Lockport-Batavia Line #112

Rebuild Project

EM&CP Update

Replacement Narrative
in
Appendix G
(SWPPP)

(Revised January 2026; Replaces Version Filed June 2025)

Lockport-Batavia Line #112

Rebuild Project

Appendix G

Stormwater Pollution Protection Plan

June 2025
Revised: January 2026

Stormwater Pollution Prevention Plan for
NATIONAL GRID
LOCKPORT BATAVIA #112
ARTICLE VII

Towns of Lockport, Royalton, and Alabama,
Niagara and Genesee Counties, NY

Prepared for:

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1. DEFINITIONS & ACRONYMS

DEFINITIONS

Commencement of construction: the initial disturbance of soils associated with clearing, grading, or excavation activities, or other construction activities that disturb or expose soils such as demolition or stockpiling of fill material, and the initial installation of erosion and sediment control practices required by this SWPPP.

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

Final stabilization: all soil-disturbance activities at the site have ceased, and uniform perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established or 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.

Qualified Inspector: a person that is knowledgeable in the principles and practices of erosion and sediment control. Qualified Inspectors include:

- Licensed Professional Engineer
- Certified Professional in Erosion and Sediment Control (CPESC)
- Registered Landscape Architect
- Person working under the direct supervision of, and at the same company as, the license Professional Engineer or Register Landscape Architect, provided that person has training in the principles and practices of erosion and sediment control (i.e. the individual has received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control within the prior three (3) years).
- New York State Erosion and Sediment Control Certificate Program holder

Trained Contractor: an employee from a contracting (construction) firm that has received four (4) hours of NYSDEC endorsed training from a Soil and Water Conservation District (or other NYSDEC endorsed entity), in proper erosion and sediment control principles no later than two (2) years from the date this general permit is issued. After receiving the initial training, the trained individual shall receive four (4) hours of training every three (3) years.

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

Temporary Stabilization: when exposed soil has been covered with materials to prevent the exposed soil from eroding as set forth in the NYS Standards and Specifications for Erosion and Sediment Control. Examples of materials include mulch, seed and mulch, and rolled erosion control products.

ACRONYMS

BMP: Best Management Practice

CPESC: Certified Profession in Erosion and Sediment Control

CPV: Channel Protection Volume

DOW: Department of Water

EG: Environmental Guidance

EM&CP: Environmental Management and Construction Plan

MS4: Municipal Separate Storm Sewer System

NOI: Notice of Intent

NOT: Notice of Termination

NYSDEC: New York State Department of Environmental Conservation

POA: Point of Analysis

Qf: Extreme Flood Control

Qp: Overbank Flood Control

RRv: Runoff Reduction volume

SPDES: State Pollution Discharge Elimination System

SWPPP: Stormwater Pollution Prevention Plan

WQv: Water Quality Volume

2. INTRODUCTION AND REGULATORY REQUIREMENTS

This Stormwater Pollution Prevention Plan (SWPPP) has been prepared by Fisher Associates, referred to as the Engineer, to provide instruction on appropriate construction management practices that will guide Niagara Mohawk, D.B.A National Grid, referred to as the Owner, in its field activities and operations to minimize the discharge of pollutants in stormwater runoff and protect water quality during and after construction activities.

ALL PERSONNEL ENGAGED IN THE NG LOCKPORT- BATAVIA REBUILD PROJECT CONSTRUCTION ACTIVITIES SHALL ABIDE BY THIS SWPPP.

This SWPPP is a requirement of New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-0-25-001 (General Permit), effective January 29, 2025 with an expiration date of January 28, 2030. The General Permit authorizes stormwater discharges to surface waters of the State from construction related activities. The contents of this SWPPP discuss and describe the requirements of this permit. A copy of the General Permit is provided in Appendix M of this SWPPP.

The SWPPP will be kept at the project site and shall be made available for review by applicable regulatory agencies, the Engineer, and Contractors upon request. Regulatory agencies that have jurisdiction over the project site may elect to review this SWPPP and if necessary may notify the Owner that modifications to the SWPPP or site conditions are required.

The Notice of Intent (NOI), SWPPP and Stormwater Construction Site Inspection reports must be made available for public review by the Owner**.** The Owner shall produce copies of these documents for any person within five business days of the receipt of a written request. The requester is responsible for copying costs.

The General Permit requires that a review of the project be completed to determine whether stormwater discharge or construction activities would have an effect on a property that is a historic or archeological resource that is listed or eligible for listing on the State or National Register of Historic Places. Documentation of this review is included in Appendix D.

The Owner shall retain the following documents for a period of at least five years from the date that the site achieves final stabilization:

- The SWPPP including:
  - NOI,
  - Municipal Separate Storm Sewer System (MS4) Acceptance form,
  - NOI acknowledgement letter,
  - Contractor Certification(s) and,
  - Notice of Termination (NOT).
- Stormwater Construction Site Inspection Reports.
- Construction Drawings and Technical Specifications.
- Correspondence (from NYSDEC, town, engineer, etc.) regarding stormwater management.

3. PERMIT COVERAGE

The erosion and sedimentation control devices included in this SWPPP were selected to minimize the discharge of pollutants and to assist in the prevention of a violation of the water quality standards as discussed in the General Permit under Part 1.B for Effluent Limitations Applicable to Discharges from Construction Activities. If there are any deviations proposed, then a demonstration of equivalence must be included. The SWPPP for the project has been prepared with no deviations from the 2016 New York State Standards and Specifications for Erosion and Sediment Control.

Lockport Batavia #112 Article VII is subject to the requirements of a regulated, traditional land use control MS4. Construction related stormwater discharges from the project construction site will be authorized five business days from the date the NYSDEC receives a complete electronic NOI and signed MS4 SWPPP Acceptance form (Appendix A).

4. SWPPP REVISION REQUIREMENTS

The SWPPP must be kept up to date to accurately document the current and future erosion and sediment control and post-construction stormwater practices for the site. The Owner or the Contractors shall amend this SWPPP when modifications to the design, construction, operation, or maintenance of the project have been or will occur which could have an effect on the potential for discharge of pollutants in stormwater runoff. Amendments shall be documented within Appendix L of this SWPPP. Some example situations include:

- The currently installed erosion and sediment control practices are ineffective in minimizing pollutants in stormwater discharges.
- An additional Contractor will be implementing the stormwater management and/or erosion and sediment control facilities and must complete the contractor certification.
- Changes in the design, construction, or operation.
- Issues are identified by the Trained Contractor , Qualified inspector, a NYSDEC representative, or other regulatory authority that require a modification.

The Contractor is responsible for the installation of all erosion and sediment control devices as specified in this SWPPP. If changes in site conditions occur as a result of the workmanship or actions of the Contractor, time of year, and/or weather conditions, the Contractor will be responsible to revise the SWPPP Documents, implement all SWPPP revisions, and install all additional or revised stormwater management, and erosion and sediment control devices at their own cost. All SWPPP revisions will be completed within seven (7) days of receiving notification that revisions are necessary. Revisions shall be reviewed and accepted by the Owner and the Engineer prior to implementation.

If existing site conditions observed by the Contractor are different than what is shown in the SWPPP documents, the Contractor shall report in writing all discrepancies to the Owner prior to any site disturbance. The Owner shall review the documented discrepancies and provide in writing acceptance or denial of discrepancies to the Contractor. When the Owner provides written acceptance of any agreed upon discrepancies prior to any site disturbance, the Owner shall revise the SWPPP Document and provide it to the Contractor within three (3) days. The Contractor shall review the revised SWPPP within three (3) days of receipt, and document in writing any changes to the negotiated contract. After acceptance by the Owner**,** the Contractor shall be responsible for full implementation of the revised SWPPP's stormwater management, and erosion and sediment control practices. All SWPPP revisions will be completed within seven (7) days of receiving notification to proceed with the revisions.

All SWPPP revisions must be marked with the revision date and distributed by the Owner or the Contractors to the involved parties (i.e., subcontractors, Engineer, and municipality).

5. SITE INFORMATION

5.1 – SITE & PROJECT DESCRIPTION

National Grid (NG) proposes to rebuild the Lockport-Batavia #112 115kV transmission line, an Article VII certified line by the NYSDPS, Case # 22-T-0654, starting from Lockport at existing Structure 1-4 and ending in the Town of Alabama at existing Structure 211. The entire 20 mile stretch between these structures will be replaced, except for a 1.9 mile stretch (as it was previously constructed for a customer project). This project will involve the installation of new and replacement structures along these lines within an existing right-of-way (ROW), except for the portion with the Tonawanda Wildlife Management Area, where the line is being relocated to a more environmentally safe and accessible location. Approximately 10.7 acres of permanent gravel access road will be constructed in order to build this project and provide access for maintenance and future improvements.

The soils information for this site is located in Appendix C.

Portions of the stormwater from the site directly discharge to 303(d) segments for Oak Orchard Cr, Upper and tributaries, as per Appendix E of GP 0-25-001. This occurs at the intersection of the LOD and the 303(d) segment, between proposed structures 159 to 160, 161 to 162, 163 to 164, 173 to 185, and 185 to 186.

5.2 – SITE LOCATION AND OWNER/OPERATOR CONTACT INFORMATION

Contact information for the site is as follows:

Owner/Operator:	National Grid
Contact:	Mary Bitka
Address:	144 Kensington Avenue Buffalo, New York 14214
Phone No.:	1-716-984-0664
Email Address:	mary.bitka@nationalgrid.com
Project Site Address:	701 Hinman Road Lockport, New York 14094

The full construction contact list is provided in Appendix K of this SWPPP.

6. SWPPP CONSTRUCTION REQUIREMENTS

6.1 – PRE-CONSTRUCTION REQUIREMENTS

Prior to construction, the owner shall have the Contractors and/or subcontractors identify at least one person from their company, who meets the requirements of a trained contractor, that will be responsible for the implementation of the SWPPP and the inspection of the erosion and sediment controls in accordance with the New York Standards and Specifications for Erosion & Sediment Controls. The Owner's Representative shall ensure that at least one trained contractor is on-site on a daily basis when soil disturbance activities are being performed. The trained contractor shall inspect the sites erosion and sediment control practices on a daily basis to ensure these facilities are in effective operating condition at all times.

Pre-construction Requirements to be followed by the Owner and Contractors prior to the commencement of any construction activities are described in Appendix E.

6.2 – CONSTRUCTION REQUIREMENTS

6.2.1 – Area of Disturbance

Construction activity will disturb greater than five (5) acres of soil over the duration of the project but will not disturb any greater than 5 acres at any one time without prior written permission of the Owner's Representative and the MS4 Stormwater Contact. To obtain approval from the MS4, the Owner will submit a written request to the MS4s. The written Request to Disturb Greater Than Five Acres must include:

- The SPDES permit identification number (Permit ID); and
- Full technical justification demonstrating why alternative methods of construction that would result in five acres of soil disturbance or less at any one time are not feasible; and
- The phasing plan for the project and sequencing plans for all phases from the SWPPP in accordance with Part III.B.1.d.; and
- Plans with locations and details of erosion and sediment control practices such that the heightened concern for erosion when disturbing greater than five acres at one time has been addressed; and
- Acknowledgment that "the owner or operator will comply with the requirements in Part IV.C.2.b."; and
- Acknowledgment that "the owner or operator will comply with the requirements in Part II.B.1.b."

6.2.2 – Construction Sequence

The Contractors shall install erosion and sediment control practices downstream of the project area, prior to disturbance, to prevent sediment transport to offsite areas. General Construction Sequence includes:

- Install temporary and permanent stabilized construction entrances.
- Install construction fence, vegetation protection and sediment control fence as needed prior to up gradient soil disturbances.
- Tree clearing the project corridor of excess vegetative growth (preceded by the installation of appropriate BMPs).
- Structure upgrades for the project, including structure and appurtenant replacement.
- Complete Soil Restoration per Section 5.1.6 of the Design Manual on all areas that disturbed areas that will be vegetated in its final state.
- Phosphorous-free fertilizer will be used for areas located within phosphorous-impaired watersheds.
- Apply topsoil and complete fine grading.
- Apply permanent seed and mulch.
- When site has reached final stabilization, remove temporary erosion and sediment control measures.

6.2.3 – Construction Site Inspection

The Owner will be responsible to provide a qualified inspector to inspect erosion and sediment control practices, post-construction stormwater management practices that are under construction, disturbed areas, and all points of discharge from the construction site. Specifically, the qualified inspector shall:

- Inspect all erosion and sediment control practices to ensure integrity and effectiveness,
- Verify that erosion and sediment control practices required by the SWPPP and the General Permit have been installed as appropriate for the phase of work and conditions at the site,
- Ensure that post-construction stormwater management practices are installed in accordance with the SWPPP,
- Inspect all areas of disturbance that have not achieved final stabilization, and
- Observe all points of discharge from the site, including natural surface waterbodies located within or immediate adjacent to the construction site, conveyance systems and overland flow.

- Provide estimates of the following areas:
    - Total area with active soil disturbance (not requiring either temporary stabilization or final stabilization),
    - Total area with inactive soil disturbance (requiring either temporary stabilization or final stabilization),
    - Total area that has achieved temporary stabilization,
    - Total area that has achieved final stabilization.

The qualified inspector shall also take digital photographs, with date stamp, that clearly show the conditions of erosion and sediment control practices and stormwater management practices that have been identified as needing corrective actions and of practices that have had corrective actions since the last inspection. These photographs shall be attached to the inspection form within seven calendar days of the inspection.

If corrective actions are needed, the qualified inspector must notify the Owner and the appropriate Contractor within one business day of completing the inspection. The Contractor shall begin implementing the corrective action within one (1) business day of receiving notification and complete it within seven (7) calendar days following the date of the inspection. Additional mitigation measures are to be implemented by the Contractors if necessary due to site conditions to minimize sediment transport or discharge of sediment laden runoff off-site. If the corrective action does not require engineering design, begin implementing corrective actions within one business day; and complete the corrective actions within five business days. If the corrective action requires engineering design, begin the engineering design process within five business days; and complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

Inspections are to be completed at least once every seven (7) calendar days. If authorization to disturb greater than five (5) acres of soil at one time is received, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. There shall be a minimum of two (2) full calendar days between inspections. If the project directly discharges to one of the 303(d) segments as listed in CGP Appendix D or is located in one of the watersheds listed in CGP Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. There shall be a minimum of two (2) full calendar days between inspections. An Inspection Report Form for conducting the inspections is included in Appendix F. Completed inspection reports are to remain on file at the site in Appendix F.

Temporary Construction Shutdown
If soil disturbing activities have been temporarily suspended, such as for winter shutdown, and temporary stabilization measures have been applied to all disturbed areas, the Owner may reduce inspections to a minimum of one (1) inspection every thirty (30) calendar days. The Owner shall notify the NYSDEC (SPDES) Program contact at the Regional Office or, if the project is under MS4 jurisdiction, the MS4 stormwater contact in writing prior to reducing the frequency of inspections. The Owner shall resume inspections in accordance with this section as soon as soil disturbance activities resume.

Final Site Inspection
The qualified inspector shall perform a final inspection of the site to certify that:

- All disturbed areas have achieved final stabilization;
- Temporary erosion and sediment control practices have been removed; and
- Post-construction stormwater management practices have been constructed in conformance with the SWPPP.

Prior to certification, the Contractors at their own cost, shall supply as-built topographic surveys of all post-construction stormwater management practices to document that the stage/storage relationship has been met. As-builts shall also show rims, inverts, orifice, pipe sizes and elevations, etc. Upon satisfactory completion of the final site inspection, the qualified inspector shall sign the appropriate sections of the NOT form (Appendix G).

6.2.4 –Authorized Non-Stormwater Discharges

Discharges from the following sources are authorized provided that they are directed to a sediment trapping device:

- Clean wash water (does not contain soaps, detergents or solvents) from cleaning construction vehicles and equipment.
- Site dewatering (ground water) from pits, excavations, and trenches.

Sediment trapping devices shall be designed and located by the Contractor and approved by the Owner and the Engineer prior to installation.

High-traffic areas will be covered with gravel and exposed soils and roadways will be wetted as needed during extended dry periods to minimize dust generation. Only plain water will be used for dust suppression.

6.2.5 – Prohibited Non-Stormwater Discharges

National Grid and its Contractor will implement precautions during the storage, handling and transporting of fuels, oils, chemicals and other potentially harmful substances to avoid spills and contravention of water quality standards or other regulations intended to protect environment resources. National Grid and its Contractor will take precautions to prevent spillage and will not store these materials beneath trees or in the vicinity of any wetlands, river, stream, or other body of water. Any hazardous substances will be transported, stored and handled as recommended by suppliers and/or manufacturers, in compliance with all applicable federal or state regulations. Preventive and protective practices for fuel and chemical handling will be accomplished through implementation of the following principal restrictions on both Contractors and company personnel:

- Pumps used for trench dewatering or dam and pump crossings operating within 100 feet of a water body, wetland or rare plant or unique natural community should be placed in properly sized and temporary secondary containment structures during their use;
- Extreme caution shall be exercised when handling fuel and while refueling to avoid spillage;
- Any equipment which must be refueled in the field will be refueled from tanks carried to the work site by truck;
- No equipment refueling shall be performed in the vicinity of streams or other sensitive areas, (i.e., intermittent streams, wetlands, beneath trees);
- When there is a need to use portable power equipment such as pumps or generators near wetlands or waterbodies, they will be used and refueled employing basic spill prevention and containment procedures. Fuel-containing vessels used to fuel immobile equipment will not be stored within 100 feet of a wetland or waterbody following refueling activities;
- All equipment operating within 100 feet of a waterbody, wetland, or rare plant or unique natural community shall have sufficient spill containment equipment on board to provide for prompt control and cleanup in the event of a release;
- During refueling, spill kits and fuel absorbent materials will be on-site in the event a spill occurs;
- All on-site construction vehicles including Contractor employee vehicles shall be monitored for leaks and shall receive regular preventative maintenance to reduce the risk of leakage. Any equipment leaking oil, fuel or hydraulic fluid shall be repaired immediately or removed from the site. In the event of a release, the spill shall be promptly cleaned up in accordance with National Grid spill response and clean up procedures; and
- The Construction Contractor shall not wash equipment or machinery in any watercourse, wetland or rare plant or unique natural community and shall not permit runoff resulting from washing operations directly enter any watercourses or wetlands.

In the event of a spill or hazardous material release to the environment, National Grid's reporting, containment and cleanup procedures are provided in Appendix H.

6.2.6 – Maintaining Surface Water Quality

It is expected that compliance with this SWPPP and the General Permit, will prevent discharges of pollutants which would cause or contribute to a violation of the surface water quality standards contained in Parts 700 through 706 of Title 6 of the New York Code, Rules and Regulations (NYCRR). Potential violations include:

- An increase in turbidity that will cause substantial visible contrast to natural conditions;
- An increase of suspended, colloidal or settleable solids that will cause deposition or impair surface waters for their best usages; and
- A residue from oil and floating substances, visible oil film, or globules of grease.

If there is evidence indicating that the stormwater discharges authorized by the General Permit are causing, have reasonable potential to cause, or are contributing to a violation of surface water quality standards; the owner or operator must take appropriate corrective action within one business day. The corrective action must be documented in the next SWPPP inspection report. To address the surface water quality standard violation, the owner or operator may need to provide additional information, include and implement appropriate controls from this SWPPP to correct the problem, or obtain an individual SPDES Permit.

6.2.7 – Chemical and Oil Management

An unintentional or accidental spill or release of any oil or chemical in any quantity on land, water or into the air must be reported in accordance with National Grid's Environmental Guidance (EG)-501NYN for Release Notification and EG-502NYN for Release Cleanup, included as Appendix H. These guidelines address immediate incident activities, reporting instructions, notifications and general cleanup procedures.

6.3 – NOTICE OF TERMINATION REQUIREMENTS

An NOT shall be filed with the NYSDEC when the project meets the termination requirements as outlined in Part V.A.2 of the General Permit. The NOT requires certification from the Qualified Inspector that construction at the project site is complete, the site has achieved final stabilization, and all erosion and sediment control measures have been removed in conformance with the SWPPP.

7. STORMWATER MANAGEMENT DURING CONSTRUCTION

Anticipated locations for the erosion and sediment control practices are shown in Appendix I "Erosion and Sediment Control Plans and Details." These practices, and any practices added due to conditions at the site, are to be installed and maintained in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC 2016).

The suggested Best Management Practices (BMPs) in this document are based on observed site conditions at the time of the fieldwork. Alternative BMPs may be required based upon actual field conditions, the time of year the work is performed, and the type of construction equipment to be used. Additional BMPs have been included in Appendix I to be used as necessary during construction and if applicable, will be used in areas approved by the Environmental Inspector.

For areas where timber matting is planned to be used for construction in/near wetland areas, all work will be completed on the timber matting. Any spoil from the foundation excavation will be placed on the timber matting. It is not anticipated that the spoil will migrate off the mats, however, if the spoil is anticipated to remain on the mats for longer than 7 days or there is a concern for migration, appropriate controls will be installed as directed by the Environmental Inspector. Erosion and sediment controls will be used as necessary throughout the site to provide additional erosion and sediment control and to protect wetland resources.

7.1 – EROSION AND SEDIMENT CONTROLS

Proposed erosion and sediment control practices were designed in accordance with the following documents:

- New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC 2016) (the Blue Book).
- New York State Stormwater Management Design Manual (the Design Manual) prepared by the Center for Watershed Protection for the NYSDEC (July 2024).
- NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-25-001) (effective date January 29, 2025).

Practices that must be directed to a temporary sediment trapping device that was not identified in the drawings shall be designed by the Contractor. Prior to installing these practices, the Contractor shall provide a detail and proposed location of the sediment trap to be approved by the owner prior to installation.

Structural erosion and sediment control practices should generally be inspected weekly (or more frequently as required by the SPDES permit such as discharge to 303(d) waterbodies, Appendix C watersheds, and greater than 5 acres of disturbance), by a qualified inspector.

Winter stabilization practices should be installed in accordance with the Blue Book between November 15 and April 1.

7.2 – STABILIZATION PRACTICES

The following stabilization practices, per the 2016 New York State Standards and Specifications for Erosion and Sediment, will be employed by the Contractor as follows:

- For portions of the site where soil disturbance activities have temporarily or permanently ceased, stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the most recent soil disturbance activity ceased, or within 7 calendar days if the current project disturbance is five (5) acres or greater or if the project directly discharges to one of the 303(d) segments listed in CGP Appendix D. If the site is snow covered and/or frozen then stabilization measures shall be implemented as soon as practicable.

7.3 – ADDITIONAL STORMWATER CONTROLS

The following are additional Best Management Practices to be implemented at the site to minimize pollutant transport:

- Material Transport – take proper precautions to prevent spilling materials during transport. Any spilled materials will be swept or removed as soon as practicable so that they do not enter a surface and subsurface drainage systems.
- Dust Control – provide dust control measures to prevent dust from leaving the site. Measures shall include gravel or water application or mulching but shall not include use of chemical additives. High-traffic areas will be covered with gravel and exposed soils and roadways will be wetted as needed during extended dry periods to minimize dust generation. Only plain water will be used for dust suppression. Any sediment that is tracked off of the site shall be removed using a hand broom or other cleaning equipment.
- Solid Waste Management – store waste in covered dumpsters or other appropriate containers. Waste is to be disposed of regularly and properly in accordance with local, state, and/or federal regulations.
- Portable toilets – install and clean portable toilets regularly with their contents properly disposed. Locate portable toilets where they will not be impacted by construction activities.
- Building materials storage – properly store and contain building materials on-site.

7.4 CULVERT DESIGN

The proposed permanent culverts (conveyance system) have been designed in accordance with the following documents:

- New York State Standards and Specifications for Erosion and Sediment Control (NYSDEC 2016) (the Blue Book)
- New York State Stormwater Management Design Manual (the Design Manual) (July 2024), Section 4.11
- USACE Nationwide Permit

Section 4.11 of the Design Manual recommends the 10-year storm as the minimum sizing criterion for closed conveyance systems. Outside of jurisdictional streams, culverts were designed using a 10-year storm event to not overtop the proposed road. Where possible, existing culverts will be upsized to meet these design requirements. At the public road entrances, culverts have been designed to match or extend an existing culvert installed or upsized to meet the 10-year storm event. National Grid will be coordinating with the applicable agencies or municipalities to obtain approval to install the construction entrances off the public road.

Culverts within jurisdictional streams were sized according to the USACE Nationwide Permit using a 50-year storm, or a 100-year storm based on feedback from USACE. Wetland continuity culverts were sized to be a minimum of 18" diameter and spaced roughly 80-150 feet apart to maintain hydraulic connectivity. Wetland continuity culverts that had a corresponding drainage area were modeled using HydroCAD. Documentation for the 1-year, 10-year, and 100-year storm events are included in Appendix Q.

Temporary culverts were sized based on available information from existing culverts, where applicable, and were not hydraulically modeled. Locations of existing culverts within the limits of disturbance are shown in Appendix I.

National Grid is responsible for maintaining the culverts according to Appendix N. If flooding or erosion issues are identified, National Grid will take appropriate measures to mitigate the concern.

8. OTHER APPLICABLE PERMITS AND CONDITIONS

8.1 – COMPLIANCE WITH FEDERAL, STATE AND LOCAL PERMITS AND REGULATIONS

The Project will be authorized under a Nationwide Permit or a Letter of Permission/Individual Permit from the U.S. Army Corps of Engineers. This Project will require an Article 24: Freshwater Wetlands Permit of the Environmental Conservation Law due to the impacts to wetlands and watercourses regulated by the NYSDEC. These permits will be issued by the New York State Department of Public Service.

8.2 – ENDANGERED SPECIES

In accordance with New York State Natural Heritage Program (NYNHP), the NYSDEC Environmental Resource Mapper was reviewed for potential rare or state-listed plants or animals, or significant natural communities. NYNHP was initially contacted on April 9th, 2020, regarding information on rare species records within the Project area. The NYNHP responded on May 5th, 2020, with information on State-listed rare, threatened, and endangered (RTE) species. The NYNHP was contacted again on September 7th, 2023, for updates or changes to known RTE species, habitat, or Significant Natural Communities in the Project area. The NYNHP responded on October 26th, 2023, with information that included: one (1) New York State endangered species (Short-eared Owl-Asio flammeus) has been documented within the project area. Nine (9) threatened/endangered species have been documented within the project area which include: Northern Harrier (Circus hudsonius-threatened), Pied-billed Grebe (Podilymbus Podiceps-threatened), Black Tern (Chlidonias niger-threatened), Least Bittern (Ixobrychus exilis-threatened), Bald Eagle (Haliaeetus leucocephalus-threatened), Short-eared Owl (Asio flammeus-endangered), Henslow's Sparrow (Ammodramus henslowii-threatened), Sedge Wren (Cistothorus stellaris-threatened) and the King Rail (Rallus elegans-threatened). Five (5) species have been documented within the project area including the Northern Harrier (Circus hudsonius-threatened), Short-eared Owl (Asio flammeus-Endangered), Sedge Wren (Cistothorus stellaris-threatened) and the Pied-billed Grebe (Podilymbus Podiceps-threatened). The following animals, while not listed by New York State as Endangered or Threatened, are of conservation concern to the state, and are considered rare by the New York Natural Heritage Program: Black Bullhead Fish (Ameiurus melas-critically imperiled in NYS) has been documented within the project area where Lewiston Road

meets Feeder Road. The Ruddy Duck (Oxyura jamaicensis- critically Imperiled in NYS) has been documented 200 yards northwest of the project area. The Prothonotary Warbler (Protonotaria citrea- Imperiled in NYS) has been documented within 0.5 mile southwest of the project area. The following plants are listed as Endangered or Threatened by New York State, and/or are considered rare by the New York Natural Heritage Program and are a vulnerable natural resource of conservation concern. Heart-leaved Plantain (Plantago cordata-rare-vulnerable in NYS) has been documented within 0.4 mile southwest of the project area. Franks Sedge (Carex frankii-threatened-Imperiled in NYS) has been documented within 0.25 mile southwest of the project area. Updates to NYNHP databases were requested on February 13th, 2025. The NHP response was received on March 24, 2025 with no updates to the previous species.

Consultation with the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) was initiated for the Project via the Information for Planning and Conservation (IPaC) online system. The Official Species List was obtained using the IPaC online site on April 9th, 2020, February 10th, 2021, September 1st, 2023, and February 13th, 2025. The most recent Official Species List indicated the possible presence of the Northern Long-eared bat (NLEB) (Myotis septentrionalis -Endangered), Tricolored Bat (Perimyotis subflavus-proposed endangered), Salamander Mussel (Simpsonaias ambigua- proposed endangered) and the Monarch Butterfly (Danaus Plexippus-proposed threatened). A NLEB and Triclored Bat determination key (d-key), consistency letter was generated through the USFWS IPaC site on February 13, 2025, and a result, a May Effect determination was received regarding the potential occurrence of the NLEB and Tricolored Bat. Time of year restrictions will be imposed and/or a Net Benefit Conservation Plan will be in place if a take should occur. Therefore no negative impacts are anticipated to the species noted above.

8.3 – HISTORIC PLACES

A review of publicly available information via the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) New York State Historic Preservation Office (New York SHPO) Cultural Resource Information System (CRIS) was conducted January 20, 2021. A response letter from New York SHPO was received on February 16, 2022, requesting additional information. An update was sent back to OPRHP on March 16, 2021 with the additional information. OPRHP letter dated March 30, 2021, was received and recommended a phase IA Archaeological survey including Phase IB testing recommendations. A Phase IA Archaeological Assessment and Literature Review was performed by Hartgen Archeological Associates, Inc. dated July 2021. A Phase IB Archaeological Survey was performed by Hartgen Archeological Associates, Inc. dated January 2022. An Archeological Avoidance was performed by Hartgen Archeological Associates, Inc. dated February 2022. A response letter was received by ORHP on March 11, 2022 requested more information. Then an OPRHP and Fisher email chain dated March 08 – April 15, 2022, recommend "four (4) shovel tests be excavated within the area of each tower within the known site/50-foot buffer zone, and 2 shovel tests at tower 9. If appropriate (if artifacts are found) additional "surround" tests may be necessary around positive pits at 1- and 3-meter intervals. Hartgen will recognize this and follow the NYAC standards as appropriate". An Avoidance Plan for NGD Area 7 Site 1 (A0634.000517) was submitted by Hartgen Archeological Associates, Inc. on May 2022. An OPRHP letter dated June 22, 2022, to Fisher re: Response to Avoidance Plan for NGD Area 7 Site 1 (A0634.000517), came back as a "No-effect" for the Project.

9. POST-CONSTRUCTION STORMWATER MANAGEMENT

The rebuild of the Lockport-Batavia #112 115kV transmission line will require installation of approximate 10.7 acres of permanent gravel access. This will allow for construction access and future maintenance and improvements along the numerous lines in the area. The increase in impervious area will require post- construction stormwater management as noted below.

9.1 – STORMWATER QUALITY

The increased emphasis on a holistic approach to stormwater has resulted in a change in stormwater management practices and techniques. The Design Manual requires stormwater management designs to use the Green Infrastructure "Five Step" Process:

1- Site Planning – Conserve of Natural Areas and Reduce Impervious Cover
2- Determine Water Quality Volume (WQv)
3- Meet Runoff Reduction Volume (RRv) Requirements
4- Apply Standard Stormwater Management Practices to Address Remaining WQv

5- Meet Rate Reduction Requirements

Each Green Infrastructure planning and reduction technique and SMPs with RRv capacity were assessed for use at the site. Filter strips were selected to provide RRv for the site. The total WQv required for the site is 4.517 acre-feet. The implementation of the stormwater practices discussed above provide a reduction of 100% of WQv (RRv). Therefore, no additional WQv treatment is required for the site. A summary of water quality management is shown in Table 1. Detailed calculations and design information related to stormwater quality can be found in Appendix O.

Table 1: Water Quality Treatment Analysis

Point of Analysis (POA)		Required WQv	Minimum RRv Required	RRv Provided (1)	Total WQv Provided	Stormwater Practice Providing RRv & WQv
		(cu-ft)	(cu-ft)	(cu-ft)	(cu-ft)	
1	STR 9-10	4106	1917	4106	4106	Grass Filter Strips
2	STRs 11-12	7757	1917	7757	7757	Grass Filter Strips
3	STRs 17-20	6996	1917	6996	6696	Grass Filter Strips
4	STRs 21-23	6777	1917	6777	6777	Grass Filter Strips
5	STRs 25-29	7634	2352	7634	7634	Grass Filter Strips
6	STRs 29-35	29300	1786	29300	29300	Grass Filter Strips
18	STR 36	3009	1568	3009	3009	Grass Filter Strips
7	STRs 37-40	35403	1786	35403	35403	Grass Filter Strips
8	STRs 41	2373	1786	2373	2373	Grass Filter Strips
19	STRs 42-47	22727	1568	22727	22727	Grass Filter Strips
9	STRs 48-50	7879	1786	7879	7879	Grass Filter Strips
10	STRs 78-83	18050	2701	18050	18050	Grass Filter Strips
11	STRs 84-86	4365	2004	4365	4365	Grass Filter Strips
12	STRs 90-96	2889	2004	2889	2889	Grass Filter Strips
13	STRs 97-103	15091	2004	15091	15091	Grass Filter Strips
14	STRs 104-106	6193	2004	6193	6193	Grass Filter Strips
15	STRs 106-109	5887	2004	5887	5887	Grass Filter Strips
16	STRs 110-117	3345	828	3345	3345	Grass Filter Strips
17	STRs 113-116	6804	828	6804	6804	Grass Filter Strips

(1) RRv Provided is based on Table 3.5 in the 2015 NYS Stormwater Management Design Manual: 100% of WQv provided by the practice is reduced for infiltration based practices.

9.2 – STORMWATER QUANTITY

Stormwater quantity requirements include the following:

- Channel Protection Volume (Cpv) – extended detention of the one (1) year storm to protect stream channels from erosion.
- Overbank Flood Control (Qp) – attenuate the ten (10) year storm post-construction peak discharge rate to pre-construction rates.
- Extreme Flood Control (Qf) – attenuate the one hundred (100) year storm post-construction peak discharge rate to pre-construction rates.

HydroCAD version 10.00, which utilizes the Soil Conservation Service (SCS) method, was used to model the existing conditions for under the National Weather Service (NWS) 24-hour 1-year, 10-year, and 100-year frequency peak flow, in accordance with the standards set forth in the NYS SMDM. The access road was divided into individual drainage areas and modeled in HydroCAD The hydrologic analysis shows no increase in the flows from the proposed impervious area. The results of the pre and post-construction analysis for the site are shown in Table 2. Peak flows did not increase from pre-construction to post-construction as shown below.

Table 2: Point of Analysis – Comparison of Pre and Post Construction Conditions

Point of Analysis (POA)		Pre-Construction			Post-Construction		
		1- Year Peak Flow (cfs)	10-Year Peak Flow (cfs)	100-Year Peak Flow (cfs)	1- Year Peak Flow (cfs)	10-Year Peak Flow (cfs)	100-Year Peak Flow (cfs)
1	STR 9-10	2.35	8.24	16.62	2.35	8.24	16.62
2	STRs 11-12	13.89	40.59	76.18	13.89	40.59	76.18
3	STRs 17-20	2.89	9.61	19.11	2.89	9.61	19.11
4	STRs 21-23	4.89	15.6	30.30	4.89	15.60	30.30
5	STRs 25-29	2.65	8.86	17.70	2.65	8.86	17.70
6	STRs 29-35	15.73	50.45	99.03	15.73	50.45	99.03
18	STR 36	2.72	9.57	19.27	2.72	9.57	19.27
7	STRs 37-40	17.95	65.87	135.74	17.95	65.87	135.74
8	STRs 41	1.22	4.52	9.32	1.22	4.52	9.32
19	STRs 42-47	13.97	49.00	99.04	13.97	49.00	99.04
9	STRs 48-50	4.89	17.11	34.71	4.89	17.11	34.71
10	STRs 78-83	7.02	25.49	52.84	7.02	25.49	52.84
11	STRs 84-86	0.53	2.87	6.92	0.53	2.87	6.92
12	STRs 90-96	0.21	3.34	10.78	0.21	3.34	10.78
13	STRs 97-103	9.41	34.95	72.21	9.41	34.95	72.21
14	STRs 104-106	2.81	10.31	21.42	2.81	10.31	21.42
15	STRs 106-109	4.92	20.95	45.02	4.92	20.95	45.02
16	STRs 110-117	2.54	10.92	23.49	2.54	10.92	23.49
17	STRs 113-116	1.75	6.09	12.39	1.75	6.09	12.39

10. COMMUNITY RISK AND RESILIENCY ACT (CRRA) CONSIDERATION

Consideration in narrative format of the future physical risks due to climate change pursuant to the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490, and associated guidance.

- The owner or operator must consider the following physical risks due to climate change:
  - increasing temperature
  - increasing precipitation
  - increasing variability in precipitation, including chance of drought
  - increasing frequency and severity of flooding
  - rising sea level (N/A)
  - increasing storm surge (N/A)

    - shifting ecology

- for each of the following:
    - overall site planning
    - location, elevation, and sizing of:
        - control measures and practices
        - conveyance system(s)
        - detention system(s)

National Grid's Electric Infrastructure provides increased renewable transport of electricity in accordance with local, state, and national rules and regulations. It does so under the purview of the NYS Public Service Commission (PSC) and Department of Public Service Staff (DPS). National Grid is required to maintain its infrastructure in order to deliver power to its ratepayers in the State of New York.

None of the physical risks identified above are expected to vary from current conditions to the extent that the overall site plan would have to be modified to ensure the safe and reliable operation of the transmission line over its useful life. The use of natural resilience measures, such as minimizing the impact to wetlands and minimizing the disturbance to naturally occurring vegetated areas were applied for the consideration of climate change. These have been considered in the development of the plan and no adverse impacts associated with the potential for the physical risks identified above are expected.