

# **Stormwater Pollution Prevention Plan**

**TerraFlex 101, LLC**

**Proposed Office/Warehouse Development**

**NYS Route 9W  
Town of Marlborough  
Ulster County, NY**

**January 23, 2024**

Prepared by:

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**VICINITY MAP**  
SCALE: NONE

**TerraFlex 101, LLC**

**NYS Route 9W  
Town of Marlborough  
Ulster County, NY**

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## **I. Introduction**

TerraFlex 101, LLC is proposing to construct three (3) new office/storage buildings, totaling 30,984 square feet of combination office/storage facility along with associated parking, access drive, and utilities on a 3.52+/- parcel of land located along the western side NYS Route 9W, 415+/- feet south of the intersection with Mahoney Road, in the Town of Marlborough, Ulster County, New York.

The 3.52 +/- acre project site is situated on NYS Route 9W as depicted on the site plans prepared by Jeffrey A. Econom, P.E., included as part of this report.

This report will address the required components for a Stormwater Pollution Prevention Plan (SWPPP) as specified by the New York State Department of Environmental Conservation SPDES General Permit for Stormwater Discharges from Construction Activity Permit No. GP-0-25-001.

## **II. Background Information**

### **VIII. Existing Conditions**

The 3.52 +/- acre parcel is currently open grassed land with the existing Central Hudson Gas & Electric Transmission Corridor, approximately 0.66 acres in size, bisecting the site in a north to south direction which remain in natural conditions.

The topography of the site is sloped such that stormwater flows from the western side of the property to the east. It then flows offsite via an existing NYSDOT culvert system to an un-named channel which eventually discharges to the Hudson River. The property is “unique” in that offsite runoff either flows to the existing drainage channel along the northeastern property line or around the parcel to the south.

The land uses in the immediate vicinity of the site include residential property and existing commercial properties.

### **IX. Proposed Conditions**

The scope of the project includes the construction of three (3) new office/storage buildings, totaling 30,984 square feet of combination office/storage facility along associated paved areas and utilities. An access drive is proposed from NYS Route 9W traversing the site in a westerly direction. The remaining areas will be open greenspace, the existing Central Hudson Gas & Electric Transmission Corridor and existing channel directing runoff from the Perkinsville Road area to the existing culvert under Route 9W. The stormwater design again is “unique” in that once the project is constructed, the flow to the existing NYSDOT culvert near the driveway entrance will be drastically reduced as the driveway curbline will limit flow to the culvert. The site consists of mostly rock/shale with the western and eastern boundaries with a topsoil/dirt compost. The stormwater will be directed to an underground CULTEC infiltration system with an outlet to the south which will ultimately discharge to another Route 9W culvert crossing thus greatly reducing the runoff to the northern Route 9W culvert system. The surrounding topography will remain as it currently exists.

The project is being proposed to be phased into 3 phases:

Phase 1: Building #1 (7,000 s.f.), associated parking and the access road (32,248.77 s.f.)

Phase 2: Building #2 (12,000 s.f.) and associated parking (26,316.67 s.f.)

Phase 3: Building #3 (11,984 s.f.) and associated parking (17,259.70 s.f.)

TerraFlex 101, LLC will be responsible for all construction activities, post construction operations and maintenance of the system and all responsibilities specified in the SWPPP.

New parking, landscaping, lighting, utility improvements, stormwater management facilities and other miscellaneous site improvement are proposed as shown on the enclosed Site Development Plans prepared by Jeffrey A. Econom, P.E.

### **III. Construction Drawings:**

Included in this report are the following drawings:

- A. Cover Sheet with Notes
- B. Existing Conditions Site Plan. Existing condition for the parcel including all required existing information (watercourses, topography, vegetation, utilities, property boundaries, etc.).
- C. Proposed Site Plan. Comprehensive plan of all proposed improvements
- D. Proposed Phasing Plan
- E. Proposed Grading, Utility Plan and Erosion/Sediment Control. Plan illustrates existing and proposed slopes, proposed stormwater measures and limits of disturbance. Plan includes detailed design information for the installation of all proposed utilities resulting in the disturbance of soil for this project. Erosion and sediment control measures to be in place and inspected, prior to commencement of construction. The proposed measures were designed in accordance with the New York Guidelines for Urban Erosion and Sediment Control. Proposed measures include inlet protection, silt fence along the project perimeter, outlet sediment traps, stabilized construction entrance and construction sequencing.
- F. Proposed Profile Sheet. Proposed profile of Access Driveway
- G. Proposed Photometric Plan. Included are the lighting fixture locations and proposed lumens.
- H. Proposed Landscaping Plan. Included are all proposed landscaping for the project.
- I. Detail Sheet

### **IV. Soil Description:**

Data supplied by the USDA Natural Resources Conservation Service (NRCS) indicates that site soils are primarily classified as the following four (4) groups:

BnC – Bath-Nassau complex, 8 to 25 percent slopes classified as Hydrologic Soil Group C

BOD – Bath-Nassau-rock outcrop complex, hilly classified as Hydrologic Soil Group C

MgB – Mardin-Nassau Complex, 3 to 8 percent slopes classified as Hydrologic Soil Group C

VoB – Volusia Gravelly Silt Loam, 3 to 8 percent slopes classified as Hydrologic Soil Group C

Soils were modeled as Hydrologic Soil Group C.

## **V. Construction Phasing:**

Construction sequencing, limits of clearing and grading, utility and infrastructure installation and all other associated activities resulting in soil disturbance are detailed on the Erosion and Sediment Control, Grading and Drainage and Utility Plans.

## **VI. Pollution Prevention Measures:**

Pollution Prevention measures during construction are detailed on the SWPPP / Erosion and Sediment Control Plan. Construction waste will be disposed in on-site construction dumpsters immediately. The dumpsters shall be located such that any stormwater run-off will be directed to a sediment trap. Any materials or chemicals considered to be hazardous shall be covered or stored in construction trailers to ensure no discharge to stormwater will occur.

## **VII. Soil Stabilization Measures:**

Initial clearing and grading will commence once the proposed erosion and sediment control practices are in place as detailed on the erosion and sediment control plan and approved by the SWPPP Monitoring Professional. All grading and excavation will be conducted such that associated stormwater run-off is directed to the temporary sediment trap. The trap will be abandoned when the drainage structures are in place with proper inlet protection installed and all disturbed areas are stabilized.

## **VIII. Erosion and Sediment Control Practices:**

Specific types, sizes, lengths and dimensions for all erosion control practices and sizing for temporary sediment basins are detailed on the Erosion and Sediment Control Plan and Detail Sheet. All temporary erosion control practices shall be in place prior to construction and shall remain until the limits of disturbed areas are stabilized.

## **IX. Maintenance Schedule:**

Maintenance of the proposed erosion and sediment control practices are detailed on the Erosion and Sediment Control Plan. Included in this report are Construction Inspection and Operations and Maintenance Checklists. The operator is ultimately responsible for inspection and maintenance during construction. Stabilization must be achieved prior to removal of temporary erosion and sediment control devices and filing of the NYSDEC Notice of Termination (NOT). The SWPPP Monitoring Professional must inspect and approve final stabilization prior to filing of the NOT. Following the NOT filing, which terminates permit coverage, the Property Owner or any subsequent owner shall follow the guidelines set forth in this report and will be responsible for operations and maintenance over the lifetime of the facility.

## **X. Receiving Waters:**

The proposed drainage system is designed to treat and release storm water below the pre-development flow rate for all subject storm events. Storm water discharges off site and ultimately discharges to an unnamed tributary of the Hudson River. The subject parcel is not located within the 100-year flood plain according to FEMA's Flood Map Service Center.

## **XI. SWPPP Implementation:**

TerraFlex 101 LLC as the operator, shall have each contractor and sub- contractors identify at least one (1) person responsible for SWPPP Implementation. This person must be trained and certified by the NYSDEC as stated on Page 12, Part III.A.6 of the NYSDEC General Permit GP-0-20-001 included in the appendix of this report. TerraFlex 101, LLC. as the operator, shall designate an inspector meeting the qualifications as set forth on page 18, Part IV of the General Permit. The inspector shall be responsible for the construction phase of the project and the implementation of the pollution prevention measures set forth in this report. The designated individual shall have a complete understanding of all components of the stormwater management system. Delineation of SWPPP implementation responsibilities for the construction phase of the project are detailed in the Erosion and Sediment Control Plan. The plan details structural practices proposed to divert flows from exposed soils, store flows, and limit run-off and discharge of pollutants from exposed areas of the site during construction. TerraFlex 101, LLC. shall also designate a qualified representative for the post development inspection and monitoring. The inspector shall follow the guidelines of the Operations and Maintenance Checklists included in this report. The inspector shall keep a continuous record of all inspection checklists, maintenance and repairs and shall make them available to the Town and The NYSDEC at their request.

## **XII. Stormwater Run-off Characteristics:**

Existing and proposed data describing stormwater run-off characteristics are included in the Stormwater Management Report, prepared by Jeffrey A. Econom, P.E. This report is included in the Appendix.

## **XIII. Archeological Sensitive Area**

The Cultural Resource Information Systems Mapping shows the subject site is not located within an archeological sensitive area.

## **XIV. Construction Activities Meeting Conditions in Table 2 of Appendix B**

This project includes construction activities that involve soil disturbances of one (1) or more acres of land and meets the criteria under Table 2 described in the permit section referenced above. Therefore, the following information is provided:

- X. Descriptions of each post-construction stormwater control practice are included in the Stormwater Management Report and are detailed on the Grading and Drainage Plan included in the Appendix of this report.
- XI. Hydrologic and hydraulic analysis for all structural components of the stormwater control system for all applicable design storms are included in the Stormwater Management Report.
- XII. Comparison of pre and post development stormwater run-off conditions is included in the Stormwater Management Report.
- XIII. Dimensions, materials and installation details for all post construction stormwater control practices are specified on the enclosed Grading and Drainage Plan.
- XIV. A maintenance schedule is detailed on the Erosion and Sediment Control Plan and in the Operations and Maintenance Checklists included in this report.

## **XV. SWPPP Development – 6 Step Process:**

- a. Site Planning - Green Infrastructure
- b. WQv Determination
- c. Apply GI Practices and Standard SMP's with RRv Capacity
- d. Determine minimum RRv
- e. Apply Standard SMP's to address remaining WQv, if required
- f. Apply volume and peak control

### 1. Site Planning - Green Infrastructure:

#### A. Preservation of Natural Resources:

##### 1. Preservation of Undisturbed Areas

Construction and/or silt fence shall be constructed along the perimeter of the limits of disturbance of the site. The operator and contractors shall be instructed not to disturb any soil or vegetation beyond the limits of construction as noted on the plans. The size of the site and undisturbed area does not justify the delineation of permanent conservation easements.

##### 2. Preservation of Buffers

There are not any existing buffers surrounding the site. Therefore, delineation of any permanent conservation easement(s) is not warranted.

##### 3. Reduction of Clearing and Grading

The limits of clearing and grading have been proposed at a minimum needed to construct the proposed facility.

##### 4. Locating Development in Less Sensitive Areas

The proposed development will not result in adverse impact to sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests and critical habitats.

##### 5. Open Space Design

The proposed layout of this facility has been designed as conservatively as practical to reduce impervious coverage, preserve open space and protect water resources, while maintaining adequate space for access, parking and building area needed for the proposed use.

##### 6. Soil Restoration / Preservation

The majority of the green space within the limits of disturbance will be the area of the proposed stormwater management areas. The original properties and porosity of the soil will be maintained within the limits of the basins by surrounding this area with construction fence to ensure no heavy equipment is allowed in this area. This will enhance the runoff reduction performance of practice and thus reduce the generation of runoff.

## B. Reduction of Impervious Cover

### 1. Roadway Reduction

Roadway reduction is not applicable to this project.

### 2. Sidewalk Reduction

Sidewalk reduction is not applicable to this project.

### 3. Driveway Reduction

The access drives have been designed at a minimum width and length to provide safe access through the site.

### 4. Cul-de-sac Reduction

Cul-de-sac reduction is not applicable to this project.

### 5. Building Footprint Reduction

The building footprint has been designed at a minimum footprint to meet the needs of the intended use.

### 6. Parking Reduction

The parking areas have been designed to provide the minimum number of spaces needed for the intended use.

## 2. Determining Water Quality Volume:

The Water Quality Volume (WQv) has been calculated and is shown in the details section of the Storm Water Management Report.

## 3. Runoff Reduction:

The Runoff Reduction Volume (RRv) Criteria has been satisfied by providing the required minimum RRv in the proposed infiltration basin which is outlined in the Stormwater Management Report.

## 4. Minimum RRv:

The minimum Runoff Reduction Volume (RRv) Criteria has been satisfied by providing the required minimum RRv for the site in a standard practice with RRv capability as detailed in the Stormwater Management Report.

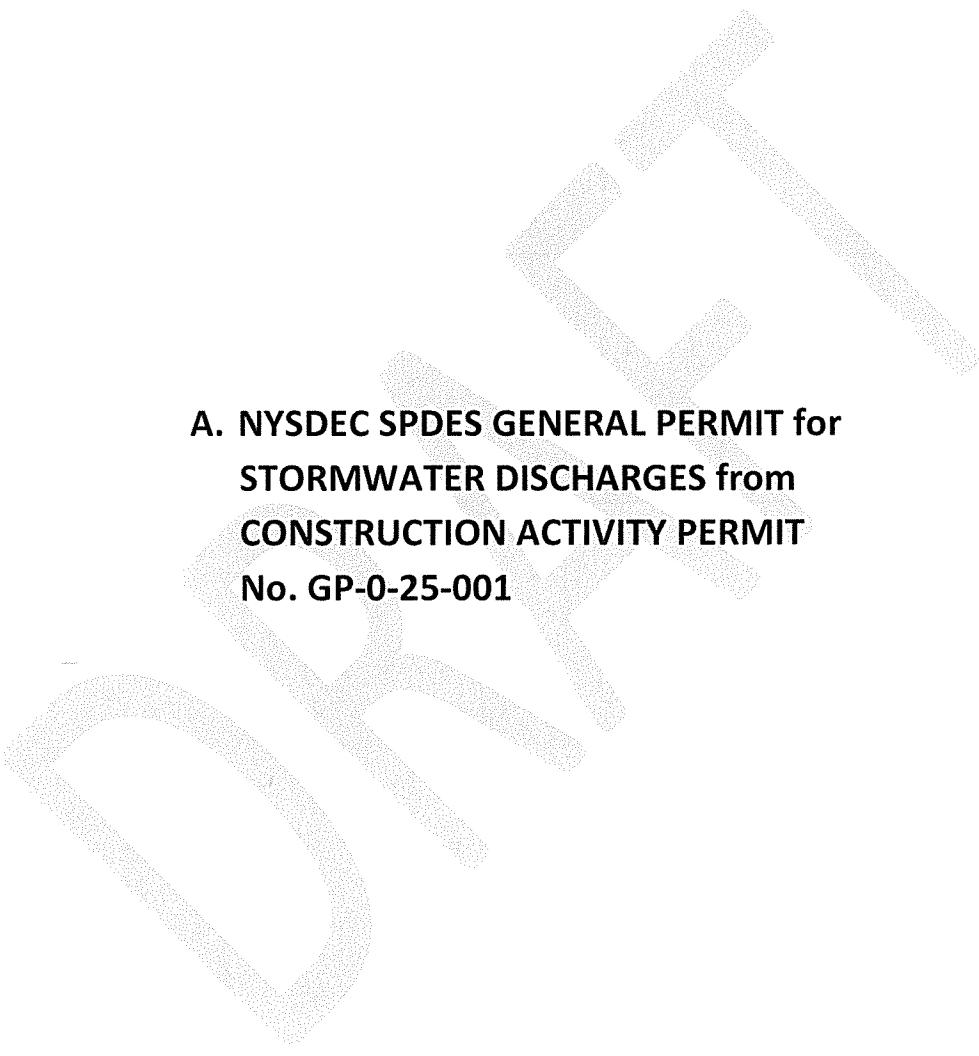
5. Apply SMP's to address remaining WQv:

The remainder of the WQv has been treated in a standard practice with RRv capability as detailed in the Stormwater Management Report.

6. Apply volume and peak rate control practices:

Additional volume and peak rate controls are provided by the proposed detention basin.





**A. NYSDEC SPDES GENERAL PERMIT for  
STORMWATER DISCHARGES from  
CONSTRUCTION ACTIVITY PERMIT  
No. GP-0-25-001**



Department of  
Environmental  
Conservation

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL  
CONSERVATION (NYSDEC)

SPDES GENERAL PERMIT  
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-25-001

Construction General Permit (CGP)

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

Effective Date: January 29, 2025

Expiration Date: January 28, 2030

Scott E. Sheeley

Chief Permit Administrator

A handwritten signature in blue ink that reads "Scott E. Sheeley".

Authorized Signature

JAN. 29, 2025

Date

Address: NYSDEC  
Division of Environmental Permits  
625 Broadway, 4th Floor  
Albany, N.Y. 12233-1750

## PREFACE

Pursuant to Section 402 of the Clean Water Act (CWA), and 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), *stormwater discharges* from certain *construction activities* are unlawful unless they are authorized by a National Pollutant Discharge Elimination System (NPDES) permit or by a state permit program. New York State administers the approved State Pollutant Discharge Elimination System (SPDES) program with permits issued in accordance with the New York State Environmental Conservation Law (ECL) Article 17, Titles 7 and 8, and Article 70, as well as 6 NYCRR Parts 621 and 750.

*Construction activities* constitute construction of a *point source* and, therefore, pursuant to ECL sections 17-0505, 17-0701, and 17-0803, the *owner or operator* must have coverage under a SPDES permit prior to *commencement of construction activities*. The *owner or operator* cannot wait until there is an actual *discharge* from the *construction site* to obtain permit coverage.

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

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
SPDES CONSTRUCTION GENERAL PERMIT (CGP) GP-0-25-001  
FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES

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## **Part I. How to Obtain Coverage and General Requirements**

To be covered under this permit, the *owner or operator* must meet all eligibility requirements in Part I.A. and follow the requirements for obtaining permit coverage in Part I.D., F., or G.

### **A. Eligibility Requirements**

For a *common plan of development or sale*, the *phase(s)* that meet the eligibility requirements in Part I.A. may obtain coverage under this permit even if other *phase(s)* of the same *common plan of development or sale* do not meet the eligibility requirements and require an individual SPDES permit.

1. The *owner's or operator's construction activities* involve soil disturbances of:
  - a. one or more acres; or
  - b. less than one acre which are part of a *common plan of development or sale* that will ultimately disturb one or more acres; or
  - c. less than one acre where NYSDEC has determined that a SPDES permit is required for *stormwater discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of pollutants to *surface waters of the State*.
    - i. 5,000 square feet or more, but less than one acre, and are in the New York City Watershed located east of the Hudson River, Appendix C Figure 1; or
    - ii. 20,000 square feet or more, but less than one acre, within the municipal boundaries of the City of New York (NYC); or
    - iii. less than 20,000 square feet which are part of a *common plan of development or sale* that will ultimately disturb 20,000 square feet or more, but less than one acre, within the municipal boundaries of NYC; or
    - iv. that creates 5,000 square feet or more of *impervious area* within the municipal boundaries of NYC.

Part I.A.2.

2. *Discharges from the owner's or operator's construction activities* are/were not:
  - a. already covered by a different SPDES permit; or
  - b. covered under a different SPDES permit that was denied, terminated, or revoked; or
  - c. identified in an expired individual SPDES permit that was not renewed; or
  - d. required to obtain an individual SPDES permit or another general SPDES permit in accordance with Part VII.K.
3. If *construction activities* may adversely affect a species that is endangered or threatened, the *owner or operator* must obtain a:
  - a. permit issued pursuant to 6 NYCRR Part 182 for the project; or
  - b. letter issued by NYSDEC of non-jurisdiction pursuant to 6 NYCRR Part 182 for the project.
4. If *construction activities* have the potential to affect an *historic property*, the *owner or operator* must obtain one of the following:
  - a. documentation that the *construction activity* is not within an archeological buffer area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant:
    - i. 1-5 acres of disturbance - 20 feet; or
    - ii. 5-20 acres of disturbance - 50 feet; or

Part I.A.4.a.iii.

- iii. 20+ acres of disturbance - 100 feet.
- b. NYSDEC consultation form sent to OPRHP,<sup>1</sup> and copied to NYSDEC's Agency Historic Preservation Officer (APO), and
  - i. the State Environmental Quality Review Act (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
  - ii. documentation from OPRHP that the *construction activity* will result in No Impact; or
  - iii. documentation from OPRHP providing a determination of No Adverse Impact; or
  - iv. a Letter of Resolution signed by the *owner or operator*, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA).
- c. documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:
  - i. No Affect; or
  - ii. No Adverse Affect; or
  - iii. Executed Memorandum of Agreement.
- d. documentation that SHPA Section 14.09 has been completed by NYSDEC or another state agency.

5. If *construction activities* are subject to SEQR, the *owner or operator* must obtain documentation that SEQR has been satisfied.

6. If *construction activities* are not subject to SEQR, but subject to the equivalent environmental review from another New York State or federal agency, the

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<sup>1</sup> The consultation form can be submitted, along with other project information, through OPRHP's Cultural Resource Information System (CRIS) portal. If submitted through CRIS, paper copies of the consultation form need not be mailed.

## Part I.A.6.

*owner or operator* must obtain documentation that project review, pursuant to a process equivalent to SEQR from another New York State or federal agency, has been satisfied.

7. If *construction activities* require Uniform Procedures Act (UPA) Permits (see 6 NYCRR Part 621) from NYSDEC, or the equivalent from another New York State or federal agency, the *owner or operator* must:
  - a. obtain all such necessary permits; or
  - b. receive notification from NYSDEC pursuant to 6 NYCRR 621.3(a)(4) excepting Part I.A.7.a.
8. *Construction activities* are not eligible if they meet the following criteria in Part I.A.8.a. or b.:
  - a. For linear transportation and linear utility project types, the *construction activities*:
    - i. are within the watershed of *surface waters of the State* classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website; and
    - ii. are undertaken on land with no existing *impervious cover*; and
    - iii. disturb two or more acres of *steep slope*.
  - b. For all other project types, the *construction activities*:
    - i. are within the watershed of *surface waters of the State* classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website; and
    - ii. are undertaken on land with no existing *impervious cover*; and
    - iii. disturb one or more acres of *steep slope*.

**B. Types of *Discharges* Authorized**

1. The following *stormwater discharges* are authorized under this permit:
  - a. *Stormwater discharges*, including *stormwater runoff*, *snowmelt runoff*, and *surface runoff* and *drainage*, associated with *construction activity*, are authorized under this permit provided that appropriate *stormwater controls* are designed, installed, and maintained in accordance with Part II. and Part III.
  - b. *Stormwater discharges* from construction support activities at the *construction site* (including concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, and borrow areas) if the following requirements are met:
    - i. The support activity is directly related to the *construction site* required to have permit coverage for *stormwater discharges*; and
    - ii. The support activity is not a commercial operation, nor does it serve multiple unrelated *construction sites*; and
    - iii. The support activity does not continue to operate beyond the completion of the *construction activity* at the site it supports; and
    - iv. *Stormwater controls* are implemented in accordance with Part II. and Part III. for *discharges* from the support activity areas.
2. The following non-*stormwater discharges* associated with *construction activity* are authorized under this permit:
  - a. Non-*stormwater discharges* listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: “*Discharges* from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned”; and
  - b. Non-*stormwater discharges* of waters to which other components have not been added that are used in accordance with the *SWPPP* to control dust or irrigate vegetation in stabilized areas; and
  - c. Uncontaminated *discharges* from *dewatering* operations

Part I.B.3.

3. Authorized *discharges* of *stormwater* or authorized *discharges* of non-*stormwater*, commingled with a *discharge* authorized by a different SPDES permit and/or a *discharge* that does not require SPDES permit authorization, are also authorized under this permit.

**C. Prohibited Discharges**

1. Non-*stormwater* *discharges* prohibited under this permit include but are not limited to:
  - a. Wastewater from washout of concrete; and
  - b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials; and
  - c. Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance; and
  - d. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and
  - e. Toxic or hazardous substances from a spill or other release.

**D. Electronic Notice of Intent (eNOI) Submittal**

To receive authorization in accordance with Part I.D.3.b., the *owner or operator* must submit a complete eNOI in accordance with the requirements in Part I.D. The eNOI contains questions to: ensure eligibility requirements in Part I.A. have been met; obtain *owner or operator* contact information; obtain the total area to be disturbed and the existing/future *impervious areas* (rounded to the nearest tenth of an acre); confirm *Traditional Land Use Control MS4 Operator* jurisdiction over construction projects; satisfy the EPA eRule requirements; confirm that the Water Quality-Based Effluent Limitations in Part II. have been met; demonstrate consideration of the future risks due to climate change in accordance with Part III.A.2.; and confirm that the other *Stormwater Pollution Prevention Plan* (SWPPP) requirements in Part III. have been met.

1. An eNOI may be submitted for:
  - a. *construction activities* that are not part of a *common plan of development or sale*; or

Part I.D.1.b..

- b. an entire *common plan of development or sale*; or
- c. separate *phase(s)* of a *common plan of development or sale* if the following requirements are met:
  - i. the *common plan of development or sale* meets the eligibility requirements of Part I.A.5. or 6.; and
  - ii. the *phase(s)* meet(s) all other eligibility requirements of Part I.A.; and
  - iii. Part III.C. Required SWPPP Components by Project Type is based on the *common plan of development or sale*, not the *phase(s)*; or
- d. *tree clearing* that is associated with, or will support, a *renewable* energy generation, transmission, or storage project that meets Part I.A.5. and 6., if the *tree clearing*:
  - i. meets all other eligibility requirements of Part I.A.; and
  - ii. will occur in NYSDEC's Regions 3-9; and
  - iii. is not within ¼ mile of a bat hibernaculum protected pursuant to 6 NYCRR Part 182; and
  - iv. will occur between November 1<sup>st</sup> and March 31<sup>st</sup>.

2. As prerequisites for submitting an eNOI, the *owner or operator* must:

- a. prepare a *SWPPP* for Part I.D.1.a., b., c., or d. in accordance with Part III.; and
- b. based on the following criteria, upload the following signature forms signed in accordance with Part VII.J. to the eNOI prior to submission:
  - i. for all eNOIs:
    - 1. the *SWPPP Preparer Certification Form*, Appendix F, signed by the *SWPPP* preparer; and

Part I.D.2.b.i.2.

2. the Owner/Operator Certification Form, Appendix J, signed by the *owner or operator*; and

- ii. if an eNOI includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that will *discharge* to the *MS4(s)*:
  1. determine if the *Traditional Land Use Control MS4 Operator(s)* have review authority. A *Traditional Land Use Control MS4 Operator* does not have review authority where:
    - a. the *owner or operator* of the *construction activities* in Part I.D.2.b.ii. is the same entity as the *Traditional Land Use Control MS4 Operator* identified in Part I.D.2.b.ii.; or
    - b. there is a statute exempting the *owner or operator* from zoning review by the *Traditional Land Use Control MS4 Operator*; or
    - c. there is no such statute per Part I.D.2.b.ii.1.b., the *Traditional Land Use Control MS4 Operator* concludes, after public hearing, that it does not have zoning review authority in accordance with Legal Memorandum LU14 Updated January 2020 "Governmental Immunity from Zoning and Other Legislation"; and
  2. if the *Traditional Land Use Control MS4 Operator(s)* have review authority, submit the *SWPPP* to the *Traditional Land Use Control MS4 Operator(s)* for review and have:
    - a. if outside the municipal boundaries of NYC: the *MS4 SWPPP Acceptance Form*, Appendix G, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator*, or by a duly authorized representative of that person in accordance with Part VII.J.2.; or

Part I.D.2.b.ii.2.b.

- b. if within the municipal boundaries of NYC: The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval Form, Appendix H, signed by the principal executive officer or ranking elected official from the Traditional Land Use Control MS4 Operator, or by a duly authorized representative of that person in accordance with Part VII.J.2.; and
  3. if the *Traditional Land Use Control MS4 Operator* does not have review authority, have the MS4 No Jurisdiction Form, Appendix I, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator*, or by a duly authorized representative of that person in accordance with Part VII.J.2.
3. Submitting an eNOI:
  - a. The *owner or operator* must submit a complete Notice of Intent electronically using a NYSDEC approved form.<sup>2</sup>
  - b. The *owner or operator* is authorized to *commence construction activity* as of the authorization date indicated in the Letter of Authorization (LOA), which is sent by NYSDEC after a complete eNOI is submitted.
    - i. If an eNOI is received for a *SWPPP* that deviates from one of the technical standards but demonstrates *equivalence* in accordance with Part III.B.1.a.ii. or Part III.B.2.b.ii., if the *SWPPP* includes *construction activities* that are not within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)*, and/or if the *SWPPP* includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that do not have review authority in accordance with Part I.D.2.b.ii.1., the authorization date indicated in the LOA will be 60 business days after the eNOI submission date.

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<sup>2</sup> Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to [Stormwater\\_info@dec.ny.gov](mailto:Stormwater_info@dec.ny.gov) or NYSDEC, Bureau of Water Permits, 625 Broadway, 4<sup>th</sup> Floor, Albany, New York 12233-3505.

Part I.D.3.c.

- c. If *Traditional Land Use Control MS4 Operator(s)* have review authority in accordance with Part I.D.2.b.ii.2., the *owner or operator* must, within five business days of receipt of the LOA, send an electronic copy of the LOA to the *Traditional Land Use Control MS4 Operator(s)* with review authority.

**E. General Requirements for Owners or Operators with Permit Coverage**

1. As of the date the LOA is received, the *owner or operator* must make the eNOI, SWPPP, and LOA available for review and copying in accordance with the requirements in Part VII.H. When applicable, as of the date an updated LOA is received, the *owner or operator* must make the updated LOA available for review and copying in accordance with the requirements in Part VII.H.
2. The *owner or operator* must ensure compliance with all requirements of this permit and that the provisions of the SWPPP, including any changes made to the SWPPP in accordance with Part III.A.5., are properly implemented and maintained from the *commencement of construction activity* until:
  - a. all areas of disturbance have achieved *final stabilization*; and
  - b. the owner's or operator's coverage under this permit is terminated in accordance with Part V.A.5.a.
3. As of the date of the *commencement of construction activities* until Part I.E.2.a. and b. have been met, the *owner or operator* must maintain at the *construction site*, a copy of:
  - a. all documentation necessary to demonstrate eligibility with this permit; and
  - b. this permit; and
  - c. the SWPPP; and
  - d. the signed SWPPP Preparer Certification Form; and
  - e. the signed MS4 SWPPP Acceptance Form or signed NYCDEP SWPPP Acceptance/Approval Form or signed MS4 No Jurisdiction Form (when applicable); and
  - f. the signed Owner/Operator Certification Form; and

Part I.E.3.g.

- g. the eNOI; and
- h. the LOA; and
- i. the LOA transmittal to the Traditional Land Use Control MS4 Operator in accordance with Part I.D.3.c. (when applicable).

4. The *owner or operator* must maintain at the *construction site*, until Part I.E.2.a. and b. have been met, as of the date the documents become final or are received, a copy of the:

- a. responsible contractor's or subcontractor's certification statement(s) in accordance with Part III.A.7.; and
- b. inspection reports in accordance with Part IV.C.4. and 6.; and
- c. Request to Disturb Greater Than Five Acres and the Authorization Letter to Disturb Greater Than Five Acres in accordance with Part I.E.6. (when applicable); and
- d. Request to Continue Coverage and the Letter of Continued Coverage (LOCC) in accordance with Part I.F.2. and 4. (when applicable); and
- e. The updated LOA(s) in accordance with Part I.E.9. (when applicable).

5. The *owner or operator* must maintain the documents in Part I.E.3. and 4. in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection. The documents must be paper documents unless electronic documents are accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be. If electronic documents are kept on site, the *owner or operator* must maintain functional equipment on site available to an inspector during normal hours of operation such that an inspector may view the electronic documents in a format that can be read in a similar manner as a paper record and in a legally dependable format with no less evidentiary value than their paper equivalent.

6. The *owner or operator* must meet the following requirements prior to disturbing greater than five acres of soil at any one time:

- a. The *owner or operator* must submit a written Request to Disturb Greater Than Five Acres to:

Part I.E.6.a.i.

- i. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, if a *Traditional Land Use Control MS4 Operator* does not have review authority in accordance with Part I.D.2.b.ii.1.; or
- ii. the *Traditional Land Use Control MS4 Operator*, if a *Traditional Land Use Control MS4 Operator* has review authority in accordance with Part I.D.2.b.ii.1.; or
- iii. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, and each involved *Traditional Land Use Control MS4 Operator*, if the project spans multiple municipalities with more than one *Traditional Land Use Control MS4 Operator* involved with review authority in accordance with Part I.D.2.b.ii.1.

b. The written Request to Disturb Greater Than Five Acres must include:

- i. The SPDES permit identification number (Permit ID); and
- ii. 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
- iii. The phasing plan for the project and sequencing plans for all phases from the *SWPPP* in accordance with Part III.B.1.d.; and
- iv. 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
- v. Acknowledgment that “the *owner or operator* will comply with the requirements in Part IV.C.2.b.”; and
- vi. Acknowledgment that “the *owner or operator* will comply with the requirements in Part II.B.1.b.”

c. The *owner or operator* must be in receipt of an Authorization Letter to Disturb Greater Than Five Acres, which will include when the

Part I.E.6.c.

authorization begins and ends and indicate a maximum area (acres) of soil disturbance allowed at any one time, from:

- i. NYSDEC, if Part I.E.6.a.i. or iii. apply; or
- ii. the *Traditional Land Use Control MS4 Operator*, if Part I.E.6.a.ii. applies.
7. Upon a finding of significant non-compliance with the practices described in the *SWPPP* or violation of this permit, NYSDEC may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order must be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
8. If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE).<sup>3</sup> *Construction activity* shall not resume until written permission to do so has been received from the RWE.
9. To be authorized to implement modifications to the information previously submitted in the eNOI, the *owner or operator* must:
  - a. notify NYSDEC via email at [Stormwater\\_info@dec.ny.gov](mailto:Stormwater_info@dec.ny.gov) requesting access to update the eNOI; and
  - b. update the eNOI to reflect the modifications and resubmit the eNOI in accordance with Part I.D.; and
  - c. receive an updated LOA.
10. The eNOI, *SWPPP*, LOA, updated LOAs (when applicable), and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

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<sup>3</sup> The Regional Water Manager where a DEC Region does not have a RWE.

## F. Permit Coverage for *Discharges Authorized Under GP-0-20-001*

When applicable:

1. Upon the effective date of this permit, an *owner or operator of a construction activity*, with coverage under GP-0-20-001, will have interim coverage under GP-0-25-001 for 45 calendar days starting on the effective date of GP-0-25-001 so long as the *owner or operator* maintains compliance with all applicable requirements of this permit.
2. Within 30 calendar days of the effective date of this permit, the *owner or operator*, with coverage under GP-0-20-001, must submit a complete Request to Continue Coverage electronically using a NYSDEC approved form,<sup>4</sup> which contains the information identified in Part I.F.3. below, if:
  - a. the *owner or operator* continues to implement the SMP component in conformance with the technical standards in place at the time of initial project authorization; and
  - b. the *owner or operator* will comply with all non-design requirements of GP-0-25-001.
3. The Request to Continue Coverage form contains questions to: ensure eligibility requirements in Part I.A. have been met; verify *owner or operator* contact information; verify the permit identification number; verify the original eNOI submission ID, if applicable; verify Part I.F.2.a. and b.; verify the version of the Design Manual that the technical/design components conform to; and receive an updated Owner/Operator Certification Form, Appendix I.
4. The *owner or operator* has obtained continued coverage under GP-0-25-001 as of the date indicated in the LOCC, which is sent by NYSDEC after a complete Request to Continue Coverage form is submitted.
5. If the owner or operator does not submit the Request to Continue Coverage form in accordance with Part I.F.2. and 3., coverage under this permit is automatically terminated after interim coverage expires.

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<sup>4</sup> Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to [Stormwater\\_info@dec.ny.gov](mailto:Stormwater_info@dec.ny.gov) or NYSDEC, Bureau of Water Permits, 625 Broadway, 4<sup>th</sup> Floor, Albany, New York 12233-3505.

**G. Change of Owner or Operator**

When applicable:

1. When property ownership changes, or when there is a change in operational control over the construction plans and specifications, the following process applies:
  - a. The new *owner or operator* must meet the applicable prerequisites for submitting an eNOI in accordance with Part I.D.2.; and
  - b. The new *owner or operator* must submit an eNOI in accordance with Part I.D.3.; and
  - c. Permit coverage for the new *owner or operator* will be effective upon receipt of the LOA in accordance with Part I.D.3.b.; and
  - d. The new *owner or operator*, upon receipt of their LOA, must provide their Permit ID to the original *owner or operator*; and
  - e. If the original *owner or operator* will no longer be the *owner or operator* of the *construction activity* identified in the original *owner's or operator's* eNOI, the original *owner or operator*, upon receipt of the new *owner's or operator's* Permit ID in accordance with Part I.G.1.d., must submit to NYSDEC a completed eNOT in accordance with Part V. that includes the name and Permit ID of the new *owner or operator*; or
  - f. If the original *owner or operator* maintains ownership of a portion of the *construction activity*, the original *owner or operator* must maintain their coverage under the permit by modifying their eNOI; modifications to the eNOI must include:
    - i. the revised area of disturbance and/or *impervious area(s)*; and
    - ii. the revised SMP information, if applicable; and
    - iii. a narrative description of what has changed; and
    - iv. the new *owner's or operator's* Permit ID for the portion of the project removed from the eNOI.

*Owners or operators* must follow Part I.E.9. to modify the eNOI.

## Part II. Water Quality-Based Effluent Limitations

### A. Maintaining Water Quality

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

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

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

If, despite compliance with the requirements of this permit, it is demonstrated that the *stormwater discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if NYSDEC determines that a modification of this permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit, and the *owner or operator* must obtain an individual SPDES permit prior to further *discharges* from the *construction site*.

### B. Effluent Limitations Applicable to *Discharges* from Construction Activities

*Discharges* authorized by this permit must achieve, at a minimum, the effluent limitations in Part II.B.1.a., b., c., d., and e. These limitations represent the

Part II.B.

degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement, and maintain control measures to *minimize the discharge of pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part II.B.1.a., b., c., d., and e. and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (BB), dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in *SWPPP* the reason(s) for the deviation, or alternative design, and provide information in the *SWPPP* demonstrating that the deviation or alternative design is *equivalent* to the technical standard.
  - a. **Erosion and Sediment Controls.** At a minimum, erosion and sediment controls must be selected, designed, installed, implemented, and maintained to:
    - i. *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*; and
    - ii. Control *stormwater discharges*, including both peak flow rates and total *stormwater* volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge points*; and
    - iii. *Minimize* the amount of soil exposed during *construction activity*; and
    - iv. *Minimize* the disturbance of *steep slope*; and
    - v. *Minimize* sediment *discharges* from the site; and
    - vi. Provide and maintain *natural buffers* around surface waters, direct *stormwater* to vegetated areas and maximize *stormwater* infiltration to reduce *pollutant discharges*, unless *infeasible*; and
  - vii. *Minimize* soil compaction. *Minimizing* soil compaction is not required

Part II.B.1.a.vii.

where the intended function of a specific area of the site dictates that it be compacted; and

- viii. Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and
- ix. *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of *pollutants* that could be discharged from the site.

b. **Soil Stabilization.** In areas where soil disturbance activity has ceased, whether permanently or *temporarily ceased*, the application of soil stabilization measures must be initiated by the end of the next business day and completed within 14 calendar days from the date the current soil disturbance activity ceased. For *construction sites* that *directly discharge* to one of the 303(d) segments listed in Appendix D, or are located in one of the watersheds listed in Appendix C, or are authorized to disturb greater than five acres in accordance with Part I.E.5.a.viii., the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven calendar days from the date the soil disturbance activity ceased.

c. **Dewatering.** *Discharges* from *dewatering* activities, including *discharges* from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures.** Select, design, install, implement, and maintain effective pollution prevention measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be selected, designed, installed, implemented, and maintained to:

- i. *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. Soaps, detergents and solvents cannot be used; and
- ii. *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation

Part II.B.1.d.ii.

and to *stormwater*. *Minimization* of exposure is not required in cases where the exposure to precipitation and to *stormwater* will not result in a *discharge of pollutants*, or where exposure of a specific material or product poses little risk of *stormwater* contamination (such as final products and materials intended for outdoor use); and

- iii. Prevent the *discharge of pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.
- e. **Surface Outlets.** When discharging from basins and impoundments, the surface outlets must be designed, constructed, and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

## C. Post-Construction Stormwater Management Practice (SMP) Requirements

- 1. The *owner or operator* of a *construction activity* that requires post-construction SMPs, in accordance with Part III.C., must select, design, install, implement, and maintain the SMPs to meet the *performance criteria* in the New York State Stormwater Management Design Manual, dated July 31, 2024 (DM), using sound engineering judgment. Where SMPs are not designed in conformance with the *performance criteria* in the DM, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
- 2. The *owner or operator* of a *construction activity*, that requires SMPs in accordance with Part III.C., must design the practices to meet the applicable *sizing criteria* in Part II.C.2.a., b., c., or d.

### a. Sizing Criteria for New Development

- i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):
  - 1. Reduce the total WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv must be calculated in accordance with the criteria in Section 4.2 of the DM; or

Part II.C.2.a.i.2.

2. Minimum RRv and Treatment of Remaining Total WQv:  
*Construction activities* that cannot meet the requirements in Part II.C.2.a.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.4 of the DM.** The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.

- ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:
  1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or
  2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs without detention or velocity controls; or
  3. The site *directly discharges* into a fifth order or larger water body (stream, river, or lake), or tidal waters, where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

Part II.C.2.a.iii.

- iii. Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - 1. the site *directly discharges* to tidal waters or fifth order or larger streams, or
  - 2. A downstream analysis reveals that *overbank* control is not required.
- iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - 1. the site *directly discharges* to tidal waters or fifth order or larger streams, or
  - 2. A downstream analysis reveals that *overbank* control is not required.

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

- i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):
  - 1. Reduce the WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24-hour design storm over the post-developed watershed and must be calculated in accordance with the criteria in Section 4.3 of the DM; or
  - 2. Minimum RRv and Treatment of Remaining Total WQv:  
*Construction activities* that cannot meet the criteria in Part II.C.2.b.i.1. due to *site limitations* must direct runoff from all newly constructed *impervious areas* to a RR technique or standard SMP with RRv capacity unless *infeasible*. The specific *site limitations* that prevent the reduction of 100% of the WQv must be documented in the *SWPPP*. For each *impervious area* that is not directed to a RR technique or standard SMP with RRv capacity, the *SWPPP* must include

Part II.C.2.b.i.2.

documentation which demonstrates that all options were considered and for each option explains why it is considered *infeasible*.

**In no case shall the runoff reduction achieved from the newly constructed *impervious areas* be less than the Minimum RRv as calculated using the criteria in Section 4.5 of the DM.** The remaining portion of the total WQv that cannot be reduced must be treated by application of standard SMPs.

- ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:
  1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or
  2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs; or
  3. The site *directly discharges* to tidal waters, or a fifth order or larger water body (stream, river, or lake) where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.
- iii. Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  1. the site *directly discharges* to tidal waters or fifth order or larger streams; or
  2. A downstream analysis reveals that *overbank* control is not required.

Part II.C.2.b.iv.

- iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - 1. the site *directly discharges* to tidal waters or fifth order or larger streams; or
  - 2. A downstream analysis reveals that *overbank* control is not required.

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

- i. Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* must be addressed by one of the following options, as outlined in Section 9.2.1. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C) must calculate the WQv in accordance with Section 4.3 of the DM. All other *redevelopment activities* must calculate the WQv in accordance with Section 4.2 of the DM.
  - 1. Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the DM must be applied to all newly created pervious areas; or
  - 2. Capture and treat 100% of the required WQv, for a minimum of 25% of the disturbed redevelopment *impervious area*, by implementation of standard SMPs or reduced by application of runoff reduction techniques; or
  - 3. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a volume-based alternative SMP, as defined in Section 9.4 of the DM; or
  - 4. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a flow-through alternative SMP sized to treat the peak rate of runoff from the WQv design storm; or

Part II.C.2.c.i.5.

5. Application of a combination of 1 through 4 above that provide a weighted average of at least two of the above methods. Application of this method must be in accordance with the criteria in Section 9.2.1(A)(V) of the DM; or
6. If there is an existing SMP located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 through 5 above.
  - ii. Channel Protection Volume (CPv) is not required if there is 0% change to hydrology that increases the *discharge* rate and volume from the project site.
  - iii. Overbank Flood Control (Qp) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.
  - iv. Extreme Flood Control (Qf) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

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

Construction projects, that include both *new development* and *redevelopment activity*, must use SMPs that meet the *sizing criteria* calculated as an aggregate of the *sizing criteria* in Part II.C.2.a. or b. for the *new development* portion of the project and Part II.C.2.c. for the *redevelopment activity* portion of the project.

**Part III. Stormwater Pollution Prevention Plan (SWPPP)**

**A. General SWPPP Requirements**

1. A SWPPP must be prepared and implemented by the *owner or operator* of all *construction activity* covered by this permit. All authorized *discharges* must be identified in the SWPPP. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and

Part III.A.1.

practices that will be used to meet the effluent limitations in Part II.B. and, where applicable, the SMP requirements in Part II.C.

2. The *SWPPP* must demonstrate 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.
  - a. The owner or operator must consider:
    - i. the following physical risks due to climate change:
      - (i) increasing temperature; and
      - (ii) increasing precipitation; and
      - (iii) increasing variability in precipitation, including chance of drought; and
      - (iv) increasing frequency and severity of flooding; and
      - (v) rising sea level; and
      - (vi) increasing storm surge; and
      - (vii) shifting ecology.
    - ii. for each of the following:
      - (i) overall site planning; and
      - (ii) location, elevation, and sizing of:
        - a. control measures and practices; and
        - b. conveyance system(s); and
        - c. detention system(s).
  3. The *SWPPP* must describe the erosion and sediment control practices and where required, SMPs that will be used and/or constructed to reduce the *pollutants* in *stormwater discharges* and to assure compliance with the

### Part III.A.3.

requirements of this permit. In addition, the *SWPPP* must identify potential sources of pollution which may reasonably be expected to affect the quality of *stormwater discharges*.

4. All *SWPPPs*, that require the *SMP* component in accordance with Part III.B.2., must be prepared by a *qualified professional*.
5. The *owner or operator* must keep the *SWPPP* current so that, at all times, it accurately documents the erosion and sediment control practices that are being used or will be used during construction, and all *SMPs* that will be constructed on the site. At a minimum, the *owner or operator* must modify the *SWPPP*, including construction drawings:
  - a. whenever the current provisions prove to be ineffective in *minimizing pollutants* in *stormwater discharges* from the site; and
  - b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge of pollutants*; and
  - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, NYSDEC, or other regulatory authority; and
  - d. to document the final construction conditions in an as-built drawing.
6. NYSDEC may notify the *owner or operator* at any time that the *SWPPP* does not meet one or more of the minimum requirements of this permit. The notification must be in writing and identify the provisions of the *SWPPP* that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by NYSDEC, the *owner or operator* must make the required changes to the *SWPPP* and submit written notification to NYSDEC that the changes have been made. If the *owner or operator* does not respond to NYSDEC's comments in the specified time frame, NYSDEC may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4.
7. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting, and maintaining the erosion and sediment control practices included in the *SWPPP* and the

### Part III.A.7.

contractor(s) and subcontractor(s) that will be responsible for constructing the SMPs included in the *SWPPP*. The *owner or operator* must have each of the contractors and subcontractors identify at least one person from their company to be *trained contractor* that will be responsible for implementation of the *SWPPP*. The *owner or operator* must ensure that at least one *trained contractor* is on site daily when soil disturbance activities are being performed.

The *owner or operator* must have each of the contractors and subcontractors identified above sign a copy of the following certification statement below before the *commencement of construction activities*:

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

In addition to providing the certification statement above, the certification page must also identify the specific elements of the *SWPPP* that each contractor and subcontractor will be responsible for and include the name and title of the person providing the signature; the name and title of the *trained contractor* responsible for *SWPPP* implementation; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification statement is signed. The *owner or operator* must attach the certification statement(s) to the copy of the *SWPPP* that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the *SWPPP* after the *commencement of construction activities*, they must also sign the certification statement and provide the information listed above prior to performing *construction activities*.

## B. Required *SWPPP* Contents

1. Erosion and sediment control component - The *owner or operator* must prepare a *SWPPP* that includes erosion and sediment control practices.
  - a. Erosion and sediment control practices must be designed:
    - i. in conformance with the BB; or
    - ii. *equivalent* to the BB if deviating from Part III.B.1.a.i.
  - b. If the erosion and sediment control practices are designed in conformance with Part III.B.1.a.ii., the *SWPPP* must include a demonstration of *equivalence* to the BB.
  - c. At a minimum, the erosion and sediment control component of the *SWPPP* must include the following:
    - i. Background information about the scope of the project, including the location, type and size of project; and
    - ii. A site map/construction drawing(s) with north arrows for the project, including a general location map. At a minimum, the site map must show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the *stormwater discharge(s)* and receiving surface water(s); and
    - iii. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG); and
    - iv. A phasing plan for the project and sequencing plans for all *phases*, both of which must address clearing and grubbing, excavation and grading, utility and infrastructure installation, *final stabilization*,

Part III.B.1.c.iv.

and any other *construction activity* at the site that will result in soil disturbance.

1. The phasing plan must include:

- a. a map delineating and labeling the limits of soil disturbance for all *phases* of a project; and
- b. a table identifying the order and intended schedule of when each *phase* will begin and end its sequencing plan. The table must identify the total disturbed area for each *phase* at any one time and the total disturbed area for the overall project at any one time all on one timeline showing all overlapping quantities of disturbed area at any one time; and

2. A sequencing plan for a specific *phase* must include:

- a. a table indicating the order and intended schedule of *construction activities* within a *phase*, and corresponding construction drawings with a description of the work to be performed; and
- b. all permanent and *temporary stabilization* measures; and
- v. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented; and
- vi. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice; and
- vii. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any

Part III.B.1.c.vii.

temporary sediment basins and structural practices that will be used to divert flows from exposed soils; and

- viii. A maintenance inspection schedule for the contractor(s) and subcontractor(s) identified in Part III.A.7. to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule must be in accordance with the requirements in the BB technical standard; and
- ix. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the *stormwater discharges*; and
- x. A description and location of any *stormwater discharges* associated with industrial activity other than construction at the site, including, but not limited to, *stormwater discharges* from asphalt plants and concrete plants located on the *construction site*; and
- xi. Identification of any elements of the design that are not in conformance with the design criteria in the BB technical standard. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

2. SMP component – The *owner or operator of construction activity* identified in Table 2 of Appendix B must prepare a *SWPPP* that includes SMPs.

- a. SMPs must be designed in conformance with the applicable *sizing criteria* in Part II.C.2.a., c., or d.; and
- b. SMPs must be designed in conformance with the *performance criteria*:
  - i. in the DM; or
  - ii. *equivalent* to the DM if deviating from Part III.B.2.b.i.; or
  - iii. in the New York State Stormwater Management Design Manual, dated January 2015 (2015 Design Manual), or *equivalent* to it, if the following criteria are met:

Part III.B.2.b.iii.1.

1. The eNOI is submitted in accordance with Part I.D. before January 29, 2027 for *construction activities* that are either:
  - a. subject to governmental review and approval:
    - i. where the *owner or operator* made any application to that governmental entity prior to the effective date of this permit; and
    - ii. such application included a *SWPPP* developed using the 2015 Design Manual or *equivalent* to it; or
  - b. not subject to governmental review and approval:
    - i. where a fiscal allocation for the *construction activities* has been developed and approved by a governmental entity; and
    - ii. the *SWPPP* was developed using the 2015 Design Manual or *equivalent* to it; and
- c. If SMPs are designed in conformance with Part III.B.2.b.ii., the *SWPPP* must include the reason(s) for the deviation or alternative design and a demonstration of *equivalence* to the DM; and
- d. If SMPs are designed in conformance with Part III.B.2.b.iii., the *SWPPP* must include supporting information or documentation demonstrating that Part III.B.2.b.iii.1.a. or b. apply; and
- e. The SMP component of the *SWPPP* must include the following:
  - i. Identification of all SMPs to be constructed as part of the project, including which option the SMP designs conform to, either Part III.B.2.b.i., ii., or iii. Include the dimensions, material specifications and installation details for each SMP; and
  - ii. A site map/construction drawing(s) showing the specific location and size of each SMP; and

Part III.B.2.e.iii.

- iii. A Stormwater Modeling and Analysis Report that includes:
  - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points; and
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and SMPs; and
  - (iii) Results of *stormwater* modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre- and post-development runoff rates and volumes for the different storm events; and
  - (iv) Summary table, with supporting calculations, which demonstrates that each SMP has been designed in conformance with the *sizing criteria* included in the DM; and
  - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part II.C.; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the DM. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the DM.
- iv. Soil testing results and locations (test pits, borings); and
- v. Infiltration test results, when required in accordance with Part III.B.2.a.; and
- vi. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each SMP. The plan must identify the entity

Part III.B.2.e.vi.

that will be responsible for the long-term operation and maintenance of each practice; and

3. Enhanced Phosphorus Removal Standards - The *owner or operator of construction activity* identified in Table 2 of Appendix B that is located in a watershed identified in Appendix C must prepare a *SWPPP* that includes SMPs designed in conformance with the applicable *sizing criteria* in Part II.C.2.b., c., or d. and the *performance criteria* Enhanced Phosphorus Removal Standards included in the DM. At a minimum, the SMP component of the *SWPPP* must meet the requirements of Part III.B.2.

**C. Required *SWPPP* Components by Project Type**

*Owners or operators of construction activities*, identified in Table 1 of Appendix B, are required to prepare a *SWPPP* that only includes erosion and sediment control practices designed in accordance with Part III.B.1. *Owners or operators* of the *construction activities*, identified in Table 2 of Appendix B, must prepare a *SWPPP* that also includes SMPs designed in accordance with Part III.B.2 or 3.

For the entire area of disturbance, including the entire *common plan of development or sale* if applicable, the owner or operator must evaluate every bullet from Appendix B Table 1 and Table 2 separately. If bullets from both Table 1 and Table 2 apply, the *SWPPP* must include erosion and sediment control practices for all *construction activities* but SMPs for only those portions of the *construction activities* that fall under Table 2 bullet(s).

**Part IV. Inspection and Maintenance Requirements**

**A. General Construction Site Inspection and Maintenance Requirements**

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures), and all SMPs identified in the *SWPPP*, are inspected and maintained in accordance with Part IV.B. and C.

**B. Contractor Maintenance Inspection Requirements**

1. The *owner or operator* of each *construction activity*, identified in Tables 1 and 2 of Appendix B, must have a *trained contractor* inspect the erosion and sediment control practices and pollution prevention measures being

## Part IV.B.1.

implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor must:

- a. if the corrective action does not require engineering design:
  - i. begin implementing corrective actions within one business day; and
  - ii. complete the corrective actions within five business days; or
- b. if the corrective action requires engineering design:
  - i. begin the engineering design process within five business days; and
  - ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.
2. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. The *trained contractor* must begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.
3. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational.

## C. *Qualified Inspector* Inspection Requirements

1. With the exception of the following *construction activities* identified in Tables 1 and 2 of Appendix B, a *qualified inspector* must conduct site inspections for all other *construction activities* identified in Tables 1 and 2 of Appendix B:
  - a. the construction of a single-family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than or equal to five (5) acres and is

Part IV.C.1.a.

not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix D; and

- b. the construction of a single-family home that involves soil disturbances of one (1) or more acres but less than or equal to five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix D; and
- c. construction on *agricultural property* that involves soil disturbances of one (1) or more acres but less than five (5) acres; and
- d. *construction activities* located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances of 5,000 square feet or more, but less than one acre.

2. The *qualified inspector* must conduct site inspections in accordance with the following timetable:

- a. For *construction sites* where soil disturbance activities are on-going, the *qualified inspector* must conduct a site inspection at least once every seven (7) calendar days; or
- b. For *construction sites* where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part I.E.6. to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days; or
- c. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* must conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas under the jurisdiction of a *Traditional Land Use Control MS4 Operator*, the *Traditional Land Use Control MS4 Operator* (provided the *Traditional Land Use Control MS4 Operator* is not the *owner or operator* of the *construction activity*) by hard copy or email prior to reducing the inspections to this frequency and again by hard copy or email prior to re-commencing construction; or

Part IV.C.2.d.

- d. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the requirement to have the *qualified inspector* conduct inspections ceases if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1., the *Traditional Land Use Control MS4 Operator(s)* (provided the *Traditional Land Use Control MS4 Operator(s)* are not the *owners or operators* of the *construction activity*) in writing prior to the shutdown and again in writing prior to resuming *construction activity*. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* must terminate coverage by meeting the requirements of Part V; or
- e. For *construction sites* involving soil disturbance of one (1) or more acres that *directly discharge* to one of the 303(d) segments listed in Appendix D or is located in one of the watersheds listed in Appendix C, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days.

3. At a minimum, the *qualified inspector* must inspect:

- a. all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness; and
- b. all SMPs under construction to ensure that they are constructed in conformance with the *SWPPP*; and
- c. all areas of disturbance that have not achieved *final stabilization*; and
- d. all points of *discharge to surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site*; and
- e. all points of *discharge* from the *construction site*.

Part IV.C.4.

4. The *qualified inspector* must prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report must include and/or address all of the following, for all *construction activities* except those listed in Part IV.C.1.:
  - a. Permit identification number; and
  - b. Date and time of inspection; and
  - c. Name and title of person(s) performing inspection; and
  - d. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection, including the temperature at the time of the inspection; and
  - e. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This must include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow; and
  - f. A description of the condition of all *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This must include identification of any *discharges* of sediment to the *surface waters of the State*; and
  - g. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance; and
  - h. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced; and
  - i. Description and sketch (map) of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection; and
  - j. Estimates, in square feet or acres, of the following areas:

Part IV.C.4.j.i.

- i. Total area with active soil disturbance (not requiring either *temporary stabilization* or *final stabilization*); and
- ii. Total area with inactive soil disturbance (requiring either *temporary stabilization* or *final stabilization*); and
- iii. Total area that has achieved *temporary stabilization*; and
- iv. Total area that has achieved *final stabilization*; and

k. Current stage of construction of all SMPs and identification of all *construction activity* on site that is not in conformance with the *SWPPP* and technical standards; and

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

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

n. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* must attach color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* must also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* must attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.

5. Within one business day of the completion of an inspection, the *qualified inspector* must notify the *owner or operator*, and appropriate contractor or subcontractor identified in Part III.A.7., of any corrective actions that need to be taken. The contractor or subcontractor must:

- a. if the corrective action does not require engineering design:

Part IV.C.5.a.i.

- i. begin implementing corrective actions within one business day; and
- ii. complete the corrective actions within five business days; or

b. if the corrective action requires engineering design:

- i. begin the engineering design process within five business days; and
- ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

6. All inspection reports must be signed by the *qualified inspector*. In accordance with Part I.E.3., the inspection reports must be maintained on site with the *SWPPP*.

## Part V. How to Terminate CGP Coverage

### A. Electronic Notice of Termination (eNOT) Submittal

The eNOT contains questions to ensure requirements in Part V.A. have been met.

1. An *owner or operator* must terminate coverage when one or more of the following requirements have been met:
  - a. Total project completion:
    - i. all *construction activity* identified in the *SWPPP* has been completed; and
    - ii. all areas of disturbance have achieved *final stabilization*; and
    - iii. all temporary, structural erosion and sediment control measures have been removed; and
    - iv. all SMPs have been constructed in conformance with the *SWPPP* and are operational; and
    - v. an as-built drawing has been prepared; or

Part V.A.1.b.

- b. Planned shutdown with partial project completion:
  - i. all soil disturbance activities have ceased; and
  - ii. all areas disturbed as of the project shutdown date have achieved *final stabilization*; and
  - iii. all temporary, structural erosion and sediment control measures have been removed; and
  - iv. all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational; and
  - v. an as-built drawing has been prepared; or
- c. In accordance with Part I.G. Change of Owner or Operator; or
- d. The *owner or operator* has obtained coverage under an alternative general SPDES permit or an individual SPDES permit.

2. For *construction activities* that require *qualified inspector* inspections in accordance with Part IV.C.1. and have met Part V.A.1.a. or b., the *owner or operator* must have the *qualified inspector* perform a final site inspection prior to submitting the eNOT. The *qualified inspector* must, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice(s)" certification statements on the eNOT, certify that all the requirements in Part V.A.1.a. or b. have been achieved.
3. For *construction activities* that are subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1. and meet Part V.A.1.a. or b., the *owner or operator* must have the *Traditional Land Use Control MS4 Operator(s)* sign the "MS4 Acceptance" statement on the eNOT in accordance with the requirements in Part VII.J. A *Traditional Land Use Control MS4 Operator* official, by signing this statement, determined that it is acceptable for the *owner or operator* to submit the eNOT in accordance with the requirements of this Part. A *Traditional Land Use Control MS4 Operator* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector's* final site inspection certification(s) when required in Part V.A.2.

Part V.A.4.

4. For *construction activities* that require SMPs and meet Part V.A.1.a. or b., the *owner or operator* must, prior to submitting the eNOT, ensure one of the following:
  - a. for SMP(s) that were constructed by a private entity, but will be owned, operated, and maintained by a public entity, the SMP(s) and any right-of-way(s) needed to operate and maintain such practice(s) have been deeded to the municipality in which the practice(s) is located; or
  - b. for SMP(s) that are privately owned, but will be operated and maintained by a public entity, an executed operation and maintenance agreement is in place with the municipality that will operate and maintain the SMP(s); or
  - c. for SMP(s) that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record; or
  - d. for SMP(s) that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility, the *owner or operator* has policies and procedures in place that ensure operation and maintenance of the practices in accordance with the operation and maintenance plan.
5. An *owner or operator* that has met the requirements of Part V.A.1., 2., 3., and 4. must request termination of coverage under this permit by submitting a complete Notice of Termination form electronically using a NYSDEC approved form.<sup>5</sup>
  - a. The owner's or operator's coverage is terminated as of the termination date indicated in the Letter of Termination (LOT), which is sent by NYSDEC after a complete eNOT is submitted.

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<sup>5</sup> Unless NYSDEC grants a waiver in accordance with 40 CFR 127.15(c) or (d). All waiver requests must be submitted to [Stormwater\\_info@dec.ny.gov](mailto:Stormwater_info@dec.ny.gov) or NYSDEC, Bureau of Water Permits, 625 Broadway, 4<sup>th</sup> Floor, Albany, New York 12233-3505.

## **Part VI. Record Retention and Reporting**

### **A. Record Retention**

The *owner or operator* must retain a copy of the documents listed in Part I.E.3. and a copy of the LOT for a period of at least five years from the date that NYSDEC accepts a complete NOT submitted in accordance with Part V.

### **B. Reporting**

Except for the eNOI, the signature forms associated with the eNOI, and the eNOT, all other written correspondence requested by NYSDEC, including individual permit applications, must be sent to the address of the appropriate DOW (SPDES) Program contact at the Regional Office listed in Appendix E.

## **Part VII. Standard Permit Requirements**

For the purposes of this permit, examples of contractors and subcontractors include: third-party maintenance and construction contractors.

### **A. Duty to Comply**

The *owner or operator*, and all contractors or subcontractors, must comply with all requirements of this permit. Any non-compliance with the requirements of this permit constitutes a violation of the New York State Environmental Conservation Law (ECL), and its implementing regulations, and is grounds for enforcement action. Filing of a request for termination of coverage under this permit, or a notification of planned changes or anticipated non-compliance, does not limit, diminish or stay compliance with any requirements of this permit.

### **B. Need to Halt or Reduce Activity Not a Defense**

The necessity to halt or reduce the *construction activity* regulated by this permit, in order to maintain compliance with the requirements of this permit, must not be a defense in an enforcement action.

### **C. Penalties**

There are substantial criminal, civil, and administrative penalties associated with violating the requirements of this permit. Fines of up to \$37,500 per day for each

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violation and imprisonment for up to 15 years may be assessed depending upon the nature and degree of the offense.

### **D. False Statements**

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

### **E. Re-Opener Clause**

Upon issuance of this permit, a determination has been made on the basis of a submitted Notice of Intent, plans, or other available information, that compliance with the specified permit requirements will reasonably protect classified water use and assure compliance with applicable *water quality standards*. Satisfaction of the requirements of this permit notwithstanding, if operation pursuant to this permit causes or contributes to a condition in contravention of State *water quality standards* or guidance values, or if NYSDEC determines that a modification is necessary to prevent impairment of the best use of the waters or to assure maintenance of *water quality standards* or compliance with other provisions of ECL Article 17 or the Clean Water Act (CWA), or any regulations adopted pursuant thereto, NYSDEC may require such modification and the Commissioner may require abatement action to be taken by the *owner or operator* and may also prohibit such operation until the modification has been implemented.

### **F. Duty to Mitigate**

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

### **G. Requiring Another General Permit or Individual SPDES Permit**

NYSDEC may require any *owner or operator* authorized to *discharge* in accordance with this permit to apply for and obtain an individual SPDES permit or apply for authorization to *discharge* in accordance with another general SPDES permit.

1. Cases where an individual SPDES permit or authorization to discharge in accordance with another general SPDES permit may be required include, but is not limited to the following:

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- a. the *owner or operator* is not in compliance with the conditions of this permit or does not meet the requirements for coverage under this permit; and
- b. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the *point source*; and
- c. new effluent limitation guidelines or new source performance standards are promulgated that are applicable to *point sources* authorized to *discharge* in accordance with this permit; and
- d. existing effluent limitation guidelines or new source performance standards that are applicable to *point sources* authorized to *discharge* in accordance with this permit are modified; and
- e. a water quality management plan containing requirements applicable to such *point sources* is approved by NYSDEC; and
- f. circumstances have changed since the time of the request to be covered so that the *owner or operator* is no longer appropriately controlled under this permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary; and
- g. the *discharge* is in violation of section 17-0501 of the ECL; and
- h. the *discharge(s)* is a significant contributor of *pollutants*. In making this determination, NYSDEC may consider the following factors:
  - i. the location of the *discharge(s)* with respect to *surface waters of the State*; and
  - ii. the size of the *discharge(s)*; and
  - iii. the quantity and nature of the *pollutants discharged to surface waters of the State*; and
  - iv. other relevant factors including compliance with other provisions of ECL Article 17, or the CWA.

2. When NYSDEC requires any *owner or operator* authorized by this permit to apply for an individual SPDES permit as provided for in this subdivision, it must notify the *owner or operator* in writing that a permit application is required. This notice must include a brief statement of the reasons for this decision, an application

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form, a statement setting a time for the *owner or operator* to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from the *owner's or operator's* receipt of the notification letter, whereby the authorization to *discharge* under this permit must be terminated. NYSDEC may grant additional time upon demonstration, to the satisfaction of the RWE,<sup>6</sup> that additional time to apply for an alternative authorization is necessary or where NYSDEC has not provided a permit determination in accordance with 6 NYCRR Part 621.

3. When an individual SPDES permit is issued to an *owner or operator* authorized to *discharge* under this permit for the same *discharge(s)*, this permit authorization for *construction activities* authorized under the individual SPDES permit is automatically terminated on the effective date of the individual SPDES permit unless termination is earlier in accordance with 6 NYCRR Part 750.

## H. Duty to Provide Information

The *owner or operator* must furnish to NYSDEC, within five business days, unless otherwise set forth by NYSDEC, any information that NYSDEC may request to determine whether cause exists to determine compliance with this permit or to determine whether cause exists for requiring an individual SPDES permit in accordance with 6 NYCRR 750-1.21(e) (see Part VII.G. Requiring Another General Permit or Individual Permit).

The *owner or operator* must make available to NYSDEC, for inspection and copying, or furnish to NYSDEC within 25 business days of receipt of a NYSDEC request for such information, any information retained in accordance with this permit.

Except for Part I.D.4. and 5. and Part I.G., the following applies: where the *owner or operator* becomes aware that it failed to submit any relevant facts on the Notice of Intent, or submitted incorrect information in a Notice of Intent or in any report to NYSDEC, the *owner or operator* must submit such facts or corrected information to NYSDEC within five business days.

## I. Extension

In the event a new permit is not issued and effective prior to the expiration of this permit, and this permit is extended pursuant to the State Administrative Procedure Act and 6 NYCRR Part 621, then the *owner or operator* with coverage under this permit may continue to operate and *discharge* in accordance with the requirements of this permit until a new permit is issued and effective.

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<sup>6</sup> The Regional Water Manager where a DEC Region does not have a RWE.

## **J. Signatories and Certification**

The Notice of Intent, Notice of Termination, and reports required by this permit must be signed as provided in 40 CFR §122.22.

1. All Notices of Intent and Notices of Termination must be signed as follows:
  - a. For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
    - (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or
    - (ii) the manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
  - b. For a partnership or sole proprietorship. By a general partner or the proprietor, respectively.

Note: NYSDEC does not require specific assignments or delegations of authority to responsible corporate officers identified in 40 CFR §122.22(a)(1)(i). NYSDEC will presume that these responsible corporate officers have the requisite authority to sign the Notice of Intent or Notice of Termination unless the corporation has notified NYSDEC to the contrary. Corporate procedures governing authority to sign a Notice of Intent or Notice of Termination may provide for assignment or delegation to applicable corporate positions under 40 CFR §122.22(a)(1)(ii) rather than to specific individuals.

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- c. For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
  1. the chief executive officer of the agency; or
  2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. All reports required by this permit, and other information requested by NYSDEC, must be signed by a person described in Part VII.J.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described in Part VII.J.1. or using the Duly Authorized Form, found on the DEC website; and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  - c. The written authorization is submitted to NYSDEC.
3. Changes to authorization. If an authorization under Part VII.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the *construction activity*, a new authorization satisfying the requirements of Part VII.J.2. must be submitted to NYSDEC prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under Part VII.J.1. or 2. must make the following certification:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who*

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*manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

5. Electronic reporting. If documents described in Part VII.J.1. or 2. are submitted electronically by or on behalf of the *construction activity* with coverage under this permit, any person providing the electronic signature for such documents must meet all relevant requirements of this section, and must ensure that all of the relevant requirements of 40 CFR Part 3 (including, in all cases, subpart D to Part 3) (Cross-Media Electronic Reporting) and 40 CFR Part 127 (NPDES Electronic Reporting Requirements) are met for that submission.

## **K. Inspection and Entry**

The *owner or operator* must allow NYSDEC, the USEPA Regional Administrator, the applicable county health department, or any authorized representatives of those entities, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the *discharge*, upon the presentation of credentials and other documents as may be required by law, to:

1. enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the requirements of this permit; and
2. have access to and copy at reasonable times, any records that must be kept under the requirements of this permit, including records required to be maintained for purposes of operation and maintenance; and
3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
4. sample or monitor at reasonable times, for the purposes of assuring general SPDES permit compliance or as otherwise authorized by the CWA or ECL, any substances or parameters at any location; and
5. enter upon the property of any contributor to the regulated facility or activity under authority of the *owner or operator*.

## **L. Confidentiality of Information**

The following must not be held confidential: this permit, the fact sheet for this permit, the name and address of any *owner or operator*, effluent data, the Notice of Intent, and information regarding the need to obtain an individual permit or an alternative general SPDES permit. This includes information submitted on forms themselves and any attachments used to supply information required by the forms (except information submitted on usage of substances). Upon the request of the *owner or operator*, NYSDEC must make determinations of confidentiality in accordance with 6 NYCRR Part 616, except as set forth in the previous sentence. Any information accorded confidential status must be disclosed to the Regional Administrator upon his or her written request. Prior to disclosing such information to the Regional Administrator, NYSDEC will notify the Regional Administrator of the confidential status of such information.

## **M. Other Permits May Be Required**

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

## **N. NYSDEC Orders or Civil Decrees/Judgments**

The issuance of this permit by the NYSDEC, and the coverage under this permit by the *owner or operator*, does not supersede, revoke, or rescind any existing order on consent or civil Decree/Judgment, or modification to any such documents or to any order issued by the Commissioner, or any of the terms, conditions, or requirements contained in such order or modification therefore, unless expressly noted.

## **O. Property Rights**

Coverage under this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining the assent of any other jurisdiction as required by law for the *discharge* authorized.

## **P. Compliance with Interstate Standards**

If the *construction activity* covered by this permit originates within the jurisdiction of an interstate water pollution control agency, then the *construction activity* must also comply with any applicable effluent standards or *water quality standards* promulgated by that interstate agency and as set forth in this permit for such *construction activities*.

**Q. Oil and Hazardous Substance Liability**

Coverage under this permit does not affect the imposition of responsibilities upon, or the institution of any legal action against, the *owner or operator* under section 311 of the CWA, which must be in conformance with regulations promulgated pursuant to section 311 governing the applicability of section 311 of the CWA to *discharges* from facilities with *NPDES* permits, nor must such issuance preclude the institution of any legal action or relieve the *owner or operator* from any responsibilities, liabilities, or penalties to which the *owner or operator* is or may be subject pursuant to the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. section 9601 et seq. (CERCLA).

**R. Severability**

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

**S. NYSDEC Approved Forms**

The *owner or operator* must provide all relevant information that is requested by NYSDEC, and required by this permit, on all NYSDEC approved forms.

## APPENDIX A – Abbreviations and Definitions

### Abbreviations

APO – Agency Preservation Officer  
BB – New York State Standards and Specifications for Erosion and Sediment Control (Blue Book), dated November 2016  
BMP – Best Management Practice  
CPESC – Certified Professional in Erosion and Sediment Control  
CPv – Channel Protection Volume  
CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 et seq)  
DM – New York State Stormwater Management Design Manual (Design Manual), dated July 31, 2024  
DOW – Division of Water  
EAF – Environmental Assessment Form  
ECL – chapter 43-B of the Consolidated Laws of the State of New York, entitled the Environmental Conservation Law  
EPA – U.S. Environmental Protection Agency  
HSG – Hydrologic Soil Group  
MS4 – Municipal Separate Storm Sewer System  
NOI – Notice of Intent  
NOT – Notice of Termination  
NPDES – National Pollutant Discharge Elimination System  
NYC – The City of New York  
NYCDEP – The City of New York Department of Environmental Protection  
NYSDEC – The New York State Department of Environmental Conservation  
OPRHP – Office of Parks, Recreation and Historic Places  
Qf – Extreme Flood  
Qp – Overbank Flood  
RR – Runoff Reduction  
RRv – Runoff Reduction Volume  
RWE – Regional Water Engineer  
SEQR – State Environmental Quality Review Act  
SHPA – State Historic Preservation Act  
SMP – Post-Construction Stormwater Management Practice  
SPDES – State Pollutant Discharge Elimination System  
SWPPP – Stormwater Pollution Prevention Plan  
TMDL – Total Maximum Daily Load  
UPA – Uniform Procedures Act  
USDA – United States Department of Agriculture  
WQv – Water Quality Volume

## Definitions

All definitions in this section are solely for the purposes of this permit. If a word is not italicized in the permit, use its common definition.

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

**Agricultural Property** – the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the “Agricultural Best Management Practice Systems Catalogue” (dated June 2023).

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

**Combined Sewer System** – a sewer system which conveys sewage and *stormwater* through a single pipe system to a publicly owned treatment works.

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

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

*Common plan of development or sale* does not include separate and distinct *construction activities* that are occurring, or may occur, under one plan that are at least 1/4 mile apart provided any interconnecting road, pipeline or utility project that is part of the same “common plan” is not concurrently being disturbed.

**Construction Activity(ies)** – identified within 40 CFR 122.26(b)(14)(x), 122.26(b)(15)(i), and 122.26(b)(15)(ii), any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, mechanized logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal.

*Construction activity* does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility, which is excluded from the calculation of the soil disturbance for a project. Routine maintenance includes, but is not limited to:

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

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

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

**Directly Discharge(s)(ing) (to a specific surface waterbody)** – runoff flows from a *construction site* by overland flow and the first point of *discharge* is the specific surface waterbody, or runoff flows from a *construction site* to a separate storm sewer system and the first point of *discharge* from the separate storm sewer system is the specific surface waterbody.

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

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

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

**Final Stabilization** – all soil disturbance activities have ceased and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established; or other *equivalent* stabilization measures, such as permanent landscape mulches, rock rip-rap or washed/crushed stone have been applied on all disturbed areas that are not covered by permanent structures, concrete or pavement.

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

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

**Infeasible** – not technologically possible, or not economically practicable and achievable considering best industry practices.

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

**Municipal Separate Storm Sewer System (MS4)** - a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

## Appendix A

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

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

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

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

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

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

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

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**Performance Criteria** – the six performance criteria for each group of SMPs in Chapters 5 and 6 of the technical standard, New York State Stormwater Management Design Manual (DM), dated July 31, 2024. These include feasibility, conveyance, pretreatment, treatment, landscaping, and maintenance. It does not include the *Sizing Criteria* (i.e. WQv, RRv, CPv, Qp and Qf) in Part I.C.2. of the permit.

**Phase** – a defined area in which *construction activities* are occurring or will occur separate from other defined area(s).

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

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

**Qualified Inspector** – a person that is knowledgeable in the principles and practices of erosion and sediment control, such as a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder or other NYSDEC endorsed individual(s).

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

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

**Note:** Inspections of any SMPs that include structural components, such as a dam for an impoundment, shall be performed by a licensed Professional Engineer.

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

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

**Renewable Energy** – electricity or thermal energy generated by renewable energy systems through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity.

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

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

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

**Stormwater** – that portion of precipitation that, once having fallen to the ground, is in excess of the evaporative or infiltrative capacity of soils, or the retentive capacity of surface features, which flows or will flow off the land by surface runoff to waters of the State.

## Appendix A

**Streambank** – the terrain alongside the bed of a creek or stream. The bank consists of the sides of the channel, between which the flow is confined.

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

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

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

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

**Total Maximum Daily Load (TMDL)** – the sum of the allowable loads of a single *pollutant* from all contributing point and *nonpoint* sources. It is a calculation of the maximum amount of a *pollutant* that a waterbody can receive and still meet *water quality standards*, and an allocation of that amount to the *pollutant's* sources. A TMDL stipulates Waste Load Allocations (WLA) for *point source discharges*, Load Allocations (LA) for *nonpoint sources*, and a margin of safety (MOS).

**Traditional Land Use Control MS4 Operator** – a city, town, or village with land use control authority that is authorized to *discharge* under New York State DEC's SPDES General Permit For Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s) or the City of New York's Individual SPDES Permit for their Municipal Separate Storm Sewer Systems (NY-0287890).

**Trained Contractor** – an employee from the contracting (construction) company, identified in Part III.A.7., that has received four (4) hours of NYSDEC endorsed training

## Appendix A

in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity. After receiving the initial training, the *trained contractor* shall receive four (4) hours of training every three (3) years.

It can also mean an employee from the contracting (construction) company, identified in Part III.A.7., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, *New York State Erosion and Sediment Control Certificate Program* holder, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of NYSDEC endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other NYSDEC endorsed entity).

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

**Tree Clearing** – *construction activities* limited to felling and removal of trees.

*Tree clearing* does not include hand felling and leaving the trees in place with no support from mechanized equipment, which is not considered *construction activity* requiring coverage under this permit.

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

**APPENDIX B – Required SWPPP Components by Project Type****Table 1****CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP*  
THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS**

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

- Single-family home not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix D
- Single-family residential subdivisions with 25% or less *impervious cover* at total site build-out and not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix D
- Construction of a barn or other *agricultural building*, silo, stock yard or pen.
- Structural agricultural conservation practices as identified in Table II in the “Agricultural Best Management Practice Systems Catalogue” (dated June 2023) that include construction or reconstruction of *impervious area* or alter hydrology from pre- to post-development conditions.

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

- All construction activities located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

**Within the municipal boundaries of NYC:**

- Stand-alone road reconstruction, where the total soil disturbance from only that road construction, is less than one (1) acre of land.

**The following construction activities:**

- Installation of underground linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains
- Environmental enhancement projects, such as wetland mitigation, *stormwater* retrofits, stream restoration, and resiliency projects that reconstruct shoreline areas to address sea level rise
- Pond construction
- Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an *impervious cover*
- Cross-country ski trails, walking/hiking trails, and mountain biking trails, including a *de minimis* parking lot (maximum 10 spaces total, sized for passenger cars) with 35 feet minimum preservation of undisturbed area downgradient from the parking lot
- Dam rehabilitation (the structure of the dam itself)
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are not part of residential, commercial, or institutional development;
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that include incidental shoulder or curb work along an existing highway to support construction of the sidewalk, bike path, or walking path.

**Table 1 (Continued)**

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

**The following construction activities:**

- Slope stabilization
- Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics
- Spoil areas that will be covered with vegetation
- Vegetated open space (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) that do not *alter hydrology from pre- to post-development conditions*
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre- to post-development conditions*
- Demolition where vegetation will be established, and no *redevelopment activity* is planned<sup>1</sup>
- Installation or replacement of either an overhead electric transmission line or a ski lift tower that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*.
- Solar array field areas that have tables elevated off the ground, spaced one table width apart, do not *alter hydrology from pre- to post-development conditions*, and address water quality volume and runoff reduction volume by maintaining sheet flow on slopes less than 8%.
- Structural agricultural conservation practices as identified in Table II in the "Agricultural Best Management Practice Systems Catalogue" (dated June 2023) that do not include construction or reconstruction of *impervious area* and do not *alter hydrology from pre- to post-development conditions*.
- Temporary access roads, median crossovers, detour roads, lanes, or other temporary *impervious areas* that will be restored to pre-construction conditions once the *construction activity* is complete (in this context, "temporary" means the *impervious area* will be in place for two years or less)
- Other *construction activities* that do not include the construction or reconstruction of *impervious area*, and do not *alter hydrology from pre- to post-development conditions*, and are not listed in Table 2.

1. If the site is redeveloped in the future, a new eNOI must be submitted.

**Table 2****CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPs)****The following construction activities:**

- Single-family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family home that disturbs five (5) or more acres of land
- Single-family residential subdivisions located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix D
- Single-family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of between 20,000 square feet and one (1) acre of land within the municipal boundaries of NYC with greater than 25% *impervious cover* at total site build-out
- Single-family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single-family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a *common plan of development or sale* that will ultimately disturb five (5) or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- Creation of 5,000 square feet or more of *impervious area* in the municipal boundaries of NYC
- Airports
- Amusement parks
- Breweries, cideries, and wineries, including establishments constructed on agricultural land
- Campgrounds
- Cemeteries that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Commercial developments
- Churches and other places of worship
- Construction of a barn or other *agricultural building* (e.g. silo) that involves soil disturbance greater than five acres.
- Structural agricultural conservation practices as identified in Table II in the “Agricultural Best Management Practice Systems Catalogue” (dated June 2023) that involves soil disturbance greater than five acres and include the construction or reconstruction of *impervious area* or *alter hydrology from pre- to post-development* conditions.
- Facility buildings, including ski lodges, restroom buildings, pumphouses, ski lift terminals, and maintenance and groomer garages
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills; including creation of landfills or capping landfills.
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTWs, water treatment plants, and water storage tanks
- Golf courses
- Office complexes

**Table 2 (Continued)****CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES (SMPs)****The following construction activities:**

- Permanent laydown yards and equipment storage lots
- Playgrounds that include the construction or reconstruction of *impervious area*
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surfaces
- Road construction or reconstruction, outside the municipal boundaries of NYC
- Road construction within the municipal boundaries of NYC
- Stand-alone road reconstruction, within the municipal boundaries of NYC where the total soil disturbance from that road reconstruction involves soil disturbance of one (1) acre or more of land
- Parking lot construction or reconstruction (as with all Table 2 bullets, this includes parking lots constructed as part of the *construction activities* listed in Table 1, unless a Table 1 bullet specifies otherwise)
- Athletic fields (natural grass) that include the construction or reconstruction of *impervious area* (>5% of disturbed area) or *alter the hydrology from pre- to post-development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations, and well drilling pads, surfaced with *impervious cover*, and constructed as part of an overhead electric transmission line, wind-power, cell tower, oil or gas well drilling, sewer or water main, ski lift, or other linear utility project
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of a residential, commercial or institutional development
- Sidewalks, bike paths, or walking paths, surfaced with an *impervious cover*, that are part of highway construction or reconstruction
- Solar array field areas on slopes greater than 8% that cannot maintain sheet flow using management practices identified in the BB or the DM
- Solar array field areas on slopes less than 8% that will *alter the hydrology from pre- to post-development* conditions
- Solar array field areas with tables that are not elevated high enough to achieve *final stabilization* beneath the tables
- Traditional *impervious areas* associated with solar development (e.g. roads, buildings, transformers)
- Utility pads surfaced with *impervious cover*, including electric vehicle charging stations
- All other *construction activities* that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre- to post-development* conditions, and are not listed in Table 1

## APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

**Watersheds where *owners or operators of construction activities* identified in Table 2 of Appendix B must prepare a SWPPP that includes SMPs designed in conformance with the Enhanced Phosphorus Removal Standards included in the DM technical standard.**

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

**Figure 1 - New York City Watershed East of the Hudson**

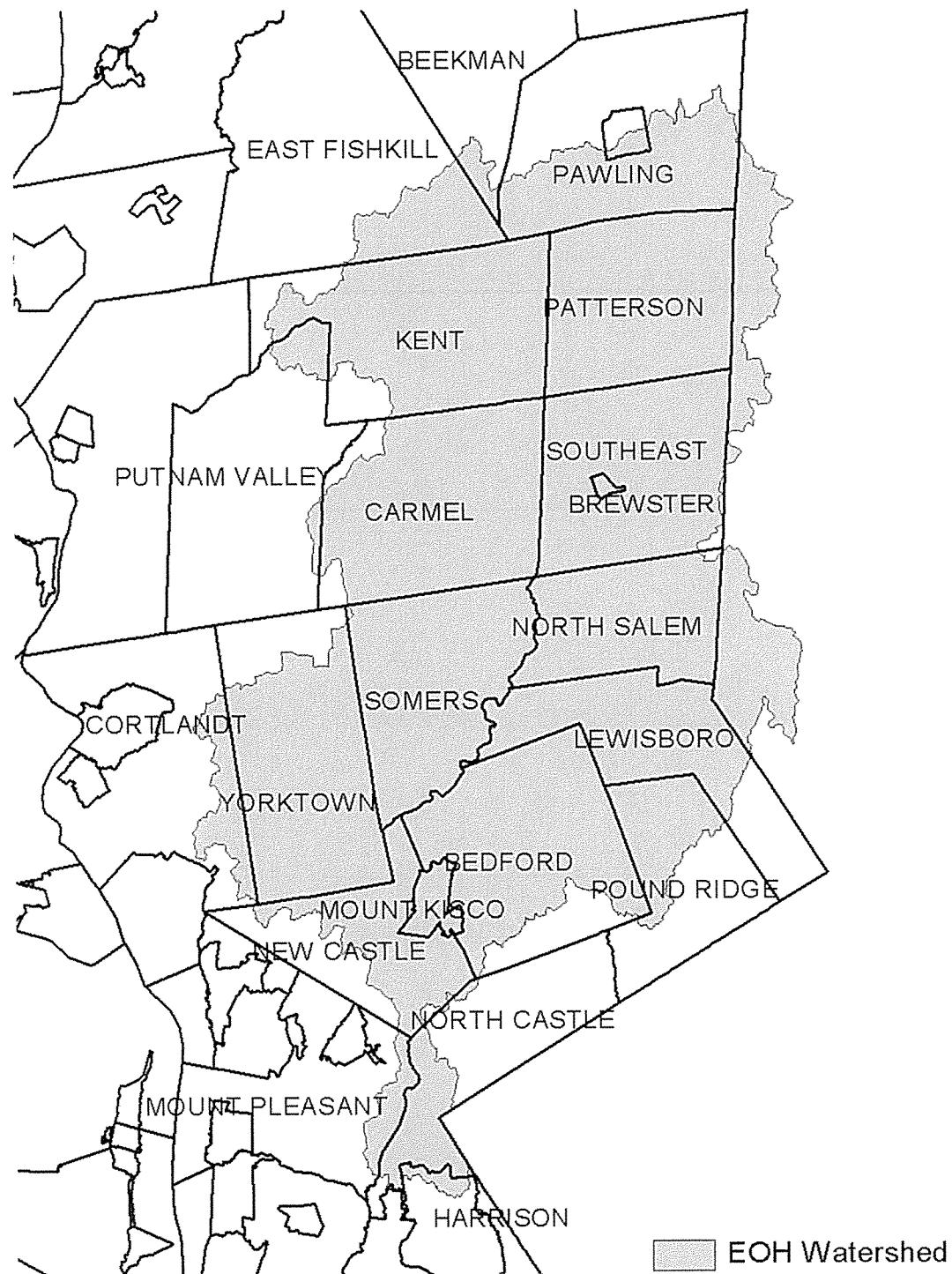


Figure 2 - Onondaga Lake Watershed

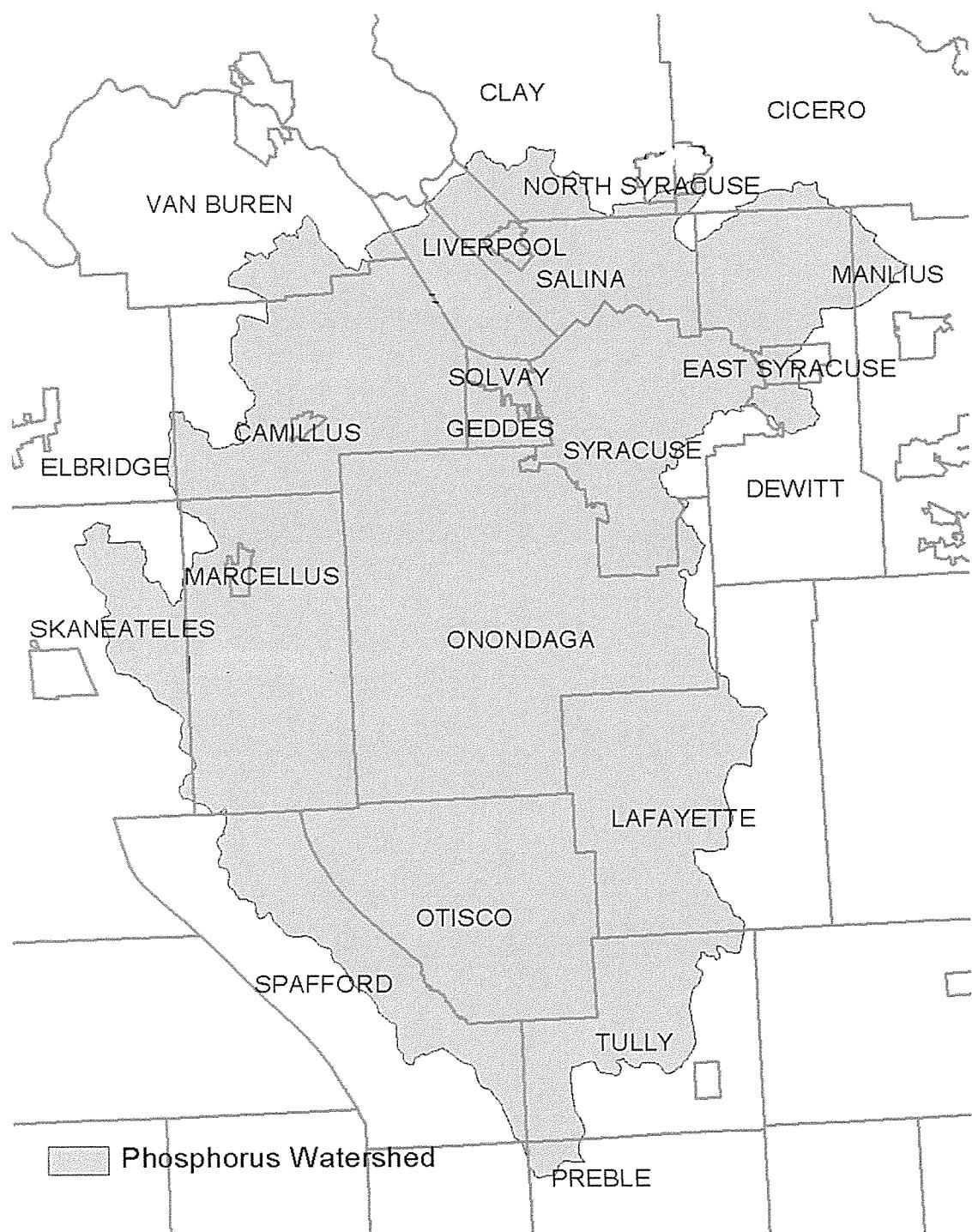


Figure 3 - Greenwood Lake Watershed

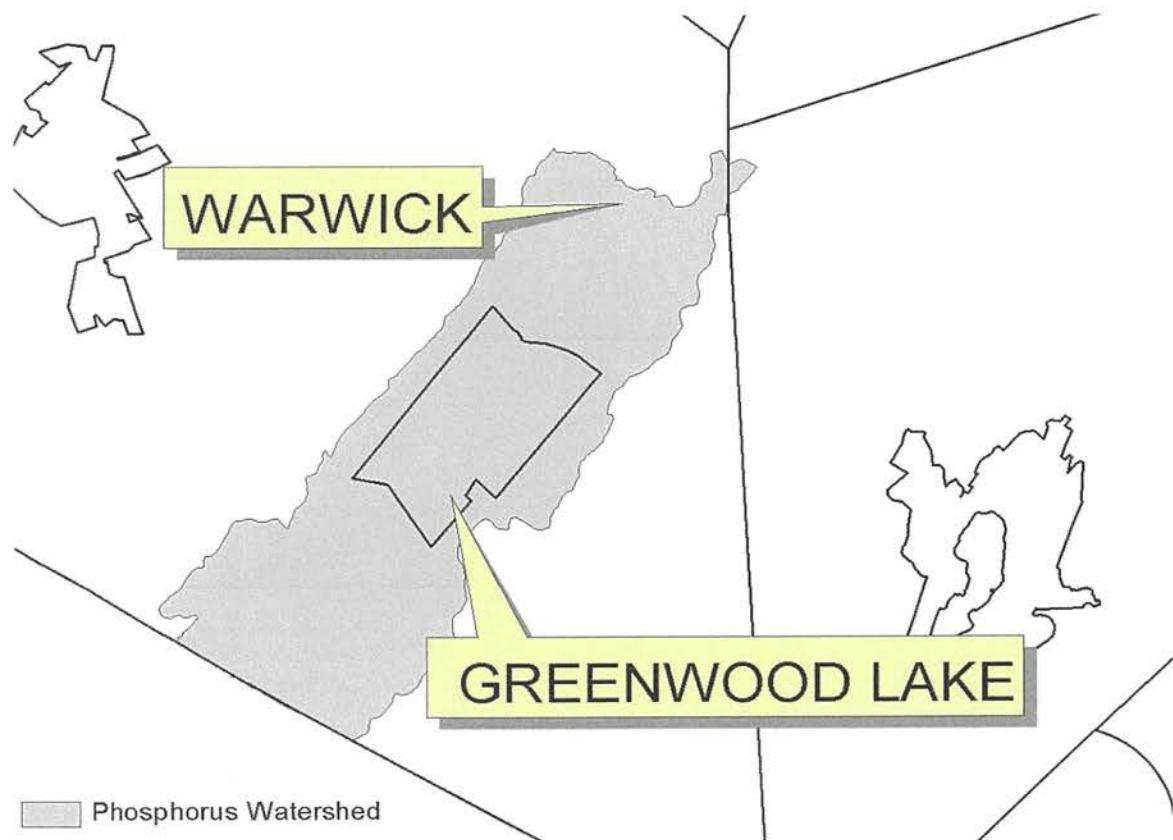
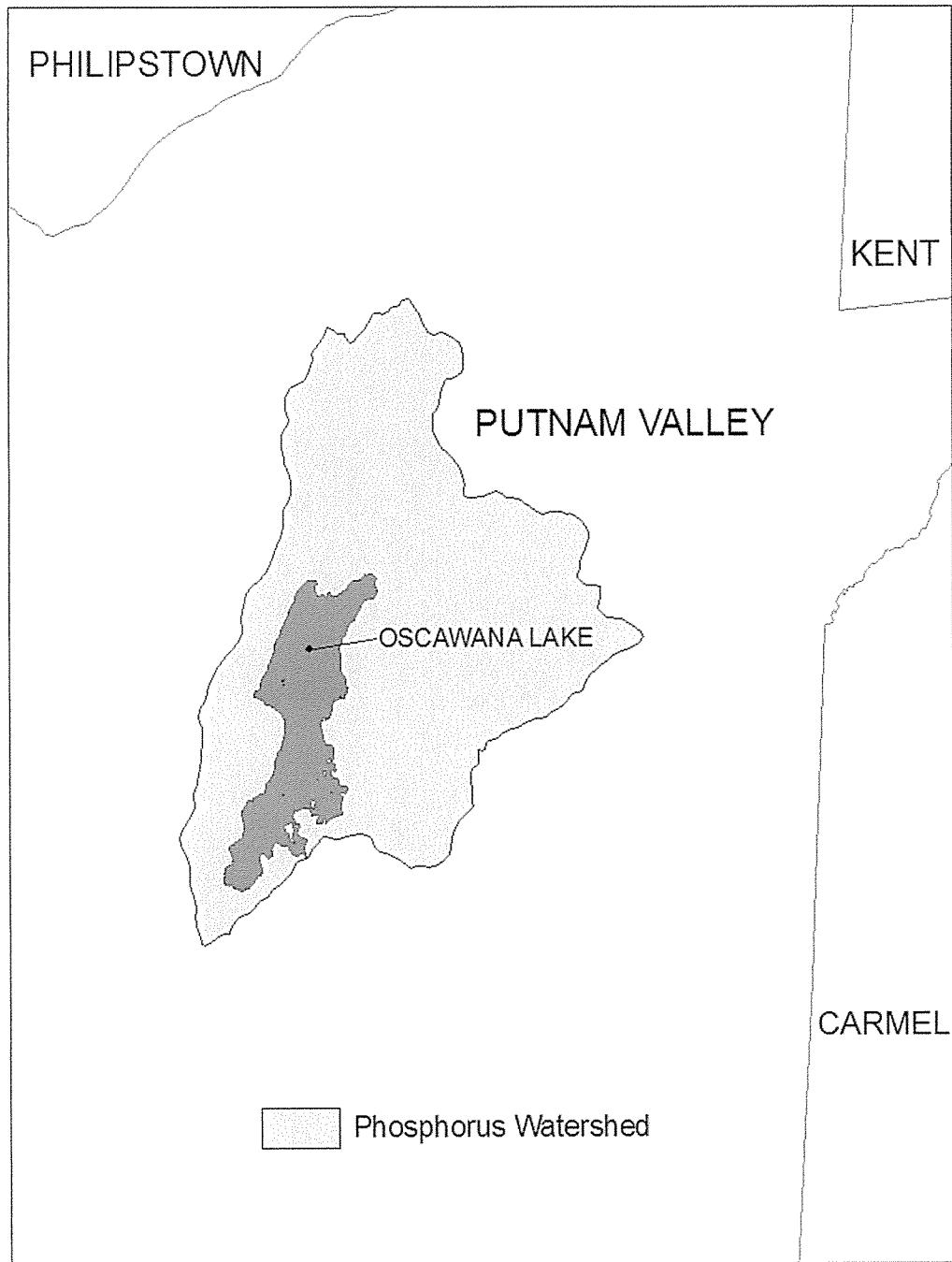
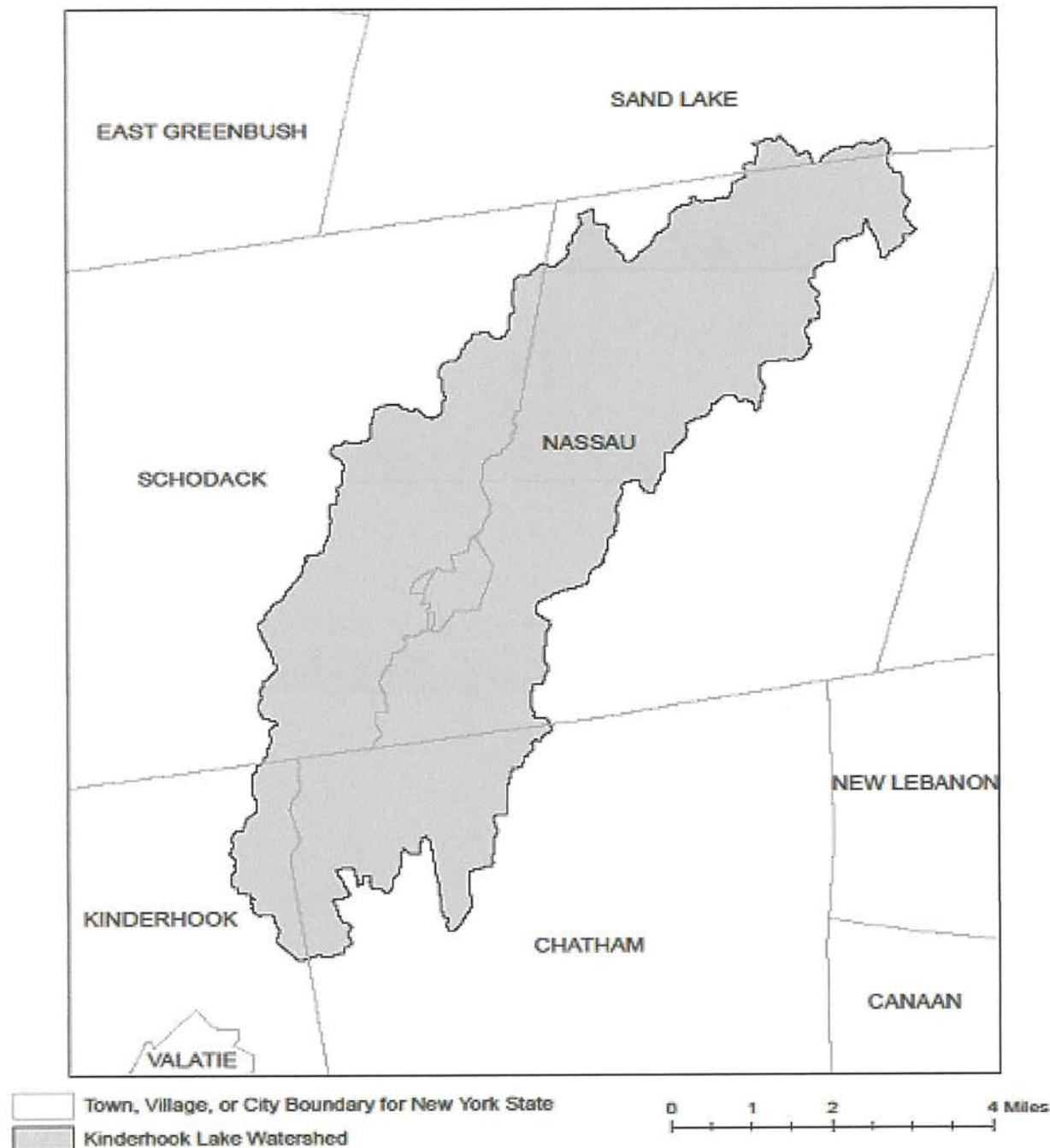


Figure 4 - Oscawana Lake Watershed



**Figure 5 - Kinderhook Lake Watershed**



## APPENDIX D – Impaired Waterbodies (by Construction Related Pollutants)

List of waterbodies impaired by *pollutants* related to *construction activity*, including turbidity, silt/sediment, and nutrients (e.g. nitrogen, phosphorus). This list is a subset of “The Final New York State 2018 Section 303(d) List of Impaired Waters Requiring a TMDL” dated June 2020.

County	Waterbody	Pollutant
Albany	Ann Lee (Shakers) Pond, Stump Pond (1201-0096)	Phosphorus
Albany	Lawsons Lake (1301-0235)	Phosphorus
Allegany	Amity Lake, Saunders Pond (0403-0054)	Phosphorus
Allegany	Andover Pond (0403-0056)	Phosphorus
Bronx	Reservoir No.1/Lake Isle (1702-0075)	Phosphorus
Bronx	Van Cortlandt Lake (1702-0008)	Phosphorus
Broome	Blueberry, Laurel Lakes (1404-0033)	Phosphorus
Broome	Fly Pond, Deer Lake (1404-0038)	Phosphorus
Broome	Minor Tribs to Lower Susquehanna (0603-0044)	Phosphorus
Broome	Whitney Point Lake/Reservoir (0602-0004)	Phosphorus
Cattaraugus	Allegheny River/Reservoir (0201-0023)	Phosphorus
Cattaraugus	Beaver Lake/Alma Pond (0201-0073)	Phosphorus
Cattaraugus	Case Lake (0201-0020)	Phosphorus
Cattaraugus	Linlyco/Club Pond (0201-0035)	Phosphorus
Cayuga	Duck Lake (0704-0025)	Phosphorus
Cayuga	Owasco Inlet, Upper, and trib (0706-0014)	Nutrients
Chautauqua	Chadakoin River and trib (0202-0018)	Phosphorus
Chautauqua	Hulbert/Clymer Pond (0202-0079)	Phosphorus
Chautauqua	Middle Cassadaga Lake (0202-0002)	Phosphorus
Clinton	Great Chazy River, Lower, Main Stem (1002-0001)	Silt/Sediment
Columbia	Robinson Pond (1308-0003)	Phosphorus
Cortland	Dean Pond (0602-0077)	Phosphorus
Dutchess	Fallkill Creek (1301-0087)	Phosphorus
Dutchess	Hillside Lake (1304-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Phosphorus
Dutchess	Wappingers Lake (1305-0001)	Silt/Sediment
Erie	Beeman Creek and trib (0102-0030)	Phosphorus
Erie	Delaware Park Pond (0101-0026)	Phosphorus
Erie	Ellicott Creek, Lower, and trib (0102-0018)	Phosphorus
Erie	Ellicott Creek, Lower, and trib (0102-0018)	Silt/Sediment
Erie	Green Lake (0101-0038)	Phosphorus
Erie	Little Sister Creek, Lower, and trib (0104-0045)	Phosphorus
Erie	Murder Creek, Lower, and trib (0102-0031)	Phosphorus

Erie	Rush Creek and trib (0104-0018)	Phosphorus
Erie	Scajaquada Creek, Lower, and trib (0101-0023)	Phosphorus
Erie	Scajaquada Creek, Middle, and trib (0101-0033)	Phosphorus
Erie	Scajaquada Creek, Upper, and trib (0101-0034)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and trib (0101-0036)	Phosphorus
Erie	South Branch Smoke Cr, Lower, and trib (0101-0036)	Silt/Sediment
Genesee	Bigelow Creek and trib (0402-0016)	Phosphorus
Genesee	Black Creek, Middle, and minor trib (0402 0028)	Phosphorus
Genesee	Black Creek, Upper, and minor trib (0402-0048)	Phosphorus
Genesee	Bowen Brook and trib (0102-0036)	Phosphorus
Genesee	LeRoy Reservoir (0402-0003)	Phosphorus
Genesee	Mill Pond (0402-0050)	Phosphorus
Genesee	Oak Orchard Cr, Upper, and trib (0301-0014)	Phosphorus
Genesee	Oatka Creek, Middle, and minor trib (0402-0031)	Phosphorus
Genesee	Tonawanda Cr, Middle, Main Stem (0102-0002)	Phosphorus
Greene	Schoharie Reservoir (1202-0012)	Silt/Sediment
Greene	Sleepy Hollow Lake (1301-0059)	Silt/Sediment
Herkimer	Steele Creek trib (1201-0197)	Phosphorus
Herkimer	Steele Creek trib (1201-0197)	Silt/Sediment
Kings	Hendrix Creek (1701-0006) 18	Nitrogen
Kings	Prospect Park Lake (1701-0196)	Phosphorus
Lewis	Mill Creek/South Branch, and trib (0801-0200)	Nutrients
Livingston	Christie Creek and trib (0402-0060)	Phosphorus
Livingston	Conesus Lake (0402-0004)	Phosphorus
Livingston	Mill Creek and minor trib (0404-0011)	Silt/Sediment
Monroe	Black Creek, Lower, and minor trib (0402-0033)	Phosphorus
Monroe	Buck Pond (0301-0017)	Phosphorus
Monroe	Cranberry Pond (0301-0016)	Phosphorus
Monroe	Durand, Eastman Lakes (0302-0037)	Phosphorus
Monroe	Lake Ontario Shoreline, Western (0301-0069) 9	Phosphorus
Monroe	Long Pond (0301-0015)	Phosphorus
Monroe	Mill Creek and trib (0302-0025)	Phosphorus 2
Monroe	Mill Creek/Blue Pond Outlet and trib (0402-0049)	Phosphorus
Monroe	Minor Tribs to Irondequoit Bay (0302-0038)	Phosphorus
Monroe	Rochester Embayment - East (0302-0002) [9]	Phosphorus
Monroe	Rochester Embayment - West (0301-0068) 9	Phosphorus
Monroe	Shipbuilders Creek and trib (0302-0026)	Phosphorus 2
Monroe	Thomas Creek/White Brook and trib (0302-0023)	Phosphorus

Nassau	Bannister Creek/Bay (1701-0380)	Nitrogen
Nassau	Beaver Lake (1702-0152)	Phosphorus
Nassau	Browswere Bay (1701-0383)	Nitrogen
Nassau	Camaans Pond (1701-0052)	Phosphorus
Nassau	East Meadow Brook, Upper, and trib (1701-0211)	Silt/Sediment
Nassau	East Rockaway Channel (1701-0381)	Nitrogen
Nassau	Glen Cove Creek, Lower, and trib (1702-0146)	Silt/Sediment
Nassau	Grant Park Pond (1701-0054)	Phosphorus
Nassau	Hempstead Bay, Broad Channel (1701-0032)	Nitrogen
Nassau	Hempstead Lake (1701-0015)	Phosphorus
Nassau	Hewlett Bay (1701-0382)	Nitrogen
Nassau	Hog Island Channel (1701-0220)	Nitrogen
Nassau	Massapequa Creek, Upper, and trib (1701-0174)	Phosphorus
Nassau	Milburn/Parsonage Creeks, Upp, and trib (1701-0212)	Phosphorus
Nassau	Reynolds Channel, East (1701-0215) [12]	Nitrogen
Nassau	Reynolds Channel, West (1701-0216) 12	Nitrogen
Nassau	Tidal Tribs to Hempstead Bay (1701-0218)	Nitrogen
Nassau	Tribs (fresh) to East Bay (1701-0204)	Silt/Sediment
Nassau	Tribs (fresh) to East Bay (1701-0204)	Phosphorus
Nassau	Tribs to Smith Pond/Halls Pond (1701-0221)	Phosphorus
Nassau	Woodmere Channel (1701-0219)	Nitrogen
New York	Harlem Meer (1702-0103)	Phosphorus
New York	The Lake in Central Park (1702-0105)	Phosphorus
Niagara	Bergholtz Creek and trib (0101-0004)	Phosphorus
Niagara	Hyde Park Lake (0101-0030)	Phosphorus
Niagara	Lake Ontario Shoreline, Western (0301-0053) 9	Phosphorus
Niagara	Lake Ontario Shoreline, Western (0301-0072) 9	Phosphorus
Oneida	Ballou, Nail Creeks (1201-0203)	Phosphorus
Onondaga	Ley Creek and trib (0702-0001) 10	Nutrients (phosphorus)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nutrients (phosphorus)
Onondaga	Minor Tribs to Onondaga Lake (0702-0022) 10	Nitrogen (NH3, NO2)
Onondaga	Onondaga Creek, Lower (0702-0023) 10	Nutrients (phosphorus)
Onondaga	Onondaga Creek, Lower, and trib (0702-0023)	Turbidity
Onondaga	Onondaga Creek, Middle, and trib (0702-0004)	Turbidity
Onondaga	Onondaga Creek, Upper, and trib (0702-0024)	Turbidity
Ontario	Great Brook and minor trib (0704-0034)	Phosphorus 2
Ontario	Great Brook and minor trib (0704-0034)	Silt/Sediment

Ontario	Hemlock Lake Outlet and minor trib (0402-0013)	Phosphorus
Ontario	Honeoye Lake (0402-0032)	Phosphorus
Orange	Brown Pond Reservoir (1303-0013)	Phosphorus
Orange	Lake Washington (1303-0012)	Phosphorus
Orange	Minor Tribs to Middle Wallkill (1306-0061)	Phosphorus
Orange	Monhagen Brook and trib (1306-0074)	Phosphorus
Orange	Orange Lake (1301-0008) [16]	Phosphorus
Orange	Quaker Creek and trib (1306-0025)	Phosphorus
Orange	Wallkill River, Middle, Main Stem (1306-0038)	Phosphorus
Orange	Wallkill River, Upper, and Minor trib (1306-0017)	Phosphorus
Orleans	Glenwood Lake (0301-0041)	Phosphorus
Orleans	Lake Ontario Shoreline, Western (0301-0070) 9	Phosphorus
Orleans	Lake Ontario Shoreline, Western (0301-0071) 9	Phosphorus
Oswego	Lake Neatahwanta (0701-0018)	Nutrients (phosphorus)
Oswego	Pleasant Lake (0703-0047)	Phosphorus
Putnam	Lost Lake, Putnam Lake (1302-0053)	Phosphorus
Putnam	Minor Tribs to Croton Falls Reservoir (1302-0001)	Phosphorus
Queens	Bergen Basin (1701-0009) 18	Nitrogen
Queens	Jamaica Bay, Eastern, and trib, Queens (1701-0005) 18	Nitrogen
Queens	Kissena Lake (1702-0258)	Phosphorus
Queens	Meadow Lake (1702-0030)	Phosphorus
Queens	Shellbank Basin (1701-0001) 18	Nitrogen
Queens	Willow Lake (1702-0031)	Phosphorus
Rensselaer	Nassau Lake (1310-0001)	Phosphorus
Rensselaer	Snyders Lake (1301-0043)	Phosphorus
Richmond	Grassmere Lake/Bradys Pond (1701-0357)	Phosphorus
Rockland	Congers Lake, Swartout Lake (1501-0019)	Phosphorus
Rockland	Rockland Lake (1501-0021)	Phosphorus
Saratoga	Ballston Lake (1101-0036)	Phosphorus
Saratoga	Dwaas Kill and trib (1101-0007)	Phosphorus
Saratoga	Dwaas Kill and trib (1101-0007)	Silt/Sediment
Saratoga	Lake Lonely (1101-0034)	Phosphorus
Saratoga	Round Lake (1101-0060)	Phosphorus
Saratoga	Tribs to Lake Lonely (1101-0001)	Phosphorus
Schenectady	Collins Lake (1201-0077)	Phosphorus
Schenectady	Duane Lake (1311-0006)	Phosphorus
Schenectady Lake	Mariaville Lake (1201-0113)	Phosphorus
Schuyler	Cayuta Lake (0603-0005)	Phosphorus

Seneca	Reeder Creek and trib (0705-0074)	Phosphorus
St.Lawrence	Black Lake Outlet, Black Lake (0906-0001)	Phosphorus
St.Lawrence	Fish Creek and minor trib (0906-0026)	Phosphorus
Steuben	Smith Pond (0502-0012)	Phosphorus
Suffolk	Agawam Lake (1701-0117)	Phosphorus
Suffolk	Big/Little Fresh Ponds (1701-0125)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Phosphorus
Suffolk	Canaan Lake (1701-0018)	Silt/Sediment
Suffolk	Fresh Pond (1701-0241)	Phosphorus
Suffolk	Great South Bay, East (1701-0039)	Nitrogen
Suffolk	Great South Bay, Middle (1701-0040)	Nitrogen
Suffolk	Great South Bay, West (1701-0173)	Nitrogen
Suffolk	Lake Ronkonkoma (1701-0020)	Phosphorus
Suffolk	Mattituck/Marratooka Pond (1701-0129)	Phosphorus
Suffolk	Mill and Seven Ponds (1701-0113)	Phosphorus
Suffolk	Millers Pond (1702-0013)	Phosphorus
Suffolk	Moriches Bay, East (1701-0305)	Nitrogen
Suffolk	Moriches Bay, West (1701-0038)	Nitrogen
Suffolk	Quantuck Bay (1701-0042)	Nitrogen
Suffolk	Shinnecock Bay and Inlet (1701-0033)	Nitrogen
Suffolk	Tidal Tribs to West Moriches Bay (1701-0312)	Nitrogen
Sullivan	Bodine, Montgomery Lakes (1401-0091)	Phosphorus
Sullivan	Davies Lake (1402-0047)	Phosphorus
Sullivan	Evens Lake (1402-0004)	Phosphorus
Sullivan	Pleasure Lake (1402-0055)	Phosphorus
Sullivan	Swan Lake (1401-0063)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Phosphorus
Tompkins	Cayuga Lake, Southern End (0705-0040)	Silt/Sediment
Ulster	Ashokan Reservoir (1307-0004)	Silt/Sediment
Ulster	Esopus Creek, Lower, Main Stem (1307-0010) [17]	Turbidity
Ulster	Esopus Creek, Middle, Main Stem (1307-0003) 17	Turbidity
Ulster	Esopus Creek, Upper, and minor trib (1307-0007)[3]	Silt/Sediment
Ulster	Wallkill River, Lower, Main Stem (1306-0027)	Phosphorus
Warren	Hague Brook and trib (1006-0006)	Silt/Sediment
Warren	Huddle/Finkle Brooks and trib (1006-0003)	Silt/Sediment
Warren	Indian Brook and trib (1006-0002)	Silt/Sediment
Warren	Lake George (1006-0016) and trib	Silt/Sediment
Warren	Tribs to Lake George, East Shore (1006-0020)	Silt/Sediment
Warren	Tribs to Lake George, Lk.George Village (1006-0008)	Silt/Sediment

Washington	Wood Cr/Champlain Canal and trib (1005-0036)	Phosphorus
Westchester	Lake Katonah (1302-0136)	Phosphorus
Westchester	Lake Lincolndale (1302-0089)	Phosphorus
Westchester	Lake Meahagh (1301-0053)	Phosphorus
Westchester	Lake Mohegan (1301-0149)	Phosphorus
Westchester	Lake Shenorock (1302-0083)	Phosphorus
Westchester	Mamaroneck River, Lower (1702-0071)	Silt/Sediment
Westchester	Mamaroneck River, Upp, & minor trib (1702-0123)	Silt/Sediment
Westchester	Saw Mill River (1301-0007)	Phosphorus
Westchester	Saw Mill River, Middle, and trib (1301-0100)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Phosphorus
Westchester	Sheldrake River (1702-0069)	Silt/Sedimnt
Westchester	Silver Lake (1702-0040)	Phosphorus
Westchester	Teatown Lake (1302-0150)	Phosphorus
Westchester	Truesdale Lake (1302-0054)	Phosphorus
Westchester	Wallace Pond (1301-0140)	Phosphorus

## APPENDIX E – List of NYSDEC Regional Offices

<u>Region</u>	<u>COVERING THE FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	220 WHITE PLAINS ROAD, SUITE 110 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIoga AND TOMPKINS	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7438	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7165	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7070

## **APPENDIX F – SWPPP Preparer Certification Form**

The SWPPP Preparer Certification Form required by this permit begins on the following page.



# SWPPP Preparer Certification Form

## SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

**Project/Site Name:**

**eNOI Submission ID:**

**Owner/Operator Name:**

### Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) has been prepared in accordance with the requirements of GP-0-25-001. I certify under penalty of law that the SWPPP and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SWPPP Preparer First Name

MI

SWPPP Preparer Last Name

Signature

Date

## **APPENDIX G – MS4 SWPPP Acceptance Form**

The MS4 SWPPP Acceptance Form required by this permit begins on the following page.



Department of  
Environmental  
Conservation

## MS4 SWPPP Acceptance Form

for construction activities seeking authorization under the

### SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

#### I. Project Owner/Operator Information

1. Owner/Operator Name:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

#### II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

#### III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

#### IV. Regulated MS4 Information

11. Name of MS4 Operator:

12. MS4 SPDES Permit Identification Number: NYR20A

13. Street Address:

14. City/State/Zip:

15. Telephone Number:

## MS4 SWPPP Acceptance Form - continued

### V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in section II. of this form has been reviewed and meets the substantive requirements in the SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP). Note: The MS4 Operator, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 Operator does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name<sup>1</sup>:

Title/Position:

Signature:

Date:

### VI. Additional Information

<sup>1</sup> Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.

## **APPENDIX H – NYCDEP SWPPP Acceptance/Approval Form**

The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval form required by this permit begins on the following page.



THE CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Environmental Planning and Analysis  
59-17 Junction Blvd., 9th Floor; Flushing, NY 11373

### SWPPP Acceptance/Approval

Application Number:

#### I. Project Owner/Operator Information

1. Owner/Operator Name:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

#### II. Project Site Information

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

#### III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance/Approval

8. SWPPP Reviewed by:

9. Title/Position: /

10. Date Final SWPPP Reviewed and Accepted:

11. Acceptance/Approval Expiration Date:

#### IV. Regulated MS4 Information for projects that require coverage under the NY State Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activity

12. Name of MS4: CITY OF NEW YORK

13. MS4 SPDES Permit Identification Number: NY-0287890

14. Contact Person:

15. Street Address: 59-17 Junction Blvd. 9th Floor

16. City/State/Zip: Flushing, NY 11373

17. Telephone Number:



Department of  
Environmental  
Conservation

Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.



THE CITY OF NEW YORK  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Bureau of Environmental Planning and Analysis  
59-17 Junction Blvd., 9th Floor; Flushing, NY 11373

#### **V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative**

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).

Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

Printed Name:

Title/Position:

Signature:

Date:

#### **VI. Conditions of Acceptance/Approval and Additional Information**



Projects in the MS4 area must submit a copy of this SWPPP Acceptance with a Notice of Intent for coverage under the NY SPDES General Permit for Stormwater Discharges from Construction Activity to: NYS Department of Environmental Conservation, Division of Water; 625 Broadway, 4th Floor; Albany, New York 12233-3505.

## **APPENDIX I – MS4 No Jurisdiction Form**

The MS4 No Jurisdiction Form required by this permit begins on the following page.



Department of  
Environmental  
Conservation

## MS4 No Jurisdiction Form

for construction activities seeking authorization under the

### SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)

(In accordance with CGP Part I.D.2.b., the completed form must be attached to the eNOI and submitted to NYSDEC electronically.)

#### I. Project Owner/Operator Information

- a. Owner/Operator Name:
- b. Contact Person:
- c. Street Address:
- d. City/State/Zip:

#### II. Project Site Information

- a. Project/Site Name:
- b. Street Address:
- c. City/State/Zip:
- d. eNOI Submission ID:

#### III. Traditional Land Use Control MS4 Operator Information

- a. Name of MS4 Operator:
- b. MS4 SPDES Permit ID Number: NYR20A
- c. Street Address:
- d. City/State/Zip:
- e. Telephone Number:

#### IV. Certification Statement

In accordance with CGP Part I.D.2.b.ii.3., I hereby certify that the Traditional Land Use Control MS4 Operator identified in section III. of this form does not have review authority over the construction project identified in section II. of this form, which is owned/operated by the entity identified in section I. of this form. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- a. Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.:
- b. Title/Position:
- c. Signature:
- d. Date:

## **APPENDIX J – Owner/Operator Certification Form**

The Owner/Operator Certification Form required by this permit begins on the following page.



Department of  
Environmental  
Conservation

# Owner/Operator Certification Form

## ***SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (CGP)***

(In accordance with CGP Part I.D.2.b. or Part I.F.2. and 3., the completed form must be attached to the eNOI or the Request to Continue Coverage, and submitted to NYSDEC electronically.

**Project/Site Name:** \_\_\_\_\_

**eNOI Submission ID:** \_\_\_\_\_

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

### **Certification Statement - Owner/Operator**

I hereby certify that I read, and will comply with, the GP-0-25-001 permit requirements. I understand that authorization to discharge under the permit for the project/site named above is dependent on receipt of a Letter of Authorization (LOA) or a Letter of Continued Coverage (LOCC) from the New York State Department of Environmental Conservation (NYSDEC) in accordance with CGP Part I.D.3.b. or Part I.F.4. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner/Operator First Name

MI

Owner/Operator Last Name

Signature

Date

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# NOI for coverage under Stormwater General Permit for Construction Activity

version 1.40

(Submission #: HQ8-1K0V-2XS92, version 1)

## Details

---

**Originally Started By** Jeffrey Econom

**Alternate Identifier** PROPOSED SITE PLAN for OFFICE/WAREHOUSE FACILITY for the TERRA GROUP

**Submission ID** HQ8-1K0V-2XS92

**Submission Reason** New

**Status** Draft

## Form Input

---

### Owner/Operator Information

**Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)**  
TERRAFLEX 101, LLC

**Owner/Operator Contact Person Last Name (NOT CONSULTANT)**  
VARRONE

**Owner/Operator Contact Person First Name**  
AL

**Owner/Operator Mailing Address**  
395 ROUTE 212

**City**  
SAUGERTIES

**State**  
NEWYORK

**Zip**  
12477

**Phone**  
(646) 315-1024

**Email**  
upstaterealtygroup@gmail.com

**Federal Tax ID**  
33-1569910

If the owner/operator is an organization, provide the Federal Tax ID number, or Employer Identification Number (EIN), in the format xx-xxxxxx. If the owner/operator is an individual and not an organization, enter "Not Applicable" or "N/A" and do not provide the individual's social security number.

## Project Location

**Project/Site Name**  
PROPOSED SITE PLAN for OFFICE/WAREHOUSE FACILITY for the TERRA GROUP

**Street Address (Not P.O. Box)**  
2021-2025 ROUTE 9W

**Side of Street**  
West

**City/Town/Village (THAT ISSUES BUILDING PERMIT)**  
TOWN OF MARLBOROUGH

**State**  
NY

**Zip**  
12542

**DEC Region**  
3

The DEC Region must be provided. Please use the NYSDEC Stormwater Interactive Map (<https://gisservices.dec.ny.gov/gis/stormwater/>) to confirm which DEC Region this site is located in. To view the DEC Regions, click on "Other Useful Reference Layers" on the left side of the map, then click on "DEC Administrative Boundary." Zoom out as needed to see the Region boundaries.

For projects that span multiple Regions, please select a primary Region and then provide the additional Regions as a note in Question 39.

**County**  
ULSTER

**Name of Nearest Cross Street**  
MILTON ROAD

**Distance to Nearest Cross Street (Feet)**  
400

**Project In Relation to Cross Street**  
South

**Tax Map Numbers Section-Block-Parcel**  
103.1-1-2.200

**Tax Map Numbers**  
N/A

If the project does not have tax map numbers (e.g. linear projects), enter "Not Applicable" or "N/A".

## **1. Coordinates**

---

Provide the Geographic Coordinates for the project site. The two methods are:

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

**Navigate to your location and click on the map to get the X,Y coordinates**  
41.6742533,-73.96073690000001

## **Project Details**

### **2. What is the nature of this project?**

New Construction

For the purposes of this eNOI, "New Construction" refers to any project that does not involve the disturbance of existing impervious area (i.e. 0 acres). If existing impervious area

will be disturbed on the project site, it is considered redevelopment with either increase in impervious area or no increase in impervious area.

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

**Pre-Development Existing Landuse**

Pasture/Open Land

**Post-Development Future Land Use**

Commercial

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

*NONE PROVIDED*

---

4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

\*\*\* ROUND TO THE NEAREST TENTH OF AN ACRE. \*\*\*

**Total Site Area (acres)**

3.5

**Total Area to be Disturbed (acres)**

2.3

**Existing Impervious Area to be Disturbed (acres)**

1.8

**Future Impervious Area Within Disturbed Area (acres)**

0.5

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

No

---

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

**A (%)**

0

**B (%)**

0

**C (%)**

100

D (%)  
0

**7. Is this a phased project?**

Yes

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

**Start Date**  
04/30/2025

**End Date**  
12/31/2025

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

HUDSON RIVER

Drainage ditches and storm sewer systems are not considered surface waterbodies. Please identify the surface waterbody that they discharge to. If the nearest surface waterbody is unnamed, provide a description of the waterbody, such as, "Unnamed tributary to Niagara River."

**9a. Type of waterbody identified in question 9?**

River Off Site

**Other Waterbody Type Off Site Description**

NONE PROVIDED

**9b. If "wetland" was selected in 9A, how was the wetland identified?**

NONE PROVIDED

**10. Has the surface waterbody(ies) in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?**

No

**11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?**

No

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

No

Please use the DEC Stormwater Interactive Map (<https://gisservices.dec.ny.gov/gis/stormwater/>) to confirm if this site is located in one of the

watersheds of an AA or AA-S classified water. To view the watershed areas, click on "Permit Related Layers" on the left side of the map, then click on "Class AA AAS Watersheds."

If No, skip question 13.

**13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as D (provided the map unit name is inclusive of slopes greater than 25%), E or F on the USDA Soil Survey?**

*NONE PROVIDED*

**If Yes, what is the acreage to be disturbed?**

*NONE PROVIDED*

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

No

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

Yes

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

TOWN OF MARLBOROUGH and NYSDOT

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

No

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

No

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

No

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

No

## **Required SWPPP Components**

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

Yes

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

No

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

**23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the 2015 or 2024 NYS Stormwater Management Design Manual?**

Yes

**24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:**  
Professional Engineer (P.E.)

**SWPPP Preparer**

JEFFREY A. ECONOM, P.E., CPESC

**Contact Name (Last, First)**

ECONOM, JEFFREY

**Mailing Address**

48 LOGANBERRY COURT

**City**

HOPEWELL JUNCTION

**State**

NEW YORK

**Zip**

12533

**Phone**

(845) 554-8442

**Email**

jaeconom@optonline.net

**Download SWPPP Preparer Certification Form**

Please take the following steps to prepare and upload your preparer certification form:

- 1) Click on the link below to download a blank certification form
- 2) The certified SWPPP preparer should sign this form
- 3) Scan the signed form
- 4) Upload the scanned document

[Download SWPPP Preparer Certification Form](#)

**Please upload the SWPPP Preparer Certification**

[SWPPP Preparer Certification Form - signed.pdf - 12/10/2024 05:48 PM](#)

**Comment**

*NONE PROVIDED*

**Erosion & Sediment Control Criteria**

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

Yes

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

**Temporary Structural**

Construction Road Stabilization

Silt Fence

Storm Drain Inlet Protection

**Biotechnical**

None

**Vegetative Measures**

Mulching

Seeding

Topsoiling

**Permanent Structural**

Land Grading

**Other**

INFILTRATION PRACTICES

## **Post-Construction Criteria**

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

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

### **29. Post-construction SMP Identification**

Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to

each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

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

*NONE PROVIDED*

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

*NONE PROVIDED*

If Yes, go to question 33.

Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

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

**33. SMPs**

Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

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

*NONE PROVIDED*

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

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

*NONE PROVIDED*

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

*NONE PROVIDED*

If Yes, go to question 36.

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

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

**CPv Required (acre-feet)**

*NONE PROVIDED*

**CPv Provided (acre-feet)**

*NONE PROVIDED*

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

*NONE PROVIDED*

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

**Overbank Flood Control Criteria (Qp)**

**Pre-Development (CFS)**

*NONE PROVIDED*

**Post-Development (CFS)**

*NONE PROVIDED*

**Total Extreme Flood Control Criteria (Qf)**

**Pre-Development (CFS)**

*NONE PROVIDED*

**Post-Development (CFS)**

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

## **Post-Construction SMP Identification**

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

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

#### **RR Techniques (Area Reduction)**

Round to the nearest tenth

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

#### **RR Techniques (Volume Reduction)**

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

---

**Standard SMPs with RRv Capacity****Total Contributing Impervious Acres for Infiltration Trench (I-1)**

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

**Total Contributing Impervious Acres for Bioretention (F-5)**

*NONE PROVIDED*

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

*NONE PROVIDED*

---

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

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

*NONE PROVIDED*

---

**Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)****Total Contributing Impervious Area for Hydrodynamic**

*NONE PROVIDED*

**Total Contributing Impervious Area for Wet Vault**

*NONE PROVIDED*

**Total Contributing Impervious Area for Media Filter**

*NONE PROVIDED*

**"Other" Alternative SMP?**

*NONE PROVIDED*

**Total Contributing Impervious Area for "Other"**

*NONE PROVIDED*

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

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

**Manufacturer of Alternative SMP**

*NONE PROVIDED*

**Name of Alternative SMP**

*NONE PROVIDED*

**Other Permits**

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

None

**If SPDES Multi-Sector GP, then give permit ID**

*NONE PROVIDED*

**If Other, then identify**

*NONE PROVIDED*

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

No

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

*NONE PROVIDED*

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

*NONE PROVIDED*

**MS4 SWPPP Acceptance**

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

Yes - Please attach the MS4 Acceptance form below

**If No, skip question 44**

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

No

Please note that per Part VII.H.4. of GP-0-20-001, the MS4 SWPPP Acceptance Form must be signed by a principal executive officer or ranking elected official of the MS4, or a duly authorized representative of that person.

### MS4 SWPPP Acceptance Form Download

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

[MS4 SWPPP Acceptance Form](#)

### MS4 Acceptance Form Upload

NONE PROVIDED

#### Comment

NONE PROVIDED

## Owner/Operator Certification

### Owner/Operator Certification Form Download

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

[Owner/Operator Certification Form \(PDF, 45KB\)](#)

### Upload Owner/Operator Certification Form

Owner\_Operator Certification Form 12 11 24 signed.pdf - 12/11/2024 02:55 PM

#### Comment

NONE PROVIDED

## Attachments

Date	Attachment Name	Context	User
12/11/2024 2:55 PM	Owner_Operator Certification Form 12 11 24 signed.pdf	Attachment	Jeffrey Econom
12/10/2024 5:48 PM	SWPPP Preparer Certification Form - signed.pdf	Attachment	Jeffrey Econom



Department of  
Environmental  
Conservation

# SWPPP Preparer Certification Form

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

## Project Site Information

### Project/Site Name

PROPOSED SITE PLAN for the TERRA GROUP, LLC

## Owner/Operator Information

### Owner/Operator (Company Name/Private Owner/Municipality Name)

TERRAFLEX 101, LLC

## Certification Statement – SWPPP Preparer

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-20-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

JEFFREY

A

ECONOM

First name

MI

Last Name

Signature

Date



Department of  
Environmental  
Conservation

## **Owner/Operator Certification Form**

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

Project/Site Name: PROPOSED SITE PLAN for the TERRA GROUP

eNOI Submission Number: HQ8-1K0V-2XS92

eNOI Submitted by:  Owner/Operator  SWPPP Preparer  Other

#### **Certification Statement - Owner/Operator**

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

Owner/Operator First Name

M.I. Last Name

---

Signature

---

Date



Department of  
Environmental  
Conservation

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

**MS4 Stormwater Pollution Prevention Plan (SWPPP) Acceptance  
Form**

for

**Construction Activities Seeking Authorization Under SPDES General Permit**

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

**I. Project Owner/Operator Information**

1. Owner/Operator Name: TERRAFLEX 101, LLC  
2. Contact Person: AL VARRONE  
3. Street Address: 395 ROUTE 212  
4. City/State/Zip: SAUGERTIES, NEW YORK 12477

**II. Project Site Information**

5. Project/Site Name: PROPOSED SITE PLAN for the TERRA GROUP  
6. Street Address: 2021-2025 ROUTE 9W  
7. City/State/Zip: MARLBOROUGH, NEW YORK 12542

**III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information**

8. SWPPP Reviewed by: PATRICK J. HINES  
9. Title/Position: PRINCIPAL, MHE ENGINEERING  
10. Date Final SWPPP Reviewed and Accepted:

**IV. Regulated MS4 Information**

11. Name of MS4: TOWN OF MARLBOROUGH  
12. MS4 SPDES Permit Identification Number: NYR20A 397  
13. Contact Person: SCOTT CORCORAN  
14. Street Address: 21 MILTON TURNPIKE, SUITE 200  
15. City/State/Zip: MILTON, NEW YORK 12547  
16. Telephone Number: 845-795-5100, EXT. 2

## **MS4 SWPPP Acceptance Form - continued**

### **V. Certification Statement - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative**

I hereby certify that the final Stormwater Pollution Prevention Plan (SWPPP) for the construction project identified in question 5 has been reviewed and meets the substantive requirements in the SPDES General Permit For Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Note: The MS4, through the acceptance of the SWPPP, assumes no responsibility for the accuracy and adequacy of the design included in the SWPPP. In addition, review and acceptance of the SWPPP by the MS4 does not relieve the owner/operator or their SWPPP preparer of responsibility or liability for errors or omissions in the plan.

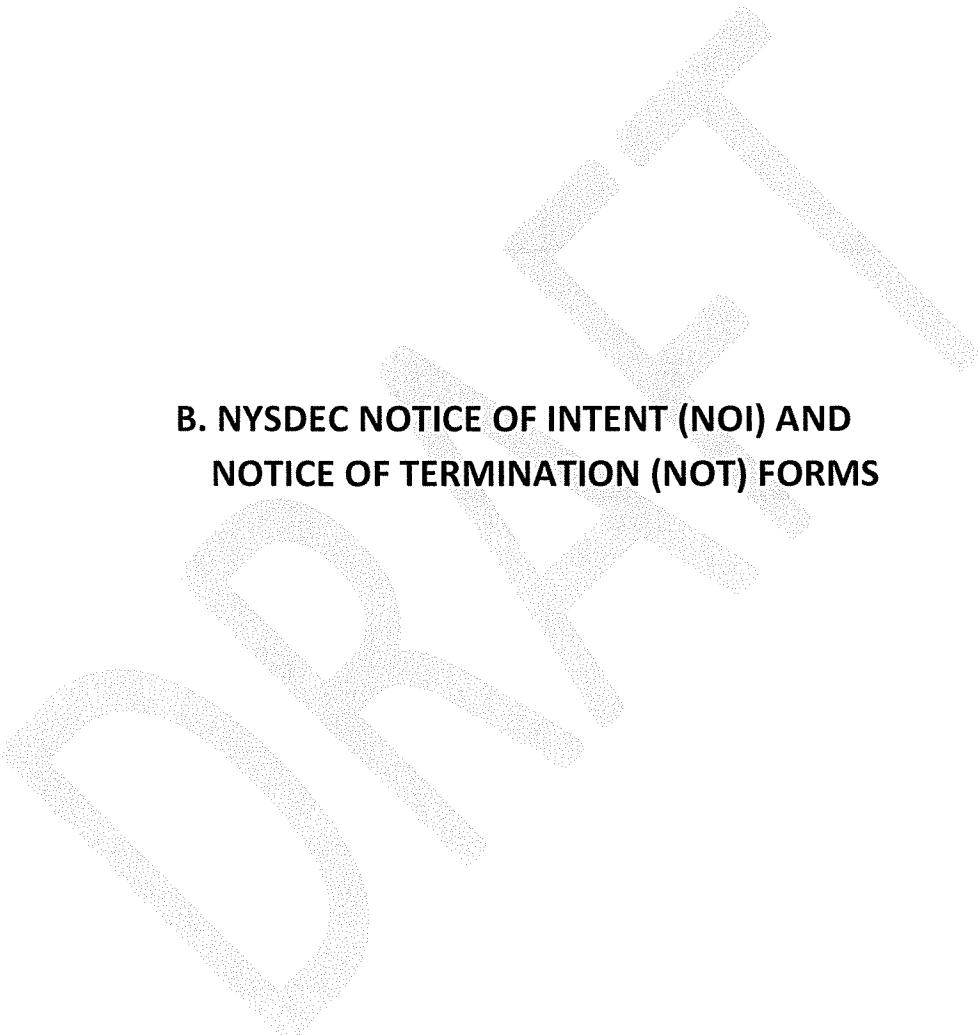
Printed Name: **SCOTT CORCORAN**

Title/Position: **TOWN SUPERVISOR - TOWN OF MARLBOROUGH**

Signature:

Date:

### **VI. Additional Information**



**B. NYSDEC NOTICE OF INTENT (NOI) AND  
NOTICE OF TERMINATION (NOT) FORMS**

# MSGP Notice of Termination

version 1.3

(Submission #: HQ9-ZNGZ-T0DR3, version 1)

## Details

---

**Originally Started By** Jeffrey Econom

**Submission ID** HQ9-ZNGZ-T0DR3

**Submission Reason** New

**Status** Draft

## Form Input

---

### Facility Information

---

#### SECTION I

##### 1. Permit ID #:

*NONE PROVIDED*

##### Facility Name

OFFICE/WAREHOUSE FACILITY for the TERRA GROUP

##### Facility location address

2021-2025 ROUTE 9W  
MARLBOROUGH, NY 12542

##### Owner Name

TERRAFLEX, LLC

##### Legal Owner address

395 ROUTE 212  
SAUGERTIES, NY 12477

##### Stormwater contact

Stormwater Contact title	First Name	Last Name	Email	Phone
Partner	AL	VARRONE	upstaterealitygroup@gmail.com	(646)315-1024

## **Termination Reason**

**. This Notice of Termination is being submitted for the following reason:**

*NONE PROVIDED*

## **CERTIFICATION**

**Download the certification form from the link below.**

Please print the certification form and enter all the information on the form.

[Certification Form](#)

**Attach completed certification form**

*NONE PROVIDED*

**Comment**

*NONE PROVIDED*

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water  
625 Broadway, Albany, New York 12233-3500  
P: (518) 402-8233 | F: (518) 402-9029  
www.dec.ny.gov

### Owner/Operator Certification Form for eReports

#### SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-23-001)

##### Instructions

Please review Appendix G.10 before signing this form. A signature by an unauthorized person will delay permit coverage for your facility.

This form must be signed by one of the following:

1. For a corporation: by a responsible corporate officer
2. For a partnership: by a general partner
3. For a sole proprietorship: by the proprietor
4. For a municipality, state, federal or other public agency: by a principal executive officer or ranking elected official

Facility Name: OFFICE/WAREHOUSE FACILITY for the T

eReport Submission Number: \_\_\_\_\_

##### Owner/Operator Certification

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

**AL VARRONE**

Name (please print or type)

**PARTNER**

Title

**TERRAFLEX 101,**

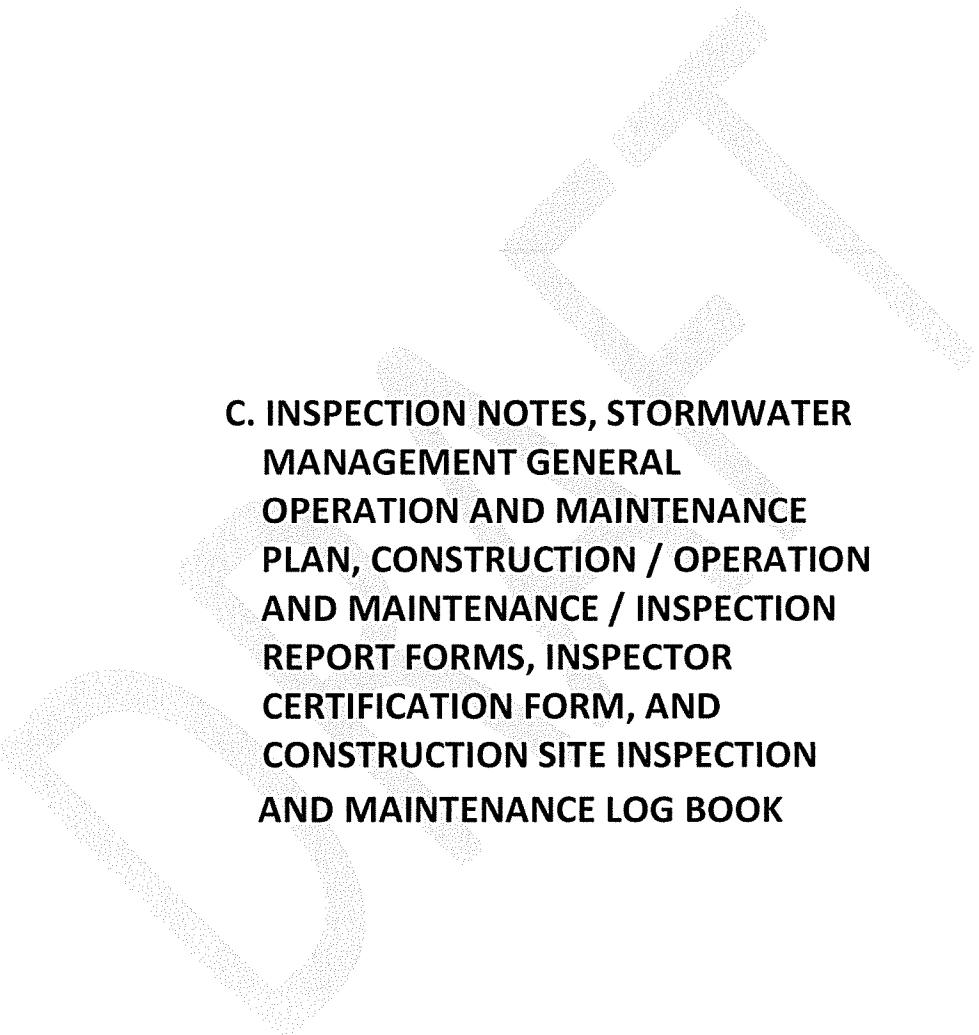
Organization

Signature

Date



Department of  
Environmental  
Conservation



**C. INSPECTION NOTES, STORMWATER  
MANAGEMENT GENERAL  
OPERATION AND MAINTENANCE  
PLAN, CONSTRUCTION / OPERATION  
AND MAINTENANCE / INSPECTION  
REPORT FORMS, INSPECTOR  
CERTIFICATION FORM, AND  
CONSTRUCTION SITE INSPECTION  
AND MAINTENANCE LOG BOOK**

## INSPECTION CERTIFICATION FORM

---

NAME

NEW YORK SPDES PERMIT NUMBER  
(fill in when obtained)

CERTIFICATION:

\*\*\*I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH THE SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED UPON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR THE GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.”

---

SIGNATURE

TITLE

DATE

**APPENDIX F**  
**CONSTRUCTION SITE INSPECTION**  
**AND MAINTENANCE LOG BOOK**

**STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION  
ACTIVITIES**

**SAMPLE CONSTRUCTION SITE LOG BOOK**

Table of Contents

---

- I. Pre-Construction Meeting Documents
  - a. Preamble to Site Assessment and Inspections
  - b. Pre-Construction Site Assessment Checklist
  
- II. Construction Duration Inspections
  - a. Directions
  - b. Modification to the SWPPP

## I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name \_\_\_\_\_  
Permit No. \_\_\_\_\_ Date of Authorization \_\_\_\_\_  
Name of Operator \_\_\_\_\_  
Prime Contractor \_\_\_\_\_

### a. Preamble to Site Assessment and Inspections

The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified inspector<sup>1</sup> conduct an assessment of the site prior to the commencement of construction<sup>2</sup> and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements. A preconstruction meeting should be held to review all of the SWPPP requirements with construction personnel.

When construction starts, site inspections shall be conducted by the qualified inspector at least every 7 calendar days. The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified inspector perform a final site inspection. The qualified inspector shall certify that the site has undergone final stabilization<sup>3</sup> using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 Refer to "Qualified Inspector" inspection requirements in the current SPDES General Permit for Stormwater Discharges from Construction Activity for complete list of inspection requirements.

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

**b. Pre-construction Site Assessment Checklist**  
**(NOTE: Provide comments below as necessary)**

**1. Notice of Intent, SWPPP, and Contractors Certification:**

**Yes No NA**

Has a Notice of Intent been filed with the NYS Department of Conservation?  
   Is the SWPPP on-site? Where? \_\_\_\_\_  
   Is the Plan current? What is the latest revision date? \_\_\_\_\_  
   Is a copy of the NOI (with brief description) onsite? Where? \_\_\_\_\_  
   Have all contractors involved with stormwater related activities signed a contractor's certification?

**2. Resource Protection**

**Yes No NA**

Are construction limits clearly flagged or fenced?  
   Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.  
   Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

**3. Surface Water Protection**

**Yes No NA**

Clean stormwater runoff has been diverted from areas to be disturbed.  
   Bodies of water located either on site or in the vicinity of the site have been identified and protected.  
   Appropriate practices to protect on-site or downstream surface water are installed.  
   Are clearing and grading operations divided into areas <5 acres?

**4. Stabilized Construction Access**

**Yes No NA**

A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.  
   Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.  
   Sediment tracked onto public streets is removed or cleaned on a regular basis.

**5. Sediment Controls**

**Yes No NA**

Silt fence material and installation comply with the standard drawing and specifications.  
   Silt fences are installed at appropriate spacing intervals  
   Sediment/detention basin was installed as first land disturbing activity.  
   Sediment traps and barriers are installed.

**6. Pollution Prevention for Waste and Hazardous Materials**

**Yes No NA**

The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.  
   The plan is contained in the SWPPP on page \_\_\_\_\_  
   Appropriate materials to control spills are onsite. Where? \_\_\_\_\_

## II. CONSTRUCTION DURATION INSPECTIONS

### a. Directions:

**Inspection Forms will be filled out during the entire construction phase of the project.**

Required Elements:

- 1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
- 2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
- 3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
- 4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);
- 5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
- 6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

**SITE PLAN/SKETCH**

---

**Inspector (print name)**

---

**Date of Inspection**

---

**Qualified Inspector (print name)**

---

**Qualified Inspector Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

**Maintaining Water Quality****Yes No NA**

- Is there an increase in turbidity causing a substantial visible contrast to natural conditions at the outfalls?
- Is there residue from oil and floating substances, visible oil film, or globules or grease at the outfalls?
- All disturbance is within the limits of the approved plans.
- Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

**Housekeeping**

## 1. General Site Conditions

**Yes No NA**

- Is construction site litter, debris and spoils appropriately managed?
- Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
- Is construction impacting the adjacent property?
- Is dust adequately controlled?

## 2. Temporary Stream Crossing

**Yes No NA**

- Maximum diameter pipes necessary to span creek without dredging are installed.
- Installed non-woven geotextile fabric beneath approaches.
- Is fill composed of aggregate (no earth or soil)?
- Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

## 3. Stabilized Construction Access

**Yes No NA**

- Stone is clean enough to effectively remove mud from vehicles.
- Installed per standards and specifications?
- Does all traffic use the stabilized entrance to enter and leave site?
- Is adequate drainage provided to prevent ponding at entrance?

**Runoff Control Practices**

## 1. Excavation Dewatering

**Yes No NA**

- Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
- Clean water from upstream pool is being pumped to the downstream pool.
- Sediment laden water from work area is being discharged to a silt-trapping device.
- Constructed upstream berm with one-foot minimum freeboard.

**Runoff Control Practices (continued)****2. Flow Spreader****Yes No NA**   Installed per plan.   Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.   Flow sheets out of level spreader without erosion on downstream edge.**3. Interceptor Dikes and Swales****Yes No NA**   Installed per plan with minimum side slopes 2H:1V or flatter.   Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.   Sediment-laden runoff directed to sediment trapping structure**4. Stone Check Dam****Yes No NA**   Is channel stable? (flow is not eroding soil underneath or around the structure).   Check is in good condition (rocks in place and no permanent pools behind the structure).   Has accumulated sediment been removed?**5. Rock Outlet Protection****Yes No NA**   Installed per plan.   Installed concurrently with pipe installation.**Soil Stabilization****1. Topsoil and Spoil Stockpiles****Yes No NA**   Stockpiles are stabilized with vegetation and/or mulch.   Sediment control is installed at the toe of the slope.**2. Revegetation****Yes No NA**   Temporary seedings and mulch have been applied to idle areas.   4 inches minimum of topsoil has been applied under permanent seedings**Sediment Control Practices****1. Silt Fence and Linear Barriers****Yes No NA**   Installed on Contour, 10 feet from toe of slope (not across conveyance channels).   Joints constructed by wrapping the two ends together for continuous support.   Fabric buried 6 inches minimum.   Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is \_\_\_\_% of design capacity.

**Sediment Control Practices (continued)****2. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated; Filter Sock or Manufactured practices)****Yes No NA**

- Installed concrete blocks lengthwise so open ends face outward, not upward.
- Placed wire screen between No. 3 crushed stone and concrete blocks.
- Drainage area is 1 acre or less.
- Excavated area is 900 cubic feet.
- Excavated side slopes should be 2:1.
- 2" x 4" frame is constructed and structurally sound.
- Posts 3-foot maximum spacing between posts.
- Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
- Posts are stable, fabric is tight and without rips or frayed areas.
- Manufactured insert fabric is free of tears and punctures.
- Filter Sock is not torn or flattened and fill material is contained within the mesh sock.

Sediment accumulation \_\_\_\_\_ % of design capacity.

**3. Temporary Sediment Trap****Yes No NA**

- Outlet structure is constructed per the approved plan or drawing.
- Geotextile fabric has been placed beneath rock fill.
- Sediment trap slopes and disturbed areas are stabilized.

Sediment accumulation is \_\_\_\_\_ % of design capacity.

**4. Temporary Sediment Basin****Yes No NA**

- Basin and outlet structure constructed per the approved plan.
- Basin side slopes are stabilized with seed/mulch.
- Drainage structure flushed and basin surface restored upon removal of sediment basin facility.
- Sediment basin dewatering pool is dewatering at appropriate rate.

Sediment accumulation is \_\_\_\_\_ % of design capacity.

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

Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

## CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
  - a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
  - b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

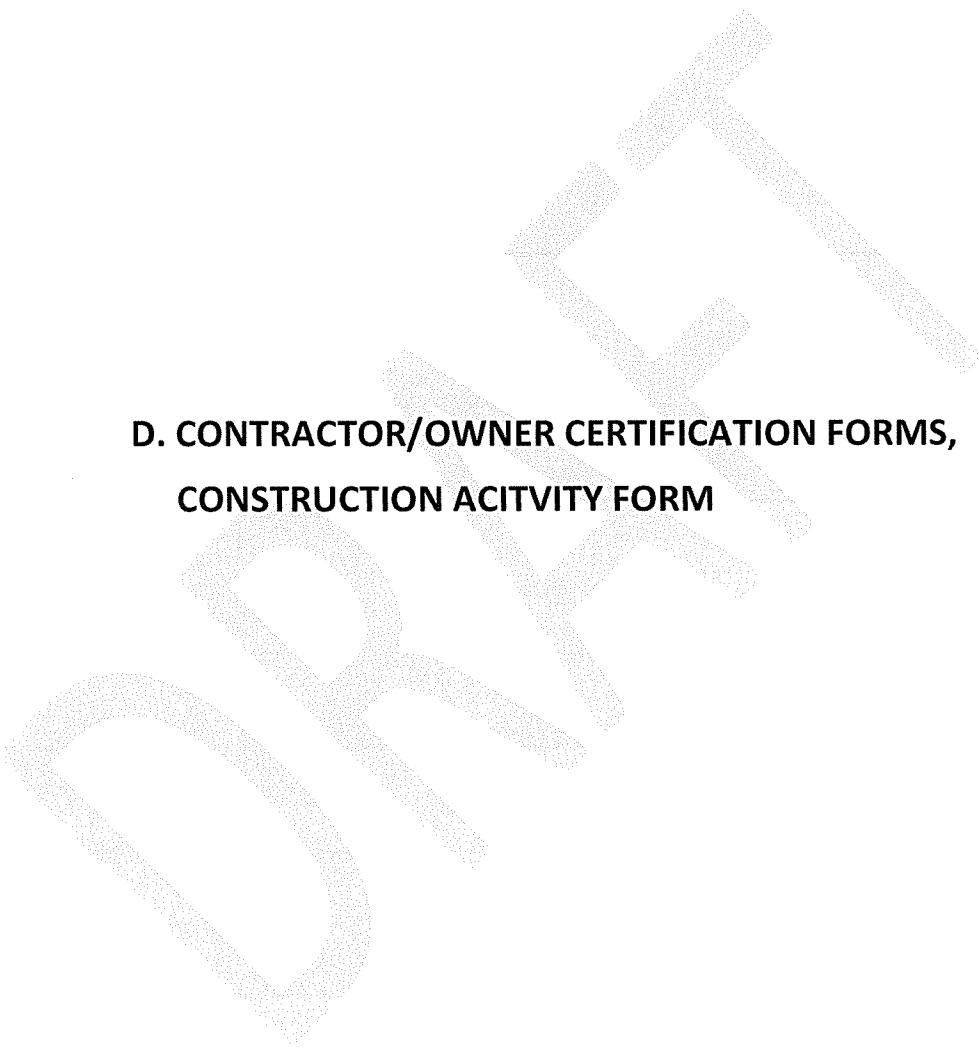
### **Modification & Reason:**

SPDES GENERAL PERMIT GP-0-20-001  
SWPPP CONSTRUCTION INSPECTION LOG

## **CONSTRUCTION ACTIVITY FORM**

**NOTE:** The contractor is responsible for maintaining an accurate and complete log of construction activities, including, but not limited to, commencement of stabilization, major grading activities, timeframes when construction ceases on a portion of site (temporary or permanent) until the Notice of Termination (NOT) is filed.

## **MAJOR STABILIZATION AND GRADING ACTIVITIES**



**D. CONTRACTOR/OWNER CERTIFICATION FORMS,  
CONSTRUCTION ACTIVITY FORM**

**CONTRACTOR CERTIFICATION**  
**FORM**

Office/Warehouse Development NYS  
Route 9W  
Town of Marlborough  
Ulster County, NY

Contractor responsible for the implementation of the SWPPP:

---

Company Name	Business Telephone Number
--------------	---------------------------

---

Business Address	City, State, Zip Code
------------------	-----------------------

---

Business Facsimile	E-mail Address
--------------------	----------------

CERTIFICATION:

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

---

Signature	Date
-----------	------

---

Printed Name	Title
--------------	-------

---

Company Name	Business Telephone Number
--------------	---------------------------

---

Business Address	City, State, Zip Code
------------------	-----------------------



Department of  
Environmental  
Conservation

## Owner/Operator Certification Form

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

Project/Site Name: PROPOSED SITE PLAN for the TERRA GROUP

eNOI Submission Number: HQ8-1K0V-2XS92

eNOI Submitted by:  Owner/Operator  SWPPP Preparer  Other

#### **Certification Statement - Owner/Operator**

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

Owner/Operator First Name

M.I. Last Name

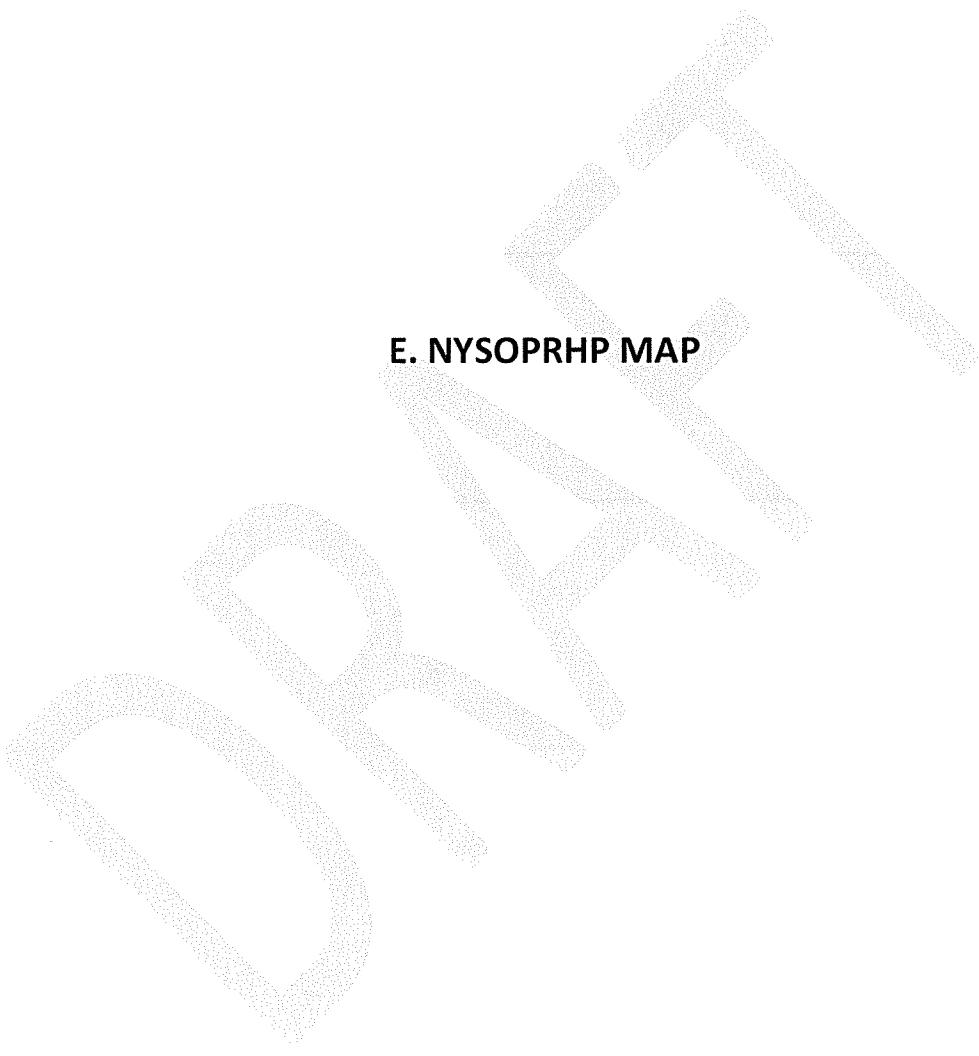
\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

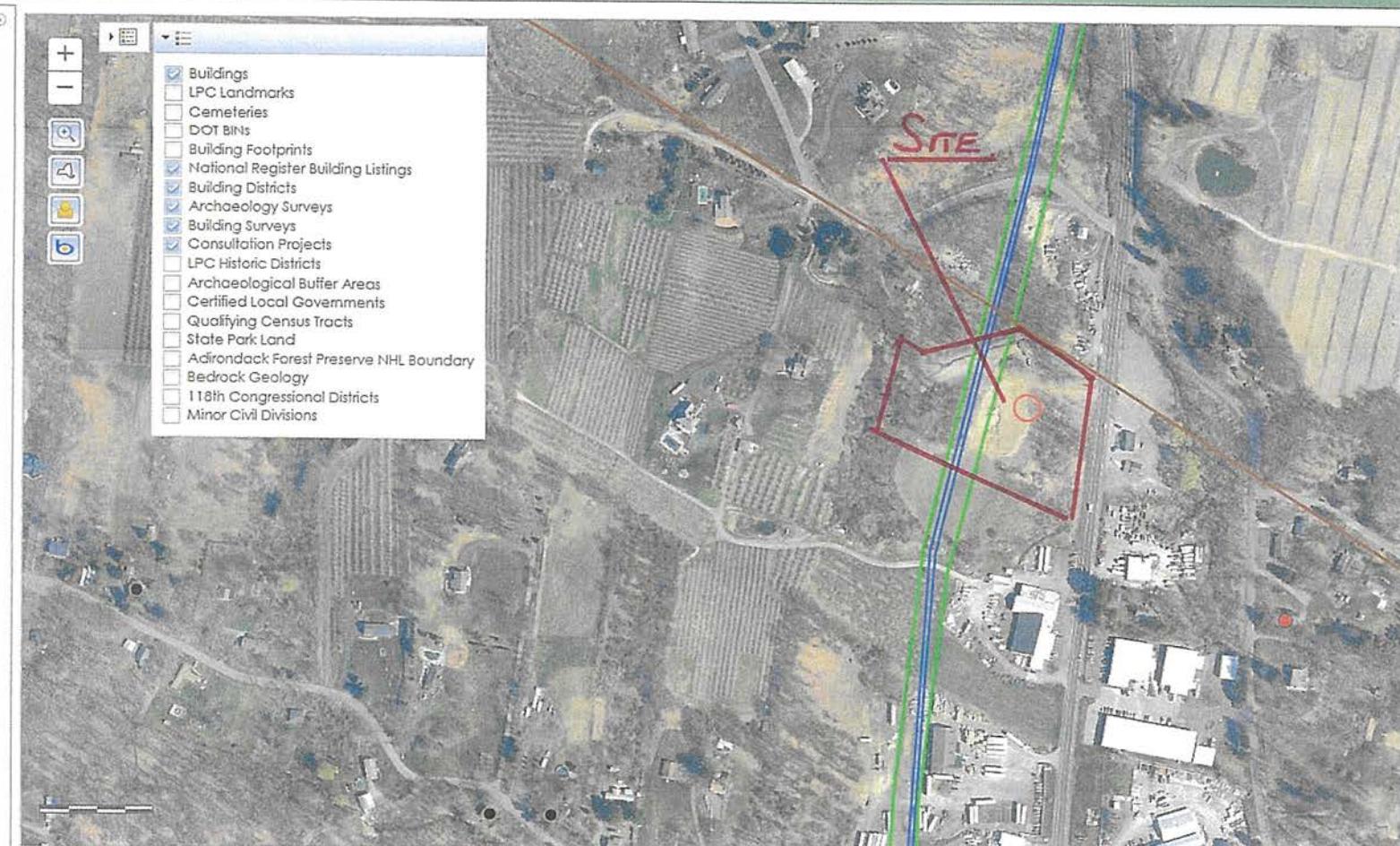
## **CONSTRUCTION ACTIVITY FORM**

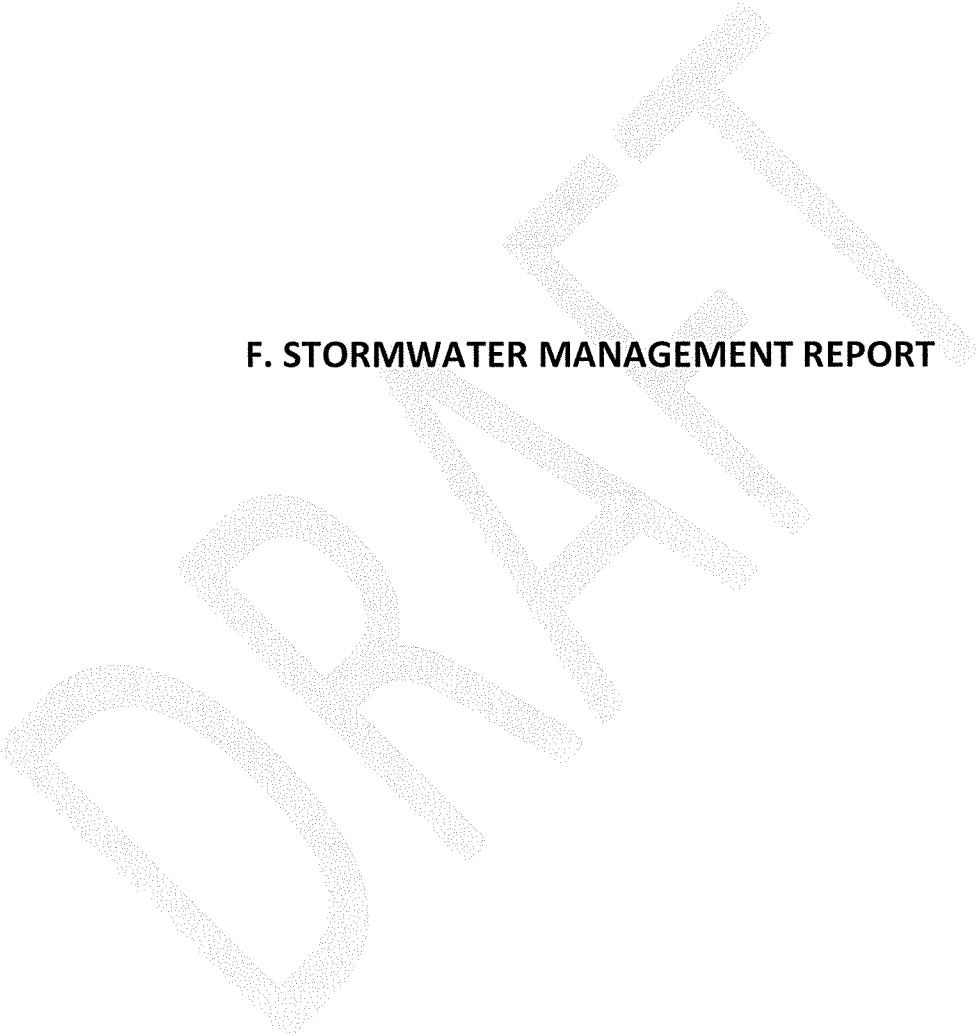
**NOTE:** The contractor is responsible for maintaining an accurate and complete log of construction activities, including, but not limited to, commencement of stabilization, major grading activities, timeframes when construction ceases on a portion of site (temporary or permanent) until the Notice of Termination (NOT) is filed.

## **MAJOR STABILIZATION AND GRADING ACTIVITIES**



**E. NYSOPRHP MAP**





## **F. STORMWATER MANAGEMENT REPORT**

# Stormwater Management Report

**TerraFlex 101, LLC**

**Proposed Office/Warehouse Development**

**NYS Route 9W  
Town of Marlborough  
Ulster County, NY**

**January 23, 2024**

Prepared by:

Jeffrey A. Econom, P.E.  
48 Loganberry Court, Hopewell Junction, NY 12533  
Phone: (845) 554-8442  
Email: [jaeconom@optonline.net](mailto:jaeconom@optonline.net)

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## **I. Introduction**

TerraFlex 101, LLC is proposing to construct a new Office/Warehouse Facility with 30,984+/- square foot of building (3 buildings) along with associated parking, access drive, and utilities on a 3.5 +/- parcel of land located along the western side NYS Route 9W, 405 feet south of the intersection with Perkinsville Road, in the Town of Marlborough, Ulster County, New York.

The 3.5+/- acre project site is situated on NYS Route 9W as depicted on the site plans prepared by Jeffrey A. Econom, P.E., Consulting Engineer, included as part of this report.

This report will briefly discuss the proposed site development and provide a detailed analysis of the existing and proposed site conditions and the proposed stormwater management system. Hydraulic calculations included in this report were generated for the 1-, 10- and 100- year storm events utilizing the SCS TR-20 and HydroCad Stormwater modeling software.

## **II. Existing Stormwater Conditions Summary:**

The 3.5 +/- acre parcel is currently open grassed land with a small wooded section running along the north and eastern property boundaries.

The proposed project site was analyzed as one watershed with two sub catchment areas designated as Watershed Area E-1A and E-1B. The watersheds have unique flow paths and therefore have been analyzed individually.

The topography of the site is sloped such that stormwater flows from the western side of the property to the east. It then flows offsite under Route 9W to an existing channel and discharges to the Hudson River.

Watershed Area E-1A is the area that drains to the existing drainage channel that runs in an easterly direction along the property line. It is comprised of approximately 0.69 acres of rock and overgrown vegetation. There is a large area from the Perkinsville Road area that drainage to the existing NYSDOT culvert at the northeast corner of the project.

Stormwater from this area travels easterly via overland flow and shallow concentrated flow towards an existing NYSDOT culvert crossing NYS Route 9W, the north eastern edge of the property to the design point 1, (DP-1).

Watershed Area E-1B is comprised of approximately 2.23 acres of both pervious and impervious area that travels in a south easterly direction via overland and shallow concentrated flow towards an existing NYSDOT culvert crossing NYS Route 9W. This area is comprised of both rock (shale) and over-grown vegetation and drains to the existing NYSDOT culvert at the southeast corner of the project.

Stormwater from this area travels easterly via overland flow and shallow concentrated flow towards an existing NYSDOT culvert crossing NYS Route 9W towards an existing drainage ditch along NYS Route 9W, the western edge of the property, where it travels north along the ditch to the design point 2, (DP-2).

The existing watershed area and topography are illustrated on the Existing Watershed Plan included on the next page of this report.

### **III. Proposed Stormwater Conditions Summary:**

The proposed development is designed to mimic the existing drainage patterns and reduce the discharge flow rate from the pre-developed to post- developed condition.

The proposed project site was analyzed as one watershed area with two sub catchments designated as Watershed Area P-1A and P-1B. The watersheds have unique flow paths and therefore have been analyzed individually.

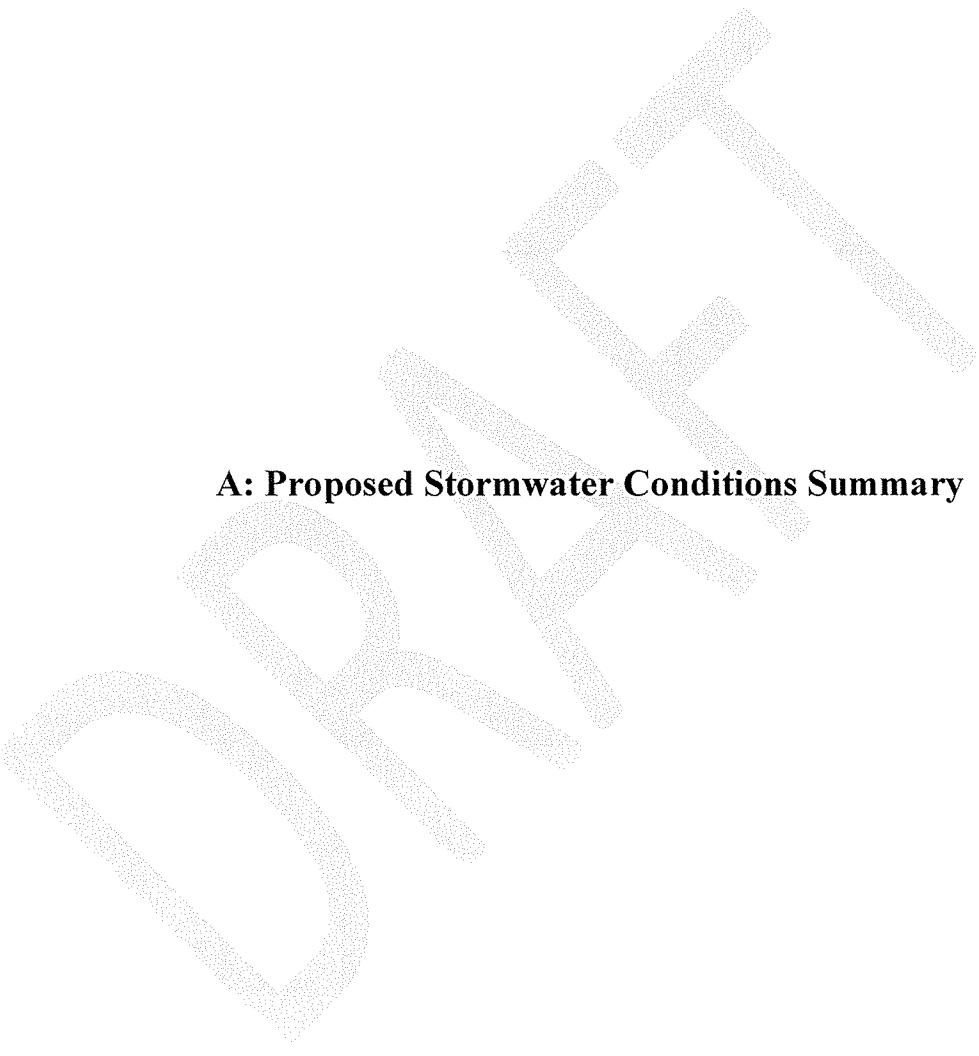
Watershed Area P-1A is approximately 1.0 acres comprised of rock and over-grown vegetation. There is the same large area from the Perkinsville Road area as in Watershed Area E-1A that drainage to the existing NYSDOT culvert at the northeast corner of the project.

Stormwater from this area travels easterly via overland flow and shallow concentrated flow towards an existing NYSDOT culvert crossing NYS Route 9W, the north eastern edge of the property to the design point 1, (DP-1).

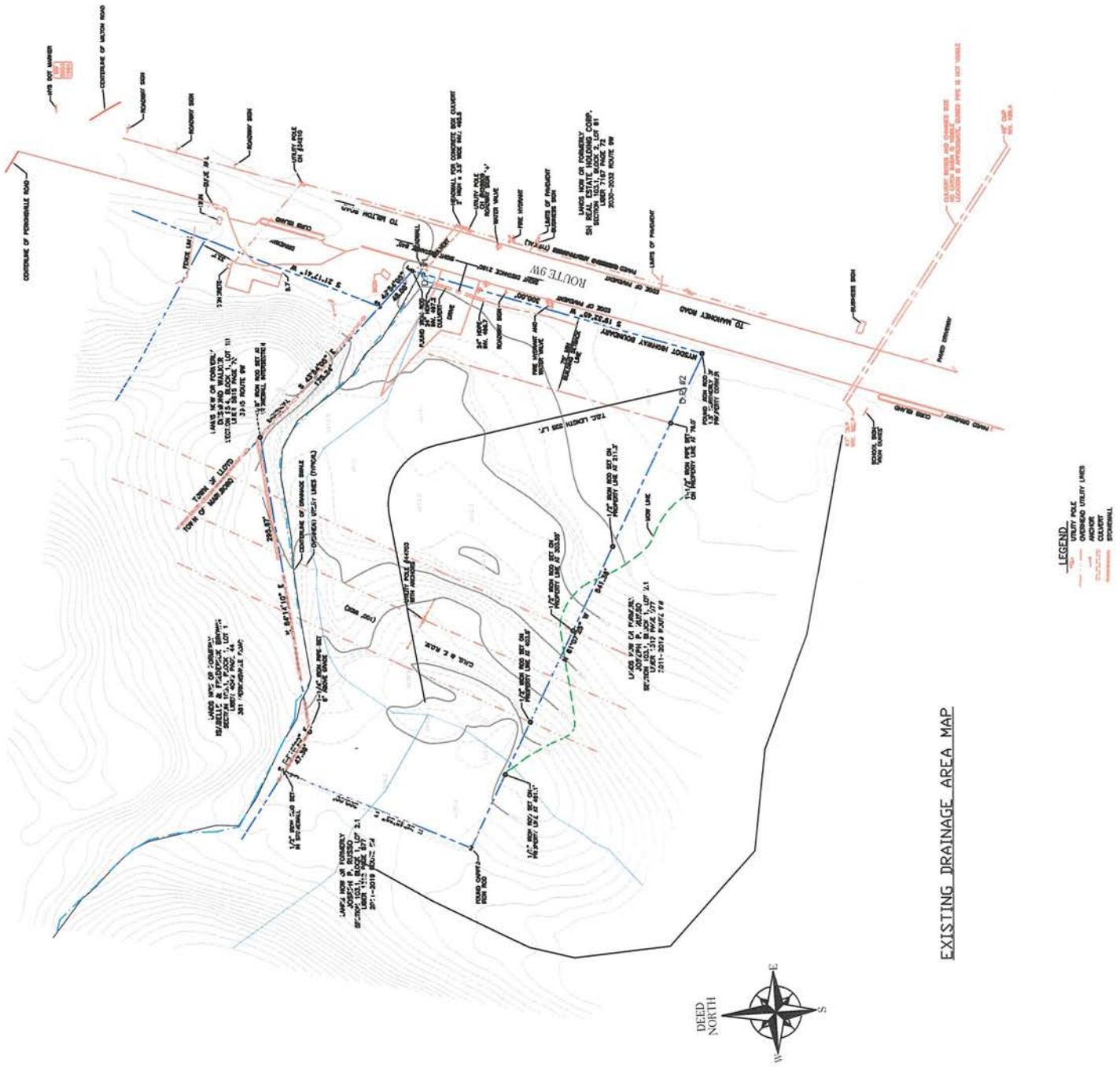
Watershed Area P-1B is approximately 2.52 acres comprised of the access driveway and 3 proposed buildings seeded or sodded greenspaces and existing impervious areas from NYS Route 9W.

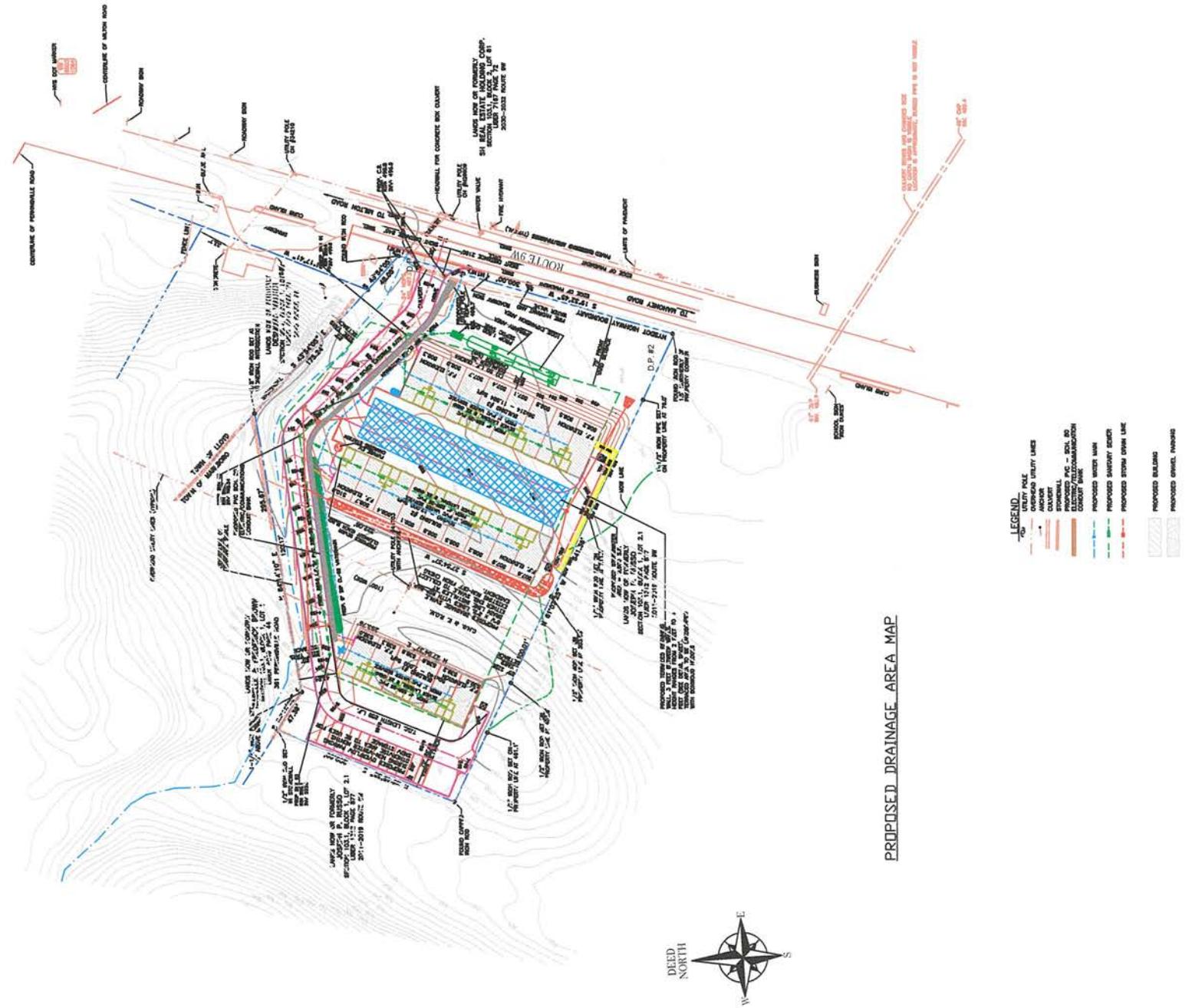
Stormwater from this area travels easterly via overland flow and shallow concentrated flow towards an existing NYSDOT culvert crossing NYS Route 9W towards an existing drainage ditch along NYS Route 9W, the western edge of the property, where it travels north along the ditch to the design point 2, (DP-2).

The proposed watershed area and topography are illustrated on the Proposed Watershed Plan included on the next page of this report.



## **A: Proposed Stormwater Conditions Summary**





## USER INPUTS

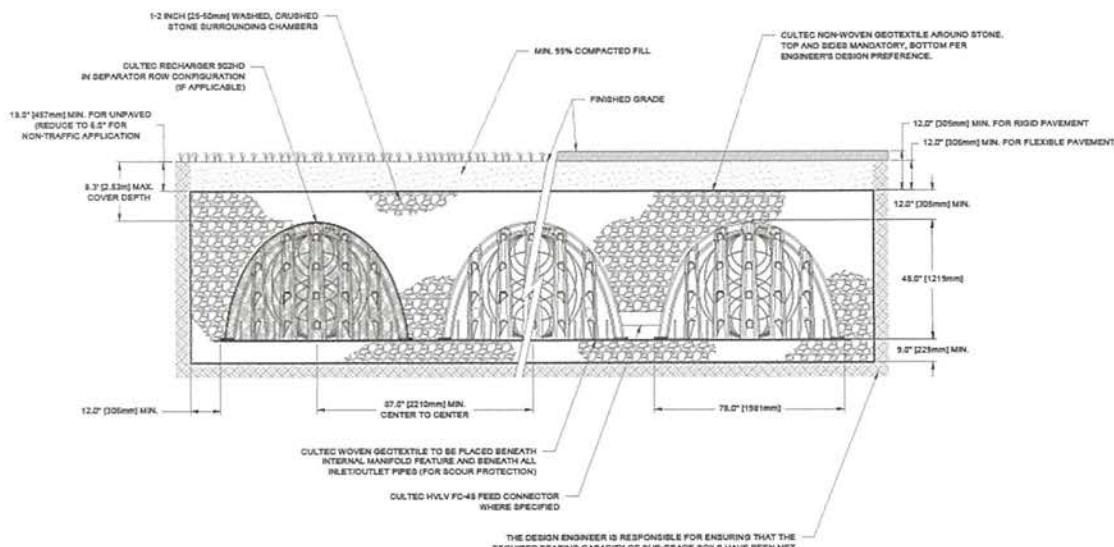
Project Name:	TERRA FLEX - OFFICE/WAREHOUSE
Engineer:	Jeffrey Econom
Project Location:	New York
Measurement Type:	Imperial
Chamber Model:	Recharger 902HD
Required Storage Volume:	18500 cf
Available Length:	225 ft
Available Width:	44 ft
Stone Above Chambers:	12 in
Stone Below Chambers:	9 in
Base Stone Elevation:	498.50 ft
Stone Porosity:	40%
Maximum Allowable Finished Grade	511.55 ft
Minimum Allowable Finished Grade	505.25 ft
Outlet Control Structure:	Yes

## RESULTS

Installed Storage Volume:	18566.82 cf
Storage Volume Per Chamber:	63.47 cf
Chamber Rows:	3
Maximum Length:	222.33 ft
Maximum Width:	23 ft
Approx. Bed Area Required:	5113.67 sf

## SYSTEM COMPONENTS - NOT FOR CONSTRUCTION

Number of Chambers Required:	177
Number of End Caps Required:	6
Number of Feed Connectors Required:	2
Amount of Stone Required:	669 cy
Volume of Excavation (Not Including Fill):	1090 cy
Non-woven Geotextile Required:	2253 sy
Woven Geotextile Required (Beneath Internal Manifold):	51 ft
Woven Geotextile Required (Separator Row):	245 ft
Total Woven Geotextile Required:	296 ft





Click for Metric

Date: 02/02/2025

**PROJECT INFORMATION**

Project Name: TERRA FLEX - OFFICE/WAREHOUSE  
 City: TOWN OF MARLBOROUGH  
 State / Province: NY  
 Country: USA

Chamber Model:	Recharger 902HD	
Number of Rows:	3	units
Total Number of Chambers:	177	units
Stone Void:	40	%
Stone Base:	9	inches
Stone Above Units:	12	inches
Area:	5113.67	ft <sup>2</sup>
Base of Stone Elevation:	498.50	ft
		<b>5113.66 Min. Area Required</b>
Note: Min. Area Required is based on 12" around the system and typ. spacing		

**TERRA FLEX - OFFICE/WAREHOUSE**  
**Recharger 902HD Incremental Storage Volumes**

Height of System	Chamber Volume	Stone Volume	Cumulative Storage Volume	Total Cumulative Storage Volume	Elevation
in	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft
69	0.00	170.46	170.46	18566.82	504.25
68	0.00	170.46	170.46	18396.36	504.17
67	0.00	170.46	170.46	18225.91	504.08
66	0.00	170.46	170.46	18055.45	504.00
65	0.00	170.46	170.46	17885.00	503.92
64	0.00	170.46	170.46	17714.54	503.83
63	0.00	170.46	170.46	17544.09	503.75
62	0.00	170.46	170.46	17373.63	503.67
61	0.00	170.46	170.46	17203.17	503.58
60	0.00	170.46	170.46	17032.72	503.50
59	0.00	170.46	170.46	16862.26	503.42
58	0.00	170.46	170.46	16691.81	503.33
57	13.10	165.22	178.32	16521.35	503.25
56	32.63	157.40	190.03	16343.04	503.17
55	45.67	152.19	197.86	16153.00	503.08
54	78.18	139.18	217.36	15955.15	503.00
53	104.20	128.78	232.98	15737.78	502.92
52	130.28	118.34	248.62	15504.81	502.83
51	143.38	113.10	256.48	15256.18	502.75
50	156.42	107.89	264.31	14999.70	502.67
49	176.01	100.05	276.06	14735.39	502.58
48	176.07	100.03	276.10	14459.33	502.50
47	189.17	94.79	283.96	14183.23	502.42
46	195.72	92.17	287.89	13899.28	502.33
45	202.33	89.52	291.85	13611.39	502.25
44	215.43	84.28	299.71	13319.53	502.17
43	222.04	81.64	303.68	13019.82	502.08
42	228.71	78.97	307.68	12716.14	502.00
41	228.83	78.92	307.75	12408.46	501.92
40	235.44	76.28	311.72	12100.71	501.83
39	241.99	73.66	315.65	11788.99	501.75
38	248.60	71.02	319.62	11473.34	501.67
37	255.21	68.37	323.58	11153.72	501.58
36	255.27	68.35	323.62	10830.14	501.50
35	261.88	65.70	327.58	10506.52	501.42
34	261.94	65.68	327.62	10178.94	501.33
33	268.49	0.00	0.00	0.00	501.25
32	268.61	0.00	0.00	0.00	501.17
31	268.67	0.00	0.00	0.00	501.08
30	275.28	0.00	0.00	0.00	501.00
29	275.34	0.00	0.00	0.00	500.92
28	275.46	0.00	0.00	0.00	500.83

TERRA FLEX - OFFICE/WAREHOUSE					
Recharger 902HD Incremental Storage Volumes					
Height of System	Chamber Volume	Stone Volume	Cumulative Storage Volume	Total Cumulative Storage Volume	Elevation
in	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft
27	282.01	57.65	339.66	7849.48	500.75
26	282.07	57.63	339.70	7509.81	500.67
25	288.62	55.01	343.63	7170.12	500.58
24	288.74	54.96	343.70	6826.49	500.50
23	295.29	52.34	347.63	6482.79	500.42
22	295.35	52.32	347.67	6135.16	500.33
21	295.41	52.29	347.70	5787.49	500.25
20	295.47	52.27	347.74	5439.79	500.17
19	302.08	49.62	351.70	5092.06	500.08
18	302.14	49.60	351.74	4740.35	500.00
17	302.26	49.55	351.81	4388.61	499.92
16	302.32	49.53	351.85	4036.80	499.83
15	308.87	46.91	355.78	3684.95	499.75
14	308.93	46.88	355.81	3329.18	499.67
13	315.42	44.29	359.71	2973.36	499.58
12	315.48	44.26	359.74	2613.65	499.50
11	315.54	44.24	359.78	2253.91	499.42
10	315.96	44.07	360.03	1894.13	499.33
9	0.00	170.46	170.46	1534.10	499.25
8	0.00	170.46	170.46	1363.64	499.17
7	0.00	170.46	170.46	1193.19	499.08
6	0.00	170.46	170.46	1022.73	499.00
5	0.00	170.46	170.46	852.28	498.92
4	0.00	170.46	170.46	681.82	498.83
3	0.00	170.46	170.46	511.37	498.75
2	0.00	170.46	170.46	340.91	498.67
1	0.00	170.46	170.46	170.46	498.58
0	0.00	0.00	0.00	0.00	498.50

<b>TERRA FLEX - OFFICE/WAREHOUSE</b> Recharger 902HD Incremental Storage Volumes					
Height of System	Chamber Volume	Stone Volume	Cumulative Storage Volume	Total Cumulative Storage Volume	Elevation
in	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft <sup>3</sup>	ft



# CULTEC RECHARGER® 902HD STORMWATER CHAMBER

The Recharger® 902HD is a 48" (1219 mm) tall, high capacity chamber. Typically when using this model, fewer chambers are required resulting in less labor and a smaller installation area. The Recharger® 902HD has the side portal internal manifold feature. HVLV® FC-48 Feed Connectors are inserted into the side portals to create the internal manifold.

Recharger 902HD Chamber	
Size (L x W x H)	4.25' x 78" x 48" 1.30 m x 1981 mm x 1219 mm
Installed Length	3.67' 1.12 m
Length Adjustment per Row - with two end caps installed	1.03' 0.31 m
Length Adjustment per Row - when not using end caps	0.58' 0.18 m
Chamber Storage	17.31 ft <sup>3</sup> /ft 1.61 m <sup>3</sup> /m 63.47 ft <sup>3</sup> /unit 1.80 m <sup>3</sup> /unit
Min. Installed Storage	27.06 ft <sup>3</sup> /ft 2.53 m <sup>3</sup> /m 99.28 ft <sup>3</sup> /unit 2.81 m <sup>3</sup> /unit
Min. Area Required	26.58 ft <sup>2</sup> 2.47 m <sup>2</sup>
Chamber Weight	83.0 lbs 37.65 kg
Shipping	15 chambers/skid 1,370 lbs/skid 14 skids/48' flatbed
Min. Center-to-Center Spacing	7.25' 2.21 m
Max. Allowable Cover	8.3' 2.53 m
Max. Allowable O.D. in Side Portal	10" HDPE, 12" PVC 250 mm HDPE, 300 mm PVC
Compatible Feed Connector	HVLV FC-48 Feed Connector

Calculations are based on installed chamber length.

All above values are nominal.

Includes 12" (305 mm) stone above crown of chamber and typical stone surround at 7.25' (2.21 m) center-to-center spacing and stone foundation depth as listed in table. Stone void calculated at 40%.

	Stone Foundation Depth		
	9"	12"	18"
	229 mm	305 mm	457 mm
Chamber and Stone Storage Per Chamber	99.28 ft <sup>3</sup> 2.81 m <sup>3</sup>	101.94 ft <sup>3</sup> 2.89 m <sup>3</sup>	107.26 ft <sup>3</sup> 3.04 m <sup>3</sup>
Min. Effective Depth	5.75' 1.75 m	6.00' 1.83 m	6.5' 1.98 m
Stone Required Per Chamber	3.32 yd <sup>3</sup> 2.54 m <sup>3</sup>	3.56 yd <sup>3</sup> 2.72 m <sup>3</sup>	4.05 yd <sup>3</sup> 3.06 m <sup>3</sup>



Recharger 902HD Chamber



Recharger 902HD End Cap

## Recharger 902HD End Cap

Size (L x W x H)	28.0" x 78.0" x 48.5" 711 mm x 1982 mm x 1231 mm
Installed Length	24.0' 610 mm
End Cap Storage	9.01 ft <sup>3</sup> /ft 0.83 m <sup>3</sup> /m 18.02 ft <sup>3</sup> /unit 0.51 m <sup>3</sup> /unit
Min. Installed Storage	22.08 ft <sup>3</sup> /ft 2.05 m <sup>3</sup> /m 44.16 ft <sup>3</sup> /unit 1.25 m <sup>3</sup> /unit
End Cap Weight	46.0 lbs 20.86 kg
Shipping	10 end caps/skid 540 lbs/skid 14 skids/48' flatbed
Max. Inlet Opening in End Cap	30" HDPE, 36" PVC 750 mm HDPE, 900 mm PVC

Calculations are based on installed chamber length.

All above values are nominal.

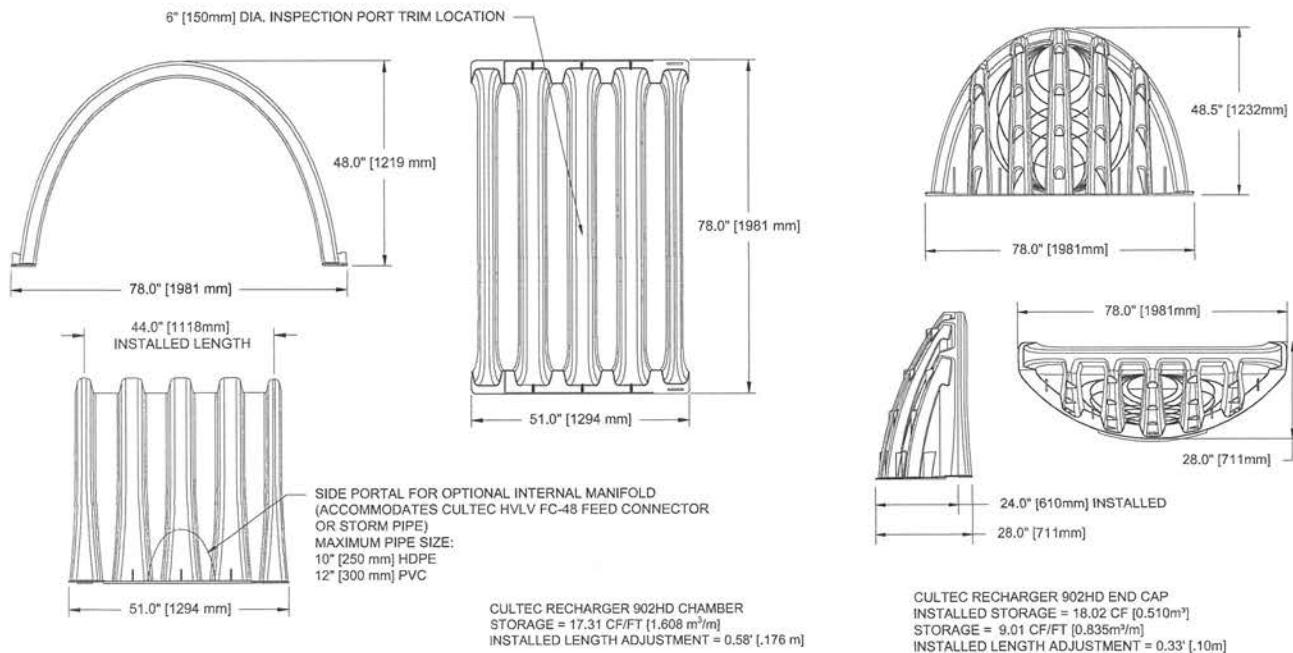
Min. installed storage includes 9" (229 mm) stone base, 12" (305 mm) stone above crown of chamber and typical stone surround at 7.25' (2.21 m) center-to-center spacing.

For more information, contact CULTEC at (203) 775-4416 or visit [www.cultec.com](http://www.cultec.com).

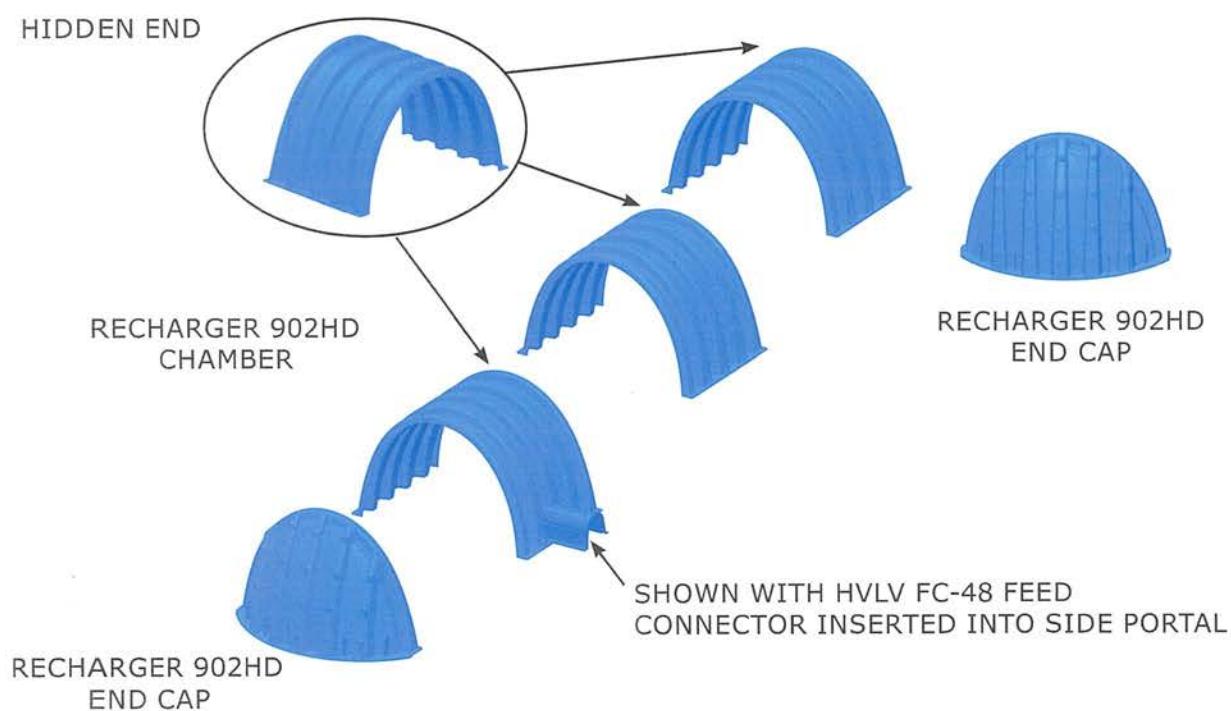


# CULTEC RECHARGER® 902HD STORMWATER CHAMBER

## Three View Drawing

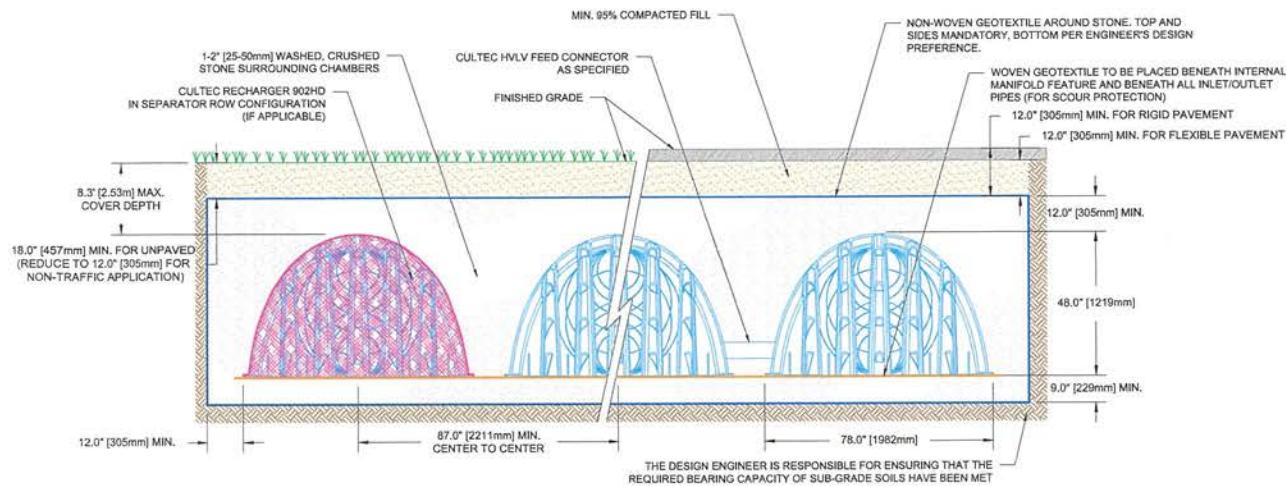


## Typical Interlock Installation



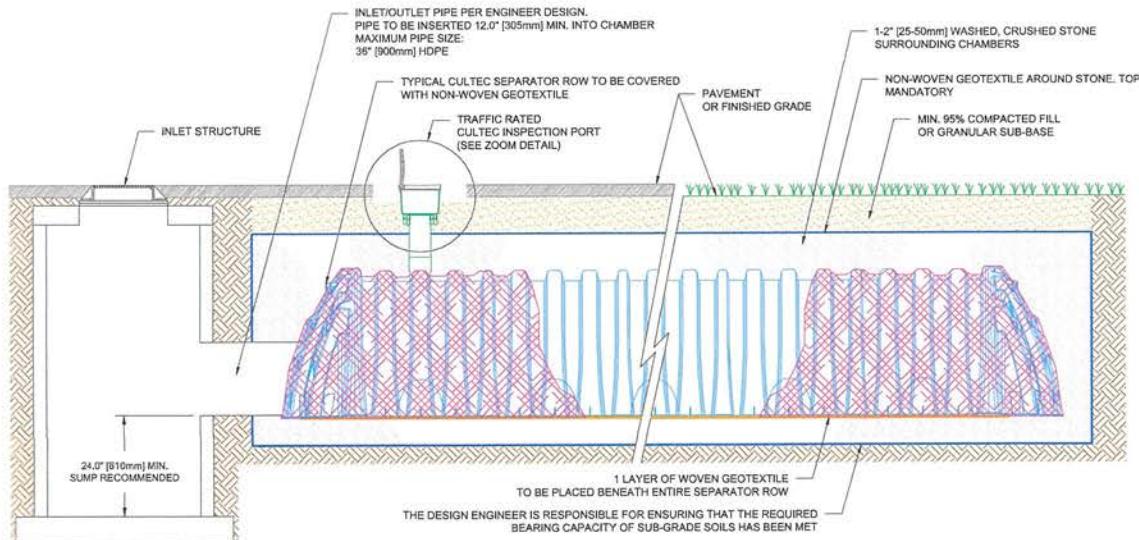
For more information, contact CULTEC at (203) 775-4416 or visit [www.cultec.com](http://www.cultec.com).

## Typical Cross Section for Traffic Application


**NOTES:**

1. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS." THE LOAD CONFIGURATION SHALL INCLUDE:
  - 1.a. INSTANTANEOUS AASHTO DESIGN TRUCK LIVE LOAD AT MINIMUM COVER
  - 1.b. MAXIMUM PERMANENT (50-YEAR) COVER LOAD
  - 1.c. 1-WEEK PARKED AASHTO DESIGN TRUCK LOAD
2. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
  - 3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
  - 3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
  - 3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95

## Typical Profile View for Traffic Application


**NOTES:**

1. THE CHAMBERS SHALL BE DESIGNED AND TESTED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS." THE LOAD CONFIGURATION SHALL INCLUDE:
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2. THE CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F3430-20 "STANDARD SPECIFICATION FOR CELLULAR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE INSTALLED CHAMBER SYSTEM SHALL PROVIDE RESISTANCE TO THE LOADS AND LOAD FACTORS AS DEFINED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS SECTION 12.12, WHEN INSTALLED ACCORDING TO CULTEC'S RECOMMENDED INSTALLATION INSTRUCTIONS. THE STRUCTURAL DESIGN OF THE CHAMBERS SHALL INCLUDE THE FOLLOWING:
  - 3.a. THE CREEP MODULUS SHALL BE 50-YEAR AS SPECIFIED IN ASTM F3430
  - 3.b. THE MINIMUM SAFETY FACTOR FOR LIVE LOADS SHALL BE 1.75
  - 3.c. THE MINIMUM SAFETY FACTOR FOR DEAD LOADS SHALL BE 1.95



# CULTEC RECHARGER® 902HD STORMWATER CHAMBER

## Recharger® 902HD Bare Chamber Storage Volumes

Elevation	in.	mm	Incremental Storage Volume			Cumulative Storage	
			ft <sup>3</sup> /ft	m <sup>3</sup> /m	ft <sup>3</sup>	m <sup>3</sup>	ft <sup>3</sup>
48	1219	0.020	0.002	0.073	0.002	63,470	1.797
47	1194	0.050	0.005	0.183	0.005	63,397	1.795
46	1168	0.070	0.007	0.257	0.007	63,213	1.790
45	1143	0.120	0.011	0.440	0.012	62,957	1.783
44	1118	0.160	0.015	0.587	0.017	62,517	1.770
43	1092	0.200	0.019	0.733	0.021	61,930	1.754
42	1067	0.220	0.020	0.807	0.023	61,197	1.733
41	1041	0.240	0.022	0.880	0.025	60,390	1.710
40	1016	0.270	0.025	0.990	0.028	59,510	1.685
39	991	0.270	0.025	0.990	0.028	58,520	1.657
38	965	0.290	0.027	1.063	0.030	57,530	1.629
37	940	0.300	0.028	1.100	0.031	56,467	1.599
36	914	0.310	0.029	1.137	0.032	55,367	1.568
35	889	0.330	0.031	1.210	0.034	54,230	1.536
34	864	0.340	0.032	1.247	0.035	53,020	1.502
33	838	0.350	0.033	1.283	0.036	51,773	1.466
32	813	0.350	0.033	1.283	0.036	50,490	1.430
31	787	0.360	0.033	1.320	0.037	49,207	1.394
30	762	0.370	0.034	1.357	0.038	47,887	1.356
29	737	0.380	0.035	1.393	0.039	46,530	1.318
28	711	0.390	0.036	1.430	0.040	45,137	1.278
27	686	0.390	0.036	1.430	0.040	43,707	1.238
26	660	0.400	0.037	1.467	0.042	42,277	1.197
25	635	0.400	0.037	1.467	0.042	40,810	1.156
24	610	0.410	0.038	1.503	0.043	39,343	1.114
23	584	0.410	0.038	1.503	0.043	37,840	1.072
22	559	0.410	0.038	1.503	0.043	36,337	1.029
21	533	0.420	0.039	1.540	0.044	34,833	0.986
20	508	0.420	0.039	1.540	0.044	33,293	0.943
19	483	0.420	0.039	1.540	0.044	31,753	0.899
18	457	0.430	0.040	1.577	0.045	30,213	0.856
17	432	0.430	0.040	1.577	0.045	28,637	0.811
16	406	0.440	0.041	1.613	0.046	27,060	0.766
15	381	0.440	0.041	1.613	0.046	25,447	0.721
14	356	0.450	0.042	1.650	0.047	23,833	0.675
13	330	0.450	0.042	1.650	0.047	22,183	0.628
12	305	0.450	0.042	1.650	0.047	20,533	0.582
11	279	0.450	0.042	1.650	0.047	18,883	0.535
10	254	0.460	0.043	1.687	0.048	17,233	0.488
9	229	0.460	0.043	1.687	0.048	15,547	0.440
8	203	0.460	0.043	1.687	0.048	13,860	0.393
7	178	0.460	0.043	1.687	0.048	12,173	0.345
6	152	0.470	0.044	1.723	0.049	10,487	0.297
5	127	0.470	0.044	1.723	0.049	8,763	0.248
4	102	0.480	0.045	1.760	0.050	7,040	0.199
3	76	0.480	0.045	1.760	0.050	5,280	0.150
2	51	0.480	0.045	1.760	0.050	3,520	0.100
1	25	0.480	0.045	1.760	0.050	1,760	0.050
<b>Total</b>		<b>17,310</b>	<b>1,608</b>	<b>63,470</b>	<b>1,797</b>	<b>63,470</b>	<b>1,797</b>

Calculations are based on installed chamber length of 3.67' (1.12 m).

## Recharger® 902HD Bare End Cap Storage Volumes

Elevation	in.	mm	Incremental Storage Volume			Cumulative Storage	
			ft <sup>3</sup> /ft	m <sup>3</sup> /m	ft <sup>3</sup>	m <sup>3</sup>	ft <sup>3</sup>
48	1219	0.010	0.001	0.020	0.0006	18,020	0.5103
47	1194	0.015	0.001	0.030	0.0008	18,000	0.5097
46	1168	0.020	0.002	0.040	0.0011	17,970	0.5088
45	1143	0.025	0.002	0.050	0.0014	17,930	0.5077
44	1118	0.030	0.003	0.060	0.0017	17,880	0.5063
43	1092	0.040	0.004	0.080	0.0023	17,820	0.5046
42	1067	0.050	0.005	0.100	0.0028	17,740	0.5023
41	1041	0.055	0.005	0.110	0.0031	17,640	0.4995
40	1016	0.065	0.006	0.130	0.0037	17,530	0.4964
39	991	0.070	0.007	0.140	0.0040	17,400	0.4927
38	965	0.080	0.007	0.160	0.0045	17,260	0.4887
37	940	0.085	0.008	0.170	0.0048	17,100	0.4842
36	914	0.095	0.009	0.190	0.0054	16,930	0.4794
35	889	0.105	0.010	0.210	0.0059	16,740	0.4740
34	864	0.115	0.011	0.230	0.0065	16,530	0.4681
33	838	0.130	0.012	0.260	0.0074	16,300	0.4615
32	813	0.140	0.013	0.280	0.0079	16,040	0.4542
31	787	0.150	0.014	0.300	0.0085	15,760	0.4463
30	762	0.155	0.014	0.310	0.0088	15,460	0.4378
29	737	0.165	0.015	0.330	0.0093	15,150	0.4290
28	711	0.175	0.016	0.350	0.0099	14,820	0.4196
27	686	0.180	0.017	0.360	0.0102	14,470	0.4097
26	660	0.190	0.018	0.380	0.0108	14,110	0.3995
25	635	0.195	0.018	0.390	0.0110	13,730	0.3888
24	610	0.200	0.019	0.400	0.0113	13,340	0.3777
23	584	0.210	0.020	0.420	0.0119	12,940	0.3664
22	559	0.215	0.020	0.430	0.0122	12,520	0.3545
21	533	0.225	0.021	0.450	0.0127	12,090	0.3423
20	508	0.230	0.021	0.460	0.0130	11,640	0.3296
19	483	0.240	0.022	0.480	0.0136	11,180	0.3166
18	457	0.245	0.023	0.490	0.0139	10,700	0.3030
17	432	0.250	0.023	0.500	0.0142	10,210	0.2891
16	406	0.255	0.024	0.510	0.0144	9,710	0.2749
15	381	0.265	0.025	0.530	0.0150	9,200	0.2605
14	356	0.270	0.025	0.540	0.0153	8,670	0.2455
13	330	0.275	0.026	0.550	0.0156	8,130	0.2302
12	305	0.280	0.026	0.560	0.0159	7,580	0.2146
11	279	0.285	0.026	0.570	0.0161	7,020	0.1988
10	254	0.295	0.027	0.590	0.0167	6,450	0.1826
9	229	0.300	0.028	0.600	0.0170	5,860	0.1659
8	203	0.310	0.029	0.620	0.0176	5,260	0.1489
7	178	0.315	0.029	0.630	0.0178	4,640	0.1314
6	152	0.320	0.030	0.640	0.0181	4,010	0.1135
5	127	0.325	0.030	0.650	0.0184	3,370	0.0954
4	102	0.325	0.030	0.650	0.0184	2,720	0.0770
3	76	0.330	0.031	0.660	0.0187	2,070	0.0586
2	51	0.335	0.031	0.670	0.0190	1,410	0.0399
1	25	0.370	0.034	0.740	0.0210	0.740	0.0210
<b>Total</b>		<b>9,010</b>	<b>0,837</b>	<b>18,020</b>	<b>0,510</b>	<b>18,020</b>	<b>0,5103</b>

Calculations are based on installed chamber length of 2' (0.61 m).

For more information, contact CULTEC at (203) 775-4416 or visit [www.cultec.com](http://www.cultec.com).



## CULTEC Recharger® 902HD Specifications

### GENERAL

CULTEC Recharger® 902HD chambers are designed for underground stormwater management. The chambers may be used for retention, recharging, detention or controlling the flow of on-site stormwater runoff.

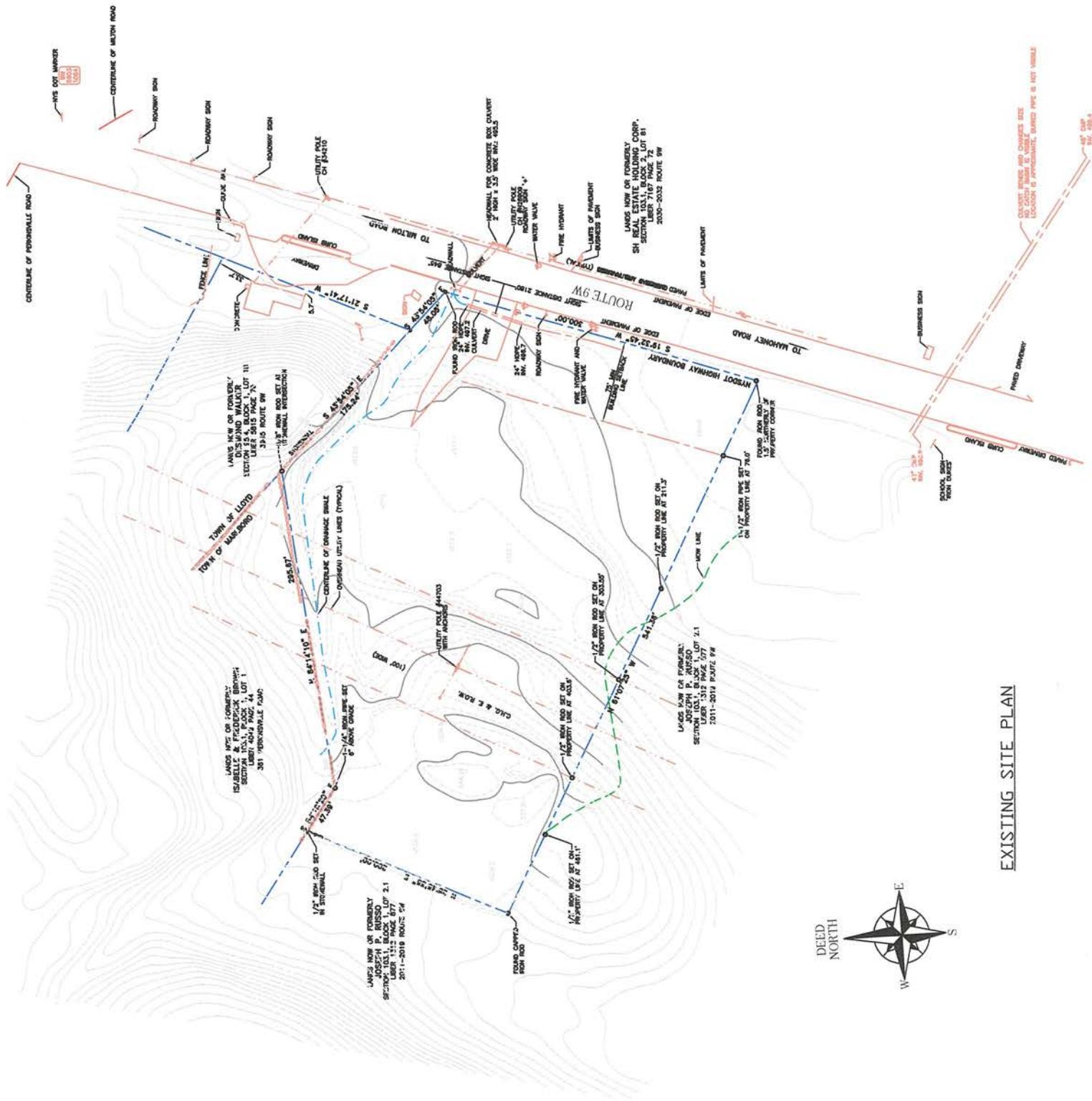
### CHAMBER PARAMETERS

1. The chambers shall be manufactured in the U.S.A. by CULTEC of Brookfield, CT (cultec.com, 203-775-4416).
2. The chambers shall be designed and tested in accordance with ASTM F2787 "Standard Practice for Structural Design of Thermoplastic Corrugated Wall Stormwater Collection Chambers". The load configuration shall include:
  - a. Instantaneous AASHTO Design Truck live load at minimum cover
  - b. Maximum permanent (50-year) cover load
  - c. 1-week parked AASHTO design truck load
3. The chambers shall meet the requirements of ASTM F3430-20 "Standard Specification for Cellular Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers".
4. The installed chamber system shall provide resistance to the loads and load factors as defined in the AASHTO LRFD Bridge Design Specifications Section 12.12, when installed according to CULTEC's recommended installation instructions. The structural design of the chambers shall include the following:
  - a. The Creep Modulus shall be 50-year as specified in ASTM F3430
  - b. The minimum safety factor for live loads shall be 1.75
  - c. The minimum safety factor for dead loads shall be 1.95
5. The chamber shall be structural foam injection molded of blue virgin high molecular weight impact-modified polypropylene.
6. The chamber shall be arched in shape.
7. The chamber shall be open-bottomed.
8. The chamber shall be joined using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings.
9. The nominal chamber dimensions of the CULTEC Recharger® 902HD shall be 48 inches (1219 mm) tall, 78 inches (1981 mm) wide and 4.25 feet (1.30 m) long. The installed length of a joined Recharger 902HD shall be 3.67 feet (1.12 m).
10. Multiple chambers may be connected to form different length rows. Each row shall begin and end with a separately formed CULTEC Recharger® 902HD End Cap. Maximum inlet opening on the end cap is 30 inches (750 mm) HDPE or 36 inches (900 mm) PVC.
11. The chamber shall have two side portals to accept CULTEC HVLV™ FC-48 Feed Connectors to create an internal manifold. Maximum allowable pipe size in the side portal is 10 inches (250 mm) HDPE and 12 inches (300 mm) PVC.
12. The nominal chamber dimensions of the CULTEC HVLV™ FC-48 Feed Connector shall be 12 inches (305 mm) tall, 16 inches (406 mm) wide and 49 inches (1245 mm) long.
13. The nominal storage volume of the Recharger 902HD chamber shall be 17.31 ft³ / ft (1.61 m³ / m) - without stone. The nominal storage volume of a joined Recharger 902HD shall be 63.47 ft³ / unit (1.80 m³ / unit) - without stone.
14. The nominal storage volume of the HVLV™ FC-48 Feed Connector shall be 0.913 ft³ / ft (0.085 m³ / m) - without stone.
15. The Recharger 902HD chamber shall have 5 corrugations.
16. The chamber shall be capable of accepting a 6 inch (150 mm) inspection port opening at the top center of each chamber, centered on the corrugation crest.
17. The chamber shall be manufactured in a facility employing CULTEC's Quality Control and Assurance Procedures.
18. Maximum allowable cover over the top of the chamber shall be 8.3 feet (2.53 m).
19. The installed chamber system shall be structurally designed to provide resistance to live loads as defined by the AASHTO H-20/HL-93 specification when installed according to CULTEC's recommended installation instructions.

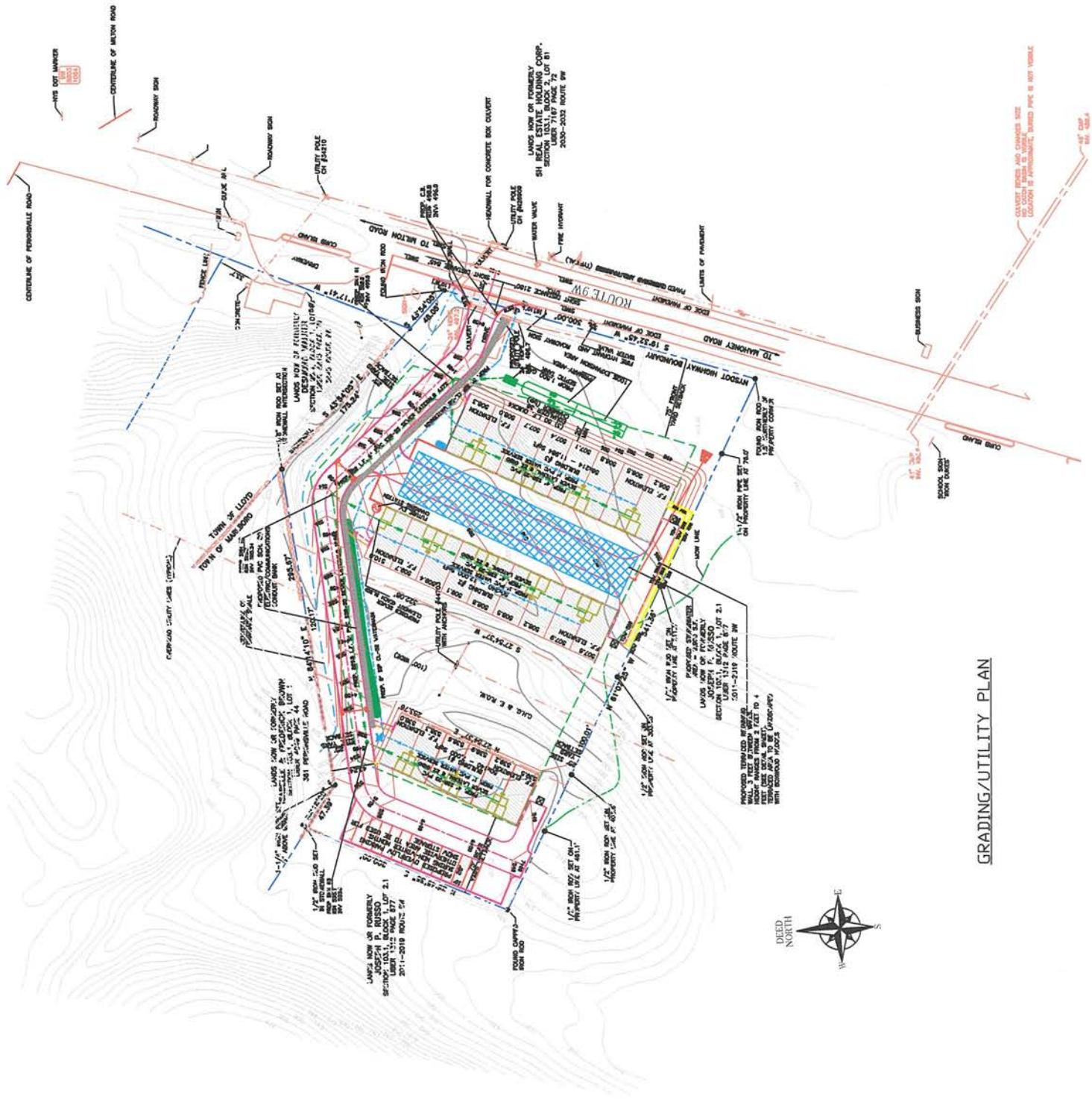
### END CAP PARAMETERS

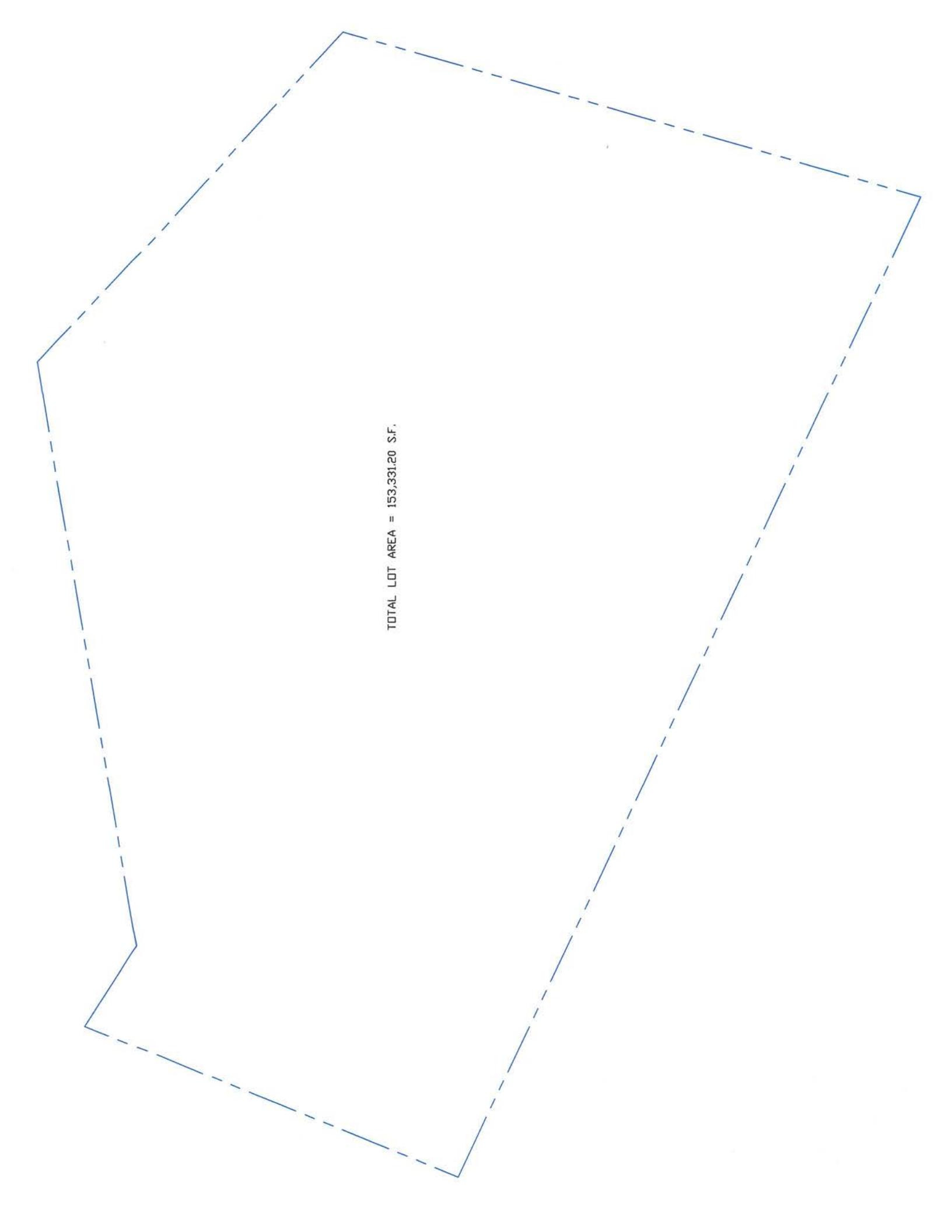
1. The CULTEC Recharger® 902HD End Cap (referred to as 'end cap') shall be manufactured in the U.S.A. by CULTEC of Brookfield, CT (cultec.com, 203-775-4416).
2. The end cap shall be structural foam injection molded of blue virgin high molecular weight impact-modified polypropylene.
3. The end cap shall be arched in shape.
4. The end cap shall be joined at the beginning and end of each row of chambers using an interlocking overlapping rib method. Connections must be fully shouldered overlapping ribs, having no separate couplings.
5. The end cap shall have 5 corrugations.
6. The nominal dimensions of the end cap shall be 48.5 inches (1231 mm) tall, 78 inches (1982 mm) wide and 28.0 inches (711 mm) long. When joined with a Recharger 902HD Chamber, the installed length of the end cap shall be 24.0 inches (610 mm).
7. The nominal storage volume of the end cap shall be 9.01 ft³ / ft (0.83 m³ / m) - without stone. The nominal storage volume of an interlocked end cap shall be 18.02 ft³ / unit (0.51 m³ / unit) - without stone.
8. Maximum inlet opening on the end cap is 30 inches (750 mm) HDPE or 36 inches (900 mm) PVC.
9. The end cap shall provide resistance to the loads and load factors as defined in the AASHTO LRFD Bridge Design Specifications Section 12.12.

**B: Proposed Watershed Plan**



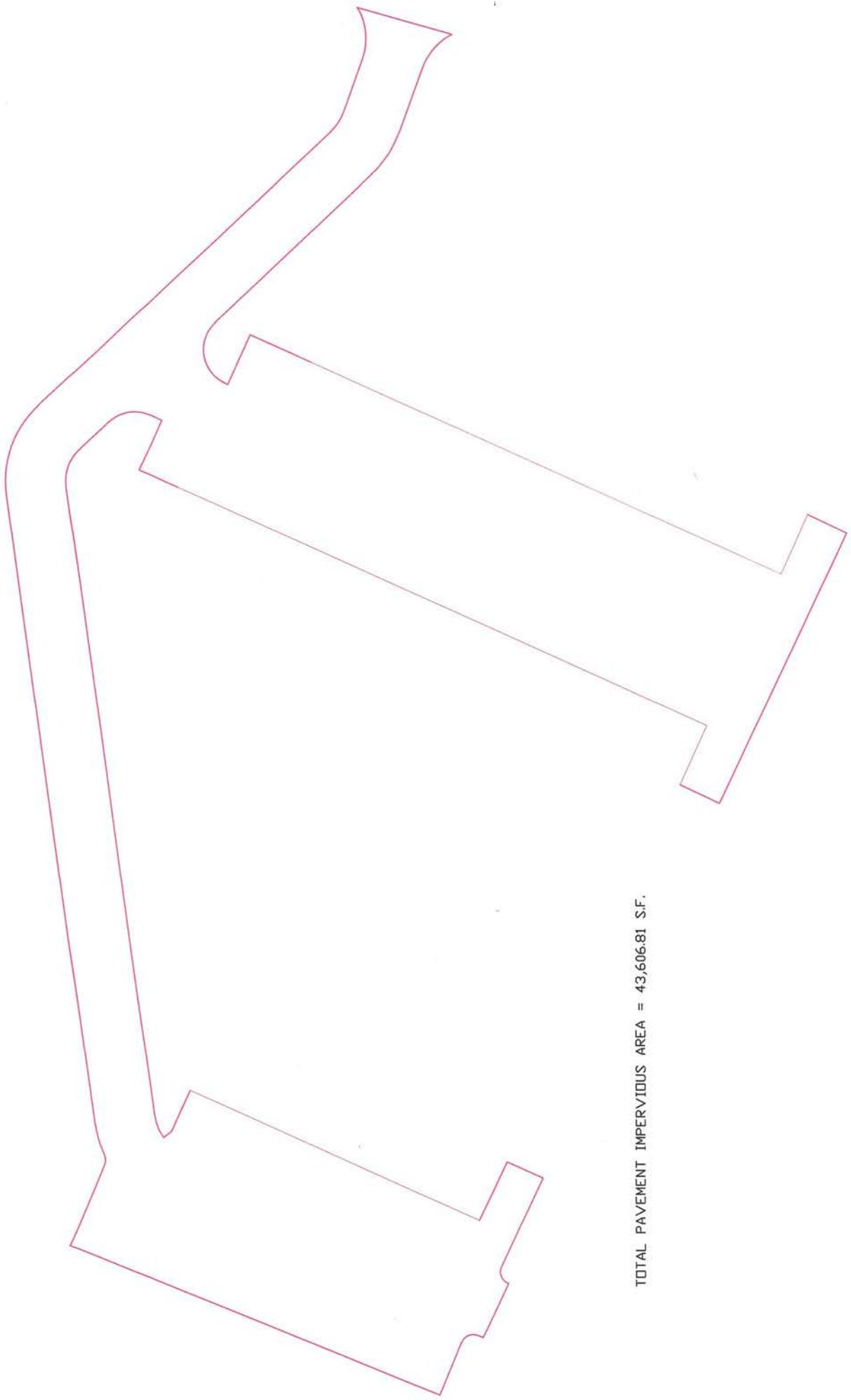
## EXISTING SITE PLAN





TOTAL LOT AREA = 153,331.20 SF.

CHE&G EASEMENT  
AREA= 28,794.11 S.F. (0.66 AC)



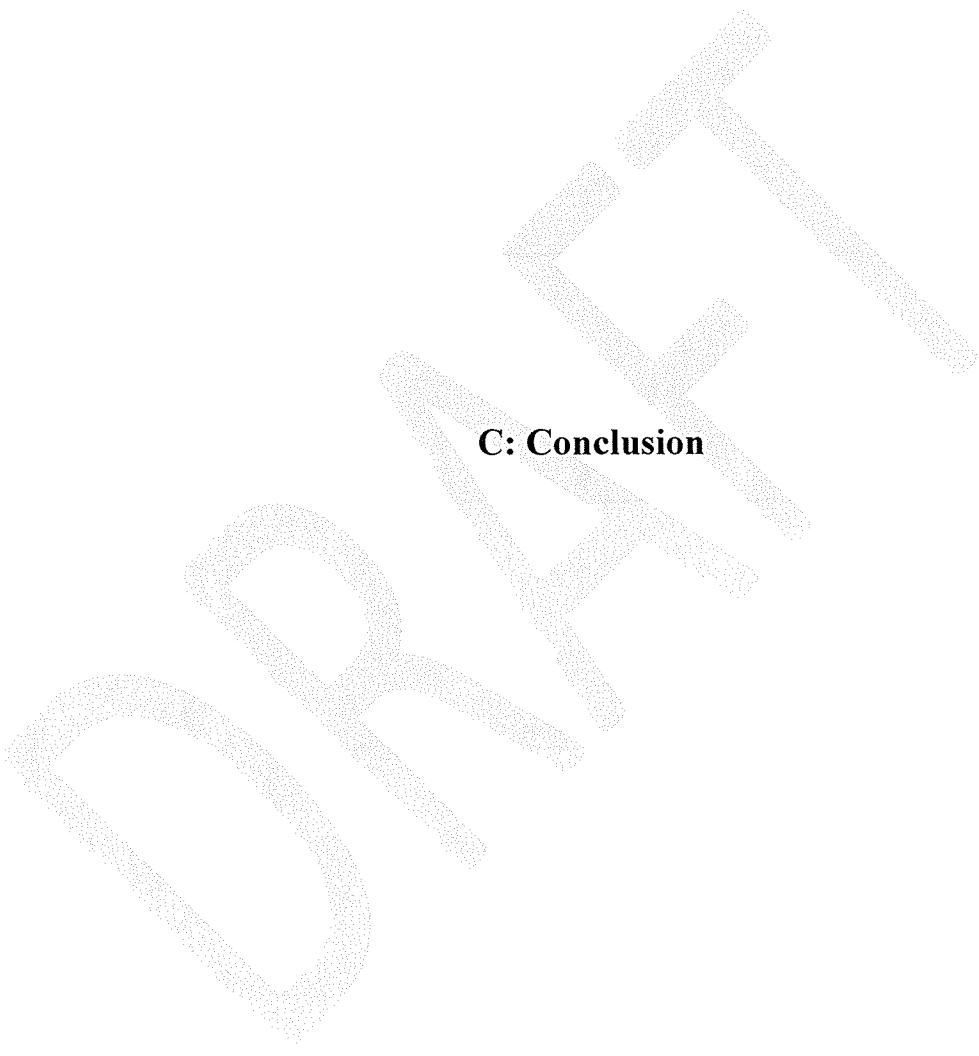
TOTAL PAVEMENT IMPERVIOUS AREA = 43,606.81 S.F.

TOTAL BUILDING AREA = 30,984.00 S.F.

BUILDING #3 AREA = 11,984 S.F.

BUILDING #2 AREA = 12,000 S.F.

BUILDING #1 AREA = 7,000 S.F.



## C: Conclusion

## **Conclusion:**

The proposed development has been designed to release stormwater at a rate not to exceed pre-development conditions for each storm event. The facility is designed to provide stormwater detention storage, discharge control and quality treatment.

The stormwater management system is designed to meet the objectives set forth in the NYSDEC Stormwater Management Design Manual. Uniform sizing criteria were calculated as follows:

- A. The 90% Rule Water Quality Volume (WQv) is discharged to infiltration system. The infiltration system has been designed per the requirements set forth by the NYSDEC. WQv calculations and requirements are illustrated on the enclosed detail sheet.
- B. The minimum Runoff Reduction Volume (RRv) requirement has been achieved by providing more than the minimum required RRv of the WQv provided in the proposed infiltration system.
- C. Extreme Storm (Qf) protection was designed to control the peak discharge from the 100-year storm to rates less than the 100-year predevelopment rates by detaining the post development runoff. These calculations can be found in the 100-year storm analysis for each watershed and the total site volume comparison included in the report.

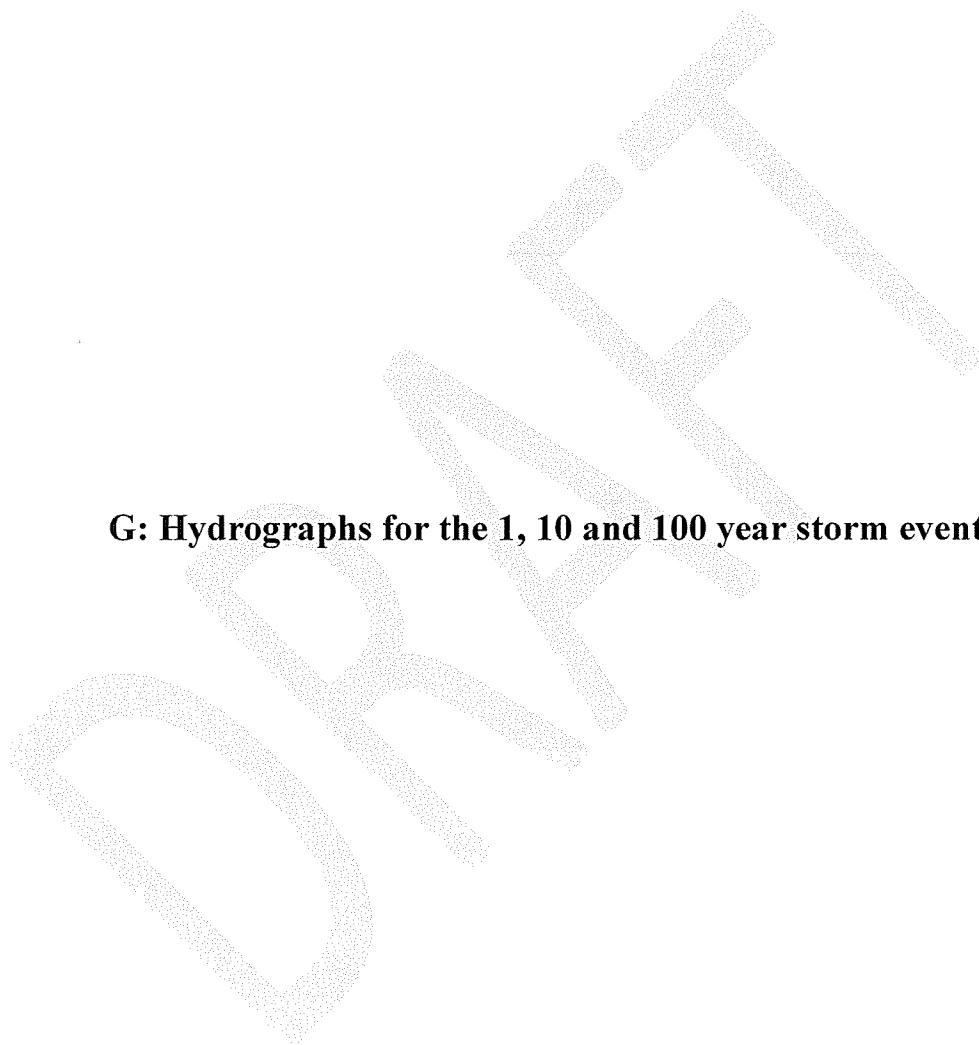
The proposed stormwater management system as designed will serve to mitigate the effects of the development of the parcel, such that the proposed use will not adversely affect any downstream or adjacent properties.

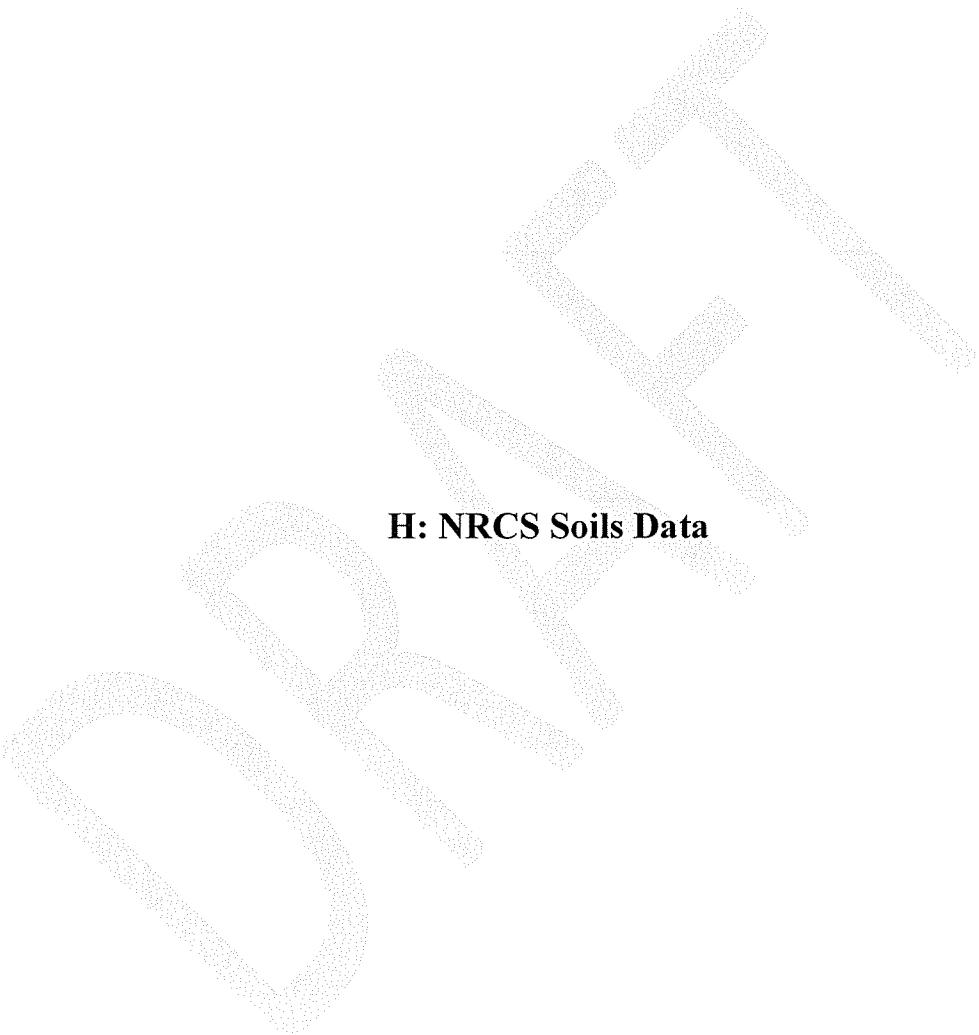
**D: Pre- and Post- Development Flow Rate Comparison Table**

**E: WQv and RRv Calculations**

**F: Pre- and Post- Development Watershed Calculations**

**G: Hydrographs for the 1, 10 and 100 year storm events**





**H: NRCS Soils Data**



United States  
Department of  
Agriculture

**NRCS**

Natural  
Resources  
Conservation  
Service

A product of the National  
Cooperative Soil Survey,  
a joint effort of the United  
States Department of  
Agriculture and other  
Federal agencies, State  
agencies including the  
Agricultural Experiment  
Stations, and local  
participants

# Custom Soil Resource Report for Ulster County, New York



# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units).

Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

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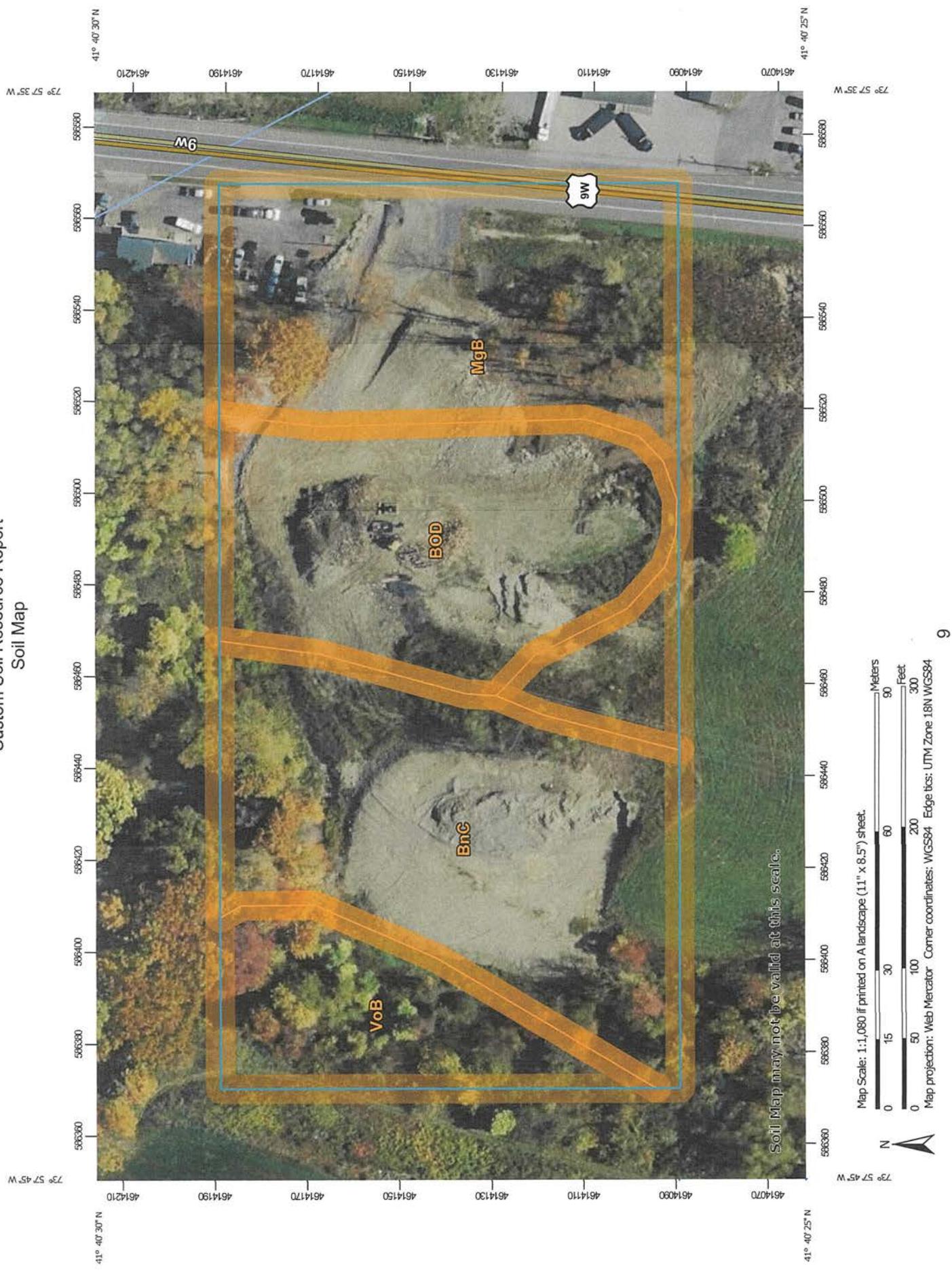
identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## **Soil Map**

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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report  
Soil Map



## MAP LEGEND

<b>Area of Interest (AOI)</b>		Spoil Area
<b>Soils</b>		Stony Spot
		Very Stony Spot
		Wet Spot
		Other
<b>Special Point Features</b>		Special Line Features
Blowout		
Borrow Pit		
Clay Spot		
Closed Depression		
Gravel Pit		
Gravelly Spot		
Landfill		
Lava Flow		
Marsh or swamp		
Mine or Quarry		
Miscellaneous Water		
Perennial Water		
Rock Outcrop		
Saline Spot		
Sandy Spot		
Severely Eroded Spot		
Sinkhole		
Slide or Slip		
Sodic Spot		

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

**Warning: Soil Map may not be valid at this scale.**

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

**Source of Map:** Natural Resources Conservation Service  
**Web Soil Survey URL:** <http://websoilsurvey.nrcs.usda.gov/>  
**Coordinate System:** Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

**Soil Survey Area:** Ulster County, New York  
**Survey Area Data:** Version 23, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

**Date(s) aerial images were photographed:** Oct 21, 2022—Oct 27, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BnC	Bath-Nassau complex, 8 to 25 percent slopes	1.6	31.8%
BOD	Bath-Nassau-Rock outcrop complex, hilly	1.2	24.8%
MgB	Mardin-Nassau complex, 3 to 8 percent slopes	1.5	31.3%
VoB	Volusia gravelly silt loam, 3 to 8 percent slopes	0.6	12.2%
<b>Totals for Area of Interest</b>		<b>4.9</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Ulster County, New York

### BnC—Bath-Nassau complex, 8 to 25 percent slopes

#### Map Unit Setting

*National map unit symbol:* 9xft

*Elevation:* 600 to 1,800 feet

*Mean annual precipitation:* 41 to 62 inches

*Mean annual air temperature:* 41 to 50 degrees F

*Frost-free period:* 110 to 200 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Bath and similar soils:* 50 percent

*Nassau and similar soils:* 30 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Bath

##### Setting

*Landform:* Till plains, hills, drumlinoid ridges

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loamy till derived mainly from gray and brown siltstone, sandstone, and shale

##### Typical profile

*H1 - 0 to 6 inches:* gravelly silt loam

*H2 - 6 to 28 inches:* gravelly loam

*H3 - 28 to 48 inches:* very gravelly loam

*H4 - 48 to 52 inches:* bedrock

##### Properties and qualities

*Slope:* 8 to 25 percent

*Depth to restrictive feature:* 26 to 38 inches to fragipan; 40 to 80 inches to lithic bedrock

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 24 to 37 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 4e

*Hydrologic Soil Group:* C

*Ecological site:* F140XY030NY - Well Drained Dense Till

*Hydric soil rating:* No

## Description of Nassau

### Setting

*Landform:* Till plains, ridges, benches  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Channery loamy till derived mainly from local slate or shale

### Typical profile

*H1 - 0 to 6 inches:* channery silt loam  
*H2 - 6 to 16 inches:* very channery silt loam  
*H3 - 16 to 20 inches:* unweathered bedrock

### Properties and qualities

*Slope:* 8 to 25 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.7 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6e  
*Hydrologic Soil Group:* D  
*Ecological site:* F144AY033MA - Shallow Dry Till Uplands  
*Hydric soil rating:* No

## Minor Components

### Cambridge

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

### Manlius

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

### Volusia

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

### Hudson

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

## **BOD—Bath-Nassau-Rock outcrop complex, hilly**

### **Map Unit Setting**

*National map unit symbol:* 9xfv

*Elevation:* 600 to 1,800 feet

*Mean annual precipitation:* 41 to 62 inches

*Mean annual air temperature:* 41 to 50 degrees F

*Frost-free period:* 110 to 200 days

*Farmland classification:* Not prime farmland

### **Map Unit Composition**

*Bath and similar soils:* 40 percent

*Nassau and similar soils:* 25 percent

*Rock outcrop:* 15 percent

*Minor components:* 20 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

### **Description of Bath**

#### **Setting**

*Landform:* Till plains, hills, drumlinoid ridges

*Landform position (two-dimensional):* Backslope

*Landform position (three-dimensional):* Side slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Loamy till derived mainly from gray and brown siltstone, sandstone, and shale

#### **Typical profile**

*H1 - 0 to 6 inches:* gravelly silt loam

*H2 - 6 to 28 inches:* gravelly loam

*H3 - 28 to 48 inches:* very gravelly loam

*H4 - 48 to 52 inches:* bedrock

#### **Properties and qualities**

*Slope:* 10 to 25 percent

*Depth to restrictive feature:* 26 to 38 inches to fragipan; 40 to 80 inches to lithic bedrock

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.20 in/hr)

*Depth to water table:* About 24 to 37 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Low (about 3.8 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6s

*Hydrologic Soil Group:* C  
*Ecological site:* F140XY030NY - Well Drained Dense Till  
*Hydric soil rating:* No

### Description of Nassau

#### Setting

*Landform:* Till plains, ridges, benches  
*Landform position (two-dimensional):* Backslope  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Channery loamy till derived mainly from local slate or shale

#### Typical profile

*H1 - 0 to 6 inches:* channery silt loam  
*H2 - 6 to 16 inches:* very channery silt loam  
*H3 - 16 to 20 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 10 to 25 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* D  
*Ecological site:* F144AY033MA - Shallow Dry Till Uplands  
*Hydric soil rating:* No

### Description of Rock Outcrop

#### Typical profile

*H1 - 0 to 60 inches:* unweathered bedrock

#### Properties and qualities

*Slope:* 10 to 25 percent  
*Depth to restrictive feature:* 0 inches to lithic bedrock  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 6s  
*Hydric soil rating:* Unranked

### Minor Components

#### Hudson

*Percent of map unit:* 5 percent  
*Hydric soil rating:* No

**Volusia**

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

**Mardin**

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

**Manlius**

*Percent of map unit: 5 percent*  
*Hydric soil rating: No*

**MgB—Mardin-Nassau complex, 3 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol: 2v30k*  
*Elevation: 330 to 2,460 feet*  
*Mean annual precipitation: 31 to 70 inches*  
*Mean annual air temperature: 39 to 52 degrees F*  
*Frost-free period: 105 to 180 days*  
*Farmland classification: Farmland of statewide importance*

**Map Unit Composition**

*Mardin and similar soils: 55 percent*  
*Nassau and similar soils: 25 percent*  
*Minor components: 20 percent*  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Mardin**

**Setting**

*Landform: Mountains, hills*  
*Landform position (two-dimensional): Summit, shoulder*  
*Landform position (three-dimensional): Interfluve, side slope*  
*Down-slope shape: Convex*  
*Across-slope shape: Convex*  
*Parent material: Loamy till*

**Typical profile**

*Ap - 0 to 8 inches: gravelly silt loam*  
*Bw - 8 to 15 inches: gravelly silt loam*  
*E - 15 to 20 inches: gravelly silt loam*  
*Bx - 20 to 72 inches: gravelly silt loam*

**Properties and qualities**

*Slope: 3 to 8 percent*  
*Surface area covered with cobbles, stones or boulders: 0.0 percent*  
*Depth to restrictive feature: 14 to 26 inches to fragipan*

*Drainage class:* Moderately well drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.14 in/hr)  
*Depth to water table:* About 13 to 24 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Low (about 3.6 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* D  
*Ecological site:* F144AY033MA - Shallow Dry Till Uplands  
*Hydric soil rating:* No

#### Description of Nassau

##### Setting

*Landform:* Till plains, ridges, benches  
*Landform position (two-dimensional):* Summit, footslope  
*Landform position (three-dimensional):* Crest, side slope  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Convex, linear  
*Parent material:* Channery loamy till derived mainly from local slate or shale

##### Typical profile

*H1 - 0 to 6 inches:* channery silt loam  
*H2 - 6 to 16 inches:* very channery silt loam  
*H3 - 16 to 20 inches:* unweathered bedrock

##### Properties and qualities

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* 10 to 20 inches to lithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to moderately high (0.06 to 0.57 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 1.7 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3s  
*Hydrologic Soil Group:* D  
*Ecological site:* F144AY033MA - Shallow Dry Till Uplands  
*Hydric soil rating:* No

#### Minor Components

##### Manlius

*Percent of map unit:* 5 percent  
*Landform:* Till plains, ridges, benches  
*Landform position (two-dimensional):* Shoulder, footslope  
*Landform position (three-dimensional):* Crest, side slope  
*Down-slope shape:* Convex, concave  
*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

**Volusia**

*Percent of map unit:* 5 percent

*Landform:* Mountains, hills

*Landform position (two-dimensional):* Foothills, summit

*Landform position (three-dimensional):* Base slope, interfluve, side slope

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Churchville**

*Percent of map unit:* 5 percent

*Landform:* Till plains, lake plains

*Landform position (two-dimensional):* Foothills

*Landform position (three-dimensional):* Base slope, side slope, tread

*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Hydric soil rating:* No

**Schoharie**

*Percent of map unit:* 5 percent

*Landform:* Lake plains

*Landform position (two-dimensional):* Summit, footslope

*Landform position (three-dimensional):* Side slope, tread

*Down-slope shape:* Concave

*Across-slope shape:* Convex, linear

*Hydric soil rating:* No

**VoB—Volusia gravelly silt loam, 3 to 8 percent slopes**

**Map Unit Setting**

*National map unit symbol:* 2srf6

*Elevation:* 330 to 2,460 feet

*Mean annual precipitation:* 31 to 70 inches

*Mean annual air temperature:* 39 to 52 degrees F

*Frost-free period:* 105 to 180 days

*Farmland classification:* Farmland of statewide importance

**Map Unit Composition**

*Volusia and similar soils:* 90 percent

*Minor components:* 10 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Volusia**

**Setting**

*Landform:* Mountains, hills

*Landform position (two-dimensional):* Foothills, summit

*Landform position (three-dimensional):* Base slope, interfluve, side slope

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*Down-slope shape:* Concave

*Across-slope shape:* Linear

*Parent material:* Loamy till derived from interbedded sedimentary rock

### Typical profile

*Ap - 0 to 8 inches:* gravelly silt loam

*Bw - 8 to 15 inches:* gravelly silt loam

*E - 15 to 19 inches:* gravelly silt loam

*Bx - 19 to 58 inches:* gravelly silt loam

*C - 58 to 70 inches:* gravelly silt loam

### Properties and qualities

*Slope:* 3 to 8 percent

*Surface area covered with cobbles, stones or boulders:* 0.0 percent

*Depth to restrictive feature:* 10 to 22 inches to fragipan

*Drainage class:* Somewhat poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.14 in/hr)

*Depth to water table:* About 6 to 18 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 5 percent

*Available water supply, 0 to 60 inches:* Low (about 3.3 inches)

### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 3w

*Hydrologic Soil Group:* D

*Ecological site:* F140XY028NY - Moist Till Upland

*Hydric soil rating:* No

### Minor Components

#### Chippewa

*Percent of map unit:* 5 percent

*Landform:* Depressions

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Base slope

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Hydric soil rating:* Yes

#### Mardin

*Percent of map unit:* 5 percent

*Landform:* Mountains, hills

*Landform position (two-dimensional):* Shoulder, backslope

*Landform position (three-dimensional):* Interfluve, side slope

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Hydric soil rating:* No

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## Custom Soil Resource Report

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2\\_054242](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/scientists/?cid=nrcs142p2_054242)

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. [http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2\\_053624](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/?cid=nrcs142p2_053624)

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210. [http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052290.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052290.pdf)



NOAA Atlas 14, Volume 10, Version 3  
 Location name: Milton, New York, USA\*  
 Latitude: 41.6742°, Longitude: -73.9607°

Elevation: 177 ft\*\*

\* source: ESRI Maps

\*\* source: USGS



## POINT PRECIPITATION FREQUENCY ESTIMATES

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### PF tabular

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.343 (0.260-0.441)	0.405 (0.307-0.521)	0.507 (0.383-0.654)	0.592 (0.444-0.768)	0.708 (0.516-0.951)	0.797 (0.571-1.09)	0.887 (0.618-1.25)	0.983 (0.658-1.42)	1.11 (0.720-1.66)	1.22 (0.770-1.85)
10-min	0.485 (0.368-0.624)	0.574 (0.435-0.738)	0.719 (0.543-0.928)	0.838 (0.630-1.09)	1.00 (0.732-1.35)	1.13 (0.808-1.54)	1.26 (0.876-1.77)	1.39 (0.931-2.01)	1.58 (1.02-2.35)	1.72 (1.09-2.62)
15-min	0.571 (0.433-0.734)	0.675 (0.511-0.869)	0.845 (0.638-1.09)	0.986 (0.741-1.28)	1.18 (0.861-1.58)	1.33 (0.951-1.82)	1.48 (1.03-2.08)	1.64 (1.10-2.37)	1.86 (1.20-2.77)	2.03 (1.28-3.08)
30-min	0.776 (0.588-0.997)	0.916 (0.694-1.18)	1.15 (0.865-1.48)	1.34 (1.00-1.73)	1.60 (1.17-2.15)	1.80 (1.29-2.46)	2.01 (1.40-2.82)	2.22 (1.49-3.21)	2.51 (1.62-3.74)	2.74 (1.74-4.16)
60-min	0.980 (0.743-1.26)	1.16 (0.877-1.49)	1.45 (1.09-1.87)	1.69 (1.27-2.19)	2.02 (1.48-2.72)	2.28 (1.63-3.11)	2.53 (1.76-3.56)	2.80 (1.88-4.05)	3.17 (2.05-4.72)	3.46 (2.19-5.24)
2-hr	1.26 (0.964-1.60)	1.49 (1.14-1.90)	1.86 (1.42-2.38)	2.17 (1.65-2.79)	2.60 (1.92-3.47)	2.92 (2.11-3.98)	3.26 (2.29-4.57)	3.63 (2.44-5.20)	4.14 (2.69-6.13)	4.56 (2.90-6.88)
3-hr	1.44 (1.11-1.83)	1.71 (1.32-2.17)	2.15 (1.65-2.74)	2.51 (1.92-3.22)	3.02 (2.24-4.01)	3.39 (2.47-4.60)	3.79 (2.69-5.32)	4.24 (2.85-6.06)	4.88 (3.17-7.20)	5.41 (3.44-8.13)
6-hr	1.78 (1.38-2.24)	2.14 (1.66-2.69)	2.73 (2.12-3.45)	3.22 (2.48-4.09)	3.90 (2.92-5.16)	4.40 (3.24-5.95)	4.94 (3.55-6.93)	5.58 (3.77-7.92)	6.53 (4.26-9.57)	7.33 (4.68-10.9)
12-hr	2.14 (1.68-2.67)	2.63 (2.06-3.28)	3.42 (2.68-4.28)	4.08 (3.18-5.13)	4.99 (3.78-6.57)	5.66 (4.20-7.62)	6.39 (4.64-8.95)	7.28 (4.94-10.3)	8.63 (5.65-12.6)	9.80 (6.27-14.5)
24-hr	2.52 (2.00-3.11)	3.13 (2.48-3.86)	4.12 (3.26-5.11)	4.94 (3.88-6.16)	6.07 (4.64-7.94)	6.91 (5.18-9.24)	7.82 (5.72-10.9)	8.94 (6.11-12.5)	10.7 (7.01-15.4)	12.2 (7.82-17.9)
2-day	2.92 (2.35-3.58)	3.62 (2.90-4.43)	4.74 (3.79-5.83)	5.68 (4.51-7.01)	6.97 (5.37-9.03)	7.92 (5.98-10.5)	8.96 (6.60-12.4)	10.2 (7.02-14.2)	12.2 (8.05-17.5)	13.9 (8.97-20.4)
3-day	3.20 (2.59-3.90)	3.93 (3.17-4.79)	5.13 (4.12-6.26)	6.12 (4.88-7.51)	7.48 (5.79-9.64)	8.48 (6.44-11.2)	9.57 (7.08-13.2)	10.9 (7.52-15.1)	13.0 (8.59-18.6)	14.8 (9.55-21.6)
4-day	3.44 (2.79-4.17)	4.20 (3.40-5.09)	5.44 (4.39-6.62)	6.46 (5.18-7.91)	7.88 (6.12-10.1)	8.93 (6.79-11.7)	10.1 (7.46-13.8)	11.5 (7.91-15.8)	13.6 (9.01-19.4)	15.5 (9.98-22.5)
7-day	4.05 (3.31-4.87)	4.88 (3.99-5.88)	6.24 (5.07-7.53)	7.36 (5.95-8.94)	8.91 (6.96-11.3)	10.1 (7.69-13.1)	11.3 (8.38-15.3)	12.8 (8.86-17.5)	15.0 (9.98-21.3)	16.9 (11.0-24.5)
10-day	4.66 (3.84-5.58)	5.54 (4.55-6.64)	6.98 (5.71-8.39)	8.18 (6.64-9.88)	9.82 (7.70-12.4)	11.0 (8.47-14.3)	12.4 (9.17-16.6)	13.9 (9.66-18.9)	16.1 (10.8-22.8)	18.1 (11.7-26.0)
20-day	6.63 (5.51-7.86)	7.61 (6.32-9.04)	9.22 (7.63-11.0)	10.6 (8.68-12.6)	12.4 (9.80-15.5)	13.8 (10.6-17.6)	15.2 (11.3-20.1)	16.8 (11.8-22.7)	19.0 (12.7-26.6)	20.8 (13.5-29.7)
30-day	8.29 (6.94-9.78)	9.35 (7.82-11.0)	11.1 (9.23-13.1)	12.5 (10.4-14.9)	14.5 (11.5-18.0)	16.0 (12.4-20.2)	17.6 (13.0-22.9)	19.2 (13.5-25.8)	21.4 (14.3-29.8)	23.0 (15.0-32.8)
45-day	10.4 (8.72-12.1)	11.5 (9.69-13.5)	13.4 (11.2-15.8)	15.0 (12.5-17.8)	17.2 (13.7-21.1)	18.9 (14.6-23.6)	20.5 (15.2-26.5)	22.2 (15.7-29.7)	24.3 (16.4-33.7)	25.9 (16.9-36.7)
60-day	12.1 (10.2-14.1)	13.3 (11.3-15.6)	15.4 (12.9-18.0)	17.1 (14.3-20.1)	19.4 (15.5-23.7)	21.2 (16.5-26.4)	23.0 (17.1-29.5)	24.7 (17.5-33.0)	26.9 (18.2-37.2)	28.4 (18.6-40.2)

<sup>1</sup> Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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### PF graphical

