

February 16, 2024

Town of Perinton
Attn: James Brasley
1350 Turk Hill Road
Fairport, NY 14450

Re: 1251 Pittsford-Victor Road – Planning Board Application
Tax ID: 193.02-1-27.111 & 193.02-1-27.112

Dear Chairman Brasley:

On behalf of our client, Christa Development, we respectfully submit the attached materials for consideration of Site Plan Preliminary and Final approval at the next available Planning Board meeting.

Existing Site

The existing site is +/- 5.3 acres located at 1251 Pittsford-Victor Road in the Town of Perinton, New York. The site is in the RB – Restricted Business District which includes areas along Pittsford-Victor Road to the north of the site. The project site is heavily wooded and undeveloped. Surrounding uses within the RB District include offices. To the south and southwest of the site and RB District are single-family homes.

Proposal

This project was previously presented and approved by the Town of Perinton Planning Board in 2018 for the development of a two-story with walkout level 14,000 SF office building, and 3,200 SF bank building on site.

Since the 2018 proposal the project has changed and now includes the construction of a 3-story with walkout basement +/- 18,500 SF hotel. The site includes a 118-space parking lot with two-way drive aisles, pedestrian facilities including sidewalks, accessibility curb cuts to the main entry and from handicap parking spaces, a refuse area, site landscaping, and stormwater management areas.

Mitigation is also provided for this project, which includes significant fencing along the southern boundary of the site that faces the adjacent single-family homes, extended buffer distance from the adjacent steep slopes, and the implementation of a left turn- lane on Pittsford-Victor Road (County Road 96) into the site per the NYSDOT.

The project was granted a special use permit from the Town of Perinton on January 10th 2024 for the Hotel use, with requirements that have been met within this site plan application

In support of our request, attached please find:

- (15) Letters of Intent – 1 Original
- (15) Planning Board Applications – 1 Original
- (15) Owner Authorization Letter
- (15) Site Plans & Checklists
- (15) Elevations
- (15) Short EAF – 1 Original
- (15) Deed
- (5) Engineer Report
- (1) SWPPP Report
- (1) Checks for \$500.00 Fee (Preliminary and Final)
- (1) Electronic Copy of Application

If you have any questions or require additional information regarding this matter, please do not hesitate to contact me at any time (585) 325-1000. Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, appearing to read "Joshua Saxton". The signature is fluid and cursive, with a long horizontal stroke at the end.

Joshua Saxton-EIT
Project Manager

JS:paf

Cc: File

PLANNING BOARD APPLICATION

To: Town of Perinton
1350 Turk Hill Road
Fairport, NY 14450
(585) 223-0770

Please note that members of Town staff and reviewing Board members may visit your property to review your request. Please review Perinton Town Code requirements at:

<http://www.perinton.org/codes/>

PROJECT NAME 1251 Pittsford-Victor Road

Location 1251 Pittsford-Victor Road

APPLICANT Christa Development

Phone 585.924.3050 mailing address 64 Commercial St. Ste. 401

City Rochester, NY Zip 14614 Fax _____ e-mail bmckinnon@christa.com

OWNER 1251 PVR, LLC

Phone 585.924.3050 mailing address 64 Commercial St. Ste. 401

City Rochester, NY Zip 14614 Fax _____ e-mail bmckinnon@christa.com

Person appearing at public hearing for application Joshua Saxton / Passero Associates

Phone 585.325.1000 mailing address 242 W. Main St. S100

City Rochester, NY Zip 14614 Fax _____ e-mail jsaxton@passero.com

REASON FOR APPEARING

Subdivision Approval: _____ Concept _____ Preliminary _____ Final

Site Plan Approval: _____ ☒ Preliminary _____ ☒ Final **FEE \$500 SQ.FT.** _____

Change of Use From _____ to _____

TYPE OF PROJECT Hotel, Office Bldg., Bank

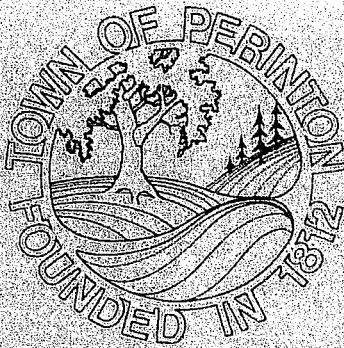
Is this parcel in a flood plain? No Conservation Easement? No

Size of parcel in acreage 5.3 Tax Account Number(s) 193.02-1-27.111 & 193.02-1-27.112

Present Zoning Restricted Business District - RB

 **Brian McKinnon - Agent for Owner**
Applicant Signature - sign & print name

 **David Christa - 1251 PVR, LLC**
Owner Signature (if other than applicant) - sign & print name



TOWN OF PERINTON

1350 TURK HILL ROAD, FAIRPORT, NEW YORK 14450-8796
(585) 223-0770, Fax: (585) 223-3629, www.perinton.org

Owner Authorization to Make Application

I, 1251 PVR, LLC, authorize
(print owner name legibly)

Joshua Saxton (Passero Associates)
(applicant/engineer name & company name)

to act as my agent to make application(s) to the Town of Perinton for the purpose of
Special Use Permit, Site plan, and variance approvals,
(site plan/subdivision/change of use, etc.)

for the property that I own located at 1251 Pittsford Victor Road.

Prillli, agent for
Signature Owner

May 2/2013
Date

NOTICE OF BOARD MEETING

Application received: _____

You or your agent are tentatively scheduled to appear before _____ Board on _____ at 7:30 PM. Your application will be reviewed by Town staff to determine completeness. **You are not on agenda. We will contact you if your application is deemed to be incomplete or complete enough to be heard by the Board, which may affect the tentative scheduled date above. Town Board applicants will be contacted by the Town Clerk as to if your request will be heard and the date for that.**

***DUE TO COVID -19 – ALL BOARD MEETINGS FOR APPLICATIONS BEFORE BOARDS WILL BE HELD IN THE BOARD ROOM AT THE PERINTON TOWN HALL**

Planning Board & Zoning Board (7:30 PM) meetings are held in the Board room at Perinton Town Hall, 1350 Turk Hill Road, Fairport, New York. The parking lot entrance has a sign that states Town Court and Town meetings. Please enter the building by using the middle set of double doors, which are to the left of the flag pole. These doors will be unlocked at approximately 7:20 PM.

***Historic Architecture Commission (7:30 PM)** meetings are typically held in the Town Hall. Please enter the building by using the third set of double doors, which are to the right of the flag pole. This is the Town Hall main entrance. These doors will be unlocked at approximately 7:20 PM.

Town Board (7:30 PM) meetings are typically held in the Board room at Perinton Town Hall, 1350 Turk Hill Road, Fairport, New York. The parking lot entrance has a sign that states Town Court and Town meetings. Please enter the building by using the middle set of double doors, which are to the left of the flag pole. These doors will be unlocked at approximately 7:20 PM.

Failure to appear by the applicant or agent of the applicant may result in the need for a new application and applicable fees.

Please note that you will not receive additional information of this meeting date. You may call this office on the day of the meeting to determine your placement on the agenda or view our website at:

<http://www.perinton.org/Boards/planbd/agenda/> (Planning Board)

<http://www.perinton.org/Boards/Zonebd/zonebdagd/> (Zoning Board of Appeals)

<http://www.perinton.org/Boards/histarch/meetagenda/> (Historic Architecture Commission)

<http://www.perinton.org/Boards/TwnBrd/twnbdAgd/> (Town Board)

- Please note that a member of Town staff will come out to your property to post a Notice of Application received sign at your front property line. If you are on a corner lot, there will be two signs. Please do not remove these signs. A member of Town staff will remove them once a decision has been made on your request. If signage falls down or is removed, please contact this office immediately, and we will replace signage. **(Planning Board, Zoning Board of Appeals, Historic Architecture Commission & Town Board)**
- We ask that you stake out the limits of your request at least two weeks prior to the public hearing & no later than _____.
- We advise that that you notify immediate neighbors of your request. **(Zoning Board of Appeals only)**
- Please note that members of Town staff, Town Board, Zoning Board of Appeals, Planning Board, Historic Architecture Commission and Conservation Board may visit your property to review your request.
- If any written comments are received by this office pertaining to your request, please note that we will forward them to you via e-mail or fax as they come in. Town staff will also provide written comments before the public hearing.

If you have any questions or concerns please contact:

Zoning Board of Appeals or Planning Board applications: Lori Stid -223-0770.

Historic Architecture Commission applications: Bill Poray – 223-0770

Town Board applications: Jennifer West – 223-0770

Received by: _____
sign and print name

5/26/20

PRELIMINARY SITE PLAN REVIEW

PROJECT NAME 1251 Pittsford Victor Road

This CHECKLIST is for use by the applicant as a guide to insure that all necessary information has been provided on the maps.

The checklist should be completed by the applicant and submitted along with the application sheet.

If the applicant is proposing a new project of a sizeable nature or a significant change to a current project, it may be to their best interest to appear before the Board for an informal discussion prior to preparing the detailed plans as required below.

If variances will be required from the Zoning Board of Appeals, the applicant should first appear before the Planning Board on an informal basis to obtain a recommendation to the Zoning Board of Appeals. This should help to minimize any future conflicts later on.

This proposal may be required to be reviewed by Monroe County, pursuant to Section 239m of the General Municipal Law. The appropriate referral form may be obtained from the Town of Perinton Planning Board Secretary.

1. Area map of applicant's entire holding, showing subdivisions, streets and easements within 100 feet of applicant's property. Adjacent land use including buildings, pavement, landscaping, topography, ownership and zoning should also be shown.

☒ Shown ☐ N/A

2. Topographic Map with 5 feet elevation contours if grades exceed 3% or susceptibility to erosion, flooding or ponding. Otherwise, contours and spot elevations at 1 or 2-foot intervals should be shown.

☒ Shown ☐ N/A

3. Also to include:

- | | | |
|---|---|------------------------------|
| a. Title of drawing | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| b. Name and address | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| c. North point, scale and date | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| d. Boundaries of the property, plotted to scale | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| e. Existing watercourses, Town LDD limits and State Wetland with buffer area must be shown | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| f. Proposed use and height of all buildings | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| g. Show parking and truck loading areas, provide breakdown as per square foot uses in the building to meet parking ordinance. | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| h. Show access and egress drives | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| i. Location of all outdoor storage | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |

4. Show existing and/or proposed site improvements:

- | | | |
|----------------------|---|---|
| a. Sidewalk easement | <input type="checkbox"/> Shown | <input checked="" type="checkbox"/> N/A |
| b. Sidewalk | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| c. Drains | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| d. Culverts | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |

- | | | |
|--|---|---|
| e. Retaining walls and fences | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| f. Storm water drainage | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| g. Sanitary sewage | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| h. Size and location of all signs | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| i. Buffer areas | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| j. Design and location of lighting facilities | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| k. Show building area for retail sales | <input type="checkbox"/> Shown | <input checked="" type="checkbox"/> N/A |
| l. Curbs | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| 5. Landscape plan shall be included | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| 6. Erosion control plan shall be included | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |
| 7. Conservation Easement | <input type="checkbox"/> Shown | <input checked="" type="checkbox"/> N/A |
| 8. Limited Development District, areas indicated | <input checked="" type="checkbox"/> Shown | <input type="checkbox"/> N/A |

SITE PLAN MAPS

Special attention should be given to the following items, as they are more often excluded from the site plan. Section 208-53B(3) requires these items to be part of the approval process but does not limit consideration to just these items. If an applicant is looking to expedite an application, it is most important that these details are shown on the site plan. Exclusion results in time and money loss with dissatisfied clients.

1. LANDSCAPING - include location, caliber, species, differentiate between existing and proposed. Show planting schedule.
2. LIGHTING – include height of pole, style of fixture, foot-candles, area coverage per fixture and location. Poles shall not exceed 16 feet in height.
3. DUMPSTERS AND REFUSE – location, landscaping, building material enclosure and elevations. Enclosure should be compatible with building.
4. SIGNAGE – location, true colored rendering drawn to scale showing size of sign, size of lettering, type of construction, lighting, structural details when attached to building, elevation drawing of building face to scale. In addition, signage requires a separate application to the Planning Board Sign Committee.
5. SIDEWALKS – location, construction, easements. Check Town Sidewalk Map to verify if required.
6. MECHANICALS – show building or ground mounted locations, show enclosure elevations and construction materials or landscaping to protect from visual pollution on the site and off the side.

7. EROSION CONTROL PLANS

8. LIMITED DEVELOPMENT DISTRICT AREAS – show flooding and ponding, wooded areas, steep slopes subject to erosion, areas where development poses a threat to the public health, safety and welfare of the Town of Perinton.

9. EASEMENTS AND DIMENSION – show and label.

10. VARIANCES OR SPECIAL PERMITS – when granted by the Board of Appeals, indicate on site plan date granted and type of approval.

The above items **DO NOT EXCLUDE** other items as described under Article X Section 208-53 Site Plan Approval.

Review Completed By Joshua Saxton Date 2/16/2024

Map No. _____ Date _____

12/9/2019

FINAL SITE PLAN REVIEW

PROJECT NAME 1251 Pittsford Victor Road

This CHECKLIST is for use by the applicant as a guide to insure that all necessary information has been provided on the maps.

The checklist should be completed by the applicant and submitted along with the application sheet.

Preliminary Site Plan Approval was granted on _____.

If more than six (6) months has lapsed since Preliminary Approval was granted, the Planning Board and/or the applicant may ask to rehear the Preliminary before proceeding with a Final Site Plan hearing.

1. The Final Plan must contain all information as required under the Preliminary phase.

☒ Shown ☐ N/A

2. The plan shall address all conditions of Preliminary Approval in accordance with the minutes of that approval and any subsequent meetings or discussions.

☐ Shown ☒ N/A

3. All required Zoning Board variances should have been obtained and must be shown in tabular form on the site plan drawing.

☐ Shown ☒ N/A

4. If the project is located on a State or County Highway, the applicant must provide some form of acknowledgement from that agency indicating their acceptance for the proposed site plan.

☐ Shown ☒ N/A

The Final set of plans includes the following sheets: DRAWING INDEX

_____	C 101	COVER
_____	C 102	SITE PLAN
_____	C 103	EXISTING CONDITIONS /DEMOLITION PLAN
_____	C 104	UTILITY PLAN
_____	C 105	GRADING & EROSION CONTROL PLAN
_____	C 106	LANDSCAPING PLAN
_____	C 107	LIGHTING PLAN
_____	C 108	FIRE TRUCK VEHICLE TRACKING PLAN
_____	C 201-207	NOTES & DETAILS

Final Site Plan Approval Expiration Date _____

Final Site Plan Approval expires one year from the date of approval.

Subsequently re-approval from the Planning Board would be required.

Date _____

Review Completed By Joshua Saxton Date 2/16/2024

Map No. _____ Date _____
/2005

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 – Project and Sponsor Information				
Name of Action or Project:				
Project Location (describe, and attach a location map):				
Brief Description of Proposed Action:				
Name of Applicant or Sponsor:			Telephone:	
			E-Mail:	
Address:				
City/PO:		State:	Zip Code:	
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation?			NO	YES
If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<input type="checkbox"/>	<input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency?			NO	YES
If Yes, list agency(s) name and permit or approval:			<input type="checkbox"/>	<input type="checkbox"/>
3. a. Total acreage of the site of the proposed action? _____ acres b. Total acreage to be physically disturbed? _____ acres c. Total acreage (project site and any contiguous properties) owned _____ acres or controlled by the applicant or project sponsor?				
4. Check all land uses that occur on, are adjoining or near the proposed action: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban) </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify): </div> <div style="margin-top: 5px;"><input type="checkbox"/> Parkland</div>				

5. Is the proposed action, a. A permitted use under the zoning regulations? b. Consistent with the adopted comprehensive plan?	NO <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	N/A <input type="checkbox"/> <input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels? b. Are public transportation services available at or near the site of the proposed action? c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	NO <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____	NO <input type="checkbox"/>	YES <input type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? b. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	NO <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency? b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____	NO <input type="checkbox"/> <input type="checkbox"/>	YES <input type="checkbox"/> <input type="checkbox"/>	

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest Agricultural/grasslands Early mid-successional </div> <div style="display: flex; justify-content: space-between; margin-top: 5px;"> Wetland <input type="checkbox"/> Urban Suburban </div>		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, <div style="margin-left: 20px; margin-top: 10px;"> a. Will storm water discharges flow to adjacent properties? </div> <div style="margin-left: 20px; margin-top: 10px;"> b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? </div> If Yes, briefly describe: <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div> <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div>	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment: <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div> <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div>	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div> <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div>	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div> <div style="border-bottom: 1px solid black; margin-top: 5px; height: 1.2em;"></div>	NO	YES
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE</p> <p>Applicant/sponsor/name: _____ Date: _____</p> <p>Signature: <u>Jessie Subl</u> Title: _____</p>		

Project:

Date:

Short Environmental Assessment Form

Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept “Have my responses been reasonable considering the scale and context of the proposed action?”

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?		
2. Will the proposed action result in a change in the use or intensity of use of land?		
3. Will the proposed action impair the character or quality of the existing community?		
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?		
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?		
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?		
7. Will the proposed action impact existing:		
a. public / private water supplies?		
b. public / private wastewater treatment utilities?		
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?		
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?		
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?		
11. Will the proposed action create a hazard to environmental resources or human health?		

Project:

Date:

Short Environmental Assessment Form

Part 3 Determination of Significance

For every question in Part 2 that was answered “moderate to large impact may occur”, or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

Name of Lead Agency

Date

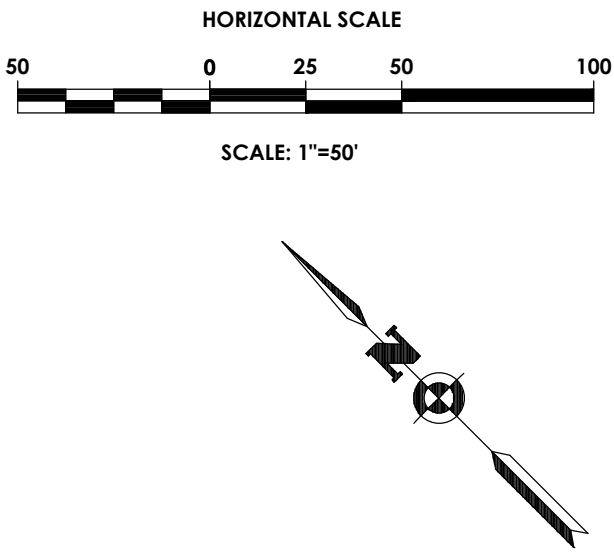
Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (if different from Responsible Officer)

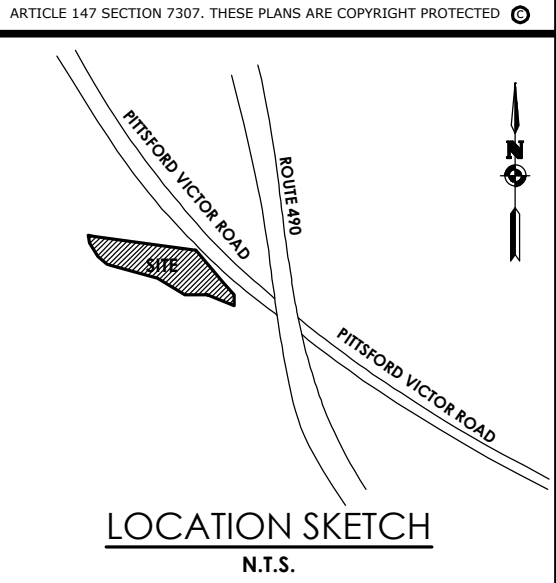
SITE DEVELOPMENT PLANS FOR
1251 PITTSFORD VICTOR ROAD - FAIRFIELD INN HOTEL
TOWN OF PERINTON, MONROE COUNTY, NEW YORK
P.N. 20182555.0005



PA
PASSERO ASSOCIATES
engineering architecture

DRAWING INDEX

C 101	COVER
C 102	SITE PLAN
C 103	EXISTING CONDITIONS /DEMOLITION PLAN
C 104	UTILITY PLAN
C 105	GRADING & EROSION CONTROL PLAN
C 106	LANDSCAPING PLAN
C 107	LIGHTING PLAN
C 108	FIRE TRUCK VEHICLE TRACKING PLAN
C 201-207	NOTES & DETAILS



Client:
Christa Construction
600 East Avenue
Rochester, NY 14607

PASSERO ASSOCIATES
242 West Main Street Suite 100
Rochester, New York 14614
(585) 325-1000
Fax: (585) 325-1691
Principal-in-Charge: Jess D. Sudol, P.E.
Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler E.I.T.

Revisions

No.	Date	By	Description
1			

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS IN VIOLATION OF STATE EDUCATION LAW ARTICLE 145 SECTION 7209 AND ARTICLE 147 SECTION 7307. THESE PLANS ARE COPYRIGHT PROTECTED ©

COVER

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

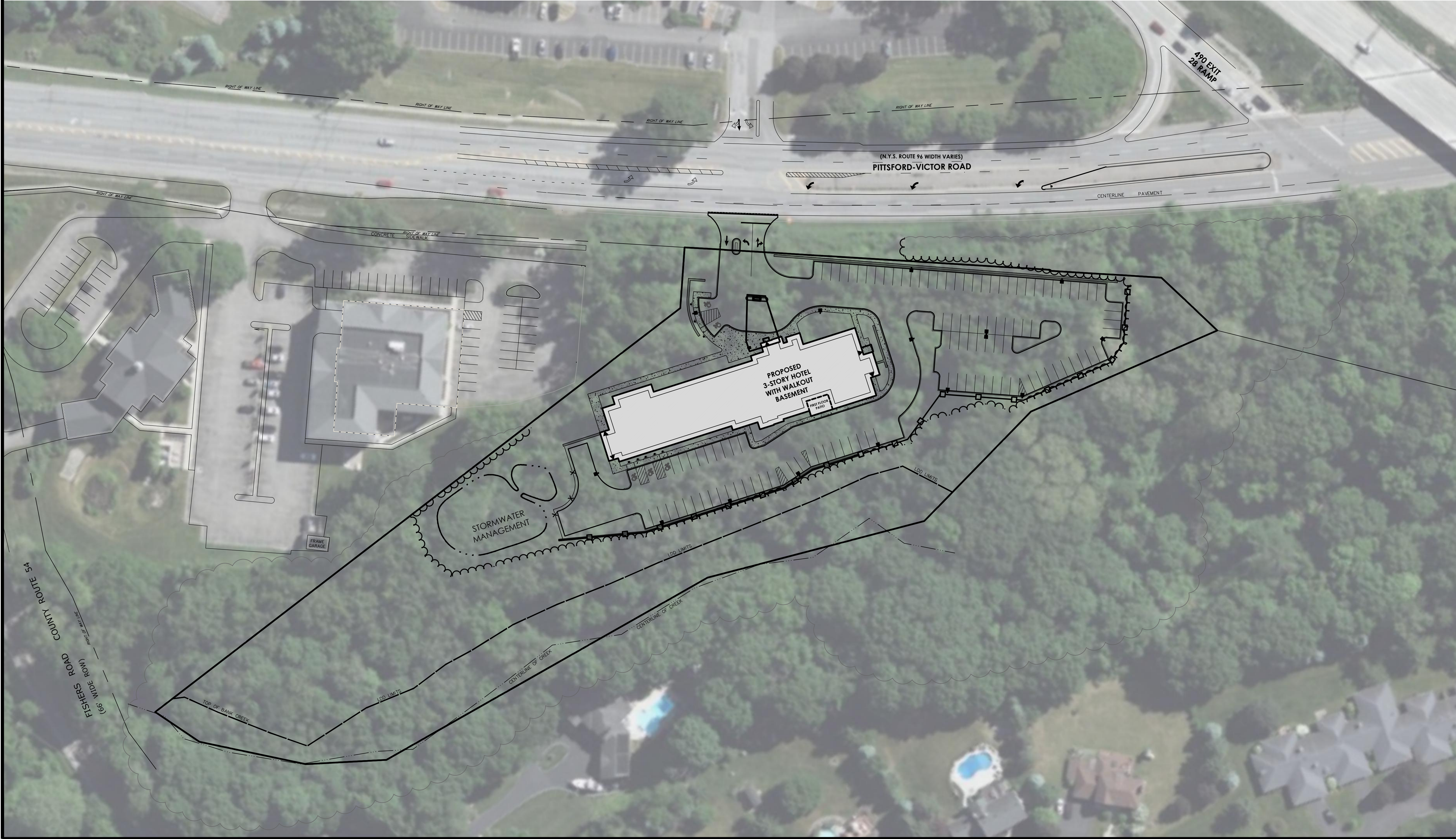
Project No.
20182555.0005

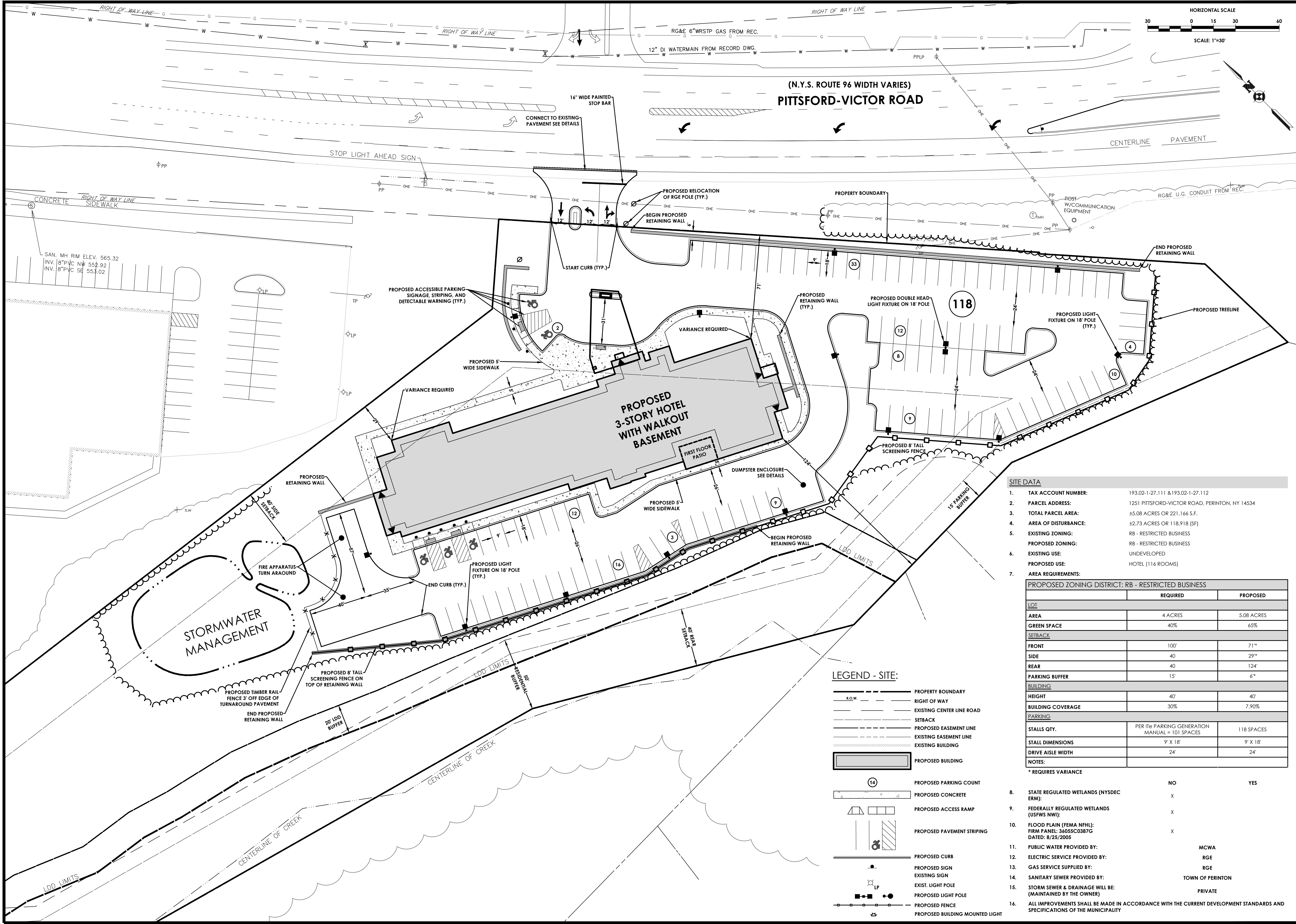
Drawing No.
C 101

Scale:
1" = 50'

Date
FEBRUARY 2024

NOT FOR CONSTRUCTION





SITE DATA		
1. TAX ACCOUNT NUMBER:	193.02-1-27.111 & 193.02-1-27.112	
2. PARCEL ADDRESS:	1251 PITTSFORD-VICTOR ROAD, PERINTON, NY 14534	
3. TOTAL PARCEL AREA:	±5.08 ACRES OR 221,166 S.F.	
4. AREA OF DISTURBANCE:	±2.73 ACRES OR 118,918 (SF)	
5. EXISTING ZONING:	RB - RESTRICTED BUSINESS	
PROPOSED ZONING:	RB - RESTRICTED BUSINESS	
6. EXISTING USE:	UNDEVELOPED	
PROPOSED USE:	HOTEL (116 ROOMS)	
7. AREA REQUIREMENTS:		

PROPOSED ZONING DISTRICT: RB - RESTRICTED BUSINESS		
	REQUIRED	PROPOSED
LOT		
AREA	4 ACRES	5.08 ACRES
GREEN SPACE	40%	65%
SETBACK		
FRONT	100'	71'
SIDE	40	29'
REAR	40	124'
PARKING BUFFER	15'	6'
BUILDING		
HEIGHT	40'	40'
BUILDING COVERAGE	30%	7.90%
PARKING		
STALLS QTY.	PER ITE PARKING GENERATION MANUAL = 101 SPACES	118 SPACES
STALL DIMENSIONS	9' X 18'	9' X 18'
DRIVE AISLE WIDTH	24'	24'
NOTES:		

	NO	YES
8. STATE REGULATED WETLANDS (NYSDEC ERM):	X	
9. FEDERALLY REGULATED WETLANDS (USFWS NWI):	X	
10. FLOOD PLAIN (FEMA NFHL): FIRM PANEL: 36055C0387G DATED: 8/25/2005	X	
11. PUBLIC WATER PROVIDED BY:		MCWA
12. ELECTRIC SERVICE PROVIDED BY:		RGE
13. GAS SERVICE SUPPLIED BY:		RGE
14. SANITARY SEWER PROVIDED BY:		TOWN OF PERINTON
15. STORM SEWER & DRAINAGE WILL BE: (MAINTAINED BY THE OWNER)		PRIVATE
16. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE CURRENT DEVELOPMENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY		

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Project Manager
Designed by

Jess D. Sudol, P.E.
Joshua Saxton, E.I.T.
James Ritzenthaler, E.I.T.

Revisions

No.	Date	By	Description
1			

SITE PLAN

1251 PITTSFORD-VICTOR ROAD

FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

Project No.
20182555.0005

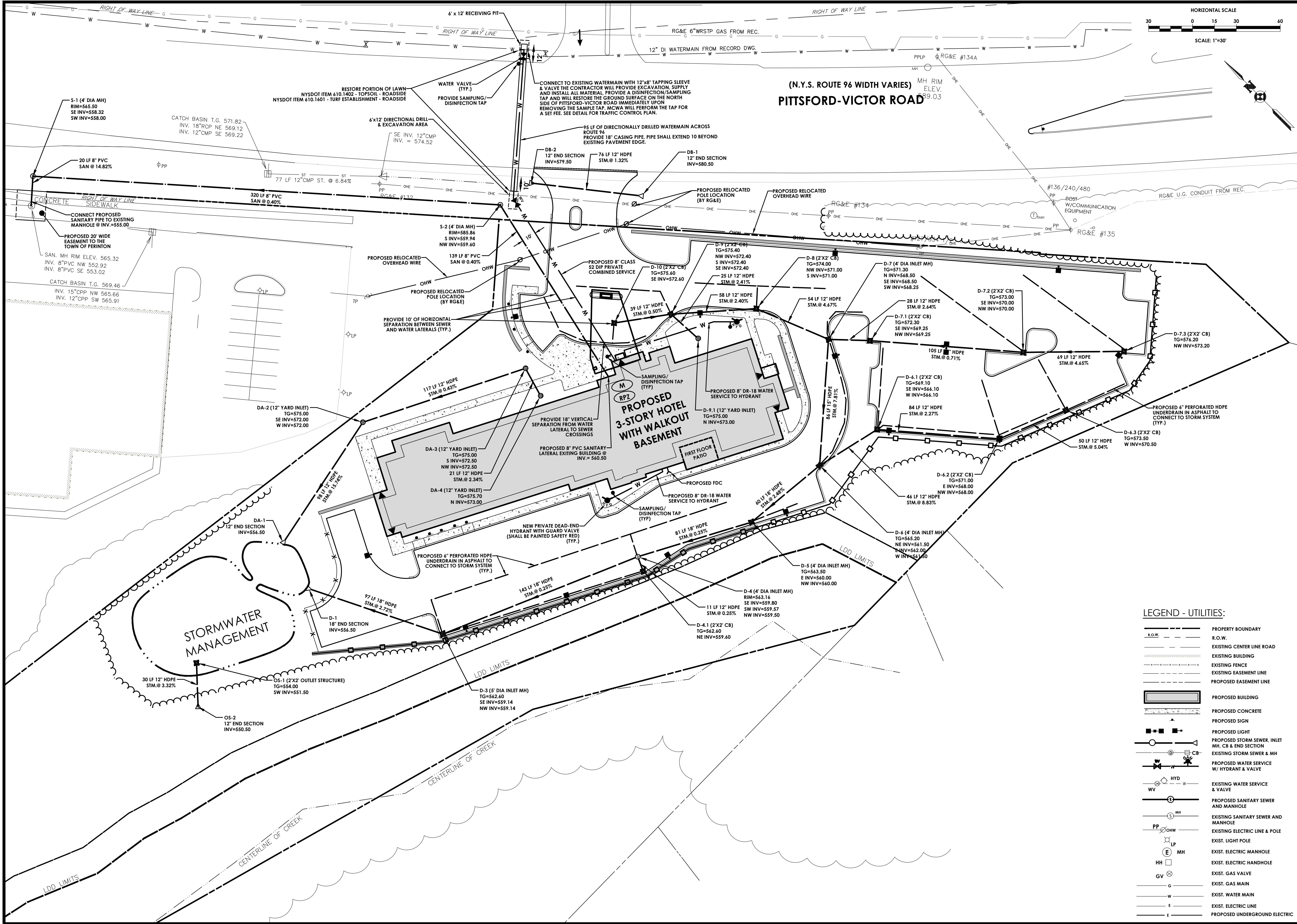
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Scale:
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Date
FEBRUARY 2024

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Project Manager: **Joshua Saxton, E.I.T.**
Designed by: **James Ritzenthaler E.I.T.**

Revisions			
No.	Date	By	Description
1			

UTILITY PLAN

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

Project No.
20182555.0005

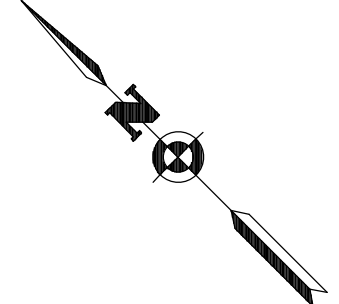
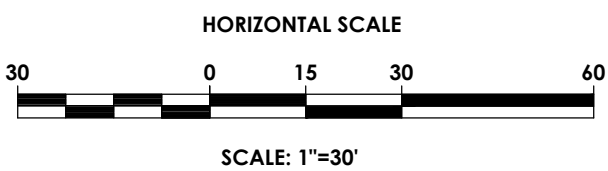
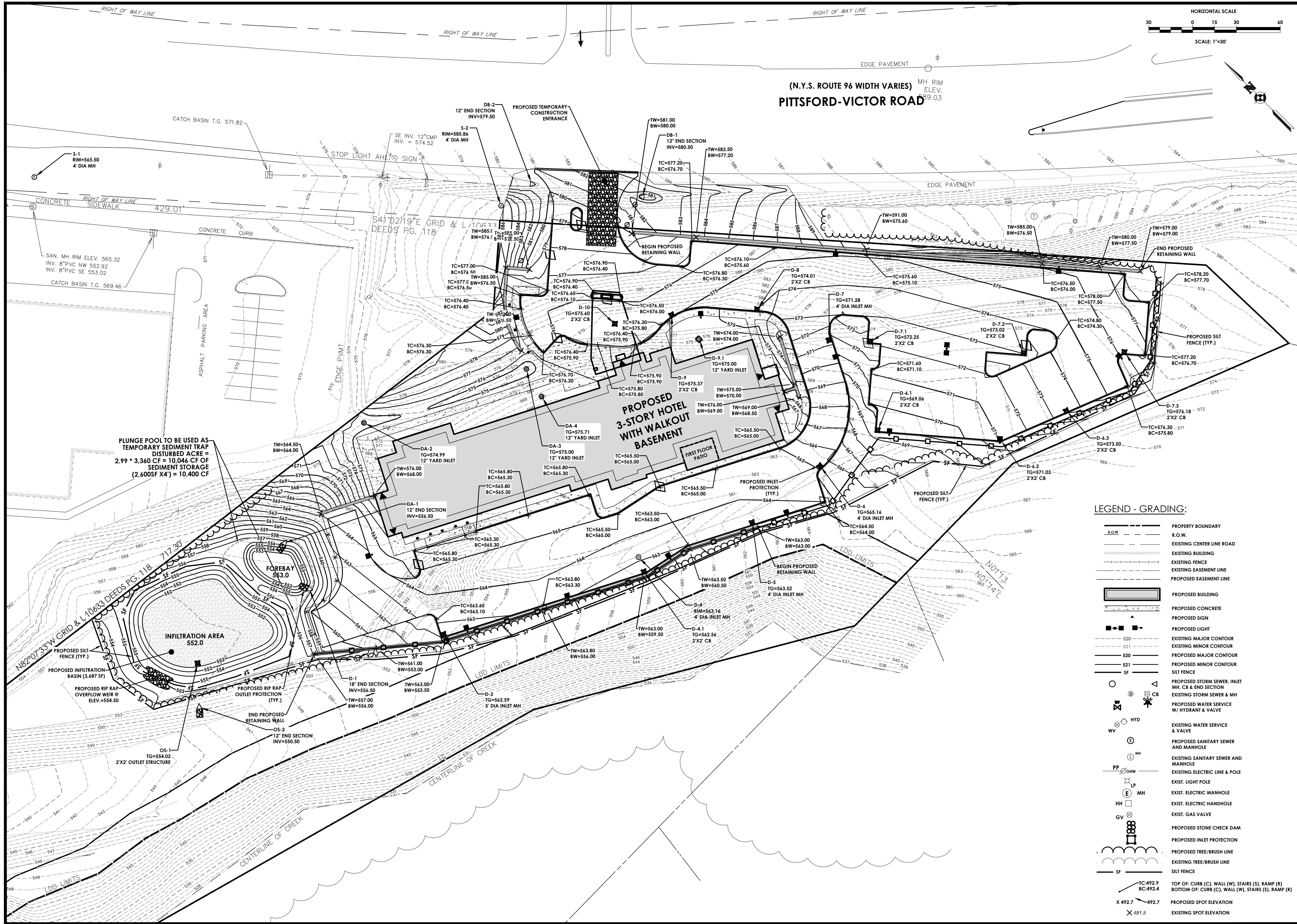
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Date
FEBRUARY 2024

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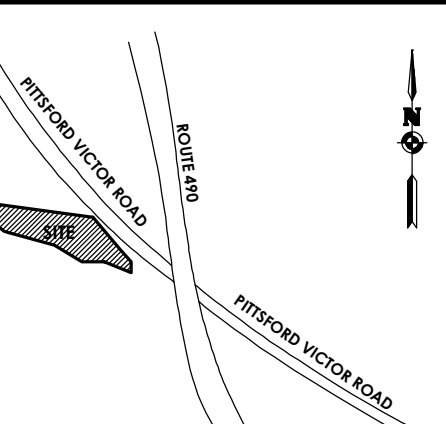
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PITTSFORD-VICTOR ROAD

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Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler, E.I.T.

Revisions

No.	Date	By	Description
1			

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**GRADING & EROSION
CONTROL PLAN**

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

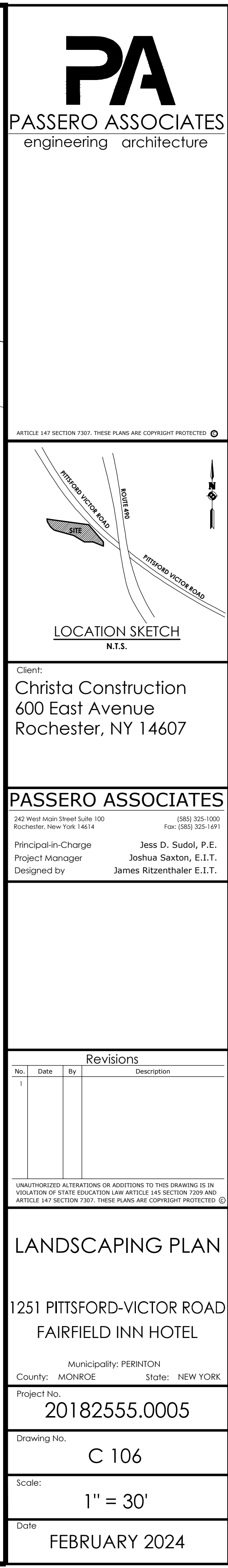
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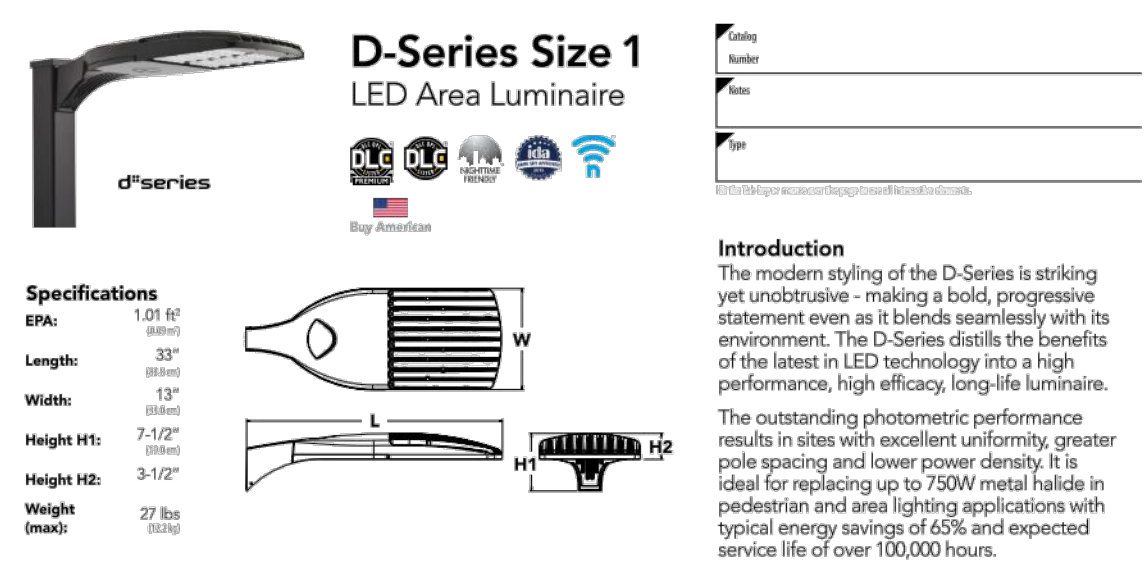
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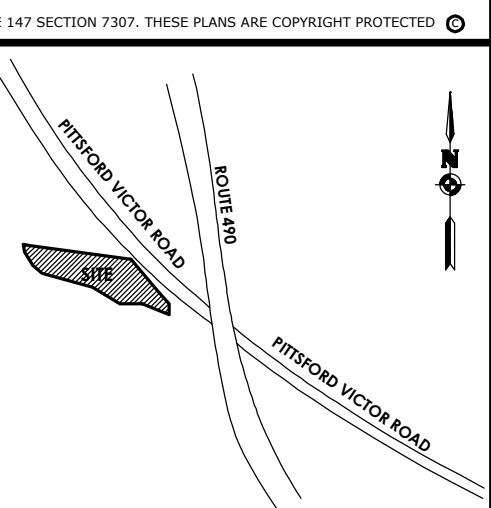




Ordering Information				EXAMPLE: DSX1 LED P7 40K TMS MVOLT SPA NLTAR2 PIRHN D2XND			
DSX1 LED							
Detail	LEDs	Color Temperature	Dimmability	Voltage	Mounting		
DSX1 LED	Forward optics P7 ¹ P8 ² P17 ³ P18 ⁴ P2 ⁵ P3 ⁶ P6 ⁷ P8 ⁸ P10 ⁹ P12 ¹⁰ P17 ¹¹ P18 ¹²	15K 2700K 3000K 40K 5000K	T15 Type I (about 14° beam) Type II (about 24° beam) T26 Type I (about 15° beam) Type II (about 24° beam) T35 Type I (about 15° beam) Type II (about 24° beam) T48 Type I (about 15° beam) Type II (about 24° beam)	T15S Type I (very short) ¹³ Type II (very short) ¹³ T26S Type I (medium) ¹³ Type II (medium) ¹³ T35S Type I (medium) ¹³ Type II (medium) ¹³ T48S Type I (medium) ¹³ Type II (medium) ¹³ LECO LED corner cubies ¹⁴ KC20 High corner cubies ¹⁴	W6V71 6V 7W W6V72 6V 7W W7V71 7V 7W W7V72 7V 7W W8V71 8V 7W W8V72 8V 7W W9V71 9V 7W W9V72 9V 7W W10V71 10V 7W W10V72 10V 7W W12V71 12V 7W W12V72 12V 7W W17V71 17V 7W W17V72 17V 7W W18V71 18V 7W W18V72 18V 7W	SPA Standard plug-in mounting WPA Wall bracket WPAW Square wall bracket mounting ¹⁵ WPAWA Round plug-in mounting adapter ¹⁶ WPAWPA Round plug-in mounting adapter (oppositely fixed)	
Control options				Other options		Finish options	
DSX1 LED	Non-dimmable N1 ¹⁷ N2 ¹⁸ N3 ¹⁹ N4 ²⁰ N5 ²¹ N6 ²² N7 ²³ N8 ²⁴ N9 ²⁵ N10 ²⁶ N11 ²⁷ N12 ²⁸ N17 ²⁹ N18 ³⁰ N19 ³¹ N20 ³² N21 ³³ N22 ³⁴ N23 ³⁵ N24 ³⁶ N25 ³⁷ N26 ³⁸ N27 ³⁹ N28 ⁴⁰ N29 ⁴¹ N30 ⁴² N31 ⁴³ N32 ⁴⁴ N33 ⁴⁵ N34 ⁴⁶ N35 ⁴⁷ N36 ⁴⁸ N37 ⁴⁹ N38 ⁵⁰ N39 ⁵¹ N40 ⁵² N41 ⁵³ N42 ⁵⁴ N43 ⁵⁵ N44 ⁵⁶ N45 ⁵⁷ N46 ⁵⁸ N47 ⁵⁹ N48 ⁶⁰ N49 ⁶¹ N50 ⁶² N51 ⁶³ N52 ⁶⁴ N53 ⁶⁵ N54 ⁶⁶ N55 ⁶⁷ N56 ⁶⁸ N57 ⁶⁹ N58 ⁷⁰ N59 ⁷¹ N60 ⁷² N61 ⁷³ N62 ⁷⁴ N63 ⁷⁵ N64 ⁷⁶ N65 ⁷⁷ N66 ⁷⁸ N67 ⁷⁹ N68 ⁸⁰ N69 ⁸¹ N70 ⁸² N71 ⁸³ N72 ⁸⁴ N73 ⁸⁵ N74 ⁸⁶ N75 ⁸⁷ N76 ⁸⁸ N77 ⁸⁹ N78 ⁹⁰ N79 ⁹¹ N80 ⁹² N81 ⁹³ N82 ⁹⁴ N83 ⁹⁵ N84 ⁹⁶ N85 ⁹⁷ N86 ⁹⁸ N87 ⁹⁹ N88 ¹⁰⁰ N89 ¹⁰¹ N90 ¹⁰² N91 ¹⁰³ N92 ¹⁰⁴ N93 ¹⁰⁵ N94 ¹⁰⁶ N95 ¹⁰⁷ N96 ¹⁰⁸ N97 ¹⁰⁹ N98 ¹¹⁰ N99 ¹¹¹ N100 ¹¹² N101 ¹¹³ N102 ¹¹⁴ N103 ¹¹⁵ N104 ¹¹⁶ N105 ¹¹⁷ N106 ¹¹⁸ N107 ¹¹⁹ N108 ¹²⁰ N109 ¹²¹ N110 ¹²² N111 ¹²³ N112 ¹²⁴ N113 ¹²⁵ N114 ¹²⁶ N115 ¹²⁷ N116 ¹²⁸ N117 ¹²⁹ N118 ¹³⁰ N119 ¹³¹ N120 ¹³² N121 ¹³³ N122 ¹³⁴ N123 ¹³⁵ N124 ¹³⁶ N125 ¹³⁷ N126 ¹³⁸ N127 ¹³⁹ N128 ¹⁴⁰ N129 ¹⁴¹ N130 ¹⁴² N131 ¹⁴³ N132 ¹⁴⁴ N133 ¹⁴⁵ N134 ¹⁴⁶ N135 ¹⁴⁷ N136 ¹⁴⁸ N137 ¹⁴⁹ N138 ¹⁵⁰ N139 ¹⁵¹ N140 ¹⁵² N141 ¹⁵³ N142 ¹⁵⁴ N143 ¹⁵⁵ N144 ¹⁵⁶ N145 ¹⁵⁷ N146 ¹⁵⁸ N147 ¹⁵⁹ N148 ¹⁶⁰ N149 ¹⁶¹ N150 ¹⁶² N151 ¹⁶³ N152 ¹⁶⁴ N153 ¹⁶⁵ N154 ¹⁶⁶ N155 ¹⁶⁷ N156 ¹⁶⁸ N157 ¹⁶⁹ N158 ¹⁷⁰ N159 ¹⁷¹ N160 ¹⁷² N161 ¹⁷³ N162 ¹⁷⁴ N163 ¹⁷⁵ N164 ¹⁷⁶ N165 ¹⁷⁷ N166 ¹⁷⁸ N167 ¹⁷⁹ N168 ¹⁸⁰ N169 ¹⁸¹ N170 ¹⁸² N171 ¹⁸³ N172 ¹⁸⁴ N173 ¹⁸⁵ N174 ¹⁸⁶ N175 ¹⁸⁷ N176 ¹⁸⁸ N177 ¹⁸⁹ N178 ¹⁹⁰ N179 ¹⁹¹ N180 ¹⁹² N181 ¹⁹³ N182 ¹⁹⁴ N183 ¹⁹⁵ N184 ¹⁹⁶ N185 ¹⁹⁷ N186 ¹⁹⁸ N187 ¹⁹⁹ N188 ²⁰⁰ N189 ²⁰¹ N190 ²⁰² N191 ²⁰³ N192 ²⁰⁴ N193 ²⁰⁵ N194 ²⁰⁶ N195 ²⁰⁷ N196 ²⁰⁸ N197 ²⁰⁹ N198 ²¹⁰ N199 ²¹¹ N200 ²¹² N201 ²¹³ N202 ²¹⁴ N203 ²¹⁵ N204 ²¹⁶ N205 ²¹⁷ N206 ²¹⁸ N207 ²¹⁹ N208 ²²⁰ N209 ²²¹ N210 ²²² N211 ²²³ N212 ²²⁴ N213 ²²⁵ N214 ²²⁶ N215 ²²⁷ N216 ²²⁸ N217 ²²⁹ N218 ²³⁰ N219 ²³¹ N220 ²³² N221 ²³³ N222 ²³⁴ N223 ²³⁵ N224 ²³⁶ N225 ²³⁷ N226 ²³⁸ N227 ²³⁹ N228 ²⁴⁰ N229 ²⁴¹ N230 ²⁴² N231 ²⁴³ N232 ²⁴⁴ N233 ²⁴⁵ N234 ²⁴⁶ N235 ²⁴⁷ N236 ²⁴⁸ N237 ²⁴⁹ N238 ²⁵⁰ N239 ²⁵¹ N240 ²⁵² N241 ²⁵³ N242 ²⁵⁴ N243 ²⁵⁵ N244 ²⁵⁶ N245 ²⁵⁷ N24						


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Revisions			
No.	Date	By	Description
1			

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LIGHTING PLAN

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

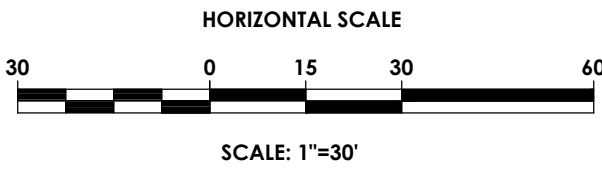
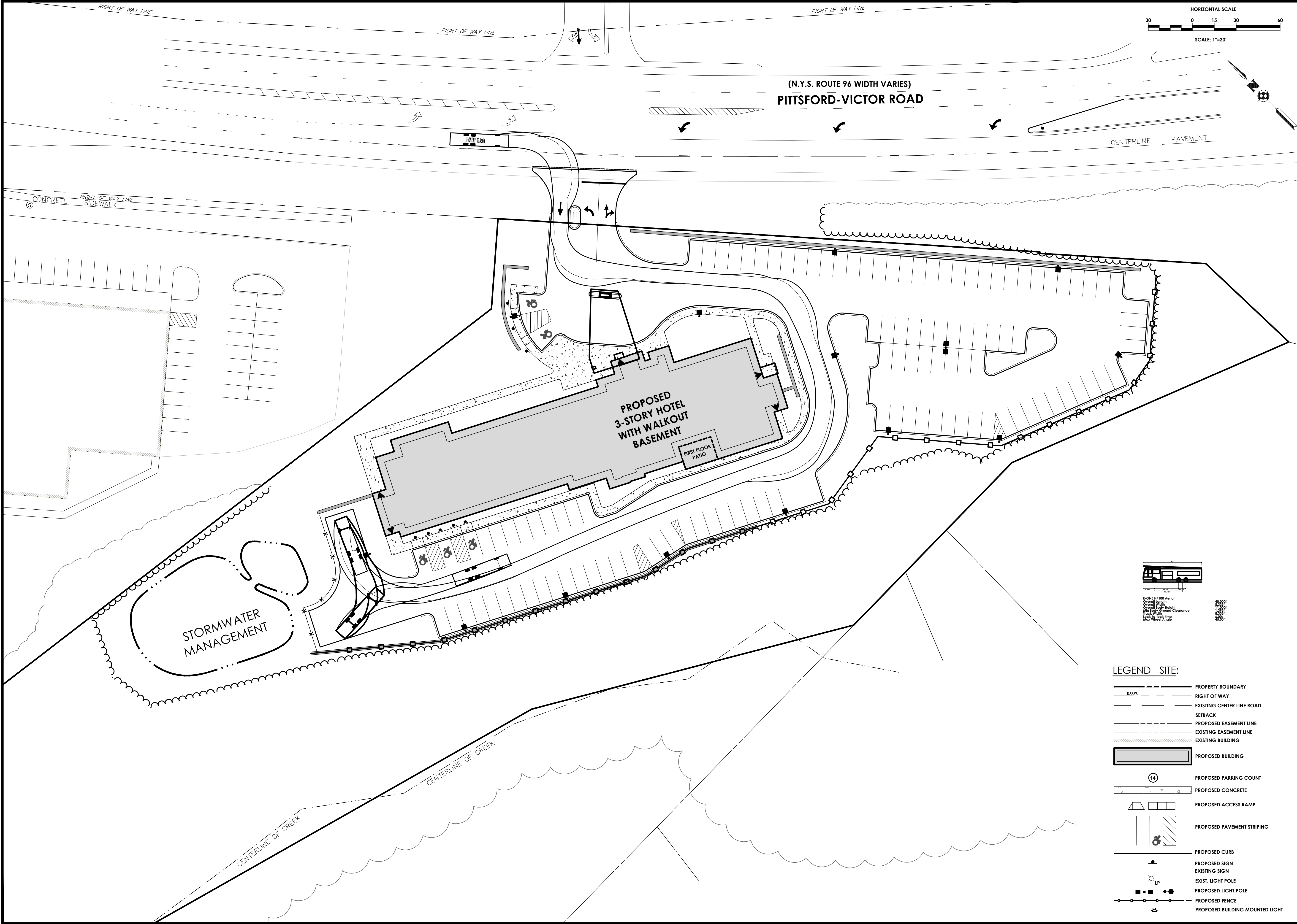
Municipality: PERINTON
County: MONROE State: NEW YORK

Project No.
20182555.0005

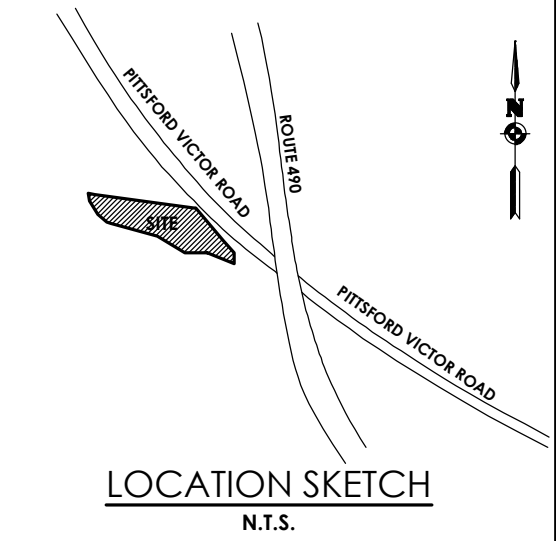
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Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler, E.I.T.

Revisions				
No.	Date	By	Description	
1				

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FIRE TRUCK VEHICLE TRACKING PLAN

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

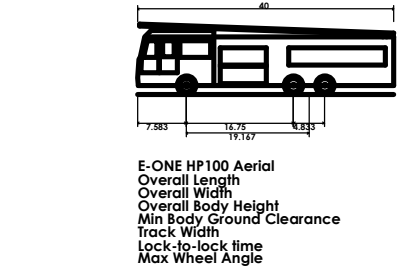
Project No.
20182555.0005

Drawing No.
C 108

Scale:
1" = 30'

Date
FEBRUARY 2024

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LEGEND - SITE:

- PROPERTY BOUNDARY
- RIGHT OF WAY
- EXISTING CENTER LINE ROAD
- SETBACK
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING
- PROPOSED BUILDING
- PROPOSED PARKING COUNT
- PROPOSED CONCRETE
- PROPOSED ACCESS RAMP
- PROPOSED PAVEMENT STRIPING
- PROPOSED CURB
- PROPOSED SIGN
- EXISTING SIGN
- EXIST. LIGHT POLE
- PROPOSED LIGHT POLE
- PROPOSED FENCE
- PROPOSED BUILDING MOUNTED LIGHT

Y:\PROJECTS-NEW\2018\20182555\20182555.0005\01_CAD-BIM-MODELS\CIVIL\20182555.0005 DETAILS.DWG 2/16/2024 10:16 AM James Ritzenthaler

STANDARD WATER MAIN EXTENSION NOTES:

- THE WATER MAIN PIPELINE SHALL BE DISINFECTED EQUAL TO AWWA STANDARD FOR DISINFECTING WATER MAINS DESIGNATION C651 (LATEST REVISION). FOLLOWING DISINFECTION, THE WATER MAIN PIPELINE SHALL BE FLUSHED UNTIL THE CHLORINE CONCENTRATION IN THE WATER LEAVING THE MAIN IS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM.

ALL WATER MAIN PIPE FITTINGS NOT RECEIVING 24-HOUR CHLORINE DISINFECTION CONTACT TIME MUST BE SWAB-DISINFECTED 30 MINUTES PRIOR TO INSTALLATION.

THE SAMPLING POINT(S) MUST BE DECONTAMINATED BY FLAMING.

FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS.

THE MONROE COUNTY DEPARTMENT OF PUBLIC HEALTH MUST RECEIVE AT LEAST 48-HOUR ADVANCE NOTIFICATION REQUESTING SAMPLING SERVICES. SAMPLING WILL NOT BE PERFORMED PRIOR TO RECEIPT FROM A NEW YORK STATE LICENSED OR REGISTERED DESIGN PROFESSIONAL (ENGINEER, ARCHITECT OR LAND SURVEYOR WITH A SPECIAL EXEMPTION UNDER SECTION 7209(N) OF THE EDUCATION LAW) CERTIFYING THAT THE WATER SUPPLY IMPROVEMENTS, TESTING AND DISINFECTION PROCEDURES WERE COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS, REPORTS, SPECIFICATIONS AND ANY APPROVED AMENDMENTS. THE DEPARTMENT WILL COLLECT SAMPLES FOR FREE CHLORINE RESIDUAL, TOTAL COLIFORM, ESCHERICHIA COLI (E. COLI) AND TURBIDITY.

THE WATER MAIN PIPE AND APPURTENANCES SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE MONROE COUNTY DEPARTMENT OF PUBLIC HEALTH.
- MINIMUM VERTICAL SEPARATION BETWEEN WATER MAIN PIPELINES AND SEWER PIPELINES 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 PIPELINE 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 MAIN PIPES AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.
- WHEN INSTALLING FIRE HYDRANTS, SHOULD GROUND WATER BE ENCOUNTERED WITHIN SEVEN (7) FEET OF THE FINISHED GRADE, FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED.
- THE WATER MAIN PIPELINE AND APPURTENANCES SHALL BE PRESSURE/LEAKAGE TESTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE AWWA STANDARD C600, C602, C604, OR C605 (MOST RECENT VERSION AS APPLICABLE) OR IN ACCORDANCE WITH MORE STRINGENT REQUIREMENTS IMPOSED BY THE SUPPLIER OF WATER

SANITARY NOTES:

- SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST REGULATIONS OF THE STATE, COUNTY AND TOWN OF PERINTON.
- MATERIALS
 - MAINS - PIPING SHALL BE POLYVINYL CHLORIDE (PVC) WITH ENDS SUITABLE FOR ELASTOMERIC GASKET JOINTS, AND A MINIMUM WALL THICKNESS OF SDR-35. PIPING AND FITTINGS SHALL MEET:
 - ASTM D-3034 (4" THRU 15")
 - ASTM F-679 (18" THRU 48")
 - LATERALS - 6" MIN. INSTALLED AT 1/4" PER FOOT MIN. 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.
 - MANHOLES - SHALL BE PRECAST CONCRETE WITH NEOPRENE GASKETS MEETING ASTM C-478 & ASTM C-443.
- INFILTRATION AND EXFILTRATION FOR SANITARY SEWERS SHALL BE LIMITED TO 100 GALLONS PER MILE PER INCH DIAMETER OF PIPE PER 24 HOURS.
- AN AIR TEST IS TO BE USED, THE TEST AS A MINIMUM SHALL CONFORM TO THE PROCEDURE DESCRIBED IN ASTM C-828-80, ENTITLED STANDARD PRACTICE FOR LOW PRESSURE AIR TEST OF VITRIFIED CLAY PIPELINES; SANITARY MANHOLES SHALL BE TESTED FOR EXFILTRATION.
- VACUUM TESTING OF MANHOLES IS REQUIRED. THE CONTRACTOR IS CAUTIONED TO SPEAK TO THE SUPERINTENDENT OF SEWERS PRIOR TO COMMENCING WITH PLANS TO VACUUM TEST.
- DEFLECTION TEST - TEN STATE STANDARDS.
 - 6.A. 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.
 - 6.B. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDRELL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
 - 6.C. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
- ALL SANITARY SEWER INSTALLATION SHALL BE MADE IN CONFORMANCE WITH THE SPECIFICATIONS, REGULATIONS, AND POLICIES OF THE PERINTON SEWER DISTRICT.
- ALL HOUSE LATERALS SHALL HAVE A CLEANOUT AT THE PROPERTY LINE OR EASEMENT LINE.
- FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY SEWER/COMBINATION SEWER. (FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS). ALL DISCHARGES TO THE SANITARY/ COMBINATION SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE MONROE COUNTY SEWER USE LAW.
- 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 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.
- SEWER USE LAW: FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY/COMBINATION SEWER. FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS. NOTE: ALL DISCHARGES TO THE SANITARY/COMBINATION SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND OR MONROE COUNTY SEWER USE LAW.
- ALL SANITARY SEWERS SHALL BE TELEVIEWED BY THE CONTRACTOR & RECORDINGS SHALL BE PROVIDED TO THE TOWN.

STORM NOTES:

- STORM SEWER LATERAL MATERIAL SHALL BE PVC SDR-21 4" MIN. SIZE & SHALL BE LAID AT A MINIMUM GRADE OF 1.00% PER FT.
- STORM SEWER MATERIAL INCLUDING CROSsoVERS SHALL BE ADS HDPE 12" MIN.
- FOUNDATION DRAINS WILL BE CONNECTED TO STORM WATER SYSTEM. DOWNSPOUTS TO BE CONNECTED TO STORM SEWER WHERE APPLICABLE, AND CONTRACTOR SHALL PROVIDE APPROPRIATE FITTINGS TO CONNECT STORM SYSTEM TO ROOF LEADERS. OTHERWISE THE DOWNSPOUT SHALL DISCHARGE TO SPLASH BLOCKS.
- AFTER PROJECT COMPLETION, THE STORM SYSTEM SHALL BE FLUSHED. ALL DEPOSITED SEDIMENT AT THE SEWER OUTLET SHALL BE REMOVED.
- SITE CONTRACTOR TO VERIFY LOCATION OF ALL DOWNSPOUTS W/ ARCHITECTS AND PROVIDE APPROPRIATE FITTINGS & PIPING TO CONNECT DOWNSPOUTS TO STORM LATERAL (TYP.)

LANDSCAPING NOTES:

- CONTRACTOR SHALL OBTAIN ALL NECESSARY STATE AND LOCAL PERMITS REQUIRED. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE TOWN OF PERINTON, AND STATE DESIGN STANDARDS AND CODES.
- IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BID SUBMITTAL, TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
- STANDARDS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", ANSI Z60.1 (LATEST EDITION) REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE THE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIALS DELIVERED AND INSTALLED ON THIS PROJECT.
- ALL PLANTS MUST BE HEALTHY, VIGOROUS AND FREE OF PESTS AND DISEASE.
- ALL PLANTS MUST BE HARDY UNDER CLIMATE CONDITIONS THAT EXIST AT THE PROJECT SITE AND GROWN AT A NURSERY IN THE SAME HARDINESS ZONE AS THE PROJECT LOCATION.
- ALL PLANTS MUST BE CONTAINER GROWN OR BALLED AND BURLAPPED AND MEET SIZE REQUIREMENTS AS INDICATED ON THE PLANT LIST.
- ALL TREES MUST BE STRAIGHT-TRUNKED, INJURY FREE, HAVE A FULL, SYMMETRICAL CROWN (HEAD) AND MEET ALL REQUIREMENTS SPECIFIED (E.G. SINGLE STEM, MULTI-STEM, HEAVY BRANCHED, ETC.).
- THE CONTRACTOR SHALL TAKE SPECIAL CARE IN PLANTING AND WATERING ALL PLANT VARIETIES THAT ARE CONSIDERED A FALL PLANTING HAZARD.
- ANY PROPOSED DEVIATION TO THE LANDSCAPE PLAN MUST FIRST BE REVIEWED AND APPROVED BY THE LANDSCAPE ARCHITECT.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS. THE BID PRICE SUBMITTED WILL ASSUME THAT ALL PLANT MATERIALS DELINEATED WILL BE SUPPLIED AND INSTALLED. ANY DISCREPANCIES IN THE QUANTITIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND/OR DESIGN LANDSCAPE ARCHITECT (OWNER'S REPRESENTATIVE) PRIOR TO COMPLETING A BID PRICE.
- ALL GRADING AND UTILITY WORK SHALL BE COMPLETED PRIOR TO INSTALLATION OF PLANT MATERIAL AND LANDSCAPE MULCH.
- THE FINAL LOCATION OF TREES AND OTHER LANDSCAPING SHALL BE DETERMINED IN THE FIELD BASED ON UTILITY STAKEOUT AND SHALL NOT CONFLICT WITH TRAFFIC SIGNS AND/OR UTILITIES. STAKE OUT SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK. PLANTS TO BE LOCATED A MINIMUM OF FIVE (5') FROM ALL UNDERGROUND UTILITIES.
- ANY CONCERNS RELATED TO SITE CONDITIONS AND/OR PLANT LOCATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
- PLANTING BACKFILL MIXTURE: 4 PARTS TOPSOIL (ON-SITE OR IMPORTED), 1 PART PEAT MOSS, 1/2 PART WELL ROTTED MANURE AND 10 LBS. 5-0-5 PLANTING FERTILIZER, MIXED THOROUGHLY PER CUBIC YARD.
- MULCH ALL PLANT BEDS, AND INDIVIDUAL TREES IN LAWN AREAS WITH SHREDDED HARDWOOD BARK MULCH TO A DEPTH OF THREE (3") INCHES UNLESS OTHERWISE SPECIFIED ON PLANTING DETAILS, OR AS DIRECTED BY THE LANDSCAPE ARCHITECT DUE TO SITE CONDITIONS.
- ANY PLANT WHICH TURNS BROWN, DEFOLIATES OR DIES PRIOR TO FINAL ACCEPTANCE BY THE OWNER, OR DESIGN LANDSCAPE ARCHITECT, SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH THE SAME PLANT (SPECIES, VARIETY AND SIZE) AS SPECIFIED ON THE PLANT SCHEDULE (LIST).
- THE CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIALS AND LAWN AREAS UNTIL THE PROJECT HAS RECEIVED FINAL ACCEPTANCE BY THE OWNER OR OWNER'S REPRESENTATIVE. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO: WATERING, MULCHING, FERTILIZING, SPRAYING (FUNGICIDE, PESTICIDE, ANTI-DESSICANT), AS WELL AS RAISING PLANTS THAT HAVE SETTLED TOO DEEP OR REQUIRE STRAIGHTENING.
- UPON COMPLETION AND ACCEPTANCE OF THE LANDSCAPING, THE LANDSCAPE MATERIALS SHALL BE GUARANTEED FOR THREE (3) YEARS. THE GUARANTEE SHALL BE INCLUSIVE OF ALL MATERIAL AND LABOR COSTS. AT THE END OF THE GUARANTEE PERIOD THE OWNER'S REPRESENTATIVE WILL INSPECT ALL PLANT MATERIALS. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REQUIRED REPLACEMENTS WITH PLANT MATERIALS MEETING THE SPECIFICATIONS (E.G. SPECIES, SIZE AND CHARACTER).
- ALL AREAS DISTURBED BY SITE GRADING AND/OR UTILITY INSTALLATION SHALL RECEIVE APPROVED TOPSOIL (BASED ON APPROVED SAMPLES SUBMITTED BY THE CONTRACTOR) AND SPREAD TO A DEPTH NOT LESS THAN SIX (6") INCHES AFTER COMPACTION. TOPSOIL PLACED FOR LAWNS SHALL BE FINE GRADED, SEDED, MULCHED AND WATERED UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED. THIS IS EXCLUDING FOUNDATION PLANT BEDS, AND ENTRANCE AREAS.
- LOCATIONS OF EXISTING BURIED UTILITIES SHOWN ON THE SITE PLAN ARE BASED UPON THE BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE TO CALL FOR A UTILITY STAKEOUT PRIOR TO COMMENCING PLANT INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, AND SITE APPURTENANCES WHICH OCCURS AS A RESULT OF LANDSCAPE INSTALLATION OPERATIONS.
- EXISTING TREES INDICATED TO BE REMOVED SHALL OCCUR UNDER THE SITE CONTRACT FOR THIS PROJECT. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR NEW PLANTINGS OR RESTORATION OF THE DISTURBED AREA (LAWNS, PLANT BEDS, ISLANDS).
- PRE-EMERGENT HERBICIDE SHALL BE USED UNDER MULCH IN ALL TREE AND PLANT BED AREAS.
- ALL SHRUB BEDS ADJACENT TO LAWN AREAS SHALL HAVE A SPADED EDGE BORDER, UNLESS METAL EDGE, CONCRETE, OR OTHER BORDER IS SPECIFIED.

EARTHWORK

- PREPARATION - PRIOR TO START OF EARTHWORK OPERATIONS THE CONTRACTOR SHALL COMPLETE THE FOLLOWING APPLICABLE ITEMS:
 - SITE DEMOLITION - REMOVAL AND DISPOSAL OFF-SITE IN A LEGAL MANNER; STRUCTURES, UTILITIES, PAYEMENTS, 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.
- 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 PAVED AREAS (SIDEWALKS, WALKS) AND TO WITHIN THIRTY-THREE HUNDREDTHS OF ONE FOOT (0.33") FOR ALL REMAINING AREAS.
 - COMPACTION - ACHIEVING THE SPECIFIED MINIMUM COMPACTION VALUES FOR EMBANKMENT/FILL AREAS. THE TERMS "FILL" AND "EMBAKMENT" 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.
- 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 AREASTHE 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.
- 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.
- 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.

TOPSOIL AND SEEDING NOTES:

- THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING AND RE-SPREADING TOPSOIL IN ALL TURF AND LANDSCAPE AREAS (BEDS AND ISLANDS).
- THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS.
- REMOVE ALL EXISTING VEGETATION DURING GRADING PROCESS.
- APPLY MINIMUM OF EIGHT (8) INCHES OF CLEAN TOPSOIL(IMPORTED OR SCREEN ON -SITE) AND FINE GRADE, LEAVING TOPSOIL IN A LOOSE AND FRIABLE CONDITION FOR SEEDING.
- LIME SOIL OR ADD OTHER ORGANIC AMENDMENTS AS NECESSARY TO ACHIEVE A SOIL pH BETWEEN 5.5 - 7.0.
- LANDSCAPE CONTRACTOR SHALL WORK OVER LAWN AREAS THAT HAVE REMAINED PARTIALLY INTACT, TOP DRESSING WITH SOIL, SCARIFYING, AND SEEDING TO FORM A SMOOTH, FULL, EVEN LAWN, FREE OF BARE SPOTS, INDENTATIONS, AND WEEDS.
- SEEDING SHOULD BEGIN IMMEDIATELY UPON COMPLETION OF FINE GRADING. SEED SHOULD BE PRESSED INTO THE SOIL TO CREATE GOOD SEED-TO-SOIL CONTACT, NO DEEPER THAN THE THICKNESS OF THE SEED.
- FERTILIZING, APPLY 10-0-10 FERTILIZER EVENLY AT THE RATE OF 20 POUNDS PER 1000 SQ FT. NO FERTILIZER CONTAINING PHOSPHORUS IS PERMITTED ON SITE.
- SEED SHOULD BE APPLIED EITHER BY HAND BROADCASTING OR HYDRO SEEDING. TWO PASSES SHALL BE MADE IN PERPENDICULAR DIRECTIONS TO INSURE PROPER COVERAGE.
- LAWN SEED MIX
 - MIX A: SEEDING RATE: 6 LBS./1,000 SQ.FT
 - LOW MAINTENANCE FESCUE LAWN
 - PREFERRED SEED : LOW MAINTENANCE GRASS SEED MIX OR APPROVED EQUAL
 - 25% FIRRELY HARD FESCUE
 - 25% BIG HORN GT HARD/SHEEP
 - 20% INTRIQUE CHEWINGS FESCUE
 - 20% QUATRO SHEEP FESCUE
 - 10% MINOTAUR HARD FESCUE
 - MIX B: SEEDING RATE: 4LBS./1,000 SQ.FT
 - OCCASIONAL WET - WET LOCATIONS (BIORETENTION):
 - 20% RED TOP P
 - 20% VIRGINIA WILD RYEGRASS
 - 20% ALKALI GRASS
 - 20% FOX SEDGE
 - 10% AUTUMN BENTGRASS
 - 10% FOWL BLUEGRASS
- DRY APPLICATION MULCH
 - A. STRAW MULCH SHOULD BE APPLIED TO NEWLY SEEDED AREAS WITHIN 12 HOURS IF HYDRO MULCH IS NOT UTILIZED.
 - B. DRY APPLICATION, STRAW: STALKS OF OATS, WHEAT, RYE OR OTHER APPROVED CROPS WHICH ARE FREE OF NOXIOUS WEEDS. WEIGHT SHALL BE BASED ON A 15 PERCENT MOISTURE CONTENT.
 - C. DRY APPLICATION: WITHIN ONE DAY AFTER SEEDING, COVER THE SEEDED AREAS WITH A UNIFORM BLANKET OF STRAW MULCH AT THE RATE OF 100 POUNDS PER 1000 SQFT OF SEEDED AREA.
- HYDRO APPLICATION: APPLY APPROVED MULCH IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDED RATES OF APPLICATION. APPLY SEEDING MATERIALS WITH AN APPROVED HYDRO SEEDER.
 - A. COLORED WOOD CELLULOSE FIBER PRODUCT SPECIFICALLY DESIGNED FOR USE AS A HYDRO-MECHANICAL APPLIED MULCH. ACCEPTABLE PRODUCT: CONWED HYDRO MULCH, CONWED FIBERS, 231 4TH STREET SW, HICKORY, NC
- FILL TANK WITH WATER AND AGITATE WHILE ADDING SEEDING MATERIALS. USE SUFFICIENT FERTILIZER, MULCH, AND SEED TO OBTAIN THE SPECIFIED APPLICATION RATE. ADD SEED TO THE TANK AFTER THE FERTILIZER AND MULCH HAVE BEEN ADDED. MAINTAIN CONSTANT AGITATION TO KEEP CONTENTS IN HOMOGENEOUS SUSPENSION. PROLONGED DELAYS IN APPLICATION OR AGITATION THAT MAY BE INJURIOUS TO THE SEED WILL BE THE BASIS OF REJECTION OF MATERIAL REMAINING IN TANK.
- DISTRIBUTE UNIFORMLY A SLURRY MIXTURE OF WATER, SEED, FERTILIZER, AND MULCH AT A MINIMUM RATE OF 57 GALLONS PER 1000 SQ FT (2500 GALLONS PER ACRE). THE OWNER AND PROJECT REPRESENTATIVE MAY ORDER THE AMOUNT OF WATER INCREASED IF DISTRIBUTION OF SEEDING MATERIALS IS NOT UNIFORM.

WATERING PLAN:

- ALL TREES TO BE CONTINUOUSLY WATERED WITH TWO (2) WATER BAGS PER TREE. BAGS ARE TO BE INSPECTED TWICE A WEEK TO ENSURE THAT THEY ARE FILLED AS REQUIRED.

UTILITY NOTES:

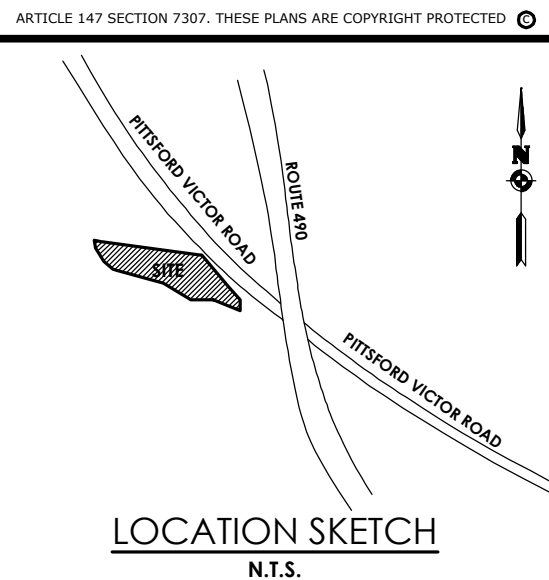
- PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR AND SUBCONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL UTILITY CONNECTIONS WITH MECHANICAL/ARCHITECTURAL DRAWINGS FOR INCLUDING BUT NOT LIMITED TO VERTICAL AND HORIZONTAL LOCATION, PENETRATIONS, AND SIZES. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNERS ONSITE REPRESENTATIVE UPON COMPLETION OF COORDINATION WITH CONTRACTORS, AND PLANS.
- THE DEVELOPER AND HIS/HER CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRICAL, CABLE, TELEPHONE AND ANY OTHER UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET WITH APPROPRIATE AGENCY. PASSERO ASSOCIATES ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR PERFORMANCE OF UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET.
- PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AND COORDINATE WITH EXISTING UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNERS ONSITE REPRESENTATIVE UPON COMPLETION EXISTING UTILITY VERIFICATION.
- THRUST BLOCKS ON THE WATERMAIN ARE REQUIRED AT BENDS, TEES OR PLUGS. SEE DETAIL SHEETS FOR THRUST BLOCK DETAILS.

STANDARD SANITARY SEWER EXTENSION NOTES:

- 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 DESIGNATION C828-84 ENTITLED PRACTICE FOR LOW-PRESSURE AIR TEST OF VITRIFIED CLAY PIPE LINES. SANITARY MANHOLES SHALL BE INSPECTED AND TESTED FOR LEAKAGE BY VACUUM TESTING. VACUUM TESTING OF MANHOLES SHALL COMPLY WITH THE METHOD OUTLINED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION - TECHNICAL INFORMATION PAMPHLET (TIP) NO. 15 (LATEST REVISION).
- 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.
- 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.
- 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 PIPELINE 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 PIPES AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.

EROSION AND SEDIMENT CONTROL NOTES:

- (OCTOBER 2017)
- IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL REVIEW THE EROSION AND SEDIMENT CONTROL PLAN INCLUDED IN THE CONTRACT DOCUMENTS, AND IF NECESSARY, MODIFY THE PLAN WITH THE CONTRACTOR'S INTENDED SEQUENCE AND TYPES OF OPERATIONS. THE CONTRACTOR'S MODIFIED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, ALONG WITH A PROGRESS SCHEDULE THAT ADDRESSES THIS WORK.
 - IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL DESIGNATE AN "EROSION AND SEDIMENT CONTROL SUPERVISOR" FOR THE PROJECT. THE SUPERVISOR SHALL BE RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL PLAN AND FOR INSPECTING AND MAINTAINING THE CONTROL MEASURES. THE NAME AND QUALIFICATIONS (TRAINING AND EXPERIENCE) OF THIS INDIVIDUAL SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING EARTHWORK.
 - THE DESIGNATED "EROSION AND SEDIMENT CONTROL SUPERVISOR" SHALL NOTIFY THE ENGINEER IN ADVANCE OF ANY FIELD CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS. THE ENGINEER MAY REQUIRE THE CONTRACTOR TO SUBMIT A MODIFIED EROSION AND SEDIMENT CONTROL PLAN FOR APPROVAL PRIOR TO IMPLEMENTING ANY FIELD CHANGES.
 - THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF FROM DISTURBED AREAS IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL DEVICES BEFORE ENTERING A WATER BODY OR WETLAND.
 - EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SOIL DISTURBANCE FOR WHICH THEY ARE INTENDED AND SHALL REMAIN IN PLACE UNTIL SOILS ARE PERMANENTLY STABILIZED.
 - UNDER NO CONDITION SHALL DISCONTINUED CONSTRUCTION ACTIVITIES IN AREAS WITH SOIL DISTURBANCES BE LEFT FOR A PERIOD OF GREATER THAN 7 DAYS WITHOUT TEMPORARILY STABILIZING THOSE AREAS WITH TEMPORARY SEED AND MULCH. MAINTENANCE OF THOSE AREAS SHALL INCLUDE RESEEDING AND REMULCHING AS NEEDED TO ESTABLISH A SATISFACTORY STAND OF GRASS. THERE SHALL BE NO ADDITIONAL PAYMENT FOR RESEEDING AND REMULCHING.
- NO WET OR FRESH CONCRETE, LEACHATE, MATERIAL, OR DEBRIS SHALL BE ALLOWED TO ESCAPE INTO A WATER BODY OR WETLAND. NOR SHALL WASHINGS FROM CONCRETE TRUCKS, MIXERS OR OTHER DEVICES BE ALLOWED TO ENTER A WATER BODY OR WETLAND. ANY MATERIAL OR DEBRIS ACCIDENTALLY DROPPED INTO THE CHANNEL SHALL BE IMMEDIATELY AND COMPLETELY REMOVED AND DEPOSITED IN AN UPLAND AREA.
- THE CONTRACTOR SHALL COVER TEMPORARY STOCKPILES OF ERODIBLE MATERIAL (SUCH AS TOPSOIL OR EARTH FILL) WITH POLY SHEETING, OR RING THE STOCKPILES WITH SILT FENCE TO CONTROL EROSION. POLY SHEETING SHALL COMPLETELY COVER THE STOCKPILE AND BE SECURELY ANCHORED AT ALL TIMES. ANY POLY SHEETING OR SILT FENCE THAT IS DAMAGED SHALL BE PROMPTLY REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER. RINGED STOCKPILES EXPOSED OR EXPECTED TO BE EXPOSED FOR LONGER THAN 7 CALENDAR DAYS SHALL IMMEDIATELY BE STABILIZED WITH APPROPRIATE MEASURES. THE COST OF COVERING AND RINGING/STABILIZING STOCKPILES SHALL BE INCLUDED IN THE PRICE BID FOR THE CORRESPONDING STOCKPILED MATERIAL.



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Revisions

No.	Date	By	Description
1			

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NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

Project No.
20182555.0005

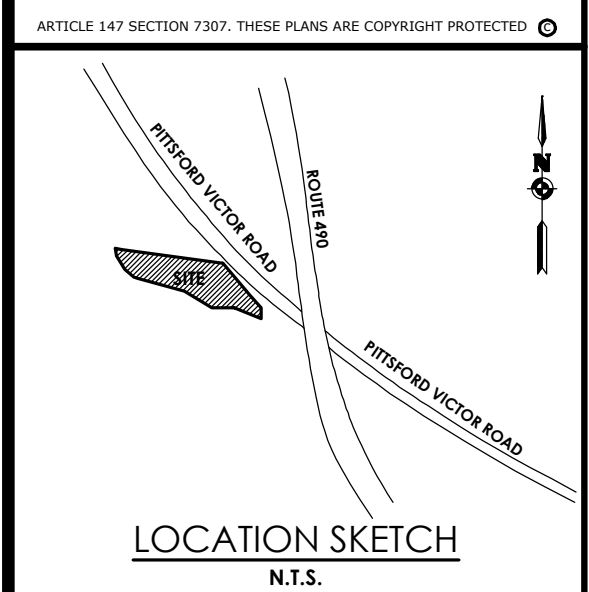
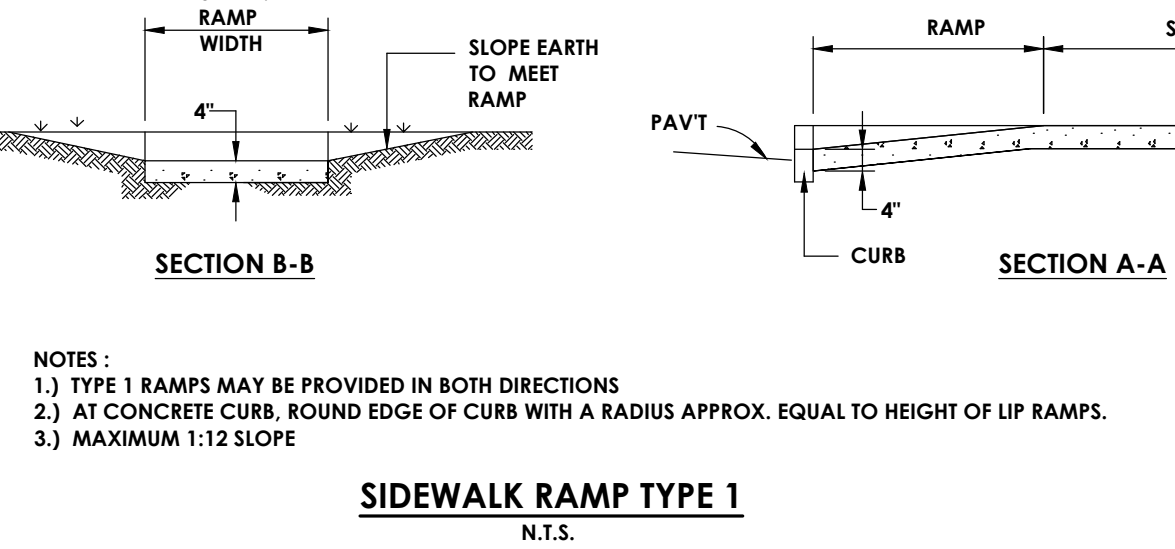
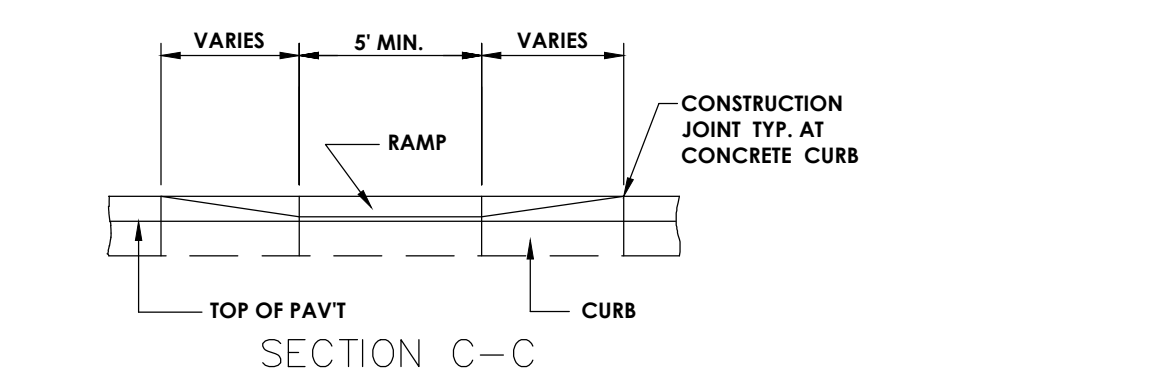
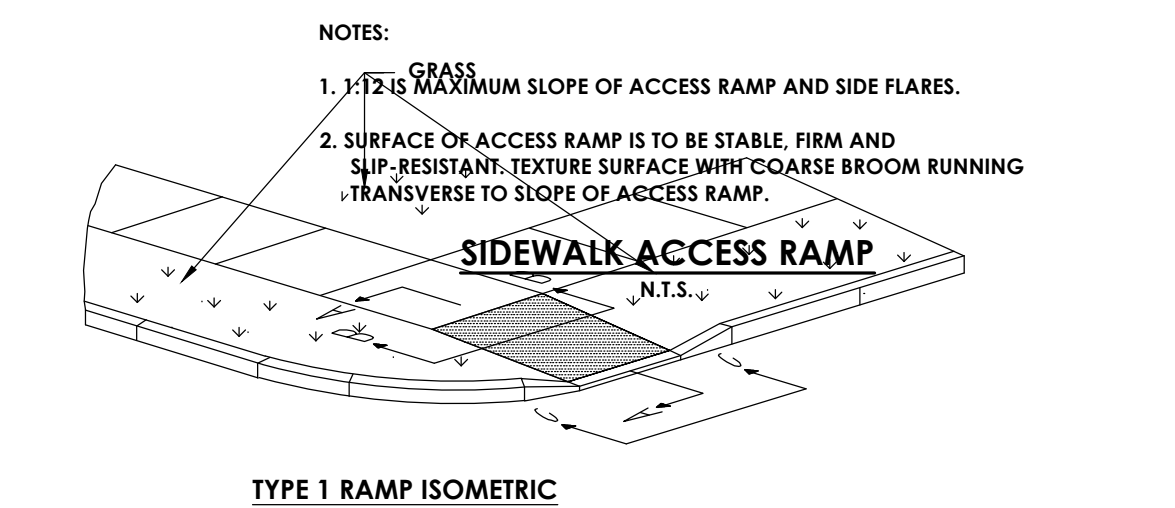
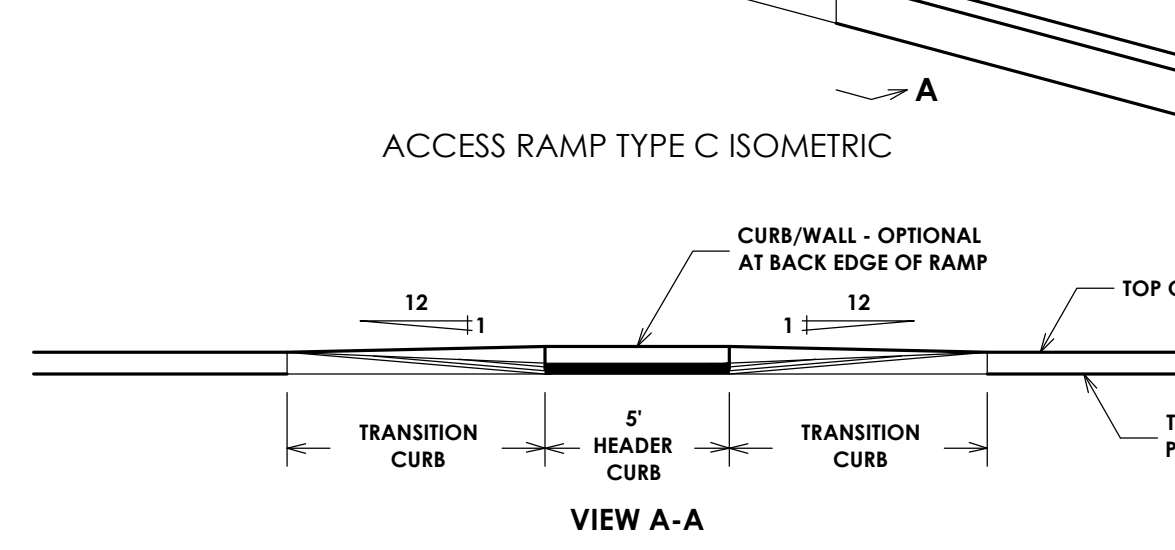
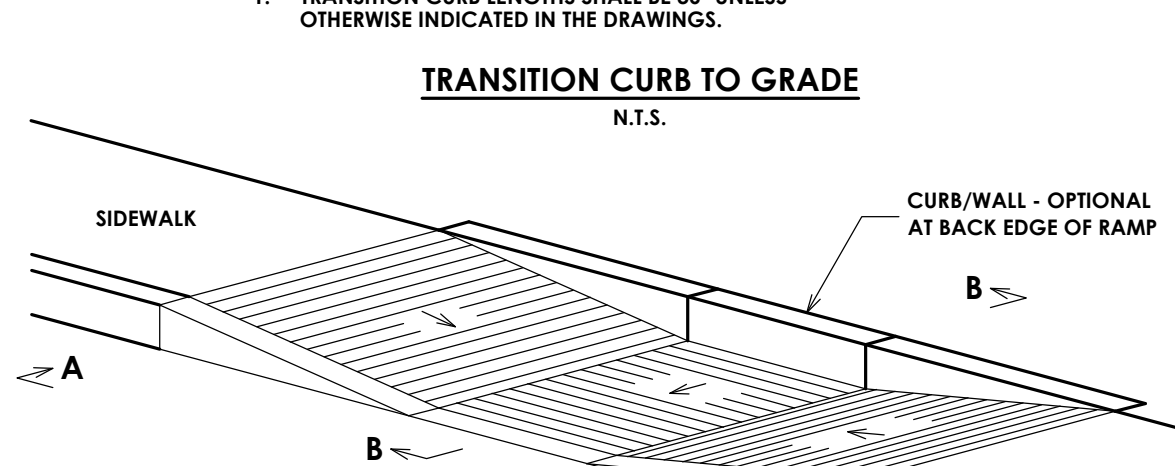
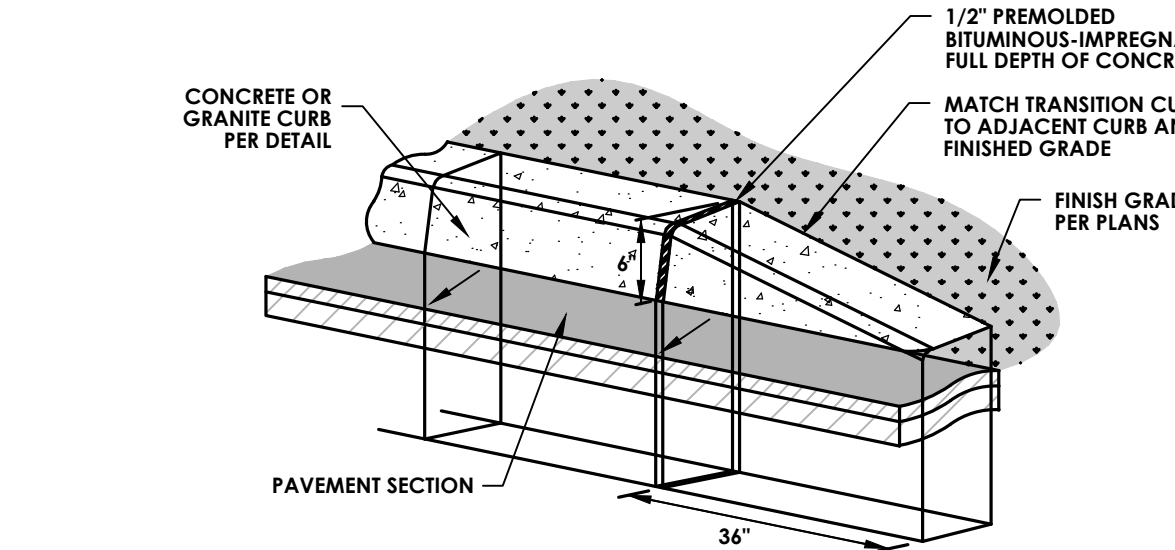
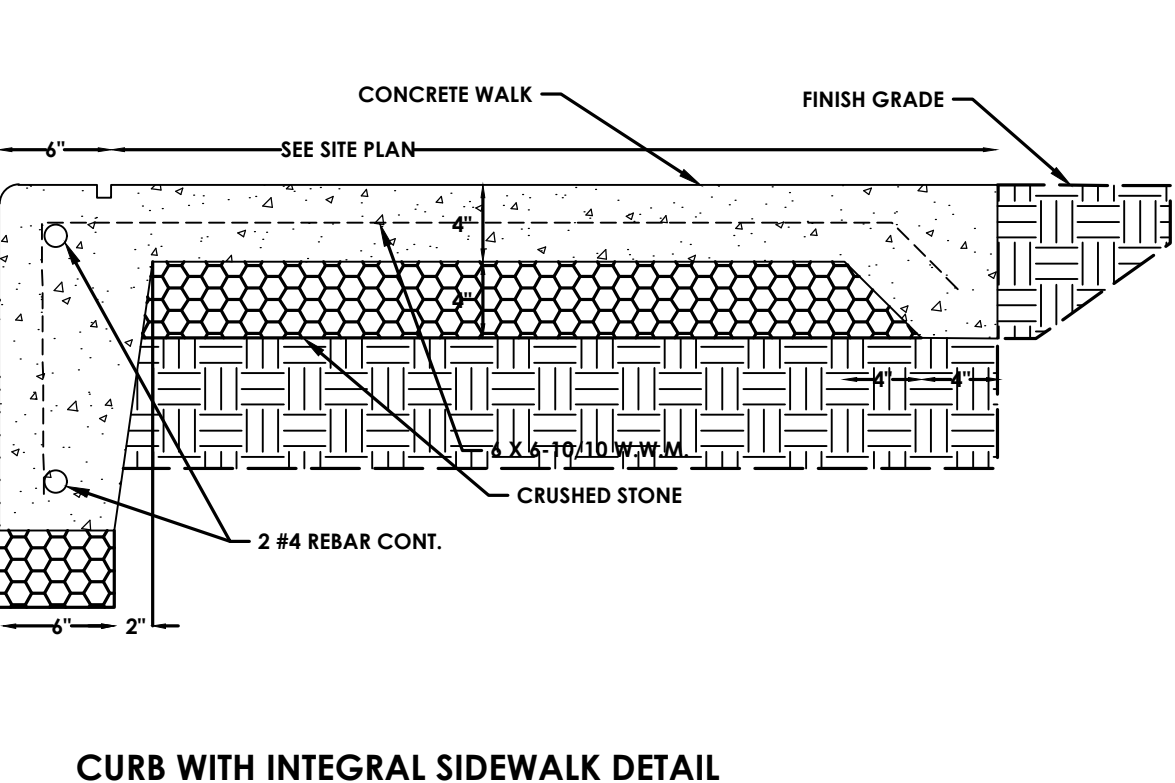
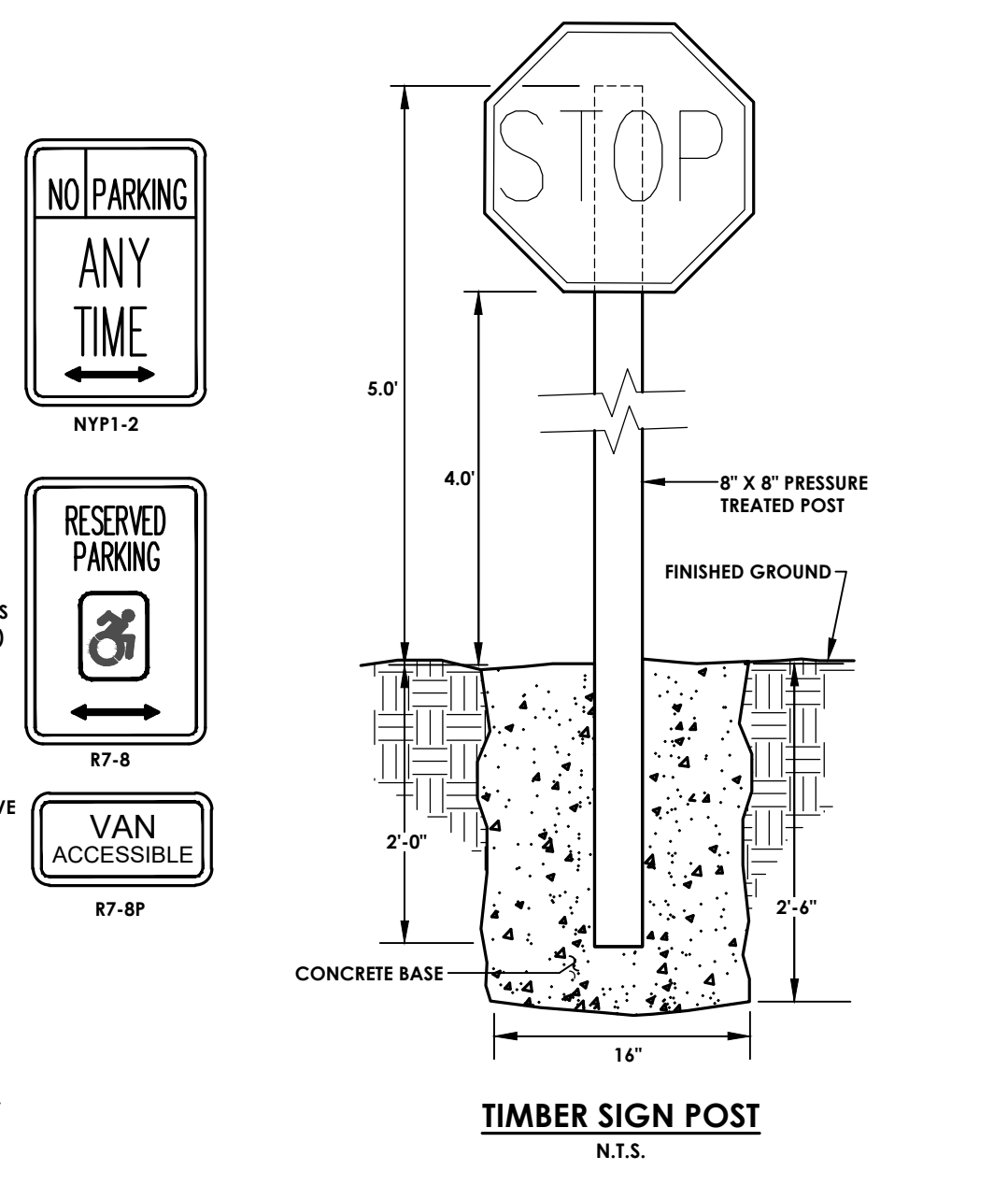
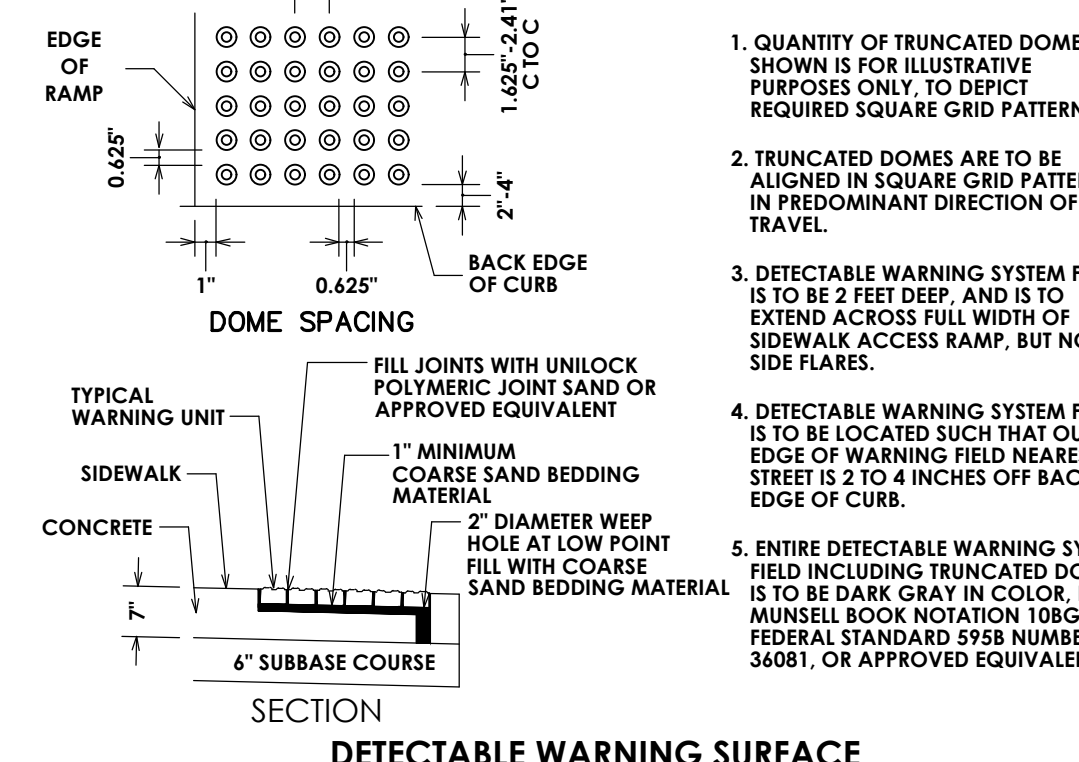
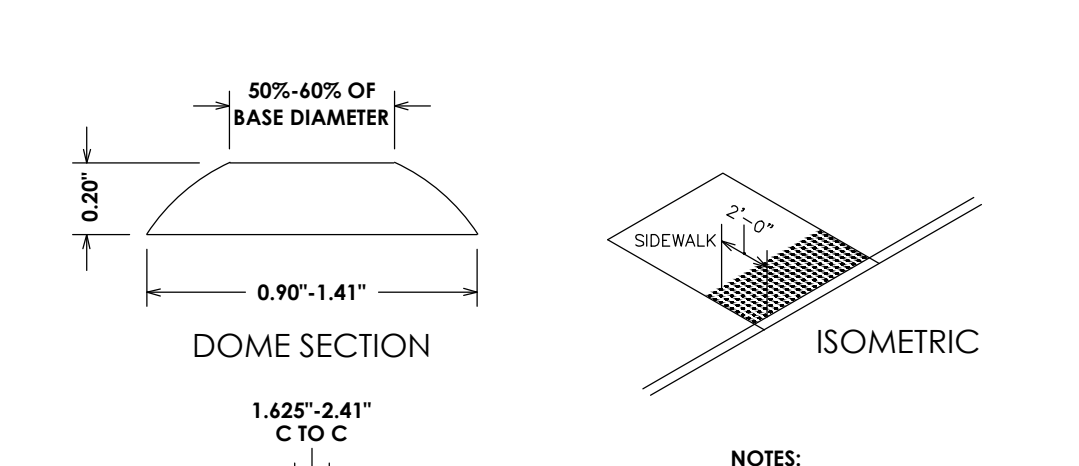
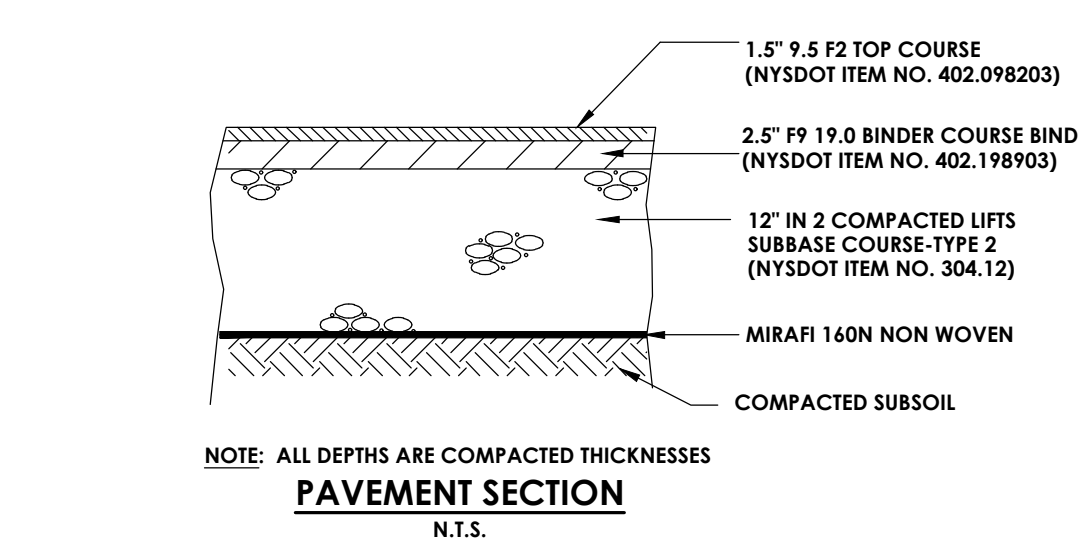
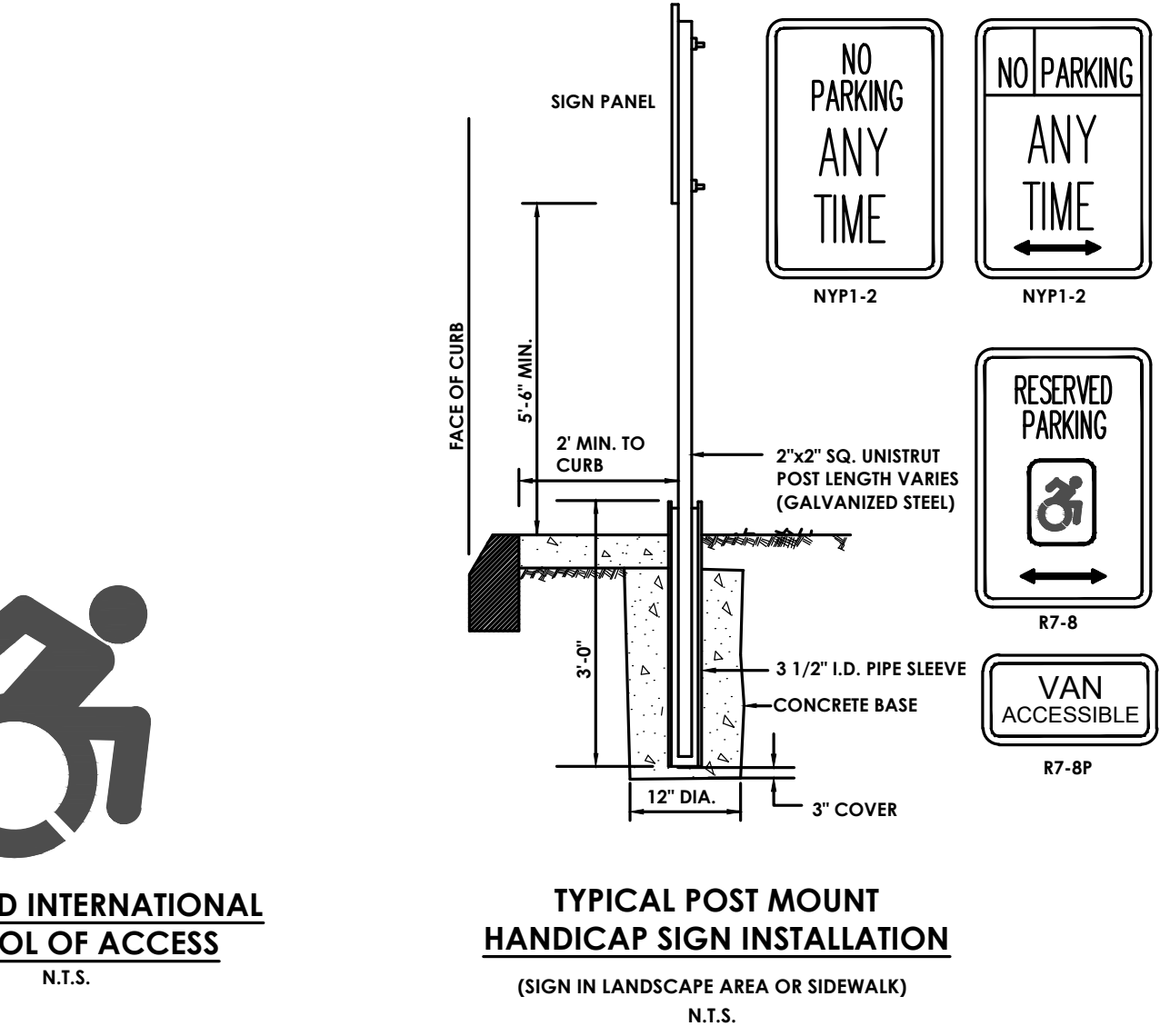
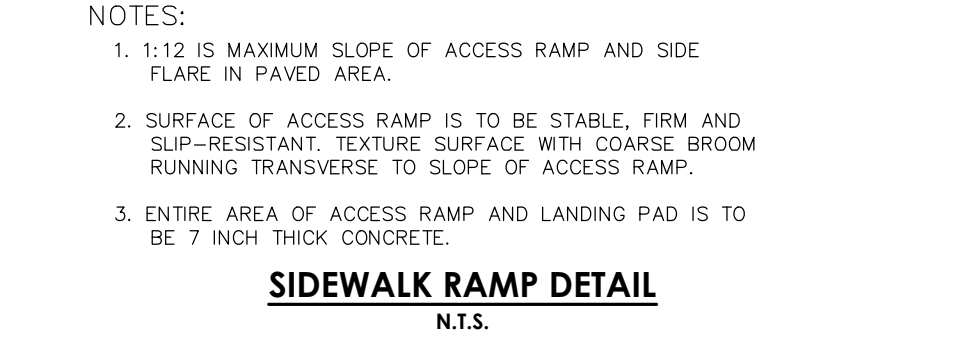
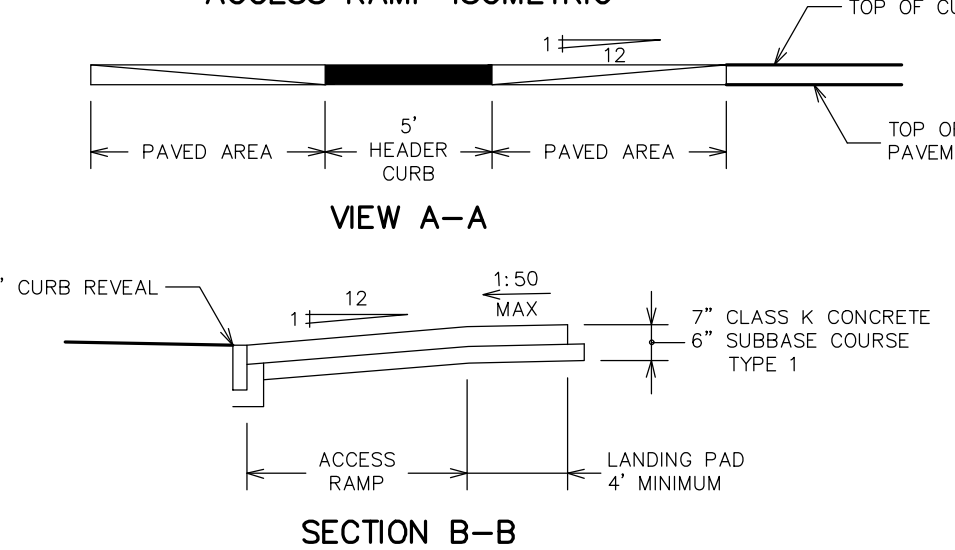
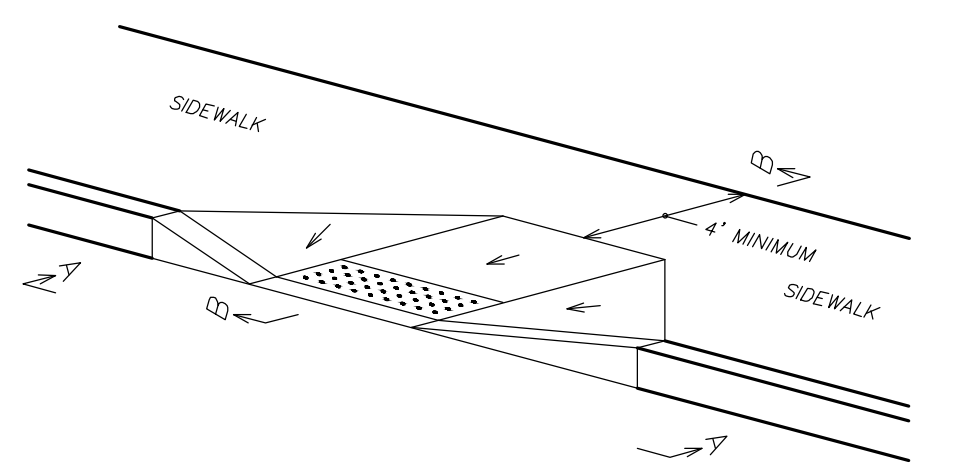
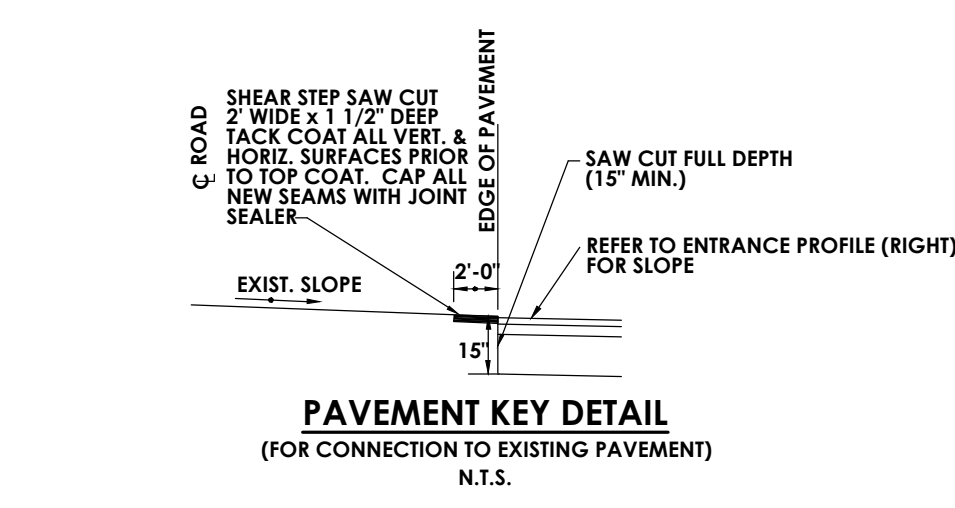
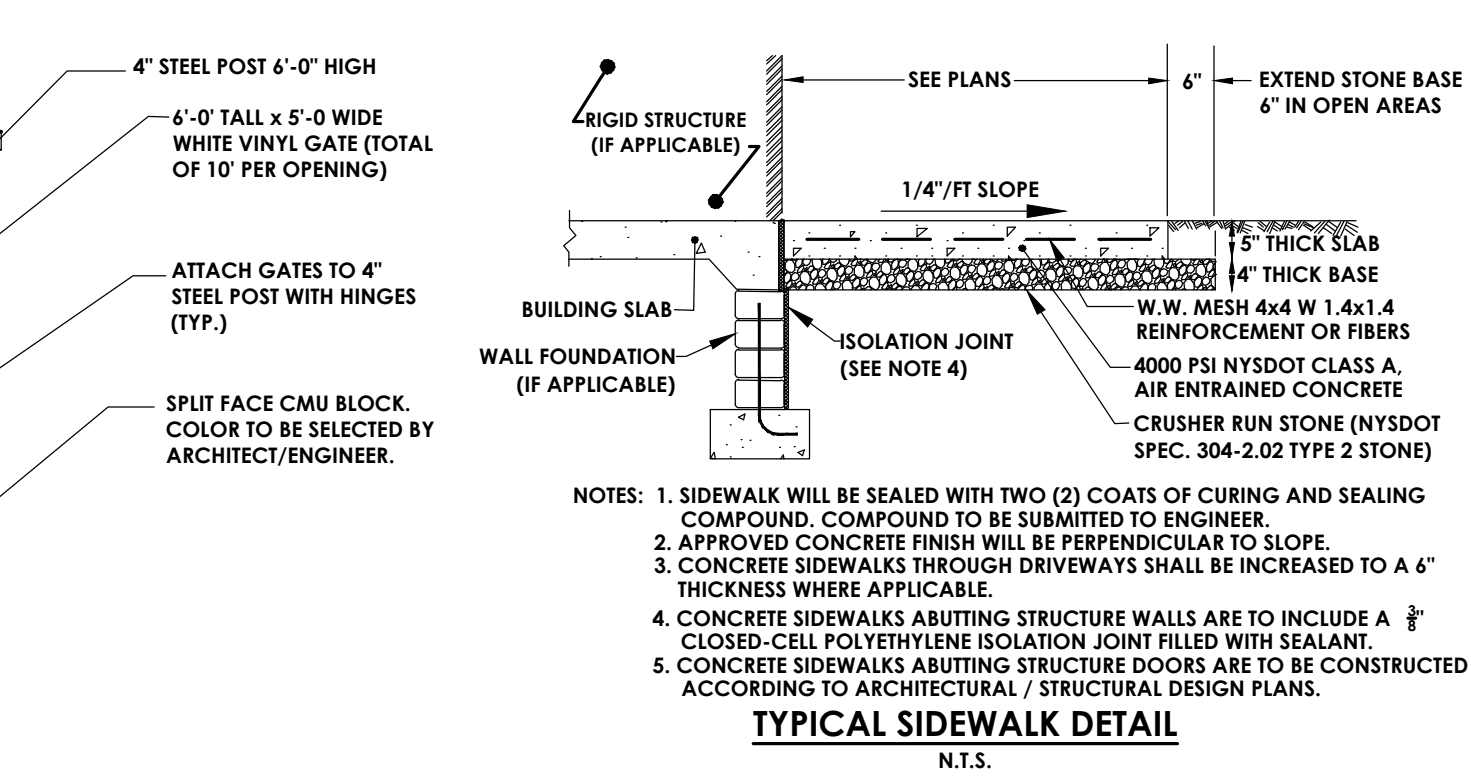
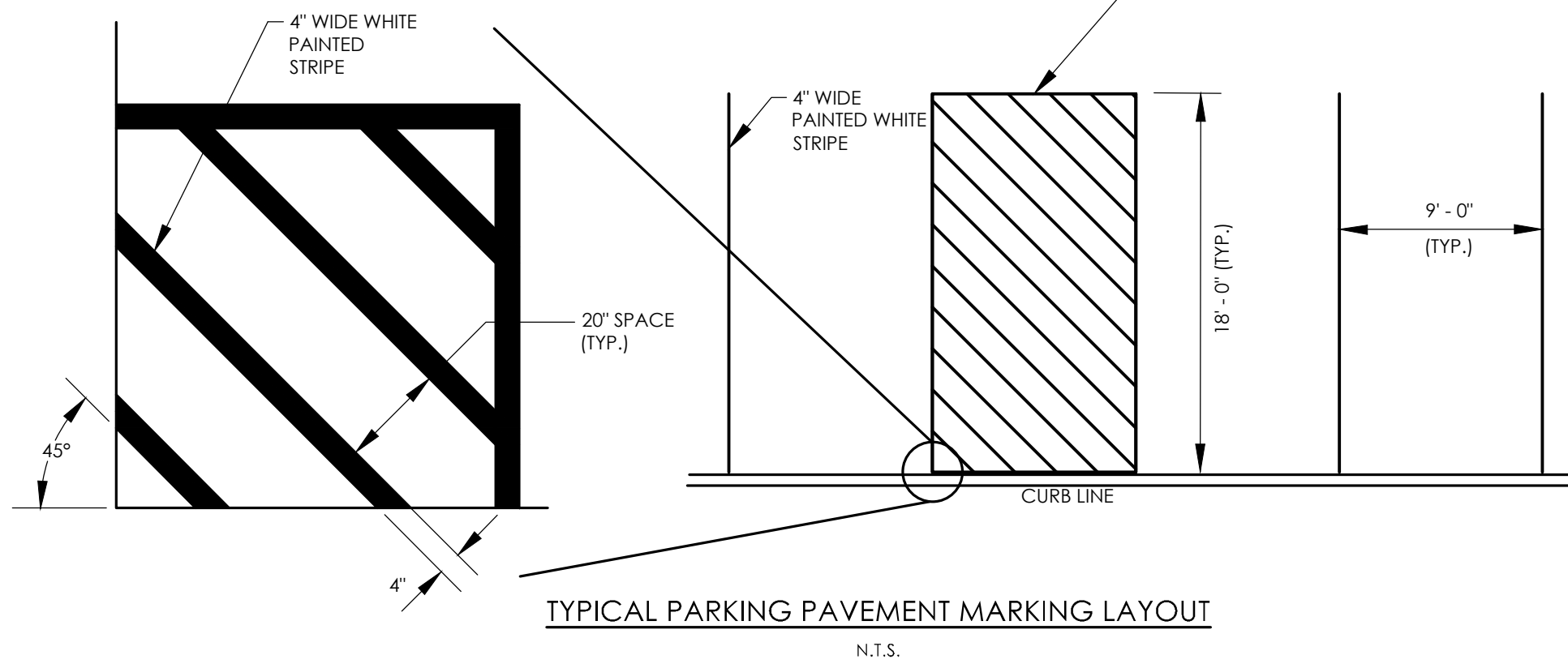
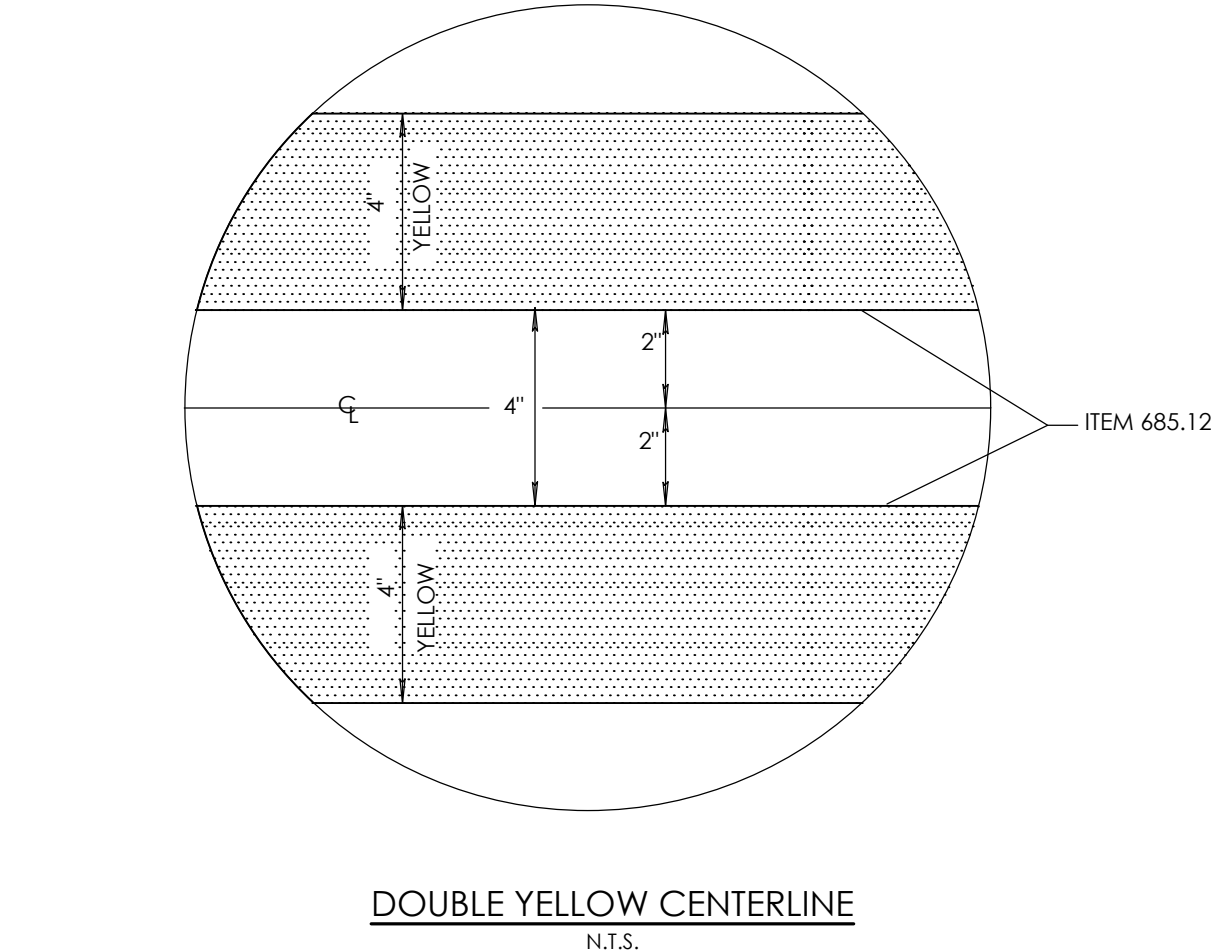
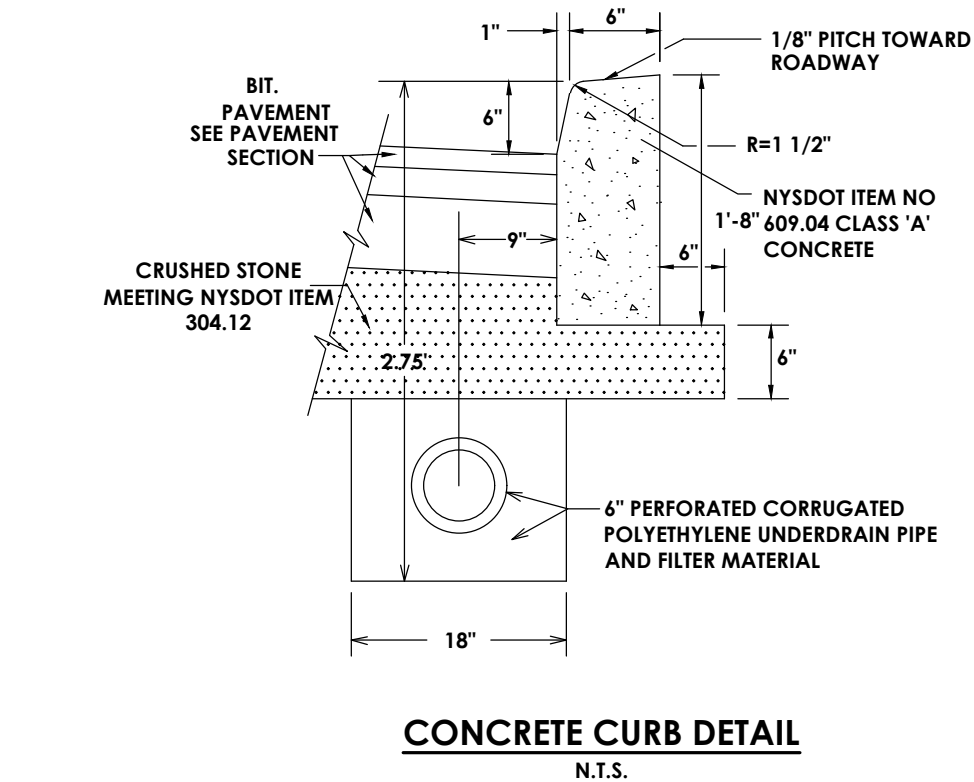
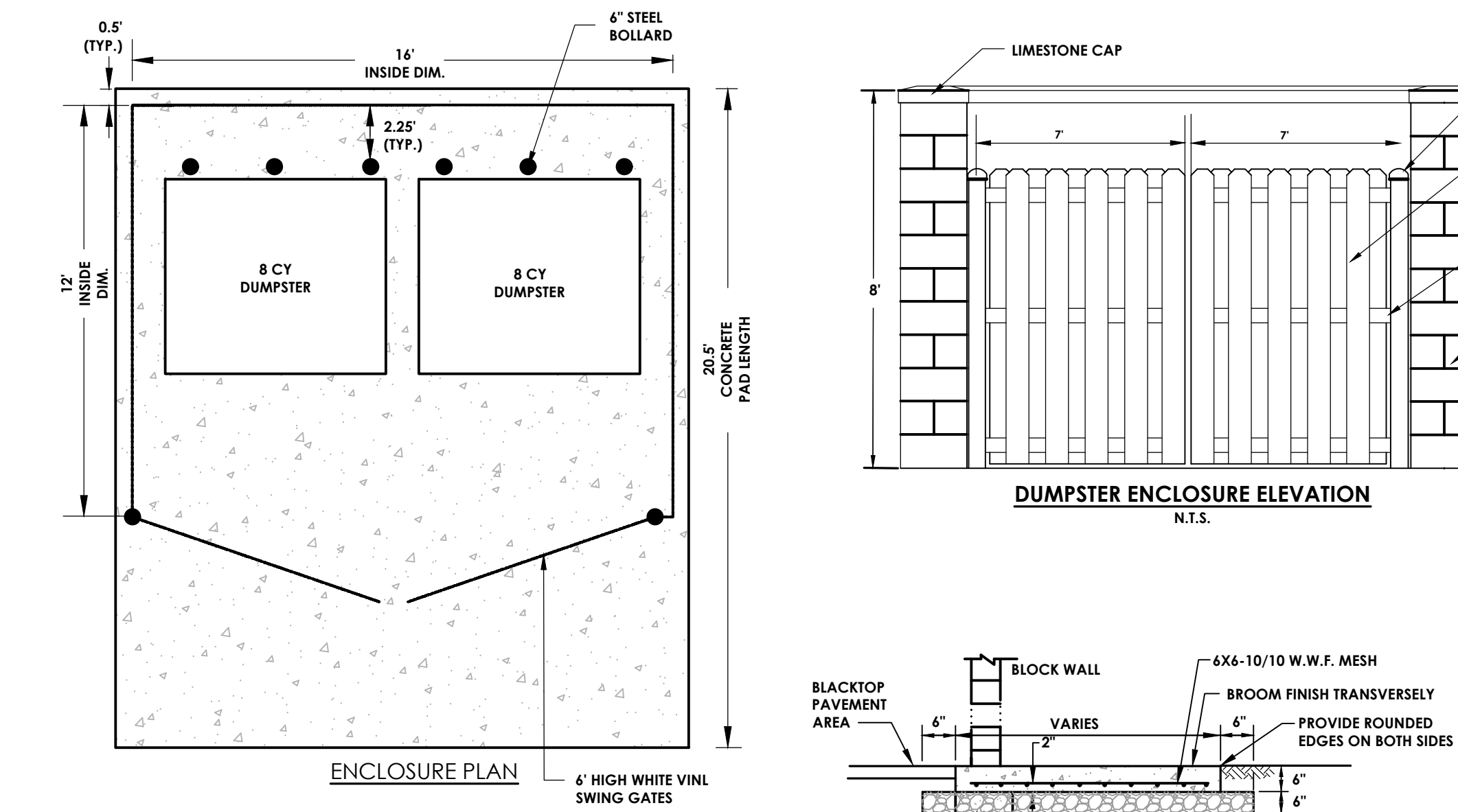
Drawing No.
C 201

Scale:
NTS

Date
FEBRUARY 2024

NOT FOR CONSTRUCTION

Y:\PROJECTS-NEW\2018\20182555\20182555\0005\01_CAD-BIM-MODELS\CIVIL\20182555.0005 DETAILS.DWG 2/16/2024 10:16 AM James Ritzenthaler



Client:
Christa Construction
600 East Avenue
Rochester, NY 14607

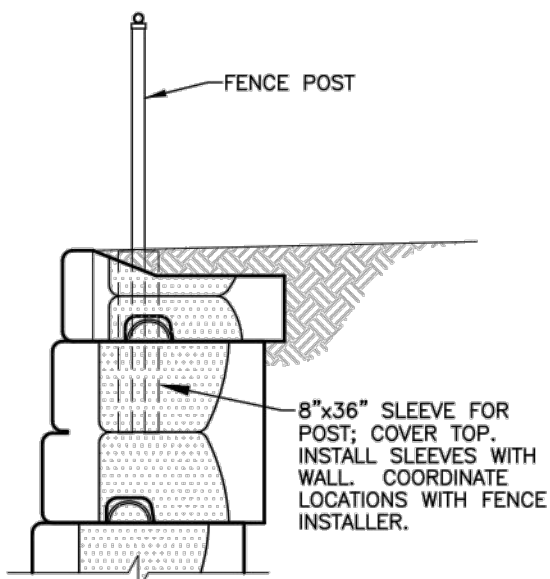
PASSERO ASSOCIATES
242 West Main Street Suite 100
Rochester, New York 14614
(585) 325-1000
Fax: (585) 325-1691
Principal-in-Charge: Jess D. Sudol, P.E.
Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler, E.I.T.

Revisions			
No.	Date	By	Description
1			

NOTES & DETAILS
1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL
Municipality: PERINTON
County: MONROE State: NEW YORK
Project No. 20182555.0005
Drawing No. C 202
Scale: NTS
Date: FEBRUARY 2024
NOT FOR CONSTRUCTION

NOTES:
1. Use reinforced 24 sf units below top 12" in geogrid reinforced walls. see face and web mesh details for optional reinforcement grid.
2. Chiseled granite style has 4 different face patterns on 24 sf blocks. install A, B, C, & D patterns at random in wall.
DISCLAIMER:
These typical details are preliminary and conceptual in nature. They are provided for general information purposes only. Anyone making use of these details and related information does so at their own risk and assumes all liability for such use. Site specific design should be performed by a licensed Professional Engineer based on the actual site conditions, materials, and local practices. Thiele Geotech, Inc. and Stone Strong LLC are the authors of these drawings and retain all common law, statutory, and other reserved rights including the copyright. Limited license is granted to copy, reproduce, or modify the details to prepare construction documents for Stone Strong retaining walls. Thiele Geotech, Inc. and Stone Strong LLC make no warranties, either expressed or implied, of merchantability or fitness for any particular purpose, and accept no responsibility for the accuracy, suitability, or completeness of information contained herein.

**STONE STRONG CAP
CHISELED GRANITE FACE**
NOT TO SCALE



FENCE SLEEVE
NOT TO SCALE

DISCLAIMER:

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www.stonestrong.com

PROJECT

**TYPICAL DETAILS
STONE STRONG SYSTEMS**

DATE: 6/29/18 | FILE: 33_6sf Fence Sleeve

TYPICAL FENCE CONFIGURATION
NOT TO SCALE

DISCLAIMER:

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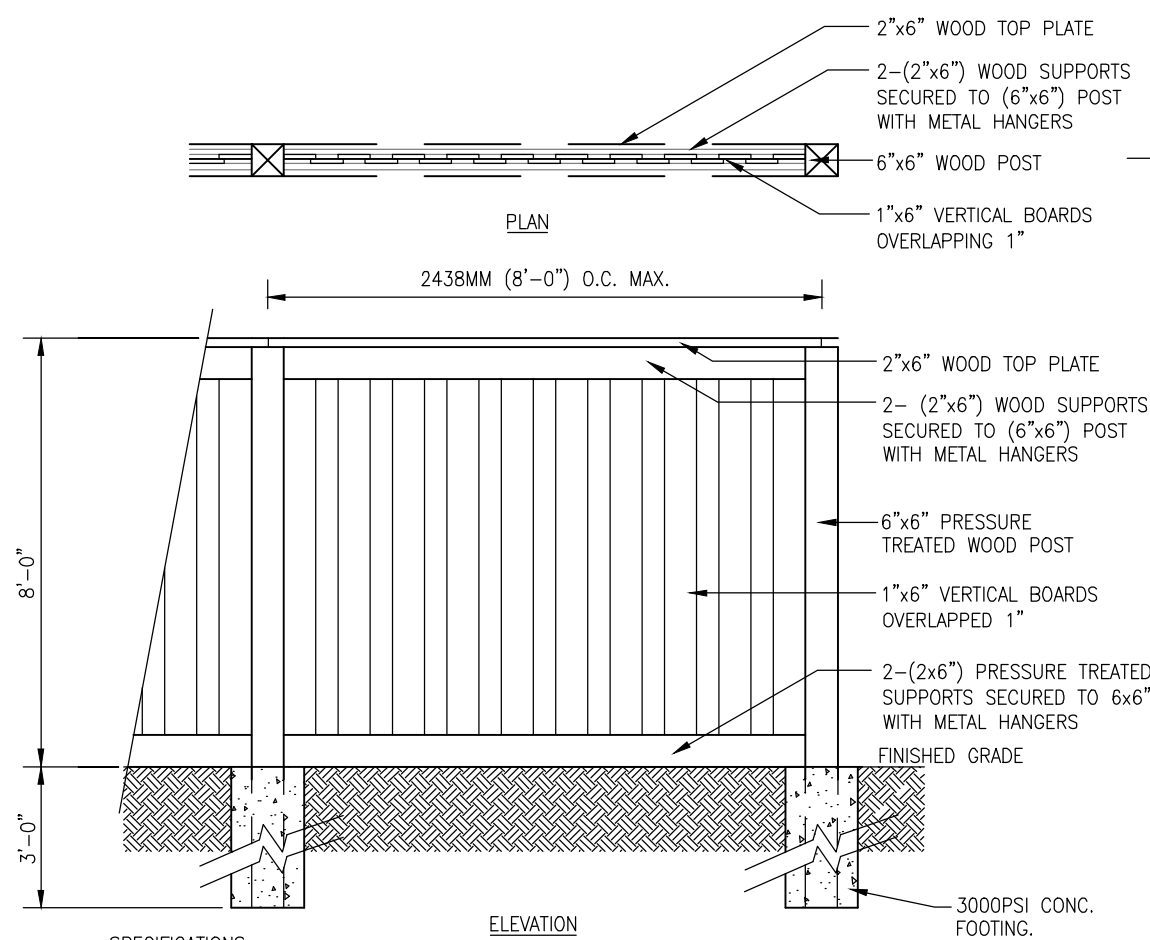


www.stonestrong.com

PROJECT

**TYPICAL DETAILS
STONE STRONG SYSTEMS**

DATE: 6/29/18 | FILE: 34_Fence Config Typ



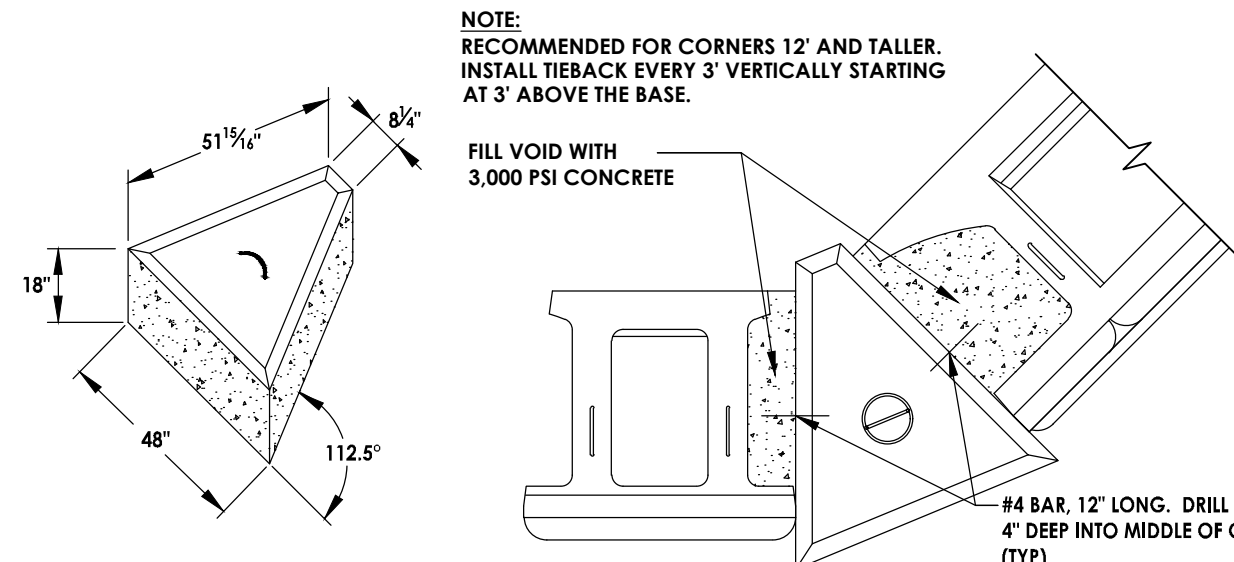
SPECIFICATIONS:

- ALL WOOD TO BE FREE OF EXCESSIVE CHIPS, CRACKS, WARPS OR KNOTS. UNLESS NOTED OTHERWISE ON DRAWING.
- ALL FASTENERS TO BE HOT DIPPED GALVANIZED.
- ALL WOOD TO BE COATED WITH TWO COATS OF SOLID STAIN

NOTES:

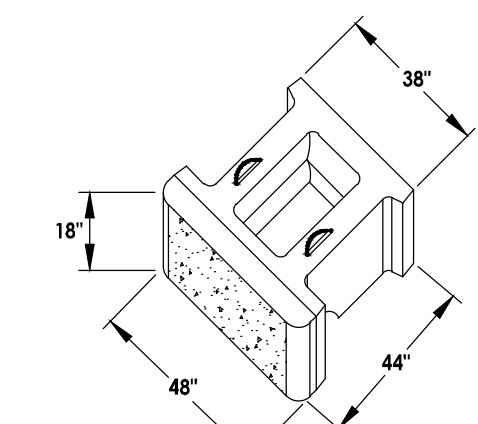
- INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- DO NOT SCALE DRAWINGS.

8' TALL OVERLAPPING BOARD FENCE

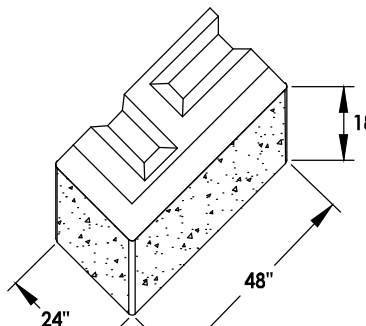


STONE STRONG 45° CORNER UNIT
NOT TO SCALE

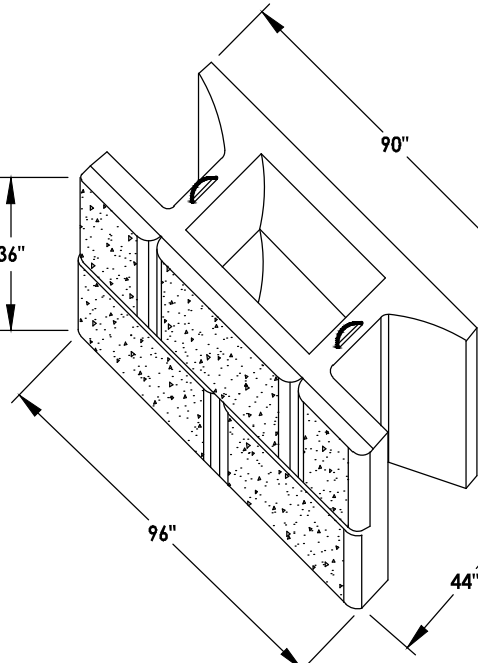
45° CORNER TIEBACK
NOT TO SCALE



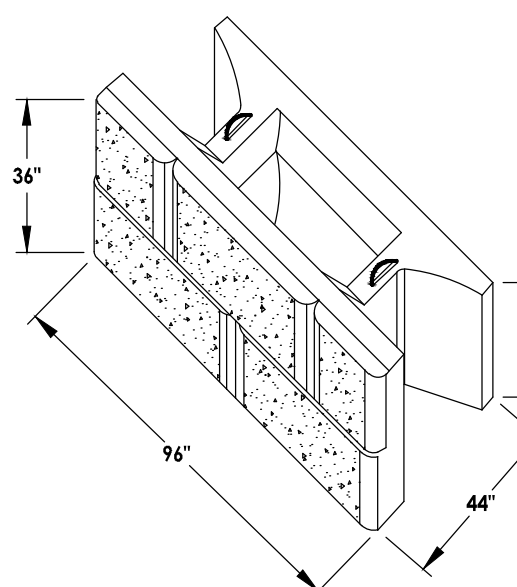
STONE STRONG 6 SF UNIT
NOT TO SCALE



STONE STRONG CORNER UNIT
NOT TO SCALE

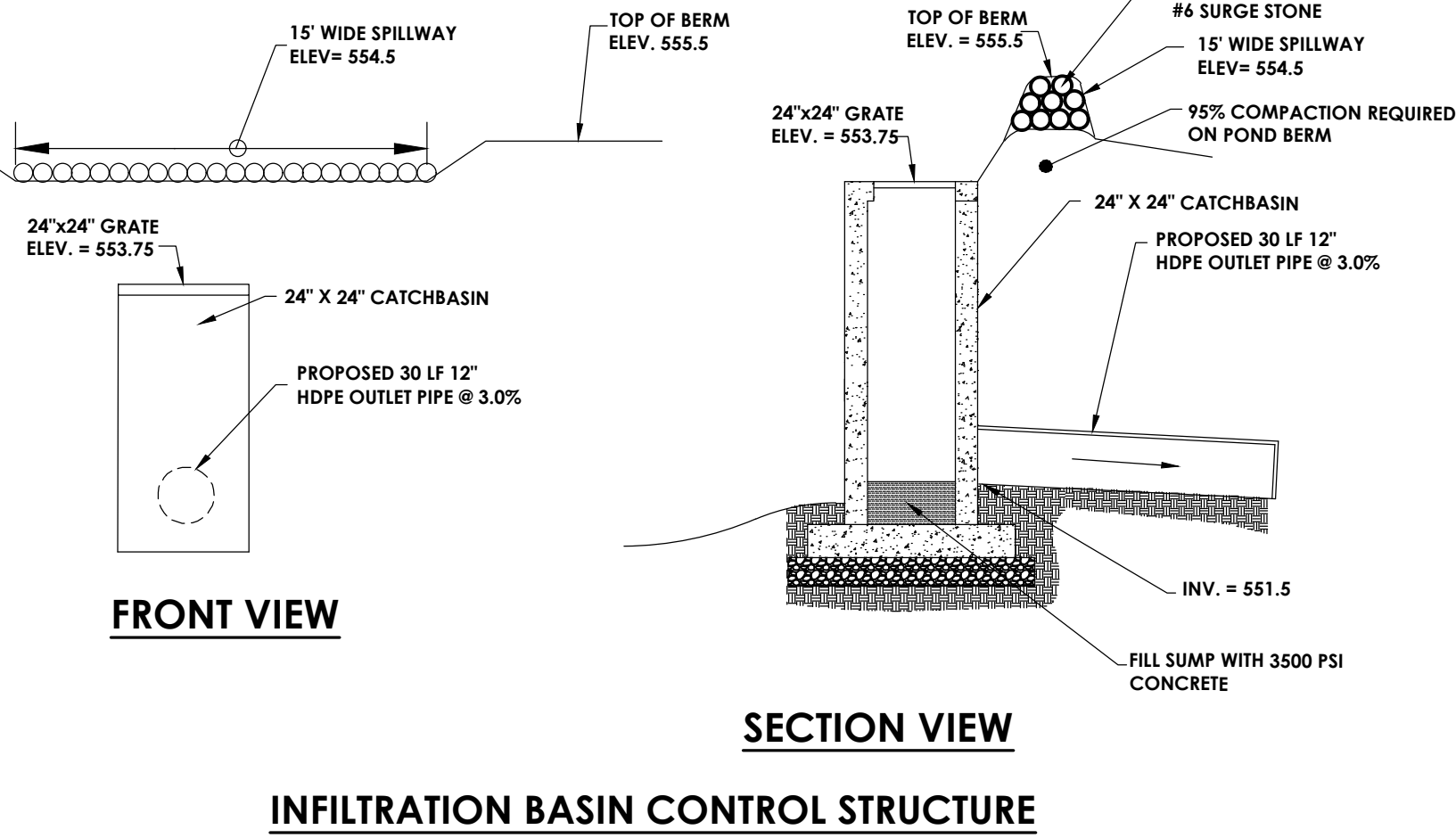


**STONE STRONG 24 SF UNIT
CHISELED GRANITE FACE**
NOT TO SCALE



**STONE STRONG 24 SF TOP UNIT
CHISELED GRANITE FACE**
NOT TO SCALE

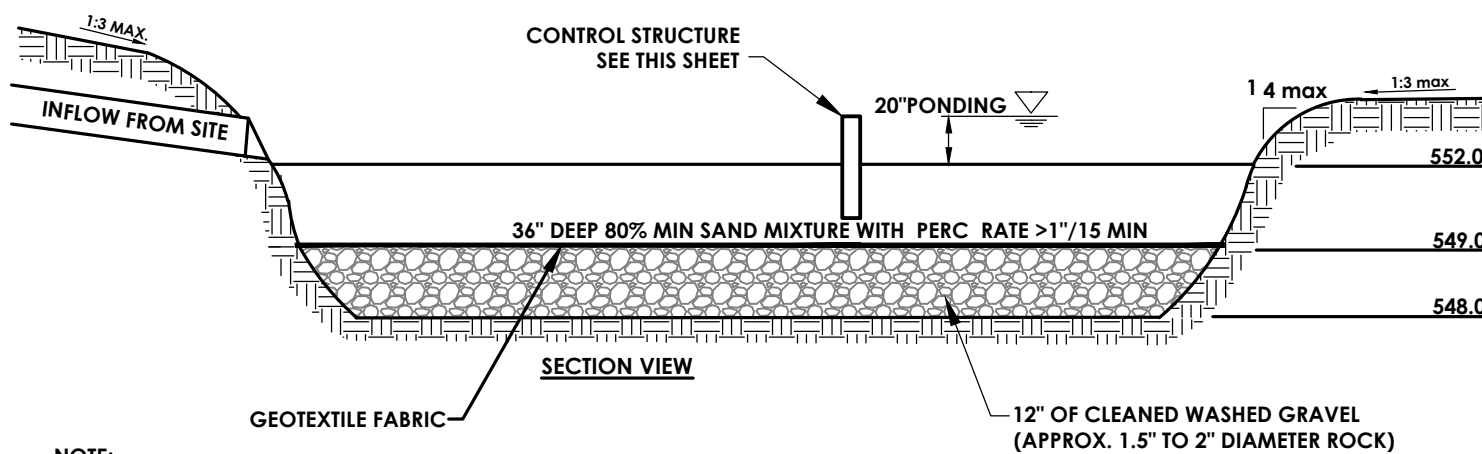
STONE STRONG RETAINING WALL
N.T.S.



FRONT VIEW

SECTION VIEW

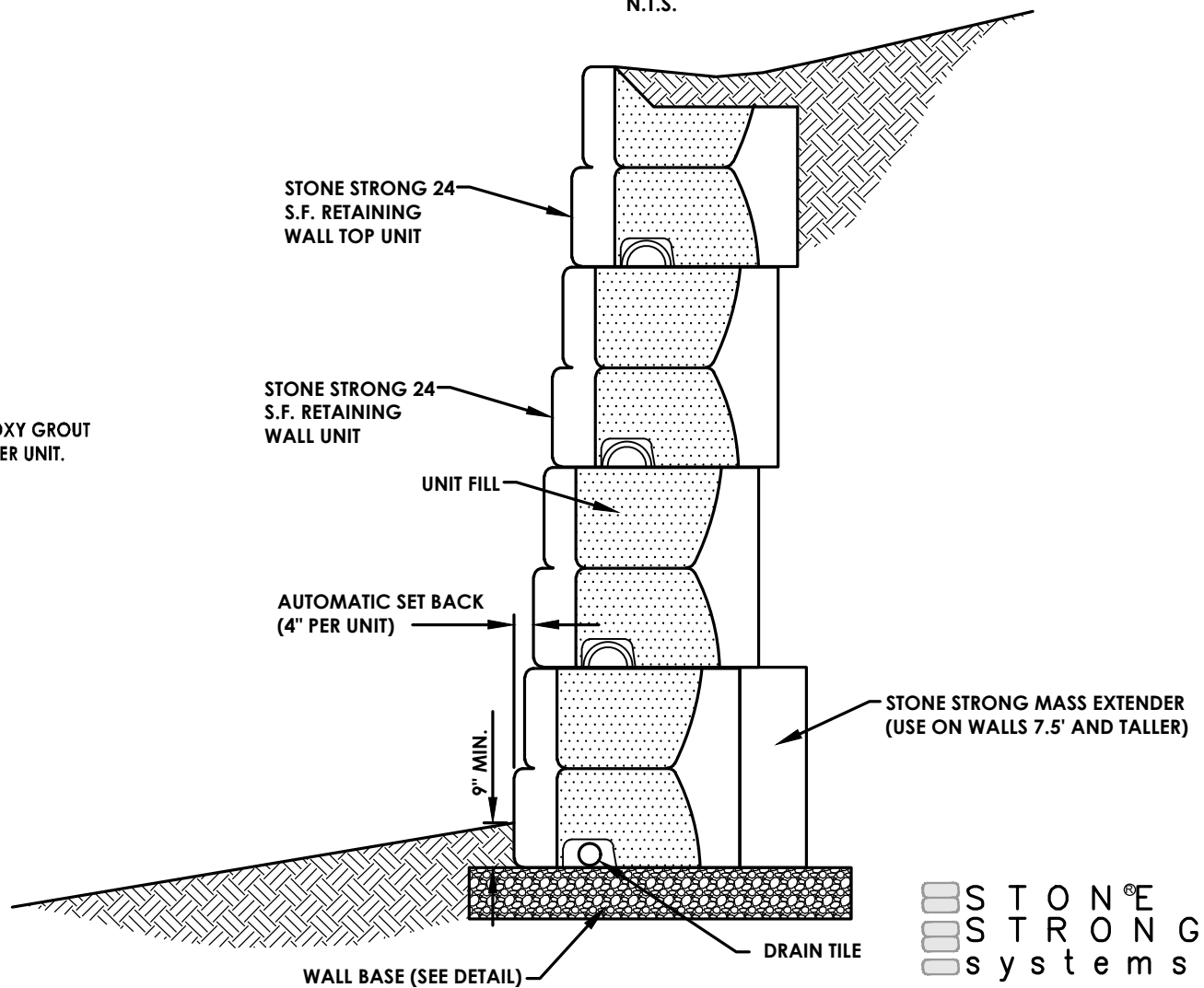
INFILTRATION BASIN CONTROL STRUCTURE
N.T.S.



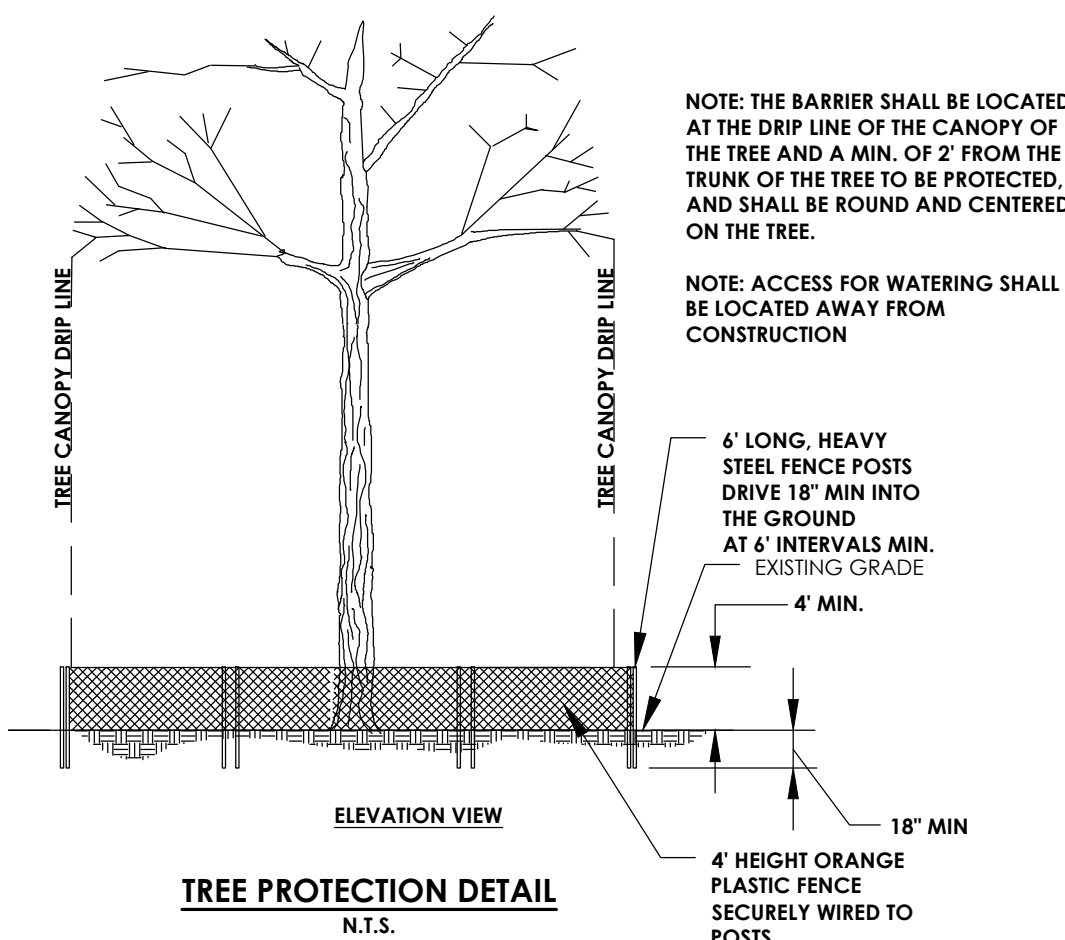
NOTE:

- FOR ALL SEEDING & STABILIZATION MEASURES IT IS THE RESPONSIBILITY OF THE OWNER & DEVELOPER TO ENSURE THAT FINAL STABILIZATION OCCURS AS REQUIRED BY THE NYSDEC.
- SAND SHALL NOT BE PLACED IN BIO RETENTION AREA UNTIL SITE HAS REACHED 50% STABILIZATION. SILT FENCE TO BE PROVIDED AROUND ENTIRE BIO RETENTION AREA AT ALL TIMES.

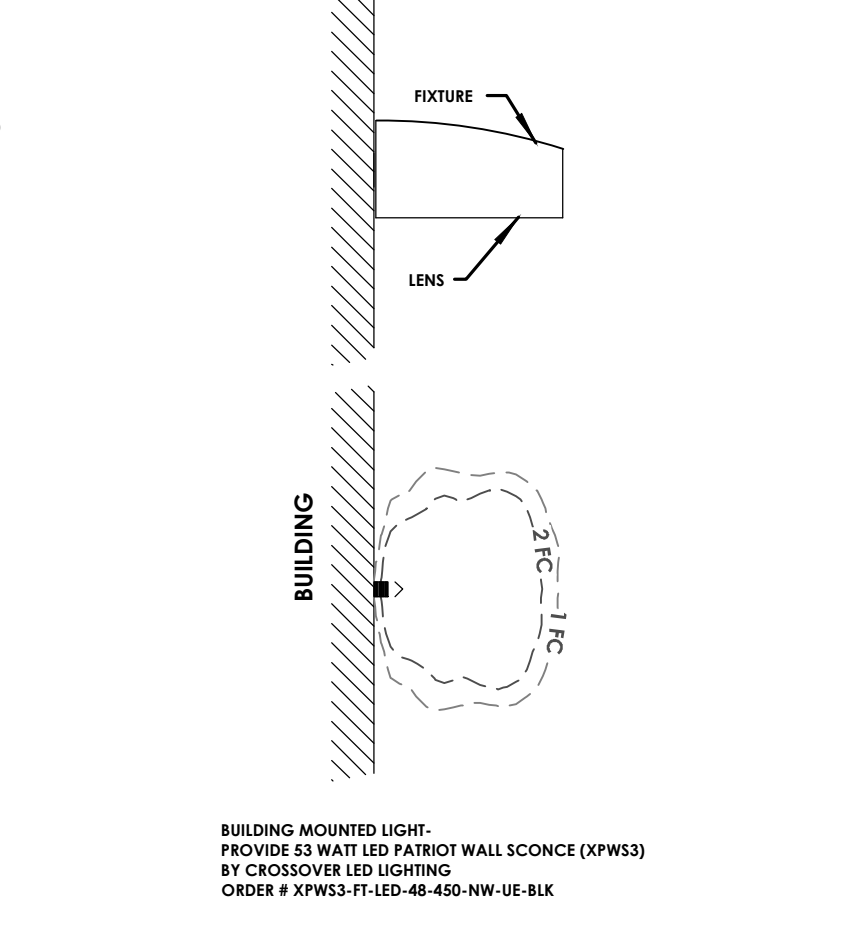
INFILTRATION BASIN
N.T.S.



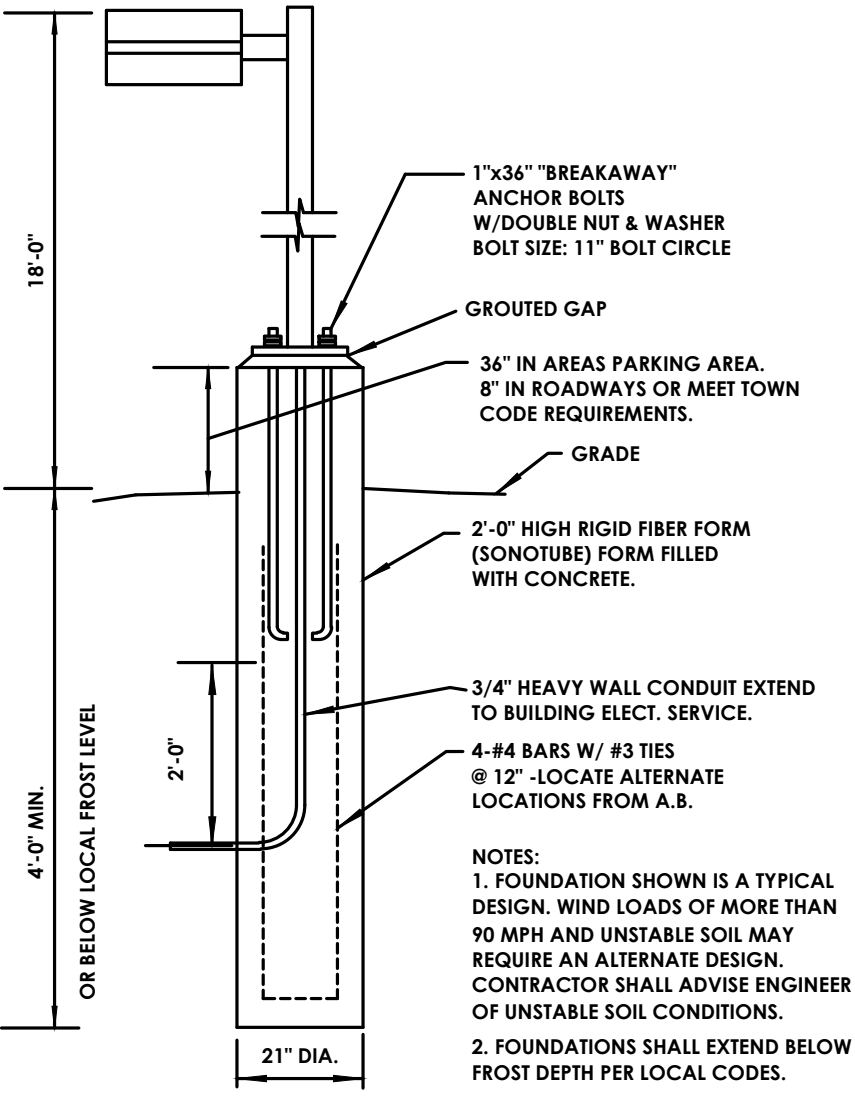
**24 S.F. GRAVITY WALL
CROSS SECTION W/ MASS EXTENDER**
N.T.S.



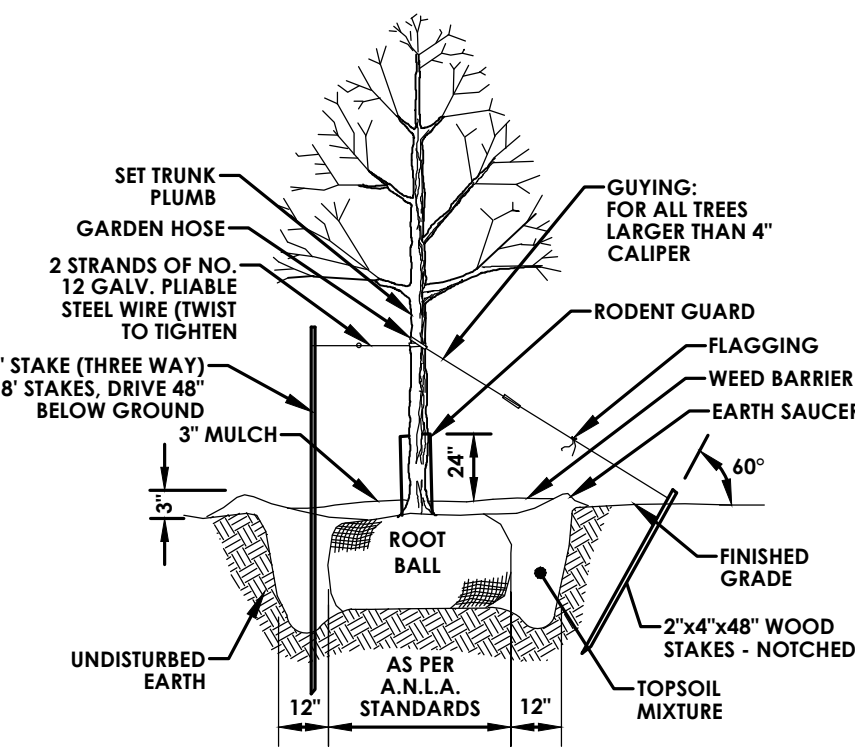
TREE PROTECTION DETAIL
N.T.S.



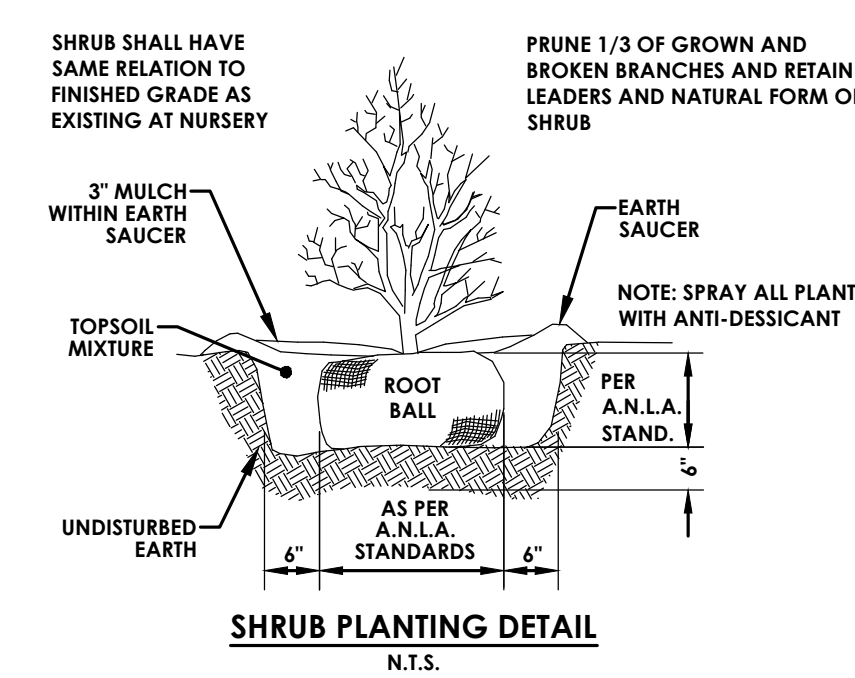
BUILDING MOUNTED LIGHT
N.T.S.



LIGHT POLE AND BASE DETAIL
N.T.S.



TREE PLANTING DETAIL
N.T.S.

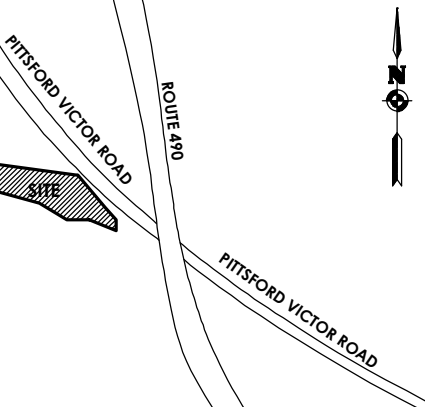


SHRUB PLANTING DETAIL
N.T.S.

PA

PASSERO ASSOCIATES
engineering architecture

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LOCATION SKETCH
N.T.S.

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(585) 325-1000
Fax: (585) 325-1691

Principal-in-Charge

Jess D. Sudol, P.E.

Project Manager

Joshua Saxton, E.I.T.

Designed by

James Ritzenthaler, E.I.T.

Revisions

No.	Date	By	Description
1			

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NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

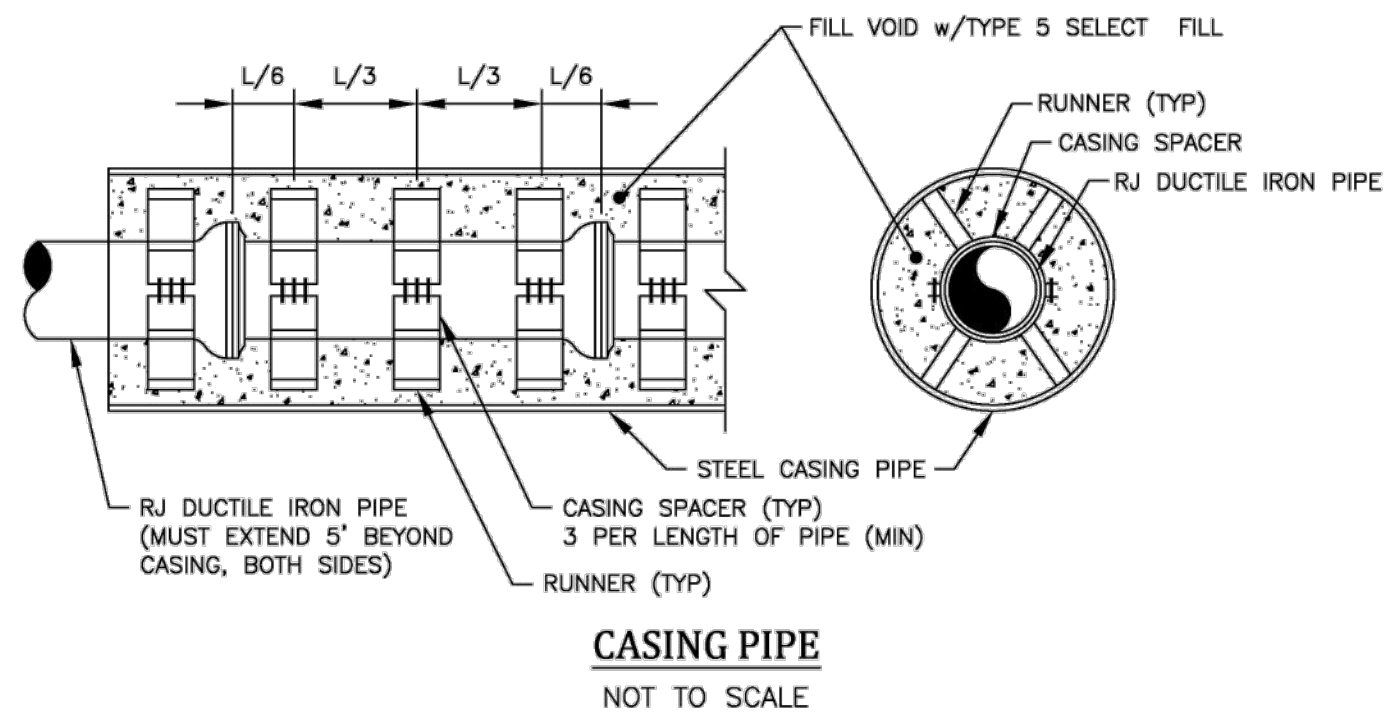
Project No.
20182555.0005

Drawing No.
C 203

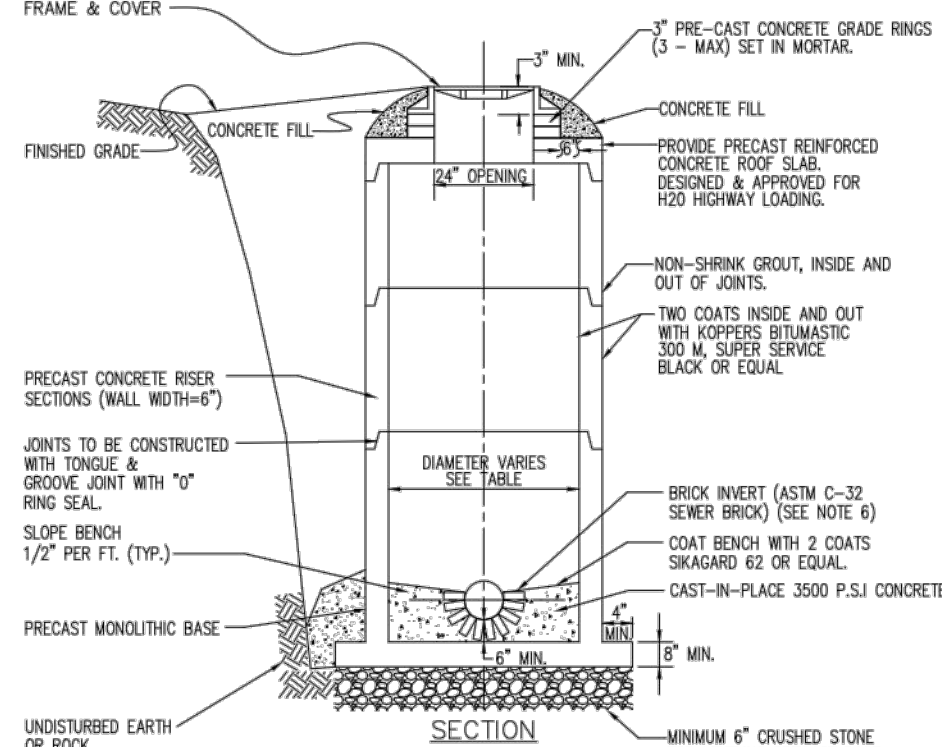
Scale:
NTS

Date
FEBRUARY 2024

NOT FOR CONSTRUCTION



SANITARY / STORM MANHOLE DETAIL N.T.S.



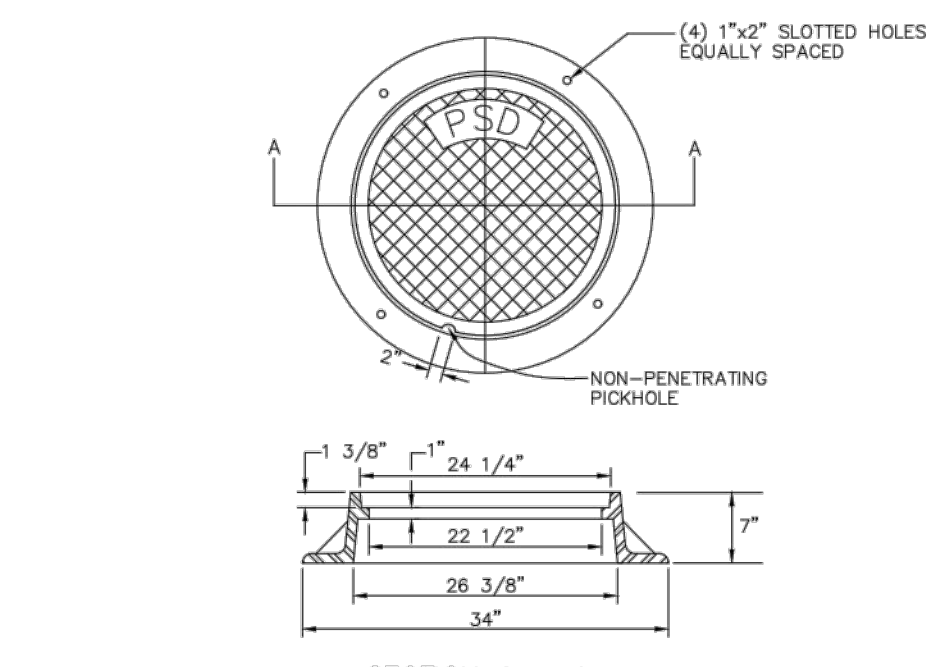
NOTES:

1. USE REINFORCED CONCRETE RISERS AS MANUFACTURED BY KISTNER CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.
2. PROVIDE TOWN STANDARD FRAME & COVER.
3. ALL PIPE CONNECTIONS TO MANHOLE SHALL BE MADE WITH KOR-N-SEAL BOOT.
4. MAXIMUM MANHOLE SPACING TO BE 300'.
5. USE MANHOLE ADJUSTMENT RINGS AS NEEDED.
6. WITH PRIOR WRITTEN APPROVAL FROM THE COMMISSIONER OF PUBLIC WORKS, HALF CLAY TILES OR HALF PVC SDR-35 PIPE SECTIONS EMBEDDED IN CONCRETE MAY BE USED INSTEAD OF A BROCK INVERT. THE BENCH MUST BE BUILT UP WITH SEWER BROCK.

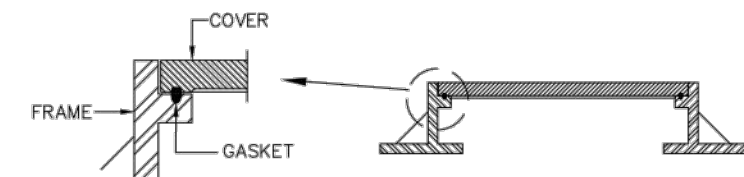
SEWER SIZE	MANHOLE DIAMETER
8"-14"	4'-0"
15"-27"	5'-0"
30"-36"	6'-0"
3&4 WAY	5'-0" MIN. SPECIAL INV. DETAIL BEYD

D23
JANUARY 2021

SANITARY MANHOLE STANDARD FRAME AND COVER DETAIL N.T.S.

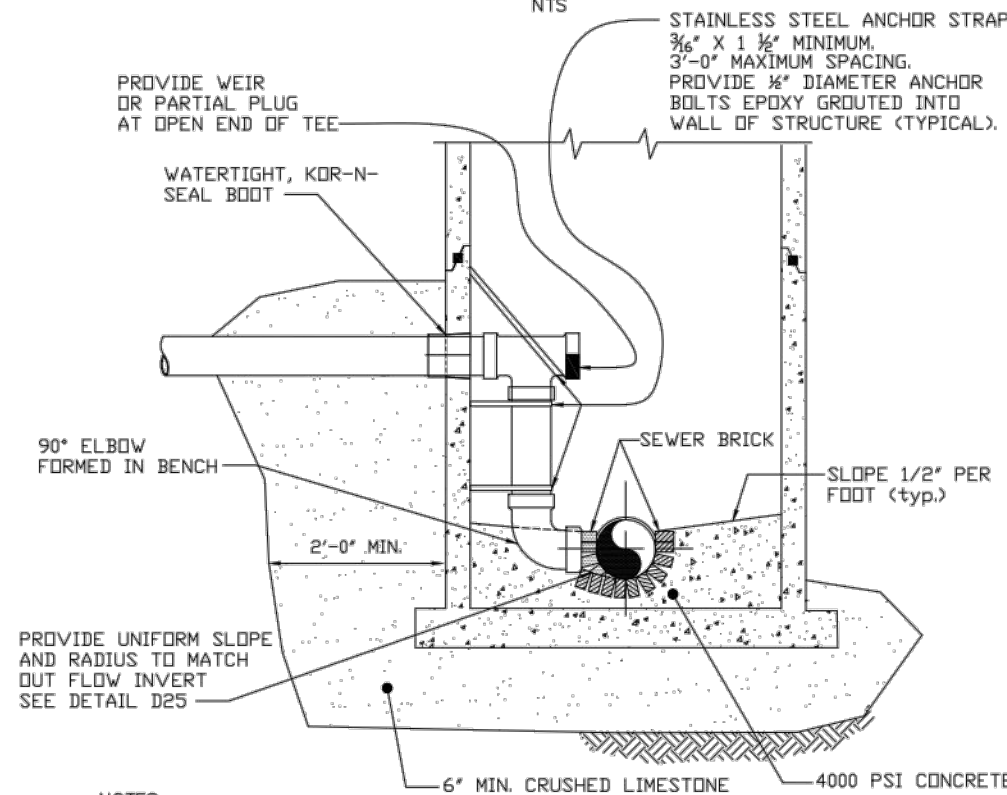


WATERTIGHT SANITARY SEWER MANHOLE COVER N.T.S.



D27
JANUARY 2021

SANITARY MANHOLE INSIDE DROP DETAIL N.T.S.

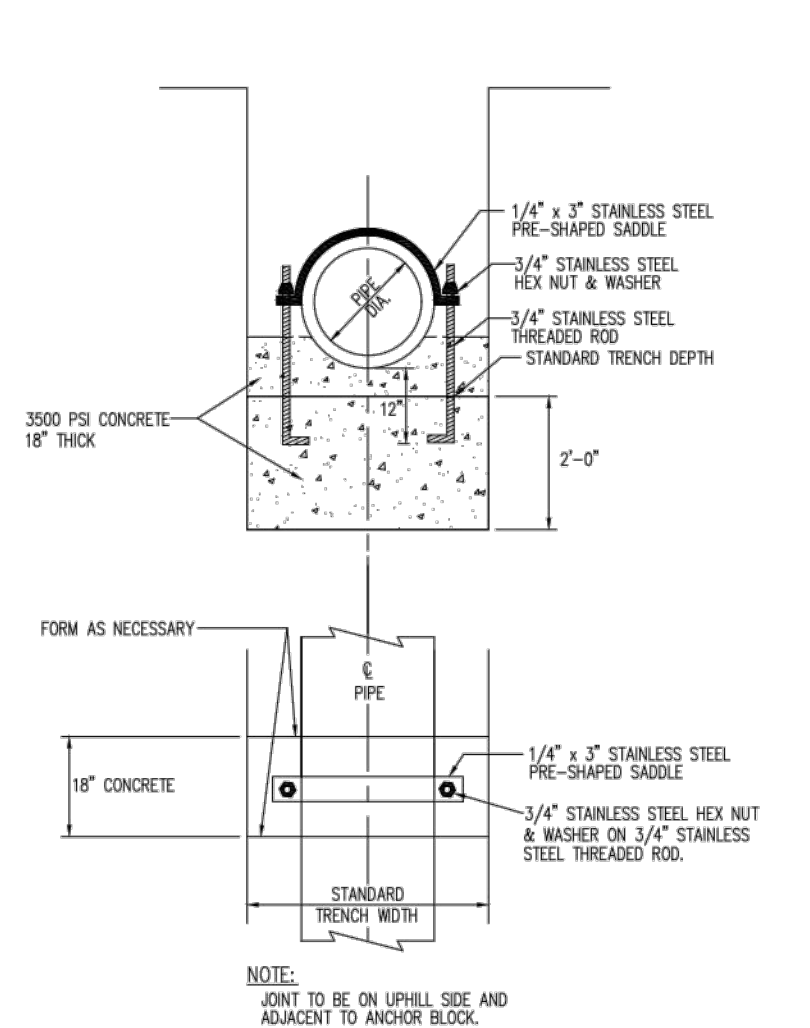


NOTES:

1. FITTINGS TO BE GPK SOLVENT WELD JOINTS MATCHING THE MATERIAL OF THE INCOMING PIPE (SDR-35 OR SDR-21). MINIMUM DROP REQUIRED FOR 8" SDR-35 PIPE IS 32".
2. THIS DETAIL IS INTENDED TO SHOW ONLY ITEMS SPECIFIC TO DROP MANHOLE. REFER TO SANITARY SEWER MANHOLE STANDARD SHEET FOR DETAILED SPECIFICATIONS RELATING TO THE ENTIRE STRUCTURE.
3. ENGINEERED DETAILS ARE REQUIRED IF INCOMING PIPE SLOPE IS 5% OR GREATER.
4. THE COMMISSIONER OF PUBLIC WORKS SHALL DETERMINE THE MINIMUM MANHOLE DIAMETER REQUIRED BASED ON INCOMING PIPE SIZE.

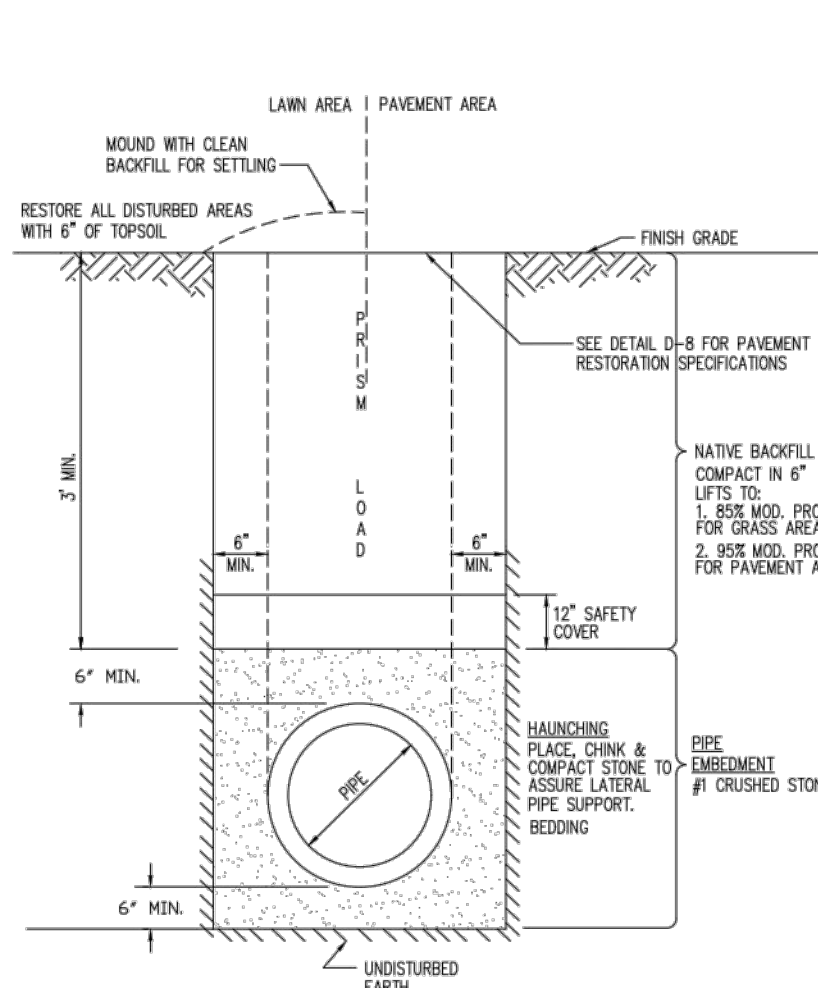
D24
JANUARY 2021

PIPE ANCHORAGE DETAIL N.T.S.



D32
JANUARY 2021

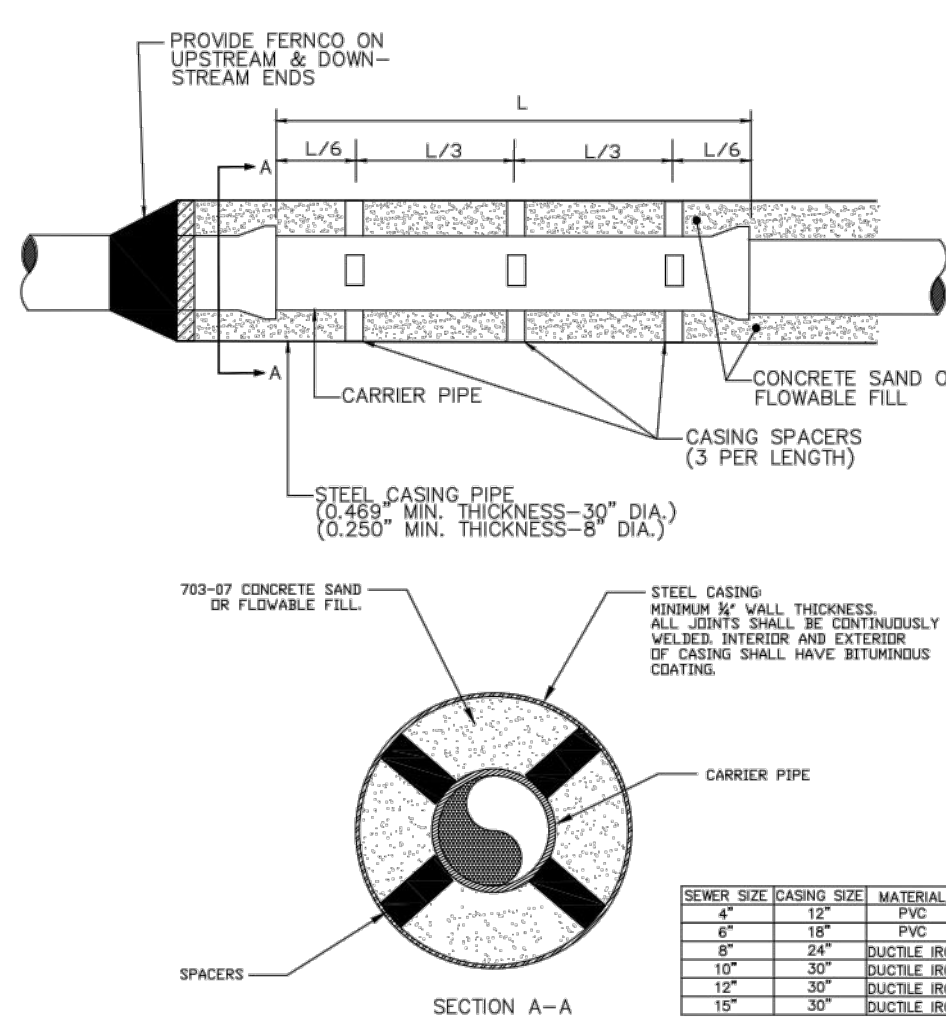
SEWER TRENCH DETAIL N.T.S.



NOTE: SAFETY COVER IS DEFINED AS NATIVE, CLEAN BACKFILL MATERIAL THAT IS FREE OF ORGANICS OR OTHER DELETERIOUS MATERIAL, INCLUDING ROCKS SIZED OVER 3-INCHES IN ANY DIRECTION.

D36
JANUARY 2021

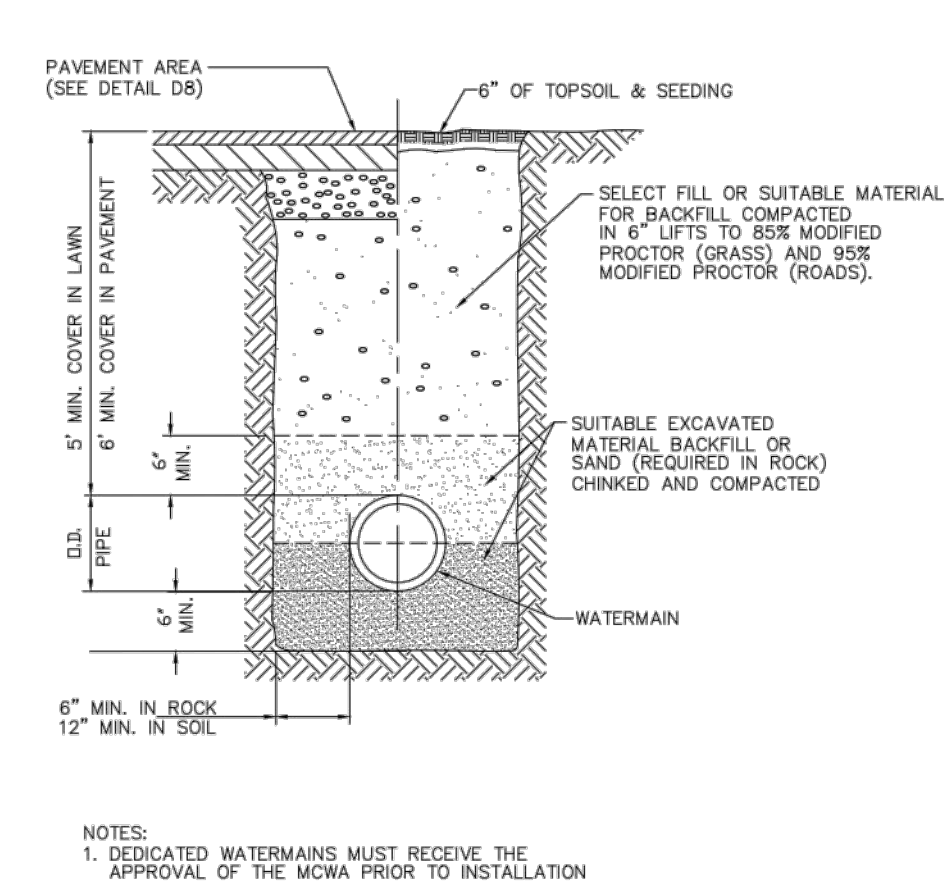
ROAD BORING & CASING DETAIL N.T.S.



NOTE: CONTRACTOR SHALL LOCATE AND EXPOSE ALL UTILITIES IN VICINITY OF BORING AND CASING PRIOR TO BEGINNING ANY WORK IN THIS AREA.

D41
JANUARY 2021

WATERMAIN TRENCH DETAIL N.T.S.

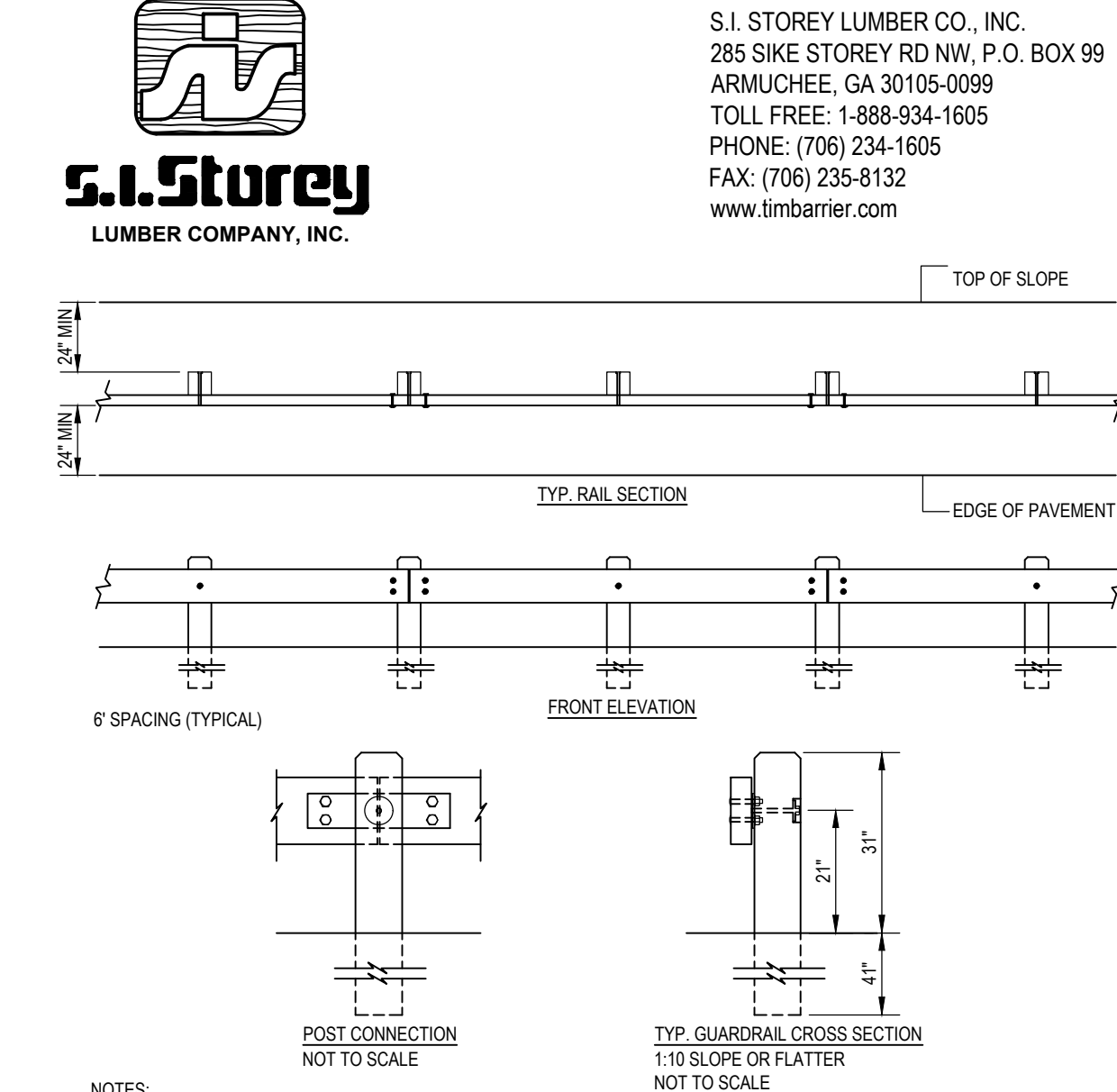


NOTES:

1. DEDICATED WATERMAINS MUST RECEIVE THE APPROVAL OF THE MCWA PRIOR TO INSTALLATION

D37
JANUARY 2021

TYPICAL TRENCH EXCAVATION DETAIL N.T.S.



NOTES:

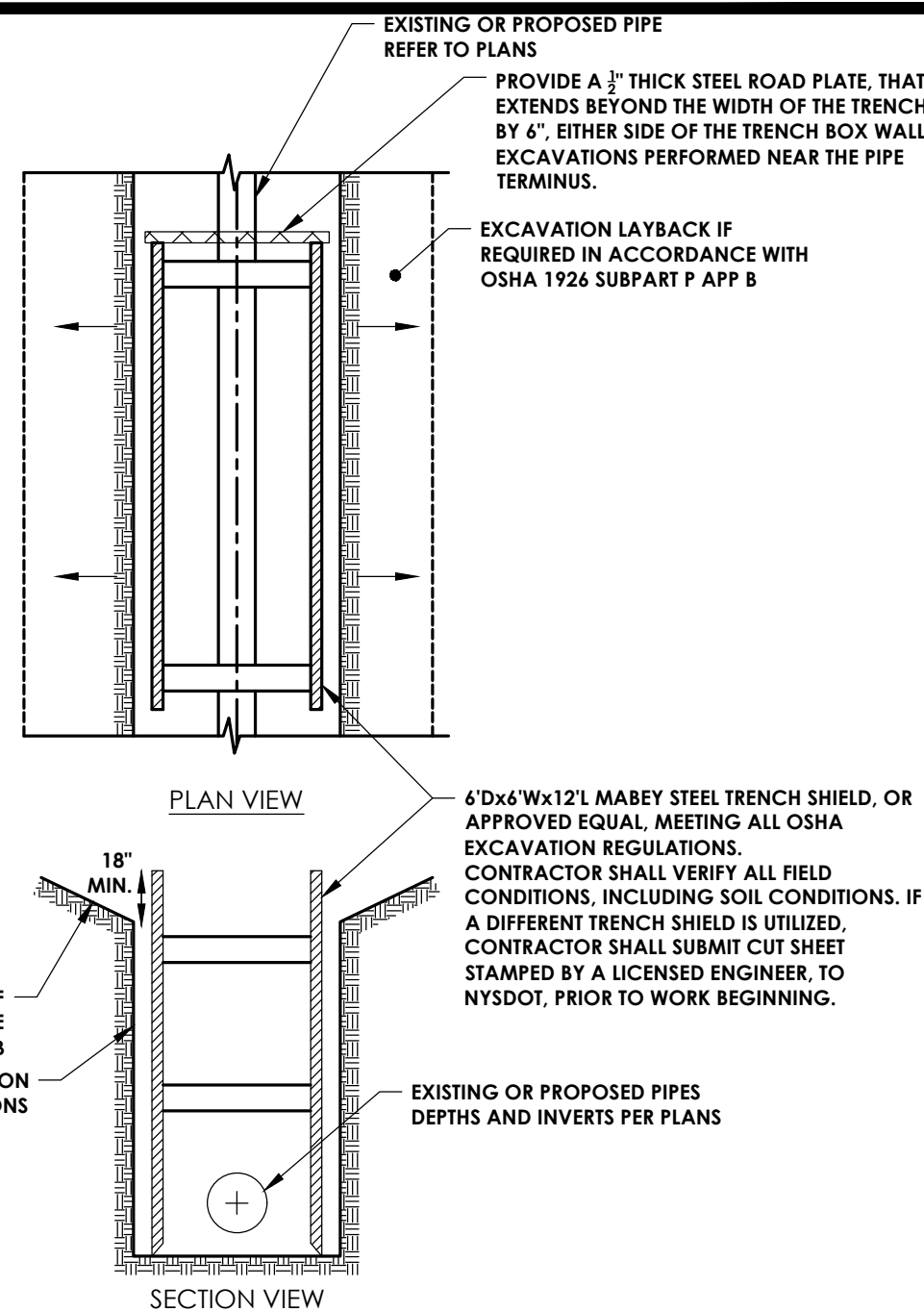
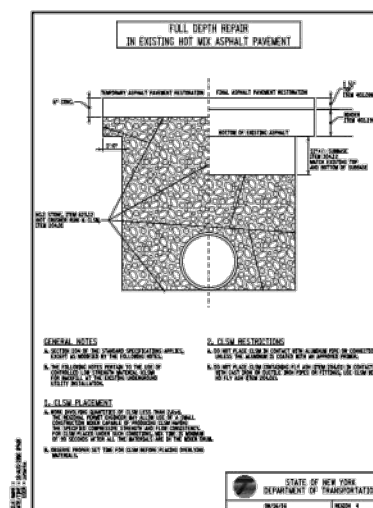
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. IF TOP OF SLOPE IS CLOSER THAN 24" INCREASE POST LENGTH TO 7'.
4. DRIVE POSTS OR AUGER BACKFILL WITH NATIVE SOIL AND COMPACT EVERY 12".
5. ALL TIMBER #1 S4S SOUTHERN PINE, PRESSURE TREATED: AWPA-C14, WOOD FOR USE IN HWY. CONSTR.
6. TYP. POST: 8" X 8" X 6' - TYP. RAIL: 4" X 12" X 11'11" 1/2"
7. FASTENERS: ASTM A307 A242; F436 TYPE 3; A563 D43.
8. TIMBARRIER™ SPLICE PLATE & PLATE WASHER ASTM-A588.
9. UNDER EACH BOLT HEAD ON FACE OF RAIL INSTALL ONE 7/8" WASHER.
10. REFER TO DRAWINGS 651-003b OR 651-003c FOR TERMINAL DETAILS
11. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 651-003.

TIMBARRIER™
STREETGUARD™ ROADWAY AND STREET APPLICATIONS (25 MPH MAX.)

651-003

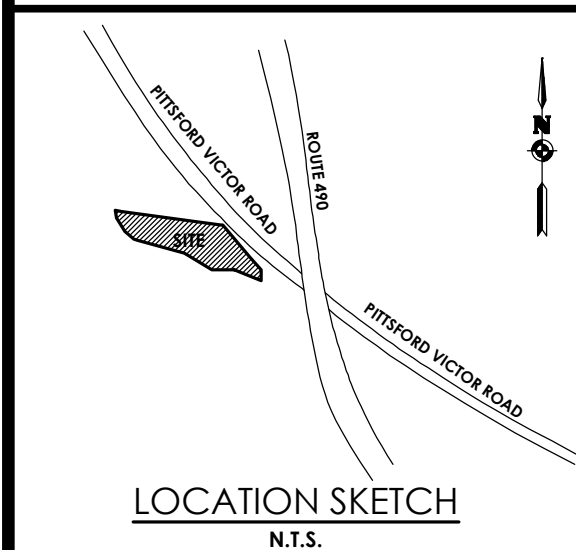
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SLOPE BACK SIDES OF EXCAVATION IN ACCORDANCE WITH OSHA 1926 SUBPART F APP B
LIMIT OF EXCAVATION REFER TO PLANS FOR DIMENSIONS

6'Dx6'Wx12'L MABEY STEEL TRENCH SHIELD, OR APPROVED EQUAL, MEETING ALL OSHA EXCAVATION REGULATIONS. CONTRACTOR SHALL VERIFY ALL FIELD CONDITIONS, INCLUDING SOIL CONDITIONS. IF A DIFFERENT TRENCH SHIELD IS UTILIZED, CONTRACTOR SHALL SUBMIT CUT SHEET STAMPED BY A LICENSED ENGINEER, TO NYSDOT, PRIOR TO WORK BEGINNING.



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Christa Construction
600 East Avenue
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242 West Main Street Suite 100
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(585) 325-1000
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Principal-in-Charge: Jess D. Sudol, P.E.
Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler, E.I.T.

Revisions			
No.	Date	By	Description
1			

NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK
Project No.
20182555.0005

Drawing No.
C 204

Scale:
NTS

Date
FEBRUARY 2024

NOT FOR CONSTRUCTION

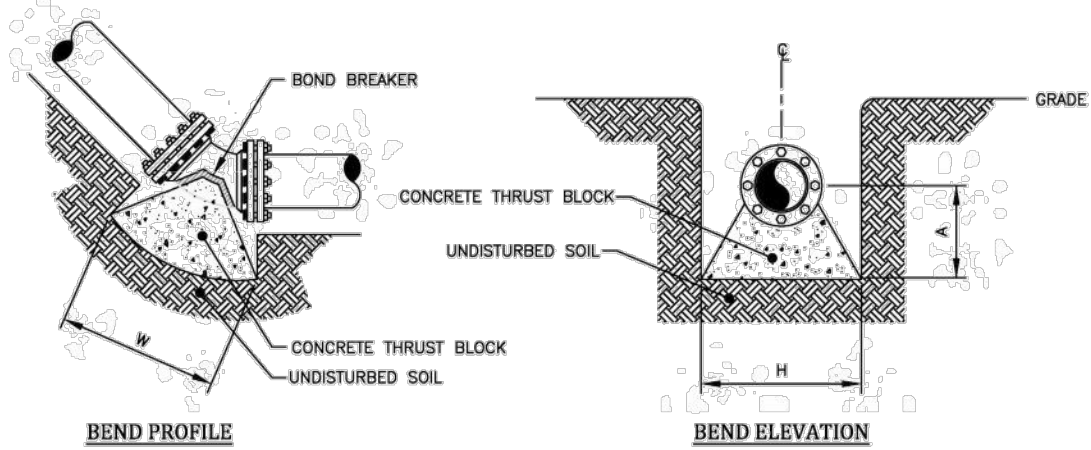
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R:\DETAILS\DM6\2016 DME DETAILS\DM6 6.DWG

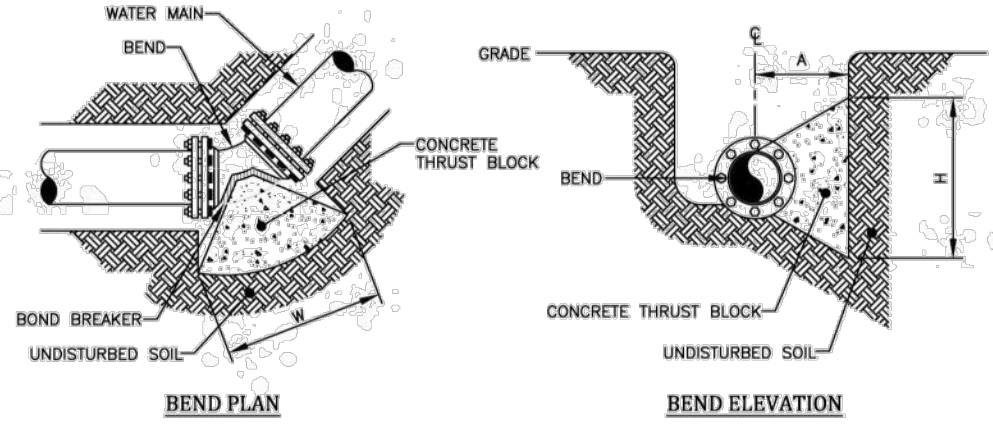
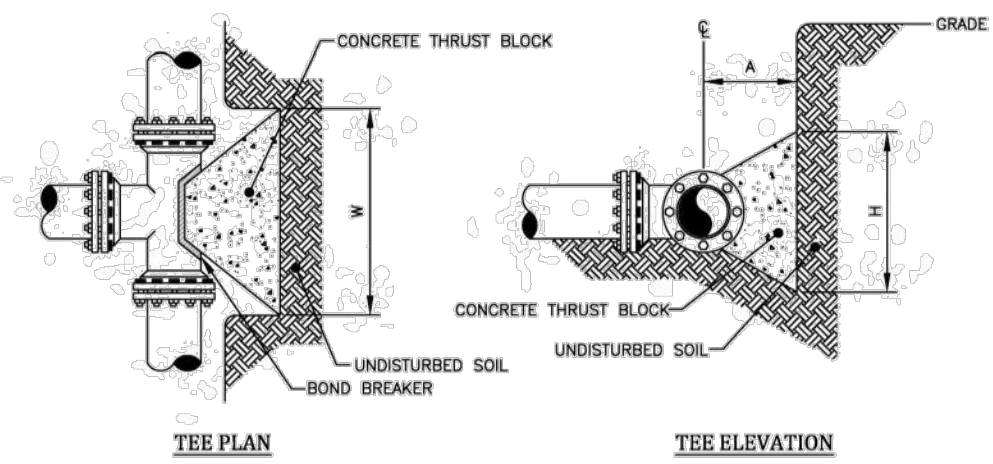
PIPE DIAMETER	BEND OR FITTING											
	11 1/2 DEGREE			22 1/2 DEGREE			45 DEGREE			90 DEGREE		
	H (FT)	W (FT)	A (FT)	H (FT)	W (FT)	A (FT)	H (FT)	W (FT)	A (FT)	H (FT)	W (FT)	A (FT)

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

HORIZONTAL AND VERTICAL UP THRUST BLOCKS



VERTICAL UP THRUST BLOCKS NOT TO SCALE



HORIZONTAL THRUST BLOCKS NOT TO SCALE

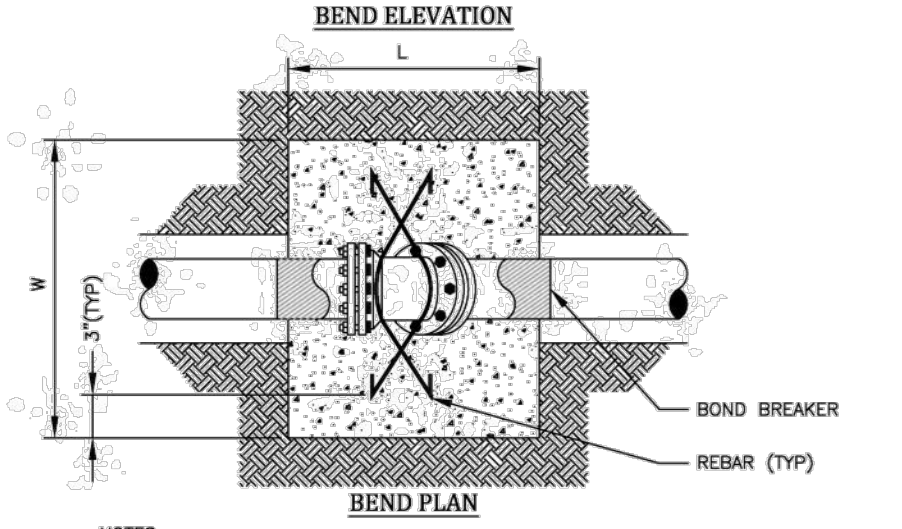
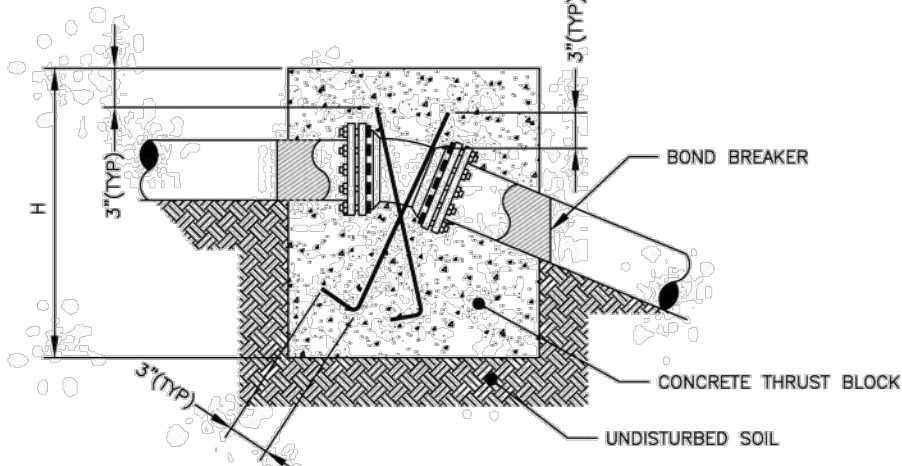
MONROE COUNTY
WATER AUTHORITY
ROCHESTER, NEW YORK
SEPT 2016
DATE
DME 6

R:\DETAILS\DM7\2016 DME DETAILS\DM7 7.DWG

PIPE DIAMETER	BEND											
	11 1/2 DEGREE			22 1/2 DEGREE			45 DEGREE			90 DEGREE		
	L (FT)	W (FT)	H (FT)	L (FT)	W (FT)	H (FT)	L (FT)	W (FT)	H (FT)	L (FT)	W (FT)	H (FT)

SOIL BEARING STRENGTH - PSF
PSI TEST PRESSURE

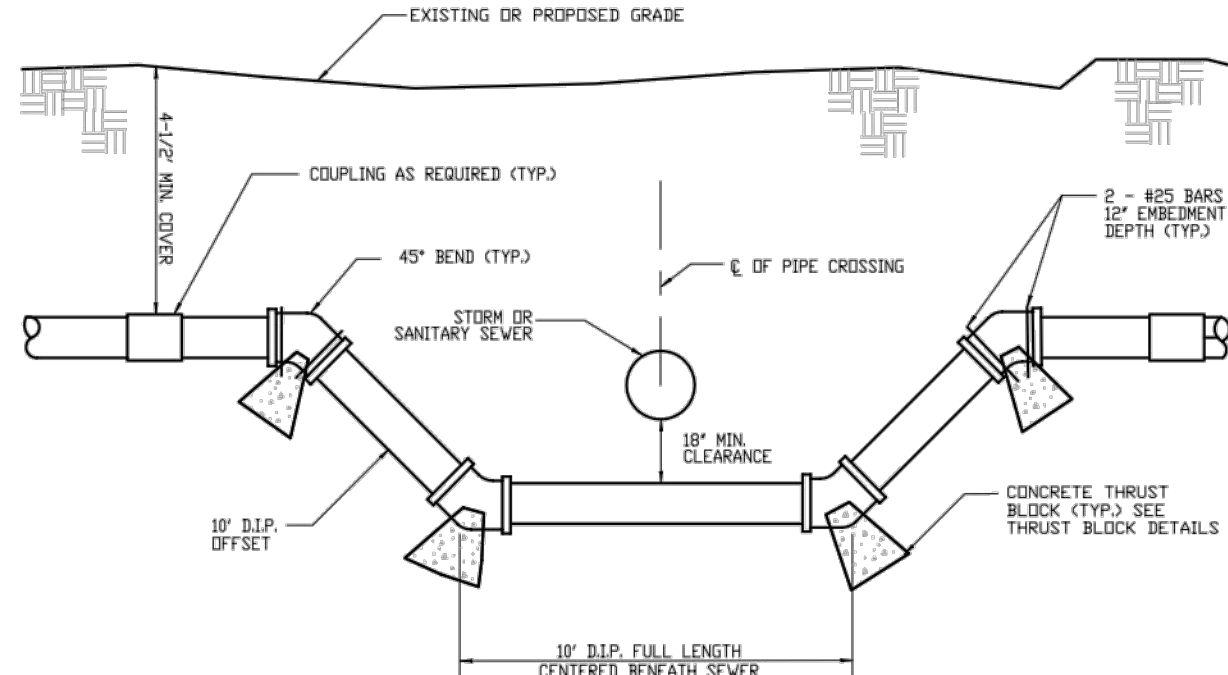
VERTICAL DOWN THRUST BLOCKS



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

VERTICAL DOWN THRUST BLOCKS NOT TO SCALE

MONROE COUNTY
WATER AUTHORITY
ROCHESTER, NEW YORK
SEPT 2016
DATE
DME 7



WATERMAIN - SEWER CROSSING ITEM 660.99 NOT TO SCALE

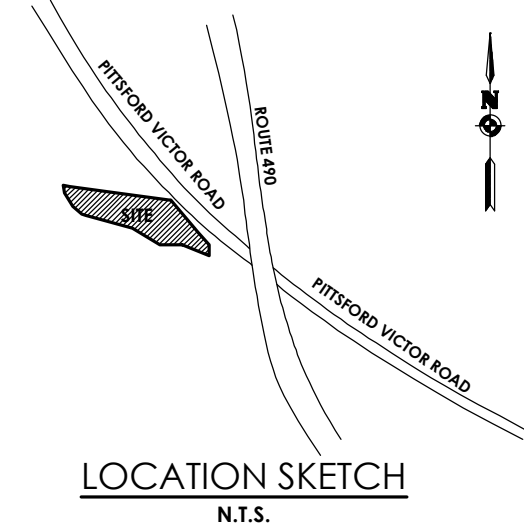
3/1/06

REVISED

PA

PASSERO ASSOCIATES
engineering architecture

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NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

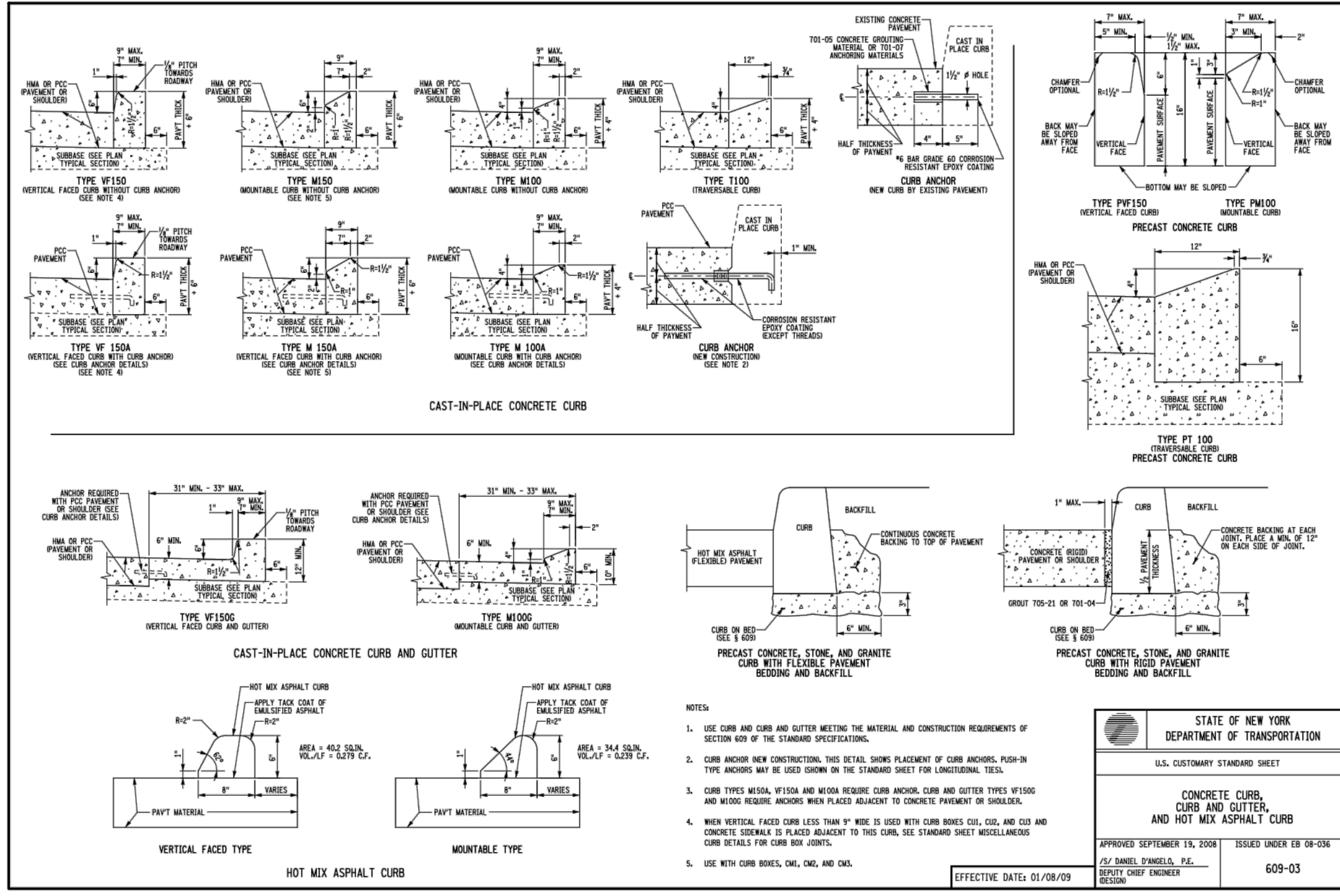
Project No.
20182555.0005

Drawing No.
C 205

Scale:
NTS

Date
FEBRUARY 2024

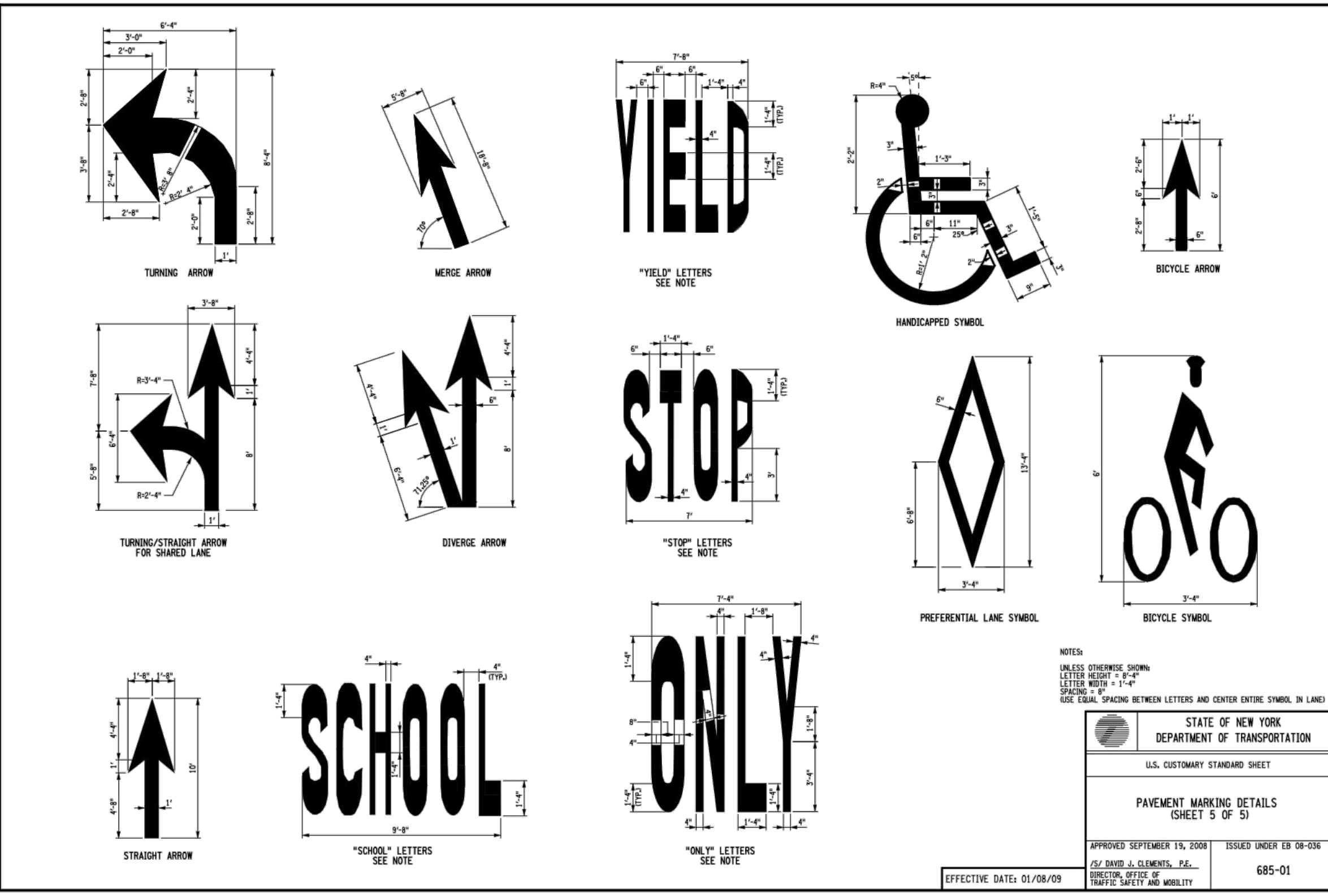
NOT FOR CONSTRUCTION



- NOTES:
- USE CURB AND GUTTER MEETING THE MATERIAL AND CONSTRUCTION REQUIREMENTS OF SECTION 600 OF THE STANDARD SPECIFICATIONS.
 - CURB ANCHOR NEW CONSTRUCTION. THIS DETAIL SHOWS PLACEMENT OF CURB ANCHORS. PUSH-IN TYPE ANCHORS MAY BE USED SHOWN ON THE STANDARD SHEET FOR UNDISTURBED TIES.
 - CURB TYPES W150A, W150B AND W150C REQUIRE CURB ANCHOR. CURB AND GUTTER TYPES W150G AND W150H REQUIRE ANCHORS WHEN PLACED ADJACENT TO CONCRETE PAVEMENT OR SHOULDER.
 - WHEN VERTICAL FACED CURB LESS THAN 9" WIDE IS USED WITH CURB BOWES, CUB, CUB, AND CUB AND CONCRETE SEWERMA IS PLACED ADJACENT TO THIS CURB. SEE STANDARD SHEET MISCELLANEOUS CURB DETAILS FOR CURB JOINTS.
 - USE WITH CURB BOWES, CUB, CUB, AND CUB.

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
U.S. CUSTOMARY STANDARD SHEET
CONCRETE CURB,
CURB AND GUTTER,
AND HOT MIX ASPHALT CURB
APPROVED SEPTEMBER 19, 2008
ISSUED UNDER E8 08-036
P.E. DANIEL D'AMICO, P.E.
DEPUTY CHIEF ENGINEER
SECTION
609-03

DATE: 01/08/09
BY: JRM
CHECKED: JRM
DESIGNED: JRM



NOTES:
UNLESS OTHERWISE SHOWN:
LETTER HEIGHT = 4"-6"
LETTER WIDTH = 1'-4"
SPACING = 1'-4"
USE EQUAL SPACING BETWEEN LETTERS AND CENTER ENTIRE SYMBOL IN LANE

STATE OF NEW YORK
DEPARTMENT OF TRANSPORTATION
U.S. CUSTOMARY STANDARD SHEET
PAVEMENT MARKING DETAILS
(SHEET 5 OF 5)
APPROVED SEPTEMBER 19, 2008
ISSUED UNDER E8 08-036
P.E. DANIEL D'AMICO, P.E.
DEPUTY CHIEF ENGINEER
SECTION
685-01

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)

Region 4 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, FIVE (5) WORK DAYS PRIOR TO WORKING WITHIN THE STATE RIGHT-OF-WAY.

GENESEE CO. - (585) 343-0502	LIVINGSTON CO. - (585) 346-3036
MONROE CO. - WEST OF GENESEE RIVER (585) 352-3471	MONROE CO. - EAST OF GENESEE RIVER (585) 586-4514
ONTARIO CO. - (585) 396-4957	ORLEANS CO. - (585) 589-6655
WAYNE CO. - (315) 332-4000	WYOMING CO. - (585) 786-3310

IN ADDITION, THE PERMITTEE SHALL NOTIFY NYSDOT REGIONAL TRAFFIC OPERATIONS CENTER (RTOC) OF ALL LANE AND SHOULDER CLOSURES AT LEAST THREE (3) DAYS IN ADVANCE OF THE PROPOSED WORK UTILIZING RTOC'S CONSTRUCTION NOTIFICATION FORM.

PROPOSED CLOSURES WILL BE REVIEWED FOR CONCURRENT AND OVERLAPPING CLOSURE OR INCIDENT CONFLICTS AND WILL BE ENTERED INTO S11NY.ORG. CLOSURES INCLUDED IN THE NOTIFICATION SHALL CONFORM TO TIME, DATE, AND LOCATION RESTRICTIONS IN THE PERMIT. RTOC MAY DISALLOW OR REDUCE CLOSURES DUE TO OTHER CLOSURES OR WORK, EVENTS, OR INCIDENTS FOUND IN CONFLICT WITH THE PROPOSED CLOSURE(S). ALL LANE AND SHOULDER CLOSURES SHALL BE REMOVED DURING NON-WORKING HOURS, EXCEPT WHERE AUTHORIZED BY THE NYSDOT REGIONAL TRAFFIC ENGINEER OR DESIGNED.

6. NOTIFY THE NYSDOT TRAFFIC SIGNAL MAINTENANCE ENGINEER AT (585) 753-7793 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 #11 FOR A UTILITY STAKE-OUT.
7. WORK ZONE TRAFFIC CONTROL STANDARD SHEETS NOT INCLUDED IN THE PERMIT PACKAGE SHALL NOT BE UTILIZED UNLESS APPROVED BY THE REGIONAL TRAFFIC ENGINEER.
8. 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.
9. 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.
10. NO NIGHT WORK SHALL BE ALLOWED UNLESS APPROVED PRIOR TO START OF PROJECT. ADDITIONAL MAINTENANCE AND PROTECTION OF TRAFFIC MAY BE REQUIRED INCLUDING THE ADDITION OF REFLECTIVE MATERIALS AND LIGHTING.
11. 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 OF 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 IS 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.
12. ADA COMPLIANCE – ALL WORK SHALL BE IN ACCORDANCE WITH THE AMERICANS DISABILITY ACT (ADA) AND THE REQUIREMENTS OF THE 2013 PROPOSED ACCESSIBILITY GUIDELINES FOR PEDESTRIAN FACILITIES (PROWAG). REFER TO STANDARD SHEET 608-01 FOR DETAILS
13. ANY DAMAGE TO ROADWAY FEATURES CAUSED DIRECTLY OR INDIRECTLY BY THE CONTRACTOR'S OPERATIONS WITHIN NYS ROW SHALL BE REPAIRED TO MEET NYSDOT STANDARDS AT THE CONTRACTOR'S EXPENSE.
14. NYSDOT OPERATIONS TAKE PRECEDENCE OVER HIGHWAY WORK PERMIT OPERATIONS. CONTRACTOR SHALL NOT HAVE WORK OPERATIONS IN PAVEMENT DURING INCLEMENT WEATHER CONDITIONS OR DURING SNOW AND ICE REMOVAL OPERATIONS ON STATE HIGHWAYS.

10/2023

**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.

General Notes for Utility Work around Existing Trees

1. When trenching within 10 feet of existing trees 6 inches and over D.B.H. vegetation protection barrier shall be installed at the limits of work to a minimum of 4 feet from tree center.
2. When trenching next to trees, and roots 2 inches or larger must be cut, shovel by hand near the roots and saw the roots. Accidentally broken roots should be sawed 2 inches behind the ragged end.
3. When trenching next to trees, do not pile soil between the trench and the tree. Place soil on the far side of the trench. When this is not possible, place soil on plywood, a tarp or a 2 inch layer of mulch.
4. The contractor shall tunnel under trees when the edge of the trench will fall within 8 feet or closer to trees 6 inches and over D.B.H. The tunnel shall be a minimum of 4 feet long on each side of the tree and a minimum of 3 feet deep. Tunneling shall be by means of jacking, pushing or other methods approved by the engineer.
5. Any tree whose roots must be cut or where tunneling takes place; fertilizer shall be applied using Method No. 1 (holes made in soil 16 inches deep and 16 inches apart in the outer two-thirds of the canopy). Fertilizer Type No. 3 (10-6-4) shall be applied at the rate of 1 pound per 6 inches DBH and evenly distributed in the lower 12 inches of each hole.
6. Fertilizer shall be applied in the spring or late fall. If applied early fall, use a fertilizer void of any nitrogen such as 0-12-12.

NYSDOT Region 4 Excavation Support System Requirements

Any excavation 5 feet or more in depth shall utilize a shields and shoring or a designed sheeting system as dictated by local soil conditions 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.

Shoring System Requirements:

- A Pre-Engineered/Manufactured Shoring System does not require a PE stamp as long as the cut sheets show what the shoring system is rated for in each soil type and that information is available for public viewing (it is readily available for anyone to look at). The manufacturer is basically liable for it.
- A Designed Shoring System, a system designed by an engineer, must be stamped by a NYS PE.

R-4 (11/14)

TABLE 1 RECOMMENDED DRIVEWAY WIDTH "W"		
DRIVEWAY CLASSIFICATION	PERMISSIBLE RANGE OF WIDTHS (FT) WITHIN 30 FT. OF TRAVELED WAY FOR ROADS POSTED 45 MPH OR LESS	PERMISSIBLE RANGE OF WIDTHS (FT) WITHIN 30 FT. OF TRAVELED WAY FOR ROADS POSTED 45 MPH OR MORE
RESIDENTIAL LESS THAN 50 FT. IN LENGTH MEASURED ALONG THE CENTERLINE	9 TO 12	10 TO 24
RESIDENTIAL GREATER THAN 50 FT. IN LENGTH MEASURED ALONG THE CENTERLINE	9 TO 12	10 TO 14
MINOR COMMERCIAL SHARED THE-WAY DRIVEWAY	22 TO 30	24 TO 35
MINOR COMMERCIAL DIVIDED OR ONE-WAY DRIVEWAY	12 TO 24	12 TO 24
MINOR COMMERCIAL MULTI-LANE DRIVEWAY	12 TO 15 EACH LANE	14 TO 16 EACH LANE

TABLE 2 MAXIMUM DRIVEWAY SLOPE		
ROADWAY CLASSIFICATION	MINOR COMMERCIAL DRIVEWAY	RESIDENTIAL DRIVEWAY
RURAL	10%	8%
URBAN	6%	6%

TABLE 4 DRIVEWAY ENTRANCE TYPE SELECTION						
DRIVEWAY ENTRANCE TYPE	ENTRANCE DESIGN METHOD	CONDITIONS FOR USE				
		DRIVEWAY CLASSIFICATION (NOTE 1)	CORNER ANGLE	TRAVEL LANE AND SHOULDER WIDTH	CURB	SIDEWALK
TYPE 1	RADIUS	RESIDENTIAL OR MINOR COMMERCIAL	60° TO 120°	ANY	USE WITH OR WITHOUT CURB	ANY SPEED
TYPE 2	RADIUS	MINOR COMMERCIAL ONLY	60° TO 120°	ANY	USE ONLY WITH CURB (SEE NOTE 6)	USE WITH OR WITHOUT SIDEWALK
TYPE 3	TAPER	RESIDENTIAL OR MINOR COMMERCIAL	80° TO 100°	15° OR GREATER (SEE NOTE 6)	USE ONLY WITH SIDEWALK (SEE NOTE 7)	ONLY LOW SPEED (45 MPH OR LESS)
TYPE 4	TAPER	RESIDENTIAL OR MINOR COMMERCIAL	80° TO 100°	15° OR GREATER (SEE NOTE 6)	USE ONLY WITH CURB (SEE NOTE 7)	ONLY LOW SPEED (45 MPH OR LESS)

TABLE 4 ONLY APPLIES TO RESIDENTIAL AND MINOR COMMERCIAL DRIVEWAYS. FOR OTHER DRIVEWAY CLASSIFICATIONS (MAJOR COMMERCIAL, FIELD ENTRANCE, ETC.), REFER TO THE NYSDOT HIGHWAY DESIGN MANUAL, CHAPTER 5, APPENDIX 5A "POLICY AND STANDARDS FOR THE DESIGN OF ENTRANCES TO STATE HIGHWAYS".


NOTE:

ALL GENERAL NOTES AND ABBREVIATIONS REFERENCED ON THIS SHEET CAN BE FOUND ON STANDARD SHEET 608-05, SHEET 1 OF 9.

TABLE 3 DRIVEWAY MATERIALS AND THICKNESS						
PROPOSED OR EXISTING DRIVE	WITHIN DRIVEWAY PAVEMENT LENGTH ("FL")			WITHIN TRANSITION LENGTH ("FL")		
	MATERIAL	THICKNESS FOR RESIDENTIAL (IN)	THICKNESS FOR MINOR COMMERCIAL (IN)	MATERIAL	THICKNESS FOR RESIDENTIAL (IN)	THICKNESS FOR MINOR COMMERCIAL (IN)
DIRT, GRASS, OR GRAVEL	ASHPALT	3	4	SUBBASE COURSE, EXCAVATE AS NECESSARY	6	9
	SUBBASE COURSE	6	8			
STONE	ASHPALT	3	4	STONE, EXCAVATE AS NECESSARY	8	11
	SUBBASE COURSE	6	8			
ASHPALT (RESURFACING)	ASHPALT	1½	1½	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	TRUE AND LEVELING COURSE	AS NECESSARY	AS NECESSARY			
ASHPALT (RESURFACING)	ASHPALT	3	4 (SEE NOTE B)	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	SUBBASE COURSE	6	8 (SEE NOTE 10)			
PCC	PCC	6	6 (SEE NOTE 9)	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	SUBBASE COURSE	6	8 (SEE NOTE 10)			

TABLE 5 MINIMUM LENGTH OF VERTICAL CURVE, L, FOR CHANGE IN GRADE IN DRIVEWAY PROFILE		
CHANGES IN GRADE A+1 (2%+1)	CREST, L ₁ (FT)	SAG, L ₂ (FT)
4-6%	5	6
6-8%	6	8
8-10%	8	10
10-12%	6	8
12-14%	7	8
14-16%	7	8
16-18%	8	8
18-20%	8	8

LENGTH OF VERTICAL CURVE BASED ON 30' CURVE RADIUS AND THE LIGHT TO PASSENGER VEHICLE AND SINGLE UNIT TRUCK CLEARANCES

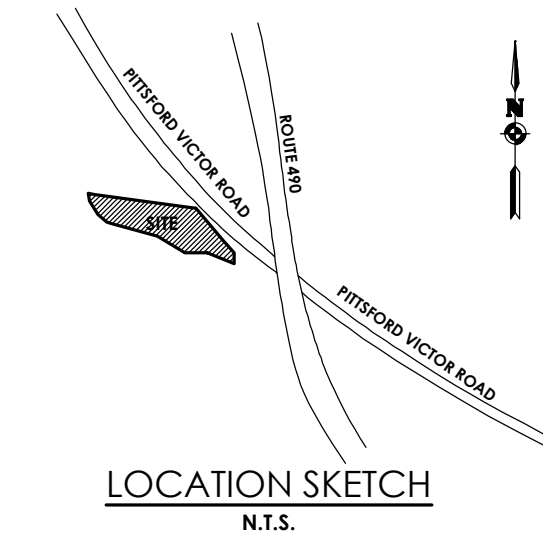
	Department of Transportation
U.S. CUSTOMARY STANDARD SHEET	
RESIDENTIAL AND MINOR COMMERCIAL DRIVEWAY (SHEET 2 OF 9)	
APPROVED MARCH 01, 2016 /s/ RICHARD M. LEE, P.E. DEPUTY CHIEF ENGINEER DESIGN	ISSUED UNDER E8 10-6 608-03

ERRATA 1 EFF. 05/01/2023
ISSUED WITH E8 23-007

PA

PASSERO ASSOCIATES
engineering architecture

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Principal-in-Charge
Project Manager
Designed by

Jess D. Sudol, P.E.
Joshua Saxton, E.I.T.
James Ritzenthaler E.I.T.

Revisions

No.	Date	By	Description
1			

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NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON

County: MONROE State: NEW YORK

Project No.
20182555.0005

Drawing No.

C 206

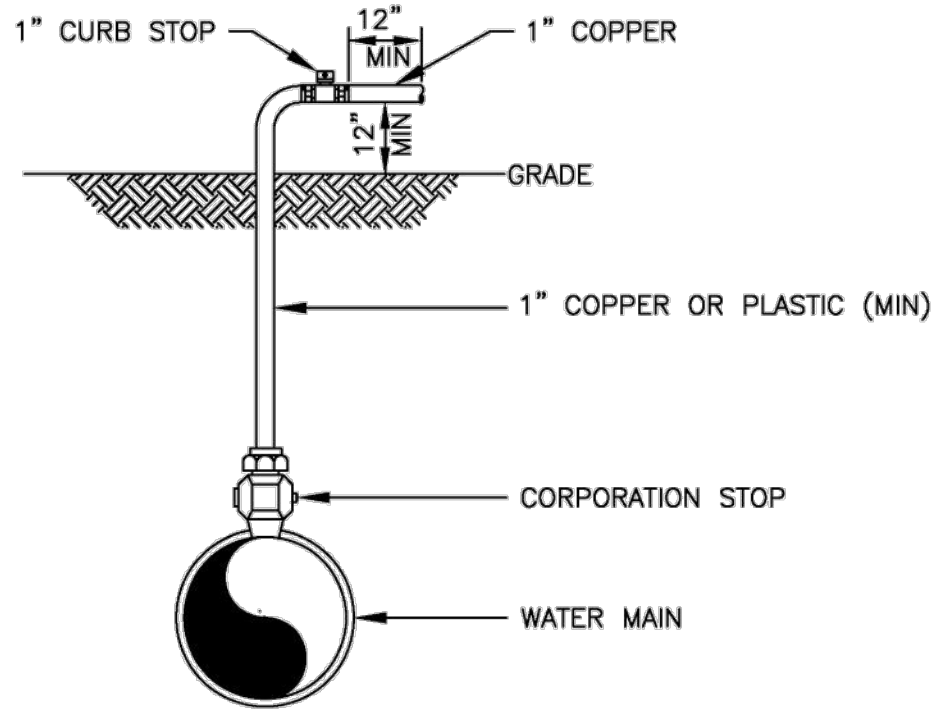
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Date

FEBRUARY 2024

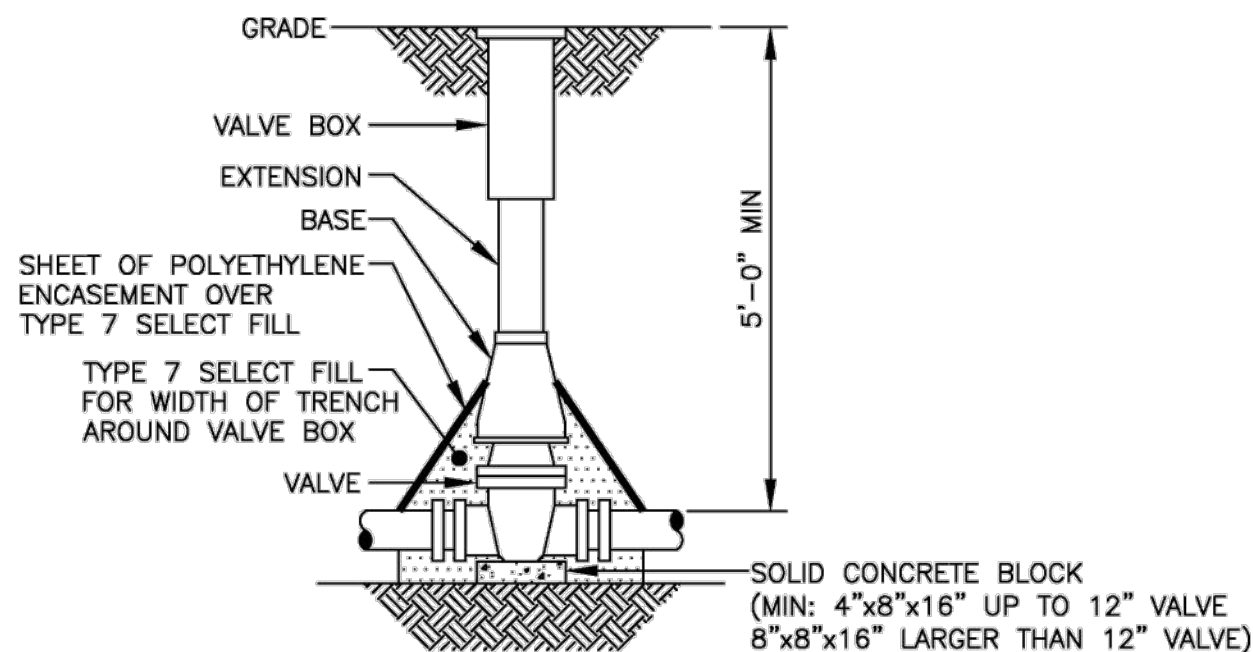
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NOTE: IN THE PRESENCE OF A WATER AUTHORITY REPRESENTATIVE REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY DISINFECTION/SAMPLE TAPS AND REPLACE WITH THREADED BRASS PLUGS.

DISINFECTION/BLOW-OFF/SAMPLING TAP (TEMPORARY)

NOT TO SCALE



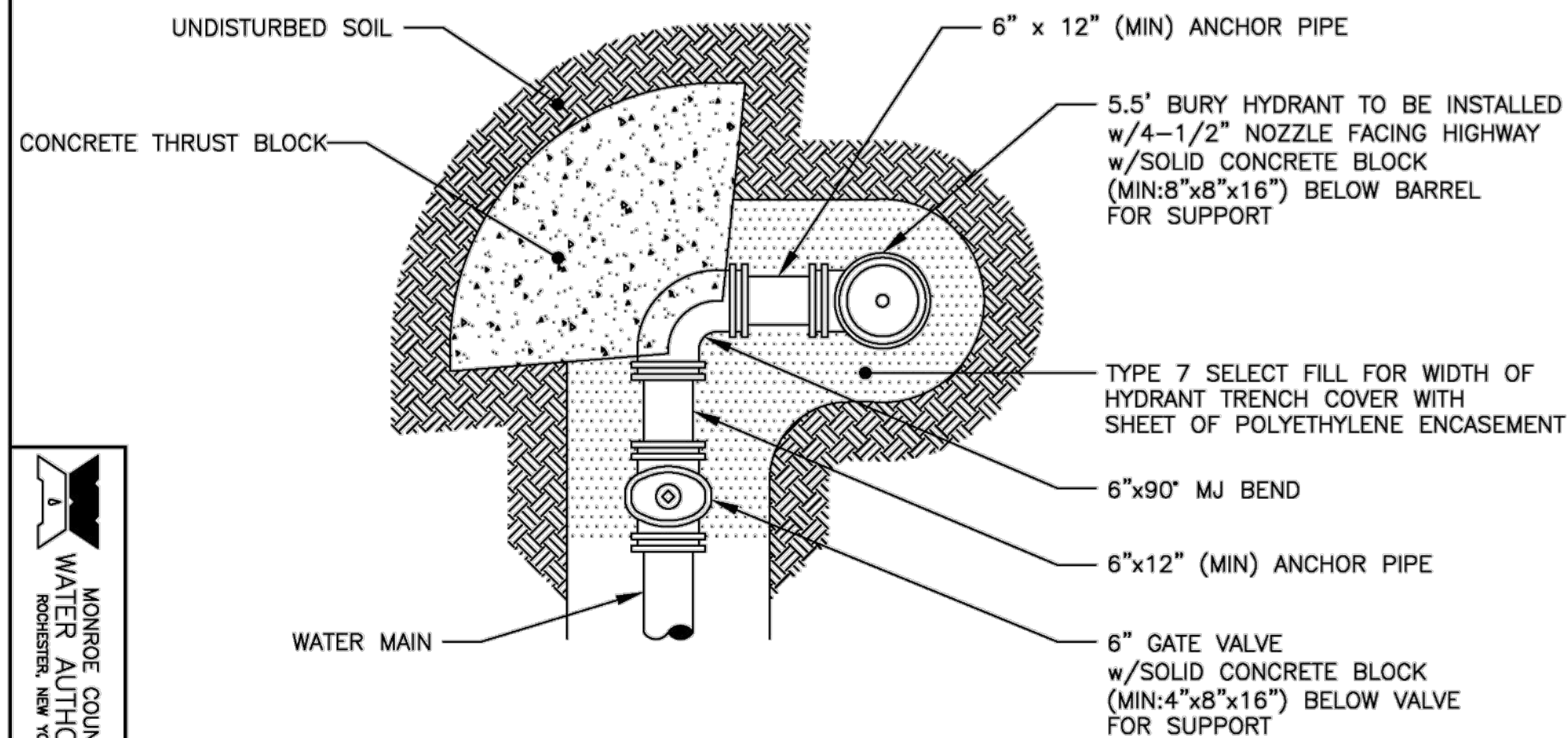
- NOTES:**
1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
 2. VALVE SHALL NOT SUPPORT VALVE BOX.
 3. ALL VALVES SHALL BE OPEN LEFT EXCEPT:
TOWN OF WEBSTER - VALVES 12" AND SMALLER SHALL OPEN RIGHT.
TOWN OF HENRIETTA - SHALL OPEN RIGHT

VALVE

NOT TO SCALE

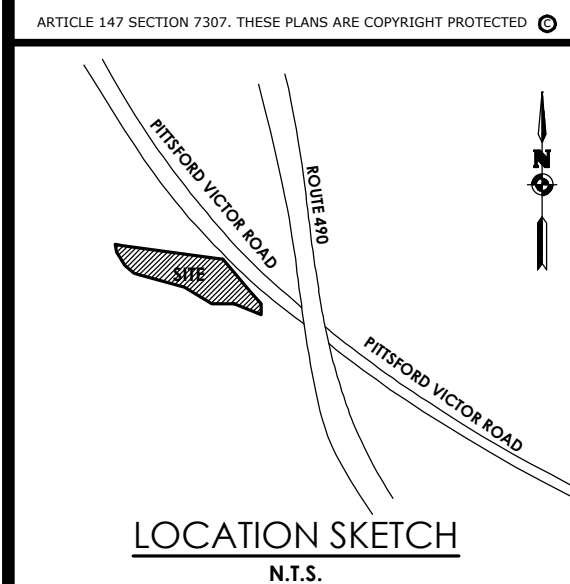
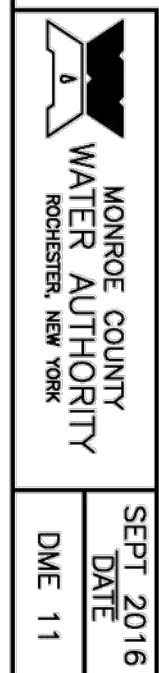


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DEAD END PERPENDICULAR HYDRANT ASSEMBLY

NOT TO SCALE



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Principal-in-Charge: Jess D. Sudol, P.E.
Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler, E.I.T.

Revisions				
No.	Date	By	Description	
1				

NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

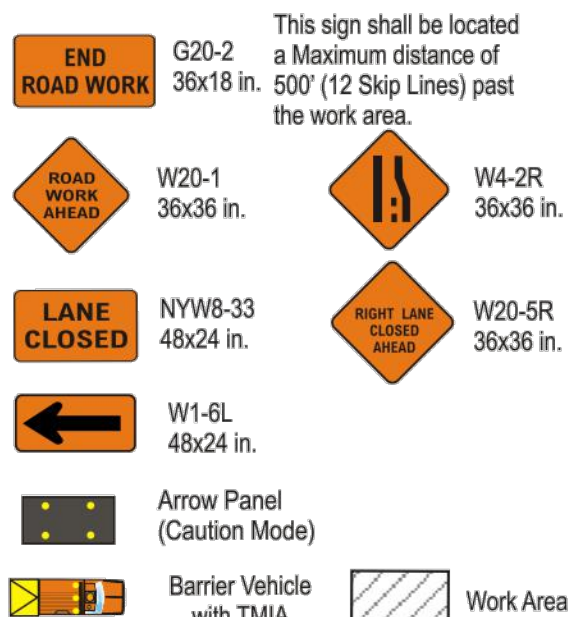
Municipality: PERINTON
County: MONROE State: NEW YORK
Project No: 20182555.0005
Drawing No: C 207
Scale: NTS
Date: FEBRUARY 2024

NOT FOR CONSTRUCTION

**HIGH SPEED URBAN HIGHWAY
(45-55 mph)**

- Notes:**
1. Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.
 2. In urban conditions, advance warning sign spacing may be reduced to a 100 FT. (Min.) in order to accommodate side streets and driveways.
 3. The Barrier Vehicle shall be an unoccupied large dump truck, with the parking brake set and with the front wheels turned away from the employees in the work area.
 4. There shall be no workers, equipment, or other vehicles in the buffer space or the roll ahead distance.
 5. Any buffer distance provided in advance of the barrier vehicle set-up will add to the safety of the work area. The buffer space is from the end of the lane taper to the beginning of the work area.
 6. State Law signs (NYR9-11 or NYR9-12) are optional if the anticipated work duration is less than 4 hours. If used, State Law sign is to be placed 300 FT. in advance of the initial warning sign.

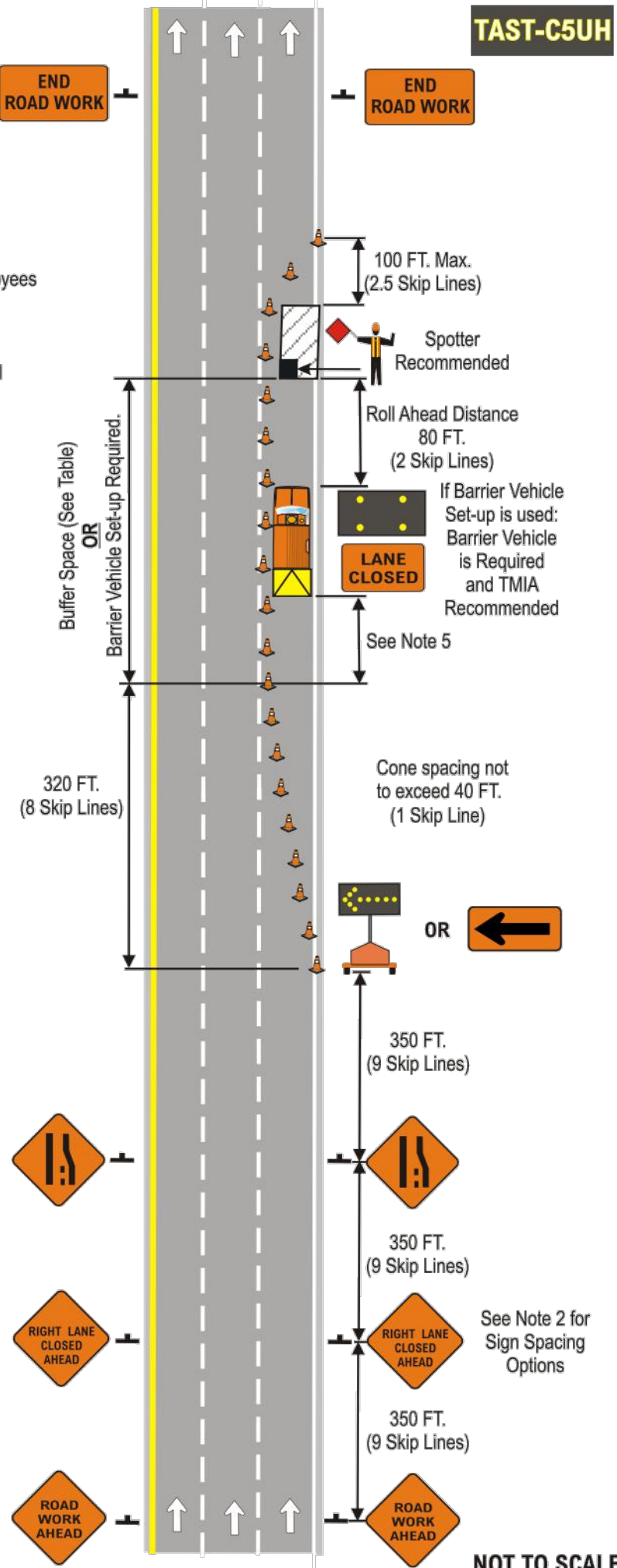
Speed Limit (Mph)	Buffer Space
45	360' (9 Skip Lines)
50	425' (~11 Skip Lines)
55	495' (~13 Skip Lines)



**NYSDOT
WORK ZONE TRAFFIC CONTROL**

SHORT-TERM STATIONARY
OPERATION INVOLVING
RIGHT LANE CLOSURE
(PAVED SHOULDER LESS THAN 8 FT.)
ON
HIGH SPEED URBAN (45-55 mph)
ONE-WAY CONVENTIONAL HIGHWAY

FEBRUARY 2009 TAST-C5UH

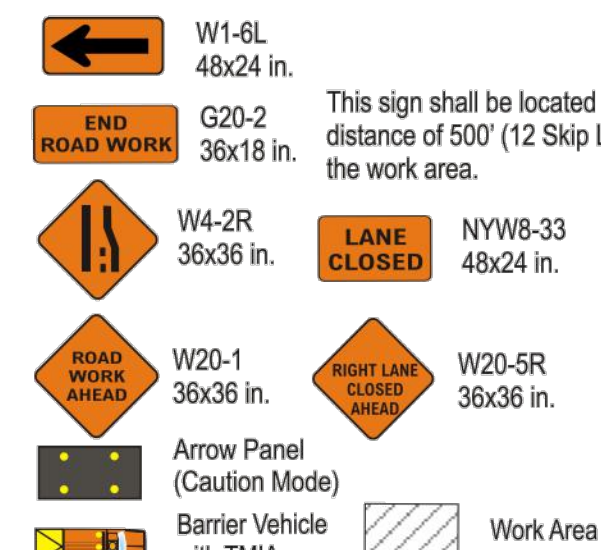


NOT TO SCALE

RURAL HIGHWAY

- Notes:**
1. Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.
 2. The barrier vehicle shall be an unoccupied large dump truck, with the parking brake set and with the front wheels turned away from the employees in the work area.
 3. There shall be no workers, equipment, or other vehicles in the buffer space or the roll ahead distance.
 4. Any buffer distance provided in advance of the barrier vehicle set-up will add to the safety of the work area. The buffer space is from the end of the lane taper to the beginning of the work area.
 5. State Law signs (NYR9-11 or NYR9-12) are optional if the anticipated work duration is less than 4 hours. If used, State Law sign is to be placed 300-500 FT. in advance of initial warning sign.

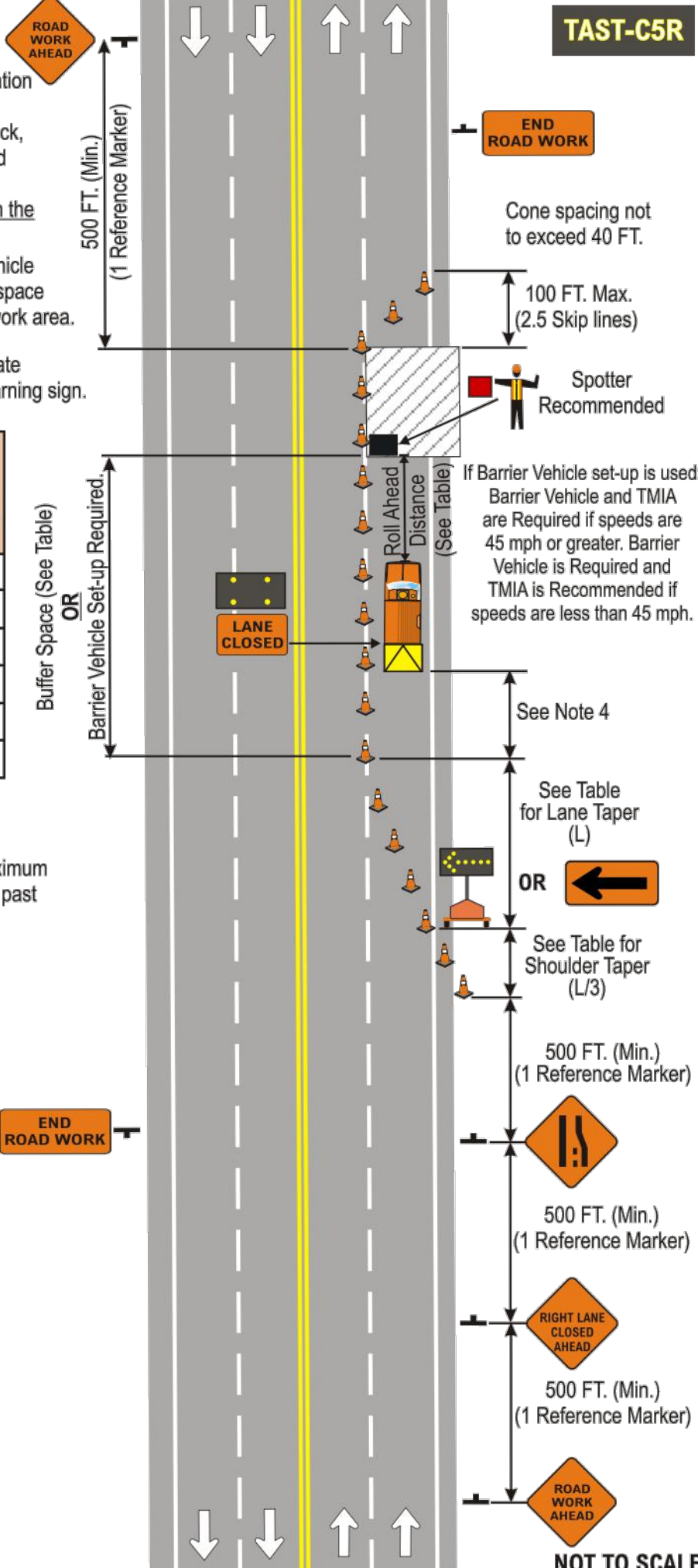
Speed Limit (Mph)	Buffer Space	Taper Lengths based on Lane Shift			Shoulder Taper based on 4'-6" Shift	Roll Ahead Distance
		10'	11'	12'		
30	200'	150'	165'	180'	20'-30'	40'
35	250'	205'	225'	245'	25'-40'	40'
40	305'	270'	300'	320'	35'-50'	40'
45	360'	450'	495'	540'	60'-90'	80'
50	425'	500'	550'	600'	70'-100'	80'
55	495'	550'	605'	660'	75'-110'	80'



**NYSDOT
WORK ZONE TRAFFIC CONTROL**

SHORT-TERM STATIONARY
OPERATION INVOLVING
RIGHT LANE CLOSURE
(PAVED SHOULDER LESS THAN 8 FT.)
ON
RURAL
MULTI-LANE CONVENTIONAL HIGHWAY

FEBRUARY 2009 TAST-C5R

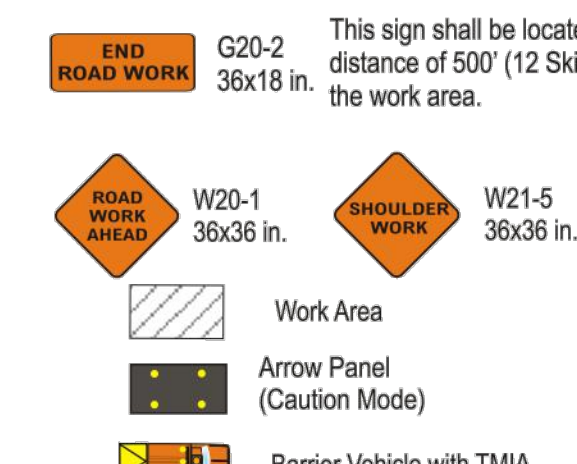


NOT TO SCALE

URBAN HIGHWAY

- Notes:**
1. Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.
 2. In urban conditions, advance warning sign spacing may be reduced (100 FT. Min.) in order to accommodate side streets and driveways.
 3. The barrier vehicle shall be an unoccupied large dump truck, with the parking brake set and with the front wheels turned away from the employees in the work area.
 4. There shall be no workers, equipment, or other vehicles in the buffer space or the roll ahead distance.
 5. Any buffer distance provided in advance of the barrier vehicle set-up will add to the safety of the work area. The buffer space is from the end of the lane taper to the beginning of the work area.
 6. State Law signs (NYR9-11 or NYR9-12) are optional if the anticipated work duration is less than 4 hours. If used, State Law sign is to be placed 300-500 FT. in advance of initial warning sign.

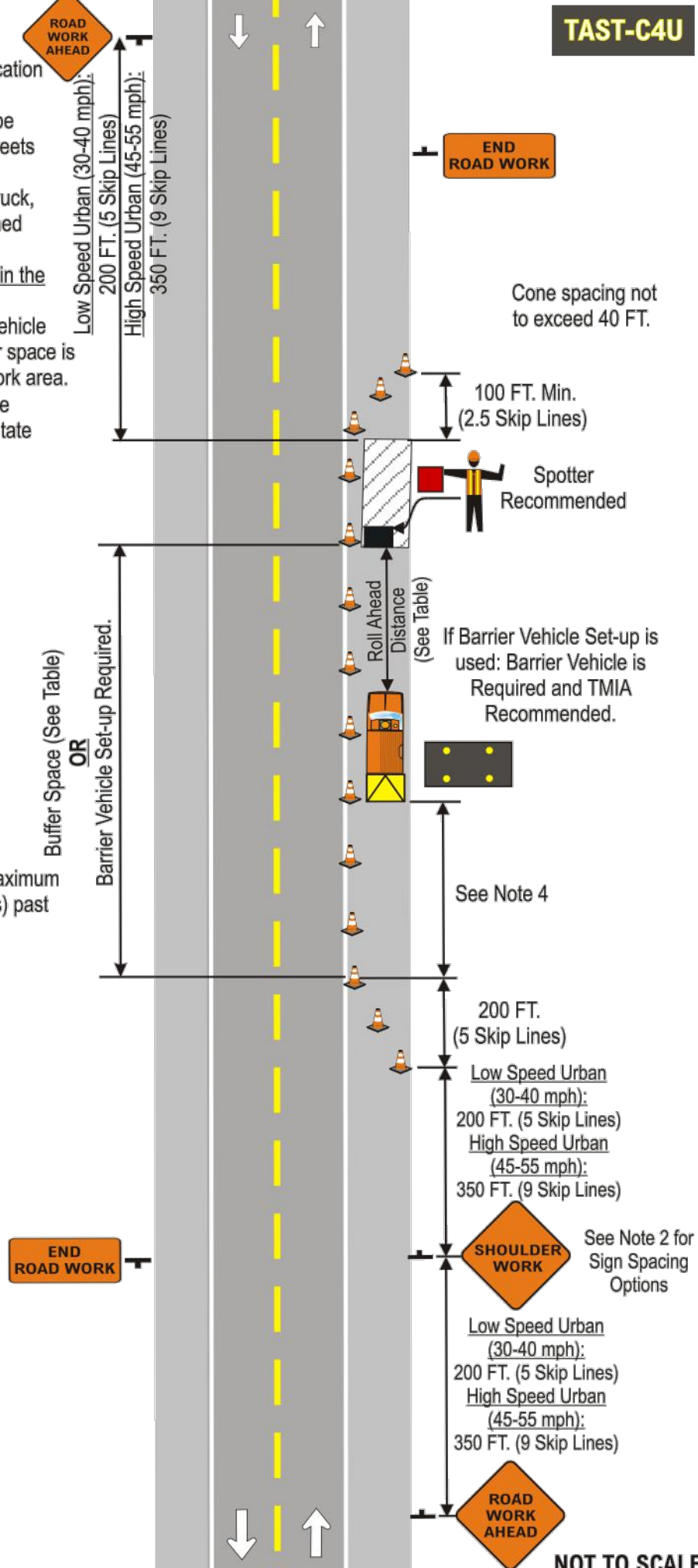
Speed Limit (Mph)	Buffer Space	Roll Ahead Distance
30	200' (5 Skip Lines)	40' (1 Skip Line)
35	250' (~6 Skip Lines)	40' (1 Skip Line)
40	305' (~8 Skip Lines)	40' (1 Skip Line)
45	360' (9 Skip Lines)	80' (2 Skip Lines)
50	425' (~11 Skip Lines)	80' (2 Skip Lines)
55	495' (~13 Skip Lines)	80' (2 Skip Lines)



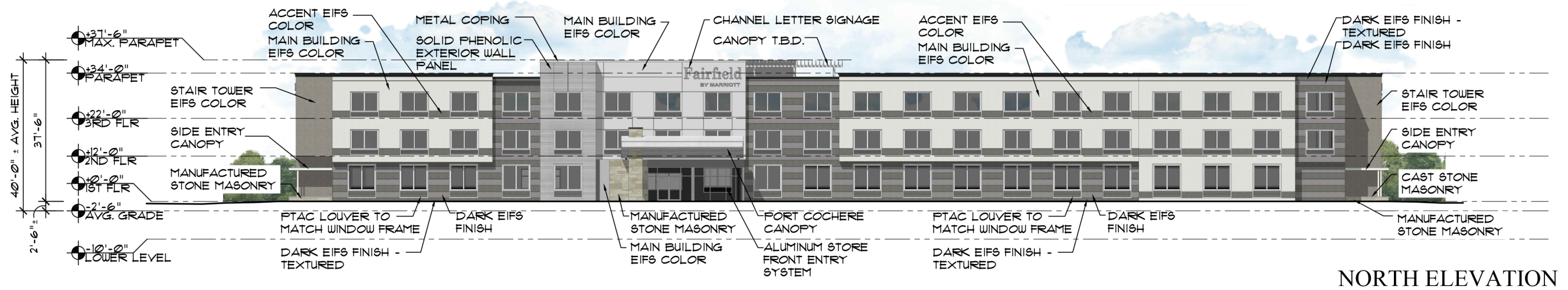
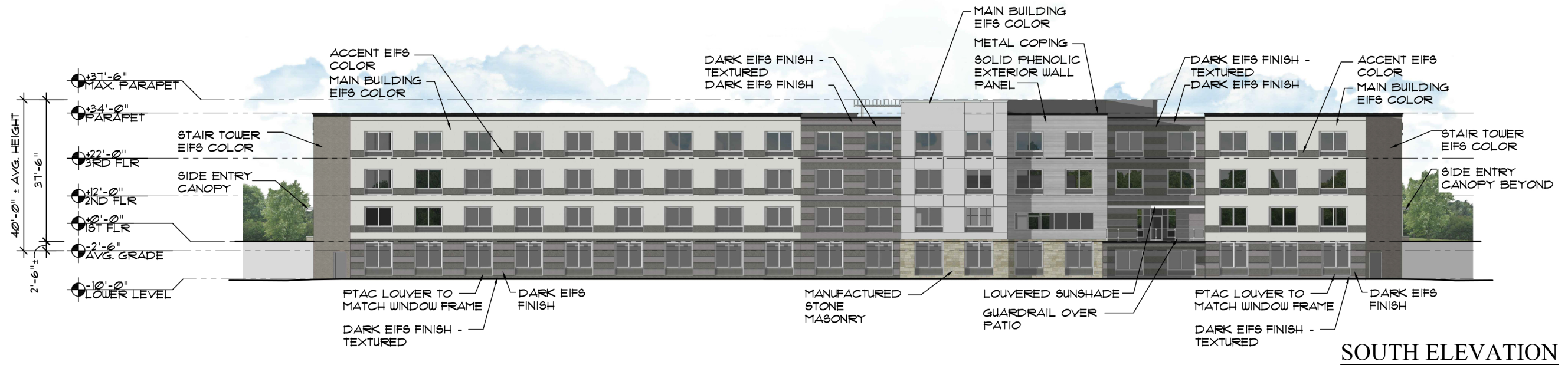
**NYSDOT
WORK ZONE TRAFFIC CONTROL**

SHORT-TERM STATIONARY
OPERATION INVOLVING
SHOULDER CLOSURE
(PAVED SHOULDER 8 FT. OR WIDER)
ON
URBAN
TWO-LANE CONVENTIONAL HIGHWAY

FEBRUARY 2009 TAST-C4U



NOT TO SCALE

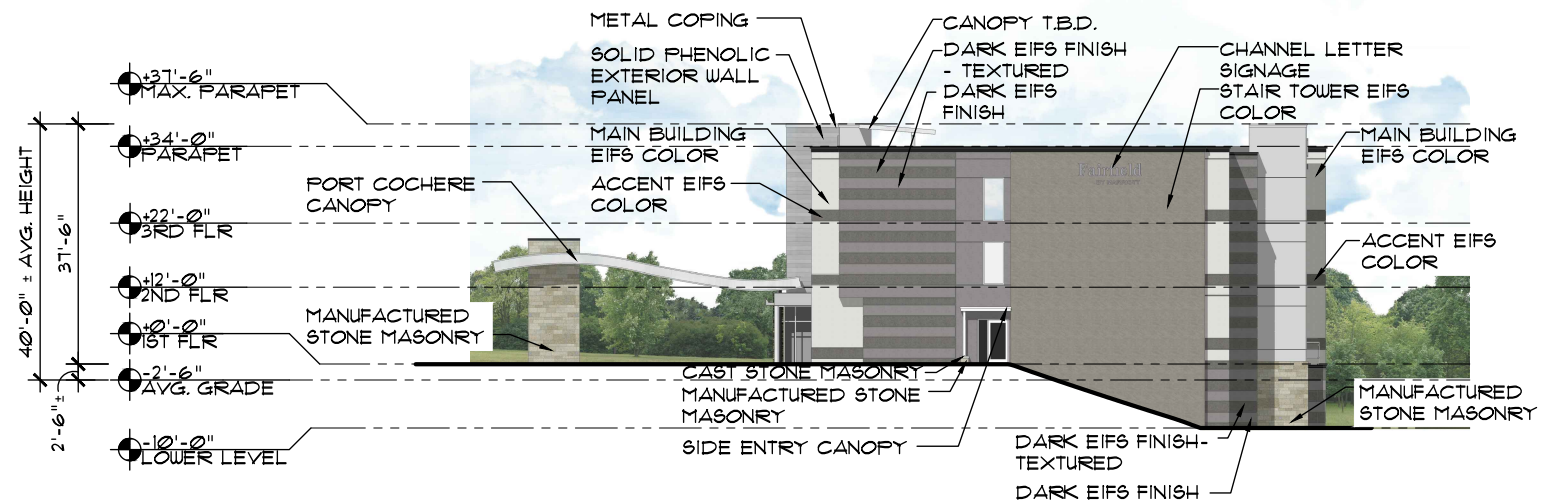


PROPOSED HOTEL: ELEVATIONS

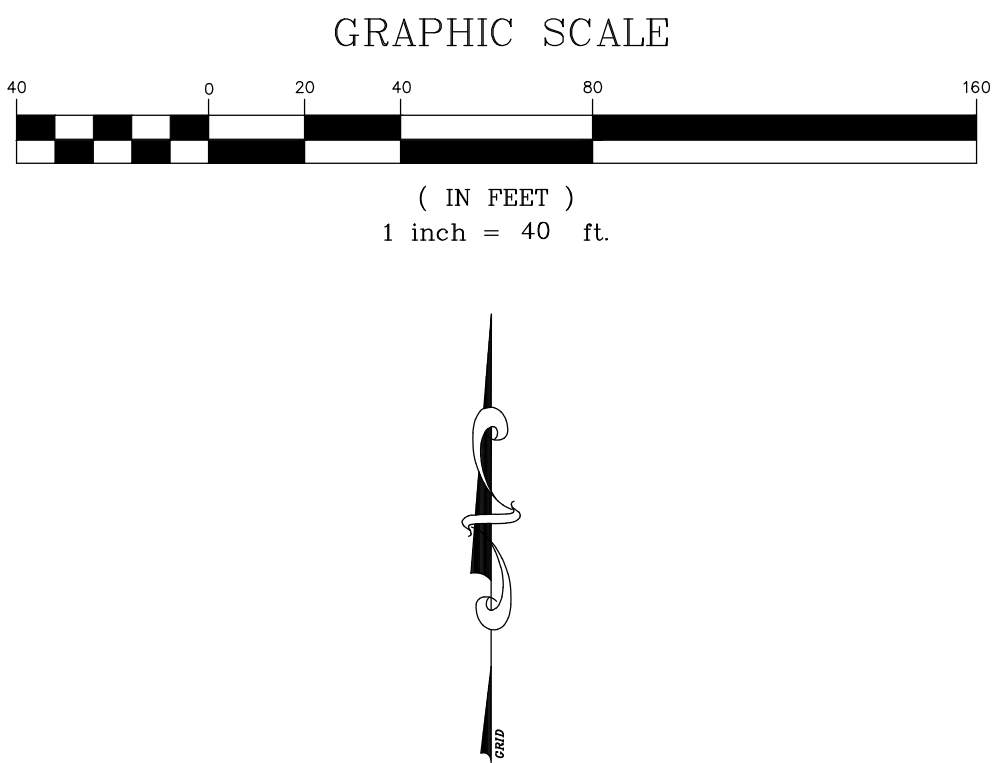
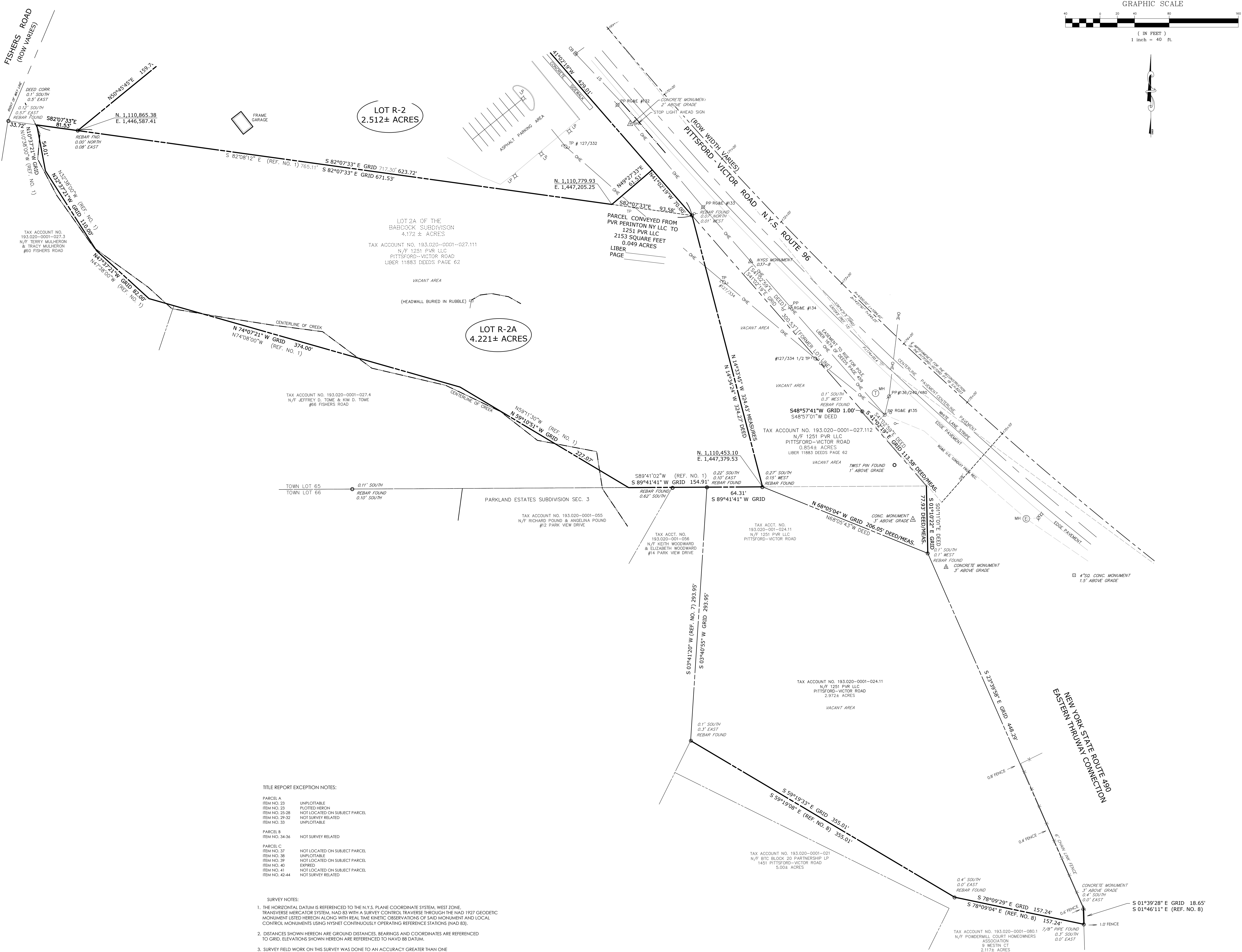
SCALE: 1" = 30'-0"
NOVEMBER 20, 2023



EAST ELEVATION



WEST ELEVATION



LEGEND	
CB	Catchbasin
CV	Cleanout
GV	Gas Valve
HYD	Hydrant
LP	Lightspole
MH	Manhole (Unknown Type)
MH	Manhole Electric
MH	Manhole Inlet Storm Drainage
MH	Manhole Storm Drainage
MH	Manhole Sanitary Sewer
SP	Sign Post (Single)
UP	Utility Pole
UA	Utility Pole Anchor Wire
UL	Utility Pole with Light
WS	Water Service
WV	Water Valve
TP	Telephone Pedestal
TE	Utility Pedestal (No Markings)
ET	Electric Transformer
SMH	MH from Record (Not Recovered)
GLM	Gas Line Marker
UPL	Point Mark at Utility Location

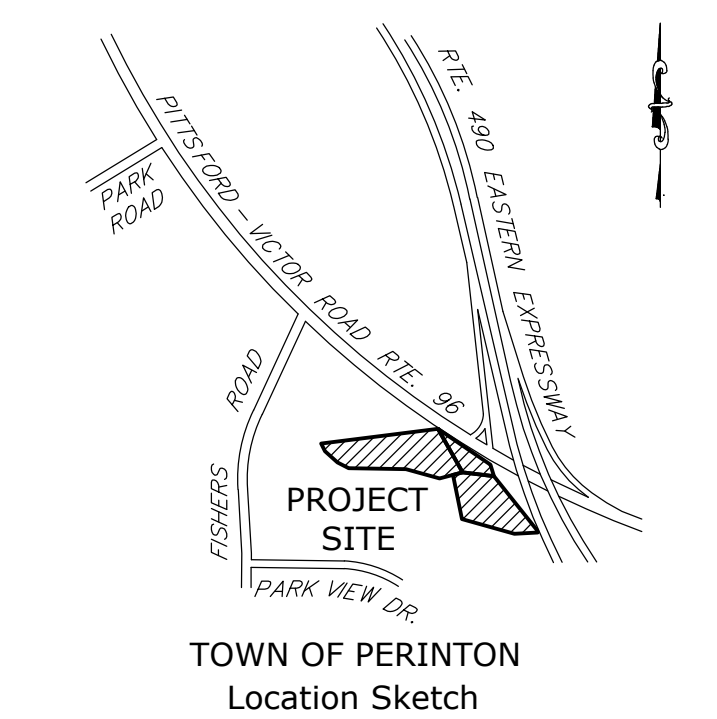
LINE LEGEND	
—G—G—	Gas Main from Record
—OE—OE—	Overhead Electric
—T—T—	Telephone from Record
—W—W—	Water Line from Record
—B—B—	Boundary Line
—E—E—	Easement Line

ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY MARKED WITH AN ORIGINAL INKED OR EMBOSSED SEAL AND INKED SIGNATURE SHALL BE CONSIDERED A TRUE AND VALID COPY.

CERTIFICATION INDICATED HEREON SHALL RELY ONLY TO THE PERSONS FOR WHOM THE SURVEY WAS PREPARED. ANY OTHER REFERENCE TO ANY OTHERS USED HEREON, CERTIFICATIONS ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT WORKS.

Revisions			
No.	Date	By	Description

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Project Manager Rob A. Vento, PLS
Drafted by D.P.S. & R.D.C.

Christa Construction
119 Victor Heights Parkway
Victor, NY 14564
585 734-3500

Instrument Survey
Lands Now or Formerly of
1251 PVR LLC
Southwest Side of
Pittsford - Victor Road
Tax Acct. 193.020-0001-024.11
Tax Acct. 193.020-0001-027.111
Tax Acct. 193.020-0001-027.112

Part of Town Lots 65 & 66, Township 12, Range 4
Town of Perinton, Monroe County, New York State

Project No.
20182555.0001

Drawing No. Ins-1	Sheet No. 1 of 1
-----------------------------	----------------------------

Scale:
1" = 40'

Date
JUNE 27, 2018

TITLE REPORT EXCEPTION NOTES:

PARCEL A
ITEM NO. 22 UNPLOTTABLE
ITEM NO. 23 PLOTTED HEREON
ITEM NO. 22-28 NOT LOCATED ON SUBJECT PARCEL
ITEM NO. 29-32 NOT SURVEY RELATED
ITEM NO. 33 UNPLOTTABLE

PARCEL B
ITEM NO. 34-36 NOT SURVEY RELATED

PARCEL C
ITEM NO. 37 NOT LOCATED ON SUBJECT PARCEL
ITEM NO. 38 UNPLOTTABLE
ITEM NO. 39 NOT LOCATED ON SUBJECT PARCEL
ITEM NO. 40 EXPIRED
ITEM NO. 41 NOT LOCATED ON SUBJECT PARCEL
ITEM NO. 42-44 NOT SURVEY RELATED

SURVEY NOTES:

1. THE HORIZONTAL DATUM IS REFERENCED TO THE N.Y.S. PLANE COORDINATE SYSTEM, WEST ZONE, TRANSVERSE MERCATOR SYSTEM, NAD 83 WITH A SURVEY CONTROL TRAVERSE THROUGH THE NAD 1927 GEODETIC MONUMENT LISTED HEREON ALONG WITH REAL TIME KINETIC OBSERVATIONS OF SAID MONUMENT AND LOCAL CONTROL MONUMENTS USING WYSENET CONTINUOUSLY OPERATING REFERENCE STATIONS (NAD 83).

2. DISTANCES SHOWN HEREON ARE GROUND DISTANCES. BEARINGS AND COORDINATES ARE REFERENCED TO GRID. ELEVATIONS SHOWN HEREON ARE REFERENCED TO NAVD 88 DATUM.

3. SURVEY FIELD WORK ON THIS SURVEY WAS DONE TO AN ACCURACY GREATER THAN ONE PART IN 10,000, (1:10,000), USING MONUMENTS SHOWN HEREON.

NYGS MONUMENT 037-8 (1941) NORTHING 1,110,675.69 EASTING 799,006.68 NAD 27 ELEV. 589.73 NAVD 29 NORTHING 1,110,714.13 EASTING 1,447,365.85 NAD 83 ELEV. 589.02 NAVD 88

NYGS MONUMENT 037-7 (1982) NORTHING 1,112,802.12 EASTING 797,703.30 NAD 27 ELEV. 512.54 NAVD 29 NORTHING 1,112,841.6 EASTING 1,446,561.8 NAD 83 ELEV. 511.6 NAVD 88 TOP OF MONUMENT SHEARED OFF AS OF 03.13.18

COMBINED ELEV. AND SCALE FACTOR NAD 83: 1.00002874

REFERENCE:

1. LIBER 304 OF MAPS, PAGE 95, MAP PREPARED BY O'NEILL-ROOK, LAND SURVEYORS ENTITLED "AMENDED MAP OF LOT 2 BARCOCK SUBDIVISION"

2. LIBER 10633 OF DEEDS, PAGE 62

3. LIBER 10646 OF DEEDS, PAGE 377

4. LIBER 11883 OF DEEDS, PAGE 62

5. LIBER 10789 OF DEEDS, PAGE 545

6. MAP PREPARED BY LAND TECH. LAND SURVEYORS ENTITLED "INSTRUMENT LOCATION MAP SHOWING LOT 2A OF THE AMENDED MAP LOT 2 BARCOCK SUBDIVISION" DATED MARCH 7, 2017, PROJECT NO. 17042

7. LIBER 273 OF MAPS, PAGE 36

8. LIBER 309 OF MAPS, PAGE 77

9. CERTIFICATE OF TITLE PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, TITLE NO. MRE-15549, DATED JUNE 11, 2018

10. ABSTRACT OF TITLE PREPARED BY STEWART TITLE INSURANCE COMPANY, TITLE NUMBER 54655-184, 1/8, DATED MARCH 21, 2017

ROBERT A. VENTO, N.Y.S.P.L.S. NO. 049701

20182555.0005

1251 PITTSFORD VICTOR ROAD

PERINTON, NY

PREPARED FOR:

Christa Development
64 Commercial Street
Rochester, NY 14614

TABLE OF CONTENTS

TABLE OF CONTENTS	1
APPENDICES	2
1.0 INTRODUCTION.....	3
2.0 LAND USE & ZONING	4
2.1 Site Data and Zoning.....	4
3.0 EXISTING CONDITIONS.....	5
3.1 Land Cover and Soils	5
Table 1: Hydrologic Soil Group Table	5
3.2 Wetlands / Creeks.....	5
3.3 NYSDEC Environmental Resources.....	5
3.4 Floodplain	6
3.5 State Historic Preservation Office Review	6
4.0 TRAFFIC AND TRANSPORTATION	7
Table 2: Traffic Generation	7
5.0 UTILITIES	8
5.1 Sanitary Sewer	8
Table 3: Sanitary Demand.....	8
Table 4: Sanitary Pipe Capacity.....	8
5.2 Water 9	
Table 5: Water Demand.....	9
5.3 Gas & Electric.....	9
6.0 DRAINAGE	10
6.1 Stormwater Quantity.....	10
Table 6: Stormwater Comparison and Requirements	10
6.2 Stormwater Quality.....	11
7.0 PARKING.....	12
Table 7: Parking Stall Requirements	12
8.0 FIRE DEPARTMENT ACCESS/FIRE CODE	12
9.0 LIGHTING, LANDSCAPING AND SIGNAGE	12
9.1 Landscaping.....	12
9.2 Lighting 12	
9.3 Signage 12	
10.0 SUMMARY	12

February 16, 2024

APPENDICES

APPENDIX A: AERIAL PHOTO
APPENDIX B: SOILS MAP
APPENDIX C: STATE AND FEDERAL
APPENDIX D: WETLANDSFEMA MAP
APPENDIX E: ARCHEOLOGICAL SENSITIVE AREA
APPENDIX F: FIRE TRUCK TURNING ANALYSIS
APPENDIX G: SITE LIGHTING
APPENDIX H: WATERCAD ANALYSIS
APPENDIX I: SWPPP (SEPARATE COVER)

1.0 INTRODUCTION

This project is to develop a hotel at the property known as 1251 Pittsford Victor Road. This project was previously presented and approved by the Town of Perinton Planning Board in 2018 for the development of a two-story with walkout level 14,000 SF office building, and 3,200 SF bank building on site.

Since the 2018 proposal the project has changed and now includes the construction of a 3-story with walkout basement +/- 18,500 SF hotel. The site includes a 118-space parking lot with two-way drive aisles, pedestrian facilities including sidewalks, accessibility curb cuts to the main entry and from handicap parking spaces, a refuse area, site landscaping, and stormwater management areas.

Mitigation is also provided for this project, which includes significant fencing along the southern boundary of the site that faces the adjacent single-family homes, extended buffer distance from the adjacent steep slopes, and the implementation of a left turn- lane on Pittsford-Victor Road (County Road 96) into the site per the NYSDOT.

This report will outline various site features and requirements, which include the underlying zoning and town requirements for the development, as well as other utility design criteria and methodology followed to meet county and state requirements.

2.0 LAND USE & ZONING

2.1 Site Data and Zoning

See below for the table outlining the site data and zoning information for this development:

SITE DATA

1. TAX ACCOUNT NUMBER: 193.02-1-27.111 & 193.02-1-27.112
2. PARCEL ADDRESS: 1251 PITTSFORD-VICTOR ROAD, PERINTON, NY 14534
3. TOTAL PARCEL AREA: ± 5.08 ACRES OR 221,166 S.F.
4. AREA OF DISTURBANCE: ± 2.99 ACRES OR 130,230 (SF)
5. EXISTING ZONING: RB - RESTRICTED BUSINESS
PROPOSED ZONING: RB - RESTRICTED BUSINESS
6. EXISTING USE: UNDEVELOPED
PROPOSED USE: HOTEL (116 ROOMS)
7. AREA REQUIREMENTS:

PROPOSED ZONING DISTRICT: RB - RESTRICTED BUSINESS		
	REQUIRED	PROPOSED
<u>LOT</u>		
AREA	4 ACRES	5.08 ACRES
GREEN SPACE	40%	65%
<u>SETBACK</u>		
FRONT	100'	71'
SIDE	40'	29'
REAR	40'	124'
PARKING BUFFER	15'	6'
<u>BUILDING</u>		
HEIGHT	40'	40'
BUILDING COVERAGE	30%	7.90%
<u>PARKING</u>		
STALLS QTY.	PER ITE PARKING GENERATION MANUAL = 101 SPACES	118 SPACES
STALL DIMENSIONS	9' X 18'	9' X 18'
DRIVE AISLE WIDTH	24'	24'
NOTES:		

* REQUIRES VARIANCE

	NO	YES
8. STATE REGULATED WETLANDS (NYSDEC ERM):	X	
9. FEDERALLY REGULATED WETLANDS (USFWS NWI):	X	
10. FLOOD PLAIN (FEMA NFHL): FIRM PANEL: 36055C0387G DATED: 8/25/2005	X	
11. PUBLIC WATER PROVIDED BY:		MCWA
12. ELECTRIC SERVICE PROVIDED BY:		RGE
13. GAS SERVICE SUPPLIED BY:		RGE
14. SANITARY SEWER PROVIDED BY:		TOWN OF PERINTON
15. STORM SEWER & DRAINAGE WILL BE:		PRIVATE
16. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE CURRENT DEVELOPMENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY		

3.0 EXISTING CONDITIONS

3.1 Land Cover and Soils

Soils within the project area were reviewed for their hydrologic soil group in accordance with the USDA's NRCS Soil Survey. The soil groups present on site are summarized below and the soils map can be found in Appendix B:

Table 1: *Hydrologic Soil Group Table*

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AnB	Alton gravelly sandy loam, 3 to 8 percent slopes	A	3.4	65.8%
AoC	Alton gravelly loam, 8 to 15 percent slopes	A	0.0	0.2%
PaC	Palmyra gravelly fine sandy loam, 8 to 15 percent slopes	A	0.4	7.4%
PaF	Palmyra gravelly fine sandy loam, 25 to 60 percent slopes	A	1.4	26.6%
Totals for Area of Interest			5.1	100.0%

3.2 Wetlands / Creeks

The site was reviewed for the existence of federal and state regulated wetlands within the property boundaries. Federal wetlands were researched using the National Wetlands Inventory (NWI) using an online U.S. Fish and Wildlife website search. State regulated wetlands were researched using the NYSDEC's online Environmental Resource Mapper website. Review of the mapping indicates there are not federal or state wetlands on site. Refer to Appendix C for the federal and state regulated wetlands mapping.

3.3 NYSDEC Environmental Resources

The NYSDEC has an Environmental Resource Mapper on its website. The Environmental Resource Mapper is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern. It displays the following:

- Animals and plants that are rare in New York, including those listed as Endangered or Threatened (generalized locations). [Updated May 2008]
- Significant natural communities, such as rare or high-quality forests, wetlands, and other habitat types.
- New York's streams, rivers, lakes, and ponds; water quality classifications are also displayed

According to this database, there are not rare and endangered animals in the vicinity of the project and there are natural communities near the project site but are not on site.

3.4 Floodplain

According to FEMA's National Flood Hazard FIRMette Mapper, the entire site is located in Flood Zone X (minimal hazard) per community panel no. 36055C0387G dated 08/25/2005. Refer to Appendix D for the FIRMette map of the site.

3.5 State Historic Preservation Office Review

The site was reviewed for the presence of archeological sensitive areas using online GIS tools found at the NYS Historic Preservation Office (SHPO). The Cultural Resource Information System mapping of the area found no archeo-sensitive areas on the parcel.

4.0 TRAFFIC AND TRANSPORTATION

This development will generate traffic that will be distributed to the surrounding road network. See the amount of traffic generated from this project below, which was calculated using the ITE Trip Generation Manual 10th edition which calculates traffic generation for specific uses:

Table 2: *Traffic Generation*

ITE Use:	ITE 312 - Business Hotel					
Dependent Factor (X):	Independent Factor (X=Number of Rooms) (X=116)					
	Rate/Formula	Total	Enter		Exit	
AM Peak Hour:	0.36	42	16	39%	26	61%
PM Peak Hour:	0.31	36	20	55%	16	45%

This traffic will generally enter the site from the east and westbound approaches, mainly from patrons coming from the 490-exit ramp, or from the north if traveling through the northern suburban and commercial areas.

A traffic study was conducted for the original proposal in 2018, with approval coming from the NYSDOT and the Town on the implementation of a left turn lane on Pittsford Victor Road.

The NYSDOT was contacted in November 2023 if an updated study would be required. It was found that an updated study would not be required because this project is projected to generate less traffic than the previous approval in the studied peak hours. All previous mitigation requests will have to be incorporated to meet the previous approval.

The site entrance was designed to allow emergency vehicles to enter the site, and a fire code compliant truck turn around is shown at the end of the southern parking area to allow emergency vehicles to navigate the site.

5.0 UTILITIES

5.1 Sanitary Sewer

The proposed buildings will be served by a new sanitary sewer connection. The sewer will flow from the building to the north and connect to an existing sanitary main located on the northern adjacent parcel. The loading rate for the proposed sanitary main per the NYS Design Standard for Intermediate Sized Wastewater Treatment Systems is described below:

Table 3: Sanitary Demand

Building Information	Dependent Factor	Amount	Loading Rate (Per NYSDEC)	Load
Hotel	Per Sleeping Unit	116	110	12760 gpd
Total:			12760 gpd	(8.86 gpm)
Peak Flow (Peak Factor of 4):				35.44 gpm

The proposed sanitary sewer system will be 8" PVC pipe from the building to the connection to the existing sewer. Manning's equation was used to calculate pipe capacity of the sewers for this project, and compared to the flow anticipated from the project to ensure the system will have ample capacity.

Table 4: Sanitary Pipe Capacity

Sanitary Lateral Capacity check using Manning's Equation		
Proposed Use	Manning's Maximum flow	Proposed Flow
8" Sanitary Sewer Pipes	$Q = A(1.49/n)(A/P)^{(2/3)}S^{0.5}$ $Q = 0.35(1.49/0.011)(0.35/2.09)^{(2/3)} * 0.059^{0.5}$ $Q = 1.11 \text{ ft}^3/\text{s} = 497 \text{ gpm}$	35.44 gpm peak flow

A=Flow Area (sf) n=Manning's Roughness Coefficient (unitless) P=wetted perimeter (ft) (for maximum flow this equals the pipe circumference = $2\pi R$) S=slope of channel (ft/ft)

Based on the table above, the sanitary sewer system can handle the proposed flows.

5.2 Water

The proposed development will connect to an existing main located on the east side of the Pittsford Victor Road Right of Way. The public water main extension for this project will be a 6" line from the building to the ROW. Once in the ROW, the waterline will be bored under Pittsford Victor Road to the receiving pit perpendicular to the main. Private fire hydrants are proposed to be placed around the building to provide ample area for fire fighting needs. The proposed water services will be constructed in accordance with the latest MCWA, MCHD, and AWWA standards and specifications. The existing water pressure used to model the proposed distribution system was derived by examining existing simulated fire flow test/supply curve data provided by the Water Authority (included in Appendix I):

Hydrant at 1250 Pittsford Victor Road

- $P_{st} = 64$ psi
- $P_{res} = 59$ psi
- $Q_{ob} = 1205$ gpm
- $Q_{20} = 3900$ gpm
- Elevation = ± 583 ft

The water distribution system was analyzed for two conditions:

- Peak Domestic Demand
- Peak Fire Demand

Pressures were calculated using WaterCAD analysis software and the resulting pressures for the demand scenarios are as follows (See Appendix B for WaterCAD calculations).

Table 5: *Water Demand*

Building Information	Dependent Factor	Amount	Loading Rate	Domestic Demand
Hotel	Bed	116	1.50 gpm	174 gpm
Total Domestic Demand:				174 gpm
Lowest Pressure (35 psi minimum):				50
Building/Infrastructure	Dependent Factor	Amount	Loading Rate	Fire Demand
Sprinkler	Building	1	500 gpm	500 gpm
Hydrant	Each	1	1000 gpm	1000 gpm
Total Fire Demand:				1500 gpm
Lowest pressure (20 psi minimum):				40 psi

As shown above the existing water systems have the capacity to support the proposed development for domestic water and fire flow.

5.3 Gas & Electric

There is gas and electric services on Pittsford Victor Road that have ample capacity to serve the proposed project.

6.0 DRAINAGE

6.1 Stormwater Quantity

Drainage calculations have been completed for the proposed development. The site was analyzed for existing and proposed drainage patterns and the runoff generated under each condition. A summary of the pre vs post runoff conditions are provided below.

Table 6: *Stormwater Comparison and Requirements*

Summary Table			
Water Quantity			
	Existing	Proposed	Reduction (%)
1-Year Runoff (cfs)	0.00	0.000	100.00%
10-Year Runoff (cfs)	0.02	0.01	50.00%
100-Year Runoff (cfs)	1.080	0.50	53.70%
Water Quality			
	Required	Provided	
Water Quality Volume (WQv) (acre-ft)	0.142	0.142	
Minimum Allowable Runoff Reduction Volume (RRv) (acre-ft)	0.076	0.142	
Channel Protection Volume (CPv) (acre-ft)	0.010	0.100	
Qp (cfs)	0.02	0.010	
Qf (cfs)	1.080	0.500	

The pre vs post runoff comparison table shows the proposed stormwater management areas can achieve the NYS requirement of matching or reducing existing runoff conditions.

Note runoff levels for this development are low, this is due to the native soil being classified as A soils, meaning there is significant infiltration on site. In pre and post conditions a majority of the runoff is infiltrated into the ground water, with the exception of the infiltration basin in the proposed condition, which passes through a soil media first.

6.2 Stormwater Quality

The project will be serviced by a network of private storm sewers which will convey stormwater runoff to stormwater management practices. The project proposes the use of an infiltration basin to meet the stormwater quality control requirements based on Chapter 9 of the *New York State Stormwater Management Design Manual, 2015* for Water Quality Volume (WQv). It will also meet the stormwater quantity requirements based on Chapter 9 of the *New York State Stormwater Management Design Manual, 2015* criteria for Channel Protection Volume (Cpv), Overbank Flood (Qf), and Extreme Storm (Qr) conditions. The stormwater quantity will include detention ponds with deep pools to reduce the peak rate of runoff from the site.

The stormwater quality requirements are shown in Table 6. All information regarding the stormwater runoff treatment and quantity practices can be found in the SWPPP report under separate cover.

7.0 PARKING

The municipality has specific parking requirements per use which relies on the ITe parking generation as a guideline for required parking and are detailed below:

Table 7: *Parking Stall Requirements*

Required Parking	
Town code Section: 208-16-B	
ITe use 310 - 116 Rooms	
Spaces = 101 Spaces	
Proposed Parking	
Spaces	118 Spaces

The total amount of proposed parking for this project meets the town requirements.

8.0 FIRE DEPARTMENT ACCESS/FIRE CODE

The municipalities Fire department can access the site from Pittsford Victor Road. Fire hydrants for the proposed site will be installed on both levels of the site. The proposed hotel will have proper access and a sprinkler system to meet all the latest building and fire codes. A set of fire truck turning movement maps are provided in Appendix F and shows there is ample room for a fire apparatus to maneuver the site designed using criteria found in Appendix D of the NYS Fire Code.

9.0 LIGHTING, LANDSCAPING AND SIGNAGE

9.1 Landscaping

Trees and other plants chosen for the facility will meet the municipality standards and compliment the local landscape. No invasive species will be selected. Landscaping will meet the requirements set by municipality.

9.2 Lighting

All new lighting fixtures will be used for the project. Decoration colonial lights 18' tall will be installed along the private roadways and parking lot. The fixtures will be dark sky compliant to prevent light from shining off of the property. There will also be building mounted lights at man doors.

9.3 Signage

Handicap parking signs will be provided per ADA requirements.

10.0 SUMMARY

In summary, the proposed project will provide a benefit to the community and provide an inviting option for a hotel use right off of an expressway. The traffic generated during peak times will have no detrimental impact on the adjacent intersections or road network. The proposed use "fits" in relation to adjacent property uses and the town's comprehensive plan and specific zoning code for this parcel. The project is seeking preliminary/final approval

APPENDICES

APPENDIX A: AERIAL PHOTO

1251 Pittsford Victor Road

Ariel Location Imagery

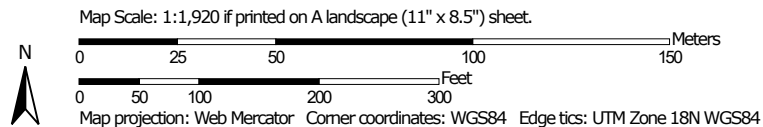


APPENDIX B: SOILS MAP

Hydrologic Soil Group—Monroe County, New York



Soil Map may not be valid at this scale.




Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

2/1/2024
Page 1 of 4

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 22, Sep 5, 2023

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	3.4	65.8%
AoC	Alton gravelly loam, 8 to 15 percent slopes	A	0.0	0.2%
PaC	Palmyra gravelly fine sandy loam, 8 to 15 percent slopes	A	0.4	7.4%
PaF	Palmyra gravelly fine sandy loam, 25 to 60 percent slopes	A	1.4	26.6%
Totals for Area of Interest			5.1	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 C: STATE AND FEDERAL

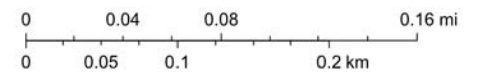
Environmental Resource Mapper



January 31, 2024

- | | |
|--|---|
| <input checked="" type="checkbox"/> ★ Unique Geological Features | <input checked="" type="checkbox"/> Imperiled Mussels |
| <input checked="" type="checkbox"/> Waterbody Classifications for Rivers/Streams | <input type="checkbox"/> Mussel Screening Ponded Waters |
| <input checked="" type="checkbox"/> Waterbody Classifications for Lakes | <input type="checkbox"/> Mussel Screening Streams |
| <input checked="" type="checkbox"/> Waterbody Inventory/Priority Waterbodies List | <input checked="" type="checkbox"/> Significant Natural Communities |
| <input type="checkbox"/> Lakes and Reservoirs | <input type="checkbox"/> Natural Communities Near This Location |
| <input type="checkbox"/> Estuaries | <input checked="" type="checkbox"/> Rare Plants or Animals |
| <input type="checkbox"/> Rivers and Streams | <input checked="" type="checkbox"/> Base Flood Elevation Plus 72/75 Inches Sea-level Rise |
| <input type="checkbox"/> Shorelines | <input checked="" type="checkbox"/> Limit to Moderate Wave Action |
| <input checked="" type="checkbox"/> State Regulated Freshwater Wetlands (Outside of the Adirondack Park) | |
| <input type="checkbox"/> State Regulated Wetland Checkzone | |

1:4,514



New York State, Maxar

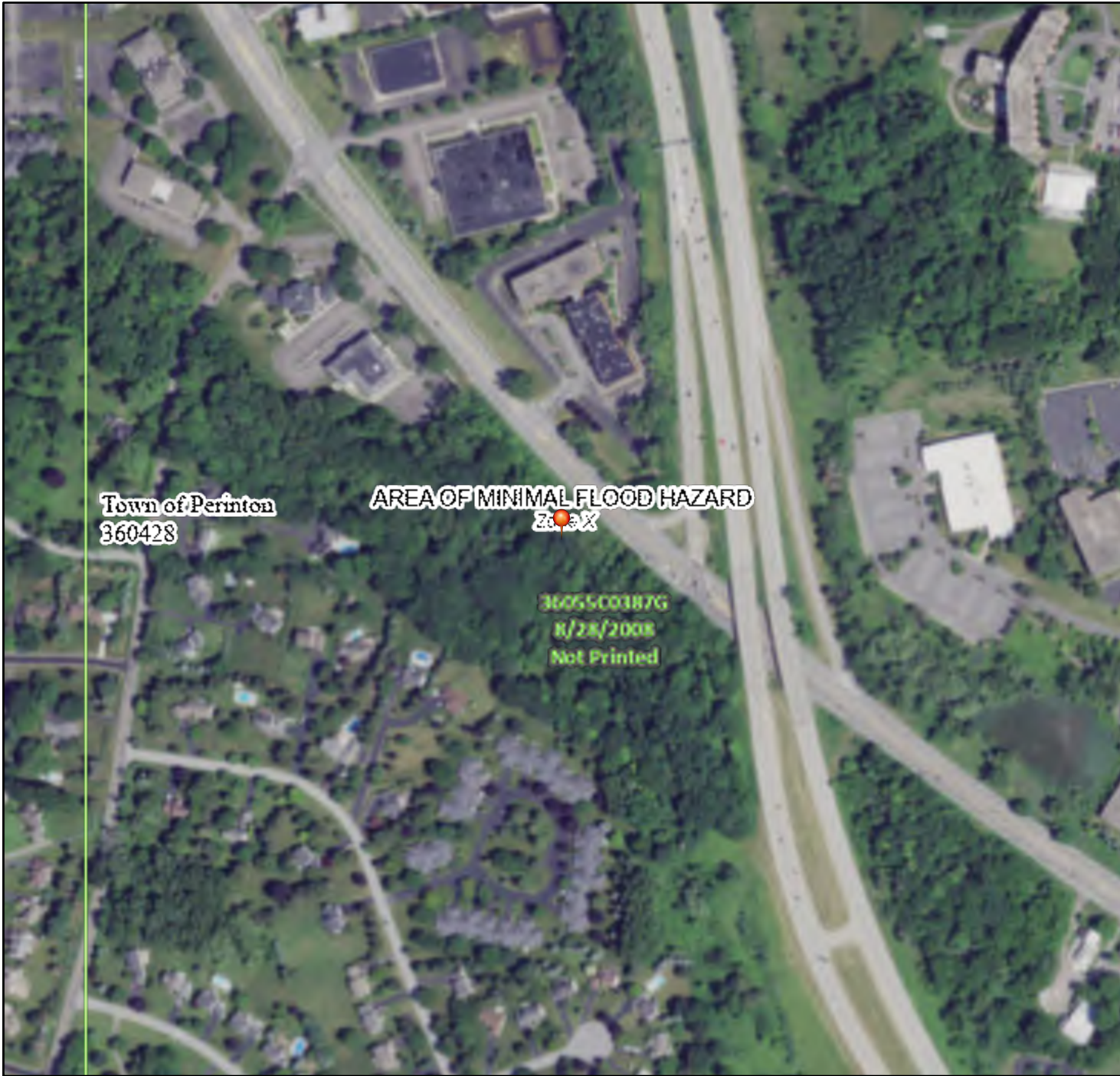


APPENDIX D: WETLANDS/FEMA MAP

National Flood Hazard Layer FIRMMette



77°28'10"W 43°2'46"N



1:6,000

77°27'33"W 43°2'20"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
		Area of Undetermined Flood Hazard Zone D
GENERAL STRUCTURES		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
OTHER FEATURES		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
MAP PANELS		Digital Data Available
		No Digital Data Available
		Unmapped



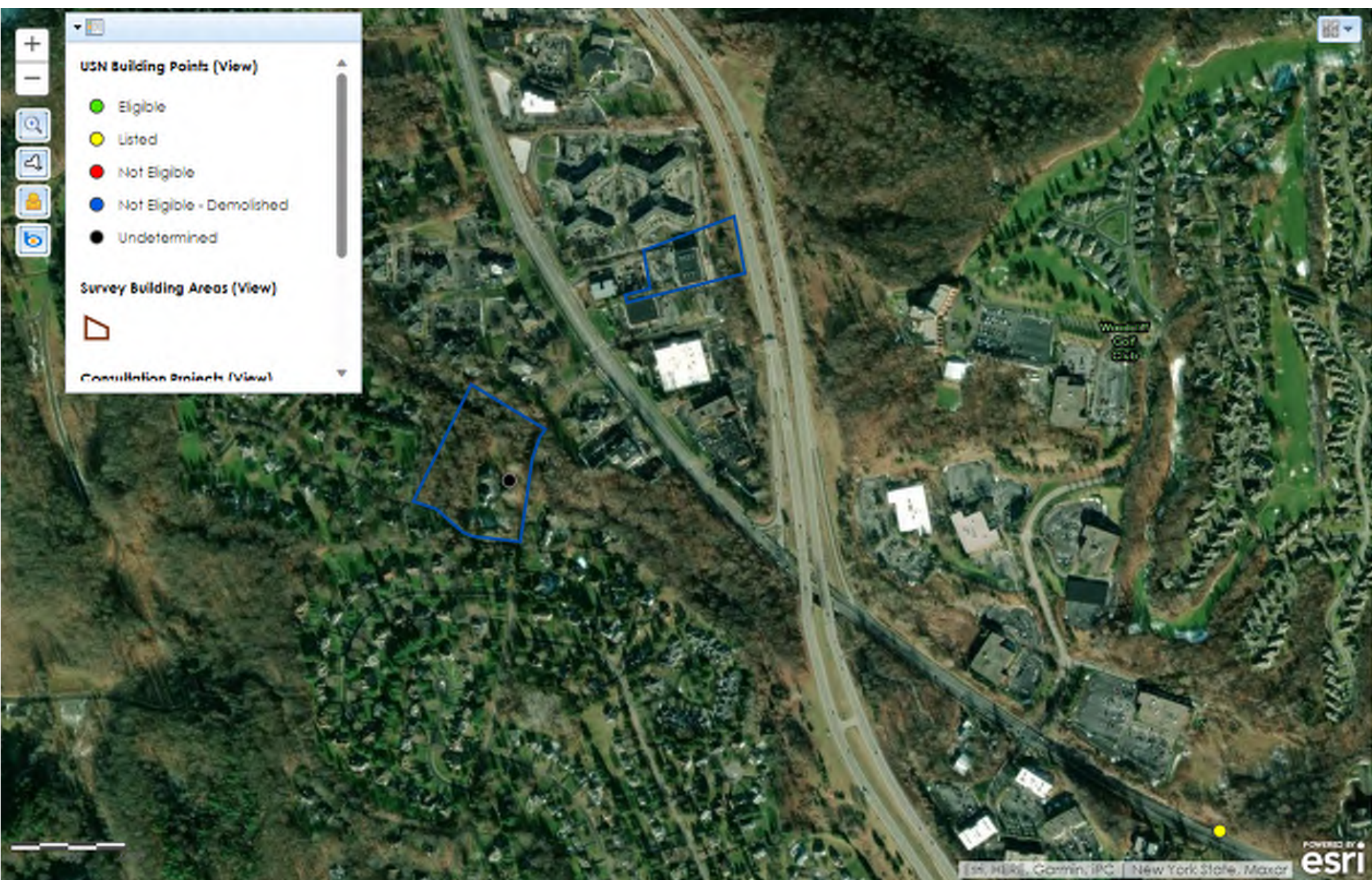
The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **2/1/2024 at 8:40 AM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

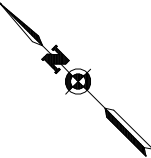
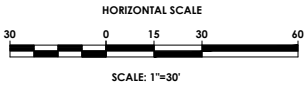
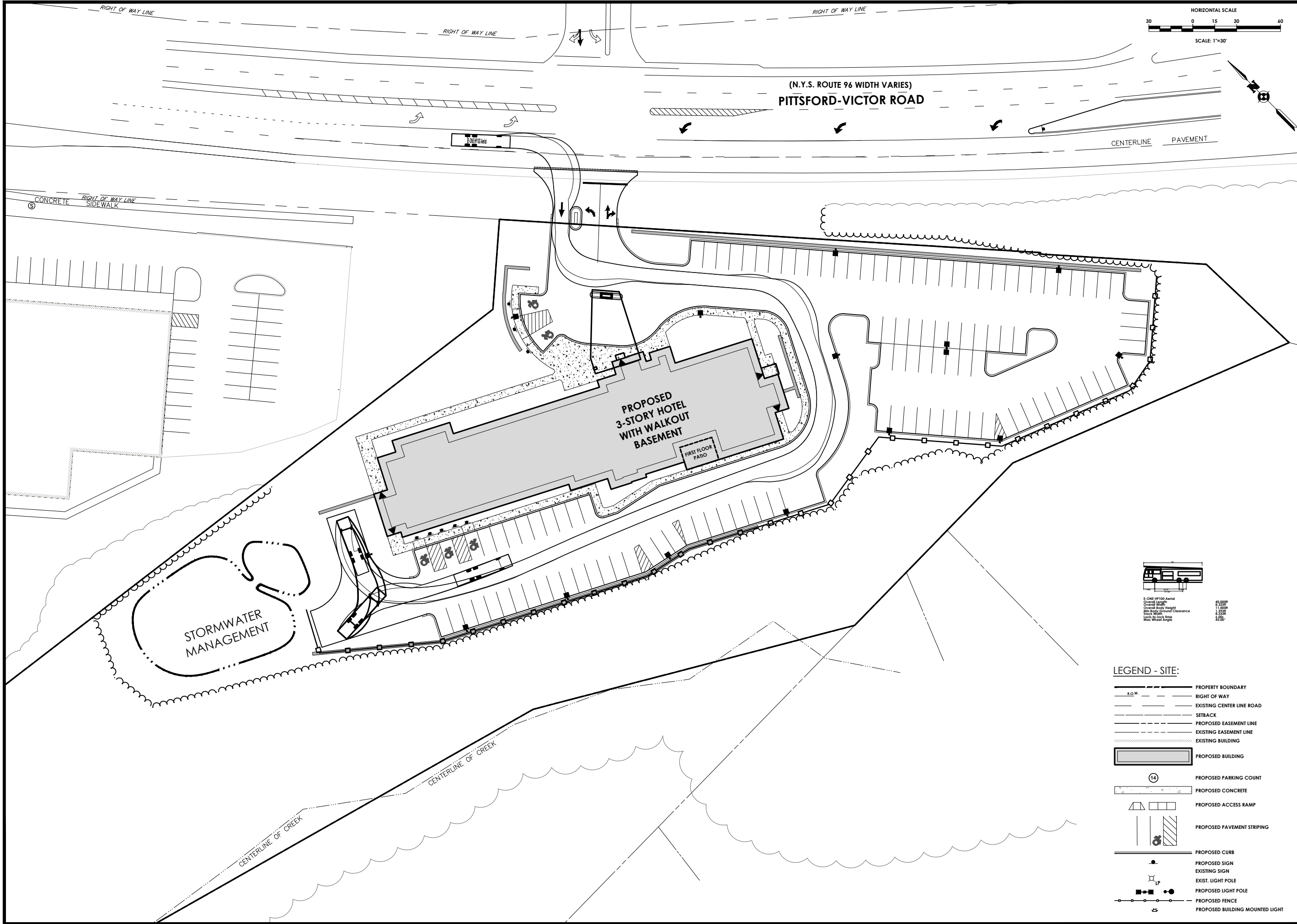
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

APPENDIX E: ARCHEOLOGICAL SENSITIVE AREA



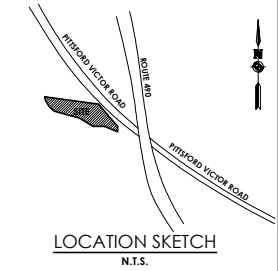
APPENDIX F: FIRE TRUCK TURNING ANALYSIS

Y:\PROJECTS-NEW\2018\20182555\20182555.0005\01_CAD-BIM-MODELS\CIVIL\20182555.0005 FIRE TRUCK TURN.DWG 2/16/2024 7:03 AM Joshua Saxton



PA
PASSERO ASSOCIATES
engineering architecture

ARTICLE 147 SECTION 7307: THESE PLANS ARE COPYRIGHT PROTECTED ©



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Christa Construction
600 East Avenue
Rochester, NY 14607

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Fax: (585) 325-1691
Principal-in-Charge: Jess D. Sudol, P.E.
Project Manager: Joshua Saxton, E.I.T.
Designed by: James Ritzenthaler E.I.T.

Revisions				
No.	Date	By	Description	
1				

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FIRE TRUCK VEHICLE TRACKING PLAN

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

Project No.
20182555.0005

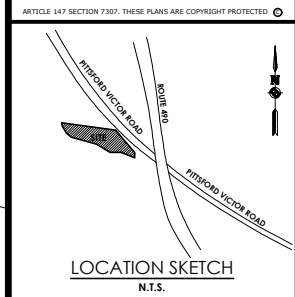
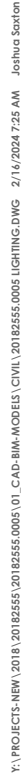
Drawing No.
C 108

Scale:
1" = 30'

Date
FEBRUARY 2024

NOT FOR CONSTRUCTION

APPENDIX G: SITE LIGHTING



PASSERO ASSOCIATES

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Principal-in-Charge
Project Manager
Designed by

Jess D. Sudol, P.E.
Joshua Saxton, E.I.T.
James Ritzenthaler E.I.T.

Revisions			
No.	Date	By	Description
1			

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Date FEBRUARY 2024

[illegible]

Ordering information			EXAMPLE: DSX1 LED P7 40K TMS MVOLT SPA NLTAIR2 PIRHN DSKXD					
DSX1 LED								
Series	LEDs	Color temperature	Life expectancy		Package		Mounting	
DSX1 LED	Forward optics	30K 3000L	T15	Type 1 beam	T505	Type 1 very small ¹	M0027 ²	Shipped included
	P1 ³ P2 ³ P3 ³ P4 ³	40K 4000L	T15	Type 1 beam	T505	Type 1 very small ¹	0274	SPR
	P5 ³ P6 ³ P7 ³ P8 ³	50K 5000L	T15	Type 1 beam	T505	Type 1 very small ¹	0274	SPR
	P9 ³ P10 ³ P11 ³ P12 ³	60K 6000L	T26	Type 1 medium	T505	Type 1 very small ¹	0274	SPR
	Recessed optics		T26	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
	P13 ³ P14 ³	30K 3000L	RLC	Recessed cavity ⁴	RLC	Recessed cavity ⁴	204 ³	SPR
	P15 ³ P16 ³	40K 4000L	RLC	Recessed cavity ⁴	RLC	Recessed cavity ⁴	204 ³	SPR
	P17 ³ P18 ³	50K 5000L	RLC	Recessed cavity ⁴	RLC	Recessed cavity ⁴	204 ³	SPR
	P19 ³ P20 ³	60K 6000L	RLC	Recessed cavity ⁴	RLC	Recessed cavity ⁴	204 ³	SPR
	P21 ³ P22 ³	70K 7000L	RLC	Recessed cavity ⁴	RLC	Recessed cavity ⁴	204 ³	SPR
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Color temperature		40K 4000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		50K 5000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		60K 6000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		70K 7000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		80K 8000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		90K 9000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		100K 10000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		110K 11000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		120K 12000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
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Color temperature		140K 14000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
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Color temperature		1270K 127000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		1280K 128000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³	SPR
Color temperature		1290K 129000L	T15	Type 1 beam	RLC	Recessed cavity ⁴	204 ³ </	

APPENDIX H: WATERCAD ANALYSIS

Modified Flow Data

Village/Town Perinton
Location 1251 Pittsford Victor Rd
Date 5/8/2018
Calculated By EH

Flow Nozzle 2.5

Flow Hydrant #848
Static 64 psi
Pitot 51 psi
Style A 1.00

Residual Hydrant #849
Static 64 psi
Residual 59 psi

Corrected
Static 64
Residual 59

Calculations
Q Observed 1205 gpm
Q @ 20 psi 3900 gpm

System Status
Zone 750
Hydraulic Grade 730'
Ele @ Flow Hyd 583'
Main Size 8"

PLEASE NOTE THE FOLLOWING INFORMATION

The pressure and flow data provided herein represents the calculated values for this location in the distribution system based on typical low operating conditions. These values can vary depending on demands, operational parameters, system configurations, subsequent modifications and other related criteria. Please contact Ed Heindl at 585-442-2001 ext 411 with any questions or concerns.

1251 Pittsford Victor Road

Hydraulic Model Properties

Title	1251 Pittsford Victor Road
Engineer	Joshua Saxton
Company	Passero Associates
Date	2/16/2024
Notes	

1251 Pittsford Victor Road
Scenario: Domestic

Pipe Table - Time: 0.00 hours

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Headloss (ft)
P-1	R-1	PMP-1	12.0	Ductile Iron	110.0	174	0.00
P-2	PMP-1	BEFORE BACKFLOW SPLIT	8.0	Ductile Iron	110.0	174	0.20
P-3A	BEFORE BACKFLOW SPLIT	1 1/2" T-10 METER	1.5	Ductile Iron	110.0	174	6.79
P-3A.1	1 1/2" T-10 METER	2" LF009RPZ	2.0	Ductile Iron	110.0	174	0.84
P-11(1)	2" LF009RPZ	DOMESTIC	2.0	Ductile Iron	110.0	174	1.67
Length (ft)	Hydraulic Grade (Stop) (ft)	Pressure (Stop) (psi)					
12	583.00	0					
203	730.08	68					
2	723.29	313					
1	700.15	303					
2	683.67	50					

1251 Pittsford Victor Road

Scenario: Domestic

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
BEFORE BACKFLOW SPLIT	572.00	0	730.08	68
DOMESTIC	569.00	174	683.67	50

GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Headloss (ft)
1 1/2" T-10 METER	0.00	6.0	2" NEPTUNE T-10	174	22.31
2" LF009RPZ	0.00	6.0	2" LF009 WATTS RPZ	174	14.81
Pressure (From) (psi)	Pressure (To) (psi)				
313	303				
303	297				

Pump Table - Time: 0.00 hours

Label	Elevation (ft)	Pump Definition	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	583.00	Hydrant Data	583.00	730.28	174	147.28

Reservoir Table - Time: 0.00 hours

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
30	R-1	583.00	174	583.00

1251 Pittsford Victor Road
Scenario: Fire

Pipe Table - Time: 0.00 hours

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Headloss (ft)
P-1	R-1	PMP-1	12.0	Ductile Iron	110.0	1,500	0.09
P-2	PMP-1	BEFORE BACKFLOW SPLIT	8.0	Ductile Iron	110.0	1,500	10.73
P-3B	BEFORE BACKFLOW SPLIT	8" LF957RPDA	8.0	Ductile Iron	110.0	1,500	1.11
P-9(1)(1)	8" LF957RPDA	FIRE SPLIT	8.0	Ductile Iron	110.0	1,500	0.66
P-9(1)(2)	FIRE SPLIT	SPRINKLER	8.0	Ductile Iron	110.0	500	0.08
P-16	FIRE SPLIT	PROPOSED HYDRANT	6.0	Ductile Iron	130.0	1,000	6.88
Length (ft)	Hydraulic Grade (Stop) (ft)	Pressure (Stop) (psi)					
12	582.91	0					
203	702.52	56					
21	701.41	303					
12	679.78	48					
11	679.70	48					
93	672.90	40					

1251 Pittsford Victor Road

Scenario: Fire

Junction Table - Time: 0.00 hours

Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
BEFORE BACKFLOW SPLIT	572.00	0	702.52	56
SPRINKLER	569.00	500	679.70	48
PROPOSED HYDRANT	580.00	1,000	672.90	40
FIRE SPLIT	569.00	0	679.78	48

GPV Table - Time: 0.00 hours

Label	Elevation (ft)	Diameter (Valve) (in)	General Purpose Valve Headloss Curve	Flow (gpm)	Headloss (ft)
8" LF957RPDA	0.00	6.0	8" LF957RPDA	1,500	20.98
Pressure (From) (psi)	Pressure (To) (psi)				
303	294				

Pump Table - Time: 0.00 hours

Label	Elevation (ft)	Pump Definition	Hydraulic Grade (Suction) (ft)	Hydraulic Grade (Discharge) (ft)	Flow (Total) (gpm)	Pump Head (ft)
PMP-1	583.00	Hydrant Data	582.91	713.25	1,500	130.34

Reservoir Table - Time: 0.00 hours

ID	Label	Elevation (ft)	Flow (Out net) (gpm)	Hydraulic Grade (ft)
30	R-1	583.00	1,500	583.00

APPENDIX I: SWPPP (SEPARATE COVER)

February 16, 2024

20182555.0005

1251 PITTSFORD VICTOR ROAD

PERINTON, NY

PREPARED FOR:

Christa Construction
600 East Avenue
Rochester, NY 14607

TABLE OF CONTENTS

1.0	EXECUTIVE SUMMARY	1
	Table 1: Summary Table	1
2.0	INTRODUCTION.....	2
3.0	EXISTING SITE CONDITIONS.....	3
	3.1 Topography/ Drainage	3
	3.2 Wetlands/Tributary	4
	3.3 Floodplain	4
	3.4 NYSDEC Environmental Resources.....	4
	3.5 State Historic Preservation Office Review	4
4.0	DEVELOPED SITE CONDITIONS	5
	4.1 Proposed Drainage Area 1:.....	5
	4.2 Proposed Drainage Area 2:.....	5
5.0	STORMWATER QUALITY	6
	5.1 Infrastructure Practice Type Example: Bioretention:	6
	Table 2: Stormwater Quality Comparison	6
6.0	STORMWATER QUANTITY	7
	Table 3: Stormwater Quantity Comparison	7
7.0	CONSTRUCTION EROSION CONTROL PRACTICES & INSPECTIONS.....	8
8.0	POST CONSTRUCTION	10
9.0	SUMMARY	10

APPENDICES

██████████	SWPPP PRACTICES PROCEDURES AND CERTIFICATIONS
██████████	AERIAL PHOTOGRAPH
██████████	USGS QUADRANGLE MAP
██████████	ENVIRONMENTAL RESOURCE MAPPER
██████████	WETLAND MAPPING
██████████	SOILS MAP
██████████	FEMA MAPPING
██████████	ARCHEOLOGICAL SENSITIVE AREAS MAP
██████████	HYDROGRAPH CALCULATIONS
APPENDIX J:	WATER QUALITY CALCULATIONS
██████████	NYSDEC SPEDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (PERMIT NO. GP-0-20-001)
██████████	CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG SHEETS
██████████	MS4 SWPPP ACCEPTANCE FORM
██████████	NOTICE OF INTENT
██████████	NOTICE OF TERMINATION
██████████	EROSION CONTROL DETAILS
APPENDIX Q:	MAINTENANCE/CONSTRUCTION INSPECTION REPORTS

1.0 EXECUTIVE SUMMARY

The proposed project is located along the south western right of way of Pittsford Victor Road (NY-96) on a parcel consisting of approximately 5.08 acres. The project will include a proposed 116 room, 3-story hotel with rear walkout level, with an 18,500 square foot pad, as well as all supporting infrastructure, utilities, and onsite amenities.

Stormwater generally drains to the west across the entire site, flowing down steep slopes and moderate swales which are all directed to the Irondequoit Creek Tributary running along the western property line. Runoff travels across existing woodland through sheet flow and shallow concentrated flow across slopes between 1.5 – 50%. There is an existing swale that runs from the southeastern portion of the site and collects stormwater from the existing sloped areas of the property along the right of way, and directs it to the northwest towards the creek.

Under developed conditions runoff generally flows to the proposed infiltration basin area located in the northwest portion of the site. The stormwater management area will discharge to the swale to the west, where it will travel towards the creek. With stormwater storage, the proposed peak discharges are 0.00 cfs for all storm events from the infiltration basin, and are reduced by $\approx 50\%$ for total site area. With soils of the hydrologic soil group A, on site soils have very high exfiltration rates, and stormwater is able to be detained in the infiltration basins until it can infiltrate back into the native soil and surrounding water table. Additionally, the site uses green infrastructure practices to meet NYSDEC stormwater quality minimum requirements, which include water quality volume, runoff reduction volume, and channel protection volume (Section 5 of this report provides more detail on this subject). The summary table below shows the site water quantity and quality comparisons between existing and proposed conditions:

Table 1: Summary Table

Summary Table			
Water Quantity			
	Existing	Proposed	Reduction (%)
1-Year Runoff (cfs)	0.00	0.000	100.00%
10-Year Runoff (cfs)	0.02	0.01	50.00%
100-Year Runoff (cfs)	1.080	0.50	53.70%
Water Quality			
	Required	Provided	
Water Quality Volume (WQv) (acre-ft)	0.142	0.142	
Minimum Allowable Runoff Reduction Volume (RRv) (acre-ft)	0.076	0.142	
Channel Protection Volume (CPv) (acre-ft)	0.010	0.100	
Qp (cfs)	0.02	0.010	
Qf (cfs)	1.080	0.500	

As shown above, the proposed stormwater pollution prevention plan meets minimum stormwater quality and quantity requirements set forth by the NYSDEC.

2.0 INTRODUCTION

The proposed project is located along the south western right of way of Pittsford Victor Road (NY-96) on a parcel consisting of approximately 5.08 acres. The project will include a proposed 116 room, 3-story hotel with rear walkout level. The project consists of approximately ± 2.99 acres of disturbance. This project will include new roads, parking lots, green infrastructure, and utilities that will serve the proposed buildings.

Public sewer, water, gas, electric and telecommunications/cable will be newly connected along Pittsford Victor Road (NY-96). Existing electric and telecommunications utilities will also be relocated.

The provided Stormwater Pollution Prevention Plan (SWPPP) materials adhere to the State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-20-01) for Stormwater Discharges from Construction Activity. The guidelines specified by the *New York State Stormwater Management Design Manual, January 2015* (SWDM) were used to analyze the proposed stormwater management facilities for this project. Erosion and Sediment controls were designed in conformance with New York Standards and Specifications for Erosion and Sediment Controls.

A copy of this SWPPP and associated inspection logs will be kept on site in the proposed office space and job trailer/SWPPP mailbox.

Owner/Operator

Christa Construction
600 East Avenue
Rochester, NY 14607
Contact: Brian McKinnon

SWPPP Preparer

Passero Associates
242 West Main Street, Suite 100
Rochester, NY 14614
(585) 325-1000
Contact: Jess Sudol, P.E.

3.0 EXISTING SITE CONDITIONS

3.1 Topography/ Drainage

The parcel has minimally varied land cover, consisting completely of woods in poor condition. The land also varies in slope throughout the site, with slopes between 1.5 and 50%.

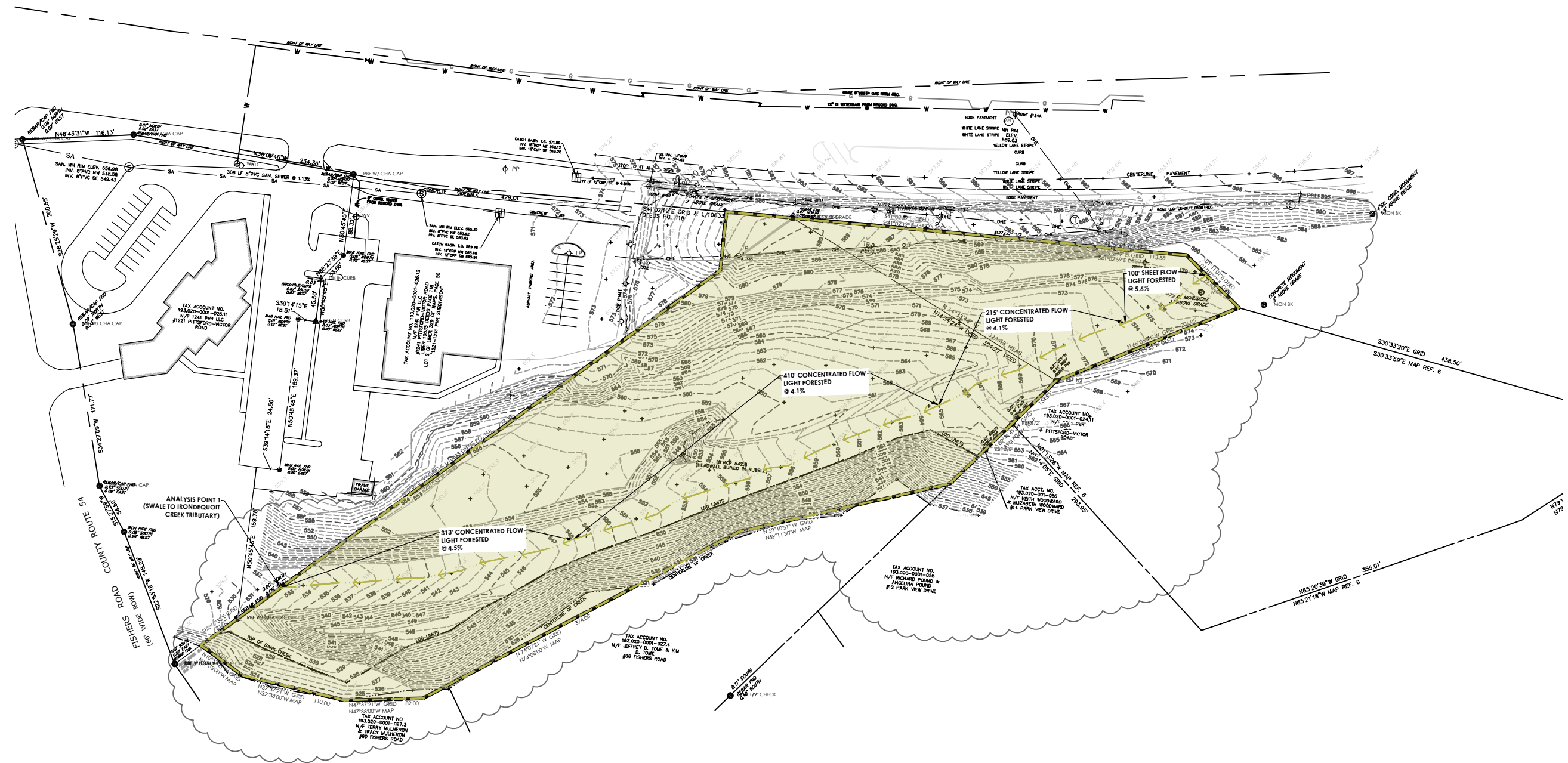
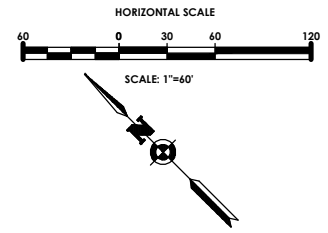
Stormwater generally drains to the west across the entire site, flowing down steep slopes and moderate swales of grades 1.5 – 50%. There is an existing swale that collects stormwater from the existing sloped areas of the property along the right of way, and directs it to the northwest towards the creek.

There is one drainage area on site that drains to Analysis Point 1 (Irondequoit Creek Tributary), see below for descriptions of the existing drainage area:

Existing Drainage Area 1:

This area encompasses the entirety of the project parcel, and is in total 5.08 acres. Stormwater generally drains to the west across the entire site, flowing down steep slopes and moderate swales which are all directed to the Irondequoit Creek Tributary running along the western property line. Runoff travels across existing woodland through sheet flow and shallow concentrated flow across slopes between 1.5 – 50%. There is an existing swale that runs from the southern portion of the site and collects stormwater from the existing sloped areas of the property along the right of way, and directs it to the northwest towards the creek.

The provided existing drainage map graphically shows this drainage area, as well as the other hydraulic characteristics:



- EXDA #1
- Tc PATH
- SOIL BOUNDARY
- PROPERTY LINE
- CIB** SOIL ABBREVIATION
- (C/D)** SOIL RATING

February 16, 2024

3.2 Wetlands/Tributary

The site was reviewed for the existence of federal and state regulated wetlands within the property boundaries. Federal wetlands were researched using the National Wetlands Inventory (NWI) using an online U.S. Fish and Wildlife website search. State regulated wetlands were researched using the NYSDEC's online Environmental Resource Mapper website. Refer to Appendix D and E for the federal and state regulated wetlands mapping.

3.3 Floodplain

Floodplains were researched using the online Firmette tools found at FEMA Map Service Center. Review of the floodplain mapping indicates there are not floodplains located on the site according to FEMA maps 36055C0387G dated 8/28/2008. Appendix G provides the FEMA Firmette maps showing the location of the floodplains.

3.4 NYSDEC Environmental Resources

The NYSDEC has an Environmental Resource Mapper on its website. The Environmental Resource Mapper is an interactive mapping application that can be used to identify some of New York State's natural resources and environmental features that are state protected, or of conservation concern. It displays the following:

- Animals and plants that are rare in New York, including those listed as Endangered or Threatened (generalized locations). [Updated May 2008]
- Significant natural communities, such as rare or high-quality forests, wetlands, and other habitat types.
- New York's streams, rivers, lakes, and ponds; water quality classifications are also displayed

According to this database, there is potential for rare and endangered animals in the vicinity of the project. The Environmental Resource Mapper shows the possibility of mussel screening ponded waters in the vicinity of the project, however these are not expected to be of concern to the project due to the limited disturbance area of the site and there being no disturbance within the creek or its banks. The environmental mapper is shown on Appendix D.

Additionally, the project was submitted to the US Fish and Wildlife Service's "Information for Planning & Consultation" (IPaC) online tool. The IPaC tool is designed to streamline the regulatory review for USFWS in accordance with the Endangered Species Act. IPaC has provided a list of threatened or endangered species that could be impacted by the project. The IPaC tool has also determined there is no effect on the endangered northern long-eared bat, and therefore the project does not require review by the USFWS regional office Biologist and there are no expected take of an threatened or endangered animals as a result of the project. The IPaC Species List and Consistency Letters are included in Appendix E.

3.5 State Historic Preservation Office Review

The site was reviewed for the presence of an archeological sensitive area within the property boundary. The archeo-sensitive areas were located using online GIS tools found at the NYS Historic Preservation Office (SHPO).

It was determined that site is not within archeological-sensitive area. The Cultural Resource Information System online mapper is included in Appendix H.

4.0 DEVELOPED SITE CONDITIONS

The site will be segmented into two proposed drainage areas. See below for a description of these drainage areas:

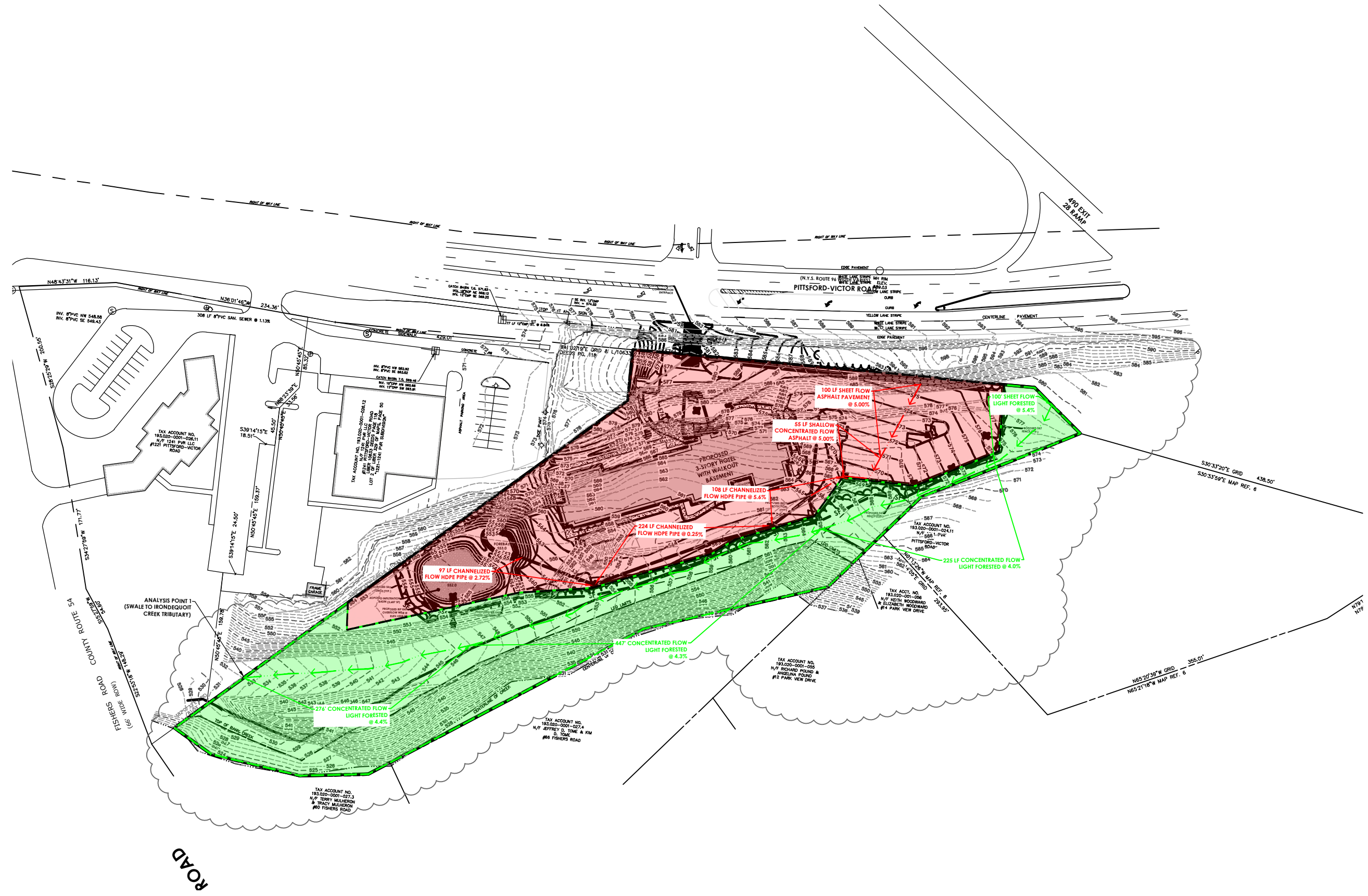
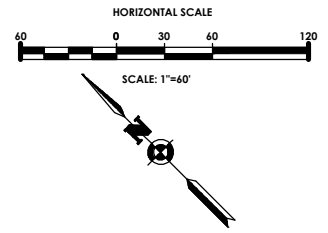
4.1 Proposed Drainage Area 1:

This area encompasses the entirety of the proposed development area. The Proposed Drainage Area 1 consists of the proposed hotel, pavements areas, gardens and landscaped islands, and retaining walls and berms along the right of way. In total, the area is 2.73 acres, with 1.74 acres of impervious area. Stormwater will sheet flow to proposed stormwater infrastructure from the parking lots, roof, and the green areas around the hotel, which ultimately discharges to a stormwater management area in the northwestern portion of the site. The stormwater will enter a plunge pool first for initial pre-treatment, and then overflow over a rip rap lined weir into the infiltration basin for detention and exfiltration back into the surrounding water table and existing soil. The infiltration basin is designed to retain water for the 1-, 10-, and 100- year storms, and in even larger storm events will have water first overtop the grate of the outlet structure, or overflow the emergency rip rap weir to the north west. From here, water would enter back to the existing swale running northwest towards Analysis Point 1 in the Irondequoit Creek Tributary.

4.2 Proposed Drainage Area 2:

This area encompasses the remainder of the site that is to be left undisturbed. The Proposed Drainage Area 2 consists of the existing woodland and is, in total, 2.35 acres of entirely pervious ground cover. Proposed Drainage Area 2 will follow the same route as stormwater in the Existing Drainage Area 1, flowing across existing woodland through sheet flow and shallow concentrated flow across slopes between 1.5 – 50% and directing water to the existing swale that runs from the southeastern portion of the to the northwest towards the creek. Water from Proposed Drainage Area 2 will continue in this swale directly to the creek, and will not route through the infiltration basin for treatment or retention.

The provided proposed drainage map graphically shows these drainage areas, as well as the other hydraulic characteristics:



- PRDA #1
- PRDA #2
- Tc PATH
- SOIL BOUNDARY
- PROPERTY LINE
- CIB** SOIL ABBREVIATION
- (C/D)** SOIL RATING

5.0 STORMWATER QUALITY

Stormwater quality requirements will be achieved using green infrastructure practices as well as standard stormwater practices. Chapter 5 of the NYSDEC Stormwater Management Design Manual was used to design the green infrastructure for this project. The design manual outlines which practices are best suited for specific scenarios, and how to properly size these practices. Water Quality Volume (WQv) and Runoff Reduction Volume (RRv) requirements are met using green infrastructure practices as well as other standard stormwater management practices.

This project will use a infiltration basin to meet all NYSDEC requirements for stormwater quality.

5.1 Infrastructure Practice Type Example: Bioretention:

The infiltration basin located in the northwestern portion fo the site will treat runoff from the entirety of the developed area, including all proposed roads, roofs, and parking areas. Water will be retained in the basin and will filter through the soil media to the native soil and water table. This practice make a direct attempt to meet Town of Perinton goals of maintaining annual groundwater recharge rates by promoting infiltration practices on site, per Chapter 119-7 of the Town of Perinton code. A rip rap lined weir and outlet structure with overflow grate will also be utilized to ensure excessive ponding does not occur in the infiltration basin during extreme storm events, which will allow stormwater to overflow the basin and follow the existing swale towards the creek to the west.

Table 2: *Stormwater Quality Comparison*

Water Quality		
Description:	Required	Provided
WQv Total (acre-ft)	0.142	0.142
Min RRv Total (acre-ft)	0.076	0.142
CPv Total (acre-ft)	0.010	0.100
Qp Total (cfs)	0.02	0.010
Qf Total (cfs)	1.080	0.500

See the Appendix K for all green infrastructure calculations, and see the green infrastructure map below which details the catchment areas that go to each GI practice:

6.0 STORMWATER QUANTITY

The proposed development will increase impervious area on site, which increases the rate of stormwater runoff from the site. This runoff must be reduced to a rate that is less than the offsite flow rate during existing conditions. Reduction for this project is achieved through a new stormwater management area that will be used to release stormwater runoff at a controlled rate. With soils of the hydrologic soil group A, on site soils have very high exfiltration rates, and stormwater is able to be detained in the infiltration basins via an outlet control structure, where the water will be retained and given a chance to infiltrate back into the native soil and water table. With stormwater storage, the proposed peak discharges are 0.00 cfs for all storm events from the infiltration basin being fed by Proposed Drainage Area 1, and overall site outflows for the entire 5.08 acres are reduced by approximately 50% in total.

See the comparison table below for the sites analysis points under existing and proposed conditions:

Table 3: *Stormwater Quantity Comparison*

Runoff Comparison Table				
Analysis Point:	Condition:	Runoff (cfs)		
		1 year	10 year	100 year
Analysis Point 1 Irondequoit Creek Tributary	EXISTING	0.00	0.02	1.08
	PROPOSED	0.00	0.01	0.50
PERCENT REDUCTION		100.00%	50.00%	53.70%

As shown above, the proposed design meets the requirements of stormwater management by releasing the water at a reduced rate that does not lead to erosion or high levels or pollution. The design does meet the Town requirement of providing runoff outflow reduction during the 1-, 10-, and 100-year events.

Note that the runoff values are relatively low for this development. This is due to the onsite soils being classified as A and as a result significantly higher infiltration rates, resulting in low levels of runoff.

Refer to Appendix I for the Hydraflow analysis and the breakdown of each hydrograph.

7.0 CONSTRUCTION EROSION CONTROL PRACTICES & INSPECTIONS

The Owner is responsible for having monthly inspections of the storm water management facility completed. The inspections shall review and document the following at a minimum: visual inspection of the outlet structure, check of the outlets for excessive sediment accumulation, burrowing, vegetation degradation, or any other issues of concern. A certified copy of the annual summary of inspections report will be provided to the Town of Perinton by the first of December. The owner is also responsible for having SWPPP inspections once per week once disturbance of the site starts. Copies of the SWPPP inspection reports will be sent to the town, owner, and contractor and deficiencies should be addressed immediately.

Several erosion control practices will be utilized during construction by the contractor under direct supervision by the owner and a qualified SWPPP inspector (S.W.T.). These practices are explained below and shown in detail in the appendix of this report and the construction plans:

- **Silt Fence** → Silt fencing shall be installed at the toe of all slopes along the perimeter of the disturbed areas and at the toe of slope for any soil stock pile areas. Also, a row of silt fence will be installed around the perimeter of all wetlands in an effort to delineate its boundary. The fencing will be installed in accordance with the NYSDEC construction standards and at the instruction of this plan. The silt fencing shall be buried in the ground at least 6 inches. The contractor shall provide continued monitoring to ensure the silt fencing remains intact, and shall repair as needed. When the silt accumulates to greater than 1/3 the height of the fence the contractor shall remove and dispose of the silt.
- **Stabilized Construction Entrance** → The existing project entrance shall serve as the construction entrance to the project. The contractor shall ensure that mud is not tracked onto the adjacent roadways and that the stone entrance properly removes mud and debris from construction vehicles.
- **Drop Inlet Protection** → All field inlets and catch basins shall have inlet protection in accordance with the detail the Appendix. Drop Inlet protection can be removed from catch basins in the roadway when the sub base is installed, and from the field inlets when the adjacent area is brought to final grade and stabilized.
- **Seeding and Stabilization** → The contractor shall seed and stabilize all disturbed areas not to be worked for 7 days within 7 days of the last disturbance. Stabilization measures may include but are not limited to straw mulching, wood chip mulching, jute mesh and hydroseeding. The SMA and adjacent areas shall be stabilized immediately following their shaping and installation. All embankments greater than 3:1 shall be stabilized with jute mesh.
- **Check Dam** → 24 inch high stone check dams will be installed in all temporary and permanent diversion swales. The check dams will be installed every 2 vertical feet. Once the site is stabilized, these check dams will be removed.
- **Truck Washdown area** → a truck washdown area will be provided adjacent to the construction entrance. This area will be constructed such that it drains to a sediment basin immediately adjacent prior to discharging offsite.

- Winter Shutdown → The contractor may request to enter winter shutdown provided the contractor has fulfilled the requirements set forth in the NYSDEC Blue Book Standard and Specifications for Winter Stabilization contained in Appendix Q of this report. The certified SWPPP inspector will then perform an inspection and upon agreement with the contractor's practice, shall complete the "Notice to reduce Frequency of SPDES Site Inspections" Form contained in Appendix Q of this report. The form will then be submitted to the regulatory MS4 (or NYSDEC regional office should there be no MS4 for the project area) for review. After the regulatory MS4 or NYSDEC regional office has approved the request, the site will enter winter shutdown and SPDES site inspections may drop to monthly. Should the certified SWPPP inspector find any problems during winter shutdown, the contractor is liable to correct the issues on site in the same timely manner as an active project

Additional measures may be required during construction at the guidance of the owner or certified SWPPP Inspector. The contractor shall begin to make all adjustments to the erosion control within 24 hours of receipt of any deficiencies. The owner will be responsible for providing weekly reports when the site disturbance totals less than 5 acres. Inspections are to be completed by a qualified inspector in accordance with the GP-0-20-001, during construction to the Town of Perinton.

If the developer of site plans to increase the disturbance greater than 5 acres at any given time, a 5 acre waiver must be submitted to the NYSDEC and approval granted prior to reaching this limit. The developer must adhere to the conditions set forth in the SPDES General Permit GP-0-20-001 Part II.D.3, located as Appendix L of this report. The conditions of Part II.D.3 are outlined below:

1. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
2. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
3. The owner or operator shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
4. The owner or operator shall install any additional site-specific practices needed to protect water quality.

Any modifications to the SWPPP will be reported and approved by the Town in writing prior to implementation. See Appendix A for additional SWPPP information. The owner is responsible for having a qualified operator on site at all times who has at least 4 hours of erosion control training in accordance with the GP-0-20-001. Once the site has achieved 80% stabilization and ground cover, the Town may sign off on the Notice of Termination prior to submission to the NYSDEC. Removal of all temporary erosion and sediment control practices is required prior to demobilization.

8.0 POST CONSTRUCTION

The owner of the subject project will be responsible for all post construction practices. The contact information for the owner is illustrated on the cover of this plan as well as the design plans for the project. The post construction practices include performing annual inspections of the SMAs to ensure proper working conditions and ensure continual stabilized cover of all project areas to 80% cover, minimum. All applicable inspection and maintenance activities shall continue until the 80% cover is met. Any silt removal will be disposed either off site or on site and immediately stabilized in accordance with the practices of this plan.

Additionally, annual monitoring of the storm sewer structures will be provided by the owner to ensure that they are functioning properly. All documentation related to this SWPPP and post construction monitoring reports, shall be kept by the owner for five years after project completion. These inspections will be certified by a Professional Engineer and a copy of the inspection report will be furnished to the Town.

9.0 SUMMARY

The proposed project requires stormwater management practices which conform to NYSDEC regulations. The proposed standard stormwater management practices will also result in a net decrease in peak runoff from the site while meeting the NYSDEC requirements for Runoff Reduction, Water Quality and Channel Protection. Continued monitoring of the practices included in this plan will be provided by the owner and a designated SWPPP Inspector.

The following appendices of this report illustrate the additional requirements and specifications for stormwater pollution prevention. All practices included in this report and incorporated in the proposed project have been designed in compliance with the NYS Storm Water Design Manual and NYS Standards and Specifications for Erosion and Sediment Control.

APPENDICES

APPENDIX A: SWPPP PRACTICES PROCEDURES AND CERTIFICATIONS

STORMWATER POLLUTION PREVENTION PLAN

SITE DESCRIPTION			
Project Name and Location: (Latitude, Longitude, or Address)	43d 02' 30.8" N 77d 27' 50.8" W	Owner Name and Address:	Christa Construction 600 East Avenue Rochester, NY 14607
Description: (Purpose and Types of Soil Disturbing Activities)			
Runoff Coefficient/Soils Conditions:	The runoff coefficient impervious area is 0.9 and 0.2 for the grass areas. The soils on-site consist of hydrologic soil class of A.		
Site Area:			
Sequence of Major Activities			
<p>The order of activities will be as follows:</p> <ol style="list-style-type: none"> 1. Install silt fences, stabilized construction entrance and other erosion control measures. 2. Protect vegetation to remain. 3. Construct temporary sediment basins including grading, and stabilization. 4. Construct stormwater management area. Strip and stockpile topsoil as necessary 5. Conduct mass earth moving activities. 6. Install utilities including storm sewers. 7. Box out road ways. 8. Install road subbase and continue monitoring of erosion control. 9. Stabilize disturbed areas and stockpiles within 7 days of last construction activity in all areas. 10. Final grading, seeding, and mulching of all disturbed areas. 11. Install Infiltration Basin Medium. 12. When all work areas are complete and the entire areas are stabilized, remove the erosion control measures. 			
Name of Receiving Waters:			

CONTROLS		
	Erosion and Sediment Controls	
Stabilization Practices		
Temporary Stabilization - Topsoil will be replaced onsite or removed from the site. Disturbed portions of the site where construction activity temporarily ceases for at least 7 days will be stabilized with temporary seed and mulch no later than 7 days from the last construction activity in that area. The temporary seed shall be Rye (grain) applied at the rate of 120 pounds per acre. Prior to seeding, 2,000 pounds per acre of ground agricultural limestone and 1,000 pounds per acre of 10-10-10 fertilizer shall be applied. If applicable, areas of the site which are to be paved will be temporarily stabilized by applying geotextile and stone sub-base until bituminous pavement can be applied.		
Permanent Stabilization - Disturbed portions of the site where construction activities permanently cease shall be stabilized with permanent seed no later than 7 days after the last construction activity. The permanent seed mix shall be as indicated on the plans and specifications.		
Stormwater Management		
The proposed storm water management areas will provide stormwater quality and siltation control post construction. The areas which are not graded as part of this project will remain untouched. When construction has been completed all surfaces will be restored and erosion control measures removed after all turf areas are established. After construction has been completed the siltation basins will be cleaned of all construction debris, then filled and stabilized.		
Post Construction Stormwater Management/Maintenance Procedures		
Once the stormwater management areas are permanently stabilized and operating properly, an annual inspection is required. This shall consist of: <ul style="list-style-type: none">• A visual inspection of the outlet structure and removal of any debris that may affect its performance.• A visual inspection of the earthen berm. Signs of erosion or areas lacking vegetation should be identified and corrected.• Provide a report summarizing the above to the Village in a format acceptable to their office.• See attached GP-01-15-002 for additional inspection requirements		
OTHER CONTROLS		
Waste Disposal:		
Waste Material - All waste material will be collected and stored in a metal dumpster rented from a NYSDEC approved hauler, which is a licensed solid waste management company. The dumpster will meet all local and state solid waste management regulations. All trash and construction debris from the site will be deposited in the dumpster. The dumpster will be emptied a minimum of once per week or more often if necessary, and the trash will be hauled to a NYSDEC approved dump. No construction waste material will be buried on site. All personnel will be instructed regarding the correct procedures for waste disposal. Notices stating these practices will be posted in the office trailer and the individual who manages the day-to-day operations will be responsible for seeing that these procedures are followed.		
Hazardous Waste – All hazardous waste materials will be disposed of in a manner specified by local and state regulations or by the manufacturer. Site personnel will be instructed in these practices and the individual who manages the day-to-day operations will be responsible for seeing that these practices are followed.		
Sanitary Waste – If portable units are used, all sanitary waste will be collected from the portable units a minimum of three times per week by a licensed sanitary waste management contractor, as required by local regulation.		
Offsite Vehicle Tracking:		
The paved streets adjacent to the site 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.		

TIMING OF CONTROLS/MEASURES
As indicated in the Sequence of Major Activities, the erosion and sedimentation control measures, including silt fence, will be constructed prior to clearing or grading of any other portions of the site. Areas where construction activity temporarily ceases for more than 7 days will be stabilized with a temporary seed and mulch within 7 days of the last disturbance. Once construction activity ceases permanently in an area, that area will be stabilized with permanent seed and mulch.
CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS
The stormwater collection and discharge complies with the NYSDEC requirements of the New York State Stormwater Management Design Manual.
MAINTENANCE/INSPECTION PROCEDURES
Erosion and Sediment Control Inspection and Maintenance Practices
<p>These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:</p> <ul style="list-style-type: none"> • All control measures will be inspected at least once each week if there is 5 acres or less of disturbance. Twice a week if more than 5 acres is disturbed. • All measures will be maintained in good working order; if a repair is necessary; it will be initiated within 24 hours or report. • Built-up sediment will be removed from silt fence when it has reached one-third the height of the fence. • Temporary and permanent seeding and planting will be inspected for bare spots, washouts, and health of growth. • A maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the inspector is attached. • The site superintendent will select individuals who will be responsible for inspections, maintenance and repair activities, and filling out the inspection and maintenance report. • Personnel selected for inspection and maintenance responsibilities will receive training from the site superintendent. They will be trained in all the inspection and maintenance practices necessary for keeping the erosion and sediment controls used on-site in good working order.
Non-Stormwater Discharges
<p>No non-stormwater discharges will occur from the site during the period, except the following: It is expected that the following non-storm water discharges will occur from the site during the construction period:</p> <ul style="list-style-type: none"> • Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred). • Uncontaminated groundwater (from dewatering excavation).

INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be present on-site during construction:

Select Granular Fill	Topsoil	HDPE Pipe
Precast Concrete	Mulch	Construction Signs
Concrete	Joint Sealant	Sign Panels & Sign Supports
Seed	Electric Cable	Metal Frames & Grates
Steel Conduit	Asphalt Tack Coat	SDR-35 PVC Pipe
Subbase Course	Asphalt Concrete	

SPILL PREVENTION

Material Management Practices

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

Good Housekeeping:

The following good housekeeping practices will be followed on-site during the construction project:

- An effort will be made to store only enough product required to do the job.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- 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.
- Manufacturers' recommendations for proper use and disposal will be followed.
- The site superintendent will inspect daily to ensure proper use and disposal of materials on-site.

Hazardous Products:

These practices are used to reduce the risks associated with hazardous materials:

- Products will be kept in original containers unless they are not re-sealable.
- Original labels and material safety data will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and state recommended methods of proper disposal will be followed.

SPILL PREVENTION (Continued)	
Product Specific Practices	
The following product specific practices will be followed on-site:	
Petroleum Products:	<p>All on-site vehicles will be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Fuel oil for construction machinery will be stored in an above-ground tank with a suitable containment system. Material safety data sheets will be filed in the site superintendent's trailer. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.</p>
Fertilizers:	<p>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. The contents of any partially used bags of fertilizer will be transferred to resealable plastic bags to avoid spills.</p>
Paints:	<p>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.</p>
Concrete Trucks:	<p>Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on site.</p>
Spill Control Practices	
<p>In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:</p> <ul style="list-style-type: none"> • 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 on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, 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 hazardous substance. • Reportable spills of any petroleum-based 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 reoccurring 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. • The site superintendent responsible for the day-to-day operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the office trailer on-site. 	

POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP for the construction site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (“SPDES”) general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards.

Signed: _____
Owner

Date: _____

Date:_____

CONTRACTOR'S CERTIFICATION

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the 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 understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

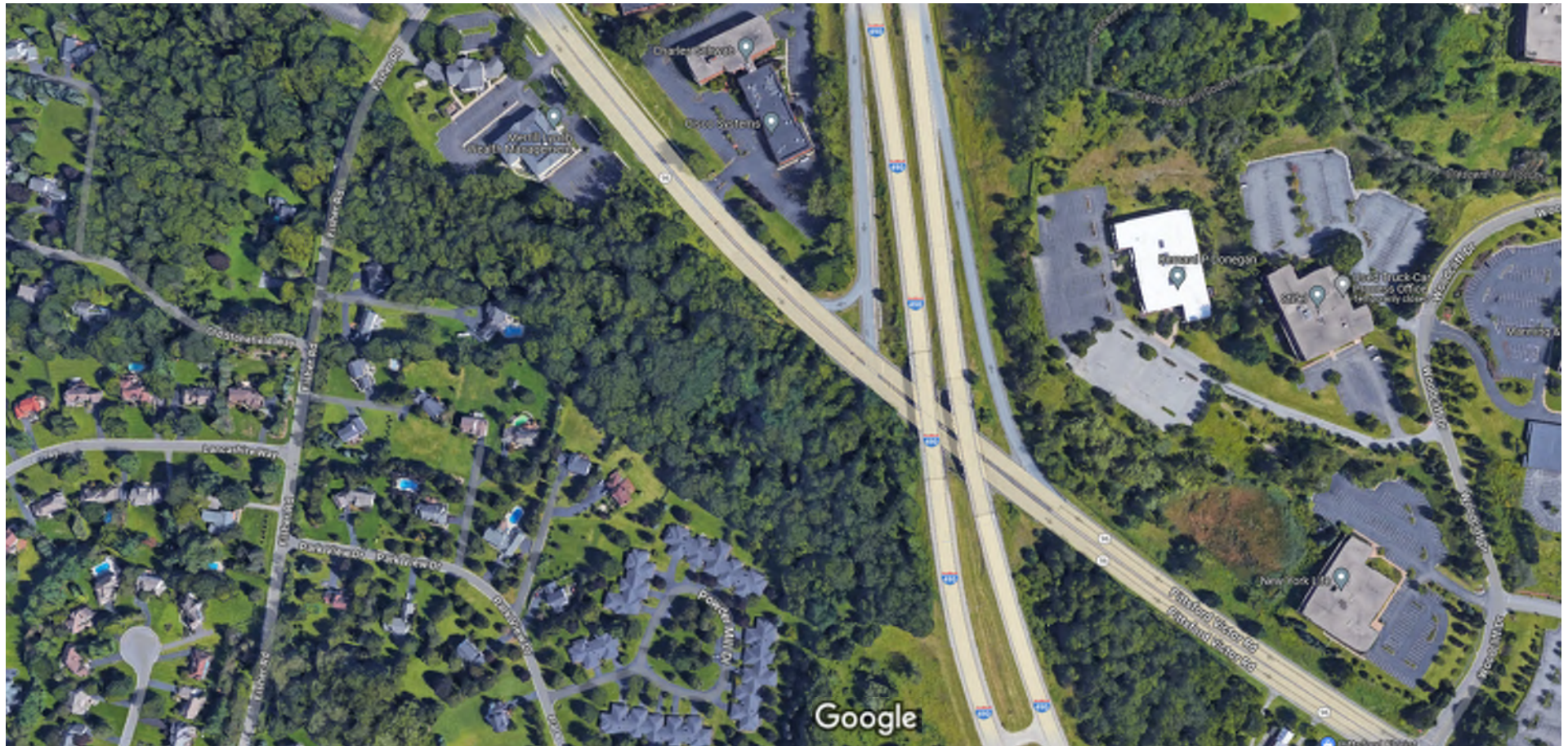
Signature	For	Responsible for
Trained Contractor _____ Date: _____ _____ Date: _____ _____ Date: _____ _____ Date: _____		

Signature	For	Responsible for
<div></div> <div>Date: <div></div></div>		
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APPENDIX B: AERIAL PHOTOGRAPH



1251 Pittsford Victor Road



Imagery ©2024 Google, Imagery ©2024 Airbus, CNES / Airbus, Maxar Technologies, New York GIS, USDA/FPAC/GEO, Map data ©2024 200 ft

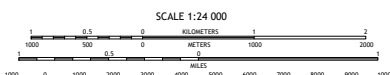
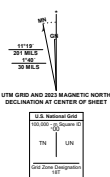
APPENDIX C: USGS QUADRANGLE MAP



Produced by the United States Geological Survey

North American Datum of 1983 (NAD83)
World Geodetic System of 1984 (WGS84) Projection and
1 000-meter grid/Universal Transverse Mercator, Zone 18T
This map is not a legal document. Boundaries may be
generated for this map scale. Private lands within government
reservations may not be shown. Obtain permission before
entering private lands.

Imagery:.....U.S. NADP, September 2017 - December 2017
Roads:.....U.S. Census Bureau, 2014
Hydrography:.....National Hydrography Dataset, 2002 - 2020
Contours:.....National Elevation Dataset, 1986 - 2020
Boundaries:.....Multiple sources, see metadata file 2021 - 2022
Wetlands:.....FWS National Wetlands Inventory 1985 - 1995



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

1 Rochester East
2 Webster
3 Ontario
4 Pittsford
5 Henrieville
6 Henrieville Falls
7 Victor
8 Canadigua

ROAD CLASSIFICATION	
Expressway	Local Connector
Secondary Hwy	Local Road
Ramp	4WD
Interstate Route	US Route
	State Route



APPENDIX D: ENVIRONMENTAL RESOURCE MAPPER



-DQXDU\

- ☒ ★ Unique Geological Features

☒ Waterbody Classifications for Rivers/Streams

☒ Waterbody Classifications for Lakes

☒ Waterbody Inventory/Priority Waterbodies List

☒ State Regulated Freshwater Wetlands (Outside of the Adirondack Park)

☒ State Regulated Wetland Checkzone
- ☒ Imperiled Mussels

☒ Significant Natural Communities

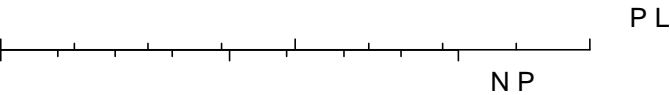
☒ Rare Plants or Animals

☒ Base Flood Elevation Plus 72/75 inches Sea-level Rise

☒ Limit to Moderate Wave Action
- ☒ Mussel Screening Ponded Waters

☒ Mussel Screening Streams

☒ Natural Communities Near This Location



1HZ <RUN 6WDWH 0D[DU

APPENDIX E: WETLAND MAPPING



U.S. Fish and Wildlife Service

National Wetlands Inventory

1251 Pittsford Victor Road



February 16, 2024

Wetlands

Estuarine and Marine Deepwater

Estuarine and Marine Wetland

Freshwater Emergent Wetland

Freshwater Forested/Shrub Wetland

Freshwater Pond

Lake

Other

Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov
<https://www.fws.gov/northeast/NYFO/>

In Reply Refer To:
Project Code: 2024-0050282
Project Name: 1251 Pittsford Victor Road

February 16, 2024

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through IPaC by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the

human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at: <https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see [Migratory Bird Permit | What We Do | U.S. Fish & Wildlife Service \(fws.gov\)](#).

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New York Ecological Services Field Office

3817 Luker Road

Cortland, NY 13045-9385

(607) 753-9334

PROJECT SUMMARY

Project Code: 2024-0050282

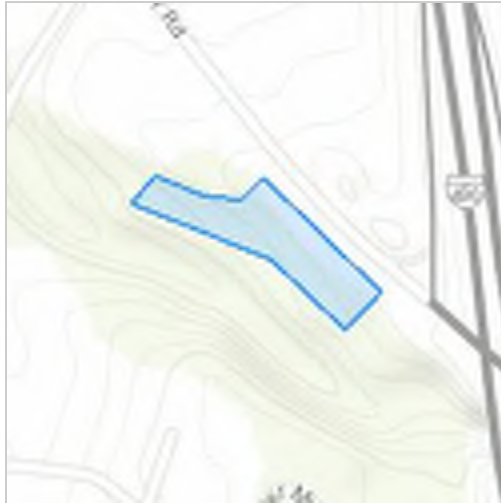
Project Name: 1251 Pittsford Victor Road

Project Type: Commercial Development

Project Description: Proposed 3 story hotel, 116 rooms, with supporting utilities, pavement areas, and stormwater management area.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.04259425,-77.46461244201474,14z>



Counties: Monroe County, New York

ENDANGERED SPECIES ACT SPECIES

There is a total of 2 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: JAMES RITZENTHALER
Address: 242 W. Main Street Suite 100
City: Rochester
State: NY
Zip: 14614
Email: jritzenthaler@passero.com
Phone: 5853251000



United States Department of the Interior



FISH AND WILDLIFE SERVICE
New York Ecological Services Field Office
3817 Luker Road
Cortland, NY 13045-9385
Phone: (607) 753-9334 Fax: (607) 753-9699
Email Address: fw5es_nyfo@fws.gov
<https://www.fws.gov/northeast/NYFO/>

In Reply Refer To:
Project code: 2024-0050282
Project Name: 1251 Pittsford Victor Road

February 16, 2024

Federal Action Agency (if applicable):

Subject: Record of project representative's no effect determination for '1251 Pittsford Victor Road'

Dear JAMES RITZENTHALER:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 16, 2024, for '1251 Pittsford Victor Road' (here forward, Project). This project has been assigned Project Code 2024-0050282 and all future correspondence should clearly reference this number. **Please carefully review this letter.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project.

Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter. ***Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.***

Determination for the Northern Long-Eared Bat

Based upon your IPaC submission and a standing analysis, your project has reached the determination of "No Effect" on the northern long-eared bat. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative), to a federally listed species or designated critical habitat. Effects of the

action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17).

Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no consultation with the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required except when the Service concurs, in writing, that a proposed action "is not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13].

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may affect the animal species listed above and, if so, how they may be affected.

Next Steps

Based upon your IPaC submission, your project has reached the determination of “No Effect” on the northern long-eared bat. If there are no updates on listed species, no further consultation/coordination for this project is required with respect to the northern long-eared bat. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional coordination with the Service should take place to ensure compliance with the Act.

If you have any questions regarding this letter or need further assistance, please contact the New York Ecological Services Field Office and reference Project Code 2024-0050282 associated with this Project.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

1251 Pittsford Victor Road

2. Description

The following description was provided for the project '1251 Pittsford Victor Road':

Proposed 3 story hotel, 116 rooms, with supporting utilities, pavement areas, and stormwater management area.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@43.04259425,-77.46461244201474,14z>



DETERMINATION KEY RESULT

Based on the information you provided, you have determined that the Proposed Action will have no effect on the Endangered northern long-eared bat (*Myotis septentrionalis*). Therefore, no consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required for those species.

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. The proposed action does not intersect an area where the northern long-eared bat is likely to occur, based on the information available to U.S. Fish and Wildlife Service as of the most recent update of this key. If you have data that indicates that northern long-eared bats are likely to be present in the action area, answer "NO" and continue through the key.

Do you want to make a no effect determination?

Yes

PROJECT QUESTIONNAIRE

IPAC USER CONTACT INFORMATION

Agency: Private Entity

Name: JAMES RITZENTHALER

Address: 242 W. Main Street Suite 100

City: Rochester

State: NY

Zip: 14614

Email: jritzenthaler@passero.com

Phone: 5853251000

APPENDIX F: SOILS MAP

Hydrologic Soil Group—Monroe County, New York



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 22, Sep 5, 2023

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	3.4	65.8%
AoC	Alton gravelly loam, 8 to 15 percent slopes	A	0.0	0.2%
PaC	Palmyra gravelly fine sandy loam, 8 to 15 percent slopes	A	0.4	7.4%
PaF	Palmyra gravelly fine sandy loam, 25 to 60 percent slopes	A	1.4	26.6%
Totals for Area of Interest			5.1	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: FEMA MAPPING

	LWKRW % DHORRG OHMDLRQ % = RQS \$ \$
	LWK % RUFBMK = RQS \$ \$ \$ \$ \$ \$KODVRU, PRRZ


\$0000 000H)P0RG-0JUG \$JHV
 R 00000 000H)I0RGZWKDYUJH
 G-0WK0HW WK0RQH1RW RU ZWKJULQ
 DJHV/R OHW WK0RQHVTXUJHEOH+;

Z6362 265		WVUH RQJ WLRQ SODD 80QH PRRG QUG =RQ;
		\$JHDZ WK GGH GPRG \$ WGHWR HYH GH RVH/ =RQ;
		\$JHDZ WK PRRG \$ WGHWR HYH =RQ;

2600	\$JHRLDQLEDPGRGDPUG	-FCH;
2601	(IHFWLYH)	
2602	\$JHRLDQLEDPGRGDPUG	-FCH;

15
6826

----- 80000 80YUW RU 8VRURZU
IIIIII AMILNH RU PRGZO

 8URV 6FWLRQ/ZWKSDDD 8QQH
 _____ DMVU 6UIDHQHDMLRQ
 - - - - 8FDWDD 7UDQHFV
 ~~~~~ 8FDWDD 7UDQHFV  
 \_\_\_\_\_ DMVU 6UIDHQHDMLRQ/LQ %  
 \_\_\_\_\_ LEW R 6VXG  
 \_\_\_\_\_ XULVLFWLRQ%RQSDU  
 - - - - 8FDWDD 7UDQHFV %DMHQLQ  
 - - - - 3URLQH%DMHQLQ  
 \_\_\_\_\_ 3JURD8LFHDXUH

|        |                                     |                   |   |
|--------|-------------------------------------|-------------------|---|
| \$\$\$ | <input type="checkbox"/>            | LJLWDDWD\$LOOEHH  | S |
|        | <input type="checkbox"/>            | RLJLWDDWD\$LOOEHH |   |
|        | <input checked="" type="checkbox"/> | 00SS-G            |   |

7KHSQGLVSDHGRQWKHBSLVDDDBSJLEWH  
SLQV VDHFWHGEWKHXH DGGHVVGRV UHSU  
DDQWKULWDWLYHSJSJLWOFDWLQ

7KLVBSFBSOLHVZWKJWVWDDUG/IRUWKHXHR  
GLJWDDIORGBS/LILWLVLQRWYRGLDVGHFULEBGEHOFZ  
7KHEDVBSWZQZBSOLHVZWKJWVWEDVBS  
DFFXJDFWDDUGJG/

7KHIOFGKQJUGLGRUBMLRQLVGHULYHGGLUHFWOUIURPWH  
DWMKRLWDMVLHYJZEYUHLFHSURLGGBG7KLVBS  
ZVHSRUWGRQ **DV \$** DOGGRH/GRW  
UHOHFWR FQDHRU **DRQDQV** VSHXHQV WRWKLVDGDHDOG  
WLP 7KHJDOGHIFWLYHLQRDWRBQFBFQDHRU  
EHRFVSHUMHGGEQZGDQDRLYUWLP

7KLVBSLBHLVYRLGLIWKHFQRU RUHRIWHIIFOORZQIBS  
HOIFQWVGRQWDSB-DU EDHBSLBHIA IOFRFQHOIDH-DV  
OHJGG VFOHDH BSFUHDVFOGDWH RFFQWALGHQWLHLHV  
JSSQHO QH-U DQGJSHIFAWLYHGDWH DSLBHIIRU  
XBSB-GDQGXRG-UQLJGDJHFDQQRV EHXWGIIRU  
UHQDMDRJA SUSRH/V

Town of Perinton  
360428

AREA OF MINIMAL FLOOD HAZARD

36055CD387G  
R/28/2008  
Not Printed

HW

$$ff^1$$

%DMES, BULGARIAN 86 DWLRQD DS

## **APPENDIX H: ARCHEOLOGICAL SENSITIVE AREAS MAP**





## **APPENDIX I: HYDROGRAPH CALCULATIONS**

# Extreme Precipitation Tables

## Northeast Regional Climate Center

Data represents point estimates calculated from partial duration series. All precipitation amounts are displayed in inches.

### Metadata for Point

|           |                                                           |
|-----------|-----------------------------------------------------------|
| Smoothing | Yes                                                       |
| State     | New York                                                  |
| Location  | New York, United States                                   |
| Latitude  | 43.042 degrees North                                      |
| Longitude | 77.464 degrees West                                       |
| Elevation | 170 feet                                                  |
| Date/Time | Thu Feb 15 2024 14:33:34 GMT-0500 (Eastern Standard Time) |

### Extreme Precipitation Estimates

|       | 5min | 10min | 15min | 30min | 60min | 120min |       | 1hr  | 2hr  | 3hr  | 6hr  | 12hr | 24hr | 48hr |       | 1day | 2day | 4day | 7day  | 10day |       |
|-------|------|-------|-------|-------|-------|--------|-------|------|------|------|------|------|------|------|-------|------|------|------|-------|-------|-------|
| 1yr   | 0.25 | 0.38  | 0.47  | 0.62  | 0.78  | 0.96   | 1yr   | 0.67 | 0.88 | 1.09 | 1.31 | 1.57 | 1.86 | 2.08 | 1yr   | 1.65 | 2.00 | 2.41 | 2.87  | 3.29  | 1yr   |
| 2yr   | 0.31 | 0.47  | 0.59  | 0.77  | 0.97  | 1.19   | 2yr   | 0.84 | 1.07 | 1.35 | 1.60 | 1.87 | 2.17 | 2.43 | 2yr   | 1.92 | 2.34 | 2.75 | 3.25  | 3.71  | 2yr   |
| 5yr   | 0.36 | 0.56  | 0.70  | 0.94  | 1.20  | 1.49   | 5yr   | 1.04 | 1.33 | 1.68 | 1.99 | 2.32 | 2.66 | 3.00 | 5yr   | 2.36 | 2.88 | 3.37 | 3.93  | 4.49  | 5yr   |
| 10yr  | 0.40 | 0.64  | 0.80  | 1.09  | 1.42  | 1.76   | 10yr  | 1.23 | 1.57 | 2.00 | 2.36 | 2.73 | 3.12 | 3.52 | 10yr  | 2.76 | 3.38 | 3.93 | 4.54  | 5.18  | 10yr  |
| 25yr  | 0.48 | 0.76  | 0.96  | 1.33  | 1.77  | 2.20   | 25yr  | 1.52 | 1.95 | 2.50 | 2.94 | 3.39 | 3.84 | 4.34 | 25yr  | 3.40 | 4.18 | 4.81 | 5.49  | 6.26  | 25yr  |
| 50yr  | 0.54 | 0.87  | 1.11  | 1.55  | 2.09  | 2.61   | 50yr  | 1.80 | 2.31 | 2.96 | 3.48 | 3.99 | 4.49 | 5.10 | 50yr  | 3.98 | 4.90 | 5.61 | 6.35  | 7.23  | 50yr  |
| 100yr | 0.61 | 0.99  | 1.27  | 1.81  | 2.47  | 3.11   | 100yr | 2.13 | 2.73 | 3.52 | 4.12 | 4.70 | 5.26 | 5.99 | 100yr | 4.66 | 5.76 | 6.55 | 7.34  | 8.36  | 100yr |
| 200yr | 0.70 | 1.14  | 1.47  | 2.11  | 2.91  | 3.68   | 200yr | 2.51 | 3.23 | 4.17 | 4.87 | 5.53 | 6.16 | 7.03 | 200yr | 5.45 | 6.76 | 7.64 | 8.49  | 9.66  | 200yr |
| 500yr | 0.83 | 1.37  | 1.78  | 2.59  | 3.64  | 4.61   | 500yr | 3.14 | 4.05 | 5.22 | 6.08 | 6.86 | 7.59 | 8.70 | 500yr | 6.72 | 8.36 | 9.37 | 10.28 | 11.70 | 500yr |

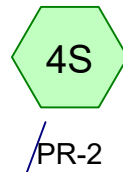
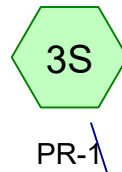
### Lower Confidence Limits

|       | 5min | 10min | 15min | 30min | 60min | 120min |       | 1hr  | 2hr  | 3hr  | 6hr  | 12hr | 24hr | 48hr |       | 1day | 2day | 4day | 7day | 10day |       |
|-------|------|-------|-------|-------|-------|--------|-------|------|------|------|------|------|------|------|-------|------|------|------|------|-------|-------|
| 1yr   | 0.21 | 0.32  | 0.39  | 0.53  | 0.65  | 0.74   | 1yr   | 0.56 | 0.72 | 0.83 | 1.08 | 1.42 | 1.64 | 1.78 | 1yr   | 1.45 | 1.71 | 2.08 | 2.57 | 3.01  | 1yr   |
| 2yr   | 0.30 | 0.46  | 0.56  | 0.76  | 0.94  | 1.05   | 2yr   | 0.81 | 1.02 | 1.15 | 1.42 | 1.72 | 2.11 | 2.38 | 2yr   | 1.87 | 2.28 | 2.68 | 3.17 | 3.63  | 2yr   |
| 5yr   | 0.33 | 0.51  | 0.64  | 0.88  | 1.11  | 1.24   | 5yr   | 0.96 | 1.21 | 1.34 | 1.64 | 2.01 | 2.49 | 2.82 | 5yr   | 2.21 | 2.72 | 3.16 | 3.68 | 4.23  | 5yr   |
| 10yr  | 0.37 | 0.56  | 0.70  | 0.97  | 1.26  | 1.38   | 10yr  | 1.09 | 1.35 | 1.49 | 1.85 | 2.24 | 2.81 | 3.20 | 10yr  | 2.49 | 3.08 | 3.56 | 4.10 | 4.72  | 10yr  |
| 25yr  | 0.42 | 0.63  | 0.79  | 1.13  | 1.48  | 1.61   | 25yr  | 1.28 | 1.57 | 1.72 | 2.14 | 2.57 | 3.27 | 3.79 | 25yr  | 2.90 | 3.65 | 4.14 | 4.75 | 5.45  | 25yr  |
| 50yr  | 0.46 | 0.70  | 0.87  | 1.25  | 1.69  | 1.80   | 50yr  | 1.46 | 1.76 | 1.90 | 2.38 | 2.83 | 3.68 | 4.31 | 50yr  | 3.26 | 4.15 | 4.65 | 5.31 | 6.08  | 50yr  |
| 100yr | 0.51 | 0.77  | 0.96  | 1.39  | 1.91  | 2.00   | 100yr | 1.65 | 1.96 | 2.07 | 2.64 | 3.11 | 4.13 | 4.91 | 100yr | 3.66 | 4.72 | 5.22 | 5.92 | 6.79  | 100yr |
| 200yr | 0.56 | 0.84  | 1.07  | 1.55  | 2.16  | 2.23   | 200yr | 1.86 | 2.18 | 2.26 | 2.93 | 3.39 | 4.64 | 5.59 | 200yr | 4.11 | 5.38 | 5.86 | 6.60 | 7.58  | 200yr |
| 500yr | 0.64 | 0.95  | 1.23  | 1.78  | 2.54  | 2.56   | 500yr | 2.19 | 2.51 | 2.49 | 3.34 | 3.79 | 5.41 | 6.68 | 500yr | 4.79 | 6.42 | 6.83 | 7.64 | 8.77  | 500yr |

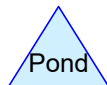
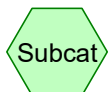
### Upper Confidence Limits

|       | 5min | 10min | 15min | 30min | 60min | 120min |       | 1hr  | 2hr  | 3hr  | 6hr  | 12hr | 24hr | 48hr  |       | 1day | 2day  | 4day  | 7day  | 10day |       |
|-------|------|-------|-------|-------|-------|--------|-------|------|------|------|------|------|------|-------|-------|------|-------|-------|-------|-------|-------|
| 1yr   | 0.27 | 0.42  | 0.51  | 0.69  | 0.85  | 0.97   | 1yr   | 0.73 | 0.95 | 1.09 | 1.34 | 1.68 | 2.02 | 2.24  | 1yr   | 1.79 | 2.15  | 2.59  | 3.06  | 3.51  | 1yr   |
| 2yr   | 0.32 | 0.49  | 0.60  | 0.82  | 1.01  | 1.14   | 2yr   | 0.87 | 1.12 | 1.25 | 1.52 | 1.85 | 2.25 | 2.51  | 2yr   | 2.00 | 2.41  | 2.87  | 3.35  | 3.84  | 2yr   |
| 5yr   | 0.39 | 0.60  | 0.75  | 1.02  | 1.30  | 1.50   | 5yr   | 1.12 | 1.47 | 1.64 | 1.95 | 2.33 | 2.85 | 3.19  | 5yr   | 2.52 | 3.07  | 3.56  | 4.17  | 4.77  | 5yr   |
| 10yr  | 0.46 | 0.71  | 0.88  | 1.22  | 1.58  | 1.86   | 10yr  | 1.37 | 1.81 | 2.03 | 2.37 | 2.81 | 3.44 | 3.82  | 10yr  | 3.04 | 3.68  | 4.25  | 4.94  | 5.65  | 10yr  |
| 25yr  | 0.58 | 0.89  | 1.10  | 1.58  | 2.07  | 2.48   | 25yr  | 1.79 | 2.42 | 2.70 | 3.10 | 3.61 | 4.40 | 4.87  | 25yr  | 3.90 | 4.68  | 5.37  | 6.18  | 7.07  | 25yr  |
| 50yr  | 0.69 | 1.05  | 1.31  | 1.88  | 2.53  | 3.08   | 50yr  | 2.19 | 3.01 | 3.38 | 3.81 | 4.38 | 5.30 | 5.85  | 50yr  | 4.69 | 5.62  | 6.43  | 7.33  | 8.40  | 50yr  |
| 100yr | 0.83 | 1.25  | 1.57  | 2.26  | 3.11  | 3.83   | 100yr | 2.68 | 3.74 | 4.23 | 4.66 | 5.34 | 6.42 | 7.03  | 100yr | 5.68 | 6.76  | 7.70  | 8.69  | 9.98  | 100yr |
| 200yr | 0.99 | 1.48  | 1.88  | 2.72  | 3.80  | 4.78   | 200yr | 3.28 | 4.67 | 5.32 | 5.74 | 6.50 | 7.75 | 8.43  | 200yr | 6.86 | 8.11  | 9.20  | 10.30 | 11.85 | 200yr |
| 500yr | 1.26 | 1.87  | 2.41  | 3.50  | 4.98  | 6.43   | 500yr | 4.30 | 6.29 | 7.24 | 7.62 | 8.48 | 9.97 | 10.74 | 500yr | 8.82 | 10.33 | 11.65 | 12.93 | 14.87 | 500yr |





INFILTRATION BASIN



### Routing Diagram for Fairfield

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## Fairfield

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Page 2

### Rainfall Events Listing (selected events)

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

## Fairfield

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Page 3

### Area Listing (all nodes)

| Area<br>(acres) | CN        | Description<br>(subcatchment-numbers) |
|-----------------|-----------|---------------------------------------|
| 0.990           | 39        | >75% Grass cover, Good, HSG A (3S)    |
| 1.740           | 98        | Paved parking, HSG A (3S)             |
| 7.430           | 45        | Woods, Poor, HSG A (1, 4S)            |
| <b>10.160</b>   | <b>53</b> | <b>TOTAL AREA</b>                     |



## Fairfield

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Page 4

### Soil Listing (all nodes)

| Area<br>(acres) | Soil<br>Group | Subcatchment<br>Numbers |
|-----------------|---------------|-------------------------|
| 10.160          | HSG A         | 1, 3S, 4S               |
| 0.000           | HSG B         |                         |
| 0.000           | HSG C         |                         |
| 0.000           | HSG D         |                         |
| 0.000           | Other         |                         |
| <b>10.160</b>   |               | <b>TOTAL AREA</b>       |

## Fairfield

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Page 5

### Ground Covers (all nodes)

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover        | Subcatchment<br>Numbers |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|-------------------------|
| 0.990            | 0.000            | 0.000            | 0.000            | 0.000            | 0.990            | >75% Grass cover, Good | 3S                      |
| 1.740            | 0.000            | 0.000            | 0.000            | 0.000            | 1.740            | Paved parking          | 3S                      |
| 7.430            | 0.000            | 0.000            | 0.000            | 0.000            | 7.430            | Woods, Poor            | 1, 4S                   |
| <b>10.160</b>    | <b>0.000</b>     | <b>0.000</b>     | <b>0.000</b>     | <b>0.000</b>     | <b>10.160</b>    | <b>TOTAL AREA</b>      |                         |

## Fairfield

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Page 6

### Pipe Listing (all nodes)

| Line# | Node<br>Number | In-Invert<br>(feet) | Out-Invert<br>(feet) | Length<br>(feet) | Slope<br>(ft/ft) | n     | Width<br>(inches) | Diam/Height<br>(inches) | Inside-Fill<br>(inches) | Node<br>Name |
|-------|----------------|---------------------|----------------------|------------------|------------------|-------|-------------------|-------------------------|-------------------------|--------------|
| 1     | 3S             | 0.00                | 0.00                 | 46.0             | 0.0883           | 0.009 | 0.0               | 12.0                    | 6.0                     |              |
| 2     | 3S             | 0.00                | 0.00                 | 60.0             | 0.0248           | 0.009 | 0.0               | 18.0                    | 9.0                     |              |
| 3     | 3S             | 0.00                | 0.00                 | 224.0            | 0.0025           | 0.009 | 0.0               | 18.0                    | 9.0                     |              |
| 4     | 3S             | 0.00                | 0.00                 | 97.0             | 0.0272           | 0.009 | 0.0               | 18.0                    | 9.0                     |              |
| 5     | 5P             | 551.50              | 550.50               | 30.0             | 0.0333           | 0.009 | 0.0               | 12.0                    | 6.0                     |              |



**Fairfield***Type II 24-hr 1-YEAR Rainfall=1.86"*

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Page 7

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1: EX-1**

Runoff Area=5.080 ac 0.00% Impervious Runoff Depth=0.00"  
Flow Length=1,038' Tc=32.6 min CN=45 Runoff=0.00 cfs 0.000 af

**Subcatchment3S: PR-1**

Runoff Area=2.730 ac 63.74% Impervious Runoff Depth>0.33"  
Flow Length=582' Tc=6.0 min CN=77 Runoff=1.64 cfs 0.075 af

**Subcatchment4S: PR-2**

Runoff Area=2.350 ac 0.00% Impervious Runoff Depth=0.00"  
Flow Length=1,048' Tc=32.9 min CN=45 Runoff=0.00 cfs 0.000 af

**Pond 5P: INFILTRATIONBASIN**

Peak Elev=549.25' Storage=365 cf Inflow=1.64 cfs 0.075 af  
Discarded=0.86 cfs 0.075 af Primary=0.00 cfs 0.000 af Outflow=0.86 cfs 0.075 af

**Link 9L: TOTAL PR**

Inflow=0.00 cfs 0.000 af  
Primary=0.00 cfs 0.000 af

**Total Runoff Area = 10.160 ac Runoff Volume = 0.075 af Average Runoff Depth = 0.09"**  
**82.87% Pervious = 8.420 ac 17.13% Impervious = 1.740 ac**

**Fairfield**

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Type II 24-hr 1-YEAR Rainfall=1.86"

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Page 8

**Summary for Subcatchment 1: EX-1**

[45] Hint: Runoff=Zero

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 1-YEAR Rainfall=1.86"

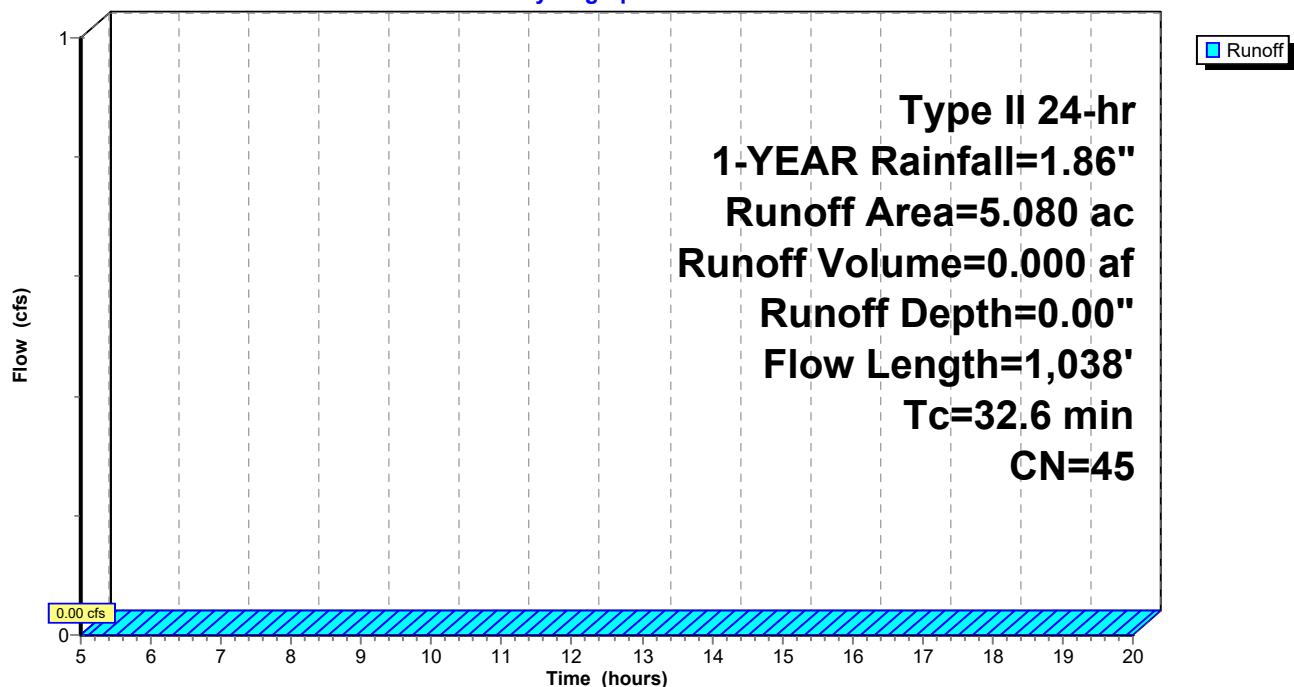
| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 5.080     | 45 | Woods, Poor, HSG A    |
| 5.080     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                                 |
|----------|---------------|---------------|-------------------|----------------|-----------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET FLOW</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.5      | 215           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SHF 1</b><br>Woodland Kv= 5.0 fps             |
| 6.7      | 410           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps             |
| 4.9      | 313           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow, SCF 3</b><br>Woodland Kv= 5.0 fps             |
| 32.6     | 1,038         | Total         |                   |                |                                                                             |

**Subcatchment 1: EX-1**

Hydrograph



**Fairfield**

Prepared by Passero Associates

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Type II 24-hr 1-YEAR Rainfall=1.86"

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Page 9

**Summary for Subcatchment 3S: PR-1**

Runoff = 1.64 cfs @ 11.99 hrs, Volume= 0.075 af, Depth> 0.33"  
 Routed to Pond 5P : INFILTRATION BASIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 1-YEAR Rainfall=1.86"

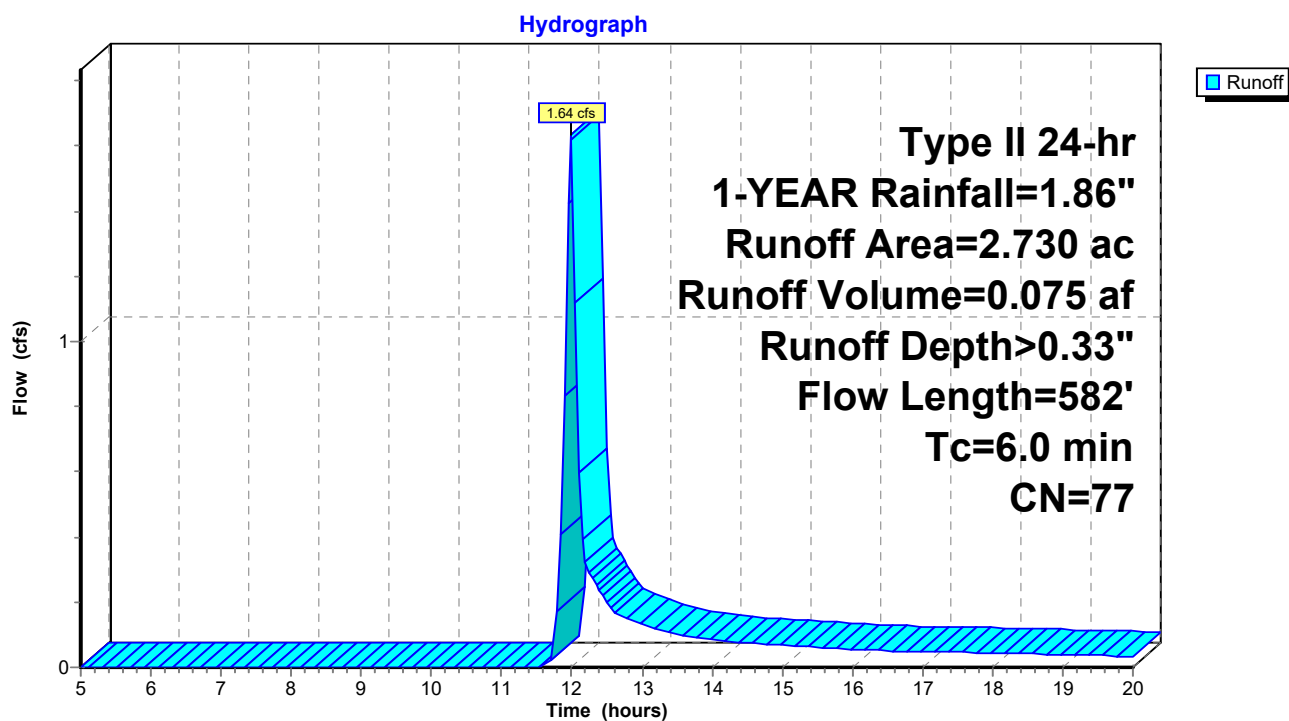
| Area (ac) | CN | Description                   |
|-----------|----|-------------------------------|
| 1.740     | 98 | Paved parking, HSG A          |
| 0.990     | 39 | >75% Grass cover, Good, HSG A |
| 2.730     | 77 | Weighted Average              |
| 0.990     |    | 36.26% Pervious Area          |
| 1.740     |    | 63.74% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft)                            | Velocity (ft/sec) | Capacity (cfs) | Description                                                                                                                     |
|----------|---------------|------------------------------------------|-------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1.0      | 100           | 0.0500                                   | 1.63              |                | <b>Sheet Flow, SHEET FLOW PAVEMENT</b><br>Smooth surfaces n= 0.011 P2= 2.17"                                                    |
| 0.2      | 55            | 0.0500                                   | 4.54              |                | <b>Shallow Concentrated Flow, SCF PAVEMENT</b><br>Paved Kv= 20.3 fps                                                            |
| 0.1      | 46            | 0.0883                                   | 14.02             | 5.51           | <b>Pipe Channel, PIPE</b><br>12.0" Round w/ 6.0" inside fill Area= 0.4 sf Perim= 2.6' r= 0.15'<br>n= 0.009 PVC, smooth interior |
| 0.1      | 60            | 0.0248                                   | 9.74              | 8.60           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 1.2      | 224           | 0.0025                                   | 3.09              | 2.73           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 0.2      | 97            | 0.0272                                   | 10.20             | 9.01           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 2.8      | 582           | Total, Increased to minimum Tc = 6.0 min |                   |                |                                                                                                                                 |



## Subcatchment 3S: PR-1



**Fairfield**

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Type II 24-hr 1-YEAR Rainfall=1.86"

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Page 11

**Summary for Subcatchment 4S: PR-2**

[45] Hint: Runoff=Zero

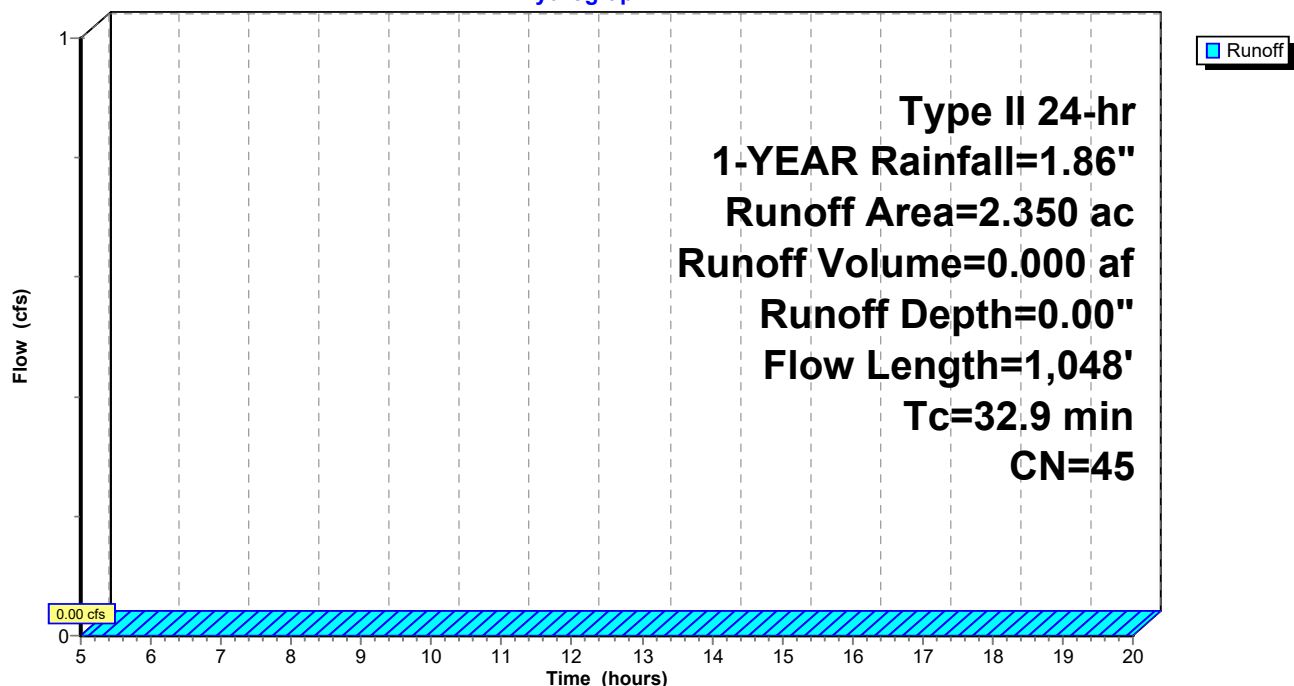
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
Routed to Link 9L : TOTAL PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 1-YEAR Rainfall=1.86"

| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 2.350     | 45 | Woods, Poor, HSG A    |
| 2.350     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                            |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.7      | 225           | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow, SCF 1</b><br>Woodland Kv= 5.0 fps        |
| 7.2      | 447           | 0.0430        | 1.04              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps        |
| 4.4      | 276           | 0.0440        | 1.05              |                | <b>Shallow Concentrated Flow, SCF3</b><br>Woodland Kv= 5.0 fps         |
| 32.9     | 1,048         | Total         |                   |                |                                                                        |

**Subcatchment 4S: PR-2****Hydrograph**

**Summary for Pond 5P: INFILTRATION BASIN**

Inflow Area = 2.730 ac, 63.74% Impervious, Inflow Depth > 0.33" for 1-YEAR event  
 Inflow = 1.64 cfs @ 11.99 hrs, Volume= 0.075 af  
 Outflow = 0.86 cfs @ 12.07 hrs, Volume= 0.075 af, Atten= 47%, Lag= 5.1 min  
 Discarded = 0.86 cfs @ 12.07 hrs, Volume= 0.075 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 9L : TOTAL PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 549.25' @ 12.07 hrs Surf.Area= 3,687 sf Storage= 365 cf

Plug-Flow detention time= 2.9 min calculated for 0.075 af (100% of inflow)  
 Center-of-Mass det. time= 2.4 min ( 831.7 - 829.3 )

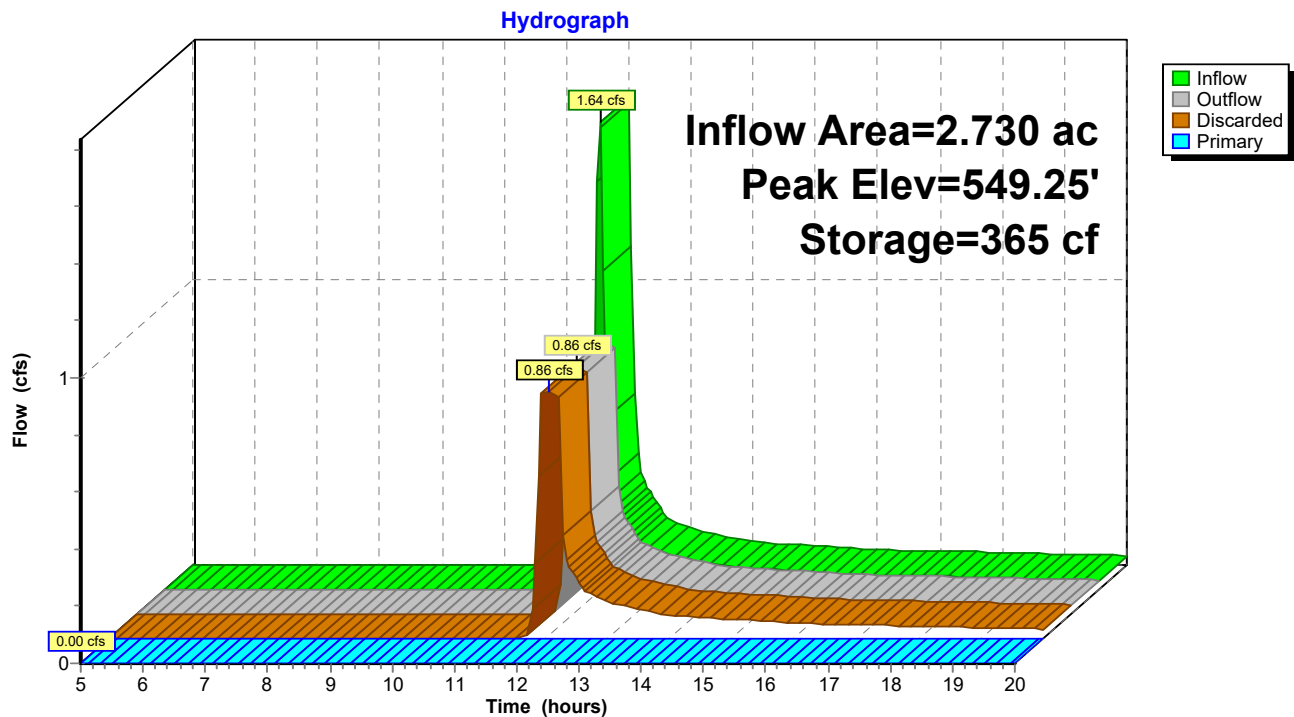
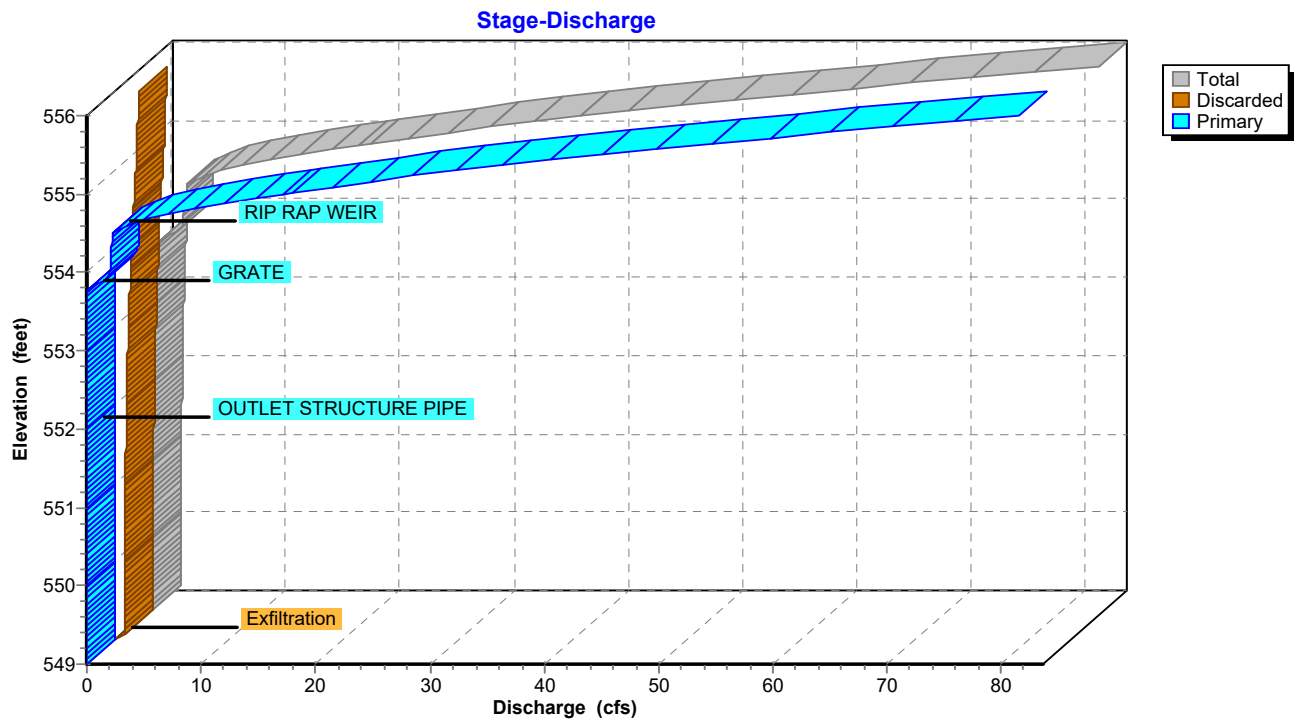
| Volume              | Invert               | Avail.Storage | Storage Description                                    |                           |                     |
|---------------------|----------------------|---------------|--------------------------------------------------------|---------------------------|---------------------|
| #1                  | 549.00'              | 28,478 cf     | <b>Custom Stage Data (Conic)</b> Listed below (Recalc) |                           |                     |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Voids<br>(%)  | Inc.Store<br>(cubic-feet)                              | Cum.Store<br>(cubic-feet) | Wet.Area<br>(sq-ft) |
| 549.00              | 3,687                | 0.0           | 0                                                      | 0                         | 3,687               |
| 550.00              | 3,687                | 40.0          | 1,475                                                  | 1,475                     | 3,902               |
| 551.00              | 3,687                | 40.0          | 1,475                                                  | 2,950                     | 4,117               |
| 552.00              | 3,687                | 100.0         | 3,687                                                  | 6,637                     | 4,333               |
| 553.00              | 4,414                | 100.0         | 4,045                                                  | 10,682                    | 5,094               |
| 554.00              | 5,201                | 100.0         | 4,802                                                  | 15,484                    | 5,918               |
| 555.00              | 6,631                | 100.0         | 5,902                                                  | 21,385                    | 7,374               |
| 556.00              | 7,565                | 100.0         | 7,093                                                  | 28,478                    | 8,355               |

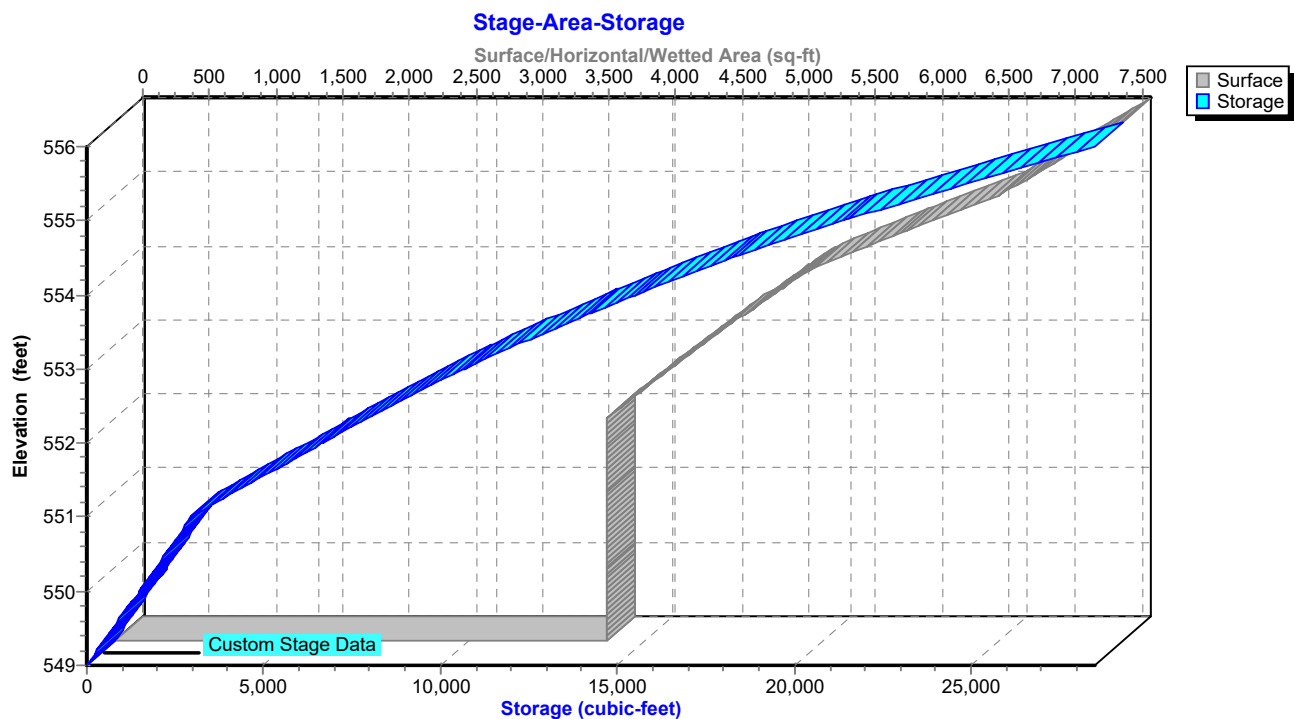
| Device | Routing   | Invert  | Outlet Devices                                                                                                                                                                                                                          |
|--------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary   | 554.50' | <b>15.0' long + 1.0 ' SideZ x 14.0' breadth RIP RAP WEIR</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63                                                          |
| #2     | Primary   | 552.00' | <b>12.0" Round OUTLET STRUCTURE PIPE w/ 6.0" inside fill</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 ' Cc= 0.900<br>n= 0.009 PVC, smooth interior, Flow Area= 0.39 sf |
| #3     | Device 2  | 553.75' | <b>24.0" x 24.0" Horiz. GRATE</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                                         |
| #4     | Discarded | 549.00' | <b>10.000 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 530.00'                                                                                                                                   |

**Discarded OutFlow** Max=0.86 cfs @ 12.07 hrs HW=549.24' (Free Discharge)  
 ↳ **4=Exfiltration** ( Controls 0.86 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=549.00' (Free Discharge)  
 ↳ **1=RIP RAP WEIR** ( Controls 0.00 cfs)  
 ↳ **2=OUTLET STRUCTURE PIPE** ( Controls 0.00 cfs)  
 ↳ **3=GRATE** ( Controls 0.00 cfs)



**Pond 5P: INFILTRATION BASIN****Pond 5P: INFILTRATION BASIN**

**Pond 5P: INFILTRATION BASIN**

**Stage-Discharge for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) | Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) |
|---------------------|--------------------|--------------------|------------------|---------------------|--------------------|--------------------|------------------|
| 549.00              | 0.00               | 0.00               | 0.00             | 554.20              | 3.62               | 1.52               | 2.10             |
| 549.10              | 0.86               | 0.86               | 0.00             | 554.30              | 3.71               | 1.56               | 2.16             |
| 549.20              | 0.86               | 0.86               | 0.00             | 554.40              | 3.80               | 1.60               | 2.21             |
| 549.30              | 0.87               | 0.87               | 0.00             | 554.50              | 3.89               | 1.63               | 2.26             |
| 549.40              | 0.87               | 0.87               | 0.00             | 554.60              | 5.24               | 1.67               | 3.56             |
| 549.50              | 0.88               | 0.88               | 0.00             | 554.70              | 7.65               | 1.72               | 5.93             |
| 549.60              | 0.88               | 0.88               | 0.00             | 554.80              | 10.81              | 1.76               | 9.05             |
| 549.70              | 0.88               | 0.88               | 0.00             | 554.90              | 14.59              | 1.80               | 12.79            |
| 549.80              | 0.89               | 0.89               | 0.00             | 555.00              | 18.95              | 1.84               | 17.11            |
| 549.90              | 0.89               | 0.89               | 0.00             | 555.10              | 23.83              | 1.87               | 21.96            |
| 550.00              | 0.90               | 0.90               | 0.00             | 555.20              | 28.85              | 1.90               | 26.96            |
| 550.10              | 0.90               | 0.90               | 0.00             | 555.30              | 34.20              | 1.93               | 32.28            |
| 550.20              | 0.91               | 0.91               | 0.00             | 555.40              | 40.12              | 1.96               | 38.17            |
| 550.30              | 0.91               | 0.91               | 0.00             | 555.50              | 46.40              | 1.98               | 44.42            |
| 550.40              | 0.92               | 0.92               | 0.00             | 555.60              | 53.22              | 2.01               | 51.21            |
| 550.50              | 0.92               | 0.92               | 0.00             | 555.70              | 60.43              | 2.04               | 58.38            |
| 550.60              | 0.93               | 0.93               | 0.00             | 555.80              | 67.90              | 2.07               | 65.83            |
| 550.70              | 0.93               | 0.93               | 0.00             | 555.90              | 75.73              | 2.10               | 73.63            |
| 550.80              | 0.93               | 0.93               | 0.00             | 556.00              | <b>83.61</b>       | <b>2.13</b>        | <b>81.47</b>     |
| 550.90              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.00              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.10              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.20              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.30              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.40              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.50              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.60              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.70              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.80              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 551.90              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 552.00              | 0.99               | 0.99               | 0.00             |                     |                    |                    |                  |
| 552.10              | 1.01               | 1.01               | 0.00             |                     |                    |                    |                  |
| 552.20              | 1.03               | 1.03               | 0.00             |                     |                    |                    |                  |
| 552.30              | 1.05               | 1.05               | 0.00             |                     |                    |                    |                  |
| 552.40              | 1.07               | 1.07               | 0.00             |                     |                    |                    |                  |
| 552.50              | 1.09               | 1.09               | 0.00             |                     |                    |                    |                  |
| 552.60              | 1.12               | 1.12               | 0.00             |                     |                    |                    |                  |
| 552.70              | 1.14               | 1.14               | 0.00             |                     |                    |                    |                  |
| 552.80              | 1.16               | 1.16               | 0.00             |                     |                    |                    |                  |
| 552.90              | 1.18               | 1.18               | 0.00             |                     |                    |                    |                  |
| 553.00              | 1.20               | 1.20               | 0.00             |                     |                    |                    |                  |
| 553.10              | 1.23               | 1.23               | 0.00             |                     |                    |                    |                  |
| 553.20              | 1.25               | 1.25               | 0.00             |                     |                    |                    |                  |
| 553.30              | 1.27               | 1.27               | 0.00             |                     |                    |                    |                  |
| 553.40              | 1.30               | 1.30               | 0.00             |                     |                    |                    |                  |
| 553.50              | 1.32               | 1.32               | 0.00             |                     |                    |                    |                  |
| 553.60              | 1.35               | 1.35               | 0.00             |                     |                    |                    |                  |
| 553.70              | 1.37               | 1.37               | 0.00             |                     |                    |                    |                  |
| 553.80              | 1.69               | 1.39               | 0.29             |                     |                    |                    |                  |
| 553.90              | 2.94               | 1.42               | 1.52             |                     |                    |                    |                  |
| 554.00              | 3.44               | 1.44               | 1.99             |                     |                    |                    |                  |
| 554.10              | 3.53               | 1.48               | 2.05             |                     |                    |                    |                  |



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Type II 24-hr 1-YEAR Rainfall=1.86"

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Page 16

**Stage-Area-Storage for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) | Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 549.00              | 3,687              | 0                       | 554.20              | 5,473              | 16,551                  |
| 549.10              | 3,687              | 147                     | 554.30              | 5,612              | 17,105                  |
| 549.20              | 3,687              | 295                     | 554.40              | 5,752              | 17,673                  |
| 549.30              | 3,687              | 442                     | 554.50              | 5,894              | 18,256                  |
| 549.40              | 3,687              | 590                     | 554.60              | 6,038              | 18,852                  |
| 549.50              | 3,687              | 737                     | 554.70              | 6,184              | 19,463                  |
| 549.60              | 3,687              | 885                     | 554.80              | 6,331              | 20,089                  |
| 549.70              | 3,687              | 1,032                   | 554.90              | 6,480              | 20,730                  |
| 549.80              | 3,687              | 1,180                   | 555.00              | 6,631              | 21,385                  |
| 549.90              | 3,687              | 1,327                   | 555.10              | 6,722              | 22,053                  |
| 550.00              | 3,687              | 1,475                   | 555.20              | 6,813              | 22,730                  |
| 550.10              | 3,687              | 1,622                   | 555.30              | 6,905              | 23,416                  |
| 550.20              | 3,687              | 1,770                   | 555.40              | 6,997              | 24,111                  |
| 550.30              | 3,687              | 1,917                   | 555.50              | 7,090              | 24,815                  |
| 550.40              | 3,687              | 2,065                   | 555.60              | 7,184              | 25,529                  |
| 550.50              | 3,687              | 2,212                   | 555.70              | 7,278              | 26,252                  |
| 550.60              | 3,687              | 2,360                   | 555.80              | 7,373              | 26,984                  |
| 550.70              | 3,687              | 2,507                   | 555.90              | 7,469              | 27,727                  |
| 550.80              | 3,687              | 2,655                   | 556.00              | <b>7,565</b>       | <b>28,478</b>           |
| 550.90              | 3,687              | 2,802                   |                     |                    |                         |
| 551.00              | 3,687              | 2,950                   |                     |                    |                         |
| 551.10              | 3,687              | 3,318                   |                     |                    |                         |
| 551.20              | 3,687              | 3,687                   |                     |                    |                         |
| 551.30              | 3,687              | 4,056                   |                     |                    |                         |
| 551.40              | 3,687              | 4,424                   |                     |                    |                         |
| 551.50              | 3,687              | 4,793                   |                     |                    |                         |
| 551.60              | 3,687              | 5,162                   |                     |                    |                         |
| 551.70              | 3,687              | 5,531                   |                     |                    |                         |
| 551.80              | 3,687              | 5,899                   |                     |                    |                         |
| 551.90              | 3,687              | 6,268                   |                     |                    |                         |
| 552.00              | 3,687              | 6,637                   |                     |                    |                         |
| 552.10              | 3,757              | 7,009                   |                     |                    |                         |
| 552.20              | 3,827              | 7,388                   |                     |                    |                         |
| 552.30              | 3,898              | 7,774                   |                     |                    |                         |
| 552.40              | 3,970              | 8,168                   |                     |                    |                         |
| 552.50              | 4,042              | 8,568                   |                     |                    |                         |
| 552.60              | 4,115              | 8,976                   |                     |                    |                         |
| 552.70              | 4,189              | 9,391                   |                     |                    |                         |
| 552.80              | 4,263              | 9,814                   |                     |                    |                         |
| 552.90              | 4,338              | 10,244                  |                     |                    |                         |
| 553.00              | 4,414              | 10,682                  |                     |                    |                         |
| 553.10              | 4,490              | 11,127                  |                     |                    |                         |
| 553.20              | 4,566              | 11,580                  |                     |                    |                         |
| 553.30              | 4,643              | 12,040                  |                     |                    |                         |
| 553.40              | 4,721              | 12,508                  |                     |                    |                         |
| 553.50              | 4,799              | 12,984                  |                     |                    |                         |
| 553.60              | 4,878              | 13,468                  |                     |                    |                         |
| 553.70              | 4,958              | 13,960                  |                     |                    |                         |
| 553.80              | 5,038              | 14,460                  |                     |                    |                         |
| 553.90              | 5,119              | 14,968                  |                     |                    |                         |
| 554.00              | 5,201              | 15,484                  |                     |                    |                         |
| 554.10              | 5,336              | 16,011                  |                     |                    |                         |

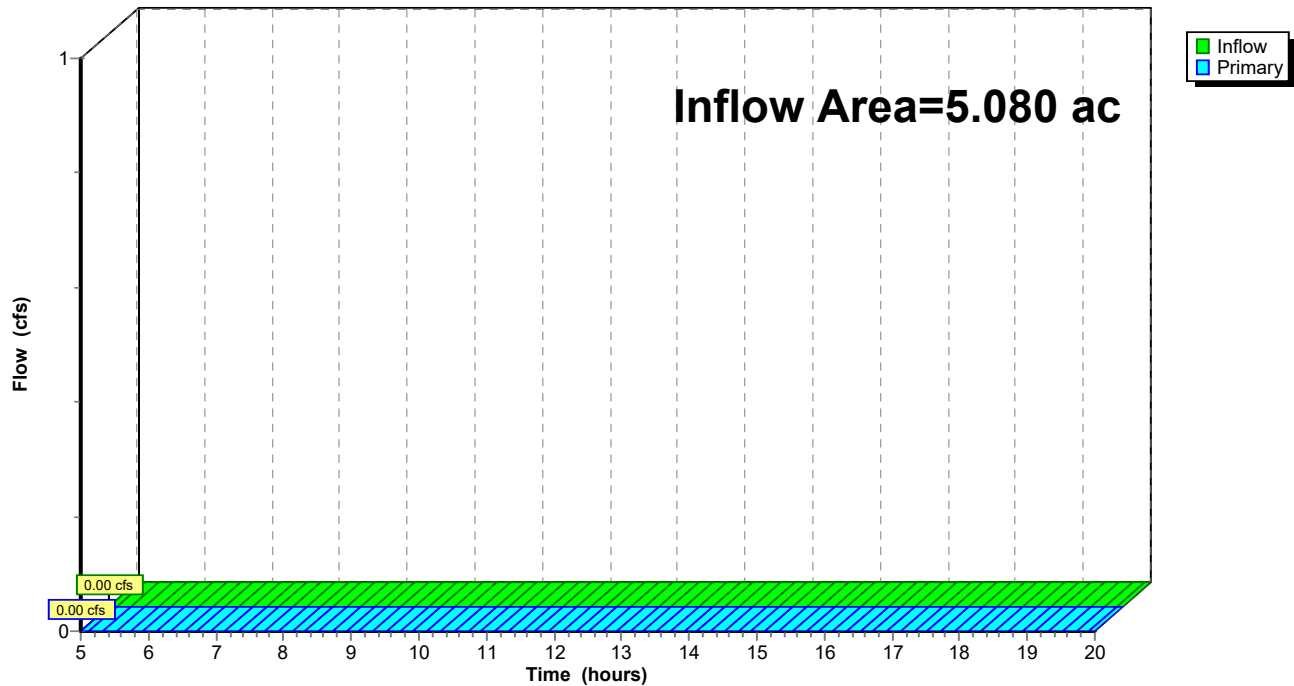
**Summary for Link 9L: TOTAL PR**

Inflow Area = 5.080 ac, 34.25% Impervious, Inflow Depth = 0.00" for 1-YEAR event  
Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 9L: TOTAL PR**

Hydrograph



**Fairfield***Type II 24-hr 10-YEAR Rainfall=3.12"*

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Page 18

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1: EX-1**

Runoff Area=5.080 ac 0.00% Impervious Runoff Depth>0.02"  
Flow Length=1,038' Tc=32.6 min CN=45 Runoff=0.02 cfs 0.008 af

**Subcatchment3S: PR-1**

Runoff Area=2.730 ac 63.74% Impervious Runoff Depth>1.05"  
Flow Length=582' Tc=6.0 min CN=77 Runoff=5.48 cfs 0.239 af

**Subcatchment4S: PR-2**

Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>0.02"  
Flow Length=1,048' Tc=32.9 min CN=45 Runoff=0.01 cfs 0.004 af

**Pond 5P: INFILTRATIONBASIN**

Peak Elev=551.07' Storage=3,198 cf Inflow=5.48 cfs 0.239 af  
Discarded=0.95 cfs 0.238 af Primary=0.00 cfs 0.000 af Outflow=0.95 cfs 0.238 af

**Link 9L: TOTAL PR**

Inflow=0.01 cfs 0.004 af  
Primary=0.01 cfs 0.004 af

**Total Runoff Area = 10.160 ac Runoff Volume = 0.251 af Average Runoff Depth = 0.30"**  
**82.87% Pervious = 8.420 ac 17.13% Impervious = 1.740 ac**



**Summary for Subcatchment 1: EX-1**

Runoff = 0.02 cfs @ 18.30 hrs, Volume= 0.008 af, Depth> 0.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 10-YEAR Rainfall=3.12"

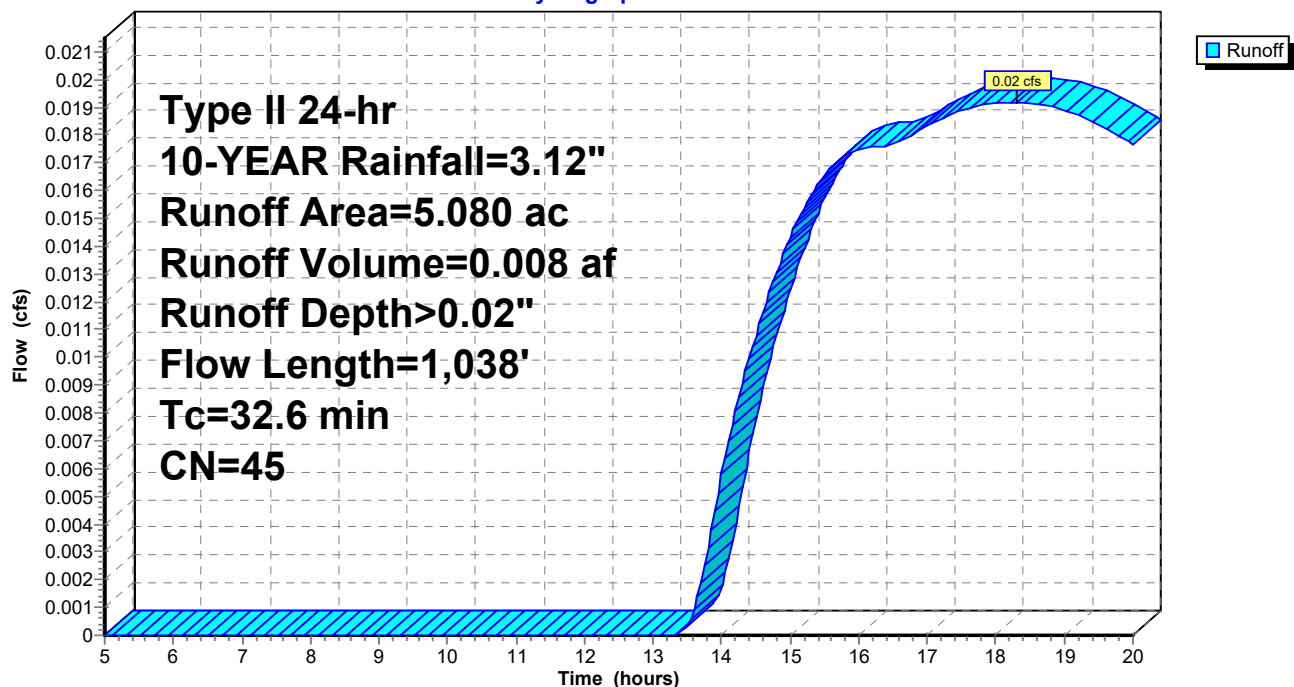
| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 5.080     | 45 | Woods, Poor, HSG A    |
| 5.080     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                                 |
|----------|---------------|---------------|-------------------|----------------|-----------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET FLOW</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.5      | 215           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SHF 1</b><br>Woodland Kv= 5.0 fps             |
| 6.7      | 410           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps             |
| 4.9      | 313           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow, SCF 3</b><br>Woodland Kv= 5.0 fps             |
| 32.6     | 1,038         | Total         |                   |                |                                                                             |

**Subcatchment 1: EX-1**

Hydrograph



**Summary for Subcatchment 3S: PR-1**

[47] Hint: Peak is 201% of capacity of segment #5

Runoff = 5.48 cfs @ 11.98 hrs, Volume= 0.239 af, Depth> 1.05"  
 Routed to Pond 5P : INFILTRATION BASIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-YEAR Rainfall=3.12"

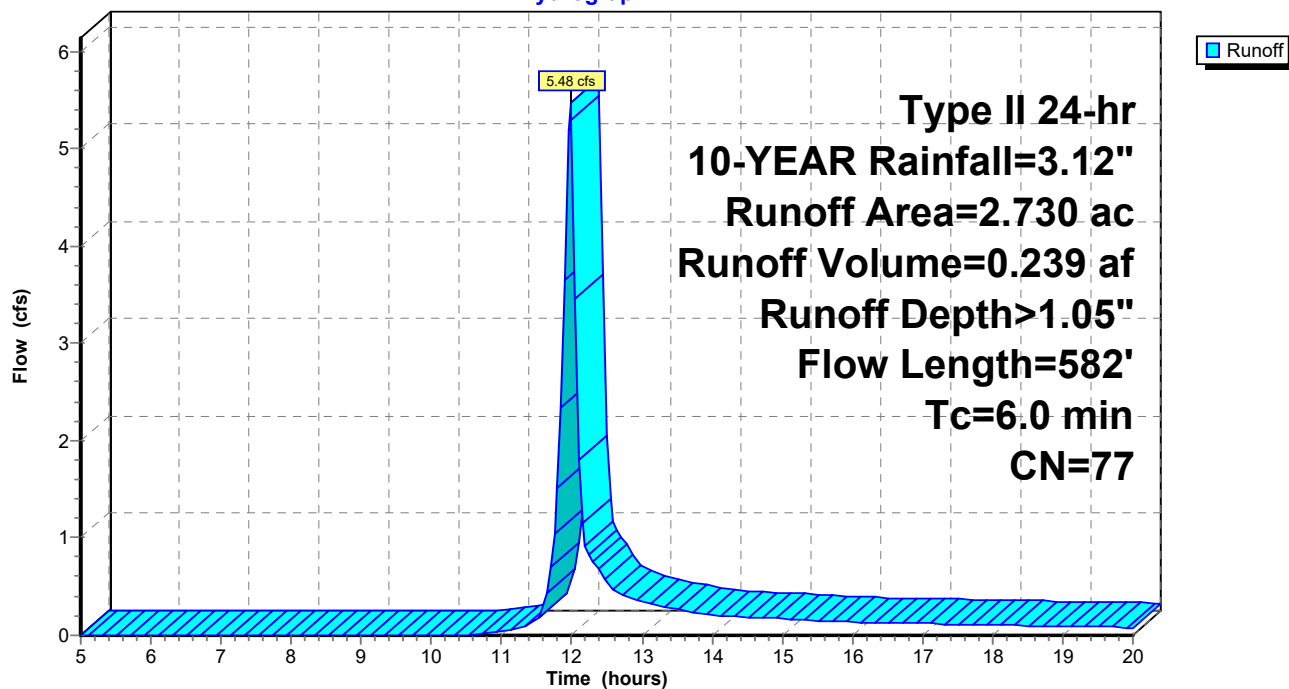
| Area (ac) | CN | Description                   |
|-----------|----|-------------------------------|
| 1.740     | 98 | Paved parking, HSG A          |
| 0.990     | 39 | >75% Grass cover, Good, HSG A |
| 2.730     | 77 | Weighted Average              |
| 0.990     |    | 36.26% Pervious Area          |
| 1.740     |    | 63.74% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft)                            | Velocity (ft/sec) | Capacity (cfs) | Description                                                                                                                     |
|----------|---------------|------------------------------------------|-------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1.0      | 100           | 0.0500                                   | 1.63              |                | <b>Sheet Flow, SHEET FLOW PAVEMENT</b><br>Smooth surfaces n= 0.011 P2= 2.17"                                                    |
| 0.2      | 55            | 0.0500                                   | 4.54              |                | <b>Shallow Concentrated Flow, SCF PAVEMENT</b><br>Paved Kv= 20.3 fps                                                            |
| 0.1      | 46            | 0.0883                                   | 14.02             | 5.51           | <b>Pipe Channel, PIPE</b><br>12.0" Round w/ 6.0" inside fill Area= 0.4 sf Perim= 2.6' r= 0.15'<br>n= 0.009 PVC, smooth interior |
| 0.1      | 60            | 0.0248                                   | 9.74              | 8.60           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 1.2      | 224           | 0.0025                                   | 3.09              | 2.73           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 0.2      | 97            | 0.0272                                   | 10.20             | 9.01           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 2.8      | 582           | Total, Increased to minimum Tc = 6.0 min |                   |                |                                                                                                                                 |

## Subcatchment 3S: PR-1

Hydrograph



**Fairfield**

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Type II 24-hr 10-YEAR Rainfall=3.12"

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Page 22

**Summary for Subcatchment 4S: PR-2**

Runoff = 0.01 cfs @ 18.26 hrs, Volume= 0.004 af, Depth> 0.02"  
Routed to Link 9L : TOTAL PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 10-YEAR Rainfall=3.12"

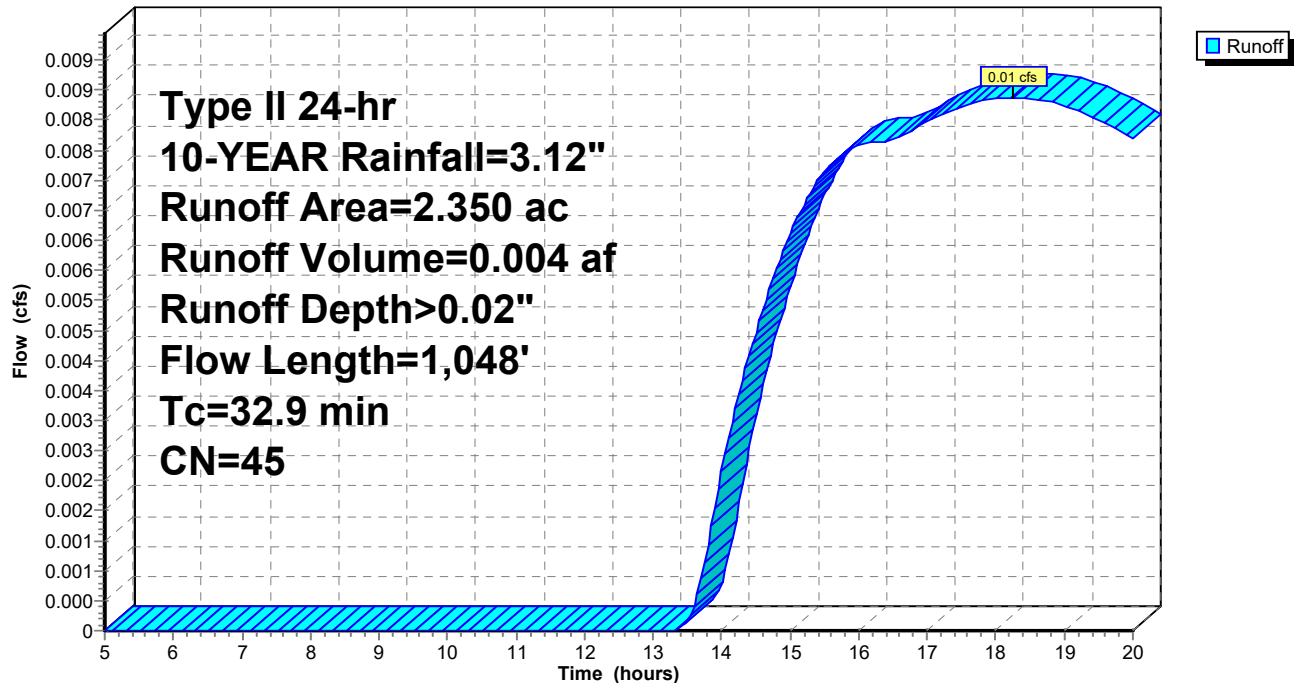
| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 2.350     | 45 | Woods, Poor, HSG A    |
| 2.350     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                            |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.7      | 225           | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow, SCF 1</b><br>Woodland Kv= 5.0 fps        |
| 7.2      | 447           | 0.0430        | 1.04              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps        |
| 4.4      | 276           | 0.0440        | 1.05              |                | <b>Shallow Concentrated Flow, SCF3</b><br>Woodland Kv= 5.0 fps         |
| 32.9     | 1,048         | Total         |                   |                |                                                                        |

**Subcatchment 4S: PR-2**

Hydrograph





**Summary for Pond 5P: INFILTRATION BASIN**

Inflow Area = 2.730 ac, 63.74% Impervious, Inflow Depth > 1.05" for 10-YEAR event  
 Inflow = 5.48 cfs @ 11.98 hrs, Volume= 0.239 af  
 Outflow = 0.95 cfs @ 12.20 hrs, Volume= 0.238 af, Atten= 83%, Lag= 13.5 min  
 Discarded = 0.95 cfs @ 12.20 hrs, Volume= 0.238 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 9L : TOTAL PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 551.07' @ 12.20 hrs Surf.Area= 3,687 sf Storage= 3,198 cf

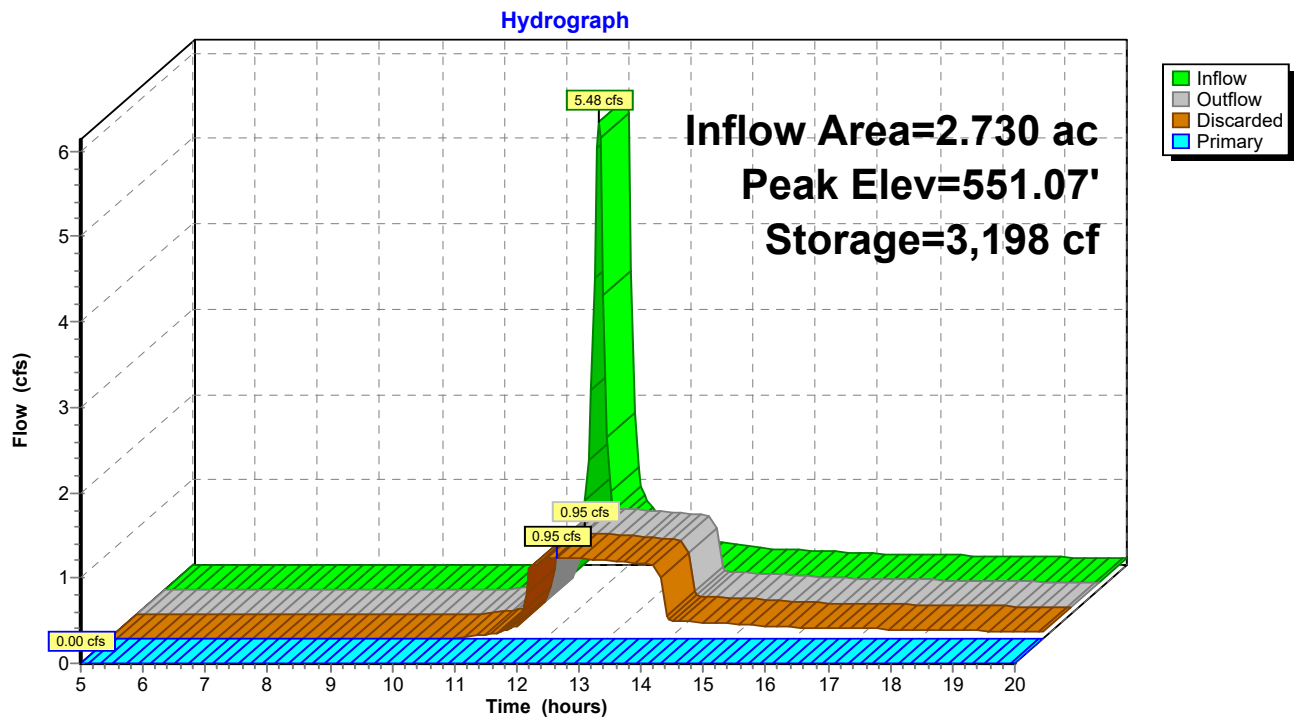
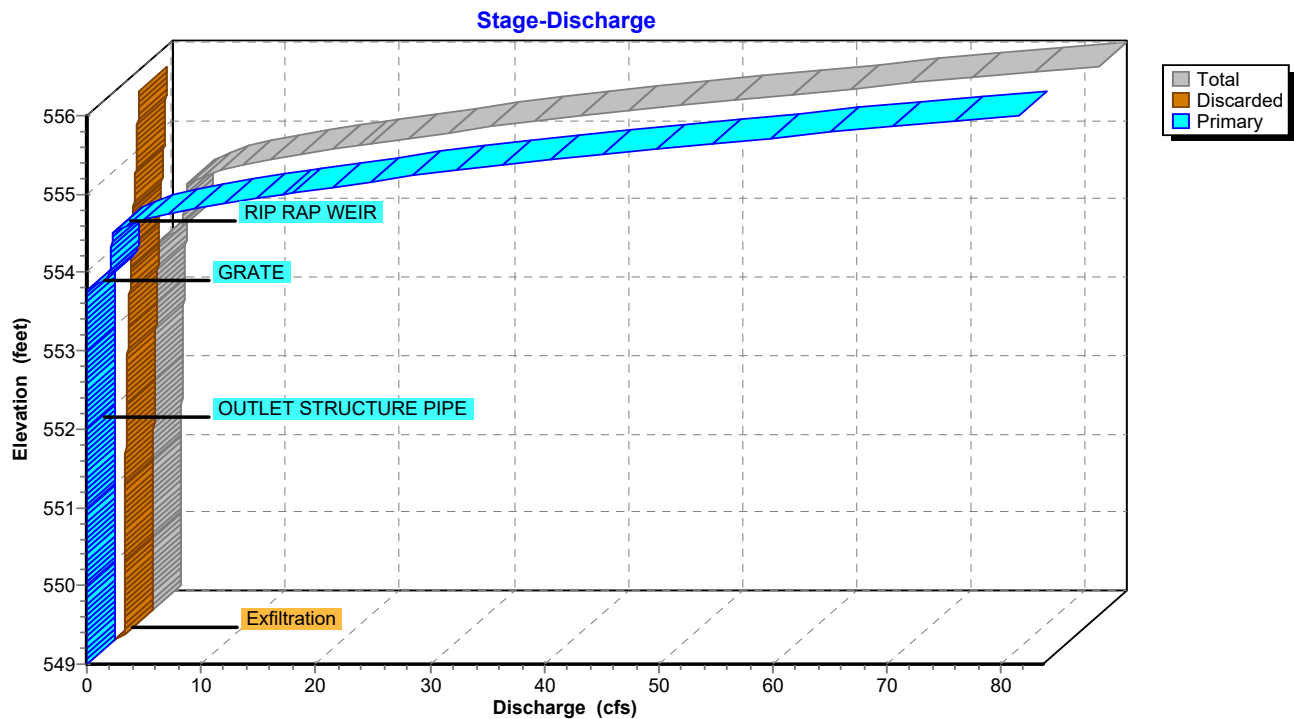
Plug-Flow detention time= 23.3 min calculated for 0.238 af (100% of inflow)  
 Center-of-Mass det. time= 22.9 min ( 825.6 - 802.7 )

| Volume              | Invert               | Avail.Storage | Storage Description                                    |                           |                     |
|---------------------|----------------------|---------------|--------------------------------------------------------|---------------------------|---------------------|
| #1                  | 549.00'              | 28,478 cf     | <b>Custom Stage Data (Conic)</b> Listed below (Recalc) |                           |                     |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Voids<br>(%)  | Inc.Store<br>(cubic-feet)                              | Cum.Store<br>(cubic-feet) | Wet.Area<br>(sq-ft) |
| 549.00              | 3,687                | 0.0           | 0                                                      | 0                         | 3,687               |
| 550.00              | 3,687                | 40.0          | 1,475                                                  | 1,475                     | 3,902               |
| 551.00              | 3,687                | 40.0          | 1,475                                                  | 2,950                     | 4,117               |
| 552.00              | 3,687                | 100.0         | 3,687                                                  | 6,637                     | 4,333               |
| 553.00              | 4,414                | 100.0         | 4,045                                                  | 10,682                    | 5,094               |
| 554.00              | 5,201                | 100.0         | 4,802                                                  | 15,484                    | 5,918               |
| 555.00              | 6,631                | 100.0         | 5,902                                                  | 21,385                    | 7,374               |
| 556.00              | 7,565                | 100.0         | 7,093                                                  | 28,478                    | 8,355               |

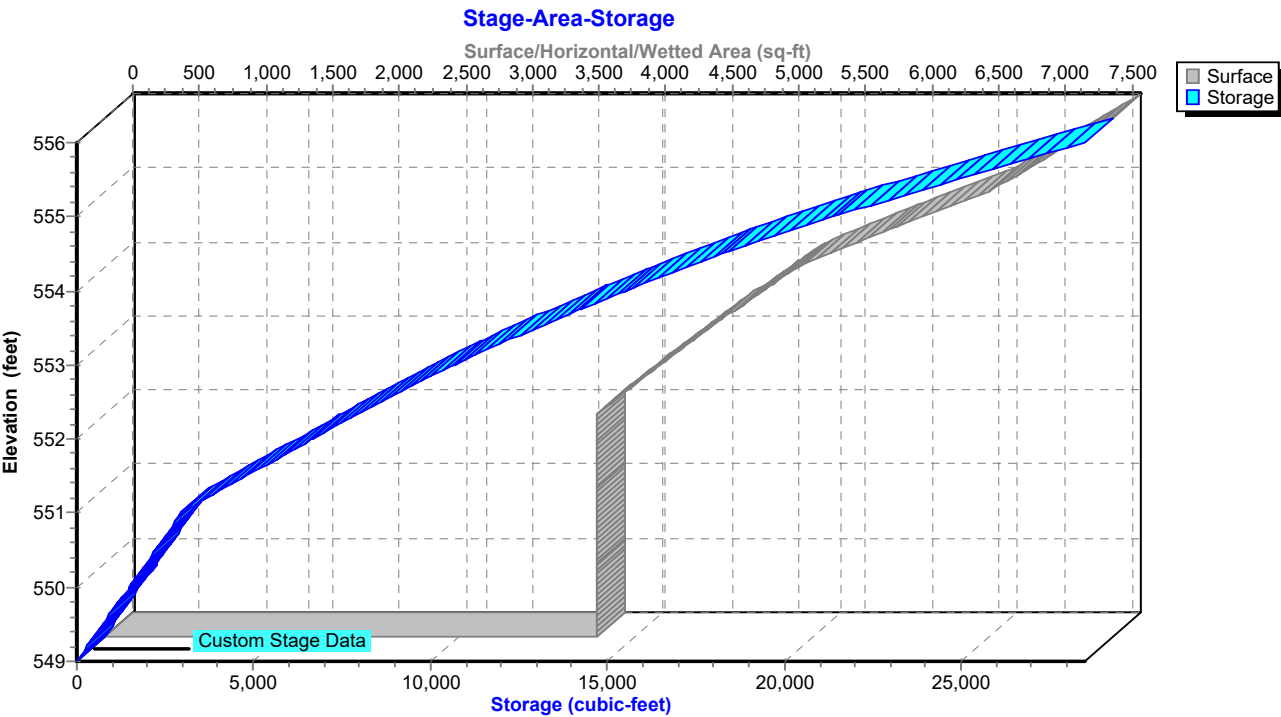
| Device | Routing   | Invert  | Outlet Devices                                                                                                                                                                                                                            |
|--------|-----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary   | 554.50' | <b>15.0' long + 1.0 ' SideZ x 14.0' breadth RIP RAP WEIR</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63                                                            |
| #2     | Primary   | 552.00' | <b>12.0" Round OUTLET STRUCTURE PIPE w/ 6.0" inside fill</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 '/' Cc= 0.900<br>n= 0.009 PVC, smooth interior, Flow Area= 0.39 sf |
| #3     | Device 2  | 553.75' | <b>24.0" x 24.0" Horiz. GRATE</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                                           |
| #4     | Discarded | 549.00' | <b>10.000 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 530.00'                                                                                                                                     |

**Discarded OutFlow** Max=0.95 cfs @ 12.20 hrs HW=551.07' (Free Discharge)  
 ↑4=Exfiltration ( Controls 0.95 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=549.00' (Free Discharge)  
 ↑1=RIP RAP WEIR ( Controls 0.00 cfs)  
 ↑2=OUTLET STRUCTURE PIPE ( Controls 0.00 cfs)  
 ↑3=GRATE ( Controls 0.00 cfs)

**Pond 5P: INFILTRATION BASIN****Pond 5P: INFILTRATION BASIN**

Pond 5P: INFILTRATION BASIN



**Fairfield**

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Type II 24-hr 10-YEAR Rainfall=3.12"

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Page 26

**Stage-Discharge for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) | Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) |
|---------------------|--------------------|--------------------|------------------|---------------------|--------------------|--------------------|------------------|
| 549.00              | 0.00               | 0.00               | 0.00             | 554.20              | 3.62               | 1.52               | 2.10             |
| 549.10              | 0.86               | 0.86               | 0.00             | 554.30              | 3.71               | 1.56               | 2.16             |
| 549.20              | 0.86               | 0.86               | 0.00             | 554.40              | 3.80               | 1.60               | 2.21             |
| 549.30              | 0.87               | 0.87               | 0.00             | 554.50              | 3.89               | 1.63               | 2.26             |
| 549.40              | 0.87               | 0.87               | 0.00             | 554.60              | 5.24               | 1.67               | 3.56             |
| 549.50              | 0.88               | 0.88               | 0.00             | 554.70              | 7.65               | 1.72               | 5.93             |
| 549.60              | 0.88               | 0.88               | 0.00             | 554.80              | 10.81              | 1.76               | 9.05             |
| 549.70              | 0.88               | 0.88               | 0.00             | 554.90              | 14.59              | 1.80               | 12.79            |
| 549.80              | 0.89               | 0.89               | 0.00             | 555.00              | 18.95              | 1.84               | 17.11            |
| 549.90              | 0.89               | 0.89               | 0.00             | 555.10              | 23.83              | 1.87               | 21.96            |
| 550.00              | 0.90               | 0.90               | 0.00             | 555.20              | 28.85              | 1.90               | 26.96            |
| 550.10              | 0.90               | 0.90               | 0.00             | 555.30              | 34.20              | 1.93               | 32.28            |
| 550.20              | 0.91               | 0.91               | 0.00             | 555.40              | 40.12              | 1.96               | 38.17            |
| 550.30              | 0.91               | 0.91               | 0.00             | 555.50              | 46.40              | 1.98               | 44.42            |
| 550.40              | 0.92               | 0.92               | 0.00             | 555.60              | 53.22              | 2.01               | 51.21            |
| 550.50              | 0.92               | 0.92               | 0.00             | 555.70              | 60.43              | 2.04               | 58.38            |
| 550.60              | 0.93               | 0.93               | 0.00             | 555.80              | 67.90              | 2.07               | 65.83            |
| 550.70              | 0.93               | 0.93               | 0.00             | 555.90              | 75.73              | 2.10               | 73.63            |
| 550.80              | 0.93               | 0.93               | 0.00             | 556.00              | <b>83.61</b>       | <b>2.13</b>        | <b>81.47</b>     |
| 550.90              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.00              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.10              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.20              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.30              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.40              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.50              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.60              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.70              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.80              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 551.90              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 552.00              | 0.99               | 0.99               | 0.00             |                     |                    |                    |                  |
| 552.10              | 1.01               | 1.01               | 0.00             |                     |                    |                    |                  |
| 552.20              | 1.03               | 1.03               | 0.00             |                     |                    |                    |                  |
| 552.30              | 1.05               | 1.05               | 0.00             |                     |                    |                    |                  |
| 552.40              | 1.07               | 1.07               | 0.00             |                     |                    |                    |                  |
| 552.50              | 1.09               | 1.09               | 0.00             |                     |                    |                    |                  |
| 552.60              | 1.12               | 1.12               | 0.00             |                     |                    |                    |                  |
| 552.70              | 1.14               | 1.14               | 0.00             |                     |                    |                    |                  |
| 552.80              | 1.16               | 1.16               | 0.00             |                     |                    |                    |                  |
| 552.90              | 1.18               | 1.18               | 0.00             |                     |                    |                    |                  |
| 553.00              | 1.20               | 1.20               | 0.00             |                     |                    |                    |                  |
| 553.10              | 1.23               | 1.23               | 0.00             |                     |                    |                    |                  |
| 553.20              | 1.25               | 1.25               | 0.00             |                     |                    |                    |                  |
| 553.30              | 1.27               | 1.27               | 0.00             |                     |                    |                    |                  |
| 553.40              | 1.30               | 1.30               | 0.00             |                     |                    |                    |                  |
| 553.50              | 1.32               | 1.32               | 0.00             |                     |                    |                    |                  |
| 553.60              | 1.35               | 1.35               | 0.00             |                     |                    |                    |                  |
| 553.70              | 1.37               | 1.37               | 0.00             |                     |                    |                    |                  |
| 553.80              | 1.69               | 1.39               | 0.29             |                     |                    |                    |                  |
| 553.90              | 2.94               | 1.42               | 1.52             |                     |                    |                    |                  |
| 554.00              | 3.44               | 1.44               | 1.99             |                     |                    |                    |                  |
| 554.10              | 3.53               | 1.48               | 2.05             |                     |                    |                    |                  |



**Stage-Area-Storage for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) | Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 549.00              | 3,687              | 0                       | 554.20              | 5,473              | 16,551                  |
| 549.10              | 3,687              | 147                     | 554.30              | 5,612              | 17,105                  |
| 549.20              | 3,687              | 295                     | 554.40              | 5,752              | 17,673                  |
| 549.30              | 3,687              | 442                     | 554.50              | 5,894              | 18,256                  |
| 549.40              | 3,687              | 590                     | 554.60              | 6,038              | 18,852                  |
| 549.50              | 3,687              | 737                     | 554.70              | 6,184              | 19,463                  |
| 549.60              | 3,687              | 885                     | 554.80              | 6,331              | 20,089                  |
| 549.70              | 3,687              | 1,032                   | 554.90              | 6,480              | 20,730                  |
| 549.80              | 3,687              | 1,180                   | 555.00              | 6,631              | 21,385                  |
| 549.90              | 3,687              | 1,327                   | 555.10              | 6,722              | 22,053                  |
| 550.00              | 3,687              | 1,475                   | 555.20              | 6,813              | 22,730                  |
| 550.10              | 3,687              | 1,622                   | 555.30              | 6,905              | 23,416                  |
| 550.20              | 3,687              | 1,770                   | 555.40              | 6,997              | 24,111                  |
| 550.30              | 3,687              | 1,917                   | 555.50              | 7,090              | 24,815                  |
| 550.40              | 3,687              | 2,065                   | 555.60              | 7,184              | 25,529                  |
| 550.50              | 3,687              | 2,212                   | 555.70              | 7,278              | 26,252                  |
| 550.60              | 3,687              | 2,360                   | 555.80              | 7,373              | 26,984                  |
| 550.70              | 3,687              | 2,507                   | 555.90              | 7,469              | 27,727                  |
| 550.80              | 3,687              | 2,655                   | 556.00              | <b>7,565</b>       | <b>28,478</b>           |
| 550.90              | 3,687              | 2,802                   |                     |                    |                         |
| 551.00              | 3,687              | 2,950                   |                     |                    |                         |
| 551.10              | 3,687              | 3,318                   |                     |                    |                         |
| 551.20              | 3,687              | 3,687                   |                     |                    |                         |
| 551.30              | 3,687              | 4,056                   |                     |                    |                         |
| 551.40              | 3,687              | 4,424                   |                     |                    |                         |
| 551.50              | 3,687              | 4,793                   |                     |                    |                         |
| 551.60              | 3,687              | 5,162                   |                     |                    |                         |
| 551.70              | 3,687              | 5,531                   |                     |                    |                         |
| 551.80              | 3,687              | 5,899                   |                     |                    |                         |
| 551.90              | 3,687              | 6,268                   |                     |                    |                         |
| 552.00              | 3,687              | 6,637                   |                     |                    |                         |
| 552.10              | 3,757              | 7,009                   |                     |                    |                         |
| 552.20              | 3,827              | 7,388                   |                     |                    |                         |
| 552.30              | 3,898              | 7,774                   |                     |                    |                         |
| 552.40              | 3,970              | 8,168                   |                     |                    |                         |
| 552.50              | 4,042              | 8,568                   |                     |                    |                         |
| 552.60              | 4,115              | 8,976                   |                     |                    |                         |
| 552.70              | 4,189              | 9,391                   |                     |                    |                         |
| 552.80              | 4,263              | 9,814                   |                     |                    |                         |
| 552.90              | 4,338              | 10,244                  |                     |                    |                         |
| 553.00              | 4,414              | 10,682                  |                     |                    |                         |
| 553.10              | 4,490              | 11,127                  |                     |                    |                         |
| 553.20              | 4,566              | 11,580                  |                     |                    |                         |
| 553.30              | 4,643              | 12,040                  |                     |                    |                         |
| 553.40              | 4,721              | 12,508                  |                     |                    |                         |
| 553.50              | 4,799              | 12,984                  |                     |                    |                         |
| 553.60              | 4,878              | 13,468                  |                     |                    |                         |
| 553.70              | 4,958              | 13,960                  |                     |                    |                         |
| 553.80              | 5,038              | 14,460                  |                     |                    |                         |
| 553.90              | 5,119              | 14,968                  |                     |                    |                         |
| 554.00              | 5,201              | 15,484                  |                     |                    |                         |
| 554.10              | 5,336              | 16,011                  |                     |                    |                         |

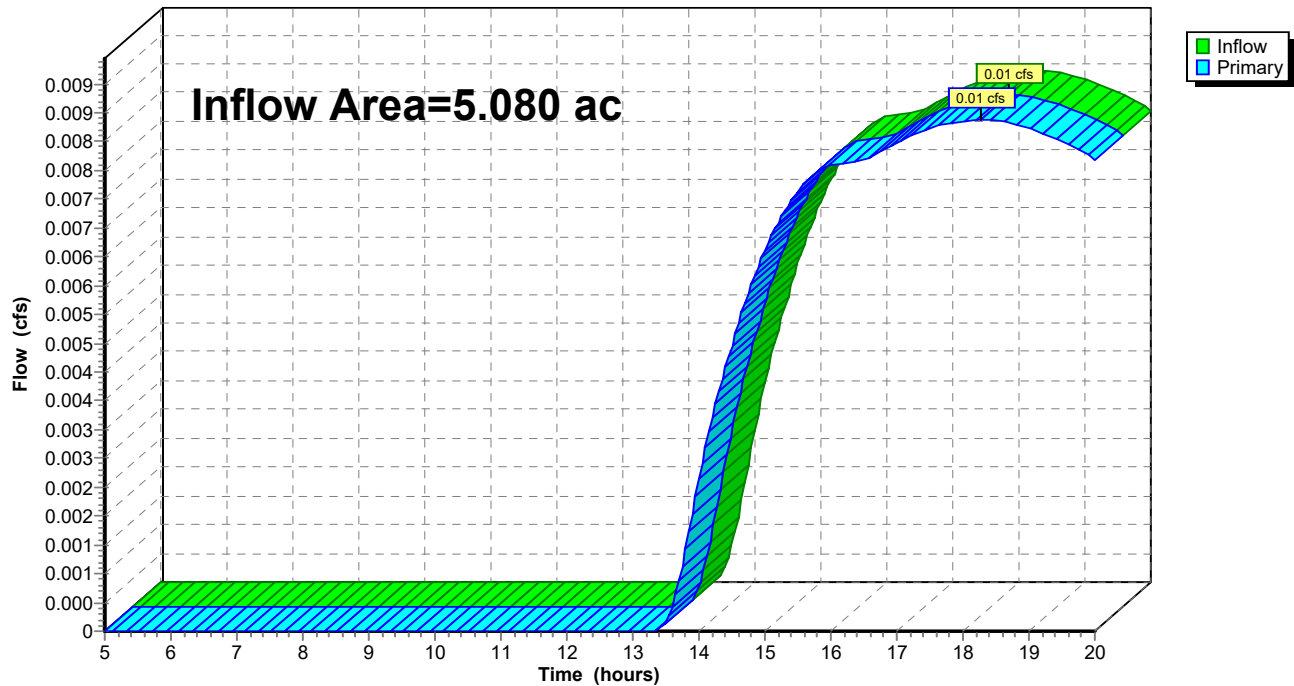
**Summary for Link 9L: TOTAL PR**

Inflow Area = 5.080 ac, 34.25% Impervious, Inflow Depth > 0.01" for 10-YEAR event

Inflow = 0.01 cfs @ 18.26 hrs, Volume= 0.004 af

Primary = 0.01 cfs @ 18.26 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 9L: TOTAL PR****Hydrograph**

**Fairfield***Type II 24-hr 100-YEAR Rainfall=5.26"*

Prepared by Passero Associates

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Page 29

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment1: EX-1**

Runoff Area=5.080 ac 0.00% Impervious Runoff Depth>0.43"  
Flow Length=1,038' Tc=32.6 min CN=45 Runoff=1.08 cfs 0.183 af

**Subcatchment3S: PR-1**

Runoff Area=2.730 ac 63.74% Impervious Runoff Depth>2.63"  
Flow Length=582' Tc=6.0 min CN=77 Runoff=13.30 cfs 0.597 af

**Subcatchment4S: PR-2**

Runoff Area=2.350 ac 0.00% Impervious Runoff Depth>0.43"  
Flow Length=1,048' Tc=32.9 min CN=45 Runoff=0.50 cfs 0.085 af

**Pond 5P: INFILTRATIONBASIN**

Peak Elev=553.10' Storage=11,105 cf Inflow=13.30 cfs 0.597 af  
Discarded=1.23 cfs 0.597 af Primary=0.00 cfs 0.000 af Outflow=1.23 cfs 0.597 af

**Link 9L: TOTAL PR**

Inflow=0.50 cfs 0.085 af  
Primary=0.50 cfs 0.085 af

**Total Runoff Area = 10.160 ac Runoff Volume = 0.866 af Average Runoff Depth = 1.02"**  
**82.87% Pervious = 8.420 ac 17.13% Impervious = 1.740 ac**

**Fairfield**

Prepared by Passero Associates

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Type II 24-hr 100-YEAR Rainfall=5.26"

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Page 30

**Summary for Subcatchment 1: EX-1**

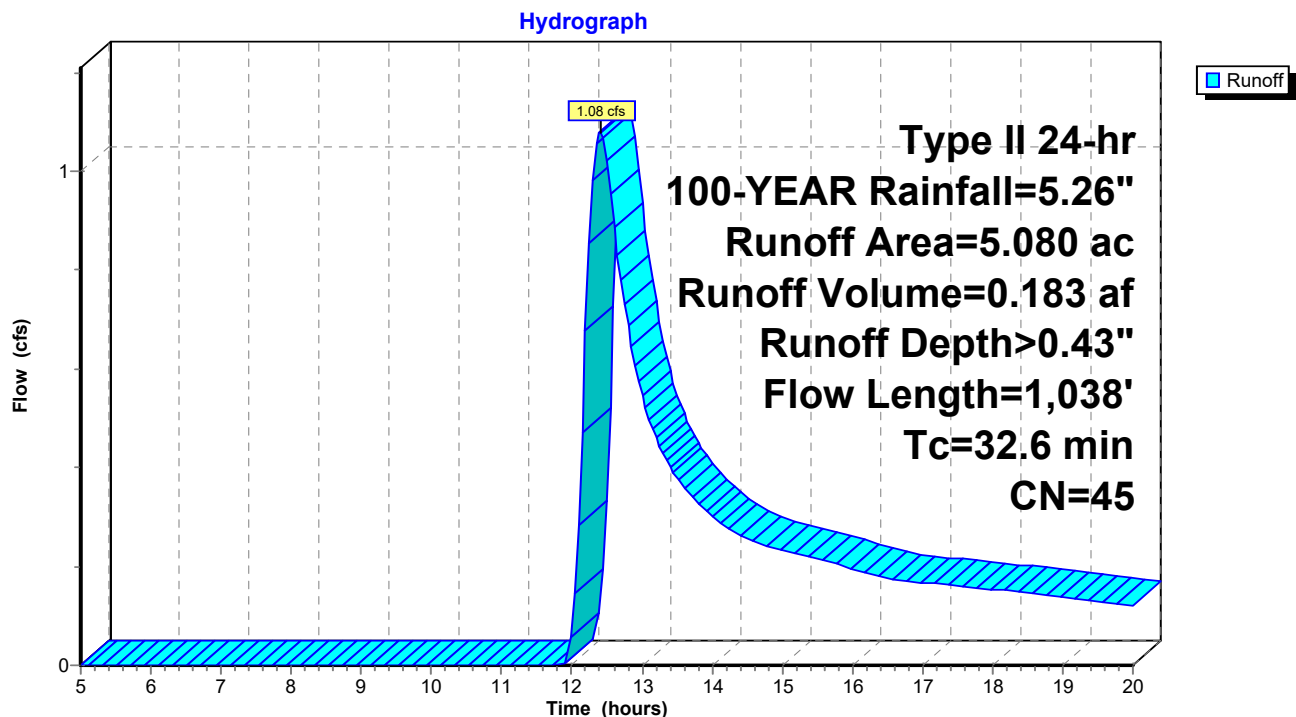
Runoff = 1.08 cfs @ 12.41 hrs, Volume= 0.183 af, Depth&gt; 0.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 100-YEAR Rainfall=5.26"

| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 5.080     | 45 | Woods, Poor, HSG A    |
| 5.080     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                                 |
|----------|---------------|---------------|-------------------|----------------|-----------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET FLOW</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.5      | 215           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SHF 1</b><br>Woodland Kv= 5.0 fps             |
| 6.7      | 410           | 0.0410        | 1.01              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps             |
| 4.9      | 313           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow, SCF 3</b><br>Woodland Kv= 5.0 fps             |
| 32.6     | 1,038         | Total         |                   |                |                                                                             |

**Subcatchment 1: EX-1**



**Summary for Subcatchment 3S: PR-1**

[47] Hint: Peak is 242% of capacity of segment #3

[47] Hint: Peak is 155% of capacity of segment #4

[47] Hint: Peak is 487% of capacity of segment #5

[47] Hint: Peak is 148% of capacity of segment #6

Runoff = 13.30 cfs @ 11.97 hrs, Volume= 0.597 af, Depth> 2.63"  
 Routed to Pond 5P : INFILTRATION BASIN

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-YEAR Rainfall=5.26"

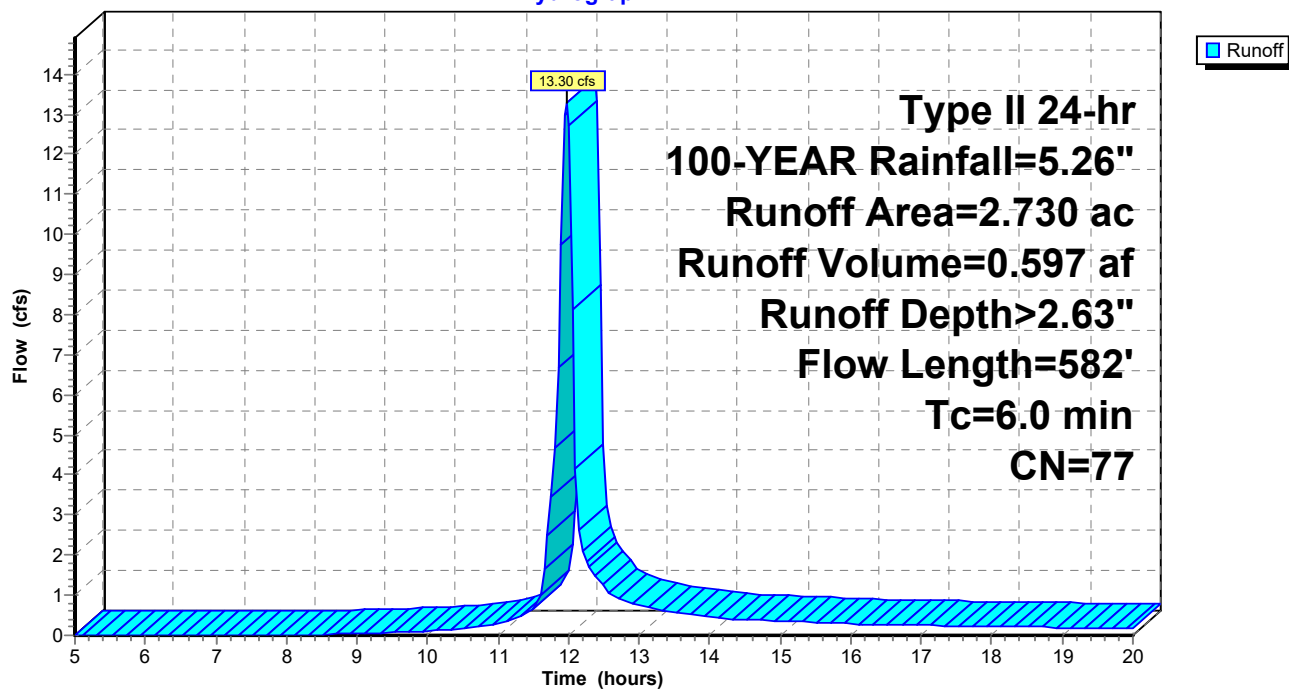
| Area (ac) | CN | Description                   |
|-----------|----|-------------------------------|
| 1.740     | 98 | Paved parking, HSG A          |
| 0.990     | 39 | >75% Grass cover, Good, HSG A |
| 2.730     | 77 | Weighted Average              |
| 0.990     |    | 36.26% Pervious Area          |
| 1.740     |    | 63.74% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft)                            | Velocity (ft/sec) | Capacity (cfs) | Description                                                                                                                     |
|----------|---------------|------------------------------------------|-------------------|----------------|---------------------------------------------------------------------------------------------------------------------------------|
| 1.0      | 100           | 0.0500                                   | 1.63              |                | <b>Sheet Flow, SHEET FLOW PAVEMENT</b><br>Smooth surfaces n= 0.011 P2= 2.17"                                                    |
| 0.2      | 55            | 0.0500                                   | 4.54              |                | <b>Shallow Concentrated Flow, SCF PAVEMENT</b><br>Paved Kv= 20.3 fps                                                            |
| 0.1      | 46            | 0.0883                                   | 14.02             | 5.51           | <b>Pipe Channel, PIPE</b><br>12.0" Round w/ 6.0" inside fill Area= 0.4 sf Perim= 2.6' r= 0.15'<br>n= 0.009 PVC, smooth interior |
| 0.1      | 60            | 0.0248                                   | 9.74              | 8.60           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 1.2      | 224           | 0.0025                                   | 3.09              | 2.73           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 0.2      | 97            | 0.0272                                   | 10.20             | 9.01           | <b>Pipe Channel, PIPE</b><br>18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23'<br>n= 0.009 PVC, smooth interior |
| 2.8      | 582           | Total, Increased to minimum Tc = 6.0 min |                   |                |                                                                                                                                 |

## Subcatchment 3S: PR-1

Hydrograph



**Fairfield**

Prepared by Passero Associates

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Type II 24-hr 100-YEAR Rainfall=5.26"

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Page 33

**Summary for Subcatchment 4S: PR-2**

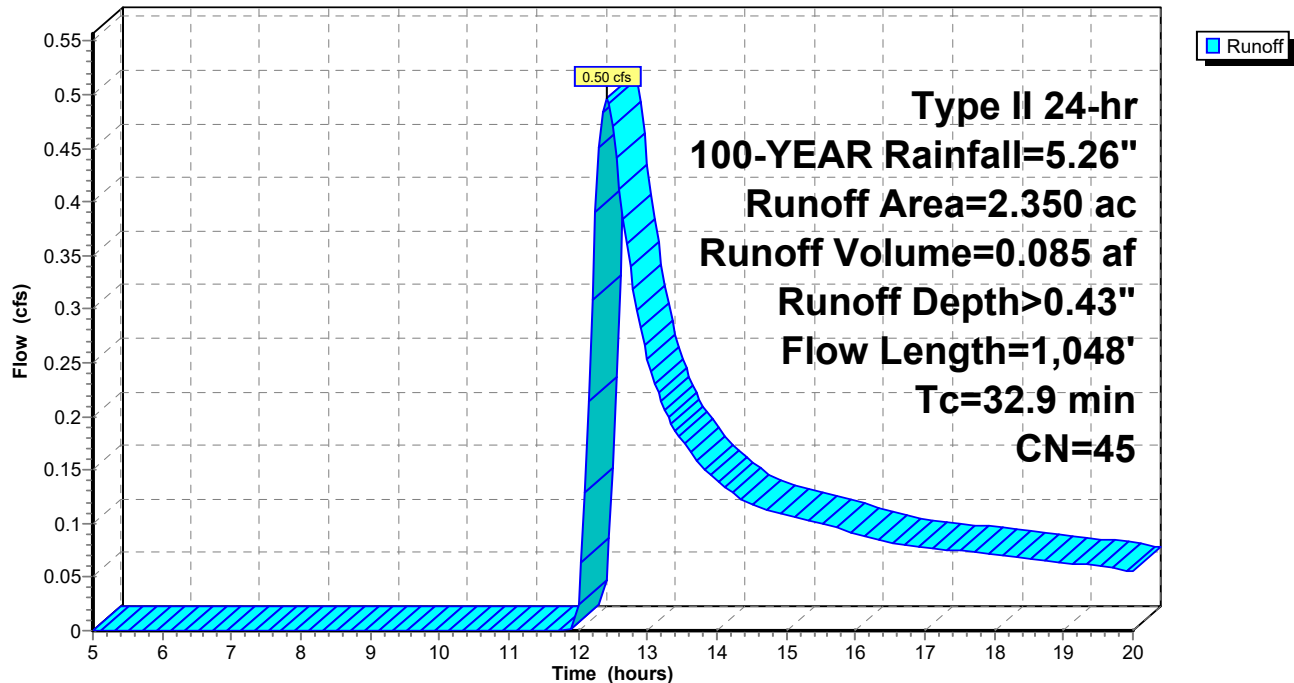
Runoff = 0.50 cfs @ 12.41 hrs, Volume= 0.085 af, Depth> 0.43"  
Routed to Link 9L : TOTAL PR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type II 24-hr 100-YEAR Rainfall=5.26"

| Area (ac) | CN | Description           |
|-----------|----|-----------------------|
| 2.350     | 45 | Woods, Poor, HSG A    |
| 2.350     |    | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                            |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------------|
| 17.5     | 100           | 0.0540        | 0.10              |                | <b>Sheet Flow, SHEET</b><br>Woods: Light underbrush n= 0.400 P2= 2.17" |
| 3.7      | 225           | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow, SCF 1</b><br>Woodland Kv= 5.0 fps        |
| 7.2      | 447           | 0.0430        | 1.04              |                | <b>Shallow Concentrated Flow, SCF 2</b><br>Woodland Kv= 5.0 fps        |
| 4.4      | 276           | 0.0440        | 1.05              |                | <b>Shallow Concentrated Flow, SCF3</b><br>Woodland Kv= 5.0 fps         |
| 32.9     | 1,048         | Total         |                   |                |                                                                        |

**Subcatchment 4S: PR-2****Hydrograph**

**Summary for Pond 5P: INFILTRATION BASIN**

Inflow Area = 2.730 ac, 63.74% Impervious, Inflow Depth > 2.63" for 100-YEAR event  
 Inflow = 13.30 cfs @ 11.97 hrs, Volume= 0.597 af  
 Outflow = 1.23 cfs @ 12.49 hrs, Volume= 0.597 af, Atten= 91%, Lag= 31.2 min  
 Discarded = 1.23 cfs @ 12.49 hrs, Volume= 0.597 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 9L : TOTAL PR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 553.10' @ 12.49 hrs Surf.Area= 4,486 sf Storage= 11,105 cf

Plug-Flow detention time= 85.1 min calculated for 0.597 af (100% of inflow)  
 Center-of-Mass det. time= 84.8 min ( 868.1 - 783.4 )

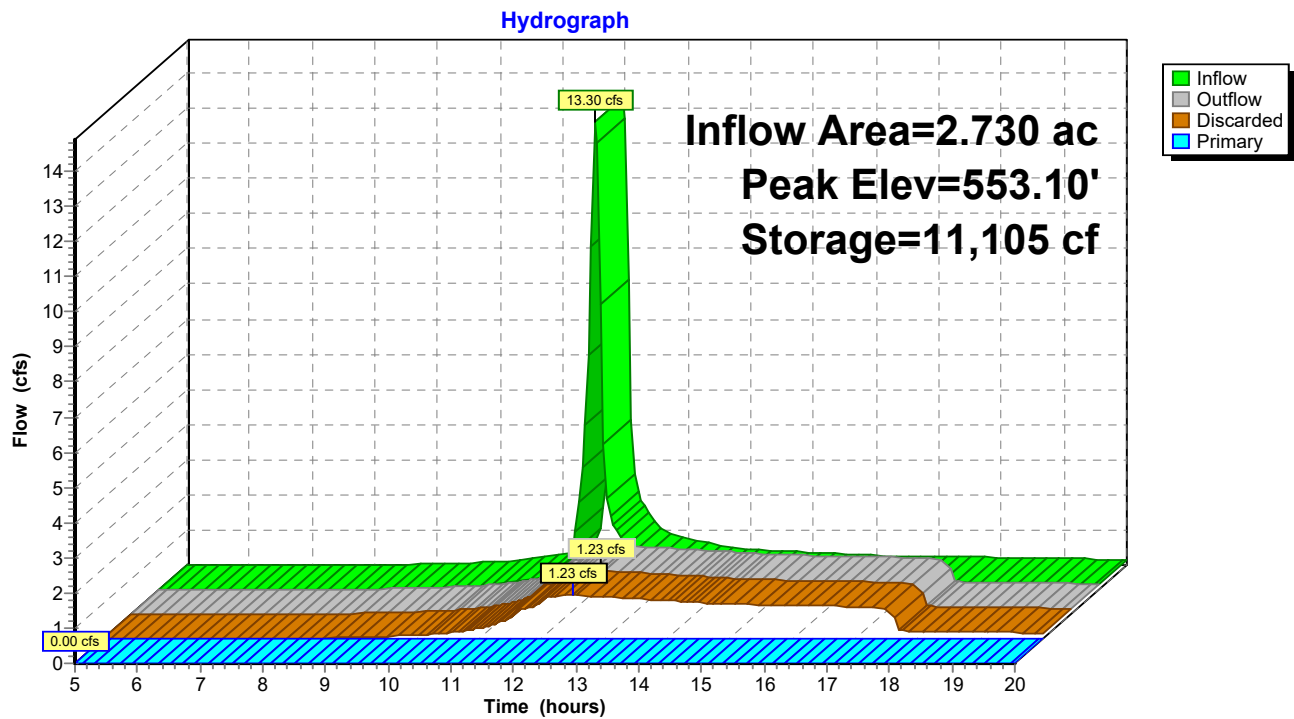
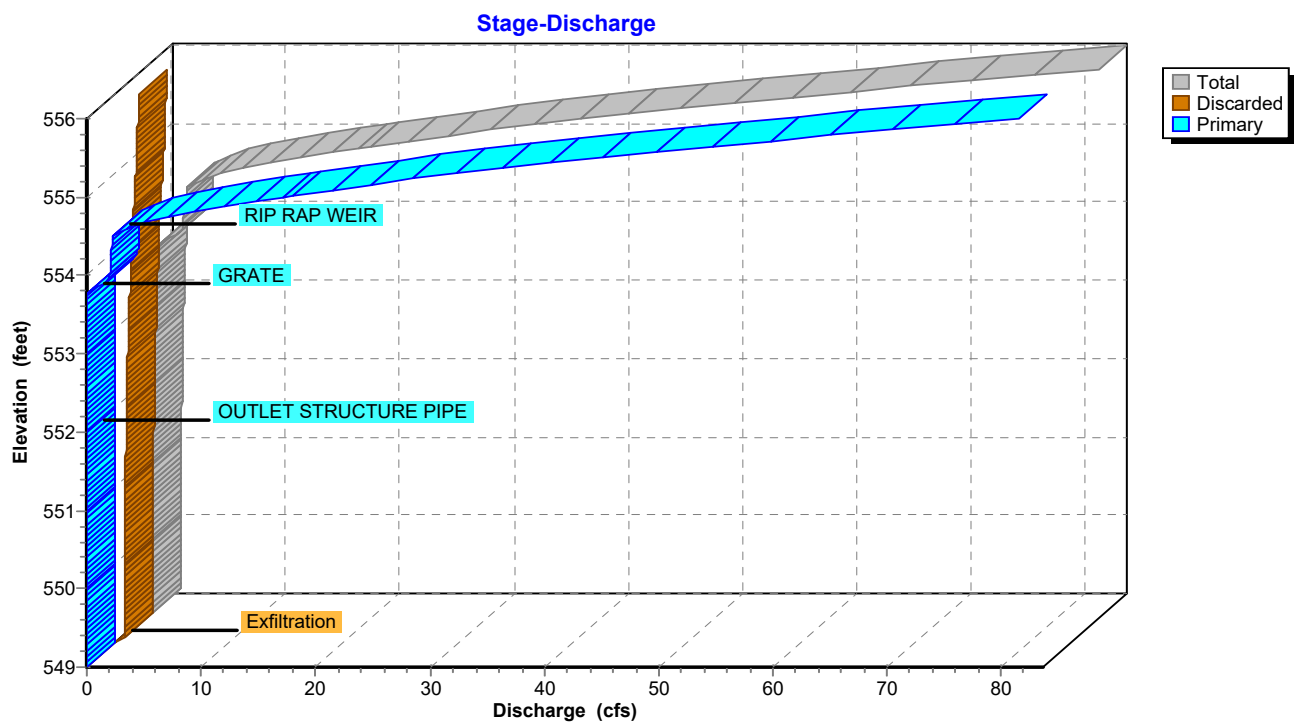
| Volume              | Invert               | Avail.Storage | Storage Description                                    |                           |                     |
|---------------------|----------------------|---------------|--------------------------------------------------------|---------------------------|---------------------|
| #1                  | 549.00'              | 28,478 cf     | <b>Custom Stage Data (Conic)</b> Listed below (Recalc) |                           |                     |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Voids<br>(%)  | Inc.Store<br>(cubic-feet)                              | Cum.Store<br>(cubic-feet) | Wet.Area<br>(sq-ft) |
| 549.00              | 3,687                | 0.0           | 0                                                      | 0                         | 3,687               |
| 550.00              | 3,687                | 40.0          | 1,475                                                  | 1,475                     | 3,902               |
| 551.00              | 3,687                | 40.0          | 1,475                                                  | 2,950                     | 4,117               |
| 552.00              | 3,687                | 100.0         | 3,687                                                  | 6,637                     | 4,333               |
| 553.00              | 4,414                | 100.0         | 4,045                                                  | 10,682                    | 5,094               |
| 554.00              | 5,201                | 100.0         | 4,802                                                  | 15,484                    | 5,918               |
| 555.00              | 6,631                | 100.0         | 5,902                                                  | 21,385                    | 7,374               |
| 556.00              | 7,565                | 100.0         | 7,093                                                  | 28,478                    | 8,355               |

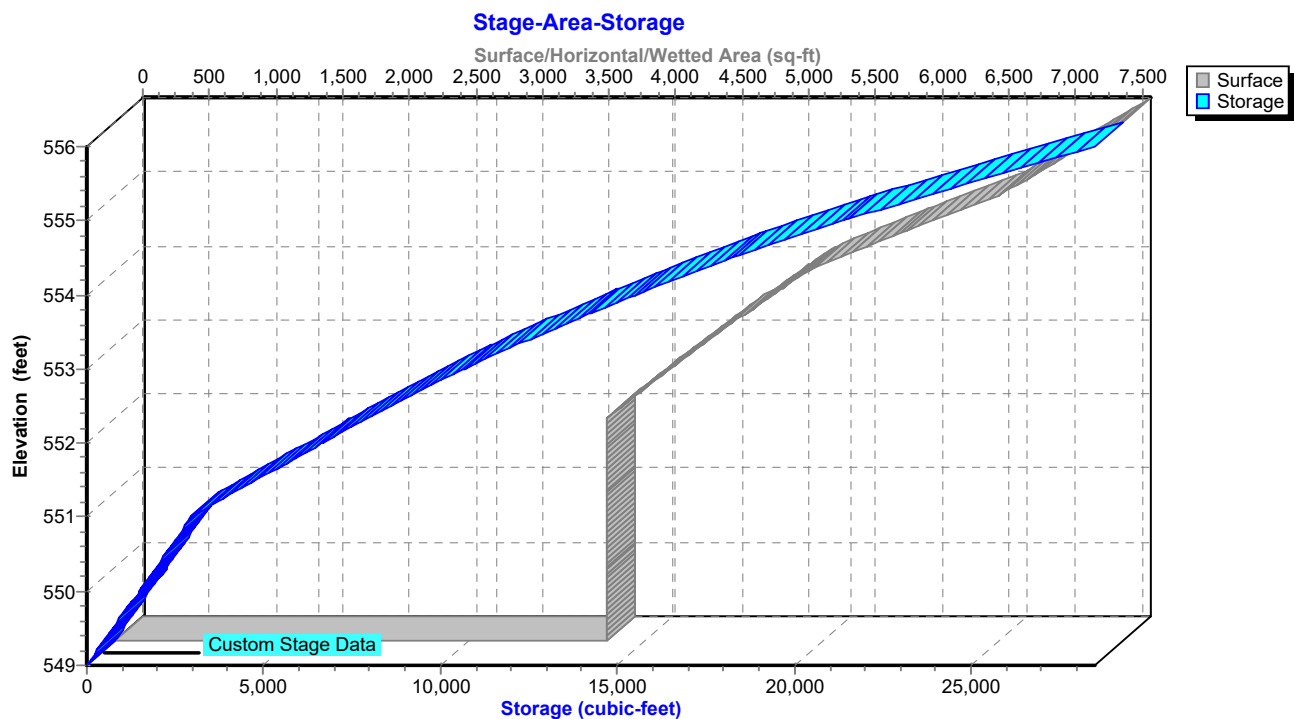
| Device | Routing   | Invert  | Outlet Devices                                                                                                                                                                                                                          |
|--------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary   | 554.50' | <b>15.0' long + 1.0 ' SideZ x 14.0' breadth RIP RAP WEIR</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60<br>Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63                                                          |
| #2     | Primary   | 552.00' | <b>12.0" Round OUTLET STRUCTURE PIPE w/ 6.0" inside fill</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 ' Cc= 0.900<br>n= 0.009 PVC, smooth interior, Flow Area= 0.39 sf |
| #3     | Device 2  | 553.75' | <b>24.0" x 24.0" Horiz. GRATE</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                                         |
| #4     | Discarded | 549.00' | <b>10.000 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 530.00'                                                                                                                                   |

**Discarded OutFlow** Max=1.23 cfs @ 12.49 hrs HW=553.09' (Free Discharge)  
 ↳ **4=Exfiltration** ( Controls 1.23 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=549.00' (Free Discharge)  
 ↳ **1=RIP RAP WEIR** ( Controls 0.00 cfs)  
 ↳ **2=OUTLET STRUCTURE PIPE** ( Controls 0.00 cfs)  
 ↳ **3=GRATE** ( Controls 0.00 cfs)



**Pond 5P: INFILTRATION BASIN****Pond 5P: INFILTRATION BASIN**

**Pond 5P: INFILTRATION BASIN**

**Stage-Discharge for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) | Elevation<br>(feet) | Discharge<br>(cfs) | Discarded<br>(cfs) | Primary<br>(cfs) |
|---------------------|--------------------|--------------------|------------------|---------------------|--------------------|--------------------|------------------|
| 549.00              | 0.00               | 0.00               | 0.00             | 554.20              | 3.62               | 1.52               | 2.10             |
| 549.10              | 0.86               | 0.86               | 0.00             | 554.30              | 3.71               | 1.56               | 2.16             |
| 549.20              | 0.86               | 0.86               | 0.00             | 554.40              | 3.80               | 1.60               | 2.21             |
| 549.30              | 0.87               | 0.87               | 0.00             | 554.50              | 3.89               | 1.63               | 2.26             |
| 549.40              | 0.87               | 0.87               | 0.00             | 554.60              | 5.24               | 1.67               | 3.56             |
| 549.50              | 0.88               | 0.88               | 0.00             | 554.70              | 7.65               | 1.72               | 5.93             |
| 549.60              | 0.88               | 0.88               | 0.00             | 554.80              | 10.81              | 1.76               | 9.05             |
| 549.70              | 0.88               | 0.88               | 0.00             | 554.90              | 14.59              | 1.80               | 12.79            |
| 549.80              | 0.89               | 0.89               | 0.00             | 555.00              | 18.95              | 1.84               | 17.11            |
| 549.90              | 0.89               | 0.89               | 0.00             | 555.10              | 23.83              | 1.87               | 21.96            |
| 550.00              | 0.90               | 0.90               | 0.00             | 555.20              | 28.85              | 1.90               | 26.96            |
| 550.10              | 0.90               | 0.90               | 0.00             | 555.30              | 34.20              | 1.93               | 32.28            |
| 550.20              | 0.91               | 0.91               | 0.00             | 555.40              | 40.12              | 1.96               | 38.17            |
| 550.30              | 0.91               | 0.91               | 0.00             | 555.50              | 46.40              | 1.98               | 44.42            |
| 550.40              | 0.92               | 0.92               | 0.00             | 555.60              | 53.22              | 2.01               | 51.21            |
| 550.50              | 0.92               | 0.92               | 0.00             | 555.70              | 60.43              | 2.04               | 58.38            |
| 550.60              | 0.93               | 0.93               | 0.00             | 555.80              | 67.90              | 2.07               | 65.83            |
| 550.70              | 0.93               | 0.93               | 0.00             | 555.90              | 75.73              | 2.10               | 73.63            |
| 550.80              | 0.93               | 0.93               | 0.00             | 556.00              | <b>83.61</b>       | <b>2.13</b>        | <b>81.47</b>     |
| 550.90              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.00              | 0.94               | 0.94               | 0.00             |                     |                    |                    |                  |
| 551.10              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.20              | 0.95               | 0.95               | 0.00             |                     |                    |                    |                  |
| 551.30              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.40              | 0.96               | 0.96               | 0.00             |                     |                    |                    |                  |
| 551.50              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.60              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.70              | 0.97               | 0.97               | 0.00             |                     |                    |                    |                  |
| 551.80              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 551.90              | 0.98               | 0.98               | 0.00             |                     |                    |                    |                  |
| 552.00              | 0.99               | 0.99               | 0.00             |                     |                    |                    |                  |
| 552.10              | 1.01               | 1.01               | 0.00             |                     |                    |                    |                  |
| 552.20              | 1.03               | 1.03               | 0.00             |                     |                    |                    |                  |
| 552.30              | 1.05               | 1.05               | 0.00             |                     |                    |                    |                  |
| 552.40              | 1.07               | 1.07               | 0.00             |                     |                    |                    |                  |
| 552.50              | 1.09               | 1.09               | 0.00             |                     |                    |                    |                  |
| 552.60              | 1.12               | 1.12               | 0.00             |                     |                    |                    |                  |
| 552.70              | 1.14               | 1.14               | 0.00             |                     |                    |                    |                  |
| 552.80              | 1.16               | 1.16               | 0.00             |                     |                    |                    |                  |
| 552.90              | 1.18               | 1.18               | 0.00             |                     |                    |                    |                  |
| 553.00              | 1.20               | 1.20               | 0.00             |                     |                    |                    |                  |
| 553.10              | 1.23               | 1.23               | 0.00             |                     |                    |                    |                  |
| 553.20              | 1.25               | 1.25               | 0.00             |                     |                    |                    |                  |
| 553.30              | 1.27               | 1.27               | 0.00             |                     |                    |                    |                  |
| 553.40              | 1.30               | 1.30               | 0.00             |                     |                    |                    |                  |
| 553.50              | 1.32               | 1.32               | 0.00             |                     |                    |                    |                  |
| 553.60              | 1.35               | 1.35               | 0.00             |                     |                    |                    |                  |
| 553.70              | 1.37               | 1.37               | 0.00             |                     |                    |                    |                  |
| 553.80              | 1.69               | 1.39               | 0.29             |                     |                    |                    |                  |
| 553.90              | 2.94               | 1.42               | 1.52             |                     |                    |                    |                  |
| 554.00              | 3.44               | 1.44               | 1.99             |                     |                    |                    |                  |
| 554.10              | 3.53               | 1.48               | 2.05             |                     |                    |                    |                  |

**Fairfield**

Prepared by Passero Associates

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Type II 24-hr 100-YEAR Rainfall=5.26"

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Page 38

**Stage-Area-Storage for Pond 5P: INFILTRATION BASIN**

| Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) | Elevation<br>(feet) | Surface<br>(sq-ft) | Storage<br>(cubic-feet) |
|---------------------|--------------------|-------------------------|---------------------|--------------------|-------------------------|
| 549.00              | 3,687              | 0                       | 554.20              | 5,473              | 16,551                  |
| 549.10              | 3,687              | 147                     | 554.30              | 5,612              | 17,105                  |
| 549.20              | 3,687              | 295                     | 554.40              | 5,752              | 17,673                  |
| 549.30              | 3,687              | 442                     | 554.50              | 5,894              | 18,256                  |
| 549.40              | 3,687              | 590                     | 554.60              | 6,038              | 18,852                  |
| 549.50              | 3,687              | 737                     | 554.70              | 6,184              | 19,463                  |
| 549.60              | 3,687              | 885                     | 554.80              | 6,331              | 20,089                  |
| 549.70              | 3,687              | 1,032                   | 554.90              | 6,480              | 20,730                  |
| 549.80              | 3,687              | 1,180                   | 555.00              | 6,631              | 21,385                  |
| 549.90              | 3,687              | 1,327                   | 555.10              | 6,722              | 22,053                  |
| 550.00              | 3,687              | 1,475                   | 555.20              | 6,813              | 22,730                  |
| 550.10              | 3,687              | 1,622                   | 555.30              | 6,905              | 23,416                  |
| 550.20              | 3,687              | 1,770                   | 555.40              | 6,997              | 24,111                  |
| 550.30              | 3,687              | 1,917                   | 555.50              | 7,090              | 24,815                  |
| 550.40              | 3,687              | 2,065                   | 555.60              | 7,184              | 25,529                  |
| 550.50              | 3,687              | 2,212                   | 555.70              | 7,278              | 26,252                  |
| 550.60              | 3,687              | 2,360                   | 555.80              | 7,373              | 26,984                  |
| 550.70              | 3,687              | 2,507                   | 555.90              | 7,469              | 27,727                  |
| 550.80              | 3,687              | 2,655                   | 556.00              | <b>7,565</b>       | <b>28,478</b>           |
| 550.90              | 3,687              | 2,802                   |                     |                    |                         |
| 551.00              | 3,687              | 2,950                   |                     |                    |                         |
| 551.10              | 3,687              | 3,318                   |                     |                    |                         |
| 551.20              | 3,687              | 3,687                   |                     |                    |                         |
| 551.30              | 3,687              | 4,056                   |                     |                    |                         |
| 551.40              | 3,687              | 4,424                   |                     |                    |                         |
| 551.50              | 3,687              | 4,793                   |                     |                    |                         |
| 551.60              | 3,687              | 5,162                   |                     |                    |                         |
| 551.70              | 3,687              | 5,531                   |                     |                    |                         |
| 551.80              | 3,687              | 5,899                   |                     |                    |                         |
| 551.90              | 3,687              | 6,268                   |                     |                    |                         |
| 552.00              | 3,687              | 6,637                   |                     |                    |                         |
| 552.10              | 3,757              | 7,009                   |                     |                    |                         |
| 552.20              | 3,827              | 7,388                   |                     |                    |                         |
| 552.30              | 3,898              | 7,774                   |                     |                    |                         |
| 552.40              | 3,970              | 8,168                   |                     |                    |                         |
| 552.50              | 4,042              | 8,568                   |                     |                    |                         |
| 552.60              | 4,115              | 8,976                   |                     |                    |                         |
| 552.70              | 4,189              | 9,391                   |                     |                    |                         |
| 552.80              | 4,263              | 9,814                   |                     |                    |                         |
| 552.90              | 4,338              | 10,244                  |                     |                    |                         |
| 553.00              | 4,414              | 10,682                  |                     |                    |                         |
| 553.10              | 4,490              | 11,127                  |                     |                    |                         |
| 553.20              | 4,566              | 11,580                  |                     |                    |                         |
| 553.30              | 4,643              | 12,040                  |                     |                    |                         |
| 553.40              | 4,721              | 12,508                  |                     |                    |                         |
| 553.50              | 4,799              | 12,984                  |                     |                    |                         |
| 553.60              | 4,878              | 13,468                  |                     |                    |                         |
| 553.70              | 4,958              | 13,960                  |                     |                    |                         |
| 553.80              | 5,038              | 14,460                  |                     |                    |                         |
| 553.90              | 5,119              | 14,968                  |                     |                    |                         |
| 554.00              | 5,201              | 15,484                  |                     |                    |                         |
| 554.10              | 5,336              | 16,011                  |                     |                    |                         |



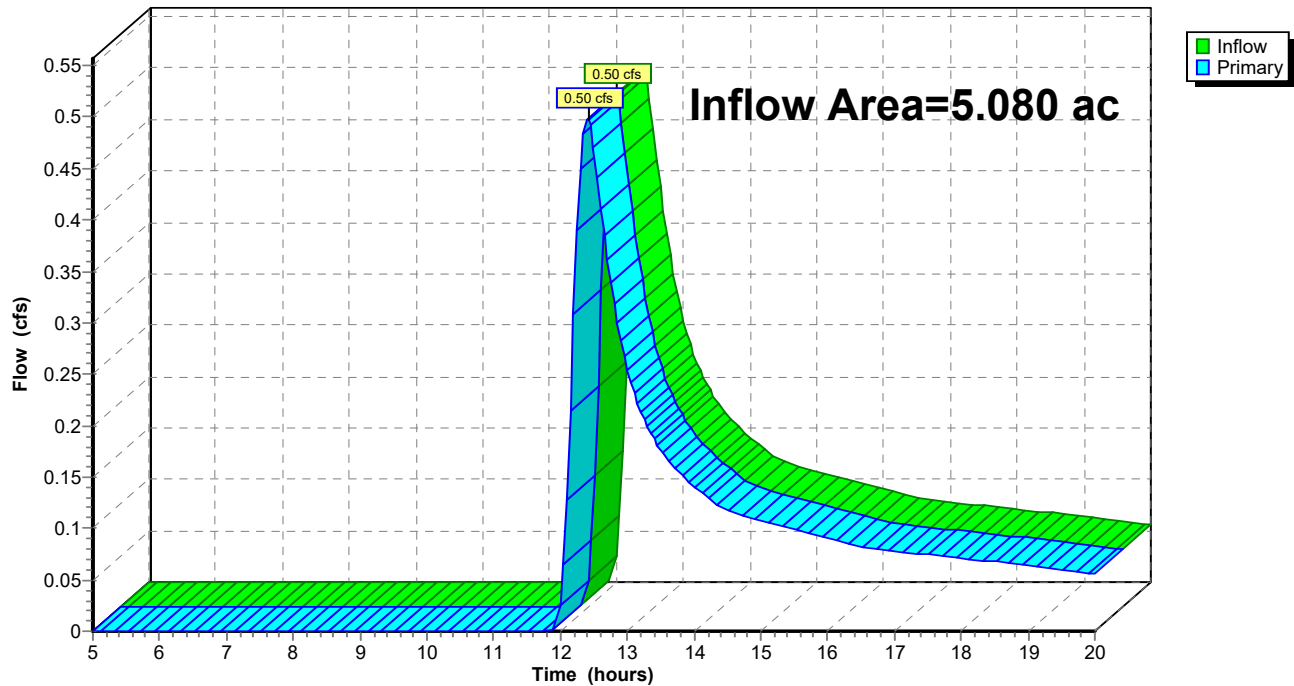
**Summary for Link 9L: TOTAL PR**

Inflow Area = 5.080 ac, 34.25% Impervious, Inflow Depth > 0.20" for 100-YEAR event  
Inflow = 0.50 cfs @ 12.41 hrs, Volume= 0.085 af  
Primary = 0.50 cfs @ 12.41 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 9L: TOTAL PR**

Hydrograph



**TABLE OF CONTENTS****Project Reports**

- 1 Routing Diagram
- 2 Rainfall Events Listing (selected events)
- 3 Area Listing (all nodes)
- 4 Soil Listing (all nodes)
- 5 Ground Covers (all nodes)
- 6 Pipe Listing (all nodes)

**1-YEAR Event**

- 7 Node Listing
- 8 Subcat 1: EX-1
- 9 Subcat 3S: PR-1
- 11 Subcat 4S: PR-2
- 12 Pond 5P: INFILTRATION BASIN
- 17 Link 9L: TOTAL PR

**10-YEAR Event**

- 18 Node Listing
- 19 Subcat 1: EX-1
- 20 Subcat 3S: PR-1
- 22 Subcat 4S: PR-2
- 23 Pond 5P: INFILTRATION BASIN
- 28 Link 9L: TOTAL PR

**100-YEAR Event**

- 29 Node Listing
- 30 Subcat 1: EX-1
- 31 Subcat 3S: PR-1
- 33 Subcat 4S: PR-2
- 34 Pond 5P: INFILTRATION BASIN
- 39 Link 9L: TOTAL PR

## **APPENDIX J: WATER QUALITY CALCULATIONS**

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?.....

No

Design Point: 1

P= 1.00

inch

*Manually enter P, Total Area and Impervious Cover.***Breakdown of Subcatchments**

| Catchment Number | Total Area (Acres) | Impervious Area (Acres) | Percent Impervious % | Rv   | WQv (ft <sup>3</sup> ) | Description |
|------------------|--------------------|-------------------------|----------------------|------|------------------------|-------------|
| 1                | 2.73               | 1.74                    | 64%                  | 0.62 | 6,180                  |             |
| 2                |                    |                         |                      |      |                        |             |
| 3                |                    |                         |                      |      |                        |             |
| 4                |                    |                         |                      |      |                        |             |
| 5                |                    |                         |                      |      |                        |             |
| 6                |                    |                         |                      |      |                        |             |
| 7                |                    |                         |                      |      |                        |             |
| 8                |                    |                         |                      |      |                        |             |
| 9                |                    |                         |                      |      |                        |             |
| 10               |                    |                         |                      |      |                        |             |
| Subtotal (1-30)  | 2.73               | 1.74                    | 64%                  | 0.62 | 6,180                  | Subtotal 1  |
| <b>Total</b>     | 2.73               | 1.74                    | 64%                  | 0.62 | 6,180                  | Initial WQv |

**Identify Runoff Reduction Techniques By Area**

| Technique                     | Total Contributing Area | Contributing Impervious Area | Notes                                                                      |
|-------------------------------|-------------------------|------------------------------|----------------------------------------------------------------------------|
|                               | (Acre)                  | (Acre)                       |                                                                            |
| Conservation of Natural Areas | 0.00                    | 0.00                         | minimum 10,000 sf                                                          |
| Riparian Buffers              | 0.00                    | 0.00                         | maximum contributing length 75 feet to 150 feet                            |
| Filter Strips                 | 0.00                    | 0.00                         |                                                                            |
| Tree Planting                 | 0.00                    | 0.00                         | Up to 100 sf directly connected impervious area may be subtracted per tree |
| <b>Total</b>                  | <b>0.00</b>             | <b>0.00</b>                  |                                                                            |

**Recalculate WQv after application of Area Reduction Techniques**

|                                                          | Total Area (Acres) | Impervious Area (Acres) | Percent Impervious % | Runoff Coefficient Rv | WQv (ft <sup>3</sup> ) |
|----------------------------------------------------------|--------------------|-------------------------|----------------------|-----------------------|------------------------|
| "<<Initial WQv"                                          | 2.73               | 1.74                    | 64%                  | 0.62                  | 6,180                  |
| Subtract Area                                            | 0.00               | 0.00                    |                      |                       |                        |
| WQv adjusted after Area Reductions                       | <b>2.73</b>        | <b>1.74</b>             | 64%                  | 0.62                  | 6,180                  |
| Disconnection of Rooftops                                |                    | 0.00                    |                      |                       |                        |
| Adjusted WQv after Area Reduction and Rooftop Disconnect | 2.73               | 1.74                    | 64%                  | 0.62                  | <b>6,180</b>           |
| WQv reduced by Area Reduction techniques                 |                    |                         |                      |                       | 0                      |



| Runoff Reduction Volume and Treated volumes |                                             |       |                         |                                    |                   |             |
|---------------------------------------------|---------------------------------------------|-------|-------------------------|------------------------------------|-------------------|-------------|
|                                             | Runoff Reduction Techniques/Standard SMPs   |       | Total Contributing Area | Total Contributing Impervious Area | WQv Reduced (RRv) | WQv Treated |
|                                             |                                             |       | (acres)                 | (acres)                            | cf                | cf          |
| Area/Volume Reduction                       | Conservation of Natural Areas               | RR-1  | 0.00                    | 0.00                               |                   |             |
|                                             | Sheetflow to Riparian Buffers/Filter Strips | RR-2  | 0.00                    | 0.00                               |                   |             |
|                                             | Tree Planting/Tree Pit                      | RR-3  | 0.00                    | 0.00                               |                   |             |
|                                             | Disconnection of Rooftop Runoff             | RR-4  |                         | 0.00                               |                   |             |
|                                             | 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                 |             |
|                                             | Rain Barrel/Cistern                         | RR-8  | 0.00                    | 0.00                               | 0                 |             |
|                                             | Porous Pavement                             | RR-9  | 0.00                    | 0.00                               | 0                 |             |
|                                             | Green Roof (Intensive & Extensive)          | RR-10 | 0.00                    | 0.00                               | 0                 |             |
| Standard SMPs w/RRv Capacity                | Infiltration Trench                         | I-1   | 0.00                    | 0.00                               | 0                 | 0           |
|                                             | Infiltration Basin                          | I-2   | 2.73                    | 1.74                               | 6180              | 0           |
|                                             | Dry Well                                    | I-3   | 0.00                    | 0.00                               | 0                 | 0           |
|                                             | Underground Infiltration System             | I-4   |                         |                                    |                   |             |
|                                             | Bioretention & Infiltration Bioretention    | F-5   | 0.00                    | 0.00                               | 0                 | 0           |
|                                             | Dry swale                                   | O-1   | 0.00                    | 0.00                               | 0                 | 0           |
| Standard SMPs                               | Micropool Extended Detention (P-1)          | P-1   |                         |                                    |                   |             |
|                                             | Wet Pond (P-2)                              | P-2   |                         |                                    |                   |             |
|                                             | Wet Extended Detention (P-3)                | P-3   |                         |                                    |                   |             |
|                                             | Multiple Pond system (P-4)                  | P-4   |                         |                                    |                   |             |
|                                             | Pocket Pond (p-5)                           | P-5   |                         |                                    |                   |             |
|                                             | Surface Sand filter (F-1)                   | F-1   |                         |                                    |                   |             |
|                                             | Underground Sand filter (F-2)               | F-2   |                         |                                    |                   |             |
|                                             | Perimeter Sand Filter (F-3)                 | F-3   |                         |                                    |                   |             |
|                                             | Organic Filter (F-4)                        | F-4   |                         |                                    |                   |             |
|                                             | Shallow Wetland (W-1)                       | W-1   |                         |                                    |                   |             |
|                                             | Extended Detention Wetland (W-2)            | W-2   |                         |                                    |                   |             |
|                                             | Pond/Wetland System (W-3)                   | W-3   |                         |                                    |                   |             |
|                                             | Pocket Wetland (W-4)                        | W-4   |                         |                                    |                   |             |
|                                             | Wet Swale (O-2)                             | O-2   |                         |                                    |                   |             |
| Totals by Area Reduction →                  |                                             |       | 0.00                    | 0.00                               | 0                 |             |
| Totals by Volume Reduction →                |                                             |       | 0.00                    | 0.00                               | 0                 |             |
| Totals by Standard SMP w/RRV →              |                                             |       | 2.73                    | 1.74                               | 6180              | 0           |
| Totals by Standard SMP →                    |                                             |       | 0.00                    | 0.00                               |                   | 0           |
| Totals ( Area + Volume + all SMPs) →        |                                             |       | 2.73                    | 1.74                               | 6,180             | 0           |

# Minimum RRv

| Enter the Soils Data for the site |       |      |
|-----------------------------------|-------|------|
| Soil Group                        | Acres | S    |
| A                                 | 2.73  | 55%  |
| B                                 | 0.00  | 40%  |
| C                                 | 0.00  | 30%  |
| D                                 | 0.00  | 20%  |
| Total Area                        | 2.73  |      |
| Calculate the Minimum RRv         |       |      |
| S =                               | 0.55  |      |
| Impervious =                      | 1.74  | acre |
| Precipitation                     | 1     | in   |
| Rv                                | 0.95  |      |
| Minimum RRv                       | 3,300 | ft3  |
|                                   | 0.08  | af   |

# NOI QUESTIONS

| #   | NOI Question                                              | Reported Value |       |
|-----|-----------------------------------------------------------|----------------|-------|
|     |                                                           | cf             | af    |
| 28  | Total Water Quality Volume (WQv) Required                 | 6180           | 0.142 |
| 30  | Total RRV Provided                                        | 6180           | 0.142 |
| 31  | Is RRV Provided $\geq$ WQv Required?                      | Yes            |       |
| 32  | Minimum RRV                                               | 3300           | 0.076 |
| 32a | Is RRV Provided $\geq$ Minimum RRV Required?              | Yes            |       |
|     |                                                           |                |       |
| 33a | Total WQv Treated                                         | 0              | 0.000 |
| 34  | Sum of Volume Reduced & Treated                           | 6180           | 0.142 |
| 34  | Sum of Volume Reduced and Treated                         | 6180           | 0.142 |
| 35  | Is Sum RRV Provided and WQv Provided $\geq$ WQv Required? | Yes            |       |

| Apply Peak Flow Attenuation |                                        |          |  |
|-----------------------------|----------------------------------------|----------|--|
| 36                          | Channel Protection                     | $C_{pv}$ |  |
| 37                          | Overbank                               | $Q_p$    |  |
| 37                          | Extreme Flood Control                  | $Q_f$    |  |
|                             | Are Quantity Control requirements met? |          |  |

# Planning

| Practice                                            | Description                                                                                                                                                                                                                                                                     | Application              |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| <b>Preservation of Undisturbed Areas</b>            | Delineate and place into permanent conservation undisturbed forests, native vegetated areas, riparian corridors, wetlands, and natural terrain.                                                                                                                                 | Considered & Not Applied |
| <b>Preservation of Buffers</b>                      | Define, delineate and preserve naturally vegetated buffers along perennial streams, rivers, shorelines and wetlands.                                                                                                                                                            | Considered & Applied     |
| <b>Reduction of Clearing and Grading</b>            | Limit clearing and grading to the minimum amount needed for roads, driveways, foundations, utilities and stormwater management facilities.                                                                                                                                      | Considered & Applied     |
| <b>Locating Development in Less Sensitive Areas</b> | 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 & Not Applied |
| <b>Open Space Design</b>                            | Use clustering, conservation design or open space design to reduce impervious cover, preserve more open space and protect water resources.                                                                                                                                      | Considered & Not Applied |
| <b>Soil Restoration</b>                             | 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.                                                                | N/A                      |
| <b>Roadway Reduction</b>                            | Minimize roadway widths and lengths to reduce site impervious area                                                                                                                                                                                                              | Considered & Applied     |
| <b>Sidewalk Reduction</b>                           | Minimize sidewalk lengths and widths to reduce site impervious area                                                                                                                                                                                                             | Considered & Applied     |
| <b>Driveway Reduction</b>                           | Minimize driveway lengths and widths to reduce site impervious area                                                                                                                                                                                                             | N/A                      |
| <b>Cul-de-sac Reduction</b>                         | Minimize the number of cul-de-sacs and incorporate landscaped areas to reduce their impervious cover.                                                                                                                                                                           | N/A                      |
| <b>Building Footprint Reduction</b>                 | Reduce the impervious footprint of residences and commercial buildings by using alternate or taller buildings while maintaining the same floor to area ratio.                                                                                                                   | Considered & Applied     |
| <b>Parking Reduction</b>                            | 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 & Applied     |



# Infiltration Basin Worksheet

| <b>Design Point:</b>                                                                        | <b>1</b>           |                         |                                                                                                           |                 |                                                      |                                                 |             |
|---------------------------------------------------------------------------------------------|--------------------|-------------------------|-----------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------|-------------------------------------------------|-------------|
| <b>Enter Site Data For Drainage Area to be Treated by Practice</b>                          |                    |                         |                                                                                                           |                 |                                                      |                                                 |             |
| Catchment Number                                                                            | Total Area (Acres) | Impervious Area (Acres) | Percent Impervious %                                                                                      | Rv              | WQv (ft <sup>3</sup> )                               | Precipitation (in)                              | Description |
| 1                                                                                           | 2.73               | 1.74                    | 0.64                                                                                                      | 0.62            | 6180.08                                              | 1.00                                            |             |
| Enter Impervious Area Reduced by Disconnection of Rooftops                                  |                    | 0.00                    | 64%                                                                                                       | 0.62            | 6,180                                                | <<WQv after adjusting for Disconnected Rooftops |             |
| Enter the portion of the WQv that is not reduced for all practices routed to this practice. |                    |                         |                                                                                                           |                 | 0                                                    | ft <sup>3</sup>                                 |             |
| <b>Pretreatment Techniques to Prevent Clogging</b>                                          |                    |                         |                                                                                                           |                 |                                                      |                                                 |             |
| Infiltration Rate                                                                           |                    |                         | 2.00                                                                                                      | in/hour         | Okay                                                 |                                                 |             |
| Pretreatment Sizing                                                                         |                    |                         | 25                                                                                                        | % WQv           | 25% minimum;<br>50% if >2 in/hr<br>100% if >5in/hour |                                                 |             |
| Pretreatment Required Volume                                                                |                    |                         | 1,545                                                                                                     | ft <sup>3</sup> |                                                      |                                                 |             |
| Pretreatment Provided                                                                       |                    |                         | 2,600                                                                                                     | ft <sup>3</sup> |                                                      |                                                 |             |
| Pretreatment Techniques utilized                                                            |                    |                         | Plunge Pool                                                                                               |                 |                                                      |                                                 |             |
| <b>Size An Infiltration Basin</b>                                                           |                    |                         |                                                                                                           |                 |                                                      |                                                 |             |
| Design Volume                                                                               | 6,180              | ft <sup>3</sup>         | WQv                                                                                                       |                 |                                                      |                                                 |             |
| Basal Area Required                                                                         | 2,060              | ft <sup>2</sup>         | Infiltration practices shall be designed to exfiltrate the entire WQv through the floor of each practice. |                 |                                                      |                                                 |             |
| Basal Area Provided                                                                         | 3,687              | ft <sup>2</sup>         |                                                                                                           |                 |                                                      |                                                 |             |
| Design Depth                                                                                | 3.00               | ft                      |                                                                                                           |                 |                                                      |                                                 |             |
| Volume Provided                                                                             | 11,061             | ft <sup>3</sup>         | Storage Volume provided in infiltration basin area (not including pretreatment.                           |                 |                                                      |                                                 |             |
| <b>Determine Runoff Reduction</b>                                                           |                    |                         |                                                                                                           |                 |                                                      |                                                 |             |
| <b>RRv</b>                                                                                  | <b>6,180</b>       | <b>ft<sup>3</sup></b>   | <b>90% of the storage provided in the basin or WQv whichever is smaller</b>                               |                 |                                                      |                                                 |             |
| Volume Treated                                                                              | 0                  | ft <sup>3</sup>         | This is the portion of the WQv that is not reduced/infiltrated                                            |                 |                                                      |                                                 |             |
| Sizing v                                                                                    | OK                 |                         | The infiltration basin must provide storage equal to or greater than the WQv of the contributing area.    |                 |                                                      |                                                 |             |

**APPENDIX K: NYSDEC SPEDES GENERAL PERMIT FOR STORMWATER  
DISCHARGES FROM CONSTRUCTION ACTIVITY (PERMIT NO. GP-0-  
20-001)**



NEW YORK  
STATE OF  
OPPORTUNITY

Department of  
Environmental  
Conservation

NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SPDES GENERAL PERMIT  
FOR STORMWATER DISCHARGES

From

**CONSTRUCTION ACTIVITY**

Permit No. GP- 0-20-001

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

Effective Date: January 29, 2020

Expiration Date: January 28, 2025

John J. Ferguson

Chief Permit Administrator



Authorized Signature

1-23-20

Date

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

## PREFACE

Pursuant to Section 402 of the Clean Water Act (“CWA”), stormwater *discharges* from certain *construction activities* are unlawful unless they are authorized by a *National Pollutant Discharge Elimination System (“NPDES”)* permit or by a state permit program. New York 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, 8 and Article 70.

An *owner or operator* of a *construction activity* that is eligible for coverage under this permit must obtain coverage prior to the *commencement of construction activity*. Activities that fit the definition of “*construction activity*”, as defined under 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), constitute construction of a *point source* and therefore, pursuant to ECL section 17-0505 and 17-0701, the *owner or operator* must have coverage under a SPDES permit prior to *commencing construction activity*. 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 GENERAL PERMIT FOR STORMWATER DISCHARGES FROM  
CONSTRUCTION ACTIVITIES**

**Table of Contents**

|                                                                                     |    |
|-------------------------------------------------------------------------------------|----|
| Part 1. PERMIT COVERAGE AND LIMITATIONS .....                                       | 1  |
| A. Permit Application .....                                                         | 1  |
| B. Effluent Limitations Applicable to Discharges from Construction Activities ..... | 1  |
| C. Post-construction Stormwater Management Practice Requirements .....              | 4  |
| D. Maintaining Water Quality .....                                                  | 8  |
| E. Eligibility Under This General Permit.....                                       | 9  |
| F. Activities Which Are Ineligible for Coverage Under This General Permit .....     | 9  |
| Part II. PERMIT COVERAGE .....                                                      | 12 |
| A. How to Obtain Coverage .....                                                     | 12 |
| B. Notice of Intent (NOI) Submittal .....                                           | 13 |
| C. Permit Authorization .....                                                       | 13 |
| D. General Requirements For Owners or Operators With Permit Coverage .....          | 15 |
| E. Permit Coverage for Discharges Authorized Under GP-0-15-002.....                 | 17 |
| F. Change of Owner or Operator .....                                                | 17 |
| Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP) .....                        | 18 |
| A. General SWPPP Requirements .....                                                 | 18 |
| B. Required SWPPP Contents .....                                                    | 20 |
| C. Required SWPPP Components by Project Type.....                                   | 24 |
| Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS .....                              | 24 |
| A. General Construction Site Inspection and Maintenance Requirements .....          | 24 |
| B. Contractor Maintenance Inspection Requirements .....                             | 24 |
| C. Qualified Inspector Inspection Requirements .....                                | 25 |
| Part V. TERMINATION OF PERMIT COVERAGE .....                                        | 29 |
| A. Termination of Permit Coverage .....                                             | 29 |
| Part VI. REPORTING AND RETENTION RECORDS .....                                      | 31 |
| A. Record Retention .....                                                           | 31 |
| B. Addresses .....                                                                  | 31 |
| Part VII. STANDARD PERMIT CONDITIONS.....                                           | 31 |
| A. Duty to Comply.....                                                              | 31 |
| B. Continuation of the Expired General Permit.....                                  | 32 |
| C. Enforcement.....                                                                 | 32 |
| D. Need to Halt or Reduce Activity Not a Defense.....                               | 32 |
| E. Duty to Mitigate .....                                                           | 33 |
| F. Duty to Provide Information.....                                                 | 33 |
| G. Other Information .....                                                          | 33 |
| H. Signatory Requirements.....                                                      | 33 |
| I. Property Rights .....                                                            | 35 |
| J. Severability.....                                                                | 35 |

|                                                                                  |                                                                  |    |
|----------------------------------------------------------------------------------|------------------------------------------------------------------|----|
| K.                                                                               | Requirement to Obtain Coverage Under an Alternative Permit ..... | 35 |
| L.                                                                               | Proper Operation and Maintenance .....                           | 36 |
| M.                                                                               | Inspection and Entry .....                                       | 36 |
| N.                                                                               | Permit Actions .....                                             | 37 |
| O.                                                                               | Definitions .....                                                | 37 |
| P.                                                                               | Re-Opener Clause .....                                           | 37 |
| Q.                                                                               | Penalties for Falsification of Forms and Reports .....           | 37 |
| R.                                                                               | Other Permits .....                                              | 38 |
| APPENDIX A – Acronyms and Definitions .....                                      |                                                                  | 39 |
| Acronyms.....                                                                    |                                                                  | 39 |
| Definitions.....                                                                 |                                                                  | 40 |
| APPENDIX B – Required SWPPP Components by Project Type .....                     |                                                                  | 48 |
| Table 1.....                                                                     |                                                                  | 48 |
| Table 2.....                                                                     |                                                                  | 50 |
| APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal.....               |                                                                  | 52 |
| APPENDIX D – Watersheds with Lower Disturbance Threshold .....                   |                                                                  | 58 |
| APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s) ..... |                                                                  | 59 |
| APPENDIX F – List of NYS DEC Regional Offices .....                              |                                                                  | 65 |

## Part 1. PERMIT COVERAGE AND LIMITATIONS

### A. Permit Application

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

1. *Construction activities* involving soil disturbances of one (1) or more acres; including disturbances of less than one acre that are part of a *larger common plan of development or sale* that will ultimately disturb one or more acres of land; excluding *routine maintenance activity* that is performed to maintain the original line and grade, hydraulic capacity or original purpose of a facility;
2. *Construction activities* involving soil disturbances of less than one (1) acre where the Department has determined that a *SPDES* permit is required for stormwater *discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of *pollutants* to *surface waters of the State*.
3. *Construction activities* located in the watershed(s) identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.

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

*Discharges* authorized by this permit must achieve, at a minimum, the effluent limitations in Part I.B.1. (a) – (f) of this permit. These limitations represent the degree of effluent reduction attainable by the application of best practicable technology currently available.

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement and maintain control measures to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part I.B.1.(a) – (f) of this permit and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in the *Stormwater Pollution Prevention Plan* (“SWPPP”) the reason(s) for the

deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

- a. **Erosion and Sediment Controls.** Design, install and maintain effective erosion and sediment controls to *minimize* the *discharge of pollutants* and prevent a violation of the *water quality standards*. At a minimum, such controls must be designed, installed and maintained to:
- (i) *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharges*;
  - (ii) Control stormwater *discharges*, including both peak flowrates and total stormwater volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points;
  - (iii) *Minimize* the amount of soil exposed during *construction activity*;
  - (iv) *Minimize* the disturbance of *steep slopes*;
  - (v) *Minimize* sediment *discharges* from the site;
  - (vi) Provide and maintain *natural buffers* around surface waters, direct stormwater to vegetated areas and maximize stormwater infiltration to reduce *pollutant discharges*, unless *infeasible*;
  - (vii) *Minimize* soil compaction. Minimizing soil compaction is not required where the intended function of a specific area of the site dictates that it be compacted;
  - (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 temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased. For construction sites that *directly discharge* to one of the 303(d) segments



listed in Appendix E or is located in one of the watersheds listed in Appendix C, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. See Appendix A for definition of *Temporarily Ceased*.

- c. **Dewatering.** *Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, must be managed by appropriate control measures.*
- d. **Pollution Prevention Measures.** Design, install, implement, and maintain effective pollution prevention measures to *minimize the discharge of pollutants* and prevent a violation of the *water quality standards*. At a minimum, such measures must be designed, installed, implemented and maintained to:
  - (i) *Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. This applies to washing operations that use clean water only. Soaps, detergents and solvents cannot be used;*
  - (ii) *Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, 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. **Prohibited Discharges.** The following *discharges* are prohibited:
  - (i) *Wastewater from washout of concrete;*
  - (ii) *Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;*

- (iii) Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance;
  - (iv) Soaps or solvents used in vehicle and equipment washing; and
  - (v) Toxic or hazardous substances from a spill or other release.
- f. Surface Outlets. When discharging from basins and impoundments, the outlets shall be designed, constructed and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

### **C. Post-construction Stormwater Management Practice Requirements**

1. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must select, design, install, and maintain the practices to meet the *performance criteria* in the New York State Stormwater Management Design Manual (“Design Manual”), dated January 2015, using sound engineering judgment. Where post-construction stormwater management practices (“SMPs”) are not designed in conformance with the *performance criteria* in the Design Manual, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. The *owner or operator* of a *construction activity* that requires post-construction stormwater management practices pursuant to Part III.C. of this permit must design the practices to meet the applicable *sizing criteria* in Part I.C.2.a., b., c. or d. of this permit.

#### **a. Sizing Criteria for New Development**

- (i) Runoff Reduction Volume (“RRv”): Reduce the total Water Quality Volume (“WQv”) by application of RR techniques and standard SMPs with RRv capacity. The total WQv shall be calculated in accordance with the criteria in Section 4.2 of the Design Manual.
- (ii) Minimum RRv and Treatment of Remaining Total WQv: Construction activities that cannot meet the criteria in Part I.C.2.a.(i) of this permit due to site limitations shall direct runoff from all newly constructed impervious areas to a RR technique or standard SMP with RRv capacity unless infeasible. The specific site limitations that prevent the reduction of 100% of the WQv shall be documented in the SWPPP.

For each impervious area that is not directed to a RR technique or standard SMP with RRv capacity, the SWPPP must include documentation which demonstrates that all options were considered and for each option explains why it is considered infeasible.

**In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the Minimum RRv as calculated using the criteria in Section 4.3 of the Design Manual.**

The remaining portion of the total WQv that cannot be reduced shall be treated by application of standard SMPs.

- (iii) Channel Protection Volume (“Cpv”): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site discharges directly to tidal waters, or fifth order or larger streams.
- (iv) *Overbank* Flood Control Criteria (“Qp”): Requires storage to attenuate the post-development 10-year, 24-hour peak discharge rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (“Qf”): Requires storage to attenuate the post-development 100-year, 24-hour peak discharge rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site discharges directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.

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

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

calculated in accordance with the criteria in Section 10.3 of the Design Manual.

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

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

- (iii) Channel Protection Volume (Cpv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event; remaining after runoff reduction. The Cpv requirement does not apply when:
  - (1) Reduction of the entire Cpv is achieved by application of runoff reduction techniques or infiltration systems, or
  - (2) The site *discharges* directly to tidal waters, or fifth order or larger streams.
- (iv) Overbank Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.
- (v) Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:
  - (1) the site *discharges* directly to tidal waters or fifth order or larger streams, or
  - (2) A downstream analysis reveals that *overbank* control is not required.



### c. Sizing Criteria for Redevelopment Activity

- (i) Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* shall be addressed by one of the following options. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C of this permit) shall calculate the WQv in accordance with Section 10.3 of the Design Manual. All other *redevelopment activities* shall calculate the WQv in accordance with Section 4.2 of the Design Manual.
  - (1) Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the Design Manual must be applied to all newly created pervious areas, or
  - (2) Capture and treat a minimum of 25% of the WQv from the disturbed, *impervious area* by the application of standard SMPs; or reduce 25% of the WQv from the disturbed, *impervious area* by the application of RR techniques or standard SMPs with RRv capacity., or
  - (3) Capture and treat a minimum of 75% of the WQv from the disturbed, *impervious area* as well as any additional runoff from tributary areas by application of the alternative practices discussed in Sections 9.3 and 9.4 of the Design Manual., or
  - (4) Application of a combination of 1, 2 and 3 above that provide a weighted average of at least two of the above methods. Application of this method shall be in accordance with the criteria in Section 9.2.1(B) (IV) of the Design Manual.

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

- (ii) Channel Protection Volume (Cpv): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iii) Overbank Flood Control Criteria (Qp): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site.
- (iv) Extreme Flood Control Criteria (Qf): Not required if there are no changes to hydrology that increase the *discharge* rate from the project site

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

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

**D. Maintaining Water Quality**

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

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

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

If there is evidence indicating that despite compliance with the terms and conditions of this general permit it is demonstrated that the stormwater *discharges* authorized by this permit are causing or contributing to a violation of *water quality standards*, or if the Department determines that a modification of the permit is necessary to prevent a violation of *water quality standards*, the authorized *discharges* will no longer be eligible for coverage under this permit. The Department may require the *owner or operator* to obtain an individual SPDES permit to continue discharging.

## **E. Eligibility Under This General Permit**

1. This permit may authorize all *discharges* of stormwater from *construction activity* to *surface waters of the State* and *groundwaters* except for ineligible *discharges* identified under subparagraph F. of this Part.
2. Except for non-stormwater *discharges* explicitly listed in the next paragraph, this permit only authorizes stormwater *discharges*; including stormwater runoff, snowmelt runoff, and surface runoff and drainage, from *construction activities*.
3. Notwithstanding paragraphs E.1 and E.2 above, the following non-stormwater discharges are authorized by this permit: those 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”; waters to which other components have not been added that are used to control dust in accordance with the SWPPP; and uncontaminated *discharges* from *construction site* de-watering operations. All non-stormwater discharges must be identified in the SWPPP. Under all circumstances, the *owner or operator* must still comply with *water quality standards* in Part I.D of this permit.
4. The *owner or operator* must maintain permit eligibility to *discharge* under this permit. Any *discharges* that are not compliant with the eligibility conditions of this permit are not authorized by the permit and the *owner or operator* must either apply for a separate permit to cover those ineligible *discharges* or take steps necessary to make the *discharge* eligible for coverage.

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

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

1. *Discharges* after *construction activities* have been completed and the site has undergone *final stabilization*;
2. *Discharges* that are mixed with sources of non-stormwater other than those expressly authorized under subsection E.3. of this Part and identified in the SWPPP required by this permit;
3. *Discharges* that are required to obtain an individual SPDES permit or another SPDES general permit pursuant to Part VII.K. of this permit;
4. *Construction activities* or *discharges* from *construction activities* that may adversely affect an *endangered or threatened species* unless the *owner or*

*operator* has obtained a permit issued pursuant to 6 NYCRR Part 182 for the project or the Department has issued a letter of non-jurisdiction for the project. All documentation necessary to demonstrate eligibility shall be maintained on site in accordance with Part II.D.2 of this permit;

5. *Discharges* which either cause or contribute to a violation of *water quality standards* adopted pursuant to the *ECL* and its accompanying regulations;
6. *Construction activities* for residential, commercial and institutional projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing *impervious cover*; and
  - c. Which disturb one (1) or more acres of land designated on the current United States Department of Agriculture ("USDA") Soil Survey as Soil Slope Phase "D", (provided the map unit name 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.
7. *Construction activities* for linear transportation projects and linear utility projects:
  - a. Where the *discharges* from the *construction activities* are tributary to waters of the state classified as AA or AA-s; and
  - b. Which are undertaken on land with no existing *impervious cover*; and
  - c. Which disturb two (2) or more acres of land designated on the current USDA Soil Survey as Soil Slope Phase "D" (provided the map unit name 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.



8. *Construction activities* that have the potential to affect an *historic property*, unless there is documentation that such impacts have been resolved. The following documentation necessary to demonstrate eligibility with this requirement shall be maintained on site in accordance with Part II.D.2 of this permit and made available to the Department in accordance with Part VII.F of this permit:
- a. Documentation that the *construction activity* is not within an archeologically sensitive area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant.
    - 1-5 acres of disturbance - 20 feet
    - 5-20 acres of disturbance - 50 feet
    - 20+ acres of disturbance - 100 feet, or
  - b. DEC consultation form sent to OPRHP, and copied to the NYS DEC Agency Historic Preservation Officer (APO), and
    - (i) the State Environmental Quality Review (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or
    - (ii) documentation from OPRHP that the *construction activity* will result in No Impact; or
    - (iii) documentation from OPRHP providing a determination of No Adverse Impact; or
    - (iv) a Letter of Resolution signed by the owner/operator, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA); or
  - c. Documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

- (i) No Affect
- (ii) No Adverse Affect
- (iii) Executed Memorandum of Agreement, or

d. Documentation that:

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

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

## Part II. PERMIT COVERAGE

### A. How to Obtain Coverage

1. An *owner or operator* of a *construction activity* that is not subject to the requirements of a regulated, traditional land use control MS4 must first prepare a SWPPP in accordance with all applicable requirements of this permit and then submit a completed Notice of Intent (NOI) to the Department to be authorized to discharge under this permit.
2. An *owner or operator* of a *construction activity* that is subject to the requirements of a *regulated, traditional land use control MS4* must first prepare a SWPPP in accordance with all applicable requirements of this permit and then have the SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department. The *owner or operator* shall have the "MS4 SWPPP Acceptance" form signed in accordance with Part VII.H., and then submit that form along with a completed NOI to the Department.
3. The requirement for an *owner or operator* to have its SWPPP reviewed and accepted by the *regulated, traditional land use control MS4* prior to submitting the NOI to the Department does not apply to an *owner or operator* that is obtaining permit coverage in accordance with the requirements in Part II.F. (Change of Owner or Operator) or where the *owner or operator* of the *construction activity* is the *regulated, traditional land use control MS4*. This exemption does not apply to *construction activities* subject to the New York City Administrative Code.

## **B. Notice of Intent (NOI) Submittal**

1. Prior to December 21, 2020, an owner or operator shall use either the electronic (eNOI) or paper version of the NOI that the Department prepared. Both versions of the NOI are located on the Department's website (<http://www.dec.ny.gov/>). The paper version of the NOI shall be signed in accordance with Part VII.H. of this permit and submitted to the following address:

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

2. Beginning December 21, 2020 and in accordance with EPA's 2015 NPDES Electronic Reporting Rule (40 CFR Part 127), the *owner or operator* must submit the NOI electronically using the *Department's* online NOI.
3. The *owner or operator* shall have the SWPPP preparer sign the "SWPPP Preparer Certification" statement on the NOI prior to submitting the form to the Department.
4. As of the date the NOI is submitted to the Department, the *owner or operator* shall make the NOI and SWPPP available for review and copying in accordance with the requirements in Part VII.F. of this permit.

## **C. Permit Authorization**

1. An *owner or operator* shall not *commence construction activity* until their authorization to *discharge* under this permit goes into effect.
2. Authorization to *discharge* under this permit will be effective when the *owner or operator* has satisfied all of the following criteria:
  - a. project review pursuant to the State Environmental Quality Review Act ("SEQRA") have been satisfied, when SEQRA is applicable. See the Department's website (<http://www.dec.ny.gov/>) for more information,
  - b. where required, all necessary Department permits subject to the *Uniform Procedures Act* ("UPA") (see 6 NYCRR Part 621), or the equivalent from another New York State agency, have been obtained, unless otherwise notified by the Department pursuant to 6 NYCRR 621.3(a)(4). *Owners or operators of construction activities* that are required to obtain UPA permits

must submit a preliminary SWPPP to the appropriate DEC Permit Administrator at the Regional Office listed in Appendix F at the time all other necessary *UPA* permit applications are submitted. The preliminary SWPPP must include sufficient information to demonstrate that the *construction activity* qualifies for authorization under this permit,

- c. the final SWPPP has been prepared, and
  - d. a complete NOI has been submitted to the Department in accordance with the requirements of this permit.
3. An *owner or operator* that has satisfied the requirements of Part II.C.2 above will be authorized to *discharge* stormwater from their *construction activity* in accordance with the following schedule:
- a. For *construction activities* that are not subject to the requirements of a *regulated, traditional land use control MS4*:
    - (i) Five (5) business days from the date the Department receives a complete electronic version of the NOI (eNOI) for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.; or
    - (ii) Sixty (60) business days from the date the Department receives a complete NOI (electronic or paper version) for *construction activities* with a SWPPP that has not been prepared in conformance with the design criteria in technical standard referenced in Part III.B.1. or, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C., the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, or;
    - (iii) Ten (10) business days from the date the Department receives a complete paper version of the NOI for *construction activities* with a SWPPP that has been prepared in conformance with the design criteria in the technical standard referenced in Part III.B.1 and the *performance criteria* in the technical standard referenced in Parts III.B., 2 or 3, for *construction activities* that require post-construction stormwater management practices pursuant to Part III.C.



- b. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*:
  - (i) Five (5) business days from the date the Department receives both a complete electronic version of the NOI (eNOI) and signed “MS4 SWPPP Acceptance” form, or
  - (ii) Ten (10) business days from the date the Department receives both a complete paper version of the NOI and signed “MS4 SWPPP Acceptance” form.
- 4. Coverage under this permit authorizes stormwater *discharges* from only those areas of disturbance that are identified in the NOI. If an *owner or operator* wishes to have stormwater *discharges* from future or additional areas of disturbance authorized, they must submit a new NOI that addresses that phase of the development, unless otherwise notified by the Department. The *owner or operator* shall not *commence construction activity* on the future or additional areas until their authorization to *discharge* under this permit goes into effect in accordance with Part II.C. of this permit.

#### **D. General Requirements For Owners or Operators With Permit Coverage**

- 1. The *owner or operator* shall ensure that the provisions of the SWPPP are implemented from the *commencement of construction activity* until all areas of disturbance have achieved *final stabilization* and the Notice of Termination (“NOT”) has been submitted to the Department in accordance with Part V. of this permit. This includes any changes made to the SWPPP pursuant to Part III.A.4. of this permit.
- 2. The *owner or operator* shall maintain a copy of the General Permit (GP-0-20-001), NOI, *NOI Acknowledgment Letter*, SWPPP, MS4 SWPPP Acceptance form, inspection reports, responsible contractor’s or subcontractor’s certification statement (see Part III.A.6.), and all documentation necessary to demonstrate eligibility with this permit at the *construction site* until all disturbed areas have achieved *final stabilization* and the NOT has been submitted to the Department. The documents must be maintained in a secure location, such as a job trailer, on-site construction office, or mailbox with lock. The secure location must be accessible during normal business hours to an individual performing a compliance inspection.
- 3. The *owner or operator* of a *construction activity* shall not disturb greater than five (5) acres of soil at any one time without prior written authorization from the Department or, in areas under the jurisdiction of a *regulated, traditional land*

*use control MS4, the regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*). At a minimum, the *owner or operator* must comply with the following requirements in order to be authorized to disturb greater than five (5) acres of soil at any one time:

- a. The *owner or operator* shall have a *qualified inspector* conduct **at least** two (2) site inspections in accordance with Part IV.C. of this permit every seven (7) calendar days, for as long as greater than five (5) acres of soil remain disturbed. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - b. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016.
  - c. The *owner or operator* shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
  - d. The *owner or operator* shall install any additional site-specific practices needed to protect water quality.
  - e. The *owner or operator* shall include the requirements above in their SWPPP.
4. In accordance with statute, regulations, and the terms and conditions of this permit, the Department may suspend or revoke an *owner's or operator's* coverage under this permit at any time if the Department determines that the SWPPP does not meet the permit requirements or consistent with Part VII.K..
  5. Upon a finding of significant non-compliance with the practices described in the SWPPP or violation of this permit, the Department may order an immediate stop to all activity at the site until the non-compliance is remedied. The stop work order shall be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.
  6. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4*, the *owner or operator* shall notify the

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

#### **E. Permit Coverage for Discharges Authorized Under GP-0-15-002**

1. Upon renewal of SPDES General Permit for Stormwater Discharges from *Construction Activity* (Permit No. GP-0-15-002), an *owner or operator* of a *construction activity* with coverage under GP-0-15-002, as of the effective date of GP- 0-20-001, shall be authorized to *discharge* in accordance with GP- 0-20-001, unless otherwise notified by the Department.

An *owner or operator* may continue to implement the technical/design components of the post-construction stormwater management controls provided that such design was done in conformance with the technical standards in place at the time of initial project authorization. However, they must comply with the other, non-design provisions of GP-0-20-001.

#### **F. Change of Owner or Operator**

1. When property ownership changes or when there is a change in operational control over the construction plans and specifications, the original *owner or operator* must notify the new *owner or operator*, in writing, of the requirement to obtain permit coverage by submitting a NOI with the Department. For *construction activities* subject to the requirements of a *regulated, traditional land use control MS4*, the original *owner or operator* must also notify the MS4, in writing, of the change in ownership at least 30 calendar days prior to the change in ownership.
2. Once the new *owner or operator* obtains permit coverage, the original *owner or operator* shall then submit a completed NOT with the name and permit identification number of the new *owner or operator* to the Department at the address in Part II.B.1. of this permit. If the original *owner or operator* maintains ownership of a portion of the *construction activity* and will disturb soil, they must maintain their coverage under the permit.
3. Permit coverage for the new *owner or operator* will be effective as of the date the Department receives a complete NOI, provided the original *owner or*

*operator* was not subject to a sixty (60) business day authorization period that has not expired as of the date the Department receives the NOI from the new *owner or operator*.

### Part III. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

#### A. General SWPPP Requirements

1. A SWPPP shall be prepared and implemented by the *owner or operator* of each *construction activity* covered by this permit. The SWPPP must document the selection, design, installation, implementation and maintenance of the control measures and practices that will be used to meet the effluent limitations in Part I.B. of this permit and where applicable, the post-construction stormwater management practice requirements in Part I.C. of this permit. The SWPPP shall be prepared prior to the submittal of the NOI. The NOI shall be submitted to the Department prior to the *commencement of construction activity*. A copy of the completed, final NOI shall be included in the SWPPP.
2. The SWPPP shall describe the erosion and sediment control practices and where required, post-construction stormwater management practices that will be used and/or constructed to reduce the *pollutants* in stormwater *discharges* and to assure compliance with the terms and conditions of this permit. In addition, the SWPPP shall identify potential sources of pollution which may reasonably be expected to affect the quality of stormwater *discharges*.
3. All SWPPPs that require the post-construction stormwater management practice component shall be prepared by a *qualified professional* that is knowledgeable in the principles and practices of stormwater management and treatment.
4. The *owner or operator* must keep the SWPPP current so that it at all times accurately documents the erosion and sediment controls practices that are being used or will be used during construction, and all post-construction stormwater management practices that will be constructed on the site. At a minimum, the *owner or operator* shall amend the SWPPP, including construction drawings:
  - a. whenever the current provisions prove to be ineffective in minimizing *pollutants* in stormwater *discharges* from the site;



- b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*;
  - c. to address issues or deficiencies identified during an inspection by the *qualified inspector*, the Department or other regulatory authority; and
  - d. to document the final construction conditions.
5. The Department 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 shall be in writing and identify the provisions of the SWPPP that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by the Department, the *owner or operator* shall make the required changes to the SWPPP and submit written notification to the Department that the changes have been made. If the *owner or operator* does not respond to the Department's comments in the specified time frame, the Department may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4. of this permit.
6. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting and maintaining the erosion and sediment control practices included in the SWPPP; and the contractor(s) and subcontractor(s) that will be responsible for constructing the post-construction stormwater management practices included in the SWPPP. The *owner or operator* shall have each of the contractors and subcontractors identify at least one person from their company that will be responsible for implementation of the SWPPP. This person shall be known as the *trained contractor*. The *owner or operator* shall ensure that at least one *trained contractor* is on site on a daily basis when soil disturbance activities are being performed.

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

"I hereby certify under penalty of law that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with

the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater *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* shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the *construction site*. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above.

7. For projects where the Department requests a copy of the SWPPP or inspection reports, the *owner or operator* shall submit the documents in both electronic (PDF only) and paper format within five (5) business days, unless otherwise notified by the Department.

## **B. Required SWPPP Contents**

1. Erosion and sediment control component - All SWPPPs prepared pursuant to this permit shall include erosion and sediment control practices designed in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Where erosion and sediment control practices are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must demonstrate *equivalence* to the technical standard. At a minimum, the erosion and sediment control component of the SWPPP shall include the following:
  - a. Background information about the scope of the project, including the location, type and size of project

- b. A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map shall show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours ; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the stormwater *discharge(s)*;
- c. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG);
- d. A construction phasing plan and sequence of operations describing the intended order of *construction activities*, including clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity at the site that results in soil disturbance;
- e. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented;
- f. A temporary and permanent soil stabilization plan that meets the requirements of this general permit and the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016, for each stage of the project, including initial land clearing and grubbing to project completion and achievement of *final stabilization*;
- g. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice;
- h. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any temporary sediment basins and structural practices that will be used to divert flows from exposed soils;
- i. A maintenance inspection schedule for the contractor(s) identified in Part III.A.6. of this permit, to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection

schedule shall be in accordance with the requirements in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016;

- j. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the stormwater *discharges*;
  - k. A description and location of any stormwater *discharges* associated with industrial activity other than construction at the site, including, but not limited to, stormwater *discharges* from asphalt plants and concrete plants located on the *construction site*; and
  - l. Identification of any elements of the design that are not in conformance with the design criteria in the technical standard, New York State Standards and Specifications for Erosion and Sediment Control, dated November 2016. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.
2. Post-construction stormwater management practice component – The *owner or operator* of any construction project identified in Table 2 of Appendix B as needing post-construction stormwater management practices shall prepare a SWPPP that includes practices designed in conformance with the applicable *sizing criteria* in Part I.C.2.a., c. or d. of this permit and the *performance criteria* in the technical standard, New York State Stormwater Management Design Manual dated January 2015

Where post-construction stormwater management practices are not designed in conformance with the *performance criteria* in the technical standard, the *owner or operator* must include in the SWPPP the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

The post-construction stormwater management practice component of the SWPPP shall include the following:

- a. Identification of all post-construction stormwater management practices to be constructed as part of the project. Include the dimensions, material specifications and installation details for each post-construction stormwater management practice;



- b. A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice;
- c. A Stormwater Modeling and Analysis Report that includes:
  - (i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points;
  - (ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and post-construction stormwater management practices;
  - (iii) Results of stormwater modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre and post-development runoff rates and volumes for the different storm events;
  - (iv) Summary table, with supporting calculations, which demonstrates that each post-construction stormwater management practice has been designed in conformance with the *sizing criteria* included in the Design Manual;
  - (v) Identification of any *sizing criteria* that is not required based on the requirements included in Part I.C. of this permit; and
  - (vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the Design Manual. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the Design Manual;
- d. Soil testing results and locations (test pits, borings);
- e. Infiltration test results, when required; and
- f. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice.

3. Enhanced Phosphorus Removal Standards - All construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the applicable *sizing criteria* in Part I.C.2. b., c. or d. of this permit and the *performance criteria*, Enhanced Phosphorus Removal Standards included in the Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 2.a - 2.f. above.

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

Unless otherwise notified by the Department, *owners or operators of construction activities* identified in Table 1 of Appendix B are required to prepare a SWPPP that only includes erosion and sediment control practices designed in conformance with Part III.B.1 of this permit. *Owners or operators of the construction activities* identified in Table 2 of Appendix B shall prepare a SWPPP that also includes post-construction stormwater management practices designed in conformance with Part III.B.2 or 3 of this permit.

## **Part IV. INSPECTION AND MAINTENANCE REQUIREMENTS**

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

1. The *owner or operator* must ensure that all erosion and sediment control practices (including pollution prevention measures) and all post-construction stormwater management practices identified in the SWPPP are inspected and maintained in accordance with Part IV.B. and C. of this permit.
2. The terms of this permit shall not be construed to prohibit the State of New York from exercising any authority pursuant to the ECL, common law or federal law, or prohibit New York State from taking any measures, whether civil or criminal, to prevent violations of the laws of the State of New York or protect the public health and safety and/or the environment.

### **B. Contractor Maintenance Inspection Requirements**

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

begin implementing corrective actions within one business day and shall complete the corrective actions in a reasonable time frame.

2. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections. The *trained contractor* shall begin conducting the maintenance inspections in accordance with Part IV.B.1. of this permit as soon as soil disturbance activities resume.
3. For construction sites where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

### C. Qualified Inspector Inspection Requirements

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

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

- licensed Professional Engineer,
  - Certified Professional in Erosion and Sediment Control (CPESC),
  - New York State Erosion and Sediment Control Certificate Program holder
  - Registered Landscape Architect, or
  - someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received four (4) hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity].
1. A *qualified inspector* shall conduct site inspections for all *construction activities* identified in Tables 1 and 2 of Appendix B, with the exception of:
    - a. the construction of a single family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located

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

- b. the construction of a single family home that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres and is not located in one of the watersheds listed in Appendix C and not directly discharging to one of the 303(d) segments listed in Appendix E;
  - c. construction on agricultural property that involves a soil disturbance of one (1) or more acres of land but less than five (5) acres; and
  - d. *construction activities* located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.
2. Unless otherwise notified by the Department, the *qualified inspector* shall conduct site inspections in accordance with the following timetable:
- a. For construction sites where soil disturbance activities are on-going, the *qualified inspector* shall conduct a site inspection at least once every seven (7) calendar days.
  - b. For construction sites where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part II.D.3 to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
  - c. For construction sites where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* shall conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to reducing the frequency of inspections.

- d. For construction sites where soil disturbance activities have been shut down with partial project completion, the *qualified inspector* can stop conducting inspections if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational. The *owner or operator* shall notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix F) or, in areas under the jurisdiction of a *regulated, traditional land use control MS4*, the *regulated, traditional land use control MS4* (provided the *regulated, traditional land use control MS4* is not the *owner or operator* of the *construction activity*) in writing prior to the shutdown. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* shall have the *qualified inspector* perform a final inspection and certify that all disturbed areas have achieved *final stabilization*, and all temporary, structural erosion and sediment control measures have been removed; and that all post-construction stormwater management practices have been constructed in conformance with the SWPPP by signing the “*Final Stabilization*” and “*Post-Construction Stormwater Management Practice*” certification statements on the NOT. The *owner or operator* shall then submit the completed NOT form to the address in Part II.B.1 of this permit.
  - e. For construction sites that directly *discharge* to one of the 303(d) segments listed in Appendix E or is located in one of the watersheds listed in Appendix C, the *qualified inspector* shall conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections shall be separated by a minimum of two (2) full calendar days.
3. At a minimum, the *qualified inspector* shall inspect all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness, all post-construction stormwater management practices under construction to ensure that they are constructed in conformance with the SWPPP, all areas of disturbance that have not achieved *final stabilization*, all points of *discharge* to natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site*, and all points of *discharge* from the *construction site*.
  4. The *qualified inspector* shall prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report shall include and/or address the following:



- a. Date and time of inspection;
- b. Name and title of person(s) performing inspection;
- c. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
- d. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This shall include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow;
- e. A description of the condition of all natural surface waterbodies located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This shall include identification of any *discharges* of sediment to the surface waterbody;
- f. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance;
- g. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced;
- h. Description and sketch of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection;
- i. Current phase of construction of all post-construction stormwater management practices and identification of all construction that is not in conformance with the SWPPP and technical standards;
- j. Corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices and pollution prevention measures; and to correct deficiencies identified with the construction of the post-construction stormwater management practice(s);
- k. Identification and status of all corrective actions that were required by previous inspection; and

- I. Digital photographs, with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report being maintained onsite within seven (7) calendar days of the date of the inspection. The *qualified inspector* shall also take digital photographs, with date stamp, that clearly show the condition of the practice(s) after the corrective action has been completed. The *qualified inspector* shall attach paper color copies of the digital photographs to the inspection report that documents the completion of the corrective action work within seven (7) calendar days of that inspection.
5. Within one business day of the completion of an inspection, the *qualified inspector* shall notify the *owner or operator* and appropriate contractor or subcontractor identified in Part III.A.6. of this permit of any corrective actions that need to be taken. The contractor or subcontractor shall begin implementing the corrective actions within one business day of this notification and shall complete the corrective actions in a reasonable time frame.
6. All inspection reports shall be signed by the *qualified inspector*. Pursuant to Part II.D.2. of this permit, the inspection reports shall be maintained on site with the SWPPP.

## **Part V. TERMINATION OF PERMIT COVERAGE**

### **A. Termination of Permit Coverage**

1. An *owner or operator* that is eligible to terminate coverage under this permit must submit a completed NOT form to the address in Part II.B.1 of this permit. The NOT form shall be one which is associated with this permit, signed in accordance with Part VII.H of this permit.
2. An *owner or operator* may terminate coverage when one or more the following conditions have been met:
  - a. Total project completion - All *construction activity* identified in the SWPPP has been completed; and all areas of disturbance have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices have been constructed in conformance with the SWPPP and are operational;

- b. Planned shutdown with partial project completion - All soil disturbance activities have ceased; and all areas disturbed as of the project shutdown date have achieved *final stabilization*; and all temporary, structural erosion and sediment control measures have been removed; and all post-construction stormwater management practices required for the completed portion of the project have been constructed in conformance with the SWPPP and are operational;
  - c. A new *owner or operator* has obtained coverage under this permit in accordance with Part II.F. of this permit.
  - d. The *owner or operator* obtains coverage under an alternative SPDES general permit or an individual SPDES permit.
3. For *construction activities* meeting subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *qualified inspector* perform a final site inspection prior to submitting the NOT. The *qualified inspector* shall, by signing the “*Final Stabilization*” and “Post-Construction Stormwater Management Practice certification statements on the NOT, certify that all the requirements in Part V.A.2.a. or b. of this permit have been achieved.
4. For *construction activities* that are subject to the requirements of a *regulated, traditional land use control MS4* and meet subdivision 2a. or 2b. of this Part, the *owner or operator* shall have the *regulated, traditional land use control MS4* sign the “MS4 Acceptance” statement on the NOT in accordance with the requirements in Part VII.H. of this permit. The *regulated, traditional land use control MS4* official, by signing this statement, has determined that it is acceptable for the *owner or operator* to submit the NOT in accordance with the requirements of this Part. The *regulated, traditional land use control MS4* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector’s* final site inspection certification(s) required in Part V.A.3. of this permit.
5. For *construction activities* that require post-construction stormwater management practices and meet subdivision 2a. of this Part, the *owner or operator* must, prior to submitting the NOT, ensure one of the following:
- a. the post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain such practice(s) have been deeded to the municipality in which the practice(s) is located,

- b. an executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s),
- c. for post-construction stormwater management practices that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record,
- d. for post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility; the *owner or operator* has policy and procedures in place that ensures operation and maintenance of the practices in accordance with the operation and maintenance plan.

## **Part VI. REPORTING AND RETENTION RECORDS**

### **A. Record Retention**

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

### **B. Addresses**

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

## **Part VII. STANDARD PERMIT CONDITIONS**

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

The *owner or operator* must comply with all conditions of this permit. All contractors and subcontractors associated with the project must comply with the terms of the SWPPP. Any non-compliance with this permit constitutes a violation of the Clean Water

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

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

## **B. Continuation of the Expired General Permit**

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

## **C. Enforcement**

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

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

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



### **E. Duty to Mitigate**

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

### **F. Duty to Provide Information**

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

### **G. Other Information**

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

### **H. Signatory Requirements**

1. All NOIs and NOTs shall be signed as follows:
  - a. For a corporation these forms shall be signed by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

- (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
    - (ii) the manager of one or more manufacturing, production or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
  - b. For a partnership or sole proprietorship these forms shall be signed by a general partner or the proprietor, respectively; or
  - c. For a municipality, State, Federal, or other public agency these forms shall be signed by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
    - (i) the chief executive officer of the agency, or
    - (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
2. The SWPPP and other information requested by the Department shall be signed by a person described in Part VII.H.1. of this permit or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part VII.H.1. of this permit;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field,

superintendent, position of *equivalent* responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position) and,

- c. The written authorization shall include the name, title and signature of the authorized representative and be attached to the SWPPP.
3. All inspection reports shall be signed by the *qualified inspector* that performs the inspection.
4. The MS4 SWPPP Acceptance form shall be signed by the principal executive officer or ranking elected official from the *regulated, traditional land use control MS4*, or by a duly authorized representative of that person.

It shall constitute a permit violation if an incorrect and/or improper signatory authorizes any required forms, SWPPP and/or inspection reports.

## **I. Property Rights**

The issuance of this permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. *Owners or operators* must obtain any applicable conveyances, easements, licenses and/or access to real property prior to *commencing construction activity*.

## **J. Severability**

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

## **K. Requirement to Obtain Coverage Under an Alternative Permit**

1. The Department may require any owner or operator authorized by this permit to apply for and/or obtain either an individual SPDES permit or another SPDES general permit. When the Department requires any discharger authorized by a general permit to apply for an individual SPDES permit, it shall notify the discharger in writing that a permit application is required. This notice shall

include a brief statement of the reasons for this decision, an application form, a statement setting a time frame for the owner or operator to file the application for an individual SPDES permit, and a deadline, not sooner than 180 days from owner or operator receipt of the notification letter, whereby the authorization to discharge under this general permit shall be terminated. Applications must be submitted to the appropriate Permit Administrator at the Regional Office. The Department may grant additional time upon demonstration, to the satisfaction of the Department, that additional time to apply for an alternative authorization is necessary or where the Department has not provided a permit determination in accordance with Part 621 of this Title.

2. When an individual SPDES permit is issued to a discharger authorized to *discharge* under a general SPDES permit for the same *discharge(s)*, the general permit authorization for outfalls authorized under the individual SPDES permit is automatically terminated on the effective date of the individual permit unless termination is earlier in accordance with 6 NYCRR Part 750.

#### **L. Proper Operation and Maintenance**

The *owner or operator* shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the *owner or operator* to achieve compliance with the conditions of this permit and with the requirements of the SWPPP.

#### **M. Inspection and Entry**

The *owner or operator* shall allow an authorized representative of the Department, EPA, applicable county health department, or, in the case of a *construction site* which *discharges* through an *MS4*, an authorized representative of the *MS4* receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the owner's or operator's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
2. Have access to and copy at reasonable times, any records that must be kept under the conditions of this permit; and

3. Inspect at reasonable times any facilities or equipment (including monitoring and control equipment), practices or operations regulated or required by this permit.
4. Sample or monitor at reasonable times, for purposes of assuring permit compliance or as otherwise authorized by the Act or ECL, any substances or parameters at any location.

## **N. Permit Actions**

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

## **O. Definitions**

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

## **P. Re-Opener Clause**

1. If there is evidence indicating potential or realized impacts on water quality due to any stormwater discharge associated with construction activity covered by this permit, the owner or operator of such discharge may be required to obtain an individual permit or alternative general permit in accordance with Part VII.K. of this permit or the permit may be modified to include different limitations and/or requirements.
2. Any Department initiated permit modification, suspension or revocation will be conducted in accordance with 6 NYCRR Part 621, 6 NYCRR 750-1.18, and 6 NYCRR 750-1.20.

## **Q. Penalties for Falsification of Forms and Reports**

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



## **R. Other Permits**

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

## **APPENDIX A – Acronyms and Definitions**

### **Acronyms**

APO – Agency Preservation Officer  
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)  
DOW – Division of Water  
EAF – Environmental Assessment Form  
ECL - 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  
OPRHP – Office of Parks, Recreation and Historic Places  
Qf – Extreme Flood  
Qp – Overbank Flood  
RRv – Runoff Reduction Volume  
RWE – Regional Water Engineer  
SEQR – State Environmental Quality Review  
SEQRA - State Environmental Quality Review Act  
SHPA – State Historic Preservation Act  
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.

**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** – means the land for construction of a barn, *agricultural building*, silo, stockyard, pen or other structural practices identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State” prepared by the Department in cooperation with agencies of New York Nonpoint Source Coordinating Committee (dated June 2007).

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

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

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

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

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

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

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

and the first point of discharge from the separate storm sewer system is the specific surface waterbody.

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

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

**Endangered or Threatened Species** – see 6 NYCRR Part 182 of the Department’s rules and regulations for definition of terms and requirements.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**New Development** – means 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.

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

**Nonpoint Source** - means 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** –means flow events that exceed the capacity of the stream channel and spill out into the adjacent floodplain.

**Owner or Operator** - means 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 conditions.

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

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

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

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

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

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

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

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

**Regulated, Traditional Land Use Control MS4** - means a city, town or village with land use control authority that is 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).

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

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

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

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

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

**Steep Slope** – means land area designated on the current United States Department of Agriculture (“USDA”) Soil Survey as Soil Slope Phase “D”, (provided the map unit name 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.

**Streambank** – as used in this permit, means 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)** – means 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 post-construction stormwater management controls); and identifies procedures the *owner or operator* will implement to comply with the terms and conditions 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** – means that an existing disturbed area will not be disturbed again within 14 calendar days of the previous soil disturbance.

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

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

**Trained Contractor** - means an employee from the contracting (construction) company, identified in Part III.A.6., that has received four (4) hours of Department endorsed

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

It can also mean an employee from the contracting (construction) company, identified in Part III.A.6., that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), Registered Landscape Architect, 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 Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

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

**Uniform Procedures Act (UPA) Permit** - means a permit required under 6 NYCRR Part 621 of the Environmental Conservation Law (ECL), Article 70.

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



## APPENDIX B – Required SWPPP Components by Project Type

**Table 1**  
**Construction Activities that Require the Preparation of a SWPPP That Only Includes Erosion and Sediment Controls**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land, but less than five (5) acres:</b></p> <ul style="list-style-type: none"><li>• Single family home <u>not</u> located in one of the watersheds listed in Appendix C or <u>not directly discharging</u> to one of the 303(d) segments listed in Appendix E</li><li>• Single family residential subdivisions with 25% or less impervious cover at total site build-out and <u>not</u> located in one of the watersheds listed in Appendix C and <u>not</u> directly discharging to one of the 303(d) segments listed in Appendix E</li><li>• Construction of a barn or other <i>agricultural building</i>, silo, stock yard or pen.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <p><b>The following construction activities that involve soil disturbances between five thousand (5000) square feet and one (1) acre of land:</b></p> <p>All construction activities located in the watersheds identified in Appendix D that involve soil disturbances between five thousand (5,000) square feet and one (1) acre of land.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <p><b>The following construction activities that involve soil disturbances of one (1) or more acres of land:</b></p> <ul style="list-style-type: none"><li>• Installation of underground, linear utilities; such as gas lines, fiber-optic cable, cable TV, electric, telephone, sewer mains, and water mains</li><li>• Environmental enhancement projects, such as wetland mitigation projects, stormwater retrofits and stream restoration projects</li><li>• Pond construction</li><li>• Linear bike paths running through areas with vegetative cover, including bike paths surfaced with an impervious cover</li><li>• Cross-country ski trails and walking/hiking trails</li><li>• Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are not part of residential, commercial or institutional development;</li><li>• Sidewalk, bike path or walking path projects, 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.</li><li>• Slope stabilization projects</li><li>• Slope flattening that changes the grade of the site, but does not significantly change the runoff characteristics</li></ul> |

**Table 1 (Continued) 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:**

- Spoil areas that will be covered with vegetation
- Vegetated open space projects (i.e. recreational parks, lawns, meadows, fields, downhill ski trails) excluding projects that *alter hydrology from pre to post development* conditions,
- Athletic fields (natural grass) that do not include the construction or reconstruction of *impervious area* and do not *alter hydrology from pre to post development* conditions
- Demolition project where vegetation will be established, and no redevelopment is planned
- Overhead electric transmission line project that does not include the construction of permanent access roads or parking areas surfaced with *impervious cover*
- Structural practices as identified in Table II in the “Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State”, excluding projects that involve soil disturbances of greater than five acres and construction activities that include the construction or reconstruction of impervious area
- 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

**Table 2**  
**CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A SWPPP THAT INCLUDES**  
**POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES**

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

- Single family home located in one of the watersheds listed in Appendix C or *directly discharging* to one of the 303(d) segments listed in Appendix E
- Single family 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 E
- Single family residential subdivisions that involve soil disturbances of between one (1) and five (5) acres of land with greater than 25% impervious cover at total site build-out
- Single family residential subdivisions that involve soil disturbances of five (5) or more acres of land, and single family residential subdivisions that involve soil disturbances of less than five (5) acres that are part of a larger common plan of development or sale that will ultimately disturb five or more acres of land
- Multi-family residential developments; includes duplexes, townhomes, condominiums, senior housing complexes, apartment complexes, and mobile home parks
- 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) and structural practices as identified in Table II in the "Agricultural Management Practices Catalog for Nonpoint Source Pollution in New York State" that include the construction or reconstruction of *impervious area*, excluding projects that involve soil disturbances of less than five acres.
- Golf courses
- Institutional development; includes hospitals, prisons, schools and colleges
- Industrial facilities; includes industrial parks
- Landfills
- Municipal facilities; includes highway garages, transfer stations, office buildings, POTW's, water treatment plants, and water storage tanks
- Office complexes
- Playgrounds that include the construction or reconstruction of impervious area
- Sports complexes
- Racetracks; includes racetracks with earthen (dirt) surface
- Road construction or reconstruction, including roads constructed as part of the construction activities listed in Table 1

Table 2 (Continued)

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

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

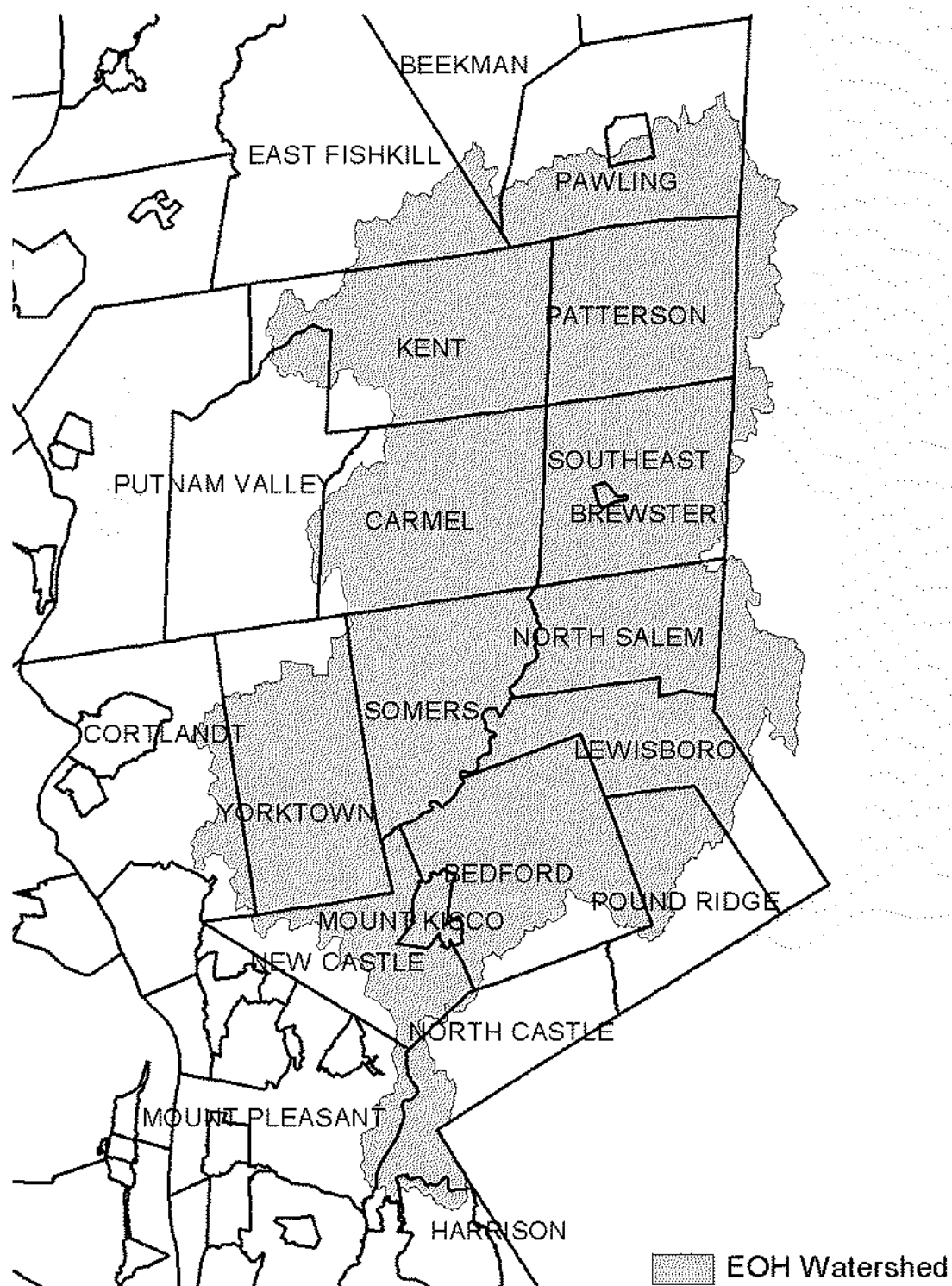
- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post development* conditions
- Athletic fields with artificial turf
- Permanent access roads, parking areas, substations, compressor stations and well drilling pads, surfaced with *impervious cover*, and constructed as part of an over-head electric transmission line project, wind-power project, cell tower project, oil or gas well drilling project, sewer or water main project or other linear utility project
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a residential, commercial or institutional development
- Sidewalk, bike path or walking path projects, surfaced with an impervious cover, that are part of a highway construction or reconstruction project
- All other construction activities that include the construction or reconstruction of *impervious area* or *alter the hydrology from pre to post development* conditions, and are not listed in Table 1

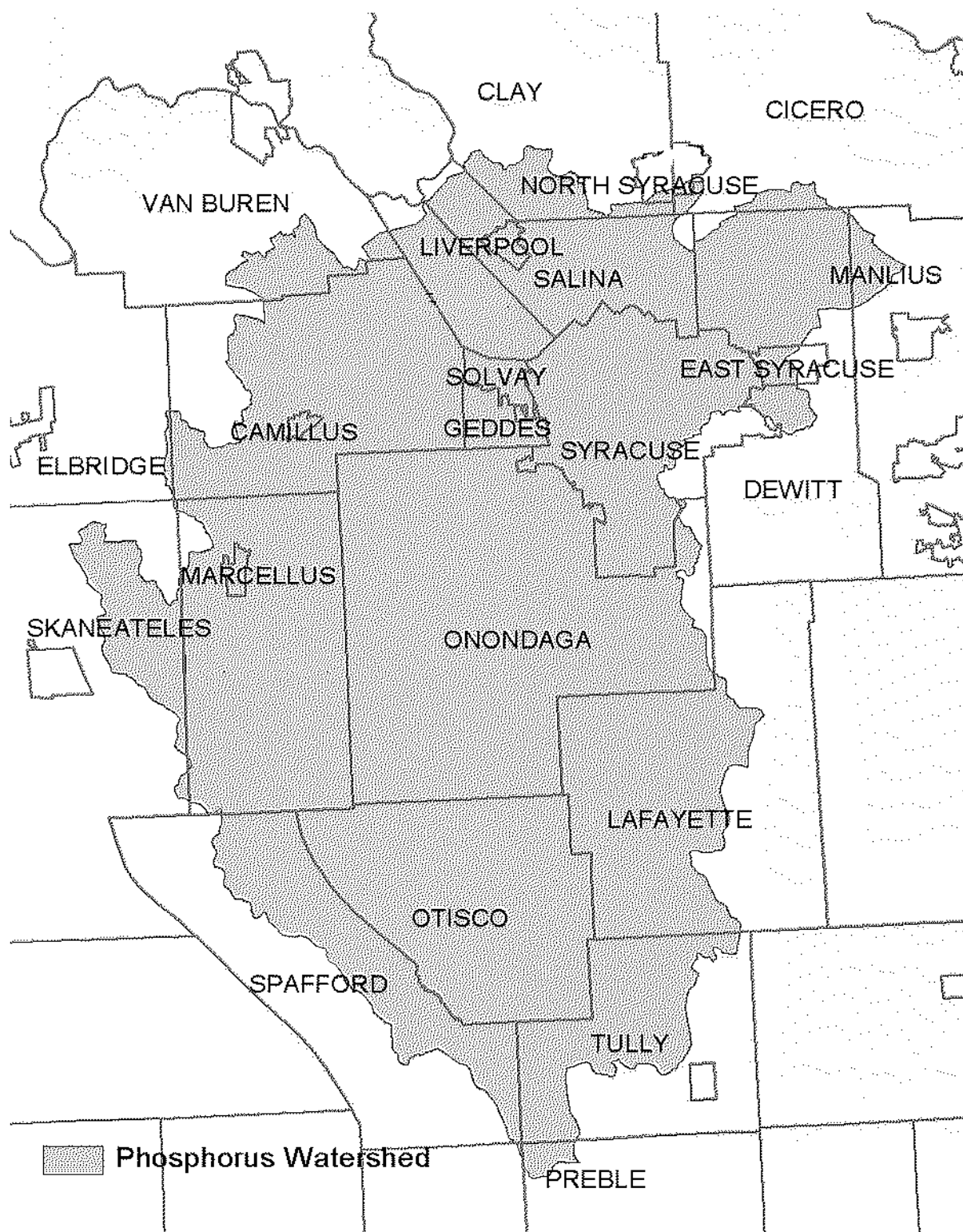
## APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

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

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

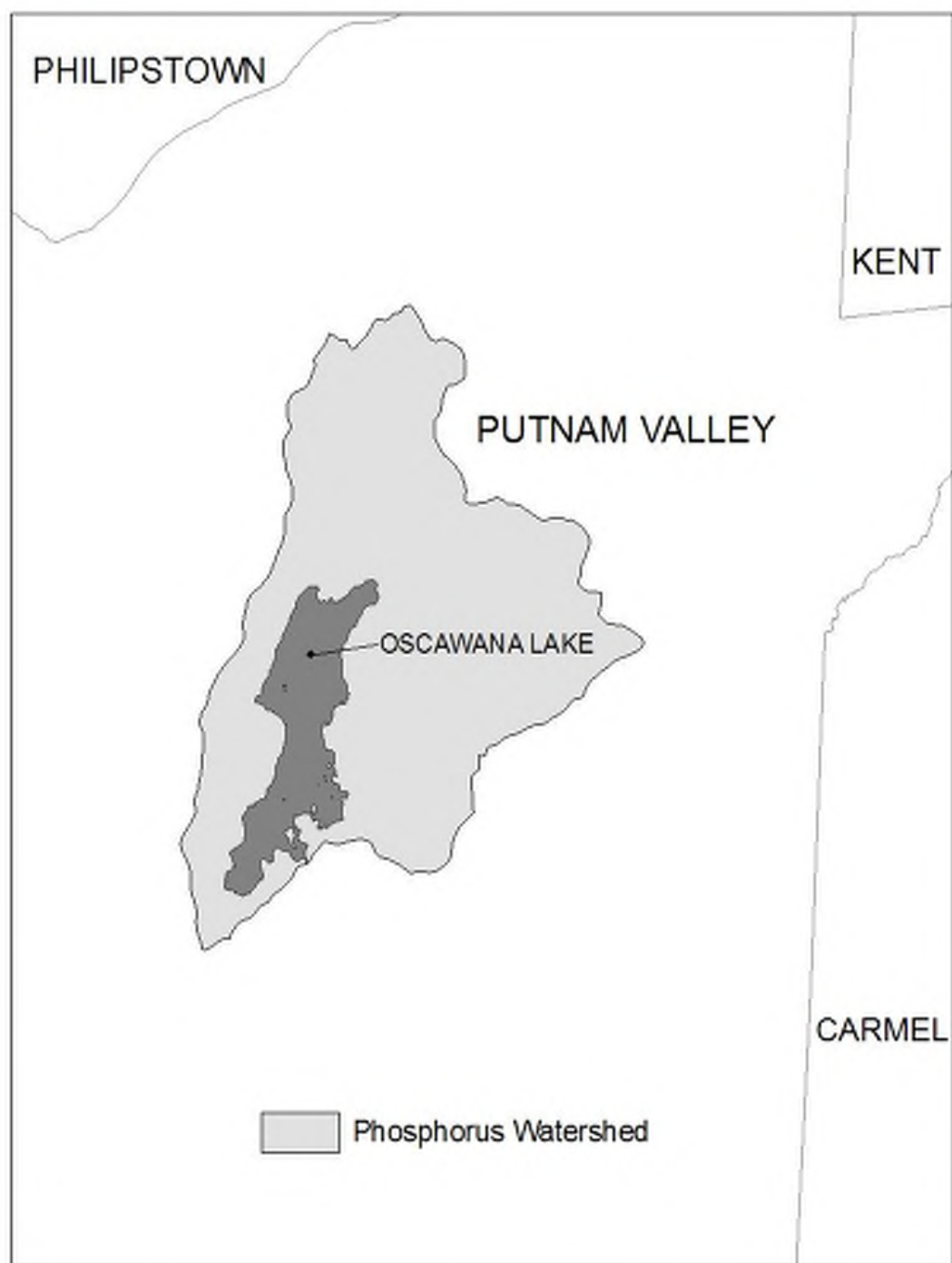


**Figure 1 - New York City Watershed East of the Hudson**

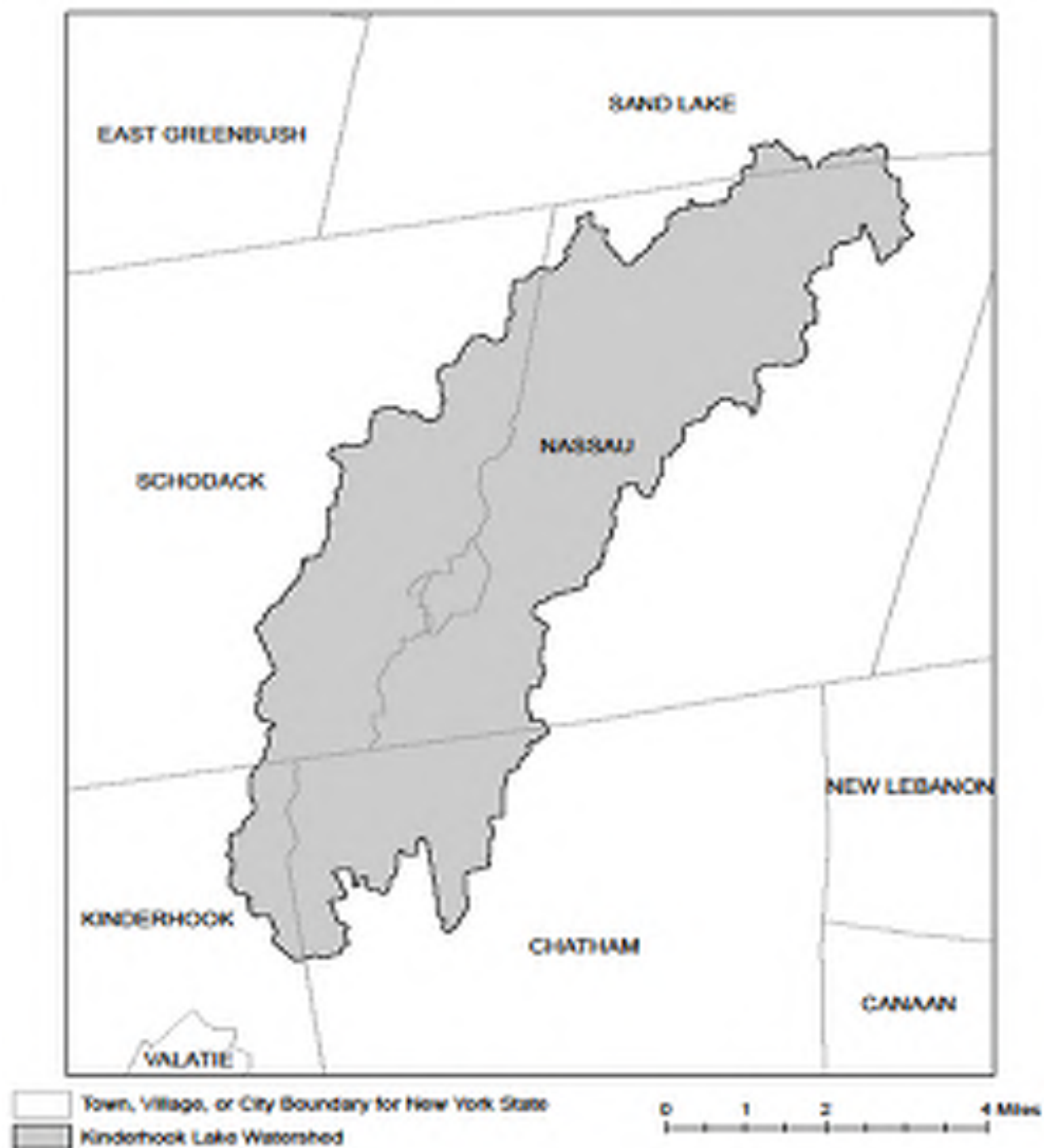
**Figure 2 - Onondaga Lake Watershed**

**Figure 3 - Greenwood Lake Watershed**



**Figure 4 - Oscawana Lake Watershed**

**Figure 5 - Kinderhook Lake Watershed**





## **APPENDIX D – Watersheds with Lower Disturbance Threshold**

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

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

## APPENDIX E – 303(d) Segments Impaired by Construction Related Pollutant(s)

List of 303(d) segments impaired by pollutants related to *construction activity* (e.g. silt, sediment or nutrients). The list was developed using "The Final New York State 2016 Section 303(d) List of Impaired Waters Requiring a TMDL/Other Strategy" dated November 2016. *Owners or operators* of single family home and single family residential subdivisions with 25% or less total impervious cover at total site build-out that involve soil disturbances of one or more acres of land, but less than 5 acres, and *directly discharge* to one of the listed segments below shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the New York State Stormwater Management Design Manual ("Design Manual"), dated January 2015.

| COUNTY      | WATERBODY                                | POLLUTANT     |
|-------------|------------------------------------------|---------------|
| Albany      | Ann Lee (Shakers) Pond, Stump Pond       | Nutrients     |
| Albany      | Basic Creek Reservoir                    | Nutrients     |
| Allegany    | Amity Lake, Saunders Pond                | Nutrients     |
| Bronx       | Long Island Sound, Bronx                 | Nutrients     |
| Bronx       | Van Cortlandt Lake                       | Nutrients     |
| Broome      | Fly Pond, Deer Lake, Sky Lake            | Nutrients     |
| Broome      | Minor Tribs to Lower Susquehanna (north) | Nutrients     |
| Broome      | Whitney Point Lake/Reservoir             | Nutrients     |
| Cattaraugus | Allegheny River/Reservoir                | Nutrients     |
| Cattaraugus | Beaver (Alma) Lake                       | Nutrients     |
| Cattaraugus | Case Lake                                | Nutrients     |
| Cattaraugus | Linlyco/Club Pond                        | Nutrients     |
| Cayuga      | Duck Lake                                | Nutrients     |
| Cayuga      | Little Sodus Bay                         | Nutrients     |
| Chautauqua  | Bear Lake                                | Nutrients     |
| Chautauqua  | Chadakoin River and tribs                | Nutrients     |
| Chautauqua  | Chautauqua Lake, North                   | Nutrients     |
| Chautauqua  | Chautauqua Lake, South                   | Nutrients     |
| Chautauqua  | Findley Lake                             | Nutrients     |
| Chautauqua  | Hulburt/Clymer Pond                      | Nutrients     |
| Clinton     | Great Chazy River, Lower, Main Stem      | Silt/Sediment |
| Clinton     | Lake Champlain, Main Lake, Middle        | Nutrients     |
| Clinton     | Lake Champlain, Main Lake, North         | Nutrients     |
| Columbia    | Kinderhook Lake                          | Nutrients     |
| Columbia    | Robinson Pond                            | Nutrients     |
| Cortland    | Dean Pond                                | Nutrients     |

### 303(d) Segments Impaired by Construction Related Pollutant(s)

|            |                                         |               |
|------------|-----------------------------------------|---------------|
| Dutchess   | Fall Kill and tribs                     | Nutrients     |
| Dutchess   | Hillside Lake                           | Nutrients     |
| Dutchess   | Wappingers Lake                         | Nutrients     |
| Dutchess   | Wappingers Lake                         | Silt/Sediment |
| Erie       | Beeman Creek and tribs                  | Nutrients     |
| Erie       | Ellicott Creek, Lower, and tribs        | Silt/Sediment |
| Erie       | Ellicott Creek, Lower, and tribs        | Nutrients     |
| Erie       | Green Lake                              | Nutrients     |
| Erie       | Little Sister Creek, Lower, and tribs   | Nutrients     |
| Erie       | Murder Creek, Lower, and tribs          | Nutrients     |
| Erie       | Rush Creek and tribs                    | Nutrients     |
| Erie       | Scajaquada Creek, Lower, and tribs      | Nutrients     |
| Erie       | Scajaquada Creek, Middle, and tribs     | Nutrients     |
| Erie       | Scajaquada Creek, Upper, and tribs      | Nutrients     |
| Erie       | South Branch Smoke Cr, Lower, and tribs | Silt/Sediment |
| Erie       | South Branch Smoke Cr, Lower, and tribs | Nutrients     |
| Essex      | Lake Champlain, Main Lake, South        | Nutrients     |
| Essex      | Lake Champlain, South Lake              | Nutrients     |
| Essex      | Willsboro Bay                           | Nutrients     |
| Genesee    | Bigelow Creek and tribs                 | Nutrients     |
| Genesee    | Black Creek, Middle, and minor tribs    | Nutrients     |
| Genesee    | Black Creek, Upper, and minor tribs     | Nutrients     |
| Genesee    | Bowen Brook and tribs                   | Nutrients     |
| Genesee    | LeRoy Reservoir                         | Nutrients     |
| Genesee    | Oak Orchard Cr, Upper, and tribs        | Nutrients     |
| Genesee    | Tonawanda Creek, Middle, Main Stem      | Nutrients     |
| Greene     | Schoharie Reservoir                     | Silt/Sediment |
| Greene     | Sleepy Hollow Lake                      | Silt/Sediment |
| Herkimer   | Steele Creek tribs                      | Silt/Sediment |
| Herkimer   | Steele Creek tribs                      | Nutrients     |
| Jefferson  | Moon Lake                               | Nutrients     |
| Kings      | Hendrix Creek                           | Nutrients     |
| Kings      | Prospect Park Lake                      | Nutrients     |
| Lewis      | Mill Creek/South Branch, and tribs      | Nutrients     |
| Livingston | Christie Creek and tribs                | Nutrients     |
| Livingston | Conesus Lake                            | Nutrients     |
| Livingston | Mill Creek and minor tribs              | Silt/Sediment |
| Monroe     | Black Creek, Lower, and minor tribs     | Nutrients     |
| Monroe     | Buck Pond                               | Nutrients     |
| Monroe     | Cranberry Pond                          | Nutrients     |

### 303(d) Segments Impaired by Construction Related Pollutant(s)

|          |                                          |               |
|----------|------------------------------------------|---------------|
| Monroe   | Lake Ontario Shoreline, Western          | Nutrients     |
| Monroe   | Long Pond                                | Nutrients     |
| Monroe   | Mill Creek and tribs                     | Nutrients     |
| Monroe   | Mill Creek/Blue Pond Outlet and tribs    | Nutrients     |
| Monroe   | Minor Tribs to Irondequoit Bay           | Nutrients     |
| Monroe   | Rochester Embayment - East               | Nutrients     |
| Monroe   | Rochester Embayment - West               | Nutrients     |
| Monroe   | Shipbuilders Creek and tribs             | Nutrients     |
| Monroe   | Thomas Creek/White Brook and tribs       | Nutrients     |
| Nassau   | Beaver Lake                              | Nutrients     |
| Nassau   | Camaans Pond                             | Nutrients     |
| Nassau   | East Meadow Brook, Upper, and tribs      | Silt/Sediment |
| Nassau   | East Rockaway Channel                    | Nutrients     |
| Nassau   | Grant Park Pond                          | Nutrients     |
| Nassau   | Hempstead Bay                            | Nutrients     |
| Nassau   | Hempstead Lake                           | Nutrients     |
| Nassau   | Hewlett Bay                              | Nutrients     |
| Nassau   | Hog Island Channel                       | Nutrients     |
| Nassau   | Long Island Sound, Nassau County Waters  | Nutrients     |
| Nassau   | Massapequa Creek and tribs               | Nutrients     |
| Nassau   | Milburn/Parsonage Creeks, Upp, and tribs | Nutrients     |
| Nassau   | Reynolds Channel, west                   | Nutrients     |
| Nassau   | Tidal Tribs to Hempstead Bay             | Nutrients     |
| Nassau   | Tribs (fresh) to East Bay                | Nutrients     |
| Nassau   | Tribs (fresh) to East Bay                | Silt/Sediment |
| Nassau   | Tribs to Smith/Halls Ponds               | Nutrients     |
| Nassau   | Woodmere Channel                         | Nutrients     |
| New York | Harlem Meer                              | Nutrients     |
| New York | The Lake in Central Park                 | Nutrients     |
| Niagara  | Bergholtz Creek and tribs                | Nutrients     |
| Niagara  | Hyde Park Lake                           | Nutrients     |
| Niagara  | Lake Ontario Shoreline, Western          | Nutrients     |
| Niagara  | Lake Ontario Shoreline, Western          | Nutrients     |
| Oneida   | Ballou, Nail Creeks and tribs            | Nutrients     |
| Onondaga | Harbor Brook, Lower, and tribs           | Nutrients     |
| Onondaga | Ley Creek and tribs                      | Nutrients     |
| Onondaga | Minor Tribs to Onondaga Lake             | Nutrients     |
| Onondaga | Ninemile Creek, Lower, and tribs         | Nutrients     |
| Onondaga | Onondaga Creek, Lower, and tribs         | Nutrients     |
| Onondaga | Onondaga Creek, Middle, and tribs        | Nutrients     |

### 303(d) Segments Impaired by Construction Related Pollutant(s)

|            |                                          |               |
|------------|------------------------------------------|---------------|
| Onondaga   | Onondaga Lake, northern end              | Nutrients     |
| Onondaga   | Onondaga Lake, southern end              | Nutrients     |
| Ontario    | Great Brook and minor tribs              | Silt/Sediment |
| Ontario    | Great Brook and minor tribs              | Nutrients     |
| Ontario    | Hemlock Lake Outlet and minor tribs      | Nutrients     |
| Ontario    | Honeoye Lake                             | Nutrients     |
| Orange     | Greenwood Lake                           | Nutrients     |
| Orange     | Monhagen Brook and tribs                 | Nutrients     |
| Orange     | Orange Lake                              | Nutrients     |
| Orleans    | Lake Ontario Shoreline, Western          | Nutrients     |
| Orleans    | Lake Ontario Shoreline, Western          | Nutrients     |
| Oswego     | Lake Neatahwanta                         | Nutrients     |
| Oswego     | Pleasant Lake                            | Nutrients     |
| Putnam     | Bog Brook Reservoir                      | Nutrients     |
| Putnam     | Boyd Corners Reservoir                   | Nutrients     |
| Putnam     | Croton Falls Reservoir                   | Nutrients     |
| Putnam     | Diverting Reservoir                      | Nutrients     |
| Putnam     | East Branch Reservoir                    | Nutrients     |
| Putnam     | Lake Carmel                              | Nutrients     |
| Putnam     | Middle Branch Reservoir                  | Nutrients     |
| Putnam     | Oscawana Lake                            | Nutrients     |
| Putnam     | Palmer Lake                              | Nutrients     |
| Putnam     | West Branch Reservoir                    | Nutrients     |
| Queens     | Bergen Basin                             | Nutrients     |
| Queens     | Flushing Creek/Bay                       | Nutrients     |
| Queens     | Jamaica Bay, Eastern, and tribs (Queens) | Nutrients     |
| Queens     | Kissena Lake                             | Nutrients     |
| Queens     | Meadow Lake                              | Nutrients     |
| Queens     | Willow Lake                              | Nutrients     |
| Rensselaer | Nassau Lake                              | Nutrients     |
| Rensselaer | Snyders Lake                             | Nutrients     |
| Richmond   | Grasmere Lake/Bradys Pond                | Nutrients     |
| Rockland   | Congers Lake, Swartout Lake              | Nutrients     |
| Rockland   | Rockland Lake                            | Nutrients     |
| Saratoga   | Ballston Lake                            | Nutrients     |
| Saratoga   | Dwaas Kill and tribs                     | Silt/Sediment |
| Saratoga   | Dwaas Kill and tribs                     | Nutrients     |
| Saratoga   | Lake Lonely                              | Nutrients     |
| Saratoga   | Round Lake                               | Nutrients     |
| Saratoga   | Tribs to Lake Lonely                     | Nutrients     |



### 303(d) Segments Impaired by Construction Related Pollutant(s)

|             |                                         |               |
|-------------|-----------------------------------------|---------------|
| Schenectady | Collins Lake                            | Nutrients     |
| Schenectady | Duane Lake                              | Nutrients     |
| Schenectady | Mariaville Lake                         | Nutrients     |
| Schoharie   | Engleville Pond                         | Nutrients     |
| Schoharie   | Summit Lake                             | Nutrients     |
| Seneca      | Reeder Creek and tribs                  | Nutrients     |
| St.Lawrence | Black Lake Outlet/Black Lake            | Nutrients     |
| St.Lawrence | Fish Creek and minor tribs              | Nutrients     |
| Steuben     | Smith Pond                              | Nutrients     |
| Suffolk     | Agawam Lake                             | Nutrients     |
| Suffolk     | Big/Little Fresh Ponds                  | Nutrients     |
| Suffolk     | Canaan Lake                             | Silt/Sediment |
| Suffolk     | Canaan Lake                             | Nutrients     |
| Suffolk     | Flanders Bay, West/Lower Sawmill Creek  | Nutrients     |
| Suffolk     | Fresh Pond                              | Nutrients     |
| Suffolk     | Great South Bay, East                   | Nutrients     |
| Suffolk     | Great South Bay, Middle                 | Nutrients     |
| Suffolk     | Great South Bay, West                   | Nutrients     |
| Suffolk     | Lake Ronkonkoma                         | Nutrients     |
| Suffolk     | Long Island Sound, Suffolk County, West | Nutrients     |
| Suffolk     | Mattituck (Marratooka) Pond             | Nutrients     |
| Suffolk     | Meetinghouse/Terrys Creeks and tribs    | Nutrients     |
| Suffolk     | Mill and Seven Ponds                    | Nutrients     |
| Suffolk     | Millers Pond                            | Nutrients     |
| Suffolk     | Moriches Bay, East                      | Nutrients     |
| Suffolk     | Moriches Bay, West                      | Nutrients     |
| Suffolk     | Peconic River, Lower, and tidal tribs   | Nutrients     |
| Suffolk     | Quantuck Bay                            | Nutrients     |
| Suffolk     | Shinnecock Bay and Inlet                | Nutrients     |
| Suffolk     | Tidal tribs to West Moriches Bay        | Nutrients     |
| Sullivan    | Bodine, Montgomery Lakes                | Nutrients     |
| Sullivan    | Davies Lake                             | Nutrients     |
| Sullivan    | Evens Lake                              | Nutrients     |
| Sullivan    | Pleasure Lake                           | Nutrients     |
| Tompkins    | Cayuga Lake, Southern End               | Nutrients     |
| Tompkins    | Cayuga Lake, Southern End               | Silt/Sediment |
| Tompkins    | Owasco Inlet, Upper, and tribs          | Nutrients     |
| Ulster      | Ashokan Reservoir                       | Silt/Sediment |
| Ulster      | Esopus Creek, Upper, and minor tribs    | Silt/Sediment |
| Warren      | Hague Brook and tribs                   | Silt/Sediment |

### 303(d) Segments Impaired by Construction Related Pollutant(s)

|             |                                          |               |
|-------------|------------------------------------------|---------------|
| Warren      | Huddle/Finkle Brooks and tribs           | Silt/Sediment |
| Warren      | Indian Brook and tribs                   | Silt/Sediment |
| Warren      | Lake George                              | Silt/Sediment |
| Warren      | Tribs to L.George, Village of L George   | Silt/Sediment |
| Washington  | Cossayuna Lake                           | Nutrients     |
| Washington  | Lake Champlain, South Bay                | Nutrients     |
| Washington  | Tribs to L.George, East Shore            | Silt/Sediment |
| Washington  | Wood Cr/Champlain Canal and minor tribs  | Nutrients     |
| Wayne       | Port Bay                                 | Nutrients     |
| Westchester | Amawalk Reservoir                        | Nutrients     |
| Westchester | Blind Brook, Upper, and tribs            | Silt/Sediment |
| Westchester | Cross River Reservoir                    | Nutrients     |
| Westchester | Lake Katonah                             | Nutrients     |
| Westchester | Lake Lincolndale                         | Nutrients     |
| Westchester | Lake Meahagh                             | Nutrients     |
| Westchester | Lake Mohegan                             | Nutrients     |
| Westchester | Lake Shenorock                           | Nutrients     |
| Westchester | Long Island Sound, Westchester (East)    | Nutrients     |
| Westchester | Mamaroneck River, Lower                  | Silt/Sediment |
| Westchester | Mamaroneck River, Upper, and minor tribs | Silt/Sediment |
| Westchester | Muscoot/Upper New Croton Reservoir       | Nutrients     |
| Westchester | New Croton Reservoir                     | Nutrients     |
| Westchester | Peach Lake                               | Nutrients     |
| Westchester | Reservoir No.1 (Lake Isle)               | Nutrients     |
| Westchester | Saw Mill River, Lower, and tribs         | Nutrients     |
| Westchester | Saw Mill River, Middle, and tribs        | Nutrients     |
| Westchester | Sheldrake River and tribs                | Silt/Sediment |
| Westchester | Sheldrake River and tribs                | Nutrients     |
| Westchester | Silver Lake                              | Nutrients     |
| Westchester | Teatown Lake                             | Nutrients     |
| Westchester | Titicus Reservoir                        | Nutrients     |
| Westchester | Truesdale Lake                           | Nutrients     |
| Westchester | Wallace Pond                             | Nutrients     |
| Wyoming     | Java Lake                                | Nutrients     |
| Wyoming     | Silver Lake                              | Nutrients     |

## APPENDIX F – List of NYS DEC Regional Offices

| <u>Region</u> | <u>COVERING THE<br/>FOLLOWING COUNTIES:</u>                                                                       | <u>DIVISION OF<br/>ENVIRONMENTAL<br/>PERMITS (DEP)<br/>PERMIT ADMINISTRATORS</u>                   | <u>DIVISION OF WATER<br/>(DOW)<br/>WATER (SPDES) PROGRAM</u>                                       |
|---------------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 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,<br>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,<br>ROCKLAND, SULLIVAN, ULSTER<br>AND WESTCHESTER                                        | 21 SOUTH PUTT CORNERS ROAD<br>NEW PALTZ, NY 12561-1696<br>TEL. (845) 256-3059                      | 100 HILLSIDE AVENUE, SUITE 1W<br>WHITE PLAINS, NY 10603<br>TEL. (914) 428 - 2505                   |
| 4             | ALBANY, COLUMBIA,<br>DELAWARE, GREENE,<br>MONTGOMERY, OTSEGO,<br>RENSSELAER, SCHENECTADY<br>AND SCHOHARIE         | 1150 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,<br>FULTON, HAMILTON,<br>SARATOGA, WARREN AND<br>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 TEL.<br>(518) 623-1200                          |
| 6             | HERKIMER, JEFFERSON,<br>LEWIS, ONEIDA AND<br>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 TEL. (315)<br>793-2554         |
| 7             | BROOME, CAYUGA,<br>CHENANGO, CORTLAND,<br>MADISON, ONONDAGA,<br>OSWEGO, TIOGA AND<br>TOMPKINS                     | 615 ERIE BLVD. WEST<br>SYRACUSE, NY 13204-2400<br>TEL. (315) 426-7438                              | 615 ERIE BLVD. WEST<br>SYRACUSE, NY 13204-2400<br>TEL. (315) 426-7500                              |
| 8             | CHEMUNG, GENESEE,<br>LIVINGSTON, MONROE,<br>ONTARIO, ORLEANS,<br>SCHUYLER, SENECA,<br>STEUBEN, WAYNE AND<br>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,<br>CATTARAUGUS,<br>CHAUTAUQUA, ERIE,<br>NIAGARA AND WYOMING                                             | 270 MICHIGAN AVENUE<br>BUFFALO, NY 14203-2999<br>TEL. (716) 851-7165                               | 270 MICHIGAN AVENUE<br>BUFFALO, NY 14203-2999<br>TEL. (716) 851-7070                               |

## **APPENDIX L: CONSTRUCTION SITE INSPECTION AND MAINTENANCE LOG SHEETS**

# Stormwater Coalition of Monroe County Qualified Inspection Form



|                                       |                              |            |
|---------------------------------------|------------------------------|------------|
| Project Name and Location of Project: | Weather and Soil Conditions: | Date:      |
| Permit #:                             | Entry Time:                  | Exit Time: |

Name of SPDES Permittee: \_\_\_\_\_  
 Phone: \_\_\_\_\_ Email: \_\_\_\_\_  
 Name of Representative on Site: \_\_\_\_\_

Number of Acres Disturbed: \_\_\_\_\_ 5 Acre Waiver: ☐ Yes ☐ No

Stormwater Discharge Points and Conditions: \_\_\_\_\_  
 \_\_\_\_\_

Is construction impacting neighboring properties? ☐ Yes ☐ No How? \_\_\_\_\_

Appendix E 303d Impaired Waterbody Nearby? ☐ Yes ☐ No Waterbody or Wetland Onsite? ☐ Yes ☐ No

| Stormwater Practices           | Satisfactory | Missing or Deficient | N/A | Notes: |
|--------------------------------|--------------|----------------------|-----|--------|
| Concrete Washout               |              |                      |     |        |
| Dust Control                   |              |                      |     |        |
| Stabilized Construction Access |              |                      |     |        |
| Construction Road              |              |                      |     |        |
| Site Pollution Prevention      |              |                      |     |        |
| Diversion/Swale                |              |                      |     |        |
| Check Dams                     |              |                      |     |        |
| Rock Outlet Protection         |              |                      |     |        |
| Water Bars                     |              |                      |     |        |
| Dewatering/Sediment Filter Bag |              |                      |     |        |
| Soil Restoration               |              |                      |     |        |
| Soil Stabilization (map)       |              |                      |     |        |
| Soil Stockpile                 |              |                      |     |        |
| Compost Filter Sock/Silt Fence |              |                      |     |        |
| Sediment Basin                 |              |                      |     |        |
| Sediment Trap                  |              |                      |     |        |
| Inlet Protection               |              |                      |     |        |



**Other Practices:**

**Inspection Summary:**

**Required Report Attachments:**

**A. Digital Color Photographs of Deficient BMPs-**The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of deficient BMPs with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions.

**B. Digital Color Photographs of BMPs that have been Corrected-**The *qualified inspector* shall attach paper color copies of the digital photographs to this inspection report of corrected BMPs with date stamp, that clearly show the condition of the practice(s) after the corrective actions has been completed.

**C. Site Plan/Sketch of Areas Disturbed at the Time of Inspection and Areas that have been Stabilized (Temporary or Final) Since Last Inspection-** Attach a map to this inspection report.

**D. Post-Construction Stormwater Management** -*Report of any corrective action(s) that must be taken to install, correct, repair, replace or maintain any deficiencies identified with the construction of the post-construction stormwater management practice(s).* Report the current phase of construction of all post-construction stormwater management practice(s) and whether the installation appears to be geometrically consistent with the approved hydraulic design (e.g. the pond, the outlet structure, orifice, pipe sizing and slope is geometrically consistent with the SWPPP: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**E. Revisions to SWPPP**-Any changes made to the SWPPP must be documented and any major changes to the project must be submitted to NYSDEC and local MS4 for approval. Revisions to SWPPP Location: \_\_\_\_\_  
\_\_\_\_\_

**F. Signature**

GP-0-15-002 Part VII.Q

**Articles 175 and 210 of the New York State Penal Law provide for Criminal penalty of a fine and/or imprisonment for falsifying forms and reports required by this permit.**

\_\_\_\_\_  
**Qualified Inspector (print name)**

\_\_\_\_\_  
**Date of Inspection**

\_\_\_\_\_  
**Signature**

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

Title: \_\_\_\_\_ Address: \_\_\_\_\_

Phone: \_\_\_\_\_ Email: \_\_\_\_\_

**CPESC#:** \_\_\_\_\_

**Stormwater Training Number** for *Trained Individuals*: \_\_\_\_\_

P.E. or L.A. Supervisor Name for *Trained Individuals*: \_\_\_\_\_

## **NOTICE TO REDUCE FREQUENCY OF SPDES SITE INSPECTIONS**

### **SPDES General Permit for Stormwater Discharges from Construction Activity**

In accordance with Part IV.C.2.c of the SPDES General Permit for Stormwater Discharges from Construction Activity, the New York State Department of Transportation hereby notifies the New York State Department of Environmental Conservation that work on this Contract will be temporarily suspended and temporary stabilization measures have been applied to all disturbed areas.

A Qualified Inspector will conduct a site inspection at least once every 30 calendar days during this period. The standard site inspection frequency will resume when construction activities recommence.

SPDES Permit ID  
#: \_\_\_\_\_

Contract No.: \_\_\_\_\_ PIN: \_\_\_\_\_

Description: \_\_\_\_\_

Town, Village, City: \_\_\_\_\_

County: \_\_\_\_\_

Reason for temporary suspension of work:

☐ Winter Shutdown

☐ Other \_\_\_\_\_

Approximate date work will be suspended: \_\_\_\_\_

Approximate date work will resume: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Phone: \_\_\_\_\_

E-Mail: \_\_\_\_\_

Date Submitted to NYSDEC: \_\_\_\_\_

# STANDARD AND SPECIFICATIONS FOR WINTER STABILIZATION



## **Definition & Scope**

A temporary site specific, enhanced erosion and sediment control plan to manage runoff and sediment at the site during construction activities in the winter months to protect off-site water resources.

## **Conditions Where Practice Applies**

This standard applies to all construction activities involved with ongoing land disturbance and exposure between November 15<sup>th</sup> to the following April 1<sup>st</sup>.

## **Design Criteria**

1. Prepare a snow management plan with adequate storage for snow and control of melt water, requiring cleared snow to be stored in a manner not affecting ongoing construction activities.
2. Enlarge and stabilize access points to provide for snow management and stockpiling. Snow management activities must not destroy or degrade installed erosion and sediment control practices.
3. A minimum 25 foot buffer shall be maintained from all perimeter controls such as silt fence. Mark silt fence with tall stakes that are visible above the snow pack.
4. Edges of disturbed areas that drain to a waterbody within 100 feet will have 2 rows of silt fence, 5 feet apart, installed on the contour.
5. Drainage structures must be kept open and free of snow and ice dams. All debris, ice dams, or debris from plowing operations, that restrict the flow of runoff and meltwater, shall be removed.
6. Sediment barriers must be installed at all appropriate

perimeter and sensitive locations. Silt fence and other practices requiring earth disturbance must be installed before the ground freezes.

7. Soil stockpiles must be protected by the use of established vegetation, anchored straw mulch, rolled stabilization matting, or other durable covering. A barrier must be installed at least 15 feet from the toe of the stockpile to prevent soil migration and to capture loose soil.
8. In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures should be initiated by the end of the next business day and completed within three (3) days. Rolled erosion control blankets must be used on all slopes 3 horizontal to 1 vertical or steeper.
9. If straw mulch alone is used for temporary stabilization, it shall be applied at double the standard rate of 2 tons per acre, making the application rate 4 tons per acre. Other manufactured mulches should be applied at double the manufacturer's recommended rate.
10. To ensure adequate stabilization of disturbed soil in advance of a melt event, areas of disturbed soil should be stabilized at the end of each work day unless:
  - a. work will resume within 24 hours in the same area and no precipitation is forecast or;
  - b. the work is in disturbed areas that collect and retain runoff, such as open utility trenches, foundation excavations, or water management areas.
11. Use stone paths to stabilize access perimeters of buildings under construction and areas where construction vehicle traffic is anticipated. Stone paths should be a minimum 10 feet in width but wider as necessary to accommodate equipment.

## **Maintenance**

The site shall be inspected frequently to ensure that the erosion and sediment control plan is performing its winter stabilization function. If the site will not have earth disturbing activities ongoing during the "winter season", **all** bare exposed soil must be stabilized by established vegetation, straw or other acceptable mulch, matting, rock, or other approved material such as rolled erosion control products. Seeding of areas with mulch cover is preferred but seeding alone is not acceptable for proper stabilization.

Compliance inspections must be performed and reports filed properly in accordance with the SWPPP for all sites under a winter shutdown.

## References

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1. Northeastern Illinois Soil and Sedimentation Control Steering Committee. October 1981. Procedures and Standards for Urban Soil Erosion and Sediment Control in Illinois.
2. J.F. Rushing, V.M. Moore, J.S. Tingle, Q. Mason, and T. McCaffery, 2005. Dust Abatement Methods for Lines of Communication and Base Camps in Temperate Climates. ERDC/GSL TR-05-23, October 2005.



## **APPENDIX M:MS4 SWPPP ACCEPTANCE FORM**



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

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

Construction Activities Seeking Authorization Under SPDES General Permit

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

**I. Project Owner/Operator Information**

1. Owner/Operator Name:

2. Contact Person:

3. Street Address:

4. City/State/Zip:

**II. Project Site Information**

5. Project/Site Name:

6. Street Address:

7. City/State/Zip:

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

8. SWPPP Reviewed by:

9. Title/Position:

10. Date Final SWPPP Reviewed and Accepted:

**IV. Regulated MS4 Information**

11. Name of MS4:

12. MS4 SPDES Permit Identification Number: NYR20A \_\_\_\_\_

13. Contact Person:

14. Street Address:

15. City/State/Zip:

16. Telephone Number:

(NYS DEC - MS4 SWPPP Acceptance Form - January 2010)

## MS4 SWPPP Acceptance Form - continued

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

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

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

Printed Name:

Title/Position:

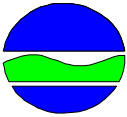
Signature:

Date:

### VI. Additional Information

## **APPENDIX N:NOTICE OF INTENT**

# NOTICE OF INTENT



## New York State Department of Environmental Conservation

### Division of Water

625 Broadway, 4th Floor

Albany, New York 12233-3505

NYR                    
(for DEC use only)

### Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

## -IMPORTANT-

## RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

### Owner/Operator Information

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

C H R I S T A   C O N S T R U C T I O N

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

M C K I N N O N

Owner/Operator Contact Person First Name

B R I A N

Owner/Operator Mailing Address

6 0 0   E A S T   A V E N U E

City

R O C H E S T E R

State

N Y

Zip

1 4 6 0 7 -   

Phone (Owner/Operator)

5 8 5 - 7 3 4 - 8 2 0 7

Fax (Owner/Operator)

  -  -  

Email (Owner/Operator)

B M C K I N N O N @ C H R I S T A . C O M

FED TAX ID

  -  (not required for individuals)



## Project Site Information

Project/Site Name

F A I R F I E L D I N N H O T E L

Street Address (NOT P.O. BOX)

1 2 5 1 P I T T S F O R D V I C T O R R O A D

Side of Street

☐ North ☐ South ☐ East ☒ West

City/Town/Village (THAT ISSUES BUILDING PERMIT)

P E R I N T O N

State

N Y

Zip

1 4 5 3 4 -

County

M O N R O E

DEC Region

8

Name of Nearest Cross Street

F I S H E R R O A D

Distance to Nearest Cross Street (Feet)

0 8 5 0

Project In Relation to Cross Street

☐ North ☒ South ☐ East ☐ West

Tax Map Numbers

Section-Block-Parcel

1 9 3 . 0 2 - 1 - 2 7 . 1 1 1

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

<https://gisservices.dec.ny.gov/gis/stormwater/>

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)

- 7 7 . 4 6 4

Ex. -73.749

Y Coordinates (Northing)

4 3 . 0 4 2 4

Ex. 42.652

2. What is the nature of this construction project?

☒ New Construction☐ Redevelopment with increase in impervious area☐ Redevelopment with no increase in impervious area

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

**SELECT ONLY ONE CHOICE FOR EACH**

**Pre-Development  
Existing Land Use**

- ☒ FOREST  
☐ PASTURE/OPEN LAND  
☐ CULTIVATED LAND  
☐ SINGLE FAMILY HOME  
☐ SINGLE FAMILY SUBDIVISION  
☐ TOWN HOME RESIDENTIAL  
☐ MULTIFAMILY RESIDENTIAL  
☐ INSTITUTIONAL/SCHOOL  
☐ INDUSTRIAL  
☐ COMMERCIAL  
☐ ROAD/HIGHWAY  
☐ RECREATIONAL/SPORTS FIELD  
☐ BIKE PATH/TRAIL  
☐ LINEAR UTILITY  
☐ PARKING LOT  
☐ OTHER

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**Post-Development  
Future Land Use**

- ☐ SINGLE FAMILY HOME  
☐ SINGLE FAMILY SUBDIVISION  
☐ TOWN HOME RESIDENTIAL  
☐ MULTIFAMILY RESIDENTIAL  
☐ INSTITUTIONAL/SCHOOL  
☐ INDUSTRIAL  
☒ COMMERCIAL  
☐ MUNICIPAL  
☐ ROAD/HIGHWAY  
☐ RECREATIONAL/SPORTS FIELD  
☐ BIKE PATH/TRAIL  
☐ LINEAR UTILITY (water, sewer, gas, etc.)  
☐ PARKING LOT  
☐ CLEARING/GRADING ONLY  
☐ DEMOLITION, NO REDEVELOPMENT  
☐ WELL DRILLING ACTIVITY \*(Oil, Gas, etc.)  
☐ OTHER

Number of Lots

|  |  |  |
|--|--|--|
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**\*Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

**Total Site  
Area**

|  |  |  |   |   |   |
|--|--|--|---|---|---|
|  |  |  | 5 | . | 0 |
|--|--|--|---|---|---|

**Total Area To  
Be Disturbed**

|  |  |  |   |   |   |
|--|--|--|---|---|---|
|  |  |  | 2 | . | 9 |
|--|--|--|---|---|---|

**Existing Impervious  
Area To Be Disturbed**

|  |  |  |   |   |  |
|--|--|--|---|---|--|
|  |  |  | 0 | . |  |
|--|--|--|---|---|--|

**Future Impervious  
Area Within  
Disturbed Area**

|  |  |  |   |   |   |
|--|--|--|---|---|---|
|  |  |  | 1 | . | 7 |
|--|--|--|---|---|---|

5. Do you plan to disturb more than 5 acres of soil at any one time? ☐ Yes ☒ No

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

**A**  
1 0 0 %

**B**  
 %

**C**  
 %

**D**  
 %

7. Is this a phased project? ☐ Yes ☒ No

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

**Start Date**

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 6 | / | 0 | 1 | / | 2 | 0 | 2 | 4 |
|---|---|---|---|---|---|---|---|---|---|

**End Date**

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 0 | / | 0 | 1 | / | 2 | 0 | 2 | 5 |
|---|---|---|---|---|---|---|---|---|---|

[illegible]

☐ Wetland / State Jurisdiction On Site (Answer 9b)  
☐ Wetland / State Jurisdiction Off Site  
☐ Wetland / Federal Jurisdiction On Site (Answer 9b)  
☐ Wetland / Federal Jurisdiction Off Site  
☒ Stream / Creek On Site  
☐ Stream / Creek Off Site  
☐ River On Site  
☐ River Off Site  
☐ Lake On Site  
☐ Lake Off Site  
☐ Other Type On Site  
☐ Other Type Off Site

- ☐ Regulatory Map
- ☐ Delineated by Consultant
- ☐ Delineated by Army Corps of Engineers
- ☐ Other (identify)

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? ☐ Yes ☒ No

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

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



15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ☐ Yes ☒ No ☐ Unknown

- [illegible]

17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ☐ Yes ☒ No ☐ Unknown

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ☐ Yes ☒ No

19. Is this property owned by a state authority, state agency, federal government or local government? ☐ Yes ☒ No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ☐ Yes ☒ No

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ☒ Yes ☐ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ☒ Yes ☐ No
- If No, skip questions 23 and 27-39.**

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ☒ Yes ☐ No

- [illegible]

[illegible][illegible][illegible][illegible]

|   |   |
|---|---|
| N | Y |
|---|---|

|   |   |   |   |   |
|---|---|---|---|---|
| 1 | 4 | 6 | 1 | 4 |
|---|---|---|---|---|

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|   |   |   |
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| 5 | 8 | 5 |
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-

|   |   |   |
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| 3 | 2 | 5 |
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-

|   |   |   |   |
|---|---|---|---|
| 1 | 0 | 0 | 0 |
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[illegible][illegible]

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

[illegible]

|  |  |
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[illegible]

*[Signature]*

|   |   |
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| 0 | 2 |
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/

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|---|---|
| 1 | 6 |
|---|---|

/

|   |   |   |   |
|---|---|---|---|
| 2 | 0 | 2 | 4 |
|---|---|---|---|



25. Has a construction sequence schedule for the planned management practices been prepared? ☐ **Yes** ☐ **No**

☐ Yes      ☐ No

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

## Temporary Structural

- ☒ Check Dams
- ☐ Construction Road Stabilization
- ☐ Dust Control
- ☐ Earth Dike
- ☐ Level Spreader
- ☐ Perimeter Dike/Swale
- ☐ Pipe Slope Drain
- ☐ Portable Sediment Tank
- ☐ Rock Dam
- ☒ Sediment Basin
- ☐ Sediment Traps
- ☒ Silt Fence
- ☒ Stabilized Construction Entrance
- ☐ Storm Drain Inlet Protection
- ☐ Straw/Hay Bale Dike
- ☐ Temporary Access Waterway Crossing
- ☐ Temporary Stormdrain Diversion
- ☐ Temporary Swale
- ☐ Turbidity Curtain
- ☐ Water bars

## Biotechnical

- Brush Matting
- Wattling

## Other

[illegible]

## Vegetative Measures

- ☐ Brush Matting
- ☐ Dune Stabilization
- ☐ Grassed Waterway
- ☒ Mulching
- ☒ Protecting Vegetation
- ☐ Recreation Area Improvement
- ☒ Seeding
- ☐ Sodding
- ☐ Straw/Hay Bale Dike
- ☐ Streambank Protection
- ☐ Temporary Swale
- ☐ Topsoiling
- ☐ Vegetating Waterways

## Permanent Structural

- ☐ Debris Basin
- ☐ Diversion
- ☐ Grade Stabilization Structure
- ☐ Land Grading
- ☐ Lined Waterway (Rock)
- ☐ Paved Channel (Concrete)
- ☐ Paved Flume
- ☒ Retaining Wall
- ☒ Riprap Slope Protection
- ☒ Rock Outlet Protection
- ☐ Streambank Protection

**Post-construction Stormwater Management Practice (SMP) Requirements**

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

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

- ☐ Preservation of Undisturbed Areas
- ☒ Preservation of Buffers
- ☒ Reduction of Clearing and Grading
- ☐ Locating Development in Less Sensitive Areas
- ☒ Roadway Reduction
- ☒ Sidewalk Reduction
- ☐ Driveway Reduction
- ☐ Cul-de-sac Reduction
- ☒ Building Footprint Reduction
- ☒ Parking Reduction

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

- ☒ All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ☐ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

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

**Total WQv Required**

.  1  4  2 **acre-feet**

29. Identify the RR techniques (Area Reduction), RR techniques (Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required (#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

**Table 1 - Runoff Reduction (RR) Techniques  
and Standard Stormwater Management  
Practices (SMPs)**

| <u>RR Techniques (Area Reduction)</u>                                              | <u>Total Contributing<br/>Area (acres)</u>                                                                                      | <u>Total Contributing<br/>Impervious Area (acres)</u> |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|---|--|------------------------------------------------------------------|---|---|----------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| <input type="radio"/> Conservation of Natural Areas (RR-1) ...                     | <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |                                                       |   |  |                                                                  |   |   | and/or <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |  |  |  |  |  |  |
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| <input type="radio"/> Sheetflow to Riparian<br>Buffers/Filters Strips (RR-2) ..... | <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |                                                       |   |  |                                                                  |   |   | and/or <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Tree Planting/Tree Pit (RR-3) .....                          | <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |                                                       |   |  |                                                                  |   |   | and/or <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |  |  |  |  |  |  |
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| <input type="radio"/> Disconnection of Rooftop Runoff (RR-4) ..                    | <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |                                                       |   |  |                                                                  |   |   | and/or <table border="1"><tr><td></td><td></td><td></td></tr></table> . <table border="1"><tr><td></td><td></td><td></td></tr></table> |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <u>RR Techniques (Volume Reduction)</u>                                            |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Vegetated Swale (RR-5) .....                                 | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Rain Garden (RR-6) .....                                     | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Stormwater Planter (RR-7) .....                              | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Rain Barrel/Cistern (RR-8) .....                             | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Porous Pavement (RR-9) .....                                 | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Green Roof (RR-10) .....                                     | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <u>Standard SMPs with RRv Capacity</u>                                             |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Infiltration Trench (I-1) .....                              | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input checked="" type="radio"/> Infiltration Basin (I-2) .....                    | <table border="1"><tr><td></td><td>1</td><td></td></tr></table>                                                                 |                                                       | 1 |  | <table border="1"><tr><td>7</td><td>4</td><td></td></tr></table> | 7 | 4 |                                                                                                                                        |  |  |  |  |  |  |
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| 7                                                                                  | 4                                                                                                                               |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Dry Well (I-3) .....                                         | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Underground Infiltration System (I-4) .....                  | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Bioretention (F-5) .....                                     | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Dry Swale (O-1) .....                                        | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <u>Standard SMPs</u>                                                               |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Micropool Extended Detention (P-1) .....                     | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Wet Pond (P-2) .....                                         | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Wet Extended Detention (P-3) .....                           | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Multiple Pond System (P-4) .....                             | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Pocket Pond (P-5) .....                                      | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Surface Sand Filter (F-1) .....                              | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Underground Sand Filter (F-2) .....                          | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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| <input type="radio"/> Perimeter Sand Filter (F-3) .....                            | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Organic Filter (F-4) .....                                   | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Shallow Wetland (W-1) .....                                  | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Extended Detention Wetland (W-2) .....                       | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Pond/Wetland System (W-3) .....                              | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Pocket Wetland (W-4) .....                                   | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |
| <input type="radio"/> Wet Swale (O-2) .....                                        | <table border="1"><tr><td></td><td></td><td></td></tr></table>                                                                  |                                                       |   |  | <table border="1"><tr><td></td><td></td><td></td></tr></table>   |   |   |                                                                                                                                        |  |  |  |  |  |  |
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|                                                                                    |                                                                                                                                 |                                                       |   |  |                                                                  |   |   |                                                                                                                                        |  |  |  |  |  |  |

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

|  |  |  |
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|  |  |  |
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|   |   |   |
|---|---|---|
| 1 | 4 | 2 |
|---|---|---|

acre-feet

If No, go to question 32.

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

.

|   |   |   |
|---|---|---|
| 0 | 7 | 6 |
|---|---|---|

acre-feet

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

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

**Note:** Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

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

**WQv Provided**

.    **acre-feet**

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

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

.

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ☐ **Yes** ☐ **No**

**If Yes, go to question 36.**

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

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

**CPv Required**

0 . 0    **acre-feet**

**CPv Provided**

0 . 1    **acre-feet**

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

- ☐ Site discharges directly to tidal waters or a fifth order or larger stream.
- ☒ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

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

**Total Overbank Flood Control Criteria (Qp)**

**Pre-Development**

. 0 2  **CFS**

**Post-development**

. 0 1  **CFS**

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

**Pre-Development**

1 . 0 8  **CFS**

**Post-development**

0 . 5   **CFS**



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

- ☐ Site discharges directly to tidal waters or a fifth order or larger stream.
- ☐ Downstream analysis reveals that the Qp and Qf controls are not required

- ☒ Yes      ☐ No

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

[illegible]

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

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

- ☐ Air Pollution Control
- ☐ Coastal Erosion
- ☐ Hazardous Waste
- ☐ Long Island Wells
- ☐ Mined Land Reclamation
- ☐ Solid Waste
- ☐ Navigable Waters Protection / Article 15
- ☐ Water Quality Certificate
- ☐ Dam Safety
- ☐ Water Supply
- ☐ Freshwater Wetlands/Article 24
- ☐ Tidal Wetlands
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Stream Bed or Bank Protection / Article 15
- ☐ Endangered or Threatened Species(Incidental Take Permit)
- ☐ Individual SPDES

|                         |   |   |   |  |  |  |  |  |  |
|-------------------------|---|---|---|--|--|--|--|--|--|
| ○ SPDES Multi-Sector GP | N | Y | R |  |  |  |  |  |  |
|-------------------------|---|---|---|--|--|--|--|--|--|

[illegible]

☐ None

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

☐ Yes    ☒ No

[illegible]

42. Is this project subject to the requirements of a regulated, traditional land use control MS4?  
(If No, skip question 43)

☒ Yes      ☐ No

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

☐ Yes    ☒ No

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

|   |   |   |  |  |  |  |
|---|---|---|--|--|--|--|
| N | Y | P |  |  |  |  |
|---|---|---|--|--|--|--|

|   |   |   |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|
| N | Y | R |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|

**Owner/Operator Certification**

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

**Print First Name**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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**Print Last Name**

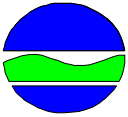
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**Owner/Operator Signature**

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**Date**

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**NOTICE OF INTENT****New York State Department of Environmental Conservation****Division of Water****625 Broadway, 4th Floor****Albany, New York 12233-3505**
 NYR        
 (for DEC use only)

**Stormwater Discharges Associated with Construction Activity Under State  
 Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-20-001**

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

**-IMPORTANT-****RETURN THIS FORM TO THE ADDRESS ABOVE****OWNER/OPERATOR MUST SIGN FORM****Owner/Operator Information**

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

Owner/Operator Contact Person Last Name (NOT CONSULTANT)

Owner/Operator Contact Person First Name

Owner/Operator Mailing Address

City

State

Zip

 - 

Phone (Owner/Operator)

 -  - 

Fax (Owner/Operator)

 -  - 

Email (Owner/Operator)



FED TAX ID

 - 

(not required for individuals)

| Project Site Information                                                                                      |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------------------------------------------------------------------------------------|--|--|--|--|-----|--|--|--|--|--------|--|--|--|--|-------------------------------------|--|--|--|--|------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Project/Site Name                                                                                             |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Street Address (NOT P.O. BOX)                                                                                 |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Side of Street                                                                                                |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <input type="radio"/> North <input type="radio"/> South <input type="radio"/> East <input type="radio"/> West |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| City/Town/Village (THAT ISSUES BUILDING PERMIT)                                                               |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| State                                                                                                         |  |  |  |  | Zip |  |  |  |  | County |  |  |  |  |                                     |  |  |  |  | DEC Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                               |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Name of Nearest Cross Street                                                                                  |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Distance to Nearest Cross Street (Feet)                                                                       |  |  |  |  |     |  |  |  |  |        |  |  |  |  | Project In Relation to Cross Street |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                               |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| Tax Map Numbers<br>Section-Block-Parcel                                                                       |  |  |  |  |     |  |  |  |  |        |  |  |  |  | Tax Map Numbers                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                                                                               |  |  |  |  |     |  |  |  |  |        |  |  |  |  |                                     |  |  |  |  |            |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

1. Provide the Geographic Coordinates for the project site. To do this, go to the NYSDEC Stormwater Interactive Map on the DEC website at:

<https://giservices.dec.ny.gov/gis/stormwater/>

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located the centroid of your project site, go to the bottom right hand corner of the map for the X, Y coordinates. Enter the coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting)

|    |   |   |   |   |   |
|----|---|---|---|---|---|
| -7 | 7 | . | 4 | 6 | 4 |
|----|---|---|---|---|---|

Ex. -73.749

Y Coordinates (Northing)

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Ex. 42.652

2. What is the nature of this construction project?

- ☐ New Construction
- ☐ Redevelopment with increase in impervious area
- ☐ Redevelopment with no increase in impervious area



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

**SELECT ONLY ONE CHOICE FOR EACH**

**Pre-Development  
Existing Land Use**

- ☐ FOREST  
☐ PASTURE/OPEN LAND  
☐ CULTIVATED LAND  
☐ SINGLE FAMILY HOME  
☐ SINGLE FAMILY SUBDIVISION  
☐ TOWN HOME RESIDENTIAL  
☐ MULTIFAMILY RESIDENTIAL  
☐ INSTITUTIONAL/SCHOOL  
☐ INDUSTRIAL  
☐ COMMERCIAL  
☐ ROAD/HIGHWAY  
☐ RECREATIONAL/SPORTS FIELD  
☐ BIKE PATH/TRAIL  
☐ LINEAR UTILITY  
☐ PARKING LOT  
☐ OTHER

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**Post-Development  
Future Land Use**

- ☐ SINGLE FAMILY HOME  
☐ SINGLE FAMILY SUBDIVISION  
☐ TOWN HOME RESIDENTIAL  
☐ MULTIFAMILY RESIDENTIAL  
☐ INSTITUTIONAL/SCHOOL  
☐ INDUSTRIAL  
☐ COMMERCIAL  
☐ MUNICIPAL  
☐ ROAD/HIGHWAY  
☐ RECREATIONAL/SPORTS FIELD  
☐ BIKE PATH/TRAIL  
☐ LINEAR UTILITY (water, sewer, gas, etc.)  
☐ PARKING LOT  
☐ CLEARING/GRADING ONLY  
☐ DEMOLITION, NO REDEVELOPMENT  
☐ WELL DRILLING ACTIVITY \*(Oil, Gas, etc.)  
☐ OTHER

Number of Lots

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**\*Note:** for gas well drilling, non-high volume hydraulic fractured wells only

4. In accordance with the larger common plan of development or sale, enter the total project site area; the total area to be disturbed; existing impervious area to be disturbed (for redevelopment activities); and the future impervious area constructed within the disturbed area. (Round to the nearest tenth of an acre.)

**Total Site  
Area**

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**Total Area To  
Be Disturbed**

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**Existing Impervious  
Area To Be Disturbed**

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**Future Impervious  
Area Within  
Disturbed Area**

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5. Do you plan to disturb more than 5 acres of soil at any one time? ☐ Yes ☐ No

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

**A**  

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 %

**B**  

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**C**  

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 %

**D**  

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 %

7. Is this a phased project? ☐ Yes ☐ No

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

**Start Date**

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**End Date**

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[illegible]

☐ Wetland / State Jurisdiction On Site (Answer 9b)  
☐ Wetland / State Jurisdiction Off Site  
☐ Wetland / Federal Jurisdiction On Site (Answer 9b)  
☐ Wetland / Federal Jurisdiction Off Site  
☐ Stream / Creek On Site  
☐ Stream / Creek Off Site  
☐ River On Site  
☐ River Off Site  
☐ Lake On Site  
☐ Lake Off Site  
☐ Other Type On Site  
☐ Other Type Off Site

- ☐ Regulatory Map
- ☐ Delineated by Consultant
- ☐ Delineated by Army Corps of Engineers
- ☐ Other (identify)

[illegible][illegible]

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001? ☐ **Yes** ☐ **No**

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

If Yes, what is the acreage to be disturbed?

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Page 4 of 14

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ☐ Yes ☐ No ☐ Unknown



17. Does any runoff from the site enter a sewer classified as a Combined Sewer? ☐ **Yes** ☐ **No** ☐ **Unknown**

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law? ☐ Yes ☐ No

19. Is this property owned by a state authority, state agency, federal government or local government? ☐ Yes ☐ No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) ☐ **Yes** ☐ **No**

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)? ☐ Yes ☐ No

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)? ☐ Yes ☐ No
- If No, skip questions 23 and 27-39.**

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual? ☐ Yes ☐ No

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

- ☐ Professional Engineer (P.E.)
- ☐ Soil and Water Conservation District (SWCD)
- ☐ Registered Landscape Architect (R.L.A.)
- ☐ Certified Professional in Erosion and Sediment Control (CPESC)
- ☐ Owner/Operator
- ☐ Other

SWPPP Preparer

Contact Name (Last, Space, First)

Mailing Address

City

State      Zip

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Email

## SWPPP Preparer Certification

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

First Name

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Last Name

Signature



Date \_\_\_\_\_

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25. Has a construction sequence schedule for the planned management practices been prepared? ☐ Yes ☐ No

☐ Yes      ☐ No

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

## Temporary Structural

- ☐ Check Dams
- ☐ Construction Road Stabilization
- ☐ Dust Control
- ☐ Earth Dike
- ☐ Level Spreader
- ☐ Perimeter Dike/Swale
- ☐ Pipe Slope Drain
- ☐ Portable Sediment Tank
- ☐ Rock Dam
- ☐ Sediment Basin
- ☐ Sediment Traps
- ☐ Silt Fence
- ☐ Stabilized Construction Entrance
- ☐ Storm Drain Inlet Protection
- ☐ Straw/Hay Bale Dike
- ☐ Temporary Access Waterway Crossing
- ☐ Temporary Stormdrain Diversion
- ☐ Temporary Swale
- ☐ Turbidity Curtain
- ☐ Water bars

## Biotechnical

- Brush Matting
- Wattling

## Other

## Vegetative Measures

- ☐ Brush Matting
- ☐ Dune Stabilization
- ☐ Grassed Waterway
- ☐ Mulching
- ☐ Protecting Vegetation
- ☐ Recreation Area Improvement
- ☐ Seeding
- ☐ Sodding
- ☐ Straw/Hay Bale Dike
- ☐ Streambank Protection
- ☐ Temporary Swale
- ☐ Topsoiling
- ☐ Vegetating Waterways

## Permanent Structural

- ☐ Debris Basin
- ☐ Diversion
- ☐ Grade Stabilization Structure
- ☐ Land Grading
- ☐ Lined Waterway (Rock)
- ☐ Paved Channel (Concrete)
- ☐ Paved Flume
- ☐ Retaining Wall
- ☐ Riprap Slope Protection
- ☐ Rock Outlet Protection
- ☐ Streambank Protection

**Post-construction Stormwater Management Practice (SMP) Requirements**

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

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

- ☐ Preservation of Undisturbed Areas
- ☐ Preservation of Buffers
- ☐ Reduction of Clearing and Grading
- ☐ Locating Development in Less Sensitive Areas
- ☐ Roadway Reduction
- ☐ Sidewalk Reduction
- ☐ Driveway Reduction
- ☐ Cul-de-sac Reduction
- ☐ Building Footprint Reduction
- ☐ Parking Reduction

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

- ☐ All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).
- ☐ Compacted areas were considered as impervious cover when calculating the **WQv Required**, and the compacted areas were assigned a post-construction Hydrologic Soil Group (HSG) designation that is one level less permeable than existing conditions for the hydrology analysis.

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

**Total WQv Required**

.     acre-feet

29. Identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity in Table 1 (See Page 9) that were used to reduce the Total WQv Required(#28).

Also, provide in Table 1 the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

**Note:** Redevelopment projects shall use Tables 1 and 2 to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.



Table 1 - Runoff Reduction (RR) Techniques  
and Standard Stormwater Management  
Practices (SMPs)

| RR Techniques (Area Reduction)                                 | Total Contributing<br>Area (acres)                                                                                              | Total Contributing<br>Impervious Area(acres)                                                                                           |
|----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| ○ Conservation of Natural Areas (RR-1) ...                     | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> | and/or <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> |
| ○ Sheetflow to Riparian<br>Buffers/Filters Strips (RR-2) ..... | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> | and/or <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> |
| ○ Tree Planting/Tree Pit (RR-3) .....                          | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> | and/or <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> |
| ○ Disconnection of Rooftop Runoff (RR-4) ..                    | <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> | and/or <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> |
| <b>RR Techniques (Volume Reduction)</b>                        |                                                                                                                                 |                                                                                                                                        |
| ○ Vegetated Swale (RR-5) .....                                 | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Rain Garden (RR-6) .....                                     | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Stormwater Planter (RR-7) .....                              | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Rain Barrel/Cistern (RR-8) .....                             | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Porous Pavement (RR-9) .....                                 | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Green Roof (RR-10) .....                                     | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| <b>Standard SMPs with RRv Capacity</b>                         |                                                                                                                                 |                                                                                                                                        |
| ○ Infiltration Trench (I-1) .....                              | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Infiltration Basin (I-2) .....                               | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Dry Well (I-3) .....                                         | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Underground Infiltration System (I-4) .....                  | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Bioretention (F-5) .....                                     | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Dry Swale (O-1) .....                                        | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| <b>Standard SMPs</b>                                           |                                                                                                                                 |                                                                                                                                        |
| ○ Micropool Extended Detention (P-1) .....                     | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Wet Pond (P-2) .....                                         | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Wet Extended Detention (P-3) .....                           | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Multiple Pond System (P-4) .....                             | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Pocket Pond (P-5) .....                                      | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Surface Sand Filter (F-1) .....                              | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Underground Sand Filter (F-2) .....                          | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Perimeter Sand Filter (F-3) .....                            | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Organic Filter (F-4) .....                                   | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Shallow Wetland (W-1) .....                                  | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Extended Detention Wetland (W-2) .....                       | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Pond/Wetland System (W-3) .....                              | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Pocket Wetland (W-4) .....                                   | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |
| ○ Wet Swale (O-2) .....                                        | <input type="text"/> <input type="text"/> <input type="text"/>                                                                  | . <input type="text"/> <input type="text"/> <input type="text"/>                                                                       |

[illegible][illegible][illegible]

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

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 acre-feet

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

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|--|--|--|
- acre-feet

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

33. Identify the Standard SMPs in Table 1 and, if applicable, the Alternative SMPs in Table 2 that were used to treat the remaining total WQv(=Total WQv Required in 28 - Total RRv Provided in 30).

Also, provide in Table 1 and 2 the total impervious area that contributes runoff to each practice selected.

**Note:** Use Tables 1 and 2 to identify the SMPs used on Redevelopment projects.

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

**WQv Provided**

.  acre-feet

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

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

.

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)? ☐ Yes ☐ No

If Yes, go to question 36.

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

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

**CPv Required**

.  acre-feet

**CPv Provided**

.  acre-feet

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

- ☐ Site discharges directly to tidal waters or a fifth order or larger stream.
- ☐ Reduction of the total CPv is achieved on site through runoff reduction techniques or infiltration systems.

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

**Total Overbank Flood Control Criteria (Qp)**

**Pre-Development**

.  CFS

**Post-development**

.  CFS

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

**Pre-Development**

.  CFS

**Post-development**

.  CFS

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

- ☐ Site discharges directly to tidal waters or a fifth order or larger stream.
- ☐ Downstream analysis reveals that the Qp and Qf controls are not required

- Site discharges directly to tidal waters or a fifth order or larger stream.
- Downstream analysis reveals that the Qp and Qf controls are not required

☐ Yes      ☐ No

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

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

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

○ Air Pollution Control

○ Coastal Erosion

☐ Hazardous Waste

○ Long Island Wells

○ Mined Land Reclamation

○ Solid Waste

○ Navigable Waters Protection / Article 15

○ Water Quality Certificate

○ Dam Safety

○ Water Supply

○ Freshwater Wetlands/Article 24

○ Tidal Wetlands

○ Wild, Scenic and Recreational Rivers

○ Stream Bed or Bank Protection / Article 15

○ Endangered or Threatened Species(Incidental Take Permit)

- Individual SPDES

|                         |  |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|
| ○ SPDES Multi-Sector GP |  |  |  |  |  |  |  |  |
|-------------------------|--|--|--|--|--|--|--|--|

☐ Other

☐ None

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

☐ Yes    ☐ No

| Weekend Permit:                  |  |  |  |  |  |
|----------------------------------|--|--|--|--|--|
| If Yes, Indicate Size of Impact. |  |  |  |  |  |
|                                  |  |  |  |  |  |

42. Is this project subject to the requirements of a regulated, traditional land use control MS4?  
(If No, skip question 43)

☐ Yes      ☐ No

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

☐ Yes    ☐ No

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

**Owner/Operator Certification**

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

**Print First Name**

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**MI**

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**Print Last Name**

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**Owner/Operator Signature**

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**Date**

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## **APPENDIX O: NOTICE OF TERMINATION**

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

\*(NOTE: Submit completed form to address above)\*

**NOTICE OF TERMINATION** for Storm Water Discharges Authorized  
under the SPDES General Permit for Construction Activity

**Please indicate your permit identification number:** NYR \_\_\_\_ \_

**I. Owner or Operator Information**

1. Owner/Operator Name:

2. Street Address:

3. City/State/Zip:

4. Contact Person:

4a. Telephone:

4b. Contact Person E-Mail:

**II. Project Site Information**

5. Project/Site Name:

6. Street Address:

7. City/Zip:

8. County:

**III. Reason for Termination**

9a. ☐ All disturbed areas have achieved final stabilization in accordance with the general permit and SWPPP. \***Date final stabilization completed** (month/year): \_\_\_\_\_

9b. ☐ Permit coverage has been transferred to new owner/operator. Indicate new owner/operator's permit identification number: NYR \_\_\_\_ \_  
(Note: Permit coverage can not be terminated by owner identified in I.1. above until new owner/operator obtains coverage under the general permit)

9c. ☐ Other (Explain on Page 2)

**IV. Final Site Information:**

10a. Did this construction activity require the development of a SWPPP that includes post-construction stormwater management practices? ☐ yes ☐ no (If no, go to question 10f.)

10b. Have all post-construction stormwater management practices included in the final SWPPP been constructed? ☐ yes ☐ no (If no, explain on Page 2)

10c. Identify the entity responsible for long-term operation and maintenance of practice(s)?

\_\_\_\_\_

**NOTICE OF TERMINATION for Storm Water Discharges Authorized under the  
SPDES General Permit for Construction Activity - continued**

10d. Has the entity responsible for long-term operation and maintenance been given a copy of the operation and maintenance plan required by the general permit?    ☐ yes    ☐ no

10e. Indicate the method used to ensure long-term operation and maintenance of the post-construction stormwater management practice(s):

- ☐ Post-construction stormwater management practice(s) and any right-of-way(s) needed to maintain practice(s) have been deeded to the municipality.
- ☐ Executed maintenance agreement is in place with the municipality that will maintain the post-construction stormwater management practice(s).
- ☐ For post-construction stormwater management practices that are privately owned, a mechanism is 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.
- ☐ For post-construction stormwater management practices that are owned by a public or private institution (e.g. school, university or hospital), government agency or authority, or public utility; policy and procedures are in place that ensures operation and maintenance of the practice(s) in accordance with the operation and maintenance plan.

10f. Provide the total area of impervious surface (i.e. roof, pavement, concrete, gravel, etc.) constructed within the disturbance area? \_\_\_\_\_  
(acres)

11. Is this project subject to the requirements of a regulated, traditional land use control MS4?    ☐ yes  
☐ no  
(If Yes, complete section VI - "MS4 Acceptance" statement)

**V. Additional Information/Explanation:**  
(Use this section to answer questions 9c. and 10b., if applicable)

**VI. MS4 Acceptance - MS4 Official (principal executive officer or ranking elected official) or Duly Authorized Representative** (Note: Not required when 9b. is checked -transfer of coverage)

I have determined that it is acceptable for the owner or operator of the construction project identified in question 5 to submit the Notice of Termination at this time.

Printed Name:

Title/Position:

Signature:

Date:

**NOTICE OF TERMINATION** for Storm Water Discharges Authorized under the  
SPDES General Permit for Construction Activity - continued

**VII. Qualified Inspector Certification - Final Stabilization:**

I hereby certify that all disturbed areas have achieved final stabilization as defined in the current version of the general permit, and that all temporary, structural erosion and sediment control measures have been removed. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

**VIII. Qualified Inspector Certification - Post-construction Stormwater Management Practice(s):**

I hereby certify that all post-construction stormwater management practices have been constructed in conformance with the SWPPP. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

Signature:

Date:

**IX. Owner or Operator Certification**

I hereby certify that this document was prepared by me or under my direction or supervision. My determination, based upon my inquiry of the person(s) who managed the construction activity, or those persons directly responsible for gathering the information, is that the information provided in this document is true, accurate and complete. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Printed Name:

Title/Position:

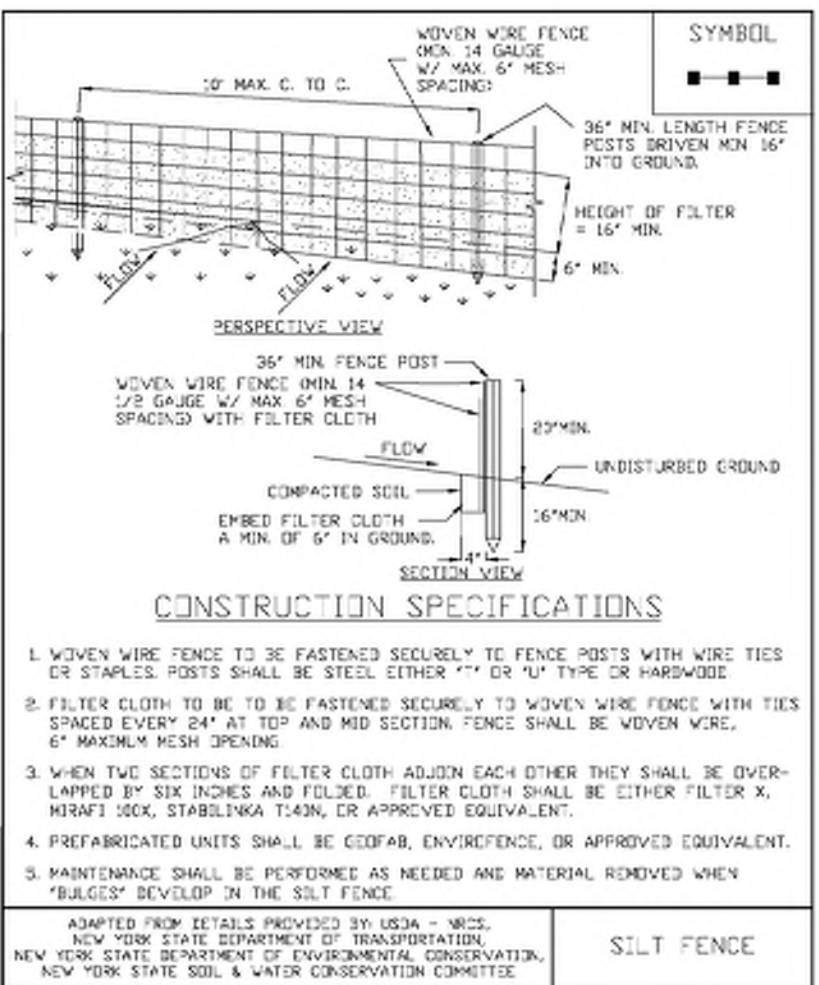
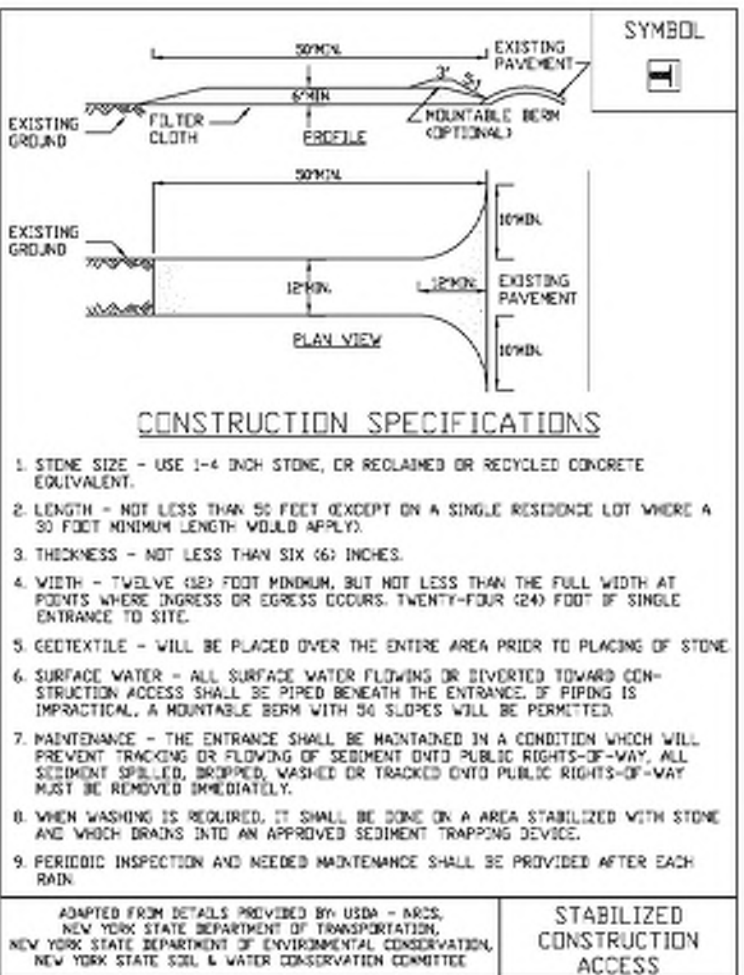
Signature:

Date:

(NYS DEC Notice of Termination - January 2015)

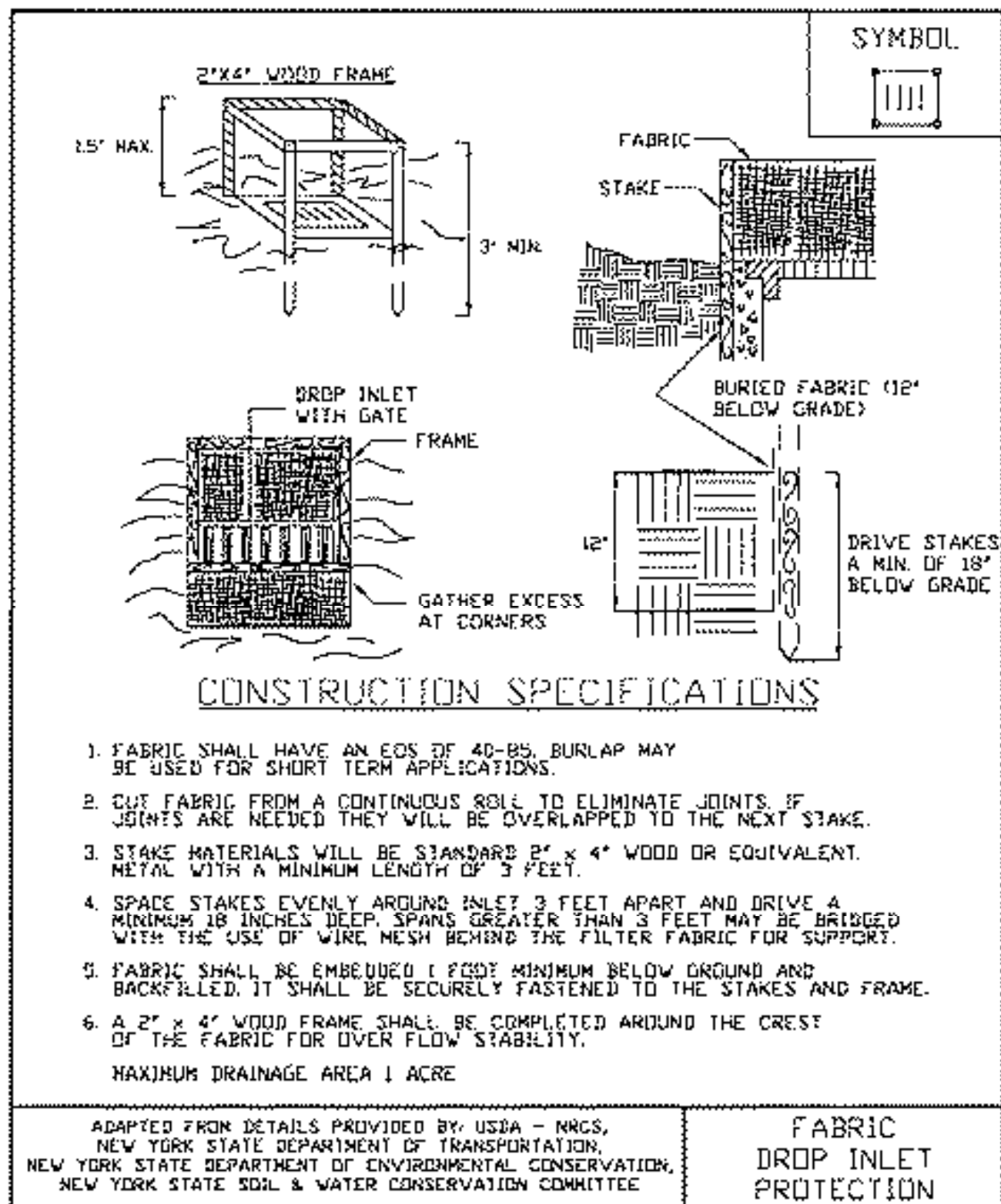
## **APPENDIX P: EROSION CONTROL DETAILS**

**Figure D.5**  
**Construction Details for Stabilized Construction Entrance and Silt**

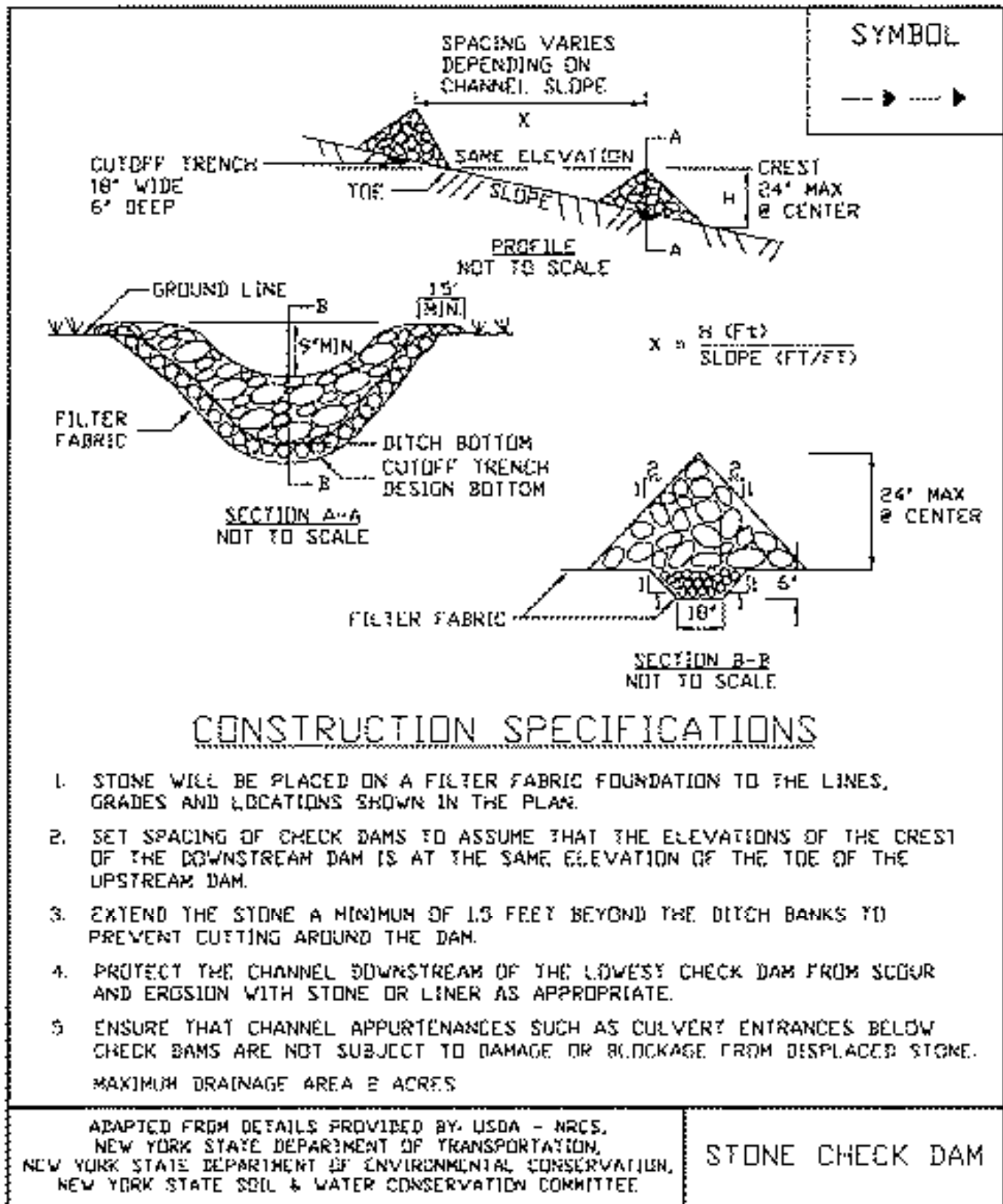




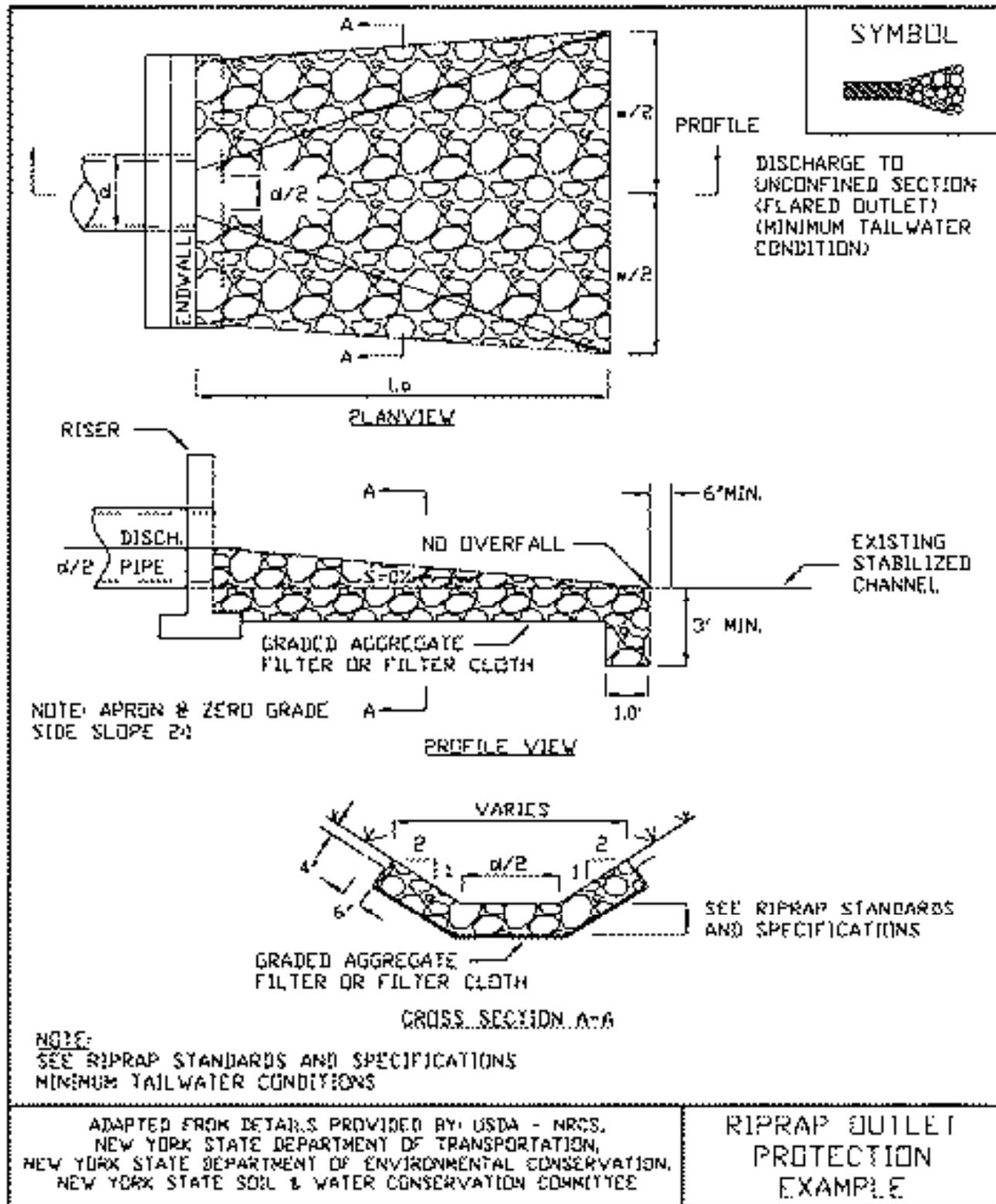
**Figure 5.32**  
**Fabric Drop Inlet Protection**



**Figure 3.1**  
**Stone Check Dam Detail**



**Figure 3.18**  
**Riprap Outlet Protection Detail (1)**



## **APPENDIX Q: MAINTENANCE/CONSTRUCTION INSPECTION REPORTS**



Department of  
Environmental  
Conservation

# MAINTENANCE GUIDANCE

## Stormwater Management Practices

March 31, 2017



FINAL

# Table of Contents

|                                                                                |           |
|--------------------------------------------------------------------------------|-----------|
| <b>Section 1. Introduction</b>                                                 | <b>3</b>  |
| 1.1. Stormwater Management Practice (SMP) Groups                               | 3         |
| 1.2. Maintenance Hierarchy                                                     | 4         |
| 1.3. Using the Remainder of this Chapter                                       | 6         |
| <b>Section 2. Level 1 Inspections</b>                                          | <b>6</b>  |
| 2.1. How to Use this Section                                                   | 6         |
| 2.2. General Guidance for Level 1 Inspections                                  | 6         |
| 2.3. Rainwater Harvesting – Level 1 Inspections                                | 8         |
| 2.4. Disconnection and Sheetflow                                               | 11        |
| 2.5. Swales                                                                    | 15        |
| 2.6. Tree Planting                                                             | 21        |
| 2.7. Bioretention                                                              | 23        |
| 2.8. Green Roof                                                                | 30        |
| 2.9. Permeable Pavement                                                        | 32        |
| 2.10. Ponds and Wetlands                                                       | 35        |
| 2.11. Infiltration                                                             | 41        |
| 2.12. Sand and Organic Filters                                                 | 47        |
| <b>Section 3. Level 2 and 3 Inspections</b>                                    | <b>52</b> |
| 3.1. How to Use this Section                                                   | 52        |
| 3.2. General Guidance for Level 2 and 3 Inspections                            | 53        |
| 3.3. Rainwater Harvesting – Level 2 Inspections and Triggers for Level 3       | 55        |
| 3.4. Disconnection & Sheet Flow – Level 2 Inspections and Triggers for Level 3 | 56        |
| 3.5. Swales – Level 2 Inspections and Triggers for Level 3                     | 57        |
| 3.6. Tree Planting – Level 2 Inspections and Triggers for Level 3              | 59        |
| 3.7. Bioretention – Level 2 Inspections and Triggers for Level 3               | 59        |
| 3.8. Green Roof – Level 2 Inspections and Triggers for Level 3                 | 61        |
| 3.9. Permeable Pavement – Level 2 Inspections and Triggers for Level 3         | 62        |
| 3.10. Ponds & Wetlands – Level 2 Inspections and Triggers for Level 3          | 64        |
| 3.11. Infiltration – Level 2 Inspections and Triggers for Level 3              | 66        |
| 3.12. Sand and Organic Filters – Level 2 Inspections and Triggers for Level 3  | 67        |
| <b>Section 4. Diagnostics and Maintenance Measures</b>                         | <b>69</b> |
| 4.1. About this Section                                                        | 69        |
| 4.2. Contributing Drainage Area – Pollutant Sources                            | 70        |
| 4.3. Physical Obstructions                                                     | 72        |
| 4.4. Erosion                                                                   | 74        |
| 4.5. Departure from Design Dimensions                                          | 75        |




|                                                                   |           |
|-------------------------------------------------------------------|-----------|
| 4.6. Improper Flow Paths.....                                     | 76        |
| 4.7. Sediment Buildup.....                                        | 79        |
| 4.8. Clogging.....                                                | 81        |
| 4.9. Vegetation.....                                              | 85        |
| 4.10. Embankment and Overflow Condition.....                      | 87        |
| 4.11. Structural Damage.....                                      | 89        |
| 4.12. Pool Stability.....                                         | 90        |
| 4.13. Pool Quality.....                                           | 91        |
| <b>Section 5. Planning for Stormwater Maintenance.....</b>        | <b>92</b> |
| 5.1. Program Models for Stormwater Maintenance.....               | 92        |
| 5.2. Inspection and Maintenance Checklists and Documentation..... | 94        |
| 5.3. Budgeting for Maintenance.....                               | 94        |
| 5.4. Planning for “Non-Routine” Maintenance.....                  | 98        |

## PW 4. Pond Outlet

**Description:** The pond's outlet enables the ponded water to discharge to downstream drainage systems or stream channels. The outlet is often at the base of the dam/embankment on the downstream side. Inspection of this point can help prevent flooding of the pond and upstream drainage systems and prevent pond failure at a weak point of a pond's containment system.

**Instruction:** Examine the outlet of the pipe on the downstream side of the dam/embankment where it empties into a stream, channel, or drainage system. Consult the table below for possible problems.

**Table 2.10.4 PW Pond Outlet**

| Problem (Check if Present)                                                                                                                                                                                                                                                             | Follow-Up Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <ul style="list-style-type: none"> <li><input type="checkbox"/> The pond outlet is clogged with sediment, trash, debris, vegetation, or is eroding, caving in, slumping, or falling apart.</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> If there is a minor blockage, remove the debris or vegetation to allow free flow of water.</li> <li><input type="checkbox"/> Remove any accumulated trash at the outlet.</li> <li><input type="checkbox"/> Outlet:</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection:</li> <li><input type="checkbox"/> If the area at the outlet cannot be easily accessed or if the blockage is substantial, a Level 2 Inspection is warranted.</li> <li><input type="checkbox"/> Erosion at and downstream of the outfall should be evaluated by a qualified professional.</li> <li><input type="checkbox"/> Any structural problems, such as broken pipes, structures falling into the stream, or holes or tunnels around the outfall pipe, should be evaluated by a Level 2 Inspector and will require repair by a qualified contractor.</li> <li><input type="checkbox"/> The pool of water at the outlet pipe is discolored, has an odor, or has excessive algae or vegetative growth.</li> </ul> |

## 2.11. Infiltration

### Areas of Infiltration

Key areas to inspect for Infiltration include the following:

- IN 1. Drainage Area
- IN 2. Inlets
- IN 3. Infiltration Area
- IN 4. Outlets

**Note:** The category of Infiltration includes:

- Infiltration Trench – Long, narrow infiltration practice, usually with small gravel at the surface and a reservoir of larger gravel or stone beneath
- Infiltration Basin – Larger practice, usually covered with grass and highly permeable soil beneath
- Dry Well – Small pit filled with stone or gravel, or precast concrete chamber surrounded by stone that receives and stores runoff to enable it to infiltrate into the underlying ground.



**Figure 2.11.1** Key Areas for Level 1 Inspection of Infiltration Practice

## Infiltration Level 1 Inspection




The Level 1 Inspection focuses on the Drainage Area (IN1), Inlets (IN2), Infiltration Area (IN3), and Outlets (IN4). The purpose of an infiltration practice is to temporarily store collected runoff so that it can percolate into the underlying soil. Using this practice is dependent on having a good on-site soil that is capable of infiltrating the amount of runoff generated by the drainage area. The Level 1 Inspection should be conducted at least twice a year, especially in early spring, to ensure that the practice has survived the winter, particularly if there has been a significant amount of snow.

### IN 1. Drainage Area

Description: The drainage area conveys runoff to and is uphill from the Infiltration cell. When it rains, water runs off and flows to the Infiltration cell and soaks into its underlying layers.

Instruction: Look for both pervious and impervious areas that are uphill from the Infiltration cell. Consult **Table 11.1.1** below.

**Table 11.1.1 IN Drainage Area**

| Problem (Check if Present)                                                                        |                                                                                          | Follow-Up Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                  | <input type="checkbox"/> Bare soil, erosion of the ground (rills washing out the dirt)   | <div> <input type="checkbox"/> Seed and straw areas of bare soil to establish vegetation.           <input type="checkbox"/> Fill in erosion areas with soil, compact, and seed and straw to get vegetation established.           <input type="checkbox"/> If a rill or small channel is forming, try to redirect water flowing to this area by creating a small berm or adding topsoil to areas that are heavily compacted.           <input type="checkbox"/> Other:         </div> <div> <input type="checkbox"/> Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.         </div> |
| <input type="checkbox"/> For Dry Wells: Leaves, sticks, or other debris in gutters and downspouts |                                                                                          | <div> <input type="checkbox"/> Remove all debris by hand.           <input type="checkbox"/> Other:         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                 | <input type="checkbox"/> Piles of grass clippings, mulch, dirt, salt, or other materials | <div> <input type="checkbox"/> Remove or cover piles of grass clippings, mulch, dirt, etc.           <input type="checkbox"/> Other:         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|                 | <input type="checkbox"/> Open containers of oil, grease, paint, or other substances      | <div> <input type="checkbox"/> Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous.           <input type="checkbox"/> Other:         </div>                                                                                                                                                                                                                                                                                                                                                                                                                                              |


## IN 2. Inlets

Description: The inlets to an Infiltration practice are where water flows into the cell. Depending on the design, inlets can be:

- *Curb cuts or openings* in a parking lot or roadway
- *Downspouts* that deliver runoff directly from a rooftop to the Infiltration practice
- *Pipes or ditches* that carry water into the Infiltration practice from the drainage area
- *Flow directly over the land surface* (known as “sheetflow”), sometimes across a strip of rock or stone

Instruction: Look for all the places where water flows into the Infiltration practice. Consult **Table 11.1.2** below for possible problems.

**Table 11.1.2 IN Inlets**

| Problem (Check if Present)                                                                                                                                                                                                                                                                   | Follow-Up Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <ul style="list-style-type: none"> <li><input type="checkbox"/> Inlets are collecting grit and debris or grass/weeds are growing. Some water may not be getting into the Infiltration practice.</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> Use a flat shovel to remove grit and debris (especially at curb inlets or openings). Parking lots generate fine grit that will accumulate at these spots.</li> <li><input type="checkbox"/> Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in.</li> <li><input type="checkbox"/> Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets.</li> <li><input type="checkbox"/> For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Infiltration practice.</li> <li><input type="checkbox"/> Dispose of all material properly in an area where it will not re-enter the practice.</li> <li><input type="checkbox"/> Other:</li> </ul> |
|                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the Infiltration practice.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <ul style="list-style-type: none"> <li><input type="checkbox"/> Some or all of the inlets are eroding so that rills, gullies, and other erosion is present, or there is bare dirt that is washing into the Infiltration practice.</li> </ul>                                                 | <ul style="list-style-type: none"> <li><input type="checkbox"/> For small areas of erosion, smooth out the eroded part and apply rock or stone (e.g., river cobble) to prevent further erosion. Usually, filter fabric is placed under the rock or stone.</li> <li><input type="checkbox"/> In some cases, reseeding and applying erosion-control matting can be used to prevent further erosion. Some of these materials may be available at a garden center, but it may be best to consult a landscape contractor.</li> <li><input type="checkbox"/> Other:</li> </ul>                                                                                                                                                                                                                                                                                         |
|                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: Erosion is occurring at most of the inlets and it looks like there is too much water that is concentrating at these points. The inlet design may have to be modified.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |





### IN 3. Infiltration Area




Description: The infiltration area is the area that collects water and allows it to seep into the underlying soil. Some infiltration areas also have a vertical perforated pipe called an *observation well*, which is used to view the water level in the infiltration practice after a storm. If the infiltration practice is working properly, the water in the observation well should be completely drained down within 2 to 3 days of a storm. Depending on the design, the infiltration area can be covered with grass, gravel, or stone.

Instruction: Examine the surface of the infiltration area and the observation well. Consult **Table 11.1.3** below for possible problems. Note: The following Problem and Follow-Up Actions apply to infiltration practice pretreatment areas also.

**Table 11.1.3 IN Infiltration Area**

| Problem (Check if Present)                                                                                                                                                                                                            | Follow-Up Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p><input type="checkbox"/> For grass-covered Infiltration practices: grass has grown very tall,<br/>(Photo credit: Stormwater Maintenance, LLC)</p> | <p><input type="checkbox"/> Mow infiltration area at least twice per year.</p> <p><input type="checkbox"/> Other:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|  <p><input type="checkbox"/> For grass-covered Infiltration practices: sparse vegetation cover or bare spots</p>                                    | <p><input type="checkbox"/> Add topsoil (as needed), grass seed, straw, and water during the growing season to re-establish consistent grass coverage.</p> <p><input type="checkbox"/> Other:</p> <p><input type="checkbox"/> Kick-Out to Level 2 Inspection: Sparse vegetation cover can be a sign that the infiltration area is not infiltrating at the proper rate and water is standing too long after a storm. The surface may be saturated or squishy, and the conditions do not enable grass to grow. This situation should be evaluated by a Level 2 Inspection and likely corrected by a qualified contractor.</p>                                                                       |
| <p><input type="checkbox"/> Minor areas of sediment, grit, trash, or other debris are accumulating on the surface.</p>                                                                                                                | <p><input type="checkbox"/> Use a shovel to scoop out minor areas of sediment or grit, especially in the spring after winter sanding materials may wash in and accumulate. Dispose of the material where it cannot re-enter the Infiltration practice.</p> <p><input type="checkbox"/> If removing the material creates a hole or low area, rake the surface smooth and level.</p> <p><input type="checkbox"/> Remove trash, debris, and other undesirable materials.</p> <p><input type="checkbox"/> Other:</p> <p><input type="checkbox"/> Kick-Out to Level 2 Inspection: Sediment has accumulated more than 2-inches deep and covers 25% or more of the surface of the Infiltration area.</p> |

**Table 11.1.3 IN Infiltration Area**

| Problem (Check if Present)                                                                                                                                                                                                                                                                                                          | Follow-Up Actions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <ul style="list-style-type: none"> <li><input type="checkbox"/> There is erosion on the surface; water seems to be carving out rills as it flows across the surface of the Infiltration area or sinkholes are forming in certain areas.</li> </ul> | <ul style="list-style-type: none"> <li><input type="checkbox"/> For minor areas of erosion, try filling the eroded areas with clean topsoil, sand, or stone (whatever the existing cover is).</li> <li><input type="checkbox"/> If the problem recurs, you may have to use larger stone (e.g., river cobble) to fill in problem areas.</li> <li><input type="checkbox"/> Other:</li> </ul><br><ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: The problem persists or the erosion is more than 3-inches deep and seems to be an issue with how water enters and moves through the infiltration area.</li> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: The problem does not seem to be caused by flowing water but a collapse or sinking of the surface (e.g., "sinkhole") due to some underground problem.</li> </ul> |
|  <ul style="list-style-type: none"> <li><input type="checkbox"/> Observation well is damaged or cap is missing</li> </ul>                                                                                                                          | <ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: Requires replacing pipes or caps.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|  <ul style="list-style-type: none"> <li><input type="checkbox"/> Water still visible in the observation well more than 72 hours after a rain storm. The Infiltration practice does not appear to be draining properly.</li> </ul>                 | <ul style="list-style-type: none"> <li><input type="checkbox"/> Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |




## IN 4. Outlets

Description: Outlets are where water exits the surface of the infiltration area during larger storms when the underground infiltration reservoir fills up and the excess water needs somewhere to go. Note that not all infiltration practices will have an identifiable outlet if the design is for all the water to infiltrate into the ground. Outlets may be a berm, stone weir, or pipe.

Instruction: Locate and inspect all outlets. Consult **Table 2.11.4** below for possible problems.

**Table 2.11.4 IN Outlets**

| Problem (Check if Present)                                                                                                                                     | Follow-Up Actions                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <input type="checkbox"/> Outlet obstructed with sediment, debris, trash, etc. | <input type="checkbox"/> Remove the debris and dispose of it where it cannot re-enter the infiltration area.<br><input type="checkbox"/> Other:                   |
|                                                                                                                                                                | <input type="checkbox"/> Kick-Out to Level 2 Inspection: Outlet is completely obstructed; there is too much material to remove by hand or with simple hand tools. |
| <input type="checkbox"/> Rills or gullies are forming at outlet.                                                                                               | <input type="checkbox"/> For minor rills, fill in with soil, compact, and seed and straw to establish vegetation.<br><input type="checkbox"/> Other:              |
|                                                                                                                                                                | <input type="checkbox"/> Kick-Out to Level 2 Inspection: Rills are more than 2" to 3" deep and require more than just hand raking and re-seeding.                 |

**Table 3.10.1 Level Inspection: PONDS and WETLANDS**

| Recommended Repairs and Required Skills                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Triggers for Level 3 Inspection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Observed Condition: Pipe or Headwall Settlement, Erosion, Corrosion or Failure</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Condition 1: Pipe or headwall settlement or failure</p> <p>Severe sinkholes, settlement or corrosion should be kicked out to Level 3 Inspection.</p> <p>Condition 2: Flow not confined to pipe and visible outside pipe wall</p> <p>With flashlight, observe the inside of the pipe and note its condition. Take photographs. Look for sinkholes developing that indicate pipe failure beneath the surface. Kick out to Level 3 inspection.</p>                                                         | <ul style="list-style-type: none"> <li>• Where blockages are visible, a decision is needed on whether to clear them or leave in place. If a third of the pipe is full of sediment, it should be removed by a contractor with pipe-cleaning equipment.</li> <li>• Corrosion of inlet pipes that allows flow around the pipe exterior is a structural concern because it can lead to settlement, sinkholes and undermining pond embankment. Evidence of this type of failure may require specialized pipe-inspection equipment and investigation by an engineer.</li> </ul>                                                                                  |
| <b>Observed Condition: Pond Conditions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <p>Condition 1: Pond pre-treatment zone is full of sediment or not constructed as shown on as-built drawings.</p> <p>Condition 2: Excessive buildup of sediment or overgrowth</p> <p>If the pre-treatment area or pond pool is overgrown or filled with sediment so that the original design is compromised, corrective measures are required. If plants have died, then replanting is necessary. If none of the original design exists due to alteration or sediment, kick out to Level 3 inspection.</p> | <ul style="list-style-type: none"> <li>• It may require inspection by an engineer to determine next steps for clearing, replanting or reconstruction.</li> <li>• Erosion or settlement such that design has been compromised should be reviewed by an engineer. Recurring erosion may require redesign and/or regrading to direct flow away from eroding area.</li> <li>• If sediment has filled more than 50% of the pond's capacity, dredging is likely needed and should be evaluated by a qualified contractor.</li> <li>• Removal or control of excessive algae or aquatic plants can be assessed by a qualified pond maintenance company.</li> </ul> |

### 3.11. Infiltration – Level 2 Inspections and Triggers for Level 3

The most likely triggers for a Level 3 Inspection for Infiltration practices are:

- Standing water, clogged media
- Severe erosion of infiltration area, inlets, or around outlets
- Significant sediment accumulation, indicating an uncontrolled source of sediment

**Table 3.11.1 Level Inspection: INFILTRATION**

| Recommended Repairs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Triggers for Level 3 Inspection                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Observed Condition: Water Stands on Surface for More than 72 Hours after Storm</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                          |
| <p>Condition 1: Small pockets of standing water</p> <p>For infiltration basins with soil, use a soil probe or auger to examine the soil profile. For gravel infiltration trenches or basins, use a shovel to dig into the gravel layer where the problem is occurring. If isolated areas have accumulated grit, fine silt, or vegetative debris or have bad soil or clogged gravel, try removing and replacing with clean material. If the practice is supposed to have grass cover, it will likely be necessary to replant once the problem is resolved.</p> <p>Condition 2: Standing water is widespread or covers entire surface</p> <p>Look in the observation well (if it exists) and use a tape measure to estimate the depth of water standing in the soil or gravel. Requires diagnosis and resolution of problem:</p> <ul style="list-style-type: none"> <li>• Too much sediment/grit washing in from drainage area?</li> <li>• Too much ponding depth?</li> <li>• Improper infiltration media?</li> <li>• Underlying soil not suitable for infiltration?</li> </ul> <p>As above, the resolution will likely require replanting and re-establishment of good grass cover if this is part of the design.</p> | <ul style="list-style-type: none"> <li>• Infiltration media is clogged and problem cannot be diagnosed from Level 2 inspection.</li> <li>• Level 2 inspection identifies problem, but it cannot be resolved easily or it is associated with the original design of the practice.</li> </ul>                              |
| <b>Observed Condition: Severe erosion of infiltration bed, inlets, or around outlets</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                          |
| <p>Condition 1: Erosion at inlets</p> <p>The lining (e.g., grass, matting, stone, rock) may not be adequate for the actual flow velocities coming through the inlets. First line of defense is to try a less erosive lining and/or extending the lining further down to where inlet slopes meet the infiltration surface. If problem persists, analysis by a Qualified Professional is warranted.</p> <p>Condition 2: Erosion of infiltration bed</p> <p>This is often caused by “preferential flow paths” along the surface. The source of flow should be analyzed and methods employed to dissipate energy and disperse the flow (e.g., check dams, rock splash pads).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Erosion (rills, gullies) is more than 12 inches deep</li> <li>• The issue is not caused by moving water but some sort of subsurface defect, which may manifest as a sinkhole or linear depression and be associated with problems with the underlying stone or soil.</li> </ul> |

**Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment**

Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep

Sediment source may be from a one-time or isolated event. For practices with soil cover, remove accumulated sediment and top 2 to 3 inches of soil; replace with clean material. Check drainage area for any ongoing sources of sediment.

Condition 2: Majority of the surface is caked with “hard pan” (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more

This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of infiltration practice) or another chronic source of sediment in the drainage area. For infiltration basins with soil, augering several holes down through the media can indicate how severe the problem is; often the damage is confined to the first several inches of soil media. Removing and replacing this top layer (or to the depth where sediment incursion is seen in auger holes) can be adequate, as long the problem does not recur.

- Trenches or dry wells with stone or gravel at surface may need to be cleaned out with a vacuum truck because the process of removing the top layer of stone may cause fine silt to drop further down.
- More than 2 inches of accumulated sediment cover 25% or more of the infiltration surface area.
- “Hard pan” of thin, crusty layer covers majority of Infiltration surface area and seems to be impeding flow of water down through the soil media.
- New sources of sediment seem to be accumulating with each significant rainfall event.

### 3.12. Sand and Organic Filters – Level 2 Inspections and Triggers for Level 3

The most likely triggers for a Level 3 Inspection for Sand and Organic Filters are:

- Standing water, clogged filter media
- Need to pump out sedimentation chamber
- Response to fuel or other spills that make it into the filter

**Table 3.12.1 Level 2 Inspection: SAND AND ORGANIC FILTERS**

**Recommended Repairs**

**Triggers for Level 3 Inspection**

**Observed Condition: Water Stands on Surface for More than 72 Hours after Storm**

Condition 1: Small pockets of standing water

Use a soil probe or auger to examine the sand or filter profile. If isolated areas have accumulated grit, fine silt, vegetative debris, oily sludge or bad sand media, try scraping off top 3 inches of media and replacing with clean, coarse construction sand.

Condition 2: Standing water is widespread or covers entire surface

Look in the underdrain cleanout (if present) and use a tape measure to estimate the depth of water standing in the sand layer. Requires diagnosis and resolution of problem:

- Clogged underdrain
- Filter fabric between the sand layer and underdrain gravel OR on top of the sand filter layer (usually held in place by a thin layer of gravel)
- Too much sediment/grit/vegetative debris/oily sludge washing in from drainage area
- Too much ponding depth
- Improper sand media

- Sand or organic media is clogged, but problem was not evident from Level 2 inspection.
- Level 2 inspection identifies problem, but it cannot be resolved easily or is associated with the original design of the practice.
- The problem seems to be filter fabric placement, but this is specified in the original design.
- The entire filter media layer or filter cartridges need to be replaced.
- The problem is associated with improper configuration of underdrain pipes or outlet structures.

**Observed Condition: Severe erosion of filter bed, inlets, or around outlets**

- Erosion (rills, gullies) is more than 12 inches deep.
- The issue is not caused by moving water but some sort of subsurface defect, which may manifest as a sinkhole or linear depression and be associated with problems with the underlying stone or soil.

**Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment**

Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep

Sediment source may be from a one-time or isolated event. Remove accumulated sediment and top 2 to 3 inches of sand or filter media; replace with clean material. Check drainage area for any ongoing sources of sediment.

Condition 2: Majority of the surface is caked with “hard pan” (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more

This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of filter practice) or another chronic source of sediment in the drainage area. Augering several holes down through the sand media can indicate how severe the problem is; often the damage is confined to the first several inches of media. Removing and replacing this top layer (or to the depth where sediment incursion is seen in auger holes) can be adequate, as long the problem does not recur.

- More than 2 inches of accumulated sediment cover 25% or more of the filter surface area.
- “Hard pan” of thin, crusty layer covers majority of filter surface area that seems to be impeding flow of water down through the filter media.
- New sources of sediment seem to be accumulating with each significant rainfall event.

**Observed Condition: Underground vault system has standing water and oily sludge floating on top, or other issues that indicate clogging, malfunction, or need for maintenance**

Condition: Compare observation to the design or as-built plans to see whether existing conditions match the plan details.

- This condition will almost always warrant conferring with the manufacturer or vendor and/or using the Level 3 inspection process to further diagnose the problem.

## Infiltration Basin Construction Inspection Checklist

Project:  
 Location:  
 Site Status:

Date:

Time:

Inspector:

| CONSTRUCTION SEQUENCE                | SATISFACTORY/<br>UNSATISFACTORY | COMMENTS |
|--------------------------------------|---------------------------------|----------|
| <b>1. Pre-Construction</b>           |                                 |          |
| Runoff diverted                      |                                 |          |
| Soil permeability tested             |                                 |          |
| Groundwater / bedrock depth          |                                 |          |
| <b>2. Excavation</b>                 |                                 |          |
| Size and location                    |                                 |          |
| Side slopes stable                   |                                 |          |
| Excavation does not compact subsoils |                                 |          |
| <b>3. Embankment</b>                 |                                 |          |
| Barrel                               |                                 |          |
| Anti-seep collar or Filter diaphragm |                                 |          |
| Fill material                        |                                 |          |



| CONSTRUCTION SEQUENCE                                                   | SATISFACTORY/<br>UNSATISFACTORY | COMMENTS |
|-------------------------------------------------------------------------|---------------------------------|----------|
| 4. Final Excavation                                                     |                                 |          |
| Drainage area stabilized                                                |                                 |          |
| Sediment removed from facility                                          |                                 |          |
| Basin floor tilled                                                      |                                 |          |
| Facility stabilized                                                     |                                 |          |
| 5. Final Inspection                                                     |                                 |          |
| Pretreatment facility in place                                          |                                 |          |
| Inlets / outlets                                                        |                                 |          |
| Contributing watershed stabilized before flow is routed to the facility |                                 |          |

Comments:

Actions to be Taken: