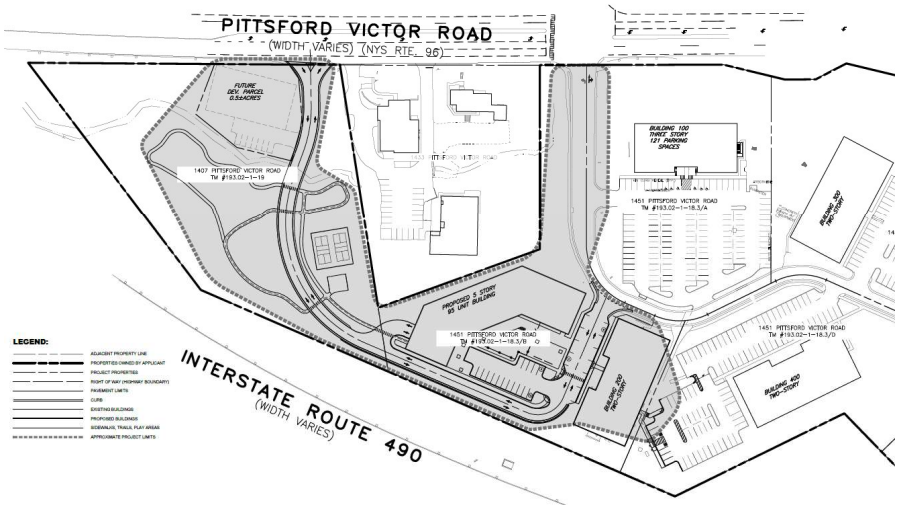
# SWPPP

Stormwater Pollution Prevention Plan




for

## The Place at WillowBrook

1407 & 1451 Pittsford Victor Road

Town of Perinton

Monroe County, State of New York

June 12, 2026

Revised September 11, 2026

Prepared By:

MARATHON ENGINEERING
39 Cascade Dr / Rochester NY 14614 / 585-458-7770
840 Hanshaw Rd, Ste 6 / Ithaca NY 14850 / 607-241-2917

Prepared For:

WB OP LLC
Christa Development
64 Commercial St, Ste 401
Rochester NY 14614

1780-24

# TABLE OF CONTENTS

**SECTION 1: PROJECT INFORMATION ..... 1**

1.1 Owner-Operator-SWPPP Contact-SWPPP Preparer Contact Information ..... 1
1.2 Site Address, Site Map, Scope of Project, Type and Size of Project ..... 1

**SECTION 2: STORMWATER SITE PLANNING, PRACTICE SELECTION, AND DETAILS ..... 2**

2.1 Site Planning ..... 2
2.2 Determine Water Quality Treatment Volume (WQv) ..... 5
2.3 Runoff Reduction by Applying Green Infrastructure Techniques and Standard Stormwater Management Practices with RRv Capacity ..... 5
2.4 Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume ..... 8
2.5 Apply Volume Peak Rate Control Practices if Needed to Meet Requirements ..... 8
2.6 Reference the Map/Construction Drawing for the Descriptions, Dimensions, Material Specifications and Installation Details for each Post-Construction Stormwater Control Practice ..... 9
2.7 Long Term Operation and Maintenance of Post-Construction Stormwater Management Practices ..... 9
2.8 Logs of Borehole Investigations and Supporting Geotechnical Report (if applicable) ..... 10
2.9 Include the Proper Stormwater Management Calculation Worksheets ..... 10

**SECTION 3: CONSTRUCTION EROSION AND SEDIMENT CONTROL PLANS, VEGETATIVE MEASURES & CONTROL OF NON-STORMWATER DISCHARGES ..... 11**

3.1 Description of Temporary and Permanent Structural and Vegetative Measures ..... 11
3.2 Reference the Map/Construction Drawing for the Material Specifications, Dimensions and Installation Details for All Erosion and Sediment Control Practices ..... 11
3.3 Identification of Design Elements not in Conformance with the New York State Standard and Specifications for Erosion and Sediment Control ..... 12
3.4 Inspection Schedule and Operation and Maintenance Schedule of all Erosion and Sediment Control Practices ..... 12
3.5 Description of the Structural Practices to Divert Flows ..... 13
3.6 Construction Phasing and Sequencing Plans ..... 13
3.7 Description of Pollution Prevention Measures to Control Construction Litter, Construction Chemicals and Debris ..... 14
3.8 Description and Location of any Stormwater Discharges Associated with Industrial Activity other than Construction at the Site ..... 16

**SECTION 4: EXISTING AND PROPOSED MAPPING AND PLANS ..... 17**

4.1 Vicinity Map and Project Boundary ..... 17
4.2 Existing and Proposed Topography ..... 17
4.3 Location of Perennial and Intermittent Streams ..... 17
4.4 Map and Description of Soils from USDA Soil Survey ..... 17
4.5 Boundaries of Existing Vegetation and Proposed Limits of Clearing ..... 17
4.6 Location & Boundaries of Resource Protection Areas such as Wetlands, Lakes, Ponds, etc. ..... 17
4.7 Boundary and Acreage of Upstream Watershed ..... 17

4.8 Name and Locations of Receiving Waters ..... 17
4.9 Location of Existing and Proposed Roads, Lot Boundaries, Buildings and Other Structures..... 17
4.10 Location and Size of Staging Areas, Equipment Storage Areas, Borrow Pits, Waste Areas, and Concrete Washout Areas..... 17
4.11 Existing and Proposed Utilities (Sewer, Water, Gas, etc.) and Easements..... 18
4.12 Location and Flow Paths of Existing and Proposed Conveyance Systems, such as Channels, Swales, Culverts, and Storm Drains ..... 18
4.13 Location of Floodplain/Floodway Limits..... 18
4.14 Location and Dimensions of Proposed Channel Modifications, such as Bridge or Culvert Crossings ..... 18
4.15 Location, Size, Maintenance Access and Limits of Disturbance of Proposed Temporary and Permanent Stormwater Management and Erosion and Sediment Control Practices, Including Timing and Duration of Temporary Practices ..... 18
4.16 Existing and Proposed Structural Elevation ..... 18
4.17 Construction Drawings Identifying the Specific Locations and Sizes of each Post-Construction Stormwater Control Practice..... 18
4.18 Final Landscaping Plans..... 18

**SECTION 5: RECORD KEEPING ..... 19**

5.1 Copy of NOI Signed by SWPPP Preparer & NOI Acknowledgement Letter ..... 19
5.2 Contractor/Subcontractors; Name, Responsibilities, and Certification Statements..... 19
5.3 Contractor/Subcontractors; Stormwater Training Cards and Numbers..... 19
5.4 Documentation from NYS-Historic Preservation Office..... 19
5.5 MS4 SWPPP Acceptance Form (if applicable)..... 20
5.6 Most Current Version of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity ..... 20
5.7 Revisions to SWPPP..... 20
5.8 Corrective Action Log..... 20
5.9 Plans Stamped by a Qualified Professional..... 20
5.10 Dedication/As-Builts for all Post-Construction Stormwater Management Facilities ..... 20
5.11 Notice of Termination..... 20

**APPENDICES**

A. MAPS & FIGURES
B. SITE DEVELOPMENT PLANS
C. NOI, NOI ACKNOWLEDGEMENT LETTER, MS4 ACCEPTANCE FORM, & NOT
D. CONTRACTOR/SUBCONTRACTORS; NAME, RESPONSIBILITIES, AND CERTIFICATION STATEMENTS & TRAINING CARDS AND NUMBERS
E. CONTRACTOR'S STORAGE OF CONSTRUCTION AND WASTE MATERIALS & NON-SOIL POLLUTION PREVENTION MEASURES
F. SOILS REPORT, SOIL MAP, DRAINAGE INFO/MAPS
G. NYSDEC SPDES GENERAL PERMIT
H. MAINTENANCE INSPECTION CHECKLIST
I. DOCUMENTATION FROM NYS-HISTORIC PRESERVATION OFFICE
J. WQv, RRv, & CPv CALCULATION SHEETS
K. HYDROCAD ANALYSIS
L. REVISIONS TO THE SWPPP
M. CONSTRUCTION SITE LOGBOOK/CORRECTIVE ACTION LOG/INSPECTION REPORTS
N. GEOTECHNICAL REPORT

## SECTION 1: PROJECT INFORMATION

### 1.1 Owner-Operator-SWPPP Contact-SWPPP Preparer Contact Information

| Owner/Operator: | Contact Person: |
|---|---|
| WB OP LLC<br>64 Commercial St, Suite 401<br>Rochester, NY 14614 | Name: Ian Denaro<br>Phone: (585) 770-8024 |

| SWPPP Preparer: | Contact Person: |
|---|---|
| Marathon Engineering<br>39 Cascade Drive<br>Rochester NY 14614 | Name: Matt Tomlinson<br>Phone: (585) 458-7770 |

### 1.2 Site Address, Site Map, Scope of Project, Type and Size of Project

| | |
|---|---|
| **Address:** | 1407 & 1451 (100/A, 200/B, 400/D) Pittsford Victor Road |
| **Municipality:** | Town of Perinton |
| **County:** | Monroe |
| **Tax Parcel #** | 193.02-1-18.3/A, 193.02-1-18.3/B, 193.02-1-18.3/D, 193.02-1-19 |
| **Nearest Cross Street:** | I-490 |
| **USGS Watershed:** | HUC 08 04 14 01 01 Watershed – Trib. To Irondequoit Creek |
| **Size:** | 12.02 Acres |

# SECTION 2: STORMWATER SITE PLANNING, PRACTICE SELECTION, AND DETAILS

## 2.1 Site Planning

### A) Vicinity Map & Project Boundary

Refer to Figure 1.0 in Appendix A for the project location and boundaries.

### B) Existing & Proposed Topography/Infrastructure

*Site Description*

The project site encompasses approximately 12± acres located in the southeastern portion of the Town of Perinton, Monroe County, New York. The site is primarily a developed office park with 1407 Pittsford Victor Road being undeveloped. The site has a tributary to Irondequoit Creek along the north edge of the project flowing east to west that the site currently drains to. The undeveloped parcel which contains the stream is a mix of woods, brush and lawn areas with slopes of 3-20%.

Existing infrastructure in the vicinity includes a signalized intersection at Pittsford Victor Road and the WillowBrook office park private roadway, associated roadside drainage systems, and multiple culvert crossings that convey flows beneath the roadway. Dedicated sanitary sewer to the Town of Perinton, gas electric and communications and private storm sewer and watermains also serve the project.

*Soils*

Soils on-site are predominantly glacially derived of upland soils. Hydrologic Soil Group (HSG) classifications are listed as Group A under existing conditions as reflected in the USGS Web Soil Survey Mapper, reflecting good infiltration capacity. A geotechnical evaluation including infiltration rates is included in Appendix N of the final SWPPP.

*Drainage Areas and Analysis Points*

The existing site is analyzed as a single drainage basin with the analysis point at the tributary to Irondequoit Creek as it leaves the site. The proposed site has been divided into five drainage basins for analysis purposes, of which three (Drainage Area-PR1 through Drainage Area-PR3) are affected by the proposed development. These basins represent the limits of disturbance (4.2 acres) and capture the primary changes in hydrology associated with the project. The analysis point for the proposed analysis is the same point as the existing.

Drainage areas outside of these basins are either unchanged or reduced in contributing area as a result of the proposed design. The analysis of these basins forms the basis for stormwater management design and erosion control measures.

Post-development drainage will mimic the drainage patterns of pre-development conditions through the use of swales, drainage pipes, and other drainage improvements to convey runoff to stormwater facilities that treat runoff and attenuate large rain events.

Drainage to each of the main drainage features offsite will be maintained and the peak discharge rate reduced.

Tables 1a and 1b list practices that were considered and/or applied in an iterative site planning and design process to preserve natural resources and reduce impervious surfaces.

| **Table 1a. PRESERVATION OF NATURAL SPACES** | | |
|---|---|---|
| Practice | Definition | Application |
| Preservation of Undisturbed Areas | Delineate and place into permanent conservation easement undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain. | ***Considered – application TBD*** |
| Preservation of Buffers | Define, delineate and place in permanent conservation easement naturally vegetated buffers along perennial streams, rivers, shorelines and wetlands. | ***Considered – application TBD*** |
| Reduction of Clearing and Grading | Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities. | ***Considered and applied*** |
| Locating Development in Less Sensitive Areas | Avoid sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests and critical habitats by locating development to fit the terrain in areas that will create the least impact. | ***Considered and applied other than stream crossing*** |
| Open Space Design | Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources. | ***Considered and applied*** |
| Soil Restoration | Restore the original properties and porosity of the soil by deep till and amendment as specified on the plans reduce the generation of runoff and enhance the runoff reduction performance of practices such as downspout disconnections, grass channels, filter strips, and tree clusters. | ***Considered and applied*** |
| **Table 1b. IMPERVIOUS COVER REDUCTION** | | |
| Practice | Definition | Considerations |
| Roadway Reduction | Minimize roadway widths and lengths to reduce site impervious area | ***N/A*** |
| Sidewalk Reduction | Minimize sidewalk lengths and widths to reduce site impervious area | ***Considered and applied*** |
| Driveway Reduction | Minimize driveway lengths and widths to reduce site impervious area | ***N/A*** |
| Cul-de-sac Reduction | Minimize the number of cul-de-sacs and incorporate landscaped areas to reduce their impervious cover. | ***N/A*** |
| Building Footprint Reduction | Reduce the impervious footprint of residences and commercial buildings by using alternate or taller buildings while maintaining the same floor to area ratio. | ***Considered and applied*** |
| Parking Reduction | Reduce imperviousness on parking lots by eliminating unneeded spaces, providing compact car spaces and efficient parking lanes, minimizing stall dimensions, using porous pavement surfaces in overflow parking areas, and using multi-storied parking decks where appropriate. | ***Considered and applied*** |

**C) Consideration of Future Physical Risks Due to Climate Change**

In accordance with the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490, and associated guidance, this Stormwater Pollution Prevention Plan (SWPPP) evaluates potential future physical risks due to climate change and their impact on site development and stormwater management.

**Climate Change Risks Considered**

This project accounts for climate-related risks, including increased temperature, precipitation, and variability in rainfall, which may impact runoff and vegetation. The design also considers the potential for more frequent and severe flooding, shifting ecology, and, where applicable, rising sea levels and storm surges.

**Integration into Site Planning and Stormwater Management**

To address these climate-related risks, the project has incorporated the following considerations into site planning and stormwater management:

- Overall Site Planning: The layout of the development accounts for anticipated changes in precipitation, flooding potential, and temperature-related impacts on site stability and vegetation.
- Location, Elevation, and Sizing of:
  - Control Measures and Practices: Stormwater erosion control and BMPs have been designed with capacity and flexibility to accommodate projected changes in precipitation patterns and runoff volume (see Erosion Control Plan).
  - Conveyance System(s): Stormwater conveyance infrastructure, including swales, storm sewers, and outlet structures, has been designed to accommodate increased flow rates up to the 10-year design storm, with additional overflow routes and ponding areas provided to safely manage flows from larger, less frequent storm events.

## 2.2 Determine Water Quality Treatment Volume (WQv)

The Water Quality Volume is intended to improve water quality by capturing and treating runoff from small, frequent storm events that tend to contain higher pollutant levels. The NYS Stormwater Design Manual (SWDM) defines the WQv as the volume of runoff generated from the entire 90th percentile rain event (1”).

The required WQv for the proposed development has been calculated to be 4,791 cubic feet (0.11 ac-ft). See Appendix J for full calculation which takes into account the redevelopment credit.

## 2.3 Runoff Reduction by Applying Green Infrastructure Techniques and Standard Stormwater Management Practices with RRv Capacity

To meet the RRv requirement, we have utilized infiltration bioretention practices.

RRv (minimum) required = 3,746 cubic ft (0.086 acft)

RRv provided = 6088 cf (0.140 acft)

| Table 2. RUNOFF REDUCTION CAPACITY FOR STANDARD MANAGEMENT PRACTICES | |
|---|---|
| SMP | RRv Capacity (% of WQv provided by practice) |
| Infiltration Practices (by source control) | 90% |
| Bioretention Practice | 80% in HSG A and B (without underdrain) |
| | 40% HSG C and D (with underdrain) |
| Dry Swale (Open Channel Practice) | 40% in HSG A and B |
| | 20% in HSG C and D |

| Table 3. RUNOFF REDUCTION PRACTICES | | |
|---|---|---|
| Practice | Definition | WQv, RRv Considerations |
| Conservation of Natural Areas | CNA drain towards developed areas on project. Retain the pre-development hydrologic and water quality characteristics of undisturbed natural areas, stream and wetland buffers by restoring and/or permanently conserving these areas on a site. | See Appendix J |
| Sheetflow to Riparian Buffers or Filter Strips | When developed areas drain by sheetflow to an undisturbed natural area such as forested conservation areas, stream buffers or vegetated filter strips, they can be used to treat and control stormwater runoff from some areas of a development project. Requires delineation and permanent protection through enforcement. | See Appendix J |
| Vegetated Open Swale | Properly designed vegetated channels used instead of storm sewers or concrete open channels, lower velocity, increase time of concentration, reduce the peak discharge, and provide treatment and promote infiltration. | See Appendix J |
| Tree Planting/ Tree Box | Plant or conserve trees to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. Trees can be used for applications such as landscaping, stormwater management practice areas, conservation areas, and erosion and sediment control. | See Appendix J |
| Disconnection of Rooftop Runoff | Direct runoff from residential rooftop areas and upland overland runoff flow to designated pervious areas to reduce runoff volumes and rates. Vegetated area to be protected by covenant or other permanent and soil decompaction may be necessary. | See Appendix J |
| Stream Daylighting for Redevelopment Projects | Stream Daylight previously culverted/piped streams to restore natural habitats, better attenuate runoff by increasing the storage size, promoting infiltration, and help reduce pollutant loads. | See Appendix J |
| Rain Garden | Manage and treat small volumes of stormwater runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. | See Appendix J |
| Green Roof | Capture runoff by a layer of vegetation and soil installed on top of a conventional flat or sloped roof. The rooftop vegetation allows evaporation and evapotranspiration processes to reduce volume and discharge rate of runoff entering conveyance system. | See Appendix J |
| Stormwater Planter | Small landscaped stormwater treatment devices that can be designed as infiltration or filtering practices. Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality. | See Appendix J |
| Rain Tank/ Cistern | Capture and store stormwater runoff to be used for irrigation systems or filtered and reused for non-contact activities. | See Appendix J |
| Porous Pavement | Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils. | See Appendix J |

### 2.4 Apply Standard Stormwater Management Practices to Address Remaining Water Quality Volume

Infiltration bioretention practices are being utilized to address all remaining water quality volume that wasn't reduced with runoff reduction. The remaining WQv that was not reduced is 1,025 cubic ft.

The stormwater quality unit selected and drywell treat an additional 1,025 cf therefore the total treated WQv addresses 100% of the calculated WQv without the reduction permitted for redevelopment. This exceeds the remaining required WQv that was not reduced. See Appendix J for WQv calculations.

### 2.5 Apply Volume Peak Rate Control Practices if Needed to Meet Requirements

The project was modeled using HydroCAD® 10.10-5a, which incorporates the key capabilities of TR-20 and TR-55 for estimating runoff and peak discharges in small watersheds. The SCS TR-20 runoff method was used for hydrologic modeling, with rainfall data obtained from the NRCC and NRCS joint collaborative website (http://precip.eas.cornell.edu) in accordance with current manual requirements. Rainfall distribution curves were developed from historic rainfall data covering a wide range of durations and storm frequencies, and were used to define the temporal distribution of rainfall over the design storm period. This data was used to generate intensity-duration-frequency (IDF) curves, which were then converted into rainfall distribution curves for both pre- and post-development hydrologic modeling.

The determination of runoff curve numbers (CN) was selected based on on-site observations of the watershed's soil and cover conditions, treatment, and hydrologic conditions. Time of concentration (Tc) is the time it takes for runoff to travel to a point of interest from the hydraulically most distant point utilizing the TR-55 methodology.

Stream Channel Protection Volume Requirements (Cpv) are designed to protect stream channels from erosion. In New York State, this goal is accomplished by providing 24-hour extended detention of the one-year, 24-hour storm event, remaining from runoff reduction. This is accomplished for this project by utilizing infiltration bioretention practices as well as a drywell and infiltrating the 1-year storm event for an effective 0.00 cfs discharge where existing conditions have a discharge rate of 0.89 cfs.

Overbank Flood control requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. Extreme Flood control requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. This is accomplished for this project by utilizing the above-mentioned bioretention practices. The full hydrology model is included in Appendix K, the following tables summarizes the existing and proposed peak discharges and percent reduction meeting the Qp and Qf requirements to each analysis point:

| Stormwater Flows Summary | | | |
|---|---|---|---|
| ***Event*** | ***Existing*** | ***Proposed w/ BMP*** | |
| | **Peak (cfs)** | **Peak (cfs)** | **Peak Reduction** |
| 10 Year (Qp) | 3.25 | 0.80 | 75% |
| 100 Year (Qf) | 8.03 | 7.12 | 11% |

### 2.6 Reference the Map/Construction Drawing for the Descriptions, Dimensions, Material Specifications and Installation Details for each Post-Construction Stormwater Control Practice

See the Site Development Plans in Appendix B for descriptions, dimensions, material specifications and installation details for stormwater control practices.

### 2.7 Long Term Operation and Maintenance of Post-Construction Stormwater Management Practices

The long-term operation and maintenance of the post-construction stormwater management practice(s) will be established through a maintenance agreement with the Town of Perinton. Under this agreement, the municipality will be responsible for inspection, operation, and maintenance of the practice(s) in accordance with the approved Operation and Maintenance Plan.

Following is a list of maintenance requirements. Inspections shall be performed at a minimum of every 6 months and required maintenance performed as noted below and on the checklists in Appendix H. Original design specifications are shown on the plan documents in Appendix B.

**Tree Planting**

- During the first three years, mulching, watering, and protection of young trees may be necessary.
- Inspections should be performed every three months and within one week of ice storms, within one week of high wind events that reach speeds of 20 mph until trees have reached maturity.
- As a minimum, the following items should be checked regularly:
    - Assess tree health
    - Determine survival rate; replace any dead trees
    - Inspect tree for evidence of insect and disease damage; treat as necessary
    - Inspect tree for damages or dead limbs, prune as necessary

**Grass Swales**

- Fertilize and lime as needed to maintain dense vegetation.
- Mow as required during the growing season to maintain grass heights at 4 inches to 6 inches.

- Remove any sediment or debris buildup by hand (if possible) in the bottom of the channel when the depth reaches 2 inches.
- Inspect for pools of standing water. Re-grade to restore design grade and re-vegetate.
- Repair rills in channel bottom with compacted topsoil, anchored with mesh or erosion blanket as needed. Seed and mulch.
- Use of heavy equipment for mowing and removing plants/debris should be avoided to minimize soil compaction. Disturbed areas should be stabilized with seed and mulch, or revetment, as necessary.

**Bioretention & Dry Swale Maintenance**

- Fertilize and maintain grasses – cut down at close of year prior to snowfall.
- Remove trash building up in stone and cobble areas.
- Remove any sediment or debris buildup by hand if possible.
- Inspect for pools of standing water. If water is standing for longer than 24 hours after a rain event the stone and fabric top layer shall be removed and the bioretention media shall be inspected and replaced as necessary.
- Once a year, replace dead plantings, as were specified on the design plans.

### 2.8 Logs of Borehole Investigations and Supporting Geotechnical Report (if applicable)

See soils info located in Appendix F.

### 2.9 Include the Proper Stormwater Management Calculation Worksheets

See Appendices J & K for the Stormwater Management Calculations.

## SECTION 3: CONSTRUCTION EROSION AND SEDIMENT CONTROL PLANS, VEGETATIVE MEASURES & CONTROL OF NON-STORMWATER DISCHARGES

### 3.1 Description of Temporary and Permanent Structural and Vegetative Measures

**A) Temporary Stabilization**

Topsoil stockpiles and disturbed portions of the site where construction activity temporarily ceases shall have stabilization measures initiated by the end of the next business day, and completed within fourteen days (seven days if 5-acres of disturbance, or three days if between November 15th and April 1st). The temporary seed shall be annual rye applied at the rate of 100 lbs. per acre. After seeding, each area shall be mulched with 2 tons per acre or 3 bales per 1000 square feet of straw. The straw mulch is to be tacked into place by a disk with blades set nearly straight. Areas of the site that are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.

**B) Permanent Stabilization**

Disturbed portions of the site where construction activities permanently cease shall have 6" of topsoil placed and be stabilized with permanent seed, with stabilization work initiated by the end of the next business day and completed within fourteen days (seven days if 5-acres of disturbance, or three days if between November 15th and April 1st). Lime and fertilizer will be applied as determined by soil tests. After seeding each area shall be mulched as described above. All slopes greater than or equal to 3H: 1V shall have jute or other erosion control fabric applied. Seed mix shall be as specified by the owner at the seed supplier's recommended rates.

**C) Off-Site Vehicle Tracking**

If the stabilized construction entrance is not sufficient to reduce vehicle tracking of sediments to an acceptable amount, the contractor shall install a truck wash station on-site. The paved street adjacent to the site entrance will be swept daily to remove any excess mud, dirt, or rock tracked from the site. Dump trucks hauling material from the construction site will be covered with a tarpaulin.

### 3.2 Reference the Map/Construction Drawing for the Material Specifications, Dimensions and Installation Details for All Erosion and Sediment Control Practices

All erosion and sediment control practices have been designed in accordance with the New York State Standards for Erosion and Sediment Control. See Site Development Plans in Appendix B, for the dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices.

### 3.3 Identification of Design Elements not in Conformance with the New York State Standard and Specifications for Erosion and Sediment Control

All design elements are in conformance with the New York State Standard and Specifications for Erosion and Sediment Control or the New York State Stormwater Management Design Manual.

### 3.4 Inspection Schedule and Operation and Maintenance Schedule of all Erosion and Sediment Control Practices

In accordance with GP-0-25-01, Contractor Maintenance Inspection Requirements are as follows: The Permittee/Operator agrees to have the "Trained Contractor" inspect the erosion and sediment control practices and pollution prevention measures being implemented within the active work area daily to ensure that they are being maintained in effective operating condition at all times. If deficiencies are identified, the contractor shall begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable timeframe.

As defined in the NYSDEC SPDES General Permit, a "Trained Contractor" is defined as an employee from the contracting (construction) company that 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 Department endorsed entity. After receiving the initial training, the trained contractor shall receive four (4) hours of training every three (3) years. Copies of the trained contractor certification cards shall be kept in Appendix D of this SWPPP. Copies of the Contractor's daily inspections shall be kept in Appendix M of this SWPPP.

The Permittee/Operator agrees to have a qualified professional conduct an assessment of the site prior to the commencement of construction 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.

After construction begins, a qualified professional will conduct site inspections once every 7 days if less than 5 acres are disturbed at a time. If more than 5 acres are disturbed and a 5-acre waiver is obtained, inspections will occur at least twice within every 7-day period, with at least 2 days between each visit.

During each inspection, the qualified professional will record the following information:

1) On a site map, indicate the extent of all disturbed site areas.
2) Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period.
3) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization.
4) Indicate all disturbed site areas that have not undergone active site work during the previous 14- day period.

5) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume (for example, 10 percent, 20 percent, 50 percent).

6) 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 barriers or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and

7) Document all deficiencies that are identified with the implementation of the SWPPP.

See Appendix M for full schedule and corrective logbook.

### 3.5 Description of the Structural Practices to Divert Flows

Flow diversions from upgradient areas shall be constructed as needed to minimize runoff onto exposed areas during construction.

### 3.6 Construction Phasing and Sequencing Plans

**Before any site grading activities begin:**

- Install stabilized construction entrance.
- Protect existing vegetation and environmental features to remain.
- Install perimeter sediment controls.
- Clear and grub for water diversions and sediment basin/trap.
- Construct diversion swales and sedimentation basins/traps. Stabilize soils of any new channels and banks of sediment basin/trap.

**Site grading:**

- Complete clearing and grubbing.
- Place erosion control measures at topsoil stockpiles and strip topsoil.
- Install additional erosion and sediment controls according to plan.
- Strip and stockpile topsoil and grade site. Disturbance shall be limited to less than 5-acres at any one time unless a 5-acre waiver is granted.
- Stabilize denuded areas and stockpiles in areas where disturbance activities have temporarily or permanently ceased, stabilization measures should be initiated by the end of the next business day and completed within 14 days (within 7 days for sites with over 5 acres of disturbance or discharges to a 303d waterbody, or within 3 days during winter, November 15th to April 1st).

**Infrastructure (utilities, parking lot, etc.):**

- Construct staging and materials storage area.
- Install utilities.

**Building/Road Construction:**

- Apply stone to roads and parking areas.
- Complete grading, reapply topsoil, and install permanent seeding, fertilizer and mulch.
- Complete final paving.

**Final stabilization and landscaping:**

- Remove accumulated sediment from sediment basin/trap.
- Remove all sediment control products after soils are stabilized.
- Install bioretention practice once all disturbed upstream soils are stabilized.

## 3.7 Description of Pollution Prevention Measures to Control Construction Litter, Construction Chemicals and Debris

I. Pollution Prevention Measures (from Construction-Phase Operations other than soil disturbance)

A. Contractor to elect site superintendent responsible for the day-to-day site operations to be the spill prevention and cleanup coordinator. **See Appendix E for contractor-specific selections.**

B. Product Specific Practices:

The following product specific practices will be followed onsite:

1. Petroleum Products - All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.
2. Fertilizers - Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
3. Paints - All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

4. Concrete Trucks - Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site.

5. Waste Disposal - All waste materials will be collected and stored in a securely lidded metal dumpster rented from [contractor to specify] which is a licensed solid waste management company in [contractor to specify (city)]. The dumpster will meet all local and any State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as often as necessary, and the trash will be hauled to [contractor to specify (landfill)]. No construction waste materials will be buried onsite. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer. The contractor to elect site superintendent responsible for the day-to-day site operations who will be responsible for seeing that these procedures are followed.

6. Hazardous Waste - All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices. Contractor to elect site superintendent responsible for the day-to-day site operations who will be responsible for seeing that these procedures are followed.

7. Sanitary Waste - All sanitary waste will be collected from the portable units a minimum of three times per week by [contractor to specify], a licensed sanitary waste management contractor.

8. Recyclable Waste – All recyclable waste (cardboard, wood etc.) shall be collected and recycled.

II. On-Site Storage of Construction and Waste Materials

A. Spill Prevention Inventory: Contractor to specify the materials or substances expected to be present onsite during construction.

B. Material Management Practices

The following are potential management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances listed above to stormwater runoff.

- Products will be kept in original containers unless they are not resealable.
- Original labels and material safety data sheets will be retained; they contain important product information.
- An effort will be made to store only enough product required to do the job.
- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure and/or on blacktop.
- Products will be kept in their original containers with the original manufacturer’s label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposing of the container.

- Manufacturer's recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure the proper use and disposal of materials onsite.
- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated, and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Spills, of any size, of toxic or hazardous material will be reported to the appropriate State or local government agency.
- The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

### 3.8 Description and Location of any Stormwater Discharges Associated with Industrial Activity other than Construction at the Site

N/A

## SECTION 4: EXISTING AND PROPOSED MAPPING AND PLANS

### 4.1 Vicinity Map and Project Boundary

See the site plans located in Appendix B, specifically the cover sheet for a location map, and the overall plan for the project boundary.

### 4.2 Existing and Proposed Topography

See the site plans located in Appendix B, specifically the grading plans for existing and proposed topography.

### 4.3 Location of Perennial and Intermittent Streams

See the site plans located in Appendix B, for location of streams on site.

### 4.4 Map and Description of Soils from USDA Soil Survey

See Appendix F for the USDA soil survey report.

### 4.5 Boundaries of Existing Vegetation and Proposed Limits of Clearing

See the site plans located in Appendix B, for boundaries of existing vegetation and proposed limits of clearing.

### 4.6 Location & Boundaries of Resource Protection Areas such as Wetlands, Lakes, Ponds, etc.

See the site plans located in Appendix B, specifically the grading plans which include the disturbance limit lines for boundaries of all disturbance and protection areas.

### 4.7 Boundary and Acreage of Upstream Watershed

See drainage mapping for upstream watersheds.

### 4.8 Name and Locations of Receiving Waters

Tributary to Irondequoit Creek located on north and west portions of the project site.

### 4.9 Location of Existing and Proposed Roads, Lot Boundaries, Buildings and Other Structures

See the site plans located in Appendix B, for locations of existing and proposed roads, lot boundaries, buildings and other structures.

### 4.10 Location and Size of Staging Areas, Equipment Storage Areas, Borrow Pits, Waste Areas, and Concrete Washout Areas

See the site plans located in Appendix B, specifically the erosion control plans for staging areas, earthwork limits, washout areas, etc.

**4.11 Existing and Proposed Utilities (Sewer, Water, Gas, etc.) and Easements**

See the site plans located in Appendix B, specifically the utility plans and subdivision plans for all existing and proposed utilities and easements.

**4.12 Location and Flow Paths of Existing and Proposed Conveyance Systems, such as Channels, Swales, Culverts, and Storm Drains**

See the site plans located in Appendix B, specifically the utility and grading plans for all existing and proposed conveyance systems.

**4.13 Location of Floodplain/Floodway Limits**

N/A

**4.14 Location and Dimensions of Proposed Channel Modifications, such as Bridge or Culvert Crossings**

N/A

**4.15 Location, Size, Maintenance Access and Limits of Disturbance of Proposed Temporary and Permanent Stormwater Management and Erosion and Sediment Control Practices, Including Timing and Duration of Temporary Practices**

See the site plans located in Appendix B, specifically the erosion control plan for temporary and permanent practices including sequence of erosion control and duration.

**4.16 Existing and Proposed Structural Elevation**

See the site plans located in Appendix B, specifically the grading plans and profiles for all locations, sizes and elevations of all existing and proposed storm inlets, outlets, water surfaces, embankments, spillways, grade control structures, conveyance channels etc.

**4.17 Construction Drawings Identifying the Specific Locations and Sizes of each Post-Construction Stormwater Control Practice**

See the site plans located in Appendix B, specifically the utility and grading plans and details for locations and sizes of each post construction stormwater control practice.

**4.18 Final Landscaping Plans**

See the site plans located in Appendix B for final landscaping plans.

## SECTION 5: RECORD KEEPING

### 5.1 Copy of NOI Signed by SWPPP Preparer & NOI Acknowledgement Letter

A copy of the eNOI is included in Appendix C of this report. A copy of the NOI acknowledgement letter (when received) will be located in Appendix C.

### 5.2 Contractor/Subcontractors; Name, Responsibilities, and Certification Statements

The signed certification statement must be signed by each of the contractors and subcontractors prior to the commencement of any construction activity.

**CONTRACTORS' 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.

**See Appendix D for signed copies of the certification statement.**

### 5.3 Contractor/Subcontractors; Stormwater Training Cards and Numbers

Identification of the trained contractor from each contracting company is required for coverage under the General Permit. A trained contractor is an employee from the contracting company that has received four hours of New York State Department of Environmental Conservation endorsed training in proper erosion and sediment control principles. The owner/operator shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP.

At least one trained contractor is required to be on-site on a daily basis when soil disturbance activities are being performed. Appendix D will include Contractor/Subcontractor training cards and numbers as soon as the contractor is selected.

### 5.4 Documentation from NYS-Historic Preservation Office

Coverage under the General Permit requires a New York State Historic Preservation Office determination. Construction activities that adversely affect a property that is listed or is eligible for listing on the State or National Register of Historic Places (note: includes Archeological sites), unless there are written agreements in place with the NYS Office of Parks, Recreation and Historic

Preservation (OPRHP) or other governmental agencies to mitigate the effects, are not eligible for permit coverage.

This project was submitted to the Office of Parks, Recreation, and Historic Preservation (OPRHP) for review, and correspondence is included in Appendix I.

### 5.5 MS4 SWPPP Acceptance Form (if applicable)

Appendix C includes the MS4 Acceptance Form.

### 5.6 Most Current Version of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity

Appendix G includes the current version of the SPDES General Permit.

### 5.7 Revisions to SWPPP

The SWPPP is a living document and may be updated as the construction process proceeds. Appendix L includes any revisions to the SWPPP.

### 5.8 Corrective Action Log

Appendix M includes the Corrective Action Log.

### 5.9 Plans Stamped by a Qualified Professional

Appendix B includes the Site Plans, which are stamped by Cole Papasergi P.E., a licensed professional engineer.

### 5.10 Dedication/As-Builts for all Post-Construction Stormwater Management Facilities

Appendix B, Site Plans, will include the above information (if applicable).

### 5.11 Notice of Termination

A project is eligible to terminate permit coverage by filing the Notice of Termination when one or more of the following criteria have been met:

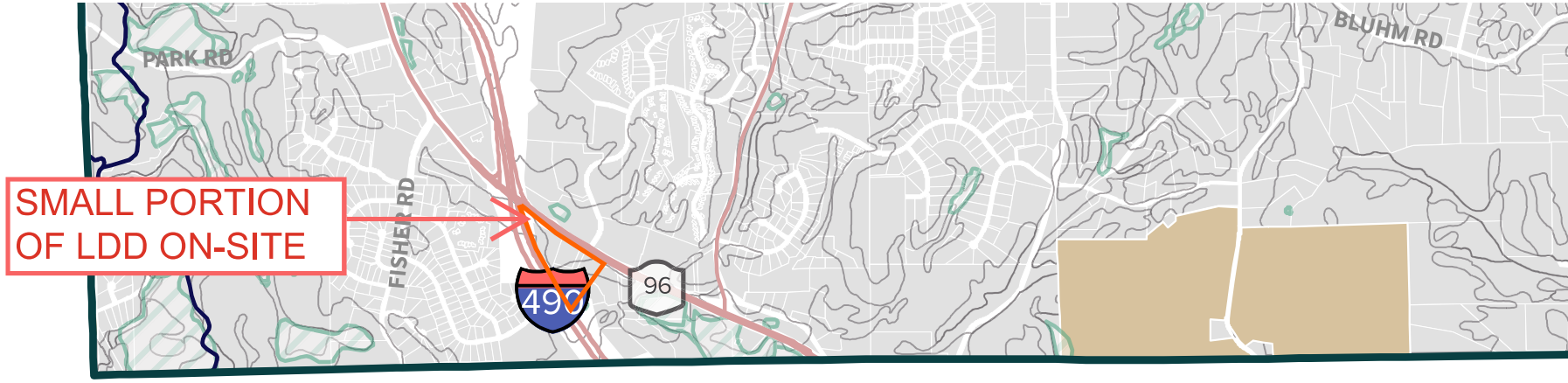
a. The project is complete. The owner or operator may terminate coverage when all construction activity identified in the SWPPP has been completed; and all areas of disturbance have achieved final stabilization; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational.
b. The project has planned shutdown with partial project completion. The owner operator may terminate coverage when all soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved final stabilization; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;

c. A new owner or operator has obtained coverage in conformance with the general permit.

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

# Appendix A

## Maps and Figures




**LEGEND**

- NWI & NYS DEC Wetland
- Eastern Agricultural District #6
- Streams
- FEMA Floodzone AE
- FEMA Floodzone A
- Limited Development District (LDD)

1780-24 Appendix A
Town of Perinton LDD Map

# Appendix A2 - Env. Resource Mapper




June 11, 2026

1:4,514

0 0.04 0.08 0.16 mi

0 0.05 0.1 0.2 km

Esri, HERE, Garmin, iPC, New York State, Vantor

1780-24 APPENDIX A
NYSDEC ENVIRONMENTAL RESOURCE MAPPER

NYS Department of Environmental Conservation
Not a legal document

# Appendix B

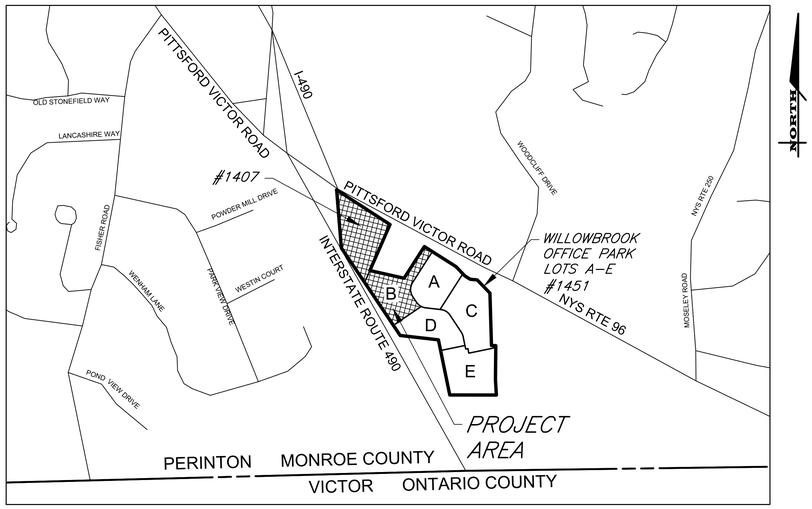
## Site Development Plans

# PRELIMINARY/FINAL SITE PLANS
## for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD

SITUATE IN:

TOWN OF PERINTON - MONROE COUNTY - STATE OF NEW YORK




LOCATION MAP

NOT TO SCALE


MARATHON ENGINEERING

ROCHESTER LOCATION

39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770

ITHACA LOCATION

840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917

www.marathoneng.com


| SHEET SCHEDULE | | |
|---|---|---|
| No. | DWG. No. | DESCRIPTION |
| 1 | C0.1 | CONSTRUCTION NOTES & SPECIFICATIONS |
| 2 | C1.0 | OVERALL PLAN |
| 3 | V1.0 | EX. CONDITIONS & DEMOLITION PLAN |
| 4 | V1.1 | EX. CONDITIONS & DEMOLITION PLAN |
| 5 | C2.0 | LAYOUT PLANS |
| 6 | C2.1 | LAYOUT PLANS |
| 7 | C3.0 | UTILITY PLANS |
| 8 | C3.1 | UTILITY PLANS |
| 9 | C4.0 | GRADING & EROSION CONTROL PLANS |
| 10 | C4.1 | GRADING & EROSION CONTROL PLANS |
| 11 | C5.0 | PROJECT PROFILES |
| 12 | C6.0 | LANDSCAPING & LIGHTING PLAN |
| 13 | C6.1 | LANDSCAPING & LIGHTING PLANS |
| 14 | C7.0 | CONSTRUCTION DETAILS |
| 15 | C7.1 | CONSTRUCTION DETAILS |
| 16 | C7.2 | CONSTRUCTION DETAILS |
| 17 | C7.3 | CONSTRUCTION DETAILS |
| 18 | C8.0 | NYSDOT DRIVEWAY PLAN |
| 19 | C8.1 | NYSDOT DRIVEWAY DETAILS |
| 20 | C8.2 | NYSDOT DRIVEWAY DETAILS |
| 21 | C9.0 | CULVERT PLAN |


COPYRIGHT © 2026
MARATHON ENGINEERING

# NOTES, INFORMATION AND SPECIFICATIONS

## GENERAL

1. **APPLICABILITY** - THE NOTES AND INFORMATION PROVIDED ON THIS SHEET ARE APPLICABLE TO ALL "C" SERIES DRAWINGS. THE "C" SERIES DRAWINGS COVER SITE RELATED IMPROVEMENTS OUTSIDE THE BUILDING ENVELOPE. THE BUILDING ENVELOPE INCLUDES ALL AREA WITHIN 5' OUTSIDE OF THE BUILDING'S EXTERIOR WALL.

2. **MAPPING** - THE EXISTING UNDERGROUND UTILITIES WERE PLOTTED BASED ON RECORD MAPPING SUPPLIED BY OTHERS. THE ENGINEER MAKES NO WARRANTY AS TO THE LOCATION, SIZE, TYPE, ELEVATION, AND/OR NUMBER OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE VICINITY OF THE NEW INFRASTRUCTURE.

3. **UTILITY STAKEOUT** - THE CONTRACTOR SHALL NOTIFY UDIG NY (1-800-962-7962) FOR A UTILITY STAKEOUT 48 HOURS IN ADVANCE OF COMMENCING WORK. STAKEOUT OF PRIVATE UTILITIES SHALL BE COORDINATED WITH THE OWNER.

4. **PROPERTY PROTECTION** - THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO EXISTING PAVEMENT, CURBS, WALKS, LAWNS, TREES, ETC. CAUSED BY THEIR CONSTRUCTION OPERATIONS. ALL DAMAGE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE OWNER'S SATISFACTION AT NO ADDITIONAL EXPENSE.

5. **ACCESS** - THE CONTRACTOR SHALL PROVIDE SATISFACTORY VEHICULAR ACCESS TO ALL ADJOINING PROPERTIES, PRIVATE ROADWAYS, PARKING FACILITIES, AND PUBLIC STREETS DURING CONSTRUCTION.

6. **SITE SAFETY** - PRIOR TO AND THROUGHOUT CONSTRUCTION, THE CONTRACTOR SHALL POST SIGNAGE IN CONFORMANCE WITH THE REQUIREMENTS OF THE LOCAL MUNICIPALITY AND OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA). JOB SAFETY AND MAINTENANCE AND PROTECTION OF TRAFFIC IS THE RESPONSIBILITY OF THE CONTRACTOR.

7. **EXCAVATIONS** - ALL EXCAVATIONS SHALL BE BACKFILLED/BARRICADED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONCLUSION OF EACH WORKING DAY.

8. **MAINTENANCE** - PUBLIC STREETS, PRIVATE DRIVES AND PARKING FACILITIES SHALL BE KEPT FREE OF FOREIGN MATERIALS. ALL AREAS SHALL BE SWEPT CLEAN AT THE END OF EACH WORKING DAY AND/OR AS DIRECTED BY THE OWNER'S ON-SITE REPRESENTATIVE.

9. **CONSTRUCTION STORAGE** - STORAGE OF EQUIPMENT AND MATERIALS SHALL BE WITHIN A SPECIFIED AND SECURED AREA AS DETERMINED IN CONTRACT DOCUMENTS OR AS SPECIFIED BY THE OWNER'S ON-SITE REPRESENTATIVE.

10. **PERMIT(S)** - PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE NECESSARY PERMITS FROM THE APPLICABLE MUNICIPALITY OR AGENCY. THE CONTRACTOR IS RESPONSIBLE FOR ALL BONDS AND INSURANCES AND THE OWNER IS RESPONSIBLE FOR PERMIT FEES UNLESS OTHERWISE STATED IN THE OWNER/ CONTRACTOR AGREEMENT

11. **INTERIM CONDITIONS** - THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS AND WITHIN PROJECT AREA TO A STABILIZED OUTLET THROUGHOUT THE CONSTRUCTION PERIOD. THIS MAY REQUIRE INTERIM GRADING, SHIMMING OF PAVEMENT ETC. THAT IS NOT SPECIFICALLY SHOWN ON THE PLANS AND SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

12. **SPECIFICATIONS** - TECHNICAL SPECIFICATIONS, IF SUPPLIED AS PART OF CONTRACT DOCUMENTS, ARE INTENDED TO AID AND HELP DEFINE THE CONTRACTOR'S WORK SCOPE. IF DISCREPANCIES OCCUR THE CONTRACTOR SHALL REQUEST A CLARIFICATION.

## CONSTRUCTION

1. **STAKEOUT** - THE CONSTRUCTION STAKEOUT SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR USING CONTROL PROVIDED ON THE "LAYOUT PLAN". THE BUILDING FOOTPRINT(S), DATED 04/28/26, WERE PROVIDED BY HANLON ARCHITECTS. DISCREPANCIES WITH BUILDING(S), CONTROL POINTS, AND/ OR TIE DIMENSIONS SHALL BE REPORTED TO THE DESIGN ENGINEER (PRIOR TO THE INSTALLATION OF IMPROVEMENTS) FOR COORDINATION AND CLARIFICATION.

2. **BOUNDARY** - BOUNDARY INFORMATION WAS COMPUTED BY MARATHON ENGINEERING & SURVEYING OF ROCHESTER D.P.C.

3. **LAYOUT** - DIMENSIONS SHOWN, WHERE APPLICABLE, SHALL BE FROM THE FACE OF CURB UNLESS SPECIFICALLY CALLED OUT OTHERWISE.

4. **DEMOLITION** - CLEARING AND GRUBBING SHALL BE LIMITED TO THE SITE BOUNDARIES OR WITHIN THE "WORK LIMIT LINE" AS DEFINED ON THE PLAN. TREES AND OBJECTS DESIGNATED FOR REMOVAL SHALL BE COORDINATED AND FIELD VERIFIED WITH PROJECT ON-SITE REPRESENTATIVE. ALL MATERIALS SHALL BE LEGALLY DISPOSED OF OFF-SITE OR RETURNED TO OWNER AS DIRECTED BY CONTRACT DOCUMENTS. ALL ITEMS NOT SPECIFICALLY CALLED OUT TO BE REMOVED SHALL REMAIN.

5. **COORDINATION** - THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITY WORK WITH OTHER SITE UTILITIES (I.E. GAS, ELECTRIC, LIGHTING, COMMUNICATIONS) TO AVOID POTENTIAL INSTALLATION CONFLICTS.

6. **STAGING** - AS DEFINED BY THE CONTRACT DOCUMENTS THE CONTRACTOR SHALL CONSTRUCT A SECURE STAGING AREA FOR STORAGE OF EQUIPMENT, MATERIALS, EMPLOYEE PARKING AND OFFICE SPACE. IF THE AREA/METHOD IS NOT SPECIFICALLY DEFINED ON THE DOCUMENTS THEN IT SHALL BE COORDINATED WITH THE OWNER'S ON-SITE REPRESENTATIVE.

7. **DOCUMENTATION REQUIREMENTS** - THE CONTRACTOR IS RESPONSIBLE FOR SUPPLYING THE OWNER OR ENGINEER WITH THE PRECISE LOCATIONS OF BLIND CONNECTIONS (I.E. WYE LOCATIONS), AS WELL AS THE CONFIGURATIONS OF LATERALS AND SERVICES TO FACILITATE THE CREATION OF AS-BUILT MAPS. THIS INFORMATION PROVIDED SHOULD BE ABLE TO BE RECREATED ON THE GROUND SURFACE, SUCH AS MEASUREMENTS FROM BUILT INFRASTRUCTURE OR COORDINATES ON THE PROJECT DATUM, OR AS AGREED UPON DURING THE PRECONSTRUCTION MEETING. ANY EXPENSES RELATED TO CONFIRMING UTILITY LOCATIONS THAT WERE NOT RECORDED DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

8. **CLOSE-OUT** - THE CONTRACTOR'S WORK SCOPE INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING AT PROJECT CLOSE-OUT TO THE SATISFACTION OF OWNER'S ON-SITE REPRESENTATIVE:
   - REMOVAL OF ANY CONSTRUCTION DEBRIS.
   - CLEANING PAVEMENT AND WALKWAY SURFACES.
   - RESTORATION OF ALL DISTURBED GRASS AND LANDSCAPED AREAS.
   - PROVIDING BONDS, GUARANTEES, CERTIFICATIONS, ETC. AS REQUIRED BY CONTRACT DOCUMENTS.
   - PROVIDING REDLINES FOR RECORD DRAWING.
   - COMPLETION OF FINAL PUNCH LIST ITEMS.

## UTILITIES

### 1. SANITARY

**1.1 MATERIALS**
- **LATERALS** - PIPING SHALL BE POLYVINYL CHLORIDE (PVC) WITH ENDS SUITABLE FOR ELASTOMERIC GASKET JOINTS, AND A MINIMUM WALL THICKNESS OF SDR-21. PIPING AND FITTINGS SHALL MEET ASTM D-2241.
- **JOINTING MATERIALS** - SHALL BE BELL-AND-SPIGOT WITH INTEGRAL PUSH ON TYPE ELASTOMERIC GASKET JOINTS, GASKET MATERIAL TO BE NEOPRENE MEETING ASTM D-3212.

**1.2 INFILTRATION/ EXFILTRATION** - MAXIMUM ALLOWABLE INFILTRATION OR EXFILTRATION SHALL NOT EXCEED 100 GALLONS PER INCH DIAMETER PER MILE OF PIPE PER DAY FOR THE SANITARY SEWER. IF AN AIR TEST IS USED, THE TEST AS A MINIMUM SHALL CONFORM TO THE PROCEDURE DESCRIBED IN ASTM F1417 ENTITLED STANDARD PRACTICE FOR INSTALLATION ACCEPTANCE OF PLASTIC NON-PRESSURE SEWER LINES USING LOW-PRESSURE AIR. SANITARY MANHOLES SHALL BE VISUALLY INSPECTED AND TESTED FOR LEAKAGE BY EX FILTRATION OR VACUUM. AIR VACUUM TESTING OF MANHOLES SHALL BE PERFORMED IN ACCORDANCE WITH ASTM C-1244.

**1.3 FLOOR DRAINS** - FLOOR DRAINS, IF CONSTRUCTED IN THE PROJECT. MUST BE CONNECTED TO THE SANITARY SEWER. **NOTE:** FLOOR DRAINS DO NOT INCLUDE FOUNDATION OR FOOTER DRAINS INSTALLED TO INTERCEPT UNCONTAMINATED GROUND WATER. ALL DISCHARGES FROM THE FLOOR DRAINS TO THE SANITARY SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.

**1.4 TESTING** - DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL. IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.

**1.5 SEPARATION** - MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN PIPE SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION. WHEN THE WATER MAIN PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES. MANHOLES OR VAULTS.

## UTILITIES (CONT.)

### 2. STORM

**2.1 REGULATIONS** - STORM SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST REGULATIONS OF THE MUNICIPALITY AND ALL THERMOPLASTIC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321.

**2.2 MATERIALS** - THE CONTRACTOR MAY USE THE FOLLOWING PIPE MATERIAL FOR THE MAIN SEWER AS ALLOWED BY THE MUNICIPALITY, PROVIDING THAT THE ROUGHNESS COEFFICIENT ("N" FACTOR) IS 0.013 OR BETTER:
- REINFORCED CONCRETE PIPE (RCP), CLASS III
- HIGH DENSITY CORRUGATED POLYETHYLENE PIPE (PE), AASHTO M-294, TYPE S, ASTM D-3350.

**2.3 ROOF DRAINAGE** - ALL ROOF DRAINAGE SHALL BE COLLECTED AND PIPED TO THE STORM SEWER SYSTEM UNLESS SPECIFIED OTHERWISE.

**2.4 TESTING** - UPON COMPLETION OF SYSTEM INSTALLATION, THE MAIN SEWER SYSTEM AND LEADS TO STRUCTURES SHALL BE FLUSHED AND LAMPED TO THE SATISFACTION OF THE MUNICIPALITY.

### 3. WATER

**3.1** ALL MATERIALS, INSTALLATION AND TESTING PROCEDURES SHALL BE IN COMPLIANCE WITH CURRENT AWWA STANDARDS AND IN ACCORDANCE WITH THE REGULATIONS AND SPECIFICATIONS OF THE AUTHORITY. SHOULD A CONFLICT EXIST THE AUTHORITY'S SPECIFICATIONS SHALL GOVERN.

**3.2** WATER SERVICE LINES SHALL HAVE A MINIMUM OF FIVE FEET OF COVER FROM FINISHED GRADE IN NON-PAVEMENT AREAS AND SIX FEET OF COVER FROM FINISHED GRADE IN PAVED AREAS.

**3.3** WATER SERVICE LINES SHALL BE SEPARATED AT LEAST TEN FEET, MEASURED FROM THE OUTSIDE OF THE PIPES, FROM SEWER MAINS OR SEPTIC SYSTEMS.

**3.4** WATER SERVICE LINES SHALL BE IDENTIFIED AS:

| DESCRIPTION | SIZE | MATERIAL (a) | TYPE (b) |
|---|---|---|---|
| **MCWA** PORTION: FROM THE WATER MAIN TO AND INCLUDING THE CONTROL VALVE ON THE ROW/PROPERTY/EASEMENT LINE | N/A | D.I.P.* | N/A |
| **PRIVATE** PORTION: FROM THE CONTROL VALVE TO THE METER | 6" | D.I.P.* | CMB |

(A) ACCEPTABLE MATERIAL IS *CLASS 52 CEMENT MORTAR LINED ZINC-COATED DUCTILE IRON PIPE.
(B) SERVICE TYPES INCLUDE: DOMESTIC = DS, FIRE = FS, OR COMBINED = CMB

**3.5** THE WATER AUTHORITY'S PORTION OF THE WATER SERVICE LINE SHALL BE INSTALLED PRIOR TO THE PRIVATE PORTION OF THE SERVICE LINE.

**3.6** WATER METER(S) TO BE LOCATED ON THE INTERIOR OF EXTERIOR WALLS(S) IMMEDIATELY UPON SERVICE ENTRANCE INTO THE BUILDING FOOTPRINT OR HEATED ENCLOSURE. A BYPASS ASSEMBLY IS **NOT** REQUIRED AROUND THE INSTALLATION OF 5/8-INCH THROUGH 1-INCH METERS. 1 ½-INCH AND 2-INCH METER INSTALLATIONS MAY REQUIRE A BYPASS ASSEMBLY DEPENDING UPON THE APPLICATION. 3-INCH AND LARGER METERS REQUIRE A BYPASS ASSEMBLY.

**3.7** WATER SERVICE LINES SIZED 4-INCHES OR GREATER SHALL BE:
- PRESSURE TESTED IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE MONROE COUNTY WATER AUTHORITY. **A WATER AUTHORITY REPRESENTATIVE MUST WITNESS THIS TEST.**
- DISINFECTED BY USING THE CONTINUOUS FEED METHOD ACCORDING TO AWWA STANDARD SPECIFICATIONS. AFTER FLUSHING AND DISINFECTING THE SERVICE LINE, WATER SAMPLES SHALL BE COLLECTED IN ACCORDANCE WITH THE DEPARTMENT OF HEALTH THAT HAS JURISDICTION OF THE AREAS REQUIREMENTS. APPROVAL AND NOTIFICATION BY THE HEALTH DEPARTMENT OF PASSING HEALTH SAMPLE TEST(S) MUST BE RECEIVED BEFORE THE SERVICE WILL BE ACTIVATED BY THE WATER AUTHORITY.

## STANDARD ABBREVIATIONS

| | |
|---|---|
| AC. | ACRE |
| A.O.B.E. | AS ORDERED BY ENGINEER |
| ASPH. | ASPHALT |
| AZ. | AZIMUTH |
| ℄ (B) | BASELINE |
| BM | BENCHMARK |
| ℄ | CENTERLINE |
| CLF | CHAIN LINKED FENCE |
| C.O. | CLEAN—OUT |
| CONC. | CONCRETE |
| CPP | CORRUGATED POLYETHYLENE PIPE |
| CSP | CORRUGATED STEEL PIPE |
| COV. | COVER |
| CB | CURB BOX |
| CY | CUBIC YARD |
| D. | DEGREE OF CURVE |
| DIA. | DIAMETER |
| DI | DROP INLET |
| D.I.P. | DUCTILE IRON PIPE |
| EA. | EACH |
| EIC | ENGINEER IN CHARGE |
| ELEV. | ELEVATION |
| EP | EDGE OF PAVEMENT |
| FF | FINISH FLOOR = FINISH FLOOR ELEVATION |
| FI | FIELD INLET |
| FR. | FRAME |
| FP | FINISH PAD = GARAGE FLOOR ELEVATION |
| FT. | FEET |
| G | GAS MAIN |
| GAL. | GALLON |
| GR. | GRAVEL |
| G.R. | GUIDE RAIL |
| HCL | HORIZONTAL CONTROL LINE |
| HYD. | HYDRANT |
| INV. | INVERT |
| IP | IRON PIPE OR IRON PIN |
| L. | LENGTH OR LENGTH OF CURVE |
| LF | LINEAR FEET |
| LP | LIGHT POST (PRIVATE) |

| | |
|---|---|
| LS | LUMP SUM |
| LT. | LEFT |
| MB. | MAILBOX |
| M.O. | MIDDLE ORDINATE |
| MON. | MONUMENT OR MONTH |
| MCGS | MONROE COUNTY GEODETIC SURVEY |
| M.H. | MANHOLE |
| NEC. | NECESSARY |
| N.I.C. | NOT—IN— CONTRACT |
| NTS | NOT TO SCALE |
| N/F | NOW OR FORMERLY |
| PAV'T. | PAVEMENT |
| PE | POLYETHYLENE PIPE |
| PPE | PERFORATED POLYETHYLENE PIPE |
| PC | POINT OF CURVATURE |
| PI | POINT OF INTERSECTION |
| PT | POINT OF TANGENCY |
| PVC | POINT OF VERTICAL CURVATURE |
| PVI | POINT OF VERTICAL INTERSECTION |
| PVT | POINT OF VERTICAL TANGENCY |
| PP | POWER POLE |
| ℄ (P) | PROPERTY LINE |
| R. | RADIUS |
| RCP | REINFORCED CONCRETE PIPE |
| RG&E | ROCHESER GAS AND ELECTRIC |
| R.O.W. | RIGHT—OF—WAY |
| RT. | RIGHT |
| RTC | ROCHESTER TELEPHONE COMPANY |
| SA. | SANITARY SEWER |
| ST. | STORM SEWER |
| STA. | STATION |
| STY. | STORY |
| SY | SQUARE YARD |
| T. | TANGENT DISTANCE |
| TGL | THEORETICAL GRADE LINE |
| TYP. | TYPICAL |
| VC | VERTICAL CURVE |
| VTP | VITRIFIED TILE PIPE |
| Δ | CENTRAL ANGLE |

## EARTHWORK

**THESE NOTES ARE COMPLEMENTARY TO THE GEOTECHNICAL ENGINEERS REPORT AND RECOMMENDATIONS. THE GEOTECHNICAL ENGINEER OF RECORDS DIRECTION TAKES PRECEDENCE IN CASE OF DISCREPANCY.**

1. **PREPARATION** - PRIOR TO START OF EARTHWORK OPERATIONS THE CONTRACTOR SHALL COMPLETE THE FOLLOWING APPLICABLE ITEMS AS DEFINED BY CONTRACT DOCUMENTS:
   - **SITE DEMOLITION** - REMOVAL AND DISPOSAL OFF-SITE IN A LEGAL MANNER; STRUCTURES, UTILITIES, PAVEMENTS, ETC.
   - **CLEARING AND GRUBBING** - REMOVAL AND DISPOSAL OFF-SITE IN A LEGAL MANNER; TREES, BRUSH, STUMPS, ETC.
   - **TOPSOIL STRIPPING** - STRIP AND STOCKPILE TOPSOIL FOR REUSE. EXCESS TOPSOIL MAY BE REMOVED FROM SITE WITH APPROVAL BY OWNER AND MUNICIPALITY.

2. **RESPONSIBILITY** - THE CONTRACTOR IS RESPONSIBLE FOR:
   - **ESTIMATE** - COMPLETION OF A QUANTITY TAKEOFF TO DETERMINE THE VOLUME OF CUT, FILL, AND TOPSOIL. COMPARE AND COORDINATE WITH INFORMATION PROVIDED BY THE DESIGN ENGINEER.
   - **GRADE TOLERANCES** - ESTABLISHING DESIGN SUBGRADE ELEVATIONS TO WITHIN ONE TENTH OF ONE FOOT (0.10') IN PAVEMENT AREAS (INCLUDING WALKS) AND TO WITHIN THIRTY-THREE HUNDREDTHS OF ONE FOOT (0.33') FOR ALL REMAINING AREAS.
   - **COMPACTION** - ACHIEVING COMPACTION VALUES (NOT LESS THAN THE PERCENTAGES SPECIFIED BELOW) FOR EMBANKMENT/FILL AREAS. THE TERMS "FILL" AND EMBANKMENT" ARE INTERCHANGEABLE.
   - **CUTS** - ONCE EXCAVATIONS ARE SHAPED TO THE DESIGN GRADES THE AREAS SHALL BE PROTECTED TO ASSURE THAT THE INTEGRITY OF MATERIAL IS NOT COMPROMISED BY CONSTRUCTION VEHICLES AND/OR IMPROPER DRAINAGE. AREAS DETERMINED BY CONTRACTOR TO BE **NOT** SUITABLE FOR SUBGRADE PLACEMENT SHALL BE IMMEDIATELY REPORTED WHEN THE SUBGRADE IS ESTABLISHED TO OWNER'S REPRESENTATIVE. STABILIZATION MEASURES FOR CUT AREAS MAY BE CONSIDERED BY OWNER'S REPRESENTATIVE AS A CHANGE TO THE BASE CONTRACT.

3. **TESTING** - THE FOLLOWING MAXIMUM DRY DENSITIES SHALL BE ACHIEVED AS MEASURED BY THE MODIFIED PROCTOR METHOD ASTM D-1557:
   - **95%** UNDER PAVEMENTS, WALKS, AND IN STRUCTURAL FILL AREAS
   - **85%** IN REMAINING AREAS

   TOWN OF GREECE REQUIRES TESTING TO BE CONDUCTED AT DRIVEWAY CENTERLINE AND 5' ON EITHER SIDE OF THE CENTERLINE EVERY 100'.
   THE AGREEMENT BETWEEN THE OWNER AND CONTRACTOR SHALL DEFINE THE NUMBER OF TESTS AND RESPONSIBILITY. WE RECOMMEND IN EMBANKMENT AREAS ONE PER LIFT AND/OR ONE PER 1,000 CUBIC YARDS.

4. **LIFT THICKNESS** - THE MAXIMUM LIFT THICKNESS UNDER PAVEMENTS, WALKS, AND STRUCTURAL FILLS SHALL BE 12 INCHES. HAND OPERATED COMPACTION FILLS SHALL NOT EXCEED 6 INCHES.

5. **PROOF ROLLING** - THE OWNER'S REPRESENTATIVE MAY REQUEST A PROOF ROLL (I.E. LOADED TEN WHEELER) OF SUBGRADE AREAS PRIOR TO PLACEMENT OF SUBBASE MATERIALS. AREAS THAT "FAIL" SHALL BE REMOVED AND REPLACED TO ACHIEVE A PASSING SUBGRADE.

## EROSION CONTROL

1. **CERTIFICATION** - THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH INCLUDES THE "GRADING PLAN", "EROSION CONTROL PLAN", "EROSION CONTROL NOTES", ALONG WITH THE "DRAINAGE REPORT", DEFINES AND MEETS THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) LATEST STORM WATER REGULATIONS.

2. **CONTRACTOR RESPONSIBILITY** - ALL CONTRACTORS AND SUB-CONTRACTORS SHALL CERTIFY WITHIN THE SWPPP THAT THEY WILL IMPLEMENT AND MAINTAIN STORM WATER MANAGEMENT PRACTICES.

3. **INSPECTION** - EROSION CONTROL (EC) MEASURES INSTALLED AND MAINTAINED BY THE SITE WORK CONTRACTOR ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE: MUNICIPALITY, DESIGN ENGINEER, NYSDEC, AND OWNER'S REPRESENTATIVE. IMMEDIATE ACTION BY THE CONTRACTOR SHALL BE TAKEN IF ADDITIONAL OR CORRECTIVE MEASURES ARE REQUIRED BY ANY ONE OF THESE CITED REVIEWERS. EROSION CONTROL MEASURES NOT SPECIFICALLY SHOWN ON CONTRACT DRAWINGS (I.E.., STRAW BALES, COLLARS, FABRICS, ETC.) SHALL BE INSTALLED AS WARRANTED BY FIELD CONDITIONS, AND AS DIRECTED BY THE AFOREMENTIONED REVIEWERS.

4. **NOTIFICATION** - AS DESIGN ENGINEER, OUR OFFICE HAS NOTIFIED THE OWNER OF THE INSPECTION REQUIREMENTS UNDER GP-0-25-001. DISTURBANCES OF 1.0 ACRE OR GREATER REQUIRE THAT THE OWNER FILE A NOTICE OF INTENT (NOI) AND A SWPPP WITH THE NYSDEC UNDER STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT #GP-0-25-001. THE REGULATIONS REQUIRE THAT A LICENSED PROFESSIONAL COMPLETE A WEEKLY INSPECTION (THROUGHOUT THE PERIOD OF LAND DISTURBANCE).

5. **PRE-CONSTRUCTION** - THE APPROPRIATE EROSION CONTROL MEASURES AS DEFINED BY THE CONSTRUCTION DOCUMENTS SHALL BE INSTALLED PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.

6. **TOPSOIL** - UPON COMPLETION OF THE STRIPPING OPERATION, STOCKPILES SHALL BE STABILIZED IN ACCORDANCE TO NYSDEC REGULATIONS.

7. **SLOPES** - UPON COMPLETION OF GRADING, SLOPES WITH A GRADIENT OF ONE FOOT VERTICAL TO THREE FEET HORIZONTAL (1 ON 3) OR GREATER SHALL BE: TOPSOILED, SEEDED, FERTILIZED AND MULCHED OR TREATED AS SPECIFIED ON CONTRACT DRAWINGS.

8. **DUST** - THE CONTRACTOR SHALL APPLY WATER AND/OR CALCIUM CHLORIDE, AS CONDITIONS WARRANT, TO CONTROL WIND BORN EROSION. THIS MEASURE APPLIES TO: HAUL ROADS, CUT AND FILL OPERATIONS, SUB-BASE AND ANY OTHER EXPOSED SURFACES.

9. **OPERATION & MAINTENANCE** - THROUGHOUT THE PERIOD OF CONSTRUCTION AND PRIOR TO ESTABLISHING FINAL GROUND COVER THE SITE CONTRACTOR IS RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE TEMPORARY EROSION CONTROL MEASURES. FOR EXAMPLE, THE SILTATION FACILITIES SHALL BE RE-EXCAVATED WHEN THE VOLUME (3600 CUBIC FEET/DISTURBED ACRE) IS REDUCED BY ONE-HALF OR MORE OF ITS SPECIFIED CAPACITY AND/OR THE MATERIAL IS WITHIN ONE FOOT OF THE DISCHARGE POINT.

10. **WORK STOPPAGE** - ALL DISTURBED AREAS NOT TO BE WORKED WITHIN 14 DAYS MUST BE SEEDED WITHIN 7 DAYS FROM THE LAST CONSTRUCTION ACTIVITY IN THAT AREA.

11. **TEMPORARY STABILIZATION** - TEMPORARY STABILIZATION SHALL REQUIRE 4 TONS OF STRAW/ ACRE OF DISTURBANCE PLACED WITH TACKIFIER OR ROLLED WITH A TRACKED VEHICLE TO ENSURE NOT DISPLACED.

12. **WINTER STABILIZATION** - ALL WINTER STABILIZATION METHODS IDENTIFIED IN THE NYS 'BLUE BOOK' SHALL BE FOLLOWED FOR ANY DISTURBANCE OR NON-STABILIZED AREAS FROM NOVEMBER 15TH - APRIL 1ST.

13. **SUBSOIL RESTORATION** - ALL AREAS TO BE RESTORED AS LAWN SHALL BE RESTORED PER CHAPTER 5 (5.1.6) OF THE NEW YORK STATE STORMWATER DESIGN MANUAL AND THE SOIL RESTORATION TABLE (TABLE 5.3 - SOIL RESTORATION REQUIREMENTS) SHOWN ON THE PLANS. THE PROJECT SOILS ARE HYDROLOGIC SOIL GROUP A AND SHALL BE RESTORED AS SPECIFIED.

**CONSTRUCTION SEQUENCE**

THE CONTRACTOR SHALL INSTALL EROSION CONTROL MEASURES IN THE FOLLOWING SEQUENCE UNLESS AUTHORIZED OTHERWISE BY THE TOWN AND TOWN ENGINEER. ALL AUTHORIZED CHANGES TO THE SEQUENCE SHALL BE ADDED TO THE REVISION SECTION OF THE SWPPP AND THE OWNER, ENGINEER, INSPECTOR AND TOWN OF CANANDAIGUA MS4 OFFICER SHALL BE NOTIFIED.

- START OF CONSTRUCTION
- INSTALL STABILIZED CONSTRUCTION ENTRANCE & CONCRETE WASH STATION
- DELINEATE WORK LIMITS
- PROTECT EXISTING VEGETATION AND OTHER ENVIRONMENTAL FEATURES TO BE PRESERVED WITH CONSTRUCTION BARRIERS.
- INSTALL REQUIRED PERIMETER SEDIMENT CONTROLS.
- CLEAR & GRUB SITE AREA TO DISTURBANCE LIMITS AS REQUIRED
- COMPLETION OF SITE CLEARING
- INSTALL SWALES AND STABILIZE
- INSTALL SEDIMENT TRAPS PRIOR TO COMPLETING SWALES
- INSTALL ADDITIONAL TEMPORARY DIVERSION SWALES AT ANY TIME AS SITE CONDITIONS REQUIRE.
- INSTALL CHECK DAMS AND SWALE LINING AS THE SWALES ARE CONSTRUCTED
- INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROLS AS REQUIRED OR NECESSITATED BY SITE CONDITIONS.
- STRIP, STOCKPILE, AND STABILIZE TOPSOIL.
- ROUGH GRADE SITE.
- STABILIZE DENUDED AREAS AND STOCKPILES IN AREAS WHERE DISTURBANCE ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, STABILIZATION MEASURES SHOULD BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN 14 DAYS*
  *WITHIN 7 DAYS IF DISTURBANCE BECOMES GREATER THAN 5 ACRES *WITHIN 3 DAYS IF BETWEEN NOVEMBER 15TH AND APRIL 1ST
- COMPLETION OF ROUGH GRADING
- INSTALL UTILITIES
- SITE WORK AT STREAM CROSSING. SEE STREAM CROSSING CONSTRUCTION SEQUENCE
- CLEAN AND MAINTAIN SEDIMENT TRAPS WHEN SEDIMENT REACHES 25% OF CAPACITY.
- INSTALL GUTTER AND SILT FENCE
- APPLY STONE TO ROAD
- START MODEL TOWNHOUSE
- COMPLETE FINAL GRADING, REAPPLY TOPSOIL, AND INSTALL PERMANENT SEEDING, FERTILIZER (CONTAINING NO PHOSPHORUS) AND MULCH.
- INSTALL BIO-RETENTION PLANTINGS
- COMPLETION OF FINAL LANDSCAPING
- COMPLETE FINAL PAVING.
- SUCCESSFUL ESTABLISHMENT OF LANDSCAPING IN PUBLIC AREAS
- REMOVE ALL SEDIMENT CONTROL PRODUCTS, TEMPORARY SEDIMENT TRAPS, AND DIVERSION SWALES AFTER SOILS ARE STABILIZED. SEED & MULCH ANY DISTURBED AREAS AFTER REMOVAL IS COMPLETE

## RESTORATION AND LANDSCAPING

1. **GUARANTEE** - THE **AGREEMENT BETWEEN THE OWNER AND CONTRACTOR SHALL** DEFINE THE REQUIREMENTS, MAINTENANCE, AND TIME TO ESTABLISH NEW TURF AND LANDSCAPING ACCEPTANCE BY THE OWNER.

2. **TOPSOIL** - PLACE A MINIMUM OF **6 INCHES** (REQUIRED) OF TOPSOIL ON ALL DISTURBED SURFACES. FINE GRADE TO ESTABLISH THE DESIGN ELEVATIONS AND DRAINAGE PATTERNS. OBTAIN OWNER'S REPRESENTATIVE APPROVAL PRIOR TO SEEDING.

3. **SEED** - LAWN AREAS SHALL BE HYDROSEEDED WITH AN APPROVED: SEED MIXTURE, MULCH, AND FERTILIZER. THE APPLICATION RATE SHALL BE DETERMINED BY CONTRACTOR TO ESTABLISH A "STAND" OF GRASS. THE CONTRACTOR SHALL SUBMIT MATERIAL AND APPLICATION SPECIFICATIONS TO THE OWNER'S REPRESENTATIVE FOR APPROVAL PRIOR TO APPLICATION.

4. **PLANT STOCK** - PLANT MATERIALS SHALL BE IN ACCORDANCE WITH "AMERICAN STANDARD FOR NURSERY STOCK". THE CONTRACTOR SHALL SUBMIT PLANT MATERIAL SPECIFICATIONS TO THE OWNER'S ON-SITE REPRESENTATIVE FOR APPROVAL PRIOR TO DELIVERY TO THE SITE.

5. **PLANT LOCATIONS** - THE PLANT LOCATIONS DEPICTED ON THE PLAN MAY BE FIELD ADJUSTED (SO THEY DO NOT INTERFERE WITH UTILITIES) AND TO THE SATISFACTION OF OWNER'S REPRESENTATIVE.

6. **PLANTING BEDS** - PROVIDE TWELVE INCHES (12") OF TOPSOIL, WEED FABRIC (AS DIRECTED BY OWNER), AND THREE INCHES (3") OF MULCH AT PLANTING BEDS, UNLESS SPECIFIED OTHERWISE ON DRAWINGS.

**SOIL RESTORATION REQUIREMENTS**

| TYPE OF SOIL DISTURBANCE | SOIL RESTORATION REQUIREMENT | | COMMENTS/EXAMPLES |
|---|---|---|---|
| NO SOIL DISTURBANCE | RESTORATION NOT PERMITED | | PRESERVATION OF NATURAL FEATURES |
| MINIMAL SOIL DISTURBANCE | RESTORATION NOT REQUIRED | | CLEARING AND GRUBBING |
| AREAS WHERE TOPSOIL IS STRIPPED ONLY - NO CHANGE IN GRADE | HSG A&B<br>APPLY 6 INCHES OF TOPSOIL | HSG C&D<br>AERATE* & APPLY 6 INCHES OF TOPSOIL | |
| AREAS OF CUTS OR FILLS | HSG A&B<br>AERATE* & APPLY 6 INCHES OF TOPSOIL | HSG C&D<br>APPLY FULL SOIL RESTORATION** AND 6 INCHES TOPSOIL | |
| HEAVY TRAFFIC AREAS (ESPECIALLY WITHIN A ZONE OF 5-25 FEET AROUND BUILDINGS, BUT NOT WITHIN 5 FEET OF FOUNDATION WALLS | APPLY FULL SOIL RESTORATION (DE-COMPACTION & COMPOST ENHANCEMENT) | | |
| AREAS WHERE RUNOFF REDUCTION AND/OR INFILTRATION PRACTICES ARE APPLIED | SOIL RESTORATION IS NOT REQUIRED, BUT MAY BE APPLIED TO ENHANCE THE REDUCTION SPECIFIED FOR APPROPRIATE PRACTICES | | KEEP CONSTRUCTION EQUIPMENT FROM CROSSING THESE AREAS. TO PROTECT NEWLY INSTALLED PRACTICE FROM ANY ONGOING CONSTRUCTION ACTIVITIES CONSTRUCT A SINGLE PHASE OPERATION FENCE AREA |
| REDEVELOPMENT PRACTICES | SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREAS WILL BE CONVERTED TO PERVIOUS AREA | | |

* AERATION INCLUDES THE USE OF MACHINES SUCH AS TRACTOR-DRAWN IMPLEMENTS WITH COULTERS MAKING A NARROW SLIT IN THE SOIL, A ROLLER WITH MANY SPIKES MAKING INDENTATIONS IN THE SOIL, OR PRONGS WHICH FUNCTION LIKE A MINI-SUBSOILER.

** PER "DEEP RIPPING AND DE-COMPACTION, DEC 2008".


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


PRELIMINARY/FINAL SITE PLANS
for
THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY STATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | N.T.S. |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER
NOT FOR CONSTRUCTION
COLE M. PAPASERGI

DRAWING TITLE:
CONSTRUCTION NOTES & SPECIFICATIONS

1 of 21
SHEET No:
C0.1
1780-26
JOB No:
DRAWING No:


File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C0.1 NOTES.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

## PROJECT INFORMATION:

**1. PARCEL DATA:**

1.1. **ADDRESS:** 1407 & 1451 PITTSFORD VICTOR RD
1.2. **PARCEL TAX NUMBERS:** 193.02-1-19, 193.02-1-18.3/A, 193.02-1-18.3/B, & 193.02-1-18.3/D
1.3. **OWNER:** WP OP LLC
1.4. **AREA:** 3.766 AC, 2.66 AC, 2.967 AC, & 2.63 AC (12.02 TOTAL)

**2. ZONING DATA:**

2.1. **ZONING DISTRICT:** RB - RESTRICTED BUSINESS
2.2. **PROPOSED USE:** MULTI-FAMILY RESIDENTIAL

**3. TOWN BULK REQUIREMENTS (§208-43): (MIXED USE BULK REQUIREMENTS ARE LISTED)**

| | | REQUIRED | PROVIDED |
|---|---|---|---|
| 3.1. | **LOT SIZE** | 10,000 SF | 129,242 SF (MIN) |
| 3.2. | **WIDTH** | 80 FT | 244 FT |
| 3.3. | **DEPTH** | 250 FT | 300+ FT |
| 3.4. | **FRONT SETBACK** | 10 FT MIN, 30 FT MAX* | 300+ FT |
| 3.5. | **SIDE SETBACK** | 15 FT | 15.9 FT |
| 3.6. | **REAR SETBACK** | 15 FT | 44.2 FT |
| 3.6. | **MAX LOT COVERAGE** | 75% | 35%[1] |
| 3.7. | **MAX BUILDING HEIGHT** | **40 FT** | **67 FT*** |

* PLANNING BOARD WAIVER REQUIRED. GRANTED __/__/2026

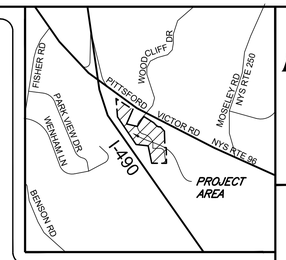
**4. TOWN PARKING REQUIREMENTS (§208-16):**

| | | |
|---|---|---|
| 4.1. | **REQUIRED** | 320[2] |
| 4.2. | **PROVIDED** | 330 |

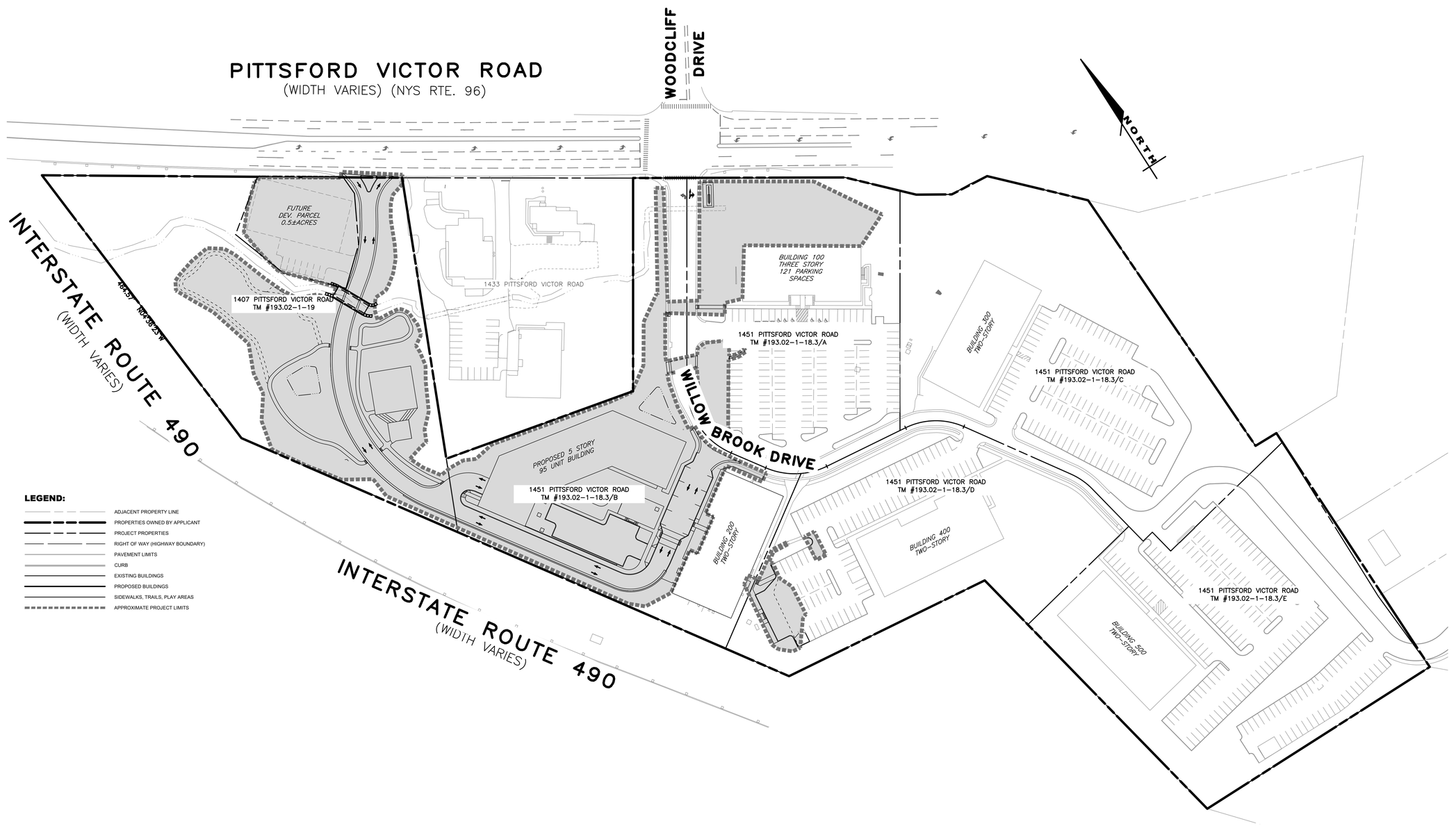
***WAIVER REQUIRED FROM THE PLANNING BOARD** §208-43.C(10)

(1) GREENSPACE IS CALCULATED FOR 1451/B (BLDG 200) AND 1407 ONLY WHERE NEW IMPERVIOUS IS PLACED.
(2) REQUIRED PARKING IS CALCULATED FROM ITE PARKING GENERATOR MANUAL 85TH PERCENTILE SEE ENGINEERING REPORT FOR FULL DETAIL

SPECIAL USE PERMIT GRANTED JUNE 11, 2025 FOR MIXED USE GREATER THAN 1 ACRE IN SIZE (§208-43.C(1))




TOWN OF PERINTON
LOCATION MAP
NOT TO SCALE





MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=60' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

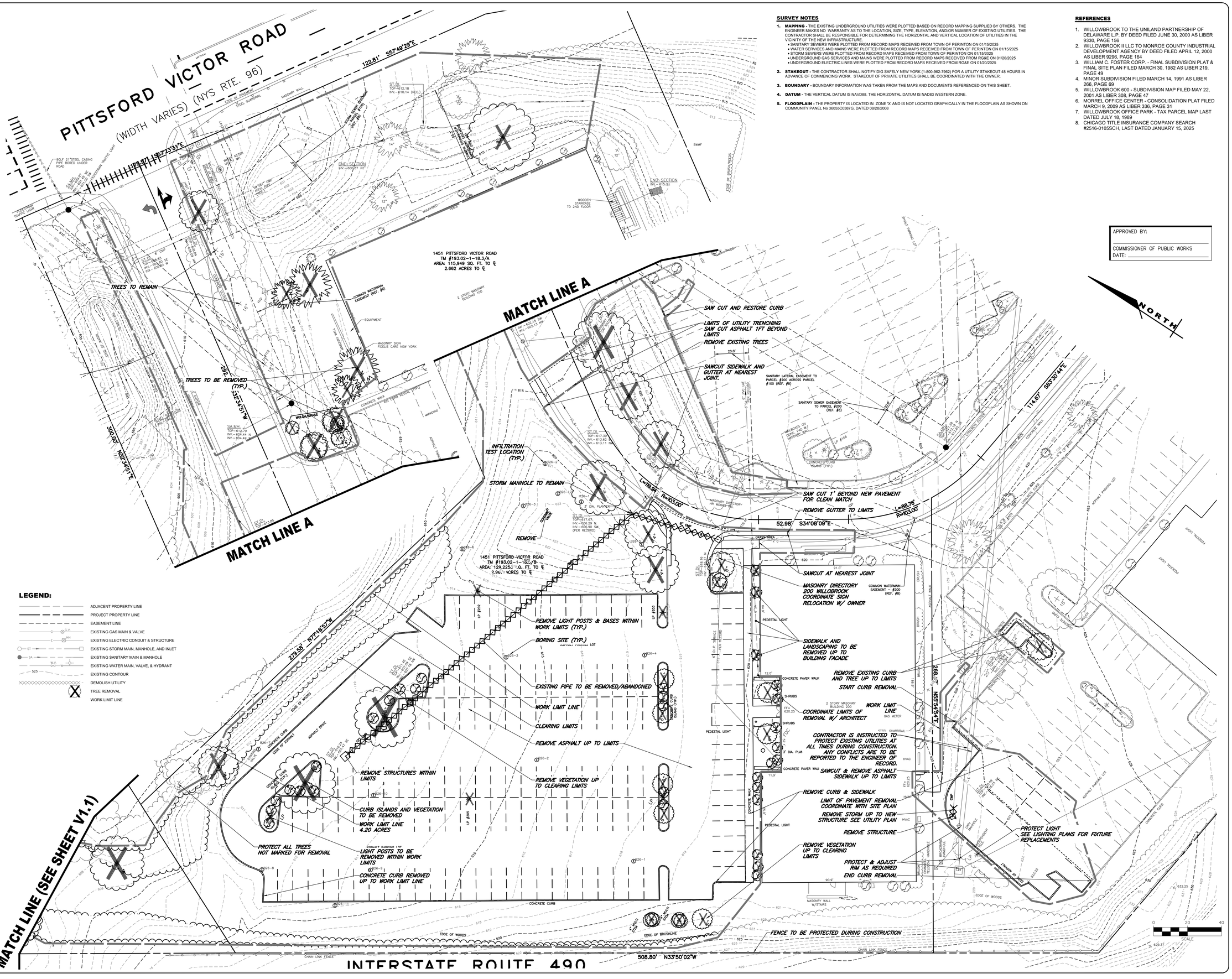
STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER
NOT FOR CONSTRUCTION

COLE M. PAPASERGI

DRAWING TITLE:
OVERALL PLAN

| | |
|---|---|
| 2 of 21 SHEET No: | C1.0 |
| 1780-26 JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C1.0 OVERALL.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




## SURVEY NOTES

1. **MAPPING -** THE EXISTING UNDERGROUND UTILITIES WERE PLOTTED BASED ON RECORD MAPPING SUPPLIED BY OTHERS. THE ENGINEER MAKES NO WARRANTY AS TO THE LOCATION, SIZE, TYPE, ELEVATION, AND/OR NUMBER OF EXISTING UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE HORIZONTAL AND VERTICAL LOCATION OF UTILITIES IN THE VICINITY OF THE NEW INFRASTRUCTURE.
   - SANITARY SEWERS WERE PLOTTED FROM RECORD MAPS RECEIVED FROM TOWN OF PERINTON ON 01/15/2025
   - WATER SERVICES AND MAINS WERE PLOTTED FROM RECORD MAPS RECEIVED FROM TOWN OF PERINTON ON 01/15/2025
   - STORM SEWERS WERE PLOTTED FROM RECORD MAPS RECEIVED FROM TOWN OF PERINTON ON 01/15/2025
   - UNDERGROUND GAS SERVICES AND MAINS WERE PLOTTED FROM RECORD MAPS RECEIVED FROM RG&E ON 01/20/2025
   - UNDERGROUND ELECTRIC LINES WERE PLOTTED FROM RECORD MAPS RECEIVED FROM RG&E ON 01/20/2025
2. **STAKEOUT -** THE CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK (1-800-962-7962) FOR A UTILITY STAKEOUT 48 HOURS IN ADVANCE OF COMMENCING WORK. STAKEOUT OF PRIVATE UTILITIES SHALL BE COORDINATED WITH THE OWNER.
3. **BOUNDARY -** BOUNDARY INFORMATION WAS TAKEN FROM THE MAPS AND DOCUMENTS REFERENCED ON THIS SHEET.
4. **DATUM -** THE VERTICAL DATUM IS NAVD88. THE HORIZONTAL DATUM IS NAD83 WESTERN ZONE.
5. **FLOODPLAIN -** THE PROPERTY IS LOCATED IN ZONE "X" AND IS NOT LOCATED GRAPHICALLY IN THE FLOODPLAIN AS SHOWN ON COMMUNITY PANEL No 36055C0387G, DATED 08/28/2008

## REFERENCES


1. WILLOWBROOK TO THE UNILAND PARTNERSHIP OF DELAWARE L.P. BY DEED FILED JUNE 30, 2000 AS LIBER 9330, PAGE 156
2. WILLOWBROOK II LLC TO MONROE COUNTY INDUSTRIAL DEVELOPMENT AGENCY BY DEED FILED APRIL 12, 2000 AS LIBER 9296, PAGE 164
3. WILLIAM C. FOSTER CORP. - FINAL SUBDIVISION PLAT & FINAL SITE PLAN FILED MARCH 30, 1982 AS LIBER 219, PAGE 49
4. MINOR SUBDIVISION FILED MARCH 14, 1991 AS LIBER 266, PAGE 69
5. WILLOWBROOK 600 - SUBDIVISION MAP FILED MAY 22, 2001 AS LIBER 308, PAGE 47
6. MORREL OFFICE CENTER - CONSOLIDATION PLAT FILED MARCH 9, 2009 AS LIBER 336, PAGE 31
7. WILLOWBROOK OFFICE PARK - TAX PARCEL MAP LAST DATED JULY 18, 1989
8. CHICAGO TITLE INSURANCE COMPANY SEARCH #2516-0105SCH, LAST DATED JANUARY 15, 2025


APPROVED BY:

COMMISSIONER OF PUBLIC WORKS
DATE: _____


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS NAME AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

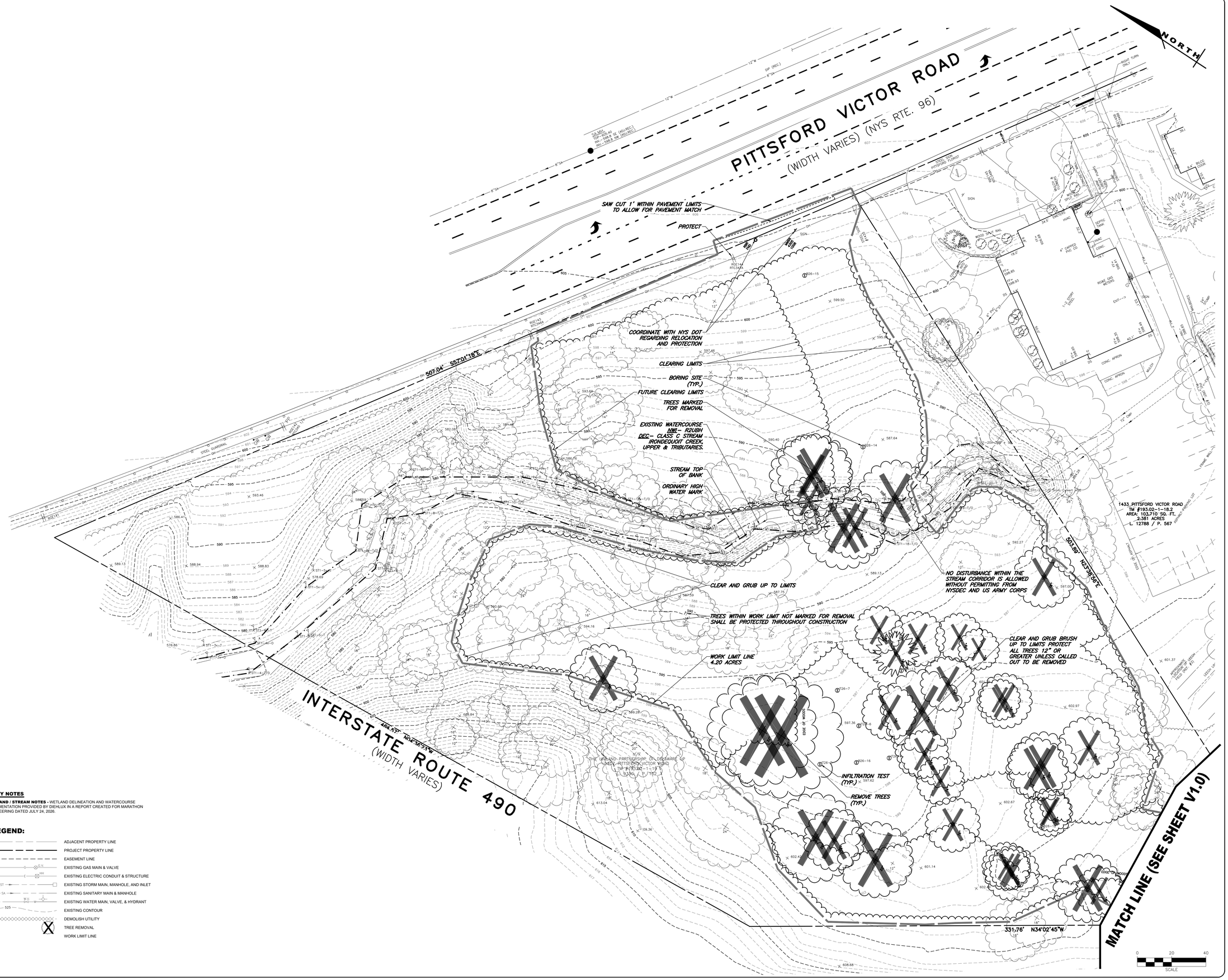

STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER

COLE M. PAPASERGI

DRAWING TITLE:
EX. CONDITIONS & DEMOLITION PLAN

| | |
|---|---|
| 3 of 21 | V1.0 |
| SHEET No: | DRAWING No: |
| 1780-26 | |
| JOB No: | |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 V1.X EX DEMO.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




**SURVEY NOTES**

- **WETLAND / STREAM NOTES** - WETLAND DELINEATION AND WATERCOURSE DOCUMENTATION PROVIDED BY DIEHLUX IN A REPORT CREATED FOR MARATHON ENGINEERING DATED JULY 24, 2026.

**LEGEND:**

- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- EASEMENT LINE
- EXISTING GAS MAIN & VALVE
- EXISTING ELECTRIC CONDUIT & STRUCTURE
- EXISTING STORM MAIN, MANHOLE, AND INLET
- EXISTING SANITARY MAIN & MANHOLE
- EXISTING WATER MAIN, VALVE, & HYDRANT
- EXISTING CONTOUR
- DEMOLISH UTILITY
- TREE REMOVAL
- WORK LIMIT LINE


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTYSTATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

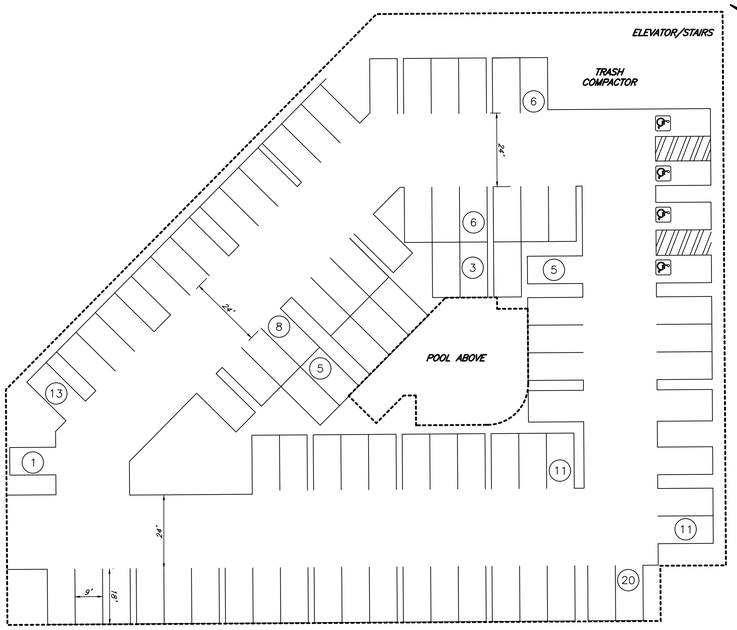
COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER
COLE M. PAPASERGI

DRAWING TITLE:
EX. CONDITIONS & DEMOLITION PLAN

| | |
|---|---|
| 4 of 21 | V1.1 |
| SHEET No: | DRAWING No: |
| 1780-26 | |
| JOB No: | |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 V1.x EX DEMO.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




## GARAGE PARKING LAYOUT

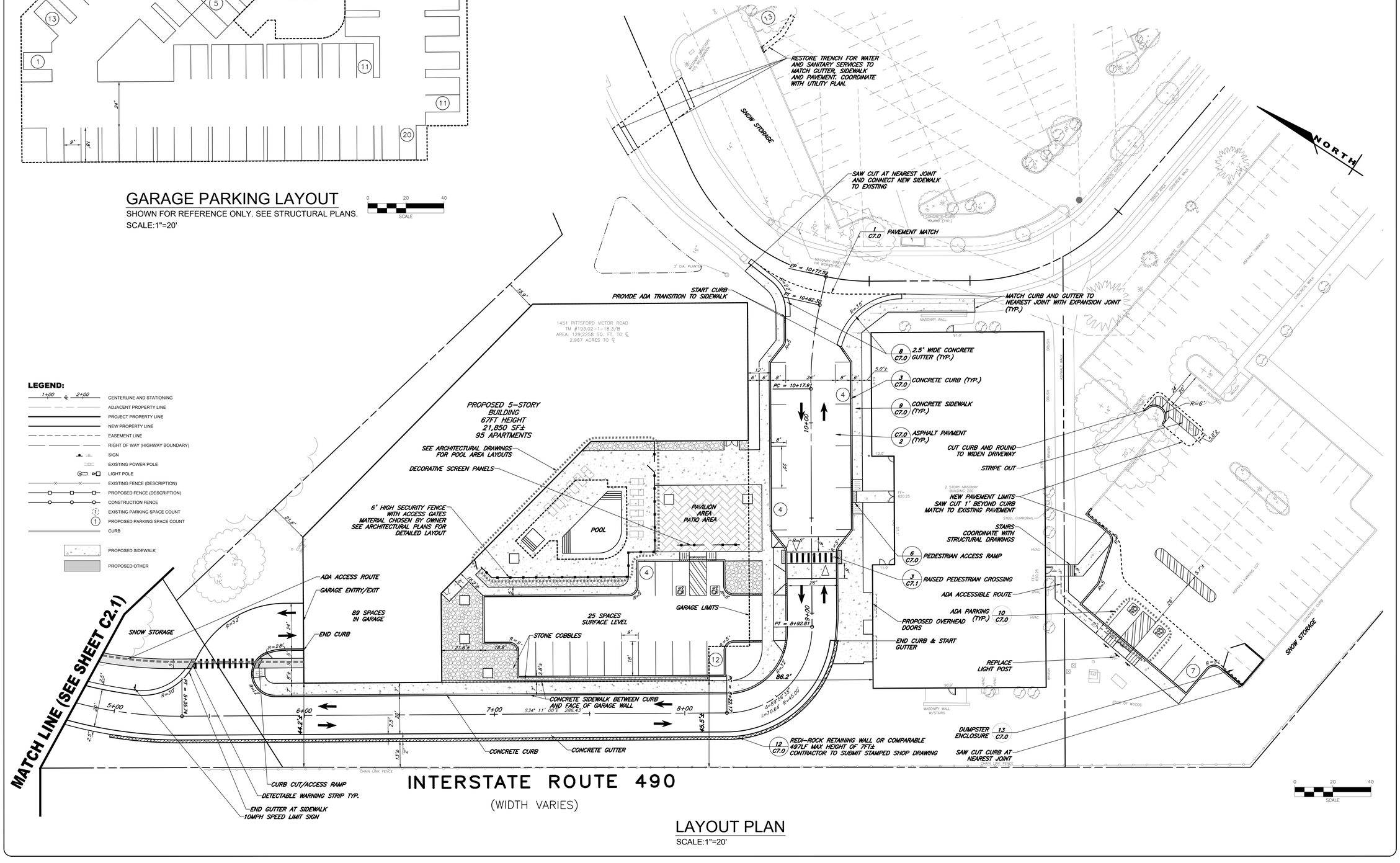
SHOWN FOR REFERENCE ONLY. SEE STRUCTURAL PLANS.
SCALE:1"=20'

0 20 40
SCALE

| APPROVED BY: | |
|---|---|
| FIRE CHIEF | DATE: |
| APPROVED BY: | |
| COMMISSIONER OF PUBLIC WORKS | DATE: |
| APPROVED BY: | |
| TOWN ENGINEER | DATE: |
| APPROVED BY: | |
| PLANNING BOARD CHAIRPERSON | DATE: |
| APPROVED BY: | |
| PLANNING BOARD ATTORNEY | DATE: |


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK




## LAYOUT PLAN

SCALE:1"=20'

0 20 40
SCALE

| JOB NO: | 1780-26 |
|---|---|
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.


COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER

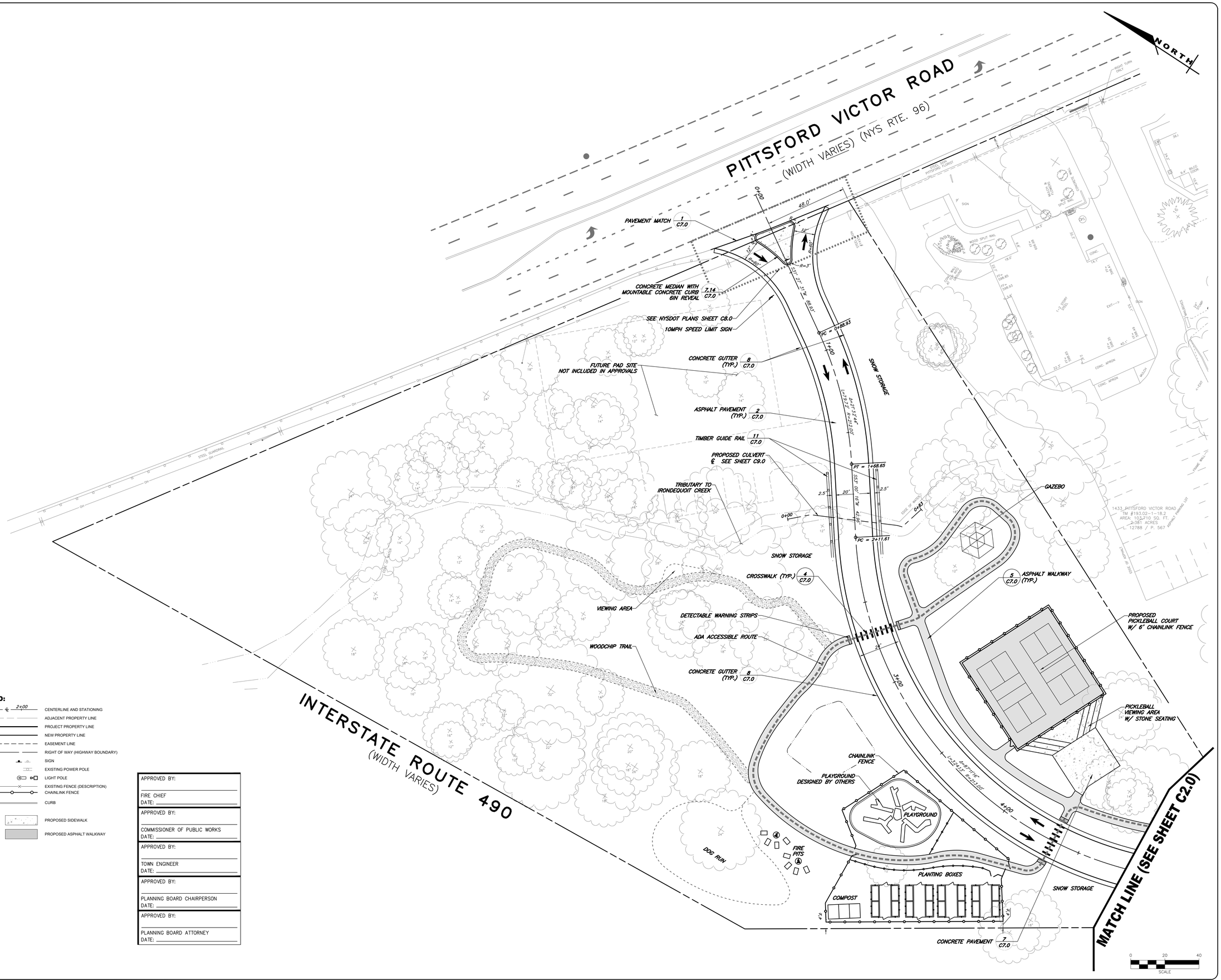
NOT FOR CONSTRUCTION

COLE M. PAPASERGI

DRAWING TITLE:
LAYOUT PLANS

| 5 of 21 SHEET No: | C2.0 |
|---|---|
| 1780-26 JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C2.x LAYOUT.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




**LEGEND:**

- CENTERLINE AND STATIONING (1+00 ℄ 2+00)
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- NEW PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY (HIGHWAY BOUNDARY)
- SIGN
- EXISTING POWER POLE
- LIGHT POLE
- EXISTING FENCE (DESCRIPTION)
- CHAINLINK FENCE
- CURB
- PROPOSED SIDEWALK
- PROPOSED ASPHALT WALKWAY

| |
|---|
| APPROVED BY: _____ FIRE CHIEF DATE: _____ |
| APPROVED BY: _____ COMMISSIONER OF PUBLIC WORKS DATE: _____ |
| APPROVED BY: _____ TOWN ENGINEER DATE: _____ |
| APPROVED BY: _____ PLANNING BOARD CHAIRPERSON DATE: _____ |
| APPROVED BY: _____ PLANNING BOARD ATTORNEY DATE: _____ |


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


# PRELIMINARY/FINAL SITE PLANS
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTYSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK COLE M. PAPASERGI LICENSED PROFESSIONAL ENGINEER 110080

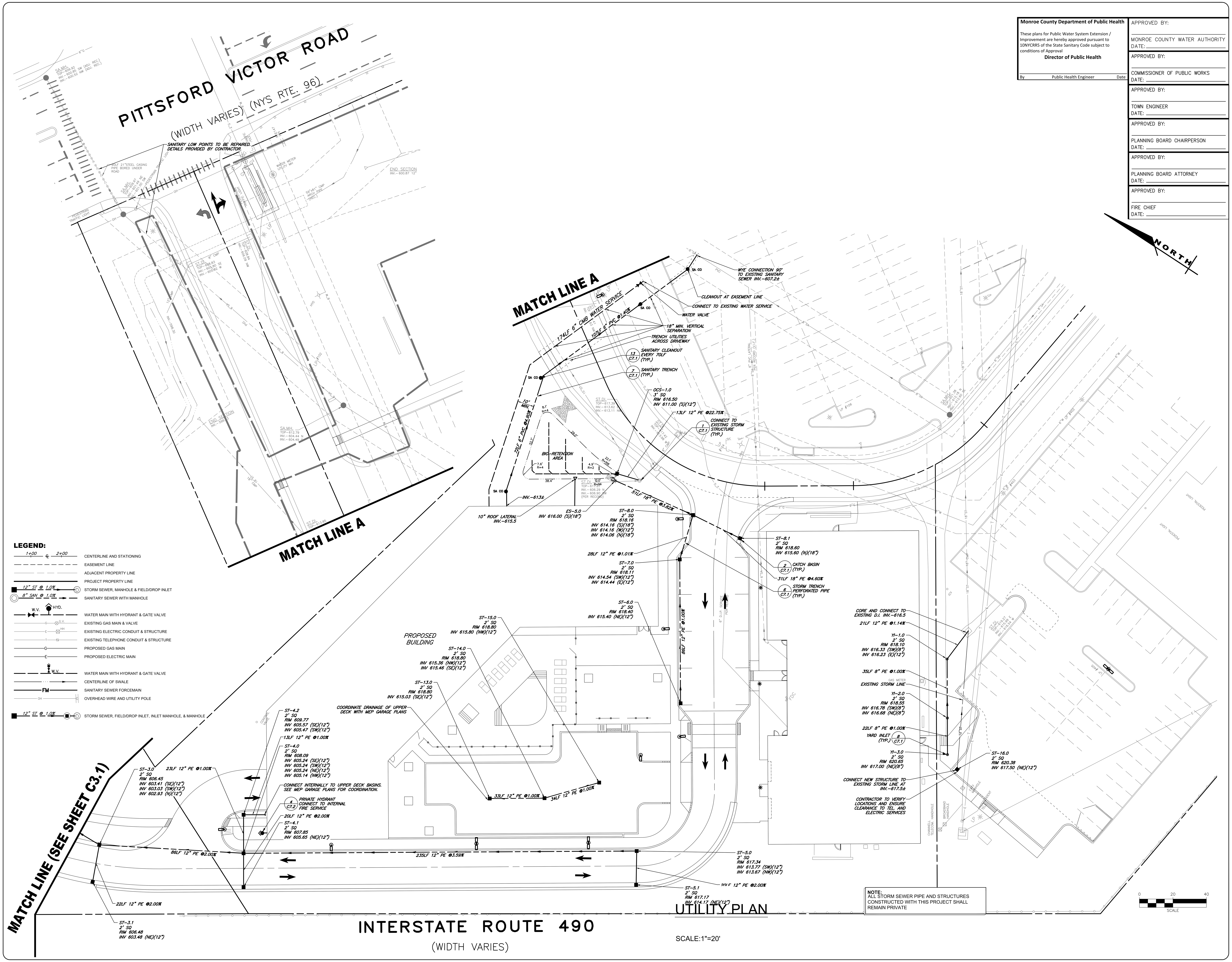
NOT VALID WITHOUT ORIGINAL SIGNATURE

COLE M. PAPASERGI

DRAWING TITLE:
LAYOUT PLANS

| | |
|---|---|
| 6 of 21 SHEET No: | C2.1 |
| 1780-26 JOB No: | DRAWING No: |


File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C2.X LAYOUT.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




**LEGEND:**

| | |
|---|---|
| 1+00 ℄ 2+00 | CENTERLINE AND STATIONING |
| | EASEMENT LINE |
| | ADJACENT PROPERTY LINE |
| | PROJECT PROPERTY LINE |
| 12" ST @ 1.0% | STORM SEWER, MANHOLE & FIELD/DROP INLET |
| 8" SAN @ 1.0% | SANITARY SEWER WITH MANHOLE |
| W.V. HYD. | WATER MAIN WITH HYDRANT & GATE VALVE |
| G.V. | EXISTING GAS MAIN & VALVE |
| HH | EXISTING ELECTRIC CONDUIT & STRUCTURE |
| | EXISTING TELEPHONE CONDUIT & STRUCTURE |
| | PROPOSED GAS MAIN |
| | PROPOSED ELECTRIC MAIN |
| W.V. | WATER MAIN WITH HYDRANT & GATE VALVE |
| | CENTERLINE OF SWALE |
| FM | SANITARY SEWER FORCEMAIN |
| OH | OVERHEAD WIRE AND UTILITY POLE |
| 12" ST @ 1.0% | STORM SEWER, FIELD/DROP INLET, INLET MANHOLE, & MANHOLE |

**NOTE:**
ALL STORM SEWER PIPE AND STRUCTURES CONSTRUCTED WITH THIS PROJECT SHALL REMAIN PRIVATE

UTILITY PLAN

SCALE:1"=20'

**Monroe County Department of Public Health**

These plans for Public Water System Extension / Improvement are hereby approved pursuant to 10NYCRR5 of the State Sanitary Code subject to conditions of Approval

**Director of Public Health**

By Public Health Engineer Date

APPROVED BY: MONROE COUNTY WATER AUTHORITY DATE:

APPROVED BY: COMMISSIONER OF PUBLIC WORKS DATE:

APPROVED BY: TOWN ENGINEER DATE:

APPROVED BY: PLANNING BOARD CHAIRPERSON DATE:

APPROVED BY: PLANNING BOARD ATTORNEY DATE:

APPROVED BY: FIRE CHIEF DATE:

**MARATHON ENGINEERING**
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

# PRELIMINARY/FINAL SITE PLANS for THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTY STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

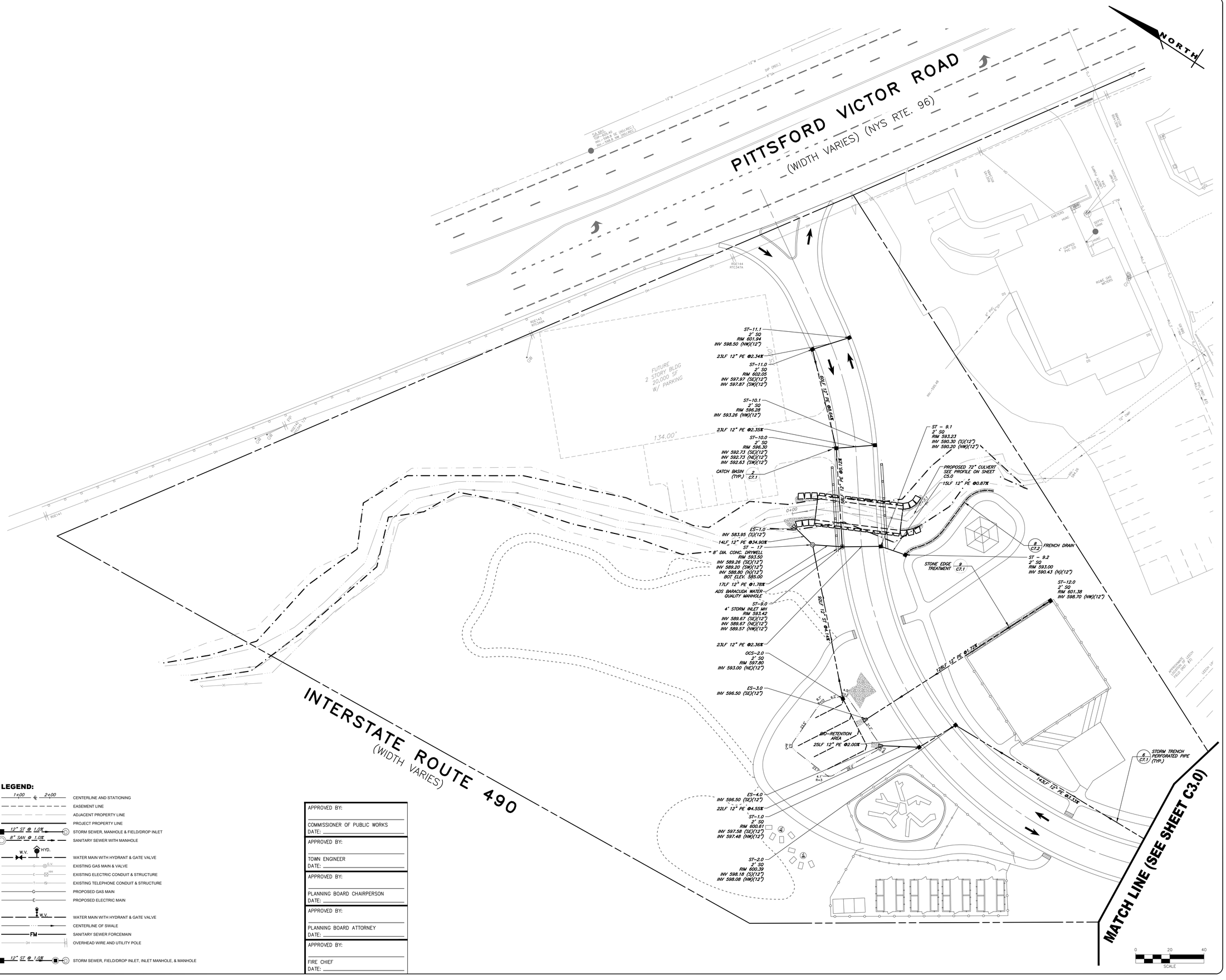
COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK · COLE M. PAPASERGI · 110080 · LICENSED PROFESSIONAL ENGINEER
NOT FOR CONSTRUCTION
COLE M. PAPASERGI

DRAWING TITLE:
UTILITY PLANS

7 of 21 SHEET No:
1780-26 JOB No:
C3.0 DRAWING No:

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C3.X UTILITY.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




**LEGEND:**

- 1+00 2+00 — CENTERLINE AND STATIONING
- EASEMENT LINE
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- 12" ST @ 1.0% — STORM SEWER, MANHOLE & FIELD/DROP INLET
- 8" SAN @ 1.0% — SANITARY SEWER WITH MANHOLE
- W.V. HYD. — WATER MAIN WITH HYDRANT & GATE VALVE
- G.V. — EXISTING GAS MAIN & VALVE
- E HH — EXISTING ELECTRIC CONDUIT & STRUCTURE
- T C — EXISTING TELEPHONE CONDUIT & STRUCTURE
- PROPOSED GAS MAIN
- PROPOSED ELECTRIC MAIN
- W.V. — WATER MAIN WITH HYDRANT & GATE VALVE
- CENTERLINE OF SWALE
- FM — SANITARY SEWER FORCEMAIN
- OH — OVERHEAD WIRE AND UTILITY POLE
- 12" ST @ 1.0% — STORM SEWER, FIELD/DROP INLET, INLET MANHOLE, & MANHOLE

| |
|---|
| APPROVED BY: _____ COMMISSIONER OF PUBLIC WORKS DATE: _____ |
| APPROVED BY: _____ TOWN ENGINEER DATE: _____ |
| APPROVED BY: _____ PLANNING BOARD CHAIRPERSON DATE: _____ |
| APPROVED BY: _____ PLANNING BOARD ATTORNEY DATE: _____ |
| APPROVED BY: _____ FIRE CHIEF DATE: _____ |


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


# PRELIMINARY/FINAL SITE PLANS
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON — MONROE COUNTY COUNTYSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, ANY ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK — COLE M. PAPASERGI — 110080 — LICENSED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

COLE M. PAPASERGI

DRAWING TITLE:
UTILITY PLANS

| | |
|---|---|
| 8 of 21 | C3.1 |
| SHEET No: | DRAWING No: |
| 1780-26 | |
| JOB No: | |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C3.X UTILITY.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

| APPROVED BY: |
|---|
| COMMISSIONER OF PUBLIC WORKS<br>DATE: |
| APPROVED BY: |
| TOWN ENGINEER<br>DATE: |

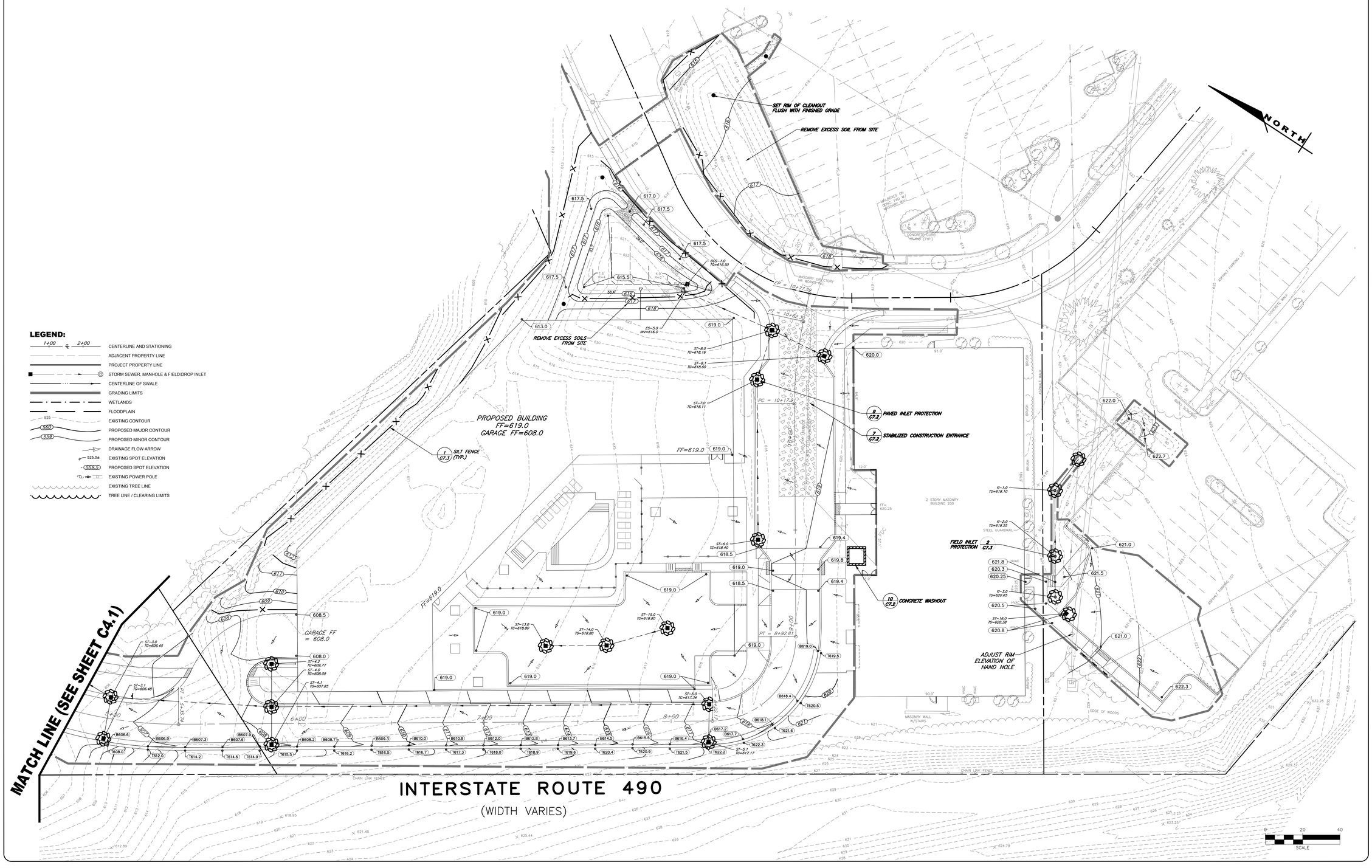

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK

**LEGEND:**

- CENTERLINE AND STATIONING (1+00 ℄ 2+00)
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- STORM SEWER, MANHOLE & FIELD/DROP INLET
- CENTERLINE OF SWALE
- GRADING LIMITS
- WETLANDS
- FLOODPLAIN
- EXISTING CONTOUR (525)
- PROPOSED MAJOR CONTOUR (560)
- PROPOSED MINOR CONTOUR (559)
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION (525.0±)
- PROPOSED SPOT ELEVATION (552.5)
- EXISTING POWER POLE
- EXISTING TREE LINE
- TREE LINE / CLEARING LIMITS




| JOB NO: | 1780-26 |
|---|---|
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER
PRELIMINARY NOT FOR CONSTRUCTION

COLE M. PAPASERGI

DRAWING TITLE:
GRADING & EROSION CONTROL PLANS

| SHEET No: | DRAWING No: |
|---|---|
| 9 of 21 | C4.0 |
| JOB No: 1780-26 | |


File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C4.X GRADING.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




**LEGEND:**

- CENTERLINE AND STATIONING (1+00 ℄ 2+00)
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- STORM SEWER, MANHOLE & FIELD/DROP INLET
- CENTERLINE OF SWALE
- GRADING LIMITS
- WETLANDS
- FLOODPLAIN
- EXISTING CONTOUR (525)
- PROPOSED MAJOR CONTOUR (560)
- PROPOSED MINOR CONTOUR (552)
- DRAINAGE FLOW ARROW
- EXISTING SPOT ELEVATION (525.08)
- PROPOSED SPOT ELEVATION (552.2)
- EXISTING POWER POLE
- EXISTING TREE LINE
- TREE LINE / CLEARING LIMITS

APPROVED BY:

COMMISSIONER OF PUBLIC WORKS
DATE: _____

APPROVED BY:

TOWN ENGINEER
DATE: _____


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 (2) FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.


COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK · COLE M. PAPASERGI · LICENSED PROFESSIONAL ENGINEER · 110080

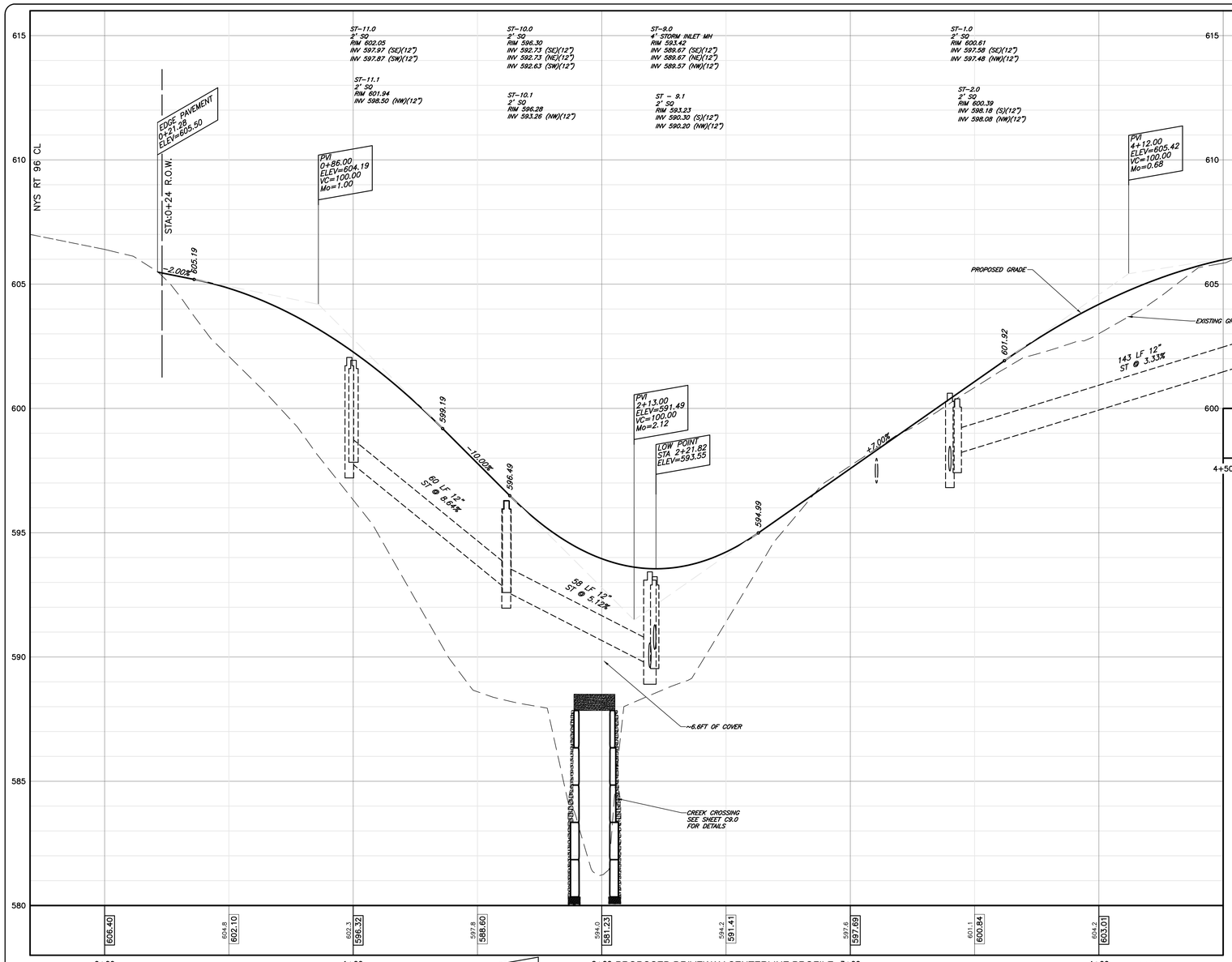
WORK NOT CONSTRUCTION

COLE M. PAPASERGI

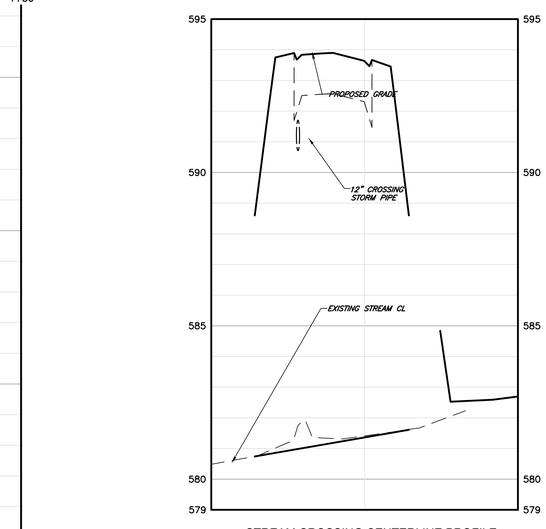
DRAWING TITLE:
GRADING & EROSION CONTROL PLANS

| | |
|---|---|
| 10 of 21 SHEET No: | C4.1 |
| 1780-26 JOB No: | DRAWING No: |

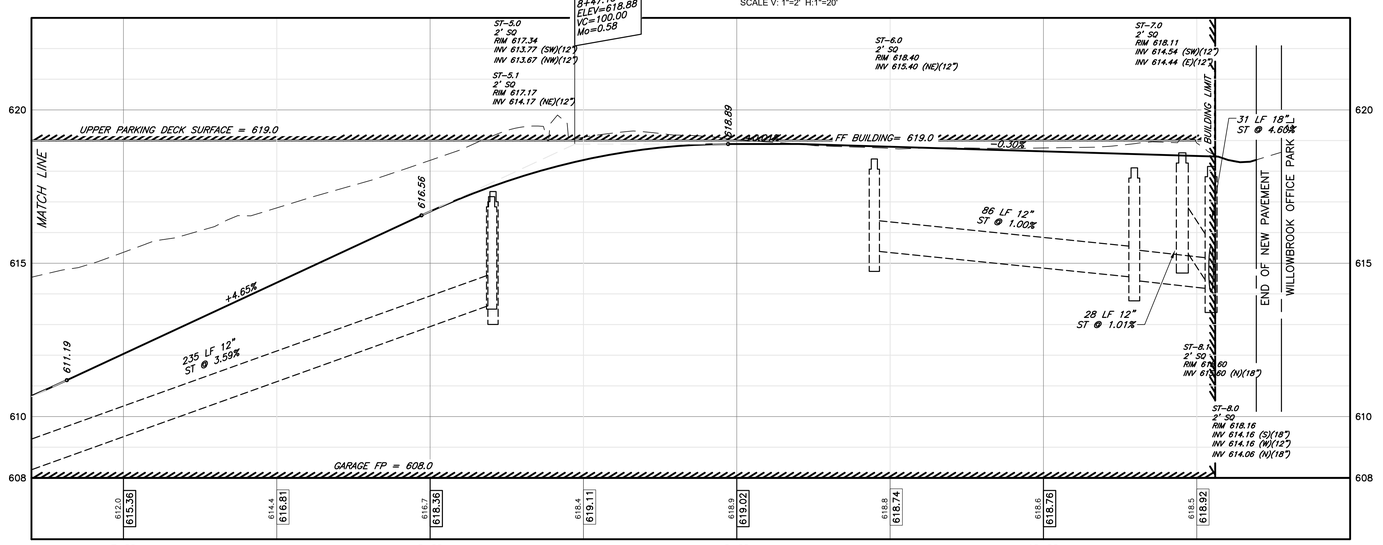

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C4.X GRADING.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

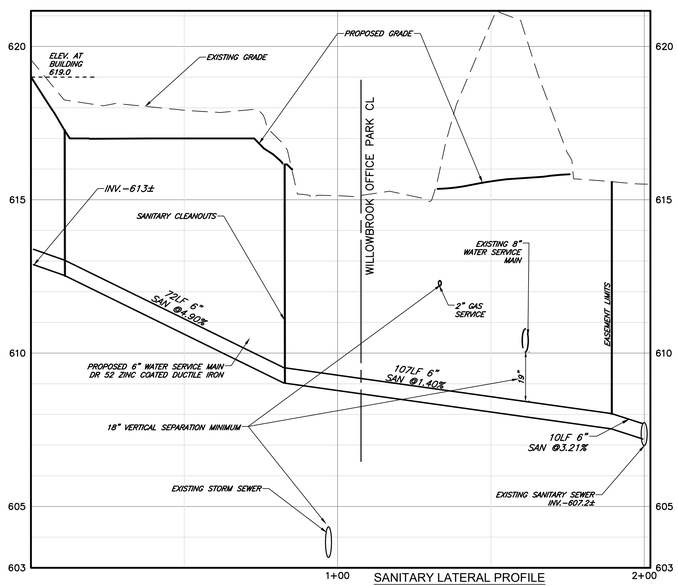



PROPOSED DRIVEWAY CENTERLINE PROFILE
SCALE V: 1"=2' H:1"=20'




STREAM CROSSING CENTERLINE PROFILE
SCALE V: 1"=2' H:1"=20'




SANITARY LATERAL PROFILE
SCALE V: 1"=2' H:1"=20'

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER
NOT FOR CONSTRUCTION

DRAWING TITLE:
PROJECT PROFILES

| | |
|---|---|
| 11 of 21 | C5.0 |
| SHEET No: | |
| 1780-26 | |
| JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C5.x PROFILES.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

PITTSFORD VICTOR ROAD

(WIDTH VARIES) (NYS RTE. 96)

MATCH LINE A

MATCH LINE (SEE SHEET C6.1)

INTERSTATE ROUTE 490

NORTH

SCALE 0 20 40

**LEGEND:**

0.2FC
0.5FC
1FC
2FC
3FC
LIGHTING CONTOUR (FOOT CANDLES)

ROW OF SIMILAR PLANTS

| Luminaire Schedule | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Code | Qty | Label | Arrangement | Description | Tag | LLF | Luminaire Lumens | Luminaire Watts | Mounting Height |
| B1 | 12 | ALTB-6-120_277-FFD-H6-CL-N05-30K-CRI 70-2 | Single | ALTB-6-120_277-FFD-H6-CL-N05-30K-CRI 70-2 | B1 | 1.000 | 383 | 5.2 | 3 |
| P1 | 3 | RSB25-PLED-VSQ-W-48LED-700mA-30K | Single | RSB25-PLED-VSQ-W-48LED-700mA-30K | P1 | 1.000 | 13024 | 104.2 | 19 |
| P2 | 23 | RSB25-PLED-III-W-48LED-700mA-30K-HS | Single | RSB25-PLED-III-W-48LED-700mA-30K-HS | P2 | 1.000 | 9336 | 104.2 | 19 |

APPROVED BY:
COMMISSIONER OF PUBLIC WORKS
DATE:

APPROVED BY:
TOWN ENGINEER
DATE:

APPROVED BY:
PLANNING BOARD CHAIRPERSON
DATE:


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR SURVEYOR SHALL AFFIX TO THE ITEM HIS/HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS/HER SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.


STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER

COLE M. PAPASERGI

DRAWING TITLE:
LANDSCAPING & LIGHTING PLAN

| | |
|---|---|
| 12 of 21 SHEET No: | C6.0 |
| 1780-26 JOB No: | DRAWING No: |


File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C6.X LNDSC LIGHTING.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAPAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

## Plant Schedule

### Flowering Trees

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Ag | Serviceberry 'Autumn Brilliance' | Amelanchier x grandiflora | | 2" cal. | B&B | 20×15' | White, April | Red-orange |
| Cc | Eastern Redbud | Cercis canadensis | 3 | 2" cal. | B&B | 20×25' | Magenta-pink, April | Yellow |
| Sr | Ivory Silk Tree Lilac | Syringa reticulata 'Ivory Silk' | 3 | 2" cal. | B&B | 20×15' | Creamy white, June | Minimal |
| Mp | Prairifire Crabapple | Malus 'Prairifire' | | 2" cal. | B&B | 20×20' | Deep pink-red, May | Orange |

### Shade Trees

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Arx | Celebration® Freeman Maple | Acer × freemanii 'Celzam' | 3 | 2.5" cal. | B&B | 45–50' × 25–35' | Red buds, April | Orange-red |
| Ar | Bowhall Red Maple | Acer rubrum 'Bowhall' | 9 | 2.5" cal. | B&B | 45×15 | Red buds, April | Orange-red |
| Ov | Eastern Hophornbeam | Ostrya virginiana | 2 | 2.5" cal. | B&B | 25–40' × 15–25' | Pendulous catkins, April | Golden yellow |
| Ss | Golden Weeping Willow | Salix × sepulcralis 'Chrysocoma' | 4 | 2.5" cal. | B&B | 40–60' × 40–60' | Yellow catkins, March–April | Golden yellow; golden stems winter |
| Zm | Musashino Zelkova | Zelkova serrata 'Musashino' | 3 | 2.5" cal. | B&B | 35–45' × 5–7' | Inconspicuous, April | Orange-red–russet |

### Evergreen Trees

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Po | Serbian Spruce | Picea omorika | 3 | 7' Ht. | B&B | 50–60' × 10–15' | Blue-green needles year-round | Blue-green; pendulous cones |
| Ac | Concolor Fir | Abies concolor | 13 | 7' Ht. | B&B | 50–80' × 15–30' | Silvery blue-green needles year-round | Silvery blue; upright cones |

### Flowering Shrubs

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Cs | Arctic Fire® Red Twig Dogwood | Cornus sericea 'Farrow' | 6 | 24" sp. | #5 cont. | 3–4' × 4–5' | White flat clusters, May–June | Vivid red stems; White berries for birds. |
| Ig | Shamrock Inkberry Holly | Ilex glabra 'Shamrock' | 8 | 24" sp. | #5 cont. | 3–4' × 4–5' | Inconspicuous white, June | |
| Hp | Little Lime Hydrangea | Hydrangea paniculata 'Jane' | 7 | 24" sp. | #5 cont. | 4'×4' | Lime-white → pink, July–Sept | Dried seed heads |
| Hpx | Bobo Hydrangea | Hydrangea paniculata 'ILVOBO' | 14 | 24" sp. | #5 cont. | 2.5'×4' | White → pink, July–Sept | Dried seed heads |
| Hq | Sikes Dwarf Oakleaf Hydrangea | Hydrangea quercifolia 'Sikes Dwarf' | 5 | 24" sp. | #5 cont. | 3' × 4–5' | White → parchment, June–Aug | |
| Kj | Kerria 'Golden Guinea' | Kerria japonica 'Golden Guinea' | | 24" sp. | #5 cont. | 3–4' × 4–5' | Bright yellow, May, sporadic rebloom | |
| Rr | Knock Out Rose | Rosa 'Radrazz' Knock Out | 11 | 24" sp. | #5 cont. | 4'×4' | Red, May–frost | Orange hips |
| Sm | Dwarf Korean Lilac 'Palibin' | Syringa meyeri 'Palibin' | 16 | 24" sp. | #5 cont. | 5'×5' | Fragrant lavender, May | Minimal |
| Vd | Blue Muffin Viburnum | Viburnum dentatum 'Christom' | 16 | 24" sp. | #5 cont. | 5'×5' | White, May–June | Brilliant red |
| Vp | Doublefile Viburnum 'Mariesii' | Viburnum plicatum f. tomentosum 'Mariesii' | 37 | 24" sp. | #5 cont. | 8–10' × 10–12' | White lacecap tiers, May — spectacular | Burgundy-wine red |

### Evergreen Shrubs

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Bs | Green Velvet Boxwood | Buxus sempervirens × microphylla 'Green Velvet' | | | | 2–3' × 3–4' | Inconspicuous, May | Dark green (semi-evergreen) |
| Bm | Winter Gem Boxwood | Buxus microphylla 'Winter Gem' | | | | 3–4' × 3–4' | Inconspicuous, May | Bright green; good winter color retention |

### Perennials

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Cm | Moonbeam Coreopsis | Coreopsis verticillata 'Moonbeam' | | 2 gal. | Cont | 16"×18" | Pale yellow, June–Sept | Minimal |
| Ep | Purple Coneflower | Echinacea purpurea | 16 | 2 gal. | Cont | 3'×2' | Pink-purple, July–Sept | Seed heads for birds |
| Gr | Rozanne Geranium | Geranium 'Gerwat' Rozanne | 11 | 2 gal. | Cont | 18"×24" | Blue-violet, May–frost | Minimal |
| Hh | Autumn Joy Sedum | Hylotelephium 'Herbstfreude' | | 2 gal. | Cont | 24"×24" | Pink→bronze, Aug–Oct | Bronze seed heads |
| Nf | Walker's Low Catmint | Nepeta x faassenii 'Walker's Low' | 13 | 2 gal. | Cont | 18"×30" | Lavender-blue, May–Sept | Minimal |
| Rf | Black-Eyed Susan | Rudbeckia fulgida 'Goldsturm' | 14 | 2 gal. | Cont | 2'×2' | Gold-black, July–Sept | Seed heads for birds |

### ORNAMENTAL GRASSES

| Key | Common Name | Botanical Name | Count | Size | Root | Mature Size H×W | Bloom / Season | Fall Interest |
|---|---|---|---|---|---|---|---|---|
| Pa | Hameln Dwarf Fountain Grass | Pennisetum alopecuroides 'Hameln' | 32 | 2 gal. | Cont | 2.5'×3' | Fuzzy tan plumes, Aug | Golden tan |
| Ms | Morning Light Maiden Grass | Miscanthus sinensis 'Morning Light' | | 2 gal. | Cont | 5'×4' | Silver plumes, Sept | Tan-gold |
| Sh | Prairie Dropseed | Sporobolus heterolepis | | 2 gal. | Cont | 2'×2' | Fragrant, Aug–Sept | Golden orange |
| Hs | Blue Oat Grass | Helictotrichon sempervirens | | 2 gal. | Cont | 2'×2' | Blue-gray, summer | Blue-gray (evergreen) |

**Zone A — Pond Bottom & Water's Edge (To Contour 613.5 +/-)**
*Periodically inundated · Wet-tolerant species · FAC–FACW hydrology · Approx. 60% grasses/sedges, 40% wildflowers*

**GRASSES, SEDGES & RUSHES**

| Common Name | Botanical Name | % Mix | Bloom Color / Season | Fall Interest | Type | Notes |
|---|---|---|---|---|---|---|
| Swamp Sedge | *Carex stricta* | 12% | — | Golden tan tussocks | Grass-like | Native sedge. Foundation species of wet meadow. Dense clumps stabilize bottom. Critical for erosion control in zone of periodic inundation. |
| Blue Joint Grass | *Calamagrostis canadensis* | 8% | Airy purple, June–July | Golden tan | Grass | Native. Very tolerant of saturated soils and brief flooding. Spreads to fill disturbed areas quickly. Good erosion control. |
| Prairie Cordgrass | *Spartina pectinata* | 6% | Inconspicuous, Aug | Tan-gold, arching | Grass | Native. Extremely tough in wet areas. Deep fibrous roots anchor pond bottom against scouring. Can spread — use intentionally. |
| Soft Rush | *Juncus effusus* | 6% | Inconspicuous, July | Dark green persistent | Rush | Native. Essential wetland structure plant. Provides dense cover for waterfowl nesting. Very tolerant of standing water. |
| Path Rush | *Juncus tenuis* | 4% | Inconspicuous, June | Tan | Rush | Native. Finer-textured than soft rush. Tolerates compaction and periodic flooding. Good transitional species. |

**WILDFLOWERS & PERENNIAL FORBS**

| Common Name | Botanical Name | % Mix | Bloom Color / Season | Fall Interest | Type | Notes |
|---|---|---|---|---|---|---|
| Swamp Milkweed | *Asclepias incarnata* | 6% | Pink-rose, July–Aug | Silky seed pods | Perennial | Native. Monarch butterfly host plant. Thrives at pond edge. Far superior to common milkweed already on site — more ornamental, less aggressive. |
| Blue Flag Iris | *Iris virginica* | 5% | Blue-violet, May–June | Interesting seed pods | Perennial | Native. Spectacular spring display at pond edge. Spreads slowly into attractive colonies. One of the showiest wet-zone natives. |
| Cardinal Flower | *Lobelia cardinalis* | 4% | Brilliant red, July–Sept | — | Perennial | Native. Hummingbird magnet. Dramatic accent at water's edge. Short-lived but self-seeds freely in wet soils. |
| Great Blue Lobelia | *Lobelia siphilitica* | 4% | Blue-purple, Aug–Sept | — | Perennial | Native. Blue counterpart to Cardinal Flower. Excellent for extending season of color. Tolerates shade and wet soils. |
| Joe Pye Weed | *Eutrochium maculatum* | 5% | Mauve-pink, Aug–Sept | Tan seed heads | Perennial | Native. Tall (5–7') — use at rear of zones. Outstanding pollinator plant. Structural anchor for late summer. |
| Blue Vervain | *Verbena hastata* | 4% | Blue-purple spikes, July–Sept | Persistent seed heads | Perennial | Native. Upright spiky form adds strong vertical interest. Seeds heavily favored by song sparrows and other birds. |
| Golden Alexanders | *Zizia aurea* | 4% | Yellow, May–June | — | Perennial | Native. Early-season color is rare in wet meadows. Host plant for black swallowtail butterfly. Tolerates wet soils. |
| Swamp Rose Mallow | *Hibiscus moscheutos* | 4% | White-pink, 6" blooms, Aug | Large seed pods | Perennial | Native. Most dramatic flower in any wet meadow — dinner-plate sized blooms. Shrub-like in late summer. Very impactful. |
| Boneset | *Eupatorium perfoliatum* | 3% | White, Aug–Sept | Airy seed heads | Perennial | Native. Excellent late-season pollinator plant. Flat-topped white clusters attract masses of butterflies. Tough and reliable. |
| Marsh Blazing Star | *Liatris spicata* | 5% | Purple spikes, July–Aug | Feathery seed heads (birds) | Perennial | Native. Vertical purple spikes are visually striking. One of the most important nectar sources for monarch butterflies. |
| New England Aster | *Symphyotrichum novae-angliae* | 5% | Purple-pink, Sept–Oct | — | Perennial | Native. Essential fall color in wet zone. Monarch butterfly fuel for migration. Extremely tough and adaptable. |
| Ironweed | *Vernonia fasciculata* | 4% | Intense purple, Aug–Sept | Russet seed heads | Perennial | Native. Deep jewel-toned purple — one of the richest colors in any meadow. Excellent contrast with goldenrods and asters. |

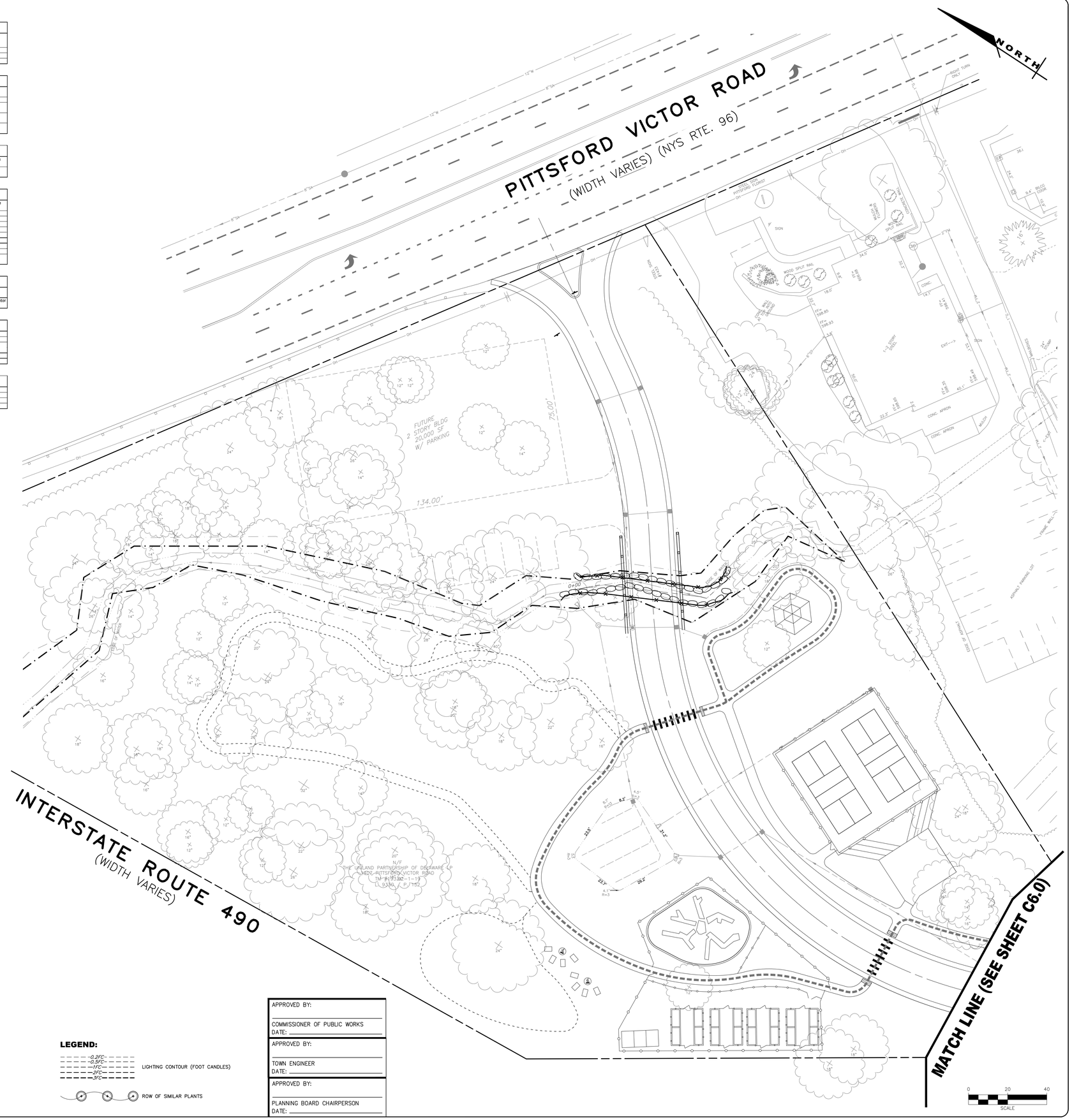
**Zone B — Side Slopes & Upland Edges**
*Well-drained slopes · Dry-mesic to mesic prairie mix · Approx. 60% grasses · 40% wildflowers*

**GRASSES, SEDGES & RUSHES**

| Common Name | Botanical Name | % Mix | Bloom Color / Season | Fall Interest | Type | Notes |
|---|---|---|---|---|---|---|
| Little Bluestem | *Schizachyrium scoparium* | 15% | Blue-green, July | Copper-red, white seed | Grass | Native. Foundation grass for dry-mesic slopes. Outstanding copper-red fall color. Excellent erosion control. Deer resistant. |
| Switchgrass | *Panicum virgatum* | 10% | Airy red, Aug | Golden yellow | Grass | Native. Adaptable from moist to dry. Strong upright structure. Excellent bird habitat (seeds). Many ornamental selections. |
| Big Bluestem | *Andropogon gerardii* | 10% | Turkey-foot, Aug | Burgundy-orange | Grass | Native. The dominant tallgrass prairie species. Deep roots (up to 10') — exceptional erosion control on slopes. Fall color outstanding. |
| Indian Grass | *Sorghastrum nutans* | 10% | Golden plumes, Aug–Sept | Copper-gold | Grass | Native. Golden plumes in late summer. Combines beautifully with Little Bluestem. Excellent wildlife seed source. |
| Side-Oats Grama | *Bouteloua curtipendula* | 5% | Dangling oat-like, July | Tan-straw | Grass | Native. Lower-growing (15–2'). Excellent for slope stabilization. Distinctive oat-like seed heads hang on one side of stem. |
| Prairie Dropseed | *Sporobolus heterolepis* | 5% | Fragrant, Aug–Sept | Golden orange | Grass | Native. Fine-textured arching mound. Fragrant flowers. Excellent texture contrast with coarser grasses. Deer resistant. |

**WILDFLOWERS & PERENNIAL FORBS**

| Common Name | Botanical Name | % Mix | Bloom Color / Season | Fall Interest | Type | Notes |
|---|---|---|---|---|---|---|
| Black-Eyed Susan | *Rudbeckia hirta* | 6% | Golden-yellow, June–Sept | Seed heads (birds) | Annual/Biennial | Native. Fast establishing — provides color in Year 1. Transitions to more persistent species over time. Self-seeds prolifically. |
| Purple Coneflower | *Echinacea purpurea* | 6% | Pink-purple, July–Sept | Seed heads (birds) | Perennial | Native. Perhaps the most important pollinator plant in the mix. Seed heads persist as critical winter food for goldfinches. |
| Wild Bergamot | *Monarda fistulosa* | 5% | Lavender, July–Aug | Dried whorls | Perennial | Native. Fragrant. Outstanding for bees and hummingbirds. Spreads by seed and rhizome to form attractive colonies. |
| Butterfly Weed | *Asclepias tuberosa* | 4% | Orange, June–Aug | Silky seed pods | Perennial | Native. Brightest color in the slope mix — vivid orange. Monarch host plant. Drought tolerant on slopes. Slow to establish but long-lived. |
| Prairie Blazing Star | *Liatris spicata* | 4% | Purple spikes, July–Aug | Feathery (birds) | Perennial | Native. Vertical purple spikes complement horizontal grasses. Excellent pollinator plant. Corms establish well from seed. |
| Ox-Eye Sunflower | *Heliopsis helianthoides* | 5% | Yellow, July–Sept | Seed heads (birds) | Perennial | Native. Long bloom season. Reliable, fast-establishing. Excellent for massing on slopes where color is needed quickly. |
| Partridge Pea | *Chamaecrista fasciculata* | 4% | Yellow, July–Aug | — | Annual | Native annual — fixes nitrogen, improves soil. Establishes Year 1. Important larval host for sulphur butterflies. |
| Wild Blue Indigo | *Baptisia australis* | 3% | Blue, May–June | Inflated black pods | Perennial | Native. Spectacular indigo-blue spring flowers. Dramatic black seed pods persist into winter. Deep taproot — excellent slope stabilizer. |
| Pale Purple Coneflower | *Echinacea pallida* | 3% | Pale pink-lavender, June–July | — | Perennial | Native. Longer, drooping petals distinguish from E. purpurea. Excellent on drier, well-drained slopes. Deer resistant. |
| New England Aster | *Symphyotrichum novae-angliae* | 4% | Purple-pink, Sept–Oct | — | Perennial | Native. Essential for fall color on slopes. Monarch butterfly fuel for migration. Adaptable to dry and moist conditions. |
| Stiff Goldenrod | *Solidago rigida* | 3% | Golden-yellow, Aug–Oct | Airy seed heads | Perennial | Native. One of the most ornamental goldenrods. Flat-topped golden clusters. Important late-season nectar source. |
| Prairie Phlox | *Phlox pilosa* | 3% | Pink, May–June | — | Perennial | Native. Low-growing fragrant pink flowers in late spring. Excellent ground layer — fills space between taller species. |




**LEGEND:**

- –0.2FC– – – – – –
- –0.5FC– – – – – –
- –1FC– – – – – –
- –2FC– – – – – –
- –5FC– – – – – –

LIGHTING CONTOUR (FOOT CANDLES)

ROW OF SIMILAR PLANTS

| |
|---|
| APPROVED BY: |
| COMMISSIONER OF PUBLIC WORKS DATE: |
| APPROVED BY: |
| TOWN ENGINEER DATE: |
| APPROVED BY: |
| PLANNING BOARD CHAIRPERSON DATE: |


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTYSTATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1"=20' |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

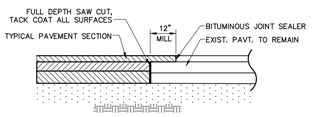

STATE OF NEW YORK · COLE M. PAPASERGI · 110080 · LICENSED PROFESSIONAL ENGINEER

COLE M. PAPASERGI

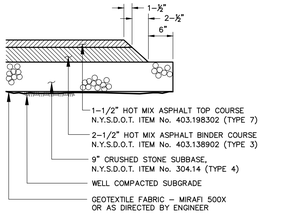
DRAWING TITLE:
LANDSCAPING & LIGHTING PLANS

| | |
|---|---|
| 13 of 21 SHEET No: | C6.1 |
| 1780-26 JOB No: | DRAWING No: |

File: Z:_Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C6.X LNDSC LIGHTING.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

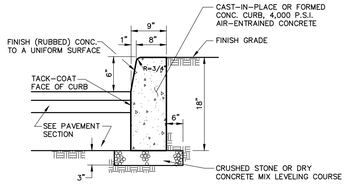



## 1 PAVEMENT MATCH

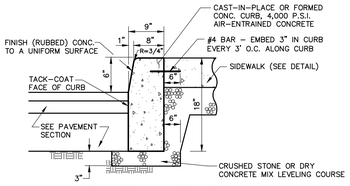



## 2 PAVEMENT SECTION

NOTES:
1. CONTRACTOR TO CLEAN AND TACK COAT BEFORE PLACING TOP COAT IF BINDER IS CONTAMINATED OR GREATER THAN 30 DAYS PASSES BETWEEN PLACEMENT OF BINDER AND TOP
2. PAVEMENT SPECIFICATION NUMBERS REFERENCE THE 2008 NYSDOT STANDARD SPECIFICATION BOOK



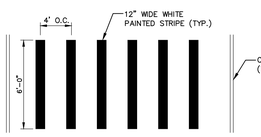

WITH LAWN/ PLANTER BEHIND



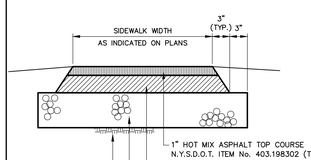

WITH SIDEWALK BEHIND

NOTES:
1. PROVIDE 7" REVEAL AT DROP INLETS
2. PROVIDE CONSTRUCTION JOINTS AT 20' INTERVALS AND EXPANSION JOINTS AT 80' MAXIMUM SPACING. EXPANSION JOINTS SHALL BE FORMED WITH PRE–MOLDED BITUMINOUS JOINT FILLER AND REBAR TO PREVENT SEPARATION.

## 3 CONCRETE CURB

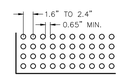



## 4 CROSSWALK

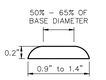



## 5 ASPHALT TRAIL

NOTE:
1. PAVEMENT SPECIFICATION NUMBERS REFERENCE THE 2008 NYSDOT STANDARD SPECIFICATION BOOK

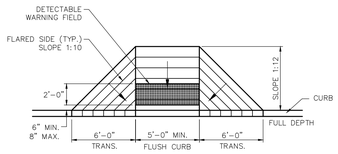


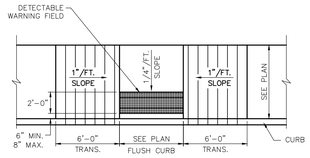

DOME SPACING




DOME SECTION

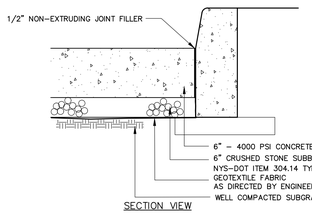
DETECTABLE WARNING FIELD



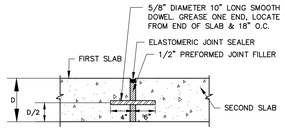




NOTES:
1. SURFACE TEXTURE OF RAMP SHALL BE COARSE BROOM FINISHED TRANSVERSE TO RAMP.
2. REFER TO TYPICAL SIDEWALK DETAIL FOR MATERIAL SPECIFICATIONS.
3. DETECTABLE WARNING FIELD SHALL EXTEND THE FULL WIDTH OF CURB RAMP OR FLUSH SURFACE.
4. DETECTABLE WARNING FIELD SHALL BE "DARK GREY" IN COLOR, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AOBE.
5. DETECTABLE WARNING FIELD SHALL BE ADA SOLUTIONS WARNING SURFACE – "CAST–IN–PLACE TACTILE REPLACEABLE" OR EQUAL.

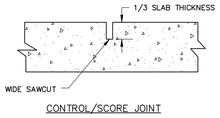
## 6 ACCESS RAMP




SECTION VIEW




CONSTRUCTION JOINT

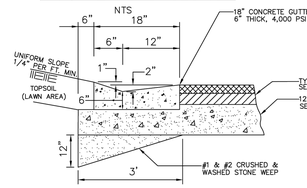



CONTROL/SCORE JOINT

CONCRETE PAVEMENT NOTES:
1. ISOLATION JOINTS TO BE CONSTRUCTED AT BUILDING, CURBING, AND FIXED OBJECTS.
2. CONTROL JOINTS TO BE MADE EVERY 12 FEET ON CENTER.
3. THE LARGER DIMENSION OF ANY PANEL SHALL NOT EXCEED 125% OF THE SMALLER DIMENSION
4. SAW CUT CONTROL JOINTS TO 1/3 SLAB THICKNESS WITHIN 24 HOURS OF CONCRETE PLACEMENT.
5. ALL EXPOSED CONCRETE SURFACES TO RECEIVE A BROOM FINISH.
6. ALL EXPOSED CONCRETE TO RECEIVE TWO COATS OF MEMBRANE FORMING SEALER.
7. CONCRETE SHALL ACHIEVE 4000 PSI COMPRESSIVE MINIMUM STRENGTH AT 28 DAYS.
8. CONCRETE SHALL HAVE AN AIR CONTENT OF 6.0 PERCENT ± 1.5 PERCENT.
9. CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES.

## 7 CONCRETE PAVEMENT

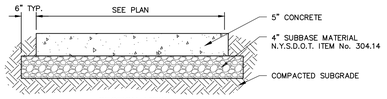
## GUTTER WITH STONE WEEP PRIVATE ROAD SECTION



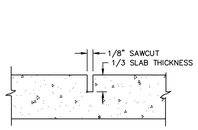

## 8 GUTTER SECTION



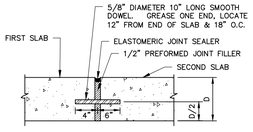

SECTION VIEW WITH CURB




SECTION VIEW



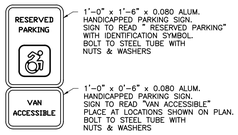

CONTROL/SCORE JOINT




CONSTRUCTION JOINT

NOTES:
1. CONCRETE SHALL BE 4000 PSI AIR–ENTRAINED MIX.
2. CONCRETE SURFACE SHALL RECEIVE A BROOM FINISH (IF NOT SPECIFIED AS EXPOSED AGGREGATE CONCRETE) AND TWO COATS OF A MEMBRANE FORMING SEALER AT RATES SPECIFIED BY PRODUCT MANUFACTURER.
3. EXPANSION JOINTS SHALL BE PROVIDED AT FIXED STRUCTURES AND AT LEAST EVERY 25' ALONG THE SIDEWALK.
4. CONSTRUCTION JOINTS WITH DOWELS SHALL BE PROVIDED AT SUBSEQUENT POURS.
5. CONTROL JOINTS SHALL BE LOCATED AS SHOWN ON PLAN AND IN ACCORDANCE WITH ACI 330–R92. THESE JOINTS SHALL BE COMPLETED WITHIN 24 HOURS OF CONCRETE PLACEMENT.
6. SCORE PATTERN – SIDEWALK TO BE SCORED EVERY 5 FEET CREATING 5' X 5' SQUARES (MAY VARY IN CERTAIN AREAS). SCORING SHALL BE COORDINATED WITH OWNERS ONSITE REP PRIOR TO SCORING.
7. SIDEWALKS SHALL HAVE A MINIMUM 0.5% AND MAXIMUM 2.0% CROSS SLOPE TO PROVIDE POSITIVE DRAINAGE. CROSS SLOPE SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND ENTRANCES.
8. "SNAP–CAP" OR EQUAL SHALL BE USED FOR PROTECTING TOP EDGE OF EXPANSION JOINTS.
9. SEE CURBING DETAIL FOR DOWELING WHEN ADJACENT TO CONCRETE CURBING.

## 9 CONCRETE SIDEWALK



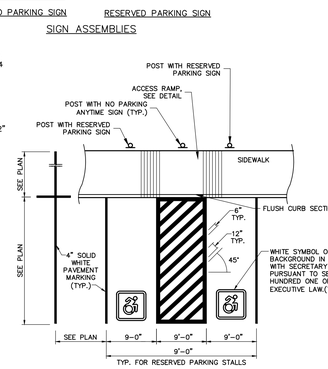




NO PARKING SIGN

RESERVED PARKING SIGN

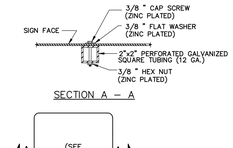
SIGN ASSEMBLIES



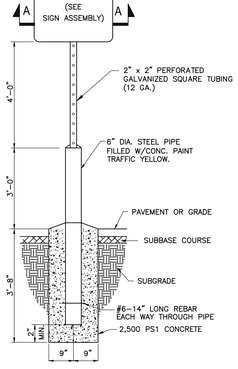

PARKING PLAN VIEW

NOTE:
ALL ACCESSIBLE PARKING AND ROUTES SHALL BE CONSTRUCTED CONSISTENT WITH THE MOST CURRENT ADA GUIDELINES. IN GENERAL ALL PARKING AND LOADING ZONES SHALL HAVE NO MORE THAN 2.0% SLOPE IN ANY DIRECTION. PRIOR TO PAVING CONTRACTOR SHALL VERIFY SLOPES AND REPORT ANY SLOPES GREATER THAN 2% TO THE ENGINEER.

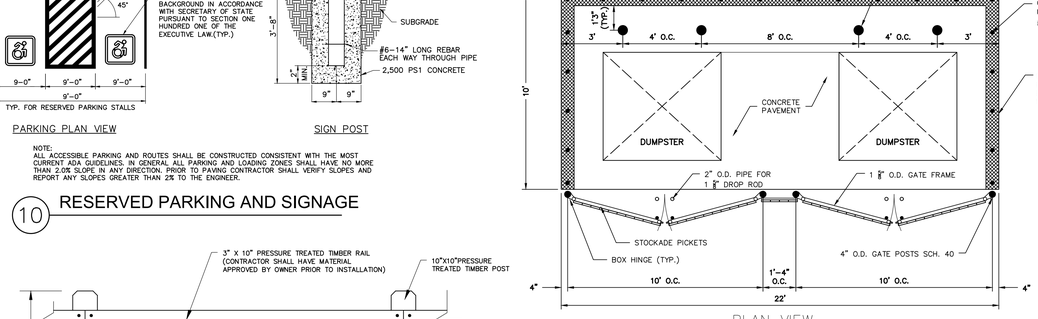
## 10 RESERVED PARKING AND SIGNAGE



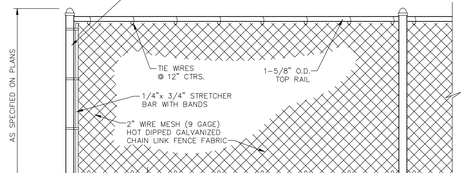

SECTION A – A



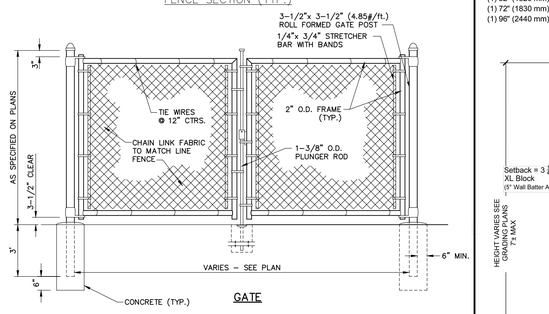

SIGN POST




## 11 TIMBER GUIDE RAIL

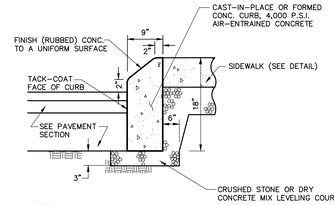



FENCE SECTION (TYP.)




GATE

## 12 CHAIN LINK FENCE




NOTES:
1. PROVIDE CONSTRUCTION JOINTS AT 20' INTERVALS AND EXPANSION JOINTS AT 80' MAXIMUM SPACING. EXPANSION JOINTS SHALL BE FORMED WITH PRE–MOLDED BITUMINOUS JOINT FILLER AND REBAR TO PREVENT SEPARATION.

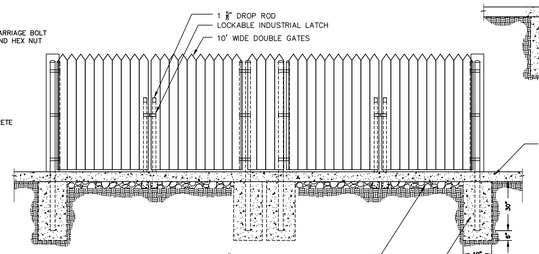
## 13 MOUNTABLE CURB WITH SIDEWALK BEHIND




PLAN VIEW




SIDE ELEVATION




FRONT ELEVATION

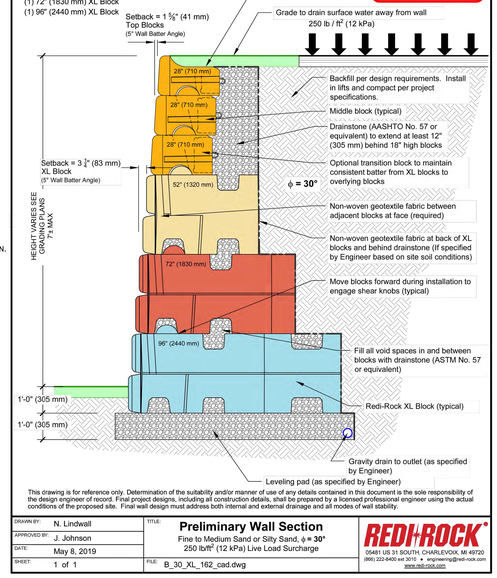
## 15 DUMPSTER ENCLOSURE

$\phi$ = 30° | FINE TO MEDIUM SAND or SILTY SAND

**LOAD CONDITION B** | 250 lb/ft² (12 kPa) LIVE LOAD SURCHARGE, NO BACK SLOPE, NO TOE SLOPE

**13.5-FOOT (4.11 m) HIGH SECTION**
(3) 28" (710 mm) Blocks
(1) 52" (1320 mm) XL Block
(1) 72" (1830 mm) XL Block
(1) 96" (2440 mm) XL Block

PRELIMINARY
Professional Engineering Design Required for Construction




This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site. Final wall design must address both internal and external drainage and all modes of wall stability.

| | |
|---|---|
| DRAWN BY: | N. Lindwall |
| APPROVED BY: | J. Johnson |
| DATE: | May 8, 2019 |
| SHEET: | 1 of 1 |

TITLE: **Preliminary Wall Section**
Fine to Medium Sand or Silty Sand, ϕ = 30°
250 lb/ft² (12 kPa) Live Load Surcharge
FILE: B_30_XL_162_cad.dwg

REDI-ROCK
(5481 US 31 SOUTH, CHARLEVOIX, MI 49720
(866) 222-8400 ext 3010 • engineering@redi-rock.com
www.redi-rock.com

## 14 RETAINING WALL DETAIL

EXAMPLE OF WALL DESIGN PROVIDED FOR REFERENCE. CONTRACTOR IS TO PROVIDE STAMPED SHOP DRAWINGS TO MARATHON ENGINEERING PRIOR TO FINAL APPROVALS.

APPROVED BY:
COMMISSIONER OF PUBLIC WORKS
DATE:

APPROVED BY:
TOWN ENGINEER
DATE:

D6
JANUARY 2021


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com


**PRELIMINARY/FINAL SITE PLANS**
for
**THE PLACE AT WILLOWBROOK**
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

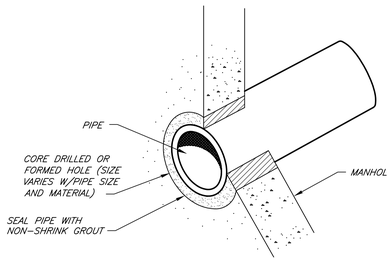

STATE OF NEW YORK · COLE M. PAPASERGI · 110080 · LICENSED PROFESSIONAL ENGINEER

COLE M. PAPASERGI

DRAWING TITLE:
CONSTRUCTION DETAILS

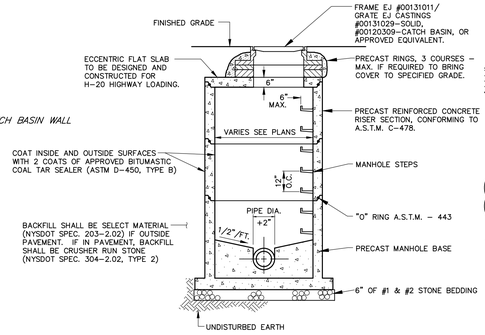
| | |
|---|---|
| 14 of 21 | C7.0 |
| SHEET No: | DRAWING No: |
| 1780-26 | |
| JOB No: | |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C7.X DETAILS.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB



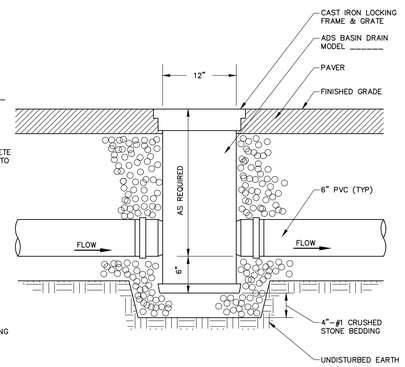

NOTE:
FOR RECONNECTION OF EXISTING PIPES, CONTRACTOR SHALL INSTALL 5' STUB PIECE OF HDPE PIPE THROUGH MANHOLE WALL. TRANSITIONS WILL THEN BE MADE USING HIGH DENSITY POLYETHYLENE, SMOOTH FLOW WITH WATERTIGHT GASKET MATERIAL MEETING ASTM F2648 STANDARDS.

## 1 CONNECT TO EXISTING STORM STRUCTURE

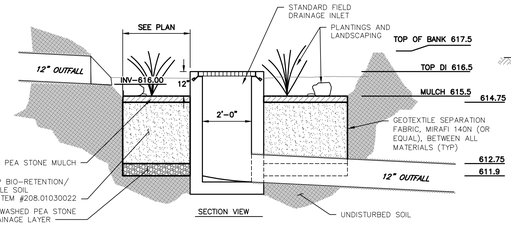



NOTES:
1.) SLOPED EXCAVATION AT CONTRACTORS OPTION- PROVIDE SHEETING AS NECESSARY TO MEET OSHA STANDARDS & REQUIREMENTS.

## 4 STORM MANHOLE

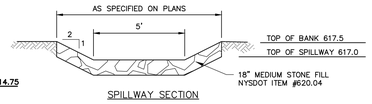



## 8 YARD INLET

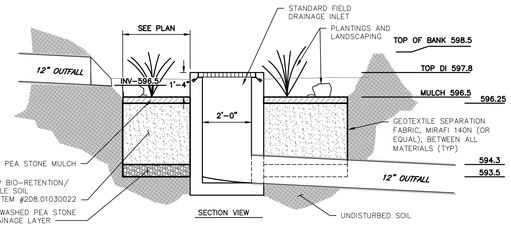



## 11 BIORETENTION 1 SECTION DETAIL

SCALE: N.T.S

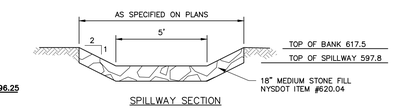



SPILLWAY SECTION

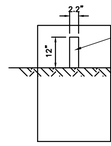



## 12 BIORETENTION 2 SECTION DETAIL

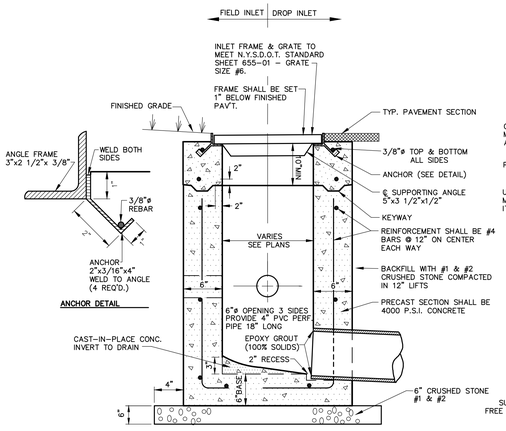
SCALE: N.T.S




SPILLWAY SECTION

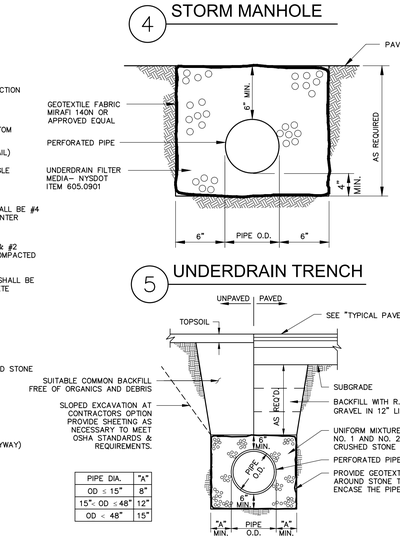



OCS-2.0 SECTION VIEW



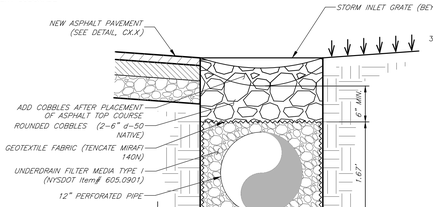

NOTES:
1.) PRE-CAST INLET SECTIONS SHALL BE MANUFACTURED BY KISTNER, MODEL No. CB-24 (WITH KEYWAY) OR APPROVED EQUIVALENT.
2.) THE INSIDE & OUTSIDE WALLS OF INLET SHALL BE COATED WITH BITUMASTIC.

## 2 DROP/ FIELD INLET




| PIPE DIA. | "A" |
|---|---|
| OD ≤ 15" | 8" |
| 15"< OD ≤ 48" | 12" |
| OD < 48" | 15" |

## 6 STORM TRENCH PERFORATED PIPE




## 5 UNDERDRAIN TRENCH




| PIPE DIA. | "A" |
|---|---|
| OD ≤ 15" | 8" |
| OD >15" | 12" |

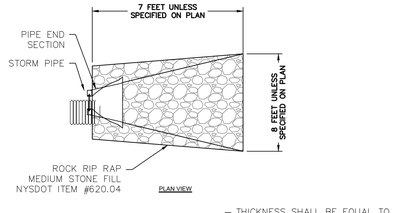
## 7 SANITARY TRENCH

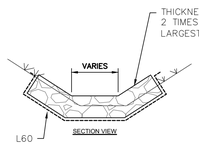



## FRENCH DRAIN TRENCH

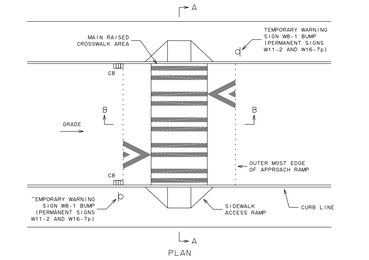



## 9 STONE EDGE TREATMENT (WITHOUT CURB)



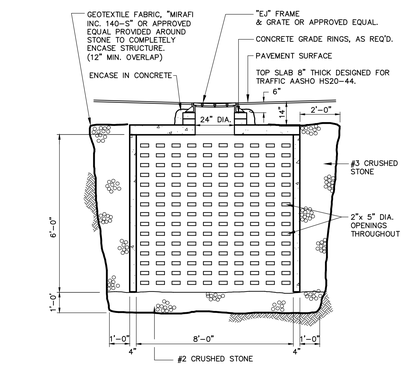

## 10 RIP RAP OUTLET PROTECTION




NOTES:
1. TOP OF MAIN RAISED CROSSWALK AREA IS TO BE 3 INCHES ABOVE AND PARALLEL WITH THEORETICAL FINISHED GRADE AND CROSS-SLOPE. TOP OF APPROACH RAMPS ARE TO BE PARABOLIC.
2. MAINTAIN THEORETICAL CURB AND PAVEMENT GRADES, AND PAVEMENT CROSS-SLOPE THRU RAISED CROSSWALK.
3. WIDTH, COLOR AND PATTERN OF MAIN RAISED CROSSWALK AREA WILL BE AS SPECIFIED IN CONTRACT DOCUMENTS.
4. CATCH BASINS ARE TO BE LOCATED ON UPHILL SIDE(S) OF TABLED INTERSECTION.
5. TEMPORARY WARNING SIGNS ARE TO BE INSTALLED MINIMUM OF 10 DAYS PRIOR TO COMMENCING CONSTRUCTION OF TABLED INTERSECTION

12" OVERLAID WHITE PLASTIC PREFORMED PERMANENT PAVEMENT MARKING SYMBOL
6'
6'
ARROW

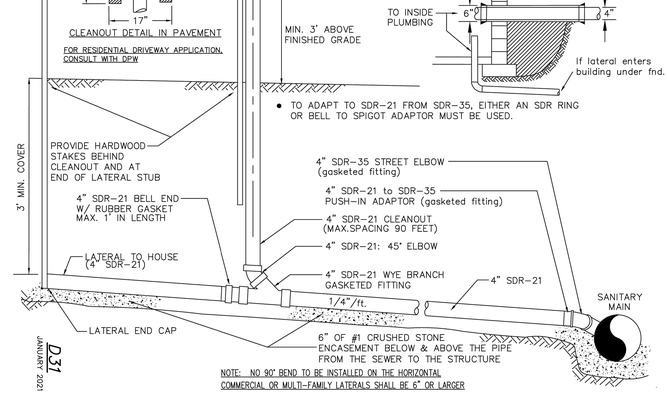
## 3 RAISED CROSSWALK




## DRYWELL

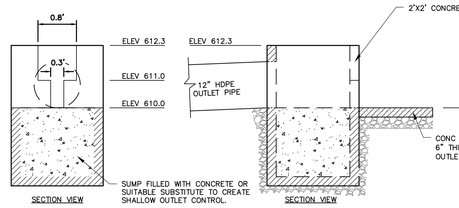
## SANITARY LATERAL DETAIL (PVC PIPE)

NTS




## 13 SANITARY LATERAL & CLEANOUT DETAIL

SCALE: N.T.S




## 14 BUILDING 100 SWMF OUTLET CONTROL STRUCTURE

SCALE: N.T.S

APPROVED BY: _____
COMMISSIONER OF PUBLIC WORKS
DATE: _____

APPROVED BY: _____
TOWN ENGINEER
DATE: _____

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

PRELIMINARY/FINAL SITE PLANS
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK · COLE M. PAPASERGI · 110080 · LICENSED PROFESSIONAL ENGINEER

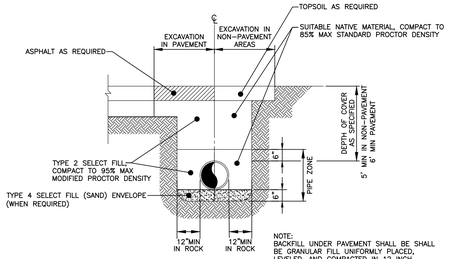
NOT VALID WITHOUT ORIGINAL SIGNATURE

COLE M. PAPASERGI

DRAWING TITLE:
CONSTRUCTION DETAILS

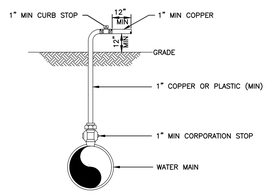
| | |
|---|---|
| 15 of 21 SHEET No: | C7.1 DRAWING No: |
| 1780-26 JOB No: | |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C7.X DETAILS.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB



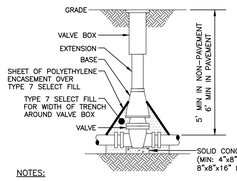

NOTE: BACKFILL UNDER PAVEMENT SHALL BE SHALL BE GRANULAR FILL UNIFORMLY PLACED, LEVELED, AND COMPACTED IN 12 INCH LAYERS USING MECHANICAL COMPACTORS

## 1 DIP TRENCH
MCWA STANDARD DETAIL (DME 3, 2025)
NTS




NOTE: IN THE PRESENCE OF A WATER AUTHORITY REPRESENTATIVE REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY DISINFECTION/SAMPLE TAPS AND REPLACE WITH THREADED BRASS PLUGS.

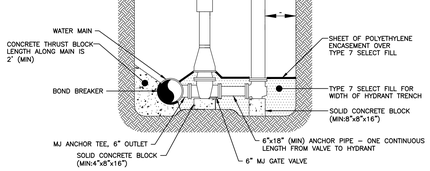
## 2 DISINFECTION/ BLOW-OFF/ SAMPLING TAP (TEMPORARY)
MCWA STANDARD DETAIL (DME 14, 2025)
NTS



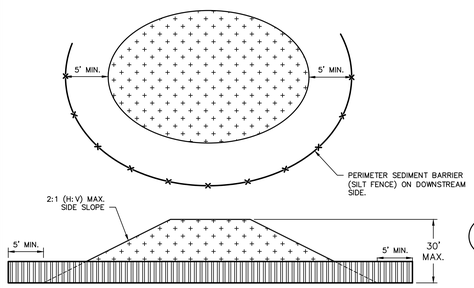

NOTES:

1. CENTER VALVE BOX ON VALVE AND SET ON COMPACTED BACKFILL.
2. VALVE SHALL NOT SUPPORT VALVE BOX.
3. ALL VALVES SHALL BE OPEN LEFT EXCEPT:
   TOWN OF WEBSTER – VALVES 12" AND SMALLER SHALL OPEN RIGHT.
   TOWN OF HENRIETTA – SHALL OPEN RIGHT

## 3 VALVE
MCWA STANDARD DETAIL (DME 5, 2025)
NTS




## 4 PERPENDICULAR HYDRANT ASSEMBLY
MCWA STANDARD DETAIL (DME 9, 2025)
NTS




CONSTRUCTION SPECIFICATIONS

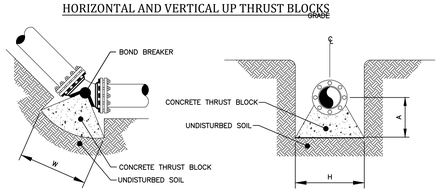
1. SEDIMENT BARRIER (SILT FENCE) SHALL BE PLACED AROUND THE PERIMETER OF ALL STOCKPILES OF ALL ERODIBLE MATERIAL.
2. OFFSET SEDIMENT BARRIER FROM STOCKPILE A MINIMUM OF 5' FROM THE TOE OF STOCKPILE FOR SEDIMENT ACCUMULATION.
3. IMMEDIATELY STABILIZED STOCKPILED MATERIAL WITH SEED AND MULCH.
4. INSPECT STOCKPILE PERIMETER CONTROL AFTER EACH RAIN EVENT.
5. ONCE SEDIMENT HAS ACCUMULATED TO A HEIGHT OF 50% OF THE SEDIMENT BARRIER HEIGHT, THE CONTRACTOR SHALL REMOVE COLLECTED SEDIMENT AND SPOIL MATERIAL ON STOCKPILE AND RESTABILIZE WITH SEED AND MULCH.

## 5 STOCKPILE AREA
SCALE: N.T.S

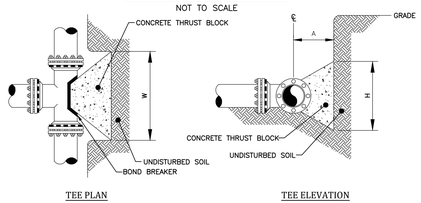
| PIPE DIAMETER | BEND OR FITTING | | | | | | | | | | | | TEE*, CAP OR PLUG | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11¼ DEGREE | | | 22½ DEGREE | | | 45 DEGREE | | | 90 DEGREE | | | | | |
| | H (FT) | W (FT) | A (FT) | H (FT) | W (FT) | A (FT) | H (FT) | W (FT) | A (FT) | H (FT) | W (FT) | A (FT) | H (FT) | W (FT) | A (FT) |
| 4" | 0.7 | 1.0 | 0.7 | 0.7 | 1.0 | 0.7 | 1.0 | 1.5 | 1.0 | 1.7 | 2.5 | 1.7 | 1.4 | 2.0 | 1.4 |
| 6" | 1.0 | 1.5 | 1.5 | 1.4 | 2.0 | 1.4 | 1.7 | 2.5 | 1.7 | 2.4 | 3.5 | 2.4 | 2.0 | 3.0 | 2.0 |
| 8" | 1.0 | 1.5 | 1.0 | 1.7 | 2.5 | 1.7 | 2.4 | 3.5 | 2.4 | 3.0 | 4.5 | 3.0 | 2.7 | 4.0 | 2.7 |

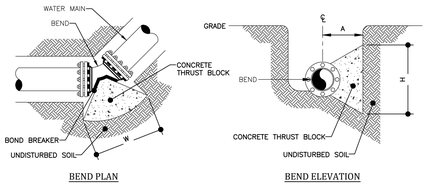
* SIZE BLOCK BASED ON BRANCH DIAMETER.
SOIL BEARING STRENGTH - 1,000 PSF
100 PSI TEST PRESSURE

HORIZONTAL AND VERTICAL UP THRUST BLOCKS



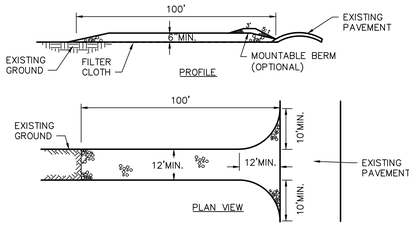

VERTICAL UP THRUST BLOCKS
NOT TO SCALE




HORIZONTAL THRUST BLOCKS
NOT TO SCALE

## 6 HORIZONTAL & VERTICAL UP THRUST BLOCKS
MCWA STANDARD DETAIL (DME 6, 2025)
NTS




CONSTRUCTION SPECIFICATIONS

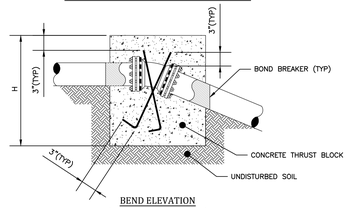
1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MIN. LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS, TWENTY–FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITHI 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY, ALL SEDIMENT SPILLED, DROPPED, TACKED, OR WASHED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

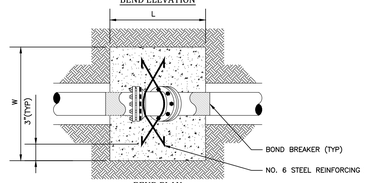
## 7 STABILIZED CONSTRUCTION ENTRANCE
NYSDEC STANDARD DETAIL
SCALE: N.T.S

| PIPE DIAMETER | BEND | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 11¼ DEGREE | | | | 22½ DEGREE | | | | 45 DEGREE | | | | 90 DEGREE | | | | | |
| | L (FT) | W (FT) | H (FT) | VOL (CY) | L (FT) | W (FT) | H (FT) | VOL (CY) | L (FT) | W (FT) | H (FT) | VOL (CY) | L (FT) | W (FT) | H (FT) | VOL (CY) | L (FT) | W (FT) | H (FT) | VOL (CY) |
| 4" | 2.5 | 2.5 | 2.5 | 0.5 | 2.5 | 2.5 | 2.5 | 0.5 | 3.5 | 2.5 | 3.5 | 1.0 | 3.5 | 2.5 | 3.5 | 1.0 | 3.5 | 2.5 | 3.5 | 1.0 |
| 6" | 2.5 | 2.5 | 2.5 | 0.5 | 3.5 | 2.5 | 3.5 | 1.0 | 1.5 | 2.5 | 1.5 | 1.5 | 5.0 | 2.5 | 5.0 | 2.0 | | | | |
| 8" | 3.0 | 3.0 | 3.0 | 1.0 | 4.0 | 3.0 | 4.0 | 1.5 | 5.0 | 3.0 | 5.0 | 2.5 | 5.5 | 3.0 | 5.5 | 3.0 | | | | |

SOIL BEARING STRENGTH - 1,000 PSF
100 PSI TEST PRESSURE

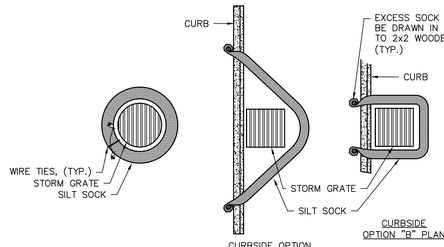
VERTICAL DOWN THRUST BLOCKS

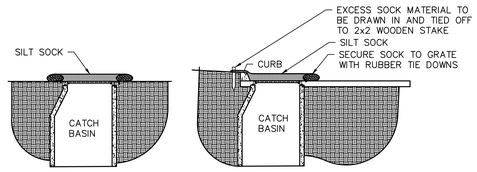



NOTES:
1. THRUST BLOCKS SHALL BE CENTERED HORIZONTALLY ON BENDS.
2. VOLUMES SHOWN IN CHART ARE MINIMUMS.

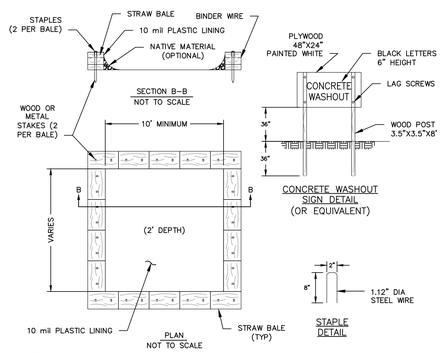
## 8 VERTICAL DOWN THRUST BLOCKS
MCWA STANDARD DETAIL (DME 7, 2025)
NTS



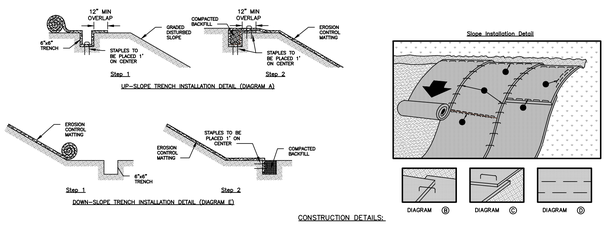

NOTES:
1. USE FILTREXX® SILTSOXX™ OR APPROVED EQUAL.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

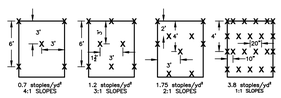
## 9 PAVED SURFACE INLET PROTECTION
SCALE: N.T.S




NOTES:
1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

## 10 CONCRETE WASHOUT
SCALE: N.T.S




CONSTRUCTION DETAILS:

1. DIG A 6" BY 6" TRENCH BOTH UP–SLOPE AND DOWN–SLOPE OF THE AREA THE MATTING IS TO BE APPLIED. PREPARE THE SLOPE SOIL SURFACE (RAKING, SEEDING AND FERTILIZING).
2. BEGIN BY PLACING THE BLANKET A MINIMUM OF 12" DOWN–SLOPE OF THE UP–SLOPE TRENCH. SECURE THE BLANKET AT THE BOTTOM OF THE TRENCH WITH STAPLES PLACED 12" APART, BACKFILL AND COMPACT THE TRENCH. APPLY SEED, AND FOLD THE BLANKET OVER SOIL. SECURE WITH A ROW OF STAPLES PLACED 12" APART ACROSS THE WIDTH OF THE BLANKET. (SEE DIAGRAM A)
3. ROLL THE BLANKET VERTICALLY DOWN THE SLOPE. SECURE USING THE APPROPRIATE STAPLE PATTERN BELOW, SPECIFIED BY SLOPE. (SEE STAPLE PATTERNS)
4. PARALLEL BLANKETS MUST BE OVERLAPPED BY A MINIMUM OF 4", AND SECURED WITH A ROW OF STAPLES PLACED APPROXIMATELY 3'–0" APART. (SEE DIAGRAM B)
5. ADDITIONAL VERTICAL BLANKETS CAN BE JOINED USING A MINIMUM 4" OVERLAPPING OR SHINGLE STYLE (SEE DIAGRAMS C) IN THE DIRECTION OF WATER FLOW. CONNECT THE BLANKETS BY PLACING STAPLES APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKETS.
6. FOR MAXIMUM PERFORMANCE A CHECK SLOT SHOULD BE PLACED AT 25'–40' INTERVALS. PLACE A ROW OF STAPLES 4" APART ALONG THE ENTIRE WIDTH OF THE SLOPE. A SECOND ROW SHOULD BE PLACED 4" BELOW IN A STAGGERED PATTERN. THEN CONTINUE WITH GENERAL INSTALLATION. (SEE DIAGRAMS D)
7. THE END OF BLANKET MUST BE SECURED IN A 6" X 6" TRENCH WITH A ROW OF STAPLES PLACED AT 12" INTERVALS. (DIAGRAM E)
8. EAST COAST EROSION CONTROL ECS–2 DOUBLE NET STRAW ROLLED EROSION CONTROL PRODUCT OR APPROVED EQUAL

## 11 EROSION CONTROL BLANKET
SCALE: N.T.S

APPROVED BY:
COMMISSIONER OF PUBLIC WORKS
DATE:

APPROVED BY:
TOWN ENGINEER
DATE:

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

PRELIMINARY/FINAL SITE PLANS for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

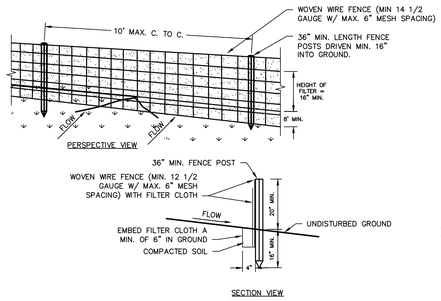
COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK — COLE M. PAPASERGI — 110080 — LICENSED PROFESSIONAL ENGINEER — PRELIMINARY NOT FOR CONSTRUCTION

DRAWING TITLE:
CONSTRUCTION DETAILS

| | |
|---|---|
| 16 of 21 SHEET No: | C7.2 |
| 1780-26 JOB No: | DRAWING No: |

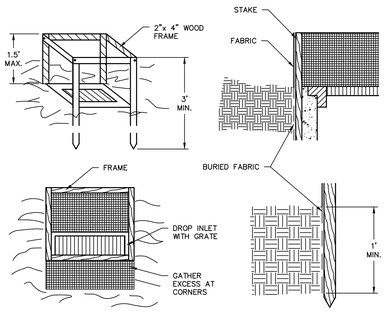
File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C7.X DETAILS.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL "T" OR "U" TYPE OF HARDWOOD.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABLINKKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
6. ENVIRO-FENCE WITH INTEGRAL MESH IS ACCEPTABLE SUBSTITUTE.

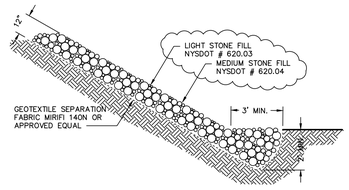
## 1 SILT FENCE
SCALE: N.T.S



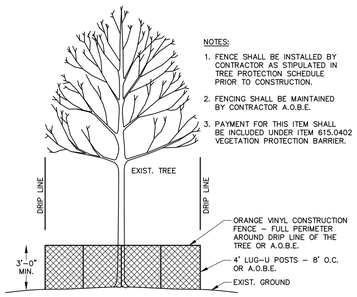

CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM OF 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL
6. BE SECURELY FASTENED TO THE STAKES AND FRAME.
7. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
8. IF AN INLET IS LOCATED IN A PAVED AREA, ONCE THE SURROUNDING HARD SURFACE IS INSTALLED, THE CONTRACTOR SHALL TRANSITION TO AN APPROVED INLET PROTECTION METHOD FOR PAVED SURFACES, SUCH AS A SEDIMENT BASKET OR SILT SOCK.

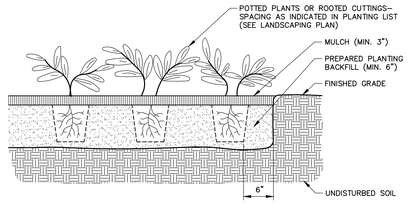
## 2 DROP INLET PROTECTION
SCALE: N.T.S



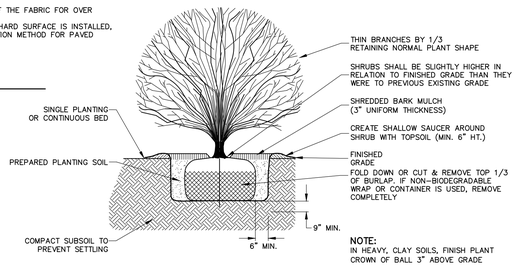

## 3 ARMORED SLOPE STONE PROTECTION
SCALE: N.T.S



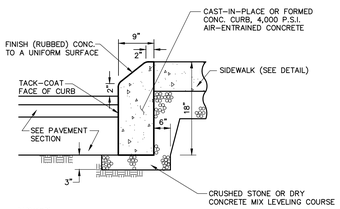

## 4 TREE PROTECTION




## 5 GROUND COVER PLANTINGS



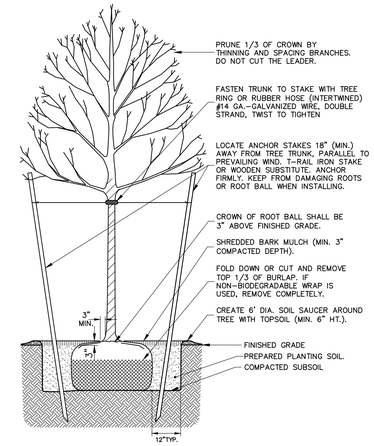

## 6 SHRUB PLANTINGS



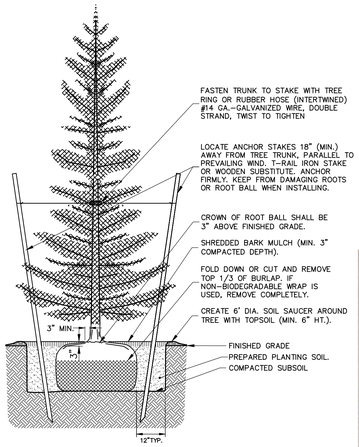

NOTES:

1. PROVIDE CONSTRUCTION JOINTS AT 20' INTERVALS AND EXPANSION JOINTS AT 80' MAXIMUM SPACING. EXPANSION JOINTS SHALL BE FORMED WITH PRE-MOLDED BITUMINOUS JOINT FILLER AND REBAR TO PREVENT SEPARATION.

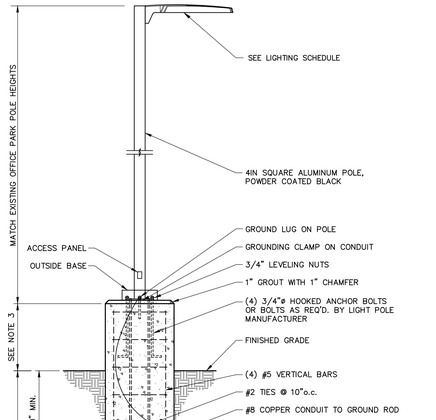
## 11 MOUNTABLE CURB WITH SIDEWALK BEHIND




## 7 DECIDUOUS PLANTINGS



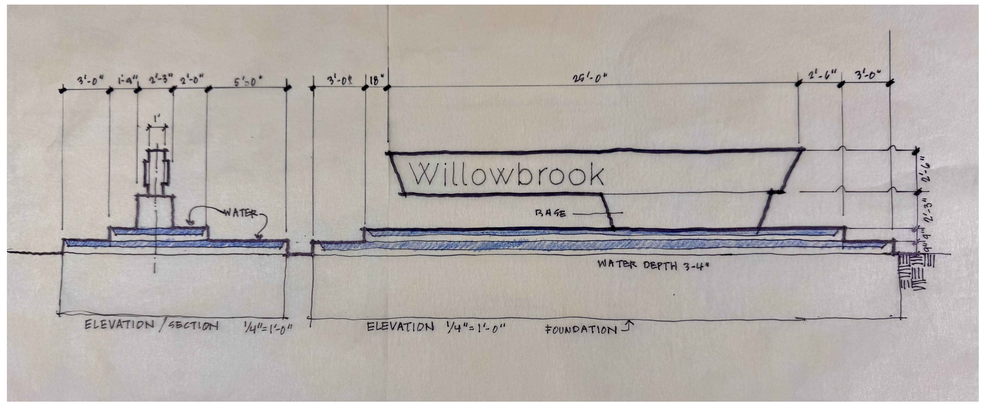

## 8 CONIFEROUS PLANTINGS




NOTES:

1. POLE BASE MAY BE PRECAST BY LAKELANDS (LB24D)
2. LIGHT POLE MANUFACTURER TO SUPPLY ANCHOR BOLTS, OUTSIDE BASE, AND BOLT PATTERN TEMPLATES.
3. IN PAVEMENT AREAS CONCRETE BASE SHALL EXTEND 24" MINIMUM ABOVE ASPHALT. IN PROTECTED LANDSCAPE AREAS (BEHIND CURB) BASES SHALL HAVE A MINIMUM OF 6" REVEAL ABOVE FINISHED GRADE.
4. BASES SHALL HAVE 2' MIN. HORIZONTAL SEPARATION FROM BACK OF CURB OR SIDEWALK UNLESS SPECIFICALLY CALLED OUT OTHERWISE ON THE PLANS.

## 9 LIGHT BASE




## 10 WILLOWBROOK SIGN DETAIL
SUBJECT TO SEPARATE PLANNING BOARD APPROVAL

APPROVED BY:
COMMISSIONER OF PUBLIC WORKS
DATE:

APPROVED BY:
TOWN ENGINEER
DATE:

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD. STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

PRELIMINARY/FINAL SITE PLANS
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

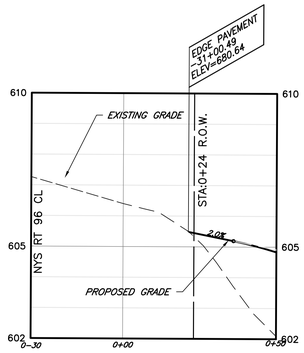
IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF THIS ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF ALTERATIONS.

COPYRIGHT © 2026 MARATHON ENG.

DRAWING TITLE:
CONSTRUCTION DETAILS

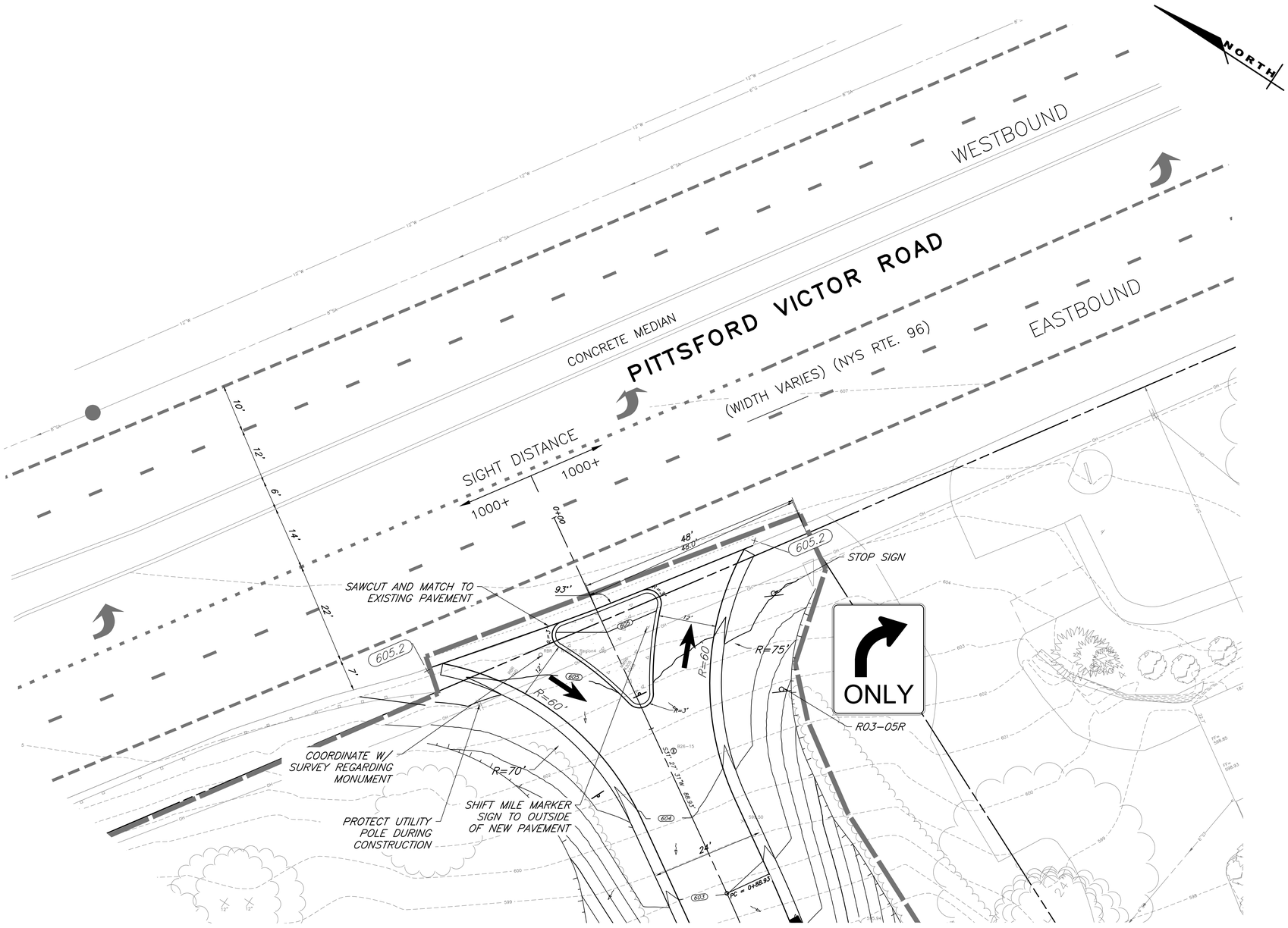
| | |
|---|---|
| 17 of 21 SHEET No: | C7.3 |
| 1780-26 JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C7.X DETAILS.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB




## DRIVEWAY PROFILE

V SCALE: 1"= 2'  H SCALE: 1"= 20'




## DRIVEWAY LAYOUT PLAN

SCALE: 1"= 10'

**LEGEND:**

- CENTERLINE AND STATIONING (1+00 ℄ 2+00)
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- NEW PROPERTY LINE
- EASEMENT LINE
- RIGHT OF WAY (HIGHWAY BOUNDARY)
- SIGN
- EXISTING POWER POLE
- LIGHT POLE
- EXISTING FENCE (DESCRIPTION)
- PROPOSED FENCE (DESCRIPTION)
- CONSTRUCTION FENCE
- CURB
- PROPOSED SIDEWALK

### STANDARD GENERAL PLAN NOTES

1. ROAD TO BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
2. ROADSIDE DRAINAGE TO BE MAINTAINED AT ALL TIMES.
3. MATERIALS, EQUIPMENT AND VEHICLES ARE NOT TO BE STORED OR PARKED WITHIN THE NEW YORK STATE RIGHT-OF-WAY.
4. MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THE CURRENT NATIONAL MUTCD WITH NYS SUPPLEMENT, SECTION 619 OF THE CURRENT NYSDOT STANDARD SPECIFICATIONS, THESE PLANS AND AS ORDERED BY THE ASSISTANT RESIDENT ENGINEER. ON A NYSDOT CONSTRUCTION PROJECT, MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THESE PLANS AND BE IN ACCORDANCE WITH THE NYSDOT CONTRACT DOCUMENTS AS DEEMED NECESSARY BY THE NYS ENGINEER-IN -CHARGE.
5. NOTIFY THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION'S ASSISTANT RESIDENT ENGINEER AT THE APPROPRIATE NUMBER, AS NOTED BELOW, THREE (3) WORK DAYS PRIOR TO WORKING WITHIN THE STATE RIGHT-OF-WAY.

| | | | |
|---|---|---|---|
| GENESEE CO. | -DAN STAHLEY (585)343-0502 | LIVINGSTON CO. | -LARRY AMIDON (585)346-3036 |
| MONROE EAST | -ALFRED OYOYO (585)586-4514 | MONROE WEST | -DAWN JINDRA (585)352-3471 |
| ONTARIO CO. | -GREG TROST (585)396-4955 | ORLEANS CO. | -RICHARD LOVELACE (585)589-6655 |
| WAYNE CO. | -JEFF JONES (315)332-4000 | WYOMING CO. | -BRIAN HOLMES (585)786-3310 |

THE PERMITTEE IS ADVISED THAT THE NYSDOT IS NOW REVIEWING ALL LANE CLOSURES ON THE PRIORITY NETWORK FOR IMPACT ON TRAFFIC OPERATIONS IN REAL TIME. THE PRIORITY NETWORK, CONSISTS OF INTERSTATES 390, 490, AND 590 AND STATE ROUTES 350,250, 104(FROM NY 390 TO WAYNE COUNTY), US 20, NY 63(FROM STEUBEN COUNTY TO I 90) AND NY 77 IN GENESEE COUNTY. WHEN ANY PARTY INTENDS TO CLOSE A LANE OR SHOULDER ON ANY OF THESE HIGHWAYS, THE SURFACE TRANSPORTATION CONTROLLER (STC) SHALL BE NOTIFIED AT (585) 753-7760. THE CLOSURE WILL BE EVALUATED IN THE LIGHT OF WHAT IS HAPPENING AT THAT TIME ON THE HIGHWAY, INCIDENTS, CONFLICTING WORK ZONES OR OTHER UNPLANNED EVENTS THAT RENDER THE HIGHWAY UNAVAILABLE FOR THE CLOSURE MAY RESULT IN A SHORT-TERM DISAPPROVAL OF CLOSURE UNTIL THE SITUATION HAS BEEN RESOLVED. EVALUATION PROCEDURES ARE AVAILABLE FOR REVIEW AT THE REGIONAL TRAFFIC OPERATIONS CENTER, 1155 SCOTTSVILLE ROAD, ROCHESTER, NY.

6. NOTIFY THE NYSDOT SIGNAL MAINTENANCE FACILITY AT (585) 753-7790 5 DAYS PRIOR TO WORKING WITHIN 350' OF A SIGNALIZED INTERSECTION. NOTIFY DIG SAFELY NEW YORK 2 WORK DAYS PRIOR TO DIGGING, DRILLING, OR BLASTING AT 811 FOR A UTILITY STAKE-OUT.
7. ALL MATERIALS USED WITHIN THE STATE RIGHT-OF-WAY MUST COMPLY WITH THE CURRENT NEW YORK STATE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS ALONG WITH ANY APPROPRIATE CURRENT NYS DEPARTMENT OF TRANSPORTATION'S STANDARD SHEETS.
8. QUALITY CONTROL OF ASPHALT CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 401 OF THE STANDARD SPECIFICATIONS. ALL ASPHALT PRODUCED AS PART OF SECTION 401 WILL BE PAID AT A FINAL QUANTITY ADJUSTMENT FACTOR OF 1.0 .ASPHALT COURSE DEPTHS SHOWN ON THE PLANS ARE COMPACTED DEPTHS.
9. NO NIGHT WORK SHALL BE ALLOWED UNLESS APPROVED PRIOR TO START OF PERJOECT. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC OF TRAFFIC MAY REQUIRE INCLUDING THE ADDITIONAL REFLECTIVE MATERIALS AND LIGHTING.
10. HAZARDOUS WASTE NOTIFICATION - THE PERMITTEE ACCEPTS THE RIGHT-OF-WAY OF THE STATE HIGHWAY IN ITS "AS IS" CONDITION. THE DEPARTMENT OF TRANSPORTATION MAKES NO REPRESENTATION AS TO THE ABSENCE OF UNDERGROUND TANKS, STRUCTURES, FEATURES OR SIMILAR IMPEDIMENTS TO THE COMPLETION THE WORK PERMITTED HEREUNDER. SHOULD PERMITTEE FIND SOME PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS TO ITS WORK, THE DEPARTMENT OF TRANSPORTATION SHALL HAVE NO OBLIGATION TO CURE, REMOVE,REMEDY OR OTHERWISE DEAL WITH SUCH PREVIOUSLY UNKNOWN UNDERGROUND IMPEDIMENTS. THE PERMITTEE REQUIRED TO REMOVE, MODIFY OR OTHERWISE DEAL WITH SUCH UNDERGROUND TANKS, STRUCTURES, FEATURES OR IMPEDIMENTS IN A MANNER WHICH MEETS ACCEPTABLE ENGINEERING PRACTICE AND IS APPROVED BY THE DEPARTMENT OF TRANSPORTATION.

0 10 20
SCALE

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTYSTATE OF STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER

NOT FOR CONSTRUCTION

COLE M. PAPASERGI

DRAWING TITLE:
NYSDOT
DRIVEWAY PLAN

| | |
|---|---|
| 18 of 21 SHEET No: | C8.0 |
| 1780-26 JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C8.X DRIVEWAY.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

## GENERAL NOTES

1. THE TYPICAL DETAILS DEPICTED ON THE STANDARD SHEETS AND IN THE MUTCD, REFLECT THE MINIMUM REQUIREMENTS.
2. PROPOSED REVISIONS TO THE TRAFFIC CONTROL PLAN SHALL BE PROVIDED, IN WRITING, TO THE DOT ENGINEER FOR REVIEW AND APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE FIVE (5) WORK DAYS PRIOR TO THE PLANNED IMPLEMENTATION OF SUCH PROPOSED REVISIONS, EXCEPT FOR CHANGES THAT ALTER THE SCOPE OF THE TRAFFIC CONTROL PLAN. SUCH CHANGES IN SCOPE MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL BY THE REGIONAL DIRECTOR OR HIS/HER DESIGNEE THIRTY (30) WORK DAYS PRIOR TO IMPLEMENTATION OF SUCH REVISIONS.
3. THE NAMES, ADDRESSES, AND TELEPHONE NUMBERS OF STAFF WHO ARE AUTHORIZED TO SECURE LABOR, MATERIALS, AND EQUIPMENT FOR EMERGENCY REPAIRS OUTSIDE NORMAL WORKING HOURS SHALL BE PROVIDED, IN WRITING, TO THE NYSDOT ENGINEER. THE ENGINEER WILL PROVIDE THE SUBMITTED INFORMATION TO REGIONAL MANAGEMENT, THE NEW YORK STATE POLICE, THE RESIDENT ENGINEER, AND THE LOCAL POLICE.
4. STANDARD SHEET 619-503 MAY BE USED FOR AN OFFSITE DETOUR SETUP FOR BOTH LONG TERM AND SHORT TERM WORK DURATIONS.
5. REGIONAL HIGH-VOLUME RESTRICTIONS SHALL BE FOLLOWED. CONSULT WITH DOT ENGINEER IF EXCEPTION NEEDED.
6. PLAN AHEAD TO AVOID CONFLICTING WORK ZONES. CHECK FOR CONSTRUCTION PROJECTS, CLOSURES, & RESTRICTIONS AT WWW.511NY.ORG, WWW.DOT.NY.GOV/PROJECTS, AND WITH NYSDOT ENGINEER.
7. WORK ZONE INCIDENTS SHALL BE DOCUMENTED AND REPORTED USING EITHER THE DEPARTMENT'S WORK ZONE INCIDENT FORM, OR THE CONSTRUCTION INCIDENT REPORTING SYSTEM, AS APPROPRIATE.
8. CONSIDER CLOSURE WIDTH AND THE ABILITY TO ACCOMMODATE WIDE LOAD VEHICLES BEFORE ESTABLISHING WORK ZONES.
9. IF THE WORK ZONE AFFECTS AN EXISTING ACCESSIBLE AND DETECTABLE PEDESTRIAN FACILITY, ACCESSIBILITY AND DETECTABILITY SHALL BE PROVIDED ALONG THE ALTERNATE ROUTE.

## ACTIVITY AREA

1. A 500' MINIMUM LONGITUDINAL DISTANCE SHALL BE MAINTAINED BETWEEN CONSTRUCTION OPERATIONS ON ALTERNATE SIDES OF THE ROADWAY, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
2. WHEN TWO OR MORE AREAS ARE ADJACENT, OVERLAP, OR ARE IN CLOSE PROXIMITY, THE CONTRACTOR SHALL ENSURE THERE ARE NO CONFLICTING SIGNS AND THAT LANE CONTINUITY IS MAINTAINED THROUGHOUT ALL WORK AREAS.

## SIGNS

1. THE LOCATIONS OF THE SIGNS SHOWN ON THE WORK ZONE TRAFFIC CONTROL PLANS AND DETAILS MAY BE ADJUSTED BASED ON SIGHT DISTANCE AND OTHER CONSIDERATIONS. THE FINAL LOCATIONS OF SIGNS ARE SUBJECT TO APPROVAL OF THE ENGINEER.
2. FOR LONG TERM WORK DURATIONS, ANY EXISTING SIGNS, INCLUDING OVERHEAD SIGNS, WHICH CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL SIGN LAYOUT SHALL BE COVERED, REMOVED, STORED OR RESET, AS APPROVED BY THE ENGINEER. ALL APPROPRIATE EXISTING SIGNS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND/OR LOCATION UNLESS OTHERWISE REPLACED IN THIS CONTRACT.
3. SIGNS AT OR NEAR INTERSECTIONS SHALL BE PLACED SO THAT THEY DO NOT OBSTRUCT A MOTORIST'S LINE OF SIGHT.
4. SIGNS MOUNTED ON THE MEDIAN OF DIVIDED HIGHWAYS WHERE MEDIAN BARRIER IS IN PLACE MAY BE MOUNTED ON THE BARRIER WITH A SADDLE TYPE BRACKET OR OMITTED WITH THE APPROVAL OF THE DOT ENGINEER. LAYING THE SIGN DOWN IN A HORIZONTAL POSITION IS NOT PERMITTED.
5. THE DIMENSIONS OF WORK ZONE TRAFFIC CONTROL SIGNS ARE DESCRIBED IN THE MUTCD. ANY CHANGES TO THE DIMENSIONS SHALL BE APPROVED BY THE REGIONAL DIRECTOR OR BY HIS/HER DESIGNEE.
6. NYR9-12 SHALL BE USED IN PLACE OF NYR9-11 WHEN A REDUCED REGULATORY SPEED LIMIT SIGN IS AUTHORIZED.
7. RIGID AND FLEXIBLE "ROLL-UP" SIGNS MAY BE USED FOR MOBILE, SHORT DURATION AND SHORT-TERM STATIONARY WORK. RIGID SIGNS MUST BE MOUNTED AT LEAST 5 FEET ABOVE GRADE (7 FEET WHERE THERE ARE PEDESTRIANS OR PARKED CARS). FLEXIBLE SIGNS SHALL BE MOUNTED AT LEAST ONE FOOT ABOVE GRADE. MESH SIGNS SHALL NOT BE USED. USE RETRO REFLECTORIZED RIGID SIGNS FOR NIGHTTIME WORK.

## LANE WIDTHS

1. UNLESS AUTHORIZED BY THE ENGINEER, THE MINIMUM LANE WIDTHS FOR WORK ZONE TRAVEL LANES SHALL BE AS FOLLOWS: FREEWAYS AND/OR EXPRESSWAYS IS 11'. THE MINIMUM LANE WIDTH FOR ALL OTHER TYPES OF ROADWAYS IS 10'.
2. A WRITTEN NOTE SHALL BE PROVIDED TO THE ENGINEER, A MINIMUM OF 21 CALENDAR DAYS IN ADVANCE OF PERFORMING ANY WORK THAT RESULTS IN THE REDUCED WIDTH OF AN EXISTING ROADWAY, SO THAT THE ENGINEER MAY NOTIFY THE REGIONAL PERMIT ENGINEER IN A TIMELY MANNER.
3. IF THE WORK ZONE AFFECTS PEDESTRIANS, A MINIMUM PEDESTRIAN PATHWAY WIDTH OF 5 FEET SHALL BE MAINTAINED UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.
4. TEMPORARY BICYCLE ACCOMMODATIONS SHALL NOT BE LESS THAN WHAT CURRENTLY EXISTS UNLESS AUTHORIZED BY THE ENGINEER.

## PROTECTIVE VEHICLES

1. PROTECTIVE VEHICLES ARE DIVIDED INTO 2 CATEGORIES BASED ON THE GROSS VEHICLE WEIGHT (GVW):

   - PROTECTIVE VEHICLE LIGHT (PVL) SHALL HAVE A MINIMUM GVW OF 9,500 LBS. OR GREATER.

   - PROTECTIVE VEHICLE HEAVY (PVH) SHALL HAVE A MINIMUM GVW OF 22,000 LBS. OR GREATER.
2. IF THE PROTECTIVE VEHICLE ENCROACHES INTO THE TRAVEL LANE, OR IF IT REMAINS ENTIRELY ON THE SHOULDER OF ANY HIGH SPEED ROAD (45 MPH), IT SHALL BE EQUIPPED WITH A DEPLOYED TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR (TMIA, SEE TABLE 011-01 ON SHEET 619-011). BALLAST MAY BE USED TO BRING A LIGHTER VEHICLE UP TO THE INDICATED WEIGHT PROVIDED THE BALLAST IS SECURELY CONTAINED WITHIN AN ENCLOSED BODY OR OTHERWISE SECURELY FASTENED TO THE VEHICLE PURSUANT TO FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION (FMCSA) CARGO SECUREMENT RULES, SUCH THAT:

   - THE BALLAST WILL NOT SEPARATE FROM THE VEHICLE UPON IMPACT AND

   - THE BALLAST WEIGHT WILL NOT EXCEED THE MANUFACTURER'S GROSS VEHICLE WEIGHT RATING (GVWR).

   - TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA.
3. WHEN A PROTECTIVE VEHICLE(S) IS USED BETWEEN THE WORK VEHICLE (CREW) OR HAZARD AND THE TRAFFIC IN A MOVING OPERATION IT IS REFERRED TO AS A SHADOW VEHICLE(S).
4. WHEN A PROTECTIVE VEHICLE(S) IS USED BETWEEN THE WORK VEHICLE (CREW) OR HAZARD AND THE TRAFFIC IN A STATIONARY OPERATION IT IS REFERRED TO AS A BARRIER VEHICLE(S).
5. WHEN A PROTECTIVE VEHICLE IS USED IN ADVANCE OF EITHER MOVING OR STATIONARY OPERATIONS TO DISPLAY SIGN MESSAGES IT IS REFERRED TO AS AN ADVANCE WARNING VEHICLE. WHEN SIGNS ARE MOUNTED ON AN ADVANCED WARNING VEHICLE, THEY SHALL NOT OBSTRUCT VISIBILITY OF ANY LIGHTS (TAILLIGHTS OR WARNING LIGHTS), OR SIDE-VIEW MIRRORS ON THE VEHICLE, OR TRUCK MOUNTED ARROW BOARDS.
6. IN A MOVING OPERATION OR A STATIONARY OPERATION THAT OCCUPIES A LOCATION FOR UP TO 1 HOUR, THE OPERATOR SHALL REMAIN IN THE PROTECTIVE VEHICLE WITH THE SAFETY BELT AND HEADREST PROPERLY ADJUSTED, MAINTAIN VEHICLE SPACING, AND KEEP THE WHEELS ALIGNED WITH THE LANE STRIPING AND LANE TO MAINTAIN LANE DISCIPLINE AND TO STAY IN LANE IF STRUCK. THE PARKING BRAKE SHALL BE SET WHENEVER POSSIBLE. TWO-WAY RADIOS SHOULD BE USED TO COMMUNICATE BETWEEN THE OPERATOR AND THE WORK CREW.
7. IN A STATIONARY OPERATION THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR, ONCE THE PROTECTIVE VEHICLE HAS BEEN APPROPRIATELY PLACED, IT SHOULD BE UNOCCUPIED. UNOCCUPIED VEHICLE SHALL BE POSITIONED PARALLEL TO TRAFFIC, PARKING BRAKE SET, PLACED IN 2ND GEAR (MANUAL TRANSMISSIONS /ENGINE OFF) OR PARK / NEUTRAL (AUTOMATIC TRANSMISSIONS). THE FRONT WHEELS SHALL BE ALIGNED WITH THE LANE STRIPING AND LANE TO MAINTAIN LANE DISCIPLINE AND TO STAY IN LANE IF STRUCK.
8. NO WORK ACTIVITY, EQUIPMENT, VEHICLES AND/OR MATERIALS SHALL BE LOCATED BETWEEN THE PROTECTIVE VEHICLE AND THE ACTIVE WORK AREA (ROLL AHEAD DISTANCE).
9. DIRECT VERBAL COMMUNICATION BETWEEN THE PROTECTIVE VEHICLES AND THE WORK VEHICLE(S) / EQUIPMENT SHALL BE UTILIZED WHERE AVAILABLE.

## CHANNELIZING DEVICES

1. WHERE POSSIBLE ALL CHANNELIZING AND GUIDING DEVICES ARE TO BE PLACED SO AS TO PROVIDE A MINIMUM 2' LATERAL CLEARANCE TO THE TRAVELED WAY.
2. A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY TO REMAIN AT THE END OF THE WORK SHIFT SHALL BE SEPARATED FROM TRAFFIC WITH POSITIVE BARRIER. FOR POSTED SPEED LIMIT OF 45 MPH AND LESS, A DROP-OFF OF GREATER THAN 24 INCHES WITHIN 10 FEET FROM THE EDGE OF THE TRAVELED WAY THAT IS 100 FEET OR LESS IN LENGTH WILL BE ALLOWED WITH CHANNELIZING DEVICES CONSISTING OF DRUMS, EXTRA TALL CONES, OR OVERSIZED VERTICAL PANELS ONLY AT A MAXIMUM SPACING OF 20 FEET FOR SHORT DURATIONS NOR TO EXCEED ONE WORK SHIFT.
3. TEMPORARY POSITIVE BARRIER MAY BE SUBSTITUTED WITH DRUM CHANNELIZING DEVICES, IN SOME CIRCUMSTANCES, WITH APPROVAL OF THE REGIONAL TRAFFIC ENGINEER BASED ON GUIDANCE FOUND IN THE HIGHWAY DESIGN MANUAL AND ENGINEERING JUDGEMENT.

## PUBLIC ACCESS

1. PROPERTY OWNERS WHOSE DRIVEWAYS WILL BE MADE INACCESSIBLE SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO RESTRICTING USE OF THE DRIVEWAY. FOR MULTIPLE ACCESS PROPERTIES, AT LEAST ONE DRIVEWAY SHALL BE OPEN AT ALL TIMES. ACCESS SHALL BE RESTORED TO ALL DRIVEWAYS AS SOON AS POSSIBLE.
2. SUITABLE RAMPS SHALL BE INSTALLED TO MAINTAIN SMOOTH TRANSITIONS FROM RESIDENTIAL AND COMMERCIAL DRIVEWAYS TO AND FROM THE WORK AREA.

## LANE CLOSURES

1. LANE CLOSURES SHALL BE LOCATED TO PROVIDE OPTIMUM VISIBILITY, I.E. BEFORE CURVES AND CRESTS, TO THE EXTENT CONDITIONS PERMIT.
2. THE ENGINEER MAY REQUIRE THAT ALL LANES BE RE-OPENED AT ANY TIME IF THE ROUTE IS NEEDED FOR EMERGENCY PURPOSES. THIS COULD INCLUDE INCIDENTS AT LOCATIONS OUTSIDE THE CONTRACT LIMITS.
3. EACH ARROW PANEL SHALL BE VISIBLE 1500 FEET IN ADVANCE FROM ANY POINT WITHIN THE ROADWAY.

## TOLERANCE NOTE

1. ALL DIMENSIONS ON ANY 619 STANDARD SHEET ARE NOMINAL.

   - WHEN A DECIMAL POINT WITH SIGNIFICANT DIGIT(S) TO THE RIGHT OF IT IS/ARE PRESENT-TOLERANCE FOR EACH DIMENSION IS ONE HALF OF THE LAST SIGNIFICANT DIGIT IN THE UNITS SHOWN. (e.g. 1.0' IS 0.05' & 1.00" IS 0.005").

   - OTHERWISE, TOLERANCE FOR EACH DIMENSION IS THE LESSER OF 10% OF THE NOMINAL DIMENSION SHOWN OR 6" (e.g. TOLERANCE FOR 3' IS 3.6" & TOLERANCE FOR 10' IS 6").
2. TOLERANCE ARE NOT CUMULATIVE. ABOVE DOES NOT APPLY WHEN ANY RANGE, MAXIMUM OR MINIMUM DIMENSION OR A CONTEXT SPECIFIC TOLERANCE IS SPECIFIED.

ERRATA 3 EFF. 05/01/24 ISSUED WITH EB 24-007
ERRATA 2 EFF. 09/01/23 ISSUED WITH EB 23-016
ERRATA 1 EFF. 05/01/23 ISSUED WITH EB 22-033

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation
U.S. CUSTOMARY STANDARD SHEET
WORK ZONE TRAFFIC CONTROL GENERAL NOTES (SHEET 1 OF 2)
APPROVED DECEMBER 21, 2022 — Robert Limoges — ROBERT LIMOGES, P.E. DIRECTOR, OTSM
ISSUED UNDER EI 22-033 — 619-010

## WORK DURATION DEFINITIONS

1. THERE ARE MAINLY FIVE WORK DURATIONS:
   A. LONG-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN 3 CONSECUTIVE DAYS.
   B. INTERMEDIATE-TERM IS STATIONARY WORK THAT OCCUPIES A LOCATION MORE THAN ONE DAYLIGHT PERIOD UP TO 3 CONSECUTIVE DAYS, OR NIGHTTIME WORK LASTING MORE THAN 1 HOUR.
   C. SHORT-TERM IS STATIONARY DAYTIME WORK THAT OCCUPIES A LOCATION FOR MORE THAN 1 HOUR WITHIN A SINGLE DAYLIGHT PERIOD.
   D. SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR. IT CAN BE PERFORMED DURING THE DAYTIME OR AT NIGHT IN ACCORDANCE WITH NOTES N1 TO N11 NOTES ON NIGHTTIME WORK.
   E. MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY WHERE THE WORK AT ANY SPECIFIC LOCATION COMPLETES WITHIN 15 MINUTES. IT IS USED FOR VEHICLE BASED OPERATIONS AND DOES NOT INVOLVE WORKERS ON FOOT. IT CAN BE PERFORMED DURING THE DAYTIME OR AT NIGHT IN ACCORDANCE WITH NOTES N1 TO N10 NOTES ON NIGHTTIME WORK.
2. SPECIAL OPERATIONS ARE WORK OPERATIONS THAT DO NOT FIT INTO ONE OF THE ABOVE FIVE CATEGORIES. SPECIAL OPERATIONS INCLUDE:
   A. STOP AND GO OPERATIONS - WORK THAT COMPLETES WITHIN 5 MINUTES AND ALLOWS WORKERS ON FOOT.
   B. OTHER OPERATIONS INCLUDING MOWING, MULCHING/HERBICIDE OPERATIONS, TEMPORARY ROAD/INTERSECTION CLOSURES, ETC.

## ROADWAY TYPE DEFINITIONS

1. FREEWAY:
   A. INTERSTATE: INTERREGIONAL HIGH-SPEED, HIGH-VOLUME, DIVIDED FACILITIES WITH COMPLETE CONTROL OF ACCESS.
   B. PARKWAY: DIVIDED HIGHWAYS FOR NON-COMMERCIAL TRAFFIC WITH FULL CONTROL OF ACCESS, GRADE PARKWAY SEPARATIONS, INTERCHANGES, AND OCCASIONAL AT-GRADE INTERSECTIONS. PARKWAYS ARE DESIGNATED BY LAW.
2. EXPRESSWAY: DIVIDED HIGHWAYS FOR THROUGH TRAFFIC WITH FULL OR PARTIAL CONTROL OF ACCESS AND GENERALLY WITH GRADE SEPARATIONS AT MAJOR CROSSROADS. ALL FREEWAY STANDARD SHEETS ARE APPLICABLE TO EXPRESSWAY.
3. NON-FREEWAY:
   A. MULTILANE DIVIDED HIGHWAY
   B. MULTILANE UNDIVIDED HIGHWAY
   C. TWO-LANE TWO-WAY ROADWAY

ALL NON-FREEWAYS CAN BE EITHER URBAN OR RURAL:

URBAN: (MEETS MORE THAN 1 OF THE FOLLOWING CRITERIA)
- HIGH DENSITY DEVELOPMENT
- ON-STREET PARKING
- VARIED BUILDING SETBACKS
- MULTI-STORY AND LOW-TO MEDIUM-RISE STRUCTURES FOR RESIDENTIAL
- COMMERCIAL, AND EDUCATIONAL USES, STRUCTURES THAT ACCOMMODATE MIXED USES: COMMERCIAL, RESIDENTIAL, AND PARKING
- LIGHT INDUSTRIAL, AND SOMETIMES HEAVY INDUSTRIAL, LAND USE
- PROMINENT DESTINATIONS WITH SPECIALIZED STRUCTURES, E.G., LARGE THEATERS, SPORTS FACILITIES OR CONFERENCE CENTERS
- HIGH LEVELS OF PEDESTRIAN AND BICYCLIST ACTIVITY, WITH NEARLY CONTINUOUS SIDEWALKS AND MARKED CROSSWALKS
- HIGHER DENSITY OF TRANSIT STOPS AND ROUTES
- DRIVEWAY DENSITIES GREATER THAN 25 DRIVEWAYS/MILE ON EACH SIDE OF THE ROAD
- MINOR COMMERCIAL DRIVEWAY DENSITIES OF 10 DRIVEWAYS/MILE OR GREATER
- MAJOR COMMERCIAL DRIVEWAYS
- HIGH DENSITY OF CROSS STREETS

RURAL: DOES NOT MEET MORE THAN ONE OF THE ABOVE CRITERIA.

## NOTES FOR NIGHTTIME OPERATIONS:

N1. WORK OCCURRING AFTER SUNSET AND BEFORE SUNRISE WILL BE CONSIDERED NIGHTTIME OPERATIONS.
N2. ALL SIGNS, STOP/SLOW PADDLES AND RED FLAGS USED TO WARN/ALERT/CONTROL TRAFFIC SHALL BE RETROREFLECTIVE.
N3. ALL WORKERS INVOLVED SHALL WEAR PROTECTIVE HELMETS AND NIGHTTIME APPAREL IN ACCORDANCE WITH §107-05A. HIGH VISIBILITY APPAREL AT ALL TIMES.
N4. VEHICLES OPERATING ON THE PAVEMENT OF A CLOSED ROADWAY OR TRAVEL LANE SHALL DISPLAY ROTATING AMBER BEACONS OR FLASHING LED BEACONS AT ALL TIMES.
N5. LEVEL I ILLUMINATION SHALL BE PROVIDED NEAR THE BEGINNING OF LANE CLOSURE TAPERS AND AT ROAD CLOSURES, INCLUDING THE SETUP AND REMOVAL OF THE CLOSURE TAPERS.
N6. LEVEL II ILLUMINATION SHALL BE PROVIDED FOR FLAGGING STATIONS, ASPHALT PAVING, MILLING, AND CONCRETE PLACEMENT AND/OR REMOVAL OPERATIONS, INCLUDING BRIDGE DECKS, 50 FEET AHEAD OF AND 100 FEET BEHIND A PAVING OR MILLING MACHINE.
N7. LEVEL III ILLUMINATION SHALL BE PROVIDED FOR PAVEMENT OR STRUCTURAL CRACK FILLING, JOINT REPAIR, PAVEMENT PATCHING AND REPAIRS, INSTALLATION OF SIGNAL EQUIPMENT OR OTHER ELECTRICAL/MECHANICAL EQUIPMENT, AND OTHER TASKS INVOLVING FINE DETAILS OR INTRICATE PARTS AND EQUIPMENT.
N8. ALL LIGHTING SHALL BE DESIGNED, INSTALLED, AND OPERATED TO AVOID GLARE THAT AFFECTS TRAFFIC ON THE ROADWAY OR THAT CAUSES ANNOYANCE OR DISCOMFORT FOR RESIDENCES ADJOINING THE ROADWAY.
N9. PRIOR TO THE START OF NIGHTTIME OPERATIONS, A WRITTEN NIGHTTIME OPERATIONS AND LIGHTING PLAN IS REQUIRED FOR APPROVAL FROM THE DOT ENGINEER.
N10. SEE STANDARD SPECIFICATIONS §619 FOR ADDITIONAL REQUIREMENTS AND CONSIDERATIONS. REFER TO SECTION 619-3.19B FOR BALLOON LIGHTING REQUIREMENTS.
N11. FLAGGERS SHALL USE A FLASHLIGHT WITH RED GLOW CONE/RED LED BATON FOR FLAGGING IN NON-ILLUMINATED FLAGGER STATIONS DURING NIGHTTIME OPERATIONS.

ERRATA 1 eff. 09/01/23 ISSUED WITH EB 23-016

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation
U.S. CUSTOMARY STANDARD SHEET
WORK ZONE TRAFFIC CONTROL GENERAL NOTES (SHEET 2 OF 2)
APPROVED DECEMBER 21, 2022 — Robert Limoges — ROBERT LIMOGES, P.E. DIRECTOR, OTSM
ISSUED UNDER EI 22-033 — 619-010

## NYSDOT Region 4 Utility Permit Notes

- Road pavement, shoulder and drainage are not to be disturbed or undermined unless indicated otherwise in the plans.
- Suitable non-frozen, non saturated backfill to be used and placed in 6" compacted lifts.
- Pavement to be maintained until a permanent repair can be made.
- Pavement to be replaced in kind or as specified on attached plans.
- All disturbed grass areas within the R.O.W. are to be fine graded, 4" topsoil placed and turf established.

### Note

Road plates shall **NOT** be used during the ASnow and Ice Season@ (November 1st through April 1st). During the months of October and April, call the work area jurisdictional N.Y.S.D.O.T. Transportation Maintenance Residency with plate locations. Road plates shall be pinned and ramped. A "STEEL PLATE AHEAD" sign (W8-24) shall be installed in advance of the plate in accordance with Table NY6H-3 on Standard Sheet 619-11. If the surface of the plate is 1" or greater above/below the surrounding pavement, a "BUMP" sign (W8-1) shall be installed between the plate and "STEEL PLATE AHEAD" sign in accordance with Table NY6H-3 on Standard Sheet 619-11 and a barrel with a Type A flasher shall be placed on the shoulder at the plate.

### Winter Asphalt Pavement and Shoulder Restoration

Excavation backfill shall be with No. 2 stone (not crusher run), Item 623.12, placed to six inches (6") below the existing pavement surface. The remaining six inches (6") shall have concrete placed to match existing adjacent pavement grade and shall have a good, smooth, non-polished riding surface.

In the spring, when asphalt plants open, the concrete and stone shall be removed to the existing bottom of the subbase in order to perform final restoration per previously approved N.Y.S.D.O.T. pavement restoration procedures.

### Test Pits

All test pits in the pavement shall be completed by an 18" square/round vacuum excavation.

### Excavation Support System Requirements

Any excavation 5 feet or more in depth shall utilize a shields and shoring or sheeting system which provides direct contact and support of the excavation sides. The system shall accommodate any associated surcharge loads and shall be submitted to NYSDOT's Regional Geotechnical Engineer for review and approval prior to permit issuance.

A sloping (layback) option will not be allowed.

Shields and shoring or sheeting system requirements do not pertain to test pits which are 18" or less in diameter.

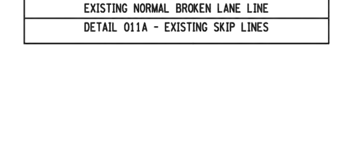
**R-4 (03/15)**

## WORK ZONE TRAFFIC CONTROL LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | ARROW PANEL |
| | ARROW PANEL, CAUTION MODE |
| | ARROW PANEL TRAILER OR SUPPORT |
| | CHANGEABLE MESSAGE SIGN (PVMS) |
| | CHANNELIZING DEVICE |
| | CONE |
| | CRASH CUSHION/TEMPORARY IMPACT ATTENUATOR |
| | DIRECTION OF TEMPORARY TRAFFIC DETOUR |
| | DIRECTION OF TRAFFIC |
| | AUTOMATED FLAGGER ASSISTANCE DEVICE WITH OPERATOR |
| | FLAGGER |
| | FLAG TREE |
| | LUMINAIRE |
| | MOWER |
| | PARKWAY GRASS SHOULDER |
| | PAVEMENT MARKINGS THAT SHALL BE REMOVED FOR A LONG TERM PROJECT |
| PVMS | PORTABLE VARIABLE MESSAGE SIGN |
| | ADVANCE WARNING SIGN WITH ORANGE FLAGS |
| | TRAILER FOR ARROW PANEL OR PORTABLE VARIABLE MESSAGE SIGN (PVMS) |

## WORK ZONE TRAFFIC CONTROL LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | SIGN, TEMPORARY |
| | SPOTTER |
| | TEMPORARY POSITIVE BARRIER |
| | TEMPORARY POSITIVE BARRIER WITH WARNING LIGHTS |
| | TEMPORARY TRAFFIC SIGNAL HEAD |
| | TYPE III BARRICADE |
| | WARNING LIGHTS |
| | WORK AREA |
| | WORK VEHICLE |
| | WORK VEHICLE (MULCHING/HERBICIDE OPERATION) |
| | WORK VEHICLE (PAVEMENT MARKING) |
| | WORK VEHICLE (SIGNAL WORK) |
| PV | PROTECTIVE VEHICLE |
| PVL | PROTECTIVE VEHICLE LIGHT |
| PVH | PROTECTIVE VEHICLE HEAVY |
| | TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR (TMIA) |



DETAIL 011A - EXISTING SKIP LINES

ERRATA 2 EFF. 09/01/23 ISSUED WITH EB 23-016
ERRATA 1 EFF. 05/01/2023 ISSUED WITH EB 22-033

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation
U.S. CUSTOMARY STANDARD SHEET
WORK ZONE TRAFFIC CONTROL GENERAL TABLES AND LEGEND (SHEET 1 OF 2)
APPROVED DECEMBER 21, 2022 — Robert Limoges — ROBERT LIMOGES, P.E. DIRECTOR, OTSM
ISSUED UNDER EI 22-033 — 619-011

### TABLE 011-01: PROTECTIVE VEHICLE REQUIREMENTS A,B

| CLOSURE TYPE | DURATION | MOBILE OPERATION AND STOP & GO | | | | SHORT DURATION OPERATION | | | | SHORT TERM OPERATION | | | | INTERMEDIATE TERM OPERATION | | | | LONG TERM OPERATION | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | ROAD TYPE & SPEED | FREEWAY | NON-FREEWAY | | | FREEWAY | NON-FREEWAY | | | FREEWAY | NON-FREEWAY | | | FREEWAY | NON-FREEWAY | | | FREEWAY | NON-FREEWAY | | |
| | EXPOSURE CONDITIONS (SEE NOTE 1) | | ≥ 45 MPH | 35 - 40 MPH | ≤ 30 MPH | | ≥ 45 MPH | 35 - 40 MPH | ≤ 30 MPH | | ≥ 45 MPH | 35 - 40 MPH | ≤ 30 MPH | | ≥ 45 MPH | 35 - 40 MPH | ≤ 30 MPH | | ≥ 45 MPH | 35 - 40 MPH | ≤ 30 MPH |
| LANE CLOSURE OR ENCROACHMENT | WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC | PVH+TMIA | PVH+TMIA | PVL+TMIA | PVL | PVH+TMIA | PVH+TMIA | PVL+TMIA | PVL | PVH+TMIA | PVH+TMIA | PVL+TMIA | PVL | PVH+TMIA | PVH+TMIA | PVL+TMIA | SEE NOTE 2 | PVH+TMIA | PVH+TMIA | PVL+TMIA | SEE NOTE 2 |
| LANE CLOSURE OR ENCROACHMENT | -NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS) | | | | | PVH+TMIA | PVH+TMIA | PVL | PVL | PVH+TMIA | PVH+TMIA | PVL | SEE NOTE 2 | PVH+TMIA | PVH+TMIA | SEE NOTE 2 | SEE NOTE 2 | PVH+TMIA | PVH+TMIA | SEE NOTE 2 | SEE NOTE 2 |
| SHOULDER CLOSURE OR ENCROACHMENT | WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC | PVH+TMIA | PVH+TMIA | PVL+TMIA | PVL | PVH+TMIA | PVH+TMIA | PVL | PVL | PVH+TMIA | PVH+TMIA | PVL | PVL | PVH+TMIA | PVH+TMIA | SEE NOTE 2 | SEE NOTE 2 | PVH+TMIA | PVH+TMIA | SEE NOTE 2 | SEE NOTE 2 |
| SHOULDER CLOSURE OR ENCROACHMENT | -NO WORKERS ON FOOT -NO WORK VEHICLE EXPOSED TO TRAFFIC -OTHER HAZARDS EXPOSED (IE EQUIPMENT, MATERIALS, EXCAVATION) | | | | | PVH+TMIA | PVH+TMIA | PVL | PVL | PVH+TMIA | PVH+TMIA | PVL | SEE NOTE 2 | PVH+TMIA | SEE NOTE 3 | SEE NOTE 2 | SEE NOTE 2 | PVH+TMIA | SEE NOTE 3 | SEE NOTE 2 | SEE NOTE 2 |

LEGEND
PVL - PROTECTIVE VEHICLE LIGHT (MINIMUM GROSS WEIGHT 9,500 LBS. OR GREATER) (SEE NOTE 5)
PVH - PROTECTIVE VEHICLE HEAVY (MINIMUM GROSS WEIGHT 22,000 LBS. OR GREATER)
TMIA - TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR

A. THESE PROTECTIVE VEHICLE REQUIREMENTS ARE NOT APPLICABLE TO PAVING AND MILLING OPERATIONS. A STANDARD BUFFER SPACE SHALL BE PROVIDED FOR THESE OPERATIONS IN ACCORDANCE WITH TABLE 011-03.

B. THESE PROTECTIVE VEHICLE REQUIREMENTS ARE NOT APPLICABLE TO FLAGGING OPERATIONS. PROTECTIVE VEHICLES WITH APPROPRIATE ROLL AHEAD DISTANCE MAY BE USED IN ADVANCE OF THE WORK AREA IF DEEMED NECESSARY BY THE DOT ENGINEER AND THEIR DESIGNEE.

NOTES
1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT.
2. EITHER A PROTECTIVE LIGHT (PVL) OR THE STANDARD BUFFER SPACE (SEE TABLE 011-03 SHALL BE PROVIDED.
3. EITHER A PROTECTIVE VEHICLE HEAVY (PVH) OR THE STANDARD BUFFER SPACE (SEE TABLE 011-03) SHALL BE PROVIDED.
4. TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS (TMIA) SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS VEHICLE WEIGHT (GVW) LESS THAN WHAT IS MINIMALLY REQUIRED BY THE MANUFACTURER OF THE TMIA.
5. THE USE OF A PROTECTIVE VEHICLE LIGHT (PVL) AS A SHADOW VEHICLE IS LIMITED TO NON-FREEWAY ROADWAYS WHERE THE POSTED SPEED LIMITS IS ≤ 40 MPH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

### TABLE 011-02: TAPER LENGTHS & NUMBER OF CONES CHART

| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | TAPER LENGTH: (FT.)/ * OF SKIP LINES/ * OF CHANNELIZING DEVICES — LATERAL SHIFT OF TRAFFIC FLOW PATH (FT.) 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | SHOULDER TAPER LENGTH: (FT.)/ * OF SKIP LINES/ * OF CHANNELIZING DEVICES — FOR SHOULDER WIDTH ≤ 4 FT. | 5 - 7 FT. | 8 FT. | 9 FT. | 10 FT. | 11 FT. | 12 FT. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | 40/1/2 | 80/2/3 | 80/2/3 | 80/2/3 | 80/2/3 | 120/3/4 | 120/3/4 | 120/3/4 | 120/3/4 | 40/1/2 | 40/1/2 | 40/1/2 | 40/1/2 | 40/1/2 | 40/1/2 | 40/1/2 |
| 30 | 80/2/3 | 80/2/3 | 80/2/3 | 120/3/4 | 120/3/4 | 160/4/5 | 160/4/5 | 160/4/5 | 200/5/6 | 40/1/2 | 40/1/2 | 40/1/2 | 40/1/2 | 80/2/3 | 80/2/3 | 80/2/3 |
| 35 | 80/2/3 | 120/3/4 | 120/3/4 | 160/4/5 | 160/4/5 | 200/5/6 | 200/5/6 | 240/6/7 | 240/6/7 | 40/1/2 | 40/1/2 | 80/2/3 | 80/2/3 | 80/2/3 | 80/2/3 | 80/2/3 |
| 40 | 120/3/4 | 160/4/5 | 160/4/5 | 200/5/6 | 240/6/7 | 240/6/7 | 280/7/8 | 320/8/9 | 320/8/9 | 40/1/2 | 80/2/3 | 80/2/3 | 80/2/3 | 120/3/4 | 120/3/4 | 120/3/4 |
| 45 | 200/5/6 | 240/6/7 | 280/7/8 | 320/8/9 | 360/9/10 | 400/10/11 | 440/11/12 | 520/13/14 | 560/14/15 | 80/2/3 | 80/2/3 | 120/3/4 | 120/3/4 | 120/3/4 | 120/3/4 | 160/4/5 |
| 50 | 200/5/6 | 240/6/7 | 320/8/9 | 360/9/10 | 400/10/11 | 440/11/12 | 520/13/14 | 560/14/15 | 600/15/16 | 80/2/3 | 120/3/4 | 160/4/5 | 160/4/5 | 160/4/5 | 160/4/5 | 160/4/5 |
| 55 | 240/6/7 | 280/7/8 | 320/8/9 | 400/10/11 | 440/11/12 | 520/13/14 | 560/14/15 | 600/15/16 | 680/17/18 | 80/2/3 | 120/3/4 | 160/4/5 | 160/4/5 | 160/4/5 | 200/5/6 | 200/5/6 |
| 60 | 240/6/7 | 320/8/9 | 360/9/10 | 440/11/12 | 480/12/13 | 560/14/15 | 600/15/16 | 680/17/18 | 720/18/19 | 80/2/3 | 120/3/4 | 160/4/5 | 200/5/6 | 200/5/6 | 240/6/7 | 240/6/7 |
| 65 | 280/7/8 | 320/8/9 | 400/10/11 | 480/12/13 | 520/13/14 | 600/15/16 | 640/16/17 | 720/18/19 | 800/19/20 | 80/2/3 | 160/4/5 | 200/5/6 | 240/6/7 | 240/6/7 | 280/7/8 | 280/7/8 |

* THIS TABLE WAS CREATED WITH REFERENCE TO MUTCD TABLE 6H-4.
** THE NUMBER OF CHANNELIZING DEVICES SHOWN IS CALCULATED BASED ON A 40FT DEVICE SPACING. THE NUMBER OF CHANNELIZING DEVICES CAN BE ADJUSTED AS NECESSARY.

### TABLE 011-03 LONGITUDINAL BUFFER SPACE

| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | DISTANCE (FT.)/ * OF SKIP LINES |
|---|---|
| 25 | 155 / 4 |
| 30 | 200 / 5 |
| 35 | 250 / 6 |
| 40 | 305 / 8 |
| 45 | 360 / 9 |
| 50 | 425 / 11 |
| 55 | 495 / 13 |
| 65 | 645 / 16 |

* THIS TABLE IS THE SAME AS MUTCD TABLE 6C-2.

### TABLE 011-04: ROLL AHEAD DISTANCE FOR PROTECTIVE VEHICLES

ROLL AHEAD DISTANCE (FT.)/* OF SKIP LINES FOR VEHICLES

| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | PROTECTIVE VEHICLES WEIGHING 9,500 TO 21,999 LBS. GVW — STATIONARY OPERATION | MOVING OPERATION (15 MPH MAX.) | PROTECTIVE VEHICLES WEIGHING 22,000 LBS. OR GREATER GVW — STATIONARY OPERATION | MOVING OPERATION (15 MPH MAX.) |
|---|---|---|---|---|
| ≥ 60 | 200/5 | 240/6 | 160/4 | 200/5 |
| 45 - 55 | 160/4 | 200/5 | 120/3 | 160/4 |
| ≤ 40 | 120/3 | 120/3 | 80/2 | 120/3 |

### TABLE 011-05 FLARE RATES FOR POSITIVE BARRIER

| TYPE OF POSITIVE BARRIER | POSTED SPEED LIMIT 30 MPH | 40 MPH | 50 MPH | 55 MPH | 65 MPH |
|---|---|---|---|---|---|
| TEMPORARY POSITIVE BARRIER | 8:1 | 11:1 | 14:1 | 16:1 | 20:1 |
| BOX BEAM OR HEAVY POST CORRUGATED BEAM | 7:1 | 9:1 | 11:1 | 12:1 | 15:1 |

### TABLE 011-06 ADVANCE WARNING SIGN SPACING

| ROAD TYPE | DISTANCE BETWEEN SIGNS A (FT.) | B (FT.) | C (FT.) | SIGN LEGEND XX | YY |
|---|---|---|---|---|---|
| URBAN (≤ 30 MPH*) | 100 | 100 | 100 | AHEAD | AHEAD |
| URBAN (35-40 MPH*) | 200 | 200 | 200 | AHEAD | AHEAD |
| URBAN (≥ 45 MPH*) | 350 | 350 | 350 | 1000 FT. | AHEAD |
| RURAL | 500 | 500 | 500 | 1500 FT. | 1000 FT. |
| FREEWAY | 1000 | 1500 | 2640 | 1 MILE | ½ MILE |

* PRECONSTRUCTION POSTED SPEED LIMIT.
** THIS TABLE IS THE SAME AS MUTCD TABLE NY6H-3.

### TABLE 011-07 TAPER LENGTH FOR TEMPORARY TRAFFIC CONTROL ZONES

| TYPE OF TAPER | TAPER LENGTH (L) |
|---|---|
| MERGING TAPER | L |
| SHIFTING TAPER | L/2 |
| SHOULDER TAPER | L/3 |
| ONE-LANE, TWO-WAY TRAFFIC TAPER | 50 FT. MIN -100 FT. MAX |
| DOWNSTREAM TAPER | 50 FT. MIN -100 FT. MAX |

* THIS TABLE IS THE SAME AS MUTCD TABLE 6C-3.

ERRATA 2 EFF. 09/01/23 ISSUED WITH EB 23-016
ERRATA 1 EFF. 05/01/2023 ISSUED WITH EB 22-033

NEW YORK STATE OF OPPORTUNITY. | Department of Transportation
U.S. CUSTOMARY STANDARD SHEET
WORK ZONE TRAFFIC CONTROL GENERAL TABLES AND LEGEND (SHEET 2 OF 2)
APPROVED DECEMBER 21, 2022 — Robert Limoges — ROBERT LIMOGES, P.E. DIRECTOR, OTSM
ISSUED UNDER EI 22-033 — 619-011

## SPECIAL NOTE
## TEMPORARY LANE/SHOULDER CLOSURE RESTRICTIONS FOR MAJOR HOLIDAYS

There shall be no temporary lane/shoulder closures on roadway facilities owned and/or maintained by NYSDOT on the major holidays listed below.

Construction activities that will result in temporary lane/shoulder closures shall be suspended to minimize travel delays associated with road work for major holidays as follows:

| Holiday | Falls on | Temporary lane closures are NOT allowed from |
|---|---|---|
| New Year's Day Independence Day Christmas Day | Sunday or Monday | 6:00 AM Friday before to 6:00 AM Tuesday after |
| | Tuesday | 6:00 AM Saturday before to 6:00 AM Wednesday after (starting at 6:00 AM Friday before to 6:00 AM Wednesday after for Christmas Day) |
| | Wednesday | 6:00 AM Tuesday before to 6:00 AM Thursday after (starting at 6:00 AM Saturday before to 6:00 AM Thursday after for Christmas Day) |
| | Thursday | 6:00 AM Thursday to 6:00 AM Monday after (starting at 6:00 AM Wednesday before to 6:00 AM Monday after for Christmas Day) |
| | Friday or Saturday | 6:00 AM Thursday before to 6:00 AM Monday after |

| Holiday | Falls on | Temporary lane closures are NOT allowed from |
|---|---|---|
| Memorial Day Labor Day | Monday | 6:00 AM Friday before to 6:00 AM Tuesday after |
| Thanksgiving Day | Thursday | 6:00 AM Wednesday before to 6:00 AM Monday after |

Exceptions can only be made under the following conditions:
- Emergency work.
- Work within long-term stationary lane/shoulder closures.
- Safety work that does not adversely impact traffic mobility and has been authorized by the Regional Traffic Engineer.

Note: The Department reserves the right to cancel any work operations, including lane closures and/or total road closures, that would create traffic delays by unforeseen events. The Contractor would be notified at least seven (7) calendar days prior to the proposed work.


MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

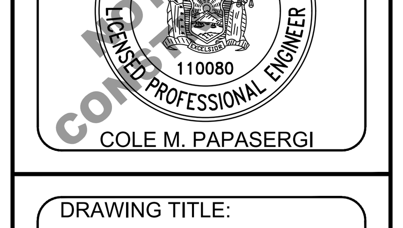

# PRELIMINARY/FINAL SITE PLANS for THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY STATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |


IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER IN ANY WAY, AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.
COPYRIGHT © 2026 MARATHON ENG.

COLE M. PAPASERGI

DRAWING TITLE:
NYSDOT DRIVEWAY DETAILS

19 of 21 SHEET No: — C8.1
1780-26 JOB No: — DRAWING No:

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C8.X DRIVEWAY.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK
1407-1451 PITTSFORD VICTOR ROAD
TOWN OF PERINTON MONROE COUNTY COUNTSTATE OF STATE OF NEW YORK

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS OR HER SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK — COLE M. PAPASERGI — 110080 — LICENSED PROFESSIONAL ENGINEER

DRAWING TITLE:
NYSDOT DRIVEWAY DETAILS

20 of 21 SHEET No:
1780-26 JOB No:
C8.2 DRAWING No:

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C8.X DRIVEWAY.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| EXIT | E5-1 | C | ---------- | 72"X60" | 72"X60" |
| EXIT ONLY | G20-1 | A | 36"X18" | 48"X24" | 48"X24" |
| EXIT ONLY | G20-2 | A | 36"X18" | 48"X24" | 48"X24" |
| EXIT ONLY | G20-4 | A | 36"X18" | ---------- | ---------- |
| EXIT | G20-5aP | A | 24"X18" | 30"X24" | 30"X24" |
| 22 22 | W1-1 | G | 1 OR 2 DIGITS 24"X24" | 36"X36" | 36"X36" |
| 495 | W1-1A | G | 3 DIGITS 30"X24" | 45"X36" | 45"X36" |
| X XX | W1-1B | B | 1 OR 2 DIGITS 24"X24" | 36"X36" | 36"X36" |
| XXX | W1-1C | B | 3 DIGITS 30"X24" | 45"X36" | 45"X36" |
| NORTH | W3-1 | SEE NOTE 3 | 24"X12" | 36"X18" | 36"X18" |
| EXIT | W3-2 | | | | |
| SOUTH | W3-3 | | | | |
| WEST | W3-4 | | | | |
| EXIT | W4-8 | A | 24"X12" | 36"X18" | 36"X18" |
| EXIT ONLY | W4-8a | A | 24"X18" | 24"X18" | 24"X18" |
| EXPRESS LANE | W4-9 W5-5 W4-9R | A | 30"X24" | 48"X36" | 48"X36" |
| LOC. 1 LOC. 2 LOC. 3 | W4-9a | A | 30"X24" | 30"X24" | ---------- |
| EXIT ONLY EXPRESS LANE | W4-9b | A | 30"X24" | 30"X24" | ---------- |
| LOC. 1 EXPRESS LANE | W4-9c | A | 30"X24" | 30"X24" | ---------- |
| EXPRESS LANE ENDS | W4-10L | A | 48"X18" | 48"X18" | 48"X18" |
| EXPRESS LANE | W4-10R | | | | |
| | W5-1 | SEE NOTE 3 | 21"X15" | 30"X21" | 30"X21" |
| | W5-2 | SEE NOTE 3 | 21"X15" | 30"X21" | 30"X21" |
| | W6-1 | SEE NOTE 3 | 21"X15" | 30"X21" | 30"X21" |
| | W6-2 | | | | |
| | W6-3 | | | | |
| | W6-4 | | | | |
| XX XX | W7W1-1 | B | 24"X24" | 36"X36" | 36"X36" |
| XXX | W7W2-2 | B | 30"X24" | 45"X36" | 45"X36" |
| XXXX | W7W2-3 | B | 30"X24" | 45"X36" | 45"X36" |

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| WHEN WORKERS ARE PRESENT | W7R9-11 | B | 24"X42" | 48"X84" | 48"X84" |
| WHEN WORKERS ARE PRESENT | W7R9-12 | B | 24"X36" | 36"X54" | 48"X72" |
| ROAD WORK | W7W4-17 | A | 36"X36" | 48"X48" | 48"X48" |
| ROAD WORK | W7W8-30 | A | 48"X24" | 48"X24" | 48"X24" |
| START OF WORK | W7W8-31 | A | 48"X24" | 48"X24" | 48"X24" |
| END OF WORK | W7W8-32 | A | 48"X24" | 48"X24" | 48"X24" |
| WORK ZONE | W7W8-33 | A | 48"X24" | 48"X24" | 48"X24" |
| STOP | R1-1 | D | 36"X36" | 36"X36" | 48"X48" |
| SPEED XX | R2-1 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| END SPEED LIMIT | R2-11 | B | 24"X30" | 36"X48" | 36"X48" |
| FOR FIRST FIRE LANE | R2-12 | B | 24"X30" | 36"X54" | 36"X54" |
| NO PASSING ZONE | R4-1 | B | 24"X30" | 36"X48" | 36"X48" |
| | R4-7 | B | 24"X30" | 36"X48" | 36"X48" |
| | R4-7a | B | 18"X30" | ---------- | ---------- |
| | R4-8 | B | 24"X30" | 36"X48" | 36"X48" |
| | R4-8c MARROW | B | 18"X30" | ---------- | ---------- |
| KEEP IN LANE | R4-9 | B | 24"X30" | 36"X48" | 36"X48" |
| | R5-1 | E | 36"X36" | 36"X36" | 48"X48" |
| | R8-3 | E | 24"X24" | 36"X36" | 48"X48" |
| | R9-8 | B | 36"X18" | 36"X18" | ---------- |
| | R9-9 | B | 24"X12" | 24"X12" | ---------- |
| SPEED XXX | R9-10 | B | 24"X12" | 24"X12" | ---------- |
| SPEED XXX | R9-10L R9-10R | B | 24"X12" | 24"X12" | ---------- |
| SPEED XXX | R9-11L R9-11R | B | 24"X18" | 24"X18" | ---------- |
| SPEED XXX | R9-11aL R9-11aR | B | 24"X12" | 24"X12" | ---------- |
| STAY IN LANE | R10-6 | B | 24"X36" | 24"X36" | ---------- |

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| RIGHT LANE CLOSED | R11-2 | B | 48"X30" | 48"X30" | 48"X30" |
| BRIDGE CLOSED | R11-2 W13J | | | | |
| BRIDGE OUT | R11-3a | B | 60"X30" | 60"X30" | ---------- |
| ROAD CLOSED TO ALL TRAFFIC | | | | | |
| | W1-6L W1-6R | A | 36"X36" | 48"X48" | 48"X48" |
| | W1-8L W1-8R | A | 36"X36" | 48"X48" | 48"X48" |
| | W1-8L W1-8R | A | 36"X36" | 48"X48" | 48"X48" |
| | W1-6L | A | 48"X24" | 60"X30" | 60"X30" |
| | W1-6R | A | | | |
| | W1-8R | A NO BORDER | 18"X24" | 30"X36" | 30"X36" |
| | W1-8R | | | | |
| | W3-1 | A[4] | 36"X36" | 48"X48" | 48"X48" |
| | W3-2 | A[4] | 36"X36" | 48"X48" | 48"X48" |
| | W3-3 | A[4] | 36"X36" | 48"X48" | 48"X48" |
| | W3-4 | A | 36"X36" | 48"X48" | 48"X48" |
| | W3-5 | A[4] | 36"X36" | 48"X48" | 48"X48" |
| | W4-1L W4-1R | A | 36"X36" | 48"X48" | 48"X48" |
| | W4-1aL W4-1aR | A | 36"X36" | 48"X48" | 48"X48" |

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| ROAD WORK | W7W23-1 | A | 36"X36" | 48"X48" | 48"X48" |
| ROAD WORK | G20-5aP | GF.12 | 24"X18" | 36"X24" | 36"X24" |
| EXIT OPEN | E5-2 | GF.28 | 48"X36" | 48"X36" | 48"X36" |
| EXIT CLOSED | E5-2a | GF.28 | 48"X36" | 48"X36" | 48"X36" |

### COLOR CODE LEGEND

| CODE | DESCRIPTION |
|---|---|
| A | BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND |
| B | BLACK LEGEND AND BORDER ON A WHITE BACKGROUND |
| C | WHITE LEGEND AND BORDER ON A GREEN BACKGROUND |
| D | WHITE LEGEND AND BORDER ON A RED BACKGROUND |
| E | RED LEGEND AND BORDER ON A WHITE BACKGROUND |
| F | BLACK LEGEND AND BORDER ON A FLUORESCENT YELLOW GREEN BACKGROUND |
| G | WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND |

NOTES:
1. DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
2. FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
3. COLORS FOR DIRECTION PLAQUES, ADVANCE TURN ARROWS, AND DIRECTIONAL ARROWS SHALL MATCH THE ROUTE OR INTERSTATE SIGN THAT THEY SUPPLEMENT AS PER THE M.U.T.C.D.
4. MULTICOLORED SYMBOL IMPOSED ON SIGN WITH BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
5. FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL SIGN TABLE (SHEET 1 OF 3)

APPROVED DECEMBER 2, 2021 — Robert Lineagen — ROBERT LINEGER, P.E., DIRECTOR, OTSM

ISSUED UNDER EI 21-028 — 619-012

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| | W5-1 | A | 36"X36" | 48"X48" | 48"X48" |
| | W5-4 | A | 36"X36" | 48"X48" | 48"X48" |
| | W6-3 | A | 36"X36" | 48"X48" | 48"X48" |
| | W7-3aP | A | 24"X18" | 36"X24" | 36"X24" |
| | W8-1 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-3 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-7 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-8 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-9 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-12 | A | 36"X36" | ---------- | ---------- |
| | W8-14 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-15 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-17 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-17p | A | 24"X18" | 30"X24" | 30"X24" |
| | W8-23 | A | 36"X36" | 48"X48" | 48"X48" |
| | W8-24 | A | 36"X36" | 48"X48" | 48"X48" |
| | W9-3 | A | 36"X36" | 48"X48" | 48"X48" |
| | W11-1L W11-1R | F | 36"X36" | 36"X36" | ---------- |
| | W11-2L W11-2R | F | 36"X36" | 36"X36" | ---------- |
| | W11-10L W11-10R | F | 36"X36" | 36"X36" | ---------- |
| W LANE | W11W5-32P | F | 24"X18" | 24"X18" | ---------- |

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| XX MPH | W13-1P | A | 24"X24" | 30"X30" | 30"X30" |
| ON RAMP | W13-4 | A | 36"X36" | 36"X36" | 36"X36" |
| EXPRESS LANE | W13-4P | A | 48"X48"X36" | ---------- | ---------- |
| TRUCK | W16-2P | A | 24"X18" | 30"X24" | ---------- |
| TRUCK | W7-3aP | A | 24"X18" | 30"X24" | ---------- |
| TRUCK | W16-4P | A | SEE NOTE 3 & SH 2 | 30"X24" | ---------- |
| | W16-5PL W16-5PR | A | 24"X18" | ---------- | ---------- |
| | W16-7PL W16-7PR | A | SEE NOTE 3 & SH 2 | 24"X12" | 30"X18" | ---------- |
| HAZMAT | W16-9P | | SEE NOTE 3 & SH 2 | 24"X12" | 30"X18" | ---------- |
| | W20-1 | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-2 | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-3 | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-4 | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-5 | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-5a | A | 36"X36" | 48"X48" | 48"X48" |
| | W20-7 | A | 36"X36" | 48"X48" | 48"X48" |

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| | W21-1 | A | 36"X36" | 48"X48" | 48"X48" |
| SLOW MULES | W21-4 | A | 36"X36" | 48"X24" | 48"X24" |
| | W21-5 | A | 36"X36" | 48"X48" | 48"X48" |
| | W21-5aL W21-5aR | A | 36"X36" | 48"X48" | 48"X48" |
| | W21-5bL W21-5bR | A | 36"X36" | 48"X48" | 48"X48" |
| | W21-6 | A | 36"X36" | 48"X48" | 48"X48" |
| | W22-1 | A | 36"X36" | 48"X48" | 48"X48" |
| TURN LANE MUST TURN | W22-2 | A | 42"X36" | 42"X36" | 42"X36" |
| END BLASTING ZONE | W22-3 | A | 42"X36" | 42"X36" | 42"X36" |
| SLOW MULES | W23-1 | A | 48"X24" | 48"X24" | 48"X24" |
| | W23-2 | A | 36"X36" | 48"X48" | 48"X48" |

### COLOR CODE LEGEND

| CODE | DESCRIPTION |
|---|---|
| A | BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND |
| B | BLACK LEGEND AND BORDER ON A WHITE BACKGROUND |
| C | WHITE LEGEND AND BORDER ON A GREEN BACKGROUND |
| D | WHITE LEGEND AND BORDER ON A RED BACKGROUND |
| E | RED LEGEND AND BORDER ON A WHITE BACKGROUND |
| F | BLACK LEGEND AND BORDER ON A FLUORESCENT YELLOW GREEN BACKGROUND |
| G | WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND |

NOTES:
1. DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
2. FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
3. WHEN USED IN CONJUNCTION WITH A BICYCLE SIGN W11-1/-2 OR PEDESTRIAN CROSSING W11-2/ COLOR CODE SHALL MATCH.

ERRATA 2 EFF. 09/01/25 ISSUED WITH EB 25-016

ERRATA 1 EFF. 09/01/24 ISSUED WITH EB 24-007

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL SIGN TABLE (SHEET 2 OF 3)

APPROVED DECEMBER 2, 2021 — Robert Lineagen — ROBERT LINEGER, P.E., DIRECTOR, OTSM

ISSUED UNDER EI 21-028 — 619-012

### WORK ZONE TRAFFIC CONTROL SIGN TABLE

| SIGN | SIGN DESIGNATION | COLOR CODE | NON-FREEWAY | EXPRESSWAY | FREEWAY |
|---|---|---|---|---|---|
| | R2-1 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| | W7R2-2 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| | W7R2-3 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| | W7R2-4 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| | W7R2-5 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |
| | W7R2-6 | B | 24"X30" OR 30"X36" (SEE NOTE 5) | 36"X48" | 36"X48" |

### COLOR CODE LEGEND

| CODE | DESCRIPTION |
|---|---|
| A | BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND |
| B | BLACK LEGEND AND BORDER ON A WHITE BACKGROUND |
| C | WHITE LEGEND AND BORDER ON A GREEN BACKGROUND |
| D | WHITE LEGEND AND BORDER ON A RED BACKGROUND |
| E | RED LEGEND AND BORDER ON A WHITE BACKGROUND |
| F | BLACK LEGEND AND BORDER ON A FLUORESCENT YELLOW GREEN BACKGROUND |
| G | WHITE LEGEND AND BORDER ON A BLUE AND RED BACKGROUND |

NOTES:
1. DIMENSIONS ARE SHOWN AS WIDTH X HEIGHT.
2. FOR SIGNAGE NOT SHOWN ON THESE TABLES REFER TO THE M.U.T.C.D.
3. COLORS FOR DIRECTION PLAQUES, ADVANCE TURN ARROWS, AND DIRECTIONAL ARROWS SHALL MATCH THE ROUTE OR INTERSTATE SIGN THAT THEY SUPPLEMENT AS PER THE M.U.T.C.D.
4. MULTICOLORED SYMBOL IMPOSED ON SIGN WITH BLACK LEGEND AND BORDER ON AN ORANGE BACKGROUND.
5. FOR R2-1 SIGN LARGER DIMENSIONS SHALL BE USED WHEN SIGN FACES MULTIPLE LANES ON A CONVENTIONAL ROAD.

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL SIGN TABLE (SHEET 3 OF 3)

APPROVED DECEMBER 2, 2021 — Robert Lineagen — ROBERT LINEGER, P.E., DIRECTOR, OTSM

ISSUED UNDER EI 21-028 — 619-012

ERRATA 1 EFF. 09/01/24 ISSUED WITH EB 24-007

### TABLE 041-01a PROTECTIVE VEHICLE REQUIREMENTS

| CLOSURE TYPE | ROAD TYPE & SPEED | NON-FREEWAY ≤ 45 MPH | NON-FREEWAY 35 - 40 MPH | NON-FREEWAY ≤ 30 MPH |
|---|---|---|---|---|
| | EXPOSURE CONDITIONS (SEE NOTE 1) | | | |
| LANE CLOSURE OR ENCROACHMENT | WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC | PVH+TMA | PVL+TMA | PVL |
| | •NO WORKERS ON FOOT •NO WORK VEHICLE EXPOSED TO TRAFFIC •OTHER HAZARDS EXPOSED OR EQUIPMENT, MATERIALS | | | |
| SHOULDER CLOSURE OR ENCROACHMENT | WORKERS ON FOOT OR WORK VEHICLE EXPOSED TO TRAFFIC | PVH+TMA | PVL+TMA | PVL |
| | •NO WORKERS ON FOOT •NO WORK VEHICLE EXPOSED TO TRAFFIC •OTHER HAZARDS EXPOSED OR EQUIPMENTS, MATERIALS, EXCAVATIONS | | | |

LEGEND
PVH - PROTECTIVE VEHICLE HEAVY (MINIMUM GROSS WEIGHT 26,000 LBS, OR GREATER)
PVL - PROTECTIVE VEHICLE LIGHT (MINIMUM GROSS WEIGHT 6,500 LBS, OR GREATER)
TMA - TRUCK/TRAILER MOUNTED IMPACT ATTENUATOR

NOTES:
1. THE EXPOSURE CONDITIONS ASSUME THERE IS NO POSITIVE PROTECTION PRESENT.
2. TRUCK/TRAILER MOUNTED IMPACT ATTENUATORS (TMA'S) SHALL NOT BE MOUNTED/INSTALLED ON VEHICLES WITH A GROSS WEIGHT LESS THAN WHAT IS NORMALLY REQUIRED BY THE MANUFACTURER OF THE TMA'S.
3. THE USE OF A PROTECTIVE VEHICLE LIGHT (PVL) AS A SHADOW VEHICLE IS LIMITED TO NON-FREEWAY FACILITIES WHERE THE POSTED SPEED LIMITS IS ≤ 40 MPH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

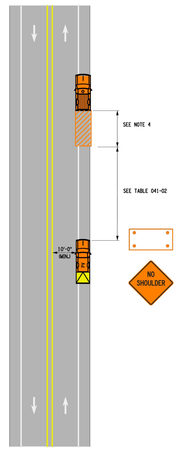
### TABLE 041-02a ROLL AHEAD DISTANCE FOR PROTECTIVE VEHICLES

| PRECONSTRUCTION POSTED SPEED LIMIT (MPH) | ROLL AHEAD DISTANCE ("La" OF SKIP LINES FOR VEHICLES MOVING OPERATION ≤15 MPH WALK) PROTECTIVE VEHICLES WEIGHING 9,000 TO 21,999 LBS, GVW | PROTECTIVE VEHICLES WEIGHING 22,000 LBS, OR GREATER GVW |
|---|---|---|
| 45 - 55 | 200/5 | 160/4 |
| ≤ 40 | 120/3 | 120/3 |

### TABLE 041-03a REQUIRED SIGN SIZES*

| SIGN | NON-FREEWAY | FREEWAY |
|---|---|---|
| W9-23 | 36x36 | 48x48 |

*FREEWAY SIZES MAY BE USED ON NON-FREEWAY, IF SPACE CONSTRAINTS DO NOT EXIST.




NOTES:
1. THIS TYPICAL APPLIES TO CONTINUOUSLY MOVING OR OPERATIONS STOPPING FOR NO MORE THAN 5 MINUTES.
2. SHOULD THE WORK DURATION EXCEED 5 MINUTES, THE WZTC SETUP SHALL BE RECONFIGURED TO MEET THE REQUIREMENTS OF STANDARD SHEET 619-02c.
3. THIS STANDARD SHEET MAY BE USED FOR OPERATIONS SUCH AS SETTING UP STATIONARY TRAFFIC CONTROL, E.G., PLACING CONES, DRUMS AND SIGNS) AND DEBRIS REMOVAL.
4. WORK AREA SHALL NOT EXCEED 40 FEET IN LENGTH.
5. THE PROTECTIVE VEHICLE SHALL BE PLACED TO OPTIMIZE AND ENHANCE VISIBILITY FROM THE REAR OF THE OPERATION, AND SHALL NOT EXCEED THE APPROPRIATE ROLL AHEAD DISTANCE VALUES.
6. THE PROTECTIVE VEHICLE SHALL STAY AS FAR RIGHT AS POSSIBLE AND SHALL ADJUST ITS SPACING TO ACCOMMODATE CHANGING SIGHT DISTANCE AND OTHER FIELD CONDITIONS.
7. UNLESS THIS SETUP IS BEING USED FOR AN EMERGENCY SITUATION, WORK SHOULD BE SCHEDULED DURING NON-PEAK HOURS.

ARROW PANEL (CAUTION MODE) — NO SHOULDER — W9-23 — PROTECTIVE VEHICLE (SEE NOTE 3 OF PV) SEE TABLE 041-02 — WORK AREA — WORK VEHICLE

NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

WORK ZONE TRAFFIC CONTROL NON-FREEWAY SHOULDER CLOSURE/LANE ENCROACHMENT STOP AND GO OPERATION

APPROVED DECEMBER 2, 2021 — Robert Lineagen — ROBERT LINEGER, P.E., DIRECTOR, OTSM

ISSUED UNDER EI 21-028 — 619-041

ERRATA 1 EFF. 09/01/23 ISSUED WITH EB 23-004

### TABLE 6 RADIUS METHOD - CORNER RADIUS

| DRIVEWAY CLASSIFICATION | "R" |
|---|---|
| RESIDENTIAL "R" ≤ 13' | 10' |
| RESIDENTIAL "R" >13' | 15' |
| MINOR COMMERCIAL (ALL WIDTHS) | 35' |

### TABLE 7 RADIUS METHOD - DISTANCE FROM INTERSECTION POINT TO ARC TANGENT POINT

| CORNER ANGLE | "X" FT. RESIDENTIAL DRIVEWAY ≤ 13' WIDE (R=10') | "X" FT. RESIDENTIAL DRIVEWAY > 13' WIDE (R=15') | "X" FT. MINOR COMMERCIAL DRIVEWAY (R=35') |
|---|---|---|---|
| 60° | 27.7 | 22.5 | 57.2 |
| 65° | 25.2 | 20.4 | 51.8 |
| 70° | 22.8 | 18.6 | 47.1 |
| 75° | 20.8 | 16.9 | 43.0 |
| 80° | 19.1 | 15.5 | 39.3 |
| 85° | 17.5 | 14.2 | 36.0 |
| 90° | 16.0 | 13.0 | 33.0 |
| 95° | 14.7 | 11.9 | 30.2 |
| 100° | 13.4 | 10.9 | 27.7 |
| 105° | 12.3 | 10.0 | 25.3 |
| 110° | 11.2 | 9.1 | 23.1 |
| 115° | 10.2 | 8.3 | 21.0 |
| 120° | 9.2 | 7.5 | 19.0 |

SEE GENERAL NOTE 15.
"X" REFERS TO EITHER "$X_{IN}$" OR "$X_{OUT}$" - THE CORNER ANGLE FOR "$X_{IN}$" + "$X_{OUT}$" IS EQUAL TO 180°.

### TABLE 8 TAPER METHOD VALUES

| DRIVEWAY CLASSIFICATION | TAPER (1:"T") | LAYOUT DISTANCE |
|---|---|---|
| RESIDENTIAL | 1:2 | 28' |
| MINOR COMMERCIAL | 1:7½ | 41' |

LAYOUT DISTANCE IS MEASURED FROM THE INSIDE EDGE OF OUTERMOST TRAVEL LANE, TO THE LAYOUT LINE.

DRIVEWAY OPENING LAYOUT:

THERE ARE TWO RECOMMENDED DRIVEWAY OPENING WIDENING METHODS: (1.) THE RADIUS METHOD, WHICH UTILIZES A CIRCULAR ARC TO WIDEN THE DRIVEWAY, AND (2.) THE TAPER METHOD, WHICH UTILIZES A STRAIGHT TAPER WIDENING OUT AT AN ESTABLISHED FLARE RATE.

THE RADIUS METHOD IS THE TYPICAL METHOD, ALTHOUGH THE TAPER METHOD IS A REASONABLE ALTERNATIVE FOR URBAN AREAS AND OTHER AREAS WHERE IT MIGHT BETTER MATCH THE HIGHWAY CORRIDOR AESTHETICS AND FUNCTIONALITY. SEE TABLE 4 - "DRIVEWAY ENTRANCE TYPE SELECTION" ON SHEET 2 FOR ADDITIONAL VARIABLES CONCERNING THE SELECTION OF A DRIVEWAY OPENING WIDENING METHOD.

RADIUS METHOD OF LAYOUT:

STEP 1. LOCATE AN OFFSET LINE 11' PARALLEL FROM THE INSIDE EDGE OF THE OUTERMOST TRAVEL LANE.

STEP 2. SCRIBE A LINE PARALLEL TO THE OFFSET LINE, OFFSET "R" FEET (SEE TABLE 6).

STEP 3. SCRIBE A LINE PARALLEL TO THE EDGE OF DRIVEWAY (NEAR SIDE), OFFSET "R" FEET.

STEP 4. FIND THE CENTER POINT OF THE CORNER RADIUS ARC, WHICH IS LOCATED AT THE INTERSECTION OF THE LINES FROM STEPS 2 AND 3.

STEP 5. FROM THE CENTER POINT, SCRIBE AN ARC WITH RADIUS "R", WHICH IS TANGENT TO BOTH THE OFFSET LINE AND THE EDGE OF DRIVEWAY. THE ARC SHOULD INTERSECT THE LINES AT THE DISTANCES "X" LISTED IN TABLE 7, DISTANCES IN TABLE 7 ARE MEASURED FROM THE INTERSECTION POINT OF THE PROJECTED EDGE OF TRAVEL LANES AND THE PROJECTED EDGE OF DRIVEWAY TO EITHER OF THE ARC TANGENT POINTS (SAME DISTANCE ALONG THE OFFSET LINE OR ALONG THE PROJECTED EDGE OF DRIVEWAY).

STEP 6. FIND THE DRIVEWAY OPENING LIMIT POINT WHICH IS WHERE THE ARC INTERSECTS THE HIGHWAY EDGE OF PAVEMENT.

STEP 7. REPEAT STEPS 1 - 6 FOR THE OTHER SIDE OF THE DRIVEWAY OPENING.

FIELD LAYOUT NOTES:

FOR THE RADIUS METHOD OF LAYOUT, IF OBSTRUCTIONS HINDER THE ABILITY TO LOCATE THE ARC TANGENT POINTS ALONG THE OFFSET LINE, LOCATE THEM ALONG THE SIDE OF DRIVE "X" DISTANCE FROM TABLE 7. THOUGH THIS SHEET IS A VARIOUS DRIVEWAY OFFSETS T="X" IS MEASURED FROM THE PROJECTED EDGE OF DRIVEWAY TO THE ADJ.

TAPER METHOD OF LAYOUT:

TAPER METHOD OF LAYOUT IS NOT RECOMMENDED FOR DRIVEWAYS WITH CORNER ANGLES LESS THAN 80° OR GREATER THAN 100°, NOR IS IT RECOMMENDED FOR DRIVEWAYS WITH A SHOULDER WIDTH GREATER THAN 10'. THE TAPER METHOD IS NOT TYPICALLY USED, IT CAN BE FIELD VERIFIED THAT THE DRIVEWAY ENTRANCE WIDTH WILL ACCOMMODATE THE VEHICLES THAT USE THE DRIVEWAY ON A REGULAR BASIS.

STEP 1. SCRIBE A LINE ("LAYOUT LINE") OFFSET THE APPROPRIATE "LAYOUT DISTANCE" (SEE TABLE 8) FROM THE INSIDE EDGE OF THE OUTERMOST TRAVEL LANE.

STEP 2. LOCATE THE TAPER LAYOUT POINT, WHICH IS AT THE INTERSECTION OF THE EDGE OF DRIVEWAY AND THE LAYOUT LINE.

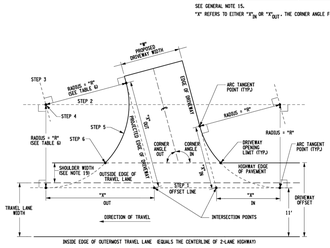
STEP 3. SCRIBE A 1:"T" (SEE TABLE 8) TAPER FROM THE LAYOUT POINT TO THE EDGE OF PAVEMENT WITH "T" BEING PERPENDICULAR TO THE EDGE OF TRAVEL LANES.

STEP 4. FIND THE DRIVEWAY OPENING LIMIT POINT WHICH IS WHERE THE TAPER INTERSECTS THE EDGE OF PAVEMENT.

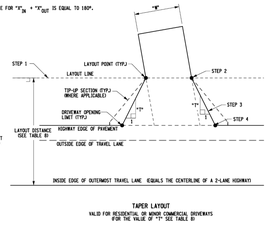
STEP 5. REPEAT STEPS 1 - 4 FOR THE OTHER SIDE OF THE DRIVEWAY OPENING.

ALTERNATE TAPER METHOD OF LAYOUT:

FOLLOW THE STEPS AS PER THE ABOVE TAPER LAYOUT METHOD, EXCEPT FOR STEPS 3 AND 4. LOCATE THE DRIVEWAY OPENING LIMIT BY USING THE APPROPRIATE "T" VALUE FROM EITHER TABLE 13 OR 15 ON SHEET 4, "T" IS THE DISTANCE BETWEEN THE OFFSET LINE AND THE INTERSECTION POINT OF THE PROJECTED EDGE OF DRIVEWAY AND THE EDGE OF PAVEMENT.




RADIUS LAYOUT
VALID FOR RESIDENTIAL OR MINOR COMMERCIAL DRIVEWAYS (FOR THE VALUES OF "R" AND "X" SEE TABLES 6 AND 7, RESPECTIVELY)




TAPER LAYOUT
VALID FOR RESIDENTIAL OR MINOR COMMERCIAL DRIVEWAYS (FOR THE VALUE OF "T" SEE TABLE 8)

NOTE:
ALL GENERAL NOTES AND ABBREVIATIONS REFERENCED ON THIS SHEET CAN BE FOUND ON STANDARD SHEET 608-03, SHEET 1 OF 5.

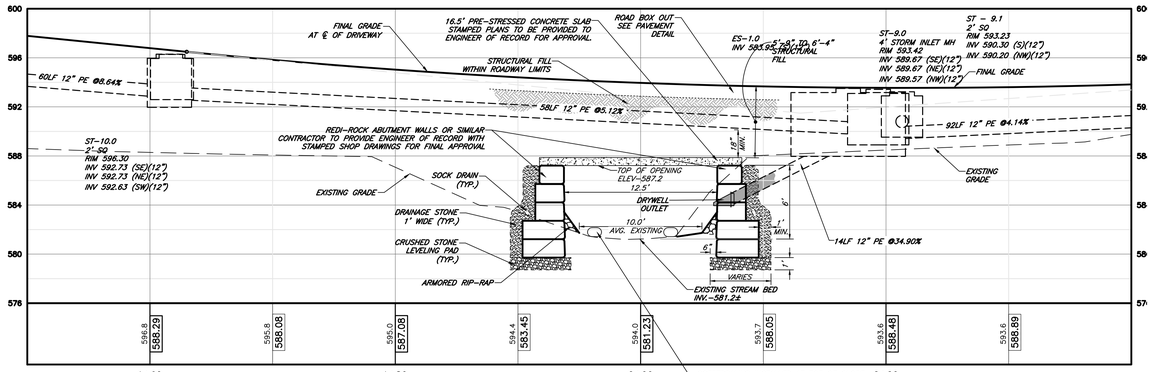
NEW YORK STATE OF OPPORTUNITY. Department of Transportation

U.S. CUSTOMARY STANDARD SHEET

RESIDENTIAL AND MINOR COMMERCIAL DRIVEWAYS (SHEET 3 OF 9)

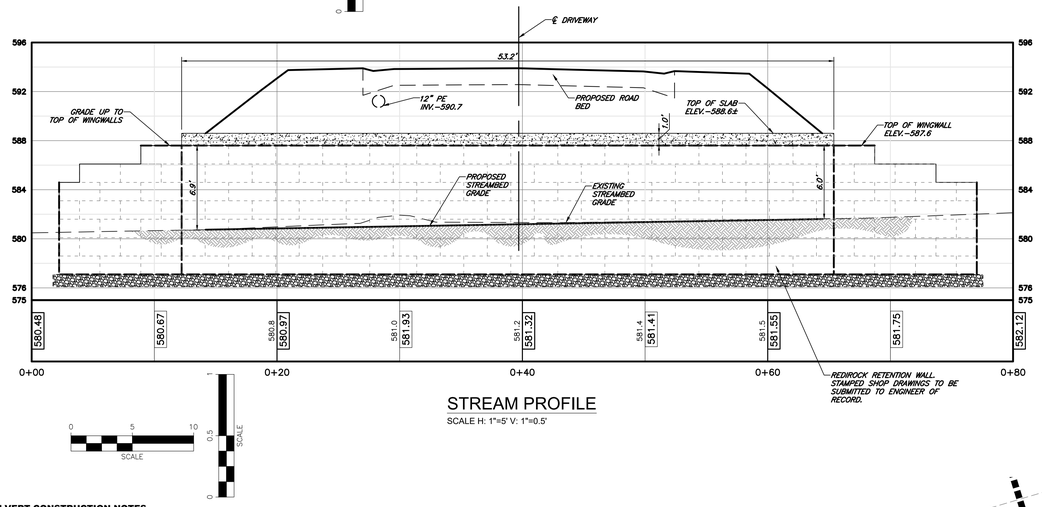
APPROVED MARCH 07, 2016 — /S/ RICHARD M. LEE, P.E. — DEPUTY CHIEF ENGINEER DESIGN

ISSUED UNDER EB 16-012 — 608-03




## BRIDGE SECTION PROFILE

SCALE H: 1"=5' V: 1"=0.5'




## STREAM PROFILE

SCALE H: 1"=5' V: 1"=0.5'

### CULVERT CONSTRUCTION NOTES

1. WETLAND DELINEATION AND WATERCOURSE DOCUMENTATION PROVIDED BY DIEHLUX IN A REPORT CREATED FOR MARATHON ENGINEERING DATED JULY 24, 2026.
2. TREE REMOVAL IS TO OCCUR OUTSIDE OF THE ACTIVE BAT SEASON (NOV.1-MAR.31)
3. DISTURBANCE PERMITTED UNDER USACOE NATIONWIDE PERMIT _____ UNDER TRANSMITTAL _____ AND PROVIDED ON _____.

### STREAM CROSSING CONSTRUCTION SEQUENCE

- INSTALL COFFERDAMS AND SILT FENCE AT EXISTING BOTTOM OF SLOPE OF EXISTING STREAM ON BOTH SIDES OF STREAM FOR LENGTH OF DISTURBANCE.
- EXCAVATE SOIL TO FORM PROPOSED STREAM BED AND EXCAVATE FOR SOUTHERN FOOTER INSTALLATION.
- BOTTOM OF NEW STREAM BED TO BE STABILIZED WITH RIP RAP.
- IF WATER INFILTRATES FOOTER EXCAVATIONS, DEWATER USING SUMP PIT PER NYSDEC STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL FIGURE 5A.39.
- SET PRECAST FOOTERS AS INSTRUCTED BY MANUFACTURER.
- INSTALL RIP RAP AT STREAM EDGE AND AT EACH END OF THE RETAINING WALL. ALL DISTURBED AREAS ARE TO BE STABILIZED AND SEEDED. SLOPES GREATER THAN 1:3 MUST USE SLOPE STABILIZATION FABRIC.
- REMOVE SUMP PIT IF INSTALLED.
- REMOVE SOUTHERN COFFERDAMS.
- EXCAVATE NORTH SECTION OF BRIDGE FOOTERS AND STREAMBED, INSTALL AS PREVIOUSLY STATED.
- INSTALL ALL BRIDGE PRECAST SECTIONS WITHOUT DISTURBING WITHIN EXISTING OR PROPOSED STREAM AREA.
- FILL IS TO BE ADDED AND COMPACTED IN 6" LIFTS. ALL DISTURBED AREAS ARE TO BE STABILIZED AND SEEDED. SLOPE STABILIZATION FABRIC IS REQUIRED ON ALL SLOPES 1:3 OR GREATER.

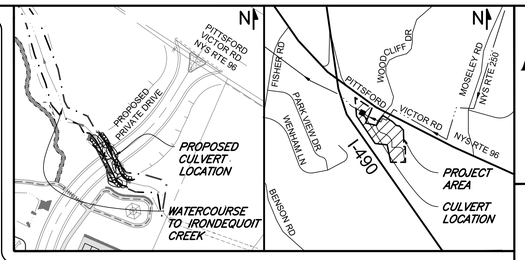
| DISTURBANCES WITHIN STREAM LIMITS | | |
|---|---|---|
| TOP OF BANK | AREA (SF) | VOLUME (CF) |
| TEMPORARY | 0 | 0 |
| PERMANENT | 196 | 823 |
| ORDINARY HIGH WATER MARK | AREA (SF) | VOLUME (CF) |
| TEMPORARY | 0 | 0 |
| PERMANENT | 1375 | 2383 |

### LEGEND:

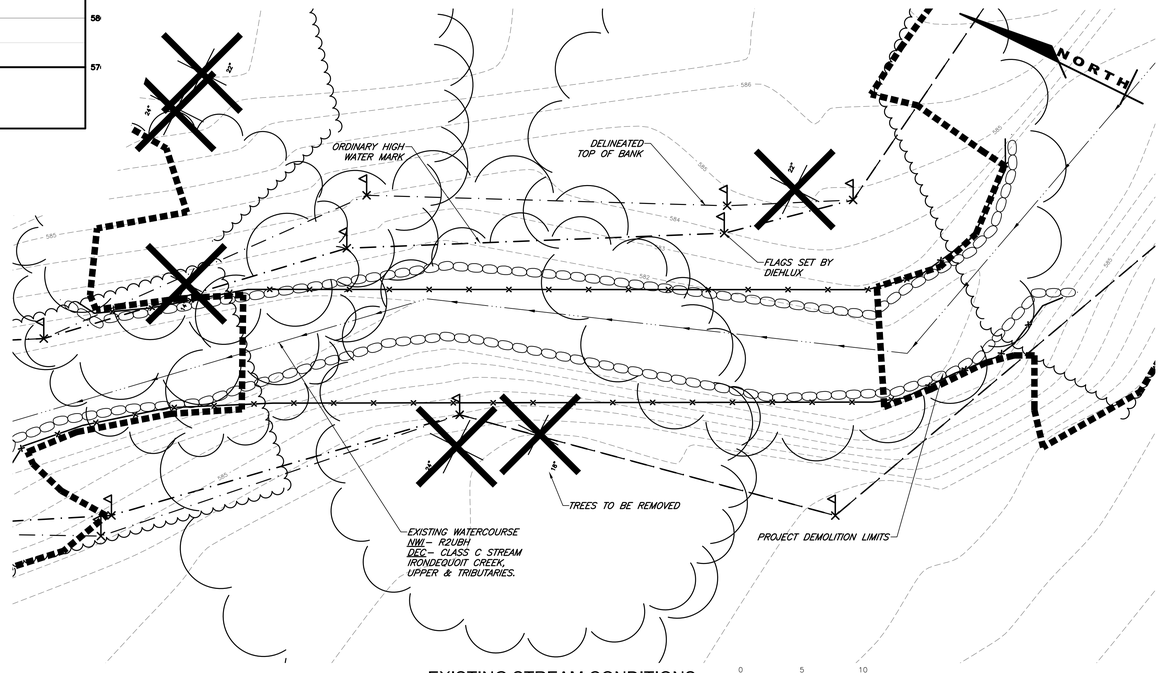
- 1+00 ℄ 2+00 — CENTERLINE AND STATIONING
- ADJACENT PROPERTY LINE
- PROJECT PROPERTY LINE
- STORM SEWER, MANHOLE & FIELD/DROP INLET
- CENTERLINE OF SWALE
- GRADING LIMITS
- WETLANDS
- FLOODPLAIN
- 525 — EXISTING CONTOUR
- 560 — PROPOSED MAJOR CONTOUR
- 559 — PROPOSED MINOR CONTOUR
- DRAINAGE FLOW ARROW
- 525.08 — EXISTING SPOT ELEVATION
- 529.2 — PROPOSED SPOT ELEVATION
- EXISTING POWER POLE
- EXISTING TREE LINE
- TREE LINE / CLEARING LIMITS

APPROVED BY:
COMMISSIONER OF PUBLIC WORKS
DATE:

APPROVED BY:
TOWN ENGINEER
DATE:

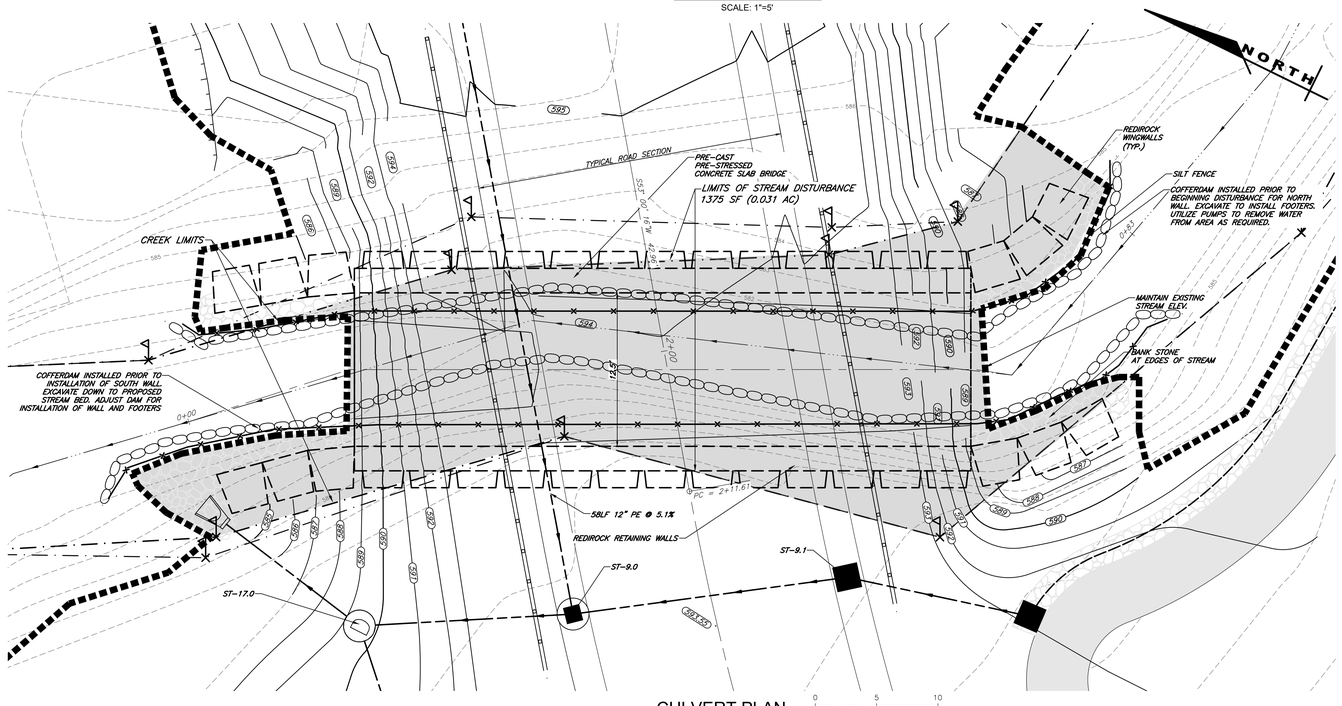



TOWN OF PERINTON
LOCATION MAP
NOT TO SCALE




## EXISTING STREAM CONDITIONS AND DEMOLITION

SCALE: 1"=5'




## CULVERT PLAN

SCALE: 1"=5'

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

**PRELIMINARY/FINAL SITE PLANS**
for
# THE PLACE AT WILLOWBROOK

1407-1451 PITTSFORD VICTOR ROAD
MONROE COUNTY COUNTSTATE OF NEW YORK
TOWN OF PERINTON

| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | AS SHOWN |
| DRAWN: | RLB |
| DESIGNED: | MPT |
| DATE: | 06/12/2026 |

| DATE | BY | REVISION |
|---|---|---|
| 07/31/26 | RB | DPW COMMENTS |
| 09/10/26 | RB | PRELIM COMMENTS |

IT IS A VIOLATION OF NEW YORK STATE EDUCATION LAW ARTICLE 145, SECTION 7209 FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF A PROFESSIONAL ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

COPYRIGHT © 2026 MARATHON ENG.

STATE OF NEW YORK
COLE M. PAPASERGI
110080
LICENSED PROFESSIONAL ENGINEER

COLE M. PAPASERGI

DRAWING TITLE:
CULVERT PLAN

| | |
|---|---|
| 21 of 21 SHEET No: | C9.0 |
| 1780-26 JOB No: | DRAWING No: |

File: Z:\Engineering\Job Files\1780-24\Drawings_Sheets\1780-26 C9.0 CULVERT.dwg, Last saved: 9/10/2026, Plot Date: 9/10/2026, By: RAFAEL BARRETO, Plot Style: MARATHON STANDARD.CTB

# Appendix C

## NOI, NOI Acknowledgement Letter, MS4 Acceptance Form, & NOT

# 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: | WB OP LLC |
| 2. Contact Person: | Ian Denaro |
| 3. Street Address: | 64 Commercial St, Suite 401 |
| 4. City/State/Zip: | Rochester, NY 14614 |
| **II. Project Site Information** | |
| 5. Project/Site Name: | The Place at WillowBrook |
| 6. Street Address: | 1407 & 1451 Pittsford Victor Road |
| 7. City/State/Zip: | Perinton NY 14564 |
| **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[1]:

Title/Position:

Signature:

Date:

**VI. Additional Information**

[1] 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.

# 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:** The Place at WillowBrook

**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.

| Ian | | Denaro |
|---|---|---|
| Owner/Operator First Name | MI | Owner/Operator Last Name |

_____

Signature

_____

Date

Revised: January 2025

# 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:** | The Place at WillowBrook |
| **eNOI Submission ID:** | |
| **Owner/Operator Name:** | WB OP LLC |

## 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.

| Matt | | Tomlinson |
|---|---|---|
| SWPPP Preparer First Name | MI | SWPPP Preparer Last Name |

Signature Date

# Appendix D

## Contractor/Subcontractors; Name, Responsibilities, and Certification Statements & Training Cards and Numbers

**Section 5.2 - Contractor/Subcontractors; Name, Responsibilities, and Certification Statements**

**CONTRACTORS' 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."

Project Title: _____

1.) Name (please print) _____
Prime or General Contractor, President (or print title)

Signature: _____ Date: _____

_____
For (Company Name and Address) Responsible For

2.) Name (please print) _____
Subcontractor, President (or print title)

Signature: _____ Date: _____

_____
For (Company Name and Address) Responsible For

3.) Name (please print) _____
Subcontractor, President (or print title)

Signature: _____ Date: _____

_____
For (Company Name and Address) Responsible For

# Appendix E

## Contractor's Storage of Construction and Waste Materials & Non-Soil Pollution Prevention Measures

Project Title: _____

**Section 3.7 - Description of Pollution Prevention Measures to Control Construction Litter, Construction Chemicals and Debris**

I. Pollution Prevention Measures (from Construction-Phase Operations other than soil disturbance)

A. _____ (site superintendent responsible for the day-to-day site operations) will be the spill prevention and cleanup coordinator.

**B. Product Specific Practices:**

The following product specific practices will be followed onsite:

1. Petroleum Products - All onsite vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers that are clearly labeled. Any asphalt substances used onsite will be applied according to the manufacturer's recommendations.
2. Fertilizers - Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.
3. Paints - All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed according to manufacturers' instructions or state and local regulations.
4. Concrete Trucks - Concrete trucks will only be allowed to wash out or discharge surplus concrete at the designated concrete washout areas depicted on the Site Development Plans (see Appendix B) and in conformance with New York State Standards and Specifications for Erosion and Sediment Control (Blue Book).
5. Waste Disposal - All waste materials will be collected and stored in a securely lidded metal dumpster rented from _____, which is a licensed solid waste management company in _____ (city). The dumpster will meet all local and any State solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied as often as necessary, and the trash will be hauled to _____ (landfill). No construction waste materials will be buried onsite. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the office trailer. _____ (site superintendent responsible for the day-to-day site operations), will be responsible for seeing that these procedures are followed.

6. Hazardous Waste - All hazardous waste materials will be disposed of in the manner specified by local or State regulation or by the manufacturer. Site personnel will be instructed in these practices. _____ (site superintendent responsible for the day-to-day site operations) will be responsible for seeing that these practices are followed.
7. Sanitary Waste - All sanitary waste will be collected from the portable units a minimum of three times per week by _____, a licensed sanitary waste management contractor.
8. Recyclable Waste - All recyclable waste (cardboard, wood etc.) shall be collected and recycled.

II. On-Site Storage of Construction and Waste Materials

A. **Spill Prevention Inventory:** The materials or substances listed below are expected to be present onsite during construction: (Check appropriate boxes)

| | | |
|---|---|---|
| ☐ Concrete | ☐ Detergents | ☐ Roofing shingles |
| ☐ Metal studs | ☐ Paints (enamel and latex) | ☐ Wood |
| ☐ Petroleum-based products | ☐ Fertilizers | ☐ Tar |
| ☐ Masonry block | ☐ Cleaning solvents | ☐ Other (specify) |

**B. Material Management Practices**

The following are the management practices that will be used to reduce the risk of spills or other accidental exposure of materials and substances listed above to stormwater runoff:

(Check appropriate boxes)

☐ Products will be kept in original containers unless they are not resealable.

☐ Original labels and material safety data sheets will be retained; they contain important product information.

☐ An effort will be made to store only enough product required to do the job.

☐ All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure and/or on blacktop.

☐ Products will be kept in their original containers with the original manufacturer's label.

☐ Substances will not be mixed with one another unless recommended by the manufacturer.

☐ Whenever possible, all of a product will be used up before disposing of the container.

☐ Manufacturer's recommendations for proper use and disposal will be followed.

- ☐ The site superintendent will inspect daily to ensure the proper use and disposal of materials onsite.
- ☐ Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.
- ☐ Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to brooms, dustpans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- ☐ All spills will be cleaned up immediately after discovery.
- ☐ The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- ☐ Spills, of any size, of toxic or hazardous material will be reported to the appropriate State or local government agency.
- ☐ The spill prevention plan will be adjusted to include measures to prevent this type of spill from recurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

# Appendix F

## Soils Report, Soil Map,

## Drainage Info/Maps

Hydrologic Soil Group—Monroe County, New York
(1780-26 Parcels)




Map Scale: 1:1,930 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 25 50 100 150

Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

## MAP LEGEND

**Area of Interest (AOI)**

Area of Interest (AOI)

**Soils**

**Soil Rating Polygons**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**Soil Rating Lines**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**Soil Rating Points**

A
A/D
B
B/D
C
C/D
D
Not rated or not available

**Water Features**

Streams and Canals

**Transportation**

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

**Background**

Aerial Photography

## 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:
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: Monroe County, New York
Survey Area Data: Version 24, Aug 27, 2025

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

Date(s) aerial images were photographed: May 15, 2023—May 28, 2023

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.

# Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| AnB | Alton gravelly sandy loam, 3 to 8 percent slopes | A | 0.6 | 8.7% |
| OpD | Ontario-Palmyra-Arkport complex, 15 to 25 percent slopes | A | 1.4 | 20.7% |
| OpF | Ontario-Palmyra-Arkport complex, 25 to 60 percent slopes | A | 0.0 | 0.2% |
| PaC | Palmyra gravelly fine sandy loam, 8 to 15 percent slopes | A | 0.7 | 10.8% |
| PaF | Palmyra gravelly fine sandy loam, 25 to 60 percent slopes | A | 4.0 | 59.6% |
| **Totals for Area of Interest** | | | **6.7** | **100.0%** |

## Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

## Rating Options

*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

# Appendix G

## NYSDEC SPDES General Permit

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

Scott E. Sheeley JAN. 29, 2025

Authorized Signature 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.

C*onstruction 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**

# Table of Contents


**Part I. How to Obtain Coverage and General Requirements ..... 5**
A. Eligibility Requirements ..... 5
B. Types of *Discharges* Authorized ..... 9
C. Prohibited *Discharges* ..... 10
D. Electronic Notice of Intent (eNOI) Submittal ..... 10
E. General Requirements for *Owners or Operators* with Permit Coverage ..... 14
F. Permit Coverage for *Discharges* Authorized Under GP-0-20-001 ..... 18
G. Change of *Owner or Operator* ..... 19
**Part II. Water Quality-Based Effluent Limitations ..... 20**
A. Maintaining Water Quality ..... 20
B. Effluent Limitations Applicable to *Discharges* from *Construction Activities* ..... 20
C. Post-Construction Stormwater Management Practice (SMP) Requirements ..... 23
**Part III. Stormwater Pollution Prevention Plan (SWPPP) ..... 28**
A. General *SWPPP* Requirements ..... 28
B. Required *SWPPP* Contents ..... 32
C. Required *SWPPP* Components by Project Type ..... 37
**Part IV. Inspection and Maintenance Requirements ..... 37**
A. General Construction Site Inspection and Maintenance Requirements ..... 37
B. Contractor Maintenance Inspection Requirements ..... 37
C. *Qualified Inspector* Inspection Requirements ..... 38
**Part V. How to Terminate CGP Coverage ..... 43**
A. Electronic Notice of Termination (eNOT) Submittal ..... 43
**Part VI. Record Retention and Reporting ..... 45**
A. Record Retention ..... 46
B. Reporting ..... 46
**Part VII. Standard Permit Requirements ..... 46**
A. Duty to Comply ..... 46
B. Need to Halt or Reduce Activity Not a Defense ..... 46
C. Penalties ..... 46
D. False Statements ..... 47
E. Re-Opener Clause ..... 47
F. Duty to Mitigate ..... 47
G. Requiring Another General Permit or Individual SPDES Permit ..... 47
H. Duty to Provide Information ..... 49
I. Extension ..... 49
J. Signatories and Certification ..... 50
K. Inspection and Entry ..... 52
L. Confidentiality of Information ..... 53
M. Other Permits May Be Required ..... 53

N. NYSDEC Orders or Civil Decrees/Judgments ..... 53
O. Property Rights ..... 53
P. Compliance with Interstate Standards ..... 53
Q. Oil and Hazardous Substance Liability ..... 54
R. Severability ..... 54
S. NYSDEC Approved Forms ..... 54
**APPENDIX A – Abbreviations and Definitions ..... 55**
Abbreviations ..... 55
Definitions ..... 56
**APPENDIX B – Required SWPPP Components by Project Type ..... 64**
Table 1 ..... 64
Table 2 ..... 66
**APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal ..... 68**
**APPENDIX D – Impaired Waterbodies (by Construction Related Pollutants) ..... 74**
**APPENDIX E – List of NYSDEC Regional Offices ..... 80**
**APPENDIX F – SWPPP Preparer Certification Form ..... 81**
**APPENDIX G – MS4 SWPPP Acceptance Form ..... 83**
**APPENDIX H – NYCDEP SWPPP Acceptance/Approval Form ..... 86**
**APPENDIX I – MS4 No Jurisdiction Form ..... 89**
**APPENDIX J – Owner/Operator Certification Form ..... 91**

## 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.

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

iii. 20+ acres of disturbance - 100 feet.

b. NYSDEC consultation form sent to OPRHP,[1] 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

[1] 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.

*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

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

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 1st and March 31st.

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

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

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.[2]

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.

[2] 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 or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th Floor, Albany, New York 12233-3505.

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

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:

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

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).[3] *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 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.

[3] 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,[4] 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.

[4] 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 or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th 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 *discharge*s necessary to meet applicable *water quality standards*. It shall be a violation of the *ECL* for any *discharge* to either cause or contribute to a violation of 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 discharge*s 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 discharge*s 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 *discharge*s 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*

*Discharge*s 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

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 discharge*s; and

        ii. Control *stormwater discharge*s, 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 *discharge*s 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 discharge*s, unless *infeasible*; and

        vii. *Minimize* soil compaction. *Minimizing* soil compaction is not required

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

viii. Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; 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**. *Discharge*s from *dewatering* activities, including *discharge*s from *dewatering* of trenches and excavations, must be managed by appropriate control measures.

d. **Pollution Prevention Measures**. 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

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

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*.

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

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.

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

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

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

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

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*,

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

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:

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

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

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

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

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

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*.

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:

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:

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

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.

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.[5]

    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.

[5] 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 or NYSDEC, Bureau of Water Permits, 625 Broadway, 4th 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

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:

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

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,[6] 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.

[6] 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.

        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.

    b. For a partnership or sole proprietorship. By a general partner or the proprietor, respectively.

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*

*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):

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.

**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.

**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 source*s. 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 source*s, 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

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[1]
- 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**

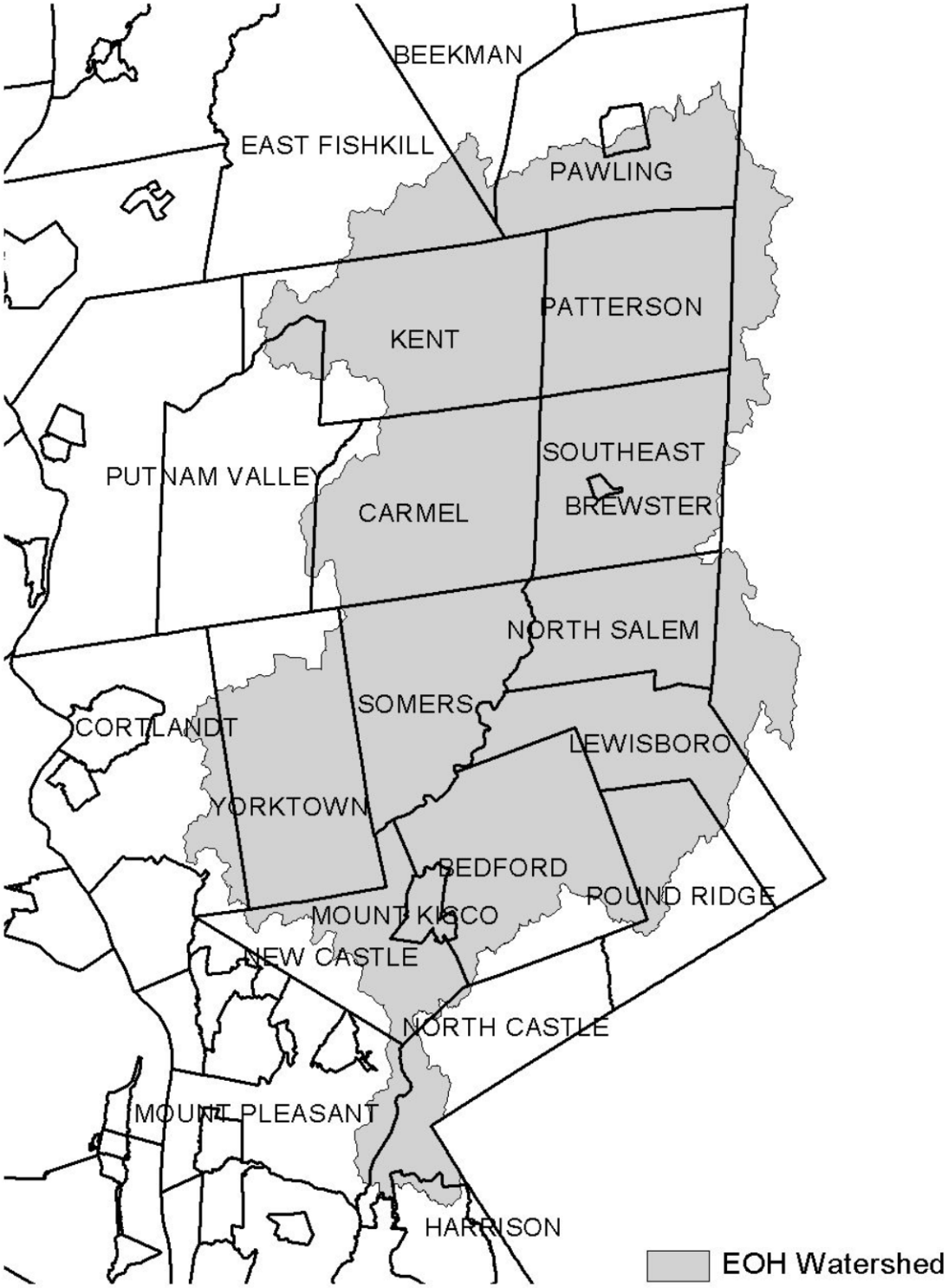


**Figure 2 - Onondaga Lake Watershed**



**Figure 3 - Greenwood Lake Watershed**

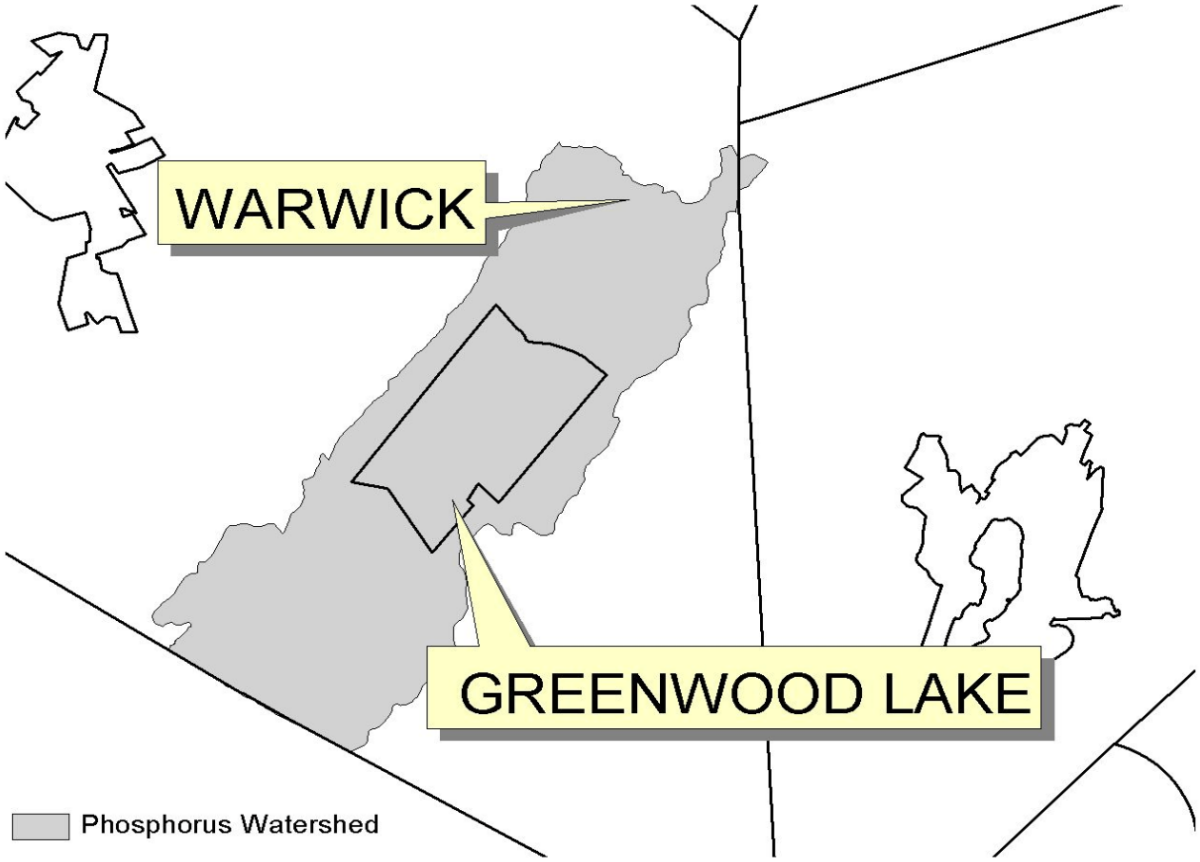


**Figure 4 - Oscawana Lake Watershed**

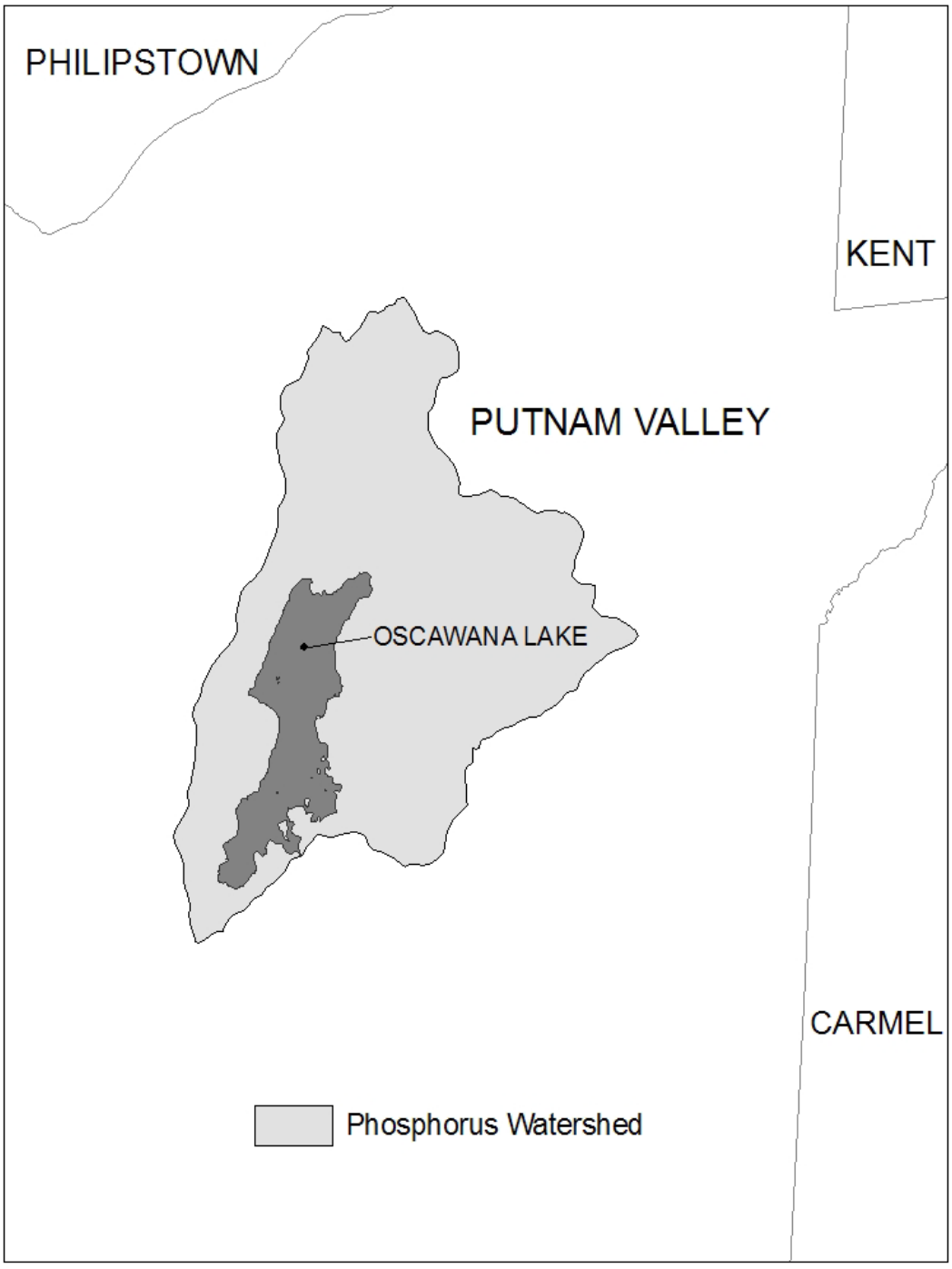
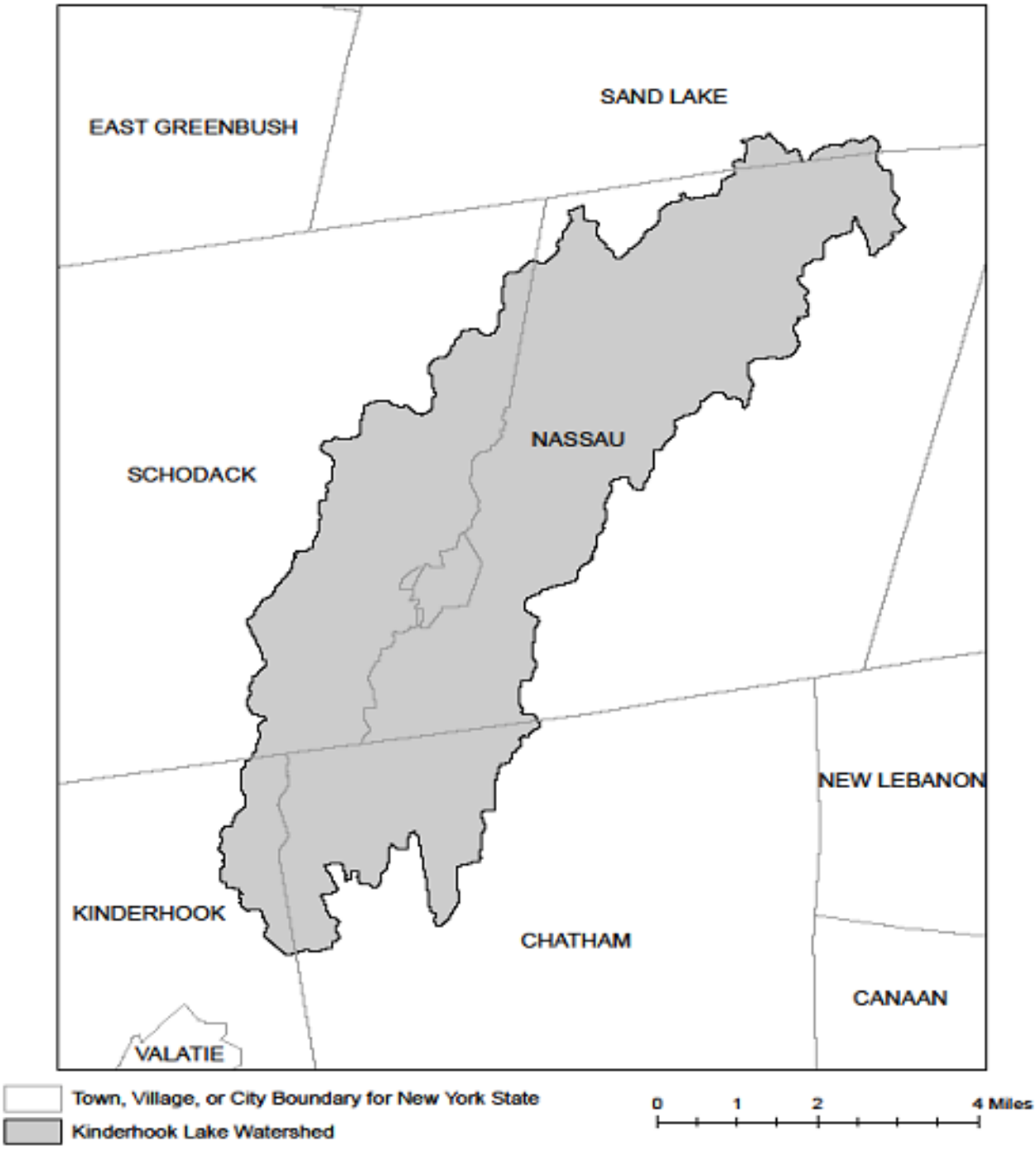


**Figure 5 - Kinderhook Lake Watershed**



## 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 tribs (0706-0014) | Nutrients |
| Chautauqua | Chadakoin River and tribs (0202-0018) | Phosphorus |
| Chautauqua | Hulburt/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 tribs (0102-0030) | Phosphorus |
| Erie | Delaware Park Pond (0101-0026) | Phosphorus |
| Erie | Ellicott Creek, Lower, and tribs (0102-0018) | Phosphorus |
| Erie | Ellicott Creek, Lower, and tribs (0102-0018) | Silt/Sediment |
| Erie | Green Lake (0101-0038) | Phosphorus |
| Erie | Little Sister Creek, Lower, and tribs (0104-0045) | Phosphorus |
| Erie | Murder Creek, Lower, and tribs (0102-0031) | Phosphorus |

| | | |
|---|---|---|
| Erie | Rush Creek and tribs (0104-0018) | Phosphorus |
| Erie | Scajaquada Creek, Lower, and tribs (0101-0023) | Phosphorus |
| Erie | Scajaquada Creek, Middle, and tribs (0101-0033) | Phosphorus |
| Erie | Scajaquada Creek, Upper, and tribs (0101-0034) | Phosphorus |
| Erie | South Branch Smoke Cr, Lower, and tribs (0101-0036) | Phosphorus |
| Erie | South Branch Smoke Cr, Lower, and tribs (0101-0036) | Silt/Sediment |
| Genesee | Bigelow Creek and tribs (0402-0016) | Phosphorus |
| Genesee | Black Creek, Middle, and minor tribs (0402 0028) | Phosphorus |
| Genesee | Black Creek, Upper, and minor tribs (0402-0048) | Phosphorus |
| Genesee | Bowen Brook and tribs (0102-0036) | Phosphorus |
| Genesee | LeRoy Reservoir (0402-0003) | Phosphorus |
| Genesee | Mill Pond (0402-0050) | Phosphorus |
| Genesee | Oak Orchard Cr, Upper, and tribs (0301-0014) | Phosphorus |
| Genesee | Oatka Creek, Middle, and minor tribs (0402-0031) | Phosphorus |
| Genessee | 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 tribs (1201-0197) | Phosphorus |
| Herkimer | Steele Creek tribs (1201-0197) | Silt/Sediment |
| Kings | Hendrix Creek (1701-0006) 18 | Nitrogen |
| Kings | Prospect Park Lake (1701-0196) | Phosphorus |
| Lewis | Mill Creek/South Branch, and tribs (0801-0200) | Nutrients |
| Livingston | Christie Creek and tribs (0402-0060) | Phosphorus |
| Livingston | Conesus Lake (0402-0004) | Phosphorus |
| Livingston | Mill Creek and minor tribs (0404-0011) | Silt/Sediment |
| Monroe | Black Creek, Lower, and minor tribs (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 tribs (0302-0025) | Phosphorus 2 |
| Monroe | Mill Creek/Blue Pond Outlet and tribs (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 tribs (0302-0026) | Phosphorus 2 |
| Monroe | Thomas Creek/White Brook and tribs (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 tribs (1701-0211) | Silt/Sediment |
| Nassau | East Rockaway Channel (1701-0381) | Nitrogen |
| Nassau | Glen Cove Creek, Lower, and tribs (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 tribs (1701-0174) | Phosphorus |
| Nassau | Milburn/Parsonage Creeks, Upp, and tribs (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 tribs (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 tribs (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 tribs (0702-0023) | Turbidity |
| Onondaga | Onondaga Creek, Middle, and tribs (0702-0004) | Turbidity |
| Onondaga | Onondaga Creek, Upper, and tribs (0702-0024) | Turbidity |
| Ontario | Great Brook and minor tribs (0704-0034) | Phosphorus 2 |
| Ontario | Great Brook and minor tribs (0704-0034) | Silt/Sediment |

| | | |
|---|---|---|
| Ontario | Hemlock Lake Outlet and minor tribs (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 tribs (1306-0074) | Phosphorus |
| Orange | Orange Lake (1301-0008) [16] | Phosphorus |
| Orange | Quaker Creek and tribs (1306-0025) | Phosphorus |
| Orange | Wallkill River, Middle, Main Stem (1306-0038) | Phosphorus |
| Orange | Wallkill River, Upper, and Minor tribs (1306-0017) | Phosphorus |
| Orleans | Glenvwood 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 tribs, 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 tribs (1101-0007) | Phosphorus |
| Saratoga | Dwaas Kill and tribs (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 tribs (0705-0074) | Phosphorus |
| St.Lawrence | Black Lake Outlet, Black Lake (0906-0001) | Phosphorus |
| St.Lawrence | Fish Creek and minor tribs (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, Mongomery 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 tribs (1307-0007)[3] | Silt/Sediment |
| Ulster | Wallkill River, Lower, Main Stem (1306-0027) | Phosphorus |
| Warren | Hague Brook and tribs (1006-0006) | Silt/Sediment |
| Warren | Huddle/Finkle Brooks and tribs (1006-0003) | Silt/Sediment |
| Warren | Indian Brook and tribs (1006-0002) | Silt/Sediment |
| Warren | Lake George (1006-0016) and tribs | 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 tribs (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 tribs (1702-0123) | Silt/Sediment |
| Westchester | Saw Mill River (1301-0007) | Phosphorus |
| Westchester | Saw Mill River, Middle, and tribs (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

| Region | Covering the following counties: | DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators | DIVISION OF WATER (DOW) Water (SPDES) Program |
|---|---|---|---|
| 1 | Nassau and Suffolk | 50 Circle Road<br>Stony Brook, NY 11790<br>Tel. (631) 444-0365 | 50 Circle Road<br>Stony Brook, NY 11790-3409<br>Tel. (631) 444-0405 |
| 2 | Bronx, Kings, New York, Queens and Richmond | 1 Hunters Point Plaza,<br>47-40 21st St.<br>Long Island City, NY 11101-5407<br>Tel. (718) 482-4997 | 1 Hunters Point Plaza,<br>47-40 21st St.<br>Long Island City, NY 11101-5407<br>Tel. (718) 482-4933 |
| 3 | Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester | 21 South Putt Corners Road<br>New Paltz, NY 12561-1696<br>Tel. (845) 256-3059 | 220 White Plains Road, Suite 110<br>Tel. (914) 428 - 2505 |
| 4 | Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie | 1130 North Westcott Road<br>Schenectady, NY 12306-2014<br>Tel. (518) 357-2069 | 1130 North Westcott Road<br>Schenectady, NY 12306-2014<br>Tel. (518) 357-2045 |
| 5 | Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington | 1115 State Route 86, Po Box 296<br>Ray Brook, NY 12977-0296<br>Tel. (518) 897-1234 | 232 Golf Course Road<br>Warrensburg, NY 12885-1172<br>Tel. (518) 623-1200 |
| 6 | HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE | STATE OFFICE BUILDING<br>317 WASHINGTON STREET<br>WATERTOWN, NY 13601-3787<br>TEL. (315) 785-2245 | STATE OFFICE BUILDING<br>207 GENESEE STREET<br>UTICA, NY 13501-2885<br>TEL. (315) 793-2554 |
| 7 | BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS | 5786 WIDEWATERS PARKWAY<br>SYRACUSE, NY 13214-1867<br>TEL. (315) 426-7438 | 5786 WIDEWATERS PARKWAY<br>SYRACUSE, NY 13214-1867<br>TEL. (315) 426-7500 |
| 8 | CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES | 6274 EAST AVON-LIMA<br>ROADAVON, NY 14414-9519<br>TEL. (585) 226-2466 | 6274 EAST AVON-LIMA RD.<br>AVON, NY 14414-9519<br>TEL. (585) 226-2466 |
| 9 | ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING | 700 DELAWARE AVENUE<br>BUFFALO, NY 14209-2999<br>TEL. (716) 851-7165 | 700 DELAWARE AVENUE<br>BUFFALO, NY 14209-2999<br>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:** | The Place at WillowBrook |
| **eNOI Submission ID:** | |
| **Owner/Operator Name:** | WB OP LLC |

## 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.

| Matt | | Tomlinson |
|---|---|---|
| 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.

# 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: | WB OP LLC |
| 2. Contact Person: | Ian Denaro |
| 3. Street Address: | 64 Commercial St, Suite 401 |
| 4. City/State/Zip: | Rochester, NY 14614 |
| **II. Project Site Information** | |
| 5. Project/Site Name: | The Place at WillowBrook |
| 6. Street Address: | 1407 & 1451 Pittsford Victor Road |
| 7. City/State/Zip: | Perinton NY 14564 |
| **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[1]:

Title/Position:

Signature:

Date:

**VI. Additional Information**

[1] 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:

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.

## 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.

# 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.

# 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:** The Place at WillowBrook

**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.

Ian

Owner/Operator First Name MI Owner/Operator Last Name

_____

Signature

_____

Date

Revised: January 2025

# Appendix H

## Maintenance Inspection Checklist

# Stormwater Pond/Wetland Operation, Maintenance and Management Inspection Checklist

Project _____
Location: _____
Site Status: _____

Date: _____
Time: _____

Inspector: _____

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|---|---|---|
| **1. Embankment and emergency spillway (Annual, After Major Storms)** | | |
| 1. Vegetation and ground cover adequate | | |
| 2. Embankment erosion | | |
| 3. Animal burrows | | |
| 4. Unauthorized planting | | |
| 5. Cracking, bulging, or sliding of dam | | |
| a. Upstream face | | |
| b. Downstream face | | |
| c. At or beyond toe | | |
| downstream | | |
| upstream | | |
| d. Emergency spillway | | |
| 6.Pond, toe & chimney drains clear and functioning | | |
| 7.Seeps/leaks on downstream face | | |
| 8.Slope protection or riprap failure | | |
| 9. Vertical/horizontal alignment of top of dam “As-Built” | | |
| | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|---|---|---|
| 10. Emergency spillway clear of obstructions and debris | | |
| 11. Other (specify) | | |
| **2. Riser and principal spillway (Annual)** | | |
| Type: Reinforced concrete _____<br>Corrugated pipe _____<br>Masonry _____<br>1. Low flow orifice obstructed | | |
| 2. Low flow trash rack.<br>a. Debris removal necessary | | |
| b. Corrosion control | | |
| 3. Weir trash rack maintenance<br>a. Debris removal necessary | | |
| b. corrosion control | | |
| 4. Excessive sediment accumulation insider riser | | |
| 5. Concrete/masonry condition riser and barrels<br>a. cracks or displacement | | |
| b. Minor spalling (<1" ) | | |
| c. Major spalling (rebars exposed) | | |
| d. Joint failures | | |
| e. Water tightness | | |
| 6. Metal pipe condition | | |
| 7. Control valve<br>a. Operational/exercised | | |
| b. Chained and locked | | |
| 8. Pond drain valve<br>a. Operational/exercised | | |
| b. Chained and locked | | |
| 9. Outfall channels functioning | | |
| 10. Other (specify) | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|---|---|---|
| **3. Permanent Pool (Wet Ponds) (monthly)** | | |
| 1. Undesirable vegetative growth | | |
| 2. Floating or floatable debris removal required | | |
| 3. Visible pollution | | |
| 4. Shoreline problem | | |
| 5. Other (specify) | | |
| **4. Sediment Forebays** | | |
| 1.Sedimentation noted | | |
| 2. Sediment cleanout when depth < 50% design depth | | |
| **5. Dry Pond Areas** | | |
| 1. Vegetation adequate | | |
| 2. Undesirable vegetative growth | | |
| 3. Undesirable woody vegetation | | |
| 4. Low flow channels clear of obstructions | | |
| 5. Standing water or wet spots | | |
| 6. Sediment and / or trash accumulation | | |
| 7. Other (specify) | | |
| **6. Condition of Outfalls (Annual , After Major Storms)** | | |
| 1. Riprap failures | | |
| 2. Slope erosion | | |
| 3. Storm drain pipes | | |
| 4.Endwalls / Headwalls | | |
| 5. Other (specify) | | |
| **7. Other ( Monthly)** | | |
| 1. Encroachment on pond, wetland or easement area | | |

| Maintenance Item | Satisfactory/ Unsatisfactory | Comments |
|---|---|---|
| 2. Complaints from residents | | |
| 3.Aesthetics<br>a. Grass growing required | | |
| b. Graffiti removal needed | | |
| c. Other (specify) | | |
| 4. Conditions of maintenance access routes. | | |
| 5. Signs of hydrocarbon build-up | | |
| 6. Any public hazards (specify) | | |
| **8. Wetland Vegetation (Annual)** | | |
| 1. Vegetation healthy and growing<br>Wetland maintaining 50% surface area coverage of wetland plants after the second growing season.<br>(If unsatisfactory, reinforcement plantings needed) | | |
| 2. Dominant wetland plants:<br>Survival of desired wetland plant species<br>Distribution according to landscaping plan? | | |
| 3. Evidence of invasive species | | |
| 4. Maintenance of adequate water depths for desired wetland plant species | | |
| 5. Harvesting of emergent plantings needed | | |
| 6. Have sediment accumulations reduced pool volume significantly or are plants “choked” with sediment | | |
| 7. Eutrophication level of the wetland. | | |
| 8. Other (specify) | | |

## Comments:

## Actions to be Taken:

# Bioretention Operation, Maintenance and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|---|---|
| **1. Debris Cleanout (Monthly)** | | |
| Bioretention and contributing areas clean of debris | | |
| No dumping of yard wastes into practice | | |
| Litter (branches, etc.) have been removed | | |
| **2. Vegetation (Monthly)** | | |
| Plant height not less than design water depth | | |
| Fertilized per specifications | | |
| Plant composition according to approved plans | | |
| No placement of inappropriate plants | | |
| Grass height not greater than 6 inches | | |
| No evidence of erosion | | |
| **3. Check Dams/Energy Dissipaters/Sumps (Annual, After Major Storms)** | | |
| No evidence of sediment buildup | | |

| MAINTENANCE ITEM | SATISFACTORY / UNSATISFACTORY | COMMENTS |
|---|---|---|
| Sumps should not be more than 50% full of sediment | | |
| No evidence of erosion at downstream toe of drop structure | | |
| **4. Dewatering (Monthly)** | | |
| Dewaters between storms | | |
| No evidence of standing water | | |
| **5. Sediment Deposition (Annual)** | | |
| Swale clean of sediments | | |
| Sediments should not be > 20% of swale design depth | | |
| **6. Outlet/Overflow Spillway (Annual, After Major Storms)** | | |
| Good condition, no need for repair | | |
| No evidence of erosion | | |
| No evidence of any blockages | | |
| **7. Integrity of Filter Bed (Annual)** | | |
| Filter bed has not been blocked or filled inappropriately | | |

## Comments:

## Actions to be Taken:

# Open Channel Operation, Maintenance, and Management Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

| MAINTENANCE ITEM | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---|---|
| **1. Debris Cleanout (Monthly)** | | |
| Contributing areas clean of debris | | |
| **2. Check Dams or Energy Dissipators (Annual, After Major Storms)** | | |
| No evidence of flow going around structures | | |
| No evidence of erosion at downstream toe | | |
| Soil permeability | | |
| Groundwater / bedrock | | |
| **3. Vegetation (Monthly)** | | |
| Mowing done when needed | | |
| Minimum mowing depth not exceeded | | |
| No evidence of erosion | | |
| Fertilized per specification | | |
| **4. Dewatering (Monthly)** | | |
| Dewaters between storms | | |

| MAINTENANCE ITEM | SATISFACTORY/ UNSATISFACTORY | COMMENTS |
|---|---|---|
| **5. Sediment deposition (Annual)** | | |
| Clean of sediment | | |
| **6. Outlet/Overflow Spillway (Annual)** | | |
| Good condition, no need for repairs | | |
| No evidence of erosion | | |

## Comments:

## Actions to be Taken:

# Appendix I

## Documentation from NYS-Historic Preservation Office

New York State
Parks, Recreation and
Historic Preservation

**KATHY HOCHUL**
Governor

**KATHY MOSER**
Acting Commissioner

June 15, 2026

Natalee Kiesling
Project Coordinator
Marathon Engineering
39 Cascade Dr
Rochester, NY 14614

Re: DEC
The Place at WillowBrook
1451 Pittsford Victor Rd, Victor, NY 14564
26PR04032

Dear Natalee Kiesling:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project.

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above. If you have any questions, please contact Sydney Snyder at the following email address:

Sydney.Snyder@parks.ny.gov

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation
Division for Historic Preservation

# Appendix J

## WQv, RRv, & CPv Calculation Sheets

MARATHON ENGINEERING
39 Cascade Drive / Rochester, NY 14614 / Phone (585) 458-7770

Project: **The Place at WillowBrook**
Project No.: **1780-26**
By: **MT**
Date: **6/10/2026**

## Water Quality Volume (WQv) Calculations:

Rv= 0.05 + 0.009 (I)
P (in)= 1 90% rainfall event number taken from Figure 4.1 in SMDM
WQv (ac-ft)= [(P)*(Rv)*(A)]/12
Rv = [(P) *0.95 * (S) * (AI)]/12

**Breakdown of Watersheds:**

**Existing Conditions**

| Area ID | Total Area (acres) | Impervious Area (acres) | Area Description |
|---|---|---|---|
| EX | 4.20 | 1.08 | Building 200 and parking |
| | | | |
| | | | |
| Total | 4.20 | 1.08 | |

**Proposed Conditions**

| Area ID | Total Area (acres) | Impervious Area (acres) | Area Description |
|---|---|---|---|
| Proposed Conditions | 4.20 | 1.99 | New building, roadway and impervious |
| | | | |
| | | | |
| Total | 4.20 | 1.99 | |

**Calculate Initial WQv:**

| Area ID | Total Area (acres) | Impervious Area (acres) [1] | % Impervios (I) | Rv | WQv (ac-ft) |
|---|---|---|---|---|---|
| Total | 4.20 | 1.18 | 28% | 0.30 | **0.11** |

**WQv = 0.11 ac-ft**

[1] Under redevelopment conditions, 25% of existing impervious area and 100% of the proposed additional impervious area shall be treated as outlined in chapter 9 of the SMDM.

# NOI QUESTIONS

| # | eNOI Question 49 | Reported Value | |
|---|---|---|---|
| | | cf | af |
| 49 | Total Water Quality Volume (WQv) Required | 7113 | 0.163 |
| 49 | Total RRV Provided | 6088 | 0.140 |
| 49 | Is RRv Provided ≥WQv Required? | No | |
| 49 | Minimum RRv | 3746 | 0.086 |
| 49 | Is RRv Provided ≥ Minimum RRv Required? | Yes | |
| | | | |
| 49 | Total WQv Treated | 1025 | 0.024 |
| 49 | Sum of Volume Reduced & Treated | 7113 | 0.163 |
| 49 | Is Sum RRv Provided and WQv Provided ≥WQv Required? | Yes | |

# Step 1 - Site Planning

| | Practice | Description | Applicable | Project Specific Evaluation |
|---|---|---|---|---|
| Preservation of Natural Features and Conservation Design | **Preservation of Undisturbed Areas** | Delineate and protect undisturbed forests, native vegetated areas, riparian corridors, water bodies, wetlands, and natural terrain. | Yes | EXAMPLES - Approximately 1.5+/- Acres of land will remain undisturbed, in its natural state, with another 1.5+/- acres used for outdoor recreation (with some disturbance and improvements). The project does not propose permanent conservation of this area at this time. |
| | **Preservation of Buffers** | Delineate and protect naturally vegetated buffers along perennial streams, rivers, shorelines, and wetlands. | Yes | There is a tributary to Irondequoit Creek located on the project site. The only disturbance that will occur within this buffer will include the minimum amount necessary for the roadway crossing for the secondary entrance. |
| | **Reduction of Clearing and Grading** | Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities. | Yes | Clearing and grading will be limited to the area of disturbance and will be minimized to the greatest extent practical. The limits of all proposed clearing will be demarcated in the field prior to construction, to prevent unnecessary removal of trees. |
| | **Locating Development in Less Sensitive Areas** | Avoid sensitive resource areas such as floodplains, steep slopes, erodible soils, wetlands, mature forests and critical habitats by locating development to fit the terrain in areas that will create the least impact. | Yes | The site has been designed to avoid sensitive resource areas to the greatest extent practical. The proposed building is located over the existing parking lot, stream impact is limited to the roadway crossing and amenities are located in generally clear areas and avoid the steepest slopes on the property. |
| | **Open Space Design** | Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources. | Yes | The site layout has been designed to maximize open space. Impervious surfaces have been minimized to the greatest extent practical and approximately 3.0+/- Acres will be maintained as vegetated open space. |
| | **Soil Restoration** | Restore the original properties and porosity of the soil by deep till and amendment with compost to reduce the generation of runoff and enhance the runoff reduction performance of post construction practices. | Yes | All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual. |
| | **Roadway Reduction** | Minimize roadway widths and lengths, below local requirements, to reduce site impervious area | N/A | The roads will be designed and constructed in accordance with fire code and will be limited to what is necessary to service the project. |

# Step 1 - Site Planning

| | | | | |
|---|---|---|---|---|
| Reduction of Impervious Cover | **Sidewalk Reduction** | Minimize sidewalk lengths and widths, below local requirements, to reduce site impervious area | Yes | Quantity of sidewalk has been reduced to that required to ensure safe pedestrian access throughout the site and provide access to the amenities. |
| | **Driveway Reduction** | Minimize driveway lengths and widths, below local requirements, to reduce site impervious area | N/A | |
| | **Cul-de-sac Reduction** | Minimize the number of cul-de-sacs and incorporate landscaped areas to reduce their impervious cover. | N/A | |
| | **Building Footprint Reduction** | Reduce the impervious footprint of residences and commercial buildings by using alternate or taller buildings while maintaining the same floor to area ratio. | Yes | Building is proposed at 5 stories with parking below |
| | **Parking Reduction** | Reduce imperviousness on parking lots by eliminating unneeded spaces, providing compact car spaces and efficient parking lanes, reducing stall dimensions below local requirements, using porous pavement surfaces in overflow parking areas, and using multi-storied parking decks where appropriate. | Yes | Parking below the building incorporated to reduce surface impervious |

# Step 2 - Calculate Water Quality Volume

| | |
|---|---|
| Is this project subject to Section 4.3 of the NYS Design Manual for Enhanced Phosphorus Removal? | No |
| What is the nature of this construction project? | Redevelopment with increase in impervious area |

| | | | |
|---|---|---|---|
| Design Point: | Creek | | |
| P= | 1.00 | inches | *Enter 90% Rainfall Event as P* |

**Calculate Required WQv**

| Drainage Area Number | Contributing Area (Acres) | Impervious Area (Acres) | Percent Impervious % | Rv | WQv (cf) | SMP Description |
|---|---|---|---|---|---|---|
| 1 | 0.99 | 0.81 | 82 | 0.79 | 2,826 | Infiltration Bioretention |
| 2 | 1.59 | 0.91 | 57 | 0.57 | 3,262 | Infiltration Bioretention |
| 3 | 0.97 | 0.26 | 27 | 0.29 | 1,025 | Flow Based Alternative Practice |
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | | | | | |
| 8 | | | | | | |
| 9 | | | | | | |
| 10 | | | | | | |
| 11 | | | | | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | | | | | | |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | | | | | |
| 18 | | | | | | |
| 19 | | | | | | |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | | | | | | |
| 26 | | | | | | |
| 27 | | | | | | |
| 28 | | | | | | |
| 29 | | | | | | |
| 30 | | | | | | |
| **Total** | 3.55 | 1.98 | 56 | 0.55 | **7113** | **Required WQv** |

# Steps 3 and 5 - Apply RR Techniques and Standard SMPs

| Runoff Reduction Volume and Treated Volumes | | | | | | |
|---|---|---|---|---|---|---|
| | **Runoff Reduction Techiques/Standard SMPs** | | **Total Contributing Area** | **Total Contributing Impervious Area** | **WQv Reduced (RRv)** | **WQv Treated** |
| | | | **(acres)** | **(acres)** | **(cf)** | **(cf)** |
| **RR Techniques** | Conservation of Natural Areas | RR-1 | 0.00 | | 0 | |
| | Sheet Flow to Riparian Buffer/Filter Strip | RR-2 | 0.00 | 0.00 | 0 | |
| | Tree Planting/Tree Pit/Tree Trench | RR-3 | 0.00 | 0.00 | 0 | |
| | Disconnection of Rooftop Runoff | RR-4 | | 0.00 | 0 | |
| | Vegetated Swale | RR-5 | 0.00 | 0.00 | 0 | |
| | Rain Garden | RR-6 | 0.00 | 0.00 | 0 | |
| | Stormwater Planter | RR-7 | 0.00 | 0.00 | 0 | |
| | Rainwater Harvesting Systems | RR-8 | 0.00 | 0.00 | 0 | |
| | Porous Pavement | RR-9 | 0.00 | 0.00 | 0 | |
| | Green Roof (Extensive & Intensive) | RR-10 | 0.00 | 0.00 | 0 | |
| | Stream Daylighting | RR-11 | | | | |
| **Standard SMPs w/ RRv Capacity** | Infiltration Trench | I-1 | 0.00 | 0.00 | 0 | 0 |
| | Infiltration Basin | I-2 | 0.00 | 0.00 | 0 | 0 |
| | Dry Well | I-3 | 0.00 | 0.00 | 0 | 0 |
| | Underground Infiltration System | I-4 | 0.00 | 0.00 | 0 | 0 |
| | Infiltration Bioretention | F-4 | 2.58 | 1.72 | 6,088 | 0 |
| | Filtration Bioretention | F-5 | 0.00 | 0.00 | 0 | 0 |
| | Bioslope | F-6 | 0.00 | 0.00 | 0 | 0 |
| | Dry swale | O-1 | 0.00 | 0.00 | 0 | 0 |
| **Standard SMPs** | Micropool Extended Detention | P-1 | 0.97 | 0.26 | | 0 |
| | Wet Pond | P-2 | 0.00 | 0.00 | | 0 |
| | Wet Extended Detention | P-3 | 0.00 | 0.00 | | 0 |
| | Multiple Pond System | P-4 | 0.00 | 0.00 | | 0 |
| | Shallow Wetland | W-1 | 0.00 | 0.00 | | 0 |
| | Extended Detention Shallow Wetland | W-2 | 0.00 | 0.00 | | 0 |
| | Pond/Wetland System | W-3 | 0.00 | 0.00 | | 0 |
| | Pocket Wetland | W-4 | 0.00 | 0.00 | | 0 |
| | Gravel Wetland | W-5 | 0.00 | 0.00 | | 0 |
| | Surface Sand Filter | F-1 | 0.00 | 0.00 | | 0 |
| | Underground Sand Filter | F-2 | 0.00 | 0.00 | | 0 |
| | Perimeter Sand Filter | F-3 | 0.00 | 0.00 | | 0 |
| | Wet Swale | O-2 | 0.00 | 0.00 | | 0 |
| **Alt. SMPs** | Flow Based Alternative Practice | - | 0.97 | 0.26 | | 1,025 |
| | Volume Based Alternative Practice | - | | | | |
| | Totals by RR Technique | → | 0.00 | 0.00 | 0 | |
| | Totals by Standard SMP w/RRV | → | 2.58 | 1.72 | 6,088 | 0 |
| | Totals by Standard SMP | → | 0.97 | 0.26 | | 0 |
| | Totals by Alternative SMP | → | 0.97 | 0.26 | | 1,025 |
| | Totals ( RR Techniques + all SMPs) | → | 4.52 | 2.24 | 6,088 | 1,025 |

# Step 3 - Evaluation of RR Techniques and Standard SMPs with RRv Capacity

| | Practice | Description | Applicable | Project Specific Evaluation |
|---|---|---|---|---|
| RR Techniques | **Conservation of Natural Areas (RR-1)** | Retain the pre-development hydrologic and water quality characteristics of undisturbed natural areas by permanently conserving these areas on a site. Undisturbed natural areas include: forest retention areas; reforestation areas; stream and river corridors; shorelines; wetlands, vernal pools, and associated vegetated buffers; and undisturbed open space. | Yes | As a Redevelopment Project, the proposed site layout has been designed to limit land disturbance to the greatest extent practical. The project does not propose permanent conservation of these areas at this time. |
| | **Sheet Flow to Riparian Buffer/Filter Strip (RR-2)** | Undisturbed natural areas such as forested conservation areas and stream buffers or vegetated filter strips and riparian buffers can be used to treat and control stormwater runoff from some areas of a development project. | Yes | Sheet flow to riparian buffers or grass filter strips is not proposed at this time. The project proposes treatment by RR techniques, Standard SMPs with RRv capacity, or Standard SMPs without RRv capacity. Stream banks other than at the crossing point are proposed to remain undisturbed. |
| | **Tree Planting/Tree Pit/Tree Trench (RR-3)** | Plant or conserve trees to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. Trees can be used for applications such as landscaping, stormwater management practice areas, conservation areas and erosion and sediment control. | Yes | The project proposes the preservation of existing mature trees, as well as the planting of numerous trees throughout the site, in order to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. In addition Tree plantings/tree pits/tree trenches are proposed on site. However, credit for these trees will not be taken toward area reduction/volume reduction in the RRv calculations. |
| | **Disconnection of Rooftop Runoff (RR-4)** | Direct runoff from rooftop areas and upland overland runoff flow to designated pervious areas to reduce runoff volumes and rates. | No | Due to the size of the proposed building(s), rooftop disconnect is not proposed at this time. |
| | **Vegetated Swale (RR-5)** | The natural drainage paths, or properly designed vegetated channels, can be used instead of constructing underground storm sewers or concrete open channels to increase time of concentration, reduce the peak discharge, and provide infiltration. | No | Due to steep topography and limited disturbance efforts vegetated swales are not feasible for use on the project site. |
| | **Rain Garden (RR-6)** | Manage and treat small volumes of stormwater runoff using a conditioned planting soil bed and planting materials to filter runoff stored within a shallow depression. | N/A | Due to the size of contributing area/tributary driveway/tributary roadway, a bioretention facility will be implemented instead of rain gardens. |

# Step 3 - Evaluation of RR Techniques and Standard SMPs with RRv Capacity

| | | | | |
|---|---|---|---|---|
| RR Techniques | **Stormwater Planter (RR-7)** | Small landscaped stormwater treatment devices that can be designed as infiltration or filtering practices. Stormwater planters use soil infiltration and biogeochemical processes to decrease stormwater quantity and improve water quality. | N/A | |
| | **Rainwater Harvesting System (RR-8)** | Capture and store stormwater runoff to be used for irrigation systems or filtered and reused for non-contact activities. | N/A | |
| | **Porous Pavement (RR-9)** | Pervious types of pavements that provide an alternative to conventional paved surfaces, designed to infiltrate rainfall through the surface, thereby reducing stormwater runoff from a site and providing some pollutant uptake in the underlying soils. | No | |
| | **Green Roof (RR-10)** | Capture runoff by a layer of vegetation and soil installed on top of a conventional flat or sloped roof. The rooftop vegetation allows evaporation and evapotranspiration processes to reduce volume and discharge rate of runoff entering conveyance system. | No | The parking below will have portions of the deck that are green, however these are simply calculated as pervious surfaces without credit being taken for green roof in the SWPPP |
| | **Stream Daylighting (RR-11)** | Stream Daylight previously-culverted/piped streams to restore natural habitats, better attenuate runoff by increasing the storage size, promoting infiltration, and help reduce pollutant loads. | No | No stream daylighting opportunities are present on the site. |
| | **Infiltration Trench (I-1)** | An infiltration practice that stores the water quality volume in the void spaces of a gravel trench before it is infiltrated into the ground. | No | |
| | **Infiltration Basin (I-2)** | An infiltration practice that stores the water quality volume in a shallow depression, before it is infiltrated it into the ground. | | EXAMPLES - Due to XX, infiltration basins are not feasible for use on the project site. **OR** An infiltration basin(s) is proposed on-site to treat XX. Calculations have been provided in the SWPPP. |
| | **Dry Well (I-3)** | An infiltration practice similar in design to the infiltration trench, and best suited for treatment of rooftop runoff. | Yes | Dry well(s) are proposed on-site to provide a small amount of storage where the WQv structure is proposed. |

# Step 3 - Evaluation of RR Techniques and Standard SMPs with RRv Capacity

| | | | | |
|---|---|---|---|---|
| Standard SMPs with RRv Capacity | **Underground Infiltration System (I-4)** | An infiltration practice below grade that stores the water quality volume in pre-manufactured pipes, vaults or other modular structures, before it is infiltrated into the ground. | No | |
| | **Infiltration Bioretention (F-4)** | A shallow depression that treats stormwater as it flows through a soil matrix, before it is infiltrated into the ground. | Yes | Infiltration bioretention will be used to treat stormwater. Calculations have been provided in the SWPPP. |
| | **Filtration Bioretention (F-5)** | A shallow depression that treats stormwater as it flows through a soil matrix and is returned to the storm drain system. | No | |
| | **Bioslope (F-6)** | Permeable engineered soil media that is installed along embankments or other slopes, designed to capture and treat stormwater runoff from adjacent paved areas. | No | |
| | **Dry Swale (O-1)** | An open drainage channel or depression explicitly designed to detain and promote the filtration of stormwater runoff into the soil media. | No | |

# Step 4 - Calcuate Minimum RRv Required

| Enter the Soils Data for the entire site | | |
|---|---|---|
| Hydrologic Soil Group | Acres | S |
| A | 4.20 | 55% |
| B | | 40% |
| C | | 30% |
| D | | 20% |
| Total Area | 4.2 | |

| Calculate the Minimum RRv | | |
|---|---|---|
| S = | **0.55** | |
| Impervious = | 1.98 | *acres* |
| Precipitation | 1.00 | *inches* |
| Rv | 0.95 | |
| **Minimum RRv** | **0.086** | ***af*** |
| | 3746 | cf |

# Infiltration Bioretention (F-4)

| Design Point: | Creek |
|---|---|

| Enter Site Data For Drainage Area to be Treated by Practice | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drainage Area Number** | **Contributing Area** (Acres) | **Impervious Area** (Acres) | **Percent Impervious** % | **Rv** | **WQv** (cf) | **Precipitation** (in) | **Description** |
| 1 | 0.99 | 0.81 | 82 | 0.79 | 2,826 | 1.00 | Infiltration Bioretention |

| Design Criteria | | |
|---|---|---|
| Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D) | 1 | |
| Is the contributing area to the practice an "Infiltration Restricted" stormwater hotspot? | No | |
| Is the contributing area to the practice an "Infiltration Prohibited" stormwater hotspot? | No | |
| Is contributing area greater than max. contributing area? | No | |
| Enter depth to seasonal high water table (ft) (4 ft min separation in sole source aquifer) | 5 | |
| Enter depth to bedrock (ft) | 10 | |
| Is pretreatment provided, in conformance with Section 6.4.3.1? | Yes | |
| Enter average height of ponding (ft) | 0.5 | |
| Enter depth of surface layer (inches) | 6 | |
| Enter depth of filter media (ft) | 2.5 | |
| Enter depth of drainage layer (inches) | 12 | |
| Enter slope of maintenance access (%) | 2 | |
| Enter width of maintenance access (ft) | 12 | |

| Sizing Criteria | | | | |
|---|---|---|---|---|
| | | Value | Units | Notes |
| Permeability Flow Rate | k | 1 | ft/day | |
| Filter Time | tf | 2 | days | |
| Required Filter Area | Af | 1178 | sf | |
| Enter Provided Filter Area | Af | 1260 | sf | |

| Calculate Runoff Reduction | | |
|---|---|---|
| **RRv Provided** | **2,826** | ***cf*** |

# Infiltration Bioretention (F-4)

| Design Point: | Creek |
|---|---|

| Enter Site Data For Drainage Area to be Treated by Practice | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Drainage Area Number** | **Contributing Area** (Acres) | **Impervious Area** (Acres) | **Percent Impervious** % | **Rv** | **WQv** (cf) | **Precipitation** (in) | **Description** |
| 2 | 1.59 | 0.91 | 57 | 0.57 | 3,262 | 1.00 | Infiltration Bioretention |

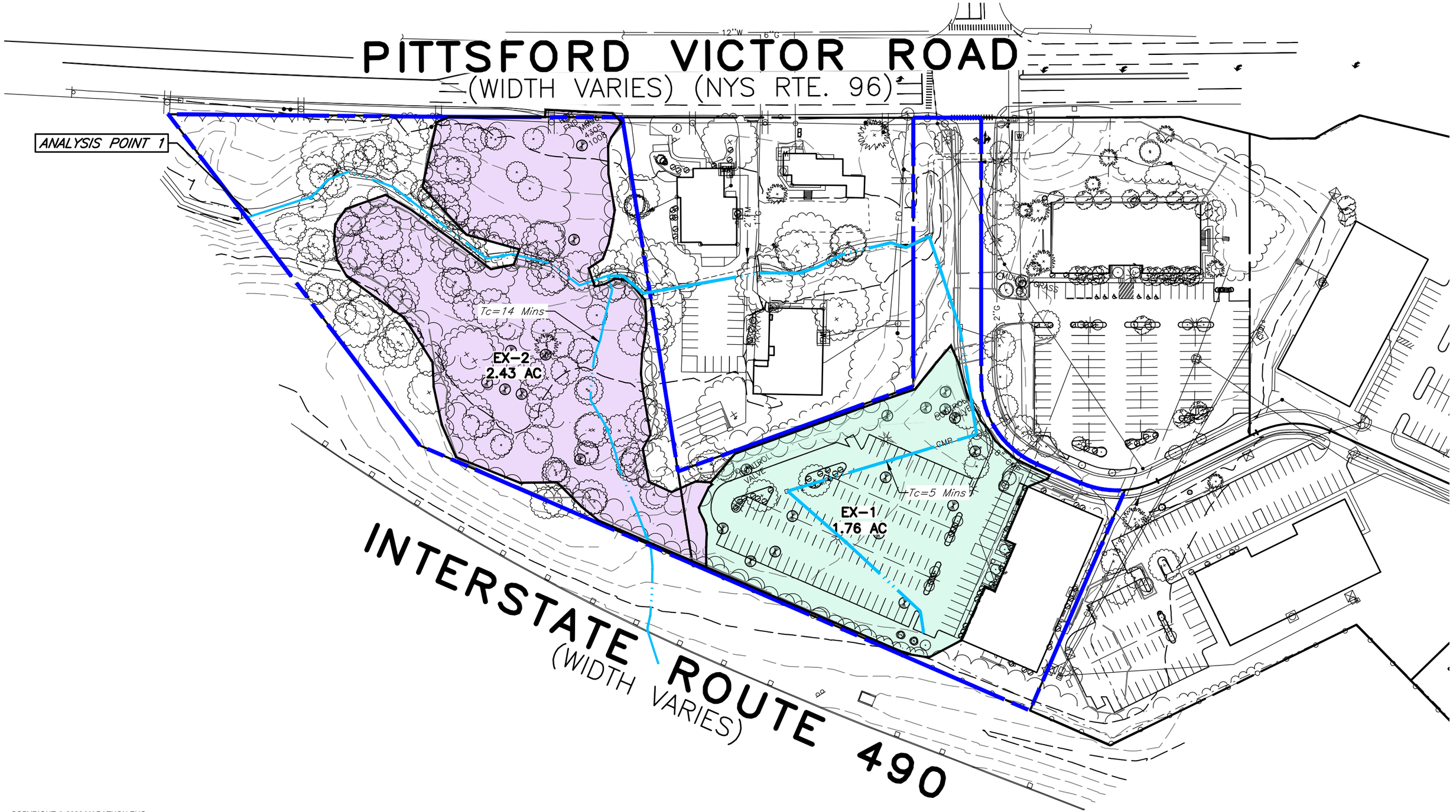
| Design Criteria | | |
|---|---|---|
| Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D) | 1 | |
| Is the contributing area to the practice an "Infiltration Restricted" stormwater hotspot? | No | |
| Is the contributing area to the practice an "Infiltration Prohibited" stormwater hotspot? | No | |
| Is contributing area greater than max. contributing area? | No | |
| Enter depth to seasonal high water table (ft) (4 ft min separation in sole source aquifer) | 10 | |
| Enter depth to bedrock (ft) | 12 | |
| Is pretreatment provided, in conformance with Section 6.4.3.1? | Yes | |
| Enter average height of ponding (ft) | 0.5 | |
| Enter depth of surface layer (inches) | 12 | |
| Enter depth of filter media (ft) | 2.5 | |
| Enter depth of drainage layer (inches) | 12 | |
| Enter slope of maintenance access (%) | 2 | |
| Enter width of maintenance access (ft) | 12 | |

| Sizing Criteria | | | | |
|---|---|---|---|---|
| | | Value | Units | Notes |
| Permeability Flow Rate | k | 1 | ft/day | |
| Filter Time | tf | 2 | days | |
| Required Filter Area | Af | 1360 | sf | |
| Enter Provided Filter Area | Af | 1450 | sf | |

| Calculate Runoff Reduction | | |
|---|---|---|
| **RRv Provided** | **3,262** | ***cf*** |

# Appendix K

## HydroCAD Analysis




File: Z:\Engineering\Job Files\1780-24\Drawings, Plot Date: 9/10/2026, By: MTOMLINSON

COPYRIGHT © 2026 MARATHON ENG.

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

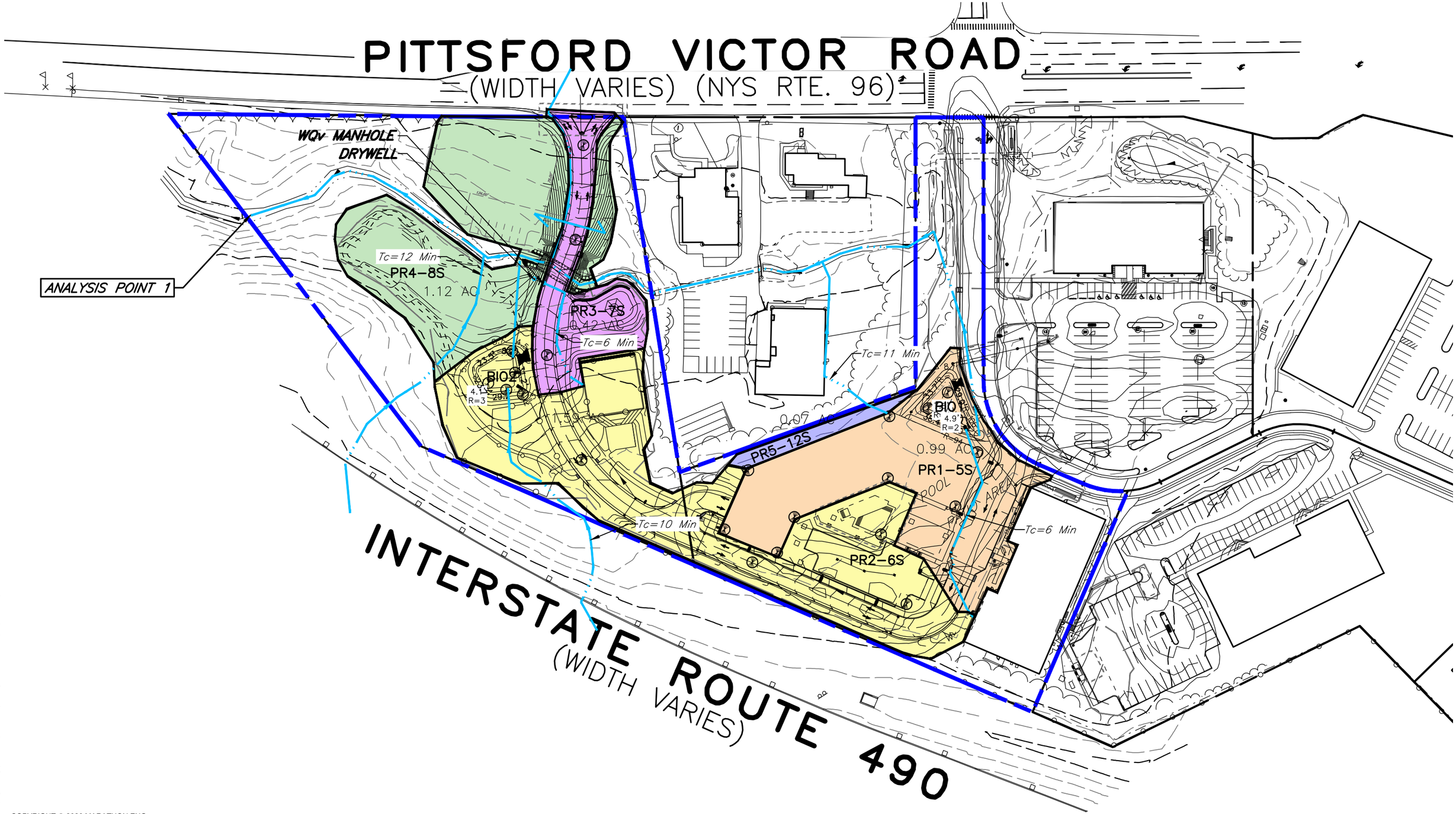
| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1" = 100' |
| DRAWN: | RLB |
| DESIGNED: | MT |
| DATE: | 05/08/2026 |

NORTH

# PRE-DEVELOPMENT DRAINAGE MAP

## THE PLACE AT WILLOWBROOK

TOWN OF PERINTON // MONROE COUNTY // STATE OF NEW YORK




File: Z:\Engineering\Job Files\1780-24\Drawings, Plot Date: 9/10/2026, By: MTOMLINSON

COPYRIGHT © 2026 MARATHON ENG.

MARATHON ENGINEERING
ROCHESTER LOCATION
39 CASCADE DRIVE
ROCHESTER, NY 14614
585-458-7770
ITHACA LOCATION
840 HANSHAW RD, STE 6
ITHACA, NY 14850
607-241-2917
www.marathoneng.com

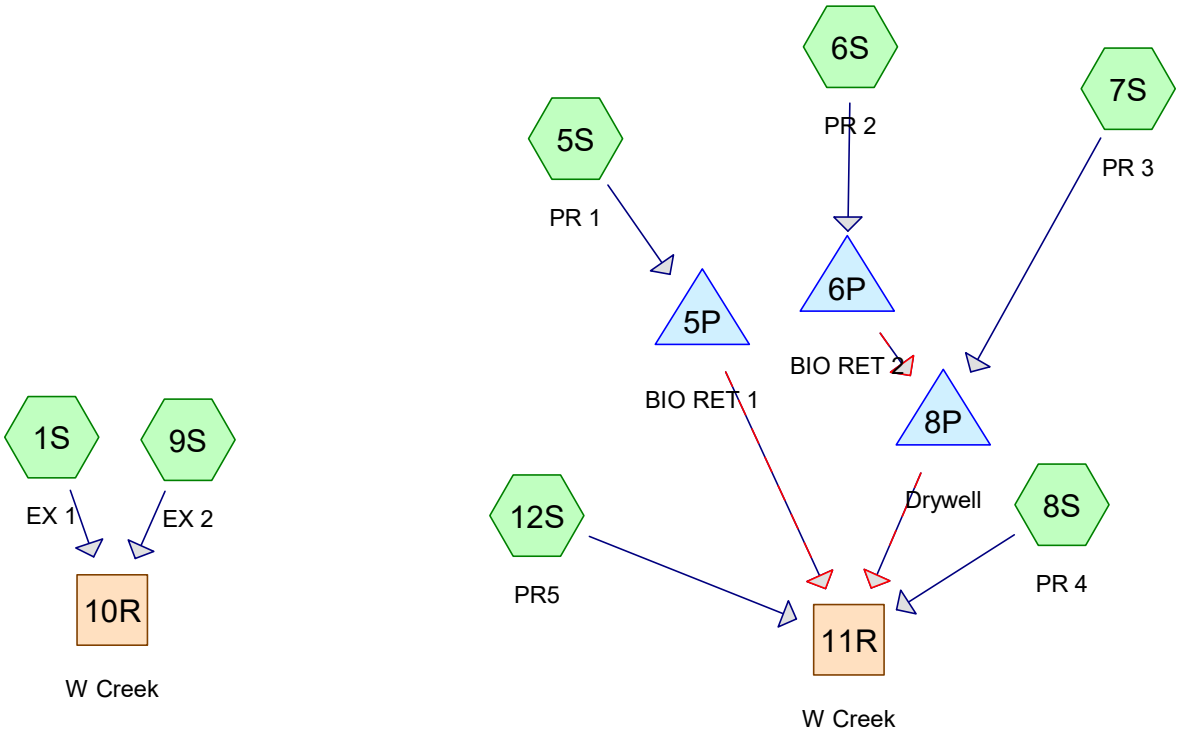
| | |
|---|---|
| JOB NO: | 1780-26 |
| SCALE: | 1" = 100' |
| DRAWN: | RLB |
| DESIGNED: | MT |
| DATE: | 05/08/2026 |

NORTH

# POST-DEVELOPMENT DRAINAGE MAP

## THE PLACE AT WILLOWBROOK

TOWN OF PERINTON // MONROE COUNTY // STATE OF NEW YORK




Subcat Reach Pond Link

**Routing Diagram for 1780-26 HydroCAD - MT Model**
Prepared by Marathon Engineering, Printed 9/8/2026
HydroCAD® 10.10-6a s/n 05610 © 2020 HydroCAD Software Solutions LLC

## Project Notes

Defined 4 rainfall events from NY-Perinton IDF
Defined 2 rainfall events from NY-Perinton IDF

## Rainfall Events Listing (selected events)

| Event# | Event Name | Storm Type | Curve | Mode | Duration (hours) | B/B | Depth (inches) | AMC |
|---|---|---|---|---|---|---|---|---|
| 1 | 1-yr | Type II 24-hr | | Default | 24.00 | 1 | 1.86 | 2 |
| 2 | 10-yr | Type II 24-hr | | Default | 24.00 | 1 | 3.12 | 2 |
| 3 | 100-yr | Type II 24-hr | | Default | 24.00 | 1 | 5.26 | 2 |

## Area Listing (selected nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 3.230 | 39 | >75% Grass cover, Good, HSG A (1S, 5S, 6S, 7S, 8S, 9S, 12S) |
| 3.110 | 98 | Paved parking, HSG A (1S, 5S, 6S, 7S) |
| 2.050 | 36 | Woods, Fair, HSG A (9S) |
| **8.390** | **60** | **TOTAL AREA** |

## Soil Listing (selected nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 8.390 | HSG A | 1S, 5S, 6S, 7S, 8S, 9S, 12S |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 0.000 | HSG D | |
| 0.000 | Other | |
| **8.390** | | **TOTAL AREA** |

## Ground Covers (selected nodes)

| HSG-A (acres) | HSG-B (acres) | HSG-C (acres) | HSG-D (acres) | Other (acres) | Total (acres) | Ground Cover | Subcatchment Numbers |
|---|---|---|---|---|---|---|---|
| 3.230 | 0.000 | 0.000 | 0.000 | 0.000 | 3.230 | >75% Grass cover, Good | 1S, 5S, 6S, 7S, 8S, 9S, 12S |
| 3.110 | 0.000 | 0.000 | 0.000 | 0.000 | 3.110 | Paved parking | 1S, 5S, 6S, 7S |
| 2.050 | 0.000 | 0.000 | 0.000 | 0.000 | 2.050 | Woods, Fair | 9S |
| **8.390** | **0.000** | **0.000** | **0.000** | **0.000** | **8.390** | **TOTAL AREA** | |

## Pipe Listing (selected nodes)

| Line# | Node Number | In-Invert (feet) | Out-Invert (feet) | Length (feet) | Slope (ft/ft) | n | Width (inches) | Diam/Height (inches) | Inside-Fill (inches) |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1S | 0.00 | 0.00 | 448.0 | 0.0100 | 0.010 | 0.0 | 12.0 | 0.0 |
| 2 | 5P | 611.00 | 608.00 | 20.0 | 0.1500 | 0.013 | 0.0 | 12.0 | 0.0 |
| 3 | 6P | 593.00 | 589.19 | 92.0 | 0.0414 | 0.013 | 0.0 | 12.0 | 0.0 |
| 4 | 8P | 588.80 | 583.95 | 13.0 | 0.3731 | 0.013 | 0.0 | 12.0 | 0.0 |

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: EX 1** Runoff Area=1.760 ac 63.64% Impervious Runoff Depth>0.37"
Flow Length=1,504' Tc=6.0 min CN=77 Runoff=1.05 cfs 0.055 af

**Subcatchment 5S: PR 1** Runoff Area=0.990 ac 81.82% Impervious Runoff Depth>0.80"
Tc=6.0 min CN=87 Runoff=1.38 cfs 0.066 af

**Subcatchment 6S: PR 2** Runoff Area=1.600 ac 57.50% Impervious Runoff Depth>0.26"
Flow Length=317' Tc=9.9 min CN=73 Runoff=0.47 cfs 0.035 af

**Subcatchment 7S: PR 3** Runoff Area=0.420 ac 61.90% Impervious Runoff Depth>0.34"
Tc=6.0 min CN=76 Runoff=0.23 cfs 0.012 af

**Subcatchment 8S: PR 4** Runoff Area=1.120 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=305' Tc=11.6 min CN=39 Runoff=0.00 cfs 0.000 af

**Subcatchment 9S: EX 2** Runoff Area=2.430 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=894' Tc=13.8 min CN=36 Runoff=0.00 cfs 0.000 af

**Subcatchment 12S: PR5** Runoff Area=0.070 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=242' Tc=10.7 min CN=39 Runoff=0.00 cfs 0.000 af

**Reach 10R: W Creek** Avg. Flow Depth=0.09' Max Vel=1.63 fps Inflow=1.05 cfs 0.055 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=0.89 cfs 0.055 af

**Reach 11R: W Creek** Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=0.00 cfs 0.000 af

**Pond 5P: BIO RET 1** Peak Elev=614.44' Storage=1,734 cf Inflow=1.38 cfs 0.066 af
Discarded=0.03 cfs 0.032 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.032 af

**Pond 6P: BIO RET 2** Peak Elev=593.92' Storage=532 cf Inflow=0.47 cfs 0.035 af
Discarded=0.03 cfs 0.033 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.03 cfs 0.033 af

**Pond 8P: Drywell** Peak Elev=588.55' Storage=269 cf Inflow=0.23 cfs 0.012 af
Discarded=0.01 cfs 0.007 af Primary=0.00 cfs 0.000 af Secondary=0.00 cfs 0.000 af Outflow=0.01 cfs 0.007 af

**Total Runoff Area = 8.390 ac Runoff Volume = 0.167 af Average Runoff Depth = 0.24"**
**62.93% Pervious = 5.280 ac 37.07% Impervious = 3.110 ac**

## Summary for Subcatchment 1S: EX 1

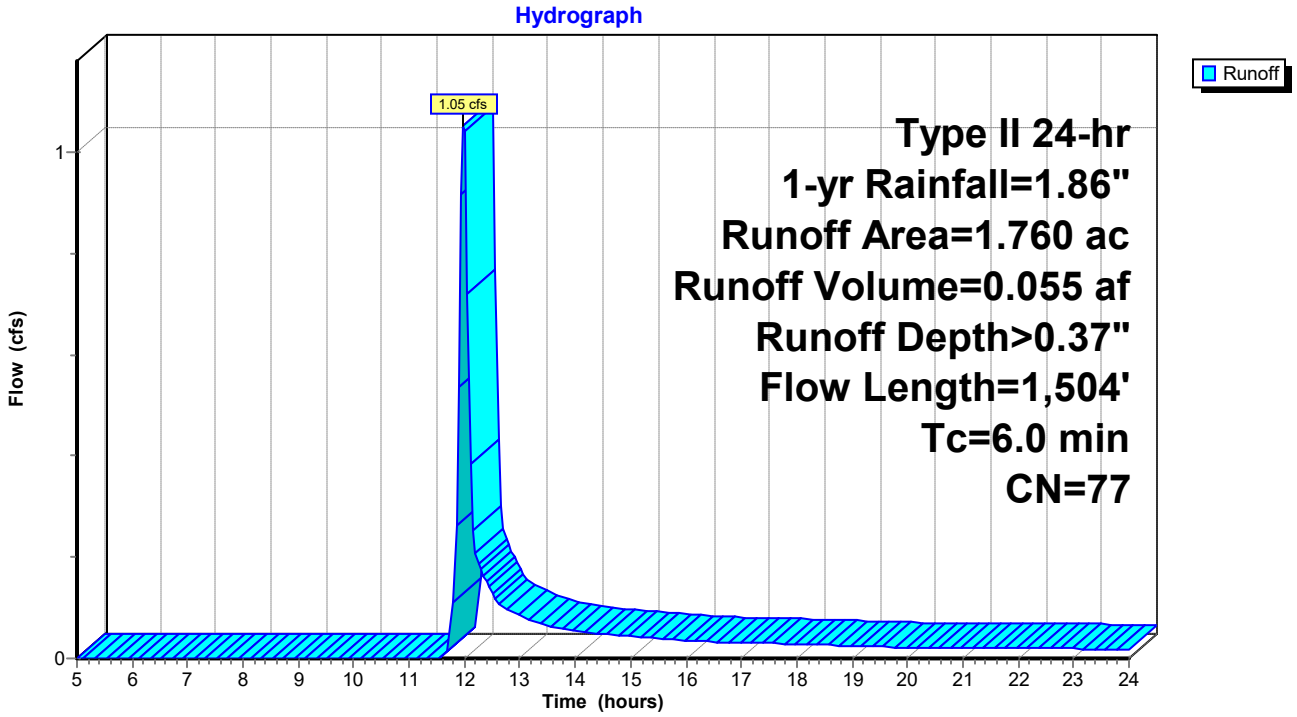
Runoff = 1.05 cfs @ 11.99 hrs, Volume= 0.055 af, Depth> 0.37"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 98 | Paved parking, HSG A |
| 0.640 | 39 | >75% Grass cover, Good, HSG A |
| 1.760 | 77 | Weighted Average |
| 0.640 | | 36.36% Pervious Area |
| 1.120 | | 63.64% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.1 | 100 | 0.0400 | 1.49 | | **Sheet Flow, Parking Lot**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 0.5 | 124 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Parking Lot**<br>Paved Kv= 20.3 fps |
| 1.3 | 448 | 0.0100 | 5.90 | 4.63 | **Pipe Channel, Sewer**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.010 PVC, smooth interior |
| 1.6 | 832 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow, Stream**<br>Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20'<br>n= 0.025 Earth, clean & winding |
| 4.5 | 1,504 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 1S: EX 1



## Summary for Subcatchment 5S: PR 1

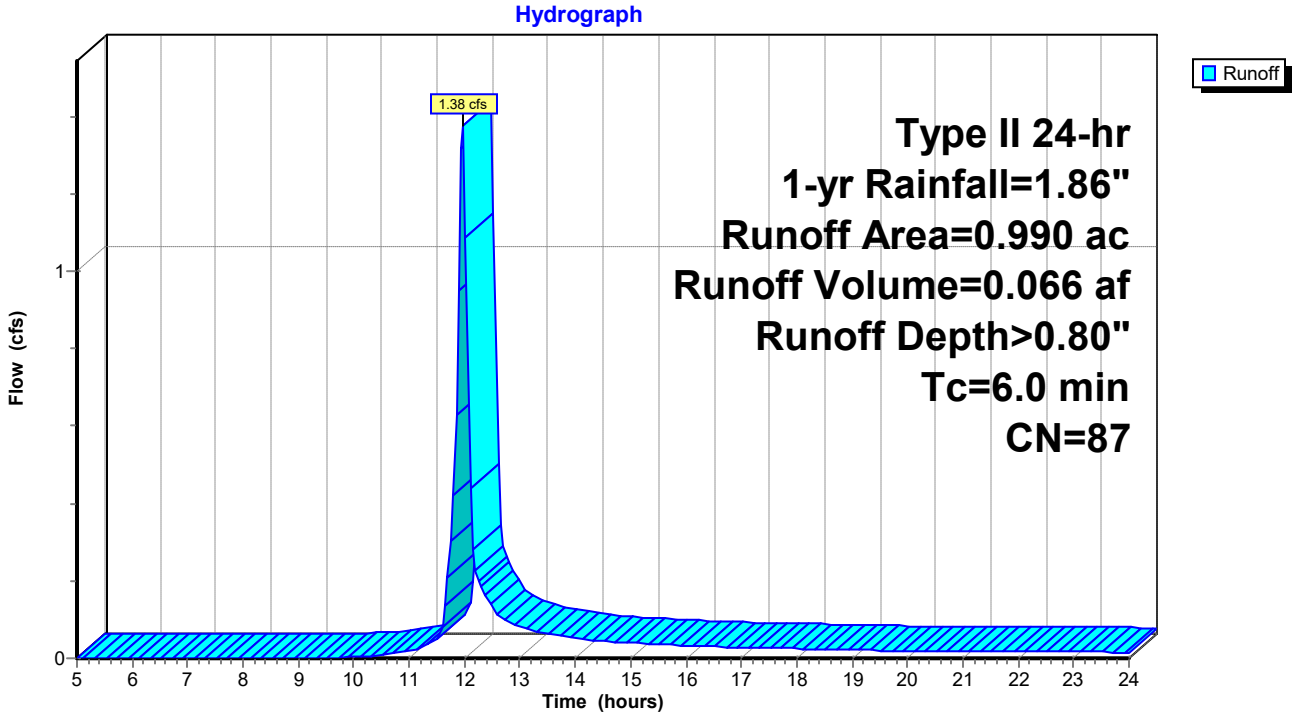
Runoff = 1.38 cfs @ 11.98 hrs, Volume= 0.066 af, Depth> 0.80"
Routed to Pond 5P : BIO RET 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 0.180 | 39 | >75% Grass cover, Good, HSG A |
| 0.810 | 98 | Paved parking, HSG A |
| 0.990 | 87 | Weighted Average |
| 0.180 | | 18.18% Pervious Area |
| 0.810 | | 81.82% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment 5S: PR 1



## Summary for Subcatchment 6S: PR 2

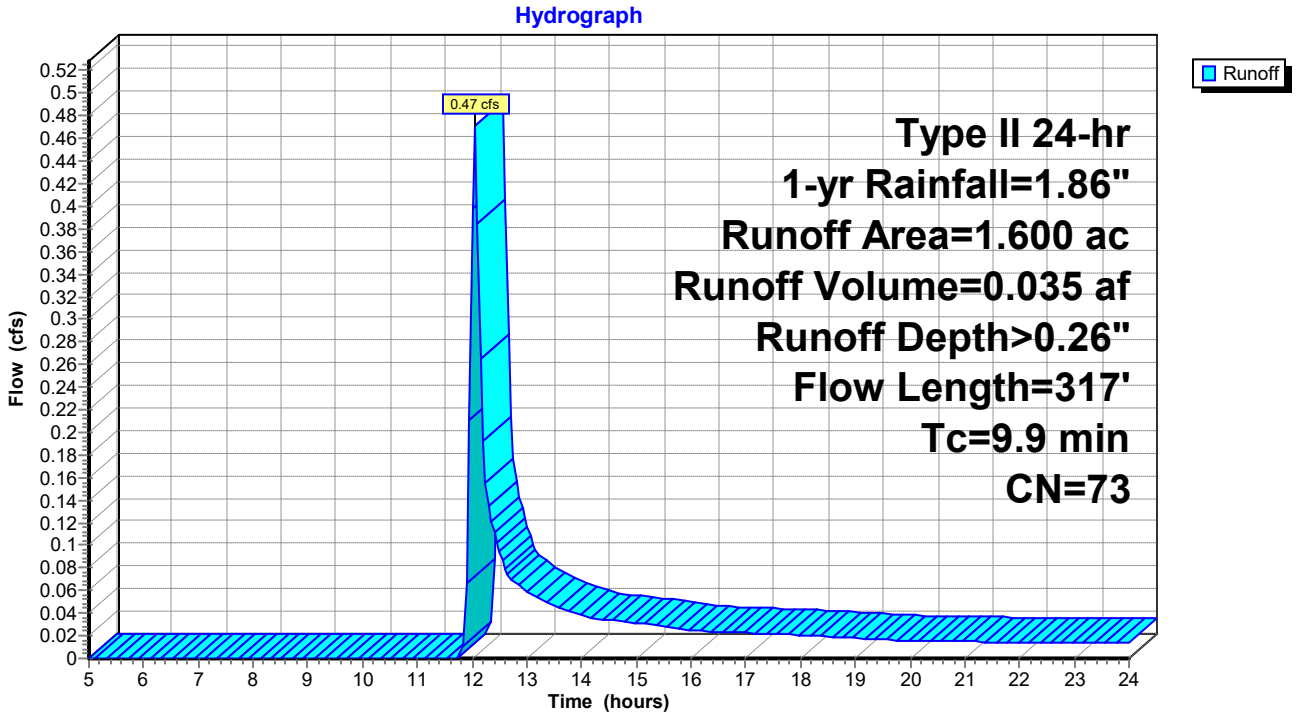
Runoff = 0.47 cfs @ 12.05 hrs, Volume= 0.035 af, Depth> 0.26"
Routed to Pond 6P : BIO RET 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 0.920 | 98 | Paved parking, HSG A |
| 0.680 | 39 | >75% Grass cover, Good, HSG A |
| 1.600 | 73 | Weighted Average |
| 0.680 | | 42.50% Pervious Area |
| 0.920 | | 57.50% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway** Smooth surfaces n= 0.011 P2= 2.17" |
| 6.5 | 70 | 0.3130 | 0.18 | | **Sheet Flow, Sheet Flow through Grass** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.3 | 30 | 0.1200 | 1.73 | | **Shallow Concentrated Flow, Drain to shallow grass** Woodland Kv= 5.0 fps |
| 2.0 | 117 | 0.0200 | 0.99 | | **Shallow Concentrated Flow, Grass area** Short Grass Pasture Kv= 7.0 fps |
| 0.4 | 50 | 0.0900 | 2.10 | | **Shallow Concentrated Flow, Sidewalk to Retention Area** Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 20 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, side of swmf** Short Grass Pasture Kv= 7.0 fps |
| 9.9 | 317 | Total | | | |

## Subcatchment 6S: PR 2



## Summary for Subcatchment 7S: PR 3

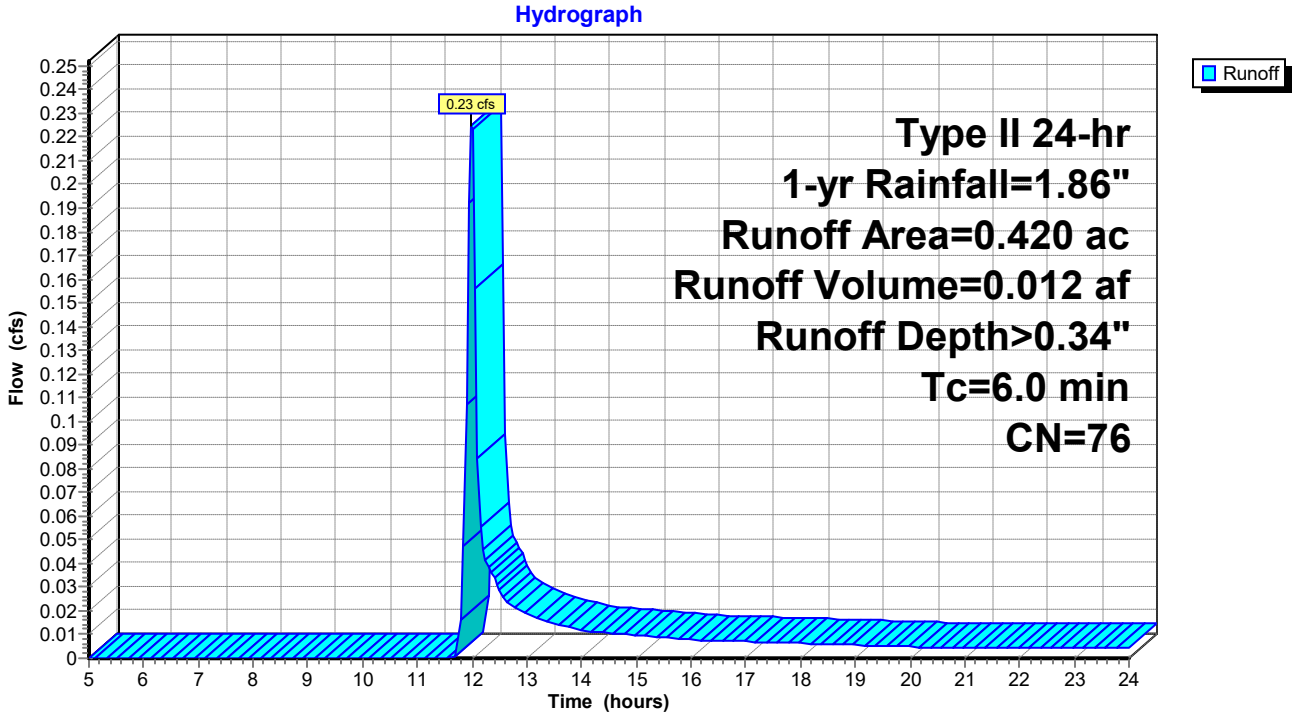
Runoff = 0.23 cfs @ 11.99 hrs, Volume= 0.012 af, Depth> 0.34"
Routed to Pond 8P : Drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 0.160 | 39 | >75% Grass cover, Good, HSG A |
| 0.260 | 98 | Paved parking, HSG A |
| 0.420 | 76 | Weighted Average |
| 0.160 | | 38.10% Pervious Area |
| 0.260 | | 61.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment 7S: PR 3



## Summary for Subcatchment 8S: PR 4

[45] Hint: Runoff=Zero

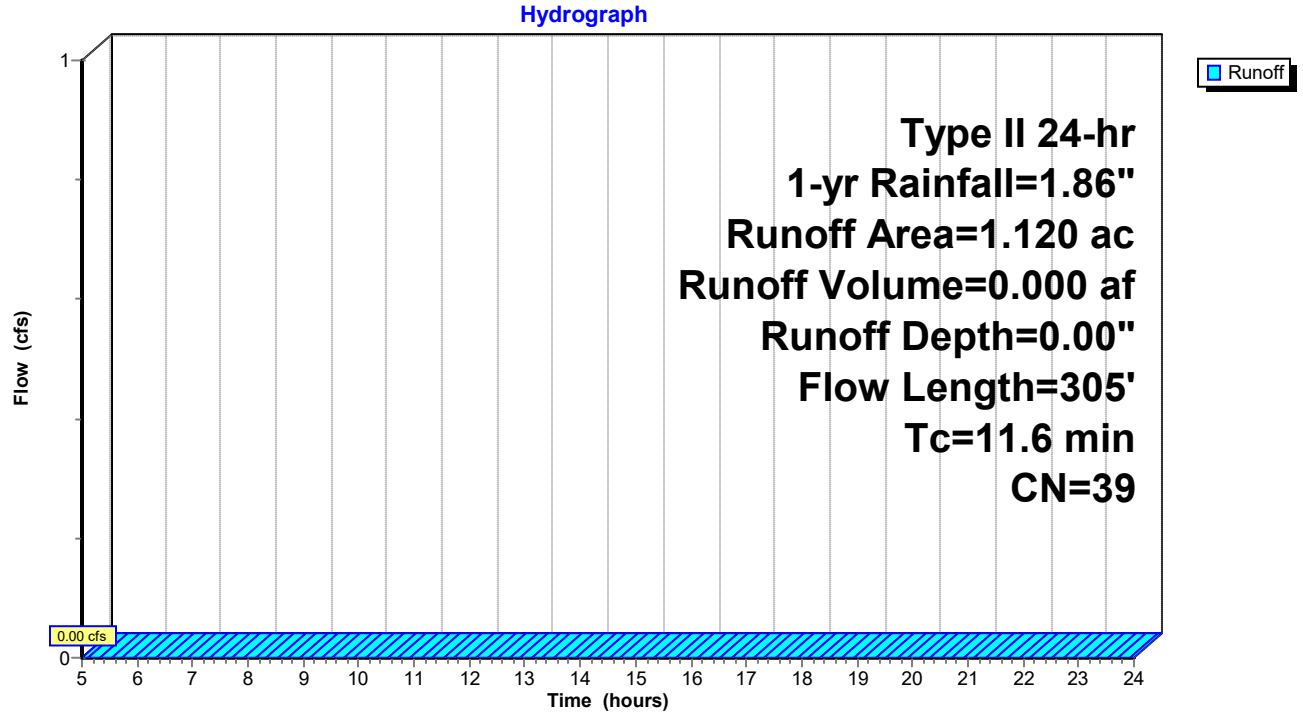
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 39 | >75% Grass cover, Good, HSG A |
| 1.120 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.6 | 75 | 0.2000 | 2.24 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.8 | 130 | 0.1500 | 2.71 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 11.6 | 305 | Total | | | |

## Subcatchment 8S: PR 4



## Summary for Subcatchment 9S: EX 2

[45] Hint: Runoff=Zero

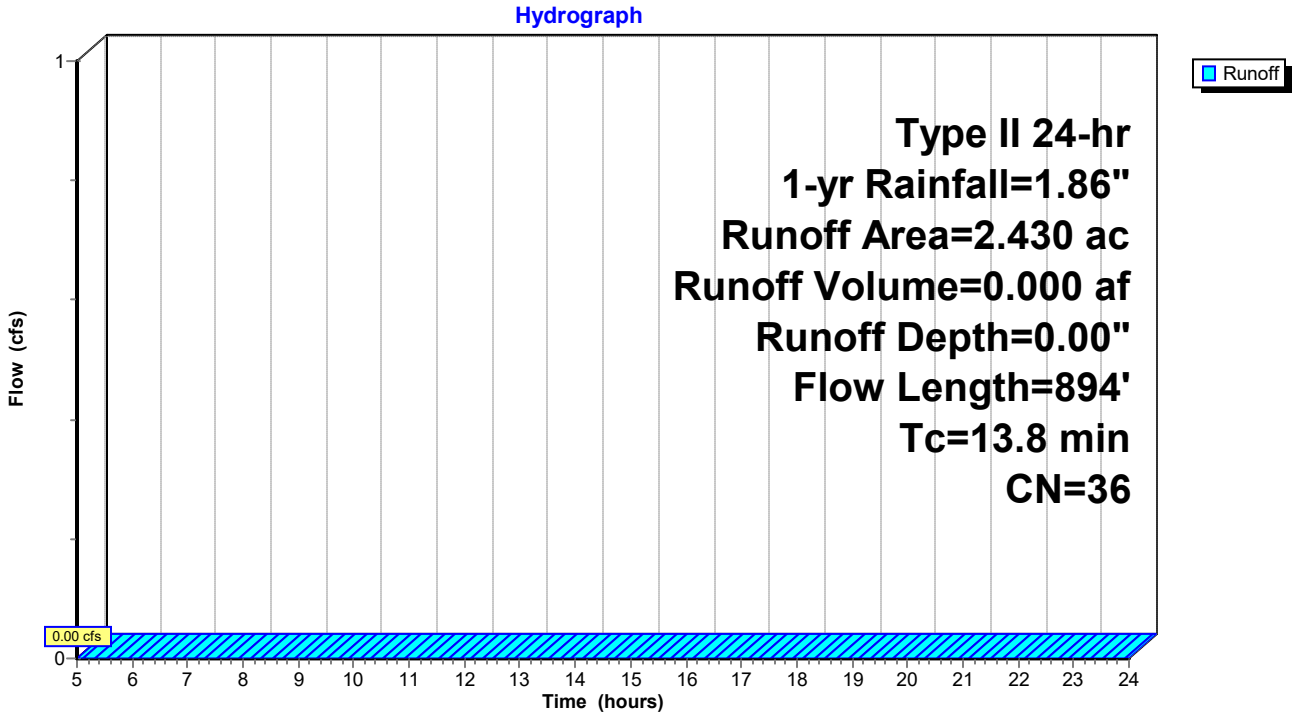
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 2.050 | 36 | Woods, Fair, HSG A |
| 0.380 | 39 | >75% Grass cover, Good, HSG A |
| 2.430 | 36 | Weighted Average |
| 2.430 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow, Woods**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.7 | 340 | 0.1700 | 2.06 | | **Shallow Concentrated Flow, Woods**<br>Woodland Kv= 5.0 fps |
| 0.9 | 454 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow,**<br>Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20'<br>n= 0.025 Earth, clean & winding |
| 13.8 | 894 | Total | | | |

## Subcatchment 9S: EX 2



## Summary for Subcatchment 12S: PR5

[45] Hint: Runoff=Zero

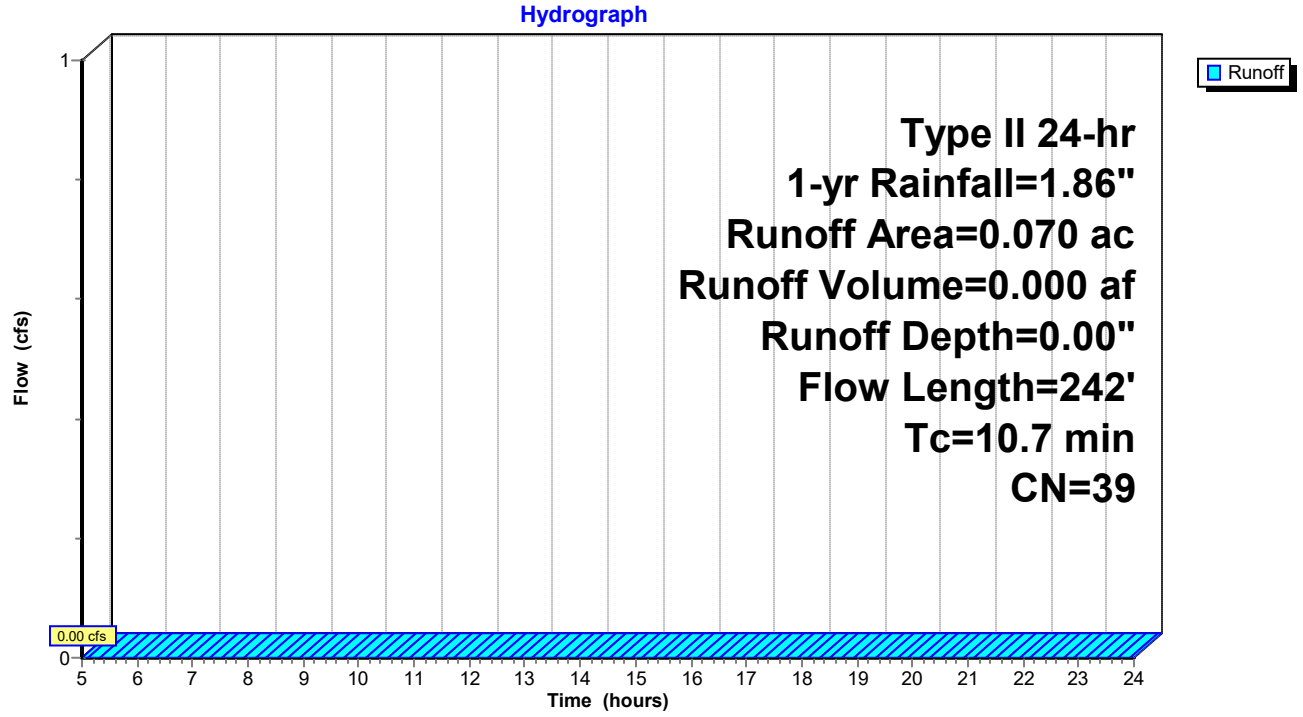
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 1-yr Rainfall=1.86"

| Area (ac) | CN | Description |
|---|---|---|
| 0.070 | 39 | >75% Grass cover, Good, HSG A |
| 0.070 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.6 | 68 | 0.1900 | 0.32 | | **Sheet Flow, grass**<br>Grass: Short n= 0.150 P2= 2.17" |
| 4.4 | 32 | 0.1800 | 0.12 | | **Sheet Flow, Woods**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.5 | 106 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Along Bldg**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 36 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, to creek cl**<br>Short Grass Pasture Kv= 7.0 fps |
| 10.7 | 242 | Total | | | |

### Subcatchment 12S: PR5



## Summary for Reach 10R: W Creek

Inflow Area = 4.190 ac, 26.73% Impervious, Inflow Depth > 0.16" for 1-yr event
Inflow = 1.05 cfs @ 11.99 hrs, Volume= 0.055 af
Outflow = 0.89 cfs @ 12.09 hrs, Volume= 0.055 af, Atten= 16%, Lag= 6.0 min

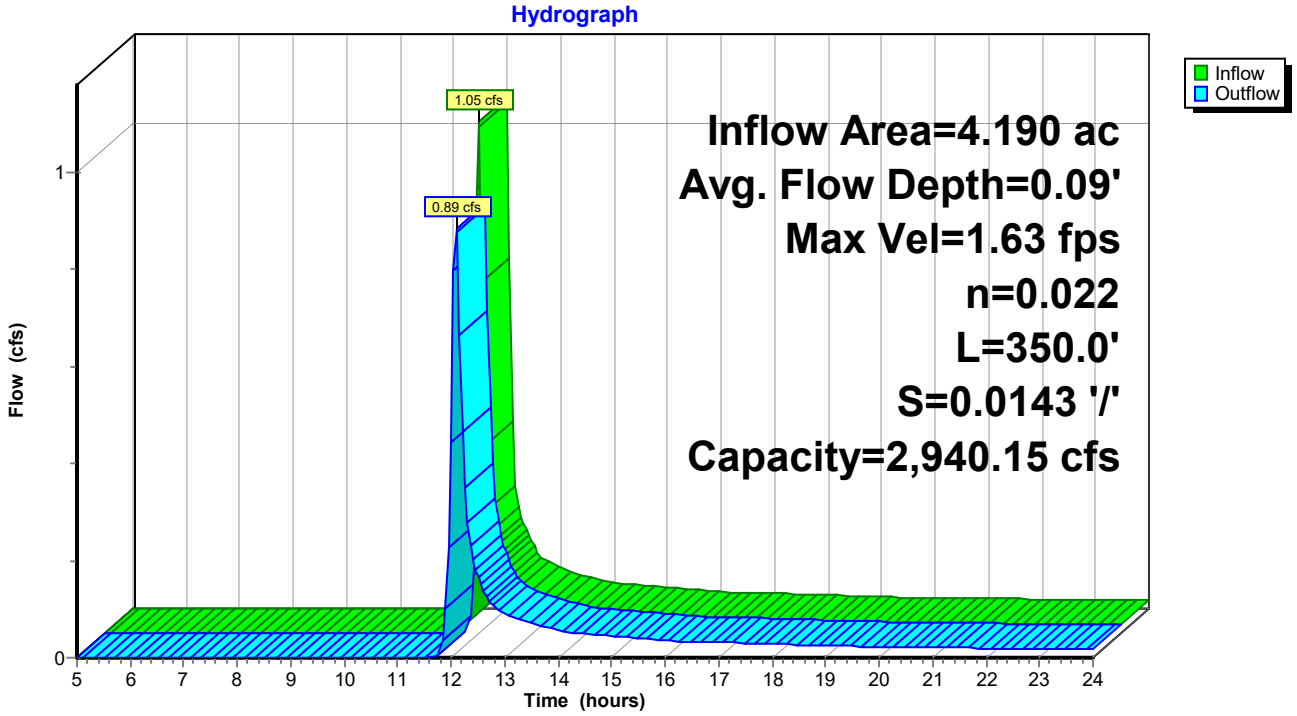
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.63 fps, Min. Travel Time= 3.6 min
Avg. Velocity = 1.28 fps, Avg. Travel Time= 4.6 min

Peak Storage= 193 cf @ 12.03 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 6.49'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



### Reach 10R: W Creek



## Summary for Reach 11R: W Creek

Inflow Area = 4.200 ac, 47.38% Impervious, Inflow Depth = 0.00" for 1-yr event
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

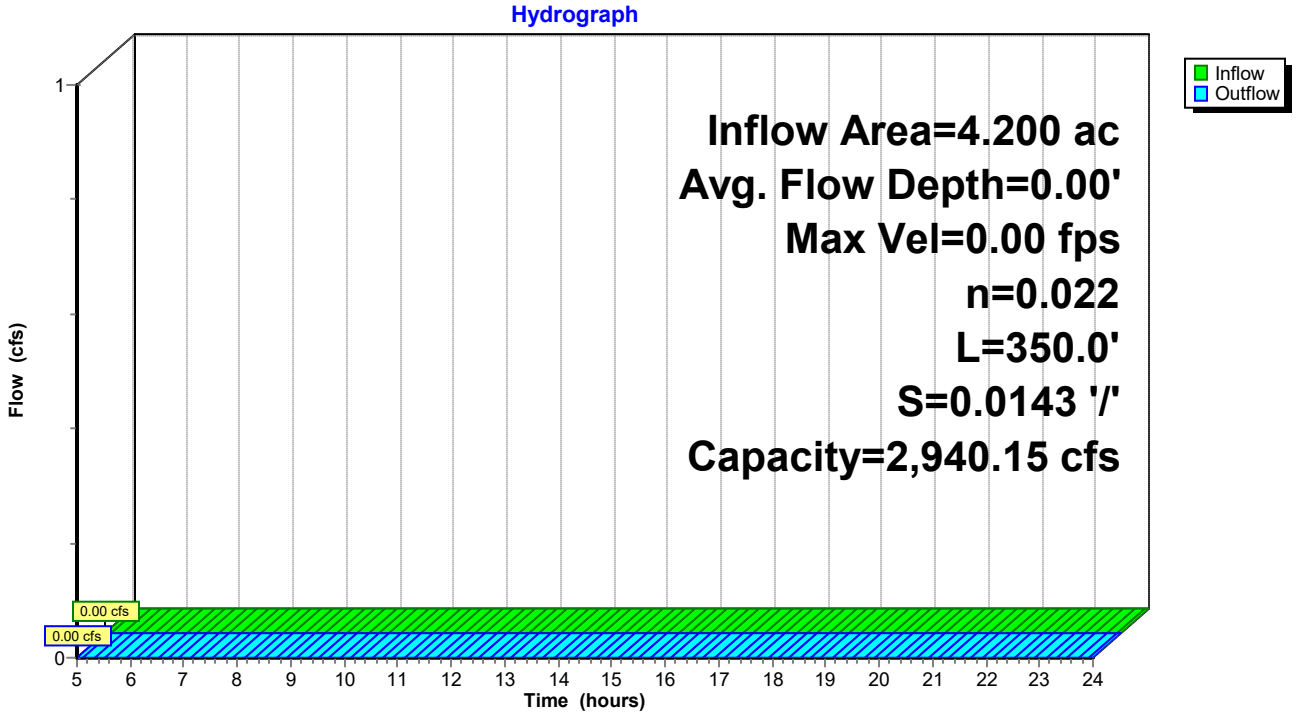
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 5.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



### Reach 11R: W Creek



## Summary for Pond 5P: BIO RET 1

Inflow Area = 0.990 ac, 81.82% Impervious, Inflow Depth > 0.80" for 1-yr event
Inflow = 1.38 cfs @ 11.98 hrs, Volume= 0.066 af
Outflow = 0.03 cfs @ 11.50 hrs, Volume= 0.032 af, Atten= 98%, Lag= 0.0 min
Discarded = 0.03 cfs @ 11.50 hrs, Volume= 0.032 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 614.44' @ 16.64 hrs Surf.Area= 1,260 sf Storage= 1,734 cf

Plug-Flow detention time= 336.3 min calculated for 0.032 af (48% of inflow)
Center-of-Mass det. time= 208.8 min ( 1,049.0 - 840.1 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 611.00' | 2,268 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,670 cf Overall x 40.0% Voids |
| #2 | 615.50' | 3,930 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,198 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 611.00 | 1,260 | 0 | 0 |
| 615.50 | 1,260 | 5,670 | 5,670 |

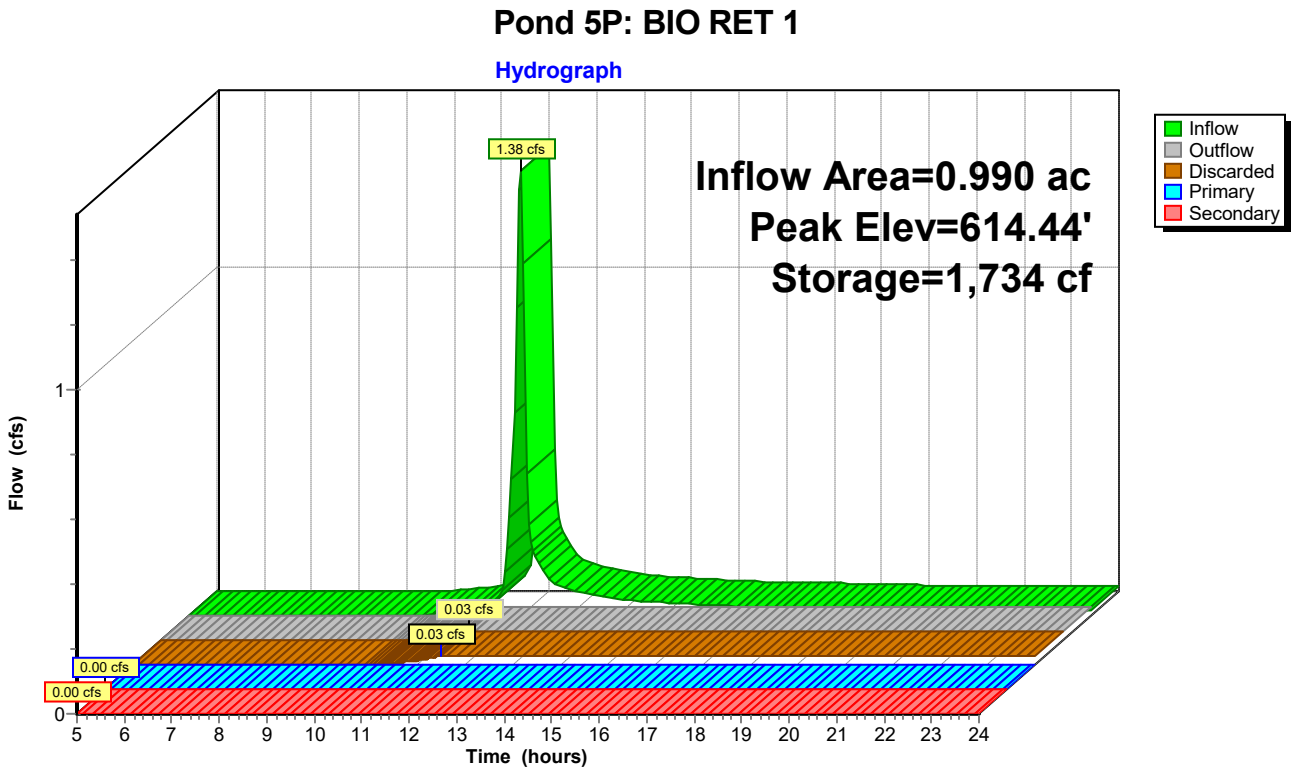
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 615.50 | 1,260 | 0 | 0 |
| 616.00 | 1,620 | 720 | 720 |
| 616.50 | 2,004 | 906 | 1,626 |
| 617.00 | 2,380 | 1,096 | 2,722 |
| 617.50 | 2,450 | 1,208 | 3,930 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 611.00' | **12.0" Round Culvert**<br>L= 20.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 611.00' / 608.00' S= 0.1500 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 615.50' | **7.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 616.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 617.00' | **5.0' long x 0.50' rise Sharp-Crested Rectangular Weir**<br>2 End Contraction(s) 1.0' Crest Height |
| #5 | Discarded | 611.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.03 cfs @ 11.50 hrs HW=611.07' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=611.00' (Free Discharge)
└**1=Culvert** ( Controls 0.00 cfs)
└**2=Orifice/Grate** ( Controls 0.00 cfs)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=611.00' (Free Discharge)
└**4=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)



## Summary for Pond 6P: BIO RET 2

Inflow Area = 1.600 ac, 57.50% Impervious, Inflow Depth > 0.26" for 1-yr event
Inflow = 0.47 cfs @ 12.05 hrs, Volume= 0.035 af
Outflow = 0.03 cfs @ 12.00 hrs, Volume= 0.033 af, Atten= 93%, Lag= 0.0 min
Discarded = 0.03 cfs @ 12.00 hrs, Volume= 0.033 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Pond 8P : Drywell
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Pond 8P : Drywell

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 593.92' @ 14.60 hrs Surf.Area= 1,442 sf Storage= 532 cf

Plug-Flow detention time= 182.0 min calculated for 0.033 af (96% of inflow)
Center-of-Mass det. time= 164.1 min ( 1,078.2 - 914.1 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 593.00' | 2,019 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,047 cf Overall x 40.0% Voids |
| #2 | 596.50' | 4,282 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,300 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 593.00 | 1,442 | 0 | 0 |
| 596.50 | 1,442 | 5,047 | 5,047 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 596.50 | 1,450 | 0 | 0 |
| 597.00 | 1,822 | 818 | 818 |
| 598.00 | 2,500 | 2,161 | 2,979 |
| 598.50 | 2,710 | 1,303 | 4,282 |

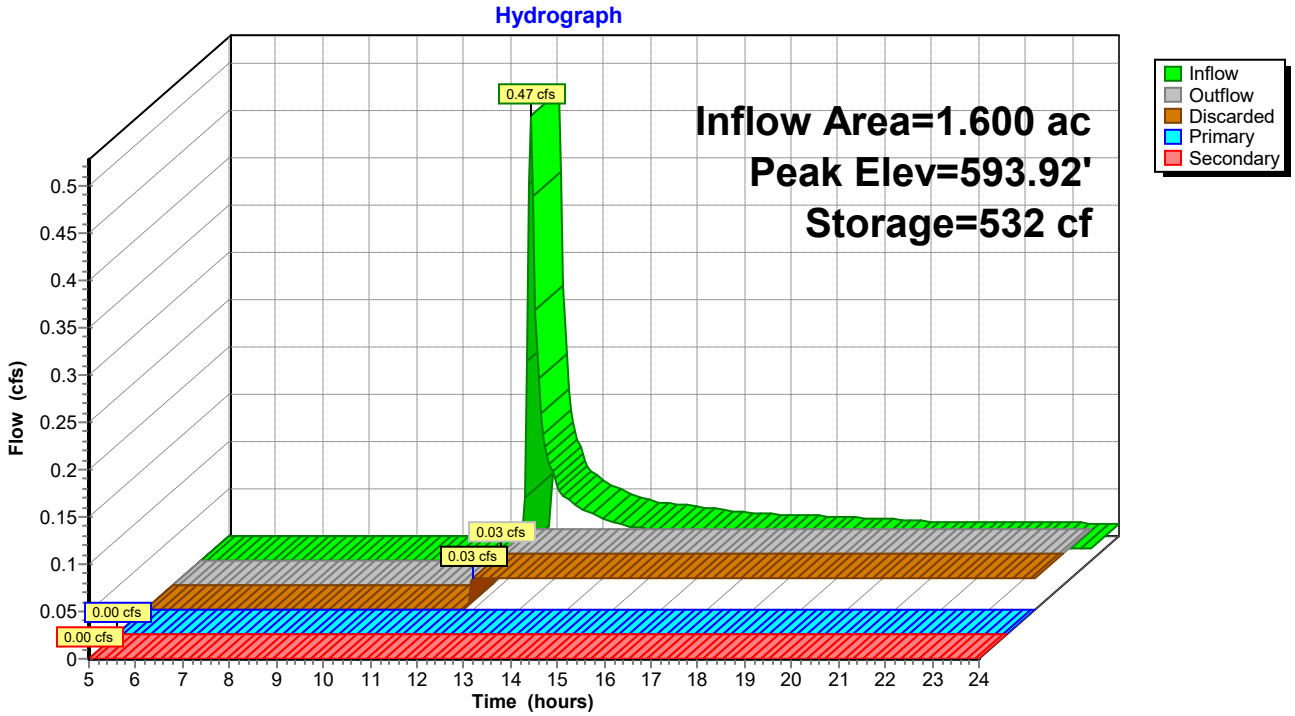
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 593.00' | **12.0" Round Culvert**<br>L= 92.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 593.00' / 589.19' S= 0.0414 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 596.50' | **2.2" W x 12.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 597.80' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 597.80' | **8.5' long + 3.0 '/' SideZ x 15.0' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63 |
| #5 | Discarded | 593.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.03 cfs @ 12.00 hrs HW=593.14' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.03 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=593.00' (Free Discharge)
└**1=Culvert** ( Controls 0.00 cfs)
└**2=Orifice/Grate** ( Controls 0.00 cfs)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=593.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond 6P: BIO RET 2



## Summary for Pond 8P: Drywell

Inflow Area = 2.020 ac, 58.42% Impervious, Inflow Depth > 0.07" for 1-yr event
Inflow = 0.23 cfs @ 11.99 hrs, Volume= 0.012 af
Outflow = 0.01 cfs @ 11.85 hrs, Volume= 0.007 af, Atten= 97%, Lag= 0.0 min
Discarded = 0.01 cfs @ 11.85 hrs, Volume= 0.007 af
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 588.55' @ 17.55 hrs Surf.Area= 145 sf Storage= 269 cf

Plug-Flow detention time= 330.1 min calculated for 0.007 af (56% of inflow)
Center-of-Mass det. time= 182.0 min ( 1,074.9 - 892.8 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 585.00' | 311 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>1,160 cf Overall - 382 cf Embedded = 778 cf x 40.0% Voids |
| #2 | 586.00' | 302 cf | **8.00'D x 6.00'H Vertical Cone/Cylinder** Inside #1<br>382 cf Overall - 6.0" Wall Thickness = 302 cf |
| #3 | 592.90' | 47 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 660 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 585.00 | 145 | 0 | 0 |
| 593.00 | 145 | 1,160 | 1,160 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 592.90 | 6 | 0 | 0 |
| 593.50 | 150 | 47 | 47 |

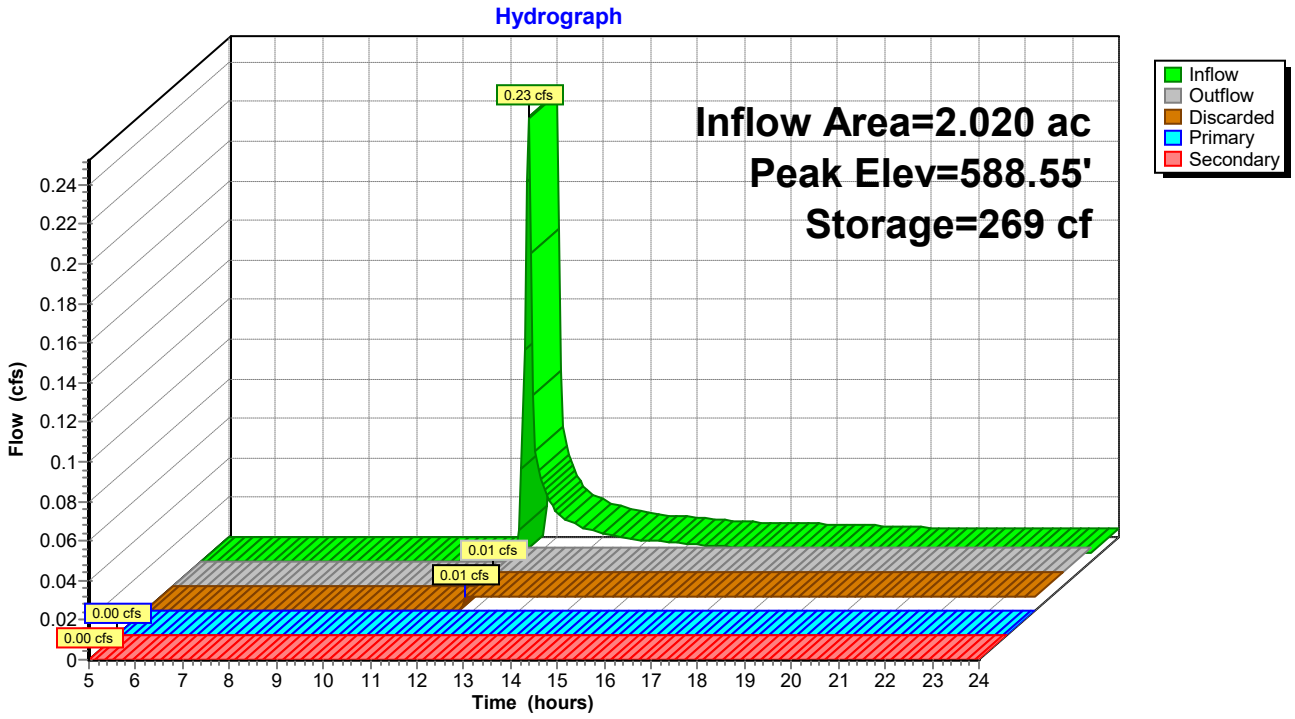
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 588.80' | **12.0" Round Culvert**<br>L= 13.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 588.80' / 583.95' S= 0.3731 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Secondary | 592.90' | **24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Discarded | 585.00' | **2.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.01 cfs @ 11.85 hrs HW=585.11' (Free Discharge)
└**3=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=585.00' (Free Discharge)
└**1=Culvert** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=585.00' (Free Discharge)
└**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond 8P: Drywell



Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: EX 1** Runoff Area=1.760 ac 63.64% Impervious Runoff Depth>1.15"
Flow Length=1,504' Tc=6.0 min CN=77 Runoff=3.53 cfs 0.169 af

**Subcatchment 5S: PR 1** Runoff Area=0.990 ac 81.82% Impervious Runoff Depth>1.84"
Tc=6.0 min CN=87 Runoff=3.11 cfs 0.152 af

**Subcatchment 6S: PR 2** Runoff Area=1.600 ac 57.50% Impervious Runoff Depth>0.93"
Flow Length=317' Tc=9.9 min CN=73 Runoff=2.18 cfs 0.124 af

**Subcatchment 7S: PR 3** Runoff Area=0.420 ac 61.90% Impervious Runoff Depth>1.10"
Tc=6.0 min CN=76 Runoff=0.80 cfs 0.038 af

**Subcatchment 8S: PR 4** Runoff Area=1.120 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=305' Tc=11.6 min CN=39 Runoff=0.00 cfs 0.000 af

**Subcatchment 9S: EX 2** Runoff Area=2.430 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=894' Tc=13.8 min CN=36 Runoff=0.00 cfs 0.000 af

**Subcatchment 12S: PR5** Runoff Area=0.070 ac 0.00% Impervious Runoff Depth=0.00"
Flow Length=242' Tc=10.7 min CN=39 Runoff=0.00 cfs 0.000 af

**Reach 10R: W Creek** Avg. Flow Depth=0.20' Max Vel=2.59 fps Inflow=3.53 cfs 0.169 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=3.25 cfs 0.169 af

**Reach 11R: W Creek** Avg. Flow Depth=0.08' Max Vel=1.58 fps Inflow=0.90 cfs 0.090 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=0.80 cfs 0.090 af

**Pond 5P: BIO RET 1** Peak Elev=615.98' Storage=2,961 cf Inflow=3.11 cfs 0.152 af
Discarded=0.07 cfs 0.056 af Primary=0.56 cfs 0.044 af Secondary=0.00 cfs 0.000 af Outflow=0.63 cfs 0.100 af

**Pond 6P: BIO RET 2** Peak Elev=596.79' Storage=2,472 cf Inflow=2.18 cfs 0.124 af
Discarded=0.07 cfs 0.057 af Primary=0.09 cfs 0.021 af Secondary=0.00 cfs 0.000 af Outflow=0.16 cfs 0.078 af

**Pond 8P: Drywell** Peak Elev=589.25' Storage=327 cf Inflow=0.80 cfs 0.059 af
Discarded=0.01 cfs 0.007 af Primary=0.77 cfs 0.045 af Secondary=0.00 cfs 0.000 af Outflow=0.78 cfs 0.053 af

**Total Runoff Area = 8.390 ac Runoff Volume = 0.483 af Average Runoff Depth = 0.69"**
**62.93% Pervious = 5.280 ac 37.07% Impervious = 3.110 ac**

## Summary for Subcatchment 1S: EX 1

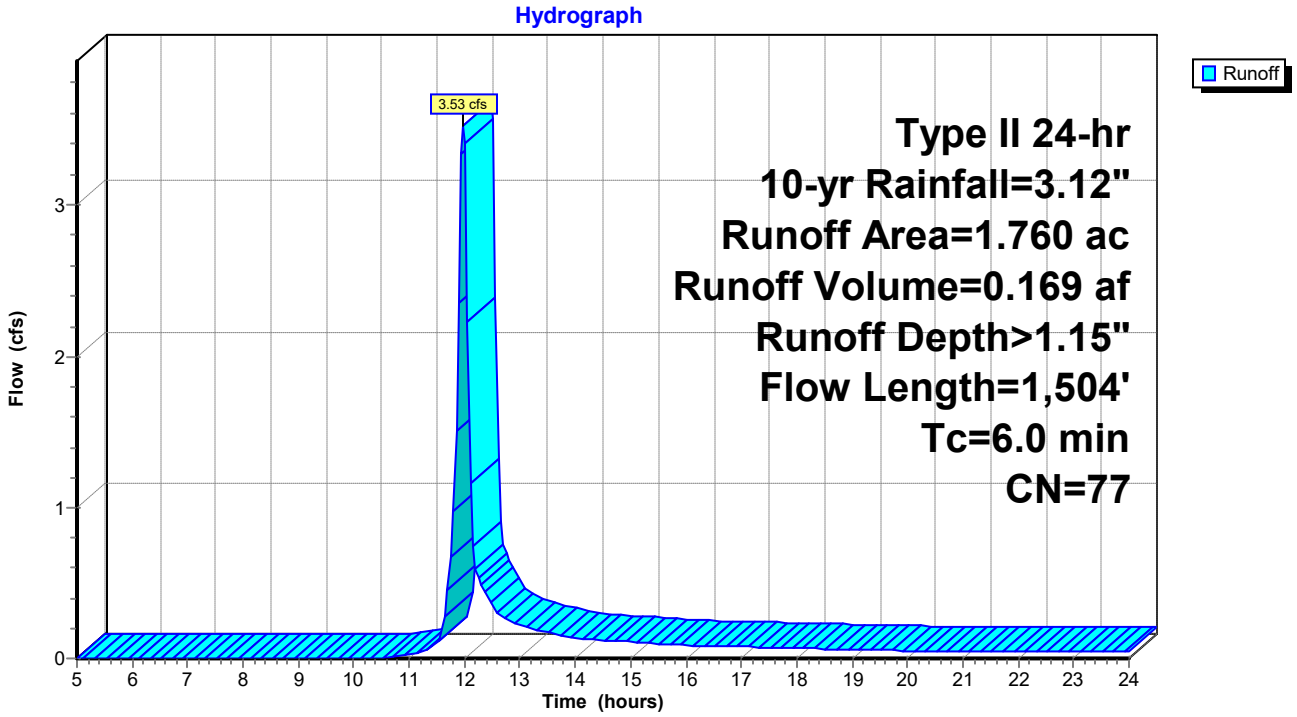
Runoff = 3.53 cfs @ 11.98 hrs, Volume= 0.169 af, Depth> 1.15"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 98 | Paved parking, HSG A |
| 0.640 | 39 | >75% Grass cover, Good, HSG A |
| 1.760 | 77 | Weighted Average |
| 0.640 | | 36.36% Pervious Area |
| 1.120 | | 63.64% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.1 | 100 | 0.0400 | 1.49 | | **Sheet Flow, Parking Lot**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 0.5 | 124 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Parking Lot**<br>Paved Kv= 20.3 fps |
| 1.3 | 448 | 0.0100 | 5.90 | 4.63 | **Pipe Channel, Sewer**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.010 PVC, smooth interior |
| 1.6 | 832 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow, Stream**<br>Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20'<br>n= 0.025 Earth, clean & winding |
| 4.5 | 1,504 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 1S: EX 1



## Summary for Subcatchment 5S: PR 1

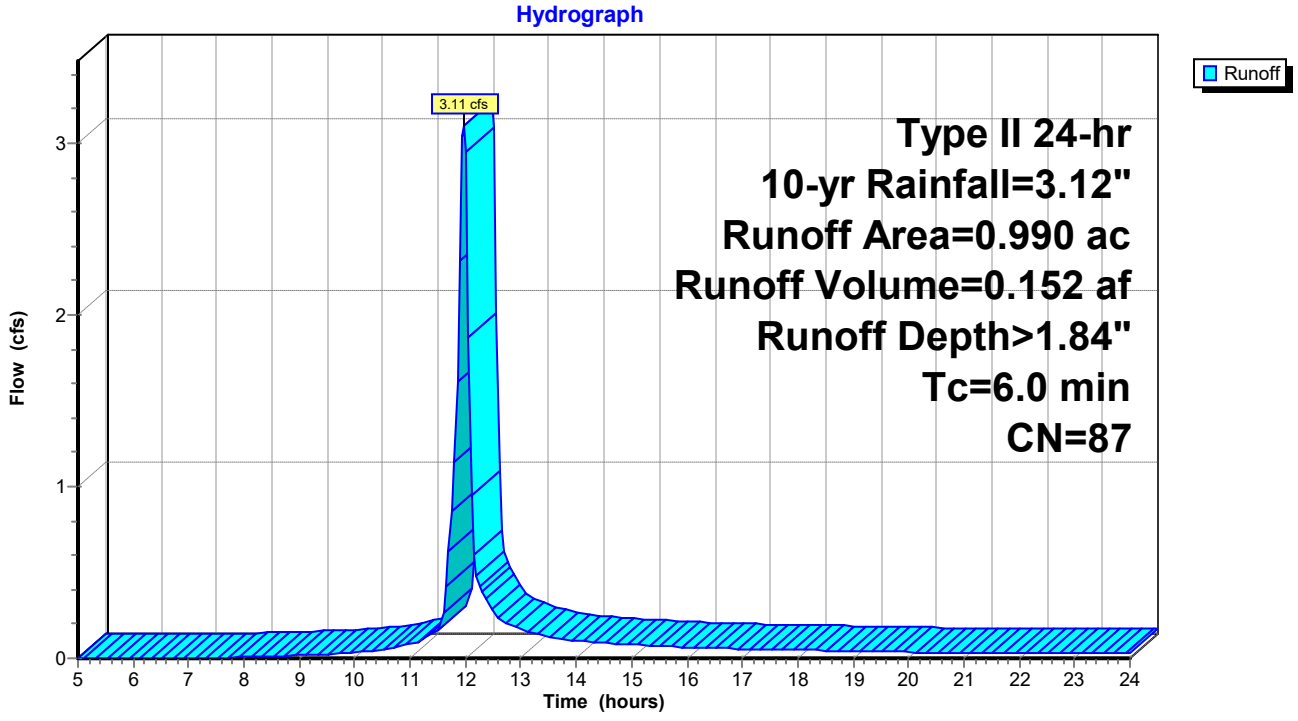
Runoff = 3.11 cfs @ 11.97 hrs, Volume= 0.152 af, Depth> 1.84"
Routed to Pond 5P : BIO RET 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 0.180 | 39 | >75% Grass cover, Good, HSG A |
| 0.810 | 98 | Paved parking, HSG A |
| 0.990 | 87 | Weighted Average |
| 0.180 | | 18.18% Pervious Area |
| 0.810 | | 81.82% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment 5S: PR 1



## Summary for Subcatchment 6S: PR 2

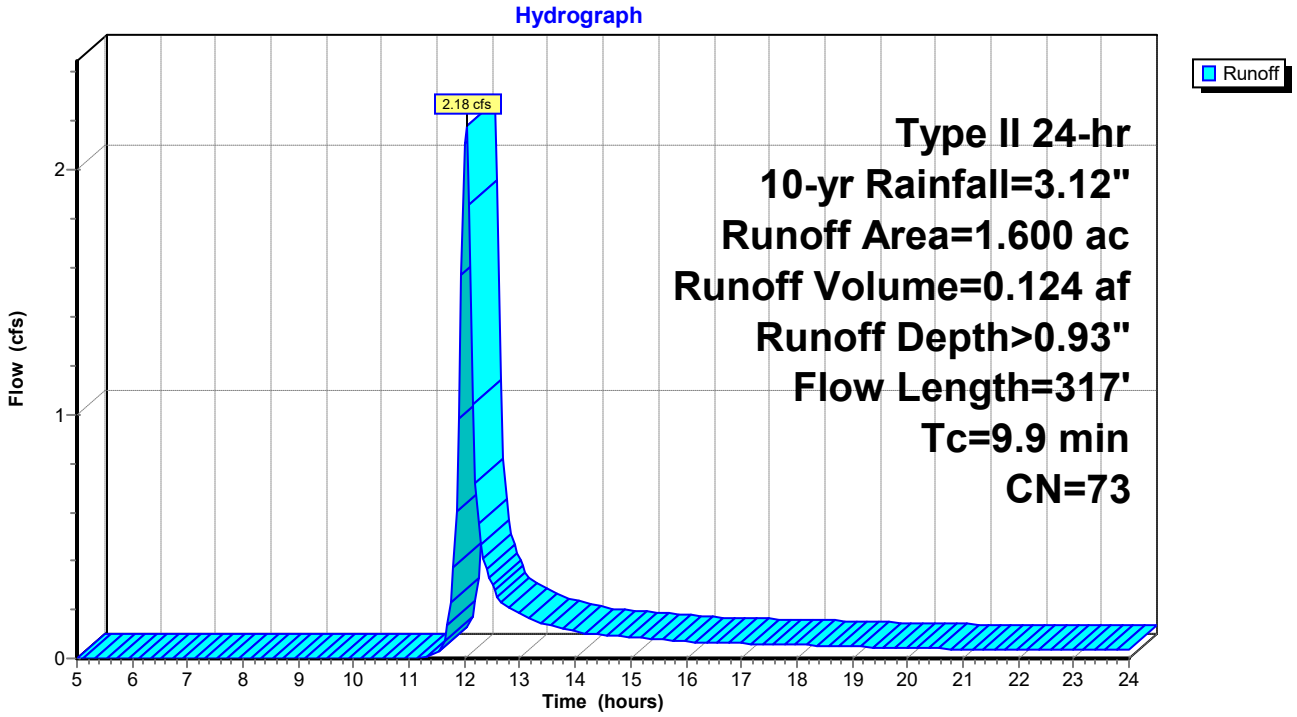
Runoff = 2.18 cfs @ 12.03 hrs, Volume= 0.124 af, Depth> 0.93"
Routed to Pond 6P : BIO RET 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 0.920 | 98 | Paved parking, HSG A |
| 0.680 | 39 | >75% Grass cover, Good, HSG A |
| 1.600 | 73 | Weighted Average |
| 0.680 | | 42.50% Pervious Area |
| 0.920 | | 57.50% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 6.5 | 70 | 0.3130 | 0.18 | | **Sheet Flow, Sheet Flow through Grass**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.3 | 30 | 0.1200 | 1.73 | | **Shallow Concentrated Flow, Drain to shallow grass**<br>Woodland Kv= 5.0 fps |
| 2.0 | 117 | 0.0200 | 0.99 | | **Shallow Concentrated Flow, Grass area**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.4 | 50 | 0.0900 | 2.10 | | **Shallow Concentrated Flow, Sidewalk to Retention Area**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 20 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, side of swmf**<br>Short Grass Pasture Kv= 7.0 fps |
| 9.9 | 317 | Total | | | |

## Subcatchment 6S: PR 2



## Summary for Subcatchment 7S: PR 3

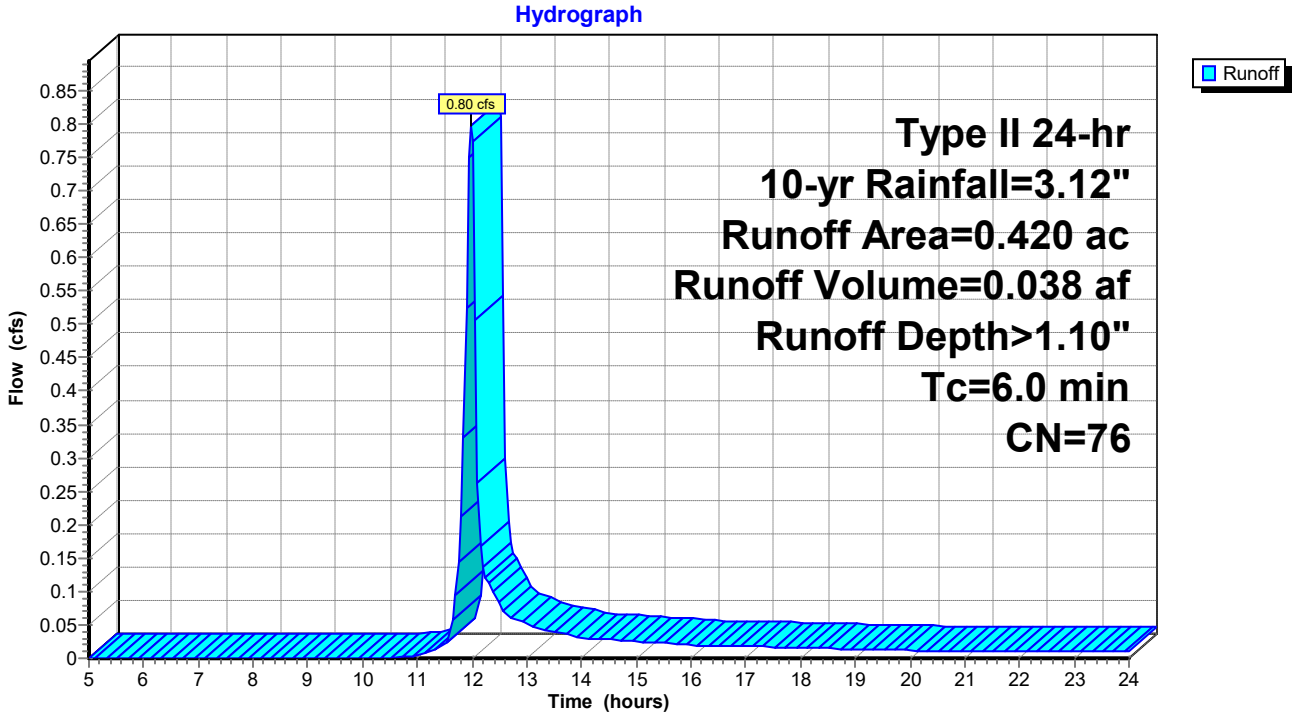
Runoff = 0.80 cfs @ 11.98 hrs, Volume= 0.038 af, Depth> 1.10"
Routed to Pond 8P : Drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 0.160 | 39 | >75% Grass cover, Good, HSG A |
| 0.260 | 98 | Paved parking, HSG A |
| 0.420 | 76 | Weighted Average |
| 0.160 | | 38.10% Pervious Area |
| 0.260 | | 61.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment 7S: PR 3



## Summary for Subcatchment 8S: PR 4

[45] Hint: Runoff=Zero

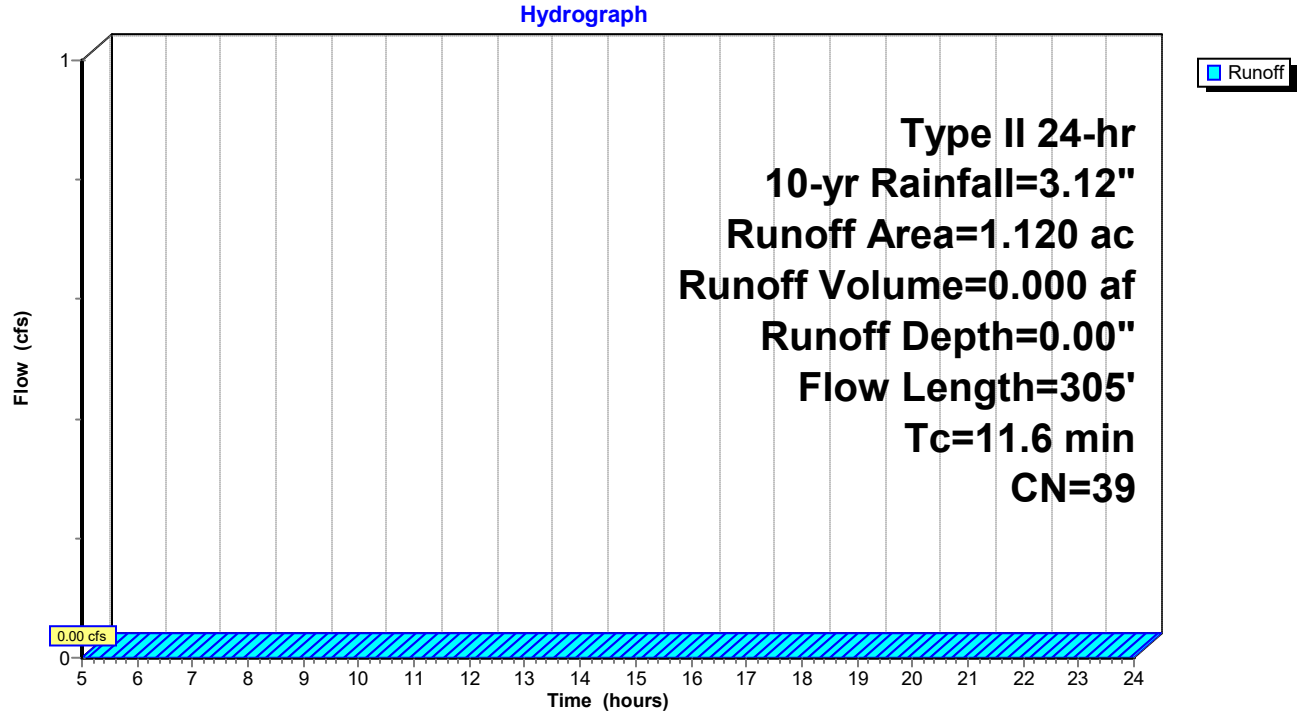
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 39 | >75% Grass cover, Good, HSG A |
| 1.120 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.6 | 75 | 0.2000 | 2.24 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.8 | 130 | 0.1500 | 2.71 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 11.6 | 305 | Total | | | |

## Subcatchment 8S: PR 4



## Summary for Subcatchment 9S: EX 2

[45] Hint: Runoff=Zero

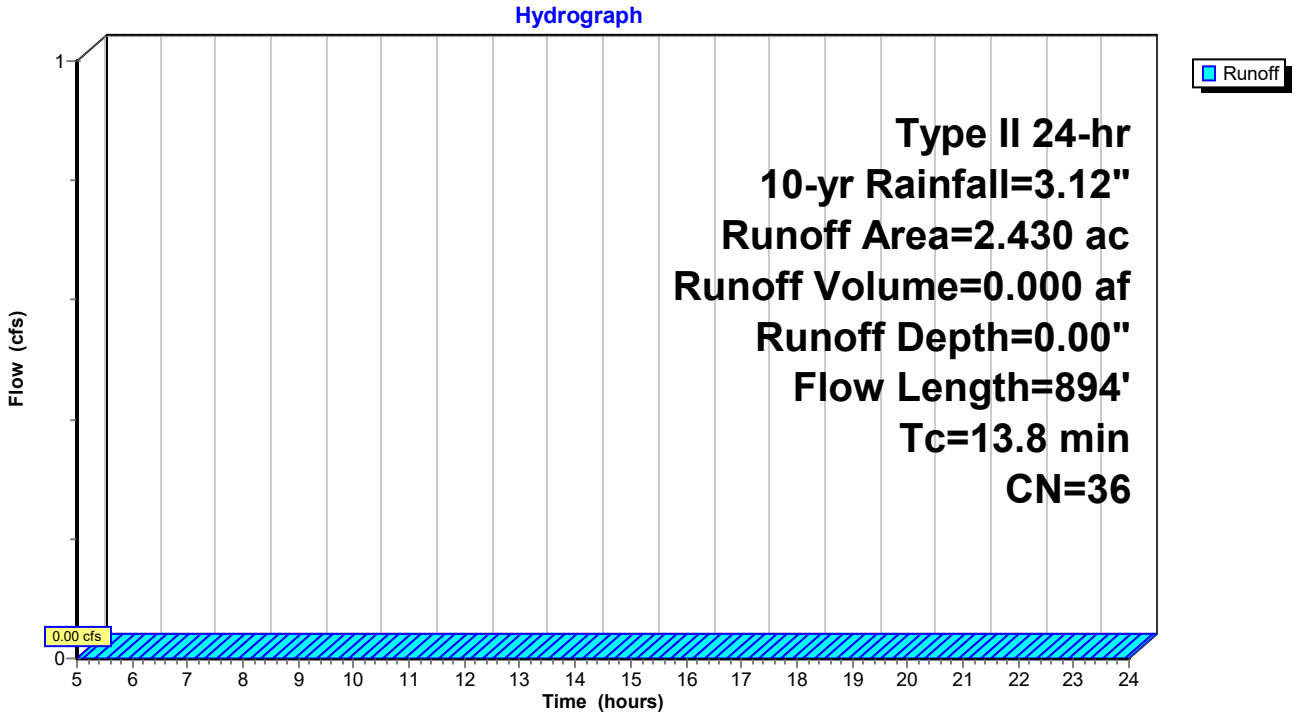
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 2.050 | 36 | Woods, Fair, HSG A |
| 0.380 | 39 | >75% Grass cover, Good, HSG A |
| 2.430 | 36 | Weighted Average |
| 2.430 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow, Woods**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.7 | 340 | 0.1700 | 2.06 | | **Shallow Concentrated Flow, Woods**<br>Woodland Kv= 5.0 fps |
| 0.9 | 454 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow,**<br>Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20'<br>n= 0.025 Earth, clean & winding |
| 13.8 | 894 | Total | | | |

## Subcatchment 9S: EX 2



## Summary for Subcatchment 12S: PR5

[45] Hint: Runoff=Zero

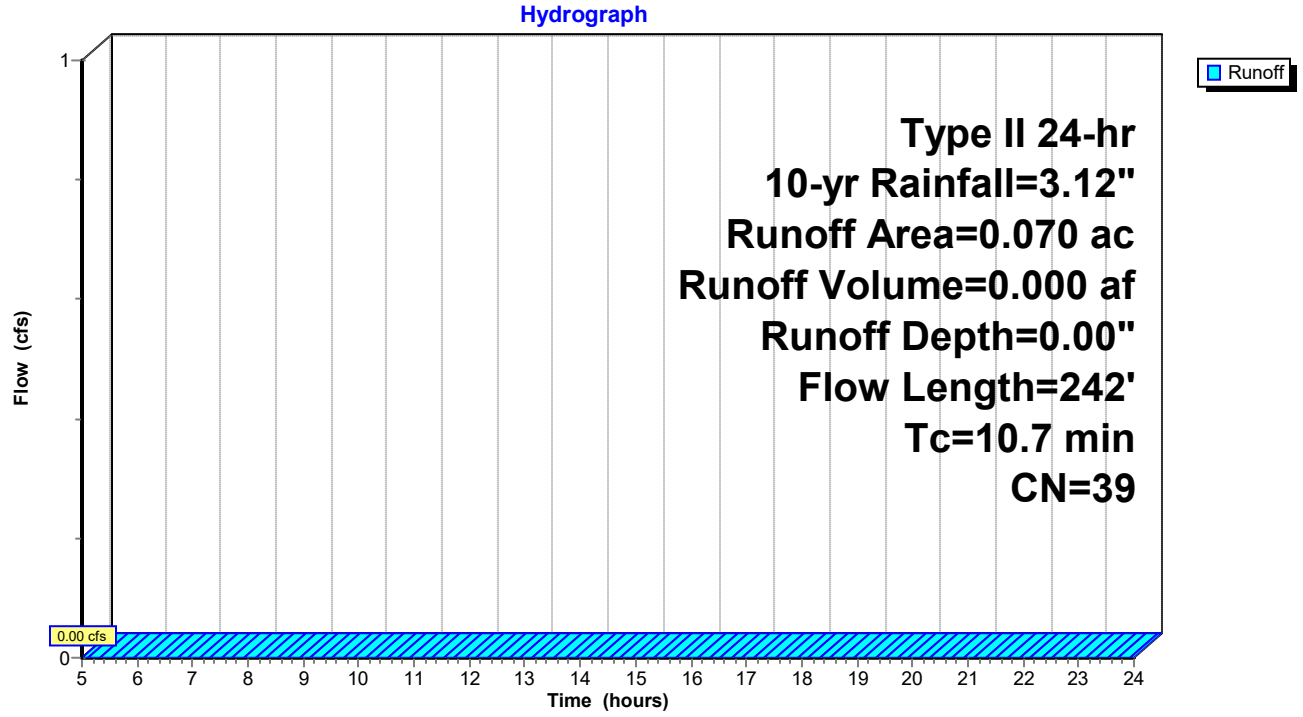
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 10-yr Rainfall=3.12"

| Area (ac) | CN | Description |
|---|---|---|
| 0.070 | 39 | >75% Grass cover, Good, HSG A |
| 0.070 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.6 | 68 | 0.1900 | 0.32 | | **Sheet Flow, grass**<br>Grass: Short n= 0.150 P2= 2.17" |
| 4.4 | 32 | 0.1800 | 0.12 | | **Sheet Flow, Woods**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.5 | 106 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Along Bldg**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 36 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, to creek cl**<br>Short Grass Pasture Kv= 7.0 fps |
| 10.7 | 242 | Total | | | |

### Subcatchment 12S: PR5



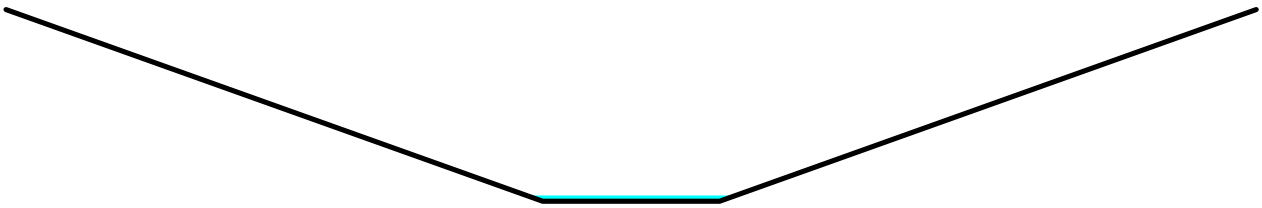
## Summary for Reach 10R: W Creek

Inflow Area = 4.190 ac, 26.73% Impervious, Inflow Depth > 0.48" for 10-yr event
Inflow = 3.53 cfs @ 11.98 hrs, Volume= 0.169 af
Outflow = 3.25 cfs @ 12.04 hrs, Volume= 0.169 af, Atten= 8%, Lag= 3.7 min

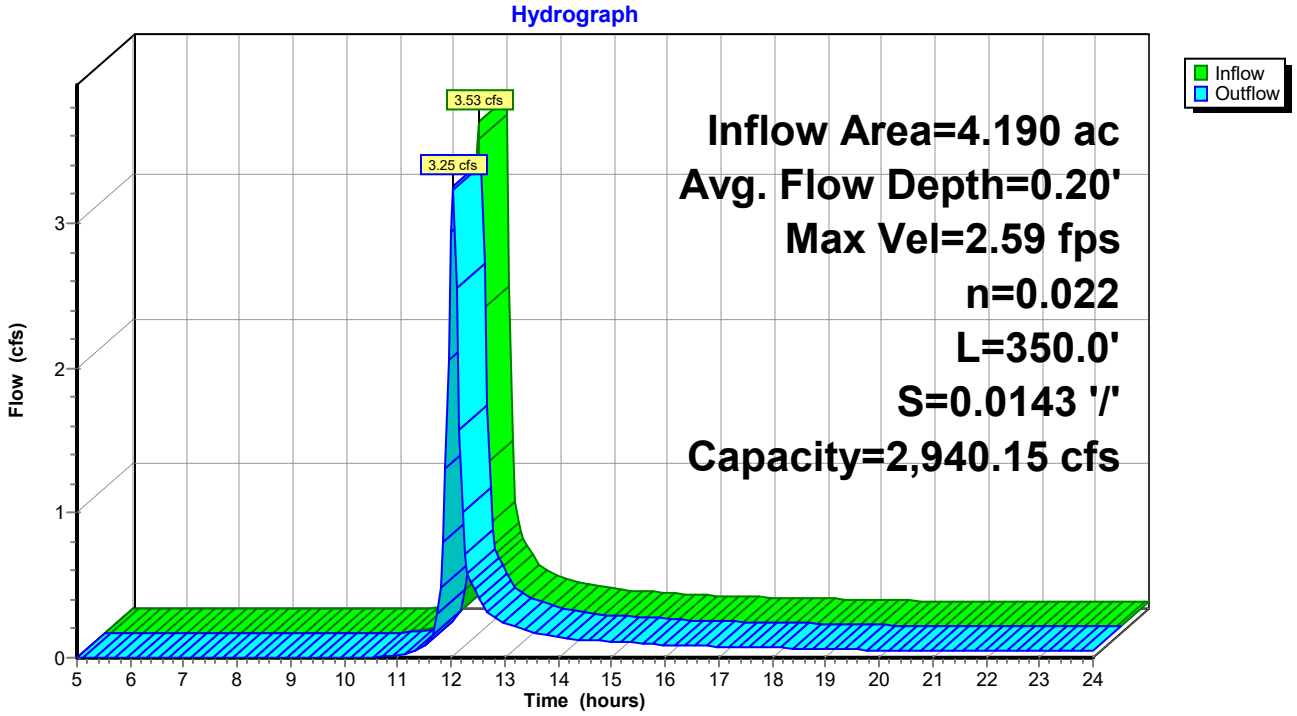
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 2.59 fps, Min. Travel Time= 2.3 min
Avg. Velocity = 1.30 fps, Avg. Travel Time= 4.5 min

Peak Storage= 454 cf @ 12.00 hrs
Average Depth at Peak Storage= 0.20' , Surface Width= 7.11'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



### Reach 10R: W Creek



## Summary for Reach 11R: W Creek

Inflow Area = 4.200 ac, 47.38% Impervious, Inflow Depth > 0.26" for 10-yr event
Inflow = 0.90 cfs @ 12.06 hrs, Volume= 0.090 af
Outflow = 0.80 cfs @ 12.19 hrs, Volume= 0.090 af, Atten= 11%, Lag= 8.0 min

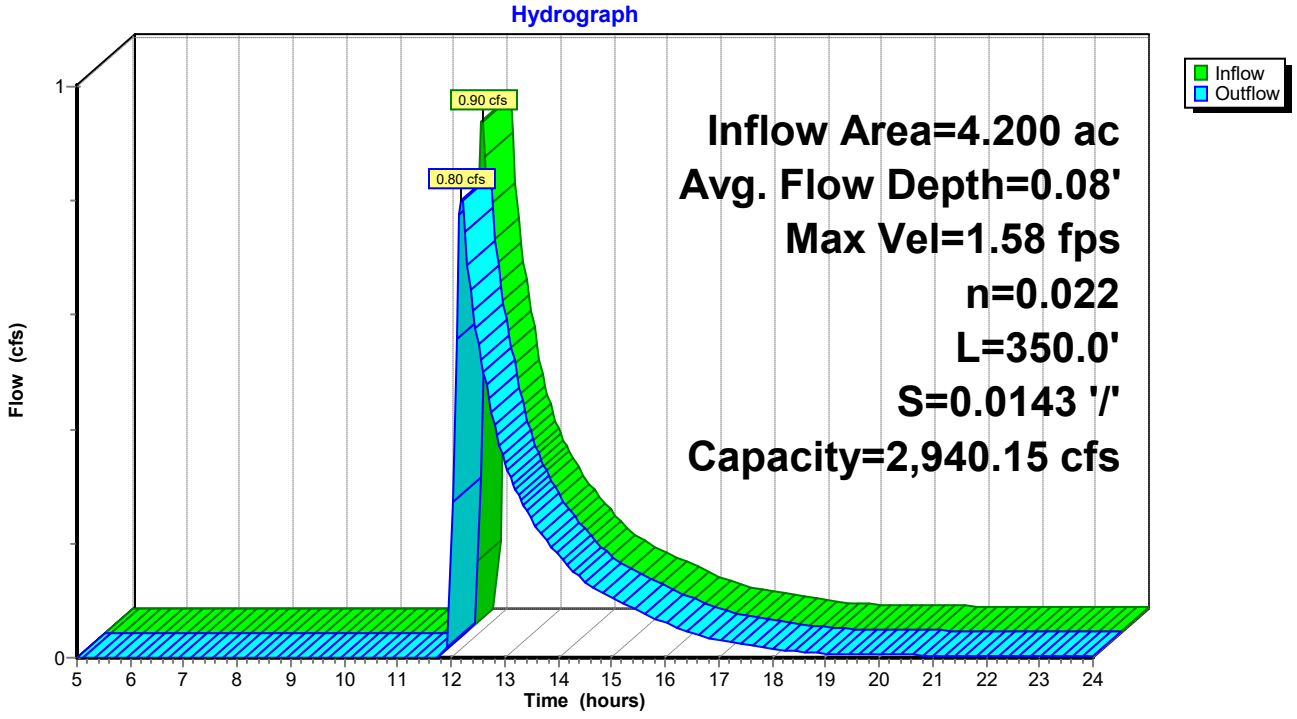
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.58 fps, Min. Travel Time= 3.7 min
Avg. Velocity = 1.28 fps, Avg. Travel Time= 4.5 min

Peak Storage= 183 cf @ 12.12 hrs
Average Depth at Peak Storage= 0.08' , Surface Width= 6.47'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



### Reach 11R: W Creek



## Summary for Pond 5P: BIO RET 1

Inflow Area = 0.990 ac, 81.82% Impervious, Inflow Depth > 1.84" for 10-yr event
Inflow = 3.11 cfs @ 11.97 hrs, Volume= 0.152 af
Outflow = 0.63 cfs @ 12.16 hrs, Volume= 0.100 af, Atten= 80%, Lag= 11.4 min
Discarded = 0.07 cfs @ 12.16 hrs, Volume= 0.056 af
Primary = 0.56 cfs @ 12.16 hrs, Volume= 0.044 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 615.98' @ 12.16 hrs Surf.Area= 2,868 sf Storage= 2,961 cf

Plug-Flow detention time= 177.8 min calculated for 0.100 af (66% of inflow)
Center-of-Mass det. time= 73.8 min ( 890.0 - 816.2 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 611.00' | 2,268 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,670 cf Overall x 40.0% Voids |
| #2 | 615.50' | 3,930 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,198 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 611.00 | 1,260 | 0 | 0 |
| 615.50 | 1,260 | 5,670 | 5,670 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 615.50 | 1,260 | 0 | 0 |
| 616.00 | 1,620 | 720 | 720 |
| 616.50 | 2,004 | 906 | 1,626 |
| 617.00 | 2,380 | 1,096 | 2,722 |
| 617.50 | 2,450 | 1,208 | 3,930 |

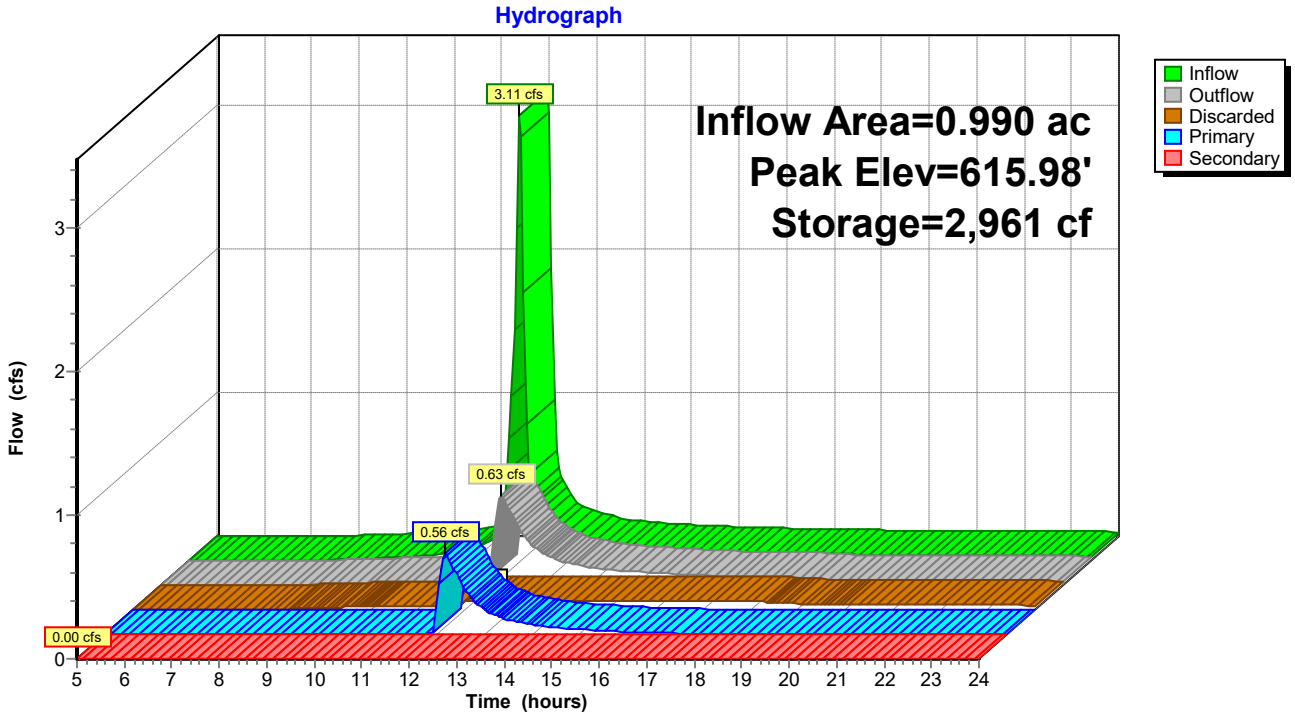
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 611.00' | **12.0" Round Culvert**<br>L= 20.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 611.00' / 608.00' S= 0.1500 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 615.50' | **7.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 616.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 617.00' | **5.0' long x 0.50' rise Sharp-Crested Rectangular Weir**<br>2 End Contraction(s) 1.0' Crest Height |
| #5 | Discarded | 611.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.07 cfs @ 12.16 hrs HW=615.98' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.07 cfs)

**Primary OutFlow** Max=0.56 cfs @ 12.16 hrs HW=615.98' (Free Discharge)
└**1=Culvert** (Passes 0.56 cfs of 8.01 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 0.56 cfs @ 2.36 fps)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=611.00' (Free Discharge)
└**4=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond 5P: BIO RET 1



## Summary for Pond 6P: BIO RET 2

Inflow Area = 1.600 ac, 57.50% Impervious, Inflow Depth > 0.93" for 10-yr event
Inflow = 2.18 cfs @ 12.03 hrs, Volume= 0.124 af
Outflow = 0.16 cfs @ 13.14 hrs, Volume= 0.078 af, Atten= 92%, Lag= 66.9 min
Discarded = 0.07 cfs @ 13.14 hrs, Volume= 0.057 af
Primary = 0.09 cfs @ 13.14 hrs, Volume= 0.021 af
Routed to Pond 8P : Drywell
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Pond 8P : Drywell

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 596.79' @ 13.14 hrs Surf.Area= 3,108 sf Storage= 2,472 cf

Plug-Flow detention time= 239.0 min calculated for 0.078 af (63% of inflow)
Center-of-Mass det. time= 114.2 min ( 979.8 - 865.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 593.00' | 2,019 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,047 cf Overall x 40.0% Voids |
| #2 | 596.50' | 4,282 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,300 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 593.00 | 1,442 | 0 | 0 |
| 596.50 | 1,442 | 5,047 | 5,047 |

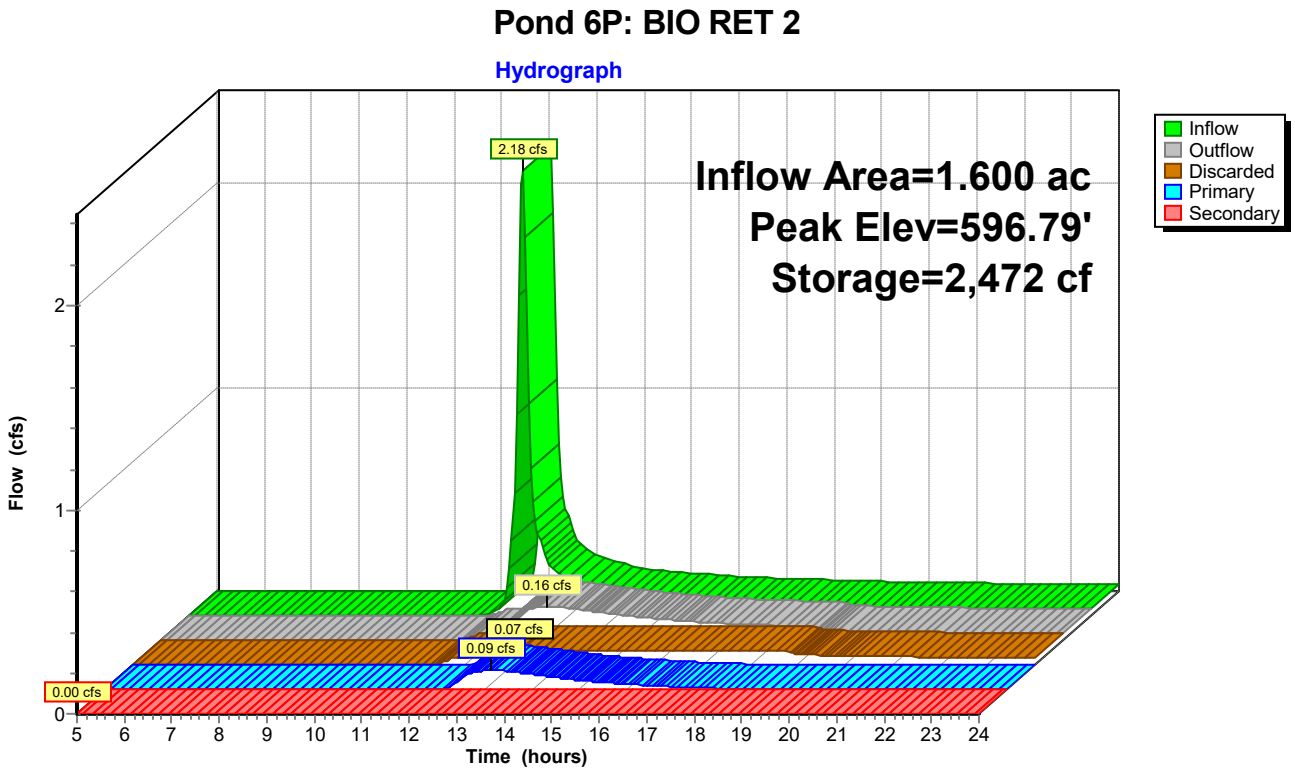
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 596.50 | 1,450 | 0 | 0 |
| 597.00 | 1,822 | 818 | 818 |
| 598.00 | 2,500 | 2,161 | 2,979 |
| 598.50 | 2,710 | 1,303 | 4,282 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 593.00' | **12.0" Round Culvert**<br>L= 92.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 593.00' / 589.19' S= 0.0414 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 596.50' | **2.2" W x 12.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 597.80' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 597.80' | **8.5' long + 3.0 '/' SideZ x 15.0' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63 |
| #5 | Discarded | 593.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.07 cfs @ 13.14 hrs HW=596.79' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.07 cfs)

**Primary OutFlow** Max=0.09 cfs @ 13.14 hrs HW=596.79' (Free Discharge)
└**1=Culvert** (Passes 0.09 cfs of 6.86 cfs potential flow)
  └**2=Orifice/Grate** (Orifice Controls 0.09 cfs @ 1.73 fps)
  └**3=Orifice/Grate** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=593.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)



## Summary for Pond 8P: Drywell

[79] Warning: Submerged Pond 6P Primary device # 1 OUTLET by 0.05'

Inflow Area = 2.020 ac, 58.42% Impervious, Inflow Depth > 0.35" for 10-yr event
Inflow = 0.80 cfs @ 11.98 hrs, Volume= 0.059 af
Outflow = 0.78 cfs @ 12.01 hrs, Volume= 0.053 af, Atten= 3%, Lag= 1.7 min
Discarded = 0.01 cfs @ 11.30 hrs, Volume= 0.007 af
Primary = 0.77 cfs @ 12.01 hrs, Volume= 0.045 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 589.25' @ 12.01 hrs Surf.Area= 145 sf Storage= 327 cf

Plug-Flow detention time= 66.7 min calculated for 0.052 af (88% of inflow)
Center-of-Mass det. time= 19.7 min ( 871.7 - 852.0 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 585.00' | 311 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>1,160 cf Overall - 382 cf Embedded = 778 cf x 40.0% Voids |
| #2 | 586.00' | 302 cf | **8.00'D x 6.00'H Vertical Cone/Cylinder** Inside #1<br>382 cf Overall - 6.0" Wall Thickness = 302 cf |
| #3 | 592.90' | 47 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 660 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 585.00 | 145 | 0 | 0 |
| 593.00 | 145 | 1,160 | 1,160 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 592.90 | 6 | 0 | 0 |
| 593.50 | 150 | 47 | 47 |

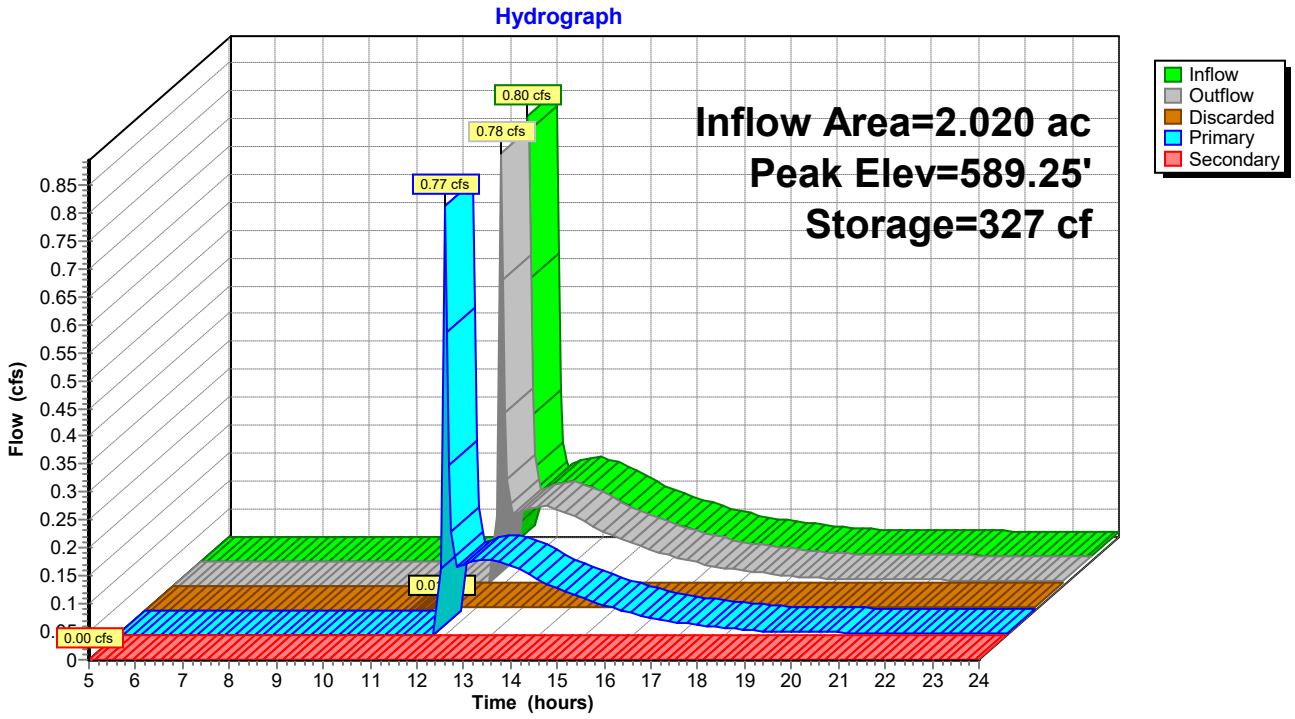
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 588.80' | **12.0" Round Culvert**<br>L= 13.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 588.80' / 583.95' S= 0.3731 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Secondary | 592.90' | **24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Discarded | 585.00' | **2.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.01 cfs @ 11.30 hrs HW=585.09' (Free Discharge)
└**3=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=0.73 cfs @ 12.01 hrs HW=589.23' (Free Discharge)
└**1=Culvert** (Inlet Controls 0.73 cfs @ 2.24 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=585.00' (Free Discharge)
└**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond 8P: Drywell



Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment 1S: EX 1** Runoff Area=1.760 ac 63.64% Impervious Runoff Depth>2.84"
Flow Length=1,504' Tc=6.0 min CN=77 Runoff=8.58 cfs 0.416 af

**Subcatchment 5S: PR 1** Runoff Area=0.990 ac 81.82% Impervious Runoff Depth>3.81"
Tc=6.0 min CN=87 Runoff=6.21 cfs 0.314 af

**Subcatchment 6S: PR 2** Runoff Area=1.600 ac 57.50% Impervious Runoff Depth>2.48"
Flow Length=317' Tc=9.9 min CN=73 Runoff=6.05 cfs 0.331 af

**Subcatchment 7S: PR 3** Runoff Area=0.420 ac 61.90% Impervious Runoff Depth>2.75"
Tc=6.0 min CN=76 Runoff=1.99 cfs 0.096 af

**Subcatchment 8S: PR 4** Runoff Area=1.120 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=305' Tc=11.6 min CN=39 Runoff=0.06 cfs 0.024 af

**Subcatchment 9S: EX 2** Runoff Area=2.430 ac 0.00% Impervious Runoff Depth>0.15"
Flow Length=894' Tc=13.8 min CN=36 Runoff=0.04 cfs 0.030 af

**Subcatchment 12S: PR5** Runoff Area=0.070 ac 0.00% Impervious Runoff Depth>0.25"
Flow Length=242' Tc=10.7 min CN=39 Runoff=0.00 cfs 0.001 af

**Reach 10R: W Creek** Avg. Flow Depth=0.34' Max Vel=3.57 fps Inflow=8.58 cfs 0.446 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=8.03 cfs 0.445 af

**Reach 11R: W Creek** Avg. Flow Depth=0.31' Max Vel=3.42 fps Inflow=7.93 cfs 0.496 af
n=0.022 L=350.0' S=0.0143 '/' Capacity=2,940.15 cfs Outflow=7.12 cfs 0.495 af

**Pond 5P: BIO RET 1** Peak Elev=616.80' Storage=4,537 cf Inflow=6.21 cfs 0.314 af
Discarded=0.08 cfs 0.075 af Primary=5.62 cfs 0.187 af Secondary=0.00 cfs 0.000 af Outflow=5.71 cfs 0.262 af

**Pond 6P: BIO RET 2** Peak Elev=597.97' Storage=4,926 cf Inflow=6.05 cfs 0.331 af
Discarded=0.09 cfs 0.079 af Primary=2.55 cfs 0.186 af Secondary=1.53 cfs 0.017 af Outflow=4.17 cfs 0.282 af

**Pond 8P: Drywell** Peak Elev=590.44' Storage=426 cf Inflow=4.59 cfs 0.299 af
Discarded=0.01 cfs 0.008 af Primary=4.06 cfs 0.283 af Secondary=0.00 cfs 0.000 af Outflow=4.06 cfs 0.292 af

**Total Runoff Area = 8.390 ac Runoff Volume = 1.212 af Average Runoff Depth = 1.73"**
**62.93% Pervious = 5.280 ac 37.07% Impervious = 3.110 ac**

## Summary for Subcatchment 1S: EX 1

[47] Hint: Peak is 185% of capacity of segment #3

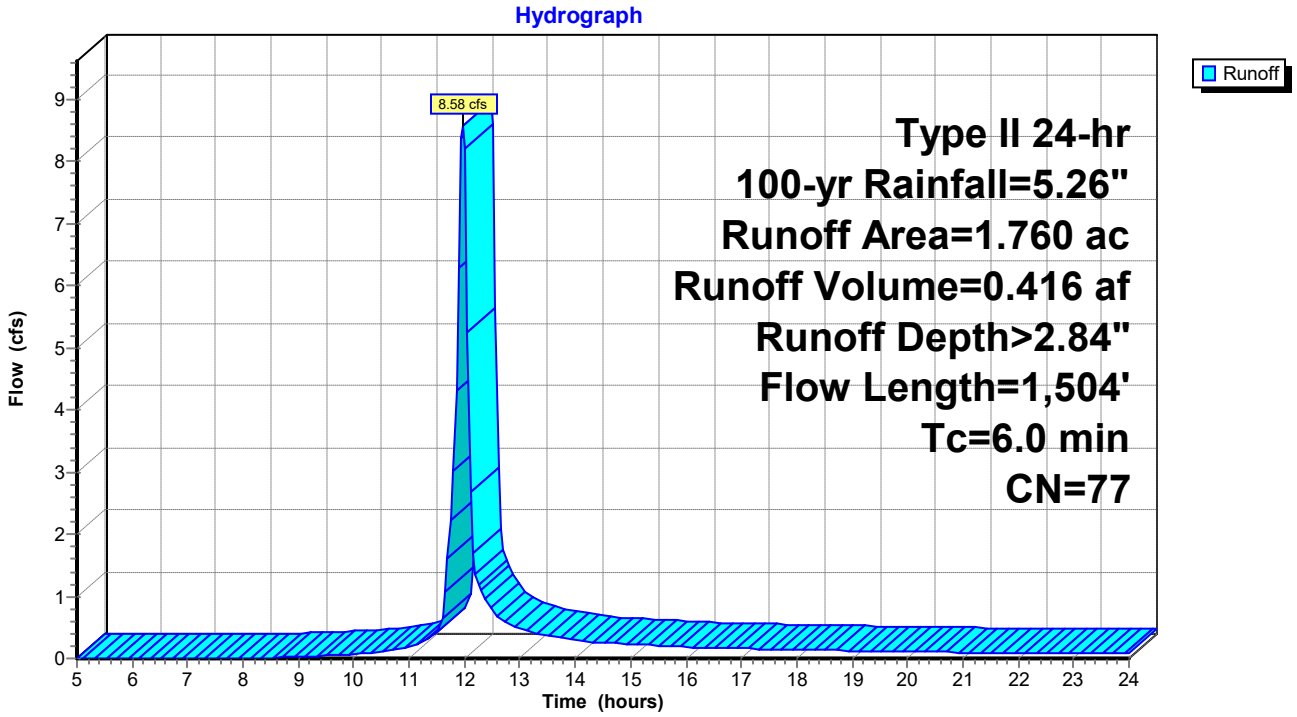
Runoff = 8.58 cfs @ 11.97 hrs, Volume= 0.416 af, Depth> 2.84"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 98 | Paved parking, HSG A |
| 0.640 | 39 | >75% Grass cover, Good, HSG A |
| 1.760 | 77 | Weighted Average |
| 0.640 | | 36.36% Pervious Area |
| 1.120 | | 63.64% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 1.1 | 100 | 0.0400 | 1.49 | | **Sheet Flow, Parking Lot**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 0.5 | 124 | 0.0400 | 4.06 | | **Shallow Concentrated Flow, Parking Lot**<br>Paved Kv= 20.3 fps |
| 1.3 | 448 | 0.0100 | 5.90 | 4.63 | **Pipe Channel, Sewer**<br>12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25'<br>n= 0.010 PVC, smooth interior |
| 1.6 | 832 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow, Stream**<br>Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20'<br>n= 0.025 Earth, clean & winding |
| 4.5 | 1,504 | Total, Increased to minimum Tc = 6.0 min | | | |

## Subcatchment 1S: EX 1



## Summary for Subcatchment 5S: PR 1

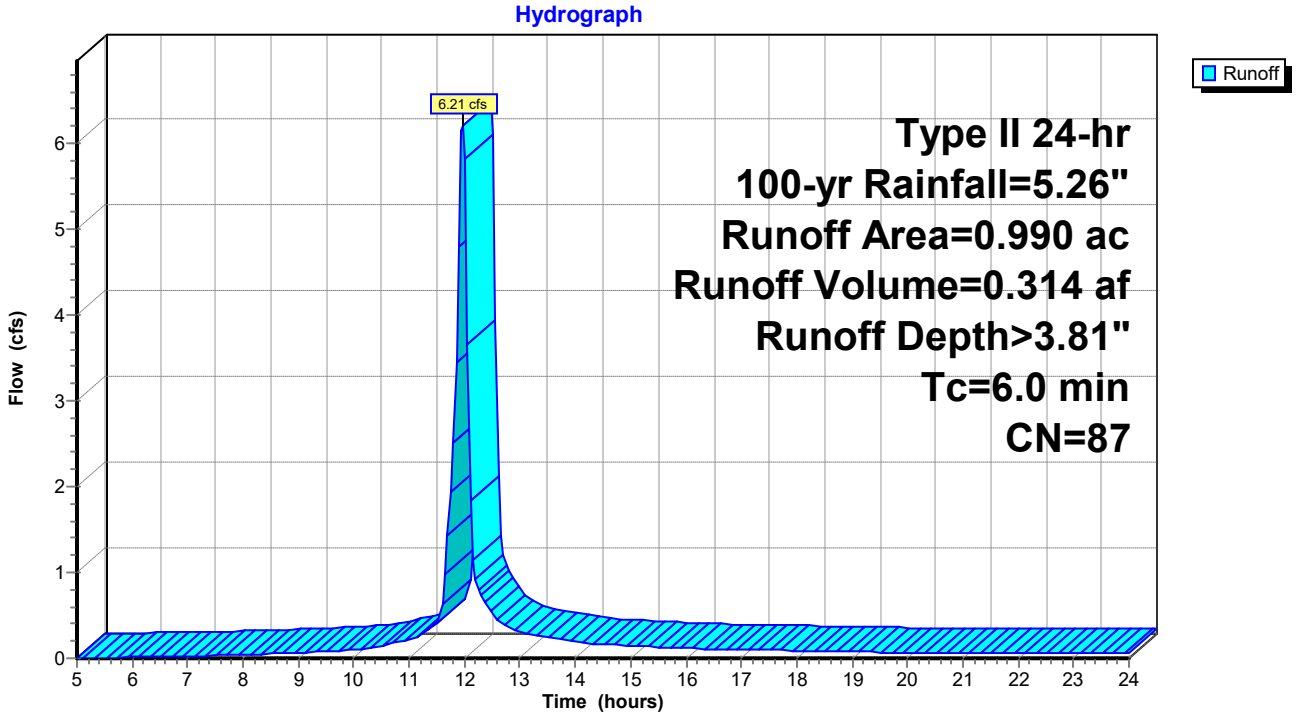
Runoff = 6.21 cfs @ 11.97 hrs, Volume= 0.314 af, Depth> 3.81"
Routed to Pond 5P : BIO RET 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 0.180 | 39 | >75% Grass cover, Good, HSG A |
| 0.810 | 98 | Paved parking, HSG A |
| 0.990 | 87 | Weighted Average |
| 0.180 | | 18.18% Pervious Area |
| 0.810 | | 81.82% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

### Subcatchment 5S: PR 1



## Summary for Subcatchment 6S: PR 2

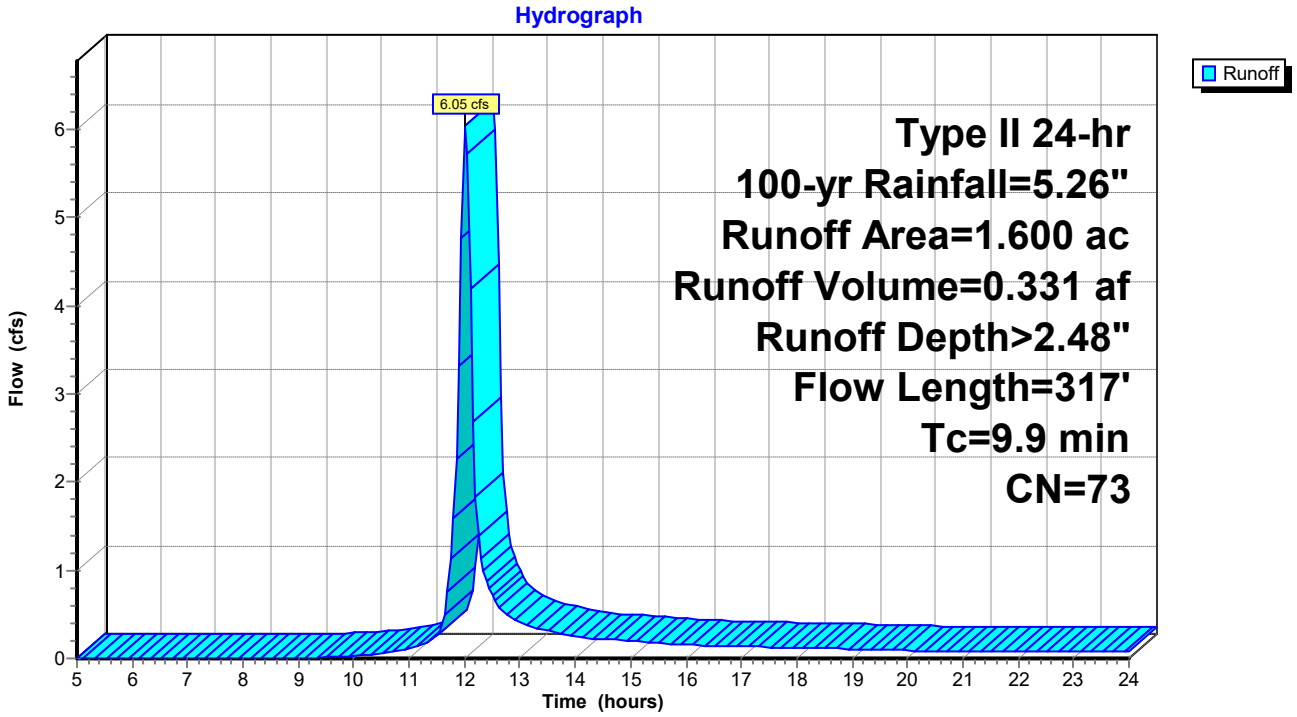
Runoff = 6.05 cfs @ 12.02 hrs, Volume= 0.331 af, Depth> 2.48"
Routed to Pond 6P : BIO RET 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 0.920 | 98 | Paved parking, HSG A |
| 0.680 | 39 | >75% Grass cover, Good, HSG A |
| 1.600 | 73 | Weighted Average |
| 0.680 | | 42.50% Pervious Area |
| 0.920 | | 57.50% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway**<br>Smooth surfaces n= 0.011 P2= 2.17" |
| 6.5 | 70 | 0.3130 | 0.18 | | **Sheet Flow, Sheet Flow through Grass**<br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.3 | 30 | 0.1200 | 1.73 | | **Shallow Concentrated Flow, Drain to shallow grass**<br>Woodland Kv= 5.0 fps |
| 2.0 | 117 | 0.0200 | 0.99 | | **Shallow Concentrated Flow, Grass area**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.4 | 50 | 0.0900 | 2.10 | | **Shallow Concentrated Flow, Sidewalk to Retention Area**<br>Short Grass Pasture Kv= 7.0 fps |
| 0.1 | 20 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, side of swmf**<br>Short Grass Pasture Kv= 7.0 fps |
| 9.9 | 317 | Total | | | |

## Subcatchment 6S: PR 2



## Summary for Subcatchment 7S: PR 3

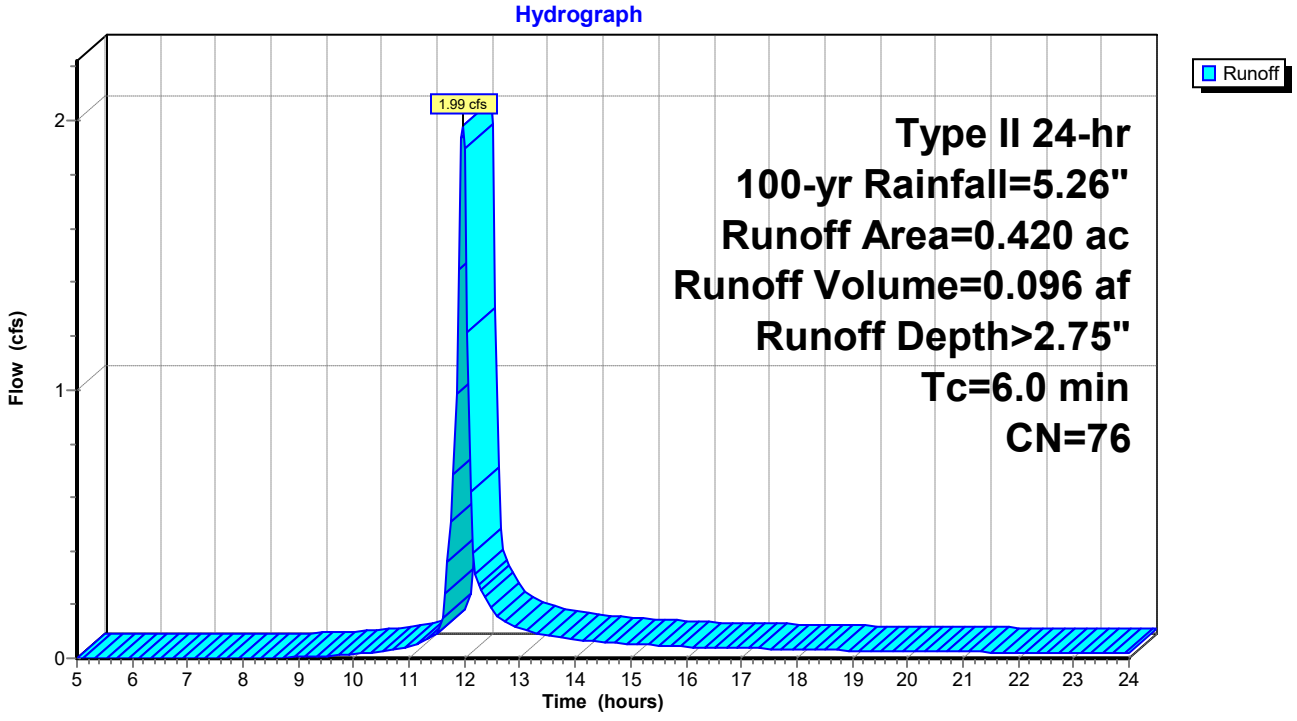
Runoff = 1.99 cfs @ 11.97 hrs, Volume= 0.096 af, Depth> 2.75"
Routed to Pond 8P : Drywell

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 0.160 | 39 | >75% Grass cover, Good, HSG A |
| 0.260 | 98 | Paved parking, HSG A |
| 0.420 | 76 | Weighted Average |
| 0.160 | | 38.10% Pervious Area |
| 0.260 | | 61.90% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry,** |

## Subcatchment 7S: PR 3



## Summary for Subcatchment 8S: PR 4

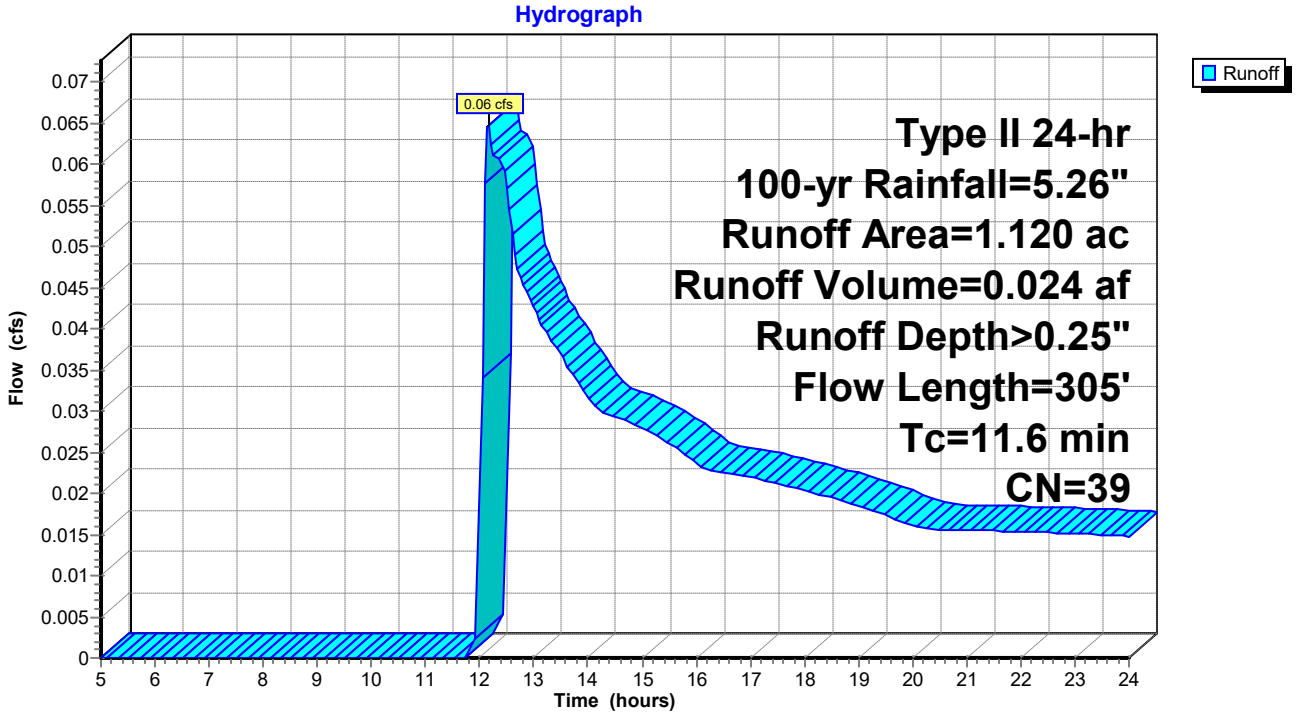
Runoff = 0.06 cfs @ 12.16 hrs, Volume= 0.024 af, Depth> 0.25"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 1.120 | 39 | >75% Grass cover, Good, HSG A |
| 1.120 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 0.6 | 75 | 0.2000 | 2.24 | | **Shallow Concentrated Flow,** Woodland Kv= 5.0 fps |
| 0.8 | 130 | 0.1500 | 2.71 | | **Shallow Concentrated Flow,** Short Grass Pasture Kv= 7.0 fps |
| 11.6 | 305 | Total | | | |

## Subcatchment 8S: PR 4



## Summary for Subcatchment 9S: EX 2

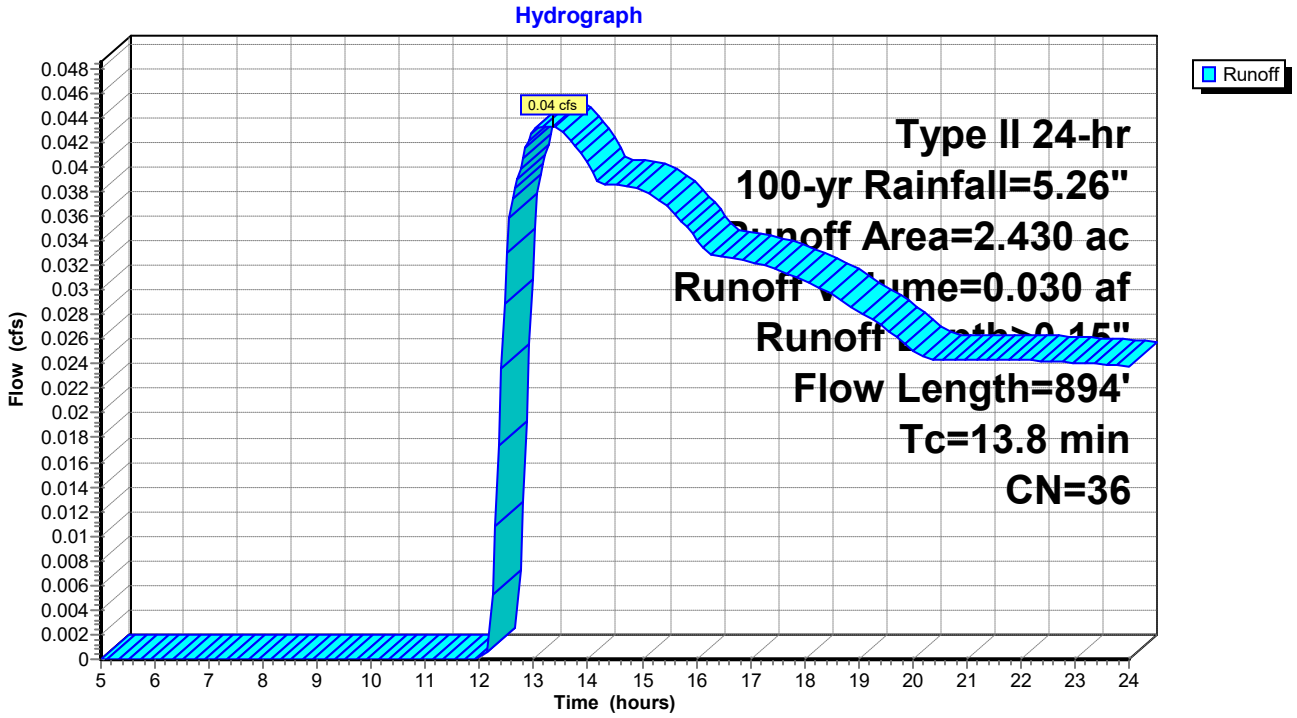
Runoff = 0.04 cfs @ 13.37 hrs, Volume= 0.030 af, Depth> 0.15"
Routed to Reach 10R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 2.050 | 36 | Woods, Fair, HSG A |
| 0.380 | 39 | >75% Grass cover, Good, HSG A |
| 2.430 | 36 | Weighted Average |
| 2.430 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 0.6 | 30 | 0.0200 | 0.89 | | **Sheet Flow, Highway** Smooth surfaces n= 0.011 P2= 2.17" |
| 9.6 | 70 | 0.1200 | 0.12 | | **Sheet Flow, Woods** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.7 | 340 | 0.1700 | 2.06 | | **Shallow Concentrated Flow, Woods** Woodland Kv= 5.0 fps |
| 0.9 | 454 | 0.0143 | 8.45 | 196.08 | **Trap/Vee/Rect Channel Flow,** Bot.W=6.00' D=2.00' Z= 2.8 '/' Top.W=17.20' n= 0.025 Earth, clean & winding |
| 13.8 | 894 | Total | | | |

## Subcatchment 9S: EX 2



## Summary for Subcatchment 12S: PR5

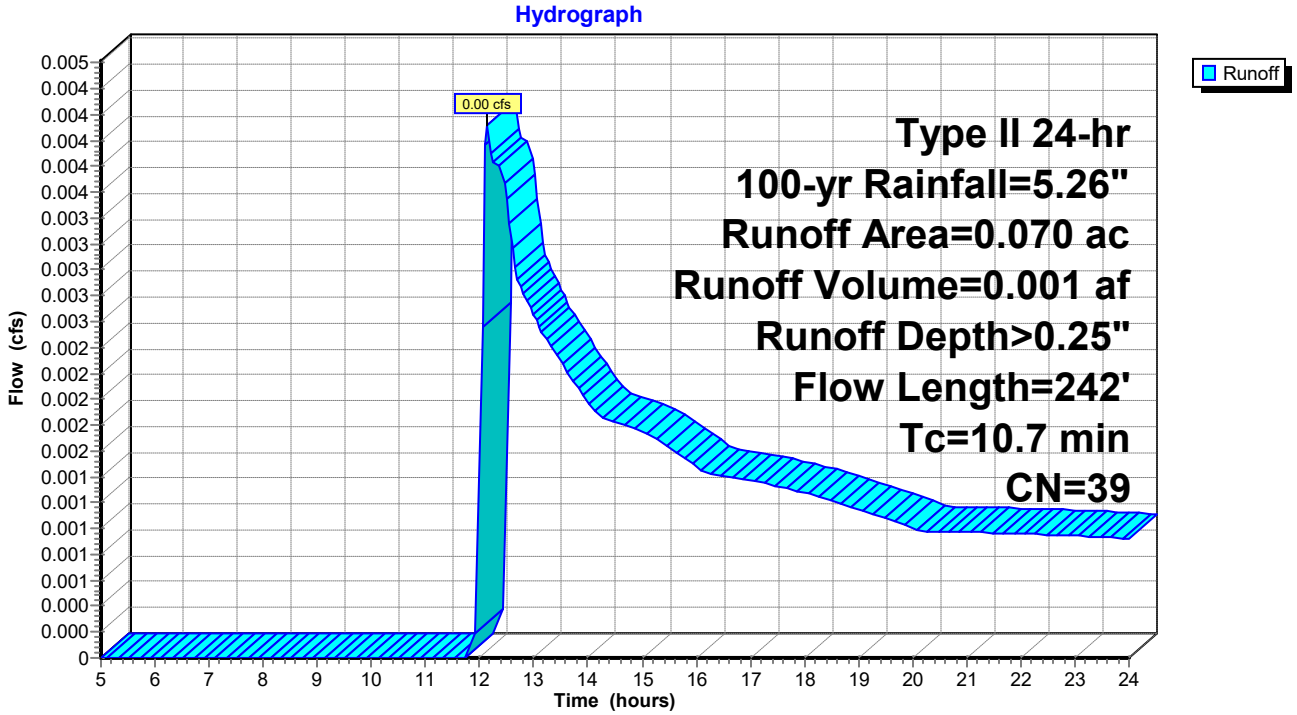
Runoff = 0.00 cfs @ 12.15 hrs, Volume= 0.001 af, Depth> 0.25"
Routed to Reach 11R : W Creek

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type II 24-hr 100-yr Rainfall=5.26"

| Area (ac) | CN | Description |
|---|---|---|
| 0.070 | 39 | >75% Grass cover, Good, HSG A |
| 0.070 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.6 | 68 | 0.1900 | 0.32 | | **Sheet Flow, grass** Grass: Short n= 0.150 P2= 2.17" |
| 4.4 | 32 | 0.1800 | 0.12 | | **Sheet Flow, Woods** Woods: Light underbrush n= 0.400 P2= 2.17" |
| 2.5 | 106 | 0.0100 | 0.70 | | **Shallow Concentrated Flow, Along Bldg** Short Grass Pasture Kv= 7.0 fps |
| 0.2 | 36 | 0.2500 | 3.50 | | **Shallow Concentrated Flow, to creek cl** Short Grass Pasture Kv= 7.0 fps |
| 10.7 | 242 | Total | | | |

## Subcatchment 12S: PR5



## Summary for Reach 10R: W Creek

Inflow Area = 4.190 ac, 26.73% Impervious, Inflow Depth > 1.28" for 100-yr event
Inflow = 8.58 cfs @ 11.97 hrs, Volume= 0.446 af
Outflow = 8.03 cfs @ 12.01 hrs, Volume= 0.445 af, Atten= 6%, Lag= 2.6 min

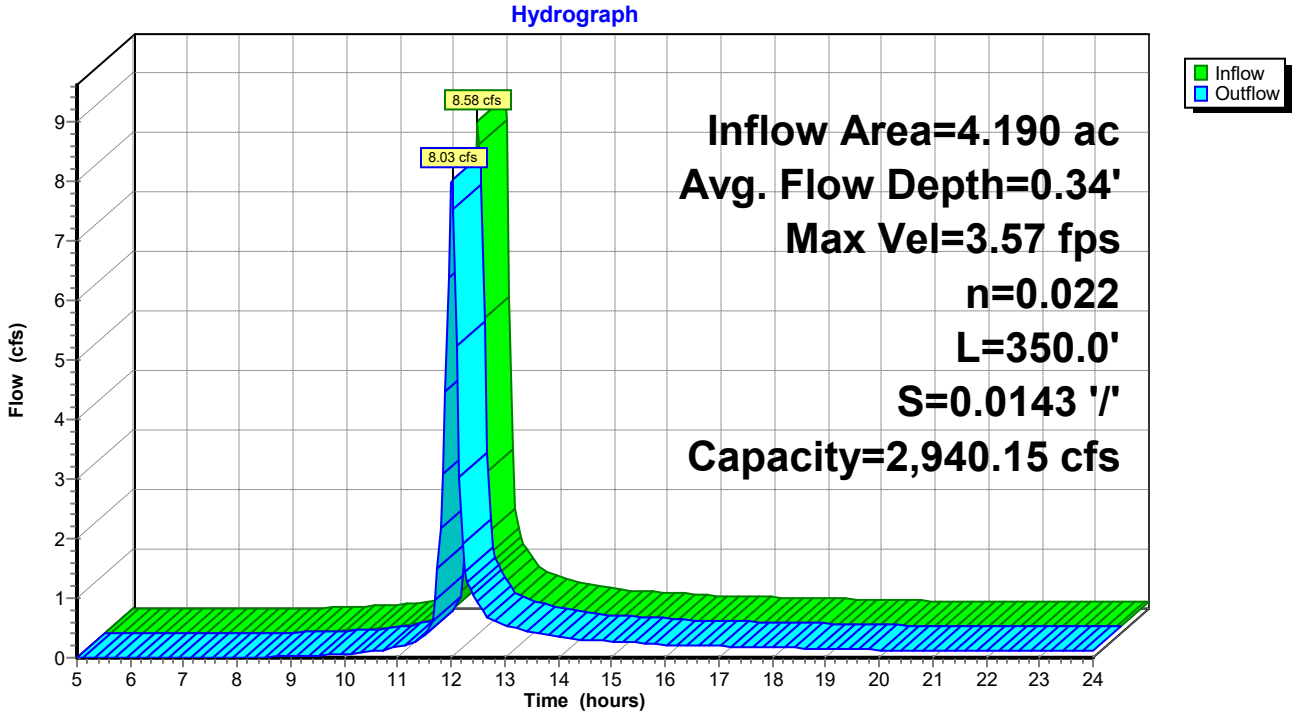
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.57 fps, Min. Travel Time= 1.6 min
Avg. Velocity = 1.34 fps, Avg. Travel Time= 4.4 min

Peak Storage= 827 cf @ 11.99 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 7.90'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



## Reach 10R: W Creek



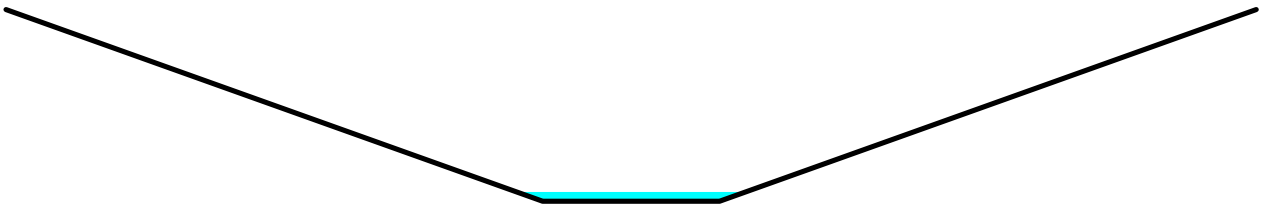
## Summary for Reach 11R: W Creek

Inflow Area = 4.200 ac, 47.38% Impervious, Inflow Depth > 1.42" for 100-yr event
Inflow = 7.93 cfs @ 12.01 hrs, Volume= 0.496 af
Outflow = 7.12 cfs @ 12.09 hrs, Volume= 0.495 af, Atten= 10%, Lag= 4.8 min

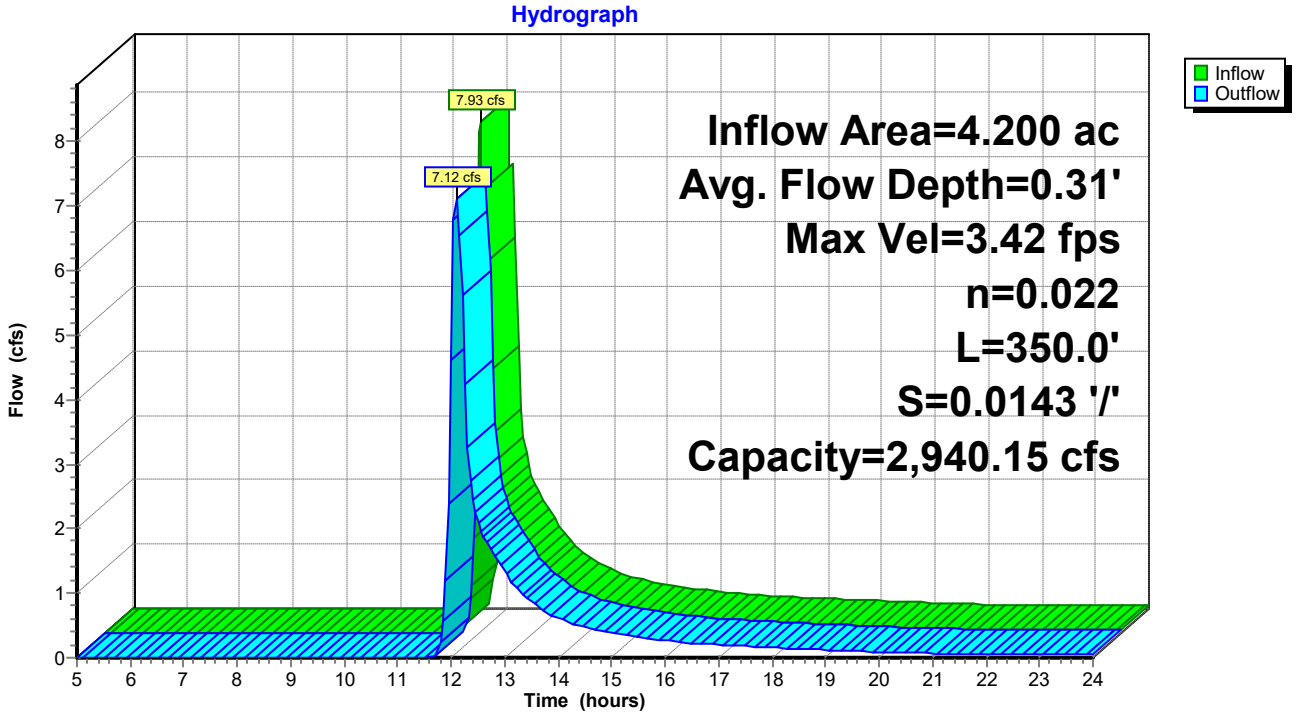
Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.42 fps, Min. Travel Time= 1.7 min
Avg. Velocity = 1.41 fps, Avg. Travel Time= 4.1 min

Peak Storage= 757 cf @ 12.06 hrs
Average Depth at Peak Storage= 0.31' , Surface Width= 7.76'
Bank-Full Depth= 6.50' Flow Area= 157.3 sf, Capacity= 2,940.15 cfs

6.00' x 6.50' deep channel, n= 0.022
Side Slope Z-value= 2.8 '/' Top Width= 42.40'
Length= 350.0' Slope= 0.0143 '/'
Inlet Invert= 580.00', Outlet Invert= 575.00'



## Reach 11R: W Creek



## Summary for Pond 5P: BIO RET 1

Inflow Area = 0.990 ac, 81.82% Impervious, Inflow Depth > 3.81" for 100-yr event
Inflow = 6.21 cfs @ 11.97 hrs, Volume= 0.314 af
Outflow = 5.71 cfs @ 12.02 hrs, Volume= 0.262 af, Atten= 8%, Lag= 3.0 min
Discarded = 0.08 cfs @ 12.02 hrs, Volume= 0.075 af
Primary = 5.62 cfs @ 12.02 hrs, Volume= 0.187 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 616.80' @ 12.02 hrs Surf.Area= 3,492 sf Storage= 4,537 cf

Plug-Flow detention time= 113.8 min calculated for 0.261 af (83% of inflow)
Center-of-Mass det. time= 42.6 min ( 838.3 - 795.6 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 611.00' | 2,268 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,670 cf Overall x 40.0% Voids |
| #2 | 615.50' | 3,930 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,198 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 611.00 | 1,260 | 0 | 0 |
| 615.50 | 1,260 | 5,670 | 5,670 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 615.50 | 1,260 | 0 | 0 |
| 616.00 | 1,620 | 720 | 720 |
| 616.50 | 2,004 | 906 | 1,626 |
| 617.00 | 2,380 | 1,096 | 2,722 |
| 617.50 | 2,450 | 1,208 | 3,930 |

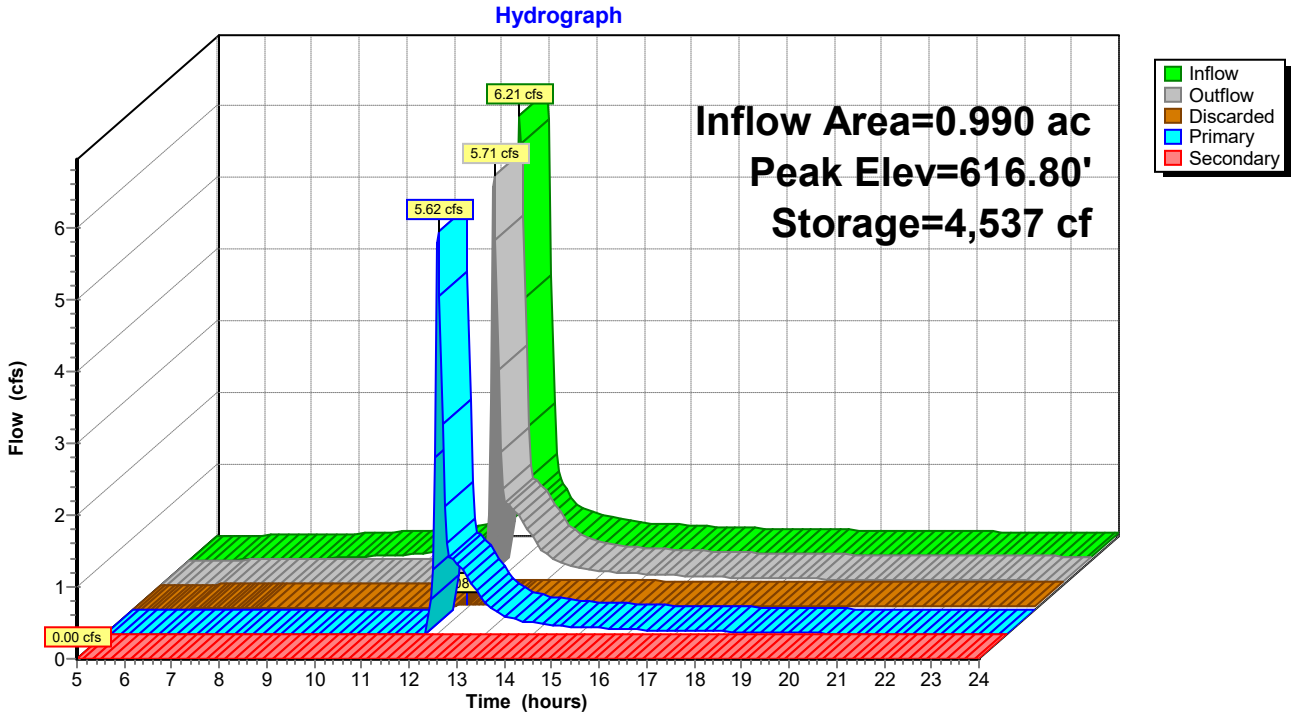
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 611.00' | **12.0" Round Culvert**<br>L= 20.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 611.00' / 608.00' S= 0.1500 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 615.50' | **7.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 616.50' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 617.00' | **5.0' long x 0.50' rise Sharp-Crested Rectangular Weir**<br>2 End Contraction(s) 1.0' Crest Height |
| #5 | Discarded | 611.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.08 cfs @ 12.02 hrs HW=616.78' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.08 cfs)

**Primary OutFlow** Max=5.22 cfs @ 12.02 hrs HW=616.78' (Free Discharge)
└**1=Culvert** (Passes 5.22 cfs of 8.69 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 1.28 cfs @ 4.79 fps)
└**3=Orifice/Grate** (Weir Controls 3.93 cfs @ 1.74 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=611.00' (Free Discharge)
└**4=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond 5P: BIO RET 1



## Summary for Pond 6P: BIO RET 2

Inflow Area = 1.600 ac, 57.50% Impervious, Inflow Depth > 2.48" for 100-yr event
Inflow = 6.05 cfs @ 12.02 hrs, Volume= 0.331 af
Outflow = 4.17 cfs @ 12.12 hrs, Volume= 0.282 af, Atten= 31%, Lag= 6.1 min
Discarded = 0.09 cfs @ 12.12 hrs, Volume= 0.079 af
Primary = 2.55 cfs @ 12.12 hrs, Volume= 0.186 af
Routed to Pond 8P : Drywell
Secondary = 1.53 cfs @ 12.12 hrs, Volume= 0.017 af
Routed to Pond 8P : Drywell

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 597.97' @ 12.12 hrs Surf.Area= 3,922 sf Storage= 4,926 cf

Plug-Flow detention time= 123.3 min calculated for 0.282 af (85% of inflow)
Center-of-Mass det. time= 55.0 min ( 891.4 - 836.4 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 593.00' | 2,019 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>5,047 cf Overall x 40.0% Voids |
| #2 | 596.50' | 4,282 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 6,300 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 593.00 | 1,442 | 0 | 0 |
| 596.50 | 1,442 | 5,047 | 5,047 |

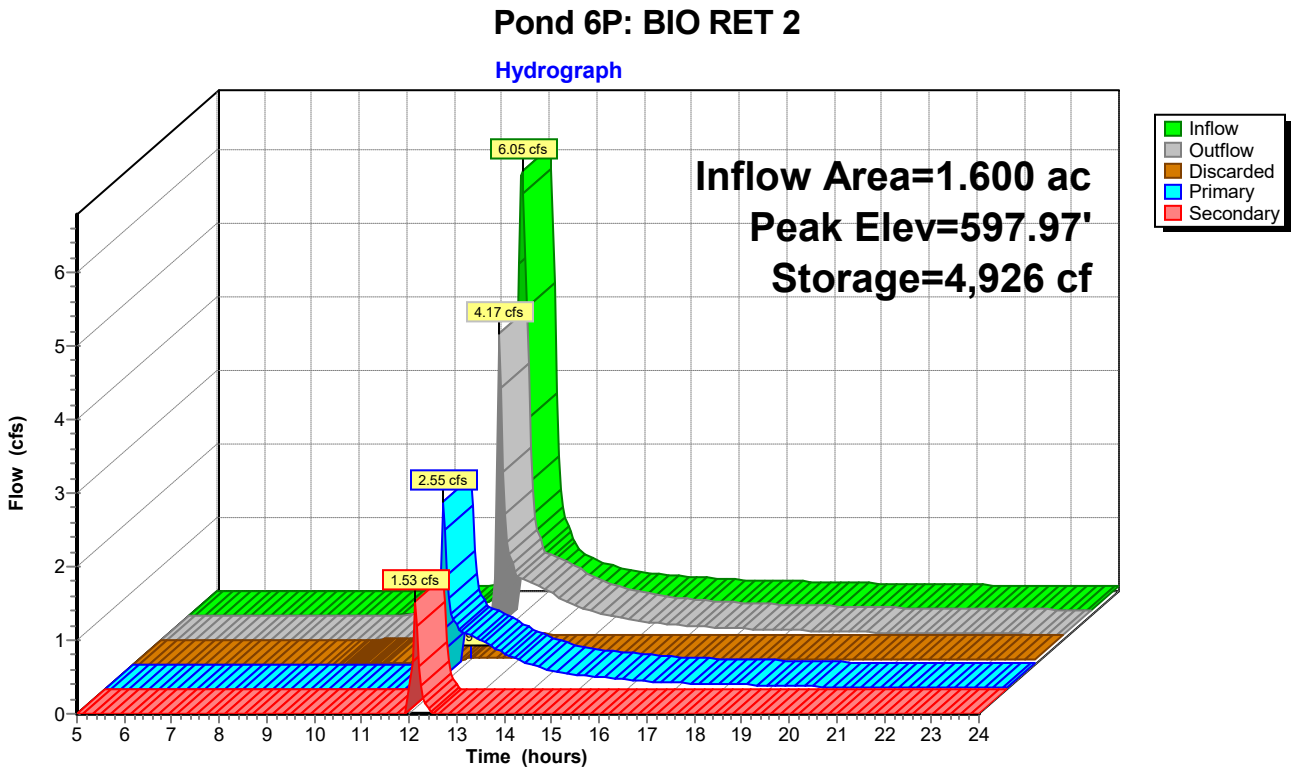
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 596.50 | 1,450 | 0 | 0 |
| 597.00 | 1,822 | 818 | 818 |
| 598.00 | 2,500 | 2,161 | 2,979 |
| 598.50 | 2,710 | 1,303 | 4,282 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 593.00' | **12.0" Round Culvert**<br>L= 92.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 593.00' / 589.19' S= 0.0414 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Device 1 | 596.50' | **2.2" W x 12.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Device 1 | 597.80' | **24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Secondary | 597.80' | **8.5' long + 3.0 '/' SideZ x 15.0' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63 |
| #5 | Discarded | 593.00' | **1.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.09 cfs @ 12.12 hrs HW=597.95' (Free Discharge)
└**5=Exfiltration** (Exfiltration Controls 0.09 cfs)

**Primary OutFlow** Max=2.31 cfs @ 12.12 hrs HW=597.95' (Free Discharge)
└**1=Culvert** (Passes 2.31 cfs of 7.97 cfs potential flow)
  └**2=Orifice/Grate** (Orifice Controls 0.85 cfs @ 4.63 fps)
  └**3=Orifice/Grate** (Weir Controls 1.47 cfs @ 1.25 fps)

**Secondary OutFlow** Max=1.33 cfs @ 12.12 hrs HW=597.95' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 1.33 cfs @ 1.02 fps)



## Summary for Pond 8P: Drywell

[79] Warning: Submerged Pond 6P Primary device # 1 OUTLET by 1.18'

Inflow Area = 2.020 ac, 58.42% Impervious, Inflow Depth > 1.78" for 100-yr event
Inflow = 4.59 cfs @ 12.11 hrs, Volume= 0.299 af
Outflow = 4.06 cfs @ 12.13 hrs, Volume= 0.292 af, Atten= 11%, Lag= 0.7 min
Discarded = 0.01 cfs @ 9.45 hrs, Volume= 0.008 af
Primary = 4.06 cfs @ 12.13 hrs, Volume= 0.283 af
Routed to Reach 11R : W Creek
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach 11R : W Creek

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs / 3
Peak Elev= 590.44' @ 12.13 hrs Surf.Area= 145 sf Storage= 426 cf

Plug-Flow detention time= 17.6 min calculated for 0.292 af (98% of inflow)
Center-of-Mass det. time= 4.6 min ( 837.3 - 832.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 585.00' | 311 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc)<br>1,160 cf Overall - 382 cf Embedded = 778 cf x 40.0% Voids |
| #2 | 586.00' | 302 cf | **8.00'D x 6.00'H Vertical Cone/Cylinder** Inside #1<br>382 cf Overall - 6.0" Wall Thickness = 302 cf |
| #3 | 592.90' | 47 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |
| | | 660 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 585.00 | 145 | 0 | 0 |
| 593.00 | 145 | 1,160 | 1,160 |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 592.90 | 6 | 0 | 0 |
| 593.50 | 150 | 47 | 47 |

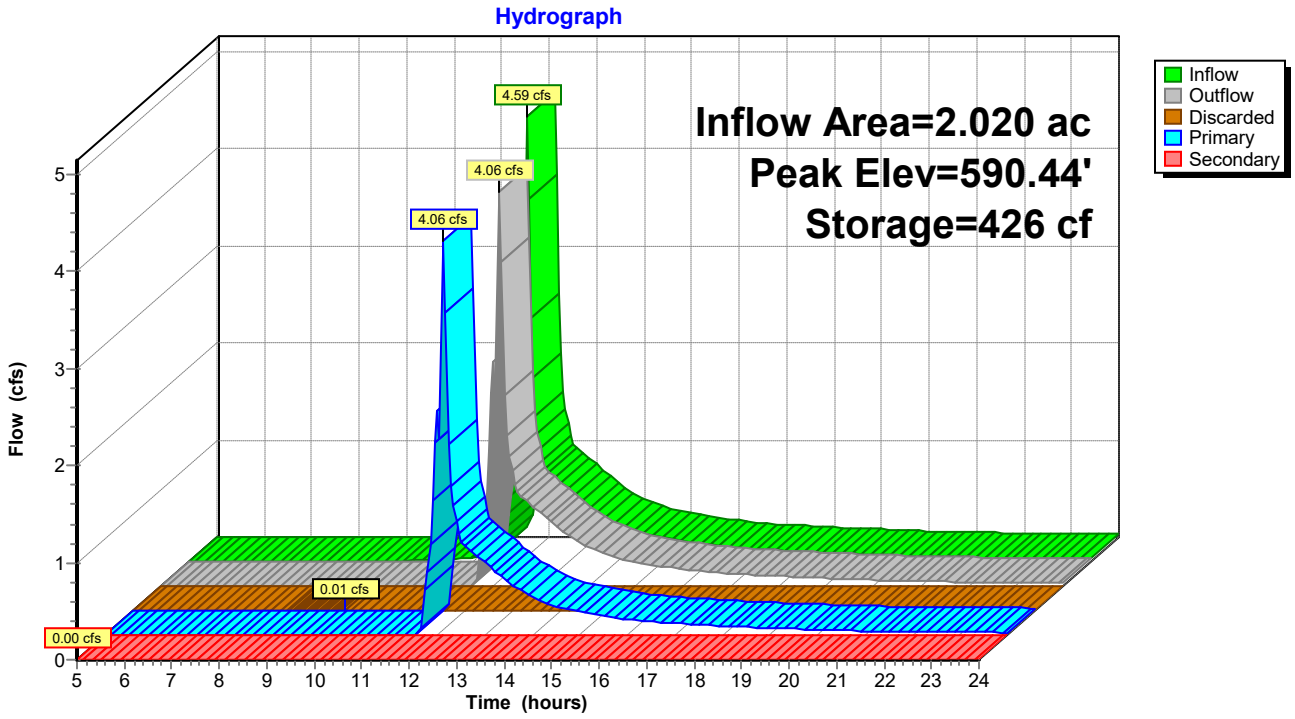
| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 588.80' | **12.0" Round Culvert**<br>L= 13.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 588.80' / 583.95' S= 0.3731 '/' Cc= 0.900<br>n= 0.013, Flow Area= 0.79 sf |
| #2 | Secondary | 592.90' | **24.0" Horiz. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #3 | Discarded | 585.00' | **2.000 in/hr Exfiltration over Surface area** |

**Discarded OutFlow** Max=0.01 cfs @ 9.45 hrs HW=585.09' (Free Discharge)
└**3=Exfiltration** (Exfiltration Controls 0.01 cfs)

**Primary OutFlow** Max=3.91 cfs @ 12.13 hrs HW=590.37' (Free Discharge)
└**1=Culvert** (Inlet Controls 3.91 cfs @ 4.98 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=585.00' (Free Discharge)
└**2=Orifice/Grate** ( Controls 0.00 cfs)

## Pond 8P: Drywell



# Appendix L

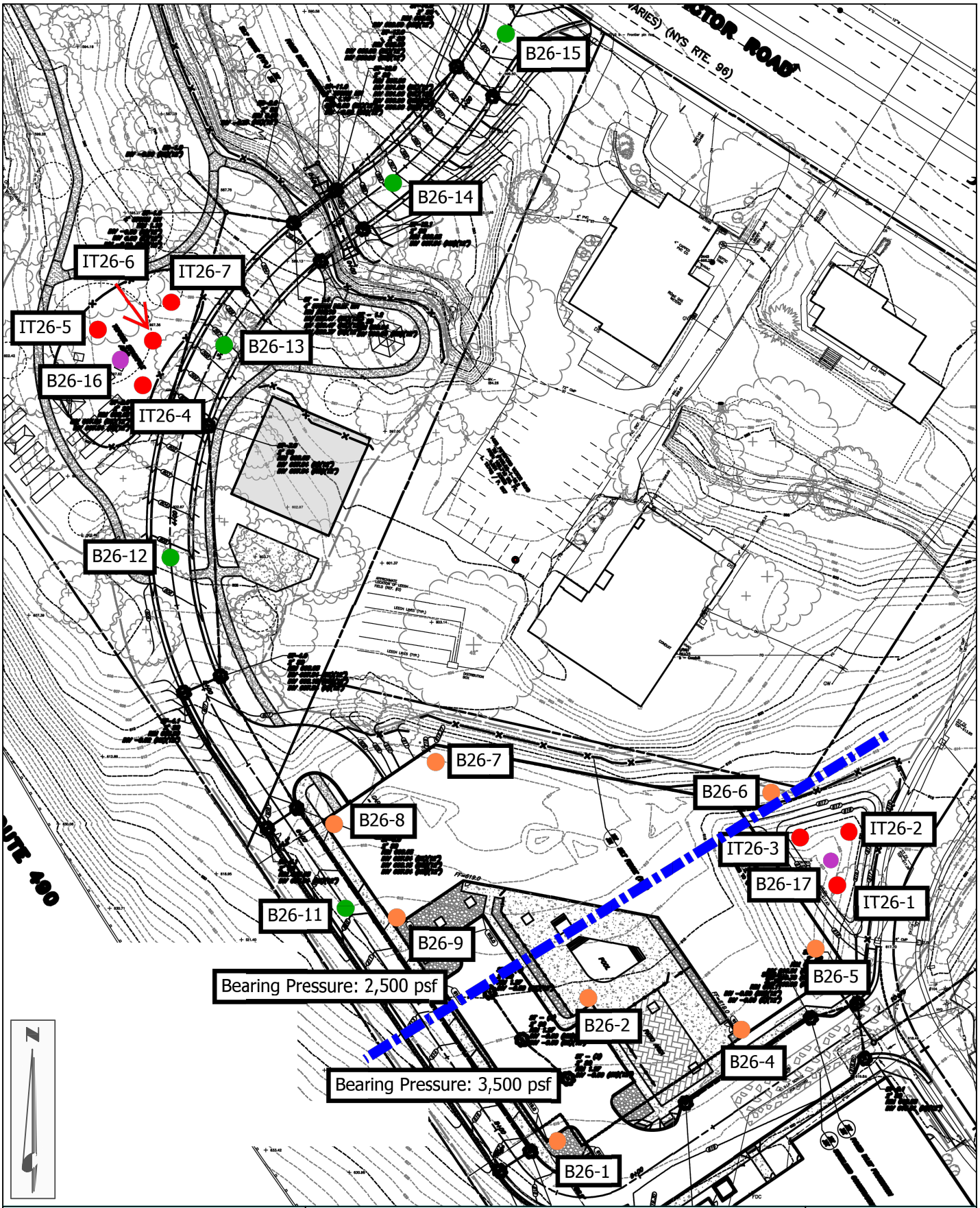
## Revisions to the SWPPP

# Appendix M

## Construction Site Logbook/ Corrective Action Log/ Inspection Reports

# Appendix N

## Geotechnical Report




**Foundation Design P.C.**

46A Sager Dr, Rochester, NY 14607

**Willowbrook Office Park Expansion**

Pittsford Victor Road, Victor, New York

**Exploration Location Plan**

Adapted from: Marathon Engineering "*Proposed Site Conditions*" July 2026

JOB NO. 26.06194

DATE: 9/9/2026

CHECKED BY: JMB | DRAWN BY: LSK | SCALE: NTS

Outlook

## Re: Willowbrook

**From** Luke Kosciol <lkosciol@foundationdesignpc.com>
**Date** Thu 9/10/2026 8:25 AM
**To** Matt Tomlinson <mtomlinson@marathoneng.com>
**Cc** Jim Baker <jbaker@foundationdesignpc.com>; Rafael Barreto <rbarreto@marathoneng.com>; Ian Denaro <idenaro@christa.com>; Sam Skufca <SSkufca@marathoneng.com>

1 attachment (5 MB)
Willowbrook Office Park - Exploration Location Plan.pdf;

Matt,

Attached to this email is the Exploration Location Plan for the Willowbrook Office Park Expansion. See the infiltration test results below. The report is in for final editing and we hope to get it out today. Let me know if you need anything else.

**Table No. 1 – Infiltration Test Results**

| Infiltration Number | Surface Elevation (ft) | Test Depth (bgs ft) | Test Elevation (ft) | Run #1 | Run #2 | Run #3 | Run #4 | Average Rate (in/hr) |
|---|---|---|---|---|---|---|---|---|
| IT26-1 | 621.60 | 11.7' | 609.8 | 7" | 6" | 6" | 5" | 6"/hr |
| IT26-2 | 620.88 | 11.0' | 609.9 | 24" | 23" | 23" | 22" | 23"/hr |
| IT26-3 | 620.52 | 10.6' | 609.9 | 12" | 11" | 8" | 7" | 9.5"/hr |
| IT26-4 | 597.85 | 3.4' | 594.5 | 24" | 24" | 24" | 24" | 24"/hr |
| IT26-5 | 597.75 | 3.3' | 594.5 | 19.25" | 19" | 7.5" | 6" | 13"/hr |
| IT26-6 | 597.58 | 3.1' | 594.5 | 17" | 15" | 13" | 7.5" | 13.1"/hr |
| IT26-7 | 596.38 | 1.9' | 594.5 | 2" | 2" | 1" | .25" | 1"/hr |

Thank You,
Luke

**Luke Kosciol, I.E.**
Staff Engineer
**Foundation Design, P.C.**
Office: (585) 458-0824
Cell: (585) 626-5095
lkosciol@foundationdesignpc.com
foundationdesignpc.com