	-	36	3	108	0	0	0	-	No proposed work
13	-	A 203+04	26	PL-28	40	3	120	30	24	18	3.3	Install stone apron at inlet and outlet
14	H-171-P 848-9	A 173+00	28	Butternut	130	15	1,950	300	250	N/A	N/A	Remove existing concrete arch culvert and install 75' bridge, daylight butternut creek
15	-	A 144+84	29	PL-20	85	3	255	40	20	330	40.0	Install stone apron at outlet and elevate stream bed to meet culvert invert
16	-	A 112+41	35	PL-15	125	3	375	240	120	900	-	Debris removal within culvert clogging existing flow through side-by-side steel pipes
17	H-171	A 30+00	-	Boiceville	250	225	54,605	400	150	4,100	600.0	Install new bridge abutments and piers, removal of old abutments, piers and construction of temporary causeway and cofferdam.
							TOTAL:	1,720	566	6,072	689.0	

DEP Delineated Stream Impacts												
Stream Number	DEC Mapped	STA.	Culvert Number	Plan sheet	Length of Stream within Project Boundary (LF)	Stream Width (ft.)	Area of Stream within Project Boundary (SF)	Temporary Stream Disturbance (LF)	Permanent Stream Disturbance (LF)	Permanent Stream Disturbance (SF)	Permanent Stream Disturbance (CY below OHWM)	Notes
18	-	A 506+05	4	PL-71	See Stream #2 for impacts and calculations							
19	-	A 473+95	5	PL-67	46	3	138	0	0	0	0.0	No Proposed Work
20	-	A 465+50 to A 471+00	-	PL-65&66	900	3	2700	550	550	1,650	40.7	assumed 6" of fill below OHWM
21	-	A 465+50 to A 471+00	-	PL-65&66	900	3	2700	550	550	1,650	40.7	assumed 6" of fill below OHWM
22	-	A 423+25 to A 426+25	-	PL-60	350	5	1750	200	200	400	7.4	assumed 6" of fill below OHWM
23	-	A 345+64	19	PL-48	120	3	360	50	20	100	5.0	Install stone apron at outlet
24	-	A 341+00 to A 345+50	-	PL-48	135	4	540	0	0	0	0.0	No Proposed Work
25	-	A 286+00 to A 290+00	-	PL-40	0	4	0	0	0	0	0.0	No Proposed Work
26	-	A 285+04	23	PL-40	80	15	1200	20	0	0	0.0	See Stream #11
27	-	A 273+00 to A 278+00	-	PL-38&39	205	3	615	0	0	0	0.0	No Proposed Work
28	Wetland AS-20	A 262+17	24	PL-37	35	3	105	40	0	0	0.0	Repair cracked concrete
29	-	A 257+50 to A 260+00	-	PL-36	250	3	750	250	250	750	7.0	assumed 6" of fill below OHWM
30	-	A 257+50 to A 260+00	-	PL-36	250	3	750	250	250	750	7.0	assumed 6" of fill below OHWM
31	-	A 229+10 to A 253+75	-	PL-32 to PL-36	2465	3	7395	1,425	1,425	1,500	52.8	assumed 6" of fill below OHWM
32	-	A 239+50 to A 253+75	-	PL-33 to PL-36	1425	3	4275	1,425	1,425	1,500	52.8	assumed 6" of fill below OHWM
33	-	A 181+00 to A 196+00	-	PL-25 to PL-27	1500	3	4500	0	0	0	0.0	No Proposed Work
34	-	A 173+00 to A 178+00	-	PL-24	25	3	75	0	0	0	0.0	No Proposed Work
35	-	A 74+55	39	PL-10	100	5	500	45	0	360	0.0	Replace existing failed culvert
36	-	A 43+00 to A 45+00	-	PL-5	0	35	0	0	0	0	0.0	No Proposed Work
37	-	Access Rd	-	AP-1A	25	2	50	0	0	0	0.0	No Proposed Work
							TOTAL:	4,805	4,670	8,660	213.4	

Location Maps:

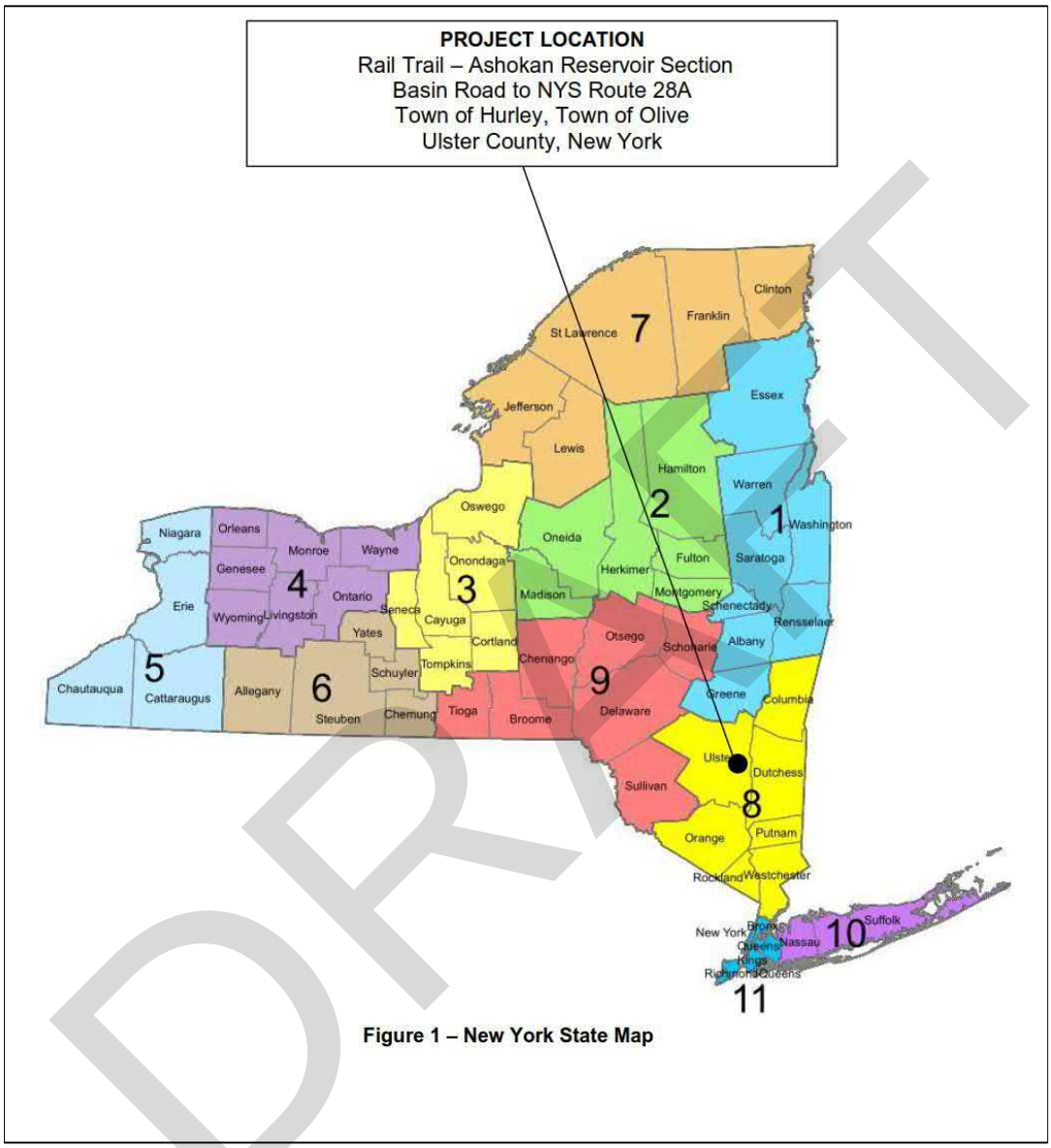


Figure 1 – New York State Map

PROJECT LOCATION
Ulster County Rail Trail Project – Ashokan Reservoir Section
Basin Road to NYS Route 28A
Town of Hurley, Town of Olive
Ulster County, New York

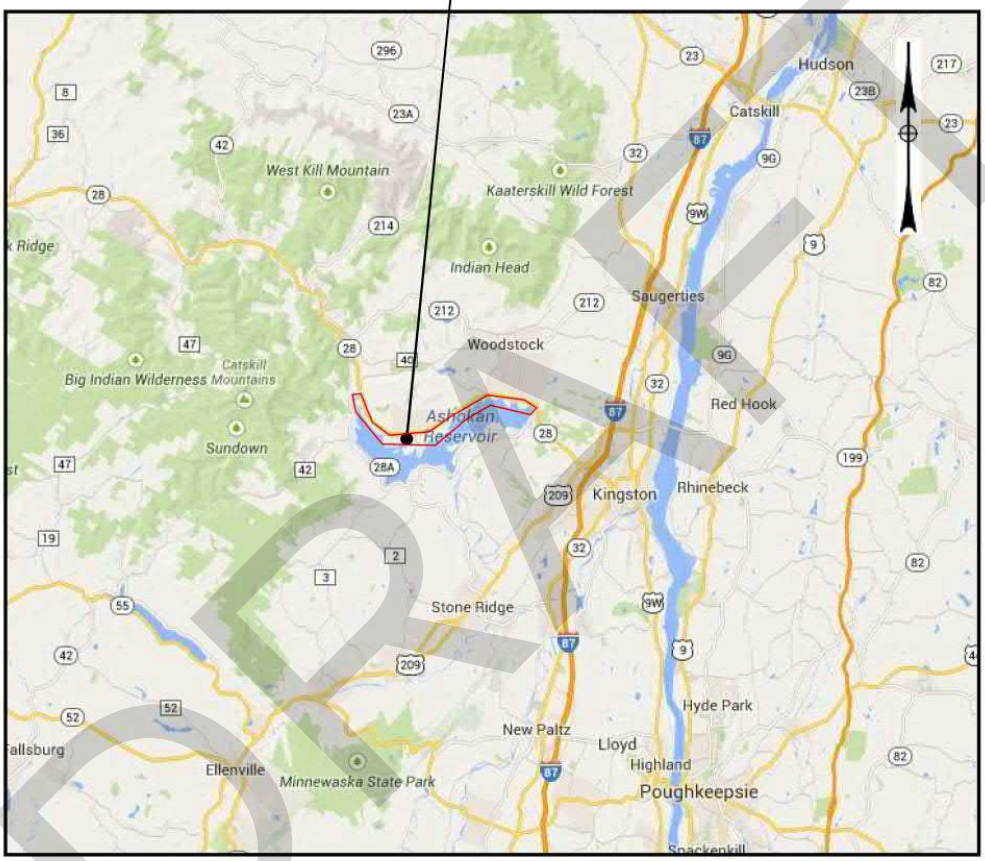


Figure 2 – Project Location Map

PROJECT LOCATION
Ulster County Rail Trail Project – Ashokan Reservoir Section
Basin Road to NYS Route 28A
Town of Hurley, Town of Olive
Ulster County, New York

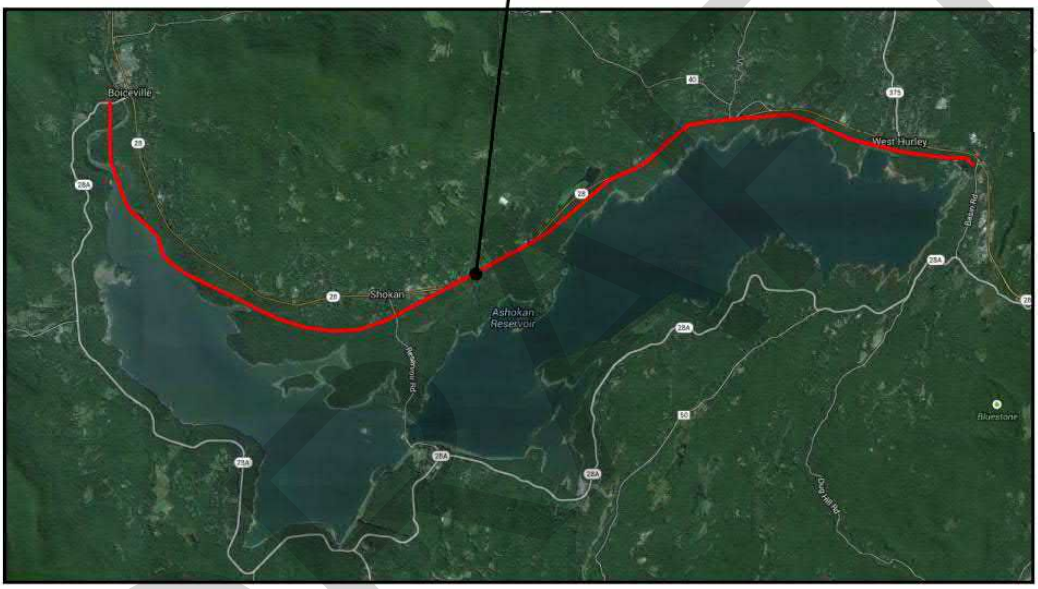


Figure 3 – Project Corridor Map

Sequence of Construction:

The following sequence of construction should be followed and cannot be modified without revisions submitted as part of a SWPPP modification.

Any changes to required erosion and sediment controls used on site should be reviewed by the Kingston DEP Office if not already specified in the SWPPP.

Phase 1 - Track, Tree and then Tie Removal

1. Obtain plan approval and applicable permits or portions of permits with limited work approval.
2. Secure a qualified contractor to complete the work.
3. Hold a preconstruction meeting with the approving agency (DEP Regulatory and Engineering Programs) at least one (1) week prior to starting construction.
4. Field delineation and marking of the sensitive areas the contractor shall avoid during this phase to be completed at least one week prior to any work taking place near these sensitive areas.
5. Mobilize to site. Layout established limits of work and buffer areas and laydown areas prior to starting construction.
6. Install erosion and sediment control measures in preparation of the construction. Please note that the project will move along in stages and erosion and sediment control practices will be mobile as well. They will be approved prior to land disturbance throughout the project and in any staging areas.
7. Remove rails and associated infrastructure.
8. Fell and remove trees

9. Remove ties and organics within limits of the existing ballast including tie fragments. Finalize all remaining permits prior to removing ties in DEP identified sensitive areas.
10. Grade the remaining stone ballast to fill in voids from ties.
11. Remove any installed temporary erosion and sediment control measures

Phase 2 – Boiceville Bridge, Butternut Creek Culvert, Trail Construction

Pre-Construction

1. Obtain plan approval and applicable permits or portions of permits with limited work approval.
2. Secure a qualified contractor to complete the work.
3. Hold a preconstruction meeting with the approving agency (DEP Regulatory and Engineering Programs) at least one (1) week prior to starting construction.

Boiceville Bridge

1. Install cofferdam #7, temporary access road and crane platform from north stream bank and extending into stream, to approximately the center of the stream. The causeway is located on the west side (downstream) of the existing bridge. The temporary access road and crane platform will be used to transport materials and equipment to the locations needed for removal of the existing bridge and construction of the new bridge.
2. Install erosion and sediment control measures as shown in the details in this SWPPP and on drawing BV-2 of the construction plans in Appendix N.

3. Remove existing girder spans that currently rest on the North Abutment and Pier 1.

4. Install Cofferdams #1 thru #4.

5. Remove existing north and south abutments and remnants of existing piers. All removals shall occur within a dewatered cofferdam. A dust containment tent shall be implemented for any concrete cutting. The contractor may elect to develop an alternative concrete cutting dust control plan. The alternative plan shall be reviewed and approved by the engineer for implementation.

6. Drive piles for the new abutments and piers.

7. Form and pour concrete for new abutments and piers. All work for driving piles and forming and pouring new abutments shall occur within a dewatered cofferdam.

8. Install heavy stone fill surrounding the base of the new abutment and piers. All stone placements shall occur within a dewatered cofferdam.

9. Remove Cofferdams #1 thru #4. The cofferdams are likely to consist of driven steel sheeting and must be removed before the proposed girders are set.

10. Set the new steel girders.

11. Install formwork and place concrete for proposed cast-in-place concrete deck.

12. Install cofferdams #5 and #6 and remove existing girder spans currently resting in the stream.

13. Remove cofferdams #5, #6, and #7.

14. Site restoration.

Butternut Creek Culvert

1. Install sediment and erosion control measures, as shown on drawing BN-2 of the construction plans in Appendix N.

2. Install permanent soldier pile and lagging walls on both sides of the existing culvert.

3. Install Cofferdam #1 at northeast wingwall.

4. Remove northeast wingwall and excavate for installation of temporary culvert pipe. A dust containment tent shall be implemented for any concrete cutting. The contractor may elect to develop an alternative concrete cutting dust control plan. The alternative plan shall be reviewed and approved by the engineer for implementation.

5. Install 4 ft. diameter temporary culvert pipe and install Cofferdams #2 and #3 to divert flow from the existing culvert into the temporary culvert pipe.

6. Remove Cofferdam #1.

7. Excavate at 2H:1V slope from base of stream to base of solider pile and lagging walls.

8. Remove existing concrete arch culvert and failed wingwalls currently resting in the stream. Flows will be diverted to the temporary culvert pipe at this time so all work associated with this step will be completed away from running water. A dust containment tent shall be implemented for any concrete cutting. The contractor may elect to develop an alternative concrete cutting dust control plan. The alternative plan shall be reviewed and approved by the engineer for implementation.

9. Place heavy stone fill along stream banks from the base of the stream to an elevation of 1’ above the ordinary high water mark.

10. Install Cofferdam #4 and remove temporary culvert pipe.

11. Excavate along trail for locations of proposed abutments.

12. Form and pour concrete for new abutments.

13. Set new proposed truss.

14. Form and pour cast-in-place concrete deck.

15. Site restoration.

Trail Construction

1. Install orange construction fencing to delineate the sensitive areas the contractor shall avoid during this phase as shown on the contract plans ESCP-1 through ESCP-88 in Appendix N. Delineation shall be completed and reviewed by the Engineer and DEP at least one week prior to any work taking place near these sensitive areas.

2. Mobilize to site. Layout established limits of work and buffer areas and laydown areas prior to starting construction.

3. Install erosion and sediment control measures in preparation of the construction as noted on the contract plans ESCP-1 through ESCP-88 in Appendix N. Please note that the project will move along in stages and erosion and sediment control practices will be mobile as well. They will be approved prior to land disturbance throughout the project and in any staging areas.

4. Install construction vehicle passing areas. Locations are shown on the PL and ESCP drawings and on drawing MD-7 of Appendix N.

5. Clear debris in existing drainage swales and culverts as indicated on the PL and ESCP drawings and on drawing MD-7 of Appendix N.

6. Construct new and rehabilitate existing swales, swale outlets/inlets, stone aprons, and related erosion control elements.

7. Repair/Replace existing culverts. If culvert work conflicts with running water, the water shall be diverted through dewatering measures detailed on drawing ESCD-4 and CD-1 through CD-10 of Appendix N of this SWPPP.

8. Grade existing ballast to full trail width noting reduced width in sensitive areas. The contractor shall take care to identify areas in the

contract drawings, where trail shifting, changes in trail width, and steep slope drop-offs adjacent to the trail exist.

9. Install and grade trail base course.

10. Soil, vegetate, and install erosion control measures to disturbed areas. Stockpiled native subsoil is to be scarified, and all compacted areas de- compacted to a minimum depth of 12-inches prior to top soil placement. Debris, woody plant parts, and stones over 3 inches in diameter are to be removed prior to application and disposed of in accordance with the Invasives Species Control Plan located in Appendix R.

11. Install trail-side fencing

12. Install and grade trail top course.

13. remove construction vehicle passing areas and restore the widened areas to pre-construction conditions.

14. Remove any installed temporary erosion and sediment control measures.

15. Punch-list items.

.

Attention Contractor:

- Under Phase 1 there is not expected to be any disturbed earth as a result of the contractors operations.

- Under Phase 2, the SWPPP and the contract plans identify and detail methods, materials, and means to controlling erosion and sediment during construction and prior to site stabilization suitable for this specific project. These should be utilized unless directed by the Engineer. The exact application of the measures will vary from location to location and will need to be applied to each specific situation using the details in the plans or slightly modified to meet the intent of the measure and will need to be approved by the Owner, Engineer, and / or DEP.

- The Contractor shall also demonstrate to the engineer and project owner proficiency in the application and understanding of Erosion and Sediment Control measures. The Owner and Engineer will work with the Contractor to ensure the ultimate goal of protecting waters and downstream infrastructure is achieved.
- The Owner or the Owners representative reserves the right to shut down project operations if a significant threat (as determined by the Owner) to the downstream infrastructure, or the surrounding environment is identified as part of the Contractors operations. This shut down will remain in effect until corrective measures to protect the environment are satisfactorily in place as deemed acceptable by the Owner or the Owners representative. No monetary claims shall be allowed due to delays caused by the Contractor's or sub-contractor's non-conformance with this SWPPP or Erosion and Sediment Control notes, details (included as part of the contract plans), specifications book, or Contractor-submitted and approved Plans and narrative.
- No more than **two (2) acres** can be disturbed at one time for this project.
- All erosion and sediment control practices will be installed and maintained in accordance with the *New York State Standards and Specifications for Erosion and Sediment Control* (2016) and as necessary to adapt to any unique conditions along the corridor. If full implementation of the contractor's measures do not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source. This shall be the responsibility of the Contractor at no additional cost to the owner.
- All erosion and sediment control practices will be enforced daily through construction inspection and administration. Needed repairs will be addressed immediately and repaired before daily work shutdown.

- **To help ensure permit compliance through timely remedying of identified site deficiencies, Contractor's payment applications will not be processed until SWPPP (and documents inherently incorporated) deficiencies are corrected to the satisfaction of the Owner or the Owners representative.**
- The Contractor shall have, onsite at all times during any disturbance activity, a NYSDEC 4-hr trained contractor representative to oversee disturbance activities and coordinate erosion and sediment control activities. The Contractor may appoint his qualified representative to act on behalf of the sub-contractor. This means he must be present during sub-contractor activities even if Contractor activities are not being conducted during the same working period.
- Permanent vegetation will be established on all disturbed areas**.** Site stabilization will be defined as 90% vegetative cover over the entire site. Following site stabilization, which shall be approved by the Engineer, all temporary erosion and sediment control practices can be removed.

What is the function of the construction activity?

☐ Residential ☐ Commercial ☐ Industrial ☐ Road Construction
☐ Linear Utility
☒ Other (please specify): Recreational - Bicycle and Hiking trail
Estimated Project Start Date: June 2018
Estimated Project Completion Date: May 2019

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

The following provides a description of soils, slopes, vegetation, and current drainage patterns of the project limits.

1.4.1 Soil Type(s)

The NRCS' SSURGO Database and Web Soil Survey (USDA, 2016) were reviewed to determine the types and characteristics of soils mapped within the limits of the Project Corridor to preliminarily evaluate the presence of hydric soils, one of the required criteria for federally regulated wetlands. Table 1, below, lists the soil symbol, mapping unit name, taxonomic classification, hydric classification and rating, drainage classification, and typical Munsell soil colors information that characterize each soil type mapped along the Project Corridor. As shown in Table 1, four of the soils mapped within the Project Corridor, defined by a hydric rating percent of >50%.

Table 1. NRCS Mapped Soils Data

Map Unit Name	Soil Symbol	Taxonomic Class	Drainage Class	Hydric Rating (%)	Typical Munsell Soil Horizon Colors	Typical Munsell Redoxymorphic Feature Colors
Alluvial land	AA	Fluvaquents	Poorly drained	65	N/A	N/A
Arnot channery silt loam, 0 to 8 percent slopes	AcB	Lithic Dystrochrepts	Somewhat excessively drained	0	0-6": 10YR 4/2 6-13": 10YR 5/4 13-17": 2.5Y 5/4 17-27": "Gray"	-
Arnot-Oquaga-Rock outcrop complex, very steep	ARF	Lithic Dystrochrepts	Somewhat excessively drained	0	0-6": 10YR 4/2 6-13": 10YR 5/4 13-17": 2.5Y 5/4 17-27": "Gray"	-
Atherton silt loam	At	Aeric Haploquepts	Poorly drained	90	0-9": 10YR 3/1, 9-22": 5Y 5/1	0-9": 2.5YR 3/6, 9-22": 2.5Y 5/4
Canandaigua silt loam	Cc	Mollic Haplaquepts	Very poorly drained	95	0-8": 10YR 3/1 8-12": 10YR 6/2 12-19": 10YR 6/1 19-30": 10YR 6/2	8-12": 10YR 5/6, 7.5YR 5/6 12-19": 10YR 7/2, 7.5YR 5/6 19-30": 7.5YR 6/4, 7.5YR 5/6
Castile gravelly silt loam, 0 to 3 percent slopes	CgA	Aquic Dystrochrepts	Moderately well drained	0	0-13": 10YR 4/2 13-18": 10YR 5/4 18-24": 10YR 5/3	18-24": 10YR 5/1
Castile gravelly silt loam, 3 to 8 percent slopes	CgB	Aquic Dystrochrepts	Moderately well drained	0	0-13": 10YR 4/2 13-18": 10YR 5/4 18-24": 10YR 5/3	18-24": 10YR 5/1

Table 1. NRCS Mapped Soils Data						
Map Unit Name	Soil Symbol	Taxonomic Class	Drainage Class	Hydric Rating (%)	Typical Munsell Soil Horizon Colors	Typical Munsell Redoxymorphic Feature Colors
Gravel pit	GP	-	Somewhat excessively drained	5	-	-
Haven loam	He	Typic Dystrochrepts	Well drained	0	0-2": Decomp 2-3": 5YR 2/1 3-6": 10YR 4/2 6-13": 7.5YR 4/4 13-22": 7.5YR 5/6	-
Hoosic gravelly loam, rolling	HgC	Typic Dystrochrepts	Somewhat excessively drained	0	0-6": 10YR 4/2 6-11": 10YR 5/6 11-22": 10YR 5/6	-
Hoosic gravelly loam, 15 to 25 percent slopes	HgD	Typic Dystrochrepts	Somewhat excessively drained	0	0-6": 10YR 4/2 6-11": 10YR 5/6 11-22": 10YR 5/6	-
Hoosic soils, very steep	HSF	Typic Dystrochrepts	Somewhat excessively drained	0	0-6": 10YR 4/2 6-11": 10YR 5/6 11-22": 10YR 5/6	-
Lackawanna flaggy silt loam, 8 to 15 percent slopes	LaC	Typic Fragiudepts	Well drained	0	0-8": 5YR 3/4 8-13": 5YR 4/4 13-26": 2.5YR 4/4	-
Lackawanna and Swartswood soils, moderately steep, very bouldery	LCD	Typic Fragiudepts	Well drained	0	0-8": 5YR 3/4 8-13": 5YR 4/4 13-26": 2.5YR 4/4	-
Lackawanna and Swartswood soils, very steep, very bouldery	LCF	Typic Fragiudepts	Well drained	0	0-8": 5YR 3/4 8-13": 5YR 4/4 13-26": 2.5YR 4/4	-
Lordstown-Arnot-Rock outcrop complex, sloping	LOC	-	-	0	-	-
Made land	ML	Udorthents	Somewhat excessively drained	5	-	-
Menlo silt loam	Mn	Histic Humaquepts	Very poorly drained	100	0-5": 10YR 2/1 5-16": 10YR 2/1 16-22": 7.5YR 5/1	5-16": 7.5YR 4/6 16-22": 7.5YR 4/6. 10YR 5/6

Table 1. NRCS Mapped Soils Data						
Map Unit Name	Soil Symbol	Taxonomic Class	Drainage Class	Hydric Rating (%)	Typical Munsell Soil Horizon Colors	Typical Munsell Redoxymorphic Feature Colors
Morris-Tuller complex, gently sloping, very bouldery	MTB	Aeric Fragiaquepts	Somewhat poorly drained	20	0-8": 5YR 4/2 8-10": 7.5YR 4/4 10-14": 5YR 5/2 14-50": 2.5YR 4/4	10-14": 5YR 4/4, N 5/0 14-50": N 6/0, 7.5YR 5/6, N 5/0
Oquaga channery silt loam, 3 to 8 percent slopes	OgB	Typic Dystrochrepts	Well drained	0	0-4": 5YR 3/3 4-11": 2.5YR 3/6 11-28": 2.5YR 4/4	-
Oquaga and Lordstown channery silt loams, 8 to 15 percent slopes	OlC	Typic Dystrochrepts	Well drained	0	0-4": 5YR 3/3 4-11": 2.5YR 3/6 11-28": 2.5YR 4/4	-
Oquaga-Arnot-Rock outcrop complex, sloping	ORC	Typic Dystrochrepts	Well drained	0	0-4": 5YR 3/3 4-11": 2.5YR 3/6 11-28": 2.5YR 4/4	-
Oquaga-Arnot-Rock outcrop complex, moderately steep	ORD	Typic Dystrochrepts	Well drained	0	0-4": 5YR 3/3 4-11": 2.5YR 3/6 11-28": 2.5YR 4/4	-
Plainfield-Riverhead complex, very steep	PmF	Typic Udipsamments	Excessively drained	0	0-7": 10YR 3/3 7-16": 7.5YR 4/4 16-28": 7.5YR 5/6	-
Quarry	QU	-	-	5	-	-
Red Hook gravelly silt loam	Re	Aeric Haploquepts	Somewhat poorly drained	5	0-6": 10YR 3/2 6-8": 10YR 4/3 8-13": 10YR 5/3 13-22" 10YR 5/2	6-8": 10YR 5/2 8-13": 10YR 5/2, 4/4 13-22": 7.5YR 4/4, 10YR 5/6
Schoharie silt loam, 3 to 8 percent slopes	SaB	Typic Hapludalfs	Moderately well drained	0	0-8": 7.5YR 3/2 8-11": 10YR 6/3 11-18": 5YR 5/4 18-33":2.5YR 4/4	18-33": 5YR 5/6
Scriba and Morris soils, 0 to 8 percent slopes	SdB	Aeric Fragiaquepts	Somewhat poorly drained	5	0-9": 10YR 3/2 9-13": 10YR 5/2 13-30": 7.5 YR 5/4	9-13": 10YR 5/6, 7.5YR 5/6, 10YR 6/1 13-30": 10YR 4/4, 7.5 YR 5/6, 7.5YR 6/2
Scriba and Morris soils, gently sloping, very bouldery	SEB	Aeric Fragiaquepts	Somewhat poorly drained	5	0-9": 10YR 3/2 9-13": 10YR 5/2 13-30": 7.5 YR 5/4	9-13": 10YR 5/6, 7.5YR 5/6, 10YR 6/1 13-30": 10YR 4/4, 7.5 YR 5/6, 7.5YR 6/2

Table 1. NRCS Mapped Soils Data						
Map Unit Name	Soil Symbol	Taxonomic Class	Drainage Class	Hydric Rating (%)	Typical Munsell Soil Horizon Colors	Typical Munsell Redoxymorphic Feature Colors
Suncook loamy fine sand	Su	Typic Udipsamments	Excessively drained	0	0-7": 10YR 3/2 7-14": 10YR 4/2 14-22": 10YR 3/3	-
Tunkhannock gravelly loam, 0 to 3 percent slopes	TkA	Typic Dystrochrepts	Well drained	0	0-8": 10YR 4/3 8-16": 7.5YR 16-26": 5YR 4/4	-
Tunkhannock gravelly loam, 3 to 8 percent slopes	TkB	Typic Dystrochrepts	Well drained	0	0-8": 10YR 4/3 8-16": 7.5YR 16-26": 5YR 4/4	-
Tunkhannock gravelly loam, rolling	TkC	Typic Dystrochrepts	Well drained	0	0-8": 10YR 4/3 8-16": 7.5YR 16-26": 5YR 4/4	-
Valois very bouldery soils, gently sloping	VAB	Typic Dystrochrepts	Well drained	0	0-7": 10YR 4/3 7-30": 7.5YR 5/6	-
Valois very bouldery soils, moderately steep	VAD	Typic Dystrochrepts	Well drained	0	0-7": 10YR 4/3 7-30": 7.5YR 5/7	-
Wellsboro and Wurtsboro soils, gently sloping, very bouldery	WLB	Typic Fragiochrepts	Moderately well drained	0	0-8": 5YR 4/2 8-18": 5YR 4/4 18-24": 7.5YR 5/4	18-24": 5YR 5/8, 10YR 6/1, 5YR 6/3

1.4.2 Slopes, Topography

Existing Conditions:

The existing profile (running slope) of the existing railroad corridor is flat to a maximum of approximately 1% in grade for the majority of the corridor. The sideslopes vary from zero (0) to no greater than 60% slopes. The trail also traverses through several rock cut sections where the rock faces are nearly vertical.

Future Conditions:

The existing grades within the railroad corridor will not be altered as part of Phase 1 of this project. The steep side slopes adjacent to the trail will not be disturbed. The removal of the existing railroad ties will create voids in the existing railroad bed. These voids will be graded and leveled as a part of

Minor changes to the profile of the trail are anticipated during Phase 2 in select areas to eliminate the need to place embankment material on the side slopes. These select areas exist in various locations along the trail and at the Boiceville Bridge and Butternut Creek Culvert. The changes are reflected on the construction plan and profile sheets in Appendix N (Bound Separately).

1.4.3 Drainage Patterns

Existing Conditions:

The existing corridor is primarily comprised of forested land, and area of dense tree cover. The ground is covered with leaves, tree debris such as small fallen branches to entire trees, small shrubs, young trees, and other underbrush. There are areas of exposed rock where sections were removed during the original railroad construction.

Stormwater runoff that does not infiltrate into the ballast is conveyed by sheetflow down the slopes at the edge of the ballast where the stormwater typically enters into depressions along the edge of the ballast, or sheetflows down the railroad embankments along the forest floor. Stormwater then will typically flow longitudinally along the tracks and ballast and outlet into the network of streams leading into the Ashokan Reservoir. In some cases, the water sits in the depressions except in heavier rainfalls where concentrated flows will eventually find drainage swales and outlet points onto the sideslopes adjacent to the trail. Various water courses and streams throughout the trail corridor also convey channelized runoff during storm events. Specific information on these streams and tributaries is described in the wetland delineation report for this project.

Future Conditions:

In the post-construction condition of Phase 1, the drainage patterns will not be modified. The existing ballast has a footprint of approximately 10'-12' in width. The ballast will be graded and stabilized after removal of the track and ties. Organic material within the ballast footprint, and ballast heavily laden with soil and/or tie fragments, will be removed and disposed of with the removed ties. As a result of the tree removal activities, tree stumps will

remain in place to help maintain soil stability. At the conclusion of phase 1, the drainage patterns will remain as they did in the pre-construction condition.

During Phase 2, the drainage patterns will also not be modified. Work proposed includes only measures to help alleviate existing erosion in various locations as identified on the construction and erosion and sediment control plans. Where stormwater flow crosses the trail, culverts are being added to convey the water under the trail directly to the previous flow pattern with erosion protection provided when appropriate. Existing culverts will undergo various levels of repair to provide long term sustainability and to properly convey marked storm events. At the conclusion of construction, the drainage patterns will remain unchanged, however, there will also be significantly less sediment transported during heavy rain events than the pre-construction condition.

1.4.4 *Vegetation*

Existing Conditions:

The corridor traverses through a forested area with many different types of vegetation present in a low lying understory. The existing railroad tracks are generally clear except for minor growth of small bushes and low lying plants. Immediately adjacent to the tracks, small trees and saplings have grown in due to lack of maintenance activities throughout the project corridor. Types of vegetation present includes: Broom sedge (*Carex scoparia*), shallow sedge (*Carex lurida*), pinkweed (*Persicaria pensylvanica*), American bur-reed (*Sparganium americanum*), speckled alder (*Alnus incana)*, Japanese stilt grass (*Microstegium vimineum*), and prickly sedge (*Carex stipata*), green bulrush (*Scirpus atrovirens*), arrow-leaf tearthumb (*Persicaria sagittata*), jewelweed (*Impatiens capensis*), silver maple (*Acer saccharinum*) and red maple (*Acer rubrum*), white pine (*Pinus strobus*, white ash (*Fraxinus americana*), and American beech (*Fagus grandifolia*), red osier dogwood (*Cornus alba*), rattlesnake grass (*Glyceria canadensis*), common reed (*Phragmites australis*), soft rush (*Juncus effusus*), poison ivy (*Toxicodendron radicans).*

Future Conditions:

Phase 1 - Track, Tree and then Tie Removal

The majority of the vegetation removals along the corridor consist of removal of dead or stressed trees that pose an immediate danger to users of the trail and trail infrastructure if they were to fall. The removal of select trees is also necessary within the immediate footprint of the track (8' wide) plus 4' on each side for a total of 16'. In addition to the select tree removals along the railroad corridor, removals are also required at three (3) locations. An 800' length by approximately 16' in width will be required to reroute the trail around Wetland O, the removals for the daylighting of Butternut Creek, and removals for the construction of the Boiceville Bridge is also necessary for construction of the trail. The steel rails and wooden ties will also be removed and the ballast graded to a width of approximately 12' in preparation for the second phase of construction. Trees to be removed have been marked by the County and are included in the Phase 1 construction documents.

Phase 2 – Trail Construction

The proposed project follows the existing alignment of the original railroad corridor. The construction activities will require widening of the existing corridor from the 12' in Phase 1, to approximately 20' in width to accommodate the 12 ft. wide trail, 1-2 ft. structural trail backup (both sides) and the additional fill slopes and swale rehabilitation. The exception to this is along the causeway where the trail is immediately adjacent to the reservoir on both sides. In these areas, the disturbance to vegetation will be limited to a maximum width of 16'. When the reservoir is along one side of the trail, the trail will be offset from the center of the rail to the non-water side to maintain as much vegetation on the water side as possible. In these locations, the edge of the existing ballast will be the limit of the existing trail surface on the water side.

1.4.5 Disturbed Areas

Phase 1 - Track, Tree and then Tie Removal

The expected disturbance under Phase 1 will be to the existing ballast and organics situated on the ballast. The disposal of unsuitable material such as the organics and ballast that is captured during tie removal will be included

with the ties as “tie waste” and treated as such with ultimate disposal in a landfill.

The ballast is not erodible in this case and pulling the ties out and smoothing the ballast surface (within the current footprint of the ballast) to fill voids from the removal of ties is the only disturbance of the ballast. This width is no greater than 12 ft. wide and centered along the existing rail. The tie removal ballast disturbance does not include the areas identified by DEP on 12/19/17 to be avoided until all permits are in place.

(54,720) long x (12’) wide = 656,640 SF (15.1 ACRE)

Once all permits are in place an additional 6,400 feet of ties can be removed

(6400’) long x (12’) wide = 76,800 SF (1.8 ACRE)

Contractor access, staging, and parking areas will be on already established access roads (8 in total) and parking areas at the Woodstock Dike, Shokan and from Route 28A in Boiceville. The Woodstock Dike, Shokan and Route 28A access points will not require stabilization with Stone and geotextile, however, stabilized construction entrances will be constructed to ensure sediment is not transported onto Route 28 and 28A. Along the other 5 access roads, there are wheel ruts, and areas that are expected to rut, along the entire length of these roads. Based on information from the contractor and review of photos it has been determined that the contractor will need to place fabric and stone along each of these roads in the wheel ruts to allow trucks to safely and efficiently traverse these access roads. The width of the fabric and stone will be 10’ from wheel rut-to-wheel rut. The stone and fabric will be removed at the end of Phase 2 if the DEP desires or remain in place to maintain emergency access or road improvements. The disposition of the roads will be determined internally at DEP.

Stabilization of Existing Access Roads (See Diagrams in Appendix R)
4,355 Linear feet x 10’ wide (max) = 43,550 SF (1.0 ACRE).
Construction Entrances = 8 x 1500 SF Each = 12,000 SF = 0.28 Acres

Phase 1 Total = 15.1 + 1.8 + 1.0 + 0.3 (Acres) = 18.2 Acres

The construction documents and this SWPPP will permit no more than 2.0 acres of disturbance at any given time.

Phase 2 – Trail Construction

Disturbances under **Phase 2** will include the demolition and construction activities involving the Boiceville Bridge and the Butternut Creek Culvert, trail grading and construction, swale grading/rehabilitation, and drainage improvements such as stone apron installation and small culvert installation and rehabilitation. These disturbances will occur in the designated areas as identified in the contract drawings. Disturbance in sensitive areas is the absolute minimum and these limits will be strictly enforced as identified on the contract drawings. No soil disturbances will occur outside of the cut/fill line, swale rehabilitation line, or stone apron installation line for the construction of the trail. To minimize disturbances and impacts to sensitive watercourses (streams and wetlands) the trail was reduced in width from 12' to 10' and also shifted from 1 to 4 ft. from the track centerline in several locations to minimize and avoid impacts to sensitive watercourses. Shoulders typically provided as per AASHTO guidelines were eliminated in all sensitive areas and most others and replaced with a narrow structural trail backup to add stability to the trail. A red project boundary line has been added to the plans in Appendix N, which shows the extreme limits of the project area. This boundary line includes areas where construction personnel or vehicles may be stationed temporarily to complete work, such as rehabilitation of the small concrete culverts. Work within this line will not result in additional ground disturbances outside of the cut / fill lines (disturbance limits.)

Phase 2 Total = 33.1 Acres

The construction documents and this SWPPP will permit no more than 2.0 acres of disturbance at any given time.

1.5 Construction Site Estimates

Phase 1 - Track, Tree and then Tie Removal**:**

Total Site Area:	228.5 acres
Total Area to be disturbed:	18.2 acres

Existing Impervious Area	0.0 acres
Existing Impervious Area to be disturbed:	0.0 acres
Future Impervious Area within disturbed area:	0.0 acres
Percentage impervious area before construction:	0.0 %
Percentage of disturbed area impervious after construction:	0.0 %

Phase 2 – Trail Construction**:**

Total Site Area:	228.5 acres
Total Area to be disturbed:	33.1 acres
Total Area within Project Boundary line	56.7 acres
Existing Impervious Area	0.0 acres
Existing Impervious Area to be disturbed:	0.0 acres
Future Impervious Area within disturbed area:	0.0 acres
Percentage impervious area before construction:	0.0 %
Percentage of disturbed area impervious after construction:	0.0 %

1.6 Receiving Waters

Stormwater runoff from the trail surface that does not infiltrate to the stone ballast layer below will be conveyed by sheet flow to the northern edge of the trail (side furthest from the reservoir) where an additional opportunity for runoff to infiltrate into the ballast layer will occur on the stabilized trail shoulder. Runoff that does not infiltrate will be collected and follow the existing drainage patterns throughout the corridor. In areas in cut, runoff will collect in trailside swales that flow into existing streams which eventually discharge into the Ashokan Reservoir, which is classified as an AA standard terminal reservoir and owned and operated by DEP. Sections of the trail that are in fill will have similar drainage characteristics as the sections in cut, however, runoff that does not infiltrate will not be collected in drainage swales. The runoff will flow off the trail edge and will enter into sheet flow down the sideslopes and eventually into more level areas were the stormwater will have the opportunity to infiltrate along the forest floor. The existing leaf litter and vegetation will help to disperse the runoff and allow for greater infiltration and pocket storage. It was noted in the soil survey that the

majority of the soils throughout the corridor exhibit well-drained characteristics.

A total of 16 wetlands were identified and delineated by B&L within and adjacent to the project corridor as part of the environmental field investigation. Figures 6A through 6I in the Wetland Delineation Report show the locations of the wetlands delineated as well as the location of the 17 observed streams. Table 2, below, provides the approximate coordinates of each wetland and stream located within the project corridor. Identified wetland areas were individually labeled as A through P. Streams observed within the project area were labeled as Stream 1 through Stream 17. Additional details and the Wetland Delineation Report can be found in Appendix H.

Table 2: Wetland and Stream Location

Resource ID	Type of Resource	Lat/Long Coordinates (NAD83)
A	Wetland	41°59'36.01"N, 74° 5'27.64"W
B	Wetland	42° 0'5.23"N, 74° 7'47.75"W
C	Wetland	41°59'42.48"N, 74° 5'32.51"W
D	Wetland	41°59'42.19"N, 74° 5'31.42"W
E	Wetland	41°59'44.24"N, 74° 9'14.53"W
F	Wetland	41°58'49.68"N, 74°10'57.76"W
G	Wetland	41°58'48.99"N, 74°10'59.81"W
H	Wetland	41°58'40.09"N, 74°11'21.86"W
I	Wetland	41°58'35.38"N, 74°11'34.48"W
J	Wetland	41°58'20.23"N, 74°12'15.83"W
K	Wetland	41°58'17.03"N, 74°12'24.42"W
L	Wetland	41°58'17.69"N, 74°12'24.47"W
M	Wetland	41°58'10.89"N, 74°12'40.99"W
N	Wetland	41°58'10.72"N, 74°12'40.71"W
O	Wetland	41°58'20.68"N, 74°14'37.94"W
P	Wetland	42° 0'2.59"N, 74°16'12.76"W
1	Stream	42°0'3.955"N, 74°7'35.846"W
2	Stream	42°0'4.43"N, 74°7'50.57"W
3	Stream	42°0'3.126"N, 74°8'5.448"W
4	Stream	41°59'57.381"N, 74°8'51.728"W
5	Stream	41°59'43.523"N, 74°9'14.097"W

Table 2: Wetland and Stream Location		
Resource ID	Type of Resource	Lat/Long Coordinates (NAD83)
6	Stream	41°59'29.018"N, 74°9'45.409"W
7	Stream	41°58'51.309"N, 74°10'51.827"W
8	Stream	41°58'49.08"N, 74°10'57.858"W
9	Stream	41°58'36.267"N, 74°11'34.791"W
10	Stream	41°58'27.057"N, 74°11'55.15"W
11	Stream	41°58'24.273"N, 74°12'4.192"W
12	Stream	41°58'1.983"N, 74°13'10.877"W
13	Stream	41°58'2.626"N, 74°13'44.729"W
14	Stream	41°58'13.383"N, 74°14'23.43"W
15	Stream	41°58'26.086"N, 74°14'54.98"W
16	Stream	41°58'44.687"N, 74°15'28.768"W

In addition to the resources identified by B&L staff, New York City Department of Environmental Protection has provided the boundaries of 10 wetlands (labeled Wetlands Q thru Z) in the vicinity of the project area based on delineations they previously conducted for forest management projects.

DEP's delineations were conducted pursuant to methods in the 1987 Army Corps of Engineers Wetland Delineation Manual and the Northcentral and Northeast Regional Supplement. Wetlands Q through S were delineated in May through July 2012, Wetlands T through X in June of 2013. Wetland Z was delineated in 2010, and recently re-delineated in 2017. Most of the wetland polygons provided by DEP are outside of the project limits for the trail project (Wetland R, S, T, U, V and Z). The corridor was re-routed to minimize and avoid impacts to wetlands O, W, X and Y. Wetlands Q and X are coincident with Wetlands H and O, Respectively.

DEP also provided the locations of 20 Watercourses (labeled Streams 18 through 37). These watercourses ultimately connect to tributaries of the Ashokan Reservoir, and as such, are believed to be jurisdictional features. A summary of these features are displayed in Appendix Q.

All water courses and wetland connections identified by B&L and DEP are being treated as sensitive areas for this project.

1.7 Site Features and Sensitive Areas to be protected

Vegetation: Under Phase 1 the only disturbance of adjacent vegetation will be limited only to what is within the 12' wide area of the existing ballast. Wetland vegetation that is adjacent to the work limits that is not to be disturbed will be delineated with survey ribbon in trees and stakes every 12' pinned with survey ribbon during Phase 1 and orange construction fencing, "Protected Area, Keep Out" signs, and fiber logs in Phase 2 to prevent the contractor and sediment from entering the wetland vegetation.

Slopes: The slopes throughout the project corridor will not be altered as a result of this project. Minor changes to the profile of the trail are anticipated in select areas to eliminate the need to place embankment material on the side slopes.

Soils: The soils in the project area are typically well drained and offer excellent treatment and infiltration potential. Soil restoration and amendments are not applicable for this project.

Critical Ecological Habitats: The project is located within areas identified as suitable habitat for the Bald Eagle, Bog Turtle and Northern Long-eared and Indiana Bat. See section 1.9 for an in depth discussion on the existing habitat and the proposed conditions.

Pursuant to USACOE Nationwide Permit General Condition 32, the SWPPP documents must describe how the mitigation requirement will be satisfied if the project will result in greater than 0.1 acre of wetland impacts.

The proposed activities included as part of Phase 1 of this project will not result in a loss of wetlands. No filling or introduction of outside materials will occur within the wetlands. Only steel rail, other iron and steel track materials, tie removal and grading of existing ballast will occur within small wetland sections that cross the existing tracks and ballast. These areas total less than 0.1 acres as part of Phase 1.

The proposed activities included as part of Phase 2 of this project will result in a loss 0.09 acres of wetlands. This loss is required for the grading and placement of the new trail material through wetland AS-20 (J and K) and for the placement of fill adjacent to the trail to wetlands M and N. The total wetland impacts have been significantly reduced by the complete avoidance of wetland O, achieved by rerouting the trail off of the existing railroad alignment to the north of the wetland, reduction of the total trail width (trail and structural back-up) from greater than 14 ft. to 12 ft. through wetlands M and N, and the installation of a boardwalk system to completely span a 250 ft. length of wetland AS-20. Wetland impacts will not exceed 0.1 acres therefore a description on how the mitigation requirement will be satisfied is not required.

1.8 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

- Land grading on and immediately adjacent to the trail
- Excavation of existing ground
- Soil stabilization activities
- Dewatering activities
- Drainage pipe installations
- Installation of concrete bridge footings and abutments

Potential pollutants and sources, other than sediment, to stormwater runoff include:

- The introduction of fluids from equipment and construction vehicles to the site. Tools and equipment requiring washing shall be washed in a designated washout location that is appropriately constructed to prevent pollutants from exiting the immediate area around the washout station or the site. This washout shall not, under any circumstances be allowed to enter the drainage ditches, swales, or any body of water.

All debris resulting from washouts shall be removed and properly disposed off-site. No potential wastes and products may be stored on-site include grubbing wastes, packaging materials, building materials, paints and thinners, cleaning solvents, pesticides, petroleum products, and fertilizers. Fluids will not be stored on site. Equipment utilized in construction shall be well-maintained and free of any known leaks of fluids. Those observed to leak will require immediate cleanup of both the equipment and the impacted area. Cleanup materials and waste will require proper disposal. The equipment will need to be removed from any location where contamination of soil or waterbodies may occur. The equipment shall be removed from use either off-site or on-site with appropriate and Owner approved storage methods until repaired and inspected by the Owner or the Owners representative. The onsite 4-hr NYSDEC trained Contractor shall visually inspect for leaks on a daily basis. The Contractor shall also submit, to the Engineer, the proposed wash out and fluids storage areas for approval.

- The introduction of concrete and stone to the site shall be handled with care. Precautions shall be taken to prevent transfer of these pollutants offsite or to be introduced to any waterbodies. At a minimum, the best management practices outlined in Section 2 shall be followed to prevent the undesired migration of construction wastes to sensitive areas.

1.9 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☒ **Yes** ☐ **No**

The Corridor has been assessed for impacts to threatened and endangered Species by NYS and Federal regulations. The following threatened and endangered species were identified during queries of the federal Information for Planning and Conservation (IPaC) and NYS Natural Heritage Program (NHP) database.

Indiana Bat (*Myotis sodalis*) - Endangered
Northern long-eared bat (*Myotis septentrionalis*) - Threatened
Bog turtle (*Clemmys muhlenbergii*) - Threatened
Bald eagle (*Haliaeetus leucocephalus*) - Threatened (NYS only).

The U.S. Fish and Wildlife Service (USFWS) New York Field Office's website was reviewed to determine whether any federally listed endangered, threatened, or candidate species are known to inhabit the proposed project area. The USFWS' Information, Planning and Conservation (IPaC) System reported three federally protected species that could potentially inhabit the project corridor: the Indiana bat (Myotis sodalis – Endangered), the northern long-eared bat (Myotis septentrionalis – Threatened), and the bog turtle (Clemmys muhlenbergii – Threatened).

Additionally, The Natural Heritage Program (NHP) was queried for information regarding the reported presence of any endangered species, threatened species, species of special concern, or significant natural communities within or adjacent to the project area. A response was received from the NHP on July 26, 2016, which indicated three records of rare or state-listed animals or plants and significant natural communities at the site or in its immediate vicinity. The bald eagle (Haliaeetus leucocephalus- Threatened) was identified to have nested within 400 feet of the project corridor. An Indiana bat maternity colony was identified within 250 feet of the project corridor. Additionally, a high quality occurrence of an uncommon community type, a bluestone vernal pool, was identified .5 mile east of the corridor.

Indiana and Northern Long-eared Bats

In accordance with the 2016 Range-wide Indiana Bat Summer Survey Guidelines (this document applies to both Indiana bat and northern long-eared bats) most trees greater than 3" DBH are considered potential habitat for the northern long-eared bats, and greater than 4" DBH for the Indiana bat. The dominant tree species observed within the project corridor include: red maple (Acer rubrum), striped maple (Acer pensylvanicum), shagbark hickory (Carya ovata), silver maple (Acer saccharinum), northern red oak (Quercus rubra), eastern white pine (Pinus strobus), and American beech (Fagus grandifolia). Approximately 9.2 acres of woody vegetation, including shrubs <3" intermixed with larger DBH trees, are proposed for clearing throughout the linear length of trail under Phases 1 and 2. In accordance with the aforementioned USFWS resources, trees greater than 3" DBH requiring removal are to be cut between November 1st and March 31st during the conservation cutting window timelines. The proposed project is not likely to adversely affect the northern long-eared or Indiana bats, or their suitable habitats, due to the selective tree felling to be conducted along a linear corridor (Only between December 15, 2017 and March 1, 2018) and the availability of large tracts of forestland adjacent to the proposed corridor that will remain untouched.

The bog turtle, the smallest of the emydid turtles, spends much of the time buried in the mud and therefore has a reputation for being secretive. While they prefer fens, highly acidic wetlands and areas of soft, deep mud are considered suitable habitat. Several wetland complexes are adjacent to, but not within, the proposed areas of disturbance for the project. Two wetland complexes will be directly impacted as a result of the project. Field delineated Wetlands K and L, identified as correspondent to NYSDEC Mapped wetland AS-20, were emergent in nature but did not contain the deep mucky soils required by this species or microtopographic relief for basking. Additionally, a large patch of common reed (Phragmites australis) was noted as dominant which due to plant density prohibits basking. The other field delineated wetland to be impacted, identified as Wetland O, was also emergent but shaded over by the upland tree canopy, lacking the necessary sunlight and microtopographic relief for basking. Additionally, the soils were restricted at 12 inches with the presence of ballast. No impacts are expected to other wetlands delineated within the corridor.

Bald eagles prefer habitat along large bodies of water and shoreline area. The project corridor is located within close proximity to the Ashokan Reservoir. Additionally, a confirmed nest with young was reported by the BBA as well as the New York City Department of Environmental Protection and the NYNHP. However, during coordination with the NYSDEC, the nest that was originally reported to be within regulation distance of the trail was not successful and is no longer active. Two other territories are active within .5 mile of the trail. It is understood that impacts may occur to this species as a result of loud construction noises during the nesting season. To minimize impacts and necessity for a BGEPA permit, it is recommended that construction that will occur within 660 feet of a nest occur during the non-breeding season, from mid-September to December.

Additionally, NYSDEC and NYCDEP have ongoing coordination to improve bald eagle habitat along the reservoir. As such, "Currently, DEC recommends that no tree removal occur within 200ft of the shoreline, no white pines be removed within 300ft of the shoreline, and no white pines larger than 25 inches are removed at any location within the project site." Trail construction is designed to limit impacts to the greatest extent possible and will be further refined during construction with full time oversight to avoid impacts to white pines. No white pines larger than 25 in. dbh will be cut or damaged as a result of this project. White pines to remain will be surrounded with orange construction fencing during construction.

1.10 Historic Preservation

Are there any historic sites on or near the construction site?

☒ **Yes** ☐ **No**

In review of the project, the State Historic Preservation Office (SHPO) has deemed that a portion of the railroad corridor running from Shokan to Phoenicia is listed under the National Register Criterion A for its association with the development of several towns. The adaptive re-use of this resource as a recreational trail will honor the historic nature of the corridor and allow it to live on in the future. In order to preserve the history of the corridor, a preservation plan will be developed that identifies historic structures, and

interpretive materials and displays will be included throughout the project that will highlight the history of the corridor. This information is planned at various kiosks and interpretive panels throughout the trail, and sections rail are proposed to be left in place. Coordination has been ongoing with the SHPO to ensure the historic significance will be maintained. A letter of "no adverse impact" is anticipated to be issued by SHPO upon acceptance of the preservation plan and the appropriate interpretative plan is in place.

2.0 Erosion and Sediment Control Practices

All Best Management Practices (BMPs) will be installed and maintained in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment, November 2016 and the most current version of the New York State Stormwater Management Design Manual (NYSSMDM). See Section 2.14 for implementation and maintenance schedules for all erosion and sediment control practices.

2.1 Fiber Roll (a.k.a. - Wattles, Fiber logs)

Under Phase 1, there will be no disturbances requiring the use of fiber rolls.

Under Phase 2, fiber rolls will be installed downgradient of all soil disturbance activities in order to protect any waters of the US or its conveyance means. The fiber roll will reduce runoff velocity and enable the localized deposition of sediment. All construction specifications will be in accordance with the most current version of the New York State Standards and Specifications for Erosion and Sediment, November 2016. Fiber rolls are a temporary sediment control device, and will require removal or they can be open cut and utilized as mulch following site stabilization. See drawings ESCP-1 through ESCP-88 of Appendix N for fiber roll installation locations.

2.2 Land Grading and Roughening

Under Phase 1, land grading and surface roughening will not be required since no erodible material will be disturbed.

Under Phase 2, Land grading and surface roughening shall be conducted in accordance with the New York State Standards and Specifications for Erosion and Sediment, November 2016. All disturbed areas shall be stabilized structurally or with vegetation in compliance with the SPDES permit requirements. All graded areas shall be permanently stabilized immediately following finished grading. Surface roughening shall be conducted on all slopes steeper than 3:1 (H:V). Approved methods include tracking, grooving and stair-stepping.

2.3 Topsoil

Phase 1 – Not applicable

Phase 2 – Topsoil, free from invasive species, from excavated areas will be reapplied to graded areas to provide acceptable plant growing conditions, reducing erosion, irrigation needs, and the need for nitrogen fertilizer. Subsoil is to be scarified, and all compacted areas de-compacted to a minimum depth of 12-inches prior to top soil placement. Debris, woody plant parts, and stones over 3 inches in diameter are to be removed prior to application. Topsoil shall be distributed to a uniform depth and shall not be placed when frozen or saturated or on top of ice, snow, frozen subsoil, or standing water. Topsoil placed on slopes greater than five percent (5%) shall be promptly stabilized by "tracking" and seeded and mulched. Top soil placement standards and specifications will be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, November 2016. Seed Mixes shall be those provided and/or approved by DEP.

2.4 Protecting Vegetation during Construction

Protection of vegetation during construction will include protection of existing trees, shrubs, ground cover and other vegetation from damage by construction equipment.

Under Phase 1, construction will begin with the removal of the steel rails at the Basin Road overpass (milepost K10) and continue west with the work area within the limits of the existing rails, ties and ballast (12' in width). This starting location is approximately 3 miles east of the nearest B&L and DEP delineated sensitive area. Prior to the contractor performing any operations adjacent to sensitive areas, B&L will delineate these sensitive areas within the first few days of construction as they are identified on the plans and in the SWPPP. DEP will have the reasonable opportunity to review the delineations prior to construction activities beyond milepost K12 and make adjustments if necessary. The use of colored tape (surveyors flagging) and stakes will be utilized during Phase 1 to call attention to the sensitive areas as no work will take place in these areas. The stakes will be spaced at 12' intervals and supplemented by flagging in the trees 6' or higher. Fencing is very difficult to install in frozen ground. The contractor has already been instructed to not

disturb these areas and is committed to preserving resources. During the Phase 1 removal tasks, construction vehicles will remain within the existing railroad ballast footprint and there will be no filling, clearing, grubbing or excavation activities adjacent to these flagged areas. After the rails are removed, trees will be removed. Following the tree removals the ties will be removed with railroad ties in sensitive areas, identified by DEP, not being removed until all permits are in place. After the ties are removed, the surface of the ballast will be minimally graded to fill the voids left from the tie removal within the limits of the existing ballast this will help minimize tripping hazards.

Under Phase 2, delineation will be accomplished by installing orange construction fence to delineate sensitive areas, specific trees, historic features (well, foundation) and other areas or elements considered to need shielding. Orange Construction fence is a temporary control device, and will require removal following site stabilization.

2.5 Temporary Seeding on All Areas

Phase 1 - There will be no temporary seeding under Phase 1 as soil disturbance will not take place.

Phase 2 - All areas that are disturbed will be **seeded and heavily mulched** in accordance with standards and specifications of the most current version of the New York State Standards and Specifications for Erosion and Sediment Control, November 2016 **by the end of each workday**.

- Site preparation will include:
  - Scarify, if compacted
  - Maintain a pH of 6.0 to 7.0
  - NO FERTILIZER SHALL BE USED ON THIS PROJECT

- For temporary and permanent seeding, the above site preparation will be conducted and the site will be seeded in accordance with the project specifications. A typical mix contains the following: Mixture of 30% k-31 Tall Fescue, 25% Creeping Red Fescue, 35% Annual Rye Grass, and 10% Kentucky Bluegrass, at 3 lbs. per 1,000 sf.

  However, NYC DEP will provide a specific mixture for this project.

- Irrigation with potable water of temporary and permanent seeding shall be conducted as necessary to encourage the required vegetative stand.
- Final site stabilization will be defined as permanent cover of 90% of the entire project site, and must be approved by the Engineer. **Note that at the conclusion of construction activities, a vegetative cover density of less than 90% of the vegetated area will require the continuation of regular weekly inspections and that a Notice of Termination cannot be submitted if the vegetative stand is less than 90%. Final Payment for this work will also be held until 90% established.**

2.6 Mulching

Phase 1, not applicable since no seeding or soil disturbance is expected. Bales of straw will be on-hand in case bare soil is exposed.

Phase 2, mulching will be used on soils subject to erosion and on areas of new seeding. Mulch is to be applied after site preparation, soil amendments and planting is accomplished at the end of each work day. Cereal grain straw mulch is to be applied at 90 lbs. per 1,000 sq. ft. (two (2) tons per acre) and anchored with wood fiber hydro-mulch at 11 to 17 lbs. per sq. ft. (500-750 lbs. per acre). Mulching standards and specifications will be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, November 2016.

2.7 Rolled Erosion Control Product (RECP):

Phase 1, not applicable since no seeding or soil disturbance is expected.

Phase 2, a biodegradable erosion control product that is designed for short term to intermediate term erosion protection and vegetation establishment on moderate to steep slopes, medium-to high-flow channels, will be utilized. Areas within 50 feet of a surface water feature, areas corresponding to constructed stormwater channels, and areas corresponding to a slope of 15% or greater, must receive RECP. After the blankets degrade, soil erosion is controlled by the mature vegetation's root, stem, and leaf structures. Rolled

erosion control product shall be installed in accordance with manufacturer's recommendations and specifications and to the satisfaction of the Engineer and SWPPP Inspector. The *North American Green S75* RECP or similar biodegradable blanket shall be used on this project.

2.8 Equipment and Laydown Areas

During Phase 1, storage of construction equipment will be at areas already used for parking and access at the Woodstock Dike and Shokan locations. Sensitive areas will be delineated and the work is limited to the existing ballast footprint.

During Phase 2, storage of equipment and stockpiling of materials will take place at the designated areas as shown on construction plans AP-1 through AP-7 in Appendix N. Most of the laydown and access roadways will already be constructed under Phase 1 of the project and will not need to be constructed as part of Phase 2.

No fuel or hazardous materials will be stored on site (See Good Housekeeping BMP's in Section 4.0) and mobile fueling vehicles will be equipped with containment and spill cleanup appurtenances. Any and all spills or leaks from the equipment must be cleaned up and reported to both the County, DEP and the NYSDEC in accordance with applicable State and Federal Regulations (see Appendix K).

2.9 Temporary Stockpile Areas

Phase 1 – Under Phase 1, the contractor has indicated that temporary stockpiles will be contained within their respective over-the-road travel vessels such as a trailer or truck bed. Details are included in the SWPPP, if stockpiling is to occur.

During Phase 2, temporary stockpile areas of stone and other similar materials shall be surrounded with a layer of fiber roll/log as necessary to prevent the migration of erodible material onto adjacent property. Erodible stockpiles shall not remain exposed for greater than 7 days unless they are to be utilized or moved within 14 days of last exposure or use. If the stockpiles will not be utilized or moved within 14 days of last exposure or use, they shall

be covered and have side slopes of 1:3 (V:H) or flatter. Designated temporary stockpile areas can be found in Appendix N on drawings AP-1 through AP-7 and shall conform to the details on drawing ESCD-2. Any change in designated temporary stockpile areas will require a SWPPP amendment.

2.10 Concrete Washout

Concrete washouts shall be used to wash any concrete, or other pollutant off of vehicles and equipment. This area shall be designed per EPA standards, completely contained and not within 100 feet of waterbodies. The washout locations shall be constructed in a designated stockpile / laydown area and shall conform to the detail on drawing ESCD-2 in Appendix N.

2.11 Rock Outlet / Stone Apron

An area of rock protection will be placed at the inlet and outlet ends of the proposed and existing culverts as noted on the construction plans in Appendix N. The intent of the rock outlet or stone apron is to reduce the depth, velocity and energy of the water to eliminate the potential for erosion downstream of the culvert. The stone apron is installed by excavating the soil at the inlet and outlet of the culvert, placing a geotextile fabric on the excavated soil, and filling the excavated area with large crushed stone. See the contract plans for materials and dimensions of the stone aprons to be installed. The stone aprons shall be installed prior to placement of a new culvert.

2.12 Stream Bank Protection

Stream bank protection shall be installed at the new Butternut Creek and Esopus Creek bridges. Specific plans and details are located on drawings BV-2 and BN-2 in Appendix N. In addition, Stream Bank Protections shall conform to New York State Standards and Specifications for Erosion and Sediment Control located in Appendix O of this SWPPP.

2.13 Dewatering

Dewatering procedures will be required at the Butternut Creek, Esopus Creek and several small culvert locations located throughout the length of the project. In general, dewatering shall be performed as necessary to perform all in-stream work in dry conditions. Under no circumstances will work be allowed to take place within flowing or standing water of a stream. For the location of the small culverts, see the general plans (PL-1 through PL-88) and for specific culvert rehabilitation details, see drawing CD-1 through CD-10 in Appendix N. Dewatering Procedures shall conform to New York State Standards and Specifications for Erosion and Sediment Control located in Appendix O and the notes and details on drawing ESCD-4 in Appendix N.

2.14 Dust Containment

The contractor will be required to erect and maintain a system capable of preventing the migration and settlement of concrete dust onto the surrounding project site. All concrete dust generated from cutting, jackhammering, or breaking of concrete shall be collected, removed from the project site, and disposed of in an appropriate disposal facility. Please see item 570.160001 – Class B containment system for further details in Appendix O.

2.15 Erosion and Sediment Control Implementation and Maintenance

The following table provides a summary of erosion and sediment control implementation to be utilized, as a minimum, on this project.

Table 3: Erosion and Sediment Control Implementation Plan

Practice	Duration	Time of Implementation	Time of Removal
Fiber Roll	Temporary	Prior to earth disturbing activities.	Upon up-gradient site stabilization.
Land Grading and Roughening	Permanent	Prior to topsoil placement and temporary or permanent seeding	Not to be removed
Topsoil	Permanent	Prior to temporary or permanent seeding	Not to be removed
Protecting Vegetation	Temporary	Prior to construction.	Upon completion of construction
Temporary Seeding	Temporary	· Within 3 days of disturbance. · At the end of each work day in sensitive areas and adjacent to protected resources.	Upon reconvening site work in location of temporary seeding.
Mulching	Temporary	· Within 3 days of disturbance. · At the end of each work day in sensitive areas and adjacent to protected resources.	Not to be removed
RECP	Permanent	After temporary or permanent seeding	Not to be removed
Equipment Laydown Areas	Temporary	Prior to commencement of construction or as part of the constructed areas	Upon completion of construction and just before final stabilization.
Temporary Stockpiles	Temporary	Upon commencement of construction	Upon completion of final grading.
Permanent Seeding	Permanent	Immediately upon final grading of areas to be vegetated	Not to be removed
Concrete Washout	Temporary	Prior to commencement of construction.	Upon completion of construction and just before final stabilization.
Stone Apron	Permanent	Prior to installation of culvert	Not to be removed
Stream Bank Protection	Permanent	Immediately after achieving final grade of streambank slopes and prior to removal of cofferdams	Not to be removed.
Dust Containment	Temporary	Prior to cutting, jackhammering, or breaking concrete at the Butternut Creek Culvert	Upon completion of concrete removal from the project site.
Dewatering	Temporary	Prior to and during in-stream work	After completion of in-stream work

Swales: Work within swales during Phase 1 will be limited to the removal of woody debris such as fallen logs, tree branches and the felling and removal of standing trees that are simple to remove and that result in no disturbances. These logs and branches will be "picked" or lifted from the swales and will not result in soil disturbances within the swales. No grading, excavation, or filling activities will occur within the existing drainage swales as part of Phase 1. Standing trees growing within existing swales will be felled and flush cut and will not result in soil disturbances.

Under Phase 2, existing swales will be rehabilitated in non-sensitive areas to convey stormwater to existing culverts or outflow areas and to prevent ponding of stormwater adjacent to the trail. Debris accumulated in the form of fallen trees and logs will be extracted from the existing swales and minor sediment deposits within the swales will be graded flat to restore stormwater flow. Grading activities shall only be performed in select locations agreed upon by the Engineer and Contractor to restore positive flow within the swale.

There are very few areas where an entirely new swale needs to be excavated to convey stormwater flow. The majority of the work within the swales will consist of the aforementioned rehabilitation. Work within the designated sensitive watercourses will consist of woody tree debris extraction only. No grading or sediment removal or deposition is permitted within a designated sensitive watercourse, unless specifically noted on the contract plans in Appendix N. Stone outlet aprons are included as indicated on the contract plans in Appendix N to reduce stormwater velocities at the exit of the swale and to promote sheetflow down the steep sideslopes.

The following table provides a summary of erosion and sediment control maintenance:

Table 4: Erosion and Sediment Control Maintenance Plan-Maintenance Measures				
Practice	**Duration**	**Maintenance Required**	**Maintenance Frequency**	**Responsible Party**
Fiber Roll	Temporary	Replace upon identification of damaged materials and when sediment reaches half the height of the fiber roll.	Inspect daily and after each runoff event.	Contractor
Temporary Seeding	Temporary	Reseed bare spots and keep free from traffic.	Weekly until stabilization occurs.	Contractor
Mulching	Temporary	Replace bare spots and keep free from traffic.	Weekly until stabilization occurs.	Contractor
RECP	Permanent	Replace upon identification of damaged materials	Weekly until stabilization occurs	Contractor
Equipment Laydown Areas	Temporary	Repair or replacement of barrier. Promptly repair any leaking equipment.	Inspect daily and after each runoff event. If torn or leaking, replace immediately.	Contractor
Temporary Stockpiles	Temporary	Ensure appropriate side slopes and functioning perimeter barriers.	Weekly	Contractor
Permanent Seeding	Permanent	Reseed bare spots, water to establish growth, keep free of vehicular travel.	Weekly until growth is established.	Contractor
Concrete Washout	Temporary	Remove hardened concrete and clean area when 75% capacity is reached.	Weekly	Contractor
Stone Apron	Permanent	Remove sediment when 75% capacity is reached	Weekly until sedimentation ceases	Contractor
Stream Bank Protection	Permanent	None	Not to be removed.	Contractor
Dust Containment	Temporary	Remove concrete dust as necessary to maintain full operational efficiency. Refer to manufacturers recommendations on maintenance.	Daily during operation	Contractor
Dewatering	Temporary	Ensure full functionality of dewatering system, especially in advance of a pending storm event.	Daily during operation	Contractor

Table 4: Erosion and Sediment Control Maintenance Plan-Maintenance Measures				
Practice	**Duration**	**Maintenance Required**	**Maintenance Frequency**	**Responsible Party**

Notes:
1) All erosion and sediment control practices will be installed and operation prior to start of work upgradient of the practice.
2) Temporary practices will remain in place and operational until vegetative site stabilization, as directed by the Engineer.
3) Practices will be inspected weekly in accordance with GP-0-15-002.
4) The Contractor is responsible for installation and maintenance until submittal of Notice of Termination.

Table 5: Best Management Practice Category

Practice	Duration	Category
Fiber Roll	Temporary	Protect Slopes, Minimize disturbed area and protect natural features and soil. Establish perimeter controls and sediment barriers. Retain sediment on-site.
Temporary Seeding	Temporary	Stabilize soils.
Mulching	Temporary	Retain sediment on-site.
RECP	Permanent	Retain sediment on-site.
Equipment Laydown Areas	Temporary	Retain sediment onsite. Establish perimeter controls, utilize geotextile
Temporary Stockpiles	Temporary	Retain sediment onsite, utilize geotextile
Seeding and Site Stabilization	Permanent	Protect slopes and retain sediment onsite using geotextiles
Access Roads	Temporary	Utilize Geotextile/stone to stabilize Access Roads
Staging Areas	Temporary	Utilize Geotextile to Stabilize Ground
Construction Entrances	Temporary	Utilize Geotextile to Stabilize Entrances
Perimeter Sediment Controls	Temporary	Utilize Geotextile to Retain Sediment
Concrete Washout	Temporary	Retain sediment onsite and protect streams and watercourses
Stone Apron	Permanent	Reduce erosion due to excessive stormwater velocities
Stream Bank Protection	Permanent	Reduce erosion due to excessive stream velocities
Dust Containment	Temporary	Retain airborne sediment onsite
Dewatering	Temporary	Retain sediment onsite and protect streams and watercourses

3.0 Post-Construction Stormwater Management

Post Construction Stormwater Management is not required for this project as the existing drainage patterns will not be altered and the project will not result in an increase in impervious area. The majority of the project will be constructed on an existing railbed where the existing railroad ballast will be utilized as a base material. Additional ballast will be installed to provide an even base for a pervious stone surface course. Stormwater will infiltrate the stone layers during most storm events and if there is any runoff it will be captured on the edge of the stone courses or be conveyed as it is today as sheet flow. There are also depressions along the trail corridor that will store runoff that will eventually be infiltrated into the existing well to moderately drained soils.

Swales: Work within swales during Phase 1 will be limited to the removal of woody debris such as fallen logs, tree branches and the felling and removal of standing trees that are simple to remove and that result in no disturbances. These logs and branches will be "picked" or lifted from the swales and will not result in soil disturbances within the swales. No grading, excavation, or filling activities will occur within the existing drainage swales as part of Phase 1. Standing trees growing within existing swales will be felled and flush cut and will not result in soil disturbances.

Under Phase 2, existing swales will be rehabilitated in non-sensitive areas to convey stormwater to existing culverts or outflow areas and to prevent ponding of stormwater adjacent to the trail. Debris accumulated in the form of fallen trees and logs will be extracted from the existing swales and minor sediment deposits within the swales will be graded flat to restore stormwater flow. Grading activities shall only be performed in select locations agreed upon by the Engineer and Contractor to restore positive flow within the swale.

There are very few areas where an entirely new swale needs to be excavated to convey stormwater flow. The majority of the work within the swales will consist of the aforementioned rehabilitation. Work within the designated sensitive watercourses will consist of woody tree debris extraction only. No grading or sediment removal or deposition is permitted within a designated sensitive watercourse, unless specifically noted on the contract plans in Appendix N. Stone outlet aprons are included as indicated on the contract plans in Appendix N to reduce stormwater velocities at the exit of the swale and to promote sheetflow down the steep sideslopes.

4.0 Good Housekeeping BMPs

The following best management practices should be implemented to ensure the proper storage and disposal of construction site wastes:

- The waste collection area will be the designated stockpile and laydown areas indicated on the contract plans, drawings AP-1 through AP-7 in Appendix N. Waste materials will be stored within the over-the-road travel vessels such as trailers or truck beds waiting for transport to the processing facility. This area does not receive significant runoff from upland areas and is not immediately adjacent to water bodies. There is not expected to be any storage of waste materials during Phase 1 or 2 of this project. However, details are included in this SWPPP if such an instance needs to occur such as an emergency situation.
- Waste containers should be covered.
- Waste collection should be scheduled at appropriate intervals to prevent overfilling of containers.
- All maintenance and washing of vehicles shall be conducted off-site.
- Any spills should be cleaned up immediately and disposed of in accordance with applicable state and local laws.
- Contractor should have adequate spill prevention materials (i.e., absorbent pads, booms, etc.) on-site.
- Under Phase 1 and 2, no petroleum products will be stored on-site.
- In the event of a spill occurrence, the actions outlined in the NYSDEC's May 1, 1996 Technical Field Guidance for Spill Reporting and Initial Notification Requirements shall be adhered to (see Appendix K).
- Disposal of hazardous waste (non-petroleum) should be conducted as follows:
  a. In accordance with local hazardous waste management authorities, and State and Federal regulations.
  b. Containers should be emptied (in accordance with environmental regulations) prior to disposal at an approved location.
  c. Product labels from containers should not be removed.
  d. All hazardous waste containers should be stored in a dry, curbed/diked area per environmental regulations.

- All sanitary waste generated on-site should disposed of in accordance with local and State regulations.
- Pesticides and fertilizers should be stored in a dry, curbed/diked area. Manufacturer's application rates should be adhered to, and pesticides shall be applied by a licensed or certified personnel where applicable.
- All storage areas and waste containers should be included in the regular inspection program of the site.

The Contractor is responsible for implementation of additional best management practices necessary to protect water quality.

Special Note: NYCDEP Land Use Permit Special Conditions:

No fuel storage except for what is necessary for one day of work, will be allowed on City property. Spill control kits containing absorbents must be kept on site at all times whenever work is conducted on City property. No releasing, dumping, spilling or overnight storage of any petroleum-based oil, hydraulic fluid, fuels or chemicals shall be permitted on City Property. All spills and releases must be reported to the DEP Police at 914-593-7500 or 888-426-7433

5.0 Inspections and Maintenance

5.1 Site Inspections

Inspections are required to be performed by a Qualified Inspector, which is a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer (PE), Certified Professional in Erosion and Sediment Control (CPESC), licensed Landscape Architect, or other Department-endorsed individual(s). The qualified inspector must also be working under the direct supervision of the licensed Professional Engineer or licensed Landscape Architect, provided that person has received at least 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 as outlined in the General Permit in Appendix A.

Unless otherwise notified by the NYSDEC, the qualified inspector shall conduct site inspections in accordance with the following schedule:

- At least once every seven (7) calendar days.
- For construction sites where soil disturbance activities are ongoing and have NYSDEC approval to disturb greater than five (5) acres of soil at any one (1) time, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. When performing just two (2) inspections every seven (7) calendar days, the inspections shall be separated by a minimum of two (2) full calendar days.
- 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.

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 (in this case 90% establishment) 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.

At a minimum, the qualified inspector shall inspect all erosion and sediment control practices to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved final stabilization, all points of discharge to natural surface water bodies located within or adjacent to the construction site, and all points of discharge from the construction site.

The qualified inspector shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:

a. Date and time of inspection;

b. Name and title of person(s) performing inspection;

c. A description of the weather and soil conditions (e.g., dry, wet, saturated) at the time of the inspection;

d. A description of the condition of the runoff at all points of discharge from the construction site. This shall include identification of any discharges of sediment from the construction site. Include discharges from conveyance systems (i.e., pipes, culverts, ditches, etc.) and overland flow;

e. A description of the condition of all natural surface water bodies located within or immediately adjacent to the construction site which receive runoff from disturbed areas, including identification of any discharges of sediment to the surface water body;

f. Identification of all erosion and sediment control practices that need repair or maintenance;

g. Identification of all erosion and sediment control practices that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;

h. Description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since the last inspection;

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s); and

k. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective action. Color copies of the digital photographs shall be attached to the inspection report maintained on-site within seven (7) calendar days of the date of inspection. The qualified inspector shall also take digital photographs, with date stamp, that clearly show the condition of the practices after the corrective action has been completed, and color copies of the photos shall be attached to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of the date of that inspection.

Within one (1) business day of the completion of an inspection, the qualified inspector shall notify the Owner, appropriate Contractor (or Subcontractor) of any corrective actions that need to be taken. The Contractor (or subcontractor) shall begin implementing the corrective actions within one (1) business day of this notification and shall complete the corrective actions within seven (7) calendar days from initial notification.

All inspection reports shall be signed by the qualified inspector. Sample inspection reports are included as Appendix E.

5.2 Maintenance of Controls

Upon completion of the project, maintenance for the Ashokan Rail Trail will be the responsibility of Ulster County.

5.3 Corrective Action Log

The corrective action log is attached as Appendix F of the SWPPP.

6.0 Recordkeeping and Training

6.1 Recordkeeping

- The following is a list of records to keep onsite, available for inspectors to review:

  - Dates of grading, construction activity, and stabilization.
  - A copy of the construction general permit (attached).
  - The signed and certified NOI form or permit application form (attached).
  - A copy of the letter from the NYSDEC notifying you of their receipt of your complete NOI/application (to be attached upon receipt).
  - Inspection reports (attached – keep all completed reports onsite).
  - Records relating to endangered species and historic preservation (attached).
  - Owner Certification (attached)
  - Contractor/Subcontractor Certification (including NYSDEC trained Contractor Certification – to be attached upon receipt)
  - Verification of 4-hr Contractor Training for on-site Contractor stormwater pollution control representative (to be attached upon receipt)

6.2 Log of Changes to the SWPPP

The SWPPP change/update log is attached as Appendix G.

7.0 Notice of Termination

Following the final inspection, a Notice of Termination (NOT) shall be filed with the NYSDEC in accordance with the SPDES Permit GP-0-15-002. The NOT will include a certification that the permanent stormwater management facilities have been constructed in accordance with the SWPPP. Prior to submittal of the NOT, an Operation and Maintenance Manual is required to be prepared for the permanent stormwater management facilities. The NOT form is included as Appendix L.

8.0 Prime Contractor Certification

Each contractor and subcontractor responsible for implementing the SWPPP, as presented herein, must sign the following:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. "

Contractor is responsible for installing additional control measures as needed to prevent water quality violations and to maintain compliance with all applicable permits. Contractor is responsible for any penalties and violations associated with water quality violations or non-compliance with SPDES Permits.

Name	
Title*	Address
Date	Telephone Number

Specific Elements of the SWPPP that Contractor is Responsible for:

Name and Title of Contractor's *Trained Individual(s)* Responsible for SWPPP Implementation:

9.0 Subcontractor Certification

Each contractor and subcontractor responsible for implementing the SWPPP, as presented herein, must sign the following:

"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the qualified inspector during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings. "

Contractor is responsible for installing additional control measures as needed to prevent water quality violations and to maintain compliance with all applicable permits. Contractor is responsible for any penalties and violations associated with water quality violations or non-compliance with SPDES Permits.

Name	
Title*	Address
Date	Telephone Number

Specific Elements of the SWPPP that Contractor is Responsible for:

Name and Title of Contractor's *Trained Individual(s)* Responsible for SWPPP Implementation:

10.0 Owner Certification

Refer to Appendix B for the Owner Certification within the Notice of Intent form.

11.0 References

New York Standards and Specifications for Erosion and Sediment Control, NYSDEC, November 2016

New York State Stormwater Management Design Manual, Center for Watershed Protection, August 2010

NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-15-002), NYSDEC, January 2015

The Lower Hudson River Basin Waterbody Inventory and Priority Waterbodies List, NYSDEC, July 2008

Developing Your Stormwater Pollution Prevention Plan, USEPA, May 2007

Stormwater Menu of BMPs, USEPA, June 1, 2006

Web Soil Survey, USDA NRCS

Appendices

Appendix A

SPDES General Permit 0-15-002

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-0-15-002

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

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

Modification Date:
July 14, 2015 – Correction of typographical error in definition of "New Development", Appendix A

November 23, 2016 – Updated to require the use of the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. The use of this standard will be required as of February 1, 2017.

John J. Ferguson
Chief Permit Administrator

Authorized Signature 11-14-16 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's *State Pollutant Discharge Elimination System ("SPDES")* is a NPDES-approved program with permits issued in accordance with the *Environmental Conservation Law ("ECL").*

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

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

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

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

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

Part I. PERMIT COVERAGE AND LIMITATIONS

A. Permit Application

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

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 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 buffers 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; and

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

b. **Soil Stabilization**. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

c. **Dewatering**. *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 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 *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) Overbank Flood Control Criteria ("Qp"): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or

(2) A downstream analysis reveals that overbank control is not required.

(v) Extreme Flood Control Criteria ("Qf"): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or

(2) A downstream analysis reveals that overbank control is not required.

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

(i) Runoff Reduction Volume (RRv): Reduce the total Water Quality Volume (WQv) by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24 hour design storm over the post-developed watershed and shall be calculated in accordance with the criteria in Section 10.3 of the Design Manual.

(ii) Minimum RRv and Treatment of Remaining Total WQv: *Construction activities* that cannot meet the criteria in Part I.C.2.b.(i) of this permit due to *site limitations* shall direct runoff from all newly constructed *impervious areas* to a RR technique or

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

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

(iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:

(1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or

(2) The site *discharge*s directly to tidal waters, or fifth order or larger streams.

(iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that overbank control is not required.

(v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

(1) the site *discharge*s directly to tidal waters or fifth order or larger streams, or
(2) A downstream analysis reveals that overbank control is not required.

c. ***Sizing Criteria* for *Redevelopment Activity***

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

(i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.

(1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
(2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
(3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
(4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

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

(ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.

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

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

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

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

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

D. Maintaining Water Quality

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

1. There shall be no increase in turbidity that will cause a substantial visible contrast to natural conditions;

2. There shall be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There shall be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

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

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

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 from *construction activities*.

3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater *discharges* may be authorized by this permit: *discharge*s from firefighting activities; fire hydrant flushings; waters to which cleansers or other components have not been added that are used to wash vehicles or control dust in accordance with the SWPPP, routine external building washdown which does not use detergents; pavement washwaters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; air conditioning condensate; uncontaminated *groundwater* or spring water; uncontaminated *discharge*s from construction site de-watering operations; and foundation or footing drains where flows are not contaminated with process materials such as solvents. For those entities required to obtain coverage under this permit, and who *discharge* as noted in this paragraph, and with the exception of flows from firefighting activities, these *discharges* must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.

4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

F. Activities Which Are Ineligible for Coverage Under This General Permit

All of the following are **not** authorized by this permit:

(Part I.F)

1. *Discharge*s after *construction activities* have been completed and the site has undergone *final stabilization*;

2. *Discharge*s that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;

3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;

4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an endangered or threatened species unless the *owner or operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.C.2 of this permit.

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;

6. *Construction activities* for residential, commercial and institutional projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which disturb one or more acres of land with no existing *impervious cover*; and

   c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the United States Department of Agriculture (“USDA”) Soil Survey for the County where the disturbance will occur.

7. *Construction activities* for linear transportation projects and linear utility projects:

   a. Where the *discharge*s from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and

   b. Which disturb two or more acres of land with no existing *impervious cover*; and

   c. Which are undertaken on land with a Soil Slope Phase that is identified as an E or F, or the map unit name is inclusive of 25% or greater slope, on the USDA Soil Survey for the County where the disturbance will occur.

(Part I.F.8)

8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.C.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:

   a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the construction site within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.

      - 1-5 acres of disturbance - 20 feet
      - 5-20 acres of disturbance - 50 feet
      - 20+ acres of disturbance - 100 feet, or

   b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
      (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
      (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
      (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
      (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or

   c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
      (i) No Affect
      (ii) No Adverse Affect

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

(iii) Executed Memorandum of Agreement, or

d. Documentation that:

(i) SHPA Section 14.09 has been completed by NYS DEC or another state agency.

9. *Discharge*s from *construction activities* that are subject to an existing SPDES individual or general permit where a SPDES permit for *construction activity* has been terminated or denied; or where the *owner or operator* has failed to renew an expired individual permit.

Part II. OBTAINING PERMIT COVERAGE

A.Notice of Intent (NOI) Submittal

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

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

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

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

(Part II.A.2)

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

3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.

4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

B. Permit Authorization

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.

2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:

   a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (http://www.dec.ny.gov/) for more information,

   b. where required, all necessary Department permits subject to the *Uniform Procedures Act ("UPA")* (see 6 NYCRR Part 621) have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators* of *construction activities* that are required to obtain *UPA* permits must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

   c. the final SWPPP has been prepared, and

   d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.

3. An *owner or operator* that has satisfied the requirements of Part II.B.2 above

(Part II.B.3)

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

a. For *construction activities* that are 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. The Department may suspend or deny an *owner's or operator's* coverage

(Part II.B.4)

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

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

C. General Requirements For Owners or Operators With Permit Coverage

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-0-15-002), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, and all documentation necessary to demonstrate eligibility with this permit at the construction site until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.

3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

   a. The *owner or operator* shall

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. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

5. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the *regulated, traditional land use control MS4* in writing of any planned amendments or modifications to the post-construction stormwater management practice component of the SWPPP required by Part III.A. 4. and 5. of this permit. Unless otherwise notified by the *regulated, traditional land use control MS4*, the *owner or operator* shall have the SWPPP amendments or modifications reviewed and accepted by the *regulated, traditional land use control MS4* prior to commencing construction of the post-construction stormwater management practice

(Part II.D)

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

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

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

E. Change of *Owner or Operator*

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. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.A.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.

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

(Part III)

Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.

2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.

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:

   a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;

   b. whenever there is a change in design, construction, or operation at the construction site that has or could have an effect on the *discharge* of *pollutants*; and

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

5. The Department may notify the *owner or operator* at any time that the

(Part III.A.5)

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

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

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

   > "I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *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)

Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS

A. General Construction Site Inspection and Maintenance Requirements

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.

2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York, or protect the public health and safety and/or the environment.

B. Contractor Maintenance Inspection Requirements

1. The *owner or operator* of each *construction activity* identified in Tables 1 and 2 of Appendix B shall have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.

3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

C. Qualified Inspector Inspection Requirements

(Part IV.C)

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

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

- licensed Professional Engineer,
- Certified Professional in Erosion and Sediment Control (CPESC),
- Registered Landscape Architect, or
- someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].

1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:

   a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;

   b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is 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.C.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.

c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4,* the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

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

e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall

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;

(Part IV.C.4.i)

i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;

j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);

k. Identification and status of all corrective actions that were required by previous inspection; and

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.C.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

Part V. TERMINATION OF PERMIT COVERAGE

A. Termination of Permit Coverage

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.A.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.

(Part V.A.2)

2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:

   a. Total project completion - All *construction activity* identified in the SWPPP has been completed; 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.E. of this permit.

   d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.

3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the "*Final Stabilization*" and "Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.

4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the "MS4 Acceptance" statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) required in Part V.A.3. of this permit.

(Part V.A.5)

5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:

   a. the post-construction stormwater management practice(s) and any 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 OF RECORDS

A. Record Retention

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

B. Addresses

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

(Part VII)

Part VII. STANDARD PERMIT CONDITIONS

A. Duty to Comply

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

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

B. Continuation of the Expired General Permit

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

C. Enforcement

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

D. Need to Halt or Reduce Activity Not a Defense

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

(Part VII.E)

E. Duty to Mitigate

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

F. Duty to Provide Information

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

G. Other Information

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

H. Signatory Requirements

1. All NOIs and NOTs shall be signed as follows:

   a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

      (i) a president, secretary, treasurer, or vice-president of the

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 *discharge*r authorized by a general permit to apply for an individual SPDES permit, it shall notify the *discharge*r 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.

(Part VII.N)

N. Permit Actions

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

O. Definitions

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

P. Re-Opener Clause

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with *construction activity* covered by this permit, the *owner or operator* of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.

2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

Q. Penalties for Falsification of Forms and Reports

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

R. Other Permits

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

APPENDIX A

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to surface waters of the State*;*

(ii) Designed or used for collecting or conveying stormwater;

(iii) Which is not a *combined sewer*; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX B

Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

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

- Single family home 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 of one (1) or more acres of land:

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

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

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

Table 2

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

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

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

APPENDIX C

Watersheds Where Enhanced Phosphorus Removal Standards Are Required

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

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

Figure 1 - New York City Watershed East of the Hudson

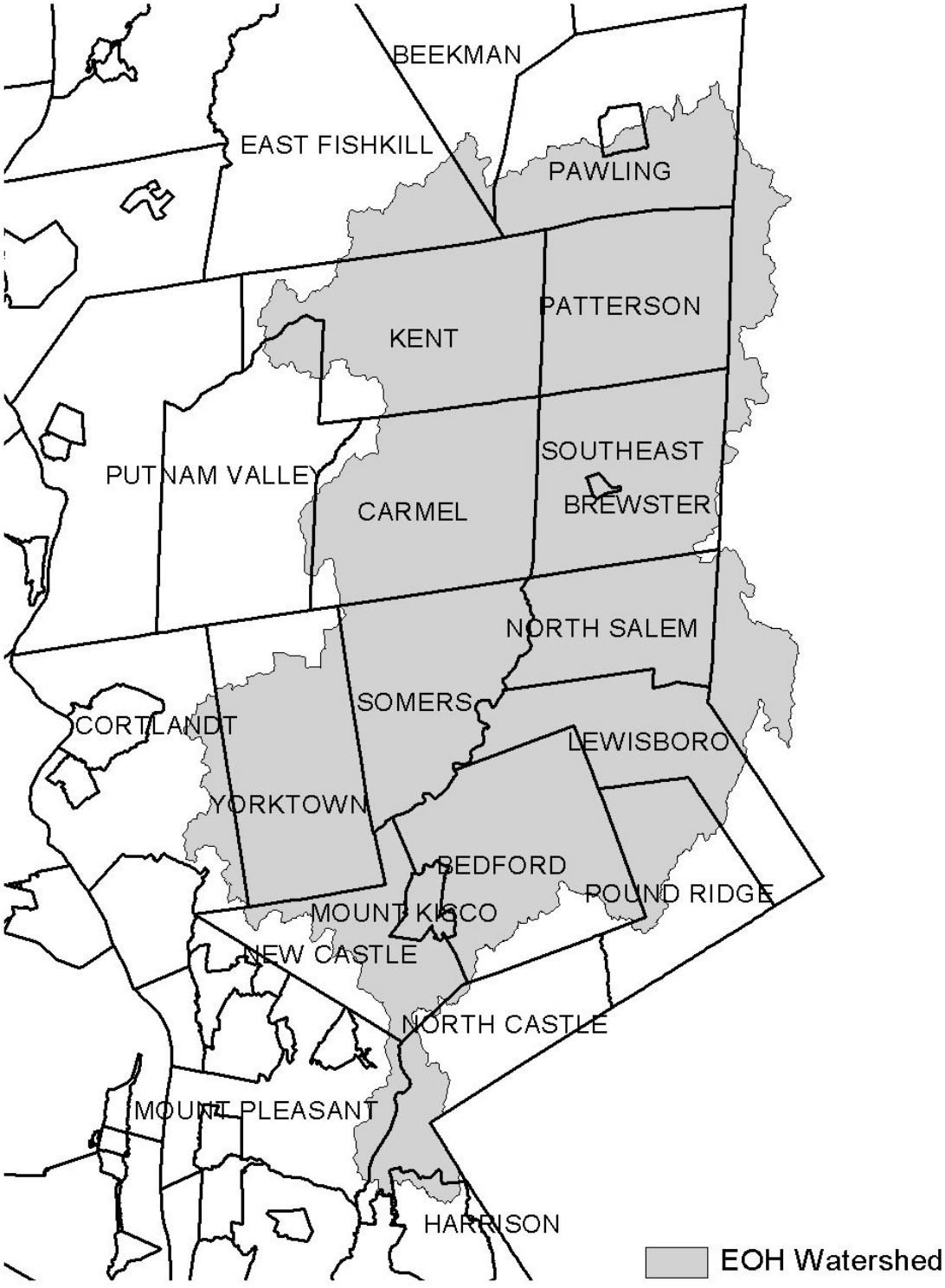


Figure 2 - Onondaga Lake Watershed

Figure 3 - Greenwood Lake Watershed

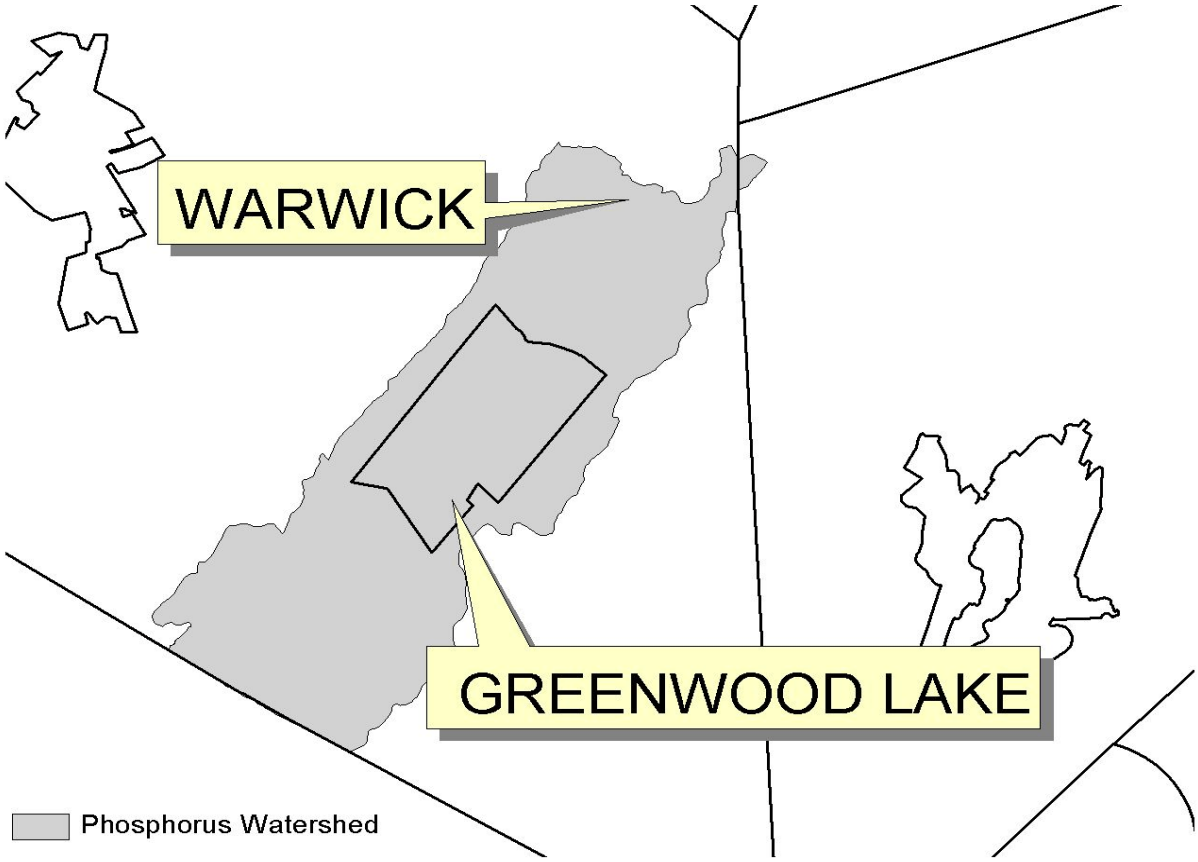


Figure 4 - Oscawana Lake Watershed

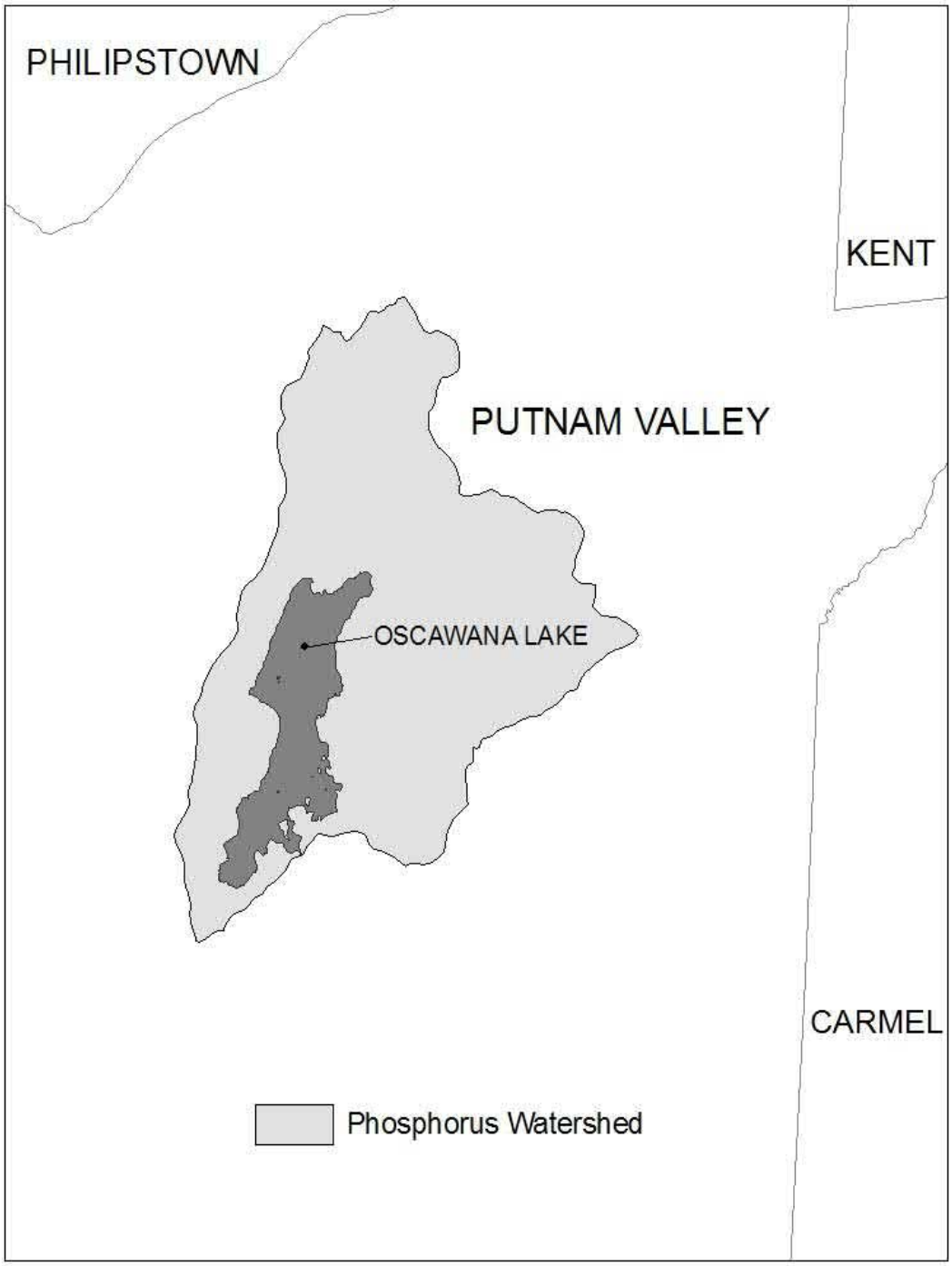
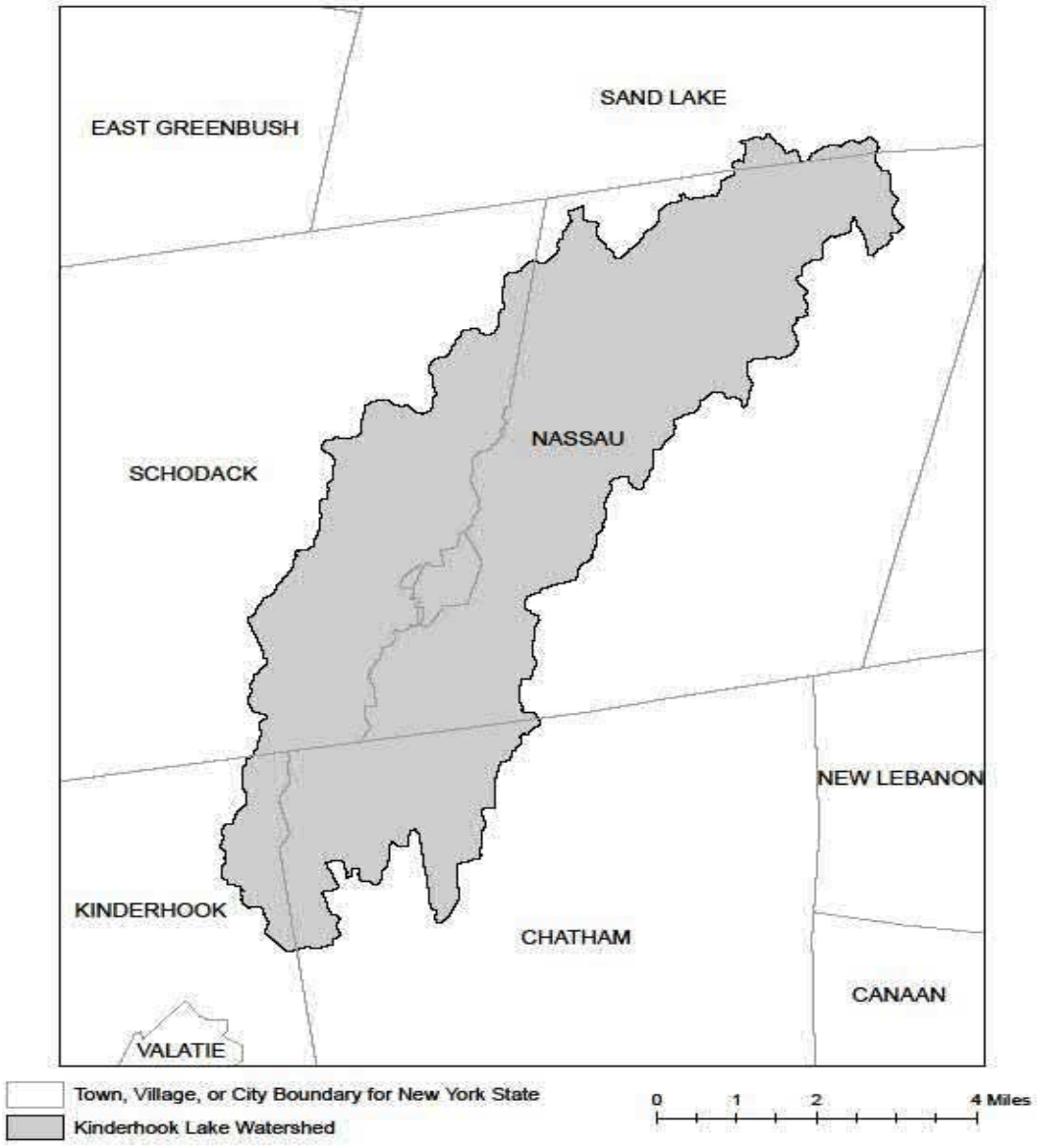


Figure 5: Kinderhook Lake Watershed



APPENDIX D

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

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

APPENDIX E

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

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

APPENDIX E

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

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

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

APPENDIX F

LIST OF NYS DEC REGIONAL OFFICES

Region	COVERING THE FOLLOWING COUNTIES:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) 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 ROAD AVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVE. BUFFALO, NY 14203-2999 TEL. (716) 851-7070

Appendix B

Notice of Intent

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.18

(Submission #: 2Z6-99SZ-G37S, version 1)

PRINTED ON 2/14/2018

Summary

Submission #:	2Z6-99SZ-G37S	**Date Submitted:**	Not Submitted
Form:	NOI for coverage under Stormwater General Permit for Construction Activity version 1.18 (NOI for Ashokan Rail Trail - Phase 2)	**Status:**	Draft
Applicant:	Chris Hannett	**Active Steps:**	Form Submitted
Reference #:			
Description:	NOI for coverage under Stormwater General Permit for Construction Activity		

Notes
There are currently no Submission Notes.

Details

Owner/Operator Information

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

Ulster County

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Ulster County Commissioner of Public Works

Owner/Operator Contact Person First Name

Ulster County Commissioner of Public Works

Owner/Operator Mailing Address

313-317 Shamrock Lane

City

Kingston

State

New York

Zip

12401-2810

Phone

(845) 340-3100

Email

NONE PROVIDED

Federal Tax ID

NONE PROVIDED

Project Location

Project/Site Name

Ashokan Rail Trail

Street Address (Not P.O. Box)

Route 28

Side of Street

South

City/Town/Village (THAT ISSUES BUILDING PERMIT)

Hurley/Olive/Woodstock

State

New York

Zip

12481

County

ULSTER

DEC Region

3

Name of Nearest Cross Street

Route 28A/Reservoir Rd/Basin Rd

Distance to Nearest Cross Street (Feet)

NONE PROVIDED

Project In Relation to Cross Street

Tax Map Numbers Section-Block-Parcel

NONE PROVIDED

Tax Map Numbers

NONE PROVIDED

1. Coordinates

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

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

41.97471027766938,
-74.19776945202784

Project Details

2. What is the nature of this project?

New Construction

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

Pre-Development Existing Landuse

Other

Other

Railroad

Post-Development Future Land Use

Bike Path/Trail

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.

NONE PROVIDED

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area. *** ROUND TO THE NEAREST TENTH OF AN ACRE. *

Total Site Area (acres)

228.5

Total Area to be Disturbed (acres)

33.1

Existing Impervious Area to be Disturbed (acres)

0

Future Impervious Area Within Disturbed Area (acres)

0

5. Do you plan to disturb more than 5 acres of soil at any one time?

No

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)

5.8

B (%)

13.3

C (%)

35.1

D (%)

45.6

7. Is this a phased project?

Yes

8. Enter the planned start and end dates of the disturbance activities.

Start Date

06/04/2018

End Date

05/24/2019

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.

Ashokan Reservoir

9a. Type of waterbody identified in question 9?

Stream/Creek On Site

Other Waterbody Type Off Site Description

Terminal Reservoir

9b. If "wetland" was selected in 9A, how was the wetland identified?
Delineated by Consultant

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-15-002?

No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-15-002?

No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?

Yes

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?

Yes

If Yes, what is the acreage to be disturbed?

NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?

Yes

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?

No

16. What is the name of the municipality/entity that owns the separate storm sewer system?

NONE PROVIDED

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?

No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?

No

19. Is this property owned by a state authority, state agency, federal government or local government?

No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)

No

Required SWPPP Components

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

Yes

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

No

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

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

Professional Engineer (P.E.)

SWPPP Preparer

Thomas C. Baird

Contact Name (Last, Space, First)

Baird, Thomas

Mailing Address

10 Airline Drive, Suite 200

City

Albany

State

New York

Zip

12205

Phone

(518) 218-1801

Email

tbaird@bartonandloguidice.com

Download SWPPP Preparer Certification Form

Please take the following steps to prepare and upload your preparer certification form: 1) Click on the link below to download a blank certification form 2) The certified SWPPP preparer should sign this form 3) Scan the signed form 4) Upload the scanned doc

Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification - Attachment

NONE PROVIDED
Comment: NONE PROVIDED

Erosion & Sediment Control Criteria

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

Yes

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

Temporary Structural

Check
Dams
Construction Road Stabilization
Dust Control
Level
Spreader
Sediment Basin
Silt Fence
Stabilized Construction
Entrance
Temporary Access Waterway Crossing
Turbidity
Curtain

Biotechnical

Wattling

Vegetative Measures

Mulching
Protecting Vegetation
Seeding
Topsoiling

Permanent Structural

Land
Grading
Lined Waterway (Rock)
Riprap Slope Protection
Rock Outlet
Protection
Streambank Protection

Other

Fiberlogs

Post-Construction Criteria

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

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

NONE PROVIDED

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

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)

NONE
PROVIDED

29. Post-construction SMP Identification

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

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)

NONE PROVIDED

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

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

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)

NONE PROVIDED

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

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP. If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30). Also, provide the total impervious area that contributes runoff to each practice selected. NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment proje

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

NONE PROVIDED

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

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

NONE PROVIDED

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?

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

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)

NONE PROVIDED

CPv Provided (acre-feet)

NONE PROVIDED

36a. The need to provide channel protection has been waived because:

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)

NONE PROVIDED

Post-Development (CFS)

NONE PROVIDED

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)

NONE PROVIDED

Post-Development (CFS)

NONE PROVIDED

37a. The need to meet the Qp and Qf criteria has been waived because:

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?

If Yes, Identify the entity responsible for the long term Operation and Maintenance

NONE PROVIDED

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.

NONE PROVIDED

Post-Construction SMP Identification

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

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

RR Techniques (Area Reduction)

Round to the nearest tenth

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

RR Techniques (Volume Reduction)

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

Standard SMPs with RRv Capacity

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

Total Contributing Impervious Acres for Bioretention (F-5)

NONE PROVIDED

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

NONE PROVIDED

Standard SMPs

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

NONE PROVIDED

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

Total Contributing Impervious Area for Hydrodynamic

NONE PROVIDED

Total Contributing Impervious Area for Wet Vault

NONE PROVIDED

Total Contributing Impervious Area for Media Filter

NONE PROVIDED

"Other" Alternative SMP?

NONE PROVIDED

Total Contributing Impervious Area for "Other"

NONE PROVIDED

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

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

Manufacturer of Alternative SMP

NONE PROVIDED

Name of Alternative SMP

NONE PROVIDED

Other Permits

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

Freshwater Wetlands/Article
24
Stream Bed or Bank Protection/Article 15

If SPDES Multi-Sector GP, then give permit ID

NONE PROVIDED

If Other, then identify

NONE PROVIDED

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

Yes

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

.1

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

NONE PROVIDED

MS4 SWPPP Acceptance

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

Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

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

No

MS4 SWPPP Acceptance Form Download

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

MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload - Attachment

NONE PROVIDED
Comment: NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download

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

Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form * - Attachment

NONE PROVIDED
Comment: NONE PROVIDED

Attachments

Date	Attachment Name	Context

Status History

Date	User	Processing Status
None		

Processing Steps

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

Appendix C

Drainage Areas and Tc Flowpaths

This page intentionally left blank.

Appendix D

Water Quantity and Quality Rate and Volume Calculations
Calculations on CD

This page intentionally left blank.

Appendix E

Weekly Inspection Form

Inspection Report

Stormwater Construction Site Inspection Report

General Information			
Project Name			
NPDES Tracking No.		**Location**	
Date of Inspection		**Start/End Time**	
Inspector's Name(s)			
Inspector's Title(s)			
Inspector's Contact Information			
Inspector's Qualifications			
Describe present phase of construction			
Type of Inspection: q Regular q Pre-storm event q During storm event q Post-storm event			
Weather Information			
Has there been a storm event since the last inspection? q Yes q No **If yes, provide:** Storm Start Date & Time: Storm Duration (hrs): Approximate Amount of Precipitation (in):			
Weather at time of this inspection? q Clear q Cloudy q Rain q Sleet q Fog q Snowing q High Winds q Other: Temperature:			
Have any discharges occurred since the last inspection? q Yes q No **If yes, describe:**			
Are there any discharges at the time of inspection? q Yes q No **If yes, describe:**			

Site-specific BMPs

- *Number the structural and non-structural BMPs identified in your SWPPP on your site map and list them below (add as many BMPs as necessary). Carry a copy of the numbered site map with you during your inspections. This list will ensure that you are inspecting all required BMPs at your site.*
- *Describe corrective actions initiated, date completed, and note the person that completed the work in the Corrective Action Log.*

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
1		q Yes q No	q Yes q No	
2		q Yes q No	q Yes q No	
3		q Yes q No	q Yes q No	
4		q Yes q No	q Yes q No	
5		q Yes q No	q Yes q No	
6		q Yes q No	q Yes q No	
7		q Yes q No	q Yes q No	
8		q Yes q No	q Yes q No	
9		q Yes q No	q Yes q No	
10		q Yes q No	q Yes q No	

	BMP	BMP Installed?	BMP Maintenance Required?	Corrective Action Needed and Notes
11		q Yes q No	q Yes q No	
12		q Yes q No	q Yes q No	
13		q Yes q No	q Yes q No	
14		q Yes q No	q Yes q No	
15		q Yes q No	q Yes q No	
16		q Yes q No	q Yes q No	
17		q Yes q No	q Yes q No	
18		q Yes q No	q Yes q No	
19		q Yes q No	q Yes q No	
20		q Yes q No	q Yes q No	

Overall Site Issues

Below are some general site issues that should be assessed during inspections. Customize this list as needed for conditions at your site.

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
1	Are all slopes and disturbed areas not actively being worked properly stabilized?	q Yes q No	q Yes q No	
2	Are natural resource areas (e.g., streams, wetlands, mature trees, etc.) protected with barriers or similar BMPs?	q Yes q No	q Yes q No	
3	Are perimeter controls and sediment barriers adequately installed (keyed into substrate) and maintained?	q Yes q No	q Yes q No	
4	Are discharge points and receiving waters free of any sediment deposits?	q Yes q No	q Yes q No	
5	Are storm drain inlets properly protected?	q Yes q No	q Yes q No	
6	Is the construction exit preventing sediment from being tracked into the street?	q Yes q No	q Yes q No	
7	Is trash/litter from work areas collected and placed in covered dumpsters?	q Yes q No	q Yes q No	
8	Are washout facilities (e.g., paint, stucco, concrete) available, clearly marked, and maintained?	q Yes q No	q Yes q No	

	BMP/activity	Implemented?	Maintenance Required?	Corrective Action Needed and Notes
9	Are vehicle and equipment fueling, cleaning, and maintenance areas free of spills, leaks, or any other deleterious material?	q Yes q No	q Yes q No	
10	Are materials that are potential stormwater contaminants stored inside or under cover?	q Yes q No	q Yes q No	
11	Are non-stormwater discharges (e.g., wash water, dewatering) properly controlled?	q Yes q No	q Yes q No	
12	(Other)	q Yes q No	q Yes q No	

Non-Compliance

Describe any incidents of non-compliance not described above:

CERTIFICATION STATEMENT

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Print name and title: _____

Signature:_____ Date:_____

Appendix F

Corrective Action Log

BEST MANAGEMENT PRACTICE (BMP)
CORRECTIVE ACTION LOG

Project: _____

Job # _____

Inspectors _____

_____

Inspection Report Date	Date of Action Taken	BMP Corrected	Corrective Action Taken	Party Who Completed Work

By signing above:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PRE-CONSTRUCTION INSPECTION CHECKLIST

Does the project site contain, or is located adjacent to, any of the following:

	Yes	No	Location	Comments
1. Trees to be protected?				
2. Wetlands?				
3. Steep Slopes?				
4. Waterbodies?				
5. Additional Resources?				

List Erosion and Sediment Control Practices to be installed to protect resources:

	Practices	Location
Trees		
Wetlands		
Steep Slopes		
Waterbodies		
Additional Resources		

Identify locations for the following:	Location
Stabilized Construction Entrance	
Contractor Staging Area	
Limits of Clearing and Grubbing	

	Yes	No
Are other erosion and sediment control practices required?		

If so, list additional Practices:

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

EROSION AND SEDIMENT CONTROL INSPECTION LOG

PROJECT: INSPECTOR:
DATE:

REASON FOR INSPECTION: WEEKLY ☐ (See Page 4) RAINFALL > 1/2 IN. ☐ (See Page 4)
PRE-CON ☐ (See Page 3) PROJECT TERM. ☐ (See Page 5)

Date of Last Rainfall: _____ Inches of Rainfall: _____

Attach sketch (utilize sheets in Appendix A) depicting:

1. Disturbed Areas
2. Areas to be disturbed in the next 14 days.
3. Drainage Pathways
3. Areas that have undergone temporary or permanent stabilization

HAVE EROSION AND SEDIMENT CONTROL PRACTICES BEEN INSTALLED PRIOR TO START OF CONSTRUCTION AS REQUIRED? YES ☐ NO ☐

IS THERE EVIDENCE OF EROSION AT THE SITE? YES ☐ NO ☐

ARE ADDITIONAL MAINTENANCE PRACTICES REQUIRED TO PREVENT EROSION? YES ☐ NO ☐

IF SO, EXPLAIN: _____

_____

IS SEDIMENT MIGRATING OFF-SITE (I.E. STREETS, WATERS, ETC.)? YES ☐ NO ☐

WERE DEFICIENCIES NOTED PERTAINING TO THE SWPPP? YES ☐ NO ☐

Comments _____

_____

ARE CHANGES REQUIRED TO THE SWPPP? YES ☐ NO ☐

Comments _____

_____

****COMPLETE THE ATTACHED SITE INSPECTION CHECKLISTS FOR INDIVIDUAL PRACTICES****

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

EROSION AND SEDIMENT CONTROL INSPECTION CHECKLIST				
Practice	**Location**	**Condition**	**Need Repair**	**Comments**
Site Preparation				
Stabilized Entrance		G F P	Y N	Is Sediment being tracked off-site? Y or N
Dust Control		- - -	- -	Required? Y or N
Rock Outlet Protection		G F P	Y N	Evidence of Erosion at limits of rock? Y or N
Runoff Control				
Diversion Berm *Berm to be stabilized		G F P	Y N	
Check Dams		G F P	Y N	Evidence of erosion between dams? - Y or N
Swales Circle Type - Grass Rock		G F P	Y N	Evidence of erosion in swale? Y or N
Pipe Slope Drain *Requires outlet protection		G F P	Y N	Evidence of erosion of slope? Y or N
Soil Stabilization - Required if work has ceased in area for more than 14 days				
Seeding Circle: Permanent or Temporary *Requires mulch		G F P	Y N	% of Area stabilized = _____%
Rolled Erosion Control Products *Proper stapling/Overlapping		G F P	Y N	Evidence of erosion along slope? Y or N
Sediment Control				
Sediment Basins/Traps		G F P	Y N	Depth of sediment = _____ in.
Silt Fence *Embed fabric 6" into ground		G F P	Y N	Sediment behind fence = _____ in.
Drop Inlet Protection *Remove accumulated sediment		G F P	Y N	Circle Type - Stone Excavated Fabric
Other Practices		G F P	Y N	

*Denotes Installation Requirements

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

NOTICE OF TERMINATION INSPECTION CHECKLIST

	Yes	No	Comments
Is the site at least 90% stabilized? *If NO, then Notice of Termination can not be filed.*	☐	☐	
List Stabilization Methods: Vegetative - Structural -			
Have all temporary erosion and sediment control practices been removed? If NO, remove all temporary practices (i.e. silt fence, etc.)	☐	☐	
List all permanent erosion and sediment control practices that will remain at the site:			
Has an O&M Manual been prepared for permanent practices?	☐	☐	
Who is responsible for maintenance of permanent practices?			_____
Additional Comments:			

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

Appendix G

Log of Changes and Updates to SWPPP

STORM WATER POLLUTION PREVENTION PLAN
UPDATE LOG

Project: _____

Job # _____

Inspectors _____

_____

Date	SWPPP Changes/Update	Comments	Signatures		
			Inspector	Contractor	P.E. / CPESC

By signing above:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

PRE-CONSTRUCTION INSPECTION CHECKLIST

Does the project site contain, or is located adjacent to, any of the following:

	Yes	No	Location	Comments
1. Trees to be protected?				
2. Wetlands?				
3. Steep Slopes?				
4. Waterbodies?				
5. Additional Resources?				

List Erosion and Sediment Control Practices to be installed to protect resources:

	Practices	Location
Trees		
Wetlands		
Steep Slopes		
Waterbodies		
Additional Resources		

Identify locations for the following:	Location
Stabilized Construction Entrance	
Contractor Staging Area	
Limits of Clearing and Grubbing	

	Yes	No
Are other erosion and sediment control practices required?		

If so, list additional Practices:

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

EROSION AND SEDIMENT CONTROL INSPECTION LOG

PROJECT: INSPECTOR:
DATE:

REASON FOR INSPECTION: WEEKLY ☐ (See Page 4) RAINFALL > 1/2 IN. ☐ (See Page 4)
PRE-CON ☐ (See Page 3) PROJECT TERM. ☐ (See Page 5)

Date of Last Rainfall: _____ Inches of Rainfall: _____

Attach sketch (utilize sheets in Appendix A) depicting:

1. Disturbed Areas
2. Areas to be disturbed in the next 14 days.
3. Drainage Pathways
3. Areas that have undergone temporary or permanent stabilization

HAVE EROSION AND SEDIMENT CONTROL PRACTICES BEEN INSTALLED PRIOR TO START OF CONSTRUCTION AS REQUIRED? YES ☐ NO ☐

IS THERE EVIDENCE OF EROSION AT THE SITE? YES ☐ NO ☐

ARE ADDITIONAL MAINTENANCE PRACTICES REQUIRED TO PREVENT EROSION? YES ☐ NO ☐

IF SO, EXPLAIN: _____

_____

IS SEDIMENT MIGRATING OFF-SITE (I.E. STREETS, WATERS, ETC.)? YES ☐ NO ☐

WERE DEFICIENCIES NOTED PERTAINING TO THE SWPPP? YES ☐ NO ☐

Comments _____

_____

ARE CHANGES REQUIRED TO THE SWPPP? YES ☐ NO ☐

Comments _____

_____

****COMPLETE THE ATTACHED SITE INSPECTION CHECKLISTS FOR INDIVIDUAL PRACTICES****

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

EROSION AND SEDIMENT CONTROL INSPECTION CHECKLIST				
Practice	**Location**	**Condition**	**Need Repair**	**Comments**
Site Preparation				
Stabilized Entrance		G F P	Y N	Is Sediment being tracked off-site? Y or N
Dust Control		- - -	- -	Required? Y or N
Rock Outlet Protection		G F P	Y N	Evidence of Erosion at limits of rock? Y or N
Runoff Control				
Diversion Berm *Berm to be stabilized		G F P	Y N	
Check Dams		G F P	Y N	Evidence of erosion between dams? - Y or N
Swales Circle Type - Grass Rock		G F P	Y N	Evidence of erosion in swale? Y or N
Pipe Slope Drain *Requires outlet protection		G F P	Y N	Evidence of erosion of slope? Y or N
Soil Stabilization - Required if work has ceased in area for more than 14 days				
Seeding Circle: Permanent or Temporary *Requires mulch		G F P	Y N	% of Area stabilized = _____%
Rolled Erosion Control Products *Proper stapling/Overlapping		G F P	Y N	Evidence of erosion along slope? Y or N
Sediment Control				
Sediment Basins/Traps		G F P	Y N	Depth of sediment = _____ in.
Silt Fence *Embed fabric 6" into ground		G F P	Y N	Sediment behind fence = _____ in.
Drop Inlet Protection *Remove accumulated sediment		G F P	Y N	Circle Type - Stone Excavated Fabric
Other Practices		G F P	Y N	

*Denotes Installation Requirements

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.

NOTICE OF TERMINATION INSPECTION CHECKLIST

	Yes	No	Comments
Is the site at least 90% stabilized? *If NO, then Notice of Termination can not be filed.*	☐	☐	
List Stabilization Methods: Vegetative - Structural -			
Have all temporary erosion and sediment control practices been removed? If NO, remove all temporary practices (i.e. silt fence, etc.)	☐	☐	
List all permanent erosion and sediment control practices that will remain at the site:			
Has an O&M Manual been prepared for permanent practices?	☐	☐	
Who is responsible for maintenance of permanent practices?			_____
Additional Comments:			

Inspections shall be conducted by, or under the supervision of a qualified professional, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or a soil scientist.