



# Stormwater Pollution Prevention Plan (SWPPP)

## YORKTOWN A SOLAR FARM – TOWN OF YORKTOWN

### INSTRUCTIONS TO OWNER/OPERATOR/OPERATOR'S ENGINEER AND CONTRACTORS

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#### Responsibilities for Compliance with Storm Water Discharge Permit Regulations at Construction Sites

##### Operator's Engineer's Responsibilities:

1. Prepare the SWPPP using good engineering practices, Best Management Practices, and in compliance with all federal, state and local permit requirements. This preparation shall also include providing a description of the Project as it relates to site ownership and development responsibilities. The Operator's Engineer shall also prepare the SWPPP Ledger for use in the implementation and documentation of the SWPPP at the Project during Construction Activities.
2. Prepare the NOI form for the Operator's signature and forward to Operator for signature; submit the signed form to the appropriate regulatory agency along with any required fees and attachments. SWPPP must be complete prior to NOI submittal.
3. Include a signed NOI in the SWPPP prepared for the Project.
4. Participate at the pre-construction meeting with Contractor and appropriate subcontractors, which should include a review with all parties of the requirements of the SWPPP, if requested by Operator.
5. Review Contractor's SWPPP records on a periodic basis to ensure compliance with requirements for reports and inspection and maintenance logs, if requested by Operator.
6. Certify to Operator the Contractor's compliance with SWPPP record keeping requirements, if requested by Operator.

##### Operator's Responsibilities:

1. Have an authorized corporate officer sign the NOI and SWPPP Certification Statement.
2. Schedule and conduct a SWPPP Pre-Construction Meeting with the Operator's Engineer, Contractor and appropriate subcontractors, which should include a review with all parties the requirements under the SWPPP.
3. Require the Contractor to implement fully the SWPPP prepared for the site by the Operator's Engineer.
4. Forward a copy of the original permit certificate received from the regulatory agency to the Owner (if different than the operator), the Municipality's Representative, the MS4 (if applicable and if different from the municipality), the Operator's Engineer and the Contractor for inclusion in the SWPPP Ledger and display at the Project.
5. Ensure (through periodic observations by Operator's Engineer) and document that the Contractor is implementing the controls, inspections, maintenance, record-keeping, and all other requirements of the SWPPP.
6. File an appropriately signed Notice of Termination ("NOT") form when site work construction is completed and stabilization is achieved in accordance with the General Permit.
7. Request and receive all SWPPP records from the Contractor and archive those records for a minimum of five (5) years after the NOT is filed.



### Contractor's Responsibilities:

1. Sign the SWPPP Contractor's Certification Form in the SWPPP prepared for the Project (Appendix H).
2. Provide subcontractor training and require all subcontractors to sign the Subcontractor's Certification Form in the SWPPP prepared for the Project (Appendix I).
3. Identify a trained individual (i.e. *Trained Contractor*) who will be responsible for implementing the SWPPP and will be on-site during all soil disturbing activities.
4. Implement the Erosion and Sediment Control Plans, and other requirements of the SWPPP.
5. Provide *Trained Contractors*, and documentation of qualifications, for the controls implemented at the Project.
6. Conduct all necessary inspections at the required intervals and prepare and retain written documentation of those inspections and all other written documentation required by the Construction General Permit.
7. Keep a copy of the SWPPP, all NOI's, permit certificates, permit language, Materials Management Process (MMP), inspection records, and other required records on the Project.
8. Post in a prominent place at the Project entrance and inside the job trailer office wall those documents required to be posted under the terms of the Construction General Permit including, the NOI (Appendix D), Letter of Acknowledgement, etc.
9. Update and make changes to the SWPPP and supporting documents (such as the BMPs) as needed and with the approval of the Operator and the Operator's Engineer.
10. Prepare and sign a NOT form when site work construction is completed and stabilization is achieved in accordance with the General Permit.
11. Transfer the SWPPP documents, along with all NOI's, permit certificates, NOT's, and written records required by the Construction General Permit to the Operator for archiving.

### Off-site borrow or fill locations

The General Permit applies to construction activities involving soil disturbances of one (1) or more acres. This may require off-site borrow, fill, and material storage sites to be permitted under the NOI and covered by the SWPPP for the construction site, only if the off-site sites are used solely for that one project. If an off-site borrow or fill location or material storage site is operated by a subcontractor for more than one project, the Operator of this multi-use site must obtain a separate NOI. The multi-use site must be covered under its own Project Permit. A Construction General Permit from a state, local, or appropriate governmental agency may have different requirements relating to off-site borrow or excess (waste) locations. The Operator's Engineer must determine any applicable permit requirements for off-site borrow or excess (waste) locations. The requirements must be incorporated into the SWPPP, where applicable. If a separate General Permit coverage is required for these activities, a copy of the coverage must be provided in the SWPPP.



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## I. SCOPE

### A. PURPOSE:

1. Development and proper implementation of the New York State Department of Environmental Conservation (NYSDEC), State Pollutant Discharge Elimination System (SPDES) Construction General Permit governing stormwater discharges during construction and the National Pollutant Discharge Elimination System (NPDES) Construction General Permit governing storm water discharges during construction, and in accordance with Erosion and Sediment Control practices is critical. The Contractor's participation in this program is mandatory and its non-compliance is subject to various remedies, including without limitation, monetary set-offs, withholding payments; reimbursement for costs, expenses (including reasonable attorney's fees), fines and civil penalties incurred by the Operator. This section provides a descriptive explanation of the Storm Water Pollution Prevention Program and required Contractor participation.

### B. SPDES CONSTRUCTION GENERAL PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION SITES:

1. Regulations promulgated by the NYSDEC to regulate the discharge of storm water from Construction Activity on sites where one (1) or more acre of soil is disturbed. One of the ways to comply with these regulations for affected sites is to request coverage under the SPDES General Permit for Stormwater Discharges from Construction Activities (GP-0-20-001). In order to use the Construction General Permit, a Notice of Intent (NOI) form must be completed and mailed to the NYSDEC. Authorization to discharge stormwater under the General Permit will be effective when the owner or operator has satisfied all of the criteria listed in Part II, B of the SPDES General Permit for Construction Activity (GP-0-20-001).

### C. NOTICE OF INTENT:

1. The Operator will petition the NYSDEC for stormwater discharges during construction at this site to be covered by the SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-20-001, following completion of this SWPPP. An NOI form will be filed by the Operator. Authorization to discharge stormwater from Construction Activities is effective five (5) or (60) calendar days after the NYSDEC receives the complete NOI.

### D. RESPONSIBILITIES OF CONTRACTOR REGARDING THE CONSTRUCTION GENERAL PERMIT:

1. The Contractor shall manage the discharge of stormwater from the site in accordance with the NYSDEC General Permit for Stormwater Discharges from Construction Activities and the following provisions:
  - a) The Contractor shall be responsible for conducting the Storm Water Management practices in accordance with the permit.
  - b) The Contractor shall be responsible for providing *Trained Contractors* (See GP-0-20-001 for definition) to conduct the inspections required by the SWPPP.
  - c) The Contractor shall be responsible for any enforcement action taken or imposed by federal, state, or local agencies, including the cost of fines, construction delays, and remedial actions resulting from the Contractor's failure to comply with the permit provisions.



E. PRE-CONSTRUCTION MEETING:

1. A Pre-Construction SWPPP Meeting shall be mandatory and occur before any land disturbing activities are started. The Certification and Training Program have been developed to stress the importance of the following topics:
  - a) Erosion and sediment control for water quality protection
  - b) Implementation of Erosion and Sediment Control Plans
  - c) The importance to proper installation of erosion and sediment control measures
  - d) Regular inspection by Qualified Inspector of erosion and sediment control measures
  - e) Diligent maintenance to erosion and sediment control measures
  - f) Contemporaneous preparation of accurate and complete records regarding inspection and maintenance of erosion and sediment control measures
  - g) Record-keeping for inspections and maintenance activities

F. SWPPP CERTIFICATION REQUIREMENTS FOR THE CONTRACTOR AND SUBCONTRACTOR(S):

1. The SWPPP shall provide forms for both the Contractor and Subcontractor(s) identifying the Company Name, Business Address and Telephone Number along with the Responsible Person for the Contractor and all Subcontractors who will implement the measures identified in the SWPPP. The Contractor shall sign, the Contractor's Certification Statement (Appendix H) and all Subcontractors shall sign the Subcontractor's Certification Statement (Appendix I) verifying they have been instructed on how to comply with and fully understand the requirements of the NYSDEC and SWPPP. These certifications must be signed by a responsible corporate officer or other party meeting the "Signatory Requirements" in Part VII Section H & Part III.A.5. of the NYS DEC SPDES General Permit for Stormwater Runoff from Construction Activity (GP-0-20-001), on behalf of each entity, prior to the beginning of any Construction Activities and shall be filed in the Project's SWPPP.

G. SWPPP LOCATION REQUIREMENTS:

1. The SWPPP Ledger is meant to be a working document that shall be maintained at the site of the Construction Activities at all times throughout the Project, shall be readily available upon request by the Operator's personnel or NYSDEC or any other agency with regulatory authority over storm water issues, and shall be kept on-site until the site complies with the Final Stabilization section of this document. A copy of the General Permit (GP-0-20-001), NOI, NOI Acknowledgment Letter, SWPPP, and inspection reports shall be maintained at the construction site until all disturbed areas have achieved final stabilization and the Notice of Termination 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; that is accessible during normal working hours to an individual performing a compliance inspection.

H. SWPPP:

1. A minimum of two (2) copies of the SWPPP, in three (3) ring binders shall be provided by the Operator's Engineer. One (1) copy shall be provided for use by the General Contractor and one (1) copy shall be provided as an original.



- I. INSPECTIONS AND RECORD-KEEPING: Inspections are required per the General Permit GP-0-20-001 by a qualified inspector.
  1. INSPECTOR QUALIFICATIONS:
    - a) Inspections must be conducted by a "Qualified" Inspector. "Qualified" is defined as a person knowledgeable in the principles and practices of erosion and sediment controls who possesses the skills to assess conditions at the construction site that could impact storm water quality and to assess the effectiveness of any sediment and erosion control measures selected to control the quality of storm water discharges from the Construction Activity such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), licensed Landscape Architect. It also means that someone working under the direct supervision of a licensed Professional Engineer, or 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 an individual performing the site inspection has received four (4) hours of training, endorsed by the Department, from a Soil and Water Conservation District, CPESC, Inc. or other department endorsed entity in proper erosion and sediment control principles no later than two (2) years from the date of the current general permit issued. After receiving the initial training, an individual working under the direct supervision of a licensed Professional Engineer or licensed Landscape Architect shall receive four (4) hours of training every three (3) years. Inspections of post construction stormwater management practices that include structural components, such as a dam for impoundment, shall be performed by a licensed Professional Engineer.
  2. RAINFALL MONITORING:
    - a) A rain gage should be maintained on the site and a record of the rainfall amounts (in tenths of an inch) and dates shall be recorded every 24 hours on the Rain Log (Appendix P).
  3. INSPECTOR RESPONSIBILITIES:
    - a) The Qualified Inspector shall be trained in all the inspection and maintenance practices necessary for keeping the Erosion and Sediment Controls that are used onsite in good working order. They will also be trained in the completion of, initiation of actions required by, and the filing of the inspection forms. Documentation of Qualified Inspector training will be kept on site with the SWPPP.
  4. INSPECTION PROCEDURES:
    - a) Inspections must include all areas of the site disturbed by Construction Activities and areas used for storage of materials that are exposed to precipitation. Qualified Inspectors must look for evidence of, or the potential for, pollutants entering the storm water conveyance system. Erosion and Sediment Control measures identified in the SWPPP must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether Erosion and Sediment Control measures are effective in preventing significant impacts to Waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of off-site tracking. The following inspection and maintenance practices will be used to maintain Erosion and Sediment Controls and stabilization measures:
      - (1) All control measures will be inspected at least at the frequency identified in this Section. The minimum inspection frequency shall be once every seven (7) calendar days.



- (2) All measures will be maintained in good working order; if repairs or other measures are found to be necessary, they will be initiated within 24 hours of report, and completed within 48 hours of report and documented with photos.
  - (3) Built up sediment will be removed from silt fence when it has reached 25% of the height of the fence.
  - (4) Silt fences will be inspected for depth of sediment, tears, etc., to see if the fabric is securely attached to the fence posts, and to see that the fence posts are securely in the ground.
  - (5) Temporary and permanent seeding and all other stabilization measures will be inspected for bare spots, washouts, and healthy growth.
  - (6) An Inspection Report (Appendix J) will be completed after each inspection. Copies of the report forms to be completed by the Qualified Inspector(s) are included in this SWPPP. These reports shall be provided to the Town of Macedon within 24 hours of completion.
  - (7) The Contractor's Superintendent will be responsible for selecting and training the individuals who will be responsible for these inspections, maintenance and repair activities, and filling out inspection and maintenance reports.
  - (8) Disturbed Areas and materials storage areas will be inspected for evidence of or potential for pollutants entering stormwater systems.
  - (9) Report to U.S. Environmental Protection Agency, or NYSDEC within 24 hours any noncompliance with the SWPPP that will endanger public health or the environment. Follow up with a written report within five (5) days of the noncompliance event. The following events require 24-hour reporting: a) any unanticipated bypass which exceeds any effluent limitation in the permit, b) any upset which exceeds any effluent limitation in the permit, and c) a violation of a maximum daily discharge limitation for any of the pollutants listed by the EPA in the permit to be reported within 24 hours. The written submission must contain a description of the non-compliance and its cause; the period of non-compliance, including exact dates and times, and if the non-compliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the non-compliance.
  - (10) Spills or Releases of Hazardous Substances or Oil in excess of reportable quantities (as established under 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302) must be reported.
5. MONITORING:
    - a) Contractor shall be required to inspect daily per GP-0-20-001, Part IV.B.1.
  6. THIRD PARTY INSPECTIONS:
    - a) Where required or requested by the Operator, third party inspections by the design engineer shall be in addition to and shall not replace inspections by the Contractor (Qualified Inspector). The third-party inspector shall complete and sign any inspection report and include a copy of the report in the SWPPP following each inspection.
  7. RECORDKEEPING:
    - a) It is imperative that documentation of the inspection and maintenance of all erosion and sediment control measures as soon as possible after the inspection and/or maintenance is completed. The inspection reports identify any incidents of non-compliance with the permit conditions. Where a report does not identify any incidents of non-compliance, the report must





contain a certification that the Project is in compliance with the SWPPP and the Construction General Permit or other applicable State Permit. The report must be signed in accordance with the General Permit (GP-0-20-001). These records are used to prove that the required inspection and maintenance were performed and shall be placed in the SWPPP Ledger. In addition to inspection and maintenance reports, records should be kept of the Construction Activities that occur on the site. The Contractor shall retain copies of the SWPPP, all reports and data for a minimum of five (5) years after the project is complete in paper and CD format.

The forms found in this SWPPP shall be used by the Qualified Inspector(s) and/or the *Trained Contractor* (as applicable) to inventory and report the condition of each measure to assist in maintaining the erosion and sediment control measures in good working order. The following list identifies the required Inspection and Maintenance documentation and record keeping that must be maintained by the Contractor under this SWPPP:

- Appendix J: Inspection Report
- Appendix K: Stabilization Schedule
- Appendix L: Implementation Schedule
- Appendix M: Modification Report
- Appendix N: Final Stabilization/Notice of Termination Checklist
- Appendix O: Reportable Quantity Release Form
- Appendix P: Project Rainfall Log

These report forms shall become an integral part of the SWPPP and shall be made readily accessible to governmental inspection officials, the Operator's Engineer, and the Operator for review upon request during visits to the Project site. In addition, copies of the reports shall be provided to any of these persons, upon request, via mail or facsimile transmission. Inspection and maintenance report forms are to be maintained by the permittee for five years following the final stabilization of the site.

#### 8. OTHER RECORD KEEPING REQUIREMENTS:

- a) The Contractor shall keep the following records related to Construction Activities at the site:
  - (1) Dates when major grading activities occur and the areas which were graded
  - (2) Dates and details concerning the installation of structural controls
  - (3) Dates when Construction Activities cease in an area
  - (4) Dates when stabilization measures are initiated
  - (5) Dates when an area is stabilized, either temporarily or permanently
  - (6) Dates of rainfall and the amount of rainfall
  - (7) Dates and descriptions of the character and amount of any spills of Hazardous Substances or Oil
  - (8) Records of reports filed with regulatory agencies if reportable quantities of Hazardous Substances or Oil spilled



- J. SWPPP MODIFICATIONS: The inspection report should also identify if any revisions to the SWPPP are warranted due to unexpected conditions. The SWPPP is meant to be a dynamic working guide that is to be kept current and amended whenever:
1. There is a change in design, construction, operation, or maintenance at the construction site that has or could have a significant effect on the discharge of pollutants to the Waters of the United States that has not been previously addressed in the SWPPP. In addition to modifying the SWPPP, the site map may also require an amendment.
  2. Inspections or investigations by site staff, or by local, state or federal officials, determine that the discharges the SWPPP is ineffective in eliminating or significantly minimizing pollutants in storm water discharges from the construction site. Modifications that are the result of an inspection must be initiated within 24 hours and completed within 48 hours.
  3. Based on the results of an inspection, it must be modified as necessary to include additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP must be completed within seven (7) calendar days following the inspection.
  4. There is a release containing a Hazardous Substance or Oil in an amount equal or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117 or 40 CFR Part 302 occurs during a 24-hour period. Revisions to the SWPPP must be completed within seven (7) calendar days of knowledge of the release.

Any such changes to the SWPPP must be made in writing on the Modification Report (Appendix M) within seven (7) days of the date such modification or amendment is made. Changes must also be drawn on the Progress Drawing.

- K. FINAL STABILIZATION AND TERMINATION OF PERMIT COVERAGE: A site can be considered finally stabilized when all soil disturbing activities have been completed and:
1. A uniform perennial vegetative cover with a density of 80% for the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been established.
  2. The facility no longer discharges storm water associated with Construction Activities.
  3. A Notice of Termination (NOT) form filed by the Operator(s) with the NYSDEC. The NOT must be submitted within thirty (30) days of final stabilization.

The Operator's Project Manager must provide a completed copy of the NOT to the Contractor for inclusion in the SWPPP. This filing terminates coverage under the Construction General Permit and terminates the Contractor's responsibility to implement the SWPPP, but the requirements of the SWPPP, including periodic inspections, must be continued until the NOT is filed. Upon achieving this milestone, the Contractor shall also submit "Final Stabilization Certification/Notice of Termination Checklist" (Appendix N).



## II. PROJECT NAME AND LOCATION

Yorktown A Solar Farm  
Town of Yorktown  
Westchester County  
73.859 W, 41.333 N

A general location map (Appendix B) with enough detail to identify the location of the construction site, direction of storm water flow, the receiving waters within one (1) mile of the site, surface waters and Wetlands, storm water discharge locations and other areas as required by *NYSDEC* is included in Appendix B.

## III. OPERATOR'S NAME AND ADDRESS

Con Edison Clean Energy Businesses, inc.  
Joe Shanahan  
100 Summit Lake Drive  
Valhalla, New York 10595

## IV. PROJECT DESCRIPTION

This SWPPP is for Yorktown A Solar Farm. The project is located within the Town of Yorktown, Westchester County, New York. The entire property is approximately 34.23± acres. The project consists of the installation of photovoltaic panels as well as the associated access road, electric utility upgrades, and perimeter fencing. This SWPPP addresses all the proposed work to be done at the new Yorktown A Solar Farm (Appendix C).

The total project disturbance area will not exceed 5.0 acres at any one time. The approximate start of construction is March, 2021 with an expected end of construction by June, 2021. General soil disturbing activities will include:

- Installation of solar racking
- Construction of entrance driveway
- Panel installation
- Trenching for wiring of panels
- Finalization of connection to the grid
- Vegetation clearing and grubbing
- Decompaction of construction driveway
- Construction of Limited use pervious gravel entrance driveway
- Final grading



V. EXISTING SITE CONDITIONS

The project site tributary area is approximately 17± acres. The topography of the project site ranges from elevations of 292 feet to 238 feet. The site has slopes ranging from 0.1% to 70.0%. The project site consists of mostly wooded areas, a wetland, and a stream. The site drains to existing on-site wetland and stream.

VI. NAME OF RECEIVING WATERS

The site discharges to an existing onsite stream (Mohegan Outlet) and wetland.

VII. DESCRIPTION OF SOILS

Soil Types within the Subject Area

Symbol	Soil Name	Hydrologic Soil Group
ChB	Charlton fine sandy loam, 3 to 8 percent slopes	B
ChE	Charlton loam, 25 to 35 percent slopes	B
SuB	Sutton loam, 3 to 8 percent slopes	B/D
LeB	Leicester loam, 2 to 8 percent slopes	A/D
PnC	Paxton fine sandy loam, 8 to 15 percent slopes	C

More information pertaining soils can be found in the Soil Map included in Appendix B section of this report.



VIII. EROSION AND SEDIMENT CONTROLS

- A. The project will utilize temporary and permanent erosion and sediment control practices to prevent sediment from leaving the project area. A list of the practices anticipated are as follows:

Temporary Structural					
	BMP	Notes		BMP	Notes
<input type="checkbox"/>	Check Dams		<input type="checkbox"/>	Sediment Traps	
<input type="checkbox"/>	Construction Road Stabilization		<input checked="" type="checkbox"/>	Silt Fence	
<input type="checkbox"/>	Dust Control		<input checked="" type="checkbox"/>	Stabilized Construction Entrance	
<input type="checkbox"/>	Earth Dike		<input type="checkbox"/>	Storm Drain Inlet Protection	
<input type="checkbox"/>	Level Spreader		<input type="checkbox"/>	Straw/Hay Bale Dike	
<input type="checkbox"/>	Perimeter Dike/Swale		<input type="checkbox"/>	Temporary Access Waterway Crossing	
<input type="checkbox"/>	Pipe Slope Drain		<input type="checkbox"/>	Temporary Stormdrain Diversion	
<input type="checkbox"/>	Portable Sediment Tank		<input type="checkbox"/>	Temporary Swale	
<input type="checkbox"/>	Rock Dam		<input type="checkbox"/>	Turbidity Curtain	
<input type="checkbox"/>	Sediment Basin		<input type="checkbox"/>	Water Bars	
Vegetative Measures					
	BMP	Notes		BMP	Notes
<input type="checkbox"/>	Brush Matting		<input type="checkbox"/>	Sodding	
<input type="checkbox"/>	Dune Stabilization		<input type="checkbox"/>	Straw/Hay Bale Dike	
<input type="checkbox"/>	Grassed Waterway		<input type="checkbox"/>	Streambank protection	
<input checked="" type="checkbox"/>	Mulching		<input type="checkbox"/>	Temporary Swale	
<input type="checkbox"/>	Protecting Vegetation		<input type="checkbox"/>	Topsoiling	
<input type="checkbox"/>	Recreation Area Improvement		<input type="checkbox"/>	Vegetative Waterways	
<input checked="" type="checkbox"/>	Seeding		<input type="checkbox"/>	Other	
Biotechnical					
<input type="checkbox"/>	Brush Matting		<input type="checkbox"/>	Wattling	



Permanent Structural					
	BMP	Notes		BMP	Notes
<input type="checkbox"/>	Debris Basin		<input type="checkbox"/>	Riprap Slope Protection	
<input type="checkbox"/>	Diversion		<input type="checkbox"/>	Rock Outlet Protection	
<input type="checkbox"/>	Grade Stabilization Structure		<input type="checkbox"/>	Streambank Protection	
<input checked="" type="checkbox"/>	Land Grading		<input type="checkbox"/>	Other	
<input type="checkbox"/>	Lined Waterway (Rock)		<input type="checkbox"/>	Other	
<input type="checkbox"/>	Paved Channel		<input type="checkbox"/>	Other	
<input type="checkbox"/>	Paved Flume		<input type="checkbox"/>	Other	
<input type="checkbox"/>	Retaining Wall		<input type="checkbox"/>	Other	

**B. Sequence of Major Construction Activities**

The Contractor will be responsible for implementing the following Erosion and Sediment Control and Storm Water Management control measures. The Contractor may designate these tasks to certain subcontractors as he sees fit, but the ultimate responsibility for implementing these controls and ensuring their proper functioning remains with the Contractor. The order of activities will be as follows (refer to the Erosion and Sediment Control / SWPPP Plan Sheet C001):

**Construction Sequence**

1. Pre-construction meeting held to include project manager, operator's engineer, town representative, contractor, and sub-contractors prior to land disturbing activities.
2. Construct construction entrance/exit at locations designated on plans.
3. Install compost silt sock.
4. Have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in the SWPPP and required by the NYSDEC permit have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.
5. Begin clearing and grubbing operations. Clearing and grubbing operations shall be done only in areas where earth work will be performed and only in areas where construction is planned to commence within fourteen (14) days after clearing and grubbing.
6. Construct stormwater management practices per plan.
7. Construct gravel driveway to be used during construction.
8. Strip topsoil and stockpile in a location acceptable to construction manager. When stockpile is complete, install a perimeter silt sock, seed surface with 100% perennial ryegrass mixture at a rate of 2-4 lbs. per 1000 square feet. Apply 90-100 lbs. per 1,000 square feet of mulch.
9. Commence earthwork cut and fills. The work shall be progressed to allow a reasonable transfer of cut and fill earth for rough grading and earth moving. The contractor will be given some latitude to vary



from the following schedule in order to meet the field conditions encountered. Contractor shall review variations to SWPPP with Design Engineer and qualified professional prior to implementation.

10. Construct solar array area in four phases as detailed in Sheet C007 of this plan set. Contractor shall construct each phase individually and shall not proceed to the following phase until the solar racking has been installed and the phase area has been temporarily stabilized with seed and mulch.
11. Stabilize all areas as soon as practicable, idle in excess of seven (7) days and in which construction will not commence within fourteen (14) days
12. Install utilities. Trench excavation/backfill areas should be stabilized progressively at the end of each workday with seed and straw mulch at a rate of 100% perennial ryegrass at 2-4 lbs. per 1,000 square feet mulched at 90-100 lbs. per 1000 square feet.
13. Remove the construction gravel driveway and construct the proposed pervious gravel driveway after construction activities such as the installation of the panels and perimeter fence. The sub-grade material where the driveway is to be installed shall be decompacted per NYSDEC'S "Deep-Ripping and Decompaction" manual, dated April 2008. Contractor shall avoid frequent heavy traffic on the Limited Use Pervious Gravel Driveway
14. Stabilize all areas as soon as practicable, idle in excess of seven (7) days and in which construction will not commence within fourteen (14) days.
15. Remove temporary construction exits and perimeter silt sock once site has achieved 80% uniform stabilization.

#### C. Storm Water Management

Con Edison Clean Energy Businesses, Inc. will be responsible for all maintenance of the stormwater management facilities associated with the project.

The amount of stormwater leaving the site will be restricted to pre-development rates for the 1-year, 10-year (Overbank Flood) and 100-year (Extreme Storm), 24 hour storm events with a Type II rainfall distribution. The Volume of water being detained will be a function of the increased runoff. Detailed information related to the proposed stormwater management facilities is included in the Stormwater Management Report (Appendix R).

Due to the use of the NYSDEC Approved Limited Use Pervious Gravel, the concrete pads constitutes the only impervious addition to the site. A Bio-Retention basin is proposed to treat stormwater runoff from the concrete pads. Detailed information related to the proposed stormwater management facilities is included in the Stormwater Management Report (Appendix R)

#### D. Post Construction Stormwater BMP Operation and Maintenance Plan

An Operations and Maintenance Plan is included to address the inspection, operation and maintenance of all post construction BMPs identified in this plan. The contractor is responsible for proper installation, maintenance and functioning of all the best management practices shown on the drawings until after stabilization is achieved. A copy of the Post Construction Stormwater BMP Operations and Maintenance Plan is included in Appendix T of this document.



## IX. OTHER CONTROLS

### A. Off-Site Vehicle Tracking

1. Dump trucks hauling material from the construction site will be covered with a tarpaulin. The job Contractor's Superintendent will be responsible for seeing that these procedures are followed.
2. Rock construction entrance to be installed as site conditions warrant or at the request of the engineer or inspector.

### B. Excavation Spoil Materials

1. Excavation spoil materials may be generated during excavations including, but not limited to roadway and utilities installation. These materials must be properly managed to prevent them from contributing to storm water discharges. The materials generated from the development of this Project will be managed by the following method: Stockpiled on-site, the general site contractor to specify location and provide erosion control for excavated spoil materials or the material shall be hauled off-site and disposed of in an appropriate manner.

### C. Dust Control

1. Minimizing wind erosion and controlling dust will be accomplished by one or more of the following methods
  - a) Covering 30% or more of the soil surface with a non-erodible material.
  - b) Roughening the soil to produce ridges perpendicular to the prevailing wind. Ridges should be about six (6) inches in height.
  - c) Frequent watering of excavation and fill areas.
  - d) Providing gravel or paving at entrance/exit drives, parking areas and transit paths.

### D. Equipment Service Area

1. The Contractor shall identify an area on the Erosion and Sediment Control Plan for equipment cleaning, maintenance and repair. This area shall be protected by a temporary perimeter berm preventing all surface runoff from leaving the area, or equivalent measure, and shall be located no closer than 100' from any Waters of the United States or state, and shall be located no closer than 50' from any storm inlet. External washing of trucks and other construction vehicles must be confined to this area. No engine degreasing or asphalt equipment or tool washing is permitted.

### E. Material Stockpiles

1. Stormwater runoff to and from material stockpiles shall be controlled to prevent materials from creating a diversion of surface water to disturbed soils or from entering the surface water. Topsoil stockpiles shall be surrounded with perimeter sediment control measures such as silt fence and be covered with non-erosive material as soon as practicable but no longer than 14 days after completion of the pile. Non-erosive material may include temporary seeding with straw mulch and tackifier, mulch, or other material providing suitable cover.

### F. Masonry Mixing Area

1. Non-stormwater discharges into storm drainage systems or waterways containing slurries from concrete or mortar mixing operations shall not be permitted. Masonry mixing areas shall be located a minimum distance of 100 linear feet from drainage ways, inlets and surface waters and all storm water runoff from these areas shall be contained by a berm or other measures. Run-on water to these areas will be diverted to prevent mixing of clean water and water contaminated with concrete slurry.





X. COMPLIANCE WITH OTHER STATE AND LOCAL REGULATIONS

- A. At a minimum, the Contractor will obtain copies of any and all local and state regulations which are applicable to Storm Water Management, Erosion and Sediment Control, and pollution minimization at this Project and will comply fully with such regulations. The Contractor will submit written evidence of such compliance if requested by the Operator or any agent of a regulatory body. The Contractor will comply with all conditions of the *NYSDEC* General Permit for Stormwater Discharges from Construction Activities including the conditions related to maintaining the SWPPP and evidence of compliance with the SWPPP at the Project and allowing regulatory personnel access to the Project and to records in order to determine compliance. The Contractor shall also comply with any additional or more stringent requirements imposed by the permit issued by an approved state storm water program, or with permits issued, or requirements imposed by the Town to which the Project discharges storm water. Requirements with which the Contractor must comply include installation of post-construction measures required by the State, County, or City.

XI. MATERIALS MANAGEMENT PLAN

A. Progress Drawing

- 1. A Progress Drawing consisting of a print of the Erosion and Sediment Control Plans shall be posted inside the job trailer wall. The Progress Drawing will be used to record the locations of the Job Trailer, Sanitary Waste Facilities, Solid Waste Facilities, Fuel Storage Area, Equipment Service Area, and Concrete Washout Pit. Any time any of these facilities are relocated on the site, a new location will be noted on the Progress Drawing and a Modification Report (Appendix M) will be prepared.

B. Materials Covered

- 1. The following materials or substances are expected to be present onsite during construction:

Concrete/Additives/Wastes	Cleaning solvents
Detergents	Petroleum based products
Paints/Solvents	Pesticides
Acids	Fertilizers
Solid and construction wastes	Sanitary wastes
Soil stabilization additives	

C. Materials Management Practices

The following are the material management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff. The Contractor's Superintendent will be responsible for ensuring that these procedures are followed:

- 1. Good Housekeeping

The following good housekeeping practices will be followed onsite during construction:

- a) An effort will be made to store only enough products required to do the job.
- b) All materials stored onsite will be stored in a neat, orderly manner and, if possible, under a roof or in a containment area. At a minimum, all containers will be stored with their lids on when not in use. Drip pans shall be provided under all dispensers.
- c) Products will be kept in their original containers with the original manufacturer's label in legible condition.



- d) Substances will not be mixed with one another unless recommended by the manufacturer.
- e) Whenever possible, all of a product will be used up before disposing of the container.
- f) Manufacturer's recommendations for proper use and disposal will be followed.
- g) The Contractor's Superintendent will be responsible for daily inspections to ensure proper use and disposal of materials.

## 2. Hazardous Substances

These practices will be used to reduce the risks associated with Hazardous Substances. Safety Data Sheets (SDS's) for each product with hazardous properties that is used at the Project will be obtained and used for the proper management of potential wastes that may result from these products. An SDS will be posted in the immediate area where such product is stored and/or used and another copy of each SDS will be maintained in the job trailer at the Project. Each employee who must handle a Hazardous Substance will be instructed on the use of SDS sheets and the specific information in the applicable SDS for the product he/she is using, particularly regarding spill control techniques.

- a) Products will be kept in original containers with the original labels in legible condition.
- b) Original labels and SDS's will be procured and used for each product.
- c) If surplus product must be disposed manufacturer's and local/state/federal required methods for proper disposal must be followed.

## 3. Hazardous Waste

It is imperative that all Hazardous Waste be properly identified and handled in accordance with all applicable Hazardous Waste Standards, including the storage, transport and disposal of the Hazardous Wastes. There are significant penalties for the improper handling of Hazardous Wastes. It is important that the Site Superintendent seeks appropriate assistance in making the determination of whether a substance or material is a Hazardous Waste. For example, Hazardous Waste may include certain Hazardous Substances, as well as pesticides, paints, paint solvents, cleaning solvents, pesticides, contaminated soils, and other materials, substances or chemicals that have been discarded (or are to be discarded) as being out-of-date, contaminated, or otherwise unusable, and can include the containers for those substances; other materials and substances can also be or become Hazardous Wastes, however. The Contractor's Superintendent is also responsible for ensuring that all site personnel are instructed as to these Hazardous Waste requirements and also that the requirements are being followed.

## 4. Product Specific Practices

The following product specific practices will be followed on the job site:

### a) Petroleum Products

- (1) All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers which are clearly labeled. Petroleum storage tanks shall be located at minimum 100 linear feet from drainage ways, inlets and surface waters. Maximum total aggregate above ground storage capacity (for the total permit area) shall not exceed 1,320 gallons (which includes both bulk and equipment operational storage volumes in fuel tanks 55 gallons and greater). Total aggregate petroleum storage exceeding 1,320 gallons shall require preparation, certification (using a Professional Engineer or providing a Self-Certified SPCC Plan if applicable) and implementation of a Spill Prevention Control and Countermeasures



(SPCC) Plan. The SPCC Plan must be prepared and fully implemented prior to the commencement of work. The SPCC Plan, if needed, will be furnished by the Contractor. Any petroleum storage tanks stored onsite will be located within a containment area that is designed with an impervious surface between the tank and the ground. The secondary containment must be designed to provide a containment volume that is equal to 110% of the volume of the largest tank. Any mobile petroleum tank shall be parked in a vehicular service area surrounded by a berm that provides a containment volume that is equal to 110% of the volume of the largest tank. Containment must provide sufficient volume to contain expected precipitation and 110% volume of the largest tank. Accumulated rainwater or spills from containment areas are to be promptly pumped into a containment device and disposed of properly by a licensed Hazardous Waste transporter. Drip pans shall be provided for all dispensers. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations. The location of any fuel tanks and/or equipment storage areas must be identified on the PROGRESS DRAWING by the Contractor once the locations have been determined.

b) Fertilizers

- (1) Fertilizers will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked in the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

c) Paints, Paint Solvents, and Cleaning Solvents

- (1) All containers will be tightly sealed and stored when not in use. Excess paint and solvents will not be discharged to the storm sewer system but will be properly disposed of according to manufacturer's instructions or state and federal regulations.

d) Concrete Wastes

- (1) Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site, but only in specifically designated diked and impervious washouts which have been prepared to prevent contact between the concrete wash and storm water. Waste generated from concrete wash water shall not be allowed to flow into drainage ways, inlets, receiving waters or highway right of ways, or any location other than the designated concrete washout. Waste concrete may be poured into forms to make riprap or other useful concrete products. Proper signage designating the "Concrete Washout" shall be placed near the facility. Concrete Washouts shall be located at minimum 100 linear feet from drainage ways, inlets and surface waters.
- (2) The hardened residue from the concrete wash out areas will be disposed of in the same manner as other non-hazardous construction waste materials or may be broken up and used on site as deemed appropriate by the Contractor. Maintenance of the washout is to include removal of hardened concrete. The Facility shall have sufficient volume to contain all the concrete waste resulting from washout and a minimum freeboard of 12 inches. Facility shall not be filled beyond 95% capacity and shall be cleaned out once 75% full unless a new facility is constructed. The Contractor's Superintendent will be responsible for seeing that these procedures are followed.
- (3) Saw-cut Portland Cement Concrete (PCC) slurry shall not be allowed to enter storm drains or Watercourses. Saw-cut residue should not be left on the surface of pavement or be allowed



to flow over and off pavement. Residue from saw-cutting and grinding shall be collected by vacuum and disposed of in the concrete washout facility.

- (4) The Project may require the use of multiple concrete wash out areas. These concrete wash out areas are to be made available to all trades and subcontractors working on the Project. The Contractor may designate certain wash out areas for particular trades or subcontractors, but the Contractor is responsible for the management of all concrete washout areas on the Project. All concrete wash out areas will be located in an area where the likelihood of the area contributing to storm water discharges is negligible. If required, additional BMPs must be implemented to prevent concrete wastes from contributing to storm water discharges. The location of concrete wash out area(s) must be identified on the PROGRESS DRAWING by the Contractor once the locations have been determined.
- e) Solid and Construction Wastes
- (1) All waste materials will be collected and stored in an appropriately covered container and/or securely contained metal dumpster rented from a local waste management company which must be a licensed solid waste management company. The dumpster will comply with all local and state solid waste management regulations.
  - (2) All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary. Once building construction has commenced, the dumpster will be emptied a minimum of once per week or when 95% full, or more often if necessary, to prevent over-flow and the trash will be hauled to a landfill. No construction waste materials will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal.
  - (3) All waste dumpsters and roll-off containers will be located in an area where the likelihood of the containers contributing to storm water discharges is negligible. Solid waste containers shall be located no less than 50 feet from any storm inlet, drainage way, or surface water. If required, additional BMPs must be implemented, such as gravel bags, wattles, dikes, berms, and fences around the base to prevent wastes from contributing to storm water discharges. The location of waste dumpsters and roll-off containers must be identified on the PROGRESS DRAWING by the Contractor once the locations have been determined.
- f) Sanitary Wastes
- (1) A minimum of one portable sanitary unit will be provided for every ten (10) workers on the site. All sanitary waste will be collected from the portable units a minimum of one time per week by a licensed portable facility provider in complete compliance with local and state regulations.
  - (2) All sanitary waste units will be located in an area where the likelihood of the unit contributing to storm water discharges is negligible. Additional containment BMPs must be implemented, such as gravel bags or specially designed plastic skid containers around the base, to prevent wastes from contributing to storm water discharges. The location of sanitary waste units must be identified on the PROGRESS DRAWING by the contractor once the locations have been determined.
- g) Contaminated Soils
- (1) Any contaminated soils (resulting from spills of Hazardous Substances or Oil or discovered during the course of construction) which may result from Construction Activities will be contained and cleaned up in accordance with applicable state and federal regulations.



Contaminated soils not resulting from Construction Activities, or which pre-existed Construction Activities, but which are discovered by virtue of Construction Activities, should be reported in the same manner as spills, but with sufficient information to indicate that the discovery of an existing condition is being reported. If there is a release that occurs by virtue of the discovery of existing contamination, this should be reported as a spill, if it otherwise meets the requirements for a reportable spill.

#### D. Spill Prevention and Response Procedures

The Contractor will train all personnel in the proper handling and cleanup of spilled Hazardous Substances or Oil. No spilled Hazardous Substances or Oil will be allowed to come in contact with storm water discharges. If such contact occurs, the storm water discharge will be contained on site until appropriate measures in compliance with state and federal regulations are taken to dispose of such contaminated storm water. It shall be the responsibility of the Contractor's Superintendent to be properly trained, and to train all personnel in spill prevention and clean up procedures.

1. In order to prevent or minimize the potential for a spill of Hazardous Substances or Oil to come into contact with storm water, the following steps will be implemented:
  - a) All Hazardous Substances or Oil (such as pesticides, petroleum products, fertilizers, detergents, construction chemicals, acids, paints, paint solvents, cleaning solvents, additives for soil stabilization, concrete curing compounds and additives, etc.) will be stored in a secure location, with their lids on, preferably under cover, when not in use.
  - b) The minimum practical quantity of all such materials will be kept at the Project.
  - c) A spill control and containment kit (containing, for example, absorbent materials, acid neutralizing powder, brooms, dust pans, mops, rags, gloves, goggles, plastic and metal trash containers, etc.) will be provided at the storage site.
  - d) Manufacturer's recommended methods for spill cleanup will be clearly posted and site personnel will be trained regarding these procedures and the location of the information and cleanup supplies.
  - e) It is the Contractors responsibility to ensure that all Hazardous Waste discovered or generated at the Project site is disposed of properly by a licensed hazardous material disposal company. The Contractor is responsible for not exceeding Hazardous Waste storage requirements mandated by the EPA or state and local authority.
2. In the event of a spill of Hazardous Substances or Oil, the following procedures must be followed:
  - a) All measures must be taken to contain and abate the spill and to prevent the discharge of the Hazardous Substance or Oil to storm water or off-site. (The spill area must be kept well ventilated and personnel must wear appropriate protective clothing to prevent injury from contact with the Hazardous Substances.
  - b) If the release is equal to or in excess of a reportable quantity, the SWPPP must be modified within seven (7) calendar days of knowledge of the discharge to provide a description of the release, the circumstances leading to the release, and the date of the release. The SWPPP must identify measures to prevent the recurrence of such releases and to respond to such releases. The form in Appendix O must be completed in accordance with this requirement.



## XII. CONTROL OF NON-STORM WATER DISCHARGES

- A. Certain types of discharges are allowable under the NYSDEC General Permit for Stormwater Discharges from Construction Activities, and it is the intent of this SWPPP to allow such discharges. These types of discharges will be allowed under the conditions that no pollutants will be allowed to come in contact with the water prior to or after its discharge. The control measures which have been outlined previously in this SWPPP will be strictly followed to ensure that no contamination of these non-storm water discharges takes place. The following non-storm water discharges are allowed by the NYSDEC and may occur at the Project:
1. Discharges from fire-fighting activities;
  2. Fire hydrant flushings;
  3. Waters used to wash vehicles where detergents are not used;
  4. Water used to control dust;
  5. Potable water including uncontaminated water line flushings;
  6. Routine external building wash down that does not use detergents;
  7. Pavement wash waters 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;
  8. Uncontaminated air conditioning or compressor condensate;
  9. Uncontaminated ground water or spring water;
  10. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
  11. Uncontaminated excavation dewatering;
  12. Landscape irrigation

## XIII. HISTORICAL PROPERTIES

- A. A review of potential adverse impact to cultural, historic and archaeological resources was conducted. The Project area was determined to be Archeologically sensitive. The New York State Historic Preservation Office response letter can be found in Appendix S.

## XIV. INDUSTRIAL ACTIVITIES

- A. There are no discharges planned from industrial activities as part of this project.

## XV. ENHANCED PHOSPHORUS REMOVAL STANDARDS

- A. This project is not required to provide enhanced phosphorus removal practices