

April 12, 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 +/- 5.08 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.

#### **Original 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 10<sup>th</sup>, 2024, for the Hotel use, with requirements that have been met within this site plan application. The project was granted variances from the Town of Perinton on March 25<sup>th</sup>, 2024, for the front and side setbacks and parking buffer.

## **Re-Design and Re-Application**

This project was previously presented to the Town of Perinton Planning Board in March 2024 and was deferred to provide the applicant time to redesign the site to address town staff and board comments regarding the steep slopes and retaining wall heights. The main request was to make the project fall more in line with Town Design Criteria 130, which states that the *design should conform to the land*.

The hotel location has not changed since the original application. Maintaining the building location provides the most amount of distance from the single-family residents to the south, while also providing enough room towards Route 96 to provide an adequate entrance to the development. Changes to the pavement and parking layouts include a flatter approach into the site, and a longer switchback approach to the parking lot. This provides a design that allows the grades to more match the existing topography and allow most grades in parking areas to be no more than 5%.

With the new design, the retaining wall along the front of the property, at the right-of-way of Route 96, has been shortened from a peak height of 15 feet at original submission to a peak height of 9 feet. This is also 1 foot lower than the previously approved wall from 2018. The rear wall that was previously proposed at 10 feet at its peak has now been removed entirely in lieu of jute mesh stabilized slopes, which will provide a more natural transition to the LDD district.

These modifications to the site address most of the town staff concerns from the original application, and overall create a more harmonic layout with the existing grades and site constraints.

In support of our request, attached please find:

- (15) Letters of Intent – 1 Original
- (15) Site Plans & Checklists
- (15) Response Letters
- (5) Engineer Report
- (5) SWPPP Report
- (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,



Joshua Saxton-EIT  
Project Manager



April 12, 2024

Town of Perinton  
Attn: Planning Board  
1350 Turk Hill Road  
Fairport, NY 14450

**Re: 1251 Pittsford Victor Road (Proposed Hotel) -Comments dated March 15, 2024  
Town of Perinton, NY**

Dear Planning Board|DPW|BCD:

This letter is regarding the comments we received dated March 15, 2024. The comments are in the order received and our responses are in bold italics.

### Engineering Comments

1. This project received a SEQR negative declaration from the Town Board when the Special Use Permit was approved in December 2023.  
***Response: Noted***
2. The project is located within a Pedestrian Zone as noted in Town Code § 208-28B (Park PED Zone #16). DPW recommends a portion of sidewalk be constructed from the hotel driveway entrance to connect with the existing sidewalk to the west, and a sidewalk contribution for the remaining length of frontage along route 96 in the amount of \$8,727.50 (Total Route 96 frontage = 484.1' less 135' of sidewalk to be constructed = 349.1' net frontage x \$25/LF = \$8,727.50).  
***Response: A sidewalk has been added to the frontage per this comment and the developer will contribute to the rest of the frontage's sidewalk fund.***
3. An administrative subdivision map should be prepared and filed with the Monroe County Clerk to consolidate the 3 separate 1251 PVC LLC parcels prior to development of the hotel. Include the triangular shaped lot line shift in the northwest portion of the property.  
***Response: The parcels will be subdivided prior to construction.***
4. Town Design Criteria Section 130 states development should incorporate into the project design natural slopes and grades of land as much as possible and "...the design should conform to the land. Significant cutting, filling and presence of excessive retaining walls will often lead to the denial of an application." In DPW's opinion, the grading as proposed is trying to modify the land to fit the large hotel pad and requires retaining walls on all sides. Many of these wall sections are between 8' and 16' tall and are directly adjacent to Route 96 ROW and along the stream corridor.  
***Response: With the design intent, as well as the limitations set-forth by the Town Boards SUP findings, the incorporation of moderate and reasonable retaining walls for this project is needed. The previously approved layout for this parcel from 2018 incorporated numerous retaining walls to achieve the design intent and develop***

*around the steep grades on site. The plans have been revised to reduce this wall height along Route 96, and eliminate entirely the retaining wall in the rear of the site in the steep slopes overlooking the creek. With these modifications, retaining walls are now at or below previously approved heights. The parking areas have also been revised with less steep slopes to help with Town concerns of steepness in parking and walking areas.*

5. DPW recommends the applicant evaluate a layout that places the hotel pad down the slope and puts parking between the building and Route 96. This will enable the development to work with the existing site constraints and significantly reduce the need for tall retaining walls.

*Response: This proposed layout was evaluated, and the current findings were found:*

- *The proposed parking layout will have a significant portion of the parking away from the hotel, which is not the design intent of the hotel.*
- *This design still requires retaining walls, though smaller in size than the current plan*
- *Eliminating the lower walkout parking area/sidewalks hinders the intent of the building design and intended layout*
- *Concern for fire access around the building to meet fire code*
- *To achieve a suitable layout the building would be too low to tie into the existing sanitary system via gravity*
- *This would essentially hide a majority of the building from Route 96*
- *This brings the building closer to the single family residents, which was not the intention of the town board when granting the SUP*

*There are ideas from this layout that we are looking into incorporating, which would be lowering the building and moving it slightly south to relieve some grading concerns in the parking area, and reducing wall heights around the site.*

6. As discussed with Conservation Board, label large individual trees along 20' LDD buffer area and indicate which will be protected as part of the project.

*Response: The trees in question were surveyed, and the plans will be developed to save as many of the larger caliper trees as possible. These trees can be seen on the tree conservation plan.*

7. Perinton design standards require roadway slopes no steeper than 3% within 50' of an intersection. The design as proposed appears to be about 6%.

*Response: The entrance intersection has been revised to meet design standards.*

8. Existing sanitary sewer on Route 96 is located closer to the project's west property line than shown on the plans. Also, the sewer is located within a 20' wide easement to the town, which should be shown on the plans. Contact Town Engineer for more information.

*Response: The existing sanitary sewer alignment has been revised and is shown on the existing conditions and demolition plan. The portion of sewer in question is proposed to be demolished as it is too high to service the proposed hotel.*

9. Show and label the existing sidewalk easement to the Town of Perinton from the adjacent parcel into the project's property.  
***Response: The existing sidewalk easement is now labeled***
10. Show and label location of proposed dumpster enclosure on the plans.  
***Response: The dumpster enclosure is now labeled on the plans.***
11. All paved areas (including emergency vehicle turn around) should be conveyed to the infiltration area.  
***Response: Additional stormwater infrastructure has been added to convey all impervious area to the infiltration area.***
12. Show and label on the grading and erosion control plan the topsoil stockpile and concrete washout area. Provide concrete washout detail and wire reinforced silt fence details on the plans per NYSDEC design criteria.  
***Response: The topsoil stockpile and concrete washout area are now shown on the plans. The details of these items has also been added to the detail sheets.***
13. Extend the construction entrance an additional 50' into the property to reduce carrying sediment into Route 96.  
***Response: The construction entrance has been extended 50'.***
14. Provide outlet detail for sediment trap to ensure infiltration basin will not be compromised with sediment from overflow during heavy rain events.  
***Response: An outlet detail for the sediment trap has been added to the plans on sheet C207.***
15. Provide hairpin parking lot striping per Town of Perinton standard details.  
***Response: Hairpin parking striping detail is now included on the plans on sheet C208, and striping is called out as such on the site plan.***
16. On Drawing C202, arrange sidewalk ramp details to prevent text conflicts.  
***Response: The above detail has been revised.***
17. On Drawing C203, adjust light pole detail to have maximum fixture height of 16' to meet Perinton Design Criteria.  
***Response: The light pole detail has been revised to have a height of 16'***
18. On Drawing C203, label on the Infiltration Basin detail the 1-, 10- and 100-Year storm elevations.  
***Response: Storm elevations are now shown on the detail, as well as the infiltration basin.***

19. The hydraulic analysis assumes an infiltration rate of 10 inches / hour based on the USGS Type A Soil classification. However, there is a 3' cut to reach the bottom of basin elevation. As such, DPW recommends an infiltration test be performed at the proposed invert depth to verify this assumed rate. Once verified, the assumed rate should be discounted to account for frozen soil conditions per NYSDEC stormwater management design guidelines.  
***Response: The infiltration rate has been revised to 5 in/hr to be more conservative.***

20. DPW has several technical comments on the hydraulic analysis. Contact Town Engineer to discuss.  
***Response: Noted.***

### Planning Comments

1. The 5.3-acre property is located in a Restricted Business zoning district. The proposed project is a permitted use under Town Code § 208-39A(6) with a Special Use Permit from the Town Board under §208-45, which was granted on January 10, 2024.

***Response: Noted.***

2. The Planning Board granted final site plan approval for a 14,000-sf office building and 3,200-sf bank building on this property in 2018. The project was never built.

***Response: Noted.***

3. The applicant is proposing a four-story, 18,500-sf, 110-room key hotel with a single two-way access and left turn- lane along Pittsford-Victor Road.

***Response: Noted.***

4. The hotel will appear to be three stories from Pittsford-Victor Road.

***Response: Noted.***

5. The Comprehensive Plan (2021) identifies the property location as appropriate for "Mixed-Use Area" in the Future Land Use plan. Mixed-Use area entails "a mix of retail spaces, offices, higher density residential units, pocket parks, and other uses concentrated in a relatively small area to promote walkability."

***Response: Noted.***

6. There are three hotels in the Town: Budget Inn (built in 1950; 20 rooms), Hilton Garden Inn (built in 1987; 107 rooms); and Woodcliff (built in 1987; 244 rooms). According to global hospitality consulting firm, HVS, U.S. hotel demand has grown at an average annualized rate of 1.9 percent since 1987 as business, leisure and family visit travel have continually increased.

***Response: Noted.***

7. According to the NYSDOT Traffic Data Viewer, Actual Average Daily Traffic (AADT) in this area of Pittsford-Victor Road during 2019 was 11,615, which is less than half the AADT of Pittsford Palmyra Rd./Route 31 (25,642) and Fairport Rd./31F (26,605). Modifications and/or improvements to Route 96 for the proposed driveway access will require NYSDOT approval.  
***Response: NYSDOT has been contacted on this revision, we await comments but the incorporation of a left turn lane into the project is proposed per the previous development of this parcel. NYSDOT has already stated the turn lane will be required for traffic mitigation.***
  
8. There are 118 parking spaces shown. The ITE Parking Generation Manual requires 91 parking spaces for a business hotel with 110 rooms.  
***Response: The parking has been raised above town code per the request of the hotel management company, and has been updated to 111 spaces, only ten more than the required 101 spaces for 116 rooms.***
  
9. Under § 208-42L, the Planning Board may, at its discretion, waive or modify requirements pertaining to setbacks and lot coverage during site plan approval if the applicant provides rationale for the relief requested, and the Planning Board agrees that the request will result in optimal planning practices.  
***Response: Noted.***
  
10. The proposed project is in a Restricted Business zoning district, which permits hotels as a permitted use under § 208-39A(6).  
***Response: Noted.***
  
11. The proposed project is in an area that is generally identified in the Future Land Use Plan of the most recent Comprehensive Plan Update as suitable for a Mixed-Use District land use, featuring “a mix of retail spaces, offices, higher density residential units, pocket parks, and other uses concentrated in a relatively small area to promote walkability.”  
***Response: Noted.***
  
12. The proposed project meets the following goals of the current Comprehensive Plan:
  - a. Encourage a greater mix of uses, such as commercial and residential development, in areas depicted in the Future Land Use Plan.  
***Response: Noted.***
  
  - b. Market available underutilized buildings and sites for redevelopment, such as office parks along the I-490 and Route 96 corridor.  
***Response: Noted.***
  
  - c. Support the existing business community in the Town.  
***Response: Noted.***

13. The proposed project does not result in the removal or elimination of any structures, facilities, or areas of historic importance and is not identified as a local property of interest or landmark.

***Response: Noted.***

14. The proposed project will be in general harmony with the surrounding community's architectural scale and character, and it borders a major business/professional office park area and is approximately 700 feet away from Interstate Route 490.

***Response: Noted.***

15. The proposed project meets the building coverage requirement of less than 30 percent and the green space requirement of more than 40 percent on the site.

***Response: Noted.***

16. The proposed project borders a Residential A zoning district, and mitigation of visual and noise impacts should be considered.

***Response: The required mitigation of adding an 8' fence to the rear of the property has been incorporated on the drawings, as well as dark sky compliant lighting along the southern portion of the property.***

## Building and Codes Comments

1. This applicant is scheduled to appear at the Zoning Board of Appeals on March 25, 2024 for the following variances:

- a. Section 208-42 H to allow a front parking landscaping buffer to be 6' instead of 50',
- b. Section 208-45 D to allow the front setback to be 71' instead of 100', and
- c. 208-45 E to allow the side setback to be 29' instead of 40'.

***Response: Noted.***

2. Fire apparatus access, aerial access, turnarounds and hydrant locations all appear to be in compliance with the NYS Fire Code.

***Response: Noted.***

If you have any further questions, please feel free to contact us. Thank you.

Sincerely,



Joshua Saxton-EIT  
Project Manager

JS:paf

Cc: File

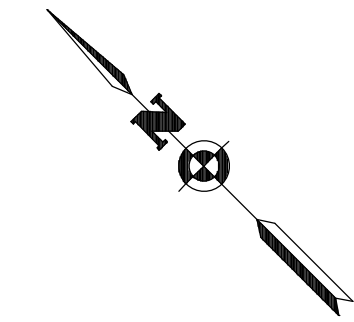
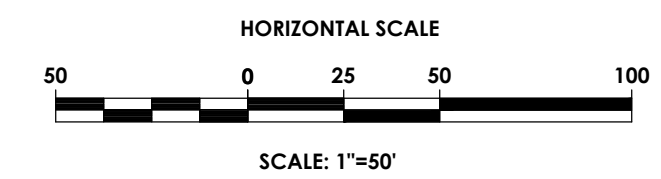


# SITE DEVELOPMENT PLANS FOR

## 1251 PITTSFORD VICTOR ROAD - FAIRFIELD INN HOTEL

### TOWN OF PERINTON, MONROE COUNTY, NEW YORK

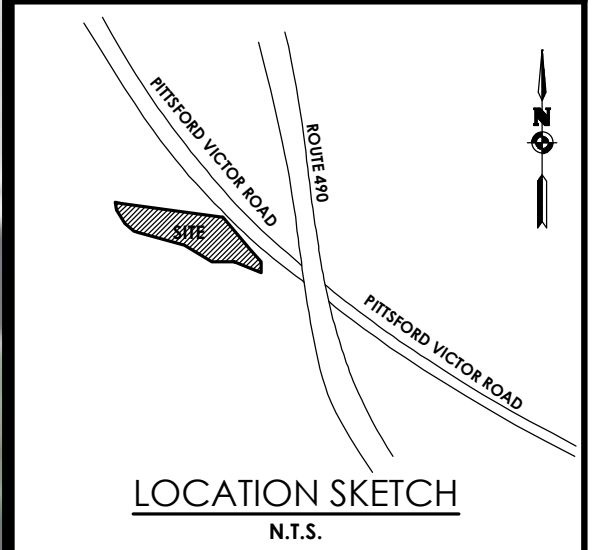
#### P.N. 20182555.0005



PA

PASSERO ASSOCIATES  
engineering architecture

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Client:  
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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### COVER

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

Municipality: PERINTON  
County: MONROE State: NEW YORK

Project No.  
**20182555.0005**

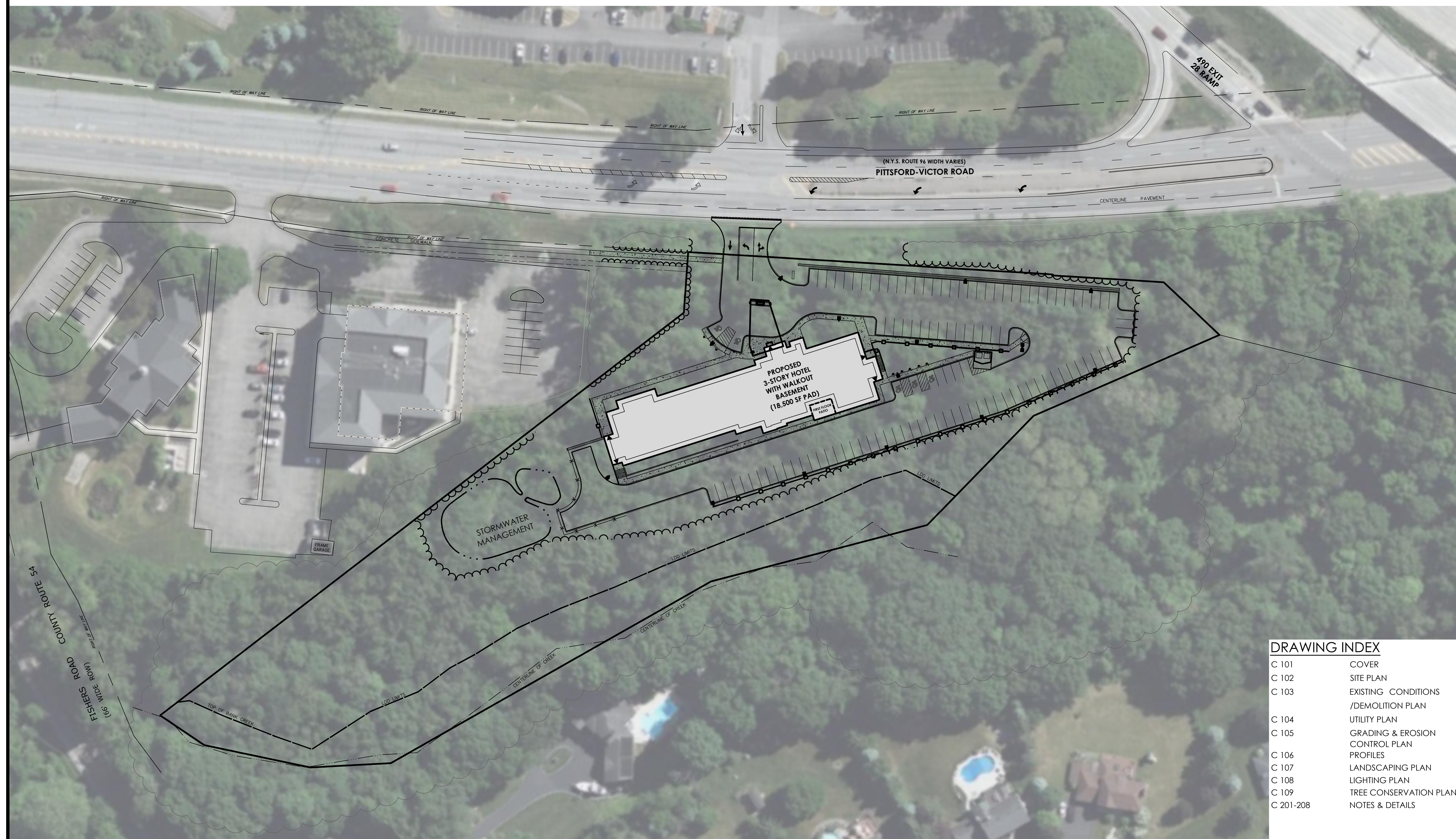
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Date  
**APRIL 2024**

### 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	PROFILES
C 107	LANDSCAPING PLAN
C 108	LIGHTING PLAN
C 109	TREE CONSERVATION PLAN
C 201-208	NOTES & DETAILS

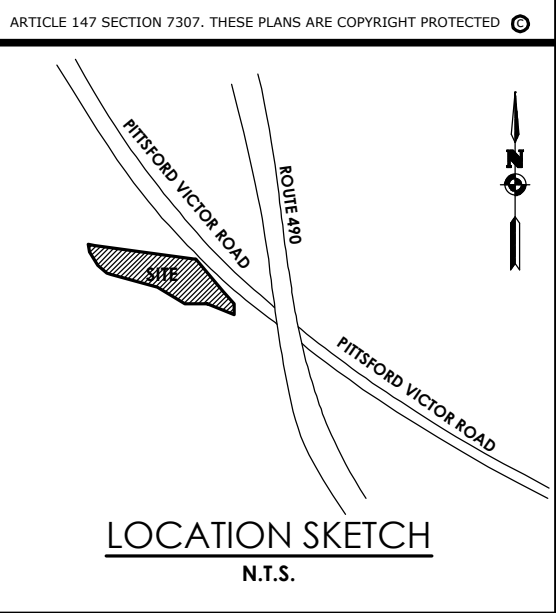
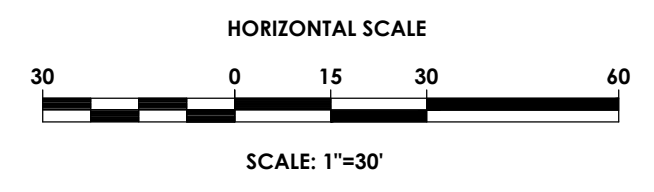
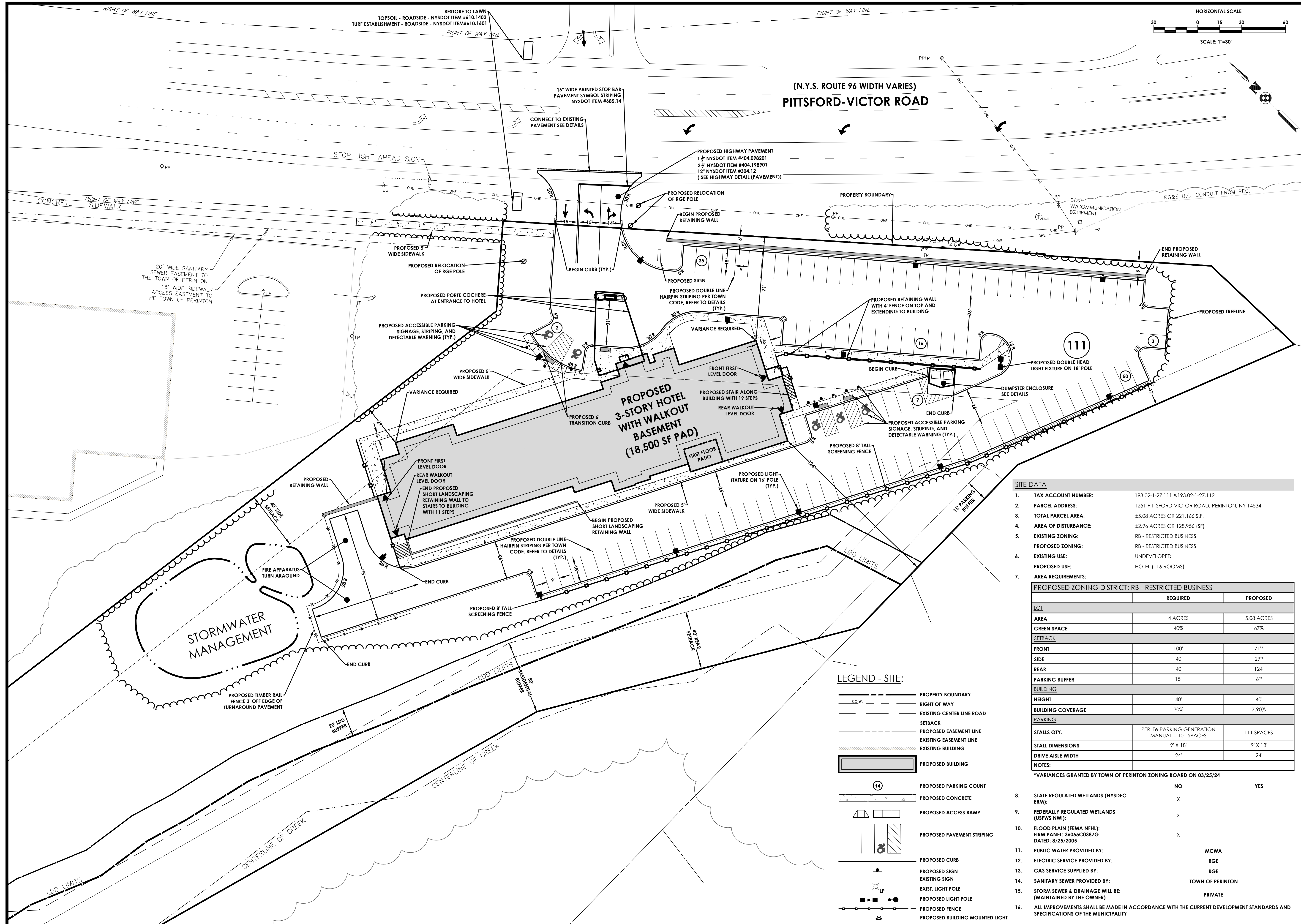


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Client:  
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Rochester, NY 14607

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242 West Main Street Suite 100  
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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.



**SITE DATA**

- TAX ACCOUNT NUMBER: 193.02-1-27.111 & 193.02-1-27.112
- PARCEL ADDRESS: 1251 PITTSFORD-VICTOR ROAD, PERINTON, NY 14534
- TOTAL PARCEL AREA: ±5.08 ACRES OR 221,166 S.F.
- AREA OF DISTURBANCE: ±2.96 ACRES OR 128,956 (SF)
- EXISTING ZONING: RB - RESTRICTED BUSINESS
- PROPOSED ZONING: RB - RESTRICTED BUSINESS
- EXISTING USE: UNDEVELOPED
- PROPOSED USE: HOTEL (116 ROOMS)
- AREA REQUIREMENTS:

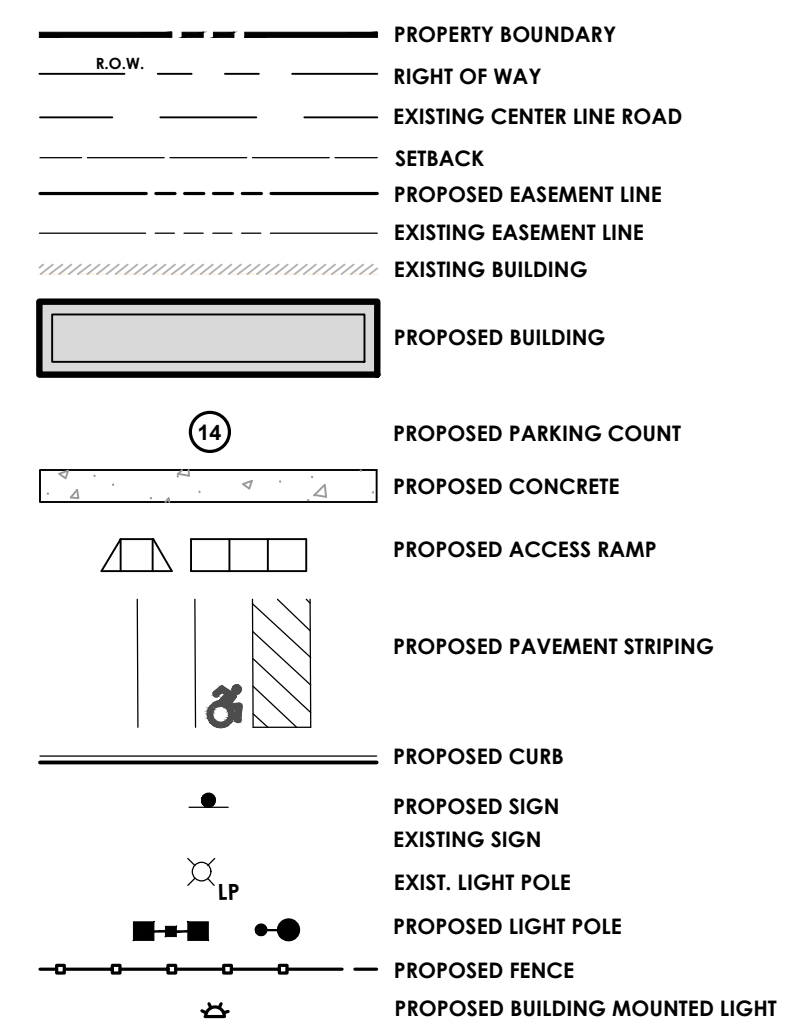
**PROPOSED ZONING DISTRICT: RB - RESTRICTED BUSINESS**

	REQUIRED	PROPOSED
LOT		
AREA	4 ACRES	5.08 ACRES
GREEN SPACE	40%	67%
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 ITC PARKING GENERATION MANUAL = 101 SPACES	111 SPACES
STALL DIMENSIONS	9' X 18'	9' X 18'
DRIVE AISLE WIDTH	24'	24'

**NOTES:**  
\*VARIANCES GRANTED BY TOWN OF PERINTON ZONING BOARD ON 03/25/24

	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 PROVIDED 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		

**LEGEND - SITE:**



**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**

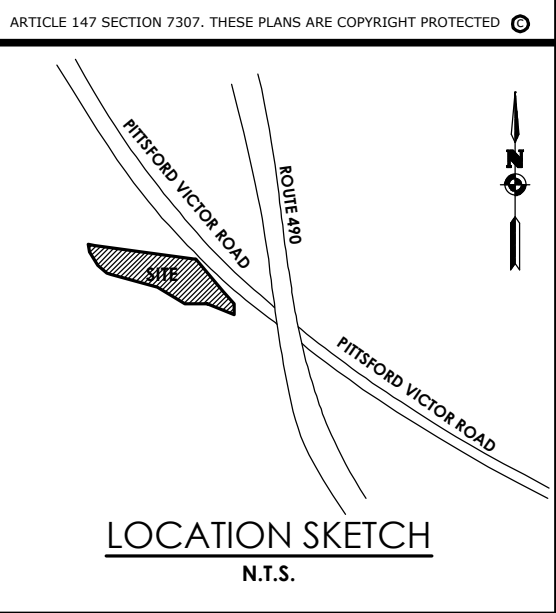
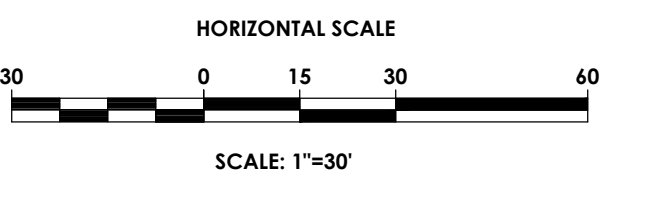
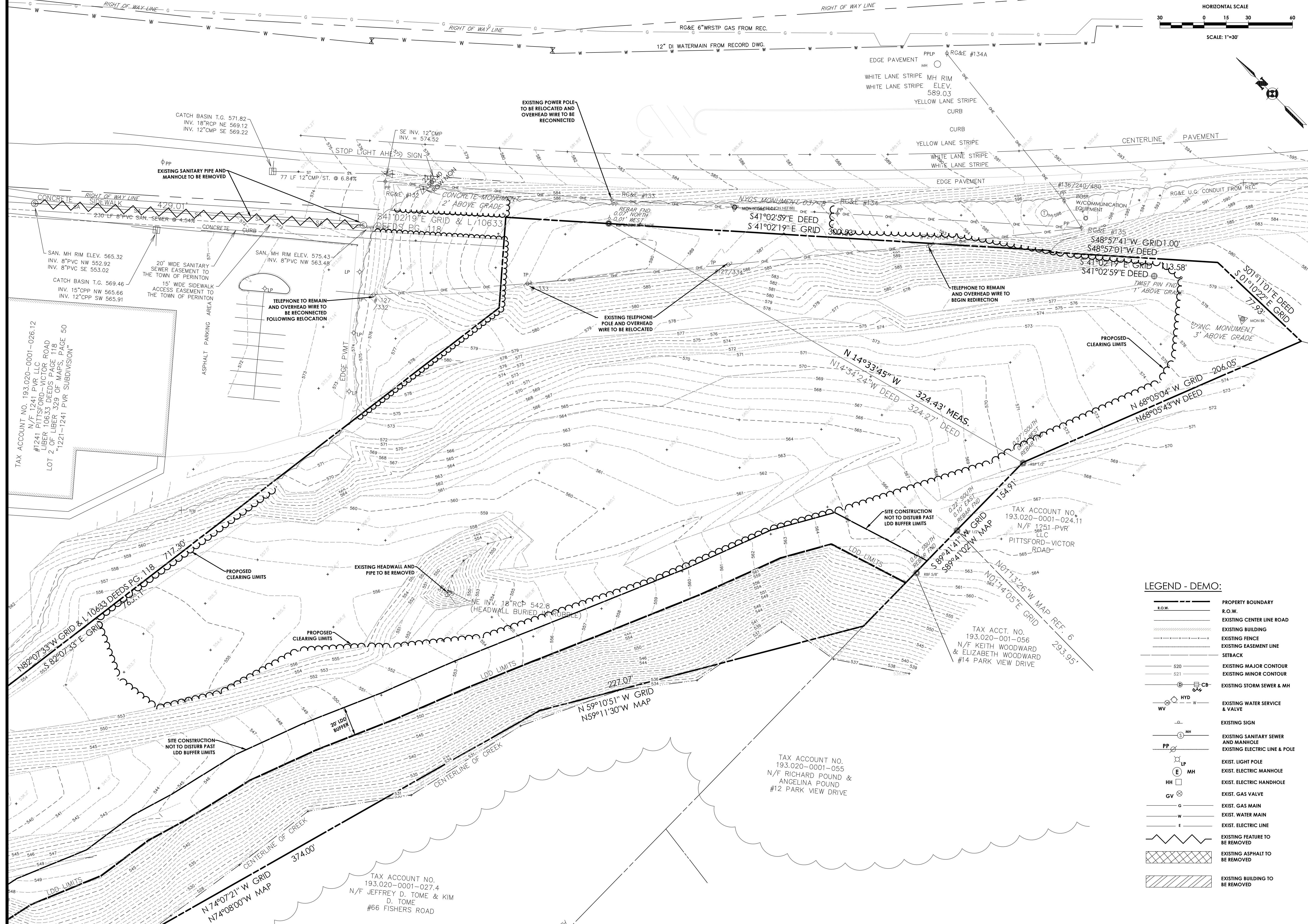
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Date  
**APRIL 2024**

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Client:  
Christa Construction  
600 East Avenue  
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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 Ritzenhaller E.I.T.



**LEGEND - DEMO:**

	PROPERTY BOUNDARY
	R.O.W.
	EXISTING CENTER LINE ROAD
	EXISTING BUILDING
	EXISTING FENCE
	EXISTING EASEMENT LINE
	SETBACK
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING STORM SEWER & MH
	EXISTING WATER SERVICE & VALVE
	EXISTING SIGN
	EXISTING SANITARY SEWER AND MANHOLE
	EXISTING ELECTRIC LINE & POLE
	EXIST. LIGHT POLE
	EXIST. ELECTRIC MANHOLE
	EXIST. ELECTRIC HANDHOLE
	EXIST. GAS VALVE
	EXIST. GAS MAIN
	EXIST. WATER MAIN
	EXIST. ELECTRIC LINE
	EXISTING FEATURE TO BE REMOVED
	EXISTING ASPHALT TO BE REMOVED
	EXISTING BUILDING TO BE REMOVED

**Revisions**

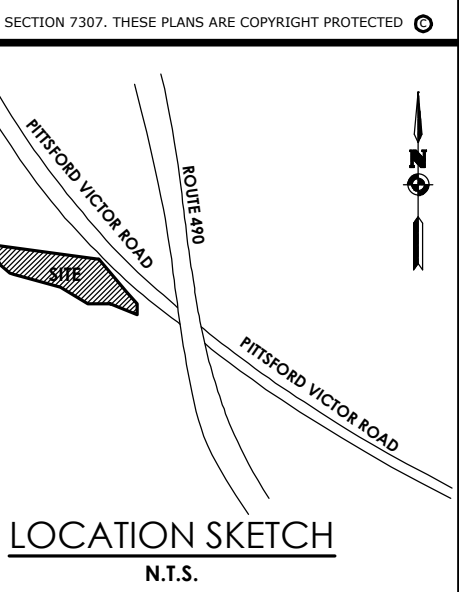
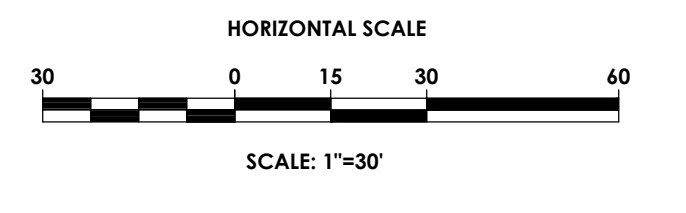
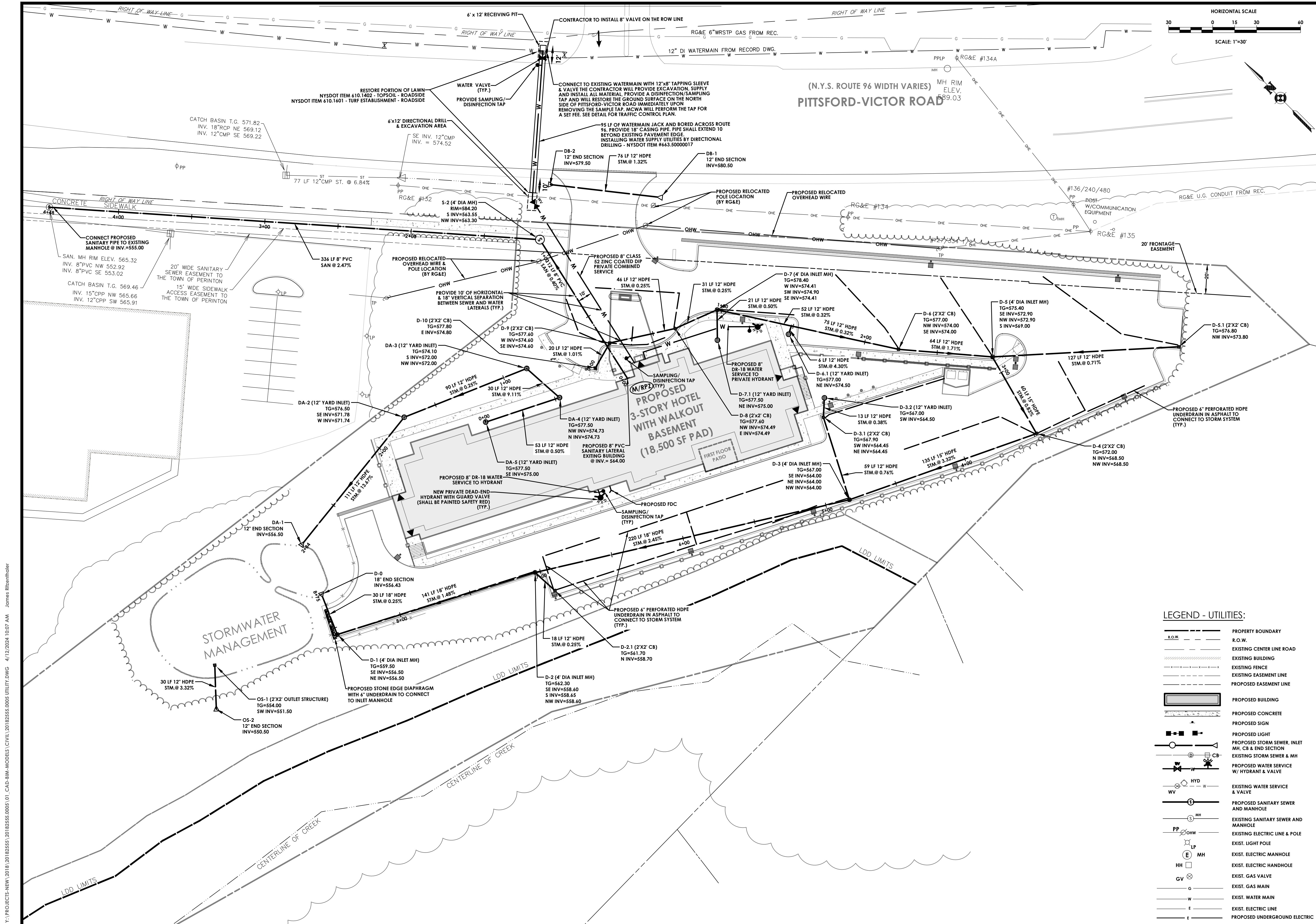
No.	Date	By	Description
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**EXISTING CONDITIONS & DEMOLITION PLAN**  
1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL  
Municipality: PERINTON  
County: MONROE State: NEW YORK  
Project No. 20182555.0005  
Drawing No. C 103  
Scale: 1" = 30'  
Date: APRIL 2024

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Rochester, NY 14607

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



**LEGEND - UTILITIES:**

---	PROPERTY BOUNDARY
- - -	R.O.W.
---	EXISTING CENTER LINE ROAD
---	EXISTING BUILDING
---	EXISTING FENCE
---	EXISTING EASEMENT LINE
---	PROPOSED EASEMENT LINE
---	PROPOSED BUILDING
---	PROPOSED CONCRETE
---	PROPOSED SIGN
---	PROPOSED LIGHT
---	PROPOSED STORM SEWER, INLET
---	MH, CB & END SECTION
---	EXISTING STORM SEWER & MH
---	PROPOSED WATER SERVICE
---	W/ HYDRANT & VALVE
---	EXISTING WATER SERVICE
---	& VALVE
---	PROPOSED SANITARY SEWER
---	AND MANHOLE
---	EXISTING SANITARY SEWER AND
---	MANHOLE
---	EXISTING ELECTRIC LINE & POLE
---	EXIST. LIGHT POLE
---	EXIST. ELECTRIC MANHOLE
---	EXIST. ELECTRIC HANDHOLE
---	EXIST. GAS VALVE
---	EXIST. GAS MAIN
---	EXIST. WATER MAIN
---	EXIST. ELECTRIC LINE
---	PROPOSED UNDERGROUND ELECTRIC

**Revisions**

No.	Date	By	Description
1			

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**UTILITY PLAN**

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

Municipality: PERINTON  
County: MONROE State: NEW YORK

Project No.  
**20182555.0005**

Drawing No.  
**C 104**

Scale:  
**1" = 30'**

Date  
**APRIL 2024**

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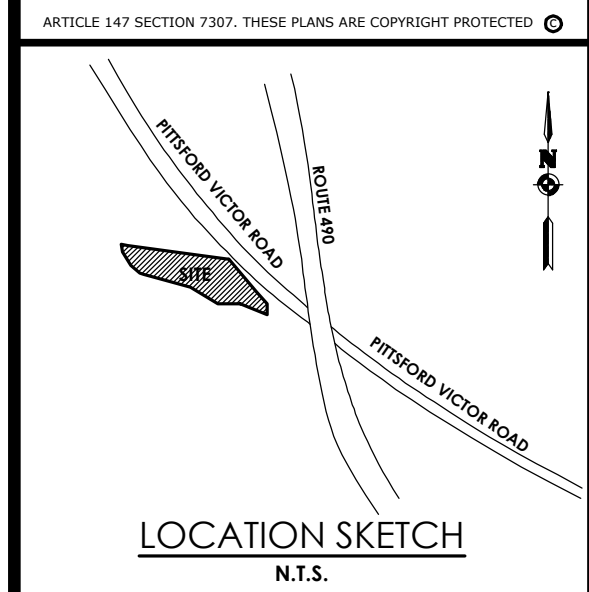








PASSERO ASSOCIATES  
engineering architecture



Client:  
Christa Construction  
600 East Avenue  
Rochester, NY 14607

PASSERO ASSOCIATES  
242 West Main Street Suite 100  
Rochester, New York 14614  
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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PROFILES

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

Municipality: PERINTON  
County: MONROE State: NEW YORK

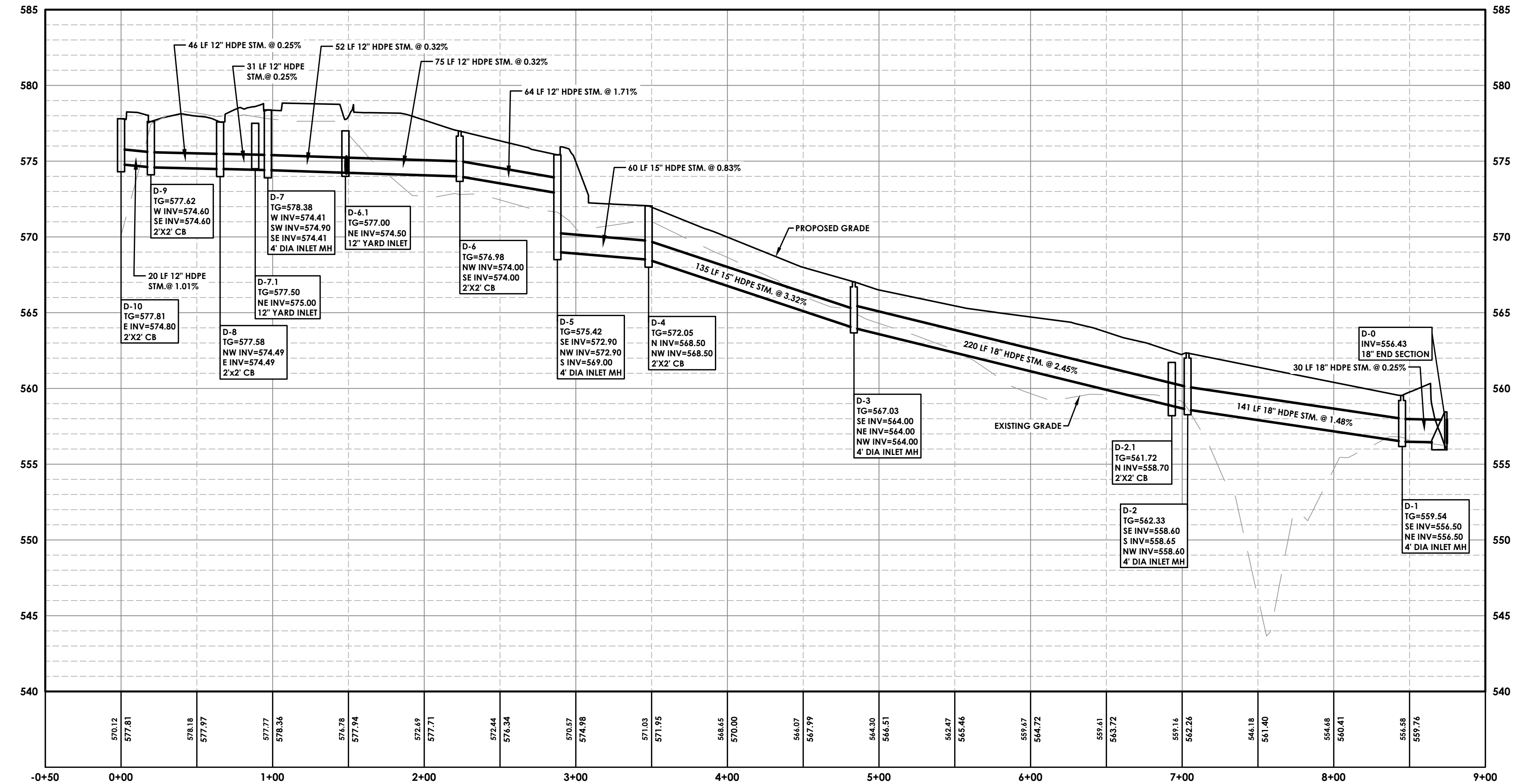
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C 106

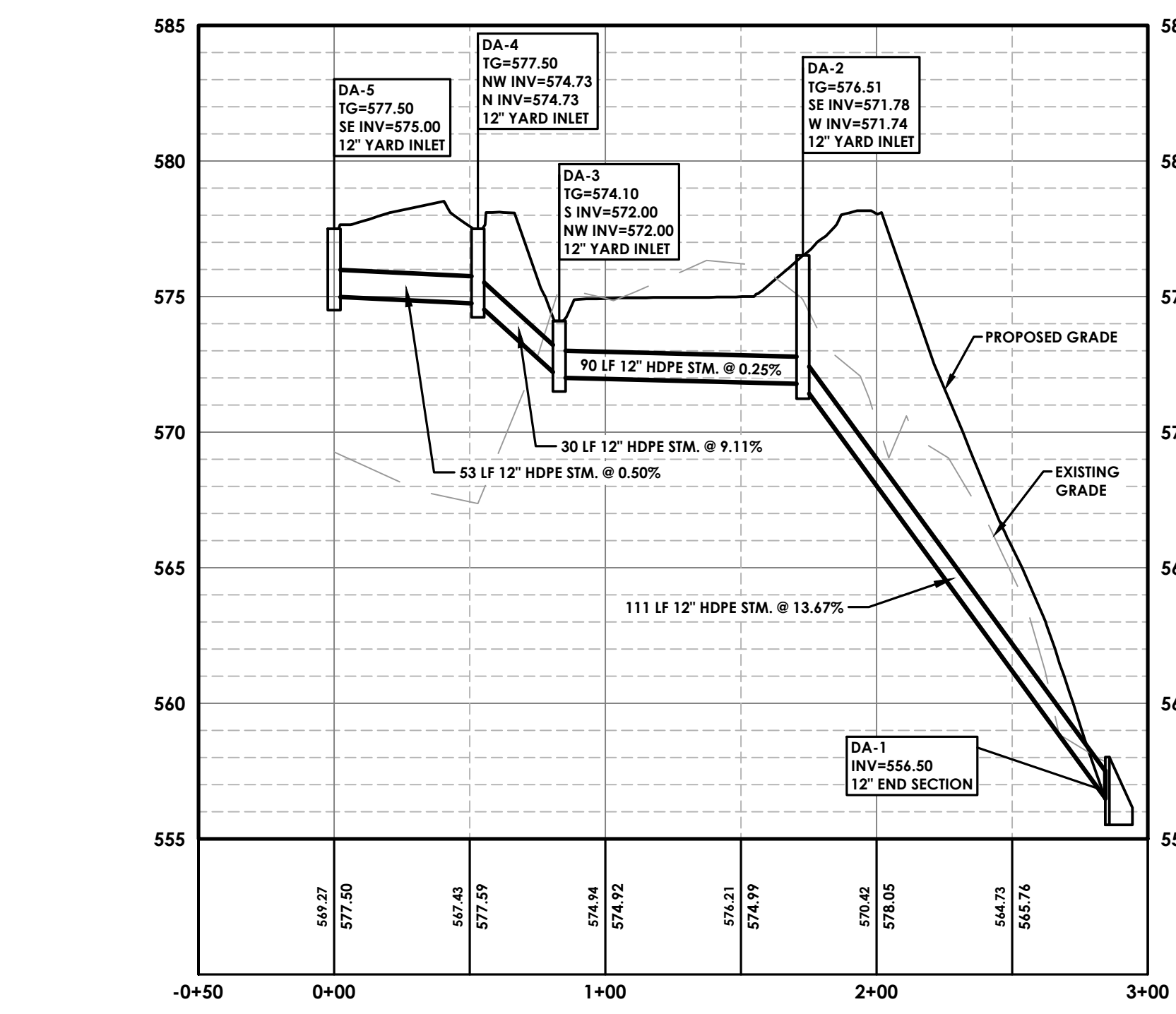
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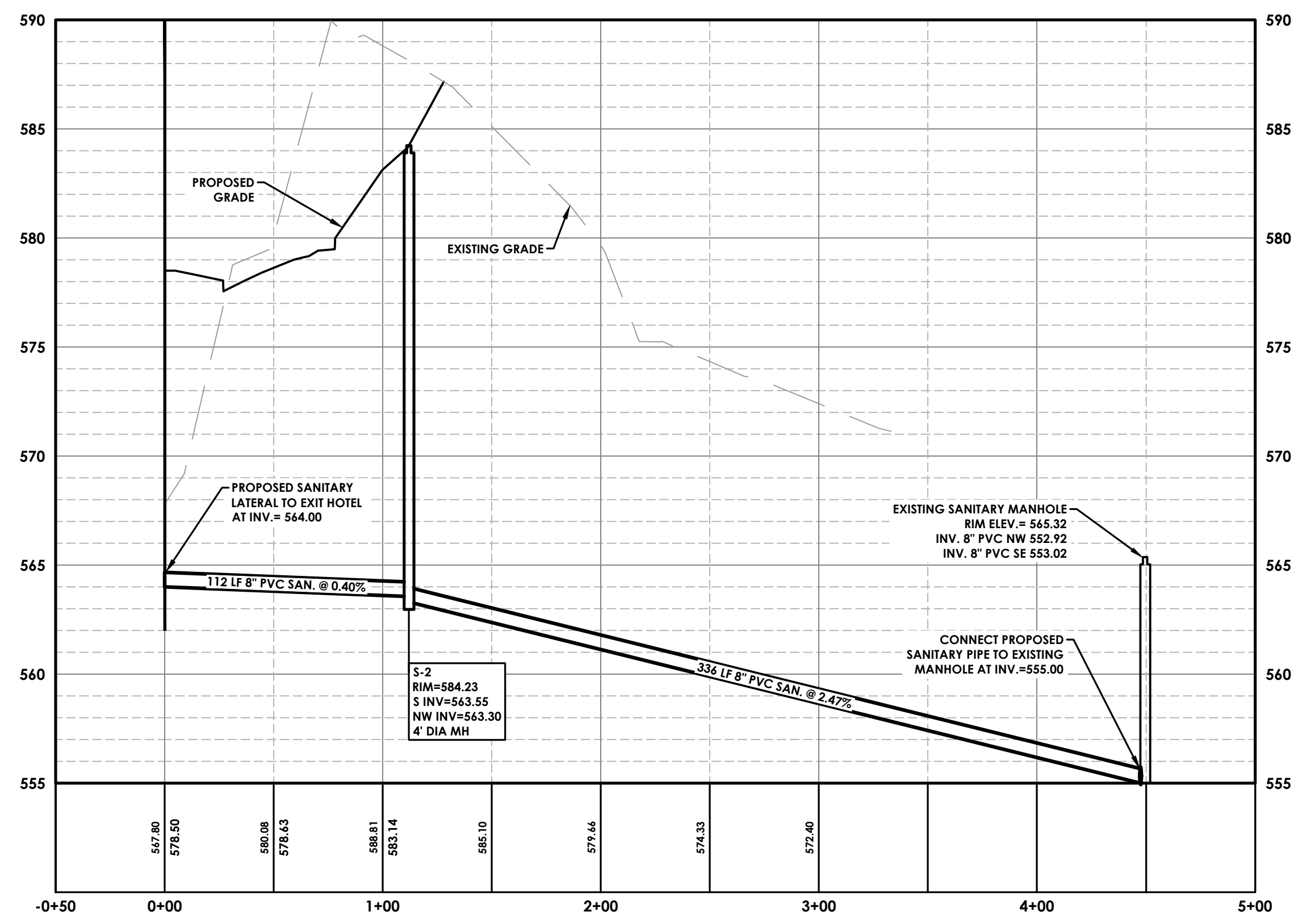
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**PROPOSED STORM NETWORK D PROFILE**  
SCALE: HORIZONTAL - 1" = 50'  
VERTICAL - 1" = 5'



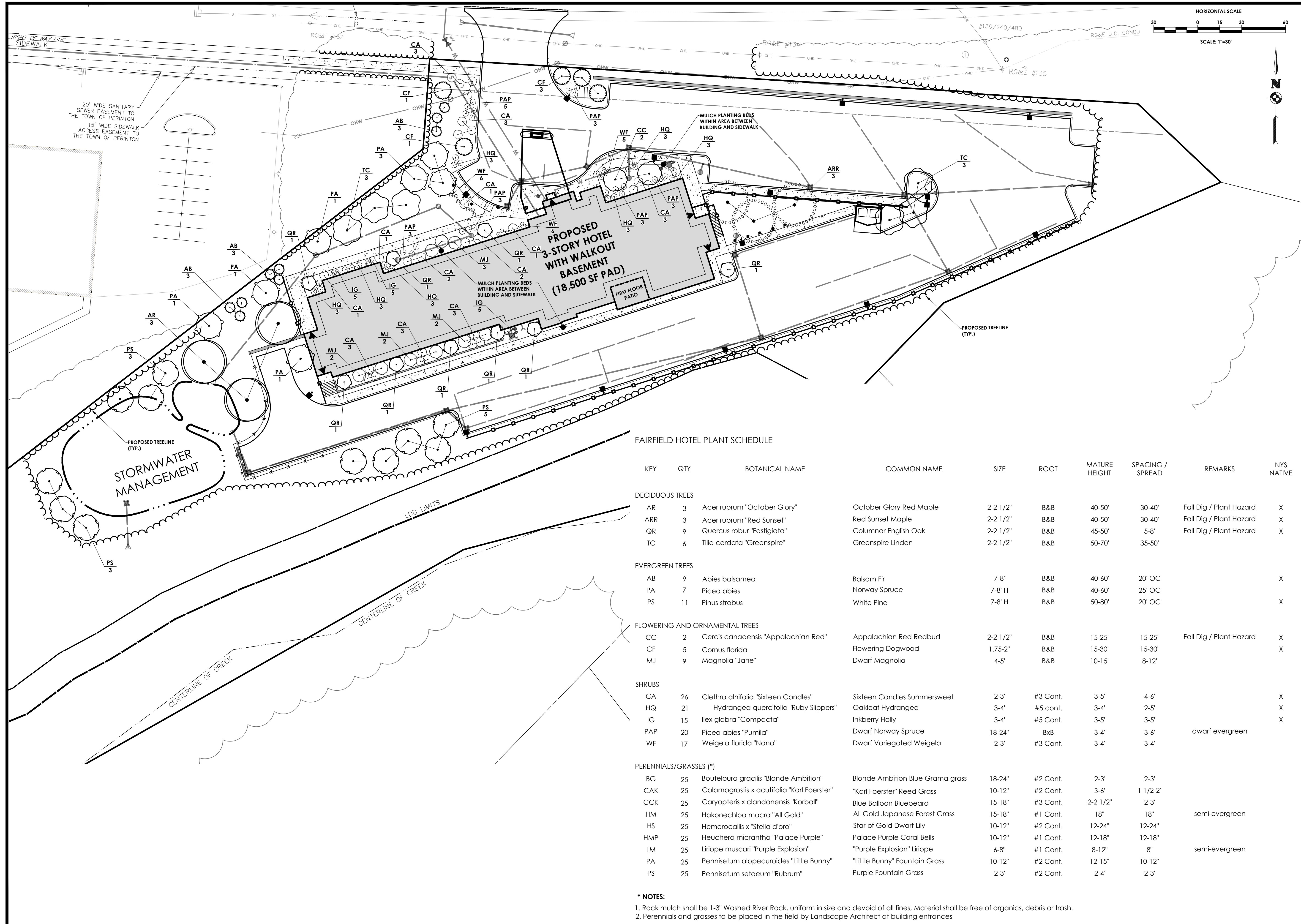
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SCALE: HORIZONTAL - 1" = 50'  
VERTICAL - 1" = 5'



**PROPOSED SANITARY NETWORK PROFILE**  
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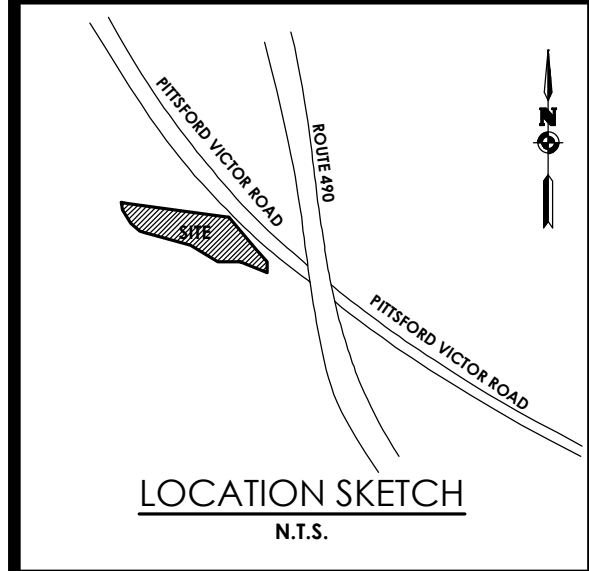
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HORIZONTAL SCALE  
 0 15 30 60  
 SCALE: 1"=30'

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



Revisions

No.	Date	By	Description
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**LANDSCAPING PLAN**

1251 PITTSFORD-VICTOR ROAD  
 FAIRFIELD INN HOTEL

Municipality: PERINTON  
 County: MONROE State: NEW YORK

Project No.  
**20182555.0005**

Drawing No.  
**C 107**

Scale:  
**1" = 30'**

Date  
**APRIL 2024**

**FAIRFIELD HOTEL PLANT SCHEDULE**

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HEIGHT	SPACING / SPREAD	REMARKS	NYS NATIVE
<b>DECIDUOUS TREES</b>									
AR	3	Acer rubrum "October Glory"	October Glory Red Maple	2-2 1/2"	B&B	40-50'	30-40'	Fall Dig / Plant Hazard	X
ARR	3	Acer rubrum "Red Sunset"	Red Sunset Maple	2-2 1/2"	B&B	40-50'	30-40'	Fall Dig / Plant Hazard	X
QR	9	Quercus robur "Fastigiata"	Columnar English Oak	2-2 1/2"	B&B	45-50'	5-8'	Fall Dig / Plant Hazard	X
TC	6	Tilia cordata "Greenspire"	Greenspire Linden	2-2 1/2"	B&B	50-70'	35-50'		
<b>EVERGREEN TREES</b>									
AB	9	Abies balsamea	Balsam Fir	7-8'	B&B	40-60'	20' OC		X
PA	7	Picea abies	Norway Spruce	7-8' H	B&B	40-60'	25' OC		
PS	11	Pinus strobus	White Pine	7-8' H	B&B	50-80'	20' OC		X
<b>FLOWERING AND ORNAMENTAL TREES</b>									
CC	2	Cercis canadensis "Appalachian Red"	Appalachian Red Redbud	2-2 1/2"	B&B	15-25'	15-25'	Fall Dig / Plant Hazard	X
CF	5	Cornus florida	Flowering Dogwood	1.75-2"	B&B	15-30'	15-30'		X
MJ	9	Magnolia "Jane"	Dwarf Magnolia	4-5'	B&B	10-15'	8-12'		
<b>SHRUBS</b>									
CA	26	Clethra alnifolia "Sixteen Candles"	Sixteen Candles Summersweet	2-3'	#3 Cont.	3-5'	4-6'		X
HQ	21	Hydrangea quercifolia "Ruby Slippers"	Oakleaf Hydrangea	3-4'	#5 cont.	3-4'	2-5'		X
IG	15	Ilex glabra "Compacta"	Inkberry Holly	3-4'	#5 Cont.	3-5'	3-5'		X
PAP	20	Picea abies "Pumila"	Dwarf Norway Spruce	18-24"	BxB	3-4'	3-6'	dwarf evergreen	
WF	17	Weigela florida "Nana"	Dwarf Variegated Weigela	2-3'	#3 Cont.	3-4'	3-4'		
<b>PERENNIALS/GRASSES (*)</b>									
BG	25	Bouteloua gracilis "Blonde Ambition"	Blonde Ambition Blue Grama grass	18-24"	#2 Cont.	2-3'	2-3'		
CAK	25	Calamagrostis x acutifolia "Karl Foerster"	"Karl Foerster" Reed Grass	10-12"	#2 Cont.	3-6'	1 1/2-2'		
CCK	25	Caryopteris x clandonensis "Korball"	Blue Balloon Bluebeard	15-18"	#3 Cont.	2-2 1/2"	2-3'		
HM	25	Hakonechloa macra "All Gold"	All Gold Japanese Forest Grass	15-18"	#1 Cont.	18"	18"	semi-evergreen	
HS	25	Hemerocallis x "Stella d'oro"	Star of Gold Dwarf Lily	10-12"	#2 Cont.	12-24"	12-24"		
HMP	25	Heuchera micrantha "Palace Purple"	Palace Purple Coral Bells	10-12"	#1 Cont.	12-18"	12-18"		
LM	25	Liriope muscari "Purple Explosion"	"Purple Explosion" Liriope	6-8"	#1 Cont.	8-12"	8"	semi-evergreen	
PA	25	Pennisetum alopecuroides "Little Bunny"	"Little Bunny" Fountain Grass	10-12"	#2 Cont.	12-15"	10-12"		
PS	25	Pennisetum setaceum "Rubrum"	Purple Fountain Grass	2-3'	#2 Cont.	2-4'	2-3'		

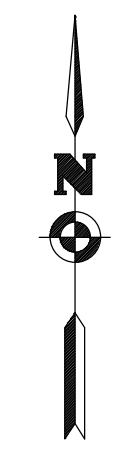
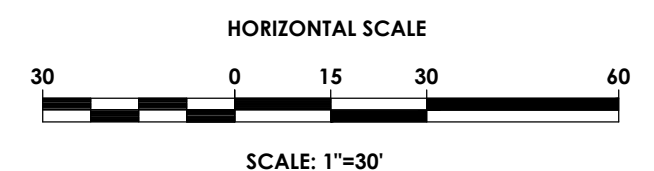
\* NOTES:  
 1. Rock mulch shall be 1-3" Washed River Rock, uniform in size and devoid of all fines, Material shall be free of organics, debris or trash.  
 2. Perennials and grasses to be placed in the field by Landscape Architect at building entrances

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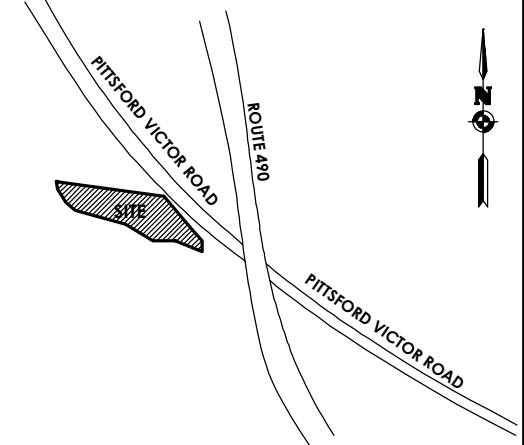








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LOCATION SKETCH  
N.T.S.

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Revisions

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**TREE CONSERVATION PLAN**

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

Municipality: PERINTON  
County: MONROE State: NEW YORK

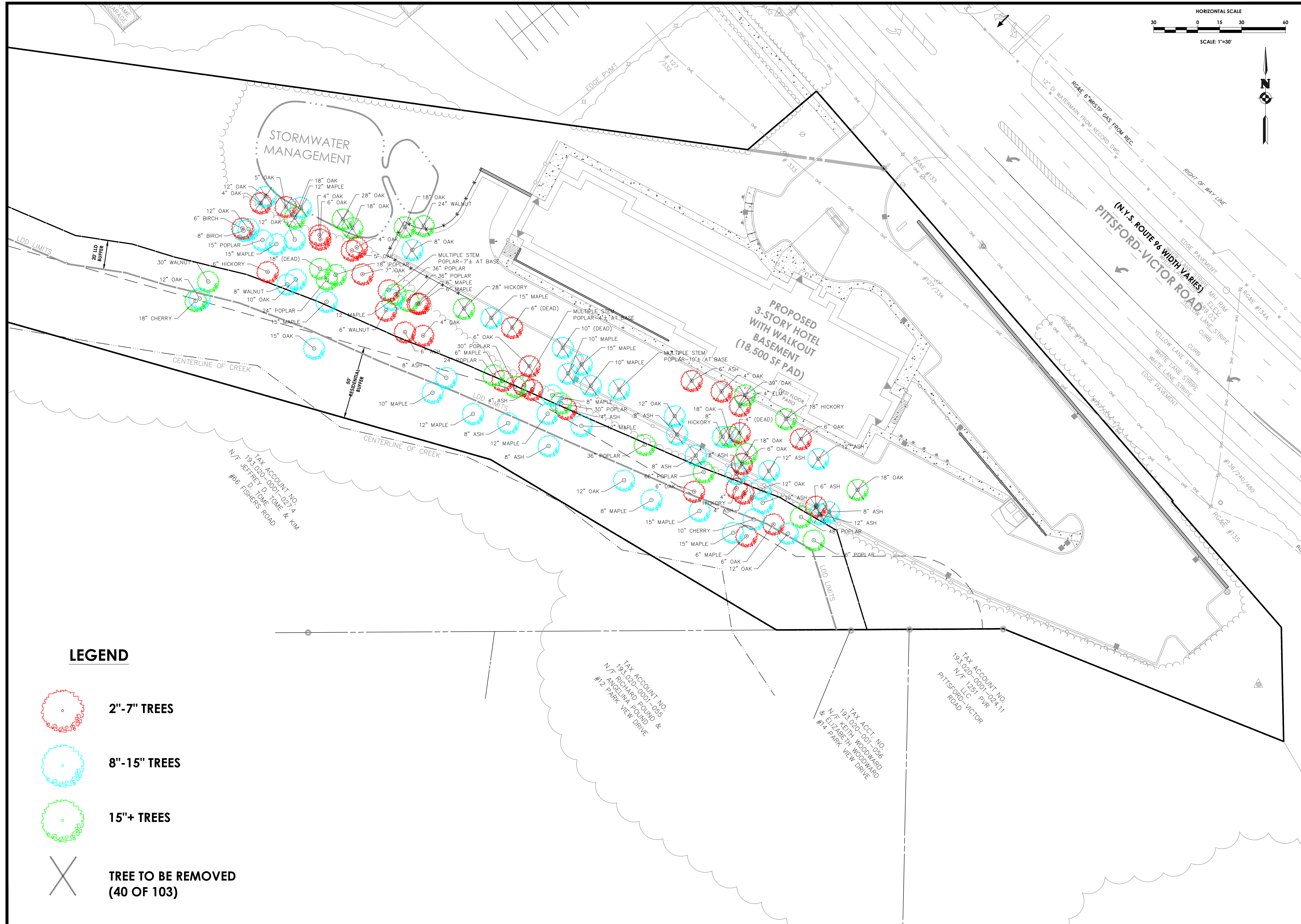
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**20182555.0005**

Drawing No.  
**C 109**

Scale:  
**1" = 30'**

Date  
**APRIL 2024**

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**LEGEND**

- 2" - 7" TREES**
- 8" - 15" TREES**
- 15" + TREES**
- TREE TO BE REMOVED (40 OF 103)**

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STANDARD WATER MAIN EXTENSION NOTES:

- 1. THE WATER MAIN PIPELINE SHALL BE DISINFECTED EQUAL TO AWWA STANDARD FOR DISINFECTING WATER MAINS DESIGNATION C651 (LATEST REVISION)...

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...

THE WATER MAIN PIPE AND APPURTENANCES SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE MONROE COUNTY DEPARTMENT OF PUBLIC HEALTH.

- 2. 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...

SANITARY NOTES:

- 1. SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST REGULATIONS OF THE STATE, COUNTY AND TOWN OF PERINTON.
2. MATERIALS
- MAINS - PIPING SHALL BE POLYVINYL CHLORIDE (PVC) WITH ENDS SUITABLE FOR ELASTOMERIC GASKET JOINTS...

STORM NOTES:

- 1. STORM SEWER LATERAL MATERIAL SHALL BE PVC SDR-21 4" MIN. SIZE & SHALL BE LAID AT A MINIMUM GRADE OF 1.00% PER FT.
2. STORM SEWER MATERIAL INCLUDING CROSSOVERS SHALL BE ADS HDPE 12" MIN.
3. FOUNDATION DRAINS WILL BE CONNECTED TO STORM WATER SYSTEM...

LANDSCAPING NOTES:

- 1. 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.
2. IT IS THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE PRIOR TO BID SUBMITTAL TO BECOME FAMILIAR WITH EXISTING CONDITIONS AT THE SITE.
3. STANDARDS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK", ANSI Z60.1 (LATEST EDITION) REPRESENT GUIDELINE SPECIFICATIONS ONLY...

- 17. 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)...

EARTHWORK

- 1. 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, PAVEMENTS, ETC.
CLEARING AND GRUBBING - REMOVAL AND DISPOSAL OFF-SITE IN A LEGAL MANNER...

TOPSOIL AND SEEDING NOTES:

- 1. THE EARTHWORK CONTRACTOR IS RESPONSIBLE FOR ROUGH GRADING AND RE-SPREADING TOPSOIL IN ALL TURF AND LANDSCAPE AREAS (BEDS AND ISLANDS).
2. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR FINE GRADING AND PREPARATION OF ALL LAWN AND LANDSCAPE AREAS.
3. REMOVE ALL EXISTING VEGETATION DURING GRADING PROCESS.
4. 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...

- 11. 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...
12. HYDRO APPLICATION: APPLY APPROVED MULCH IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDED RATES OF APPLICATION...

WATERING PLAN:

- 1. 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:

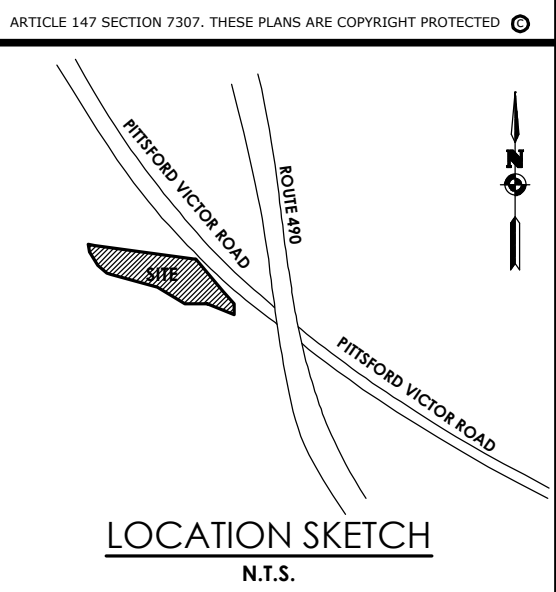
- 1. PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR AND SUBCONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL UTILITY CONNECTIONS WITH MECHANICAL/ARCHITECTURAL DRAWINGS FOR INCLUDING BUT NOT LIMITED TO VERTICAL AND HORIZONTAL LOCATION, PENETRATIONS, AND SIZES.
2. THE DEVELOPER AND HIS/HER CONTRACTOR IS RESPONSIBLE FOR COORDINATING GAS, ELECTRICAL, CABLE, TELEPHONE AND ANY OTHER UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET WITH APPROPRIATE AGENCY...

STANDARD SANITARY SEWER EXTENSION NOTES:

- 1. 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 C828-86 ENTITLED PRACTICE FOR LOW-PRESSURE AIR TEST OF VITRIFIED CLAY PIPE LINES...
2. 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...
3. 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...

EROSION AND SEDIMENT CONTROL NOTES: (OCTOBER 2017)

- 1. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYS DOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL DESIGNATE AN 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.
2. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYS DOT 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...
3. 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...



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



Revisions table with columns: No., Date, By, Description

NOTES & DETAILS

1251 PITTSFORD-VICTOR ROAD
FAIRFIELD INN HOTEL

Municipality: PERINTON
County: MONROE State: NEW YORK

Project No. 20182555.0005

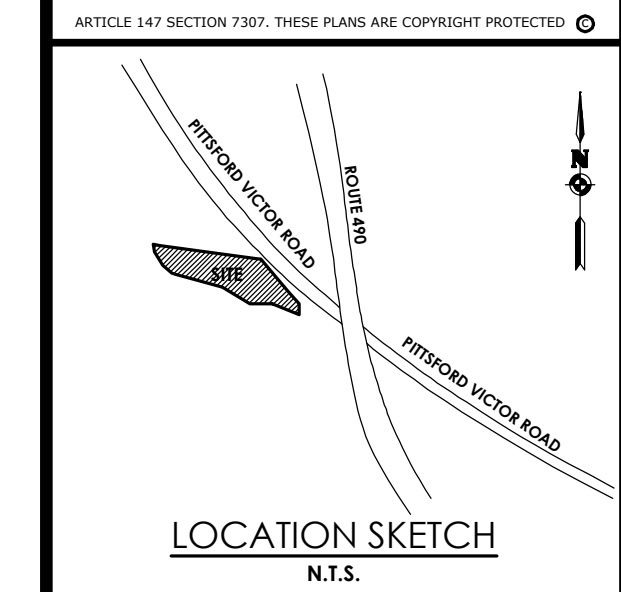
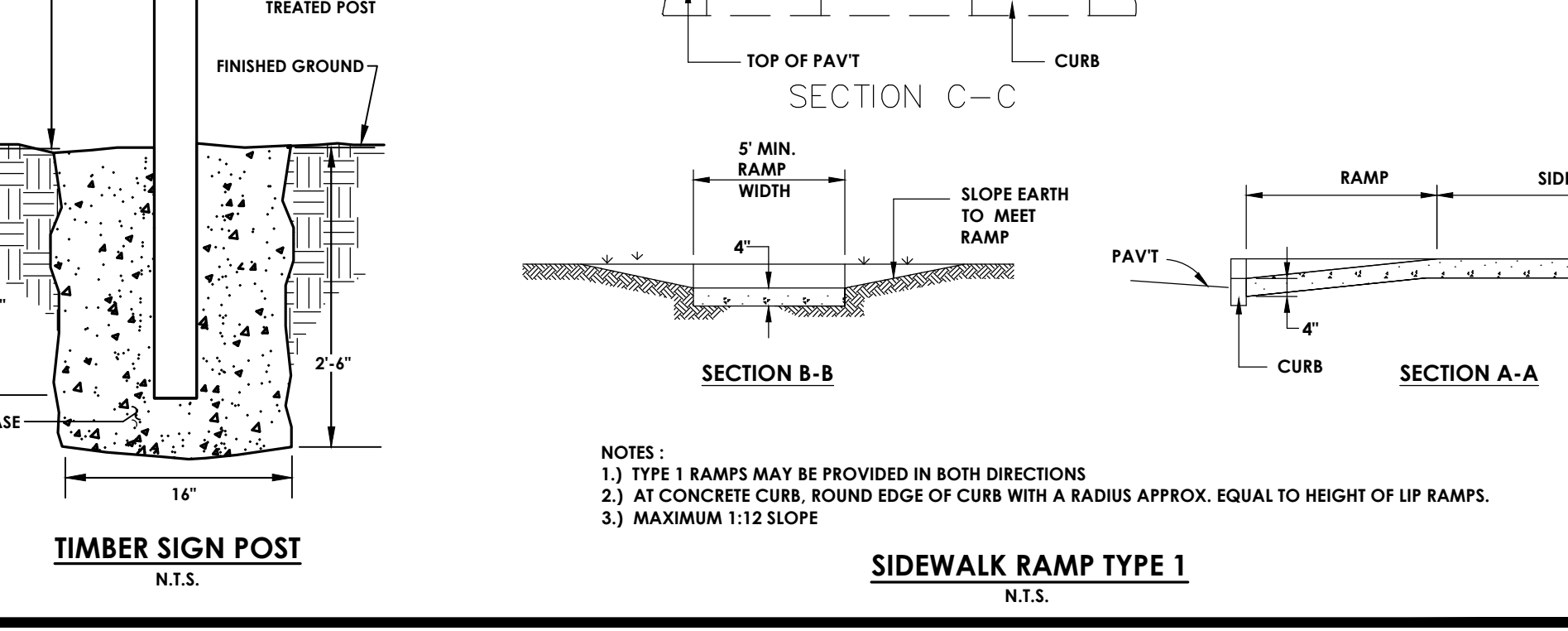
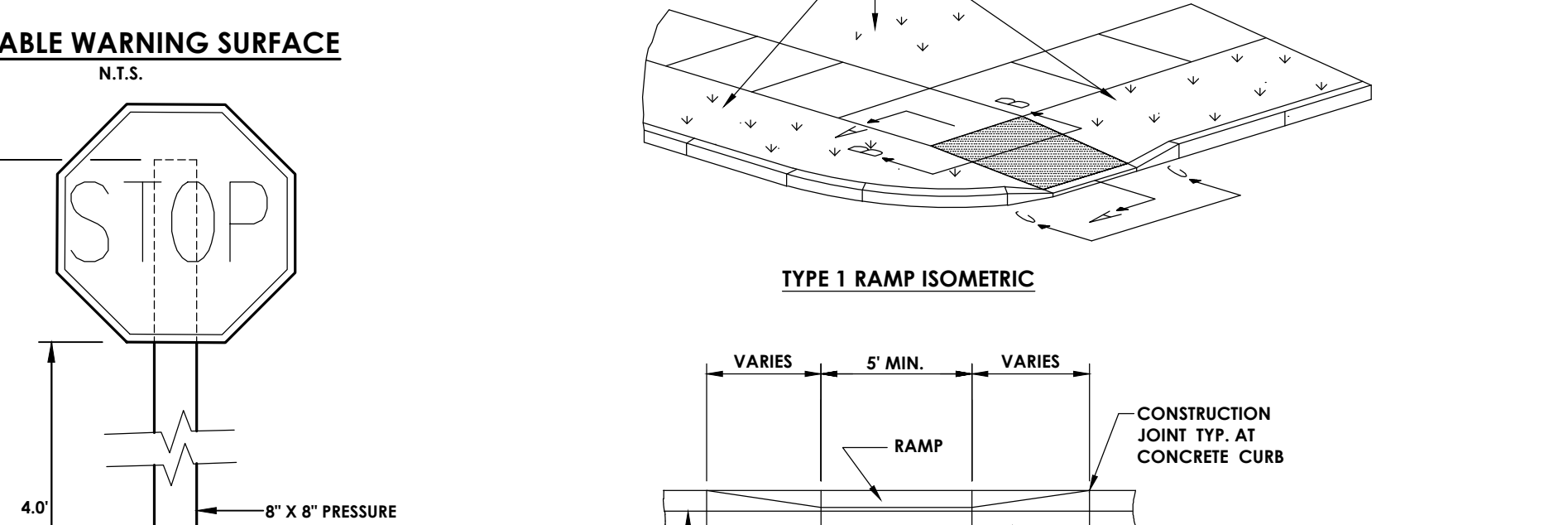
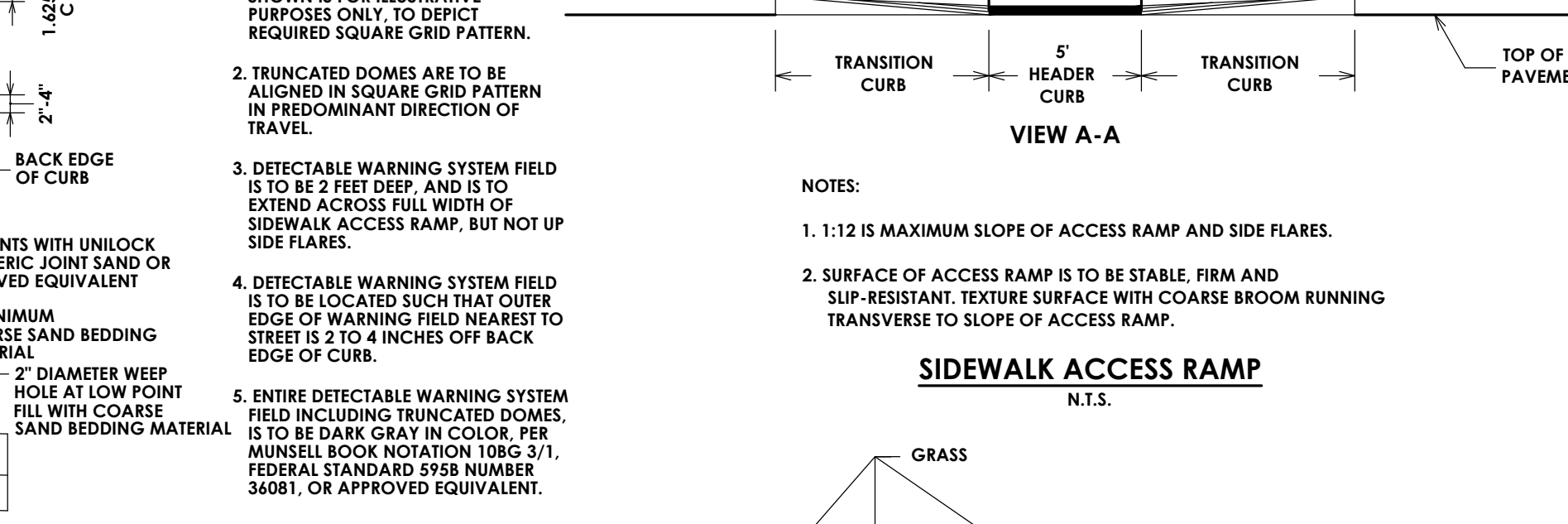
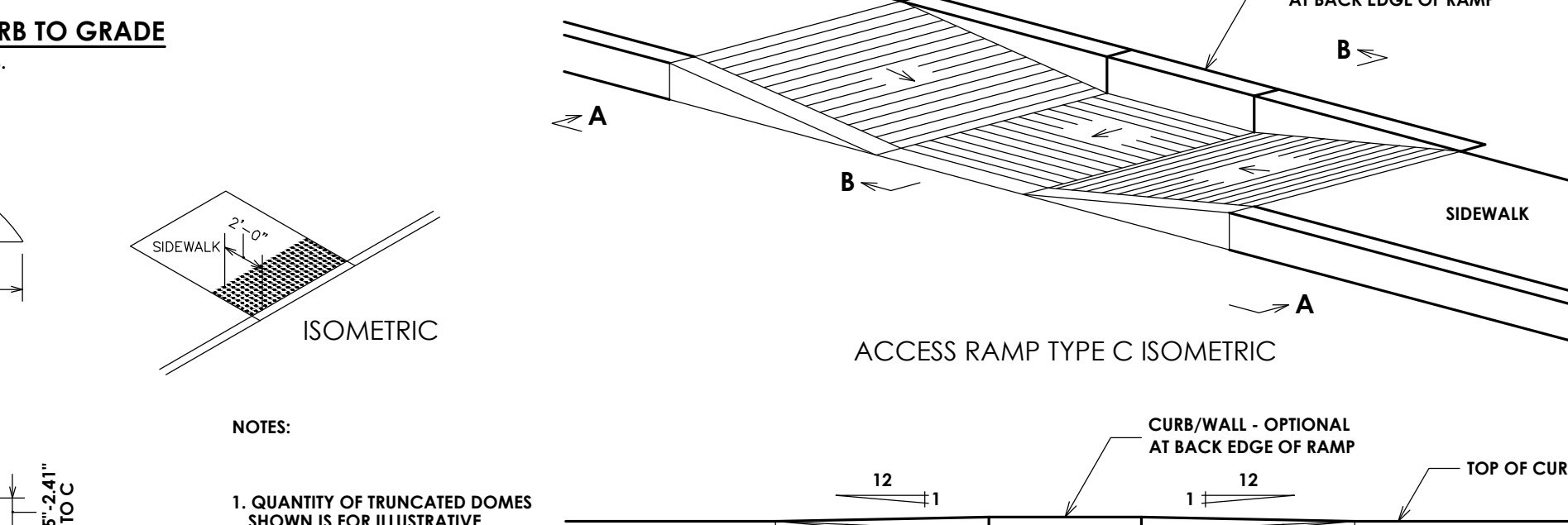
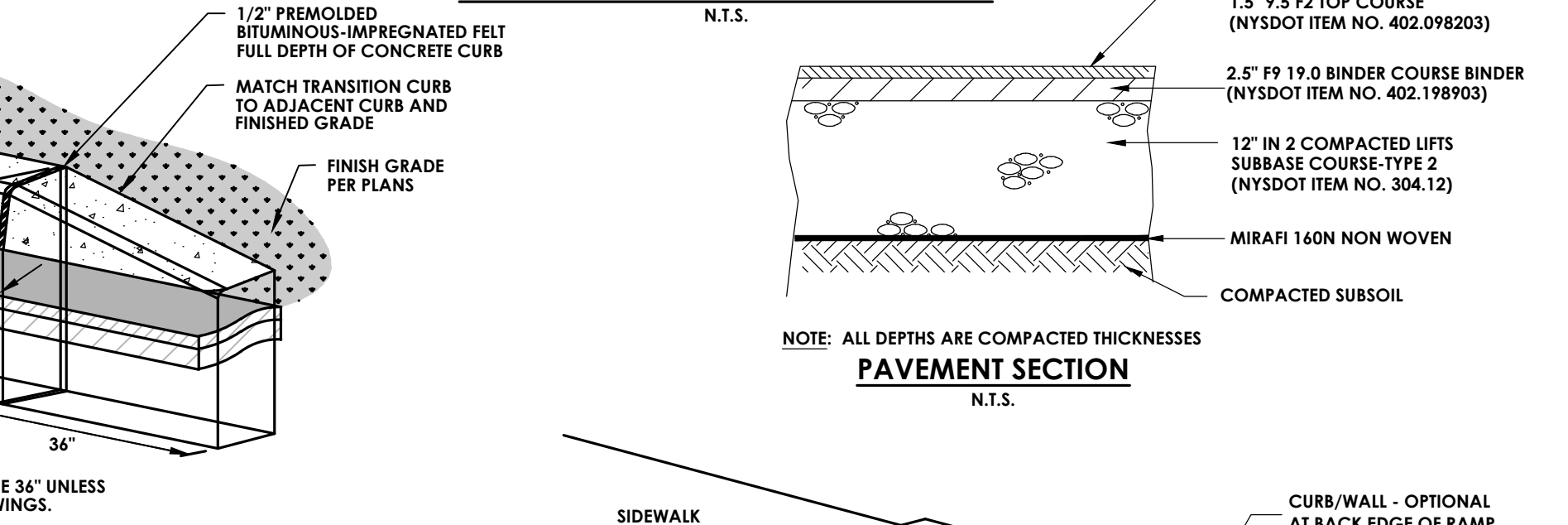
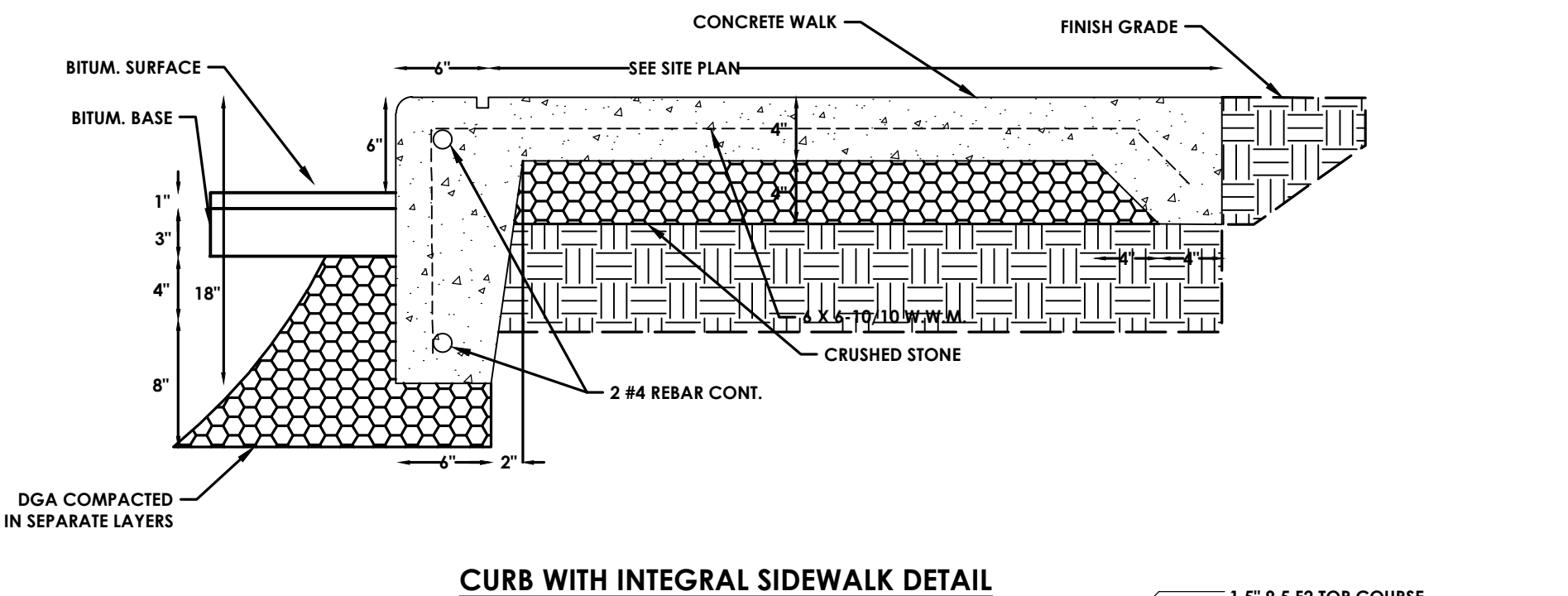
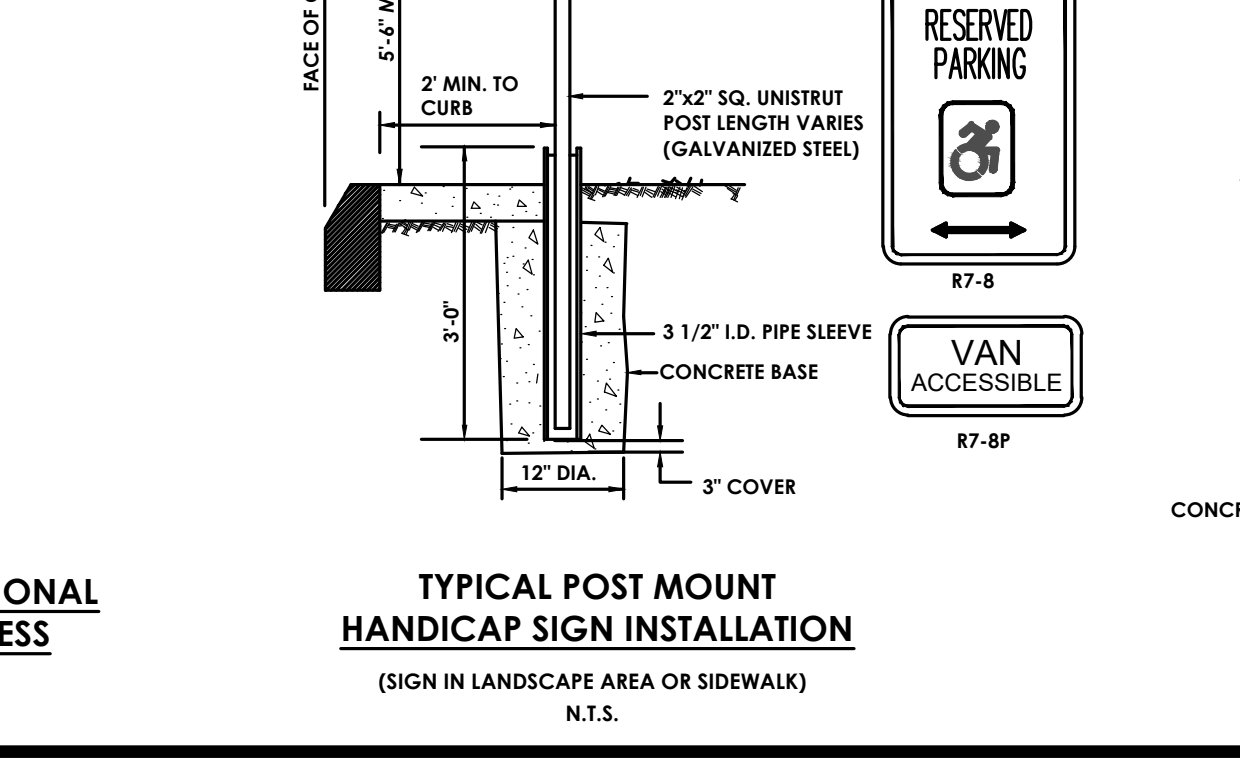
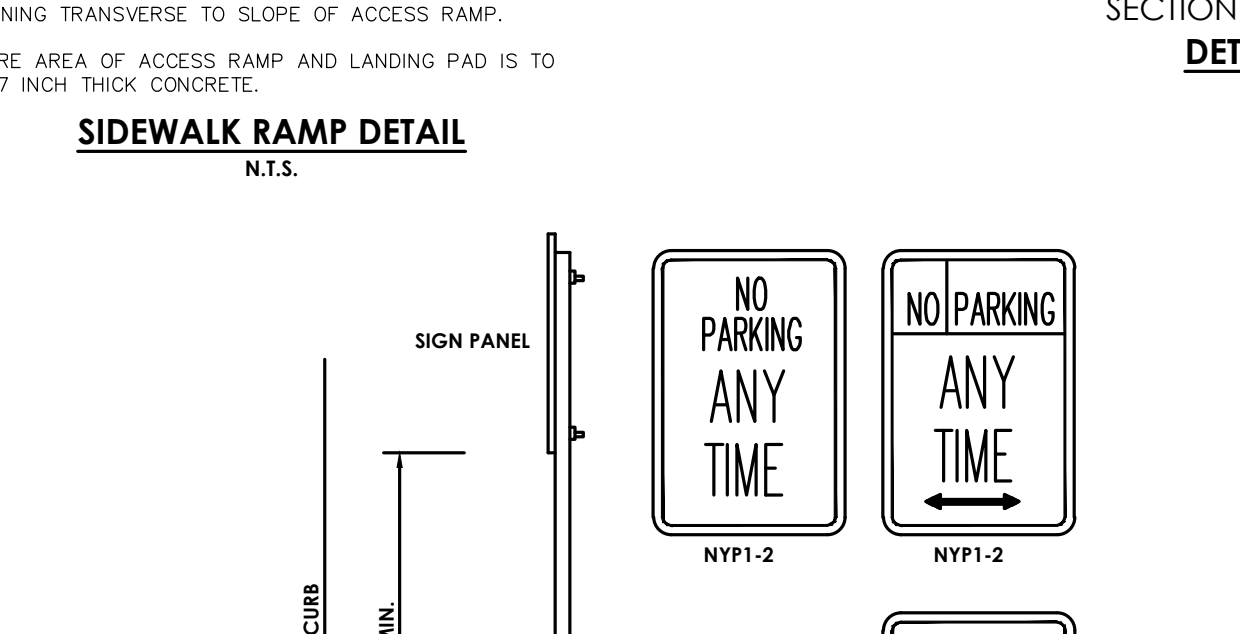
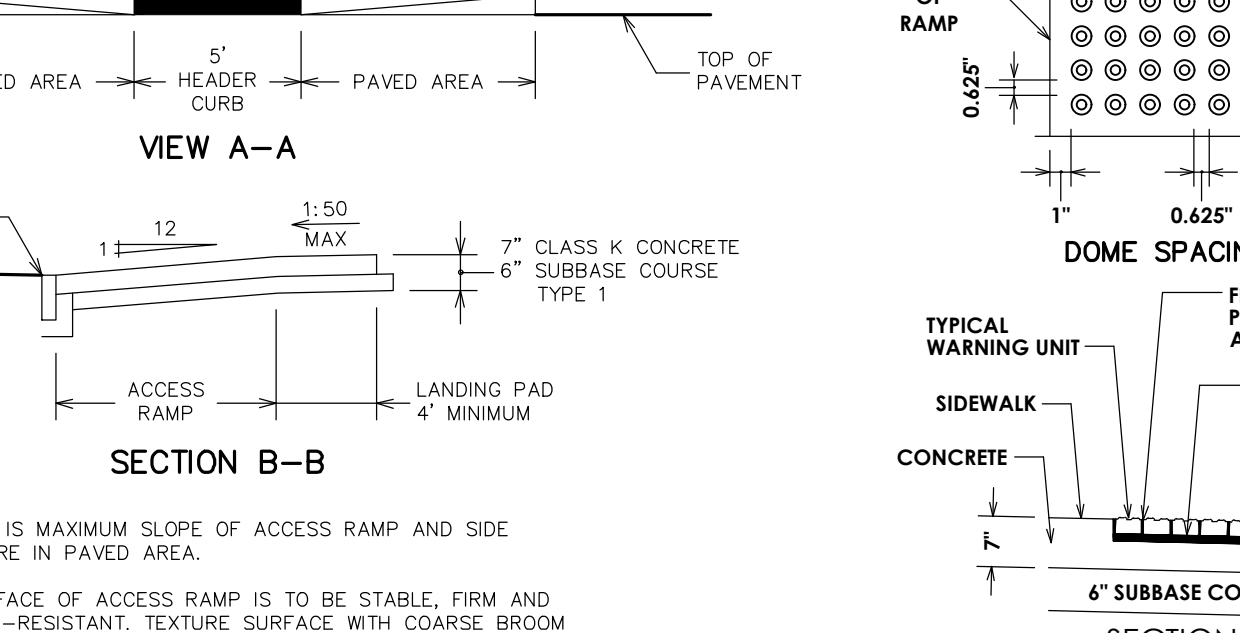
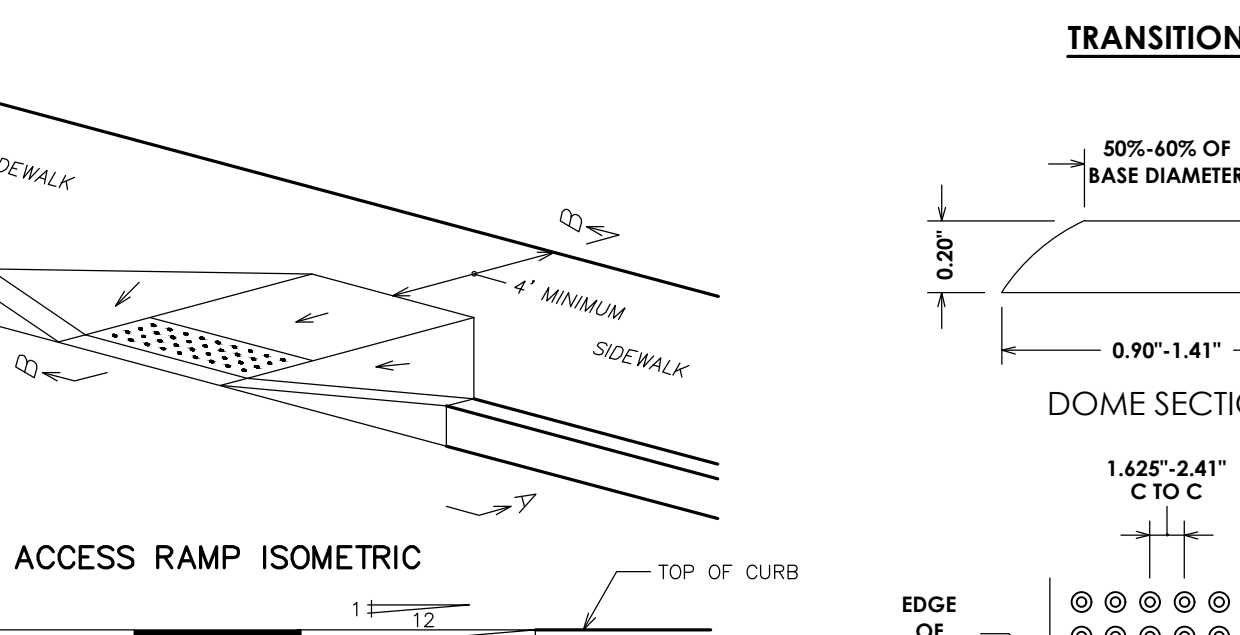
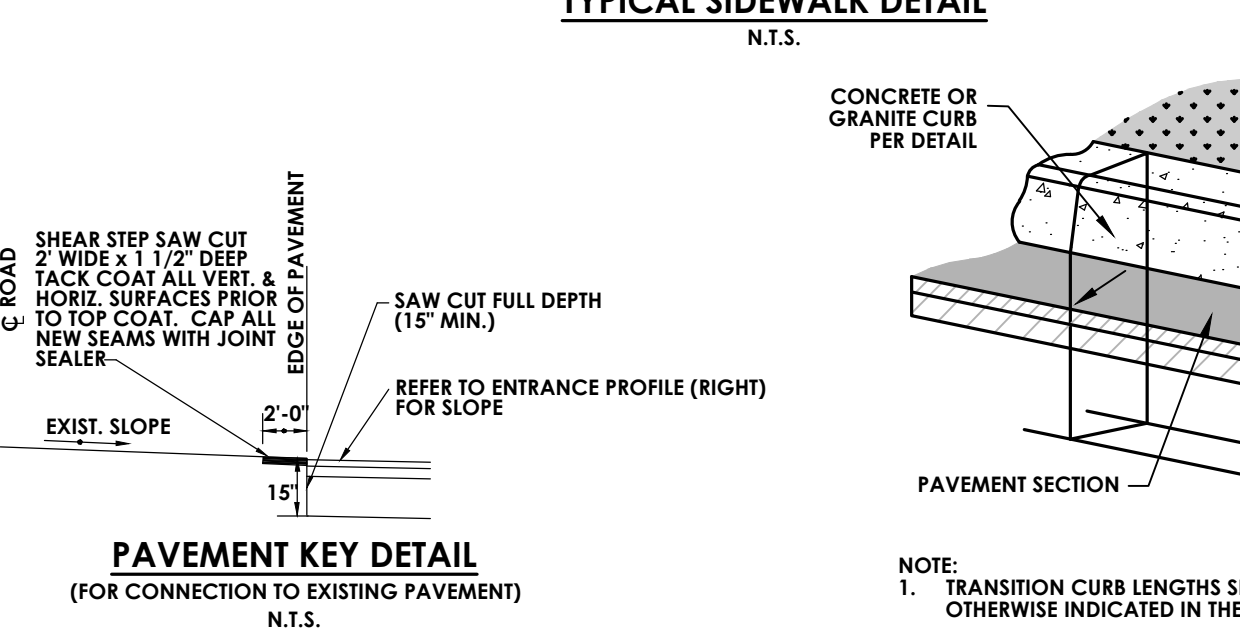
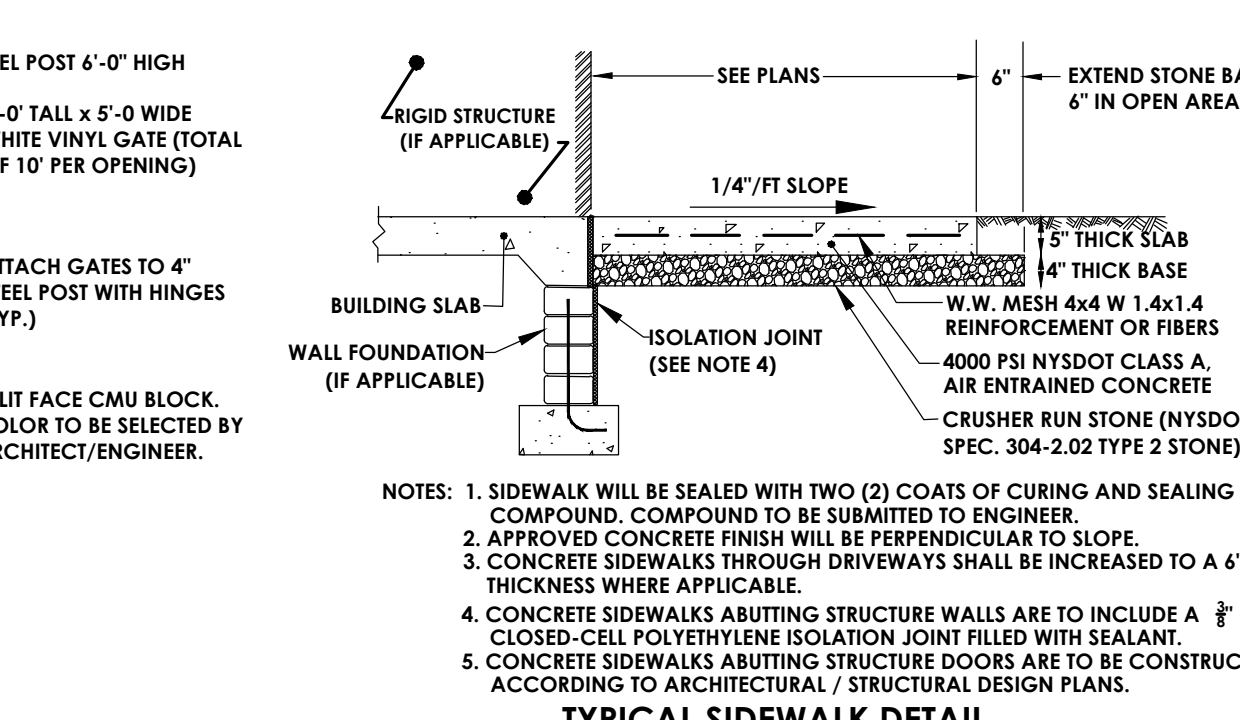
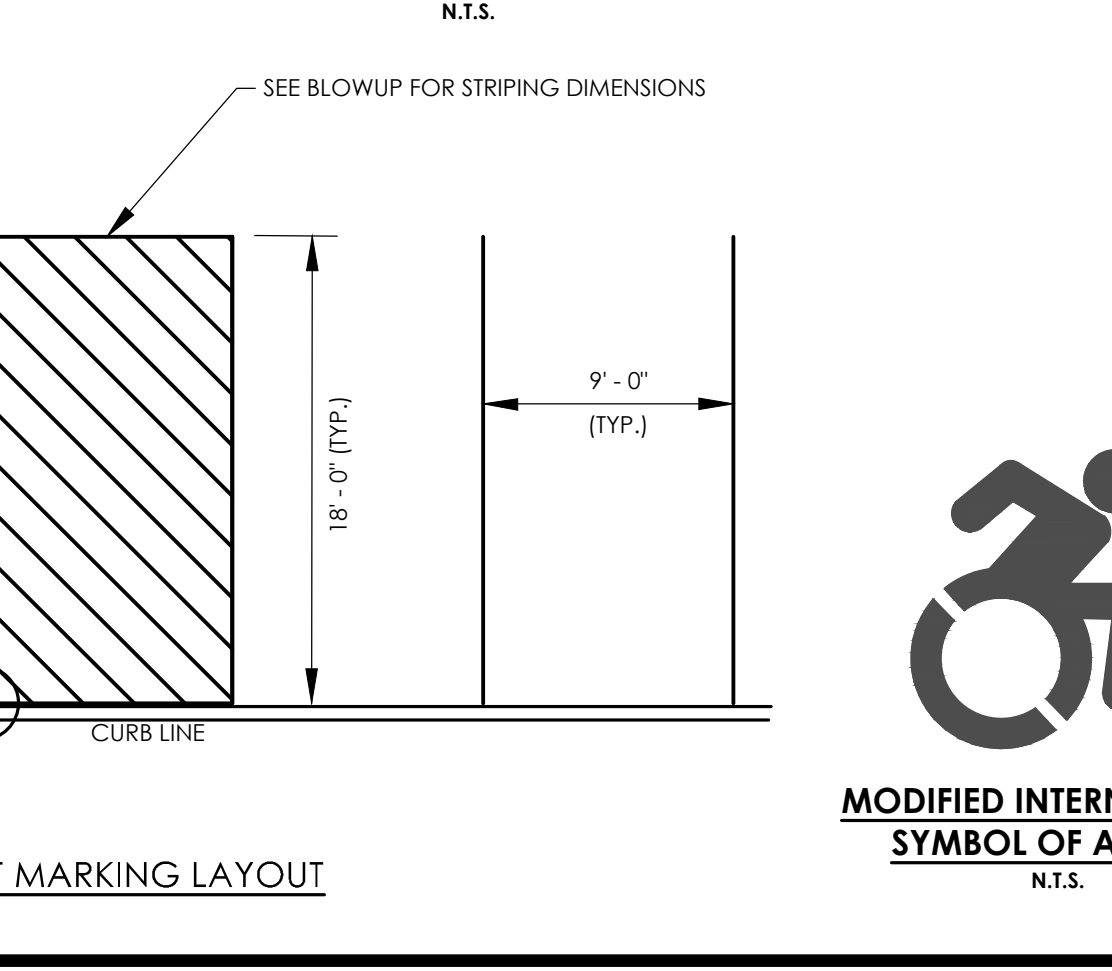
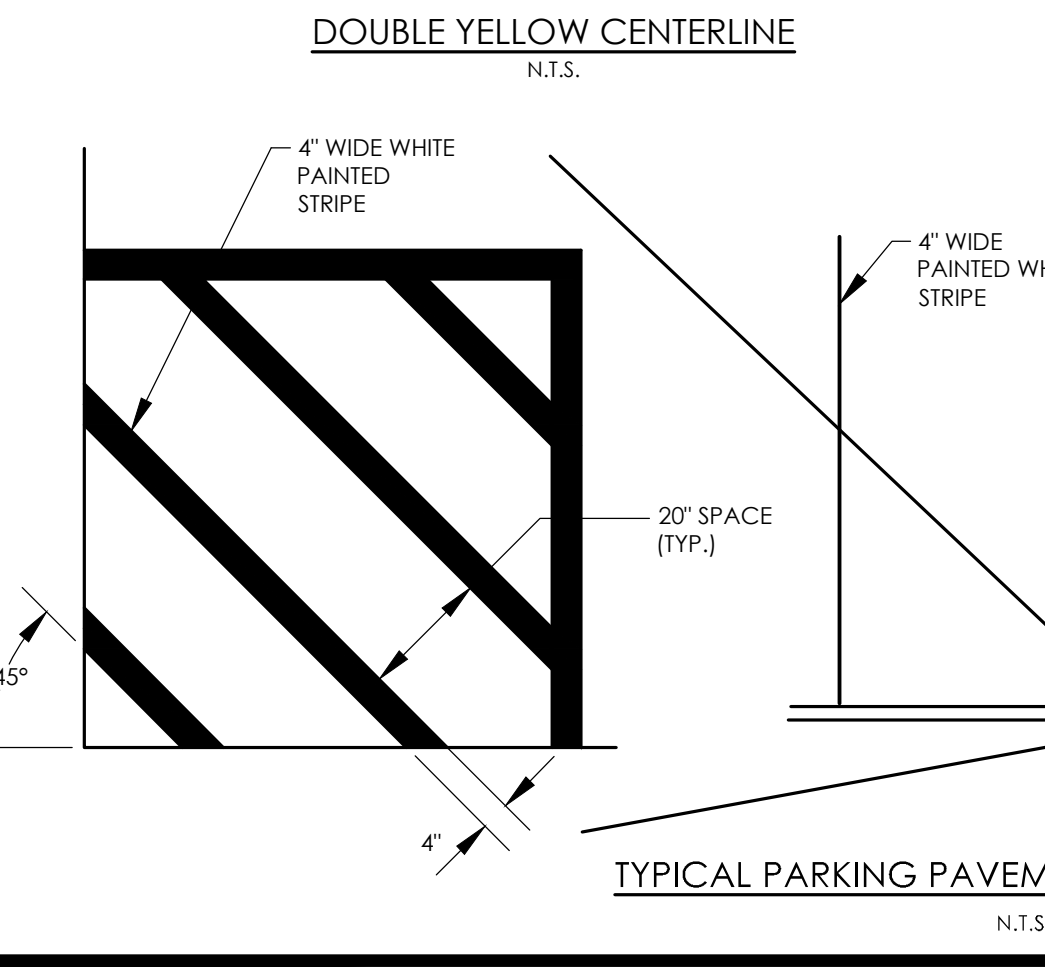
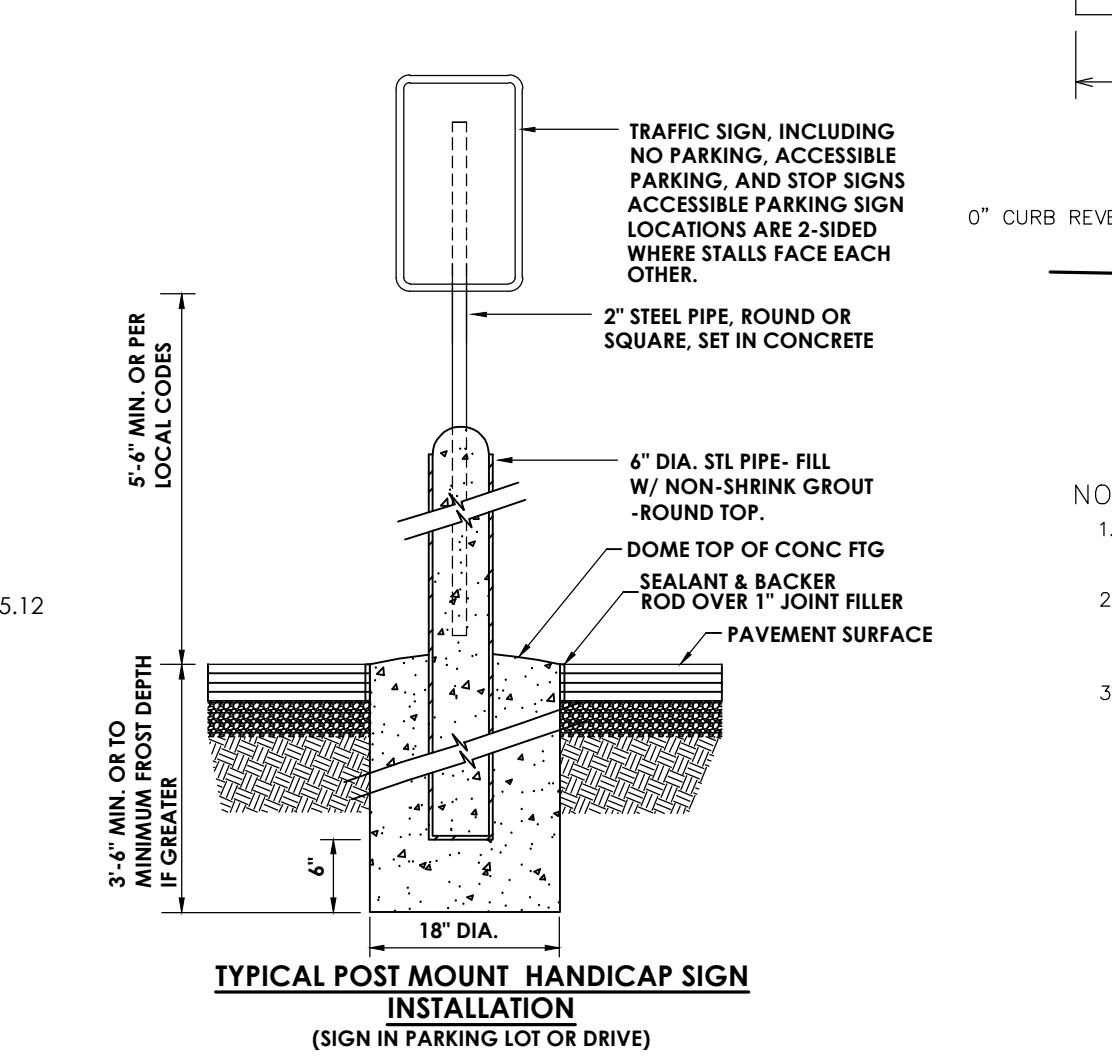
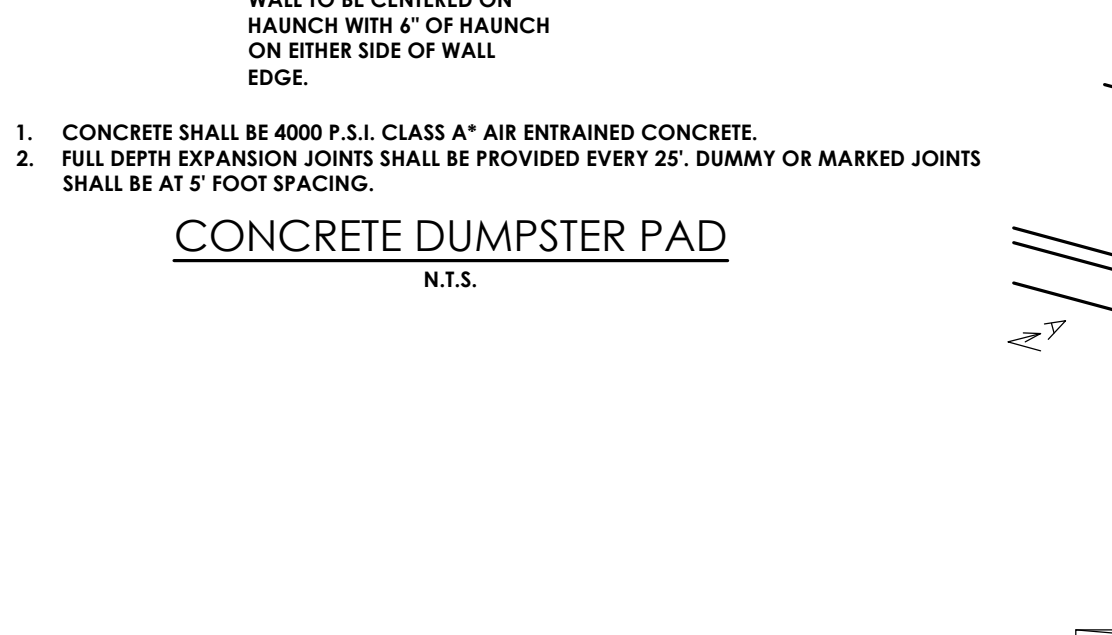
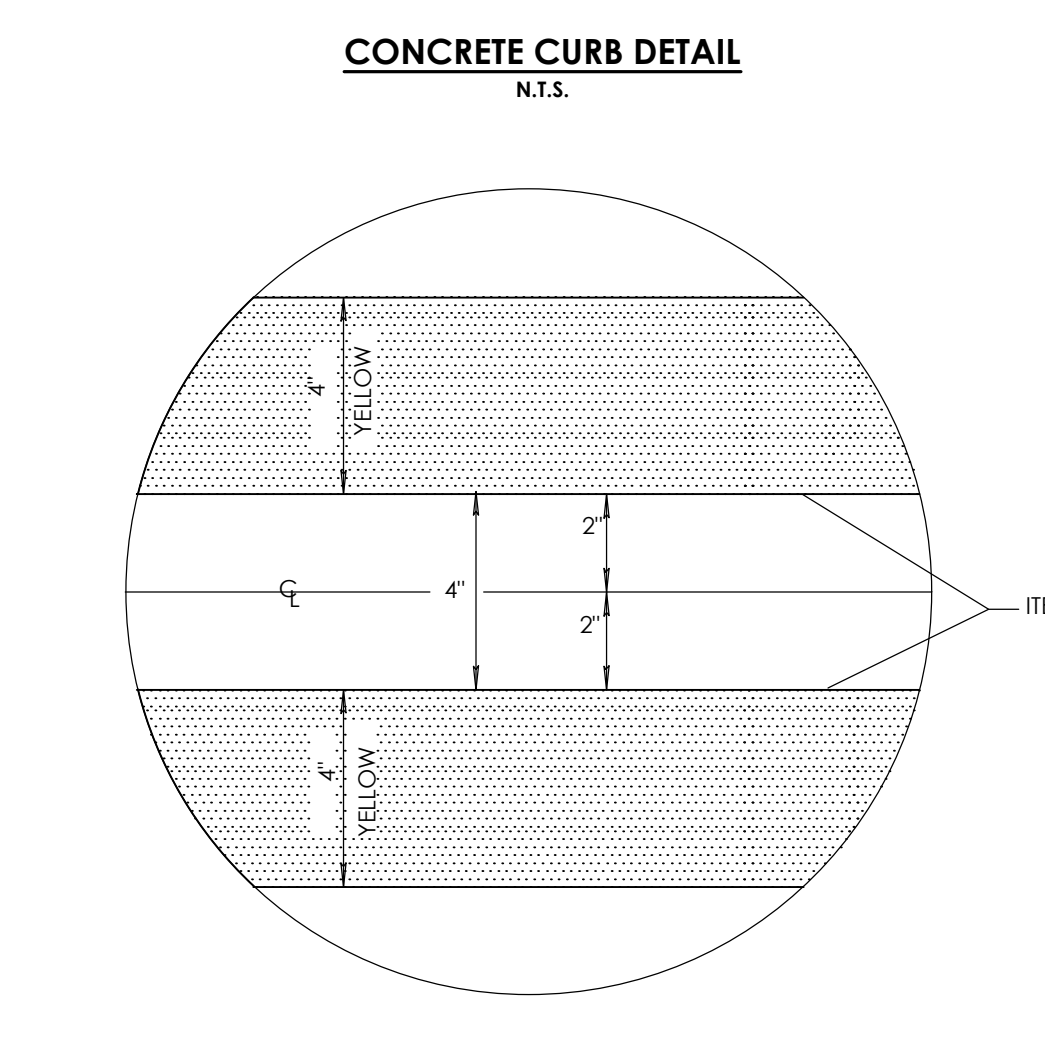
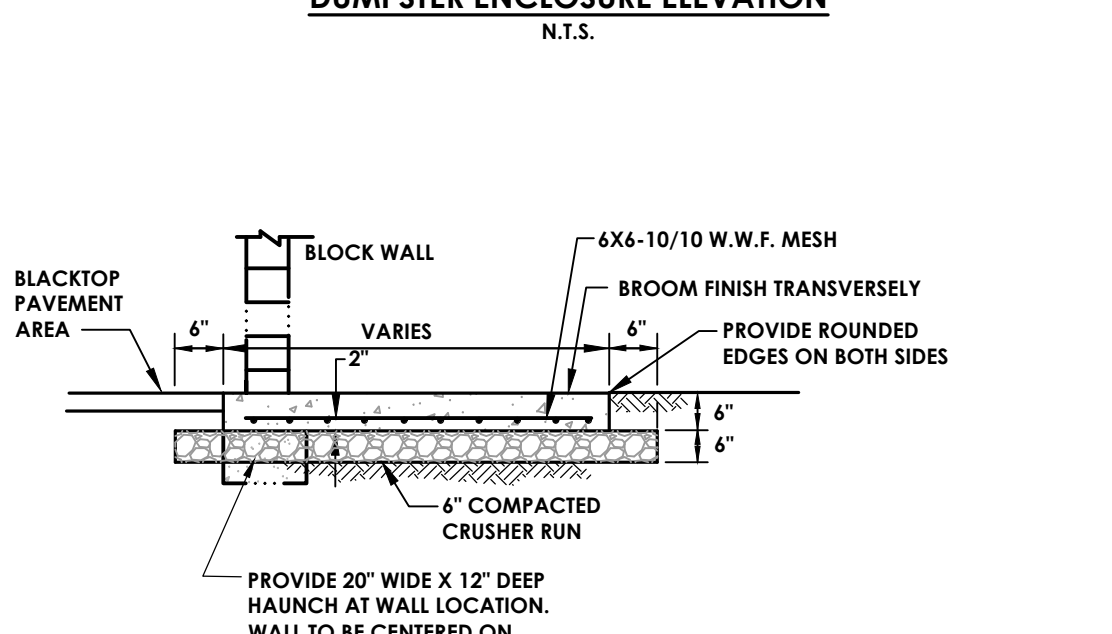
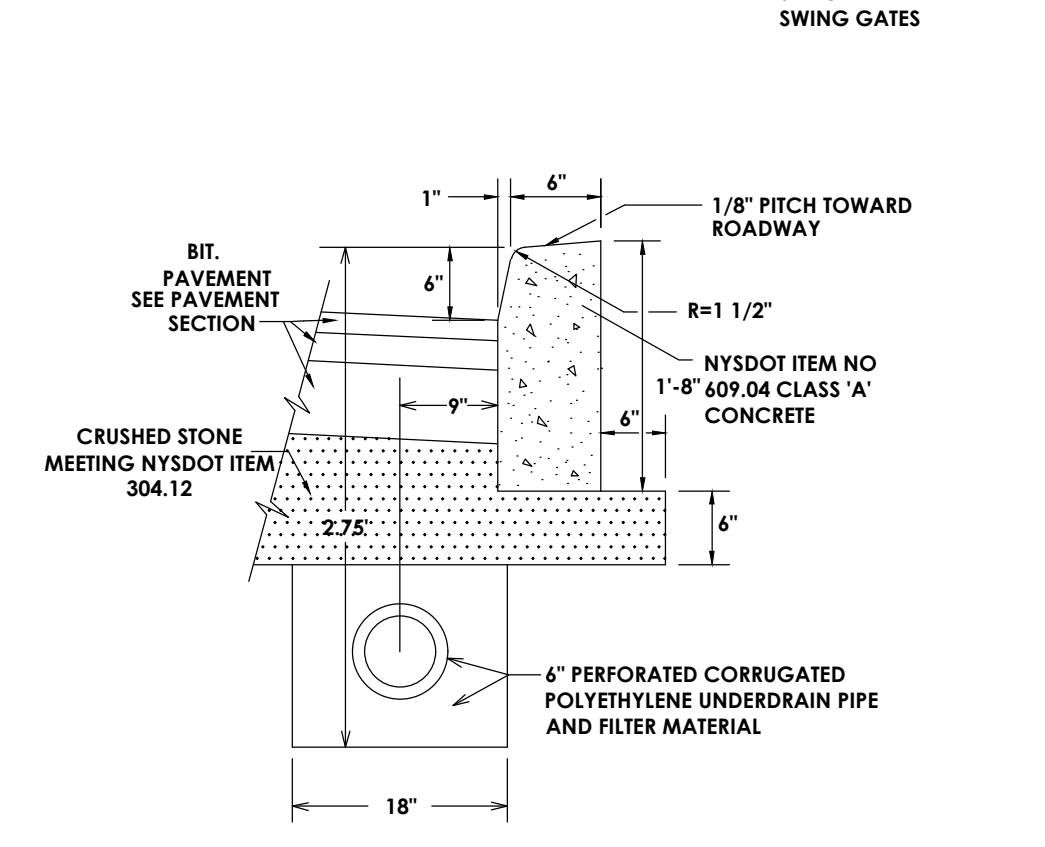
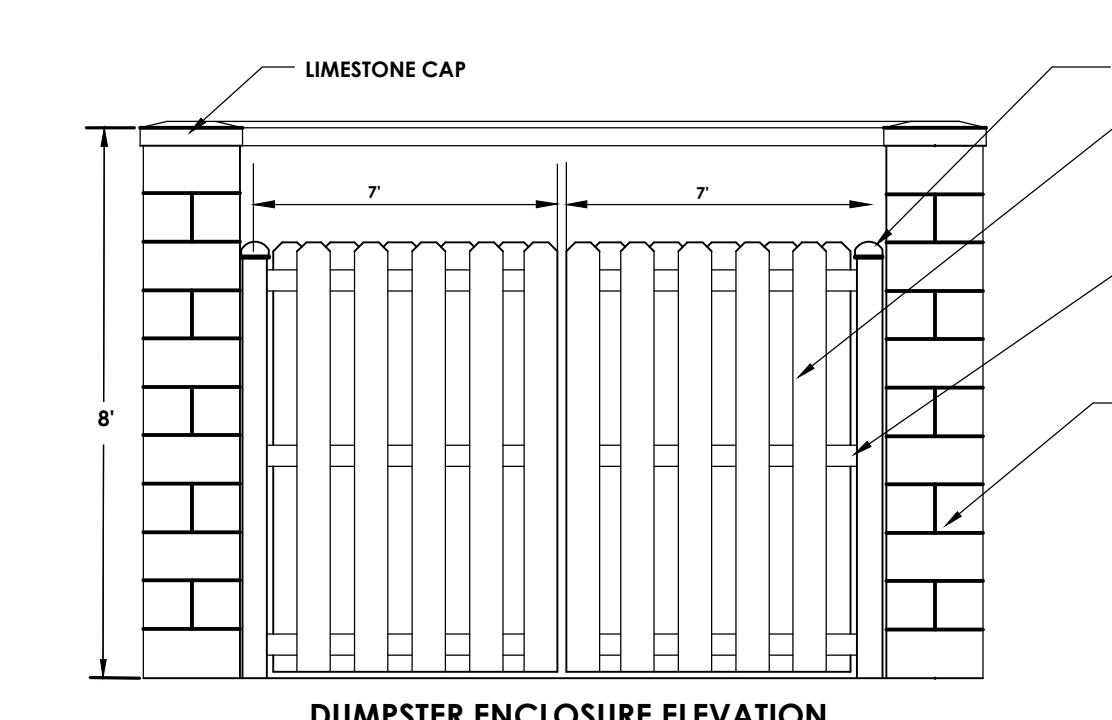
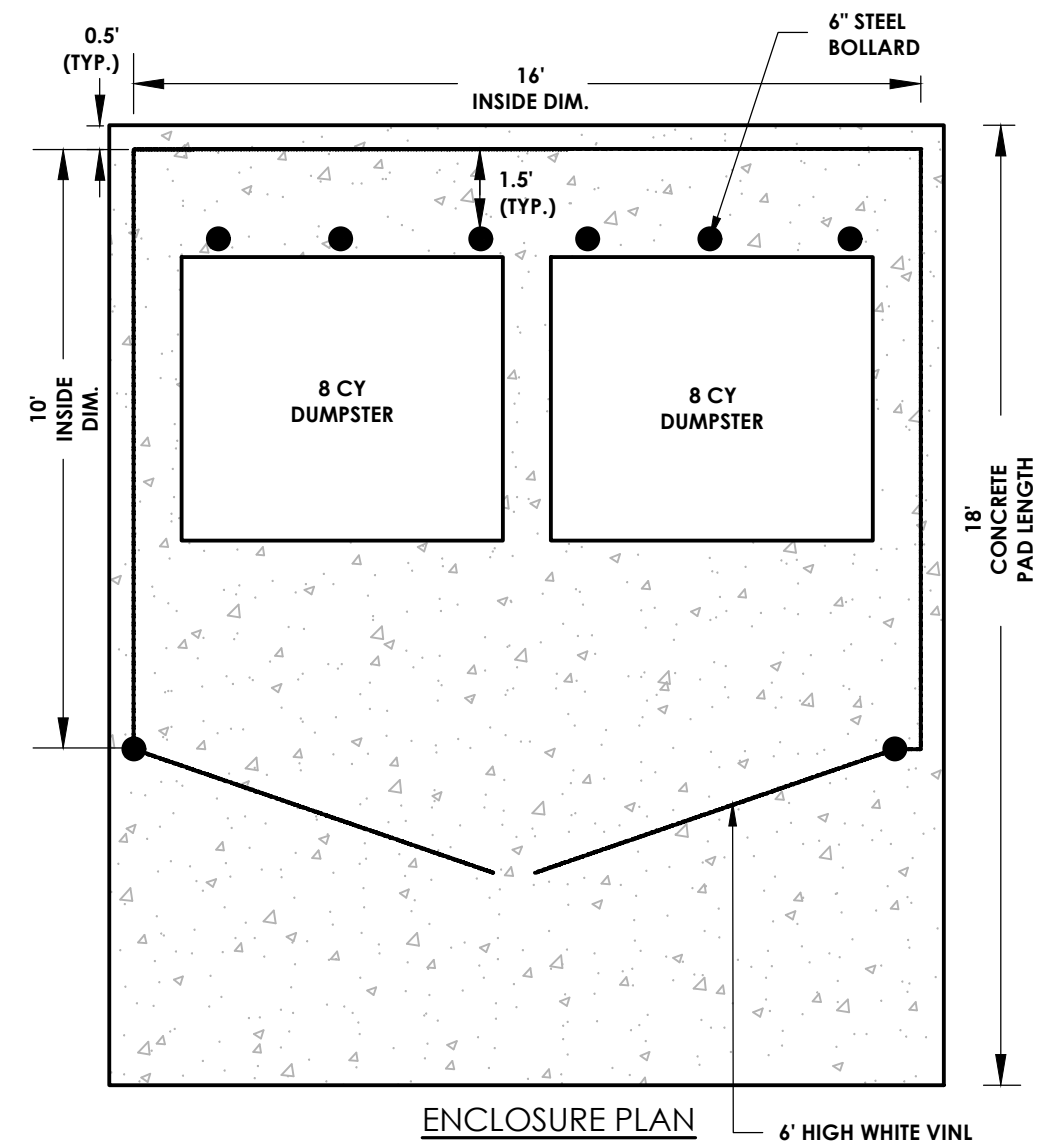
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Scale: NTS

Date: APRIL 2024

NOT FOR CONSTRUCTION





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Designed by: **James Ritzenhaller 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**

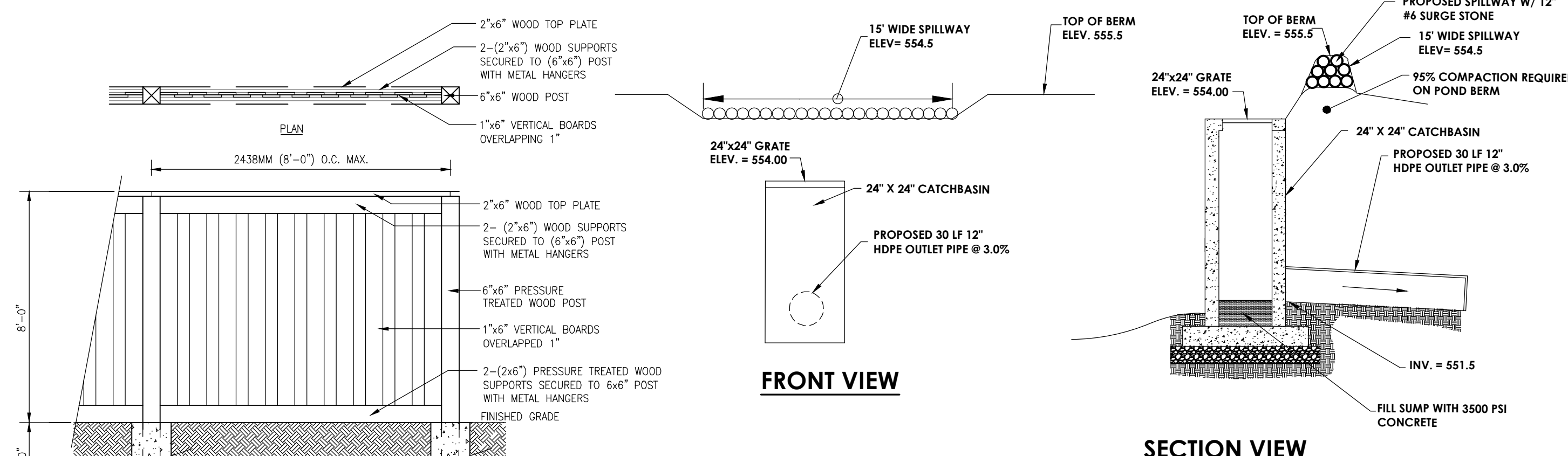
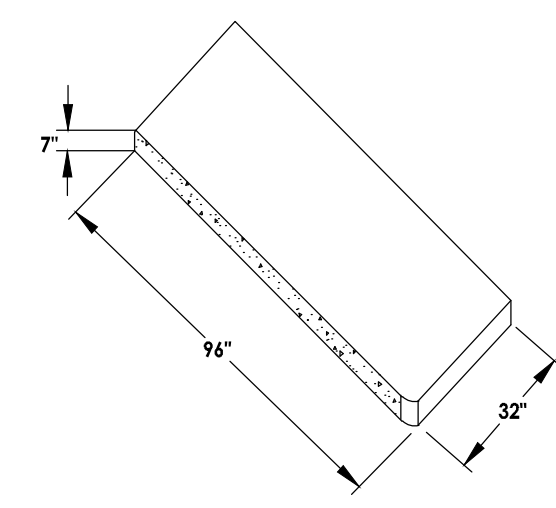
Date **APRIL 2024**

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**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 of 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.

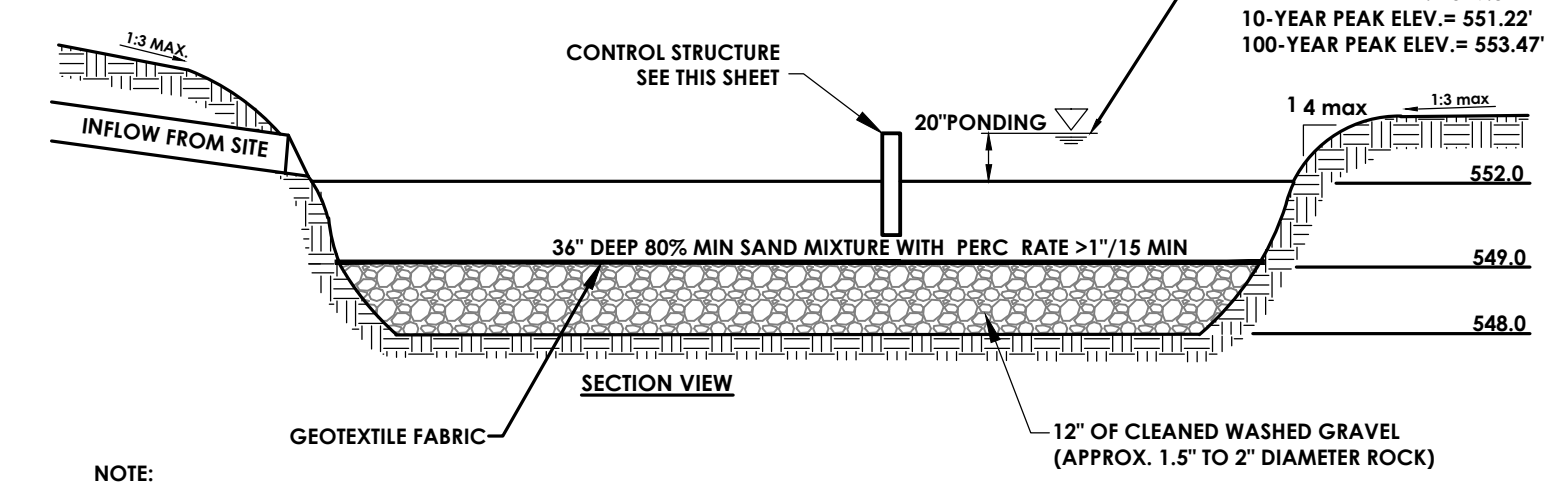
**STONE STRONG CAP  
 CHISELED GRANITE FACE**  
 NOT TO SCALE



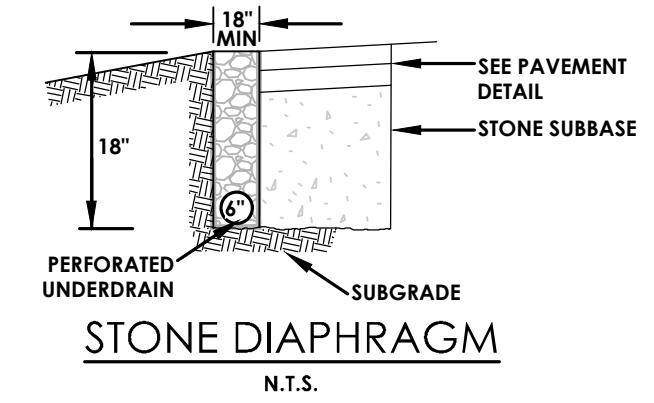
**FRONT VIEW**

**SECTION VIEW**

**INFILTRATION BASIN CONTROL STRUCTURE**  
 N.T.S.



**NOTE:**  
 1. FOR ALL SEEDING & STABILIZATION MEASURES IT IS THE RESPONSIBILITY OF THE OWNER & DEVELOPER TO ENSURE THAT FINAL STABILIZATION OCCURS AS REQUIRED BY THE NYSDEC.  
 2. 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.



**STONE DIAPHRAGM**  
 N.T.S.

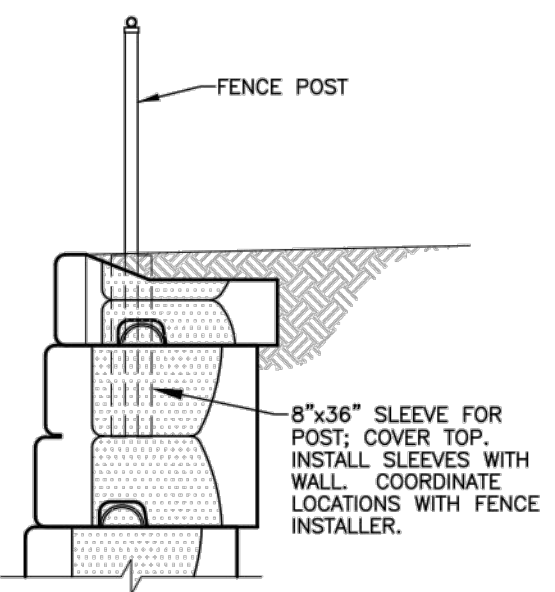
**SPECIFICATIONS:**

- 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.

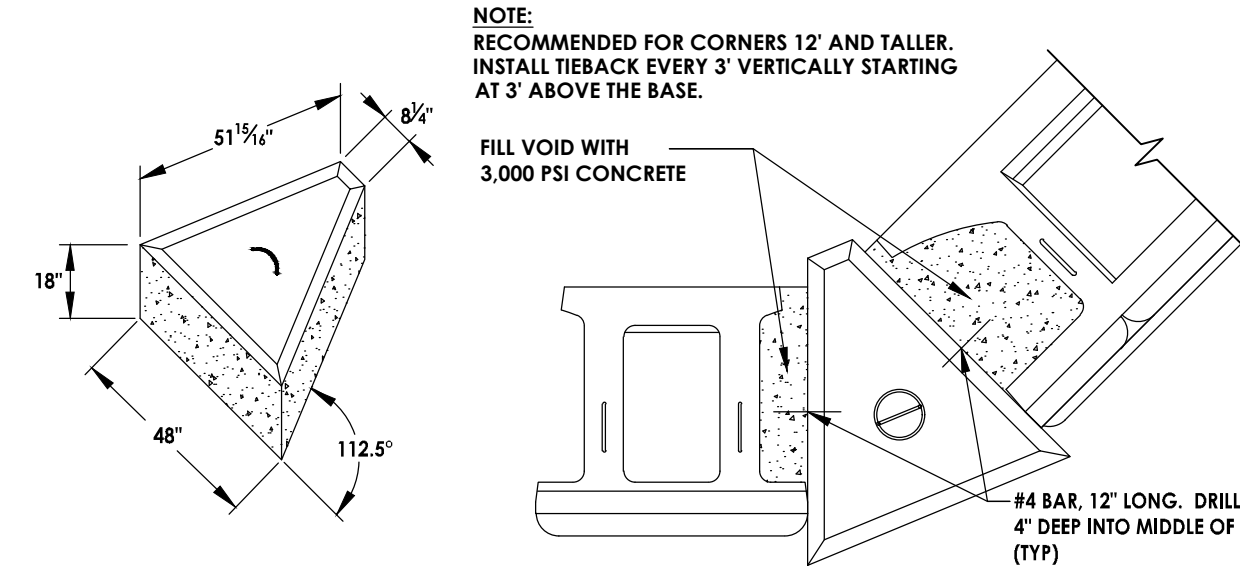
**NOTES:**

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

**8' TALL OVERLAPPING BOARD FENCE**



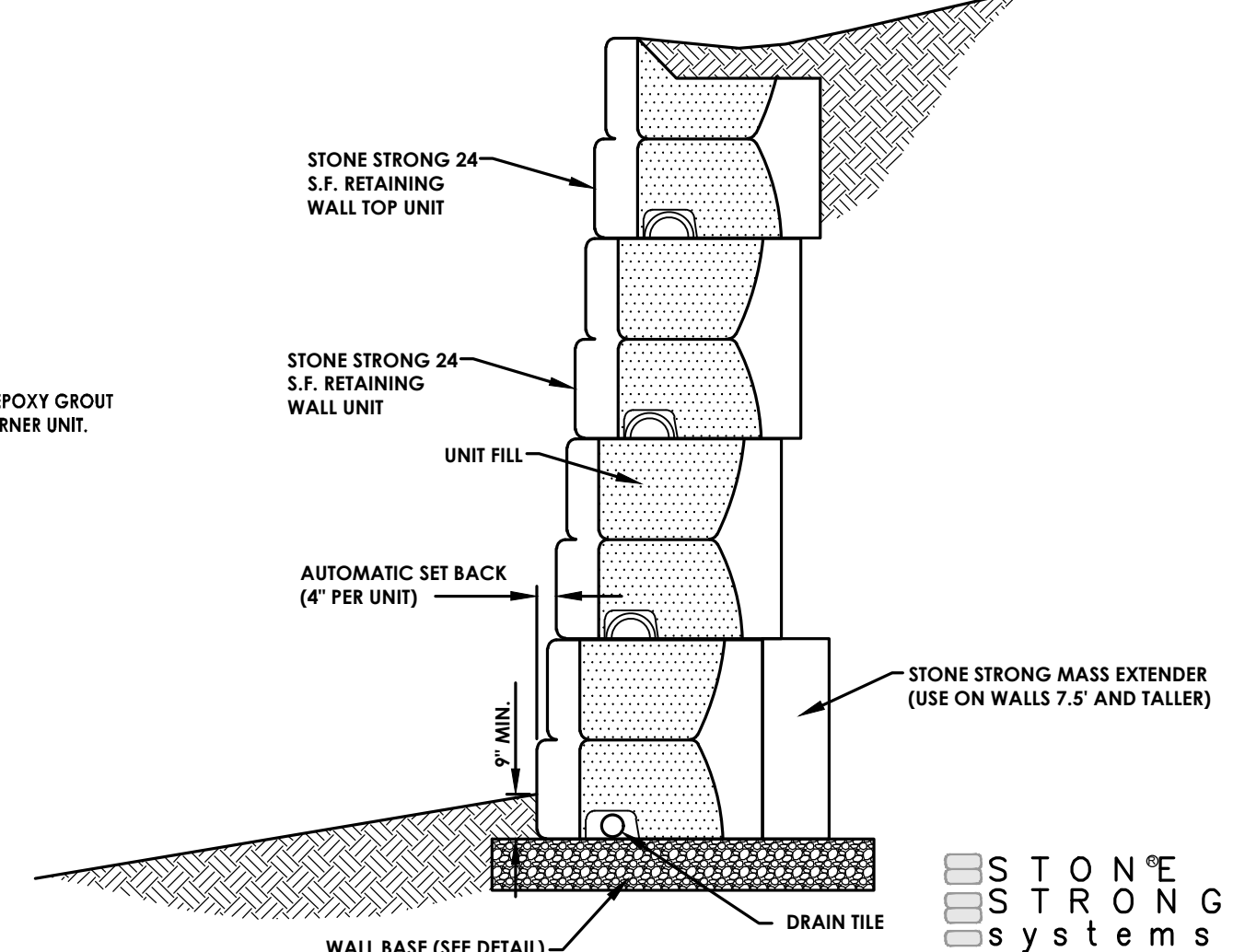
**FENCE SLEEVE**  
 NOT TO SCALE



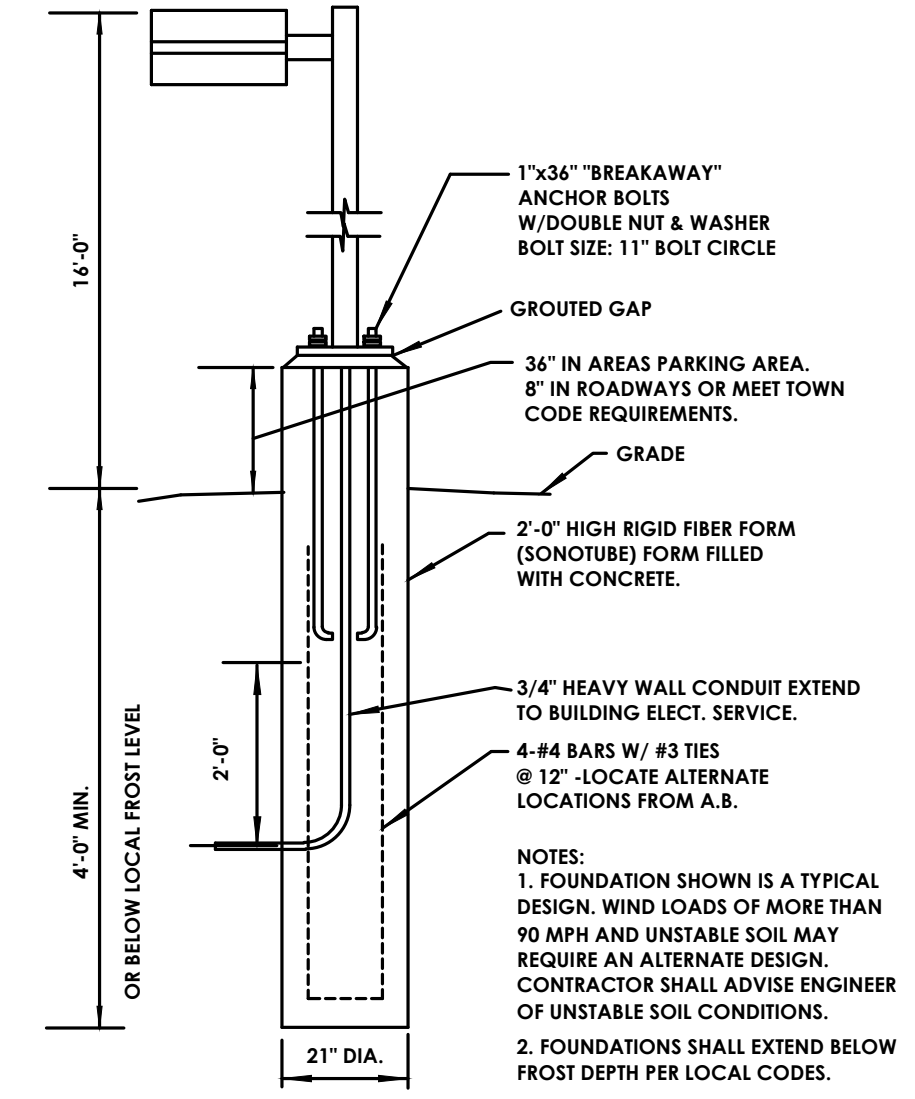
**STONE STRONG 45° CORNER UNIT**  
 NOT TO SCALE

**45° CORNER TIEBACK**  
 NOT TO SCALE

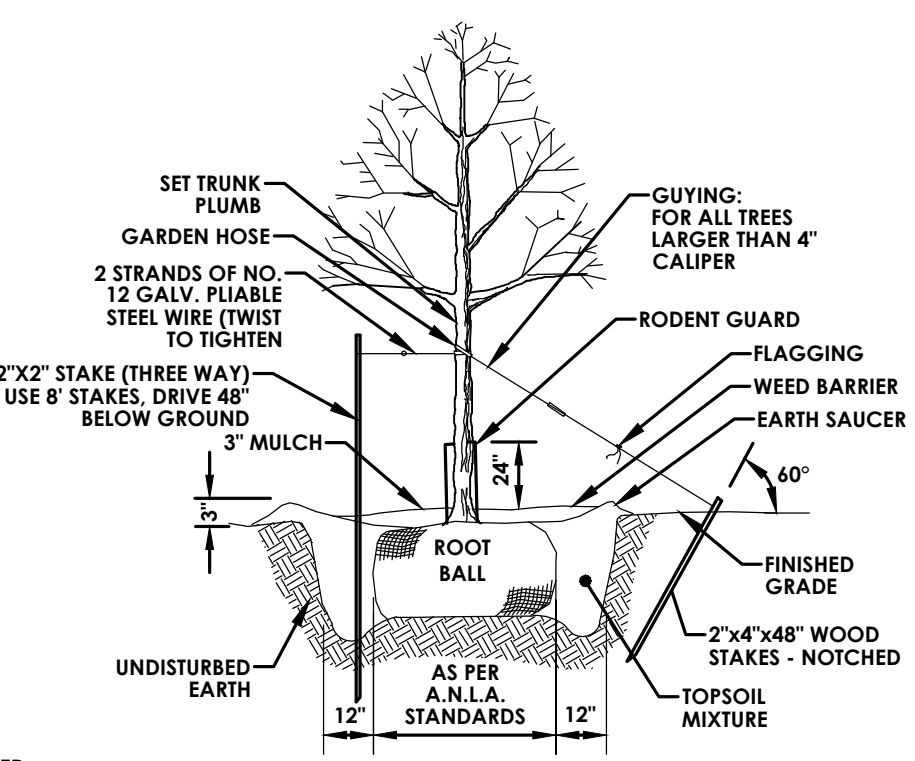
**INFILTRATION BASIN**  
 N.T.S.



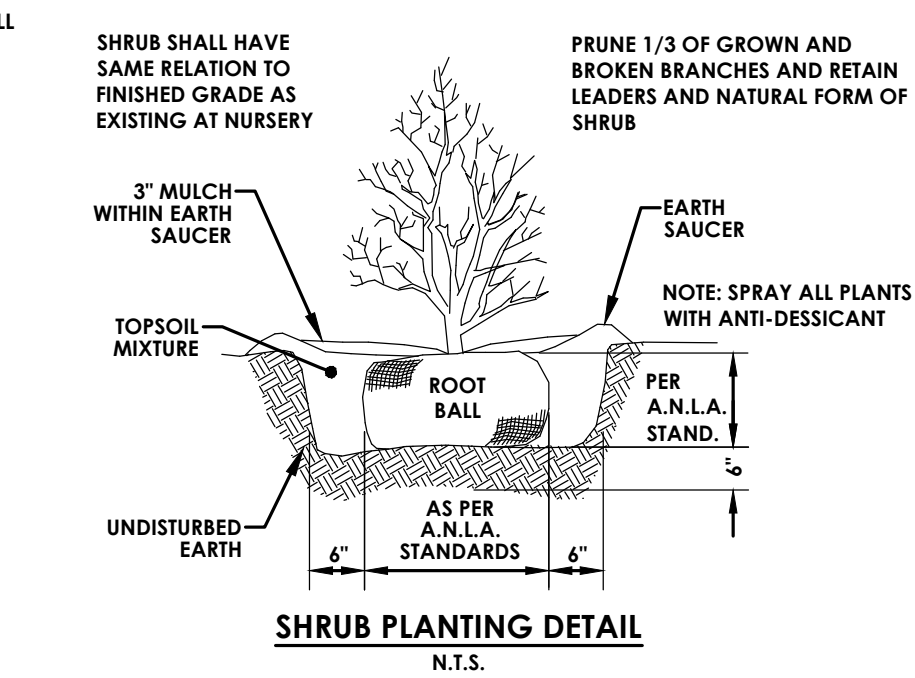
**24 S.F. GRAVITY WALL  
 CROSS SECTION W/ MASS EXTENDER**  
 N.T.S.



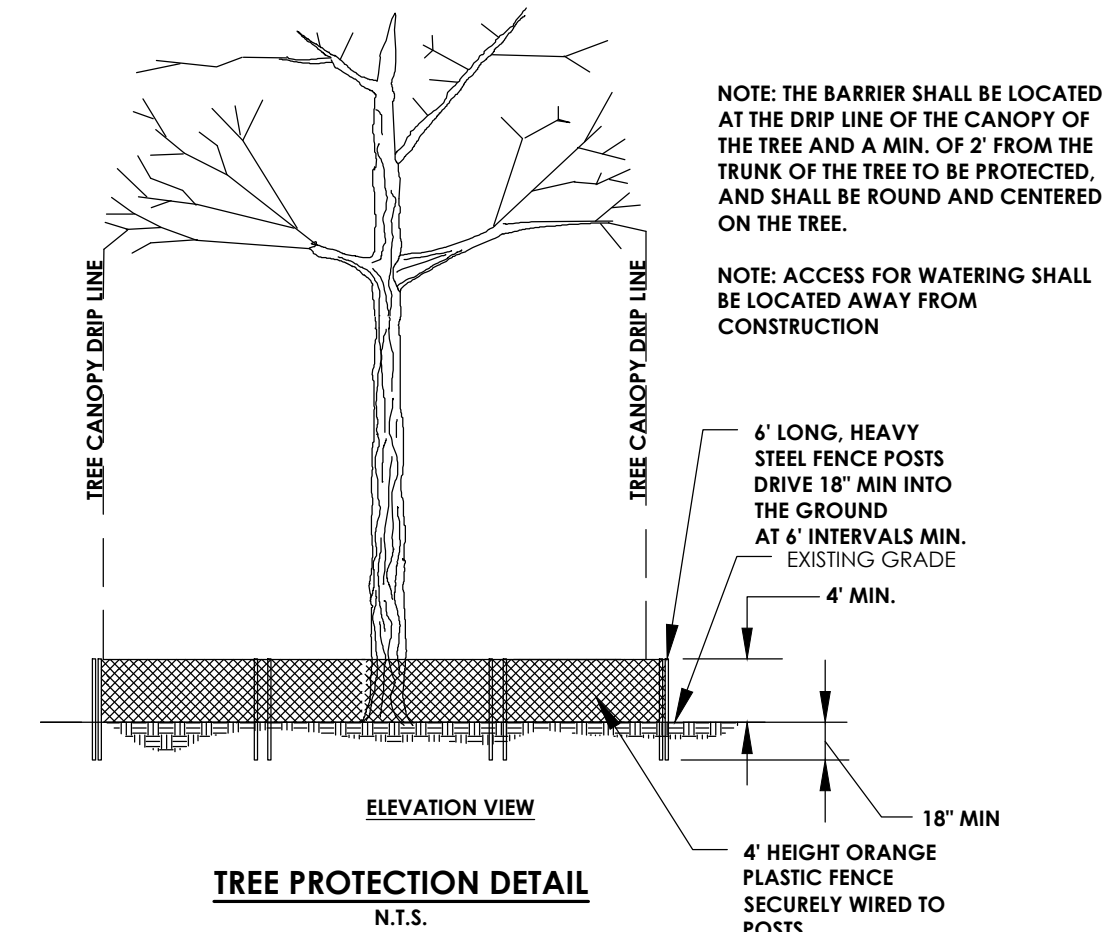
**LIGHT POLE AND BASE DETAIL**  
 N.T.S.



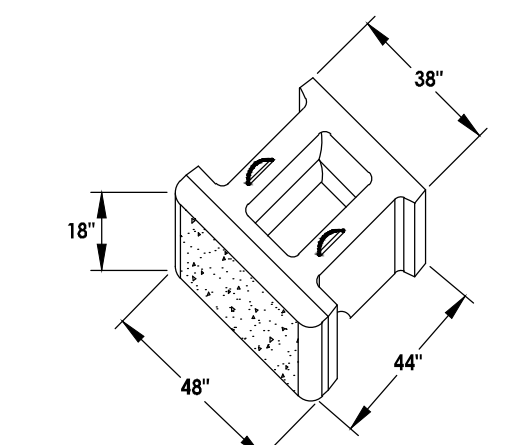
**TREE PLANTING DETAIL**  
 N.T.S.



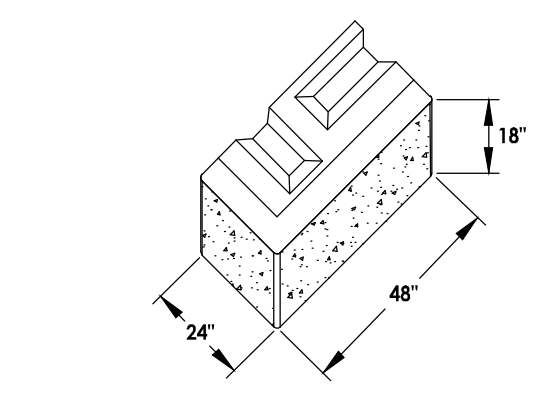
**SHRUB PLANTING DETAIL**  
 N.T.S.



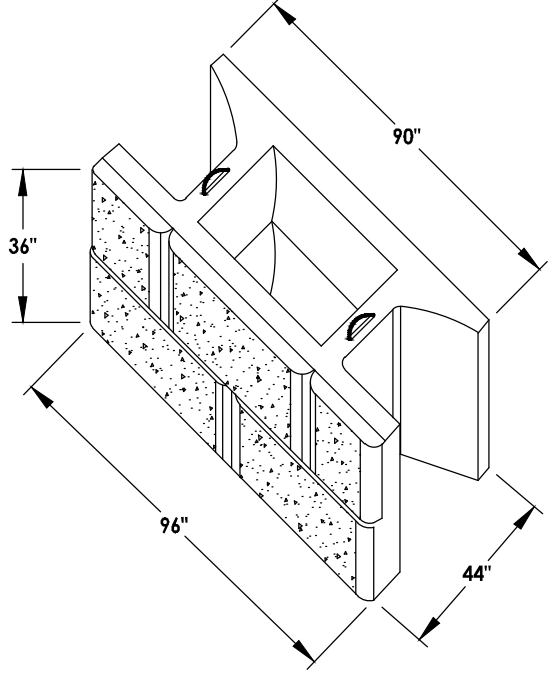
**TREE PROTECTION DETAIL**  
 N.T.S.



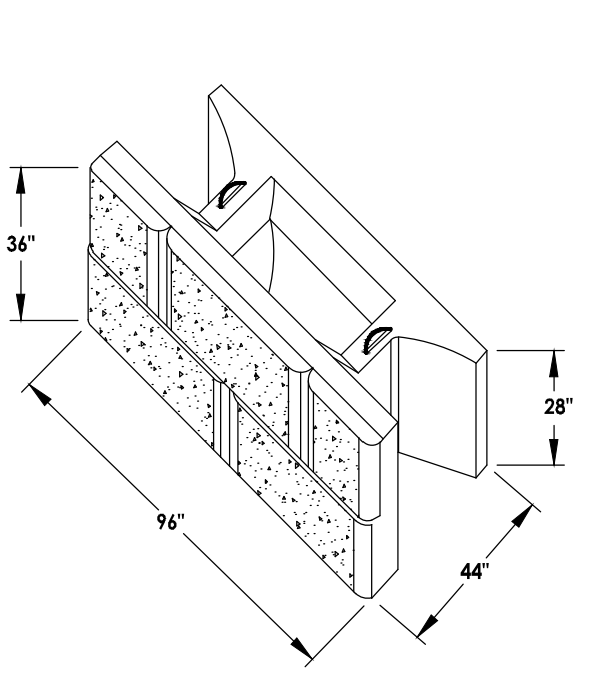
**STONE STRONG 6 SF UNIT**  
 NOT TO SCALE



**STONE STRONG CORNER UNIT**  
 NOT TO SCALE

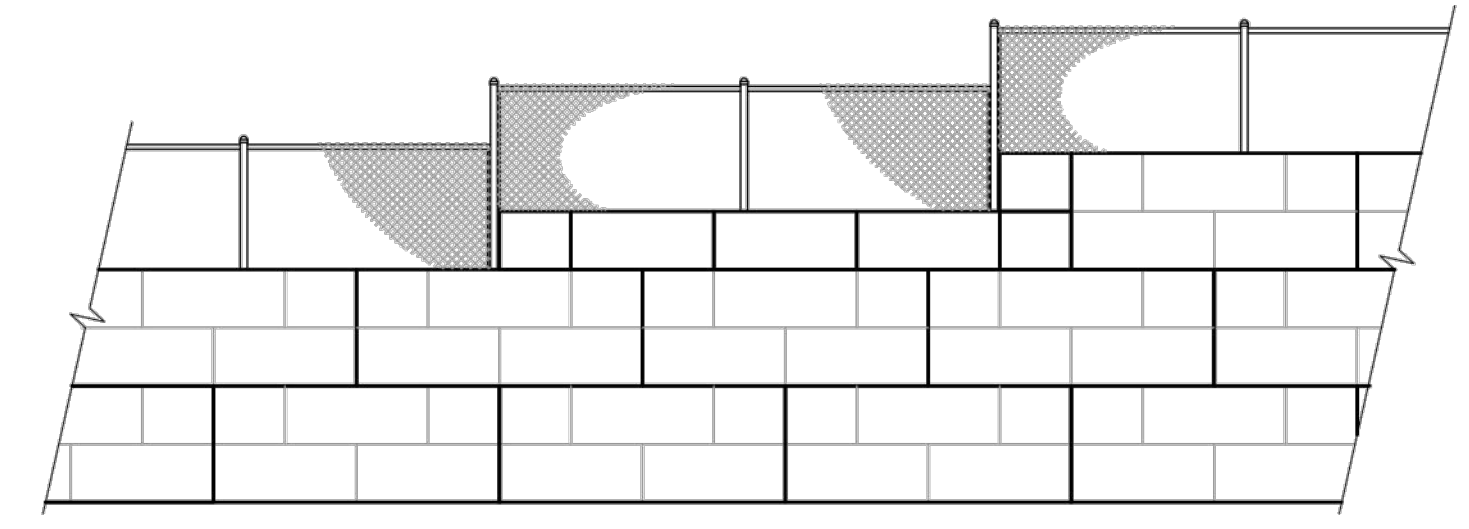


**STONE STRONG 24 SF UNIT  
 CHISELED GRANITE FACE**  
 NOT TO SCALE



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

**STONE STRONG RETAINING WALL**  
 N.T.S.



**TYPICAL FENCE CONFIGURATION**  
 NOT TO SCALE

**DISCLAIMER:**  
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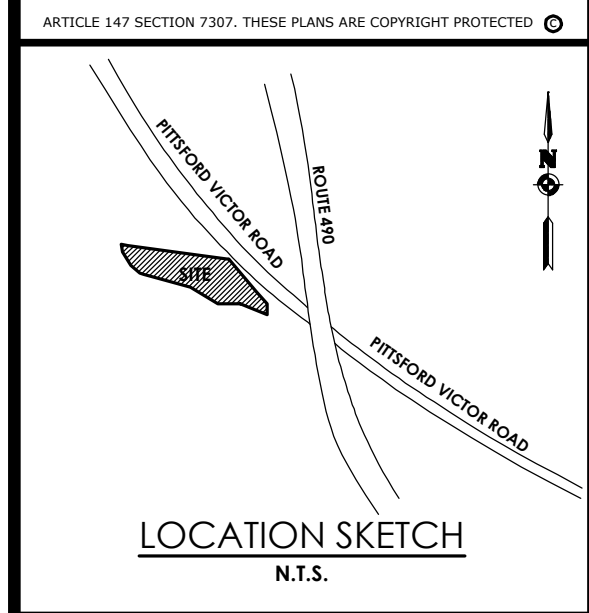


**TYPICAL DETAILS  
 STONE STRONG SYSTEMS**  
 www.stonestrong.com  
 DATE: 6/29/18 FILE: 33\_Bat.Fence Sleeve

**DISCLAIMER:**  
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**TYPICAL DETAILS  
 STONE STRONG SYSTEMS**  
 www.stonestrong.com  
 DATE: 6/29/18 FILE: 34\_FenceConfig.Type



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.



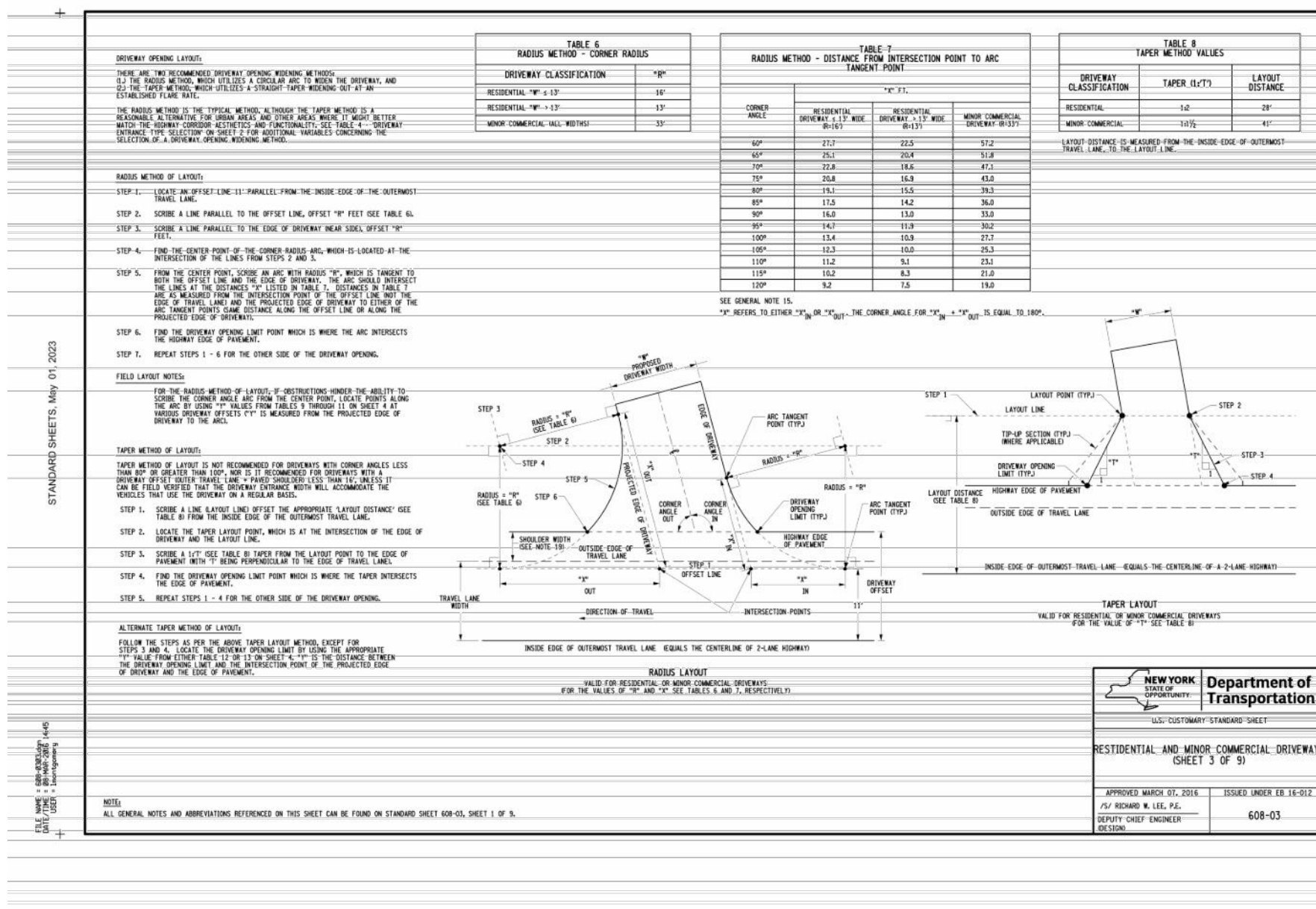
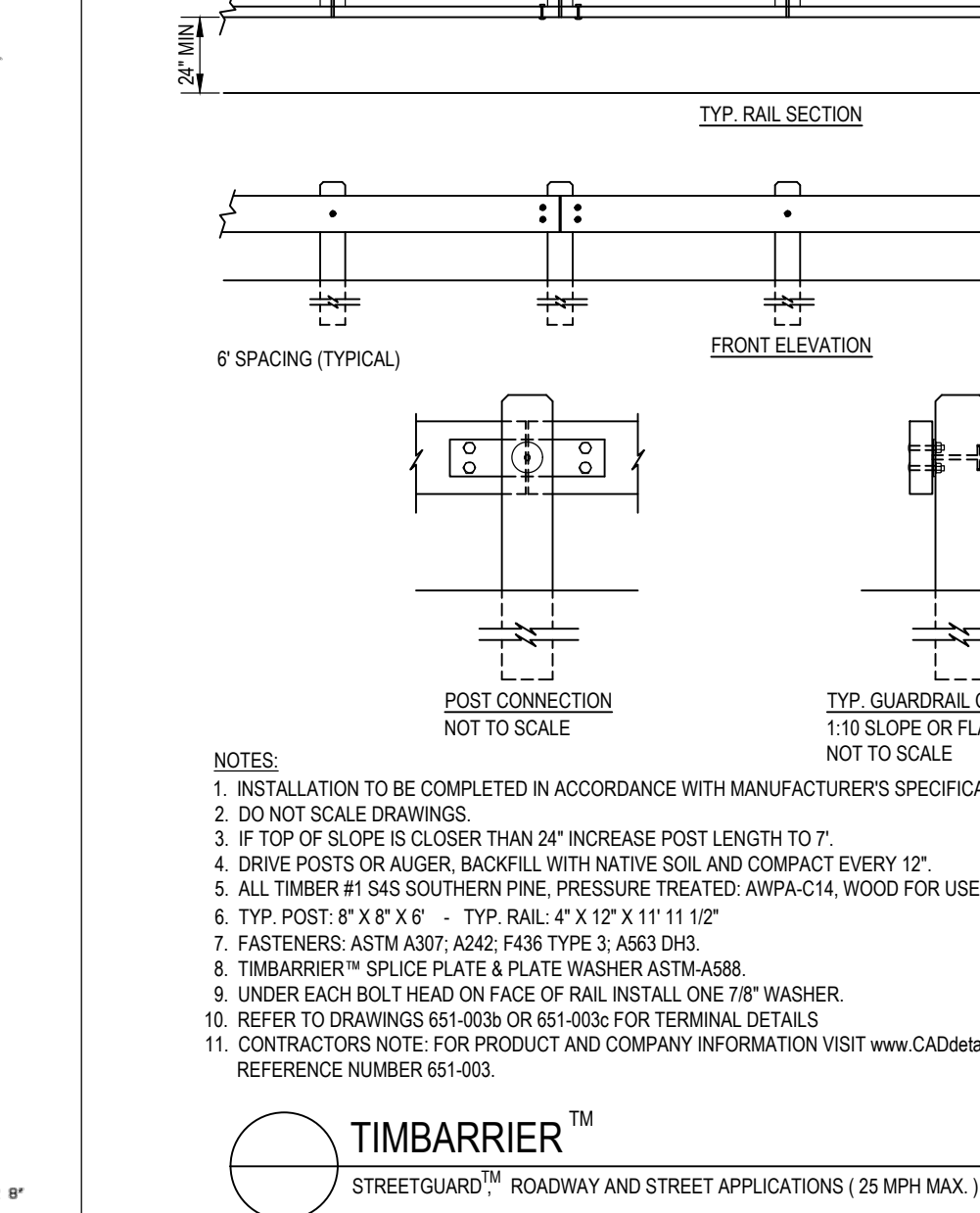
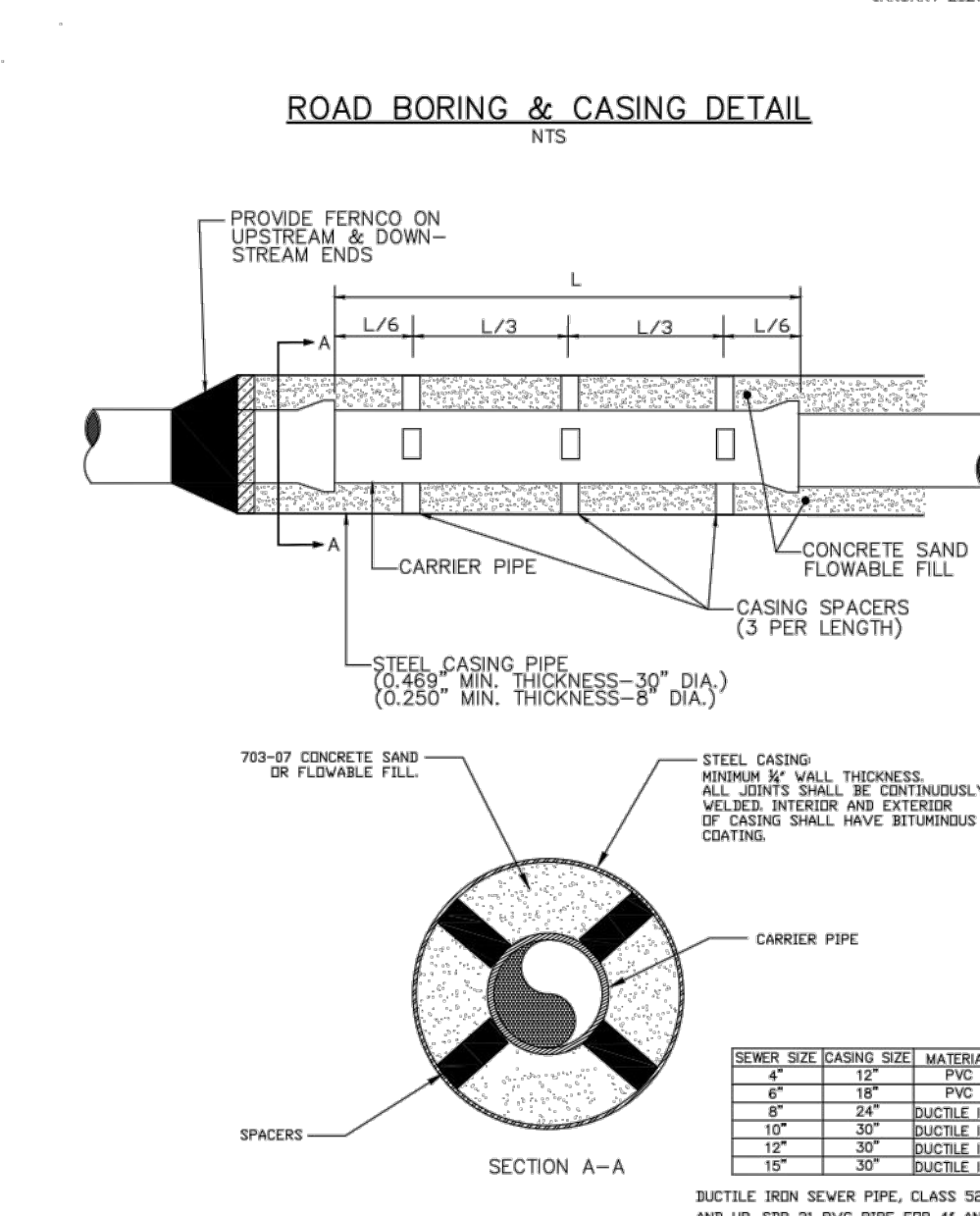
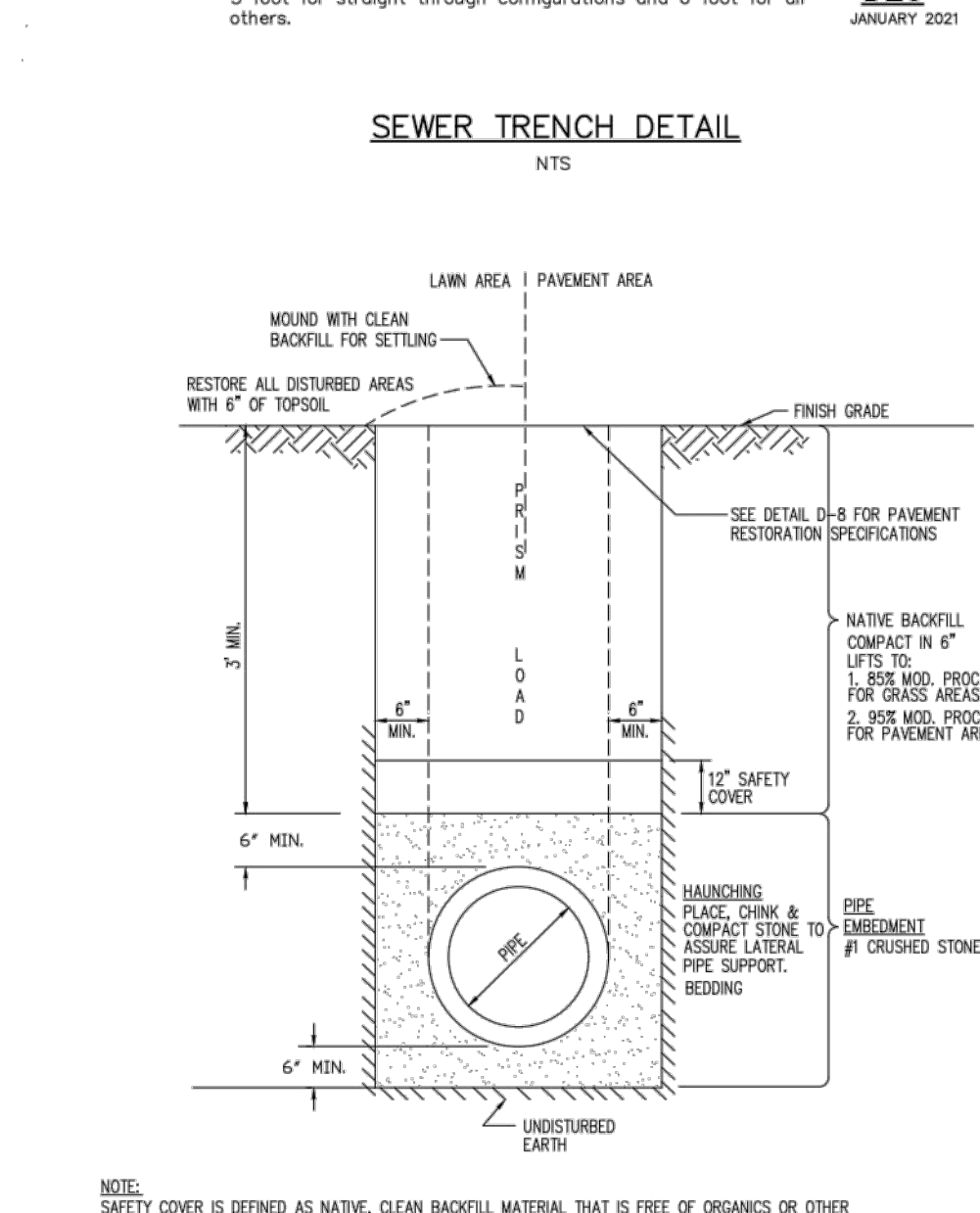
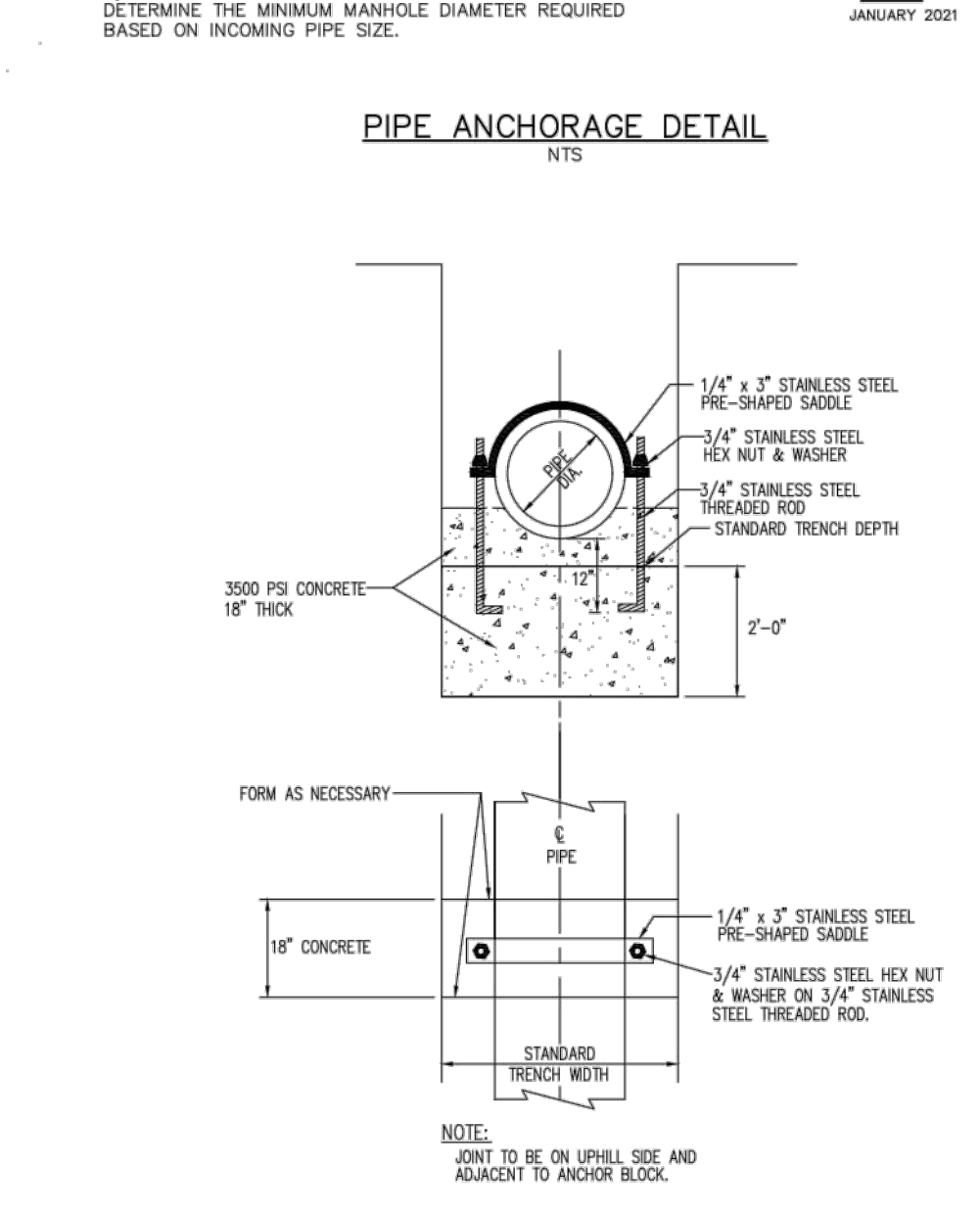
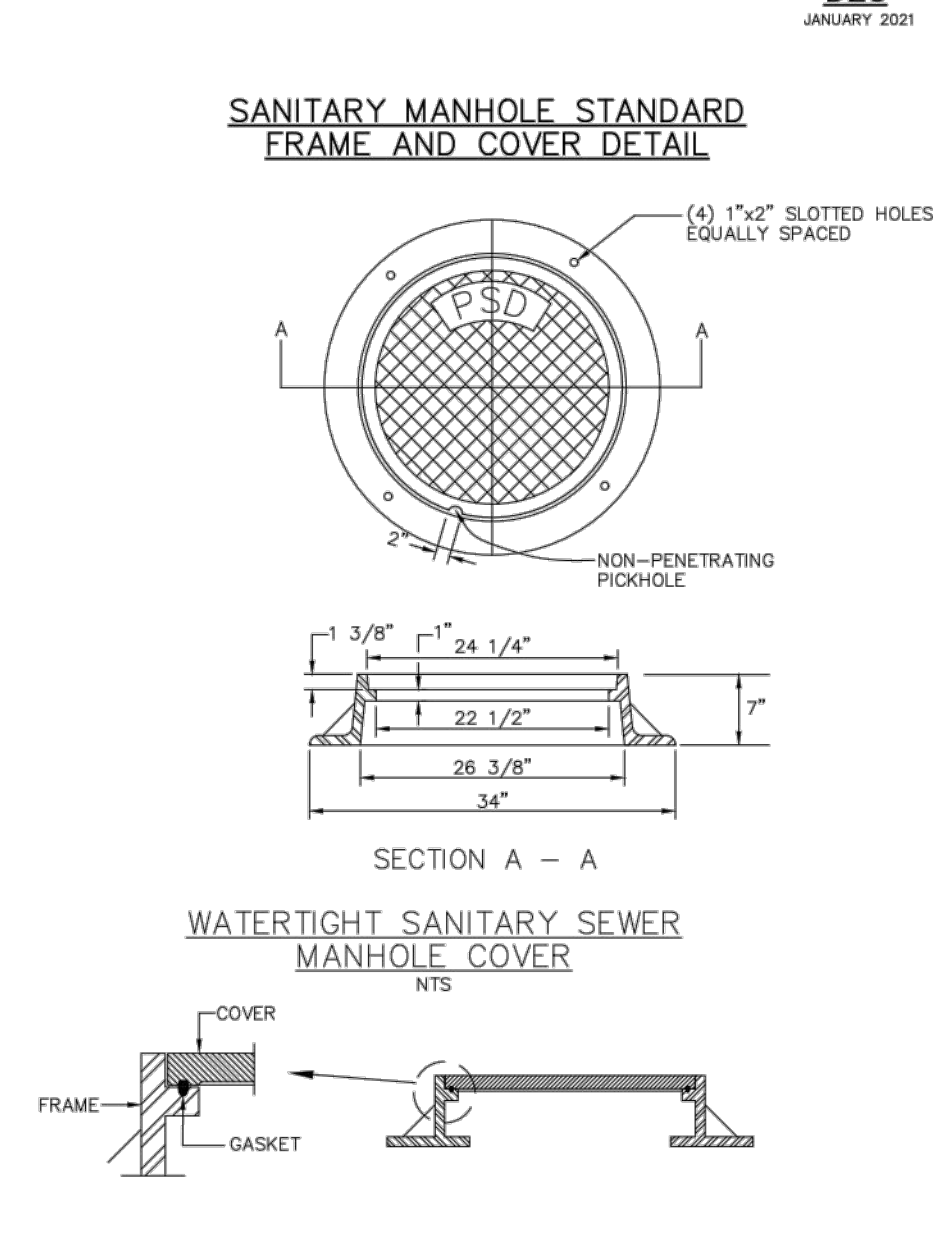
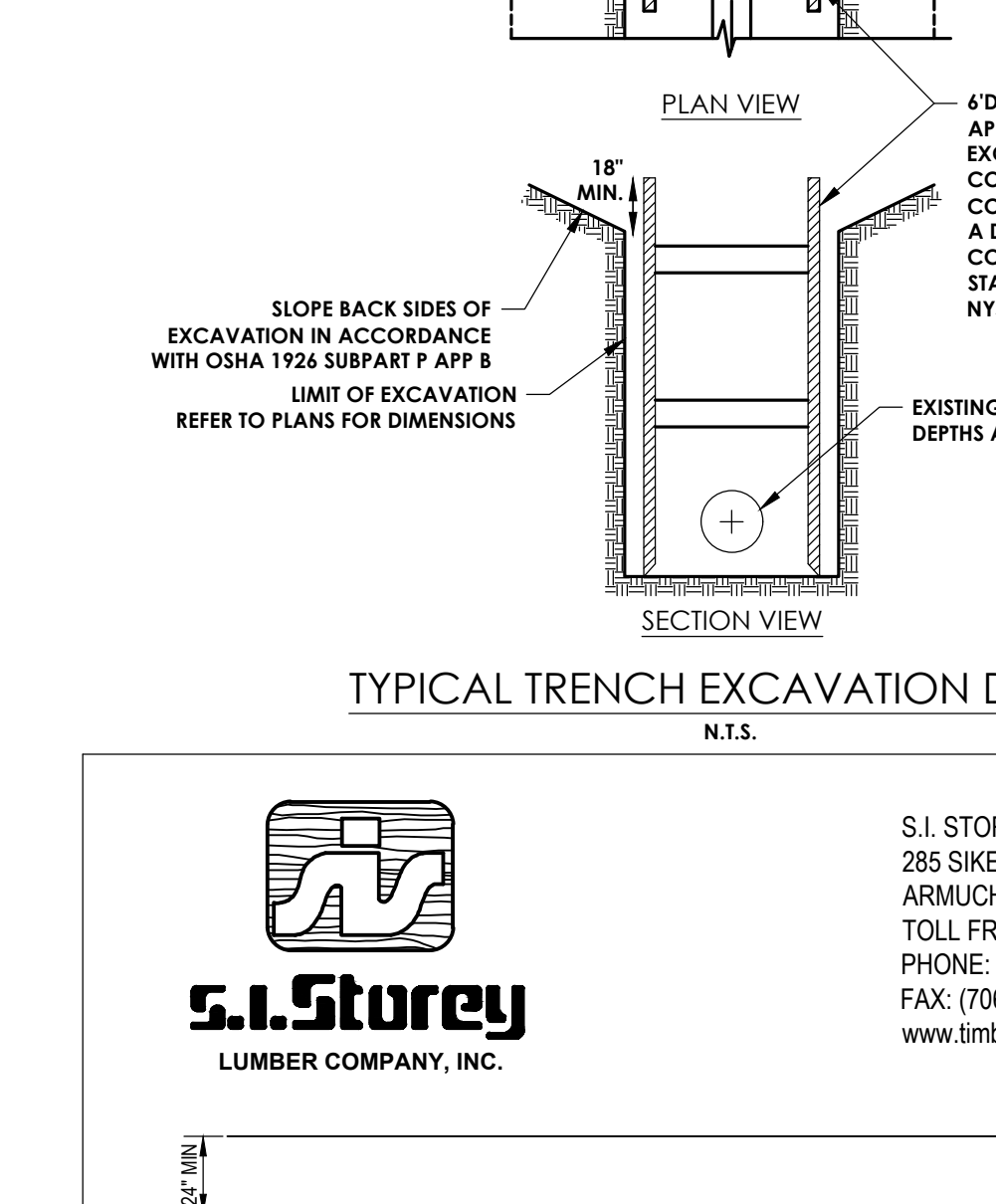
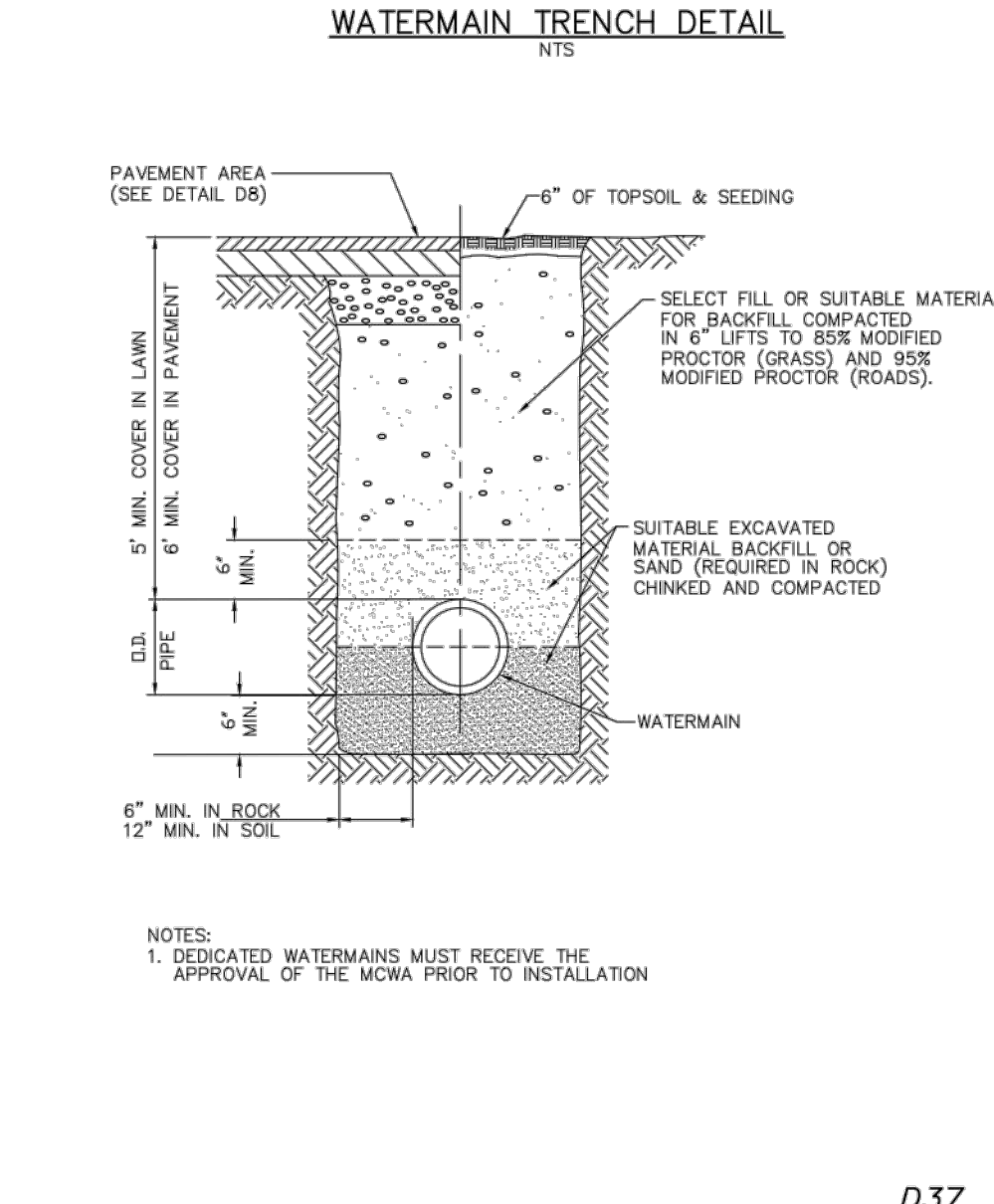
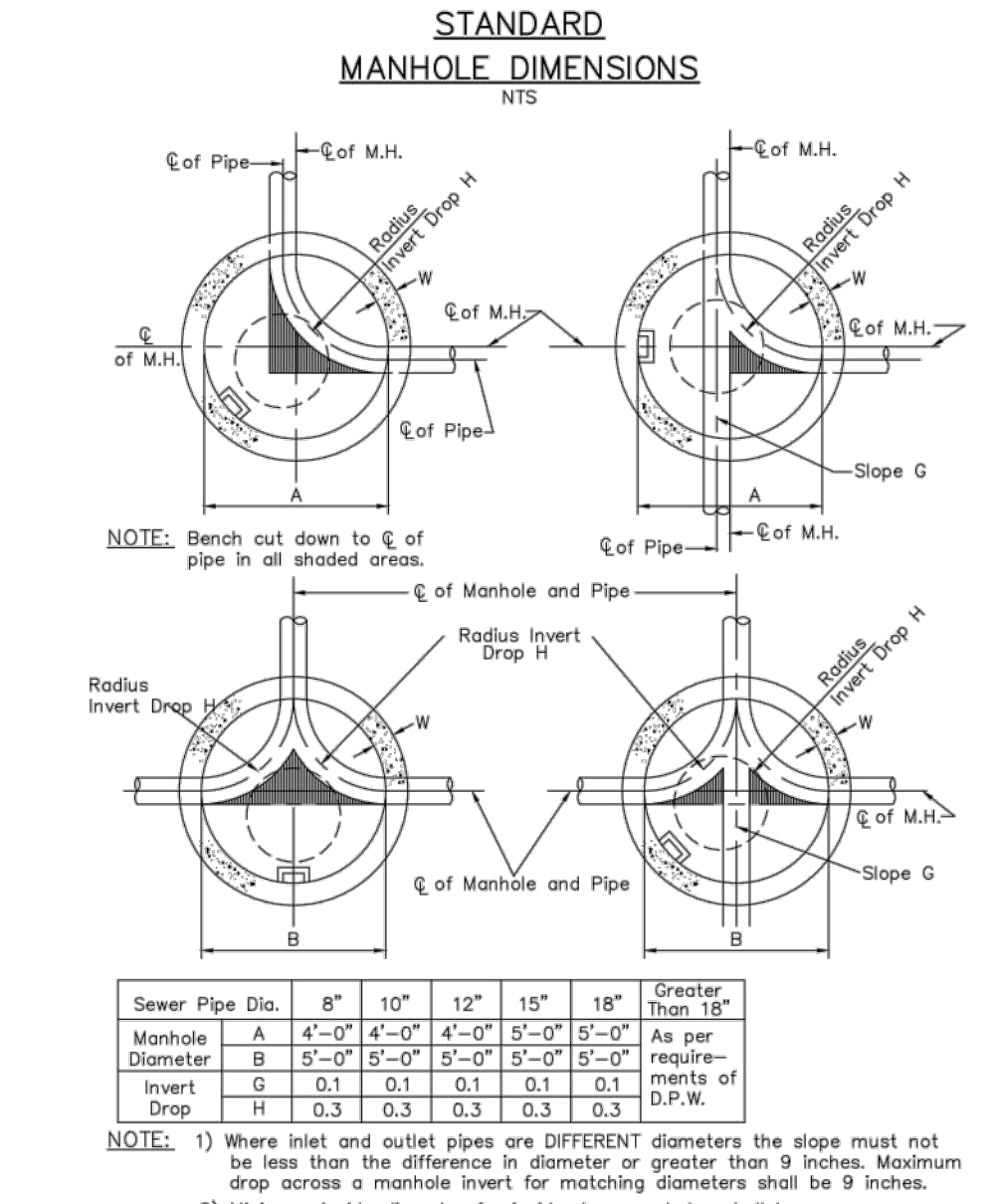
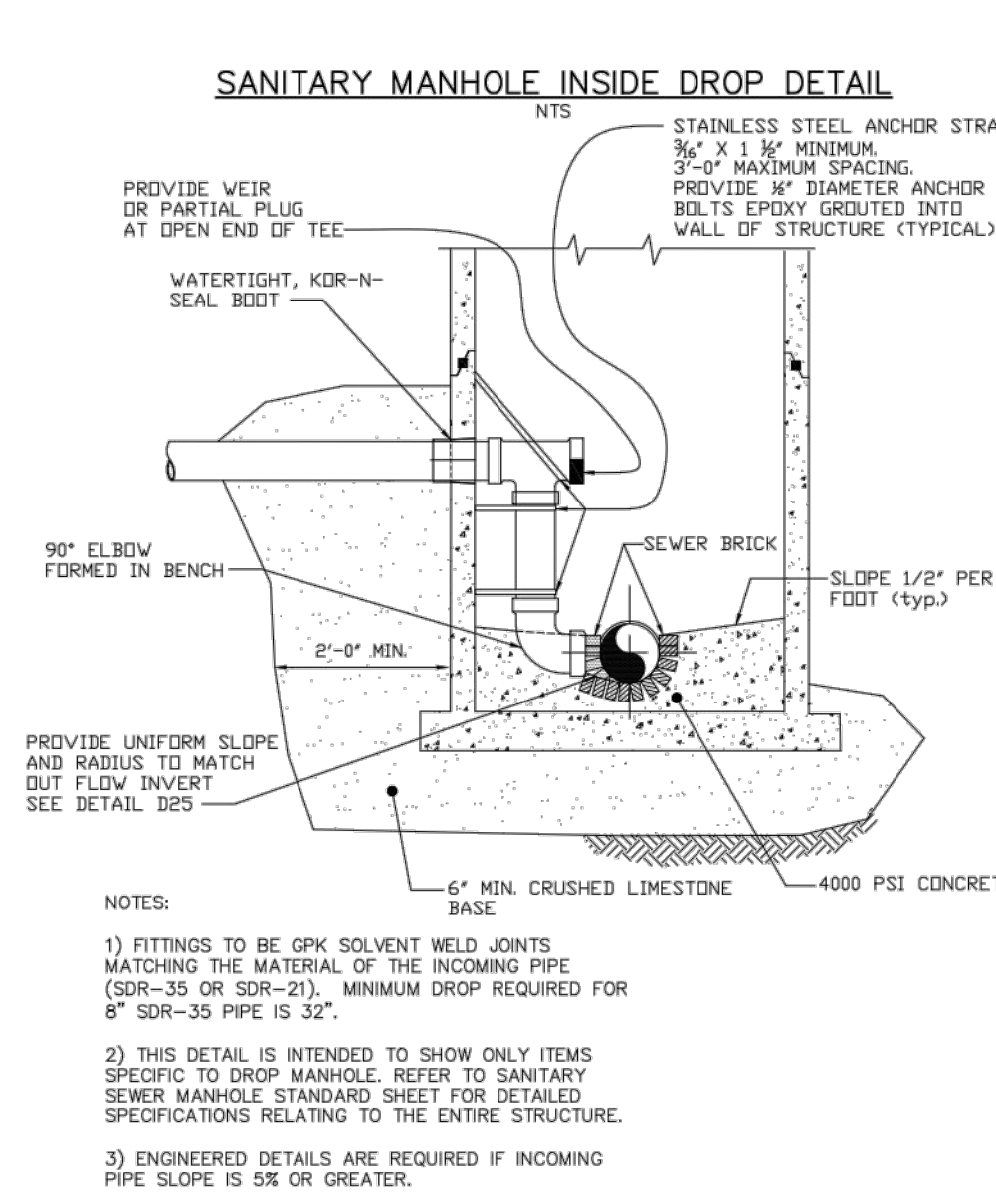
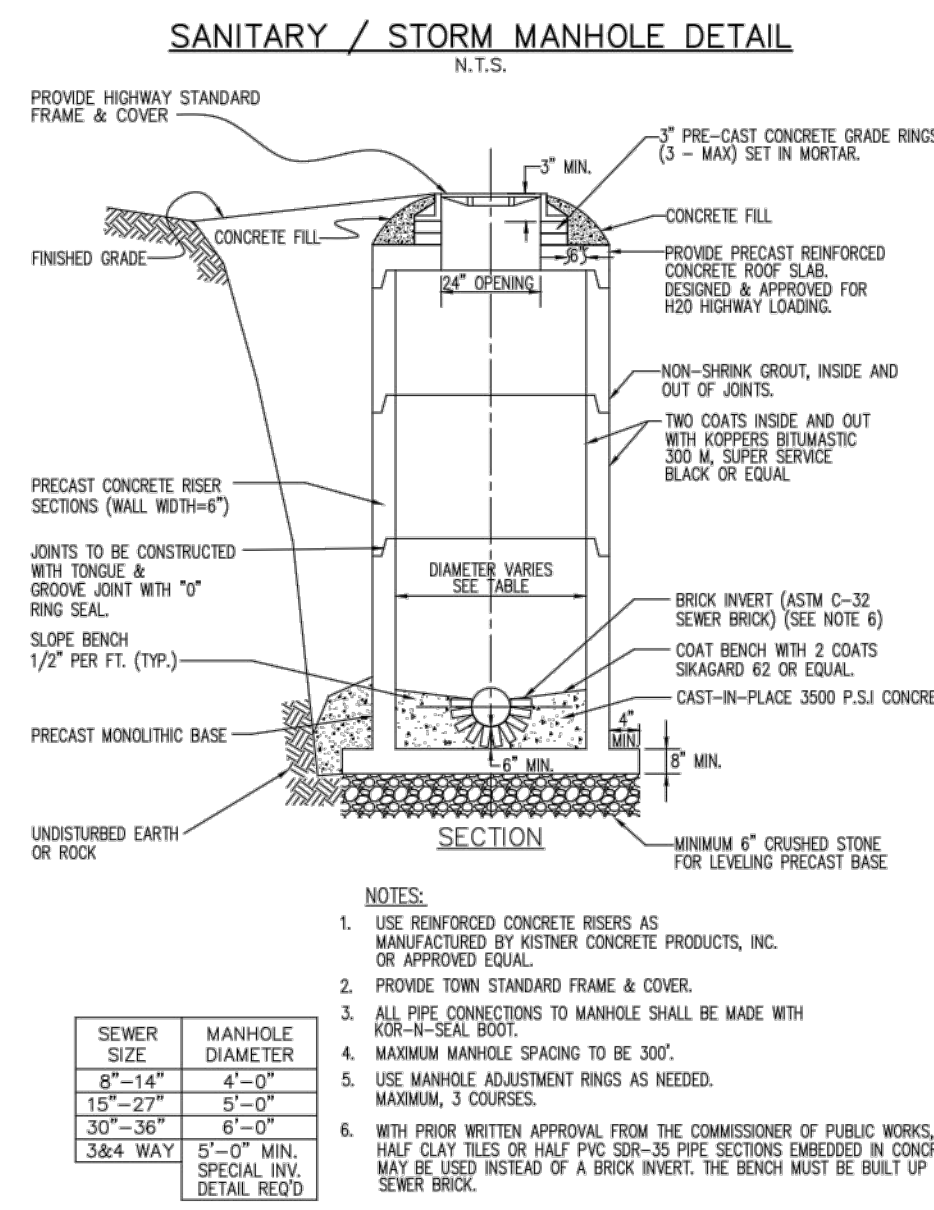
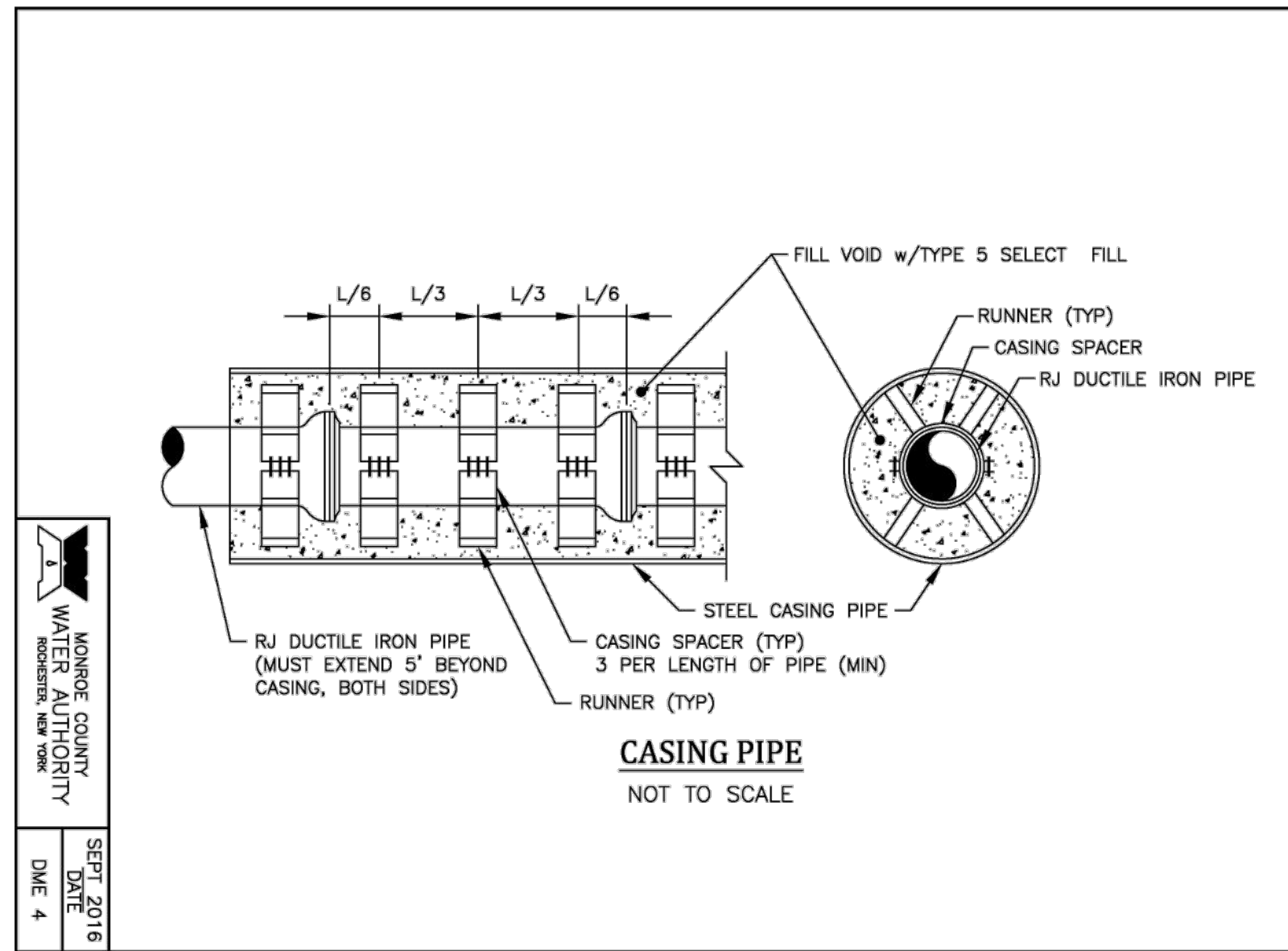
Revisions

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 203  
 Scale: NTS  
 Date: APRIL 2024

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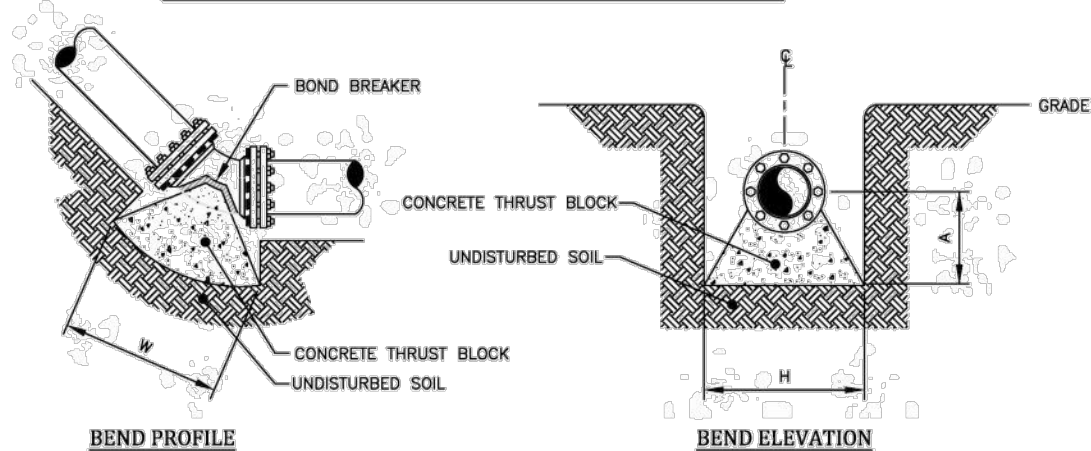




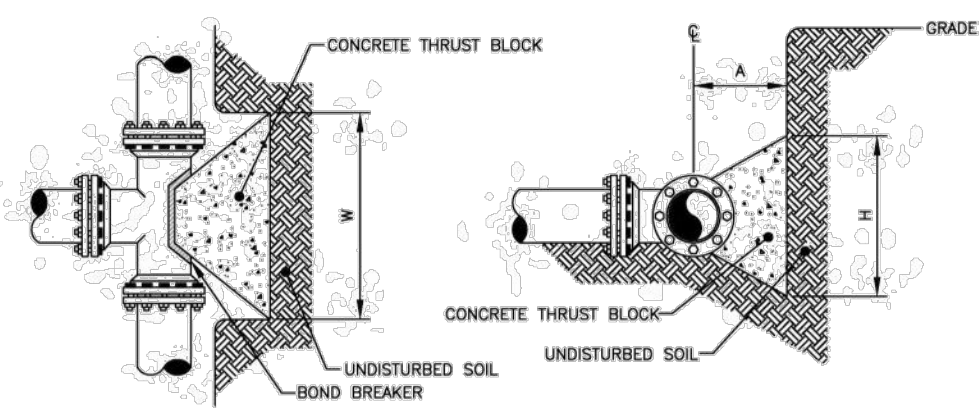
PIPE DIAMETER	BEND OR FITTING																						
	11 1/2 DEGREE				22 1/2 DEGREE				45 DEGREE				90 DEGREE				TEE, CAP OR PLUG						
	L	W	H	VOL	L	W	H	VOL	L	W	H	VOL	L	W	H	VOL	L	W	H	VOL			
8"	1.0	2.0	1.5	1.5	3.0	1.5	2.0	4.0	2.0	3.0	4.0	2.5	2.5	5.0	2.0								

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

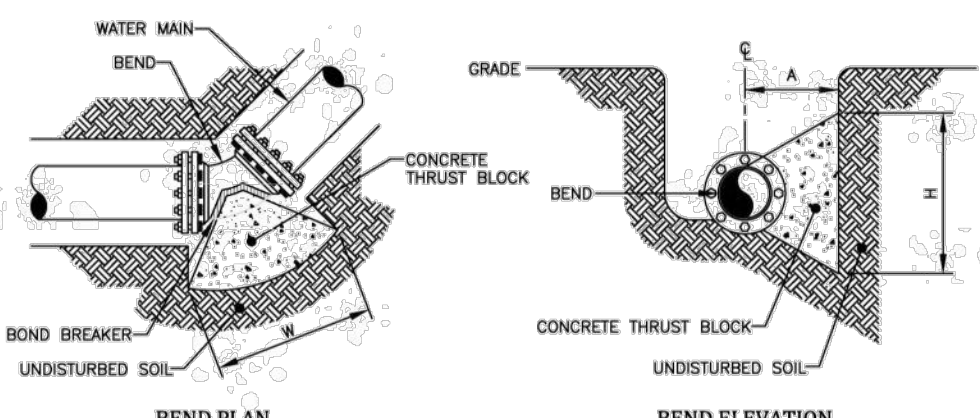
**HORIZONTAL AND VERTICAL UP THRUST BLOCKS**



**VERTICAL UP THRUST BLOCKS**  
NOT TO SCALE



**TEE PLAN**      **TEE ELEVATION**



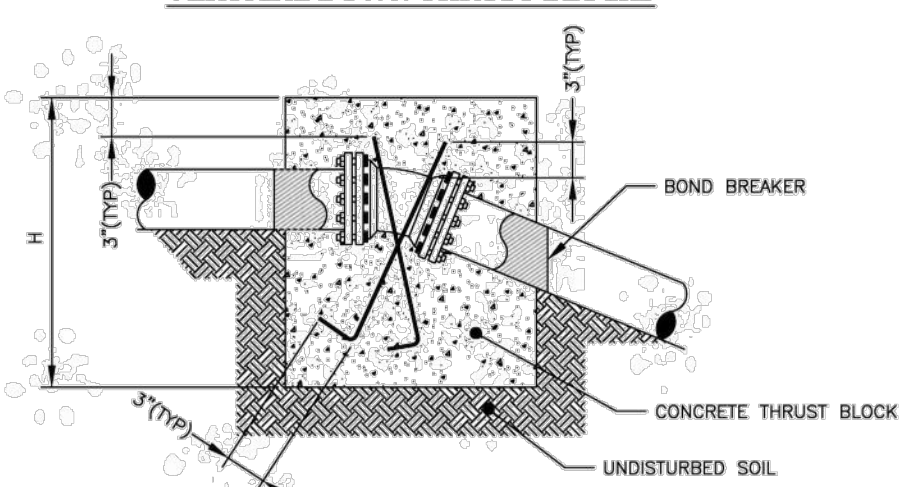
**HORIZONTAL THRUST BLOCKS**  
NOT TO SCALE

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

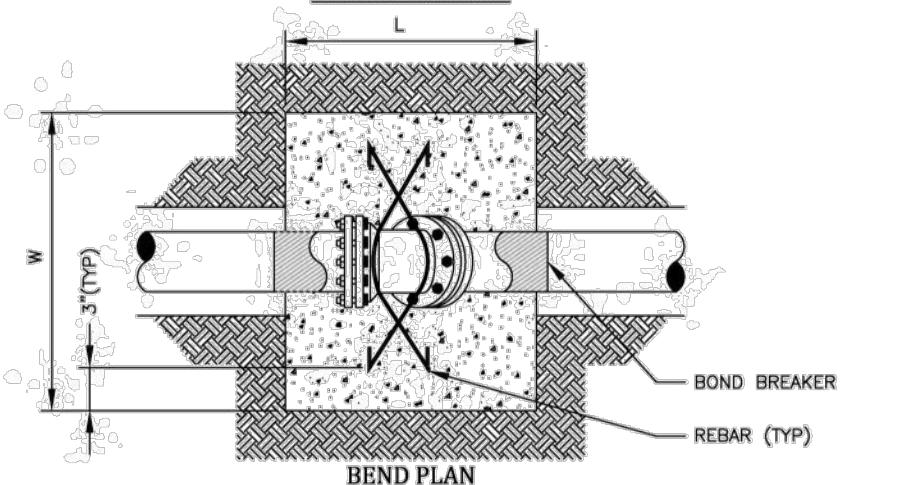
PIPE DIAMETER	BEND																		
	11 1/2 DEGREE				22 1/2 DEGREE				45 DEGREE				90 DEGREE						
	L	W	H	VOL	L	W	H	VOL	L	W	H	VOL	L	W	H	VOL			
8"	1.0	2.0	1.5	1.5	3.0	1.5	2.0	4.0	2.0	3.0	4.0	2.5	2.5	5.0	2.0				

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

**VERTICAL DOWN THRUST BLOCKS**



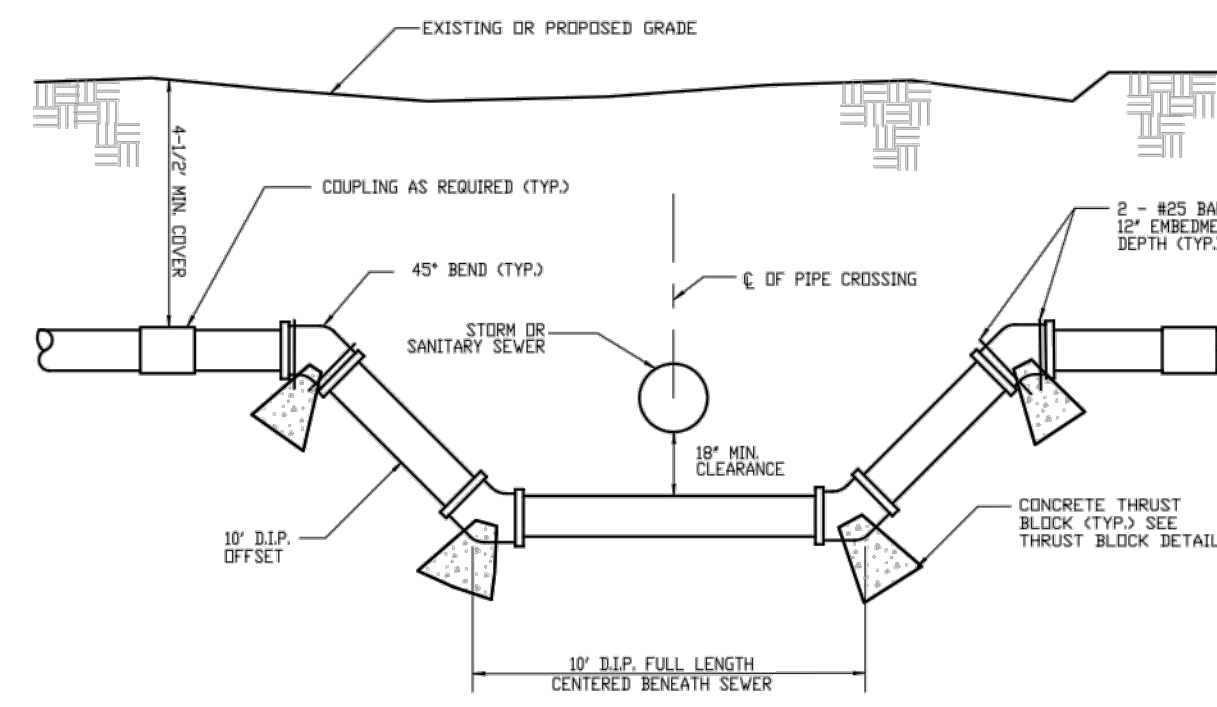
**BEND ELEVATION**



**VERTICAL DOWN THRUST BLOCKS**  
NOT TO SCALE

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

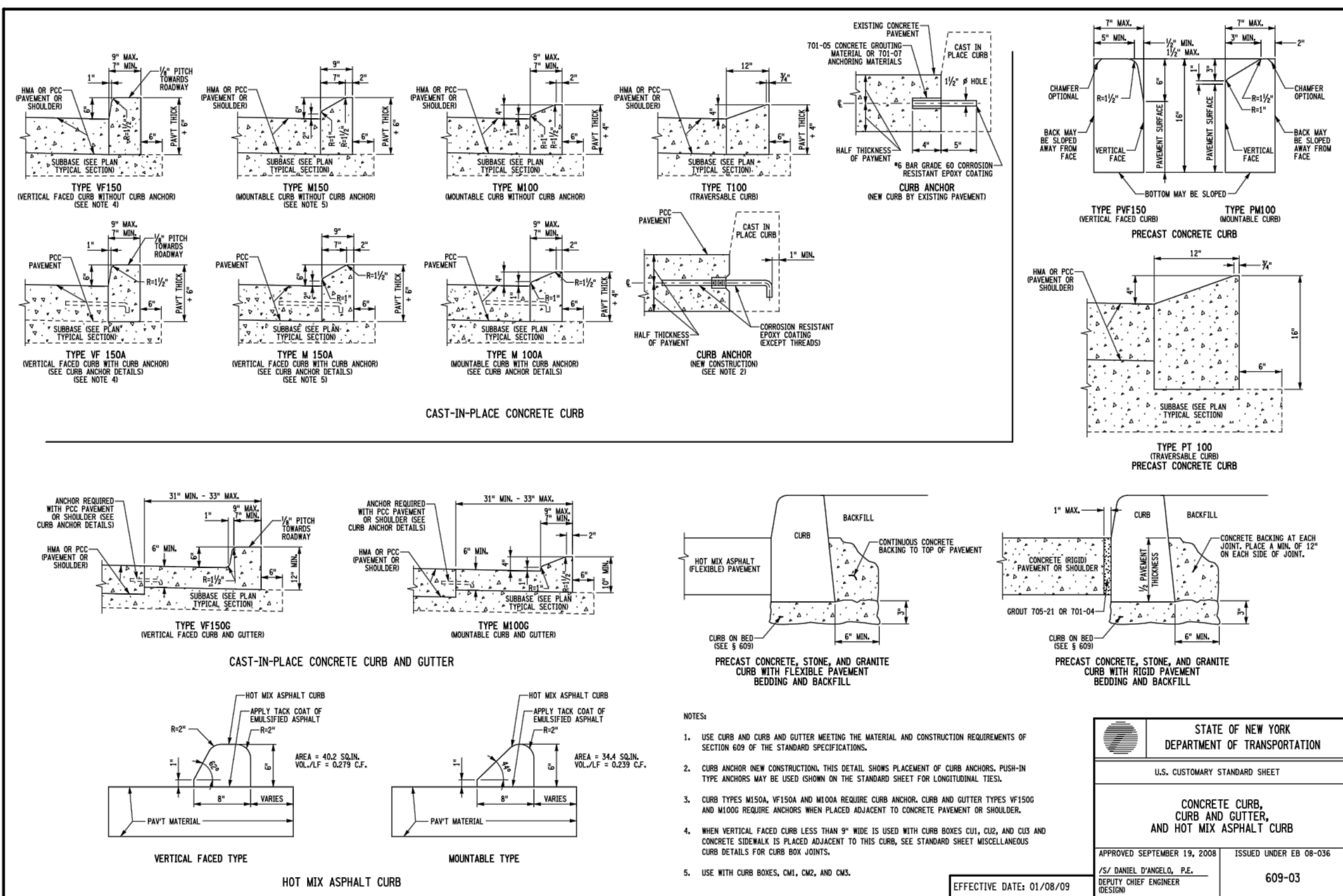
MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK  
SEPT 2016 DATE  
DME 7



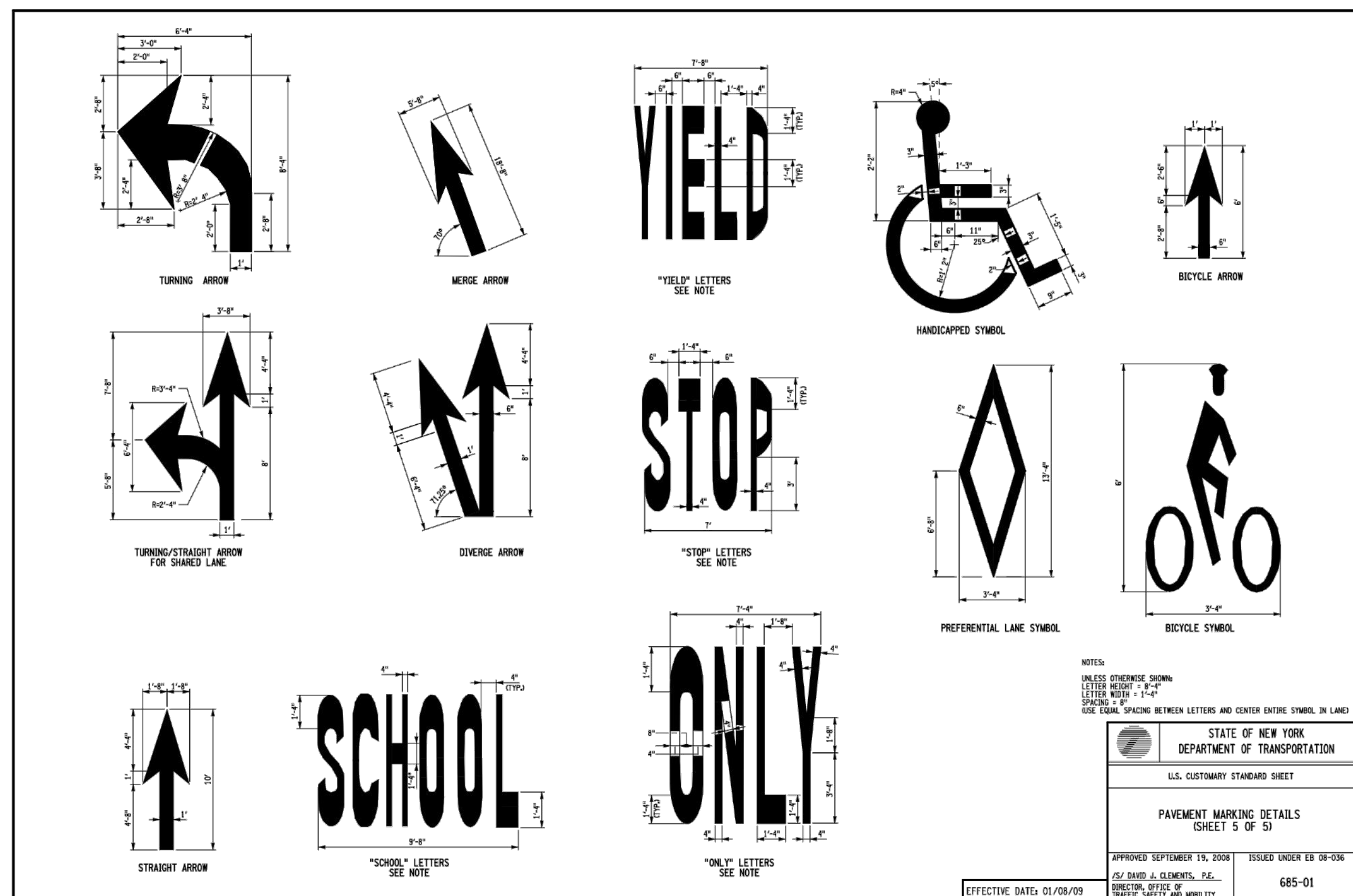
**WATERMAIN - SEWER CROSSING**  
ITEM 660.99  
NOT TO SCALE

3/1/06

REVISED

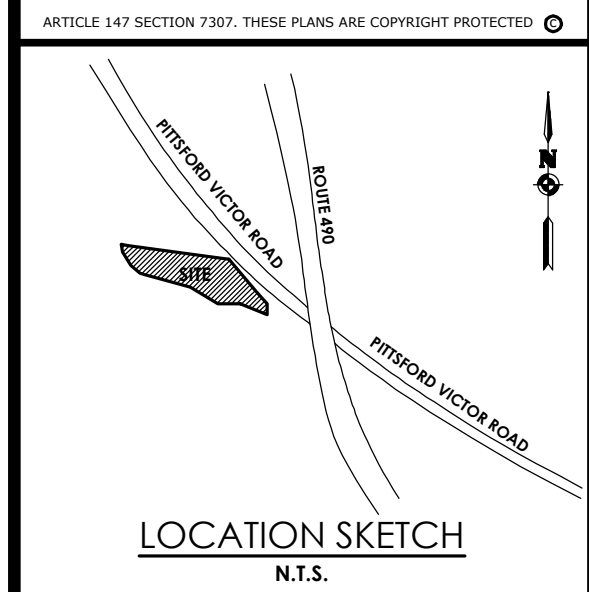


STATE OF NEW YORK  
DEPARTMENT OF TRANSPORTATION  
U.S. CUSTOMARY STANDARD SHEET  
**CONCRETE CURB, CURB AND GUTTER, AND HOT MIX ASPHALT CURB**  
APPROVED SEPTEMBER 19, 2008  
ISSUED UNDER EB 08-036  
BY: DANIEL J. CLEMENTS, P.E.  
DEPUTY CHIEF ENGINEER (DESIGN)  
609-03  
EFFECTIVE DATE: 01/08/09



NOTES:  
UNLESS OTHERWISE SHOWN:  
LETTER HEIGHT = 8"-0"  
LETTER WIDTH = 4"  
SPACING = 6"  
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 EB 08-036  
BY: DANIEL J. CLEMENTS, P.E.  
DEPUTY CHIEF ENGINEER (DESIGN)  
685-01  
EFFECTIVE DATE: 01/08/09



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 Ritzenhaller 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 205  
Scale: NTS  
Date: APRIL 2024



**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 1<sup>st</sup> through April 1<sup>st</sup>). 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**

- ROAD TO BE KEPT CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- ROADSIDE DRAINAGE TO BE MAINTAINED AT ALL TIMES.
- MATERIALS, EQUIPMENT AND VEHICLES ARE NOT TO BE STORED OR PARKED WITHIN THE NEW YORK STATE RIGHT-OF-WAY.
- 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.
- 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 DESIGNER.

- 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.
- WORK ZONE TRAFFIC CONTROL STANDARD SHEETS NOT INCLUDED IN THE PERMIT PACKAGE SHALL NOT BE UTILIZED UNLESS APPROVED BY THE REGIONAL TRAFFIC ENGINEER.
- 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.
- 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.
- 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.
- 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.
- 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
- 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.
- 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.

**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**

- 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.
- 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.
- 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.
- 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.
- 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.
- 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 "N"			TABLE 2 MAXIMUM DRIVEWAY SLOPE		
DRIVEWAY CLASSIFICATION	PERMISSIBLE RANGE OF WIDTHS (F.T.) WITHIN 30 F.T. OF TRAVELER MAY TOP SIGNS POSTED 45 MPH OR LESS	PERMISSIBLE RANGE OF WIDTHS (F.T.) WITHIN 30 F.T. OF TRAVELER MAY TOP SIGNS POSTED 45 MPH OR MORE	ROADWAY CLASSIFICATION	MINOR COMMERCIAL DRIVEWAY	RESIDENTIAL DRIVEWAY
RESIDENTIAL LESS THAN 60 FT. IN LENGTH MEASURED ALONG THE CENTERLINE	9 TO 12	10 TO 24	RURAL	5%	2%
RESIDENTIAL GREATER THAN 60 FT. IN LENGTH MEASURED ALONG THE CENTERLINE	9 TO 12	10 TO 14	URBAN	6%	3%
MINOR COMMERCIAL SAVED-TWO-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 3 DRIVEWAY MATERIALS AND THICKNESS						
PROPOSED OR EXISTING DRIVE	WITHIN DRIVEWAY PAVEMENT LENGTH (F.T.)			WITHIN TRANSITION LENGTH (F.T.)		
	MATERIAL	THICKNESS FOR RESIDENTIAL (IN.)	THICKNESS FOR MINOR COMMERCIAL (IN.)	MATERIAL	THICKNESS FOR RESIDENTIAL (IN.)	THICKNESS FOR MINOR COMMERCIAL (IN.)
DIRT, GRASS, OR GRAVEL	ASPHALT	3	4	SUBBASE COURSE, EXCAVATE AS NECESSARY	6	9
	SUBBASE COURSE	6	8			
STONE	ASPHALT	3	4	STONE, EXCAVATE AS NECESSARY	8	11
	SUBBASE COURSE	6	8			
ASPHALT RESURFACING	ASPHALT	1 1/2	1 1/2	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	PAVE AND LEVELING COURSE	AS NECESSARY	AS NECESSARY			
ASPHALT RESURFACING	ASPHALT	3	4	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	SUBBASE COURSE	6	8			
PCC	PCC	6	6	NOT APPLICABLE - ALL WORK ON AN EXISTING PAVED DRIVEWAY IS WITHIN THE DRIVEWAY PAVEMENT LENGTH		
	SUBBASE COURSE	6	8			

TABLE 4 DRIVEWAY ENTRANCE TYPE SELECTION							
DRIVEWAY ENTRANCE TYPE	ENTRANCE FINISHING METHOD	CONDITIONS FOR USE					
		DRIVEWAY CLASSIFICATION (NOTE 1)	CORNER ANGLE	TRAVEL LANE AND SHOULDER WIDTH	CURB	SIDEWALK	HIGHWAY DESIGN SPEED
TYPE 1	RADIUS	RESIDENTIAL OR MINOR COMMERCIAL	60° TO 120°	ANY	USE WITH OR WITHOUT CURB	ANY SPEED	RECOMMENDED FOR ALL LOCATIONS EXCEPT FOR MINOR COMMERCIAL WITH CURB
TYPE 2	RADIUS	MINOR COMMERCIAL ONLY	60° TO 120°	ANY	USE ONLY WITH CURB	ANY SPEED	RECOMMENDED ONLY FOR MINOR COMMERCIAL WITH CURB
TYPE 3	TAPER	RESIDENTIAL OR MINOR COMMERCIAL	90° TO 100°	18" OR GREATER (SEE NOTE 6)	USE ONLY WITH SIDEWALK OFFSET A MIN. OF 2" FROM THE EDGE OF PAVEMENT OR WITHOUT SIDEWALK	ONLY LOW SPEED (AS MPH OR LESS)	ALTERNATIVE ENTRANCE TYPE (TYPICALLY FOR URBAN AREA USE)
TYPE 4	TAPER	RESIDENTIAL OR MINOR COMMERCIAL	90° TO 100°	18" OR GREATER (SEE NOTE 6)	USE ONLY WITH SIDEWALK LESS THAN 2" FROM OR ADJACENT TO THE EDGE OF PAVEMENT	ONLY LOW SPEED (AS MPH OR LESS)	ALTERNATIVE ENTRANCE TYPE (TYPICALLY FOR URBAN AREA USE)

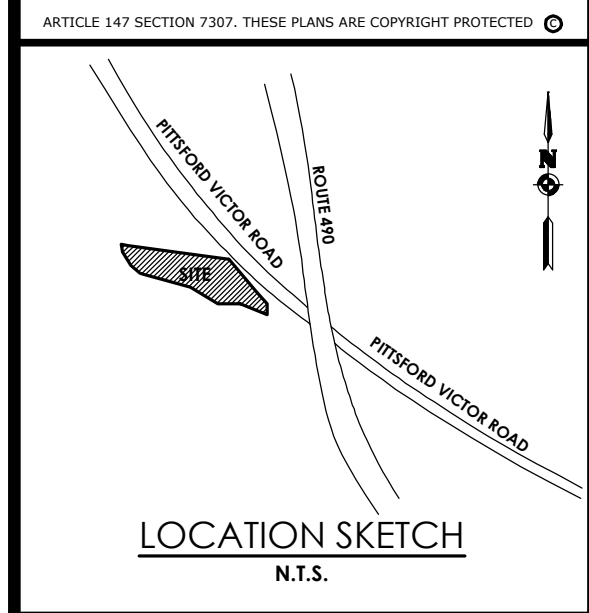
TABLE 5 MINIMUM LENGTH OF VERTICAL CURVE, L <sub>v</sub> FOR CHANGE IN GRADE IN DRIVEWAY PROFILE		
CHANGES IN GRADE A ± 1% (24:1)	CRST. L <sub>v</sub> (FT.)	SAC. L <sub>v</sub> (FT.)
4-5%	5	5
6-8%	6	6
8-10%	6	6
10-12%	6	6
12-14%	7	6
14-16%	7	6
16-18%	8	6
18-20%	8	6

LENGTH OF VERTICAL CURVE BASED ON 35' CURVE RADIUS AND THE AASHTO PASSENGER VEHICLE AND SINGLE UNIT TRUCK CLEARANCES.

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 608-03, SHEET 1 OF 5.

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



Client:  
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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			

**NOTES & DETAILS**

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

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

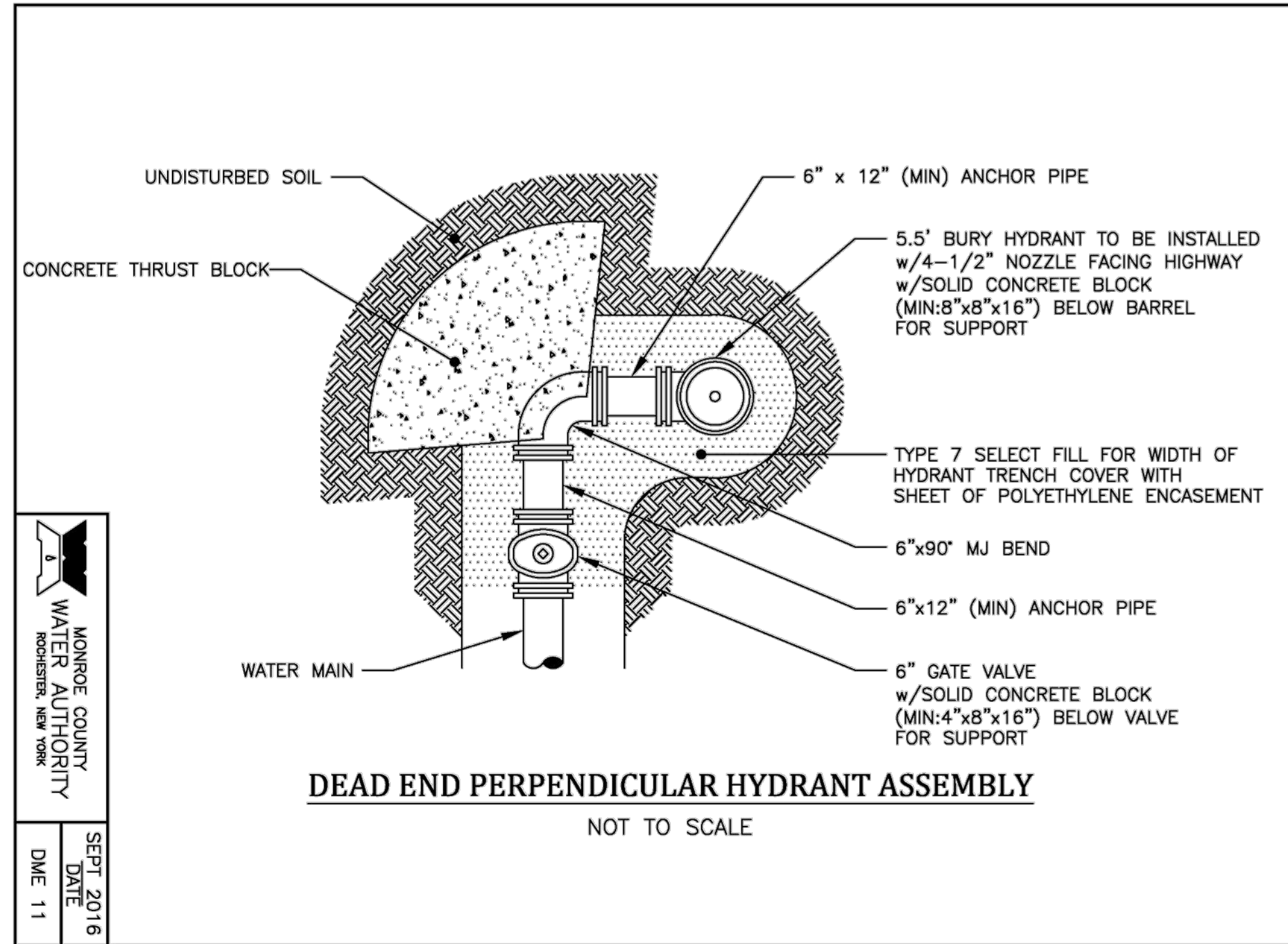
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Scale: **NTS**

Date **APRIL 2024**

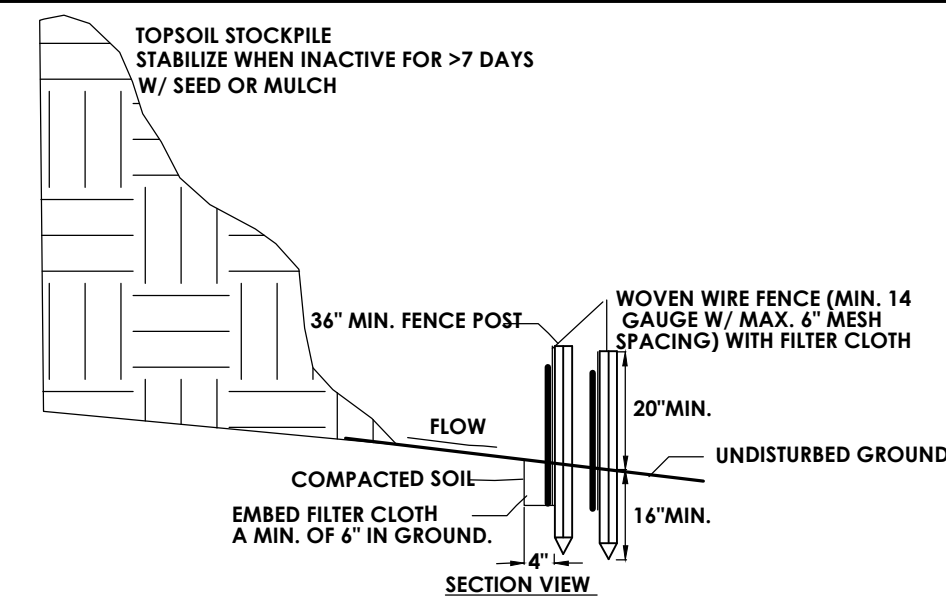
NOT FOR CONSTRUCTION



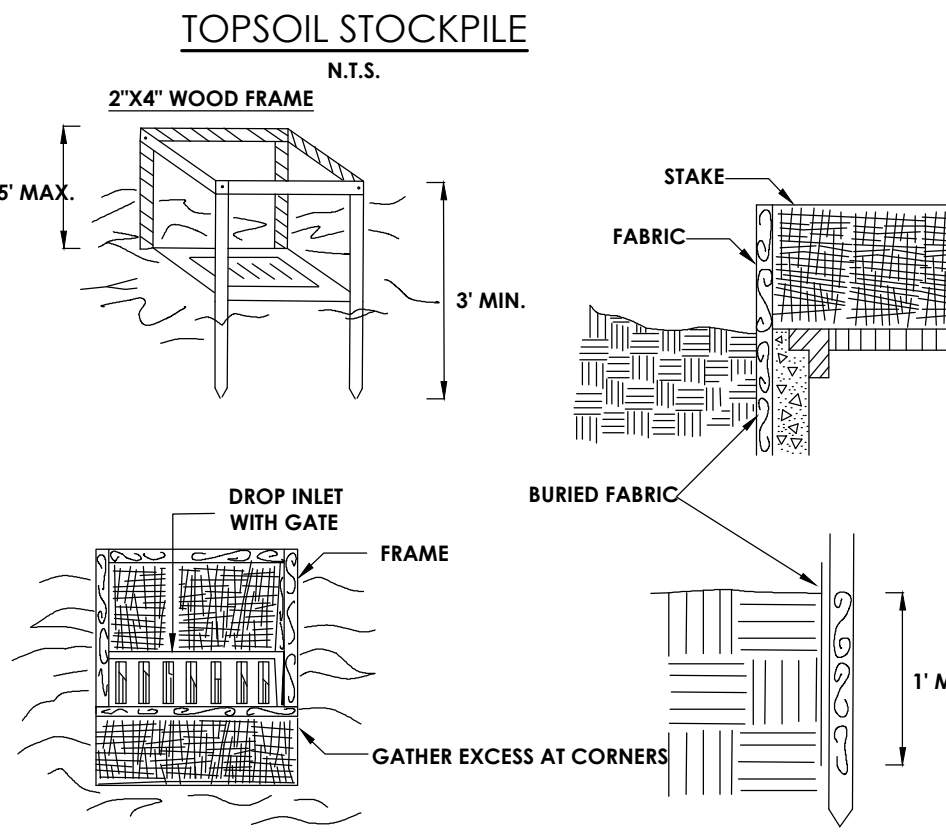


MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK

SEPT 2016  
DATE  
DME 11

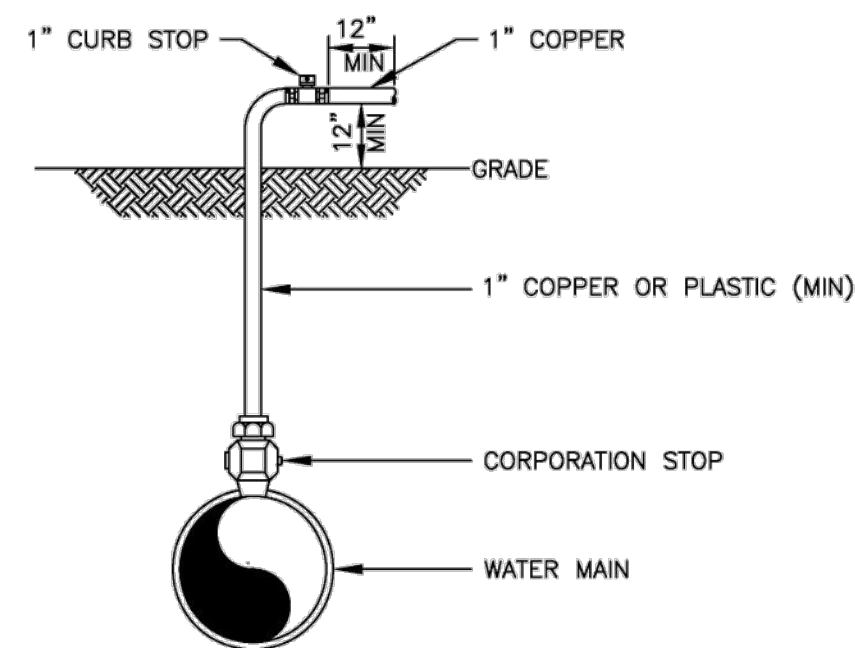


- CONSTRUCTION SPECIFICATIONS**
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
  - FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MAXIMUM MESH OPENING.
  - WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILUNKA 1140N, OR APPROVED EQUIVALENT.
  - PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.



- CONSTRUCTION SPECIFICATIONS**
- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
  - CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
  - STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
  - SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
  - FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
  - A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
- MAXIMUM DRAINAGE AREA 1 ACRE

**FILTER FABRIC DROP INLET PROTECTION**  
N.T.S.



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

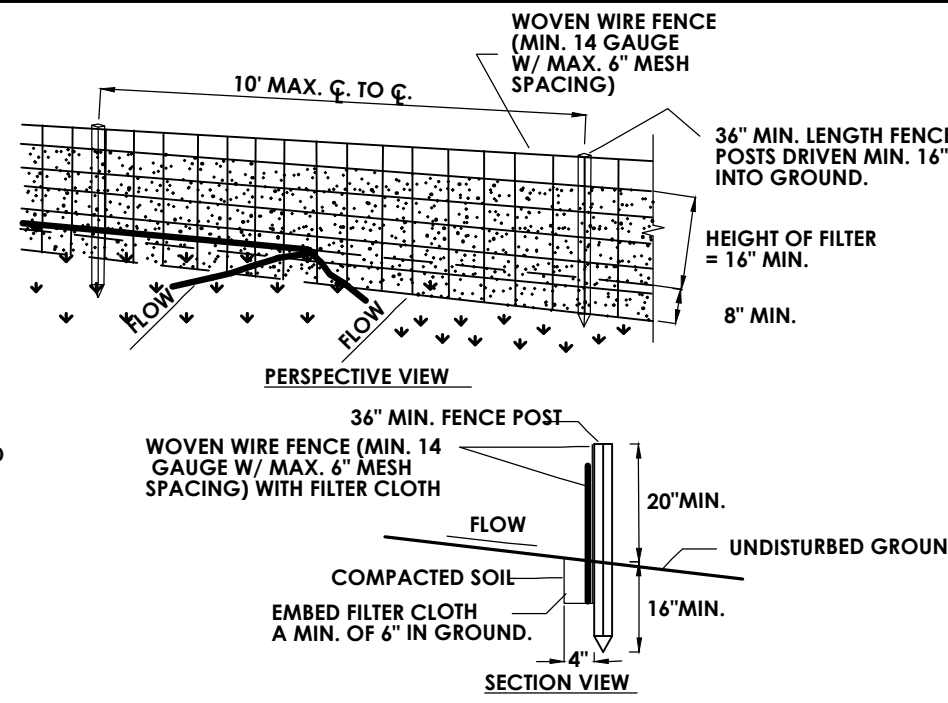
**DISINFECTION/BLOW-OFF/SAMPLING TAP (TEMPORARY)**  
NOT TO SCALE

MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK

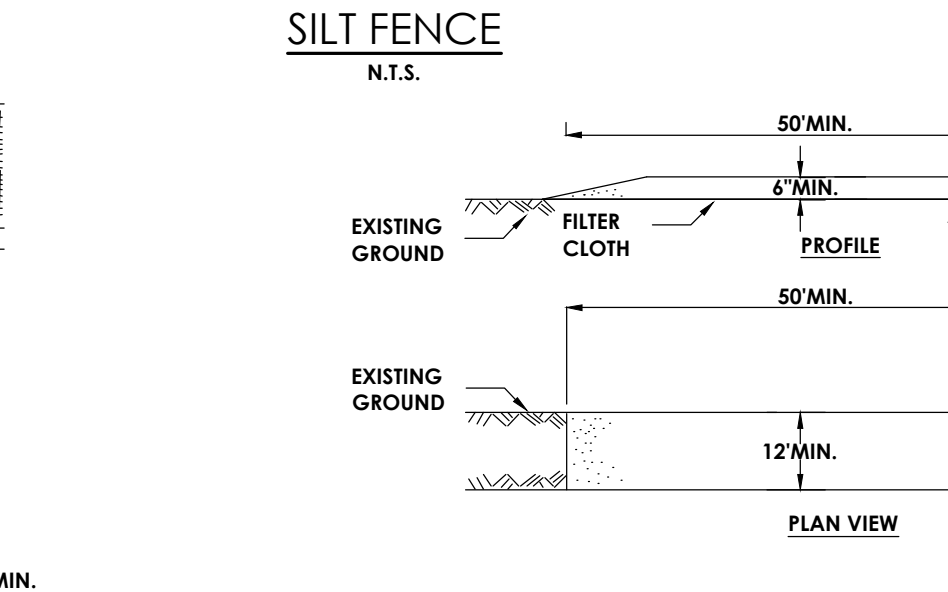
SEPT 2020  
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MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK

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DATE  
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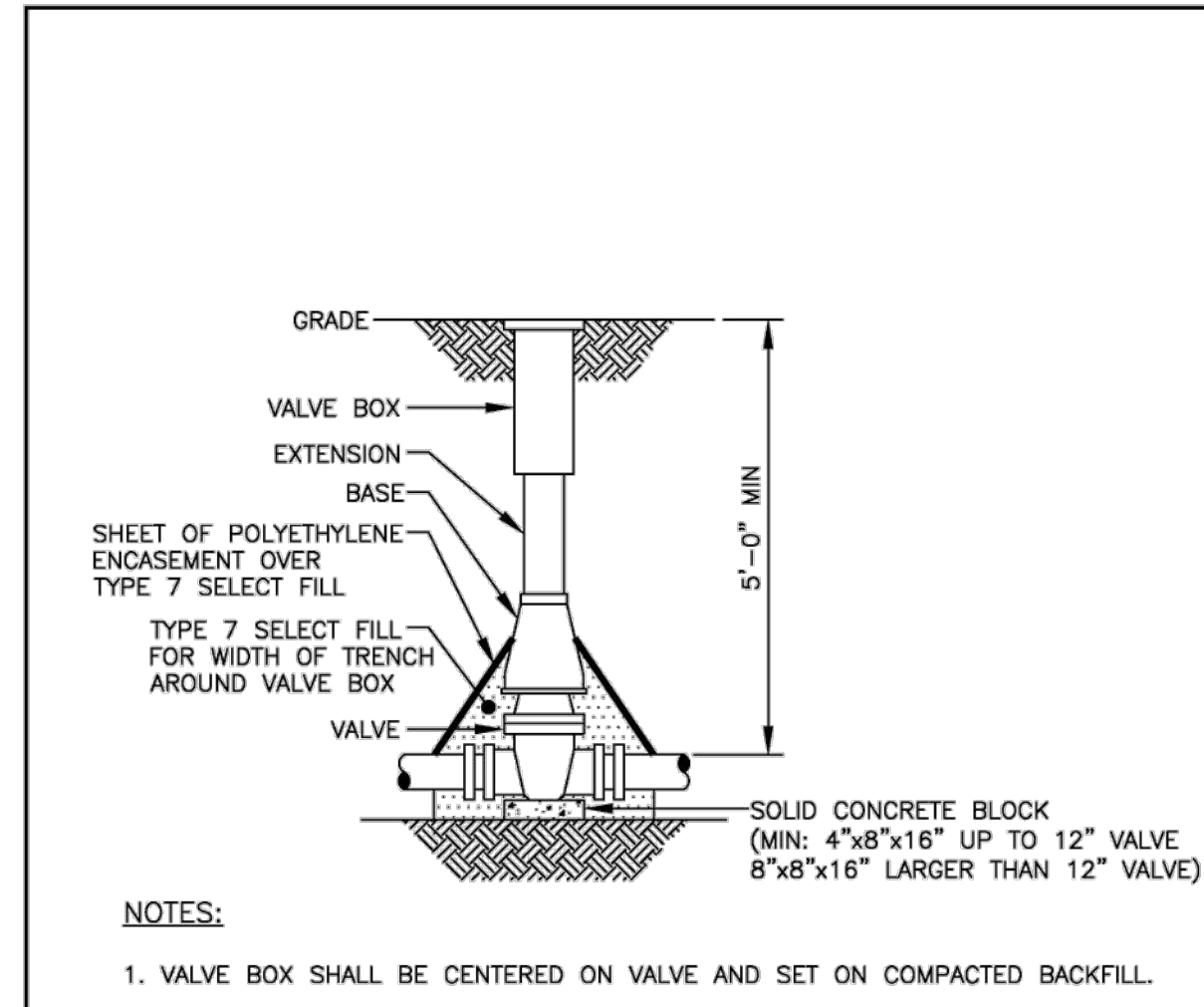


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  - PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
  - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN 'BULGES' DEVELOP IN THE SILT FENCE.



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

**STABILIZED CONSTRUCTION ENTRANCE**  
N.T.S.

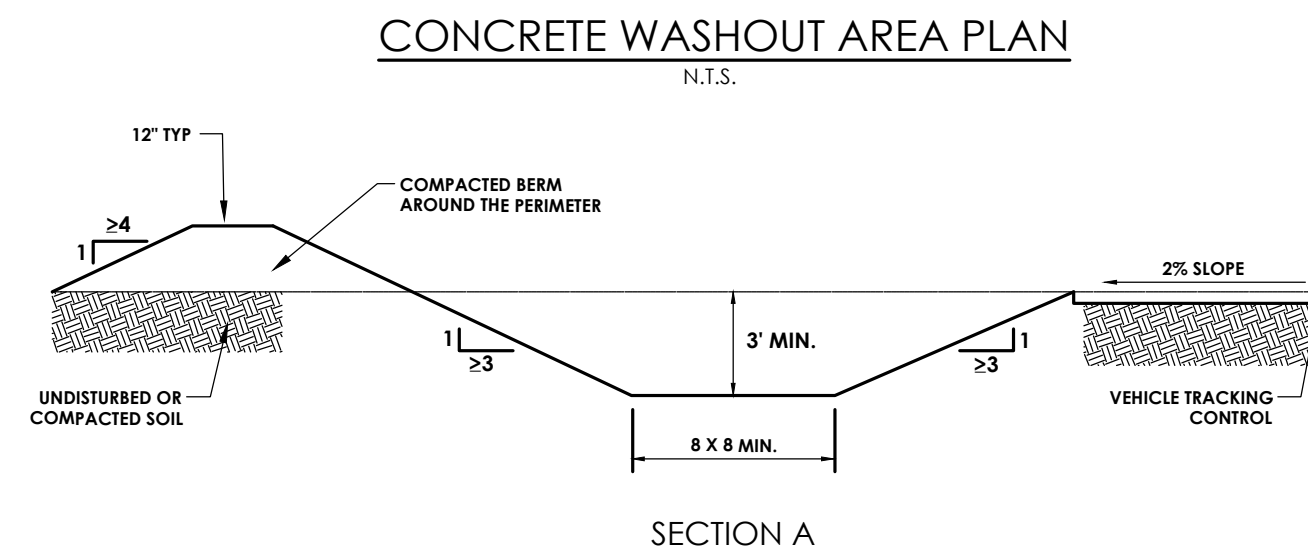
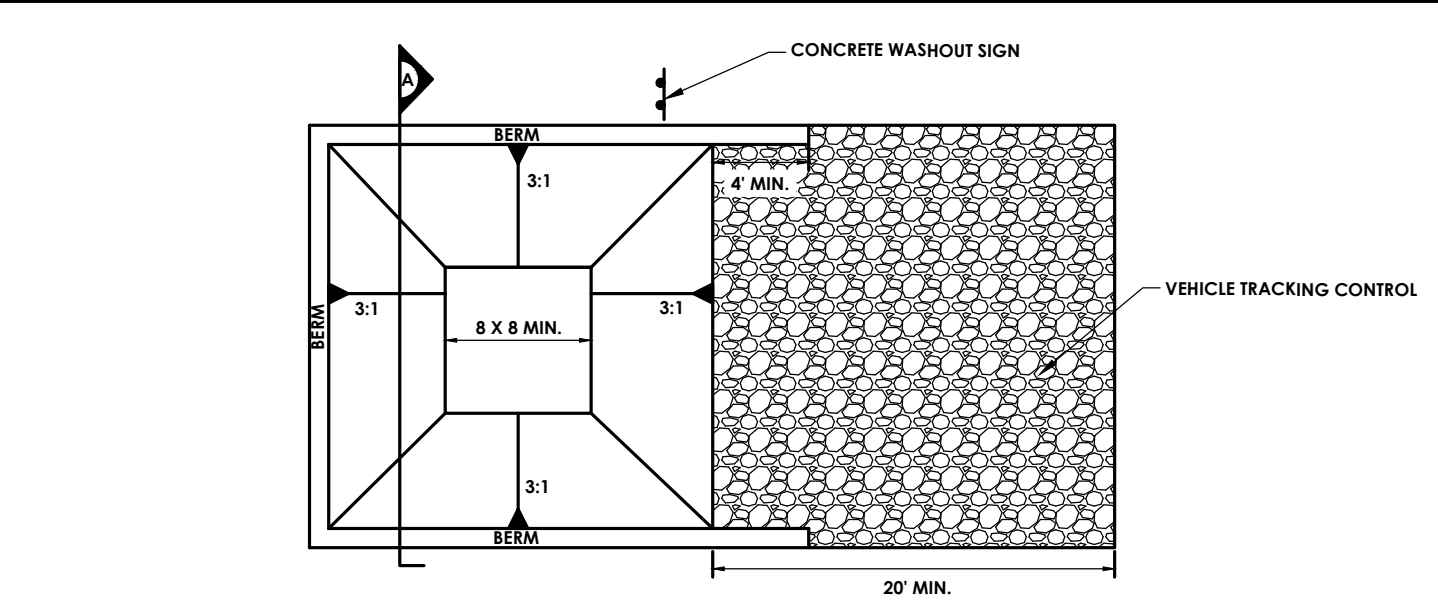


- NOTES:**
- VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
  - VALVE SHALL NOT SUPPORT VALVE BOX.
  - ALL VALVES SHALL BE OPEN LEFT EXCEPT: TOWN OF WEBSTER - VALVES 12" AND SMALLER SHALL OPEN RIGHT. TOWN OF HENRIETTA - SHALL OPEN RIGHT

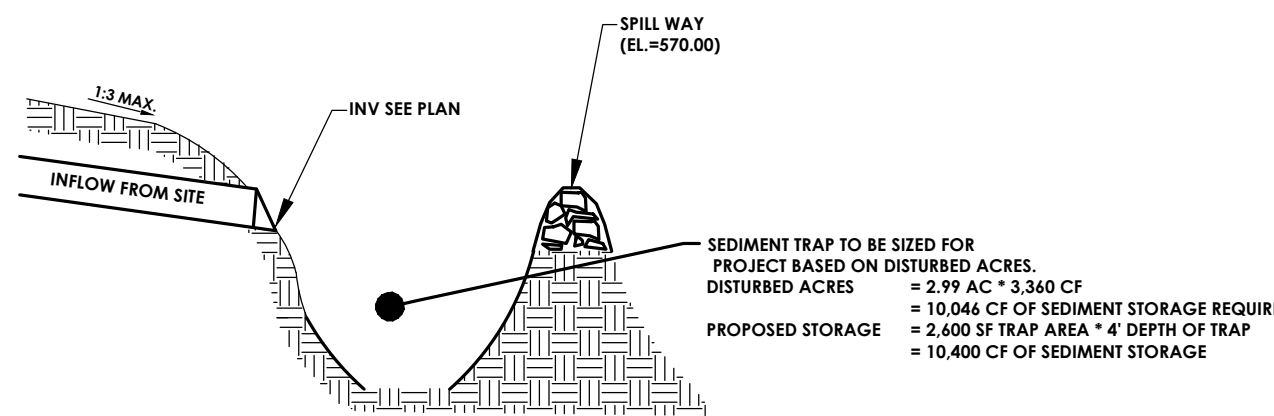
**VALVE**  
NOT TO SCALE

MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK

SEPT 2016  
DATE  
DME 5



- CWA INSTALLATION NOTES**
- SEE PLAN FOR: CWA INSTALLATION LOCATION.
  - DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A UNID ABOVE GROUND STORAGE SHOULD BE USED.
  - THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
  - CWA SHALL INCLUDE A FLAT SURFACE FIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE IT SHALL BE 5:1 OR FLATTER, THE PIT SHALL BE AT LEAST 3' DEEP.
  - BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
  - VEHICLE TRACKING PAID SHALL BE SLOPED 2% TOWARDS THE CWA.
  - SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
  - USE EXCAVATED MATERIAL FOR THE PERIMETER BERM CONSTRUCTION.



NOTE: 1. FOR ALL SEEDING & STABILIZATION MEASURES IT IS THE RESPONSIBILITY OF THE OWNER & DEVELOPER TO ENSURE THAT FINAL STABILIZATION OCCURS AS REQUIRED BY THE NYSDEC.

**SEDIMENT TRAP DETAIL**  
N.T.S.

**4" AND LARGER WATER SERVICE LINE NOTES**

- Water service lines shall be constructed in accordance with the regulations and specifications of the Water Authority.
- Water service lines shall have a minimum of five feet of cover from finished grade in lawn areas and six feet of cover from finished grade in paved areas.
- Water service lines shall be separated at least ten feet, measured from the outside of the pipes, from sewer mains or septic systems.
- Water service lines shall be identified as:

DESCRIPTION	SIZE	MATERIAL <sup>(a)</sup>	TYPE <sup>(b)</sup>
MCWA Portion: from the water main to and including the control valve on the ROW/property/easement line		D.I.P.*	
Private Portion: from the control valve to the meter		D.I.P.*	

<sup>(a)</sup>Acceptable material is \*Class 52 cement mortar lined Ductile Iron Pipe.  
<sup>(b)</sup>Service Types include: Domestic = DS, Fire = FS, or Combined = CMB

- The Water Authority's portion of the water service line shall be installed prior to the private portion of the service line.
- Water meter(s) to be located on the interior of exterior walls(s) immediately upon service entrance into the building(s). A by-pass assembly is not required around the installation of 5/8-inch through 1-inch meters. 1 1/2-inch + 2-inch Meter installations may require a by-pass assembly around the meter. Meter installation 3-inch or greater require a bypass assembly around the meter.
- Water service lines sized 4-inches or greater shall be:
  - Pressure tested in accordance with the latest specifications of the Monroe County Water Authority. **A Water Authority representative must witness this test.**
  - Disinfected by using the continuous feed method according to AWWA Standard Specifications. After flushing and disinfecting the service line, water samples shall be collected in accordance with the Department of Health that has jurisdiction of the areas requirements. Approval and notification by the Health Department of passing health sample test(s) must be received before the service will be activated by the Water Authority.

MONROE COUNTY WATER AUTHORITY  
ROCHESTER, NEW YORK

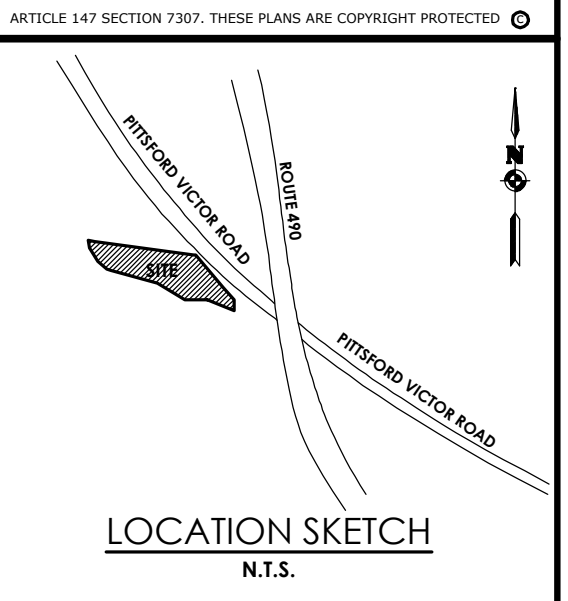
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Rochester, NY 14607

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

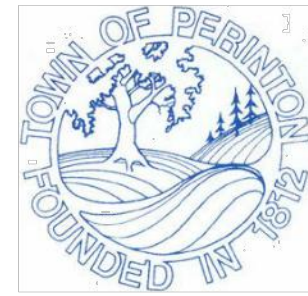
Project No.  
**20182555.0005**

Drawing No.  
**C 207**

Scale:  
**NTS**

Date  
**APRIL 2024**





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

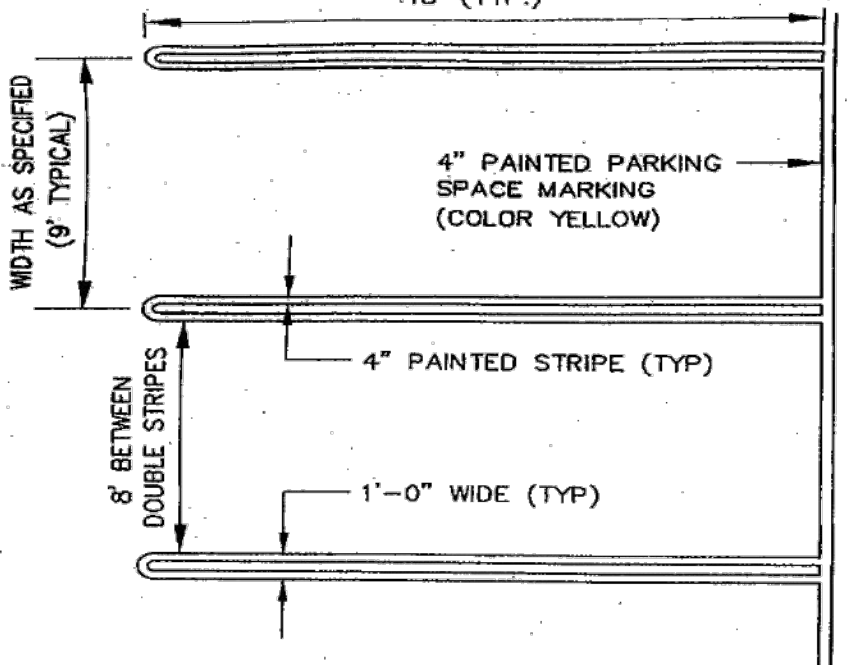
**Parking Lot Striping Requirements**

208-16. Off-street parking and loading. [Amended 10-13-1977 by L.L. No. 7-1977; 5-9-1990 by L.L. No. 3-1990]

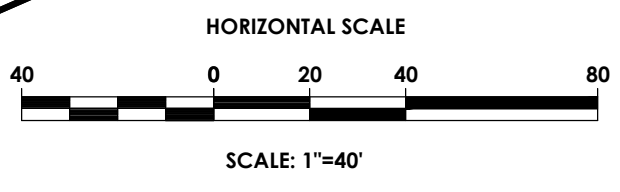
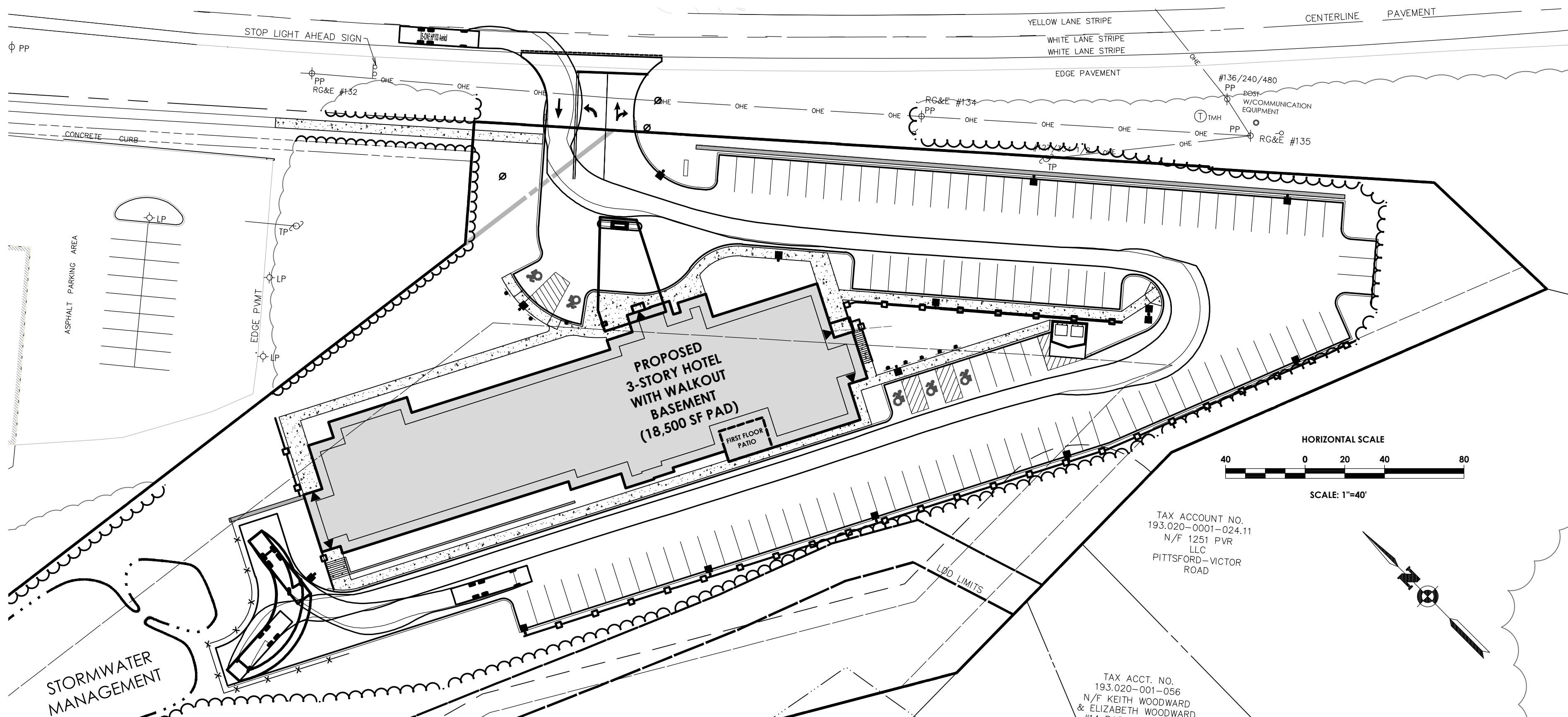
In all districts there shall be provided, at the time any building or structure is erected, enlarged, increased in capacity or changed in use, improved and usable parking spaces for automobiles in accordance with the requirements of this section.

**A. General conditions.**

- (1) Each off-street parking space for any use shall measure a minimum of 9 feet by 18 feet and shall be designed with twenty-four-foot travel aisles for two-way travel or fifteen-foot travel aisles for one-way travel.
- (2) All paved parking areas, with the exception of those related to one-family and two-family dwellings, shall be hairpin striped in the following manner:
  - (a) Striping shall be yellow or white, three inches to four inches in width, outside dimension of the double stripe 12 inches. The area between each set of double stripes shall be eight feet minimum.
  - (b) Handicapped parking spaces shall be provided in an area and location in accordance with the New York State Uniform Fire Prevention and Building Code.



**Signage.** Each accessible parking space shall be provided with signage displaying the international symbol of accessibility and read "Permit Required". Each access aisle shall be provided with signage reading "No Parking Anytime." Signs shall be permanently installed at a clear height of between 60 inches (1525 mm) and 84 inches (2185 mm) above grade and shall not interfere with an accessible route from an access aisle.



TAX ACCOUNT NO. 193.020-0001-024.11  
N/F 1251 PVR LLC  
PITTSFORD-VICTOR ROAD

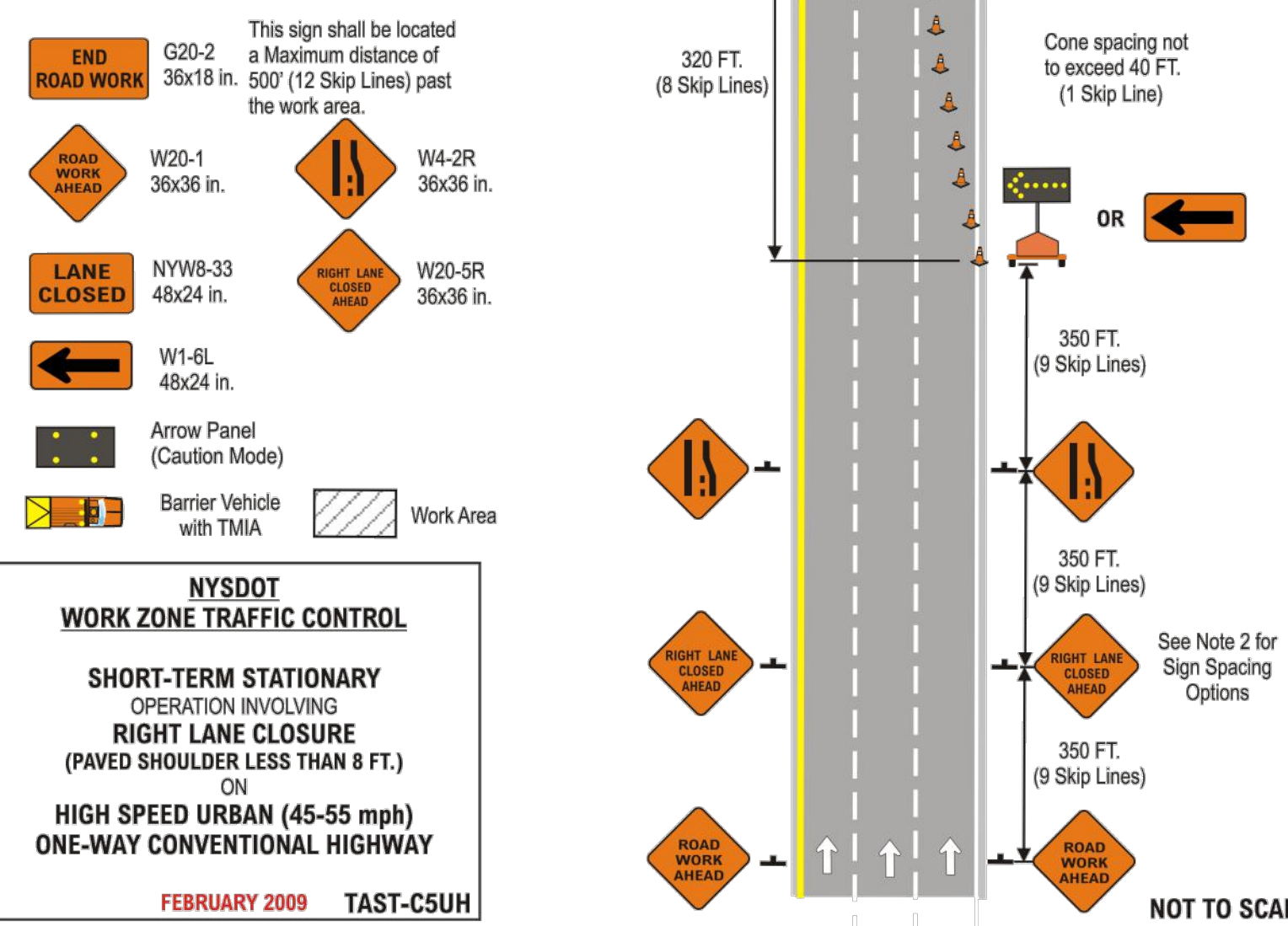
TAX ACCT. NO. 193.020-001-056  
N/F KEITH WOODWARD & ELIZABETH WOODWARD

**FIRE TRUCK TURNING ANALYSIS**

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

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)

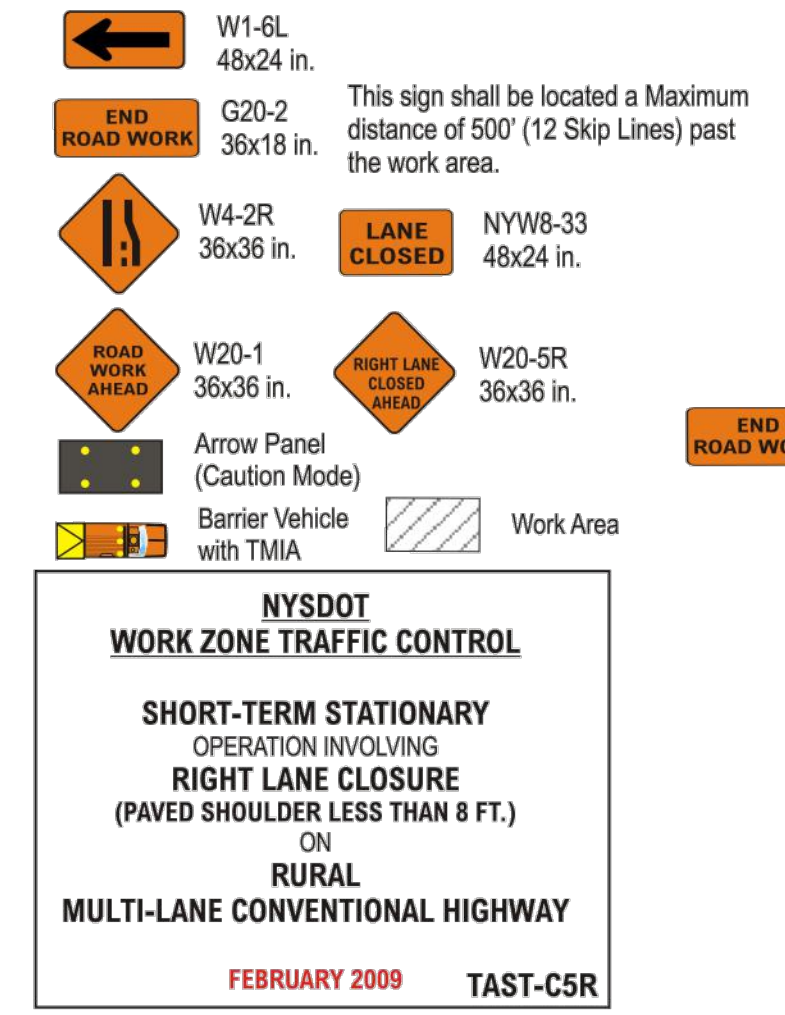


**NYSDOT WORK ZONE TRAFFIC CONTROL**  
SHORT-TERM STATIONARY OPERATION INVOLVING RIGHT LANE CLOSURE (PAVED SHOULDER LESS THAN 8 FT.) ON HIGH SPEED URBAN (45-55 mph) ONE-WAY CONVENTIONAL HIGHWAY  
FEBRUARY 2009 TAST-C5UH

**RURAL HIGHWAY**

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'

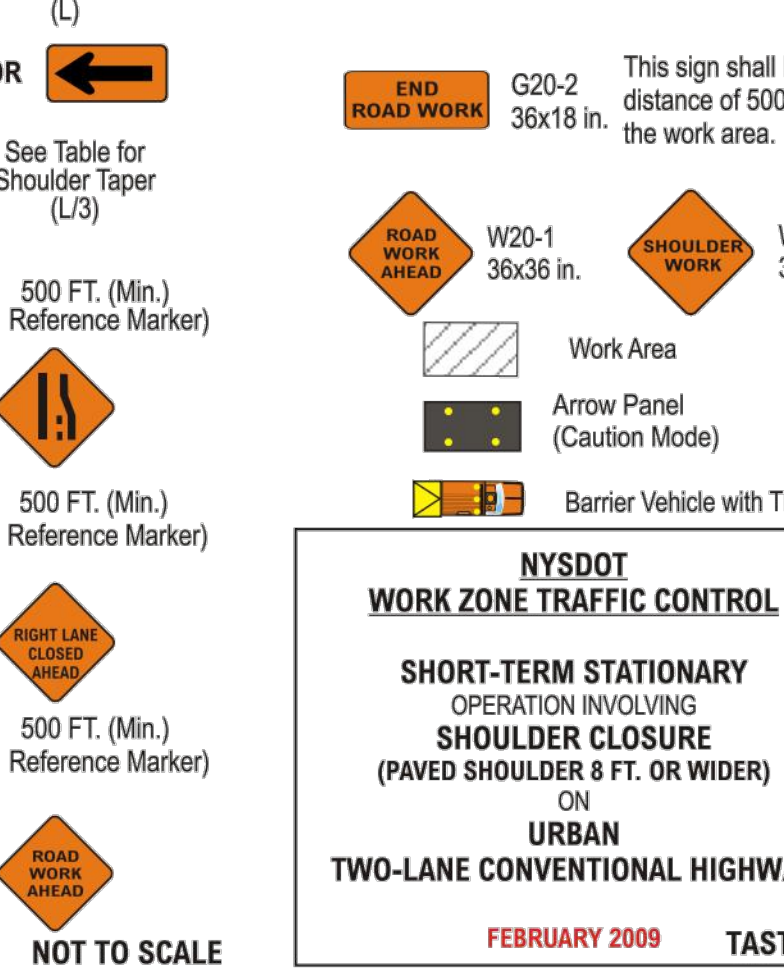


**NYSDOT WORK ZONE TRAFFIC CONTROL**  
SHORT-TERM STATIONARY OPERATION INVOLVING RIGHT LANE CLOSURE (PAVED SHOULDER LESS THAN 8 FT.) ON RURAL MULTI-LANE CONVENTIONAL HIGHWAY  
FEBRUARY 2009 TAST-C5R

**URBAN HIGHWAY**

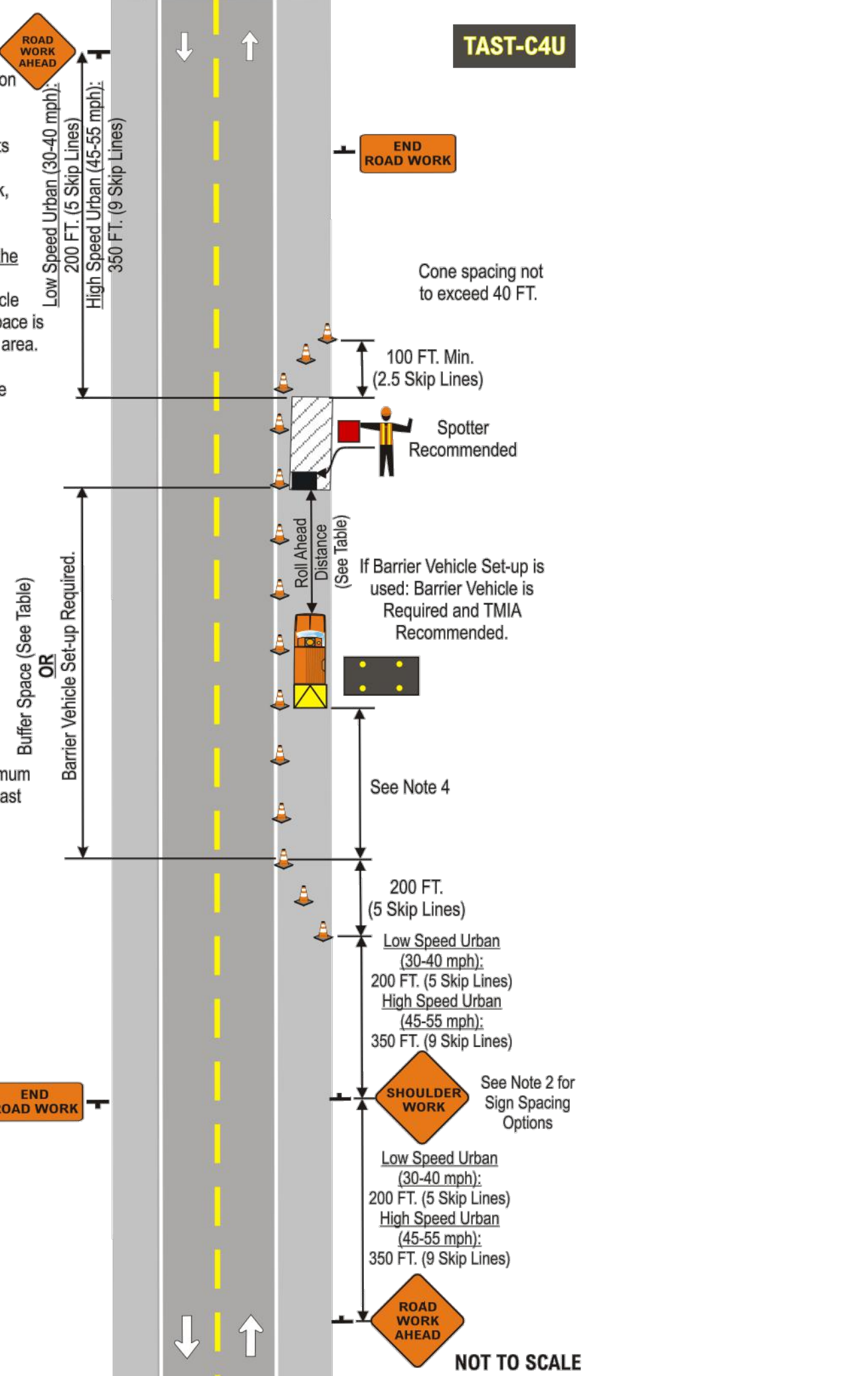
1. Short-term stationary is daytime work that occupies a location for more than 1 hour within a single daylight period.
2. In urban conditions, advance warning sign spacing may be reduced (100 FT. Min.) in order to accommodate side streets and driveways.
3. The barrier vehicle shall be an unoccupied 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

**TAST-C4U**



**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



CLIENT: Christa Construction  
600 East Avenue  
Rochester, NY 14607



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Rochester, NY 14607

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600 East Avenue  
Rochester, NY 14607

**PASSERO ASSOCIATES**

242 West Main Street Suite 100  
Rochester, New York 14614  
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 208

Scale: NTS  
Date: APRIL 2024

NOT FOR CONSTRUCTION



20182555.0005

# 1251 PITTSFORD VICTOR ROAD

PERINTON, NY

PREPARED FOR:  
Christa Development  
64 Commercial Street  
Rochester, NY 14614



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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 111-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: ±2.96 ACRES OR 128,956 (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%	67%
<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	111 SPACES
STALL DIMENSIONS	9' X 18'	9' X 18'
DRIVE AISLE WIDTH	24'	24'
NOTES:		

\*VARIANCES GRANTED BY TOWN OF PERINTON ZONING BOARD ON 03/25/24

- |  | NO | YES              |
|--|----|------------------|
| 8. STATE REGULATED WETLANDS (NYSDEC ERM):  | X  |                  |
| 9. FEDERALLY REGULATED WETLANDS (USFWS NWI):   | X  |                  |
| 10. FLOOD PLAIN (FEMA NFHL):<br>FIRM PANEL: 36055C0387G<br>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%
<b>Totals for Area of Interest</b>			<b>5.1</b>	<b>100.0%</b>

#### 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 10<sup>th</sup> 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 western 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 within easement. 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
<b>Total:</b>			<b>12760 gpd</b>	<b>(8.86 gpm)</b>
Peak Flow (Peak Factor of 4):				<b>35.44 gpm</b>

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	$Q = A(1.49/n)(A/P)^{(2/3)}S^{0.5}$ $Q=0.35(1.49/0.011)(0.35/2.09)^{(2/3)*.0059^{(0.5)}}$ $Q= 1.11 \text{ ft}^3/\text{s} = 497 \text{ gpm}$	<b>35.44 gpm peak flow</b>

A=Flow Area (sf) n=Manning's Roughness Coefficient (unitless) P=wetted perimeter (ft) (for maximum flow this equals the pipe circumference = 2πR) 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 an 8" line from the building to the ROW. Once in the ROW, the waterline will be bored under Pittsford Victor Road to a 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= $\pm 583$  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:				<b>174 gpm</b>
Lowest Pressure (35 psi minimum):				<b>50</b>
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:				<b>1500 gpm</b>
Lowest pressure (20 psi minimum):				<b>40 psi</b>

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	0.48	55.56%

Water Quality		
	Required	Provided
Water Quality Volume (WQv) (acre-ft)	0.139	0.139
Minimum Allowable Runoff Reduction Volume (RRv) (acre-ft)	0.074	0.139
Channel Protection Volume (CPv) (acre-ft)	0.010	0.100
Qp (cfs)	0.02	0.010
Qf (cfs)	1.080	0.480

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	111 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 16' tall will be installed along the private roadways and parking lot. The fixtures will be dark sky compliant and use backside shields 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



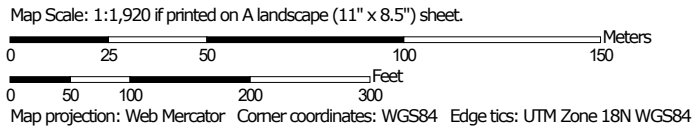
## APPENDIX B: SOILS MAP



Hydrologic Soil Group—Monroe County, New York




Soil Map may not be valid at this scale.



## 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%
<b>Totals for Area of Interest</b>			<b>5.1</b>	<b>100.0%</b>

## 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

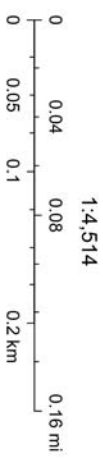


# Environmental Resource Mapper



January 31, 2024

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



New York State, Maxar





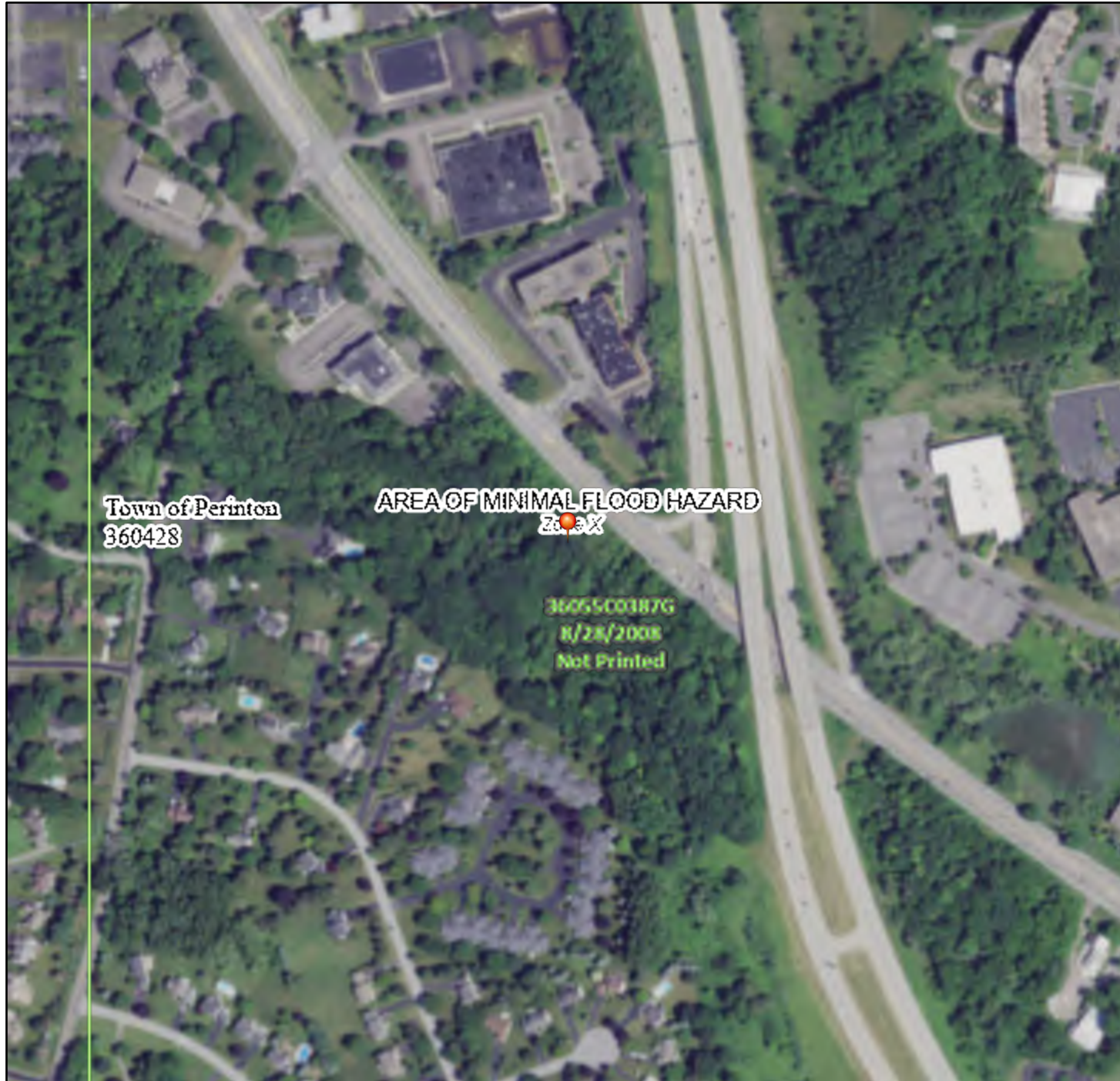
## APPENDIX D: WETLANDSFEMA MAP



# National Flood Hazard Layer FIRMMette



77°28'10"W 43°2'46"N



## Legend

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

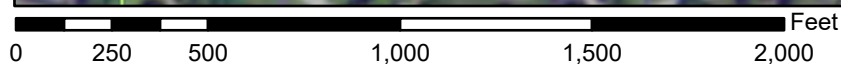
SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>
		With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage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

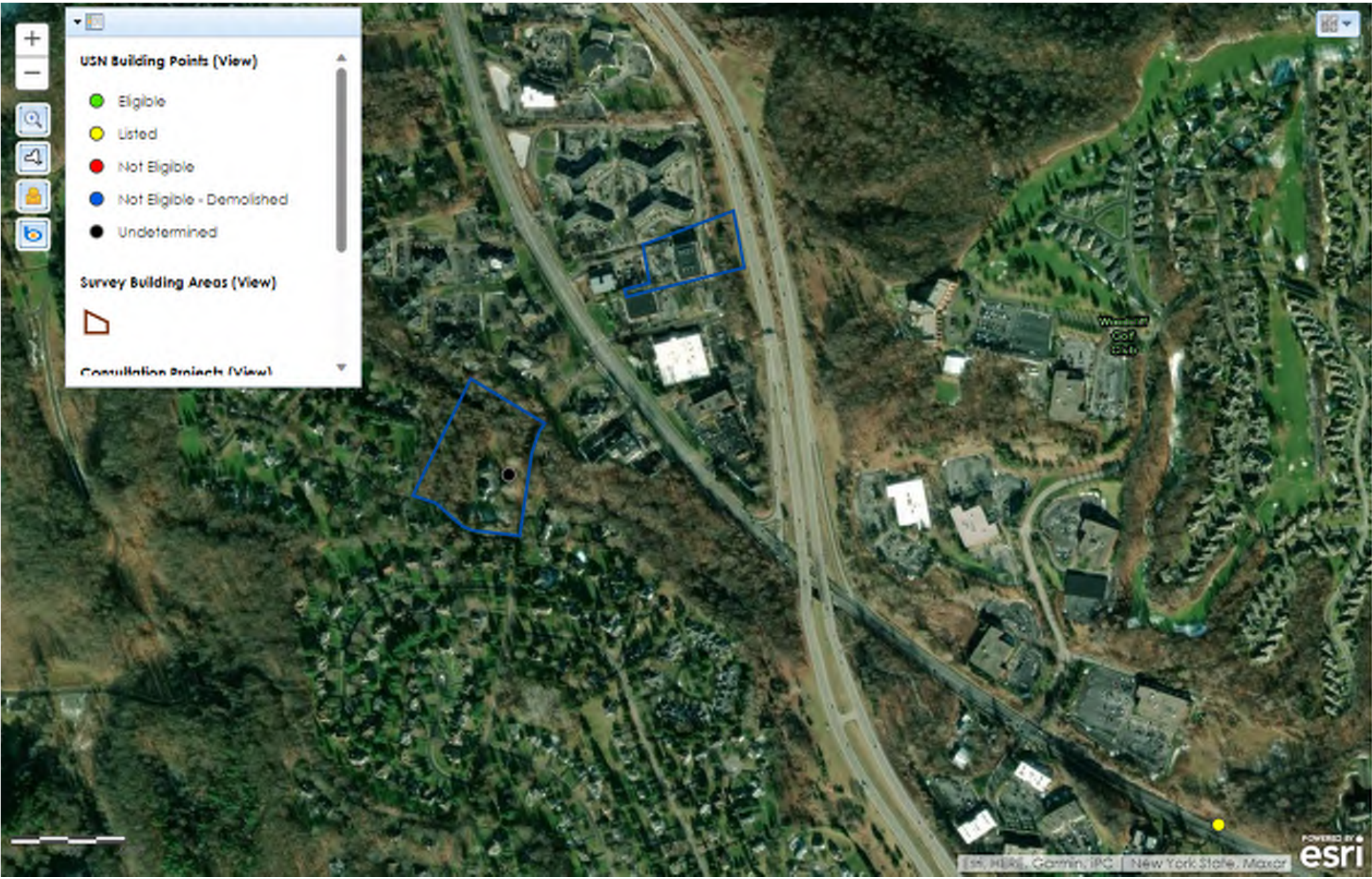


1:6,000

77°27'33"W 43°2'20"N

## APPENDIX E: ARCHEOLOGICAL SENSITIVE AREA

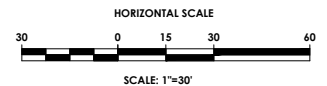
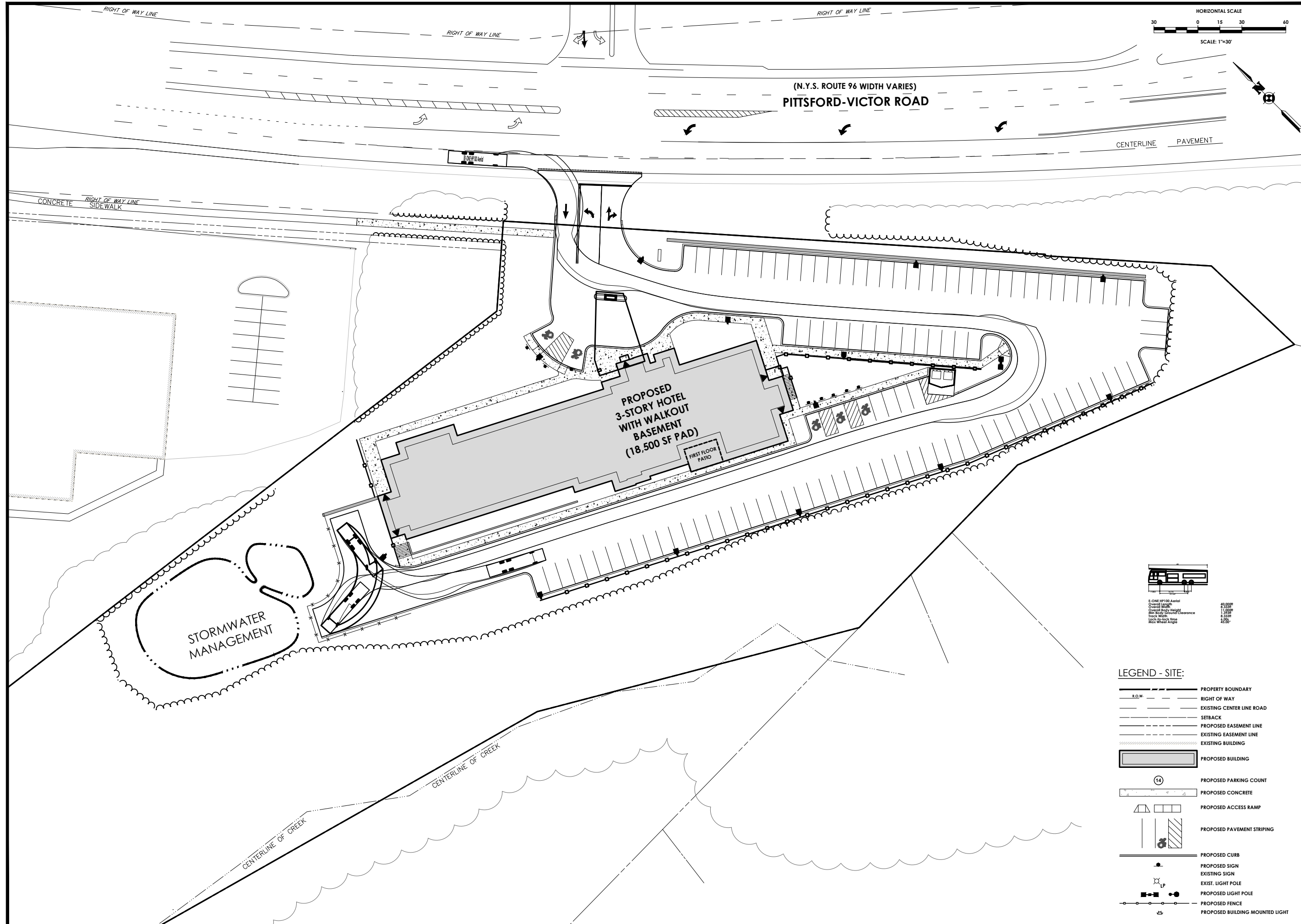




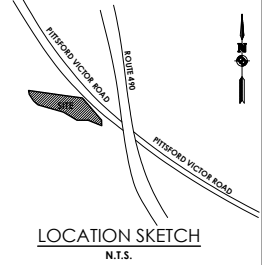
## APPENDIX F: FIRE TRUCK TURNING ANALYSIS



Y:\PROJECTS-NEW\2018\20182555\20182555.0005\01\_CAD-BIM-MODELS\CIVIL\20182555.0005\FIRE TRUCK TURN.DWG 4/12/2024 4:17 AM James Ritzenhaller

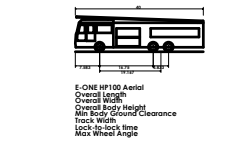


ARTICLE 147 SECTION 7307, THESE PLANS ARE COPYRIGHT PROTECTED



Client:  
Christa Construction  
600 East Avenue  
Rochester, NY 14607

**PASSERO ASSOCIATES**  
342 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 Ritzenhaller E.I.T.



**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

Revisions			
No.	Date	By	Description
1			

**FIRE TRUCK VEHICLE TRACKING PLAN**

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

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

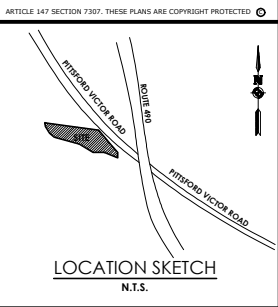
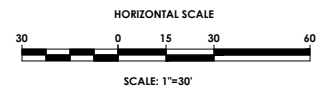
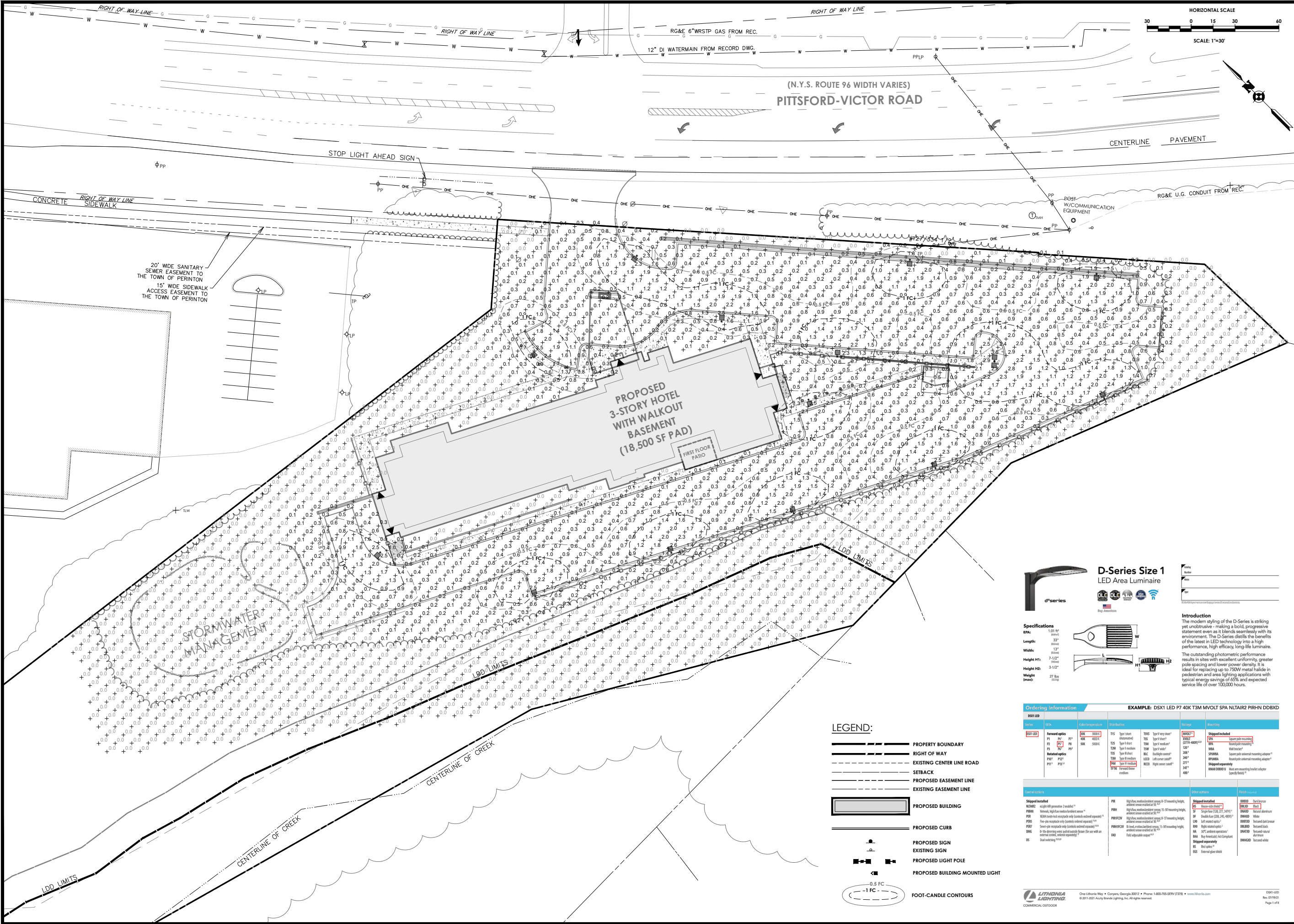
Drawing No.  
**C 108**

Scale:  
**1" = 30'**

Date  
**APRIL 2024**

NOT FOR CONSTRUCTION

## APPENDIX G: SITE LIGHTING



Client:  
Christa Construction  
600 East Avenue  
Rochester, NY 14607

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



**D-Series Size 1 LED Area Luminaire**

**Specifications**  
EPA: 1.01 ft  
Length: 33"  
Width: 13"  
Height H1: 7.12"  
Height H2: 3.12"  
Weight: 27 lbs  
Weight (max): 27 lbs

**Introduction**  
The modern styling of the D-Series is striking yet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment. The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing up to 750W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

**LEGEND:**

- PROPERTY BOUNDARY
- RIGHT OF WAY
- EXISTING CENTER LINE ROAD
- SETBACK
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED CURB
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED LIGHT POLE
- PROPOSED BUILDING MOUNTED LIGHT
- FOOT-CANDLE CONTOURS (0.5 FC, -1 FC)

**Ordering Information** EXAMPLE: DSX1 LED P7 40K T3M MWOLT SPA NLAIR2 PRH9 DBB/D

DSX1 LED	Type	Optic	Color temperature	Ballast type	THS	THS Type	THS Voltage	THS Rating
DSX1 LED	P7	P7	40K	T3M	MWOLT	SPA	NLAIR2	PRH9

**Shipped separately**

DSX1 LED	Type	Optic	Color temperature	Ballast type	THS	THS Type	THS Voltage	THS Rating
DSX1 LED	P7	P7	40K	T3M	MWOLT	SPA	NLAIR2	PRH9

**Revisions**

No.	Date	By	Description
1			

**LIGHTING PLAN**

1251 PITTSFORD-VICTOR ROAD  
FAIRFIELD INN HOTEL

Municipality: PERINTON  
County: MONROE State: NEW YORK

Project No. 20182555.0005

Drawing No. C 107

Scale: 1" = 30'

Date: APRIL 2024

## APPENDIX H: WATERCAD ANALYSIS



## Modified Flow Data

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

<b>Flow Nozzle</b>	2.5	
<b><u>Flow Hydrant</u></b>	#848	
<b>Static</b>	64	psi
<b>Pitot</b>	51	psi
<b>Style</b>	A	1.00
<b><u>Residual Hydrant</u></b>	#849	
<b>Static</b>	64	psi
<b>Residual</b>	59	psi

**Corrected**

<b>Static</b>	64
<b>Residual</b>	59

**Calculations**

<b>Q Observed</b>	1205	gpm
<b>Q @ 20 psi</b>	3900	gpm

**System Status**

<b>Zone</b>	750
<b>Hydraulic Grade</b>	730'
<b>Ele @ Flow Hyd</b>	583'
<b>Main Size</b>	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)



*April 12, 2024*

*20182555.0005*

# 1251 PITTSFORD VICTOR ROAD

PERINTON, NY

PREPARED FOR:  
Christa Construction  
600 East Avenue  
Rochester, NY 14607

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April 12, 2024

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- APPENDIX D: ENVIRONMENTAL RESOURCE MAPPER
- APPENDIX E: WETLAND MAPPING
- APPENDIX F: SOILS MAP
- APPENDIX G: FEMA MAPPING
- APPENDIX H: ARCHEOLOGICAL SENSITIVE AREAS MAP
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April 12, 2024

## 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 ≈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	0.48	55.56%
Water Quality			
	Required	Provided	
Water Quality Volume (WQv) (acre-ft)	0.139	0.139	
Minimum Allowable Runoff Reduction Volume (RRv) (acre-ft)	0.074	0.139	
Channel Protection Volume (CPv) (acre-ft)	0.010	0.100	
Qp (cfs)	0.02	0.010	
Qf (cfs)	1.080	0.480	

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



April 12, 2024

## 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.

*April 12, 2024*

## 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%.

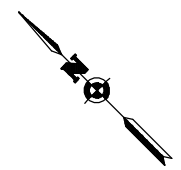
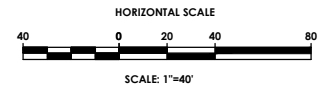
Stormwater generally drains to the west across the entire site, flowing down steep slopes and moderate swales of grades 1.5 – 50%. There is an existing swale that collects stormwater from the existing sloped areas of the property along the right of way, and directs it to the northwest towards the creek.

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

Y:\PROJECTS-NEW\2018\20182555\20182555-0005-DRAINAGE MAP.DWG 4/12/2024 4:00 AM James Ritzenthaler

April 12, 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.



*April 12, 2024*

## 4.0 DEVELOPED SITE CONDITIONS

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

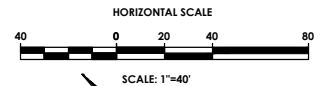
### 4.1 Proposed Drainage Area 1:

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 2.81 acres, with 1.70 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, 2.27 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

Y:\PROJECTS-NEW\2018\20182555\20182555-0005-DRAINAGE MAP.DWG 4/12/2024 4:00 AM James Ribaudo

## 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: Infiltration Basin

The infiltration basin located in the northwestern portion of 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 makes 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)	0.139	0.139
Min RRv Total (acre-ft)	0.074	0.139
CPv Total (acre-ft)	0.010	0.100
Qp Total (cfs)	0.02	0.010
Qf Total (cfs)	1.080	0.480

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	EXISTING	0.00	0.02	1.08
Irondequoit Creek Tributary	PROPOSED	0.00	0.01	0.48
<b>PERCENT REDUCTION</b>		<b>100.00%</b>	<b>50.00%</b>	<b>55.56%</b>

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.



*April 12, 2024*

## 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.

April 12, 2024

- 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.

*April 12, 2024*

## 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><b>The order of activities will be as follows:</b></p> <ol style="list-style-type: none"> <li><b>1. Install silt fences, stabilized construction entrance and other erosion control measures.</b></li> <li><b>2. Protect vegetation to remain.</b></li> <li><b>3. Construct temporary sediment basins including grading, and stabilization.</b></li> <li><b>4. Construct stormwater management area. Strip and stockpile topsoil as necessary</b></li> <li><b>5. Conduct mass earth moving activities.</b></li> <li><b>6. Install utilities including storm sewers.</b></li> <li><b>7. Box out road ways.</b></li> <li><b>8. Install road subbase and continue monitoring of erosion control.</b></li> <li><b>9. Stabilize disturbed areas and stockpiles within 7 days of last construction activity in all areas.</b></li> <li><b>10. Final grading, seeding, and mulching of all disturbed areas.</b></li> <li><b>11. Install Infiltration Basin Medium.</b></li> <li><b>12. When all work areas are complete and the entire areas are stabilized, remove the erosion control measures.</b></li> </ol>			
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:

- 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

These are the inspection and maintenance practices that will be used to maintain erosion and sediment controls:

- 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

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:

- 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:

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.

#### Fertilizers:

Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. The contents of any partially used bags of fertilizer will be transferred to resealable plastic bags to avoid spills.

#### Paints:

All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system, but will be properly disposed of according to manufacturers' instructions or state and local regulations.

#### Concrete Trucks:

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

### Spill Control Practices

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:

- 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.



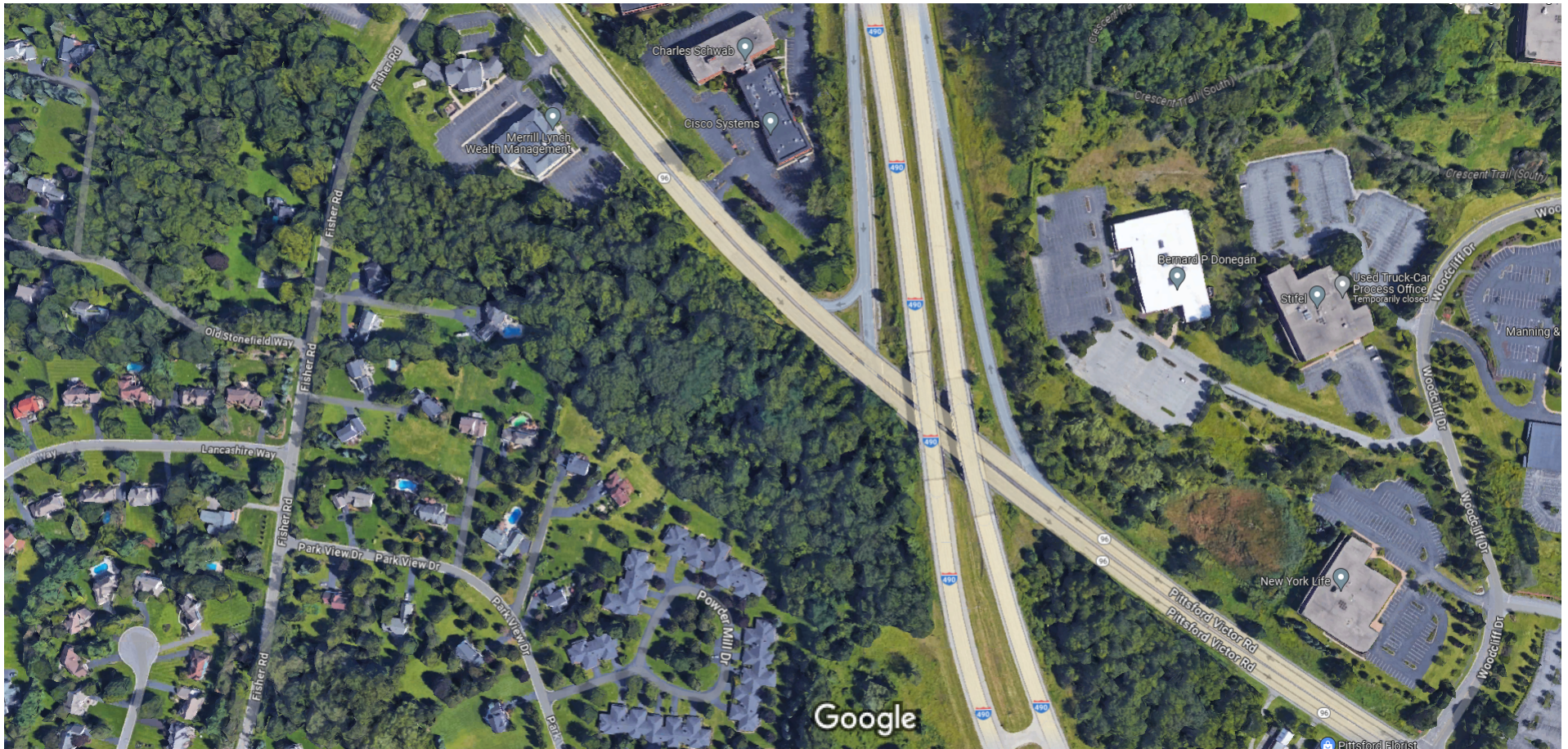
Signature	For	Responsible for
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## APPENDIX B: AERIAL PHOTOGRAPH



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

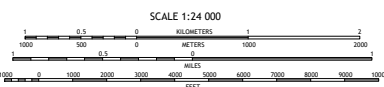




**Produced by the United States Geological Survey**

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  
generalized for this map scale. Private lands within government  
reservations may not be shown. Obtain permission before  
entering private lands.

Inventory.....U.S. National Wetlands Inventory 1985 - 1995  
Wetlands.....FWS National Wetlands Inventory 1985 - 1995



1	2	3
4	5	6
7	8	9

ADJOINING QUADRANGLES

**ROAD CLASSIFICATION**

Expressway	Local Connector	State Route
Secondary Hwy	Local Road	
Ramp	RD	
Interstate Route	US Route	

CONTOUR INTERVAL: 5 FEET  
NORTH AMERICAN VERTICAL DATUM OF 1988  
This map was produced to conform with the  
National Geospatial Program US Topo Product Standard.





## APPENDIX D: ENVIRONMENTAL RESOURCE MAPPER

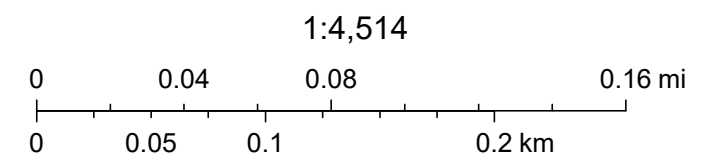


# Environmental Resource Mapper



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 ⓘ   |   |



New York State, Maxar











## APPENDIX E: WETLAND MAPPING





February 16, 2024

**Wetlands**

- |  |   |  |
|--|---|--|
|  Estuarine and Marine Deepwater |  Freshwater Emergent Wetland       |  Lake     |
|  Estuarine and Marine Wetland   |  Freshwater Forested/Shrub Wetland |  Other    |
|  |  Freshwater Pond                   |  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](mailto: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 Fisheries<sup>1</sup>, 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: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	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](mailto: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**

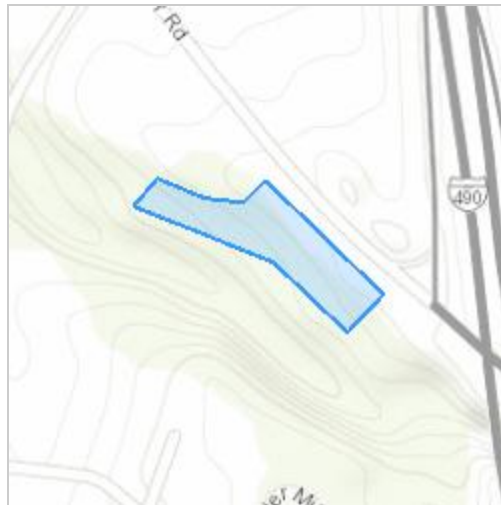
1251 Pittsford Victor Road

**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**

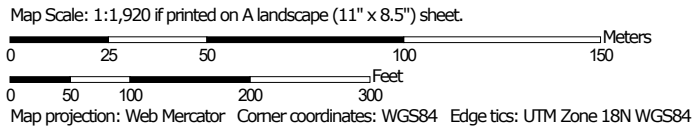
Agency: Private Entity  
Name: JAMES RITZENTHALER  
Address: 242 W. Main Street Suite 100  
City: Rochester  
State: NY  
Zip: 14614  
Email: jritzenthaler@passero.com  
Phone: 5853251000

## APPENDIX F: SOILS MAP

Hydrologic Soil Group—Monroe County, New York




Soil Map may not be valid at this scale.





## 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%
<b>Totals for Area of Interest</b>			<b>5.1</b>	<b>100.0%</b>

## 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

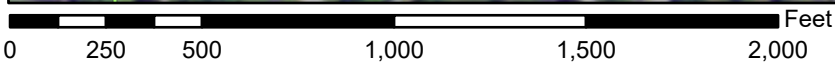
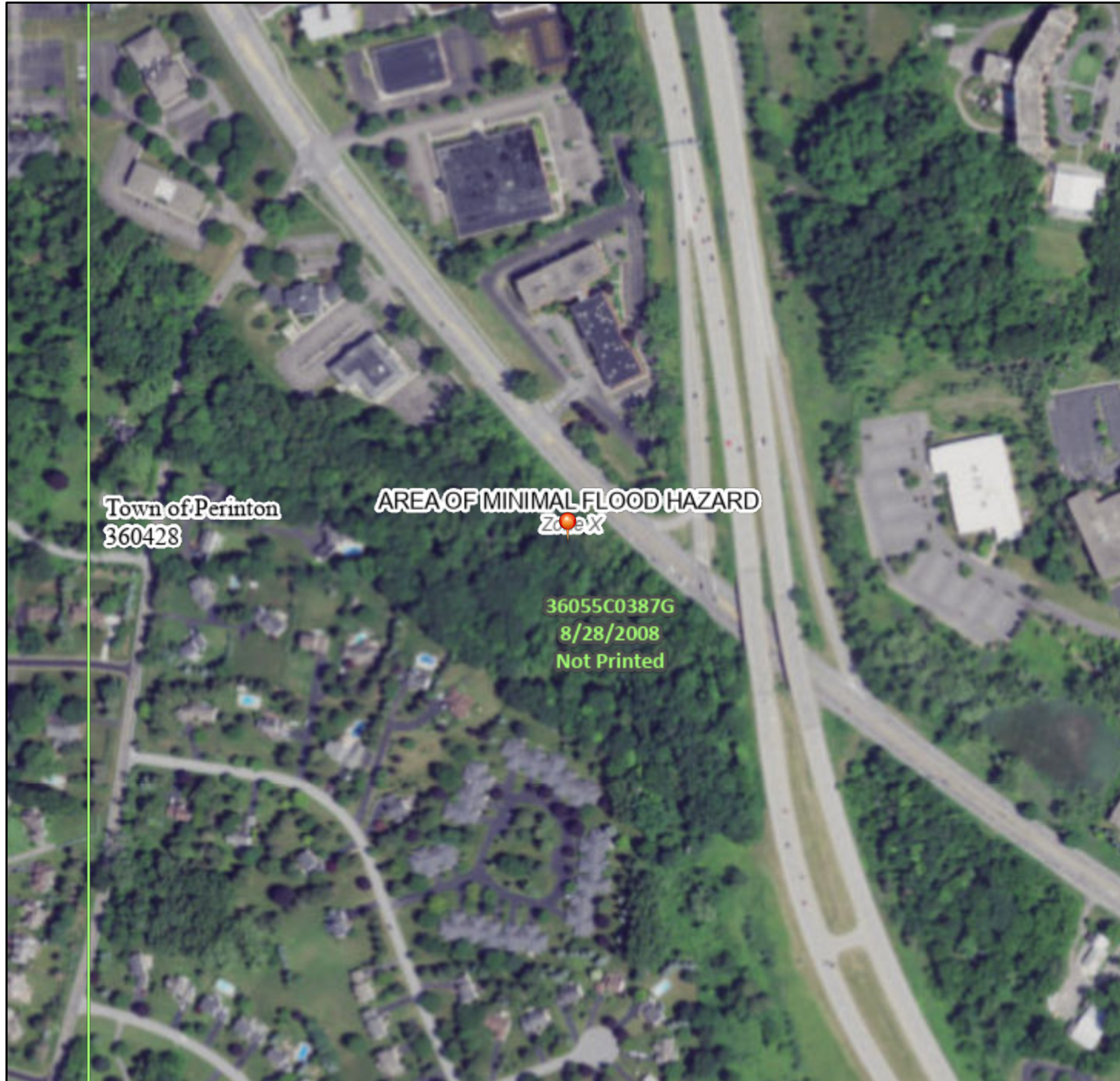


## APPENDIX G: FEMA MAPPING

# 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
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
		Levee, Dike, or Floodwall
OTHER FEATURES		20.2 Cross Sections with 1% Annual Chance Water Surface Elevation
		17.5 Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
MAP PANELS		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		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 **2/16/2024 at 1:19 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 H: ARCHEOLOGICAL SENSITIVE AREAS MAP



**USN Building Points (View)**

- Eligible
- Listed
- Not Eligible
- Not Eligible - Demolished
- Undetermined

**National Register Building Sites (View)**

**National Register Building Sites (View)**

**Survey Building Areas (View)**

**Survey Archaeology Areas (View)**

**Consultation Projects (View)**

0 150 300ft

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

### Lower Confidence Limits

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

### Upper Confidence Limits

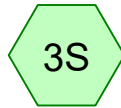
	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
<b>1yr</b>	0.27	0.42	0.51	0.69	0.85	0.97	<b>1yr</b>	0.73	0.95	1.09	1.34	1.68	2.02	2.24	<b>1yr</b>	1.79	2.15	2.59	3.06	3.51	<b>1yr</b>
<b>2yr</b>	0.32	0.49	0.60	0.82	1.01	1.14	<b>2yr</b>	0.87	1.12	1.25	1.52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







EX-1



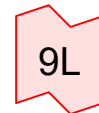
PR-1



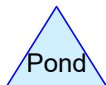
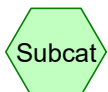
PR-2



INFILTRATION BASIN



TOTAL PR



**Routing Diagram for Fairfield**

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# Fairfield

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## Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (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

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## Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.103	39	>75% Grass cover, Good, HSG A (3S)
1.705	98	Paved parking, HSG A (3S)
7.349	45	Woods, Poor, HSG A (1, 4S)
<b>10.157</b>	<b>53</b>	<b>TOTAL AREA</b>



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## Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
10.157	HSG A	1, 3S, 4S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.000	Other	
<b>10.157</b>		<b>TOTAL AREA</b>

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## Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
1.103	0.000	0.000	0.000	0.000	1.103	>75% Grass cover, Good	3S
1.705	0.000	0.000	0.000	0.000	1.705	Paved parking	3S
7.349	0.000	0.000	0.000	0.000	7.349	Woods, Poor	1, 4S
<b>10.157</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>0.000</b>	<b>10.157</b>	<b>TOTAL AREA</b>	

# Fairfield

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## Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	3S	0.00	0.00	135.0	0.0332	0.009	0.0	15.0	8.0	
2	3S	0.00	0.00	211.0	0.0256	0.009	0.0	18.0	9.0	
3	3S	0.00	0.00	151.0	0.0139	0.009	0.0	18.0	9.0	
4	3S	0.00	0.00	30.0	0.0025	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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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=2.808 ac 60.72% Impervious Runoff Depth>0.27"  
Flow Length=658' Tc=6.0 min CN=75 Runoff=1.34 cfs 0.064 af

**Subcatchment4S: PR-2**

Runoff Area=2.269 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=549.32' Storage=479 cf Inflow=1.34 cfs 0.064 af  
Discarded=0.43 cfs 0.064 af Primary=0.00 cfs 0.000 af Outflow=0.43 cfs 0.064 af

**Link 9L: TOTAL PR**

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

**Total Runoff Area = 10.157 ac Runoff Volume = 0.064 af Average Runoff Depth = 0.08"**  
**83.21% Pervious = 8.452 ac 16.79% Impervious = 1.705 ac**

**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"

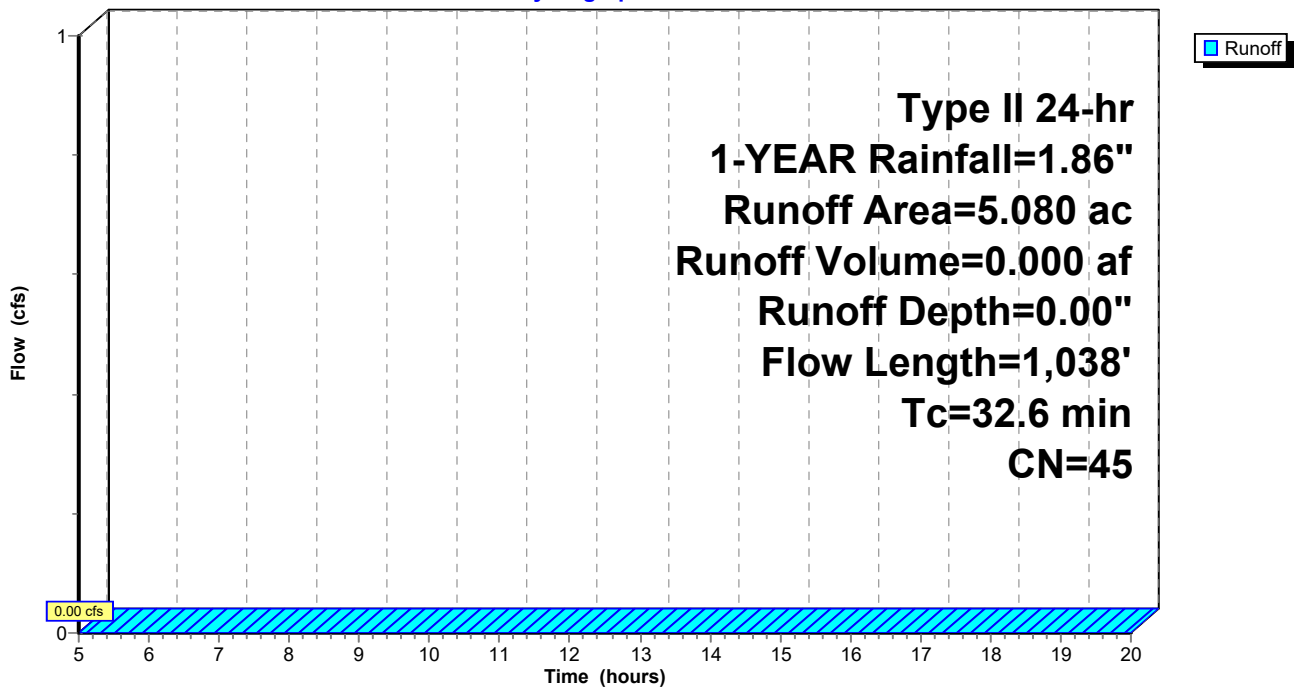
Area (ac)	CN	Description
5.080	45	Woods, Poor, HSG A
5.080		100.00% Pervious Area

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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.5	215	0.0410	1.01		<b>Shallow Concentrated Flow, SHF 1</b> Woodland Kv= 5.0 fps
6.7	410	0.0410	1.01		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.9	313	0.0450	1.06		<b>Shallow Concentrated Flow, SCF 3</b> Woodland Kv= 5.0 fps
32.6	1,038	Total			

**Subcatchment 1: EX-1**

Hydrograph



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

Runoff = 1.34 cfs @ 11.99 hrs, Volume= 0.064 af, Depth> 0.27"  
 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"

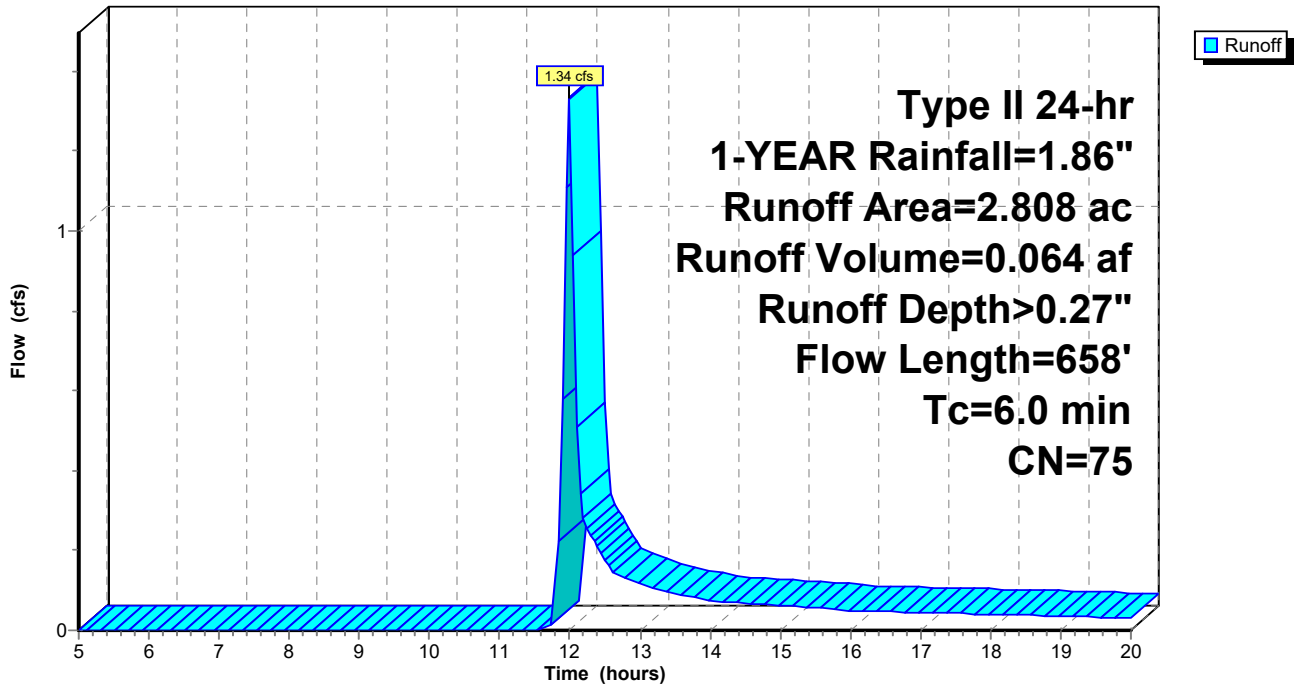
Area (ac)	CN	Description
1.705	98	Paved parking, HSG A
1.103	39	>75% Grass cover, Good, HSG A
2.808	75	Weighted Average
1.103		39.28% Pervious Area
1.705		60.72% Impervious Area

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> Smooth surfaces n= 0.011 P2= 2.17"
0.1	31	0.0500	4.54		<b>Shallow Concentrated Flow, SCF PAVEMENT</b> Paved Kv= 20.3 fps
0.2	135	0.0332	9.58	5.38	<b>Pipe Channel, PIPE</b> 15.0" Round w/ 8.0" inside fill Area= 0.6 sf Perim= 3.1' r= 0.18' n= 0.009 PVC, smooth interior
0.4	211	0.0256	9.89	8.74	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.3	151	0.0139	7.29	6.44	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.2	30	0.0025	3.09	2.73	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
2.2	658	Total, Increased to minimum Tc = 6.0 min			



Subcatchment 3S: PR-1

Hydrograph



**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"

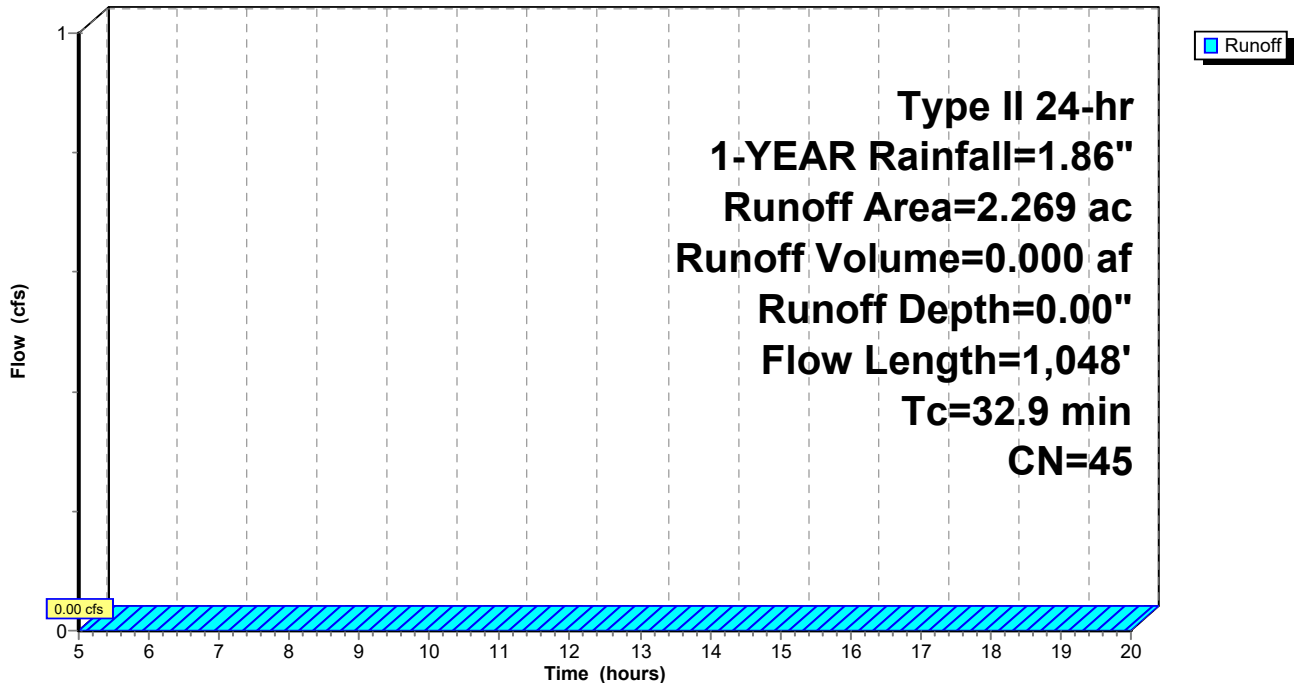
Area (ac)	CN	Description
2.269	45	Woods, Poor, HSG A
2.269		100.00% Pervious Area

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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.7	225	0.0400	1.00		<b>Shallow Concentrated Flow, SCF 1</b> Woodland Kv= 5.0 fps
7.2	447	0.0430	1.04		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.4	276	0.0440	1.05		<b>Shallow Concentrated Flow, SCF3</b> Woodland Kv= 5.0 fps
32.9	1,048	Total			

**Subcatchment 4S: PR-2**

Hydrograph



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

Inflow Area = 2.808 ac, 60.72% Impervious, Inflow Depth > 0.27" for 1-YEAR event  
 Inflow = 1.34 cfs @ 11.99 hrs, Volume= 0.064 af  
 Outflow = 0.43 cfs @ 12.12 hrs, Volume= 0.064 af, Atten= 67%, Lag= 7.8 min  
 Discarded = 0.43 cfs @ 12.12 hrs, Volume= 0.064 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= 549.32' @ 12.12 hrs Surf.Area= 3,687 sf Storage= 479 cf

Plug-Flow detention time= 7.3 min calculated for 0.064 af (100% of inflow)  
 Center-of-Mass det. time= 6.4 min ( 843.7 - 837.3 )

Volume	Invert	Avail.Storage	Storage Description			
#1	549.00'	28,478 cf	<b>Custom Stage Data (Conic)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (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	

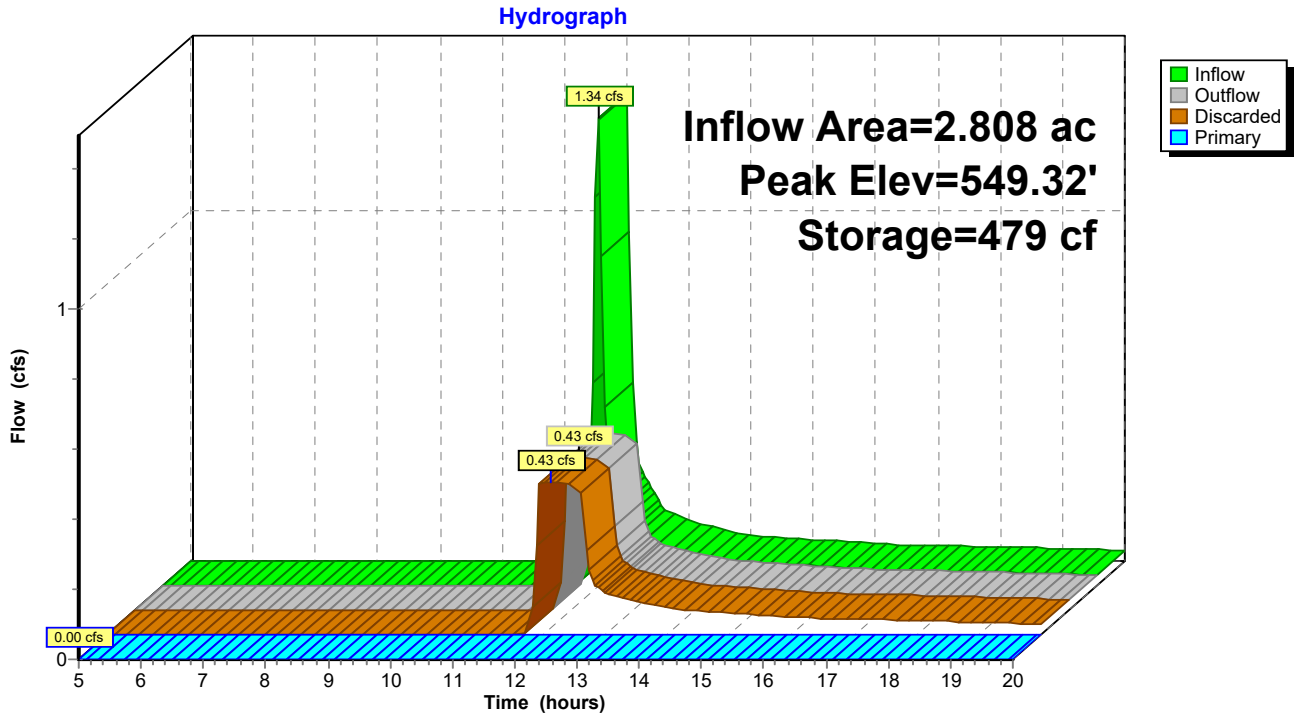
Device	Routing	Invert	Outlet Devices
#1	Primary	554.50'	<b>15.0' long + 1.0 ' SideZ x 14.0' breadth RIP RAP WEIR</b> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.64 2.67 2.70 2.65 2.64 2.65 2.65 2.63
#2	Primary	552.00'	<b>12.0" Round OUTLET STRUCTURE PIPE w/ 6.0" inside fill</b> L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 '/' Cc= 0.900 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 Limited to weir flow at low heads
#4	Discarded	549.00'	<b>5.000 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 530.00'

**Discarded OutFlow** Max=0.43 cfs @ 12.12 hrs HW=549.32' (Free Discharge)  
 ↑4=Exfiltration ( Controls 0.43 cfs)

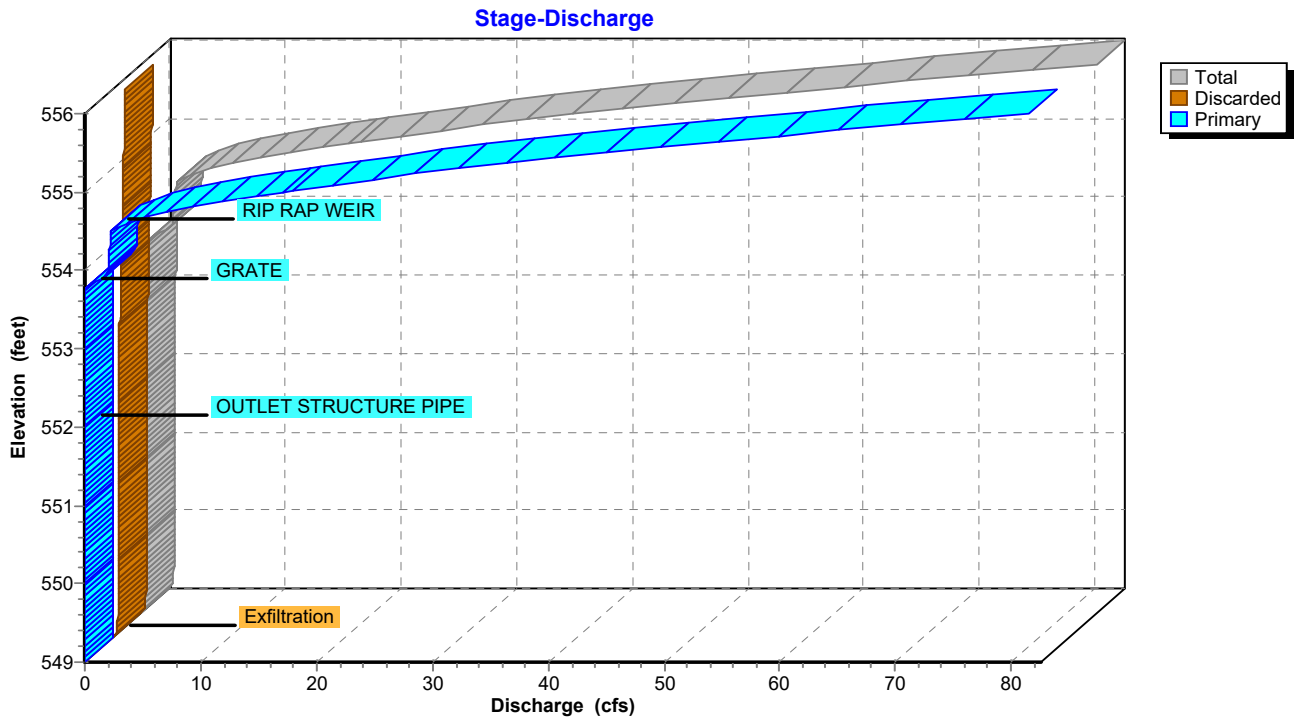
**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=549.00' (Free Discharge)  
 ↑1=RIP RAP WEIR ( Controls 0.00 cfs)  
 ↑2=OUTLET STRUCTURE PIPE ( Controls 0.00 cfs)  
 ↑3=GRATE ( Controls 0.00 cfs)



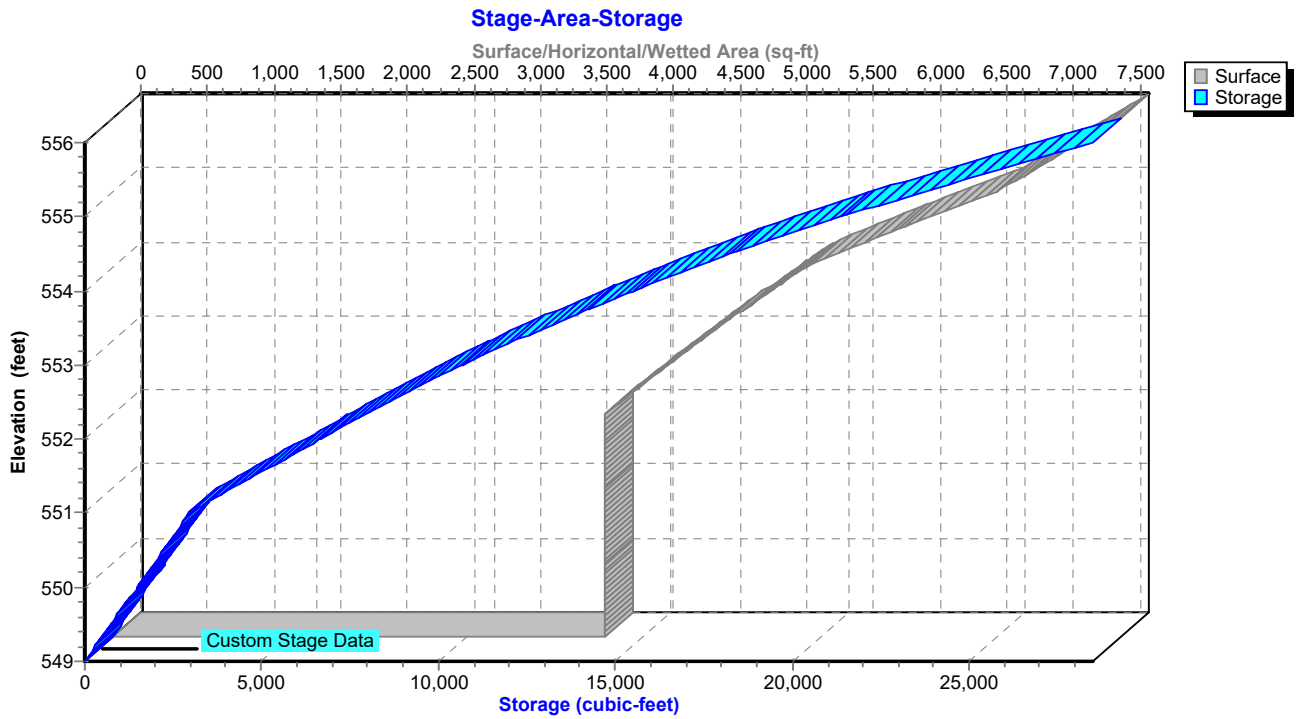
### Pond 5P: INFILTRATION BASIN



### Pond 5P: INFILTRATION BASIN



### Pond 5P: INFILTRATION BASIN



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

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
549.00	0.00	0.00	0.00	554.20	2.86	0.76	2.10
549.10	0.43	0.43	0.00	554.30	2.93	0.78	2.16
549.20	0.43	0.43	0.00	554.40	3.00	0.80	2.21
549.30	0.43	0.43	0.00	554.50	3.07	0.82	2.26
549.40	0.44	0.44	0.00	554.60	4.40	0.84	3.56
549.50	0.44	0.44	0.00	554.70	6.79	0.86	5.93
549.60	0.44	0.44	0.00	554.80	9.93	0.88	9.05
549.70	0.44	0.44	0.00	554.90	13.69	0.90	12.79
549.80	0.44	0.44	0.00	555.00	18.03	0.92	17.11
549.90	0.45	0.45	0.00	555.10	22.90	0.93	21.96
550.00	0.45	0.45	0.00	555.20	27.91	0.95	26.96
550.10	0.45	0.45	0.00	555.30	33.24	0.96	32.28
550.20	0.45	0.45	0.00	555.40	39.14	0.98	38.17
550.30	0.46	0.46	0.00	555.50	45.41	0.99	44.42
550.40	0.46	0.46	0.00	555.60	52.21	1.01	51.21
550.50	0.46	0.46	0.00	555.70	59.41	1.02	58.38
550.60	0.46	0.46	0.00	555.80	66.87	1.04	65.83
550.70	0.46	0.46	0.00	555.90	74.68	1.05	73.63
550.80	0.47	0.47	0.00	556.00	<b>82.54</b>	<b>1.07</b>	<b>81.47</b>
550.90	0.47	0.47	0.00				
551.00	0.47	0.47	0.00				
551.10	0.47	0.47	0.00				
551.20	0.48	0.48	0.00				
551.30	0.48	0.48	0.00				
551.40	0.48	0.48	0.00				
551.50	0.48	0.48	0.00				
551.60	0.49	0.49	0.00				
551.70	0.49	0.49	0.00				
551.80	0.49	0.49	0.00				
551.90	0.49	0.49	0.00				
552.00	0.49	0.49	0.00				
552.10	0.50	0.50	0.00				
552.20	0.51	0.51	0.00				
552.30	0.53	0.53	0.00				
552.40	0.54	0.54	0.00				
552.50	0.55	0.55	0.00				
552.60	0.56	0.56	0.00				
552.70	0.57	0.57	0.00				
552.80	0.58	0.58	0.00				
552.90	0.59	0.59	0.00				
553.00	0.60	0.60	0.00				
553.10	0.61	0.61	0.00				
553.20	0.63	0.63	0.00				
553.30	0.64	0.64	0.00				
553.40	0.65	0.65	0.00				
553.50	0.66	0.66	0.00				
553.60	0.67	0.67	0.00				
553.70	0.68	0.68	0.00				
553.80	0.99	0.70	0.29				
553.90	2.23	0.71	1.52				
554.00	2.72	0.72	1.99				
554.10	2.79	0.74	2.05				



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

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (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			

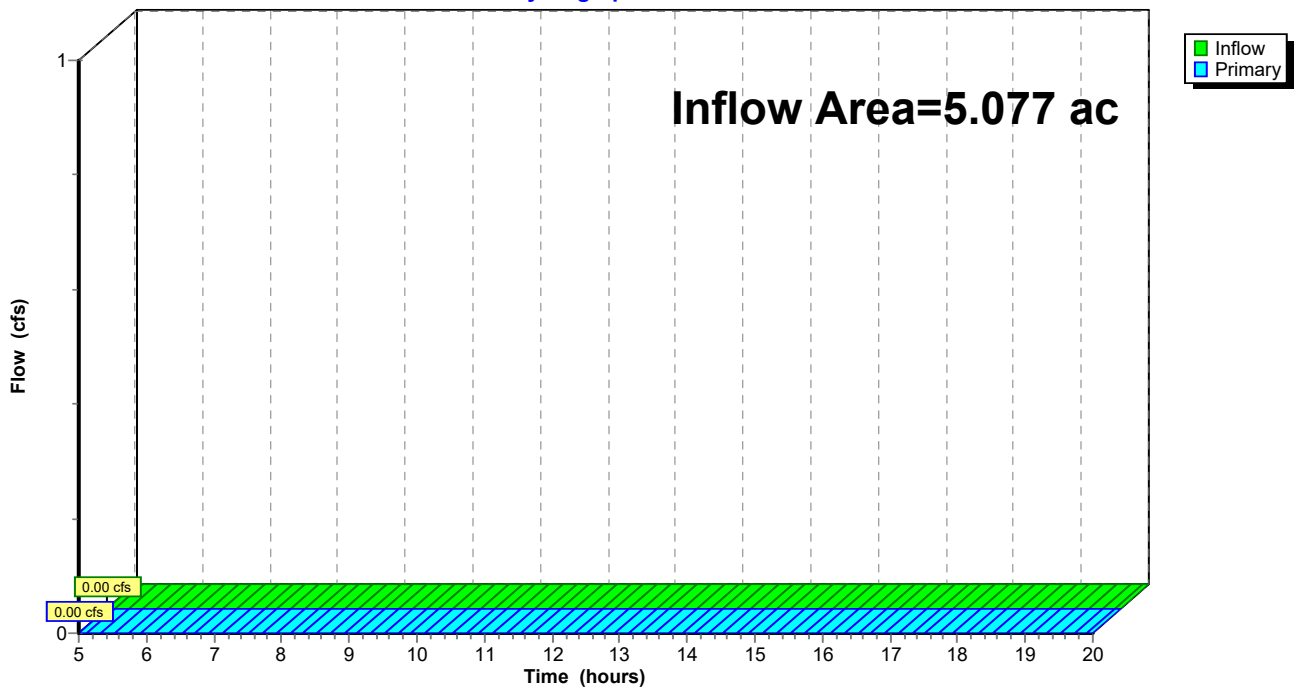
### Summary for Link 9L: TOTAL PR

Inflow Area = 5.077 ac, 33.58% 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"

Prepared by Passero Associates

Printed 4/12/2024

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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=2.808 ac 60.72% Impervious Runoff Depth>0.94"  
Flow Length=658' Tc=6.0 min CN=75 Runoff=5.05 cfs 0.220 af

**Subcatchment4S: PR-2**

Runoff Area=2.269 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=551.22' Storage=3,767 cf Inflow=5.05 cfs 0.220 af  
Discarded=0.48 cfs 0.219 af Primary=0.00 cfs 0.000 af Outflow=0.48 cfs 0.219 af

**Link 9L: TOTAL PR**

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

**Total Runoff Area = 10.157 ac Runoff Volume = 0.232 af Average Runoff Depth = 0.27"**  
**83.21% Pervious = 8.452 ac 16.79% Impervious = 1.705 ac**



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

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

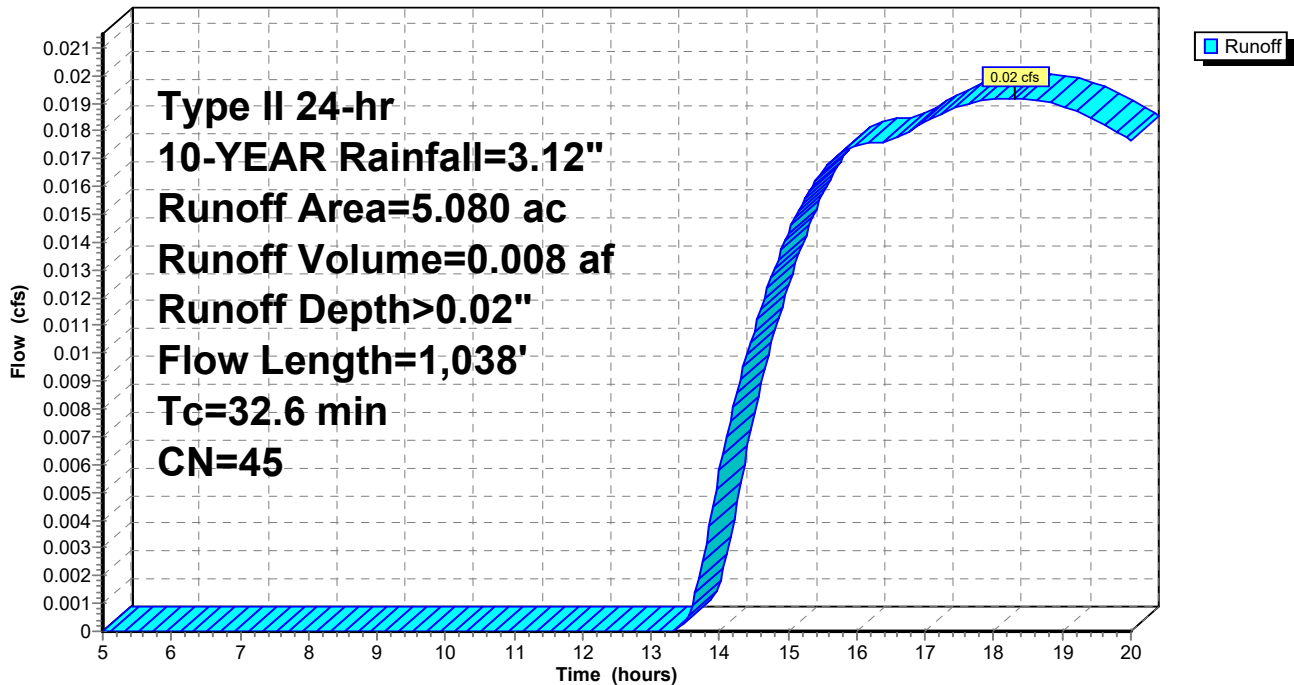
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-YEAR Rainfall=3.12"

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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.5	215	0.0410	1.01		<b>Shallow Concentrated Flow, SHF 1</b> Woodland Kv= 5.0 fps
6.7	410	0.0410	1.01		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.9	313	0.0450	1.06		<b>Shallow Concentrated Flow, SCF 3</b> 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 185% of capacity of segment #6

Runoff = 5.05 cfs @ 11.98 hrs, Volume= 0.220 af, Depth> 0.94"  
 Routed to Pond 5P : INFILTRATION BASIN

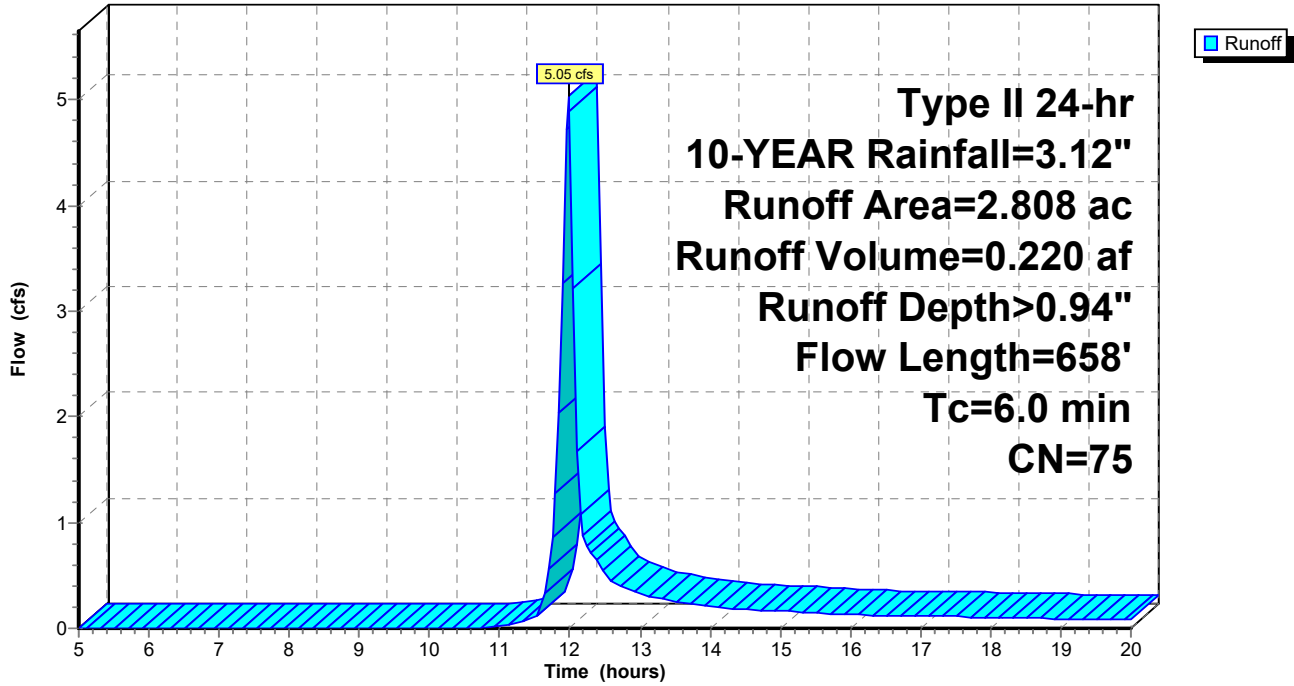
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-YEAR Rainfall=3.12"

Area (ac)	CN	Description
1.705	98	Paved parking, HSG A
1.103	39	>75% Grass cover, Good, HSG A
2.808	75	Weighted Average
1.103		39.28% Pervious Area
1.705		60.72% 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> Smooth surfaces n= 0.011 P2= 2.17"
0.1	31	0.0500	4.54		<b>Shallow Concentrated Flow, SCF PAVEMENT</b> Paved Kv= 20.3 fps
0.2	135	0.0332	9.58	5.38	<b>Pipe Channel, PIPE</b> 15.0" Round w/ 8.0" inside fill Area= 0.6 sf Perim= 3.1' r= 0.18' n= 0.009 PVC, smooth interior
0.4	211	0.0256	9.89	8.74	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.3	151	0.0139	7.29	6.44	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.2	30	0.0025	3.09	2.73	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
2.2	658	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: PR-1

Hydrograph





**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

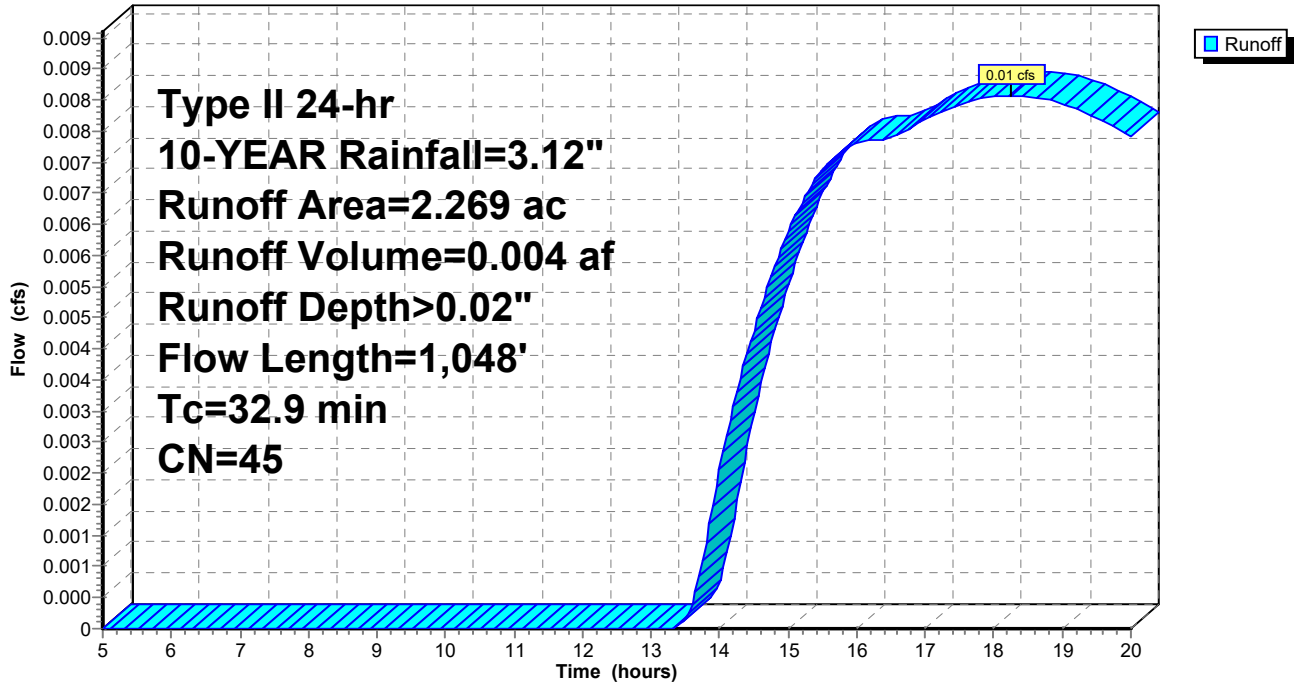
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-YEAR Rainfall=3.12"

Area (ac)	CN	Description
2.269	45	Woods, Poor, HSG A
2.269		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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.7	225	0.0400	1.00		<b>Shallow Concentrated Flow, SCF 1</b> Woodland Kv= 5.0 fps
7.2	447	0.0430	1.04		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.4	276	0.0440	1.05		<b>Shallow Concentrated Flow, SCF3</b> Woodland Kv= 5.0 fps
32.9	1,048	Total			

**Subcatchment 4S: PR-2**

Hydrograph



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

Inflow Area = 2.808 ac, 60.72% Impervious, Inflow Depth > 0.94" for 10-YEAR event  
 Inflow = 5.05 cfs @ 11.98 hrs, Volume= 0.220 af  
 Outflow = 0.48 cfs @ 12.54 hrs, Volume= 0.219 af, Atten= 91%, Lag= 33.9 min  
 Discarded = 0.48 cfs @ 12.54 hrs, Volume= 0.219 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= 551.22' @ 12.54 hrs Surf.Area= 3,687 sf Storage= 3,767 cf

Plug-Flow detention time= 69.7 min calculated for 0.219 af (99% of inflow)  
 Center-of-Mass det. time= 68.7 min ( 876.1 - 807.4 )

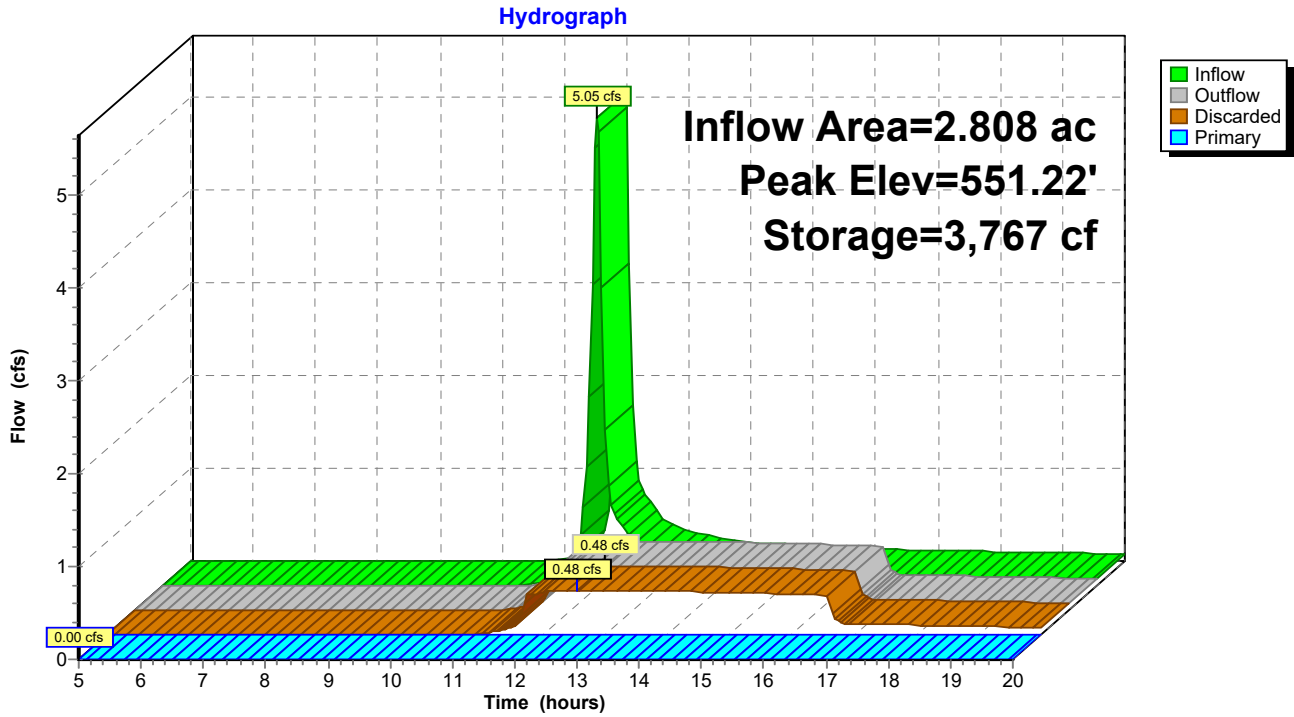
Volume	Invert	Avail.Storage	Storage Description			
#1	549.00'	28,478 cf	<b>Custom Stage Data (Conic)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
549.00	3,687	0.0	0	0	3,687	
550.00	3,687	40.0	1,475	1,475	3,902	
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> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 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> L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 '/' Cc= 0.900 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 Limited to weir flow at low heads
#4	Discarded	549.00'	<b>5.000 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 530.00'

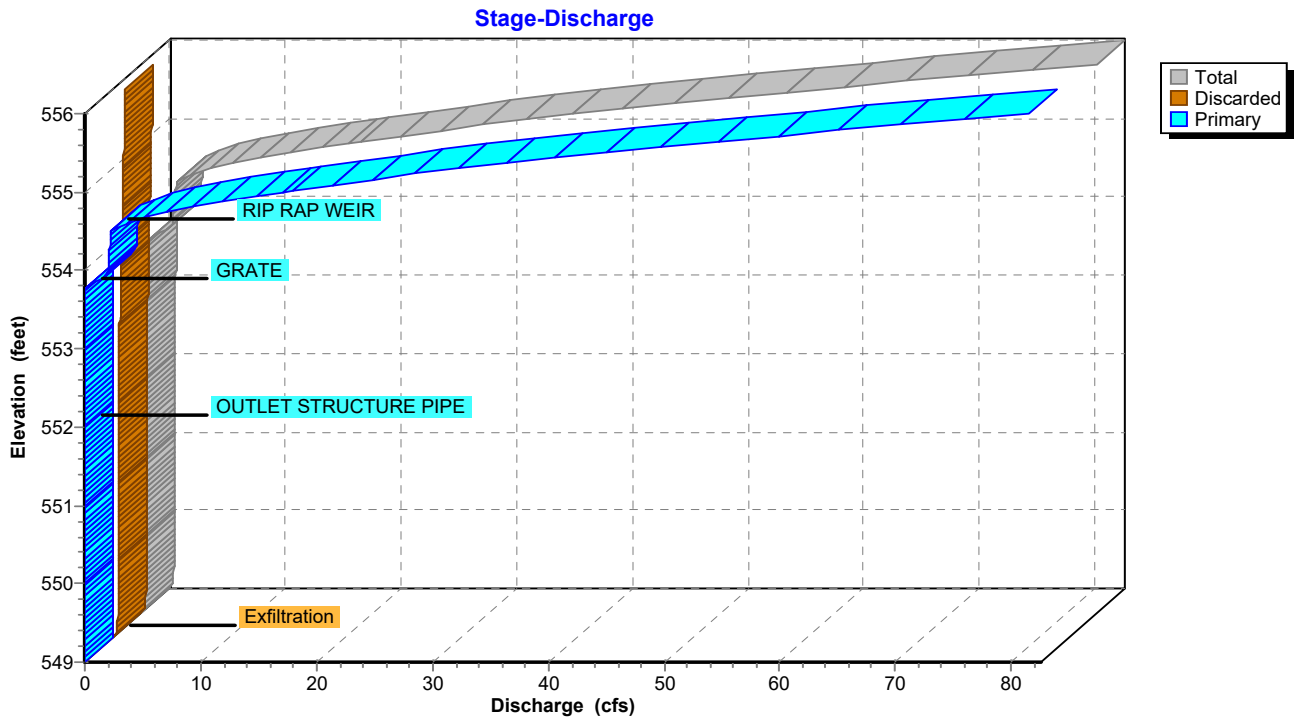
**Discarded OutFlow** Max=0.48 cfs @ 12.54 hrs HW=551.22' (Free Discharge)  
 ↑4=Exfiltration ( Controls 0.48 cfs)

**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

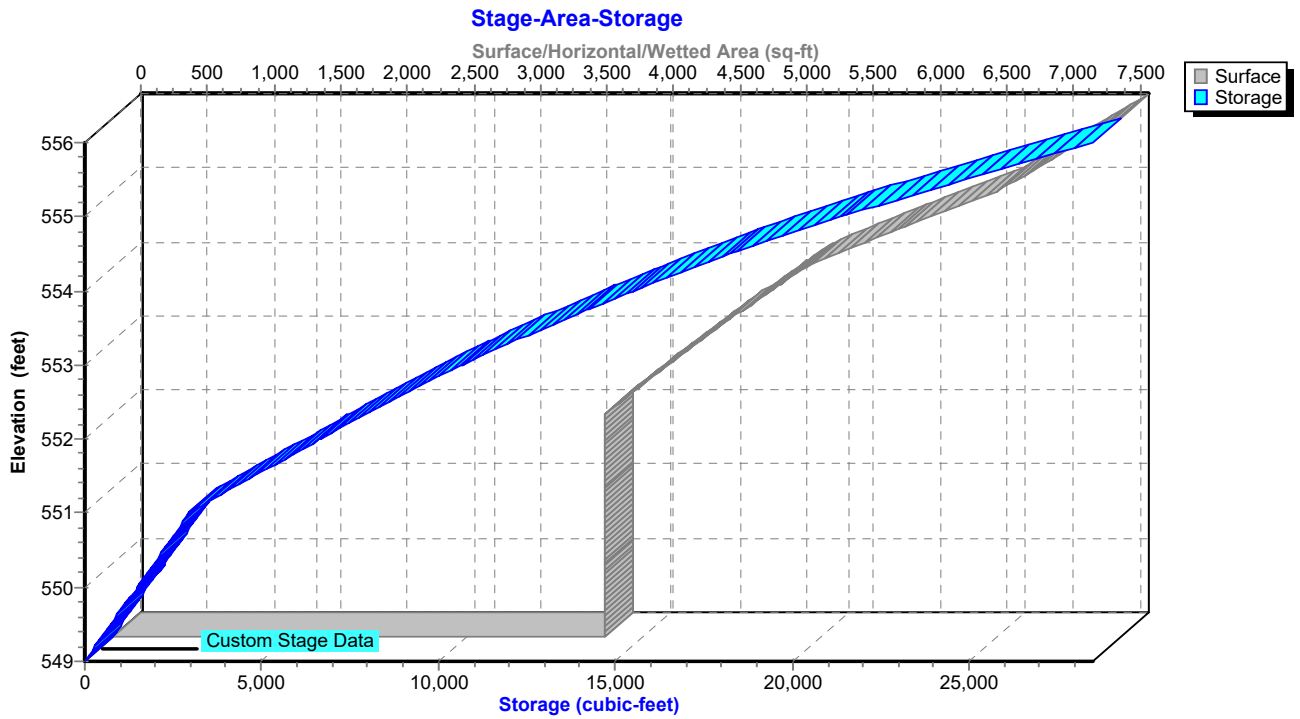


### Pond 5P: INFILTRATION BASIN





### Pond 5P: INFILTRATION BASIN



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

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
549.00	0.00	0.00	0.00	554.20	2.86	0.76	2.10
549.10	0.43	0.43	0.00	554.30	2.93	0.78	2.16
549.20	0.43	0.43	0.00	554.40	3.00	0.80	2.21
549.30	0.43	0.43	0.00	554.50	3.07	0.82	2.26
549.40	0.44	0.44	0.00	554.60	4.40	0.84	3.56
549.50	0.44	0.44	0.00	554.70	6.79	0.86	5.93
549.60	0.44	0.44	0.00	554.80	9.93	0.88	9.05
549.70	0.44	0.44	0.00	554.90	13.69	0.90	12.79
549.80	0.44	0.44	0.00	555.00	18.03	0.92	17.11
549.90	0.45	0.45	0.00	555.10	22.90	0.93	21.96
550.00	0.45	0.45	0.00	555.20	27.91	0.95	26.96
550.10	0.45	0.45	0.00	555.30	33.24	0.96	32.28
550.20	0.45	0.45	0.00	555.40	39.14	0.98	38.17
550.30	0.46	0.46	0.00	555.50	45.41	0.99	44.42
550.40	0.46	0.46	0.00	555.60	52.21	1.01	51.21
550.50	0.46	0.46	0.00	555.70	59.41	1.02	58.38
550.60	0.46	0.46	0.00	555.80	66.87	1.04	65.83
550.70	0.46	0.46	0.00	555.90	74.68	1.05	73.63
550.80	0.47	0.47	0.00	556.00	<b>82.54</b>	<b>1.07</b>	<b>81.47</b>
550.90	0.47	0.47	0.00				
551.00	0.47	0.47	0.00				
551.10	0.47	0.47	0.00				
551.20	0.48	0.48	0.00				
551.30	0.48	0.48	0.00				
551.40	0.48	0.48	0.00				
551.50	0.48	0.48	0.00				
551.60	0.49	0.49	0.00				
551.70	0.49	0.49	0.00				
551.80	0.49	0.49	0.00				
551.90	0.49	0.49	0.00				
552.00	0.49	0.49	0.00				
552.10	0.50	0.50	0.00				
552.20	0.51	0.51	0.00				
552.30	0.53	0.53	0.00				
552.40	0.54	0.54	0.00				
552.50	0.55	0.55	0.00				
552.60	0.56	0.56	0.00				
552.70	0.57	0.57	0.00				
552.80	0.58	0.58	0.00				
552.90	0.59	0.59	0.00				
553.00	0.60	0.60	0.00				
553.10	0.61	0.61	0.00				
553.20	0.63	0.63	0.00				
553.30	0.64	0.64	0.00				
553.40	0.65	0.65	0.00				
553.50	0.66	0.66	0.00				
553.60	0.67	0.67	0.00				
553.70	0.68	0.68	0.00				
553.80	0.99	0.70	0.29				
553.90	2.23	0.71	1.52				
554.00	2.72	0.72	1.99				
554.10	2.79	0.74	2.05				

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

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (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			



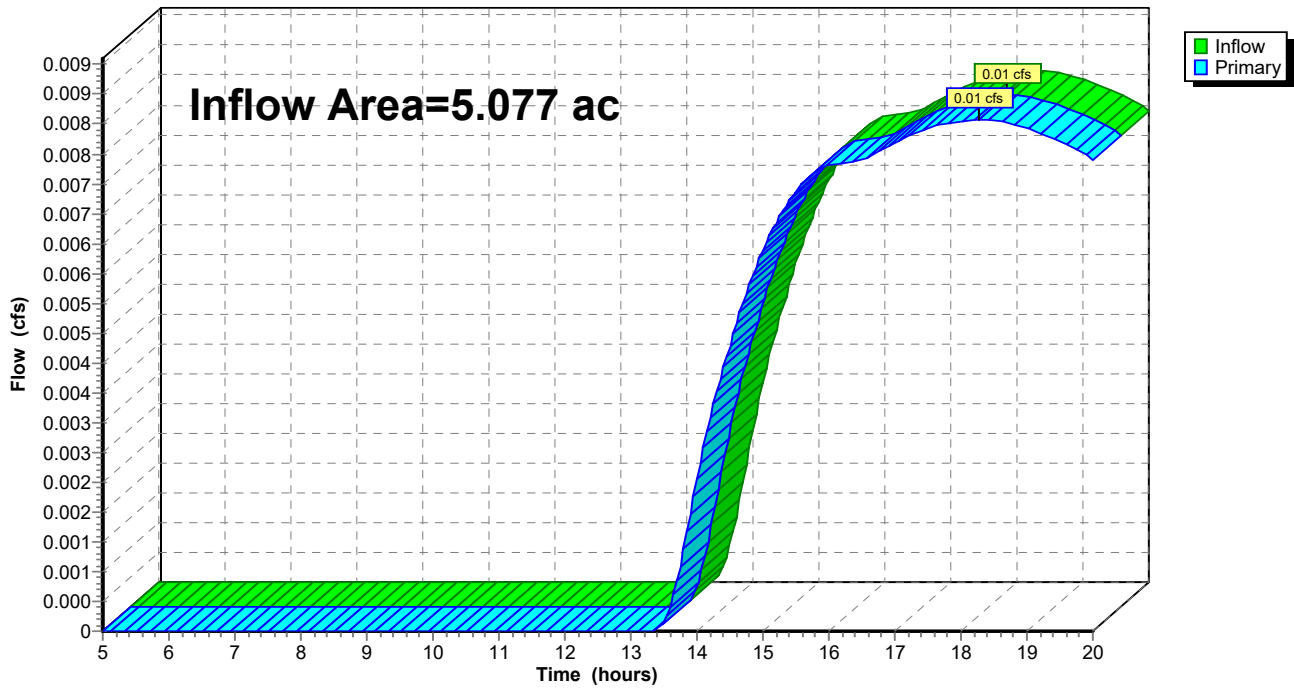
### Summary for Link 9L: TOTAL PR

Inflow Area = 5.077 ac, 33.58% 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

Printed 4/12/2024

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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=2.808 ac 60.72% Impervious Runoff Depth>2.45"  
Flow Length=658' Tc=6.0 min CN=75 Runoff=12.86 cfs 0.574 af

**Subcatchment4S: PR-2**

Runoff Area=2.269 ac 0.00% Impervious Runoff Depth>0.43"  
Flow Length=1,048' Tc=32.9 min CN=45 Runoff=0.48 cfs 0.082 af

**Pond 5P: INFILTRATIONBASIN**

Peak Elev=553.47' Storage=12,819 cf Inflow=12.86 cfs 0.574 af  
Discarded=0.66 cfs 0.438 af Primary=0.00 cfs 0.000 af Outflow=0.66 cfs 0.438 af

**Link 9L: TOTAL PR**

Inflow=0.48 cfs 0.082 af  
Primary=0.48 cfs 0.082 af

**Total Runoff Area = 10.157 ac Runoff Volume = 0.839 af Average Runoff Depth = 0.99"**  
**83.21% Pervious = 8.452 ac 16.79% Impervious = 1.705 ac**

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

Runoff = 1.08 cfs @ 12.41 hrs, Volume= 0.183 af, Depth> 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"

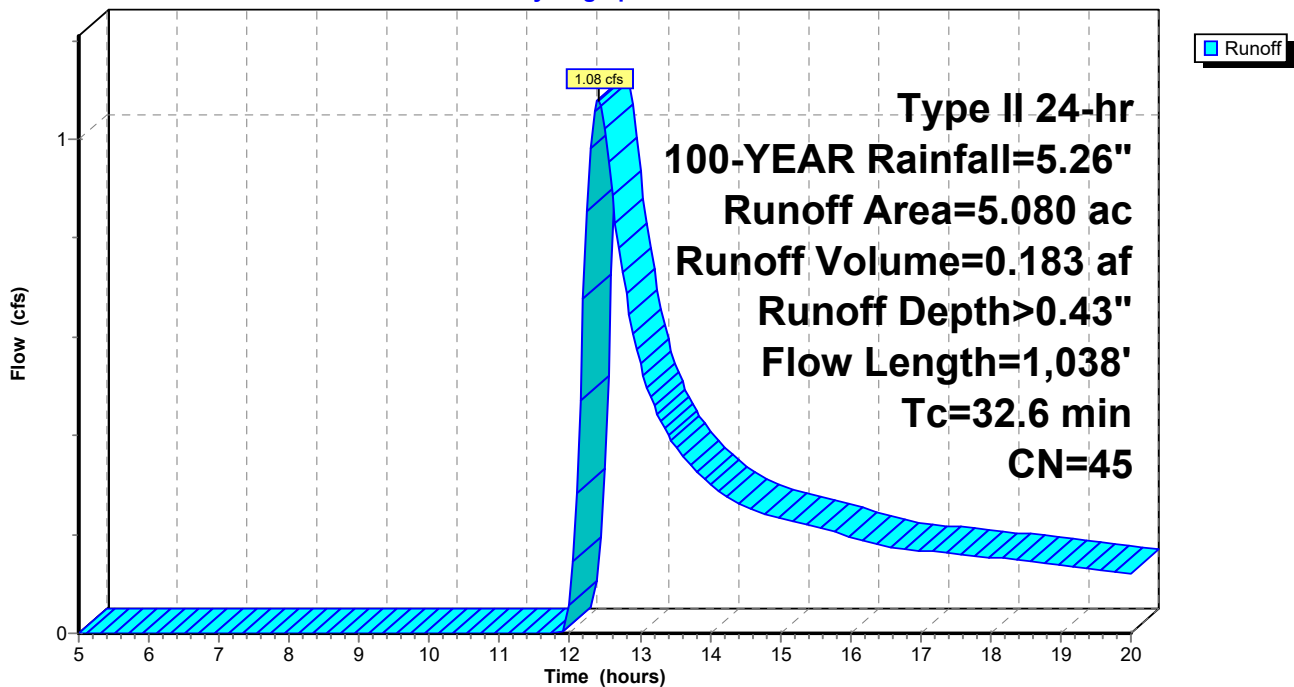
Area (ac)	CN	Description
5.080	45	Woods, Poor, HSG A
5.080		100.00% Pervious Area

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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.5	215	0.0410	1.01		<b>Shallow Concentrated Flow, SHF 1</b> Woodland Kv= 5.0 fps
6.7	410	0.0410	1.01		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.9	313	0.0450	1.06		<b>Shallow Concentrated Flow, SCF 3</b> 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 239% of capacity of segment #3
- [47] Hint: Peak is 147% of capacity of segment #4
- [47] Hint: Peak is 200% of capacity of segment #5
- [47] Hint: Peak is 471% of capacity of segment #6

Runoff = 12.86 cfs @ 11.97 hrs, Volume= 0.574 af, Depth> 2.45"  
 Routed to Pond 5P : INFILTRATION BASIN

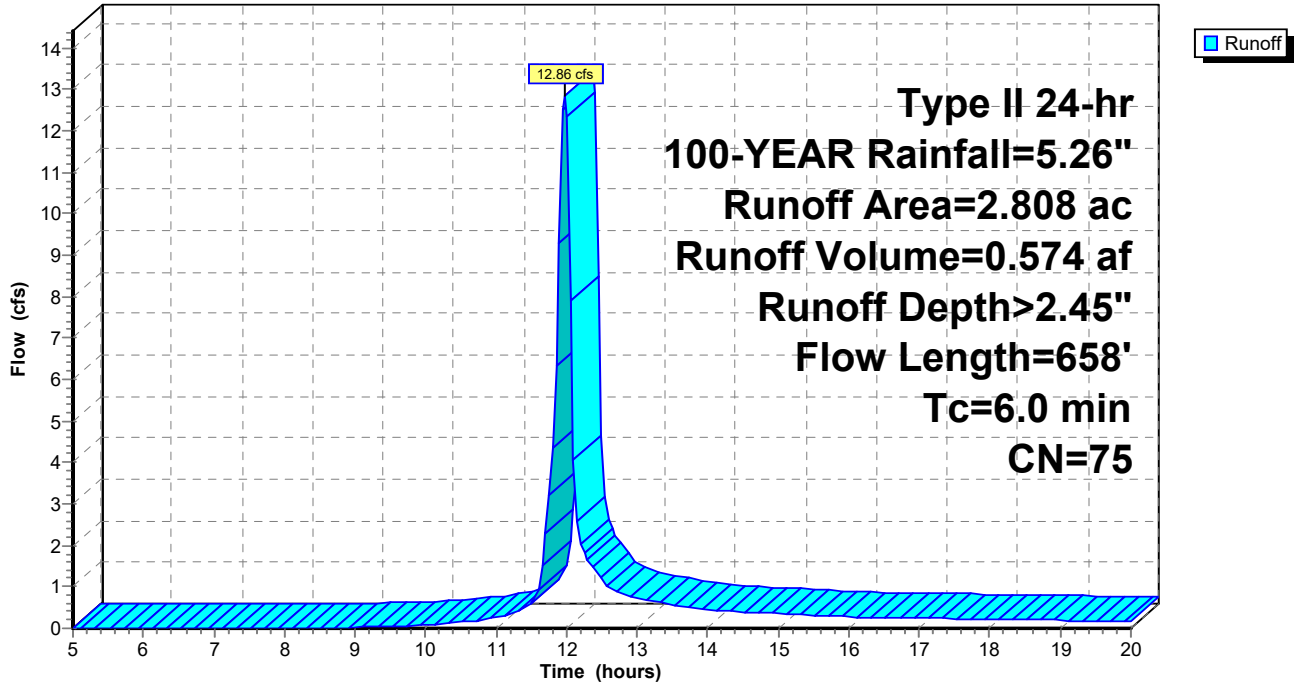
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 100-YEAR Rainfall=5.26"

Area (ac)	CN	Description
1.705	98	Paved parking, HSG A
1.103	39	>75% Grass cover, Good, HSG A
2.808	75	Weighted Average
1.103		39.28% Pervious Area
1.705		60.72% 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> Smooth surfaces n= 0.011 P2= 2.17"
0.1	31	0.0500	4.54		<b>Shallow Concentrated Flow, SCF PAVEMENT</b> Paved Kv= 20.3 fps
0.2	135	0.0332	9.58	5.38	<b>Pipe Channel, PIPE</b> 15.0" Round w/ 8.0" inside fill Area= 0.6 sf Perim= 3.1' r= 0.18' n= 0.009 PVC, smooth interior
0.4	211	0.0256	9.89	8.74	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.3	151	0.0139	7.29	6.44	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
0.2	30	0.0025	3.09	2.73	<b>Pipe Channel, PIPE</b> 18.0" Round w/ 9.0" inside fill Area= 0.9 sf Perim= 3.9' r= 0.23' n= 0.009 PVC, smooth interior
2.2	658	Total, Increased to minimum Tc = 6.0 min			

Subcatchment 3S: PR-1

Hydrograph



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

Runoff = 0.48 cfs @ 12.41 hrs, Volume= 0.082 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"

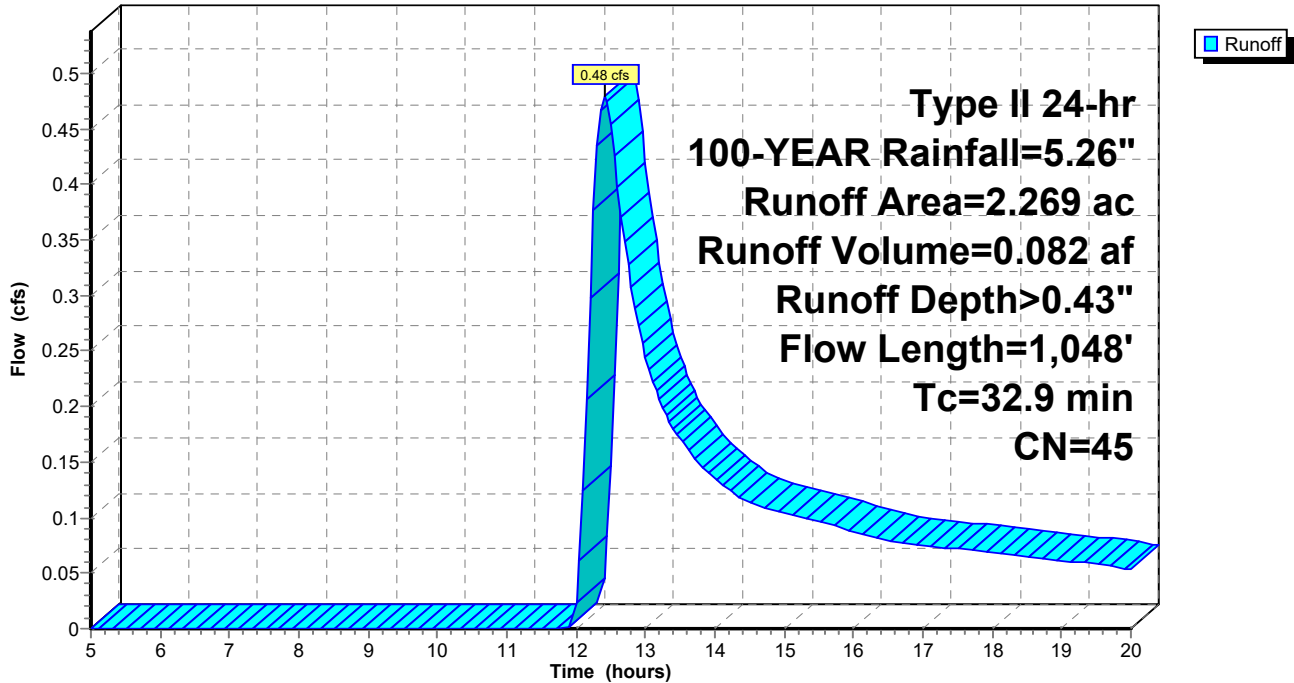
Area (ac)	CN	Description
2.269	45	Woods, Poor, HSG A
2.269		100.00% Pervious Area

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> Woods: Light underbrush n= 0.400 P2= 2.17"
3.7	225	0.0400	1.00		<b>Shallow Concentrated Flow, SCF 1</b> Woodland Kv= 5.0 fps
7.2	447	0.0430	1.04		<b>Shallow Concentrated Flow, SCF 2</b> Woodland Kv= 5.0 fps
4.4	276	0.0440	1.05		<b>Shallow Concentrated Flow, SCF3</b> Woodland Kv= 5.0 fps
32.9	1,048	Total			

**Subcatchment 4S: PR-2**

Hydrograph





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

Inflow Area = 2.808 ac, 60.72% Impervious, Inflow Depth > 2.45" for 100-YEAR event  
 Inflow = 12.86 cfs @ 11.97 hrs, Volume= 0.574 af  
 Outflow = 0.66 cfs @ 13.19 hrs, Volume= 0.438 af, Atten= 95%, Lag= 73.2 min  
 Discarded = 0.66 cfs @ 13.19 hrs, Volume= 0.438 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= 553.47' @ 13.19 hrs Surf.Area= 4,772 sf Storage= 12,819 cf

Plug-Flow detention time= 191.0 min calculated for 0.437 af (76% of inflow)  
 Center-of-Mass det. time= 129.8 min ( 917.0 - 787.2 )

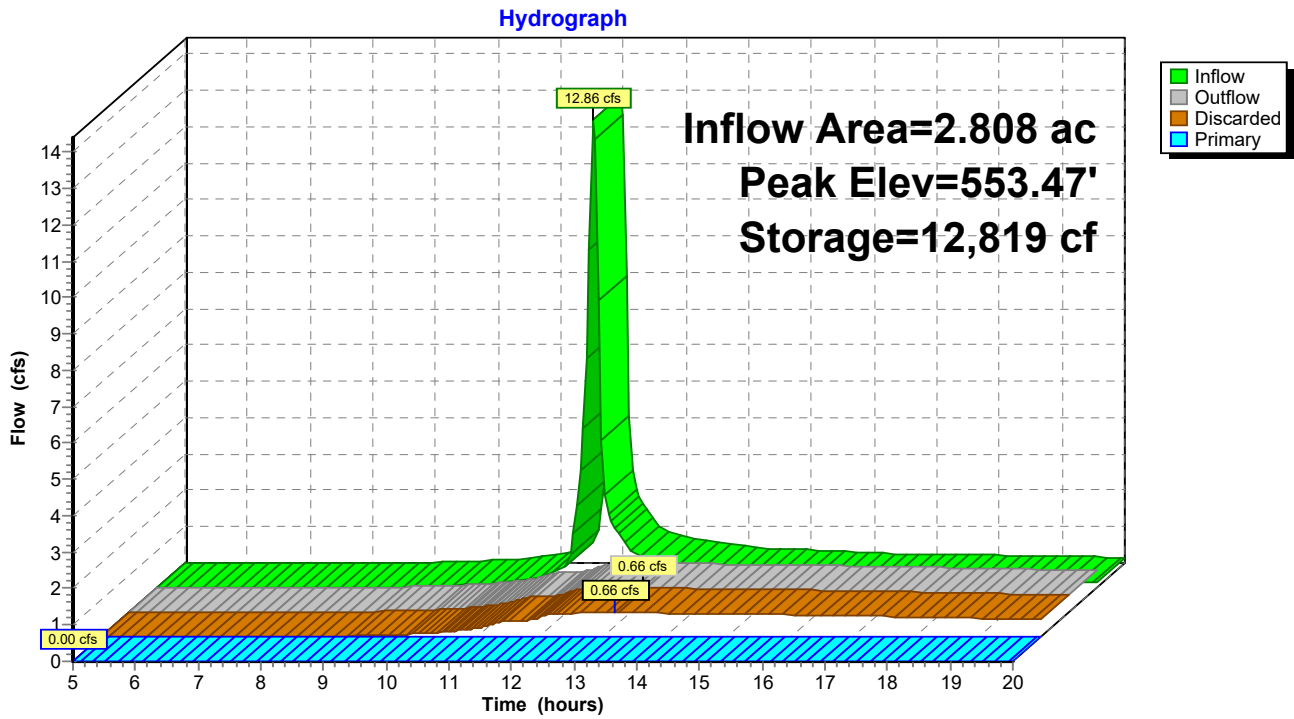
Volume	Invert	Avail.Storage	Storage Description			
#1	549.00'	28,478 cf	<b>Custom Stage Data (Conic)</b> Listed below (Recalc)			
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)	
549.00	3,687	0.0	0	0	3,687	
550.00	3,687	40.0	1,475	1,475	3,902	
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> Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 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> L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 551.50' / 550.50' S= 0.0333 '/' Cc= 0.900 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 Limited to weir flow at low heads						
#4	Discarded	549.00'	<b>5.000 in/hr Exfiltration over Surface area</b> Conductivity to Groundwater Elevation = 530.00'						

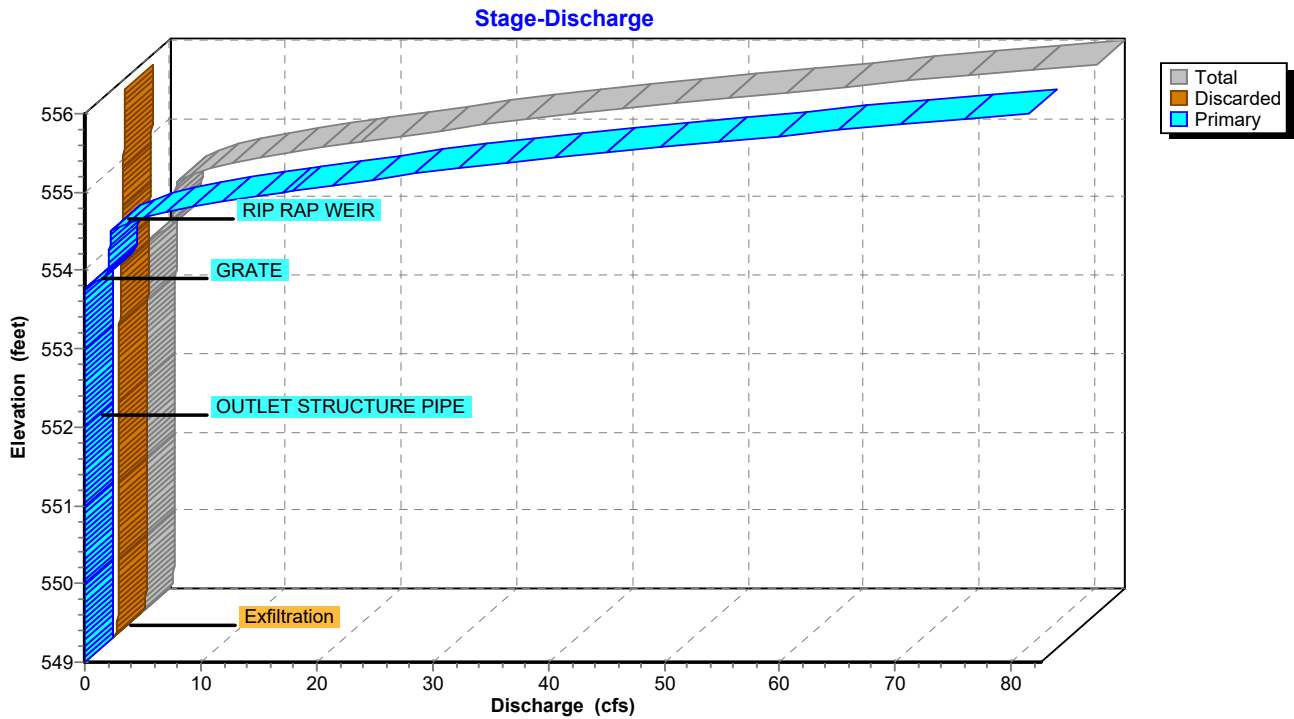
**Discarded OutFlow** Max=0.66 cfs @ 13.19 hrs HW=553.47' (Free Discharge)  
 ↑4=Exfiltration ( Controls 0.66 cfs)

**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)

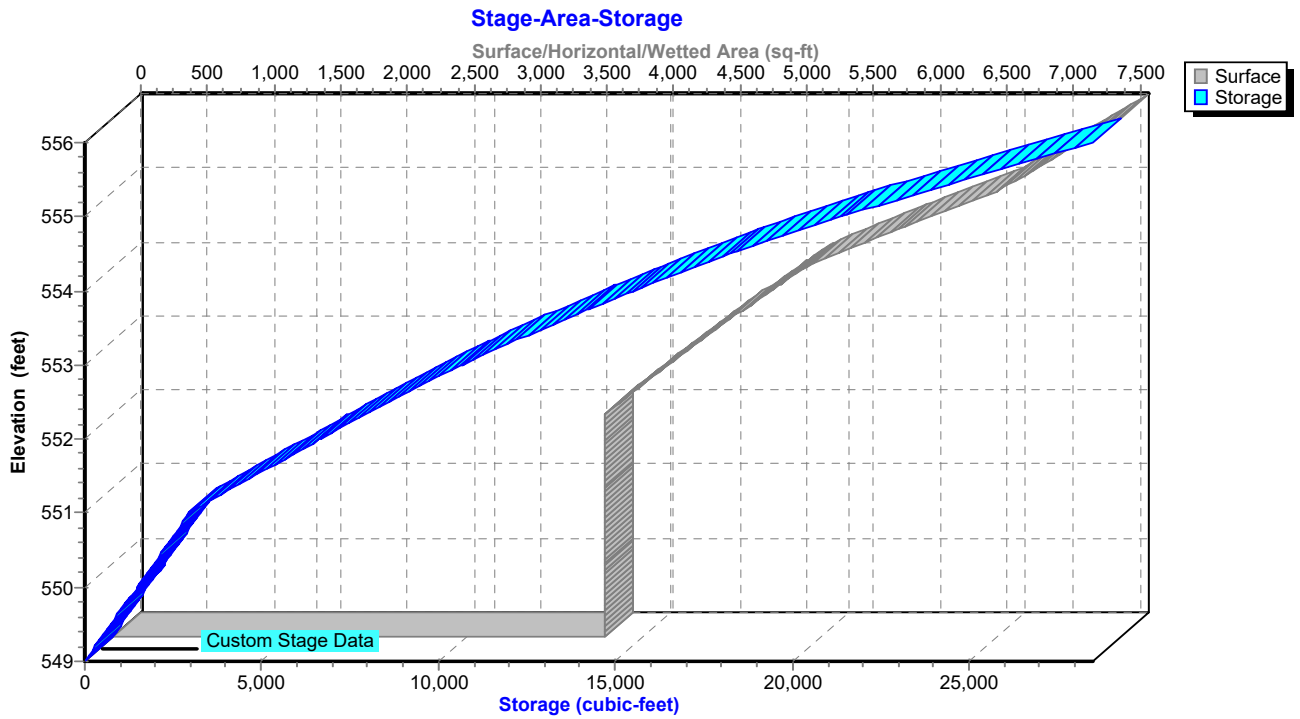
### Pond 5P: INFILTRATION BASIN



### Pond 5P: INFILTRATION BASIN



### Pond 5P: INFILTRATION BASIN





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

Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Discharge (cfs)	Discarded (cfs)	Primary (cfs)
549.00	0.00	0.00	0.00	554.20	2.86	0.76	2.10
549.10	0.43	0.43	0.00	554.30	2.93	0.78	2.16
549.20	0.43	0.43	0.00	554.40	3.00	0.80	2.21
549.30	0.43	0.43	0.00	554.50	3.07	0.82	2.26
549.40	0.44	0.44	0.00	554.60	4.40	0.84	3.56
549.50	0.44	0.44	0.00	554.70	6.79	0.86	5.93
549.60	0.44	0.44	0.00	554.80	9.93	0.88	9.05
549.70	0.44	0.44	0.00	554.90	13.69	0.90	12.79
549.80	0.44	0.44	0.00	555.00	18.03	0.92	17.11
549.90	0.45	0.45	0.00	555.10	22.90	0.93	21.96
550.00	0.45	0.45	0.00	555.20	27.91	0.95	26.96
550.10	0.45	0.45	0.00	555.30	33.24	0.96	32.28
550.20	0.45	0.45	0.00	555.40	39.14	0.98	38.17
550.30	0.46	0.46	0.00	555.50	45.41	0.99	44.42
550.40	0.46	0.46	0.00	555.60	52.21	1.01	51.21
550.50	0.46	0.46	0.00	555.70	59.41	1.02	58.38
550.60	0.46	0.46	0.00	555.80	66.87	1.04	65.83
550.70	0.46	0.46	0.00	555.90	74.68	1.05	73.63
550.80	0.47	0.47	0.00	556.00	<b>82.54</b>	<b>1.07</b>	<b>81.47</b>
550.90	0.47	0.47	0.00				
551.00	0.47	0.47	0.00				
551.10	0.47	0.47	0.00				
551.20	0.48	0.48	0.00				
551.30	0.48	0.48	0.00				
551.40	0.48	0.48	0.00				
551.50	0.48	0.48	0.00				
551.60	0.49	0.49	0.00				
551.70	0.49	0.49	0.00				
551.80	0.49	0.49	0.00				
551.90	0.49	0.49	0.00				
552.00	0.49	0.49	0.00				
552.10	0.50	0.50	0.00				
552.20	0.51	0.51	0.00				
552.30	0.53	0.53	0.00				
552.40	0.54	0.54	0.00				
552.50	0.55	0.55	0.00				
552.60	0.56	0.56	0.00				
552.70	0.57	0.57	0.00				
552.80	0.58	0.58	0.00				
552.90	0.59	0.59	0.00				
553.00	0.60	0.60	0.00				
553.10	0.61	0.61	0.00				
553.20	0.63	0.63	0.00				
553.30	0.64	0.64	0.00				
553.40	0.65	0.65	0.00				
553.50	0.66	0.66	0.00				
553.60	0.67	0.67	0.00				
553.70	0.68	0.68	0.00				
553.80	0.99	0.70	0.29				
553.90	2.23	0.71	1.52				
554.00	2.72	0.72	1.99				
554.10	2.79	0.74	2.05				

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

Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)	Elevation (feet)	Surface (sq-ft)	Storage (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			

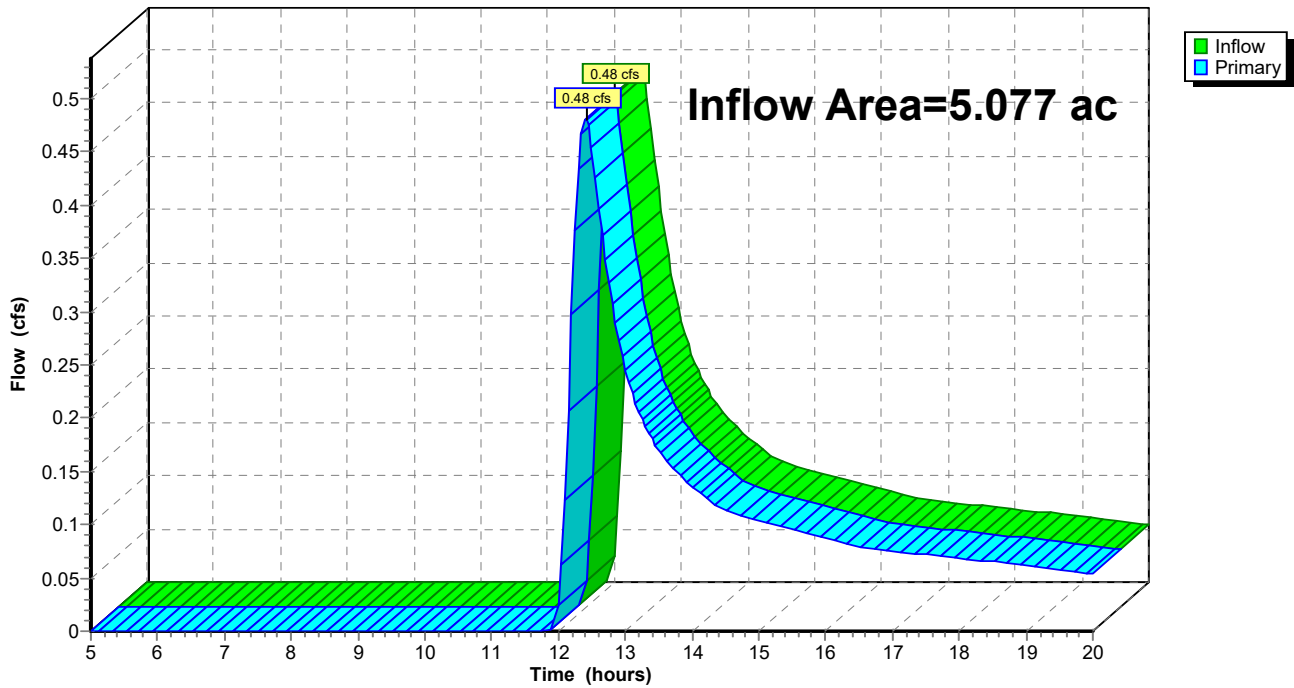
### Summary for Link 9L: TOTAL PR

Inflow Area = 5.077 ac, 33.58% Impervious, Inflow Depth > 0.19" for 100-YEAR event  
Inflow = 0.48 cfs @ 12.41 hrs, Volume= 0.082 af  
Primary = 0.48 cfs @ 12.41 hrs, Volume= 0.082 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**

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*Multi-Event Tables*

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**Events for Subcatchment 1: EX-1**

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-YEAR	1.86	0.00	0.000	0.00
10-YEAR	3.12	0.02	0.008	0.02
100-YEAR	<b>5.26</b>	<b>1.08</b>	<b>0.183</b>	<b>0.43</b>



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*Multi-Event Tables*

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

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-YEAR	1.86	1.34	0.064	0.27
10-YEAR	3.12	5.05	0.220	0.94
100-YEAR	<b>5.26</b>	<b>12.86</b>	<b>0.574</b>	<b>2.45</b>

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

Event	Rainfall (inches)	Runoff (cfs)	Volume (acre-feet)	Depth (inches)
1-YEAR	1.86	0.00	0.000	0.00
10-YEAR	3.12	0.01	0.004	0.02
100-YEAR	<b>5.26</b>	<b>0.48</b>	<b>0.082</b>	<b>0.43</b>

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*Multi-Event Tables*

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

Event	Inflow (cfs)	Outflow (cfs)	Discarded (cfs)	Primary (cfs)	Elevation (feet)	Storage (cubic-feet)
1-YEAR	1.34	0.43	0.43	<b>0.00</b>	549.32	479
10-YEAR	5.05	0.48	0.48	0.00	551.22	3,767
100-YEAR	<b>12.86</b>	<b>0.66</b>	<b>0.66</b>	0.00	<b>553.47</b>	<b>12,819</b>

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*Multi-Event Tables*

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

Event	Inflow (cfs)	Primary (cfs)	Elevation (feet)
1-YEAR	0.00	0.00	<b>0.00</b>
10-YEAR	0.01	0.01	0.00
100-YEAR	<b>0.48</b>	<b>0.48</b>	0.00



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## 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	2.81	1.70	60%	0.59	6,064	
2						
3						
4						
5						
6						
7						
8						
9						
10						
Subtotal (1-30)	2.81	1.70	60%	0.59	<b>6,064</b>	<b>Subtotal 1</b>
<b>Total</b>	<b>2.81</b>	<b>1.70</b>	<b>60%</b>	<b>0.59</b>	<b>6,064</b>	<b>Initial WQv</b>

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"	2.81	1.70	60%	0.59	6,064
Subtract Area	0.00	0.00			
WQv adjusted after Area Reductions	<b>2.81</b>	<b>1.70</b>	60%	0.59	6,064
Disconnection of Rooftops		0.00			
Adjusted WQv after Area Reduction and Rooftop Disconnect	2.81	1.70	60%	0.59	<b>6,064</b>
WQv reduced by Area Reduction techniques					0

Total Water Quality Volume Calculation

$$WQv(\text{acre-feet}) = [(P)(Rv)(A)] / 12$$

All Subcatchments						
Catchment	Total Area (Acres)	Impervious Cover (Acres)	Percent Impervious %	Runoff Coefficient Rv	WQv (ft <sup>3</sup> )	Description
1	2.81	1.70	0.60	0.59	6063.92	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						



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	2.81	1.70	6064	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		→	2.81	1.70	6064	0
Totals by Standard SMP		→	0.00	0.00		0
Totals ( Area + Volume + all SMPs)		→	2.81	1.70	6,064	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	<b>0.00</b>	20%
Total Area	2.73	

**Calculate the Minimum RRv**

S =	<b>0.55</b>	
Impervious =	1.70	<i>acre</i>
Precipitation	1	<i>in</i>
Rv	0.95	
<b>Minimum RRv</b>	<b>3,224</b>	<b><i>ft3</i></b>
	0.07	<i>af</i>

# NOI QUESTIONS

#	NOI Question	Reported Value	
		cf	af
28	Total Water Quality Volume (WQv) Required	6064	0.139
30	Total RRV Provided	6064	0.139
31	Is RRV Provided $\geq$ WQv Required?	Yes	
32	Minimum RRV	3224	0.074
32a	Is RRV Provided $\geq$ Minimum RRV Required?	Yes	
33a	Total WQv Treated	0	0.000
34	Sum of Volume Reduced & Treated	6064	0.139
34	Sum of Volume Reduced and Treated	6064	0.139
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>	1	<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	2.81	1.70	0.60	0.59	6063.92	1.00		
Enter Impervious Area Reduced by Disconnection of Rooftops		0.00	60%	0.59	6,064	<<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	<i>Okay</i>			
Pretreatment Sizing			25	% WQv	25% minimum; 50% if >2 in/hr 100% if >5in/hour			
Pretreatment Required Volume			1,516	ft <sup>3</sup>				
Pretreatment Provided			2,600	ft <sup>3</sup>				
Pretreatment Techniques utilized			<i>Plunge Pool</i>					
<b>Size An Infiltration Basin</b>								
Design Volume	6,064	ft <sup>3</sup>	WQv					
Basal Area Required	2,021	ft <sup>2</sup>	<i>Infiltration practices shall be designed to exfiltrate the entire WQv through the floor of each practice.</i>					
Basal Area Provided	3,687	ft <sup>2</sup>						
Design Depth	3.00	ft						
Volume Provided	11,061	ft <sup>3</sup>	<i>Storage Volume provided in infiltration basin area (not including pretreatment.</i>					
<b>Determine Runoff Reduction</b>								
<b>RRv</b>	<b>6,064</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>	<i>This is the portion of the WQv that is not reduced/infiltrated</i>					
Sizing v	OK		<i>The infiltration basin must provide storage equal to or greater than the WQv of the contributing area.</i>					

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



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

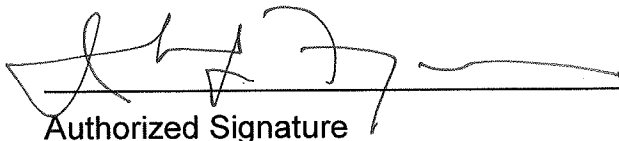
Issued Pursuant to Article 17, Titles 7, 8 and Article 70  
of the Environmental Conservation Law

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**

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## 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:

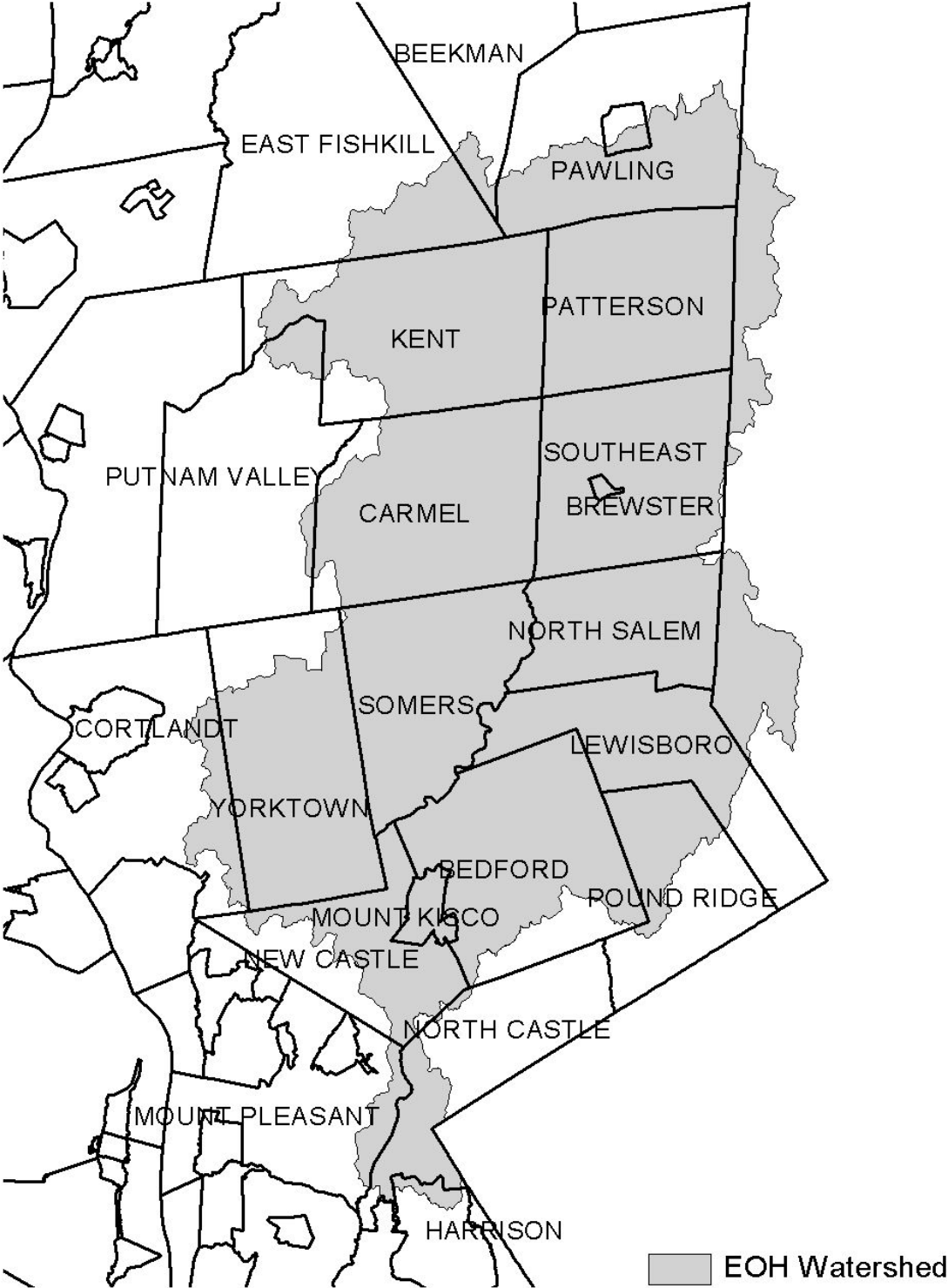
- Parking lot construction or reconstruction, including parking lots constructed as part of the construction activities listed in Table 1
- Athletic fields (natural grass) that include the construction or reconstruction of impervious area (>5% of disturbed area) or *alter the hydrology from pre to post 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**

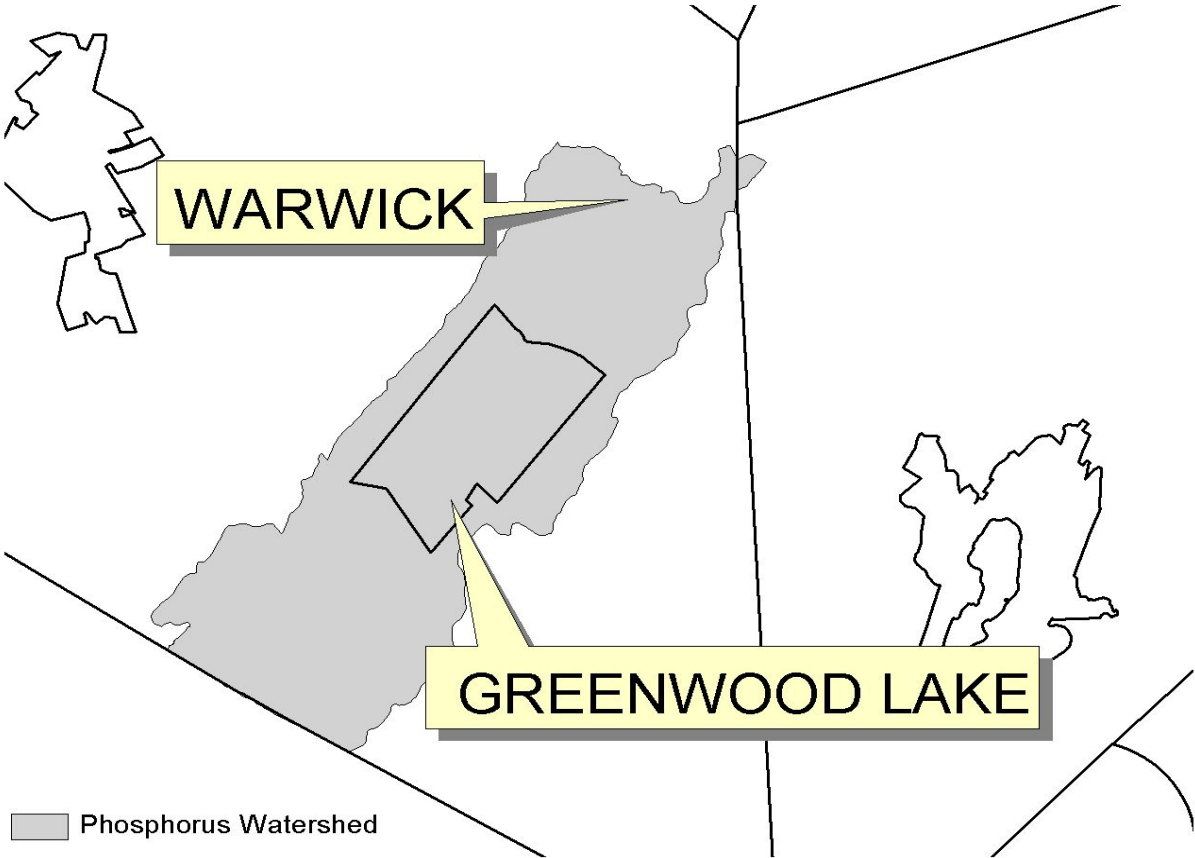


**Figure 2 - Onondaga Lake Watershed**

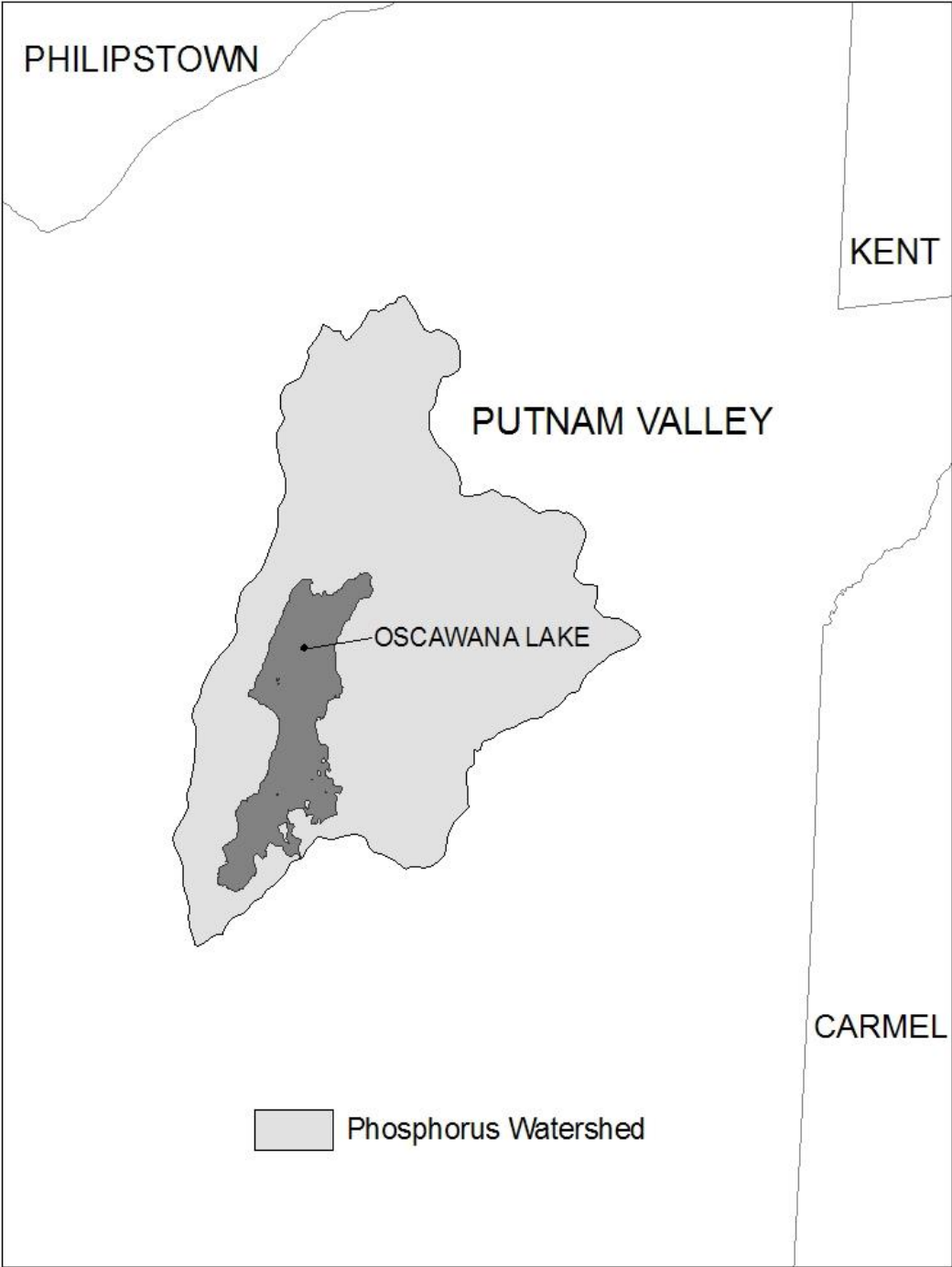




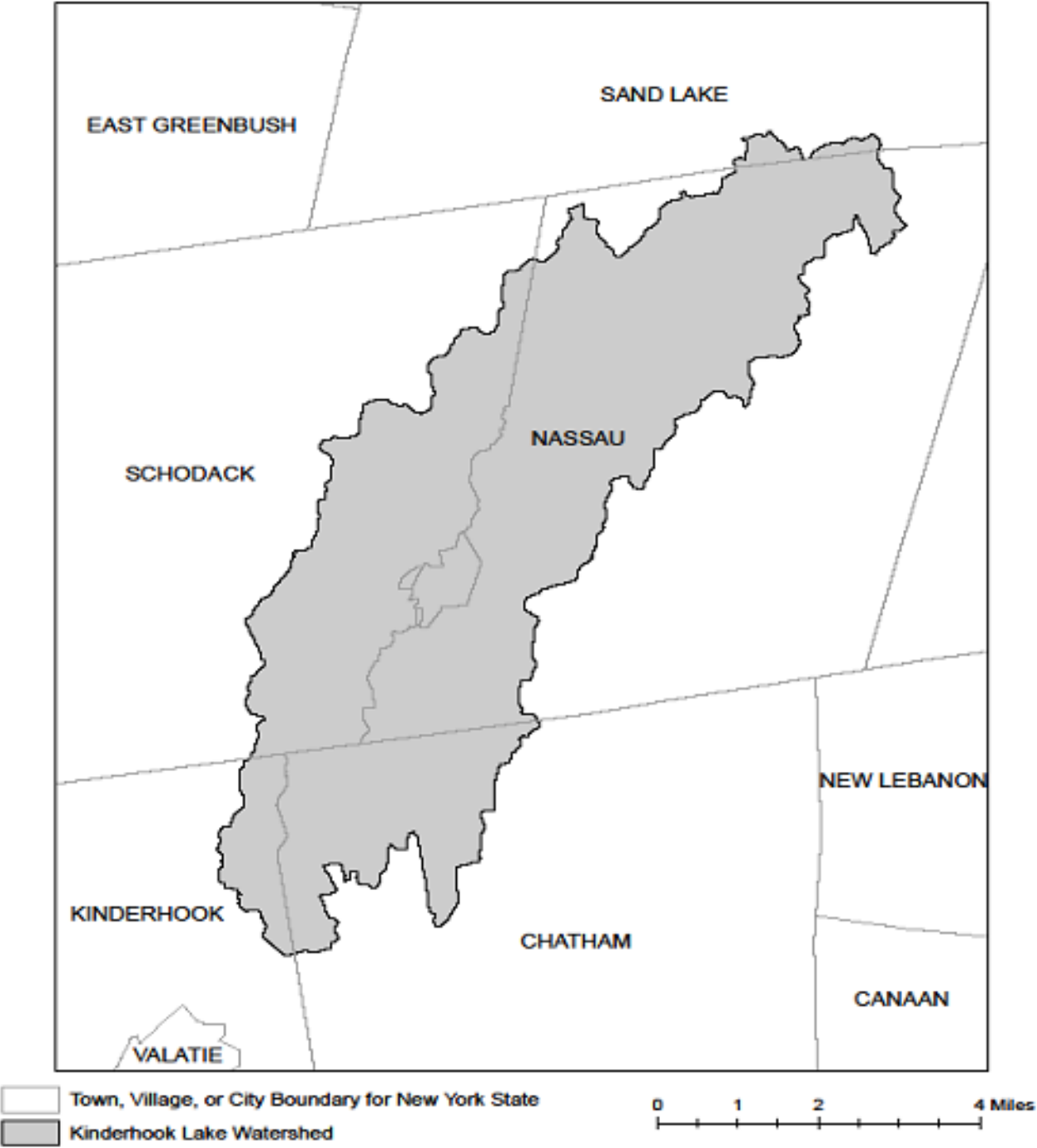
**Figure 3 - Greenwood Lake Watershed**



**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 FOLLOWING COUNTIES:</u>	<u>DIVISION OF ENVIRONMENTAL PERMITS (DEP) PERMIT ADMINISTRATORS</u>	<u>DIVISION OF WATER (DOW) WATER (SPDES) PROGRAM</u>
1	NASSAU AND SUFFOLK	50 CIRCLE ROAD STONY BROOK, NY 11790 TEL. (631) 444-0365	50 CIRCLE ROAD STONY BROOK, NY 11790-3409 TEL. (631) 444-0405
2	BRONX, KINGS, NEW YORK, QUEENS AND RICHMOND	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4997	1 HUNTERS POINT PLAZA, 47-40 21ST ST. LONG ISLAND CITY, NY 11101-5407 TEL. (718) 482-4933
3	DUTCHESS, ORANGE, PUTNAM, ROCKLAND, SULLIVAN, ULSTER AND WESTCHESTER	21 SOUTH PUTT CORNERS ROAD NEW PALTZ, NY 12561-1696 TEL. (845) 256-3059	100 HILLSIDE AVENUE, SUITE 1W WHITE PLAINS, NY 10603 TEL. (914) 428 - 2505
4	ALBANY, COLUMBIA, DELAWARE, GREENE, MONTGOMERY, OTSEGO, RENSSELAER, SCHENECTADY AND SCHOHARIE	1150 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2069	1130 NORTH WESTCOTT ROAD SCHENECTADY, NY 12306-2014 TEL. (518) 357-2045
5	CLINTON, ESSEX, FRANKLIN, FULTON, HAMILTON, SARATOGA, WARREN AND WASHINGTON	1115 STATE ROUTE 86, Po Box 296 RAY BROOK, NY 12977-0296 TEL. (518) 897-1234	232 GOLF COURSE ROAD WARRENSBURG, NY 12885-1172 TEL. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7438	615 ERIE BLVD. WEST SYRACUSE, NY 13204-2400 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 TEL. (716) 851-7165	270 MICHIGAN AVENUE BUFFALO, NY 14203-2999 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

---

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:

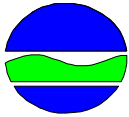
Date:

**VI. Additional Information**

Empty box for 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)









15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?  Yes  No  Unknown

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

Two rows of 25 empty grid boxes for text entry.

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





**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)

<u>RR Techniques (Area Reduction)</u>	<u>Total Contributing Area (acres)</u>		<u>Total Contributing Impervious Area (acres)</u>	
<input type="radio"/> Conservation of Natural Areas (RR-1) ...	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Sheetflow to Riparian Buffers/Filters Strips (RR-2) .....	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Tree Planting/Tree Pit (RR-3) .....	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<input type="radio"/> Disconnection of Rooftop Runoff (RR-4) ..	<input type="text"/>	<input type="text"/>	and/or	<input type="text"/>
<u>RR Techniques (Volume Reduction)</u>				
<input type="radio"/> Vegetated Swale (RR-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Rain Garden (RR-6) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Stormwater Planter (RR-7) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Rain Barrel/Cistern (RR-8) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Porous Pavement (RR-9) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Green Roof (RR-10) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs with RRv Capacity</u>				
<input type="radio"/> Infiltration Trench (I-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input checked="" type="radio"/> Infiltration Basin (I-2) .....	<input type="text"/>	<input type="text"/>	1	7 0
<input type="radio"/> Dry Well (I-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Underground Infiltration System (I-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Bioretention (F-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Dry Swale (O-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<u>Standard SMPs</u>				
<input type="radio"/> Micropool Extended Detention (P-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Pond (P-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Extended Detention (P-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Multiple Pond System (P-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pocket Pond (P-5) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Surface Sand Filter (F-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Underground Sand Filter (F-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Perimeter Sand Filter (F-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Organic Filter (F-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Shallow Wetland (W-1) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Extended Detention Wetland (W-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pond/Wetland System (W-3) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Pocket Wetland (W-4) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>
<input type="radio"/> Wet Swale (O-2) .....	<input type="text"/>	<input type="text"/>		<input type="text"/>



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**  

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 . 
 

--	--	--	--

 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.

<b>CPv Required</b>	<b>CPv Provided</b>																
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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)**

<b>Pre-Development</b>	<b>Post-development</b>																
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**Total Extreme Flood Control Criteria (Qf)**

<b>Pre-Development</b>	<b>Post-development</b>																
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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:

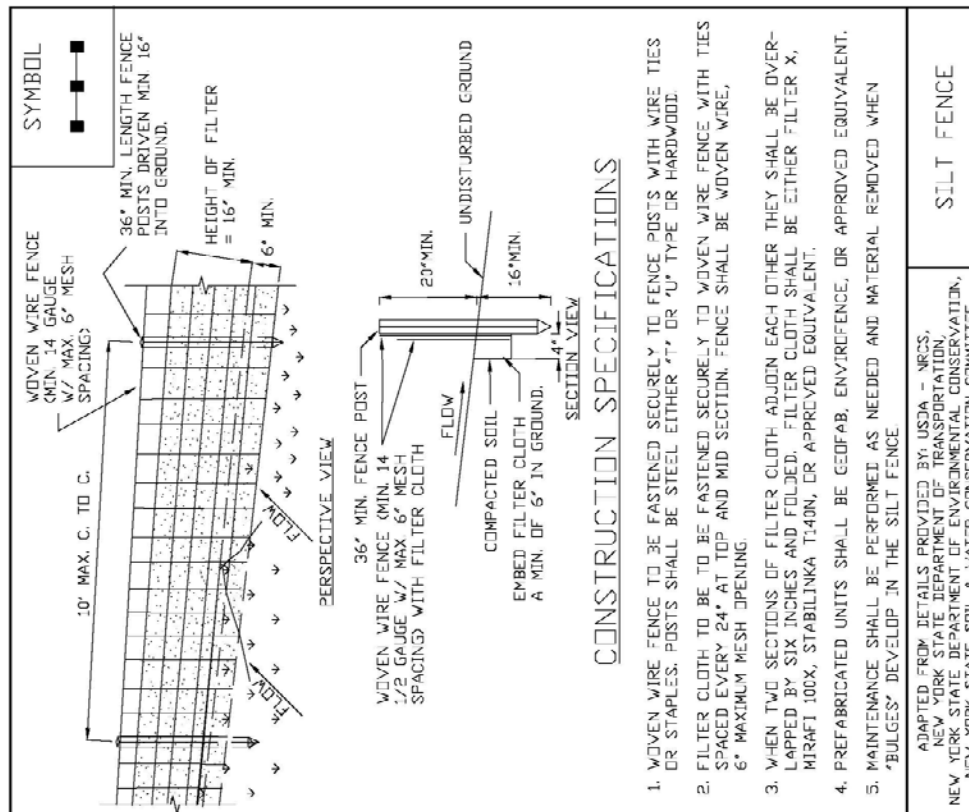
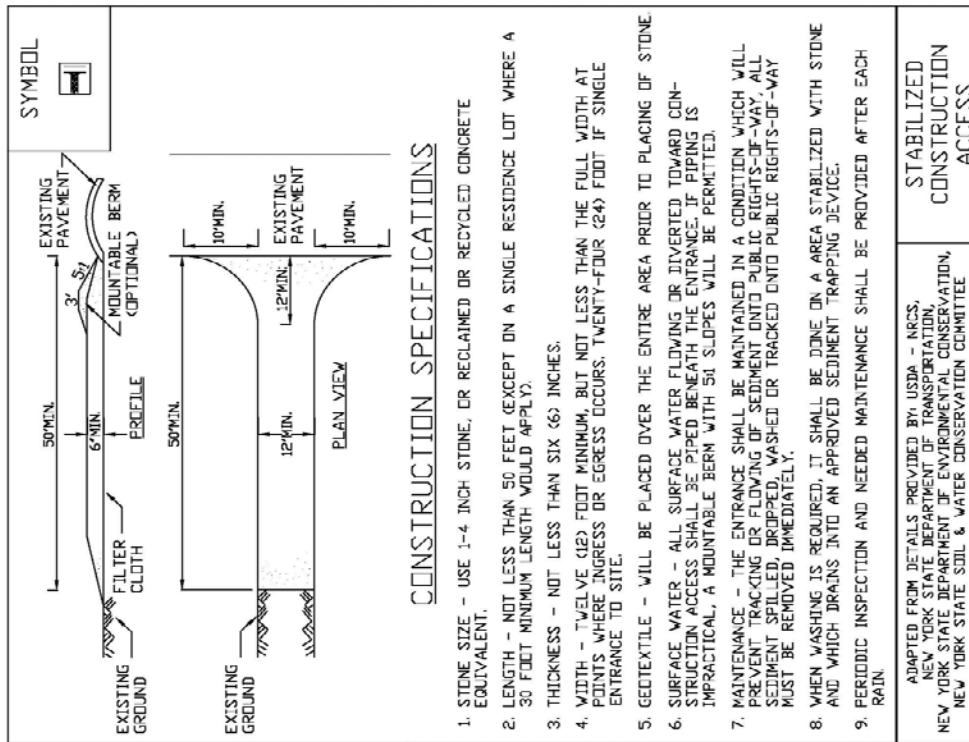
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Date:

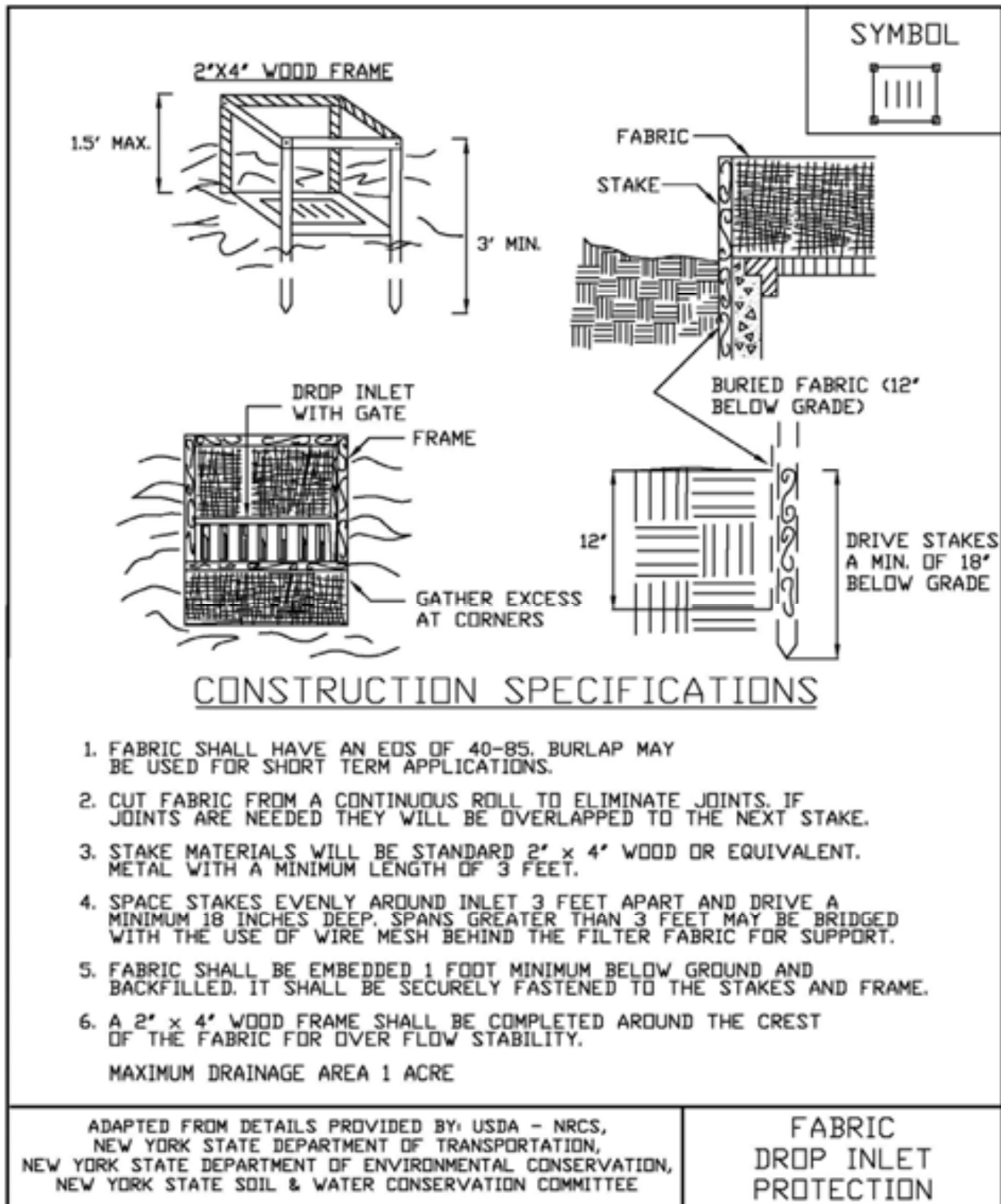


## APPENDIX P: EROSION CONTROL DETAILS

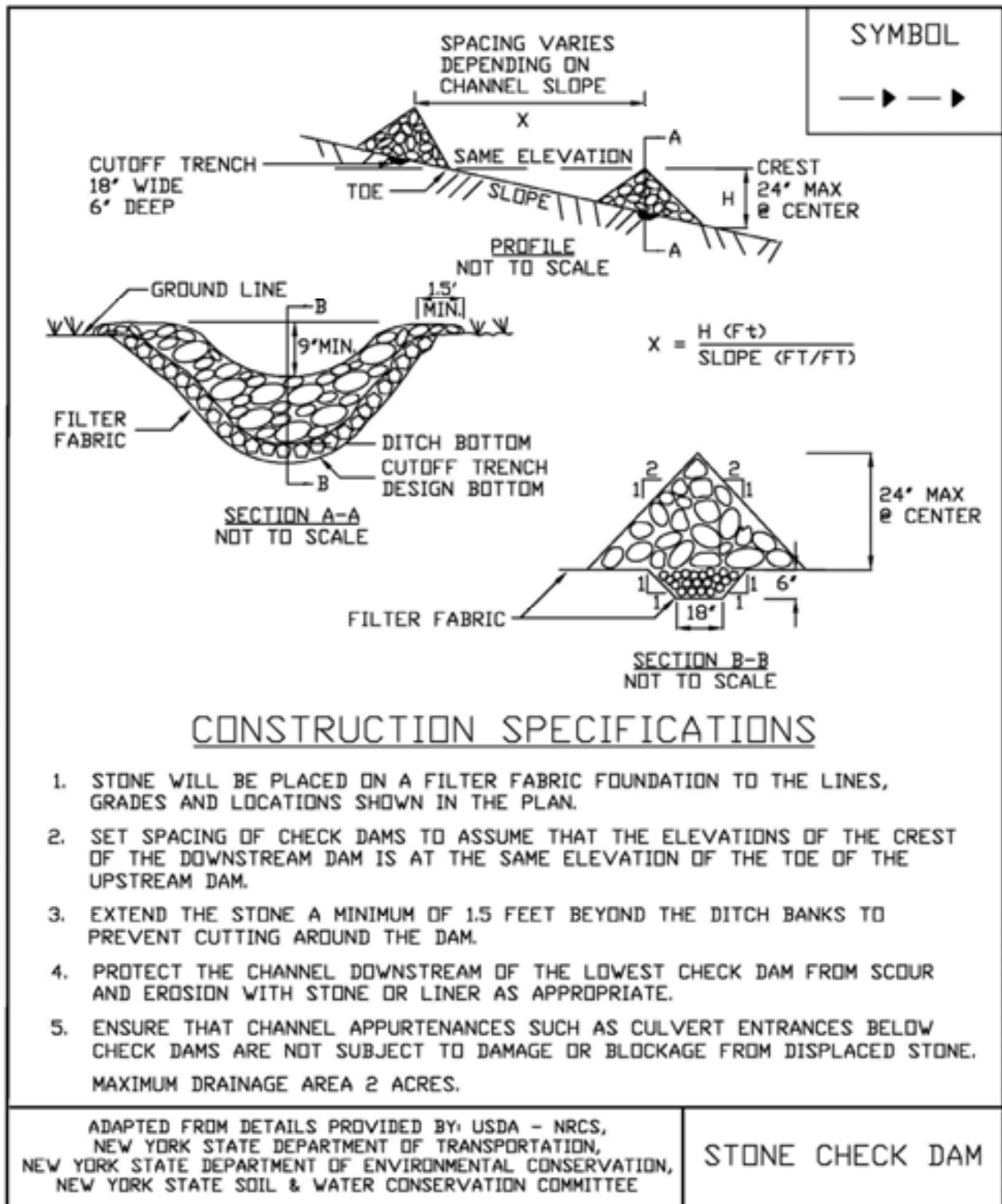
# Figure D.5 Construction Details for Stabilized Construction Entrance and Silt



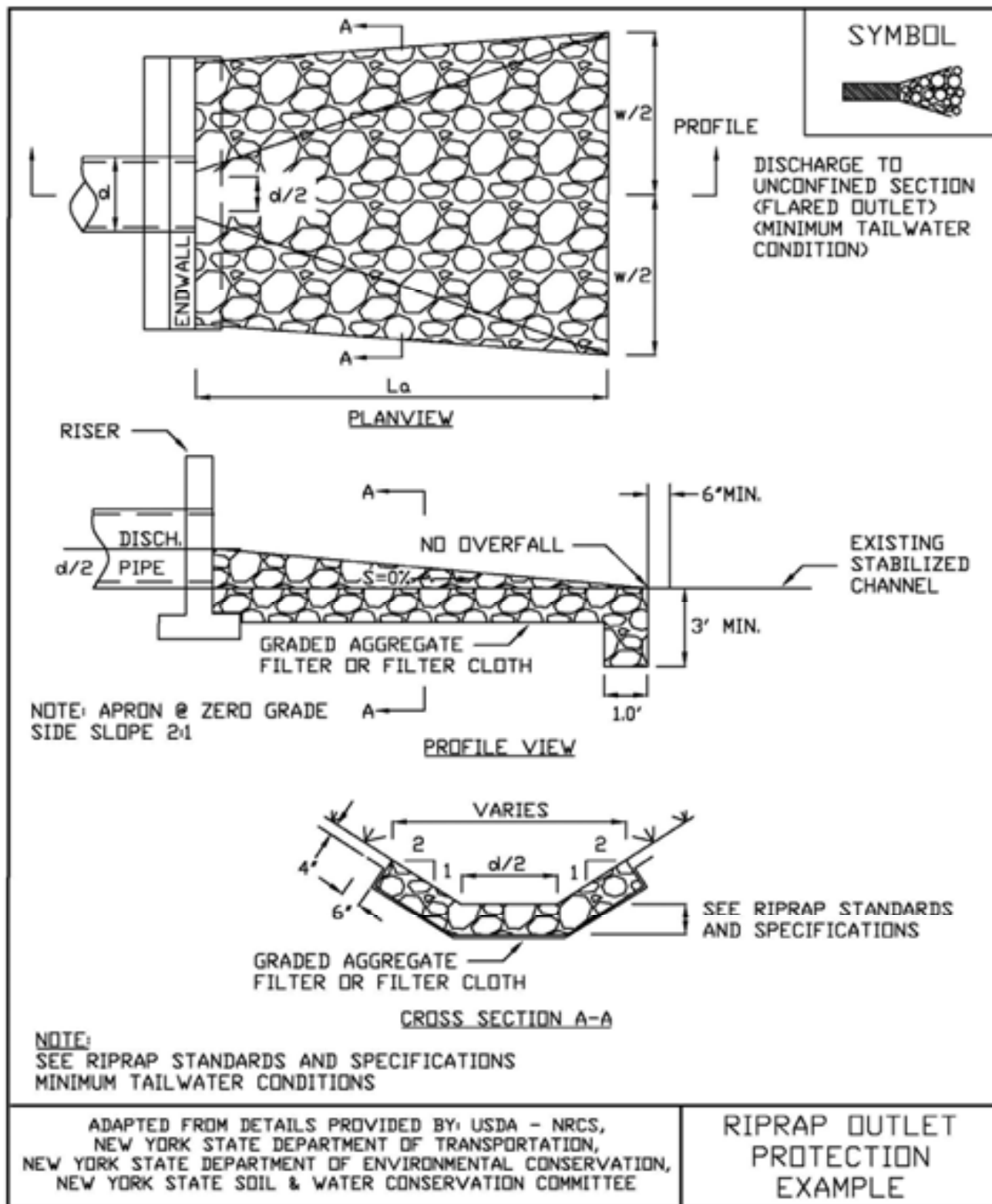
**Figure 5.32  
Fabric Drop Inlet Protection**



**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

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## 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> <hr/> <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)	<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: <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.
<input type="checkbox"/> For Dry Wells: Leaves, sticks, or other debris in gutters and downspouts		<input type="checkbox"/> Remove all debris by hand. <input type="checkbox"/> Other:
	<input type="checkbox"/> Piles of grass clippings, mulch, dirt, salt, or other materials	<input type="checkbox"/> Remove or cover piles of grass clippings, mulch, dirt, etc. <input type="checkbox"/> Other:
	<input type="checkbox"/> Open containers of oil, grease, paint, or other substances	<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:




## 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> <hr/> <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> <hr/> <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, (Photo credit: Stormwater Maintenance, LLC)</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Mow infiltration area at least twice per year.</li> <li><input type="checkbox"/> Other:</li> </ul>
 <p><input type="checkbox"/> For grass-covered Infiltration practices: sparse vegetation cover or bare spots</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Add topsoil (as needed), grass seed, straw, and water during the growing season to re-establish consistent grass coverage.</li> <li><input type="checkbox"/> Other:</li> </ul> <div style="background-color: #e0e0e0; padding: 5px;"> <ul style="list-style-type: none"> <li><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.</li> </ul> </div>
<p><input type="checkbox"/> Minor areas of sediment, grit, trash, or other debris are accumulating on the surface.</p>	<ul style="list-style-type: none"> <li><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.</li> <li><input type="checkbox"/> If removing the material creates a hole or low area, rake the surface smooth and level.</li> <li><input type="checkbox"/> Remove trash, debris, and other undesirable materials.</li> <li><input type="checkbox"/> Other:</li> </ul> <div style="background-color: #e0e0e0; padding: 5px;"> <ul style="list-style-type: none"> <li><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.</li> </ul> </div>

**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> <hr/> <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
 <p><input type="checkbox"/> Outlet obstructed with sediment, debris, trash, etc.</p>	<p><input type="checkbox"/> Remove the debris and dispose of it where it cannot re-enter the infiltration area.</p> <p><input type="checkbox"/> Other:</p> <hr/> <p><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.</p>
<p><input type="checkbox"/> Rills or gullies are forming at outlet.</p>	<p><input type="checkbox"/> For minor rills, fill in with soil, compact, and seed and straw to establish vegetation.</p> <p><input type="checkbox"/> Other:</p> <hr/> <p><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.</p>

**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**

	<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>
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**Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment**

<p>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.</p> <p>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</p> <p>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.</p>	<ul style="list-style-type: none"><li>• More than 2 inches of accumulated sediment cover 25% or more of the filter surface area.</li><li>• “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.</li><li>• New sources of sediment seem to be accumulating with each significant rainfall event.</li></ul>
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**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**

<p>Condition: Compare observation to the design or as-built plans to see whether existing conditions match the plan details.</p>	<ul style="list-style-type: none"><li>• 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.</li></ul>
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## Infiltration Basin Construction Inspection Checklist

Project:  
 Location:  
 Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ 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		

