Auburn Planning Board
AGENDA

The August 4th Planning Board Meeting has been CANCELED. The next meeting will be held on September 1, 2026.

Accommodations: Requests for accommodations for individuals with disabilities may be made with prior notice of at least three work days in advance of the meeting by calling (315) 255-4100 or e-mailing disabilityaccess@auburnny.gov. As much advance notice as possible is needed to assure that appropriate services can be acquired

August 4, 2026 6:30 PM

1. Approval of Meeting Minutes

1.1. Planning Board Meeting Minutes 7.7.2026

2. Site Plan Applications

2.1. Site Plan Review 121, 135, 139 Grant Ave & 9-13 McGarr St - Horizon Storage Group

2.2. Site Plan Review of 143 & 147 North St., 23 Perrine St., and 1 West Park Ave

3. Adjournment

MINUTES OF CITY OF AUBURN PLANNING BOARD
TUESDAY, JULY 7, 2026 6:30 PM
MEMORIAL CITY HALL
AUBURN, NY

Present: Crystal Cosentino, Chair
Andy Tehan
Fran Daloia
Theresa Walsh
Amy Sargent

Staff: Ashley Teucke, Senior Planner

Agenda Items:
1. Approval of the June 2nd, 2026 Planning Board Meeting Minutes – *Board Action: Approved*

2. Major Site Plan Review of Chick-fil-a 281 Grant ave for proposed demolition of existing structure and construction of a new ~4,620 sf restaurant with drive-thru, outdoor patio, lighting, landscaping and parking design. Applicant: Zach Middlebrooks, Chick-fil-A, Inc – *Board Action: Approved*

3. Major Site Plan Review at 23 Perrine, 147 & 143 North St and 1 West Park Ave for the proposed demolition of existing structures, consolidation of all four parcels, and construction of a new three-story Auburn Community Hospital Health Campus. The proposed building will have a ~30,700 sf footprint and will provide office space, patient access, and support services associated with the Auburn Medical Center. Site improvements include parking, landscaping, and utility connections. Applicant: Andrew Bodewes, Park Grove Realty LLC, Auburn Memorial Hospital. – *Board Action: Tabled*

4. Special Use Permit of 10 Seminary St. for interior conversion and renovation of an existing four-unit into a five-unit multifamily residential building with off street parking in the Downtown district. Applicant: Robin Casper – *Board Action: Approved*

5. Special Use Permit of 6 Seminary Ave to operate an auto detailing service out of the structure located in the Downtown district. Applicant: Robert Stearns – *Board Action: Approved*

Meeting Call to order: 6:30p

Pledge of Allegiance

Agenda Item 1: Approval of the June 2, 2026 Planning Board Meeting Minutes

Crystal Cosentino asks if there is a motion to approve the meeting minutes.
Theresa makes a correction to the date for the next Planning Board meeting

DRAFT

Motion to approve minutes by: Theresa Walsh and Second by: Fran Daloia
All in Favor, Aye. Opposed, None. Motion carried.

Agenda Item 2: Major Site Plan Review of Chick-fil-a 281 Grant ave for proposed demolition of existing structure and construction of a new ~4,620 sf restaurant with 2 lane drive-thru, outdoor patio, lighting, landscaping and parking design. Applicant: Zach Middlebrooks, Chick-fil-A, Inc

Chair Crystal Cosentino invites Randy Bebout to update the Board regarding revisions.

Randy gives details of changes, new wishbone to narrow drive-through and add a mountable island to separate the travel lane from the parking. Changes were also updated to landscaping regarding use of native species, back flow preventor, waiting on feedback from DOT but they have accepted the traffic study.

Crystal asks the Board for questions or discussion.

The Board reviewed SEQRA.

Chair asks for a motion to adopt a negative declaration of the SEQR.

Motion to approve SEQRA by: Andy Tehan and Second by: Amy Sargent
All in Favor, Aye. Opposed, None. Motion carried.

Chair asks for a motion to adopt the resolution approving the proposed Site Plan for 281 Grant Ave.

Motion to approve Site Plan by: Theresa Walsh and Second by: Fran Daloia
All in Favor, Aye. Opposed, None. Motion carried.

Agenda Item 3: Major Site Plan Review at 23 Perrine, 147 & 143 North St and 1 West Park Ave for the proposed demolition of existing structures, consolidation of all four parcels, and construction of a new three-story Auburn Community Hospital Health Campus. The proposed building will have a ~30,700 sf footprint and will provide office space, patient access, and support services associated with the Auburn Medical Center. Site improvements include parking, landscaping, and utility connections. Applicant: Andrew Bodewes, Park Grove Realty LLC, Auburn Memorial Hospital.

Staff gives update regarding receiving updated documents today and because of Open Meetings laws, those documents have requirements regarding publication to the public. New documents will be shared with the Board members and Staff over the next coming weeks and will be published for the August meeting. Plantings have been added and there have been talks with DOT regarding traffic concerns.

DRAFT

The Board engaged in a candid conversation regarding traffic and pedestrian safety. Several questions were asked of Officer Gilfus regarding concerns.

The Board determined they want to hear from DOT and may need more information from the traffic engineer.

Chair asks for a motion to table the application.
Motion to approve Site Plan by: Theresa Walsh and Second by: Amy Sargent
All in Favor, Aye. Opposed, None. Motion carried.

Agenda Item 4: Special Use Permit 10 Seminary St. for interior conversion and renovation of an existing four-unit into a five-unit multifamily residential building with off street parking in the Downtown district. Applicant: Robin Casper

Crystal asks the Board if they've had a chance to review the prepared SEQRA.

Chair asks for a motion to adopt a negative declaration of the SEQR.
Motion to approve SEQRA by: Fran Daloia and Second by: Andy Tehan
All in Favor, Aye. Opposed, None. Motion carried.

Chair asks for a motion to adopt the resolution approving the proposed Special Use Permit for 10 Seminary Street to allow a 5th unit.

Motion to approve Site Plan by: Andy Tehan and Second by: Theresa Walsh
All in Favor, Aye. Opposed, None. Motion carried.

Agenda item 5: Special Use Permit of 6 Seminary Ave to operate an auto detailing service out of the structure located in the Downtown district. Applicant: Robert Stearns

Staff gave update that no further comments came into the Planning Department after the Public Hearing so a draft of the SEQRA resolution has been prepared for the Boards consideration.

Crystal asks the Board if they've had a chance to review the prepared SEQRA.

Chair asks for a motion to adopt a negative declaration of the SEQR.

Motion to approve SEQRA by: Theresa Walsh and Second by: Amy Sargent
All in Favor, Aye. Opposed, None. Motion carried.

Chair asks for a motion to adopt the resolution approving the Special Use Permit allowing a car detailing service in the downtown district.

Motion to approve Site Plan by: Fran Daloia and Second by: Theresa Walsh
All in Favor, Aye. Opposed, None. Motion carried.

DRAFT

Next Planning Board meeting is scheduled for Tuesday August 4th, 2026 at 6:30pm.

Motion to adjourn made by: Theresa Walsh, Second: by Andy Tehan
All in Favor, Aye, None opposed. Motion Carried.

Meeting adjourned 7:10pm

Minutes prepared by: A. Teucke

DRAFT

CITY OF AUBURN, NY

"History's Hometown"

SITE PLAN REVIEW

APPLICATION

Return completed application, all required materials to, and the applicable fee to:
Code Enforcement Office ● Memorial City Hall ● 24 South Street ● Auburn, New York 13021

For assistance call the Office of Planning and Economic Development at (315) 255-4118.

Submission Checklist

Office Use	☐ **MINOR** SITE PLAN REVIEW REQUIREMENTS:
☐ ☒ ☒ ☒ ☒ ☒ ☒	1) Fee: $100.00 2) One (1) copy of the application 3) One (1) copy of the Environmental Assessment Form. Please utilize the NYS Dept. of Environmental Conservation EAF Mapper tool available at https://gisservices.dec.ny.gov/eafmapper/ 4) One (1) copy of an original Instrument Survey Map that show current site conditions. 5) Three (3) copies of a scaled site plan (see attached Site Plan Checklist). 6) One (1) copy of scaled elevations of proposed structures, or façade renovation to existing structures, as applicable. 7) Digital versions of all documents in portable document format (PDF) files via email or file transfer.
Office Use	☒ **MAJOR** SITE PLAN REVIEW REQUIREMENTS:
☒ ☒ ☒ ☒	**All of the above documents, 2-7, plus:** 1) Fee: $250.00 2) One (1) copy of scaled floor plans for all proposed buildings. 3) Color renderings or other type of visual aids depicting the proposed development in its built condition. 4) Stormwater drainage report, including calculations, or Stormwater Pollution Prevention Plan, as applicable.

IMPORTANT

All above materials must be submitted by the appropriate due date to be included on the Planning Board Agenda (see schedule below). Certain plans may have to be stamped by a design professional licensed in the State of New York. The City, as needed for review purposes, may require additional information regarding a project.

[For Office Use Only]

Address:_____ Project Name:_____

Date Submitted:_____ Fee:_____ Received By:_____

CITY OF AUBURN, NY

"History's Hometown"

SITE PLAN REVIEW

Project Information

(Please Type or Print)

1. Applicant: Josh Sullivan Company Name: Horizon Storage Group, LLC

   Address: 1216 Broadway, 2nd Floor City/State: New York, NY Zip: 10001

   Email: [redacted] Phone: 603.770.6885

   Interest in Property: ☐ Owner ☐ Lessee ☒ Other, Explain Purchaser

2. Project Name: Auburn Storage Unit Development

3. Project Address(es): 121-139 Grant Ave, Auburn, NY 13021

4. Tax Map Number(s): 109.79-1-21 0.25± acres; 109.79-1-22.1 2.68± acres; 109.79-1-33.1 0.20± acres; 109.79-1-44 0.51± acres

5. Present Zoning District: HIGHWAY COMMERCIAL (HC)

6. Property within Historic District: ☐ Yes ☒ No

7. Property within Flood Zone: ☒ X ☐ A ☐ AE ☐ Other, Explain

8. Detailed Project Description (Please attach separately):

   A detailed project description shall include, but not be limited to, the following information: Project acreage; existing and proposed uses and their hours of operation; total square footage; square footage of individual project components; square footage of existing and proposed impervious surface; existing and proposed dwelling units; height of existing and proposed structure(s) in feet and stories; and the number of existing and proposed parking spaces; façade renovations; and identifying how the site is accessed.

9. Anticipated Construction Period: September 2026 to August 2027 (12 months)

Consultant Contact Information

1. Plan Preparer*: Laura C. Cassalia, PE - CHA Consulting, Inc.

   *A New York State Licensed Design Professional, i.e. Landscape Architect (RLA), Engineer (PE), and/or Architect (RA) must prepare all plans for Major Site Plan Review.

   Address: 300 South State Street Suite 600 City/State: Syracuse, NY Zip: 13202

   Email: [redacted] Phone: 315-228-0717

2. Surveyor: Paul James Olszewski, PLS

   Address: 1326 New Seneca Turnpike, Suite B1 City/State: Skaneateles, NY Zip: 13152

   Email: [redacted] Phone: 315-488-5552

3. Attorney: _____

   Address: _____ City/State: _____ Zip: _____

   Email: _____ Phone: _____

4. Other: _____ Role: _____

   Address: _____ City/State: _____ Zip: _____

   Email: _____ Phone: _____

Certification / Authorization

APPLICANT: I certify that the information supplied on this application is complete and accurate, and that the project described, if approved, will be completed in accordance with the terms and conditions of said approval.

Signature: _____ Date: 5/7/26

OWNER (if other than applicant): I have read and familiarized myself with the contents of this application and do hereby consent to its submission and processing.

Signature: Louis E. Springer III Mary K. Springer Date: 7 MAY 2026

Short Environmental Assessment Form
Part 1 - Project Information

Instructions for Completing

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

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

Part 1 – Project and Sponsor Information

Name of Action or Project:

Horizon Storage Group, LLC

Project Location (describe, and attach a location map):

121-139 Grant Ave, Auburn, NY 13021

Brief Description of Proposed Action:

Demolition of two (2) existing dwellings and outbuildings for construction of a new 3-story, approx. 100,000 SF building (33,000+ SF building footprint) climate-controlled storage facility. Parking will be provided for approximately 20 cars with maneuvering space for loading/unloading. New landscaping will provide buffers to residential neighbors and stormwater will be handled via a bioretention basin and underground stormwater management system.

Name of Applicant or Sponsor:	Telephone: 603.770.6885
Josh Sullivan	E-Mail: [redacted]

Address:

1216 Broadway, 2nd Floor

City/PO:	State:	Zip Code:
New York	NY	10001

	NO	YES
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.	☑	☐
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval: Site Plan Review City of Auburn	☑	☐

3. a. Total acreage of the site of the proposed action? 3.64 acres
   b. Total acreage to be physically disturbed? 2.63 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 3.64 acres

4. Check all land uses that occur on, are adjoining or near the proposed action:

5. ☑ Urban ☐ Rural (non-agriculture) ☐ Industrial ☑ Commercial ☑ Residential (suburban)
   ☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other(Specify):
   ☐ Parkland

	NO	YES	N/A
5. Is the proposed action,			
a. A permitted use under the zoning regulations?	☐	☑	☐
b. Consistent with the adopted comprehensive plan?	☐	☑	☐

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

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply:

☐ Shoreline ☑ Forest ☐ Agricultural/grasslands ☐ Early mid-successional

☐ Wetland ☑ Urban ☐ Suburban

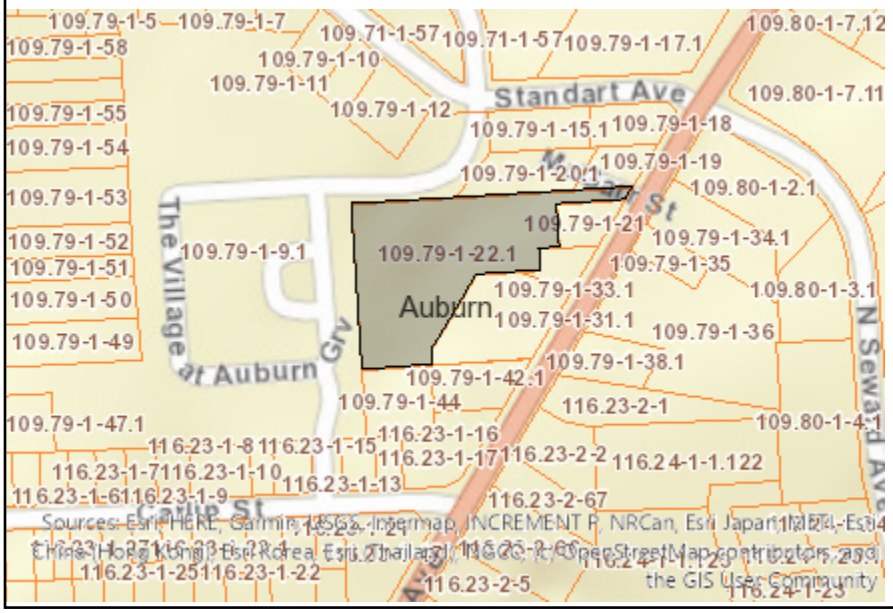
	NO	YES
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	☑	☐
16. Is the project site located in the 100-year flood plan?	☑	☐
17. Will the proposed action create storm water discharge, either from point or non-point sources?	☐	☑
If Yes,		
a. Will storm water discharges flow to adjacent properties?	☐	☑
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)?	☑	☐
If Yes, briefly describe: _____		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)?	☑	☐
If Yes, explain the purpose and size of the impoundment: _____		
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility?	☑	☐
If Yes, describe: _____		
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?	☑	☐
If Yes, describe: _____		

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE

Applicant/sponsor/name: CHA Consulting, Inc. on behalf of Horizon Storage Group, LLC Date: 7/13/2026

Signature: Laura C. Casalia Title: CHA - Senior Project Manager

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources to confirm data provided by the Mapper or to obtain data not provided by the Mapper.



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local, New York State, and federal wetlands and waterbodies is known to be incomplete. Refer to the EAF Workbook.
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	No
Part 1 / Question 20 [Remediation Site]	No

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Environmental Resource Mapper

Base Map: Satellite with Labels | Using this map

- Search
- Tools
- Layers and Legend
- **Wetland Layers**

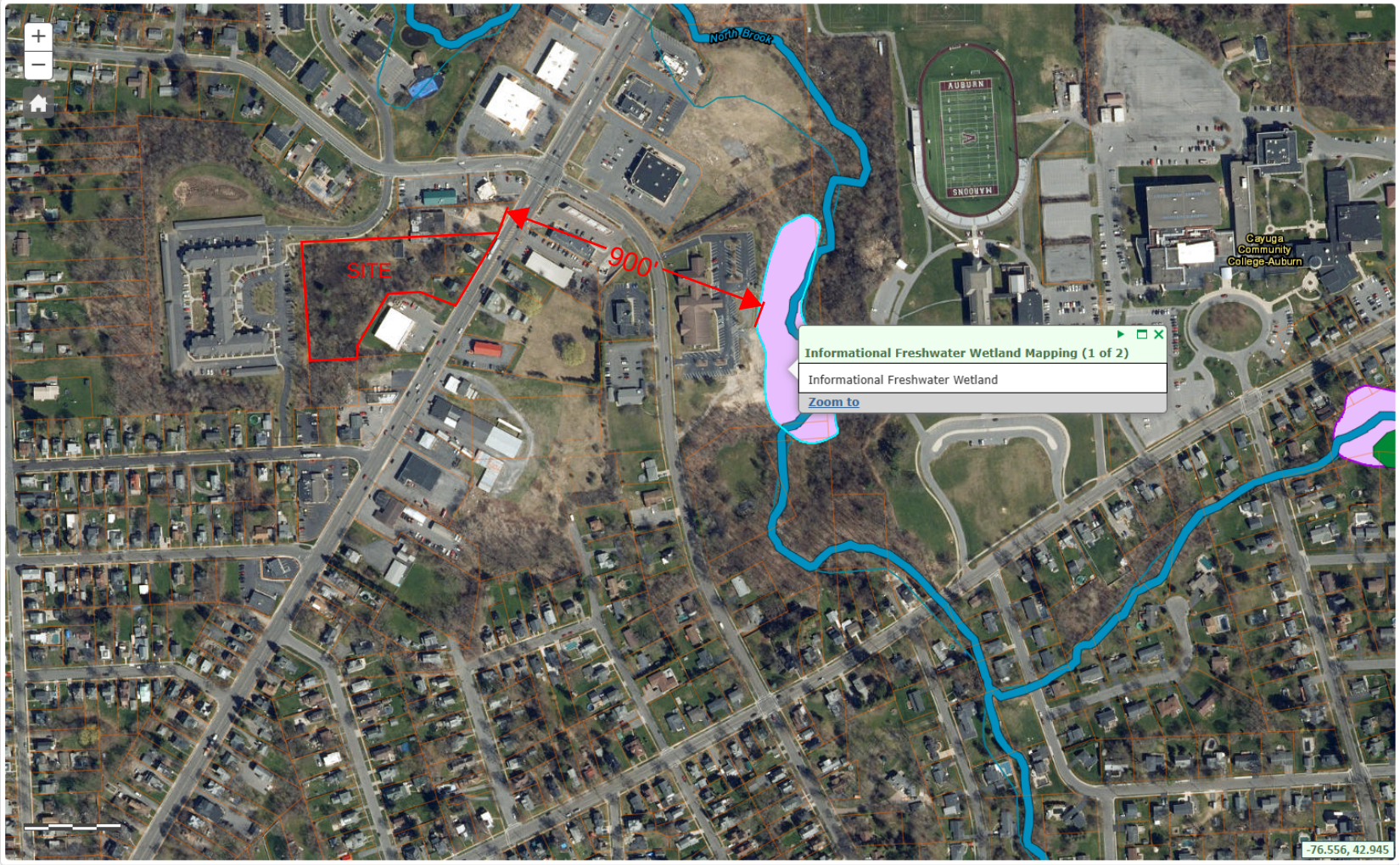
All Layers

Previously Mapped Freshwater Wetlands
(Outside of the Adirondack Park)

Informational Freshwater Wetland Mapping

National Wetlands Inventory
- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

- Reference Layers
- Tell Me More...
- Need A Permit?
- Contacts



Horizon Storage Group, LLC
Auburn Storage Unit Development
121-139 Grant Ave, City of Auburn, NY

Detailed Project Description

Zoning District: Highway Commercial (HC)

Project Address: 135 Grant Ave (Route 5), Auburn, NY 13021

Tax Map Nos.:	109.79-1-21	0.25± Acres
	109.79-1-22.1	2.68± Acres
	109.79-1-33.1	0.20± Acres
	109.79-1-44	0.51± Acres

Total Area: 158,760± sf (3.64± acres)

Proposed Project Acreage: 3.56 acres (after proposed lot line adjustment and combination of lots)

Existing Use: Vacant land

Proposed Use: Commercial, Indoor climate-controlled storage facility.

Total Building SF: 100,950 sf (3 floors at 33,650 sf each)

Unit Counts: The storage unit breakdown is as follows:

UNIT MIX SCHEDULE

PROJECT : **HORIZON SS - AUBURN, NY**

CLIMATE CONTROLLED UNITS BUILDING	GROSS SF	5'x4'	5'x5'	5'x10'	7.5'x10'	10'x10'	10'x12.5'	10'x15'	10'x20'	10'x25'	10'x30'	UNITS	
FIRST FLR	33,223	-	5	52	-	60	-	39	28	17	6	207	
SECOND FLR	33,223	1	42	54	-	42	-	50	36	3	5	233	
THIRD FLR	33,223	-	73	1	68	33	1	33	33	16	-	258	
UNITS		1	120	107	68	135	1	122	97	36	11	**698**	Total Units
SF		20	25	50	75	100	125	150	200	250	300		
TOTAL SF	**99,669**	20	3,000	5,350	5,100	13,500	125	18,300	19,400	9,000	3,300	**77,095**	Net Rentable
% UNITS (#)		0%	17%	15%	10%	19%	0%	17%	14%	5%	2%	100%	
% UNITS (SF)		0%	4%	7%	7%	18%	0%	24%	25%	12%	4%	110.45	Avg Unit
												77%	Efficiency

Hours of Operation: The hours of operation have not yet been finalized, but historically have been:

Sunday	Closed
Monday	9:30 AM–6 PM
Tuesday	9:30 AM–6 PM
Wednesday	9:30 AM–6 PM
Thursday	9:30 AM–6 PM
Friday	9:30 AM–6 PM
Saturday	8:30 AM–5 PM

Proposed building height: 35’-6” to Line of Roof Surface

The building height by definition is 36’-0”, which is calculated by measuring the vertical distance from the average elevation of the proposed finished grade at the front of the building to the average height of the highest roof surface.

Proposed impervious surface: 69,210 sf (44% of total lot area)

Existing and proposed dwelling units: There are two (2) existing dwellings with outbuildings that will be demolished. No new dwelling units are proposed.

Number of existing and proposed parking spaces:

Existing residential homes: 4 parking spaces (assumed 2 per driveway)
Proposed self-storage facility: 20 - 9’ x 18’ parking spaces

Based upon operational experience, typically 10-15 parking spaces are sufficient to meet the needs of a facility of this size. The Zoning Code requires 50 parking spaces and a total of 20 parking spaces are being proposed. Providing 50 parking spaces would be excessive for this facility and would create additional impervious area, which negatively impacts stormwater management and would reduce green space thus limiting the buffering opportunities to retain existing vegetation and provide additional landscaping. The reduction to 20 parking spaces from the required 50 parking spaces would satisfy our operational needs.

Site access: 26’ wide commercial driveway off of Grant Avenue. The Anticipated Trip Generation Memo, dated June 30, 2026, has been included in this submission.

Signage:

Allowable signage in the HC District:

- Wall Sign: 1 per façade; 1.5 square feet per 1 foot of building length
- Monument Signs: 1 per Lot; max 80 sf
- Maximum Total: 200 sf

Proposed Signage:

- Wall Sign: One (1) at 150 sf
  1.5 square feet per 1 foot of building length = 1.5 sf x 221’-9.5” = 332.69 sf
- Monument Signs: One (1) at 50 sf max
- Total of all Signage: 200 sf

Construction Period: 12 months

June 30, 2026

Horizon Storage Group, LLC
1216 Broadway, 2nd Floor
New York, NY 10001

Subject: Anticipated Trip Generation Memo
Proposed Storage Facility at 121-139 Grant Ave, Auburn, NY
CHA Project No. 106860

Introduction

The purpose of this memorandum is to provide a general trip generation assessment for the proposed self-storage facility at 121-139 Grant Avenue in Auburn, New York. This memo will evaluate and compare the trips generated by the existing site usage with the trips generated by the proposed development during the anticipated peak hours.

Project Description

The proposed project would redevelop 3.64 acres of residential property (containing two distinct residential units) into a mini-warehouse self-storage facility of approximately 101,000 square feet, including 698 storage units. The project is located at 121-139 Grant Avenue in the City of Auburn, NY.

Trip Generation

The typical traffic generated by the existing and proposed conditions was estimated utilizing the Trip Generation Manual (11th Edition) from the Institute of Transportation Engineers' (ITE). The estimated values for peak hour conditions are provided in Table 1. In the worst-case scenario, the proposed development will add 12 new total trips during the PM peak hour.

Pass-by Trip Rates

Pass-by trips are defined as trips that are not new trips generated by a proposed development but rather traffic travelling on the roadway that stops by the development while headed elsewhere. For purposes of this analysis, pass-by trips are not considered to be relevant for the proposed use type.

Table 1: Estimated Weekday Traffic Volume During Peak Periods

Land Use	ITE Code	Units	AM Peak Hour (vph)				PM Peak Hour (vph)			
			In (vph)	Out (vph)	Pass-by Rate	Adjusted Total Trips (vph)	In (vph)	Out (vph)	Pass-by Rate	Adjusted Total Trips (vph)
Existing – Single Family Homes (2)	210	2 DU	1	1	0%	2	1	1	0%	2
Proposed – Mini Warehouse	151	698 units	7	7	0%	14	7	7	0%	14

Adjacent Roadway Volumes

The proposed site will be accessed from Grant Avenue (NYS Route 5). According to the NYS Traffic Data Viewer, the most recent AADT estimate at this location is 30,864 vehicles per day, with a maximum morning peak of 1,902 vehicles per hour and an afternoon peak of 2,748 vehicles per hour.

Conclusion

While the proposed development is forecast to generate slightly more trips than the existing usage, an increase of 12 trips in the morning and 12 trips in the afternoon is considered insignificant. Further traffic analysis is not warranted.

Agency Coordination

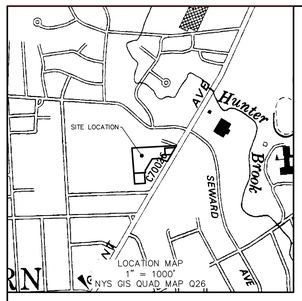
Based on these initial findings, preliminary communications with the NYSDOT Region 3 permitting group have been encouraging. NYSDOT does not anticipate the need for a comprehensive traffic study, and this summary memo of anticipated trips should satisfy permitting requirements.

In addition, NYSDOT encourages the developer to utilize the existing curb cut along Route 5, and to keep all stormwater on site, without directing runoff into the adjacent city system.

Sincerely,



Luke Morenus, PE
Project Team Leader – Northeast Highway



SURVEYOR'S LEGAL DESCRIPTION

PARCEL No.1 (TM# 109.79–1–21)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF AUBURN, COUNTY OF CAYUGA, AND STATE OF NEW YORK, BEING PART OF LOT NOS. 18 & 19 ON A MAP OF TWENTY–EIGHT CITY LOTS SITUATE ON GREAT LOT NO. 38, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5), SAID POINT BEING THE NORTHEASTERLY CORNER OF PARCEL No.4;

THENCE FROM SAID POINT OF BEGINNING S87°27'42"W A DISTANCE OF 85.74 FEET TO AN IRON ROD SET, SAID COURSE PASSING OVER AN IRON ROD FOUND AT A DISTANCE OF 0.94 FEET; THENCE N04°14'W A DISTANCE OF 93.83 FEET TO AN IRON ROD SET; THENCE N86°49'41"E A DISTANCE OF 149.08 FEET TO AN IRON ROD SET IN THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5); THENCE SOUTHWESTERLY ALONG THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5) THE FOLLOWING TWO COURSES AND DISTANCES; S29°48'25"W A DISTANCE OF 106.25 FEET TO A POINT; THENCE S30°37'45"W A DISTANCE OF 6.78 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 0.25 PLUS OR MINUS ACRES OF LAND.

SUBJECT TO ALL COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.

PARCEL No.2 (TM# 109.79–1–21)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF AUBURN, COUNTY OF CAYUGA, AND STATE OF NEW YORK, BEING PART OF LOT NOS. 18 & 19 ON A MAP OF TWENTY–EIGHT CITY LOTS SITUATE ON GREAT LOT NO. 38, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT IRON ROD SET IN THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5), SAID POINT BEING THE NORTHEASTERLY CORNER OF PARCEL No.1;

THENCE FROM SAID POINT OF BEGINNING S86°49'41"W A DISTANCE OF 149.08 FEET TO AN IRON ROD SET; THENCE S04°14'E A DISTANCE OF 93.83 FEET TO AN IRON ROD SET; THENCE S87°27'42"W A DISTANCE OF 44.02 FEET TO A POINT, SAID POINT BEING NORTHEASTERLY 0.9 FEET FROM AN IRON ROD FOUND; THENCE S03°35'59"E A DISTANCE OF 47.48 FEET TO AN IRON ROD FOUND; THENCE S87°27'42"W A DISTANCE OF 141.06 FEET TO AN IRON ROD FOUND; THENCE S30°37'43"W A DISTANCE OF 189.00 FEET TO AN IRON ROD FOUND; THENCE S02°45'12"E A DISTANCE OF 31.22 FEET TO AN IRON ROD FOUND; THENCE S86°50'37"W A DISTANCE OF 12.76 FEET TO AN IRON ROD SET; THENCE S86°49'41"W A DISTANCE OF 148.53 FEET TO AN IRON ROD SET; THENCE N04°14'W A DISTANCE OF 354.31 FEET TO AN IRON ROD FOUND; THENCE N86°49'41"E A DISTANCE OF 622.71 FEET TO AN IRON ROD SET IN THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5), SAID COURSE PASSING OVER AN IRON ROD FOUND AT A DISTANCE OF 239.93 FEET; THENCE ALONG THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5) THE FOLLOWING TWO COURSES AND DISTANCES; THENCE S29°56'20"W A DISTANCE OF 29.94 FEET TO A POINT; THENCE S29°48'25"W A DISTANCE OF 1.98 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 2.68 PLUS OR MINUS ACRES OF LAND.

SUBJECT TO ALL COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.

PARCEL No.3 (TM# 109.79–1–44)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF AUBURN, COUNTY OF CAYUGA, AND STATE OF NEW YORK, BEING PART OF LOT NOS. 18 & 19 ON A MAP OF TWENTY–EIGHT CITY LOTS SITUATE ON GREAT LOT NO. 38, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT AN IRON ROD SET IN THE SOUTHERLY LINE OF PARCEL No.2, SAID POINT BEING S86°50'37"W A DISTANCE OF 12.76 FEET FROM AN IRON ROD FOUND BEING THE MOST SOUTHEASTERLY CORNER OF PARCEL No.2;

THENCE FROM SAID POINT OF BEGINNING S04°14'E A DISTANCE OF 148.53 FEET TO AN IRON ROD SET; THENCE S86°49'41"W A DISTANCE OF 148.53 FEET TO AN IRON ROD SET; THENCE N04°14'W A DISTANCE OF 148.53 FEET TO AN IRON ROD SET; THENCE N86°49'41"E A DISTANCE OF 148.53 FEET TO THE POINT AND PLACE OF BEGINNING.

CONTAINING 0.51 PLUS OR MINUS ACRES OF LAND.

SUBJECT TO ALL COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.

PARCEL No.4 (TM# 109.79–1–33.1)

ALL THAT TRACT OR PARCEL OF LAND SITUATE IN THE CITY OF AUBURN, COUNTY OF CAYUGA, AND STATE OF NEW YORK, BEING PART OF LOT NOS. 18 & 19 ON A MAP OF TWENTY–EIGHT CITY LOTS SITUATE ON GREAT LOT NO. 38, AND BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5), SAID POINT BEING THE SOUTHEASTERLY CORNER OF PARCEL No.1;

THENCE FROM SAID POINT OF BEGINNING AND ALONG THE NORTHWESTERLY ROAD LINE OF GRANT AVENUE (US ROUTE 5) S30°37'45"W A DISTANCE OF 111.87 FEET TO A POINT, SAID POINT BEING 1.1 FEET EASTERLY OF AN IRON ROD FOUND; THENCE N70°04'52"W A DISTANCE OF 120.89 FEET TO AN IRON ROD FOUND; THENCE N87°27'42"E A DISTANCE OF 44.04 FEET TO AN IRON ROD FOUND; THENCE N03°35'59"W A DISTANCE OF 47.48 FEET TO A POINT, SAID POINT BEING NORTHEASTERLY 0.9 FEET FROM AN IRON ROD FOUND; THENCE N87°27'42"E A DISTANCE OF 129.76 FEET TO THE POINT AND PLACE OF BEGINNING, SAID COURSE PASSING OVER AN IRON ROD SET AT A DISTANCE OF 44.0 FEET AND AN IRON ROD FOUND AT A DISTANCE OF 128.8 FEET.

CONTAINING 0.20 PLUS OR MINUS ACRES OF LAND.

SUBJECT TO ALL COVENANTS, EASEMENTS AND RESTRICTIONS OF RECORD.

The properties described hereon is the same as the property described in Republic Title Commitment No. 1002–421365–RTT with an effective date of 12/31/2025 and that all easements, covenants and restrictions referenced in said title commitment or apparent from a physical inspection of the site or otherwise known to me have been plotted hereon or otherwise noted as to their effect on the subject property.

TABLE "A" NOTES

1) MONUMENTS WHERE FOUND OR PLACED AT ALL MAJOR CORNERS OF THE BOUNDARY OF THE SURVEYED PARCEL.
2) THE OBSERVED ADDRESSES OF THE SITES ARE AS FOLLOWED; (PARCEL NO. 1 TM# 109.79–1–21) 139 GRANT AVENUE, CITY OF AUBURN, NEW YORK 13021; (PARCEL NO. 2 TM# 109.79–1–22.1) 121 GRANT AVENUE, CITY OF AUBURN, NEW YORK 13021; (PARCEL NO. 3 TM# 109.79–1–44) 9–13 MCGARR STREET, CITY OF AUBURN, NEW YORK 13021; (PARCEL NO. 4 TM# 109.79–1–33.1) 135 GRANT AVENUE, CITY OF AUBURN, NEW YORK 13021.
3) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY (F.E.M.A.) FLOOD INSURANCE RATE MAP 36011C0308E, DATED 08–02–2007, COMMUNITY PANEL NUMBER 360102, FOR THE CITY OF AUBURN, CAYUGA COUNTY, NEW YORK, THE SURVEYED PARCELS LIE WITHIN ZONE "X" AN AREA TO BE DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.
4) THE GROSS LAND AREA OF THE SURVEYED PARCELS ARE AS FOLLOWED:(PARCEL NO. 1 TM# 109.79–1–21) 0.25 ACRES; (PARCEL NO. 2 TM# 109.79–1–22.1) 2.68 ACRES; (PARCEL NO. 3 TM# 109.79–1–44) 0.51 ACRES; (PARCEL NO. 4 TM# 109.79–1–33.1) 0.20 ACRES.
5) THE TOPOGRAPHIC VERTICAL RELIEF WAS PREPARED FROM A GROUND SURVEY COMPLETED ON 02–11–2026, CONTOUR INTERVAL 1 AND 5 FEET, VERTICAL DATUM NAVD88.
6) N/A
7) N/A
8) SUBSTANTIAL FEATURES OBSERVED IN THE PROCESS OF CONDUCTING FIELDWORK ARE SHOWN HEREON.
9) N/A
10) N/A
11) THE UNDERGROUND UTILITIES AND FEATURES SHOWN HEREON HAVE BEEN LOCATED FROM ABOVE GROUND VISIBLE FEATURES AND OTHER AVAILABLE RECORDS AND THEREFORE THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE ONLY. OTHER UNDERGROUND UTILITIES AND FEATURES MAY EXIST, EITHER IN SERVICE OR ABANDONED, THAT ARE NOT INDICATED ON THIS SURVEY. UDIG NY SHOULD BE CONTACTED PRIOR TO PERFORMING ANY EXCAVATION ACTIVITIES.
12) N/A
13) NAMES OF ADJOINING OWNERS ACCORDING TO CURRENT TAX RECORDS ARE SHOWN HEREON.
14) N/A
15) N/A
16) THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
17) N/A
18) N/A

SCHEDULE"B-II" NOTES

1. GAS EASEMENT BY HOWARD J. MULDOON AND STELLA MULDOON TO NEW YORK STATE ELECTRIC & GAS CORPORATION, DATED APRIL 08, 1970, AND RECORDED ON JUNE 11, 1970 IN BOOK 378 PAGE OF DEEDS AT PAGE 665. SHOWN HEREON THE SURVEYED MAP. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 5)

2. UTILITY EASEMENT BY JOHN M. FLUMMERFELT AND PRISCILLA E. FLUMMERFELT TO NEW YORK STATE ELECTRIC & GAS CORPORATION, DATED DECEMBER 04, 1979, AND RECORDED ON JANUARY 04, 1980 IN BOOK 589 OF DEEDS AT PAGE 132. NOT ABLE TO PLOT. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 6)

3. UTILITY EASEMENT BY JOHN M. FLUMMERFELT AND PRISCILLA E. FLUMMERFELT TO NEW YORK STATE ELECTRIC & GAS CORPORATION, DATED DECEMBER 04, 1979, AND RECORDED ON JANUARY 04, 1980 IN BOOK 589 OF DEEDS AT PAGE 134. NOT ABLE TO PLOT. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 7)

4. ACCESS EASEMENT BY RM11 HOLDINGS, LLC TO JOHN M. FLUMMERFELT AND PRISCILLA E. FLUMMERFELT, DATED APRIL 02, 2013, AND RECORDED ON APRIL 09, 2013 IN BOOK 1506 OF DEEDS AT PAGE 253. SHOWN HEREON THE SURVEYED MAP. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 8)

5. NOTICE OF APPROPRIATION RECORDED ON AUGUST 30, 1995 IN BOO 920 OF DEEDS AT PAGE 257. NOT ABLE TO PLOT. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 9)

6. NOTICE OF APPROPRIATION RECORDED ON MAY 15, 2025 IN BOOK 4604 OF DEEDS AT PAGE 243. NOT ABLE TO PLOT. WITH REGARD THERETO: (REPUBLIC TITLE SCHEDULE "B–II" ITEM 10)
a) AFFIDAVIT OF SERVICE FILED ON MAY 29, 2025 IN BOOK 4611 OF DEEDS AT PAGE 179. NOT ABLE TO PLOT.

7. NOTICE OF APPROPRIATION RECORDED ON MAY 15, 2025 IN BOOK 4604 OF DEEDS AT PAGE 245. NOT ABLE TO PLOT. WITH REGARD THERETO: (REPUBLIC TITLE SCHEDULE "B–II" ITEM 11)
a) AFFIDAVIT OF SERVICE FILED ON MAY 29, 2025 IN BOOK 4611 AT PAGE 75. NOT ABLE TO PLOT.

8. MATTERS AS SHOWN ON FILED MAP RECORDED IN BOOK 2 OF MAPS AT PAGE 141. SUBJECT TO THE SURVEYED PARCELS IN THEIR ENTIRETY. (REPUBLIC TITLE SCHEDULE "B–II" ITEM 12)

GENERAL NOTES

1. There are no gaps, strips, or gores, and that the legal description presented in the Survey mathematically closes.

2. The boundary lines of the adjacent properties and adjacent public or private rights–of–way are contiguous with the property boundary line.

3. There is no evidence of solid waste dump, sump, or sanitary landfill on subject properties.

4. Parcels 1, 2, and 4 have direct access to Grant Avenue (U.S. Route 5).

5. There are no current plans to widen the adjacent Right of Way that the Surveyor is aware of at the time the survey was completed.

6. All visible improvement, easements and utilities were located and shown on the survey.



LEGEND

- CONCRETE MONUMENT FOUND
- IRON PIPE FOUND
- IRON ROD FOUND
- IRON ROD SET
- MANHOLE
- UTILITY POLE
- LIGHT POLE
- VALVE
- SIGN
- UTILITY BOX
- CATCH BASIN
- CENTERLINE ROAD
- PROPERTY LINE
- DEED PLOT LINE
- MISC. DIVISION
- TOPO ISOLINE –578–

ENCROACHMENT NOTES

Encroachment "A"

- Single story building over property line
- Western edge of encroaching building is 15.2' over property line
- Eastern edge of encroaching building is 18.3' over property line

Encroachment "B"

- Gravel driveway over property line
- Gravel driveway is 20.4' over property line

ALTA/NSPS CERTIFICATION

CERTIFY TO HORIZON STORAGE GROUP LLC, AUBURN SELF STORAGE LLC, AND REPUBLIC TITLE A FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2026 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 8, 11(a), 13, 16, AND 19 OF TABLE A THEREOF.

PAUL J. OLSZEWSKI, P.L.S. LICENSE NO. 50212

Fieldwork Completed: 02/25/2026
Date Signed: 05/14/2026

NOTES:

- VERTICAL DATUM – NAVD 1988
- HORIZONTAL DATUM – NAD 1983
- SURVEY COMPLETED IN SNOW COVERED CONDITIONS

REFERENCES:

MAP OF 28 CITY LOTS PREPARED BY D.F. AUSTIN DATED 9–1907. FILED IN THE CAYUGA COUNTY CLERKS OFFICE AS MAP NO. 2–141.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION ACQUISITION MAP, MAP No. 466 PARCEL No. 511

NEW YORK STATE DEPARTMENT OF TRANSPORTATION ACQUISITION MAP, MAP NO. 465 PARCEL No. 510

SURVEY COMPLETED WITH BENEFIT OF TITLE PROVIDED BY REPUBLIC TITLE A FIRST AMERICAN TITLE INSURANCE COMPANY. TITLE NO. 1002–421365–RTT DATED 12–31–2025.

THE UNDERSIGNED SURVEYOR HEREBY CERTIFIES THAT THIS IS AN ACCURATE MAP OF AN ACTUAL SURVEY COMPLETED 02–25–2026.

PAUL J. OLSZEWSKI, P.L.S. LICENSE No. 50212

"UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB–DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW."

"COPIES FROM THE ORIGINAL OF THIS SURVEY MAP NOT MARKED WITH AN ORIGINAL OF THE LAND SURVEYOR'S INKED SEAL OR HIS EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID "TRUE COPY"."

ALTA/NSPS LAND TITLE SURVEY
PARCELS OF LAND

PART OF LOTS 18 & 19 — CITY OF AUBURN
COUNTY OF CAYUGA — STATE OF NEW YORK

PAUL JAMES OLSZEWSKI, P.L.S., PLLC
1326 NEW SENECA TPKE, SUITE B1
SKANEATELES NEW YORK, 13152
315–488–5552 pjosurvey.com

DATE: MAY 21, 2026 — SCALE: 1" = 30 FEET — PROJECT No. AUB109.79–01–21, 22.1, 33.1, 44

AUBURN SELF STORAGE

121-139 GRANT AVE
AUBURN, NY 13021

SITE LOCATION MAP

NORTH
NO SCALE



DRAWING INDEX

SHEET NUMBER	SHEET TITLE
C-001	TITLE SHEET
C-002	GENERAL NOTES & LEGEND
C-003	EXISTING CONDITIONS PLAN
C-004	DEMOLITION PLAN
C-101	OVERALL SITE LAYOUT PLAN
C-201	GRADING & DRAINAGE PLAN
C-301	UTILITY PLAN
C-501	EROSION & SEDIMENT CONTROL PLAN
C-502	EROSION & SEDIMENT CONTROL DETAILS
C-601	SITE DETAILS
C-602	SITE DETAILS
C-603	SITE DETAILS
C-604	SITE DETAILS
C-605	SITE DETAILS
C-606	SITE DETAILS
C-701	LANDSCAPING PLAN
C-801	SITE LIGHTING PLAN

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COA # 0021745

AUBURN
SELF STORAGE,LLC

HORIZON STORAGE GROUP,LLC
1216 BROADWAY, 2ND FL
NEW YORK, NY 10001

STATE OF NEW YORK
ANTHONY VITALI
092006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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

STORAGE UNIT DEVELOPMENT
121-139 GRANT AVE
AUBURN, NY 13021

No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE

TITLE SHEET

Designed By:	Drawn By:	Checked By:
AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

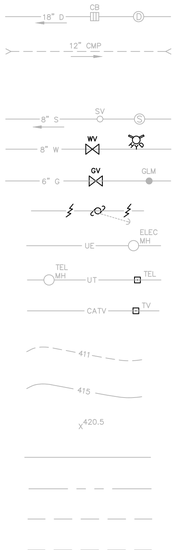
Drawing No.:

C-001

File: \\CHA-LLP.COM\PROJ\PROJECTS\ANY\KY\106860.000\DP_DESIGN\DRAWINGS\01_SHEETS\106860_C-001-TITLE.DWG
Date: 7/13/2026, 11:12:56 AM Plotted: 7/13/2026 11:13:25 AM, Current User: Vitalis, Anthony Last Saved By: ATA

LEGEND

EXISTING



	PROPOSED
STORM SEWER	ST
STORM SEWER CULVERT/PIPE END	ST
UNDERDRAIN	UD
SANITARY SEWER	S
WATER LINE	W
GAS LINE	G
OVERHEAD ELECTRIC	E
UNDERGROUND ELECTRIC	E
UNDERGROUND TELEPHONE	T
UNDERGROUND CABLE	CATV
1' CONTOUR LINE	411
5' CONTOUR LINE	415
SPOT ELEVATION	+120.56
DITCH OR SWALE	
PROPERTY LINE	
PERMANENT EASEMENT	
TEMPORARY CONSTRUCTION EASEMENT	
SAWCUT PAVEMENT	
CATCH BASIN	
MANHOLE	
FIRE HYDRANT	
WATER/GAS VALVE	
WATER SERVICE	
UTILITY POLE	
LIGHT POLE, LAMP POST	
SIGN	
TELEPHONE PEDESTAL	
IRON ROD, PIN, OR PIPE	IF FND / MON. FND
CONCRETE MONUMENT	
RIGHT-OF-WAY MONUMENT	
DIVERSION BOX	
CONCRETE CURB	
ASPHALT PAVEMENT	
GRAVEL PAVEMENT	
TREES AND SHRUBS	

VIEW MARKER

4 — DETAIL IDENTIFICATION
C-9 — SHEET NO. WHERE DETAIL IS SHOWN
} PLAN SHEETS

DETAIL IDENTIFICATION
TITLE
3 — OF DETAIL
– — NO SCALE
} DETAIL SHEETS

ABBREVIATIONS/ACRONYMS

AD	ALGEBRAIC DIFFERENCE
AOBE	AS ORDERED BY ENGINEER
BM	BENCH MARK
BVCE	BEGIN VERTICAL CURVE ELEVATION
BVCS	BEGIN VERTICAL CURVE STATION
CB	CATCH BASIN
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CONC	CONCRETE
CY	CUBIC YARD
D	DIAMETER
DIA	DIAMETER
ELEV	ELEVATION
EST	ESTIMATED
EVCE	END VERTICAL CURVE ELEVATION
EVCS	END VERTICAL CURVE STATION
EX	EXISTING
FG	FINISHED GRADE
FT	FEET
GL	GUTTER LINE
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HYD	HYDRANT
IN	INCHES
INV	INVERT
L	LENGTH
LA	LANDSCAPED AREA
LF	LINEAR FEET
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MPT	MAINTENANCE & PROTECTION OF TRAFFIC
MUTCD	MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
NYS	NEW YORK STATE
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
OC	ON-CENTER
OD	OUTSIDE DIAMETER
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RG	ROAD GRADE
ROW	RIGHT-OF-WAY
RT	ROUTE
SIM	SIMILAR TO
STA	STATION
TEL	TELEPHONE
TF	TOP OF FRAME
TYP	TYPICAL
UFPO	UNDERGROUND FACILITIES PROTECTIVE ORGANIZATION
UNO	UNLESS NOTED OTHERWISE
UTIL	UTILITY
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
WV	WATER VALVE

GENERAL NOTES

BASE MAPPING PREPARED BY PAUL OLSZEWSKI. REFER TO ALTA/NSPS TITLE SURVEY, LOTS 18 & 19, MARCH 6, 2026.

1. ELEVATIONS REFER TO LOCAL DATUM. CONTRACTOR TO COORDINATE WITH SURVEYOR TO SET BENCHMARKS FOR CONSTRUCTION.
2. CONTOUR INTERVAL IS ONE (1) FOOT. CONTOURS ARE INTERPOLATIONS OF EXISTING GROUND SPOT ELEVATIONS AND ARE CONSIDERED APPROXIMATE ONLY.
3. LOCATION OF UNDERGROUND FACILITIES TAKEN BY FIELD MEASUREMENT WHERE PRACTICABLE, OTHERWISE TAKEN FROM VARIOUS OTHER SOURCES AND ARE APPROXIMATE ONLY.
4. THE PLANS SHOW KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA. EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN, AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. TWO (2) DAYS BEFORE YOU DIG, DRILL, OR BLAST, CALL DIG SAFELY NEW YORK. 1-800-962-7962 TOLL FREE.
5. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER, IN WRITING, OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE ENGINEER.
6. THE CONTRACTOR SHALL RESTORE LAWNS, DRIVEWAYS, CULVERTS, SIGNS AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD A CONDITION AS BEFORE BEING DISTURBED AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS, AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE ENGINEER OR OWNER, SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY ERRORS OR DISCREPANCIES.
9. CONTRACTOR SHALL MAINTAIN FLOW FOR ALL EXISTING UTILITIES, CULVERTS, AND DITCHES.
10. BEFORE CONSTRUCTING LINES TO CONNECT TO EXISTING UTILITIES OR UTILITIES INSTALLED UNDER OTHER CONTRACTS, VERIFY EXISTING UTILITY INVERTS AND NOTIFY ENGINEER IF ANY VARIATION FROM THE PLANS IS REQUIRED.
11. CONTRACTOR SHALL GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE TO OR FROM ANY CRITICAL POINTS.
12. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN OPERATING CONSTRUCTION EQUIPMENT OVER NEW UTILITY TRENCHES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING A MINIMUM OF TWO FEET OF COVER OVER UTILITY LINES PRIOR TO OPERATION OF TRACKED VEHICLES.
13. THE CONTRACTOR SHALL IMPLEMENT ALL EROSION CONTROL MEASURES IN STRICT ACCORDANCE WITH THE PLAN AND SCHEDULE SET OUT IN THESE PLANS AND THE DESIGN SPECIFICATIONS.
14. THE CONTRACTOR SHALL:
    A. VERIFY ALL CONDITIONS IN THE FIELD PRIOR TO COMMENCEMENT OF WORK AND NOTIFY THE OWNER AND ENGINEER OF ANY DISCREPANCIES.
    B. NOTIFY UFPO FOR UTILITY MARK-OUT AT LEAST TWO DAYS PRIOR TO BEGINNING CONSTRUCTION.
    C. EXAMINE THE SITE AND INCLUDE IN HIS/HER WORK THE EFFECT OF ALL EXISTING CONDITIONS ON THE WORK.
    D. PROVIDE AND INSTALL ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH RECOGNIZED GOOD STANDARD PRACTICE.
    E. HOLD THE OWNER HARMLESS AGAINST ANY AND ALL CLAIMS ARISING FROM WORK DONE BY THE CONTRACTOR ON SITE.
15. ALL WORK SHALL BE DONE IN STRICT COMPLIANCE WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES, STANDARDS, ORDINANCES, RULES, AND REGULATIONS.
16. THE ENGINEER RESERVES THE RIGHT TO EXAMINE ANY WORK DONE ON THIS PROJECT AT ANY TIME TO DETERMINE THE CONFORMANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS OF THIS PROJECT, AS INDICATED AND INTENDED BY THE ENGINEER.
18. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING THE SITE PLAN REVIEW APPROVAL AND THE BUILDING PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND INCURRING THE COST OF OTHER PERMITS, INSPECTIONS, CERTIFICATES, ETC AND SHALL COMPLY WITH ALL REQUIRED PERMITS AND CONDITIONS.
19. ALL PROPOSED UTILITIES AND APPURTENANCES TO BE CONSTRUCTED IN COMPLIANCE WITH THE LOCAL MUNICIPALITIES' CODES AND REGULATIONS GOVERNING THE INSTALLATION OF SUCH UTILITIES.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONDUCTING EXPLORATORY TEST PITS AS REQUIRED TO DETERMINE UNDERGROUND CONDITIONS. THE CONTRACTOR SHALL CONDUCT TEST PITS AS REQUIRED FOR PERFORMANCE OF WORK AT THE CONTRACTOR'S EXPENSE.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL TAKE TIES TO ALL UTILITY CONNECTIONS AND PROVIDE MARKED-UP RECORD DRAWINGS FOR ALL UTILITIES SHOWING TIES TO CONNECTIONS, BENDS, VALVES, LENGTHS OF LINES, AND INVERTS. RECORD DRAWINGS SHOWING ALL UNDERGROUND UTILITIES INSTALLED OR ENCOUNTERED SHALL BE REVIEWED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE ANY CORRECTIONS OR OMISSIONS TO THE SATISFACTION OF THE ENGINEER BEFORE UTILITIES WILL BE ACCEPTED.
22. ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE ENGINEER AND THE UTILITY OWNER. NOTIFY THE ENGINEER AND THE UTILITY OWNER 72 HOURS BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE. CONTRACTOR SHALL BE REQUIRED TO NOTIFY PROPERTY OWNER, IN WRITING, 72 HOURS IN ADVANCE OF ANY INTERRUPTION IN UTILITY SERVICES.
23. THE CONTRACTOR SHALL TAKE CARE TO PREVENT DAMAGE TO ANY UTILITIES, ESPECIALLY WHEN OPERATING EQUIPMENT NEAR UTILITY LINES. DAMAGED UTILITIES SHALL BE IMMEDIATELY REPAIRED BY CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
24. ALL FRAMES/COVERS, CASTINGS, VALVE BOXES, ETC. WITHIN PAVED AREAS SHALL HAVE THE TOPS SET 0.1' BELOW THE FINAL PAVEMENT GRADE. IN ALL LANDSCAPED AND GRASS AREAS, ALL FRAMES SHALL BE 0.1' ABOVE GRADE.
25. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST REVISIONS OF NEW YORK STATE INDUSTRIAL CODE RULE 23 AND OSHA REGULATIONS FOR CONSTRUCTION. SHEET PILING SHALL BE DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER.
26. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF THE WORK. THE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN DESIGNED AND SEALED BY A NEW YORK STATE PROFESSIONAL ENGINEER. THE CONTRACTOR SHALL MAINTAIN EXISTING SITE DRAINAGE PATTERNS THROUGHOUT CONSTRUCTION.
27. ALL SITE FILL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS UNLESS NOTED OTHERWISE.
28. ALL BACKFILL USED IN TRENCHES EXCAVATED IN EXISTING ROADWAYS SHALL MEET THE MATERIAL SPECIFICATIONS AND COMPACTED PER NYSDOT OR CITY OF AUBURN STANDARDS
29. ALL BACKFILL MATERIALS LOCATED UNDER PROPOSED PAVEMENT ARE REQUIRED TO BE COMPACTED 95% OF MODIFIED PROCTOR DENSITY VALUE AS PER ASTM D-1157.
30. WHEN BACKFILLING AROUND PROPOSED OR EXISTING STRUCTURES, MATERIAL SHALL BE PLACED IN MAXIMUM 6-INCH LIFTS AND COMPACTED BY MEANS OF A MECHANICAL COMPACTOR BETWEEN LIFTS.
31. PERMANENT OR TEMPORARY PAVEMENT SHALL BE PLACED WITHIN 48 HOURS OF THE COMPLETION OF BACKFILL OPERATIONS WITHIN THE PAVEMENT AREAS.
32. CONTRACTOR SHALL MAINTAIN ALL TRAFFIC IN AREAS IN ACCORDANCE WITH THE NYSDOT "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," AND SECTION 619 OF NYSDOT'S STANDARD SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK, LANE CLOSURES, AND DISRUPTIONS WITH THE OWNER AND OTHER GOVERNING OR APPLICABLE AGENCIES.
33. CONTRACTOR SHALL MAINTAIN ACCESS TO ALL COMMERCIAL, RESIDENTIAL, AND PUBLIC PROPERTIES WHENEVER POSSIBLE AND/OR AS DIRECTED BY THE ENGINEER.
34. ALL DRIVEWAYS AND SIDE STREETS SHALL BE MADE ACCESSIBLE BY CONTRACTOR AT THE END OF EACH DAY THAT WORK IS PERFORMED. ALL EXCAVATIONS SHALL BE BACKFILLED TO EXISTING GRADE AT THE END OF EACH WORK DAY.
35. THE CONTRACTOR IS TO EXERCISE ALL POSSIBLE CAUTION WHILE WORKING IN THE VICINITY OF EXISTING TREES. ANY DAMAGE TO TREES DURING CONSTRUCTION ACTIVITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
36. MISCELLANEOUS WORK NOT SPECIFICALLY SHOWN ON THE CONTRACT DRAWINGS SUCH AS PATCHING, BLOCKING, TRIMMING, ETC, SHALL BE PERFORMED BY THE CONTRACTOR TO MAKE THE WORK COMPLETE.
37. ALL ROADS SHALL BE KEPT CLEAN OF DEBRIS AT ALL TIMES. CLEAN AND SWEEP ALL EXISTING AND NEW PAVEMENTS AND/OR LANES AS PART OF THIS PROJECT PRIOR TO OPENING TO TRAFFIC AND AT THE END OF THE DAY FOR EACH CONSTRUCTION ACTIVITY.
38. MATERIALS, EQUIPMENT AND VEHICLES ARE NOT TO BE STORED OR PARKED WITHIN ANY HIGHWAY RIGHT-OF-WAY.

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1216 BROADWAY, 2ND FL
NEW YORK, NY 10001

STATE OF NEW YORK
ANTHONY VITALE
92006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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

STORAGE UNIT
DEVELOPMENT
121-139 GRANT AVE
AUBURN, NY 13021

No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

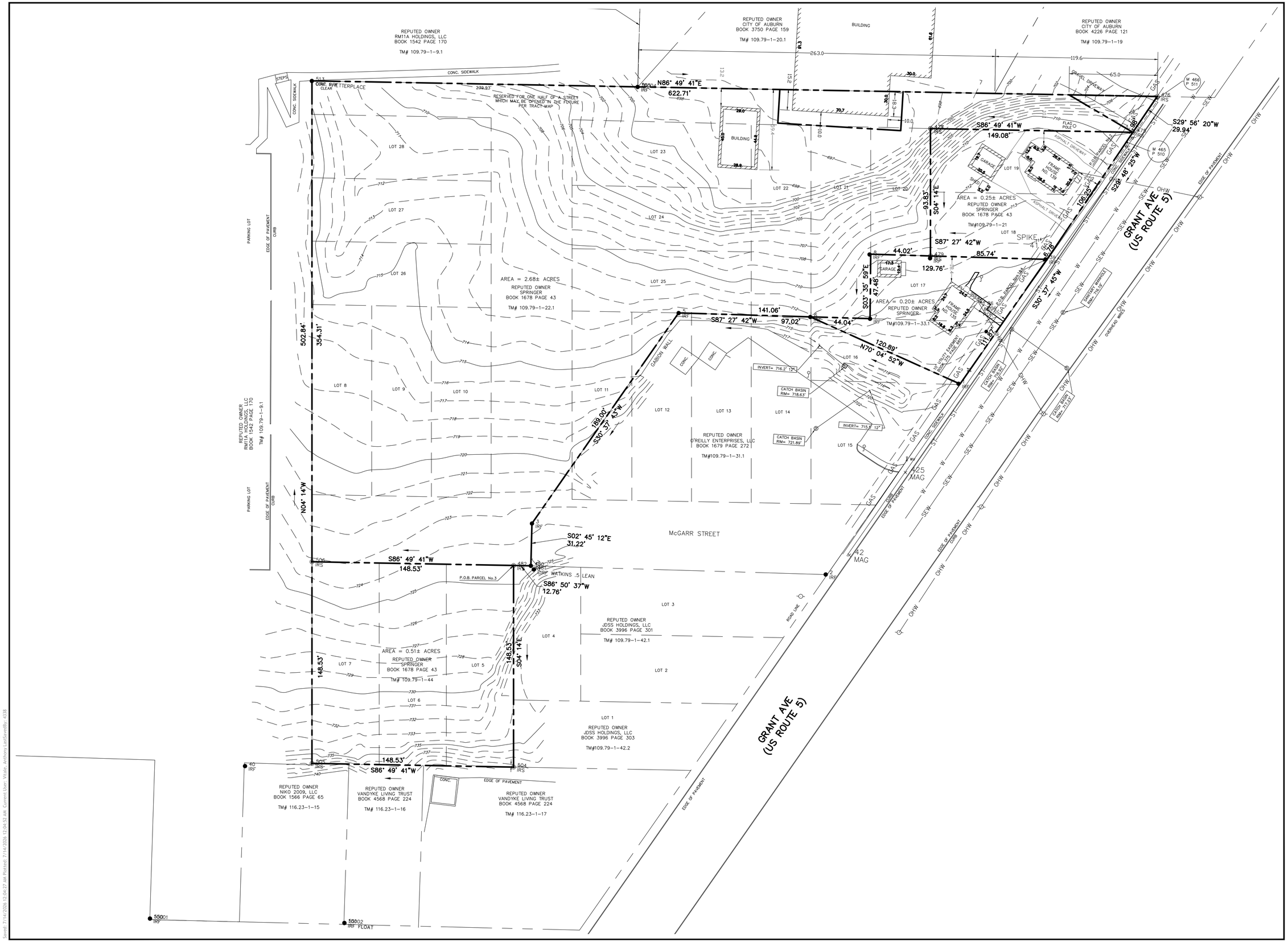
SHEET TITLE

GENERAL NOTES & LEGENDS

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07/13/26	106860	AS SHOWN

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C-002

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NEW YORK, NY 10001

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STATE OF NEW YORK
ANTHONY VITALI
032006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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EXISTING CONDITIONS PLAN

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C-003

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PROJECT INFORMATION

EXISTING LOT INFORMATION:
ZONING DISTRICT: HIGHWAY COMMERCIAL (HC)

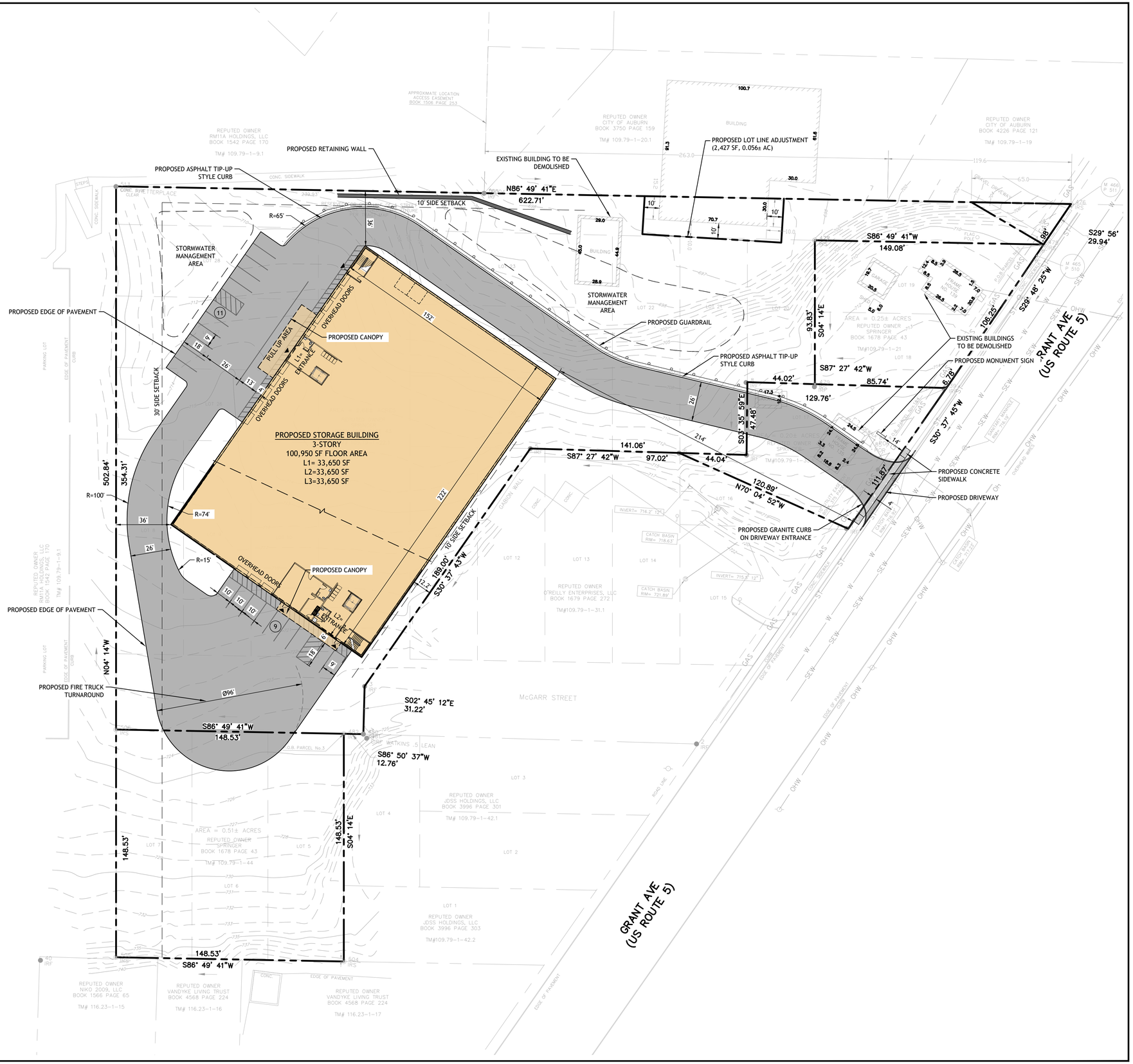
ADDRESS: 135 GRANT AVE (ROUTE 5), AUBURN, NY 13021

TAX MAP Nos.:	AREA:
109.79-1-21	0.25± ACRES
109.79-1-22.1	2.68± ACRES
109.79-1-33.1	0.20± ACRES
109.79-1-44	0.51± ACRES

TOTAL AREA: 158,760± SF (3.64± ACRES)

	CODE	PROVIDED
MINIMUM YARD REQUIREMENTS		
FRONT	30 FT	214 FT
SIDE	10 FT	12 FT
REAR	30 FT	36 FT
MAXIMUM IMPERVIOUS COVERAGE (PROPOSED: 69,210± SF)	80 %	44 %
MAXIMUM BUILDING HEIGHT	40 FT	<40 FT
BUILDING- GROSS BUILDING AREA	-	100,950 SF
OFF-STREET PARKING		
PARKING SPACE SIZE:	9 FT X 18 FT	9 FT X 18 FT (MIN)
REQUIRED PARKING* -SELF STORAGE (1/ 2,000 SF)	50 Spaces	20 Spaces*

*Variance Request for reduced parking count based on typical use data for similar projects of same scope and size.



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STATE OF NEW YORK ANTHONY VITALE 092006 LICENSED PROFESSIONAL ENGINEER
7/13/26

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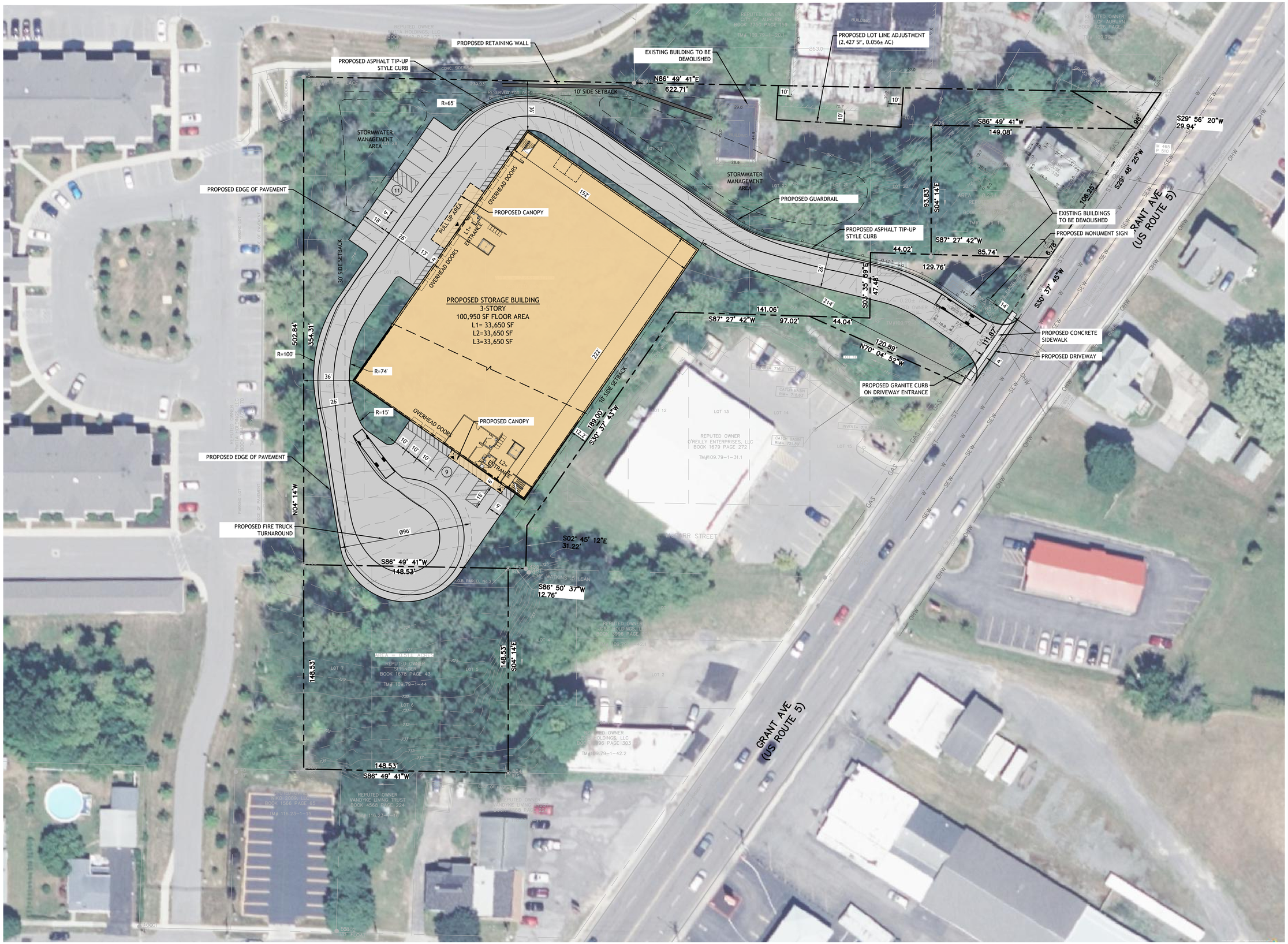
No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE
OVERALL SITE LAYOUT PLAN

Designed By:	Drawn By:	Checked By:
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Drawing No.:
C-100

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STATE OF NEW YORK
ANTHONY VITALE
092006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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1	SITE PLAN APPLICATION	LC	AMV	07/13/26

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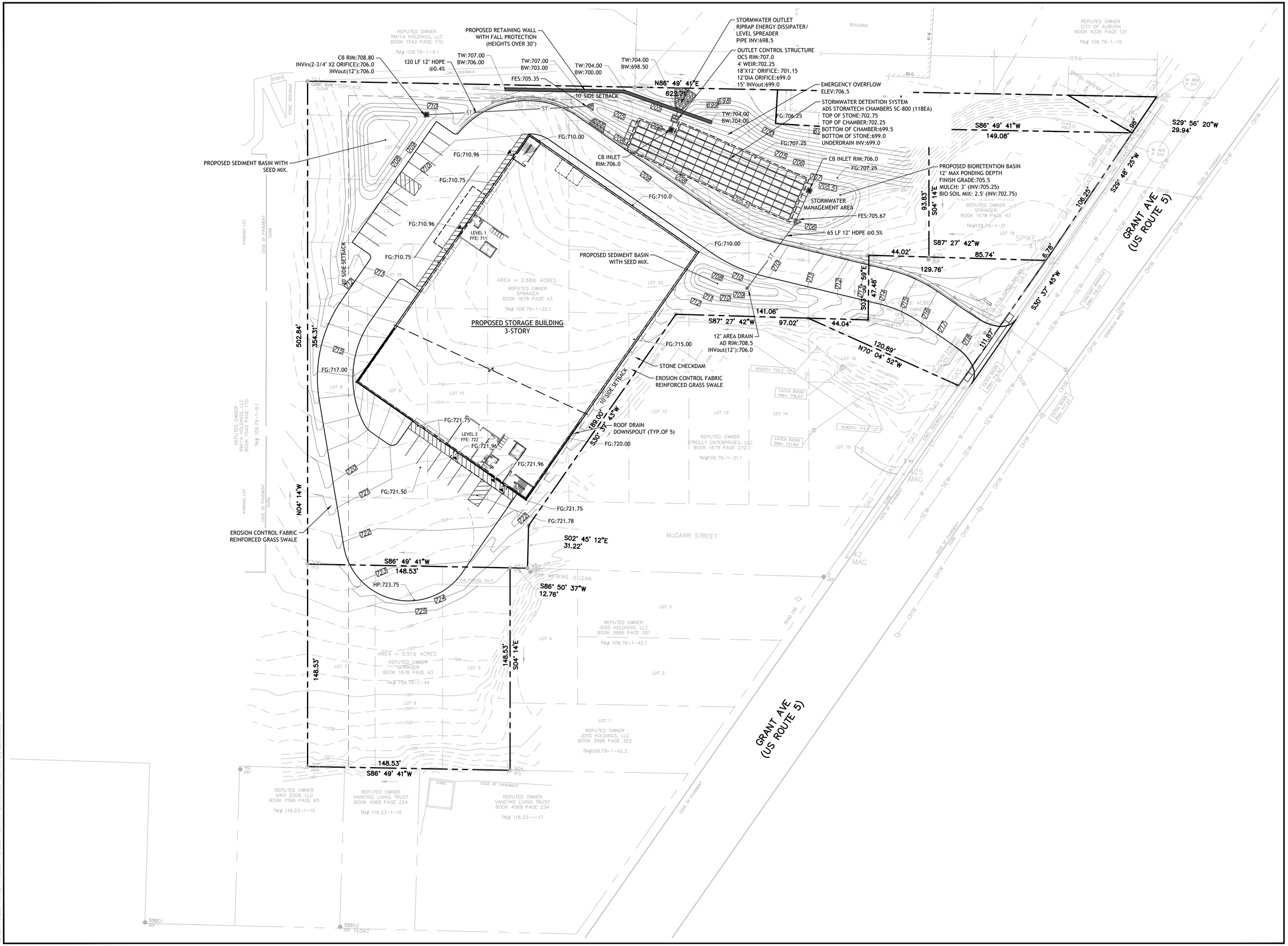
SITE LAYOUT PLAN

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ANTHONY VITALI
032006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

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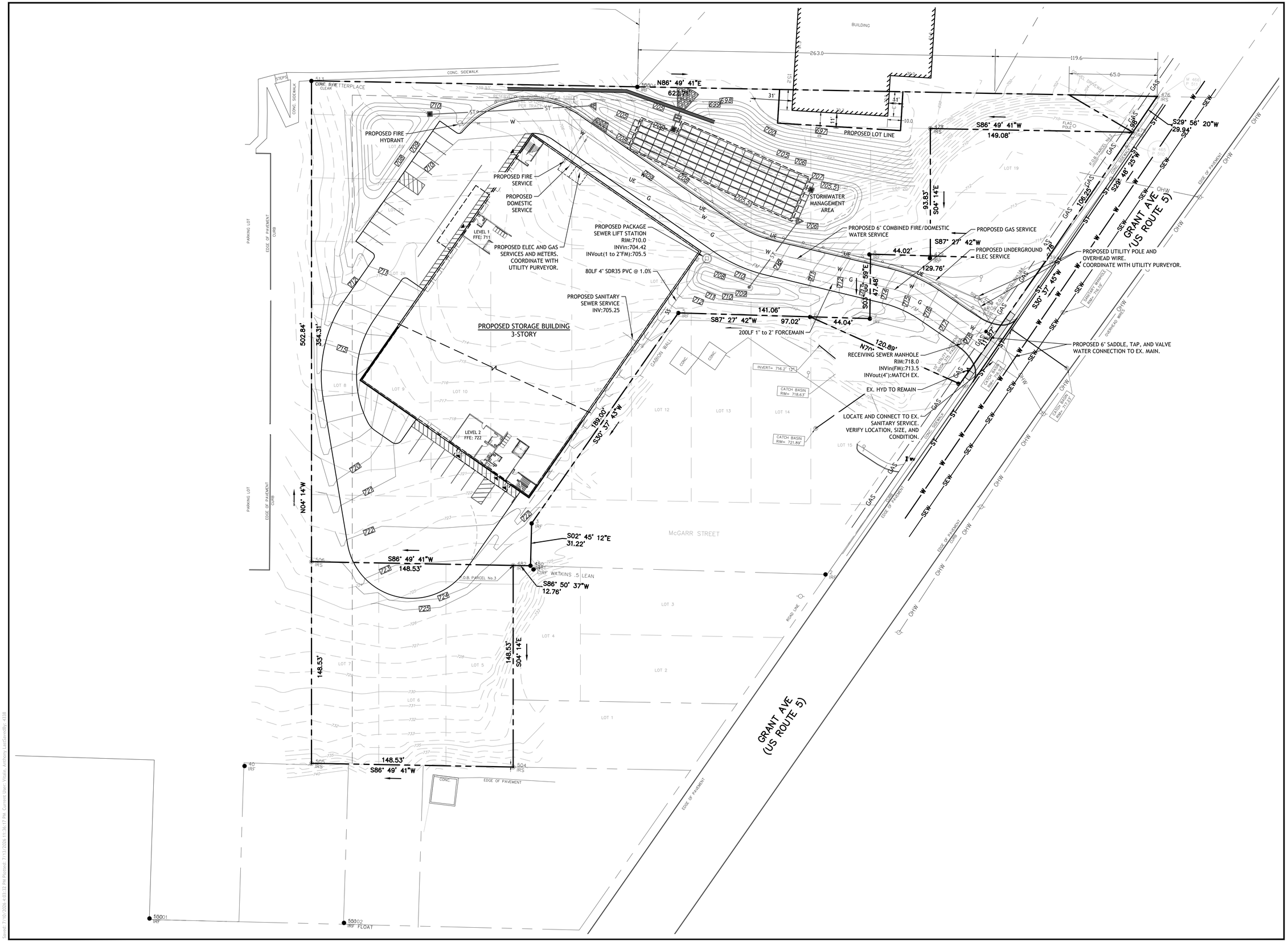
GRADING PLAN

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ANTHONY VITALE
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7/13/26

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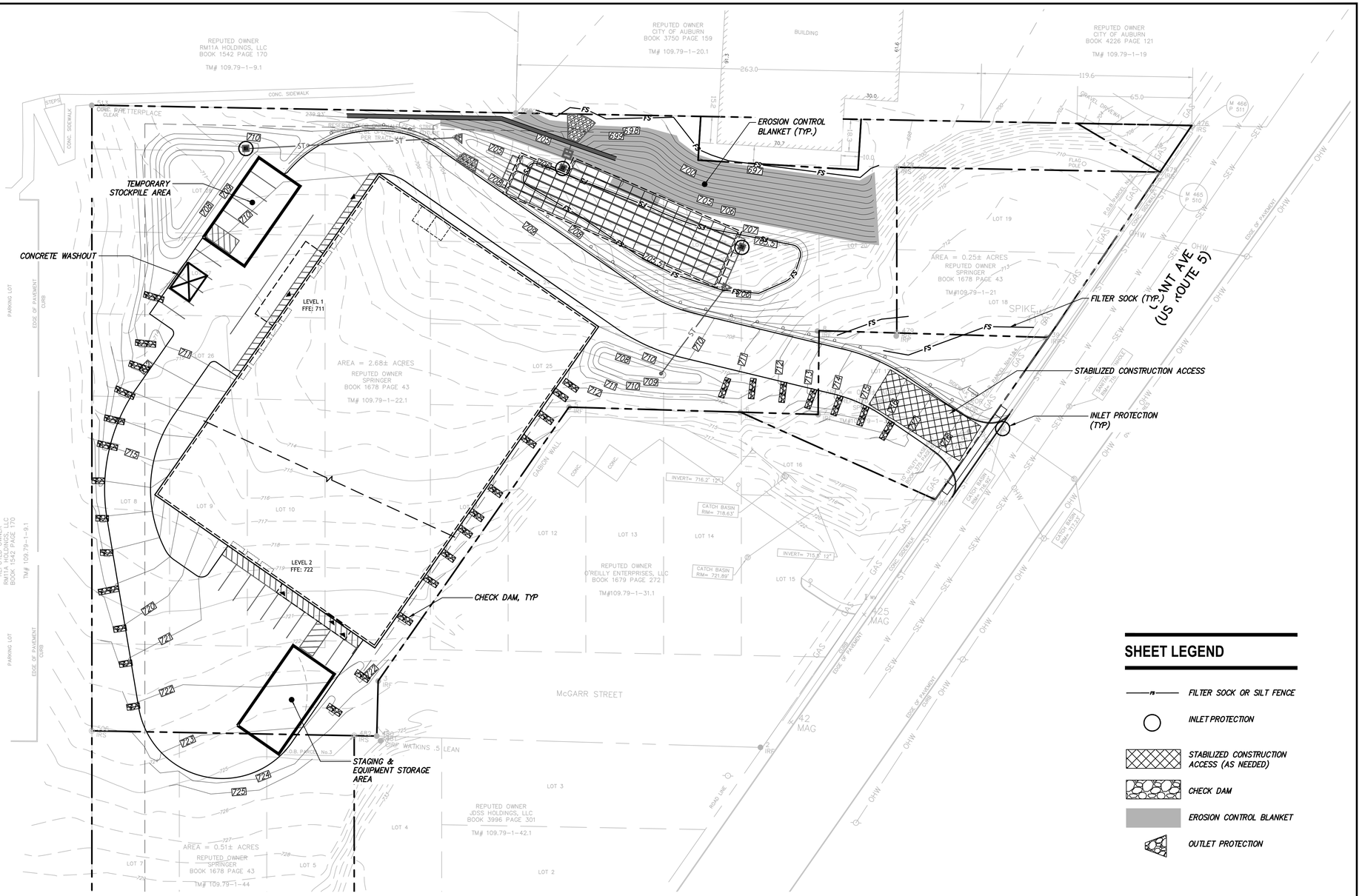
UTILITY PLAN

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C-301

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SHEET LEGEND

- FS — FILTER SOCK OR SILT FENCE
- INLET PROTECTION
- STABILIZED CONSTRUCTION ACCESS (AS NEEDED)
- CHECK DAM
- EROSION CONTROL BLANKET
- OUTLET PROTECTION

EROSION & SEDIMENT CONTROL SPECIFICATION

ONE WEEK PRIOR TO BEGINNING EARTHWORK OPERATIONS, A PRE-CONSTRUCTION MEETING WILL BE HELD TO DISCUSS THE EROSION AND SEDIMENT CONTROL PLAN, AND TO FINALIZE THE PAPER WORK FOR THE STORM WATER POLLUTION PREVENTION PLAN AS SPECIFIED IN THE NYSDEC STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES (GP-0-25-001).

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED PRIOR TO BEGINNING ANY LAND DISTURBANCE ACTIVITIES. THE DEVICES PROVIDING PROTECTION TO A GIVEN AREA SHALL NOT BE REMOVED UNTIL THE LANDS IN THAT AREA ARE STABILIZED.

NO DISTURBED AREA SHALL REMAIN EXPOSED FOR MORE THAN 7 CALENDAR DAYS, EXCEPT FOR PORTIONS OF THE SITE IN WHICH WORK WILL BE CONTINUOUS BEYOND 7 DAYS (I.E. THE BUILDING FOOTPRINT).

CONSTRUCTION SEQUENCE:

GENERAL NOTES:

- CONTROLS SHOWN ON PLAN ARE MINIMUM. ADDITIONAL CONTROLS SHALL BE INSTALLED AS WARRANTED BY SITE CONDITIONS AND/OR WEATHER TO PREVENT SEDIMENT TRANSPORT TO UNDISTURBED AREAS.
- SEDIMENT TRAPS MAY BE CONSTRUCTED AS NECESSARY.
- SILT FENCE/FILTER SOCK MUST BE INSTALLED AT THE TOE OF SLOPES WITH BUFFER AREAS PER BLUE BOOK GUIDELINES. ADDITIONAL FENCING SHALL BE INSTALLED AS NECESSARY AS CONSTRUCTION PROGRESSES.
- BACKFILL SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL TRENCHES DURING UTILITY CONSTRUCTION.
- PROTECT ALL EXISTING STORM SEWER FACILITIES AND WATERWAYS SURROUNDING THE SITE FROM SEDIMENT TRANSPORT.

GENERAL CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE AS SHOWN. LIMIT ALL VEHICULAR TRAFFIC TO THIS ENTRANCE ONLY.
2. INSTALL SILT FENCE AND/OR FILTER SOCK.
3. CLEAR AND GRUB SITE PER DISTURBANCE LIMITS. DO NOT CLEAR OR DISTURB ANY AREAS OUTSIDE OF THE DISTURBANCE LIMITS.
4. ROUGH GRADE SITE PER DESIGN.
5. ESTABLISH STAGING AND STOCKPILE AREAS. PROVIDE SILT FENCING AROUND PERIMETER OF STAGED/STOCKPILED TOP SOIL AND/OR TEMPORARY STAGED PILE OR FILL.
6. INSTALL UTILITIES. TRENCHES SHALL BE BACKFILLED/COMPACTED AND STABILIZED IMMEDIATELY AFTER BACKFILL OPERATION.
7. INSTALL STORM SYSTEM. STABILIZE SLOPE WITH EROSION CONTROL BLANKET.
8. CONSTRUCT BUILDING.
9. ALL GRADED AREAS ARE TO BE SEEDED AND MULCHED FOR VEGETATIVE COVER IMMEDIATELY UPON COMPLETION OF EARTHWORK OPERATION.
10. CONSTRUCT PARKING LOTS AND ACCESS DRIVES.
11. CONSTRUCT AND STABILIZE BIORETENTION AREA. USE EXTREME CARE TO PREVENT SEDIMENT TRANSPORT TO FILTER AREA. IMMEDIATELY INSTALL SILT SOCK AND STABILIZE UPSTREAM AREAS.
12. COMPLETE FINAL GRADING AND INSTALL PERMANENT SEEDING AND MULCH.
13. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND GROUND IS STABILIZED, REMOVE EROSION CONTROL MEASURES AND RESEED ANY DISTURBED AREAS CREATED BY THEIR REMOVAL.

INSPECTION PROCEDURES & MAINTENANCE:

1. DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE TEMPORARY EROSION CONTROL FACILITIES. ALSO, AREAS THAT HAVE BEEN SEEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS.
2. INSPECTIONS OF ALL DEVICES SHALL BE COMPLETED WEEKLY AT MINIMUM. REPAIRS SHOULD BE COMPLETED IMMEDIATELY UPON DISCOVERY OF DEFICIENCIES.
3. THE OWNER WILL DESIGNATE A QUALIFIED PERSON(S) TO PERFORM THE FOLLOWING INSPECTIONS:
   - A. STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT.
   - B. STRUCTURAL CONTROLS: ALL EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UP-SLOPE SIDE OF THE FILTER FABRIC.
   - C. DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.
   - D. CONSTRUCTION ENTRANCES: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
4. ALL SEEDED AREAS SHALL BE MAINTAINED AS FOLLOWS:
   - A. IDENTIFY SEEDED AREAS WITH STAKES, STRING AND BRIGHTLY COLORED FLAGGING. PROTECT SEEDED AREAS UNTIL VEGETATION HAS BEEN ESTABLISHED.
   - B. IMMEDIATELY RESEED AREAS WHICH DO NOT ESTABLISH VEGETATION.

PERMANENT EROSION CONTROL MEASURES NOTES

PERMANENT STABILIZATION NOTES: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

TOPSOIL SHALL HAVE AT LEAST TWO (2) PERCENT BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN SIX (6) PERCENT. MUCK SOIL SHALL NOT BE CONSIDERED TOPSOIL. TOPSOIL SHALL NOT HAVE LESS THAN 20 PERCENT FINE TEXTURES MATERIAL (PASSING THE No. 200 SIEVE) AND NOT MORE THAN 15 PERCENT CLAY. TOPSOIL SHALL BE FREE OF STONES OVER 1.5 INCHES IN DIAMETER, TRASH, NOXIOUS WEEDS SUCH AS NUT SEDGE AND QUACKGRASS, AND WILL HAVE LESS THAN 10 PERCENT GRAVEL BY VOLUME. REFER TO THE NYSSMDM FOR INFORMATION ON TOPSOIL APPLICATION AND GRADING.

THE PERMANENT SEED MIX SHALL BE AS FOLLOWS:

SPECIES	RATE PER ACRE (LBS.)	RATE PER 1,000 SQ.FT. (LBS.)
KENTUCKY BLUEGRASS	115	2.6
PERENNIAL RYE	35	0.8
FINE FESCUE	25	0.6

FERTILIZER SHALL BE COMMERCIAL FERTILIZER (5-0-5) INORGANIC, OR ORGANIC, CONTAINING NOT LESS THAN FIVE (5) PERCENT NITROGEN, AND FIVE (5) PERCENT WATER SOLUBLE POTASH.

PROVIDE AND INSTALL A MULCH ADEQUATE TO PROTECT THE SEEDING DURING ITS GROWING PERIOD. REFER TO THE NYSSMDM TO DETERMINE THE APPROPRIATE MULCHING TECHNIQUES FOR THE PARTICULAR SITE CONDITIONS.

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COA # 0021745

AUBURN SELF STORAGE,LLC

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1216 BROADWAY, 2ND FL
NEW YORK, NY 10001

0 30 60
Scale in feet

STATE OF NEW YORK
ANTHONY VITALI
092006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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

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121-139 GRANT AVE
AUBURN, NY 13021

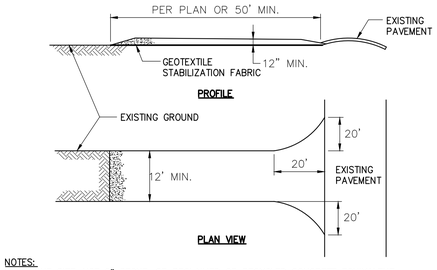
No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE
EROSION & SEDIMENT CONTROL PLAN

Designed By:	Drawn By:	Checked By:
AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

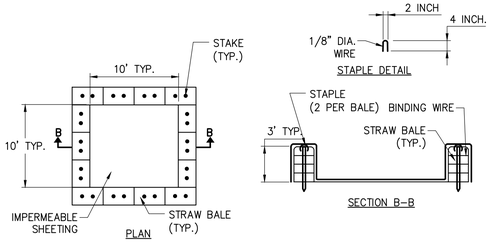
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NOTES:
1. STONE SIZE–USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS–NOT LESS THAN 12".
3. WOVEN GEOTEXTILE FABRIC WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. EXISTING ROAD SIDE DRAINAGE SHALL BE MAINTAINED.
5. MAINTENANCE–THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT OR STONE SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.



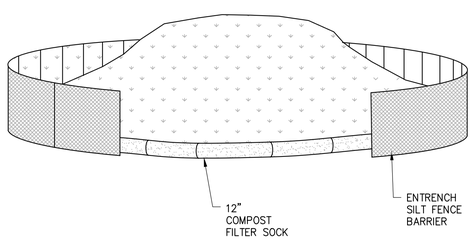
NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT. DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 30 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLAND,S BUFFERS, AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEET, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGE (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

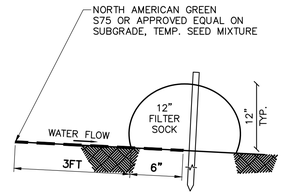
4 CONCRETE WASHOUT
SCALE: N.T.S.

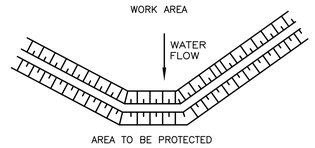


INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH COMOST FILTER SOCK, THEN STABILIZED WITH VEGETATION, OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF COMPOST FILTER SOCKS.

8 SOIL STOCKPILE
SCALE: N.T.S.

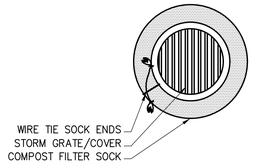




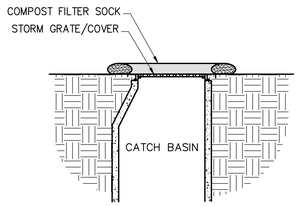
AT GRADE PLACEMENT

NOTES:
1. ALL MATERIAL TO MEET MANUFACTURER SPECIFICATIONS.
2. ALL FILTER SOCKS SHALL BE 12" DIAMETER.
3. INSTALL PERPENDICULAR TO FLOW.
4. SOCKS MAY BE USED AROUND PERIMETER OF CATCH BASINS (STAKES NOT NECESSARY).
5. THE CONTRACTOR SHALL MAINTAIN SOCK IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
6. DAMAGED SOCKS SHALL BE REPAIRED IN THE MANNER REQUIRED BY THE MANUFACTURER OR REPLACED WITHIN 24 HOURS OF INSPECTION NOTIFICATION.
7. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE SOCK WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE SOCK, OR AS DIRECTED BY THE REPRESENTATIVE.
8. UPON STABILIZATION OF THE AREA CONTRIBUTORY TO THE SOCK, STAKES SHALL BE REMOVED. THE INTERNAL COMPOST MATERIAL WITHIN THE SOCK SHALL BE DISPERSED ON SITE.

2 COMPOST FILTER SOCK DETAIL
SCALE: N.T.S.

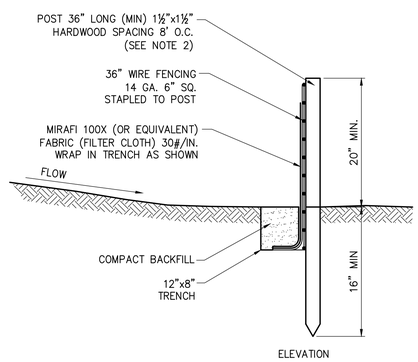


DRAIN INLET PLAN



DRAIN INLET SECTION

3 FILTER SOCK INLET PROTECTION
SCALE: N.T.S.



ELEVATION

NOTES:
1. TIE FABRIC TO WIRE FENCE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
2. IF EXTRA STRENGTH FABRIC (GREATER THAN 50#/INCH) IS USED, WIRE CAN BE DELETED IF POST SPACING IS REDUCED TO 6' O.C.
3. AT THE ENDS OF THE FENCING THE FIRST 20' SHALL BE TURNED UP THE SLOPE 2'.
4. POSTS SHOULD BE INCLINED TOWARD THE DIRECTION FLOW CAME FROM.
5. OVERLAP FABRIC A MINIMUM OF 6" AND FOLDED AT JOINTS. ATTACH FILTER FABRIS TO STAKES ALLOWING EXTENSION INTO TRENCH AS SHOWN; SECURE TO STAKES AS NOTED.
6. THE MAXIMUM AREA OF RUNOFF PER 100LF. OF FENCE SHALL NOT EXCEED 0.25 ACRES.
7. MAINTENANCE SHALL BE PERFORMED AS NECESSARY. THE FENCING SHALL BE CHECKED AFTER EVERY STORM TO ENSURE THEIR PROPER FUNCTIONING.
8. WHEN FENCE IS NO LONGER NEEDED, THE ACCUMULATED SILT, THE POSTS AND FABRIC SHALL BE REMOVED AND TRENCH BACK FILLED WITH TOPSOIL AND SEEDED.
9. FENCING SHOULD BE PLACED AS SHOWN ON THE DRAWING OR IF NOT SHOWN, 10' BEYOND THE TOE OF THE OF THE SLOPE AND AT A SPACING IN ACCORDANCE WITH THE TABLE.
10. EXCAVATE TRENCH AS PER DETAIL AND SET POSTS AT 10' O.C.
11. BACKFILL WITH COMPACTED, EXCAVATED SOIL FROM TRENCH.

5 SILT FENCE
SCALE: N.T.S.

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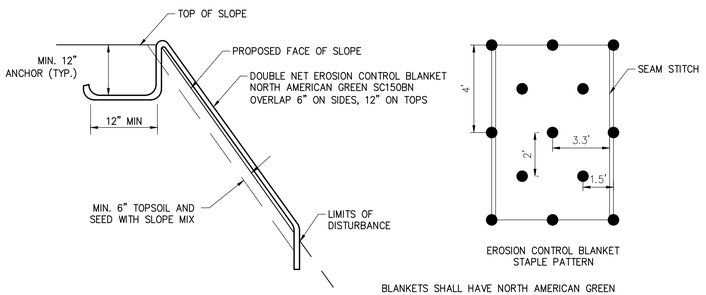
NOTE:
USE SILT–SAVER SEDIMENT BAG OR APPROVED EQUIVALENT FOR ALL EXISTING CATCH BASINS AS SHOWN ON PLAN.

6 SEDIMENT BAG INLET PROTECTION
SCALE: N.T.S.

NOTES:

SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM. CHECK DAMS SHALL BE A MINIMUM OF 2' BELOW THE BANK.

7 CHECK DAM
SCALE: N.T.S.



EROSION CONTROL BLANKET STAPLE PATTERN

BLANKETS SHALL HAVE NORTH AMERICAN GREEN DOT SYSTEM TO ENSURE ADHERENCE TO THE ABOVE PATTERN.

9 EROSION CONTROL BLANKET
SCALE: N.T.S.

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STATE OF NEW YORK ANTHONY VITALE 092006 LICENSED PROFESSIONAL ENGINEER
7/13/26

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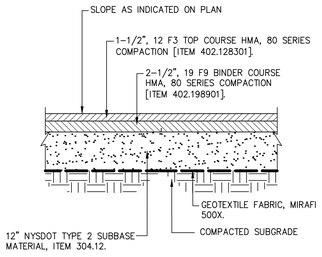
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1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE
EROSION & SEDIMENT CONTROL DETAILS

Designed By:	Drawn By:	Checked By:
AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

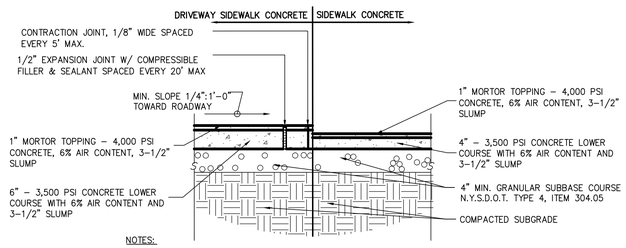
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NOTE: USE ASPHALT JOINT SEALER ALONG TRANSITION TO EXISTING PAVEMENT

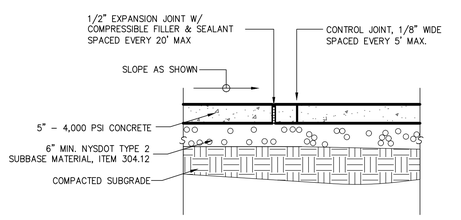
1 ASPHALT PAVEMENT
SCALE: N.T.S.



NOTES:

1. CONTRACTOR SHALL ADHERE TO CITY OF AUBURN PORTLAND CEMENT CONCRETE SIDEWALKS AND DRIVEWAYS REGULATIONS (FOUND IN SIDEWALK CONSTRUCTION APPLICATION).
2. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, AT PENETRATING STRUCTURES, OR EXISTING JOINTS.
3. MORTOR TOPPING UPPER COURSE SHALL BE PROPORTIONED TO CONTAIN ONE (1) PART PORTLAND CEMENT TO TWO (2) PARTS CONCRETE SAND.
4. TOP COURSE SHALL BE PLACED WITHIN 45 MINUTES AFTER THE BASE COURSE IS PLACED. NO MORE THAN 50 L.F. OF BASE COURSE SHALL BE PLACED PRIOR TO STARTING THE TOP COURSE.

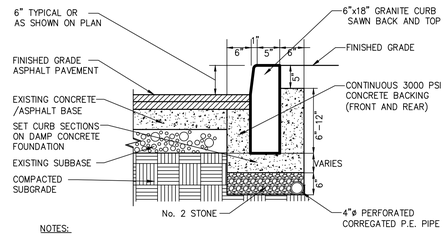
2 CONCRETE SIDEWALK DETAIL (ROW)
SCALE: N.T.S.



NOTES:

1. EXPANSION JOINTS TO BE PLACED BETWEEN ADJACENT SLABS, AT BUILDING LINE, AT CURBS, AT PENETRATING STRUCTURES, OR EXISTING JOINTS.

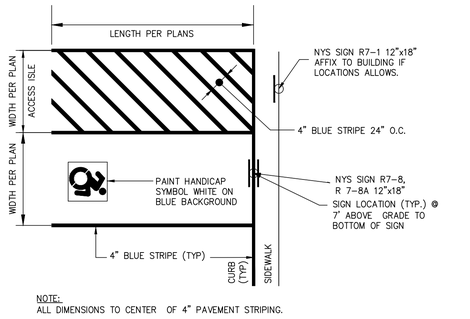
3 CONCRETE SIDEWALK (SITE)
SCALE: N.T.S.



NOTES:

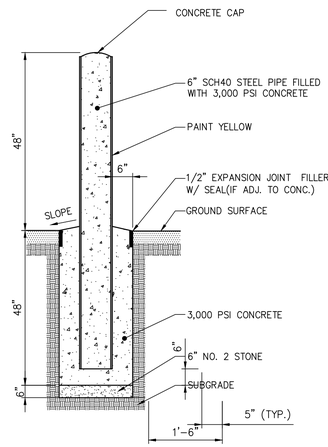
1. CURB JOINTS TO BE POINTED WITH MORTAR.
2. 1" REVEAL CURB WHERE DRIVEWAYS MEET ROADWAYS.
3. UNDERDRAIN MAY BE OMITTED FOR CURBING WITHIN SITE.

4 GRANITE CURB DETAIL
SCALE: N.T.S.

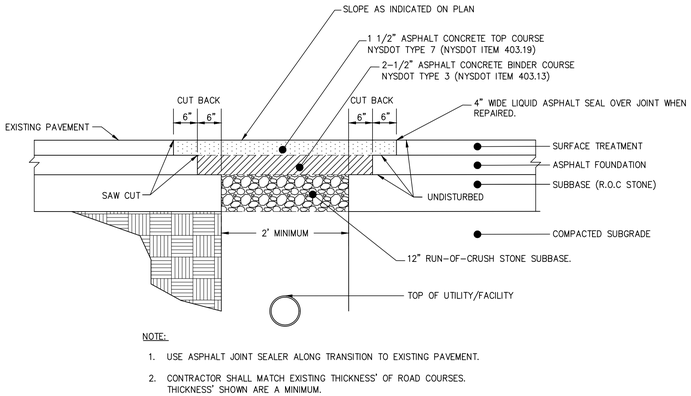


NOTE:
ALL DIMENSIONS TO CENTER OF 4" PAVEMENT STRIPING.

5 ACCESSIBLE PARKING SPACE
SCALE: N.T.S.



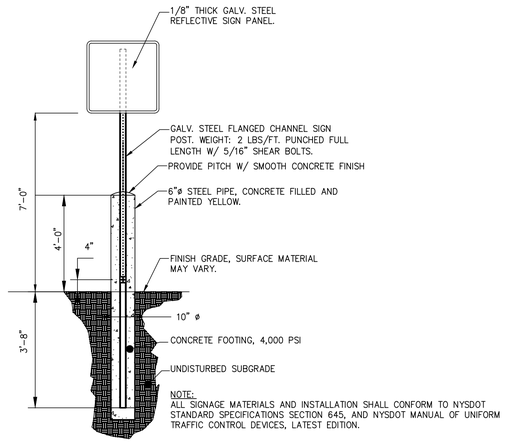
6 PIPE BOLLARD DETAIL
SCALE: N.T.S.



NOTE:

1. USE ASPHALT JOINT SEALER ALONG TRANSITION TO EXISTING PAVEMENT.
2. CONTRACTOR SHALL MATCH EXISTING THICKNESS' OF ROAD COURSES. THICKNESS' SHOWN ARE A MINIMUM.

7 STREET CUT REPAIR – FULL DEPTH ASPHALT
SCALE: N.T.S.

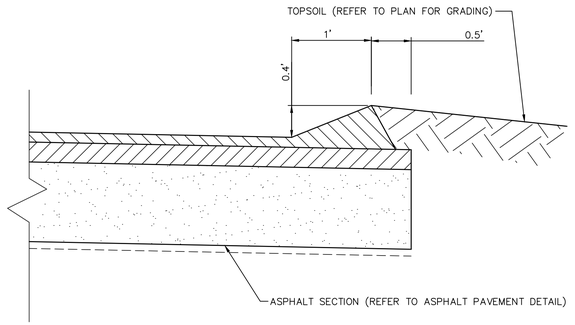


NOTE:
ALL SIGNAGE MATERIALS AND INSTALLATION SHALL CONFORM TO NYSDOT STANDARD SPECIFICATIONS SECTION 645, AND NYSDOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

8 ROADWAY SIGNAGE W/ BOLLARD
SCALE: N.T.S.

SITE SIGN TABLE		
SIGN NO.	DESCRIPTION	M.U.T.C.D. NO./SIZE
2	RESERVED PARKING	R7-8 12"x18"
3	VAN ACCESSIBLE	R7-8A (12"x18")
5	NO PARKING ANY TIME	R7-1 (12"x18")

9 SITE SIGN TABLE
SCALE: N.T.S.



NOTE: ASPHALT TIP UP TO BE MADE FROM THE TOP COURSE

10 ASPHALT TIP UP
SCALE: N.T.S.

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STATE OF NEW YORK · ANTHONY VITALE · 092006 · LICENSED PROFESSIONAL ENGINEER
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No.	Submittal / Revision	Apv	By	Date
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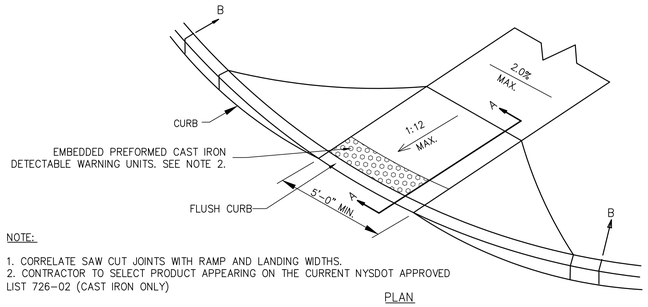
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AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

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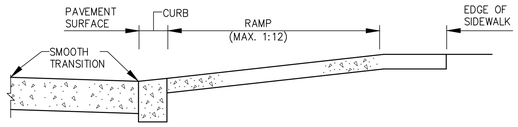
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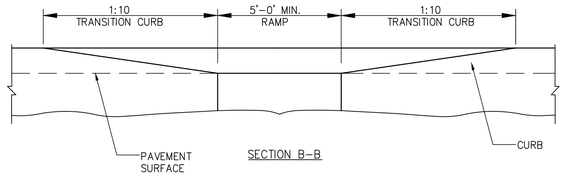
NOTE:

1. CORRELATE SAW CUT JOINTS WITH RAMP AND LANDING WIDTHS.
2. CONTRACTOR TO SELECT PRODUCT APPEARING ON THE CURRENT NYSDOT APPROVED LIST 726-02 (CAST IRON ONLY)

PLAN



SECTION A-A



SECTION B-B

SIDEWALK AND CURB RAMP NOTES:

1. THE SIDEWALK CURB RAMP MUST BE CONSISTENT WITH THE PROVISIONS AS REQUIRED BY THE AMERICAN'S WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG).

2. CROSS SLOPES. THE MAXIMUM CROSS SLOPE OF CURB RAMPS SHALL BE 2.0%. THE MAXIMUM CROSS SLOPE AT LANDINGS IS 2.0% IN ANY DIRECTION. SURFACES SHALL GENERALLY LIE IN CONTINUOUS PLANES WITH A MINIMUM OF SURFACE WARP.

3. THE RUNNING GRADE OF CURB RAMPS SHOULD BE AS FLAT AS PRACTICABLE. THE MAXIMUM RUNNING GRADE OF ANY PORTION OF ANY CURB RAMP SHALL BE 1:12 (8.3%). CURB RAMPS ARE NOT REQUIRED TO BE LONGER THAN 15 FT.

4. TRANSITION AND FLUSH SECTIONS SHALL BE CUT STRAIGHT OR TO THE PROPER RADIUS AS DESIGNATED ON PLANS.

5. CENTER THE FLUSH CURB SECTION IN ACCESSIBLE AISLE. (FOR PARKING AREAS AND CROSSWALK ON STREETS)

6. THE SURFACE OF ALL CURB RAMPS SHALL BE STABLE, FIRM AND SLIP RESISTANT. A COARSE BROOM FINISH RUNNING PERPENDICULAR TO THE SLOPE IS RECOMMENDED ON CONCRETE RAMP SURFACES, EXCLUSIVE OF THE DETECTABLE WARNING FIELDS.

7. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES (0.3 INCHES MAX.).

8. COORDINATE STRIPING AND SURFACE MATERIAL TO ENSURE A CONTINUOUS PEDESTRIAN ACCESS ROUTE AT ALL CURB RAMP LOCATIONS. GUIDANCE IS PROVIDED IN THE MUTCD. DRAINAGE GRATES AND UTILITY ACCESS COVERS ARE NOT ALLOWED IN RAMP WALKING SURFACES OR LANDINGS.

9. AT MARKED CROSSINGS, THE FULL WIDTH OF THE RAMP SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS. THE SIDES OF THE RAMPS (THE FLARES, IF NEEDED) NEED NOT BE WITHIN THE WIDTH OF THE MARKINGS.

10. DETECTABLE WARNINGS ARE REQUIRED. DETECTABLE WARNING SURFACE TO COVER AT LEAST THE FIRST 24" OF RAMP SURFACE FOR FULL WIDTH OF RAMP.

11. THERE SHALL BE A LANDING AT THE TOP OF EACH CURB RAMP. THERE SHALL BE A LANDING AT THE TOP AND AT THE BOTTOM OF EACH PARALLEL AND PARALLEL/PERPENDICULAR RAMP.

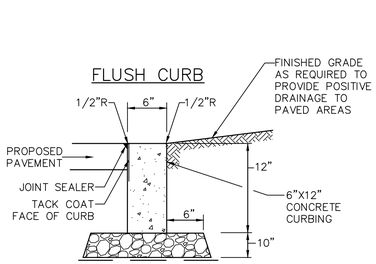
12. LANDINGS SHALL HAVE A MINIMUM CLEAR DIMENSION OF A 4 FT. BY 4 FT. SQUARE. LANDINGS MAY OVERLAP WITH ADJACENT LANDINGS OR A SINGLE LANDING MAY SERVE MULTIPLE CURB RAMPS OR PARALLEL OR PARALLEL/PERPENDICULAR RAMPS. LANDINGS MAY OVERLAP WITH THE CLEAR GROUND SPACE REQUIRED AT PEDESTRIAN SIGNAL PUSH BUTTONS.

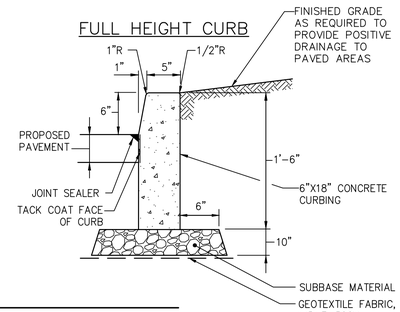
13. CURB RAMPS LOCATED WHERE PEDESTRIANS MAY WALK ACROSS THE CURB RAMP SHALL HAVE FLARED SIDES. THE LENGTH OF THE FLARES SHALL BE AT LEAST 10 TIMES THE CURB HEIGHT, MEASURED ALONG THE CURB LINE. WHEN INFEASIBLE OR IMPRACTICABLE TO PROVIDE A LANDING THAT IS AT LEAST 4 FT. WIDE (MEASURED FROM THE TOP OF THE RAMP TO THE BACK OF THE SIDEWALK), THE LENGTH OF THE FLARES SHALL BE 12 TIMES THE CURB HEIGHT MEASURED ALONG THE CURB LINE.

14. WHERE FEASIBLE, E.G. WHERE R.O.W. WIDTH PROVIDES SUFFICIENT SPACE TO INSTALL SIDEWALKS SET BACK FROM THE CURBS, RAMP NYSDOT TYPES 1 AND 3 SHOULD BE INSTALLED AS THE SEPARATION PROVIDED BETWEEN SIDEWALK AND CURB OR TRAVELWAY MAKE FOR GREATER PEDESTRIAN SAFETY AND COMFORT.

1 SIDEWALK CURB RAMP DETAIL

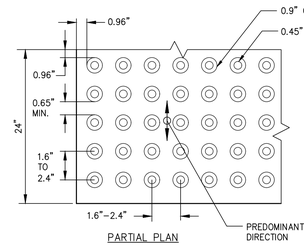
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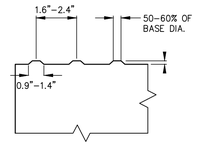


2 CONCRETE CURB

SCALE: N.T.S.



PARTIAL PLAN



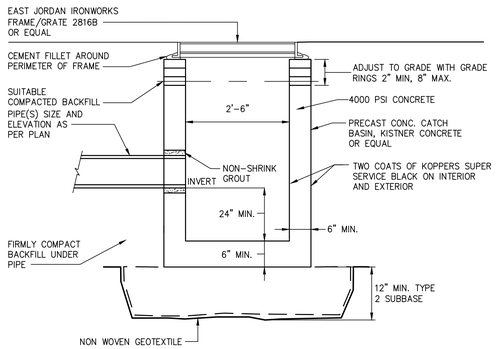
PARTIAL SECTION

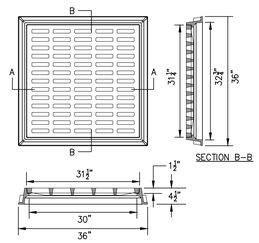
NOTES:

1. DETECTABLE WARNING SURFACE SHALL BE CAST IRON AND APPEAR ON CURRENT NYSDOT APPROVED LIST 726-02.
2. DETAIL REFERENCED FROM NYSDOT SS M608-5R1.
3. INSTALL IN ACCORDANCE WITH THE NYSDOT STANDARD DETAIL SHEETS 608-01 AND 608-02.
4. THE QUANTITY OF DOMES DEPICTED ARE FOR ILLUSTRATION ONLY.
5. THE TRUNCATED DOME SURFACE SHALL CONTRAST VISUALLY WITH ADJOINING WALKING SURFACES. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE TRUNCATED DOME SURFACE.
6. DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE OF WARNING FIELD NEAREST TO THE ROADWAY SURFACE IS 6" TO 9" FROM THE EDGE OF ROADWAY OR 2" FROM THE BACK OF THE DROPPED CURB, WHERE A DROPPED CURB CONTINUES ACROSS THE BOTTOM OF THE SIDEWALK CURB RAMP. THE DETECTABLE WARNINGS SHALL EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.
7. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL.

3 DETECTABLE WARNING SURFACE

SCALE: N.T.S.





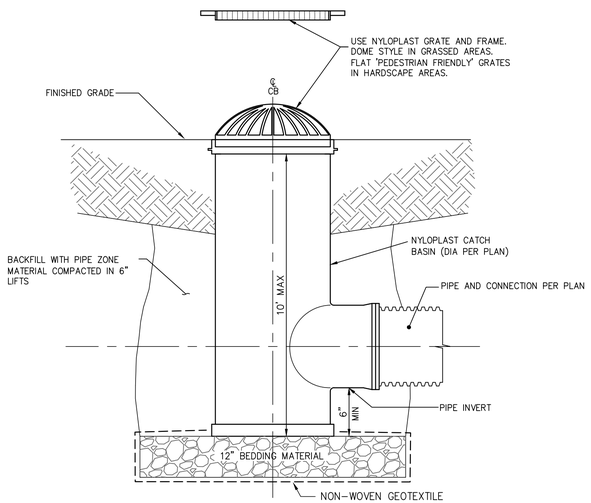
SECTION A-A

NOTES:

1. MATERIAL SHALL BE GRAY CAST IRON CONFORMING TO ASTM A48 (LATEST REVISION) CLASS 30B.
2. UNITS DESIGNED HEAVY DUTY FOR AASHTO H20-44 WHEEL LOADS.

4 PRECAST CONCRETE CATCH BASIN DETAIL

SCALE: N.T.S.



5 NYLOPLAST DRAINAGE BASIN

SCALE: N.T.S.

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121-139 GRANT AVE
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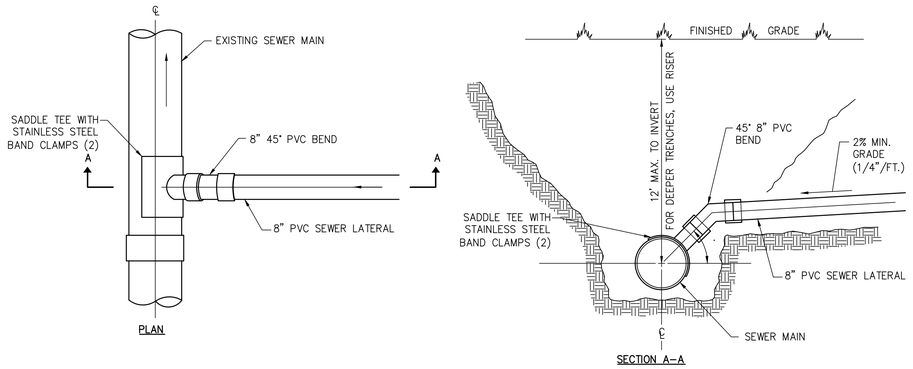
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AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

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1 SEWER SERVICE SADDLE CONNECTIONS

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THRUST BLOCK NOTES

1. FOR REQUIRED BEARING AREA DIMENSIONS D & L SEE TABLE. DIMENSIONS OF D & L OTHER THAN THOSE SHOWN IN THE TABLE MAY BE USED PROVIDED THEY YIELD A BEARING AREA EQUAL TO OR LARGER THAN THAT REQUIRED.
2. CONCRETE NOT TO OVERLAP ANY JOINT.
3. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.
4. APPROXIMATE VOLUME OF CONCRETE THRUST BLOCK:

$$V = \frac{LD\ (W+ID) - ID}{81}$$

WHERE:
V = VOLUME IN CUBIC YARDS
L = LENGTH OF BLOCK IN FEET
D = DEPTH OF BLOCK IN FEET
W = WIDTH OF BLOCK IN FEET
ID = INSIDE DIAMETER OF PIPE IN FEET

5. VALUES FOR TEE ALSO APPLY TO END PLUGS, CAPS, AND TAPPING SLEEVES.
6. REQUIRED BEARING AREAS ARE DUE TO THRUSTS CAUSED BY 150 PSI WORKING PRESSURE PLUS 50%(75 PSI) SURGE ALLOWANCE RESULTING IN 225 PSI TOTAL INTERNAL PRESSURE. NORMAL PIPE DIAMETER USED.
7. REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 2000 LBS. PER SQUARE FOOT FOR SAND. DUE TO OTHER SOIL CONDITIONS ENCOUNTERED, BEARING AREAS MAY BE MODIFIED BY THE ENGINEER.
8. IN MUCK, PEAT, OR RECENTLY PLACED FILL ALL THRUST SHALL BE RESISTED BY PILES OR TIE RODS TO SOLID FOUNDATIONS, OR BY REMOVAL OF SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH BALLAST OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS REQUIRED BY THE ENGINEER.

REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS

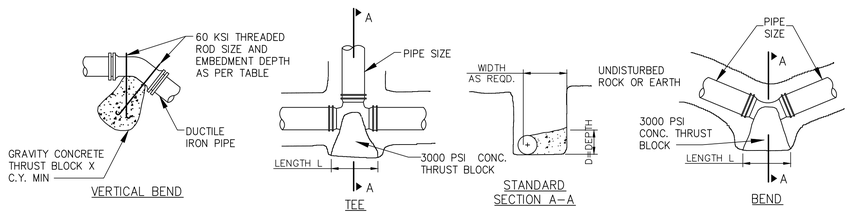
PIPE SIZE (IN.)	TEE(See Note 5)		90°(1/4)BEND		45°(1/8)BEND		22-1/2°(1/16)BEND		11-1/4°(1/32)BEND	
	AREA Sq.Ft.	Dimen. D x L	AREA Sq.Ft.	Dimen. D x L	AREA Sq.Ft.	Dimen. D x L	AREA Sq.Ft.	Dimen. D x L	AREA Sq.Ft.	Dimen. D x L
2,3,4	1.4	1.0 x 1.5	2.0	1.0 x 2.0	1.1	1.0 x 1.5	0.6	0.5 x 1.5	0.3	0.5 x 1.0
6	3.2	1.5 x 2.5	4.5	2.0 x 2.5	2.4	1.5 x 2.0	1.2	1.0 x 1.5	0.6	1.5 x 1.5
8	5.7	2.0 x 3.0	8.0	2.0 x 4.0	4.3	2.0 x 2.5	2.2	1.5 x 1.5	1.1	1.0 x 1.5

TYPE A BLOCKING FOR 11 1/4° & 22 1/2° VERT BENDS

PIPE SIZE NOM DIA(INCHES)	VERTICAL BEND DEGREES	NO. OF CUFT OF CONC BLOCKING	SIDE OF CUBE (FEET)	DIA OF SHACKLE RODS(2)* (INCHES)	DEPTH OF RODS IN CONC* (FEET)
2,3,4	11 1/4°	8	2.0	3/4	1.6
	22 1/2°	16	2.5		
6	11 1/4°	16	2.5	3/4	1.6
	22 1/2°	32	3.2		
8	11 1/4°	28	3.0	3/4	1.6
	22 1/2°	55	3.8		

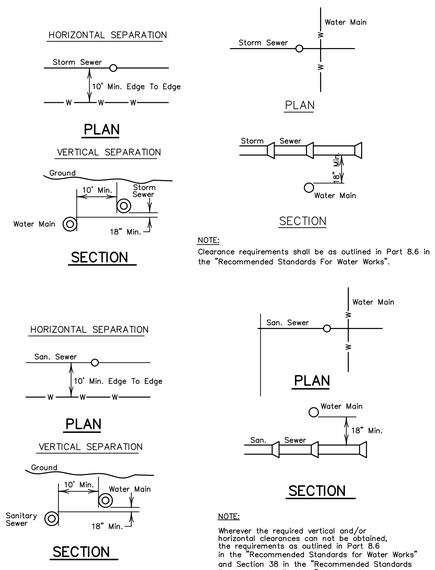
TYPE B BLOCKING FOR 45° VERTICAL BENDS

PIPE SIZE NOM DIA(INCHES)	NO. OF CUFT OF CONC BLOCKING	SIDE OF CUBE (FEET)	DIA OF SHACKLE RODS(2)* (INCHES)	DEPTH OF RODS IN CONC* (FEET)
2,3,4	29	3.1	3/4	1.6
6	59	3.9		
8	102	4.7		



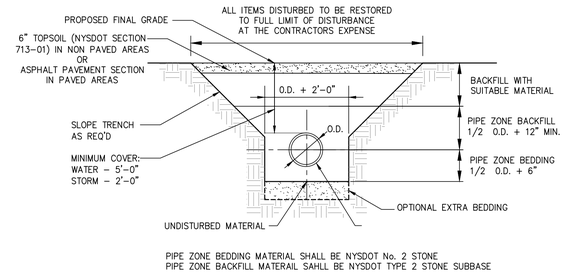
4 THRUST BLOCK DETAILS

SCALE: N.T.S.



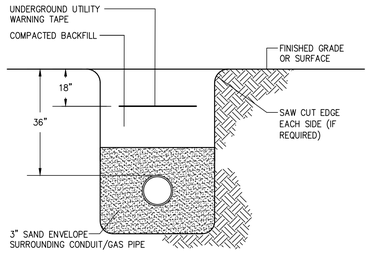
2 UTILITY SEPERATION

SCALE: N.T.S.



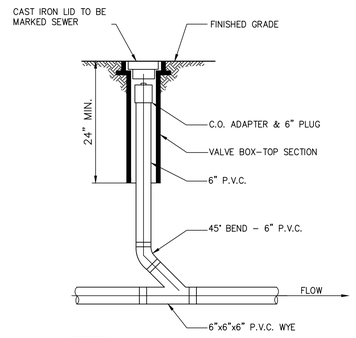
3 TYPICAL STORM, SANITARY, WATER TRENCH DETAIL

SCALE: N.T.S.



5 UNDERGROUND CONDUIT/GAS TRENCH

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6 GRAVITY IN-LINE CLEANOUT

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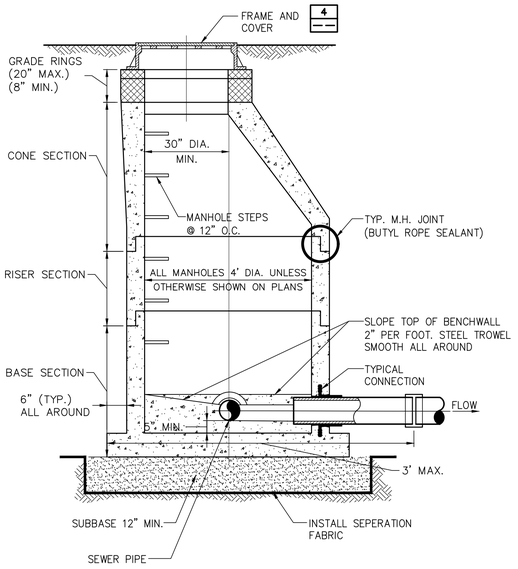
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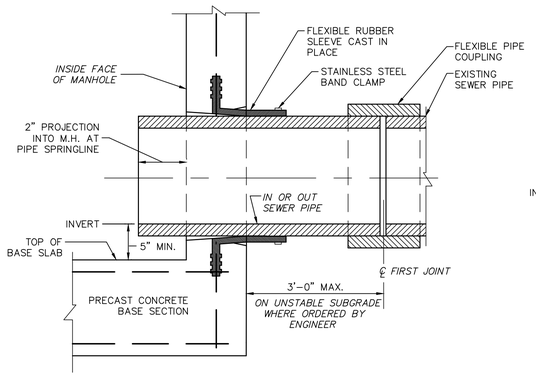
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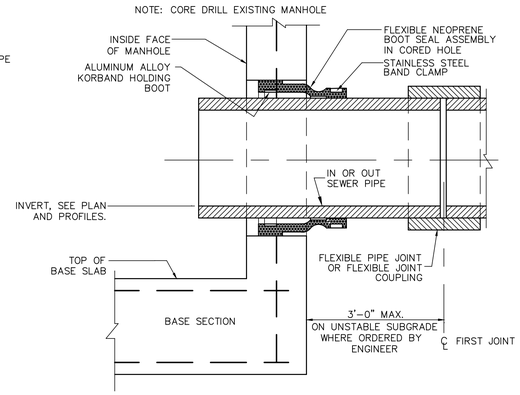
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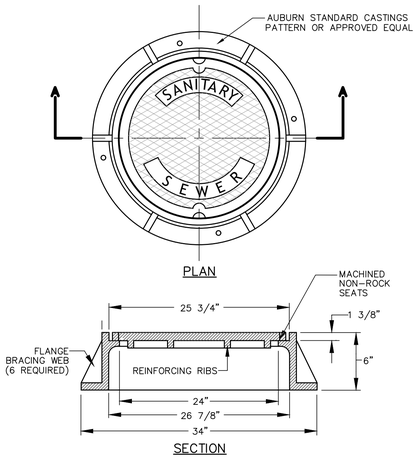
1 PRECAST CONCRETE MANHOLE DETAIL
SCALE: N.T.S.



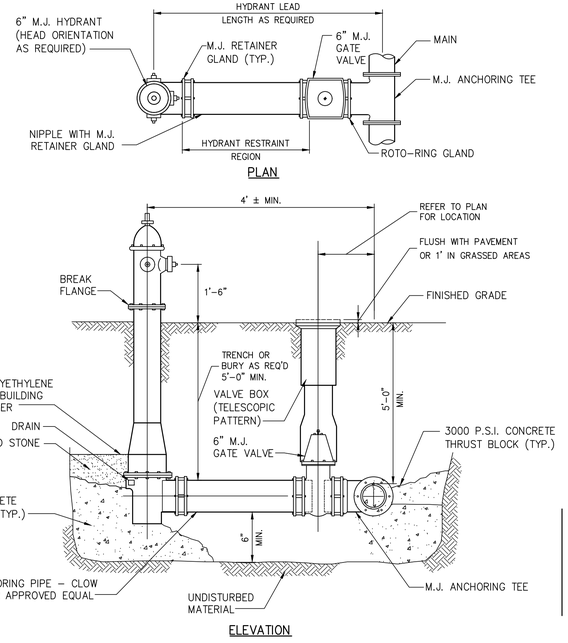
2 FLEXIBLE PIPE–TO–M.H. JOINT DETAIL FOR CONNECTION OF PROPOSED MH TO PROPOSED SANITARY SEWER LINE
SCALE: NTS



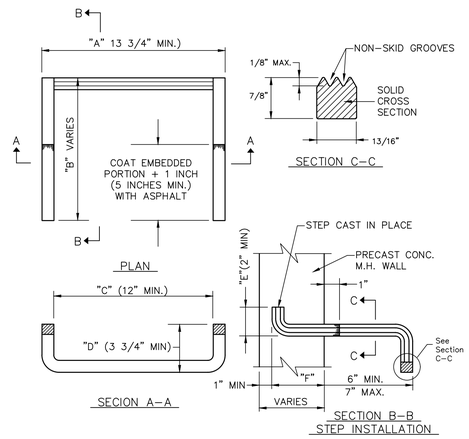
3 FLEXIBLE PIPE–TO–M.H. JOINT DETAIL FOR CONNECTION TO EXISTING M.H. ONLY
SCALE: NTS



4 MANHOLE COVER DETAIL
SCALE: N.T.S.



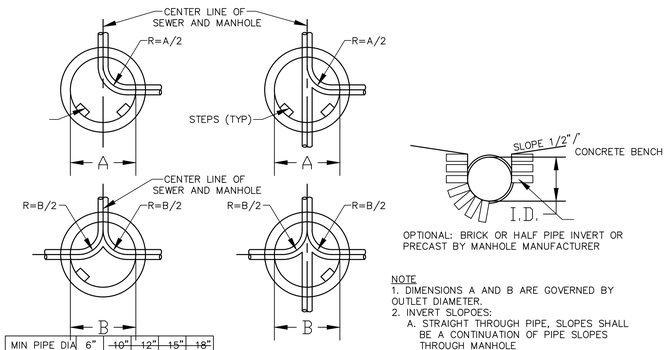
5 HYDRANT AND VALVE ASSEMBLY INSTALLATION DETAIL
SCALE: N.T.S.



ACCEPTABLE MANHOLE STEPS								
Manufacturer	Pattern Number	"A" Step Width	"B" Leg Length	"C" Rung Clear	"D" Drop Depth	"E" Hook Height	"F" Embedment	Step Cross Section
ALCOA ALUMINUM	12653 A	13 3/4"	10 11/16"	12"	3 3/4"	2"	4"	7 8"x13/16"
WASHINGTON ALUMINUM	F–14–2–A							
ALCOA ALUMINUM	12653 B		9 5/16"				3 15/16"	
WASHINGTON ALUMINUM	F–14–2–B							

OR APPROVED EQUAL

6 CAST–IN–PLACE SANITARY SEWER MANHOLE STEPS
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MIN PIPE DIA		6"	10"	12"	15"	18"
DIMENSIONS	A	4'	4'	4'	5'	5'
	B	5'	5'	5'	5'	5'
SEE NOTE 2 FOR INVERT SLOPES						

NOTE
1. DIMENSIONS A AND B ARE GOVERNED BY OUTLET DIAMETER.
2. INVERT SLOPOES:
   A. STRAIGHT THROUGH PIPE, SLOPES SHALL BE A CONTINUATION OF PIPE SLOPES THROUGH MANHOLE
   B. 90° BEND, PRIVIDE A MINIMUM 0.2' DROP ACROSS MANHOLE.
   C. WHERE TWO OR MORE PIPES ENTER A MANHOLE, THE STEEPER OF SLOPES I OR II ABOVE WILL DETERMINE THE OUTLET ELEVATION.
   D. WHERE PIPES ARE OF DIFFERENT SIZE, SLOPE SHALL BE AS DETERMINED BY CONTRACT PLANS.

7 MANHOLE BENCHING/CHANNEL
SCALE: NTS

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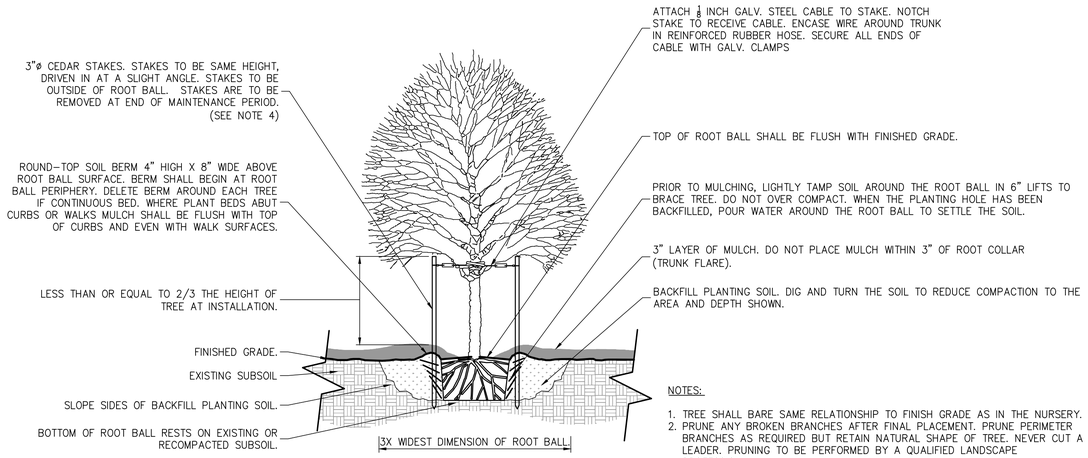
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AMV	AMV	LC
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07/13/26	106860	AS SHOWN

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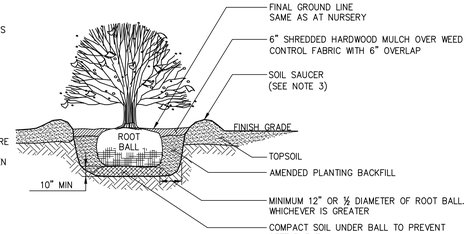
1. TREE SHALL BARE SAME RELATIONSHIP TO FINISH GRADE AS IN THE NURSERY.
2. PRUNE ANY BROKEN BRANCHES AFTER FINAL PLACEMENT. PRUNE PERIMETER BRANCHES AS REQUIRED BUT RETAIN NATURAL SHAPE OF TREE. NEVER CUT A LEADER. PRUNING TO BE PERFORMED BY A QUALIFIED LANDSCAPE PROFESSIONAL.
3. TREE SHALL BE PLUMB AND STRAIGHT.
4. TREES 2 1/2" CAL. OR GREATER SHALL BE GUYED AND STAKED WITH 3 EQUALLY SPACED STAKES.
5. AFTER PLACEMENT AND ROTATION OF TREE, REMOVE ALL ROPES FROM ROOT BALL AND CUT AND REMOVE TOP HALF OF BURLAP. COMPLETELY REMOVE BURLAP IF IT IS MADE OF SYNTHETIC MATERIAL.

1 DECIDUOUS TREE PLANTING & STAKING

NOT TO SCALE

NOTES:

1. PLANTING SOIL MIX IN INDIVIDUAL PLANTING HOLES OR CONTINUOUS BEDS.
2. AFTER PLACEMENT AND ROTATION OF SHRUB REMOVE ALL ROPES FROM ROOT BALL AND CUT AND REMOVE TOP OF BURLAP. COMPLETELY REMOVE BURLAP IF IT IS MADE OF SYNTHETIC MATERIAL.
3. DELETE SOIL SAUCER AROUND EACH SHRUB IF CONTINUOUS BED. PROVIDE NEAT TRIMMED SOIL EDGE AT CONTINUOUS BEDS AGAINST LAWN. WHERE PLANT BEDS ABUT CURBS OR WALKS MULCH SHOULD BE FLUSH WITH TOP OF CURBS AND EVEN WITH WALK SURFACES.
4. PRUNE BROKEN CANES AFTER PLANTING



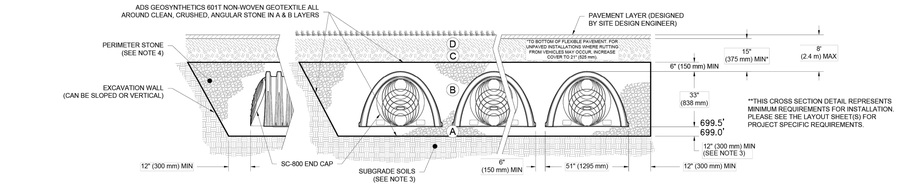
2 TYPICAL SHRUB PLANTING DETAIL

SCALE: N.T.S.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[4] A-1, A-2-4, A-3 OR AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5]	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 750 LBS/FT/%, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

STANDARD CROSS SECTION
SC-800 CHAMBER
STORMTECH

DATE:	07/07/2025	DRAWN:	BMW
DRAWING #	721-SD3	CHECKED:	JLM

DATE	DRWN	CHKD	DESCRIPTION
07/07/25	BMW	JLM	INITIAL RELEASE

StormTech® Chamber System
1-800-821-6710 | WWW.STORMTECH.COM

4640 TRUEMAN BLVD
HILLIARD, OH 43026

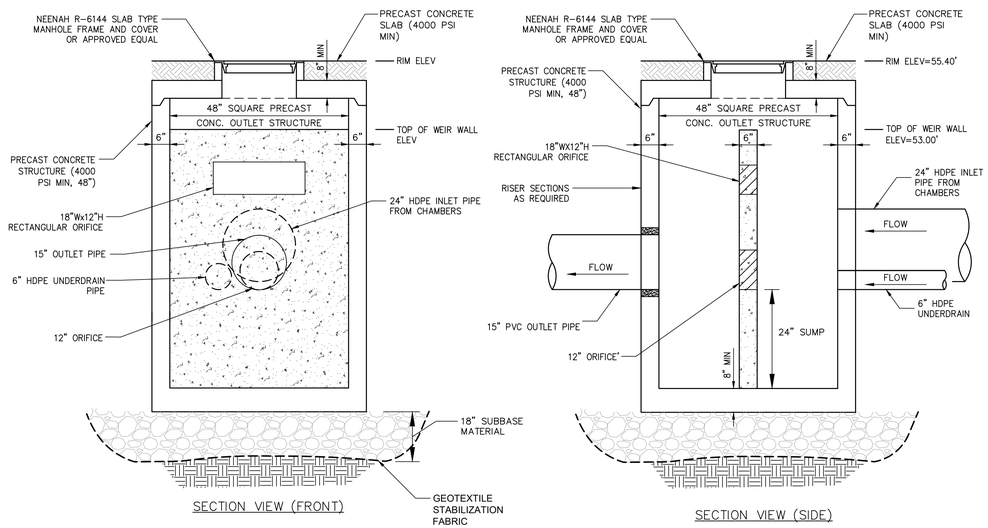
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SHEET 1 OF 1

3 SC-800 CHAMBER SYSTEM STANDARD DETAIL

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1 OUTLET CONTROL STRUCTURE #1

SCALE: N.T.S.

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1216 BROADWAY, 2ND FL
NEW YORK, NY 10001

STATE OF NEW YORK
ANTHONY VITALE
092006
LICENSED PROFESSIONAL ENGINEER
7/13/26

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121-139 GRANT AVE
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1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE

DETAILS

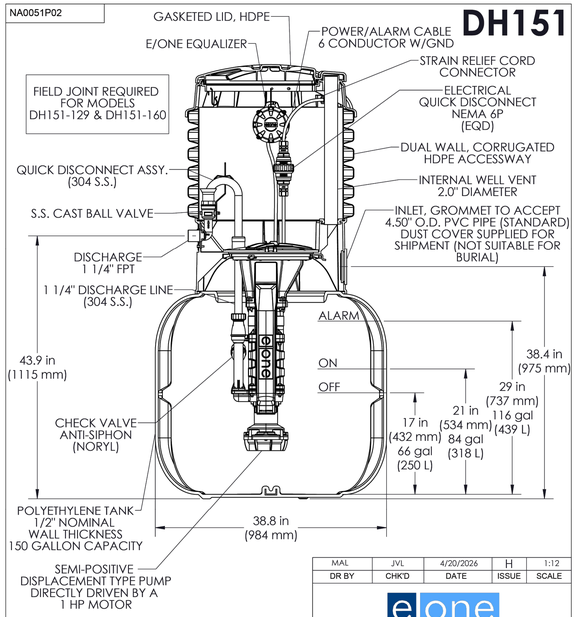
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NA0051P02

DH151



CONCRETE BALLAST MAY BE REQUIRED
SEE INSTALLATION INSTRUCTIONS FOR DETAILS

NOTE: DIMENSIONS ARE FOR REFERENCE ONLY

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DR BY	CHK'D	DATE	ISSUE	SCALE

SEWER SYSTEMS

MODEL DH151
DETAIL SHEET

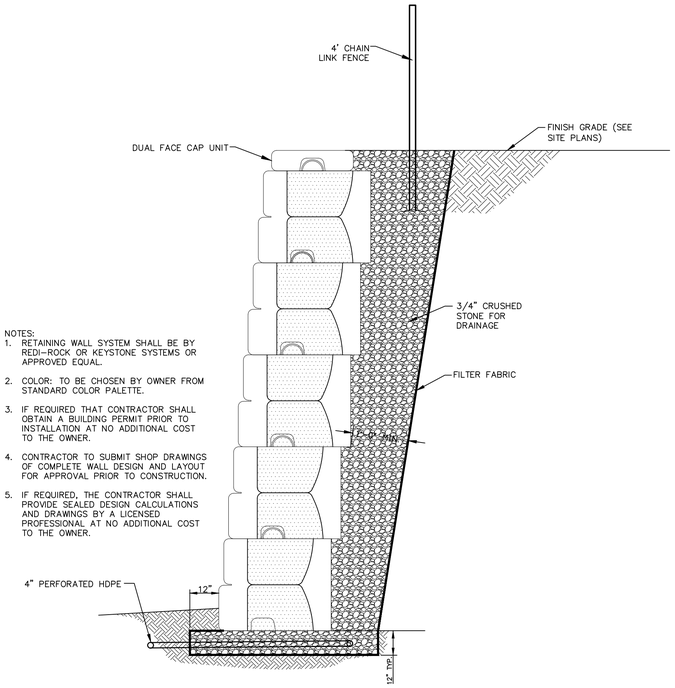
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NOTES:

1. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

1 SEWER PACKAGE PUMP STATION

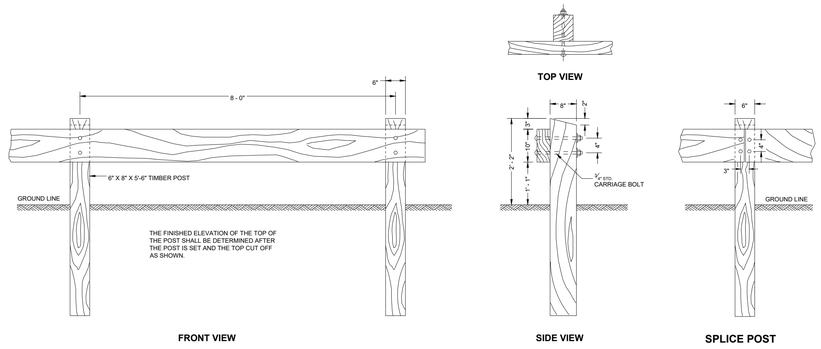
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NOTES:
1. RETAINING WALL SYSTEM SHALL BE BY REDI-ROCK OR KEYSTONE SYSTEMS OR APPROVED EQUAL.
2. COLOR: TO BE CHOSEN BY OWNER FROM STANDARD COLOR PALETTE.
3. IF REQUIRED THAT CONTRACTOR SHALL OBTAIN A BUILDING PERMIT PRIOR TO INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
4. CONTRACTOR TO SUBMIT SHOP DRAWINGS OF COMPLETE WALL DESIGN AND LAYOUT FOR APPROVAL PRIOR TO CONSTRUCTION.
5. IF REQUIRED, THE CONTRACTOR SHALL PROVIDE SEALED DESIGN CALCULATIONS AND DRAWINGS BY A LICENSED PROFESSIONAL AT NO ADDITIONAL COST TO THE OWNER.

2 SEGMENTAL BLOCK RETAINING WALL

SCALE: NO SCALE



TIMBER GUARD RAIL NOTES:
1. ALL TIMBER TO BE PRESSURE TREATED.
2. ALL METAL HARDWARE TO BE GALVANIZED.

3 TIMBER GUARD RAIL

SCALE: N.T.S.

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NEW YORK, NY 10001

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7/13/26

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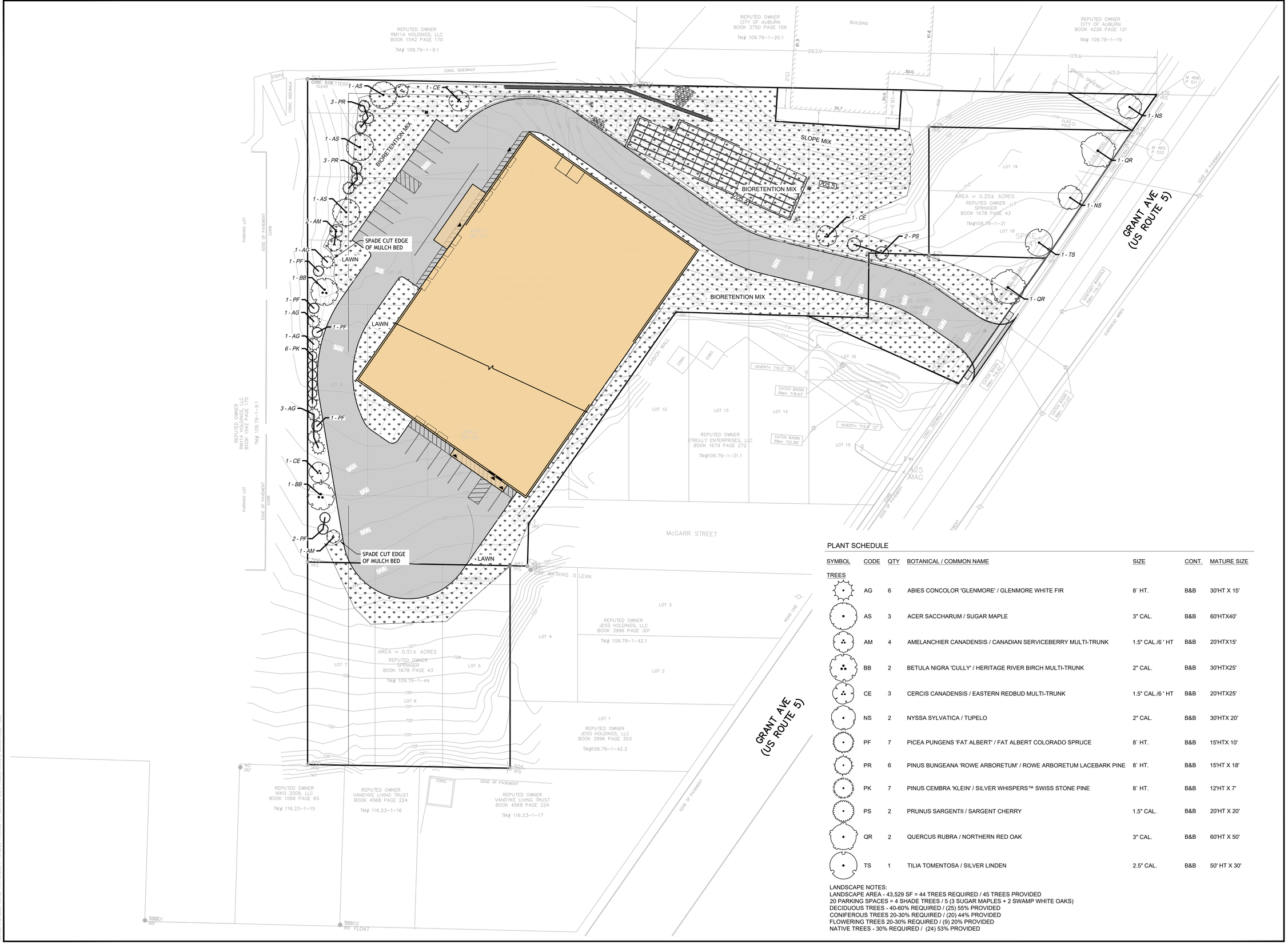
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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONT.	MATURE SIZE
TREES						
	AG	6	ABIES CONCOLOR 'GLENMORE' / GLENMORE WHITE FIR	8` HT.	B&B	30'HT X 15'
	AS	3	ACER SACCHARUM / SUGAR MAPLE	3" CAL.	B&B	60'HTX40'
	AM	4	AMELANCHIER CANADENSIS / CANADIAN SERVICEBERRY MULTI-TRUNK	1.5" CAL./6 ' HT	B&B	20'HTX15'
	BB	2	BETULA NIGRA 'CULLY' / HERITAGE RIVER BIRCH MULTI-TRUNK	2" CAL.	B&B	30'HTX25'
	CE	3	CERCIS CANADENSIS / EASTERN REDBUD MULTI-TRUNK	1.5" CAL./6 ' HT	B&B	20'HTX25'
	NS	2	NYSSA SYLVATICA / TUPELO	2" CAL.	B&B	30'HTX 20'
	PF	7	PICEA PUNGENS 'FAT ALBERT' / FAT ALBERT COLORADO SPRUCE	8` HT.	B&B	15'HTX 10'
	PR	6	PINUS BUNGEANA 'ROWE ARBORETUM' / ROWE ARBORETUM LACEBARK PINE	8` HT.	B&B	15'HT X 18'
	PK	7	PINUS CEMBRA 'KLEIN' / SILVER WHISPERS™ SWISS STONE PINE	8` HT.	B&B	12'HT X 7'
	PS	2	PRUNUS SARGENTII / SARGENT CHERRY	1.5" CAL.	B&B	20'HT X 20'
	QR	2	QUERCUS RUBRA / NORTHERN RED OAK	3" CAL.	B&B	60'HT X 50'
	TS	1	TILIA TOMENTOSA / SILVER LINDEN	2.5" CAL.	B&B	50' HT X 30'

LANDSCAPE NOTES:
LANDSCAPE AREA - 43,529 SF = 44 TREES REQUIRED / 45 TREES PROVIDED
20 PARKING SPACES = 4 SHADE TREES / 5 (3 SUGAR MAPLES + 2 SWAMP WHITE OAKS)
DECIDUOUS TREES - 40-60% REQUIRED / (25) 55% PROVIDED
CONIFEROUS TREES 20-30% REQUIRED / (20) 44% PROVIDED
FLOWERING TREES 20-30% REQUIRED / (9) 20% PROVIDED
NATIVE TREES - 30% REQUIRED / (24) 53% PROVIDED

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032006
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LANDSCAPE PLANS

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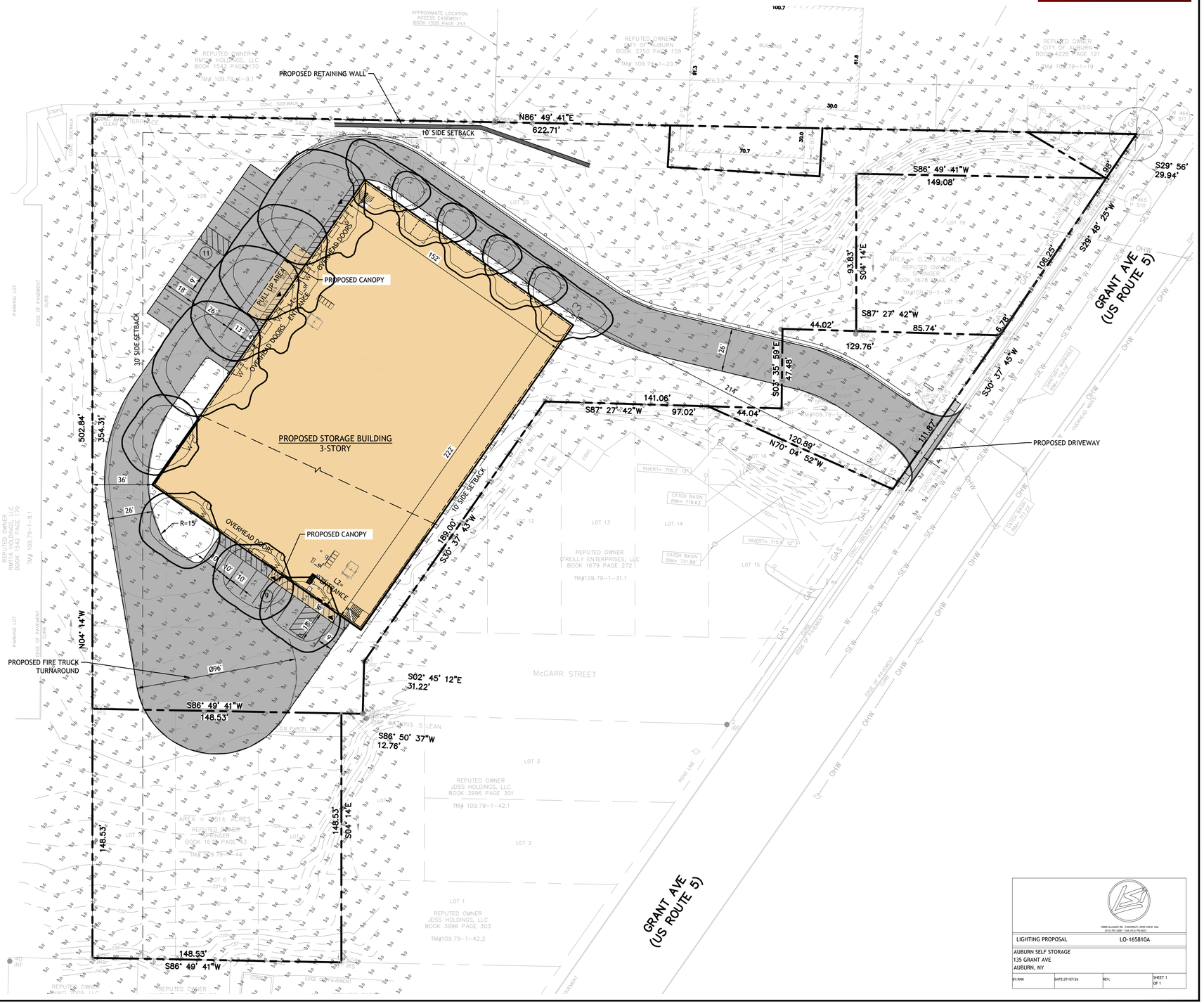
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Scale: 7/13/2026 4:07:27 PM Revised: 7/13/2026 11:59:03 AM, Current User: Vitali, Anthony J, xrefs: None

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	Mounting Height	LLF	Arr. Lum. Lumens	Arr. Watts	BUG Rating
▪	4	W1	Single	XWM-4-LED-12L-30-70CRI	12'	0.970	11486	77	B2-U0-G3
▪	4	W2	Single	XWM-4-LED-04L-30-70CRI	9'	0.970	4234	30	B1-U0-G2
▪	5	W3	Single	XWM-3-LED-04L-30-70CRI	9'	0.970	4291	30	B1-U0-G1

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Grid Z
ALL CALCS AT GRADE	Illuminance	Fc	0.32	12.2	0.0	N.A.	N.A.	0
BOUNDARY	Illuminance	Fc	0.01	0.1	0.0	N.A.	N.A.	N.A.
PARKING AND DRIVE	Illuminance	Fc	1.45	12.2	0.0	N.A.	N.A.	





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092006
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SITE LIGHTING PLAN

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Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

Drawing No.:

C-801

10000 ALLIANCE RD. CINCINNATI, OHIO 45242 USA
(513) 792-3200 T FAX (513) 793-6023

LIGHTING PROPOSAL LO-165810A

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135 GRANT AVE
AUBURN, NY

BY: RNK	DATE: 07/07/26	REV:	SHEET 1 OF 1

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STORMWATER POLLUTION PREVENTION PLAN

Auburn Self Storage
121-139 Grant Avenue
Auburn, New York 13021

CHA Project Number: 106860.0000

July 2026

Prepared for:
Horizon Storage Group LLC
1216 Broadway, 2nd Floor
New York, New York 10001

Prepared by:
CHA Consulting, Inc.
One Park Place
300 South State Street, Suite 600
Syracuse, New York 13202
Phone: (315) 471-3920

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CERTIFICATION

I, the undersigned, certify that I am currently a New York registered professional engineer and that this Stormwater Pollution Prevention Plan was prepared in accordance with all applicable statutes and regulations.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class “A” misdemeanor, pursuant to Section 210.45 of the Penal Law. I, the undersigned, of CHA Consulting, Inc. have been designated by the Site owner to sign this certification for the Site.

For CHA Consulting, Inc.:



JAMES TRASHER, P.E.
Printed Name of Certifying Engineer

MARKET SEGMENT LEADER
Title

JULY 13, 2026
Date of Certification

081584
NY Professional Engineer Registration Number

NEW YORK
Registration State

CHA Consulting, Inc.
Company

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1.0 PROJECT INFORMATION

1.1 Project Name and Location

Auburn Self Storage
121-139 Grant Avenue
Auburn, New York 13021

1.2 Owner Name and Address

Mr. Josh Sullivan
Horizon Storage Group, LLC
1216 Broadway, 2nd Floor
Auburn, New York 10001
(603) 770-6885
josh@horizonstoragegroup.com

2.0 PROJECT DESCRIPTION

2.1 Purpose and Extent of Proposed Development

The proposed project is located on the west side of Grant Avenue between Catlin Street and Standart Avenue in the City of Auburn, Cayuga County, New York (see Figure 1 – Location Plan). The project area is comprised of four parcels encompassing approximately 3.64 acres and is generally bounded by commercial and residential properties.

This Stormwater Pollution Prevention Plan (SWPPP) covers all site development, scheduled to be completed by Fall 2027. More specifically, site development includes the demolition of two existing dwellings and outbuildings for the construction of a 3-story, 100,000 SF building (~33,000 SF footprint) climate-controlled storage facility with associated access drives, parking, utilities, and landscaping.

Since site disturbance is greater than 1 acre, coverage under the New York State Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (CGP) is required. Therefore, stormwater treatment and mitigation will be provided per NYSDEC standards.

2.2 Project Disturbance Area

Total Disturbance Area:	±2.60 ac
Existing Impervious Area (within disturbed):	±0.10 ac
Proposed Impervious Area (within disturbed):	±1.60 ac

2.3 Description and Limitations of On-Site Soils

The soil disturbance for the proposed work is limited to 1.60± ac within the property boundary, and adjacent right of way. According to the USDA Soil Survey of Cayuga County, New York, the area of disturbance consists of Cazenovia silt loam (CeB, CeC3).

Detailed information for this soil type is located in Appendix A – Soils Information. A summary of

the soil composition is shown in Table 1 below.

The Natural Resource Conservation Service (NRCS, formerly known as the SCS), as part of their soil classification system, assigns each soil series to a Hydrologic Soil Group (HSG). The HSG is a four-letter index intended to indicate the minimum rate of infiltration obtained after prolonged wetting, and to indicate the relative potential for a soil type to generate runoff. The infiltration rate is the rate at which water enters the soil at the soil surface. The HSG also indicates the transmission rate – the rate at which water moves within the soil. Soil scientists define the four groups as follows:

- HSG 'A' (sand, loamy sand, or sandy loam): Soils have low runoff potential and high infiltration rates even when thoroughly wetted. They consist chiefly of deep, well to excessively drained sands or gravels and have a high rate of water transmission (> than 0.30 inches/hour).

- HSG 'B' (silt loam or loam): Soils have moderate infiltration rates when thoroughly wetted, and consist chiefly of moderately deep to deep, moderately well to well drained soils with moderately fine to fine texture. These soils have a moderate rate of water transmission (0.15 to 0.30 inches/hour).

- HSG 'C' (sandy clay loam): Soils have low infiltration rates when thoroughly wetted and consist chiefly of soils with a layer that impedes downward movement of water, and soils with moderately fine to fine texture. These soils have a low rate of water transmission (0.05 to 0.15 inches/hour).

- HSG 'D' (clay loam, silty clay loam, sandy clay, silty clay, or clay): Soils have high runoff potential. They have very low infiltration rates when thoroughly wetted, and consist chiefly of clay soils with a high swelling potential, soils with a permanent high water table, soils with a clay pan or clay layer at or near the surface, and shallow soils over nearly impervious material. These soils have a very low rate of water transmission (< 0.05 inches/hour).

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

Table #1. Soil Analysis Summary

Soil Name	Hydrologic Soil Group
CeB – Cazenovia, 2-8% slopes	C
CeC3 – Cazenovia, 5-14% slopes	C

2.4 Historic Places

The proposed project will have no impacts, whether stormwater discharge or construction activities, on a property that is listed or eligible for listing on the State or National Register of Historic Places in Cayuga County, New York per the Cultural Resource Information System (CRIS) website (see Appendix B).

3.0 SEQUENCE OF MAJOR ACTIVITIES

This SWPPP presents erosion and sediment controls, both temporary and permanent, to assist the operator in compliance with the project's SPDES General Permit for construction activity. To the degree practicable, all temporary erosion and sediment control mitigation measures shall be installed immediately before associated project areas are disturbed in anticipation of all soil disturbing activities to follow.

It is the responsibility of the Contractor to ensure that all soils removed from the project site are spoiled in a manner consistent with all local, state, and federal regulations. Appropriate erosion and sediment controls shall be installed at all spoil sites. Disturbances associated with offsite spoil areas do not contribute to the total disturbances associated with onsite activities.

3.1 Name of Receiving Waters

Stormwater runoff from the property drains north a closed storm sewer on Standart Avenue which appears to eventually discharge to North Brook.

4.0 CONTROLS

4.1 Timing of Controls/Measures

The erosion and sediment control measures shall be constructed prior to clearing or grading of any portion of the project. Where land disturbance is necessary, temporary seeding or mulching must be used on areas which will be exposed for more than 7 days. Permanent stabilization should be performed as soon as possible after completion of grading. After the entire project area is stabilized, the accumulated sediment shall be removed from the project area. Erosion control devices shall remain in place until disturbed areas are permanently stabilized. For projects where soil disturbance is greater than five (5) acres, and construction activity has temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control.

4.2 Erosion and Sediment Controls / Stabilization Practice

4.2.1 Temporary Stabilization

Topsoil stockpiles, staging areas and disturbed pervious portions of the project area where construction activity temporarily ceases for at least 7 days shall be stabilized with temporary seed and mulch no later than 7 days from the last construction activity in that area.
Temporary seed shall be ryegrass applied at the rates specified below:

- If seeding in spring, summer or early fall then seed with annual or perennial rye at a rate of 30 lbs per acre. If area is to remain stabilized over the winter and into the following spring, use perennial rye only.

- If seeding in late fall or early winter, use certified Aroostook winter rye (cereal rye) at a rate of 90 lbs per acre.

Any seeding method may be used that will provide uniform application of seed to the area and result in relatively good soil to seed contact. Area must be free of large rocks and debris and seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding. Fertilizer or lime is not typically used for temporary plantings.

Mulch shall be applied in conjunction with seeding and applied at the rate of 90 lbs per 1,000 square feet. Mulch shall be reapplied as necessary. Areas of the project area, which are to be paved, shall be temporarily stabilized by applying temporary gravel subbase until pavement can be applied.

Proposed grades which will have slopes steeper than 3:1 shall be stabilized with erosion control blankets.

A stabilized construction entrance shall be installed as shown on the attached plan. This entrance shall be utilized as the exclusive construction entrance and exit to the construction areas. Construction traffic shall be limited to the construction entrance.

Filter sock and inlet protection shall be installed around the site where depicted on the attached plan sheets. Silt fence may be used in lieu of or in addition to filter sock.

4.2.2 Permanent Stabilization

Disturbed portions of the project area 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 in accordance with the project specifications and plans. Construction and maintenance of erosion and siltation control measures are in accordance with the New York Standards and Specifications for Erosion and Sediment Control.

Where construction activity is complete over areas to be permanently vegetated, stabilize with permanent seeding. Verify seeding dates with engineer. If the engineer determines that seed cannot be applied due to climate, topsoil shall not be spread and mulching shall be applied to the exposed surface to stabilize soils until the next recommended seeding period. Other project areas shall be permanently stabilized with pavement, concrete, gravel or building structures.

4.2.3 Soil Restoration

According to the NYSSMDM, soil restoration is a required practice applied across areas of a development site where soils have been disturbed and will be vegetated in order to recover the original properties and porosity of the soil. A deep, well-drained soil, rich in organic matter, absorbs rainwater, helps prevent flooding and soil erosion, filters out water pollutants, and promotes vigorous plant growth that requires less irrigation, pesticides and fertilizer.

Due to the soil types onsite, Full Soil Restoration is required in any area where existing impervious surface will be converted to pervious area and in areas of cut and fill. As outlined in the NYSSMDM, during periods of relatively low to moderate subsoil moisture, the disturbed subsoils are returned to rough grade and the following Soil Restoration steps are applied:

1. Apply 3 inches of compost over subsoil

2. Till compost into subsoil to a depth of at least 12 inches using a cat-mounted ripper, tractor-mounted disc, or tiller, mixing, and circulating air and compost into subsoils
3. Rock-pick until uplifted stone/rock materials of four inches and larger size are cleaned off the site
4. Apply topsoil to a depth of 6 inches
5. Vegetate as required by approved plan

See Chapter 5 Section 5.1.6 of the NYSSMDM for additional requirements.

4.3 Climate Change

This project complies with the requirements of the Community Risk and Resiliency Act (CRRA) and 6 NYCRR Part 490 by addressing future physical risks due to climate change. The project design incorporates considerations for increasing temperature, precipitation variability, flooding frequency, sea-level rise, storm surges, and shifting ecological conditions.

In alignment with state guidelines, site planning, elevation, and sizing of control measures, conveyance systems, and detention systems have been evaluated to mitigate climate-related risks. The project references the latest climate data available from the Northeast Regional Climate Center (NRCC) in collaboration with the Natural Resources Conservation Service (NRCS).

By integrating current climate data specific to the project site, this project meets regulatory requirements and supports long-term sustainability and resilience efforts.

4.4 Winter Operations

If construction activities proceed through the winter season, access points should be enlarged and stabilized to provide for snow stockpiling. Drainage structures should be kept open and free of potential snow and ice dams. Inspection and maintenance are necessary to ensure the function of these practices during runoff events. For sites where construction activities temporarily cease, temporary and/or permanent soil stabilization measures shall be installed within seven (7) days from the date the soil disturbing activity ceased. Disturbed areas should be stabilized with seed and mulch, or other approved methods, even if the ground is covered by significant amounts of snow.

4.4.1 Winter Shutdown

Site inspections by the qualified inspector may be decreased to a minimum of once every thirty (30) days for sites where soil disturbing activities have ceased and the site has been completely stabilized with an approved method. Inlet protection should be installed and/or repaired before shutdown of the site. The owner or operator shall provide written notification to the respective NYSDEC regional office and/or MS4 prior to reducing the frequency of any site inspections.

4.5 Other Controls

4.5.1 Waste Disposal

Waste materials – Foreign waste materials shall be collected and stored in a secured area until removal and disposal by a licensed solid waste management company. All trash and construction debris from the project area shall be disposed of in a portable container unit. No foreign waste materials shall be buried within the project area. All personnel shall be instructed regarding the correct procedure for waste disposal. Notices stating these practices shall be posted in the project

trailer and the individual who manages day-to-day project operations will be responsible for seeing that these procedures are followed.

Petroleum Impacted Waste – During the excavation activities, there is the potential that petroleum impacted soils may be encountered. In the event that field evidence of contamination is identified during the project, potentially contaminated soils will be segregated and stockpiled on polyethylene sheeting and covered in a predetermined staging area. The potentially impacted, stockpiled soils will then be sampled to determine if the soils are suitable for use as clean backfill. In the event that the soils are not suitable for re-use, the contaminated soil will be properly characterized and disposed of at an off-site NYSDEC permitted facility. The excavation will then be backfilled with clean, imported fill.

Hazardous Waste - All hazardous waste materials shall be disposed of in a manner specified by local or state regulations or by the manufacturer. Project personnel shall be instructed in these practices and the individual who manages day-to-day project operations shall be responsible for seeing that these practices are followed.

Sanitary Waste - Any sanitary waste from portable units shall be collected from the portable units by a licensed sanitary waste management contractor, as required by NYSDEC regulations.

4.5.2 Sediment tracking by Vehicles

A stabilized construction entrance shall be installed where depicted on attached plan and maintained as necessary to help reduce vehicular tracking of sediment. The entrance shall be cleaned of sediment and redressed when voids in the crushed stone become filled and vehicular tracking of sediment is occurring. Dump trucks hauling materials to and from the construction project area shall be covered with a tarpaulin to reduce dust. Any sediment and debris tracked from work area along project adjacent roadways shall be immediately removed with a street sweeper or equivalent sweeping method. Further, sweeping of streets adjacent to disturbed areas shall be performed prior to the end of each workday (at a minimum) when tracking of sediment is occurring.

4.5.3 Non-Stormwater Discharges

Non-stormwater discharges are not expected to exit the project area during construction.

4.6 Certification of Compliance with Federal, State, and Local Regulations

This Stormwater Pollution Prevention Plan reflects the current New York State requirements for stormwater management and erosion and sediment control. To ensure compliance, this plan was prepared in accordance with current New York State Standards. There are no other applicable State or Federal requirements for sediment and erosion plans (or permits), or stormwater management plans (or permits).

5.0 POST-CONSTRUCTION STORMWATER MANAGEMENT

5.1 Hydrologic Evaluation

5.1.1 Methodology

The proposed project has been designed in accordance with the NYSSMDM (July 31, 2024) and the SPDES CGP (GP-0-25-001).

In order to evaluate the potential impacts associated with the development of the site, existing and proposed condition hydrographs were generated using the SCS unit hydrograph method with a Type II rainfall distribution. The 24-hour rainfall amounts for the 1, 10, and 100-year design storms for the project site are 1.95, 3.28, and 5.51 inches respectively.

Runoff curve numbers and times of concentration were computed using standard NRCS TR-55 methodology. Additionally, peak stormwater flows and hydrographs for the existing and proposed conditions were computed using HydroCAD Version 10.20-7a.

5.2 Existing Conditions

The existing area of analysis was broken into two subareas (EXDA-1 and EXDA-2). EXDA-1 is approximately 4.34 acres in size and consists mainly of wooded area with smaller areas of impervious surface and open space. Existing dwellings and outbuildings will be demolished. Runoff generally drains to the north from off-site properties and through the wooded area, eventually draining to City of Auburn property where it is received by a closed storm sewer system along Standart Avenue. The north edge of the subarea boundary follows the proposed conditions boundary for calculation purposes.

EXDA-2 is approximately 0.60 acre in size and consists mainly of off-site impervious surfaces. Runoff from this area drains north to an existing organic filter prior to discharging to the property (see Figure 2 – Existing Conditions).

For detailed hydrologic analyses output for the existing conditions see Appendix C. For a summary of the existing conditions hydrologic analysis see Table 2 below.

Table #2. Existing Conditions Analysis Summary

Drainage Area	Area (ac)	Tc (min)	Curve Number	Peak Flow Rate (cfs)		
				1-yr	10-yr	100-yr
EXDA-1	4.34	32.0	73	0.73	3.44	9.63
EXDA-2	0.60	8.5	92	1.15	2.26	4.11
Total	--	--	--	0.90	3.82	10.31

5.3 Proposed Conditions

The proposed property will consist of a 3-story, 100,000 SF (33,000 SF building footprint) climate controlled self-storage building with associated parking and an access drive off Grant Avenue (see Figure 3 – Proposed Conditions).

The proposed area of analysis was broken into three subareas (PRPDA-1A, PRPDA-1B and PRPDA-2). PRPDA-1A is approximately 2.19 acres in size and consists of off-site area to the south and west which will remain undisturbed as well as the proposed parking areas and a small stormwater management area. Runoff from this area generally drains north where it is received by a proposed swale and directed to the small stormwater management area which discharges to the large stormwater management area located within PRPDA-1B.

PRPDA-1B is approximately 2.16 acres in size and consists of the proposed building, access drive and off-site area to the south. Runoff from this area is generally captured via swale and directed to a proposed bioretention area which overflows to an underground chamber system below the bioretention area.

PRPDA-2 remains the same as in existing conditions (EXDA-2).

For detailed hydrologic analyses output for the proposed conditions see Appendix C. For a summary of the proposed conditions hydrologic analysis see Table 3 below.

Table #3. Proposed Conditions Analysis Summary

Drainage Area	Area (ac)	Tc (min)	Curve Number	Peak Flow Rate (cfs)		
				1-yr	10-yr	100-yr
PRPDA-1A	2.19	19.9	82	1.42	3.90	8.61
PRPDA-1B	2.16	8.1	85	2.71	6.49	13.24
PRPDA-2	0.60	8.5	92	1.15	2.26	4.11
Total	--	--	--	3.58	11.37	23.42

5.4 Post-Development Stormwater Management Practices

5.4.1 Water Quality

According to Chapter 4 of the NYSSMDM, water quality treatment will be designed to capture and treat 90% of the annual stormwater runoff volume, or the full water quality volume (WQ_v). Treatment practices need to be capable of 80% Total Suspended Solids (TSS) removal and 40% Total Phosphorous (TP) removal, have an accepted longevity in the field and have a pretreatment mechanism.

According to the New York State Stormwater Management Design Manual (NYSSMDM), the Water Quality Volume (WQv) is calculated as follows:

WQv = (P x Rv x A)/12, where
P = 90% Rainfall Event Number, from NYSSMDM Figure 4.1, P=1.0
Rv = Impervious coefficient, based on % impervious cover (I)
Rv = 0.05 + 0.009*(I)
A = Drainage area in acres

Therefore,

WQv = 1.0 x (0.05 + (0.009 x 31)) x 4.95 / 12 = 0.137 acft

5.4.2 Runoff Reduction

The goal of runoff reduction is to provide infiltration, groundwater recharge, reuse, recycle evaporation/evapotranspiration of 100 percent of the post-development water quality volumes to replicate pre-development hydrology by maintaining pre-construction infiltration, peak runoff flow, discharge volume, as well as minimizing concentrated flow by using runoff control techniques to provide treatment in a distributed manner before runoff reaches the collection system. This requirement can be accomplished by application of on-site green infrastructure techniques, standard stormwater management practices with runoff reduction capacity, and good operation and maintenance. Runoff reduction can be achieved by three methods: reduction of contributing drainage area, reduction of runoff volume through practice storage, and using standard stormwater practices with runoff reduction capacity.

According to the NYSSMDM, construction activities that cannot achieve 100% reduction of the total WQv 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. In no case shall the runoff reduction achieved from the newly constructed impervious areas be less than the minimum runoff reduction volume determined by the following equation:

RRv_{min} = P x Rv x Aic x S / 12, where

RRv_{min} = Minimum runoff reduction volume required from new impervious area (acft)
Rv = 0.05 + 0.009(I) where I is 100% impervious
Aic = Total area of new impervious cover
S = Hydrologic Soil Group (HSG) Specific Reduction Factor (S) = 0.30 for HSG C

RRv_{min} = 1.0 x (0.05 + (0.009 x 100) x 1.55 ac x 0.30 / 12 = 0.037 acft

Due to topography and lack of infiltration capacity of the soils within the project area, 100% of the RRv cannot be met. These limitations prevent the use of infiltration practices such as infiltration rain gardens, infiltration bioretention areas and porous pavements which allow 100% of the provided volume to be considered for RRv. Due to HSG C soils, underdrains are required for the remaining acceptable practices which only allow 40% of the provided volume to be considered for RRv.

The plan provides 0.0.082 acft of RRv within the bioretention area. See sizing calculations located in Appendix C.

5.4.3 Channel Protection

Channel Protection Volume (CPv) control requires storage and detention for a period of 24 hours of the post-developed 1-year, 24-hour storm event after runoff reduction. As shown in the attached calculations located in Appendix C, channel protection volume requirements are met.

5.4.4 Peak Flow Attenuation

Based on a comparison between the existing condition and the unmitigated proposed condition peak flow rates, the proposed development will increase peak rates of runoff in all storm events due to the increase in impervious surfaces. NYSDEC regulations require peak flow rates to be mitigated to existing condition rates for the 10-year and 100-year storm events.

In order to mitigate peak flow rates, a small stormwater management area, bioretention area, and an underground detention system are proposed. The small stormwater management area is located in the northwest corner of the property and discharges via 12" pipe to the proposed bioretention area which provides 12" of ponding on the surface. The bioretention section consists of 3" of mulch and 2.5' of bioretention soil mix which sits directly above the underground detention system, separated by filter fabric. The underground system consists of 7 rows (one of which is an isolator row) of 33" arch chamber pipe averaging 17 chambers per row. The entire system will be encased in stone (6" of foundation stone and 6" above the top of pipe) and wrapped with filter fabric. The isolator row contains added filter fabric which is placed between the stone and pipe providing a media for stormwater filtration, a durable surface for maintenance, and scour protection. Runoff will enter the isolator row through the upstream drainage inlet which contains a manifold set at the top of chamber elevation. This forces runoff to fill the isolator row first, allowing treatment of the first flush, prior to entering the rest of the system. According to the manufacturer, each chamber within the isolator row provides a water quality treatment flow rate of 0.25 cfs. The isolator row contains 13 chambers, therefore, provides a water quality treatment flow rate of 3.25 cfs. Underdrain is provided at the base of the detention system which will drain both the bioretention area and the chamber system.

The system discharges to an outlet control structure which includes an internal weir wall and properly sized orifices to limit peak flow rates. The system will then discharge via 12" pipe to the north as in existing conditions.

Hydrographs were developed for the post-mitigated conditions which include routing runoff through the stormwater management pond, bioretention area, and underground detention system. A comparison of the results of the existing condition and mitigated proposed condition hydrologic analysis is shown in the following table. Detailed computations are included in Appendix C.

Table #4. Existing Condition and Mitigated Post-Development Peak Flow Comparison

Peak Flow Rate (cfs)								
1-Year Storm			10-Year Storm			100-Year Storm		
Existing	Proposed	Δ	Existing	Proposed	Δ	Existing	Proposed	Δ
0.90	0.88	-0.02	3.82	3.80	-0.02	10.31	10.01	-0.30

As shown in the above table, peak flow rates are mitigated below existing peak flow rates which meets requirements.

5.5 Floodplains

The property is not located within a floodplain, therefore, floodplain impacts are not applicable.

6.0 MAINTENANCE/INSPECTION PROCEDURES

6.1 Erosion and Sediment Control Inspection and Maintenance Practices

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

6.1.1 Owner/Operator Inspection Requirements

- Prior to construction activity the owner/operator shall have contractors and sub-contractors identify a trained individual responsible for the implementation of the SWPPP. The trained individual must be on-site on a daily basis when soil disturbing activities are occurring.
- The owner/operator shall inspect the erosion and sediment control measures as identified in the SWPPP to ensure that they are being maintained in effective operating conditions at all times. Where soil disturbing activities temporarily cease (e.g. winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the owner/operator can stop conducting inspections. The owner/operator shall resume inspections when soil disturbing activities begin again.
- Where soil disturbing activities have ceased with partial project completion, the owner/operator can stop conducting inspections when disturbed areas have reached final stabilization. All post construction stormwater management practices required for the completed areas shall have been constructed in conformance with the SWPPP and be fully operational. 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.
- The owner/operator shall notify the NYSDEC and municipal stormwater contact person prior to any reduction in the frequency of site inspections.
- The owner/operator shall retain copies of the NOI, NOI acknowledgment letter, SWPPP and any inspection reports submitted in conjunction with this permit and records or all data used to complete the NOI to be covered by this permit for a period of at least five (5) years from the date that the site is finally stabilized.

6.1.2 Qualified Inspector Inspection Requirements

- The qualified inspector is defined as 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), licensed Landscape Architect, or other Department endorsed individual(s). It may also mean someone working under the direct supervision of the licensed Professional Engineer or licensed 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 the person has received four (4) hours of training endorsed by the Department and shall receive four (4) hours of training every three (3) years after the initial training.
- A site inspection shall be conducted at least once every seven (7) days by the qualified inspector when soil disturbing activities are occurring. Electronic reports in PDF format shall be emailed to the City Engineer within 24 hours of inspection. A copy of the “Construction Duration Inspection Form” is included in Appendix G.
- All measures shall be maintained in good working order; if any repairs or corrective actions are necessary, it is the responsibility of the qualified inspector to notify the owner/operator and

appropriate contractor within one business day. The contactor shall begin implementing the corrective action within one business day of being notified.

- During construction activities where soil disturbances exceed the five (5) acre maximum, and the owner/operator has received prior authorization, the qualified inspector shall conduct at least two (2) site inspections every seven (7) calendar days. Inspections shall be separated by a minimum of two (2) full calendar days.
- All inspection forms must be signed by a qualified inspector.
- For construction sites where soil disturbing activities are temporarily suspended, temporary stabilization measures shall be applied and the qualified inspector shall conduct a site inspection at least once every thirty (30) calendar days.
- Where soil disturbing activities have ceased with partial project completion the qualified inspector can stop conducting inspections when disturbed areas have reached final stabilization and all post construction stormwater management practices required for the completed areas have been constructed in conformance with the SWPPP and are fully operational.

6.1.3 General Requirements

- The owner or operator must maintain copies of the following documents at the construction site in a secure location, such as a job trailer, on-site construction office, or mailbox with lock until the site has achieved final stabilization and coverage under the CGP has been terminated:
    - SWPPP
    - NYSDEC SPDES CGP (GP-0-25-001)
    - Signed SWPPP Preparer Certification Form
    - Signed MS4 SWPPP Acceptance Form (when applicable)
    - Signed Owner/Operator Certification Form
    - Electronic Notice of Intent (eNOI)
    - Letter of Authorization (LOA)
    - Inspection reports
    - Responsible contractor's or subcontractor's certification statements
    - Request to Disturb Greater than 5 Acres and associated Authorization Letter
    - Request to Continue Coverage and the Letter of Continued Coverage (when applicable)
    - Updated LOA(s) when applicable
- Built up sediment shall be removed from any silt fence and/or filter sock when it has reached one-third the height of the fence/sock.
- Sediment fencing/sock shall be inspected for depth of sediment, and tears, to see if fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- The construction entrance shall be cleaned of sediment and redressed when voids in the crushed stone become filled and vehicular tracking of sediment is occurring.
- Dust shall be controlled on access points and other disturbed areas subject to surface dust movement and blowing.
- Stabilization fabric and check dams shall be inspected to ensure that slopes and swales are not being eroded. Fabric shall be replaced / reinstalled and check dams added as necessary to prevent any such erosion.
- Inspection of diversion swales shall be conducted to check condition of swale.
- Temporary sediment basins shall be inspected to check condition of basin. They shall be cleaned immediately once accumulated sediment reaches a depth of 1/3 the depth of the basin.
- Inspection must verify that all practices are adequately operational, maintained properly and that sediment is removed from all control structures.
- Inspection must look for evidence of soil erosion on the site, potential of pollutants entering drainage systems, problems at the discharge points, and signs of soil and mud transport from the site to the public road.

6.2 Final Site Inspection

The qualified inspector shall perform a final inspection of the site with City Engineering and the Contractor to certify that:

- All disturbed areas have achieved final stabilization.
- Temporary erosion and sediment control practices have been removed; and
- Post-construction stormwater management practices (if required) have been constructed in conformance with the SWPPP.

Upon satisfactory completion of the final site inspection, the qualified inspector shall terminate permit coverage via submission of the electronic Notice of Termination (eNOT) in accordance with Part V of the CGP.

6.3 Post-Construction Stormwater Inspection and Maintenance Practices

The property owner is responsible for maintenance of the proposed stormwater management and treatment facilities and is responsible for providing routine inspection reports to City Engineering per maintenance agreements. Long-term inspection forms and maintenance documents (included in Appendix G of this plan) are referenced from NYSDEC's Maintenance Guidance Manual for Stormwater Management Practices dated March 31, 2017 and manufacturer documentation.

7.0 INVENTORY FOR POLLUTION PREVENTION PLAN

The materials or substances listed below are expected to be within the project area during construction:

- Portland cement concrete.
- Fertilizers / seeding materials.
- Stone.
- Bituminous asphalt.
- Petroleum based products.
- Silt fence fabric and/or filter sock.
- Lumber.
- Pavement marking paint.
- HDPE pipe, PVC pipe, and CMP.
- Bonded fiber matrix material.
- HDPE Geomembrane material.

8.0 SPILL PREVENTION

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

8.1 Good Housekeeping

The following good housekeeping practices shall be followed within project areas during construction:

- An effort shall be made to store only enough products required to do the job.
- All materials stored within project areas shall be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.

- Products shall be kept in their original containers with the original manufacturer's label.
- Substances shall not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product shall be used up before disposing of the container.
- Manufacturers' recommendations for proper use and disposal shall be followed.
- The project superintendent shall inspect daily to ensure proper use and disposal of materials.

8.2 Hazardous Products

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

- Products shall be kept in original containers unless they are not resealable.
- Original labels and material safety data shall be retained.
- If surplus product must be disposed of, manufacturers' or local and state recommended methods of proper disposal shall be followed.
- Material Safety Data Sheets for all hazardous products shall be within the project area for the duration of construction.

8.3 Product Specific Practices

The following product-specific practices shall be followed within the project areas:

8.3.1 Petroleum Products

All project related vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers which are clearly labeled. Any asphalt substances used during construction shall be applied according to the manufacturer's recommendations.

8.3.2 Fertilizers

Fertilizers used shall be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer shall be worked into the soil to limit exposure to stormwater. Fertilizers shall be stored in a covered or other contained area.

8.3.3 Paints

All containers shall be tightly sealed and stored when not required for use. Excess paint shall not be discharged to the storm sewer system but shall be properly disposed of according to manufacturer’s instructions or State regulations.

8.3.4 Concrete Trucks

Concrete trucks shall be allowed to wash out within project areas provided that the contractor provides an area which collects and contains any concrete / slurry material washed from trucks (concrete washout) for recovery and disposal at a later time. No concrete / slurry shall be discharged from the property at any time of construction. If such washing is anticipated, the contractor shall submit a plan detailing the control of concrete / slurry to the engineer for approval.

8.3.5 Watercourse Protection

Construction operations shall be conducted in such a manner as to prevent damage to watercourses from pollution of debris, sediment, or other foreign material, or from manipulation, from equipment and/or materials in or near the watercourse. The contractor shall not return directly to the watercourse any water used for wash purposes or other similar operations which may cause the water to become polluted with sand, silt, cement, oil or other impurities. If the contractor uses water from the water course, the contractor shall construct an intake or temporary dam to protect and maintain watercourse water quality.

8.4 Spill Control Practices

The contractor will be responsible for preparing a project area specific spill control plan in accordance with local and NYS DEC regulations. At a minimum this plan should:

- Reduce stormwater contact if there is a spill.
- Contain the spill.
- Stop the source of the spill.
- Dispose of contaminated material in accordance with manufacturer's procedures, and NYS DEC regulations.
- Identify responsible and trained personnel.
- Ensure spill area is well ventilated.

9.0 UPDATING THE SWPPP

The SWPPP shall be updated/revised as conditions merit or as directed by the regulating authority. The attached inspection forms included with this document allow for the certification of any updates/revisions.

10.0 SWPPP CERTIFICATION

10.1 Contracting Firm Information

_____

Contracting Firm

_____

Address

_____

City/Town *State* *Zip*

10.2 Site Location

121-139 Grant Avenue
Auburn, New York 13021

10.3 Contractor's Certification

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

Signature (Contractor/Subcontractor) *Date*

For

Responsible For

Signature (Trained Contractor) *Date*

For

Responsible For

Signature (Contractor/Subcontractor) *Date*

For

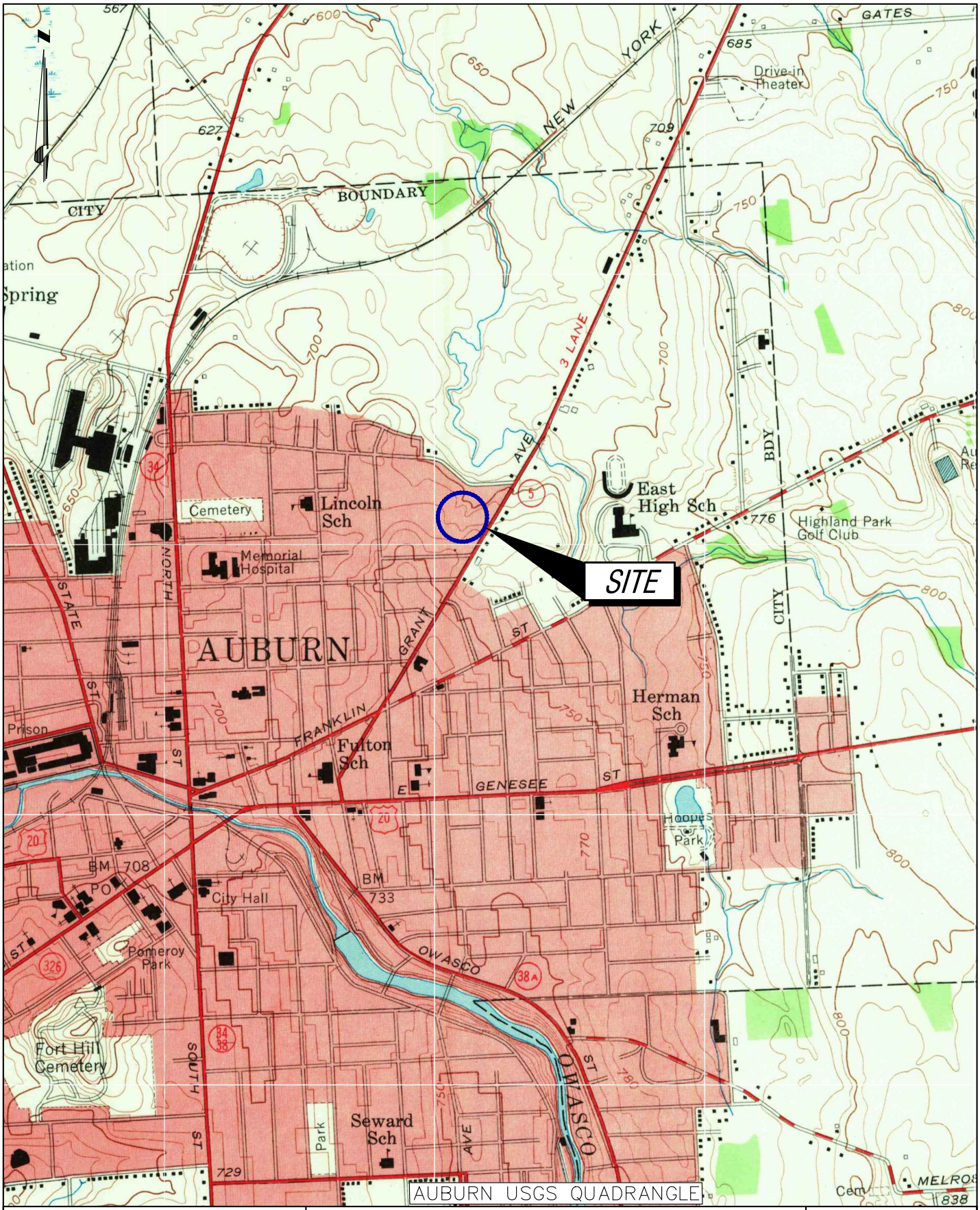
Responsible For

Signature (Trained Contractor) *Date*

For

Responsible For

FIGURES



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One Park Place, 300 South State Street, Suite 600
Syracuse, NY 13202
315.471.3920 . www.chacompanies.com

LOCATION PLAN

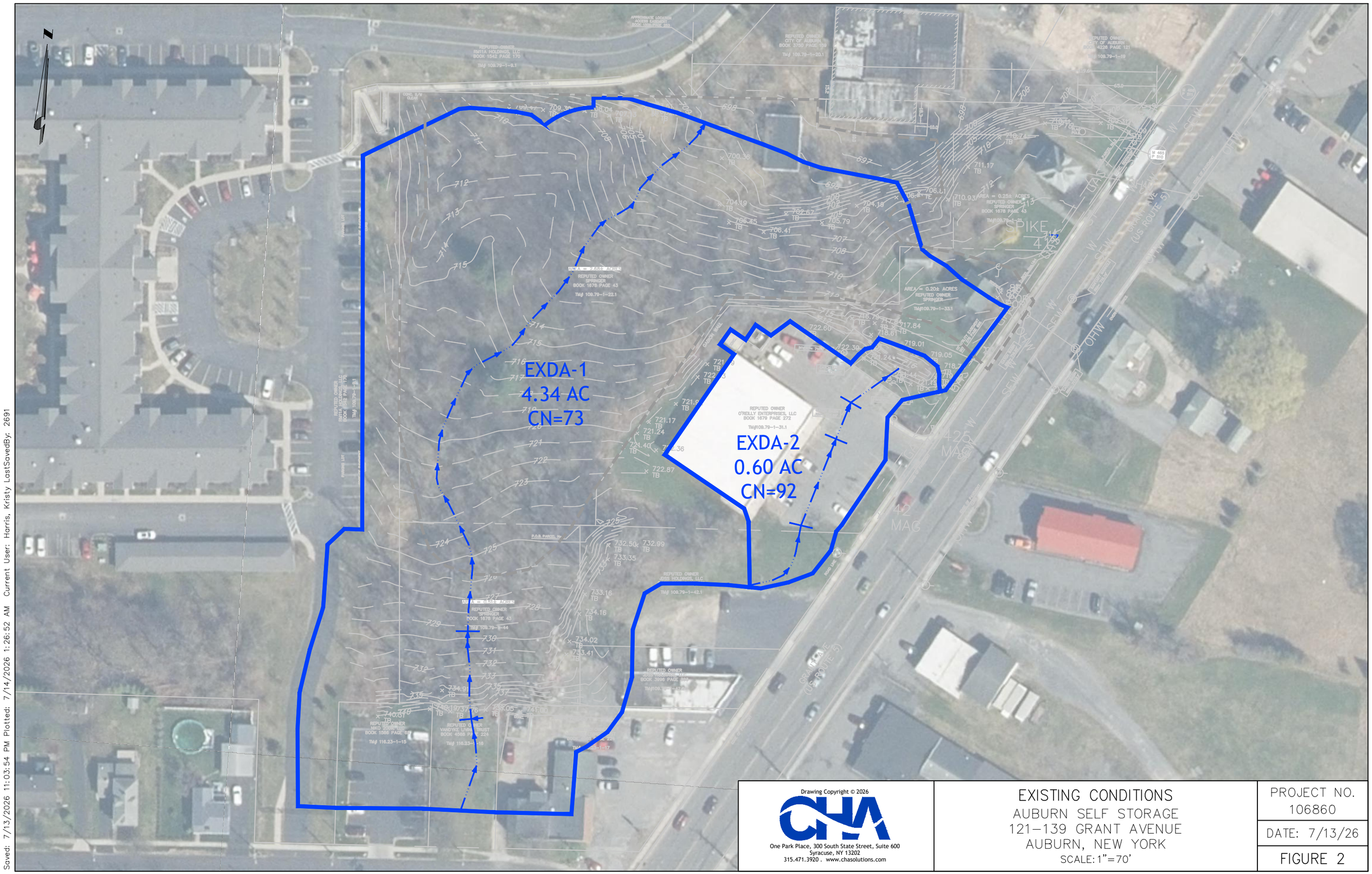
AUBURN SELF STORAGE
121–139 GRANT AVENUE
AUBURN, NEW YORK
SCALE: 1"=2,000'

PROJECT NO. 106860

DATE: 7/13/26

FIGURE 1

File: V:\PROJECTS\ANY\K7\106860.000\09_DESIGN\EXHIBITS\STORMWATER\FIGURE 1 – LOCATION PLAN.DWG Saved: 7/13/2026 11:04:36 PM Plotted: 7/13/2026 11:23:34 PM Current User: Harris, Kristy LastSavedBy: 2691



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EXISTING CONDITIONS

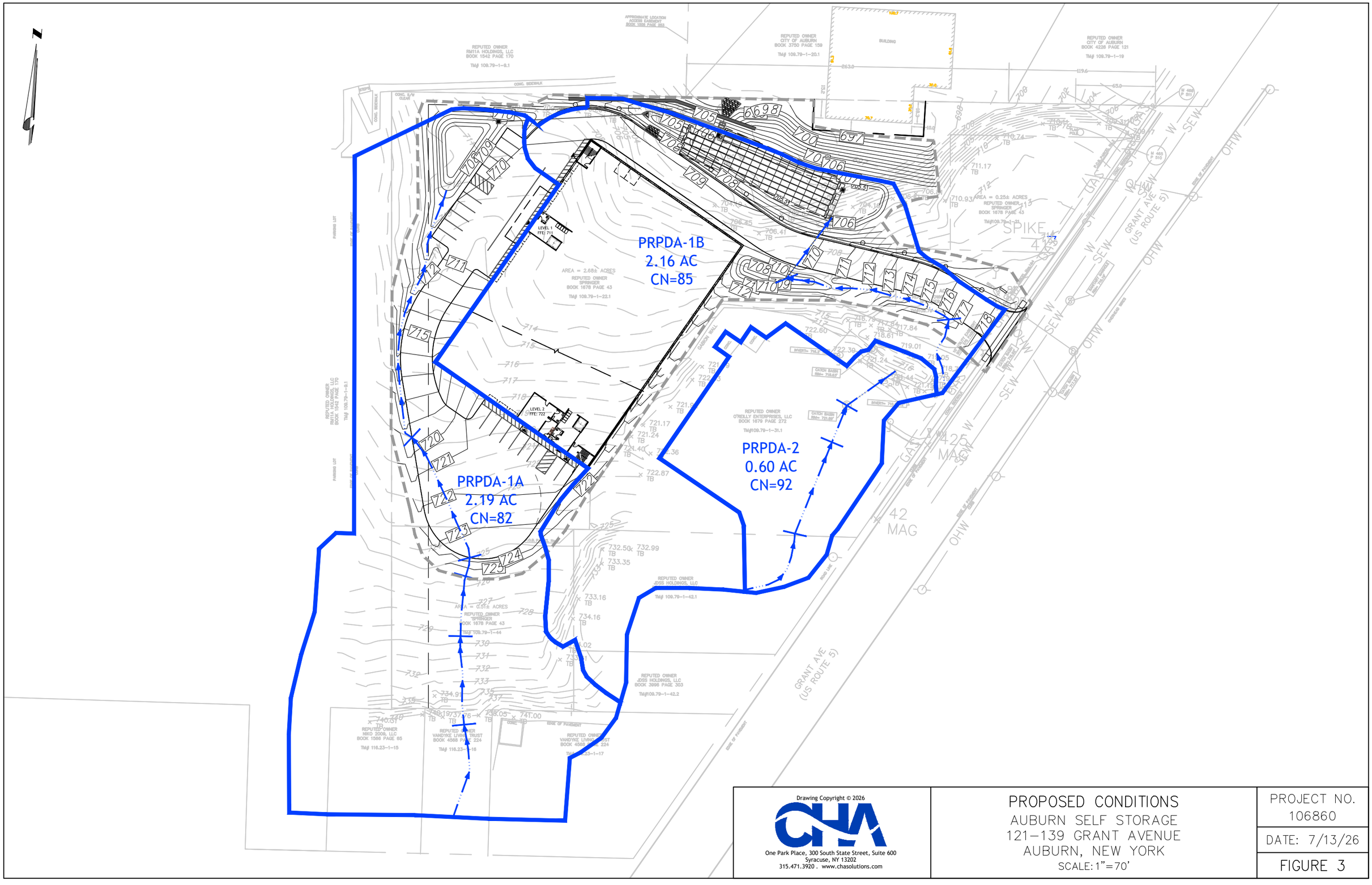
AUBURN SELF STORAGE
121–139 GRANT AVENUE
AUBURN, NEW YORK
SCALE: 1"=70'

PROJECT NO. 106860

DATE: 7/13/26

FIGURE 2

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PROPOSED CONDITIONS

AUBURN SELF STORAGE
121–139 GRANT AVENUE
AUBURN, NEW YORK
SCALE: 1"=70'

PROJECT NO. 106860

DATE: 7/13/26

FIGURE 3

File: V:\PROJECTS\ANY\K7\106860.000\09_DESIGN\EXHIBITS\STORMWATER\FIGURE 3 - PROPOSED CONDITIONS.DWG
Saved: 7/14/2026 1:22:45 AM Plotted: 7/14/2026 1:28:15 AM Current User: Harris, Kristy LastSavedBy: 2691

APPENDIX A

Soils Information



Map Scale: 1:1,620 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

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

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Cayuga County, New York
Survey Area Data: Version 22, Sep 2, 2025

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

Date(s) aerial images were photographed: Apr 1, 2020—Oct 1, 2020

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
CeB	Cazenovia silt loam, 2 to 8 percent slopes	C	5.2	73.6%
CeC3	Cazenovia silt loam, 5 to 14 percent slopes, eroded	C	1.9	26.4%
Totals for Area of Interest			**7.0**	**100.0%**

Description

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

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

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

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

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

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

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

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Cayuga County, New York

CeB—Cazenovia silt loam, 2 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9q3n
Elevation: 330 to 1,020 feet
Mean annual precipitation: 32 to 41 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 145 to 185 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Cazenovia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Till plains, Reworked lake plains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till that contains limestone with an admixture of reddish lake-laid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 36 inches: silty clay loam
H3 - 36 to 60 inches: silty clay loam

Properties and qualities

Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components

Ovid

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

Romulus

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ontario

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

Data Source Information

Soil Survey Area: Cayuga County, New York
Survey Area Data: Version 22, Sep 2, 2025

Cayuga County, New York

CeC3—Cazenovia silt loam, 5 to 14 percent slopes, eroded

Map Unit Setting

National map unit symbol: 9q3q
Elevation: 360 to 1,200 feet
Mean annual precipitation: 32 to 41 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 145 to 185 days
Farmland classification: Not prime farmland

Map Unit Composition

Cazenovia and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cazenovia

Setting

Landform: Reworked lake plains, Till plains
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy till that contains limestone with an admixture of reddish lake-laid clays or reddish clay shale

Typical profile

H1 - 0 to 8 inches: silt loam
H2 - 8 to 36 inches: silty clay loam
H3 - 36 to 60 inches: silty clay loam

Properties and qualities

Slope: 5 to 14 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Available water supply, 0 to 60 inches: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: C
Ecological site: F101XY013NY - Moist Till

Hydric soil rating: No

Minor Components

Romulus

Percent of map unit: 5 percent
Landform: Depressions
Hydric soil rating: Yes

Ovid

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

Ontario

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

Data Source Information

Soil Survey Area: Cayuga County, New York
Survey Area Data: Version 22, Sep 2, 2025

APPENDIX B

Historic Preservation Information

CRIS Cultural Resource Information System

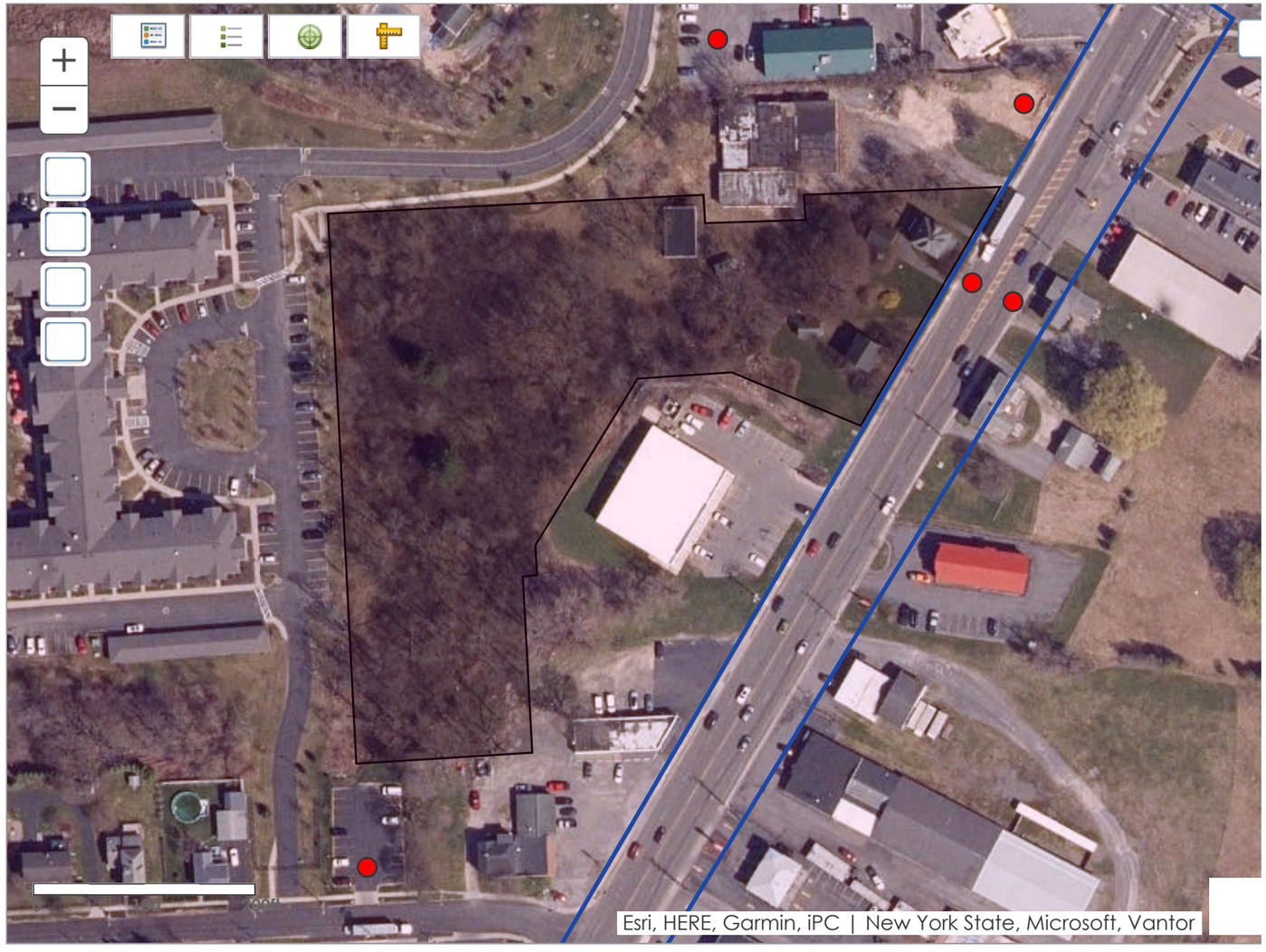
HOME SUBMIT SEARCH COMMUNICATE

Criteria | Spatial | **Results**

Building Surveys (1)

Download Results

View	Zoom	Number	Name
☐	☐	18SR56130	City of Auburn Reconnaissance Survey

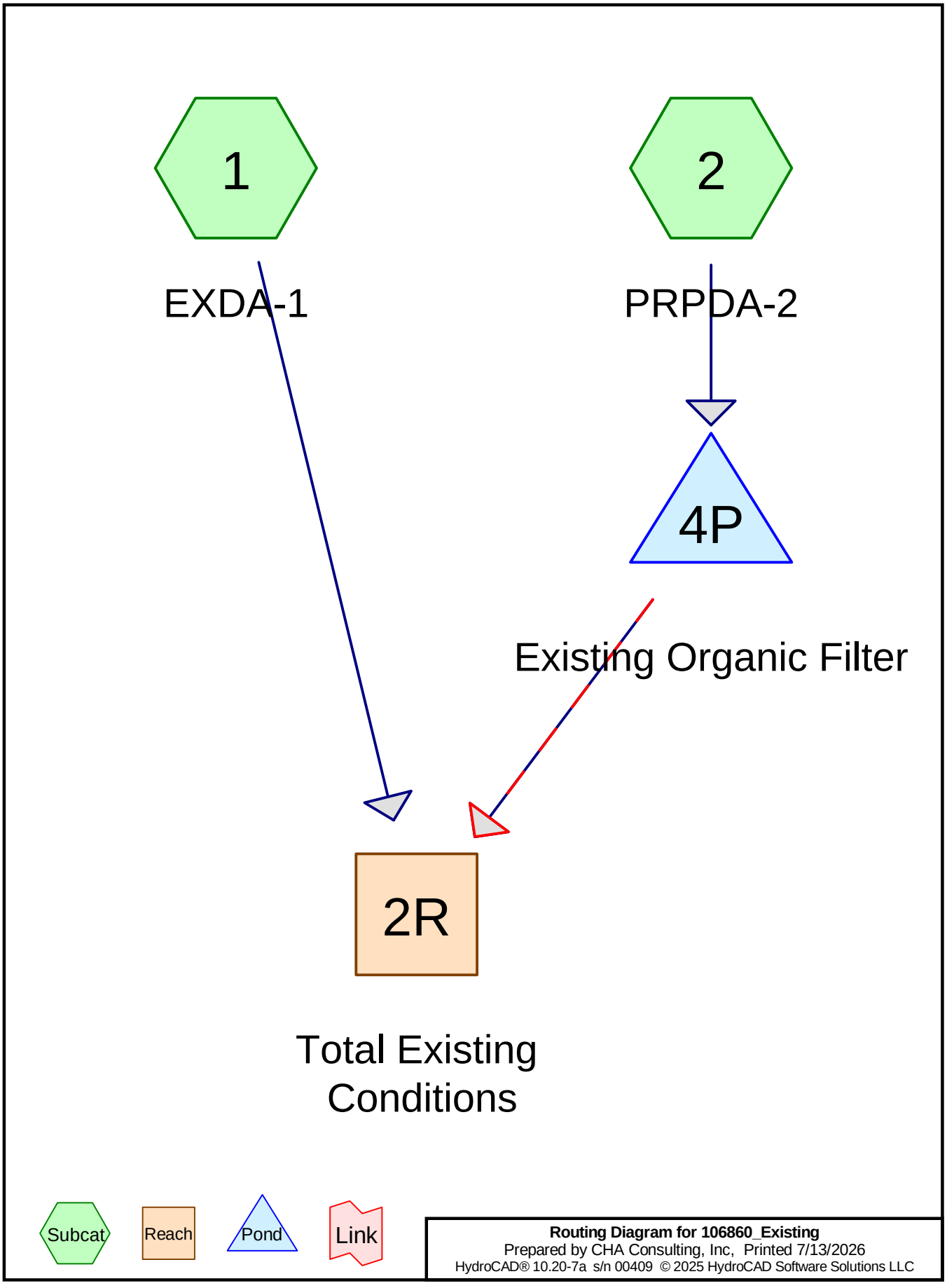


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APPENDIX C

Hydrologic Analysis

HydroCAD Output – Existing Conditions


1
2
EXDA-1
PRPDA-2
4P
Existing Organic Filter
2R
Total Existing Conditions
Subcat
Reach
Pond
Link
Routing Diagram for 106860_Existing
Prepared by CHA Consulting, Inc, Printed 7/13/2026
HydroCAD® 10.20-7a s/n 00409 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: EXDA-1 Runoff Area=4.340 ac 9.22% Impervious Runoff Depth=0.30"
Flow Length=677' Tc=32.0 min CN=73 Runoff=0.73 cfs 0.108 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=1.19"
Flow Length=230' Tc=8.5 min CN=92 Runoff=1.15 cfs 0.060 af

Reach 2R: Total Existing Conditions Inflow=0.90 cfs 0.141 af
Outflow=0.90 cfs 0.141 af

Pond 4P: Existing Organic Filter Peak Elev=718.70' Storage=1,230 cf Inflow=1.15 cfs 0.060 af
Primary=0.51 cfs 0.033 af Secondary=0.00 cfs 0.000 af Outflow=0.51 cfs 0.033 af

Total Runoff Area = 4.940 ac Runoff Volume = 0.168 af Average Runoff Depth = 0.41"
82.39% Pervious = 4.070 ac 17.61% Impervious = 0.870 ac

Summary for Subcatchment 1: EXDA-1

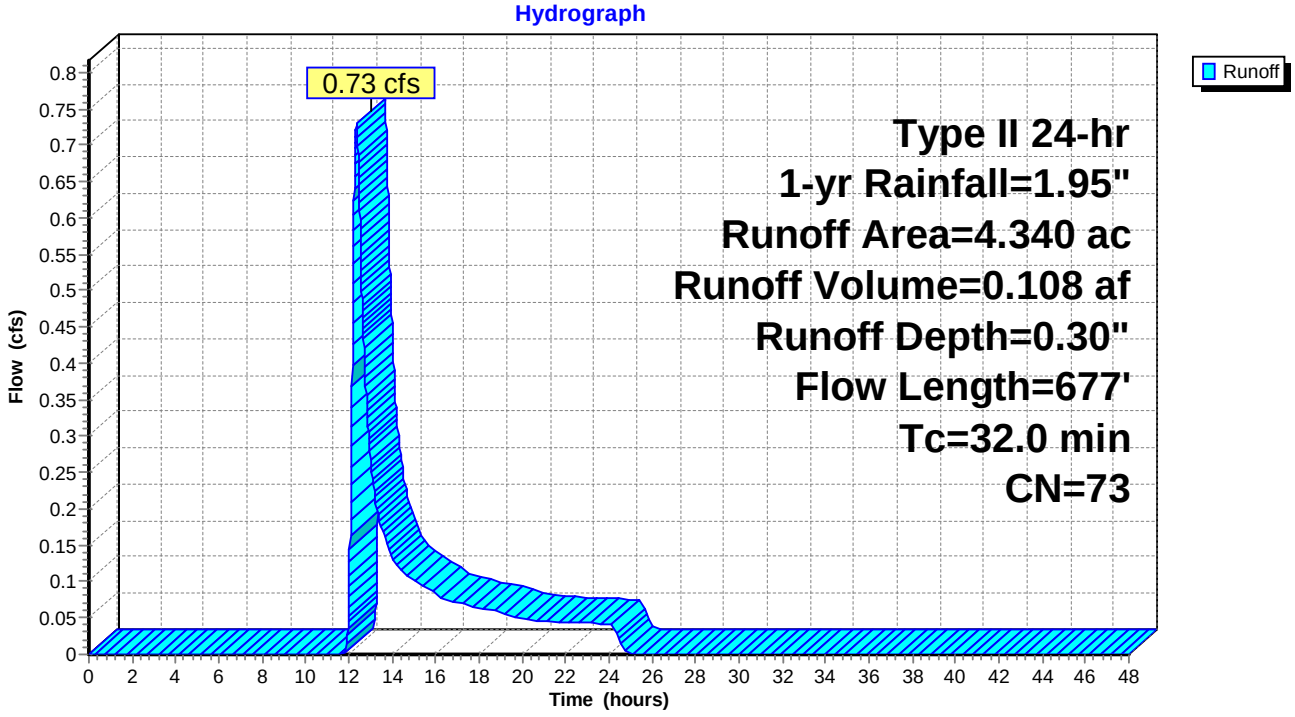
Runoff = 0.73 cfs @ 12.34 hrs, Volume= 0.108 af, Depth= 0.30"
Routed to Reach 2R : Total Existing Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.560	74	>75% Grass cover, Good, HSG C
	3.380	70	Woods, Good, HSG C
*	0.400	98	Impervious Surface, HSG C
	4.340	73	Weighted Average
	3.940		90.78% Pervious Area
	0.400		9.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
14.4	526	0.0590	0.61		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
32.0	677	Total			

Subcatchment 1: EXDA-1



Summary for Subcatchment 2: PRPDA-2

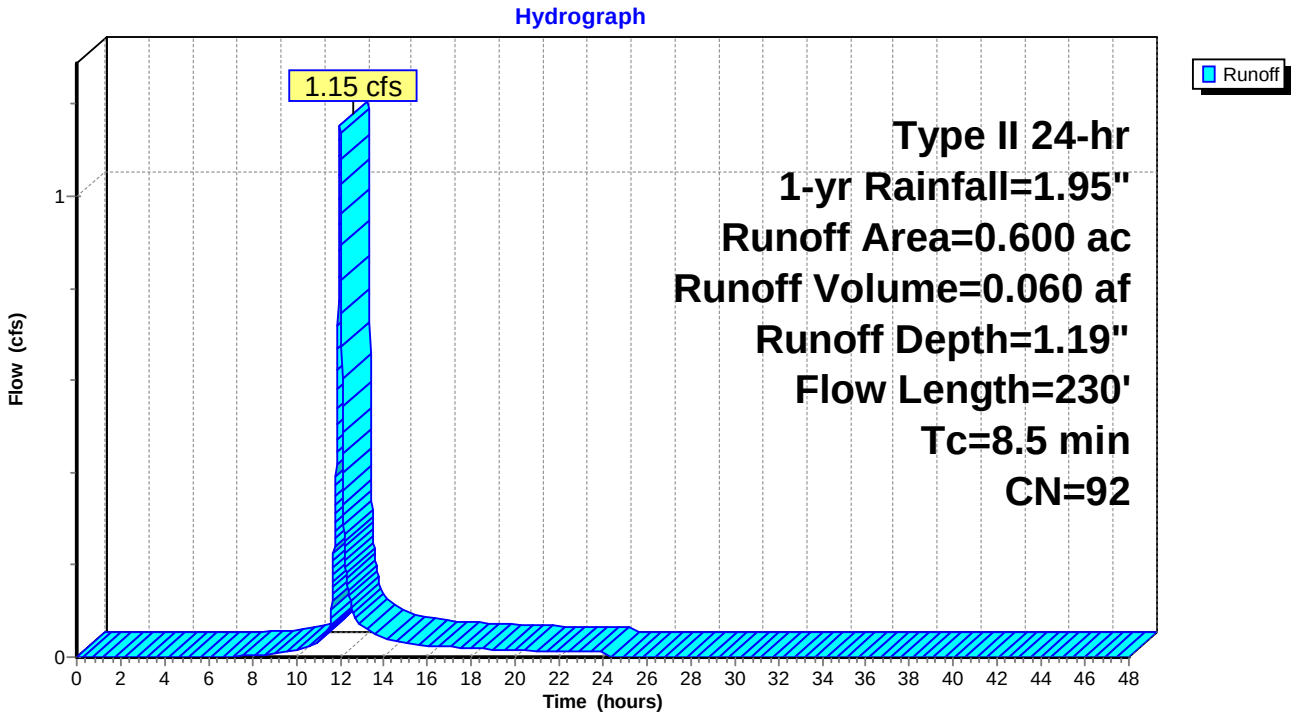
Runoff = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af, Depth= 1.19"
Routed to Pond 4P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

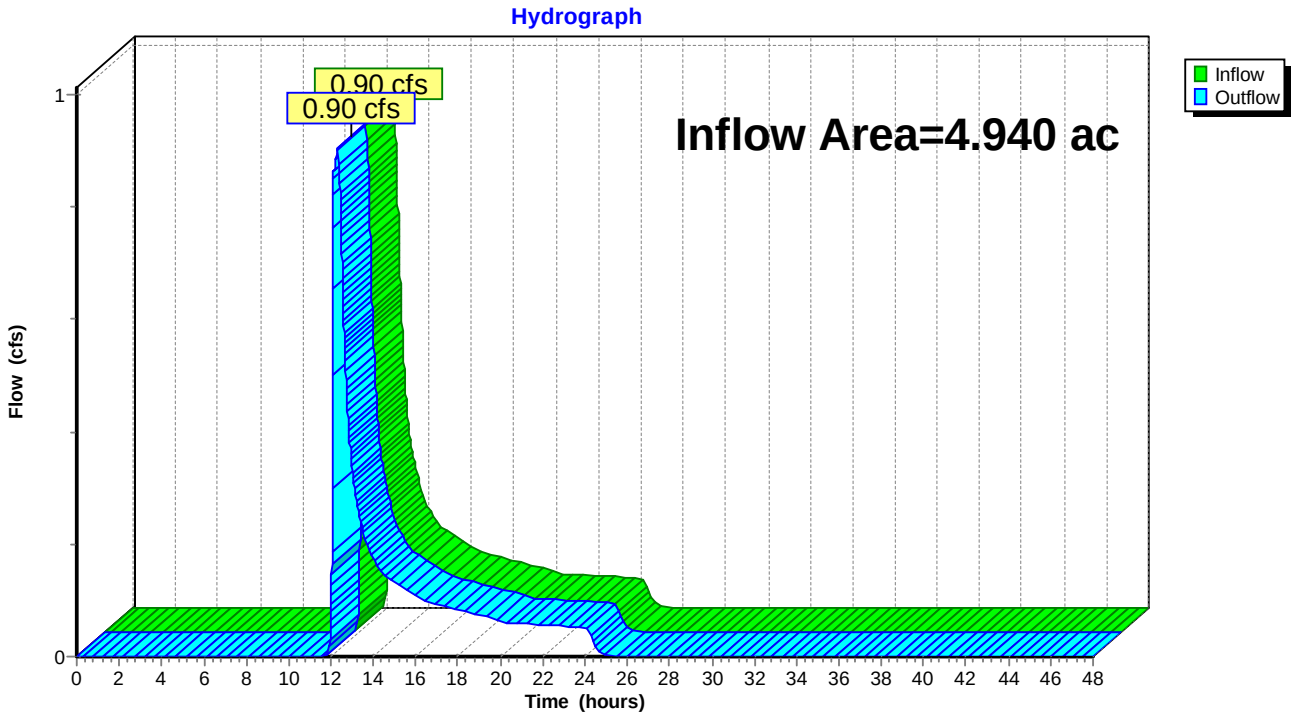


Summary for Reach 2R: Total Existing Conditions

Inflow Area = 4.940 ac, 17.61% Impervious, Inflow Depth = 0.34" for 1-yr event
Inflow = 0.90 cfs @ 12.30 hrs, Volume= 0.141 af
Outflow = 0.90 cfs @ 12.30 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Conditions



Summary for Pond 4P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 1.19" for 1-yr event
Inflow = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af
Outflow = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af, Atten= 55%, Lag= 7.0 min
Primary = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af
Routed to Reach 2R : Total Existing Conditions
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 2R : Total Existing Conditions

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.70' @ 12.12 hrs Surf.Area= 922 sf Storage= 1,230 cf

Plug-Flow detention time= 212.8 min calculated for 0.033 af (55% of inflow)
Center-of-Mass det. time= 100.0 min (916.2 - 816.2)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

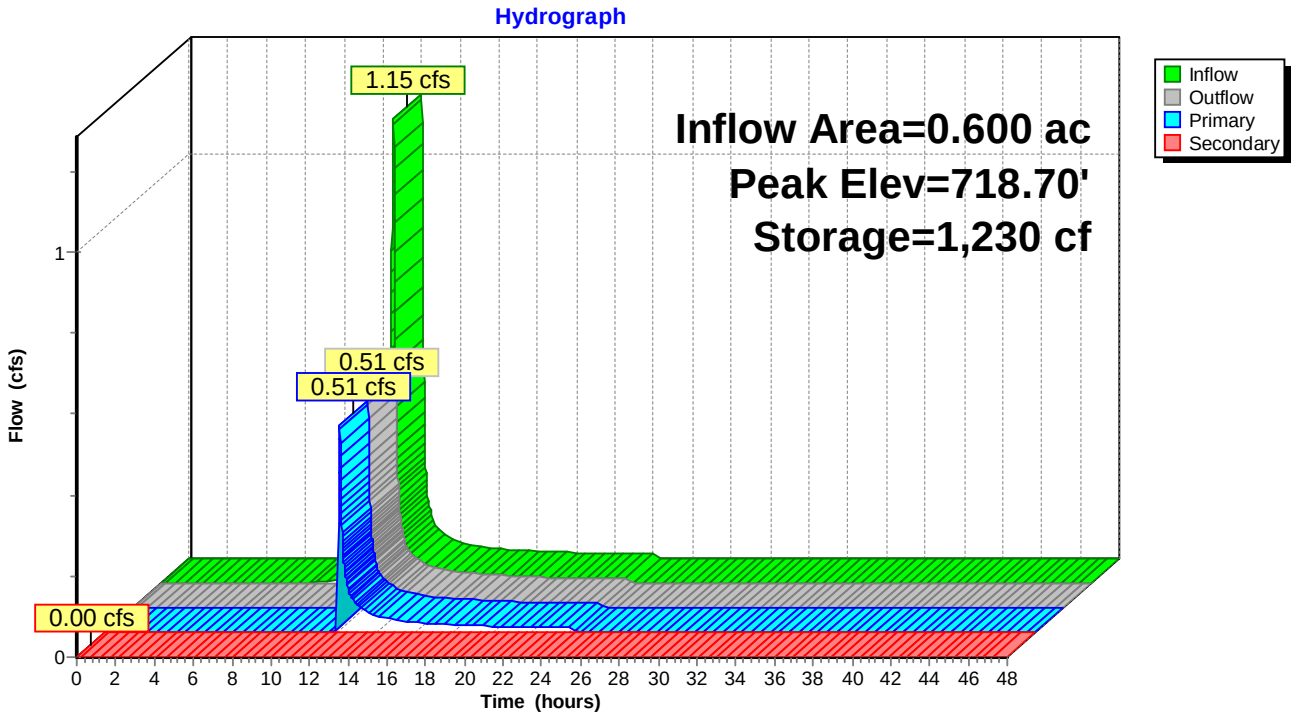
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.50 cfs @ 12.12 hrs HW=718.70' (Free Discharge)
└**1=Culvert** (Passes 0.50 cfs of 4.10 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.50 cfs @ 0.87 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=715.50' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 4P: Existing Organic Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: EXDA-1 Runoff Area=4.340 ac 9.22% Impervious Runoff Depth=1.03"
Flow Length=677' Tc=32.0 min CN=73 Runoff=3.44 cfs 0.374 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=2.43"
Flow Length=230' Tc=8.5 min CN=92 Runoff=2.26 cfs 0.121 af

Reach 2R: Total Existing Conditions Inflow=3.82 cfs 0.469 af
Outflow=3.82 cfs 0.469 af

Pond 4P: Existing Organic Filter Peak Elev=718.79' Storage=1,308 cf Inflow=2.26 cfs 0.121 af
Primary=1.60 cfs 0.087 af Secondary=0.65 cfs 0.007 af Outflow=2.25 cfs 0.095 af

Total Runoff Area = 4.940 ac Runoff Volume = 0.495 af Average Runoff Depth = 1.20"
82.39% Pervious = 4.070 ac 17.61% Impervious = 0.870 ac

Summary for Subcatchment 1: EXDA-1

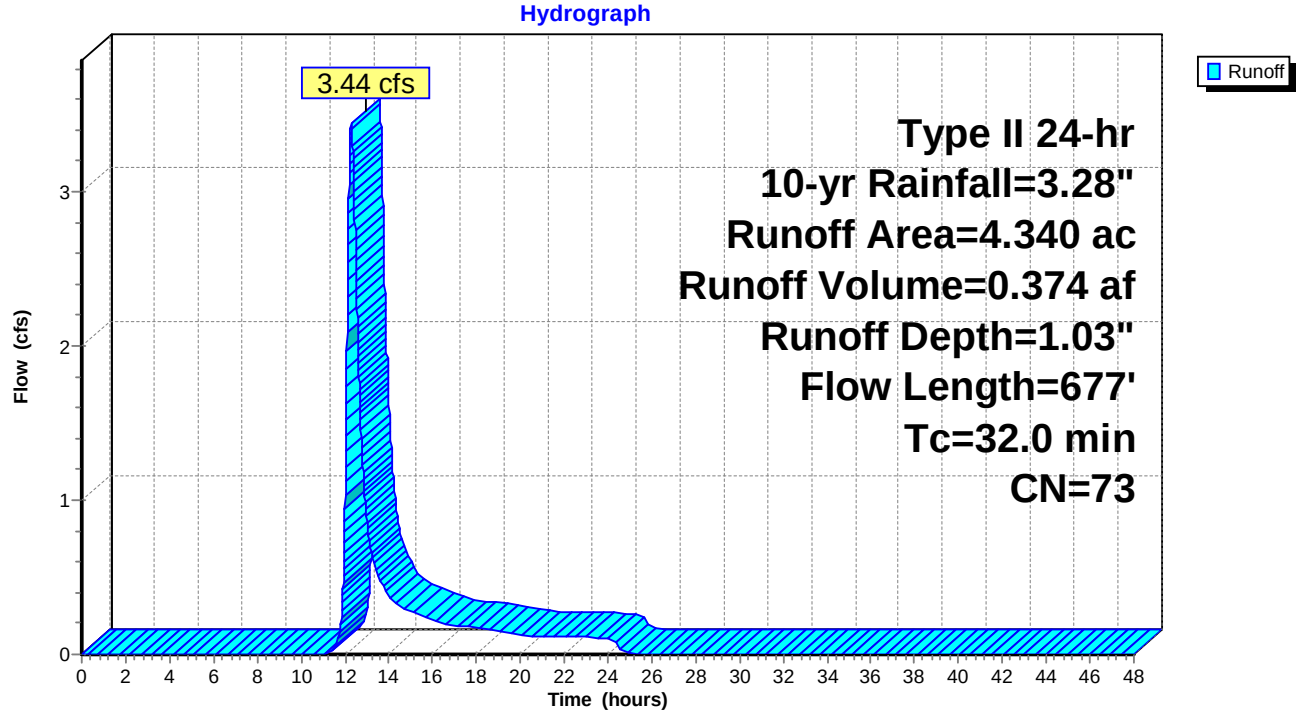
Runoff = 3.44 cfs @ 12.30 hrs, Volume= 0.374 af, Depth= 1.03"
Routed to Reach 2R : Total Existing Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.560	74	>75% Grass cover, Good, HSG C
	3.380	70	Woods, Good, HSG C
*	0.400	98	Impervious Surface, HSG C
	4.340	73	Weighted Average
	3.940		90.78% Pervious Area
	0.400		9.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
14.4	526	0.0590	0.61		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
32.0	677	Total			

Subcatchment 1: EXDA-1



Summary for Subcatchment 2: PRPDA-2

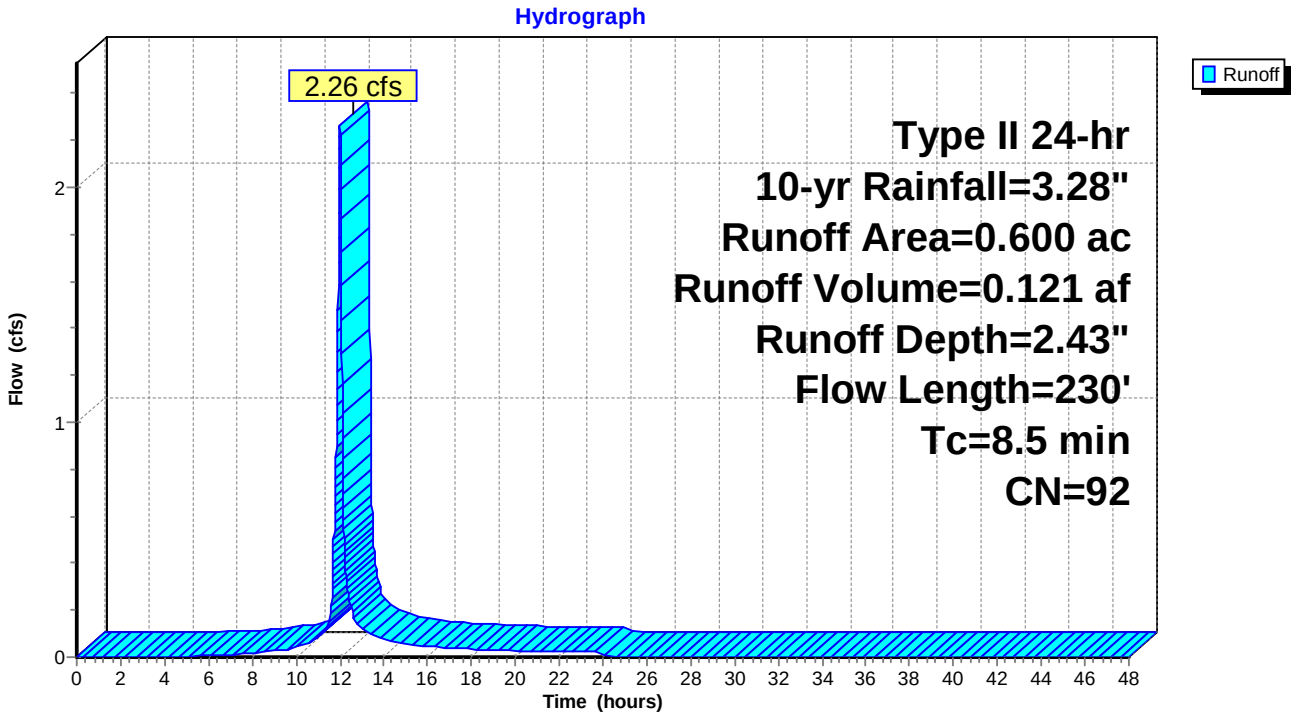
Runoff = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af, Depth= 2.43"
Routed to Pond 4P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

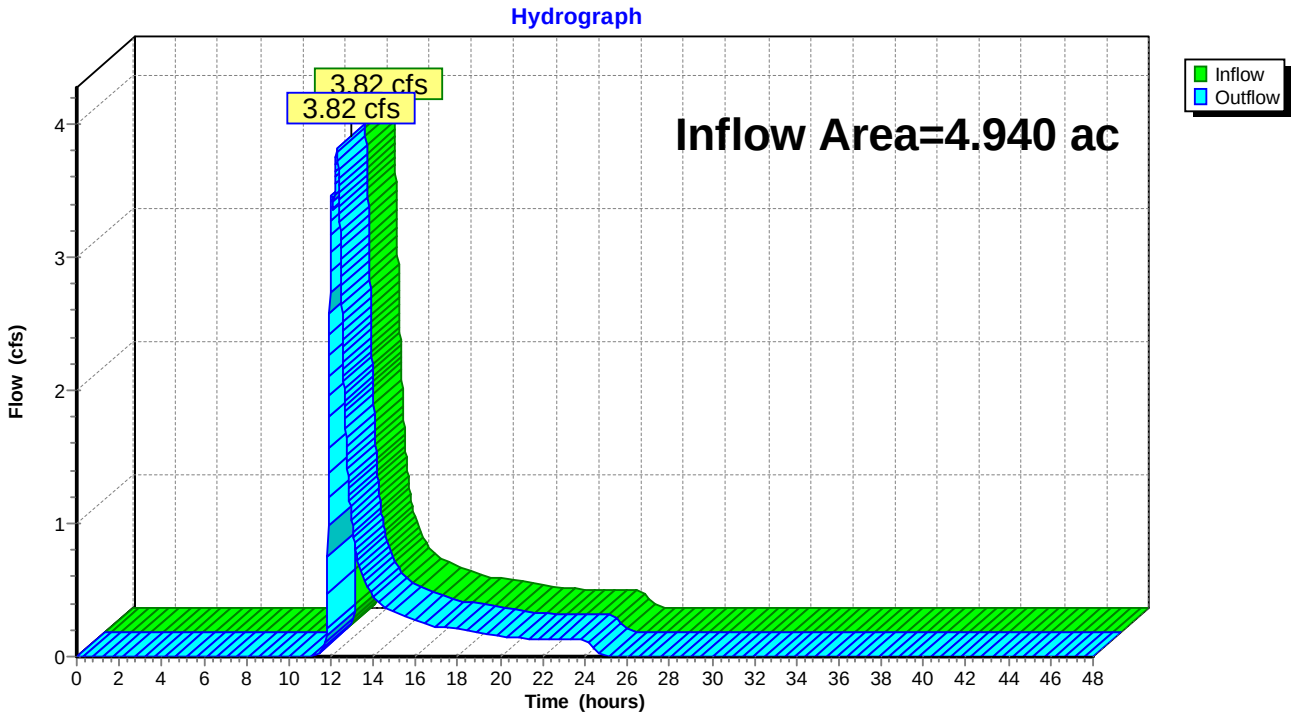


Summary for Reach 2R: Total Existing Conditions

Inflow Area = 4.940 ac, 17.61% Impervious, Inflow Depth = 1.14" for 10-yr event
Inflow = 3.82 cfs @ 12.27 hrs, Volume= 0.469 af
Outflow = 3.82 cfs @ 12.27 hrs, Volume= 0.469 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Conditions



Summary for Pond 4P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 2.43" for 10-yr event
Inflow = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af
Outflow = 2.25 cfs @ 12.00 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.4 min
Primary = 1.60 cfs @ 12.00 hrs, Volume= 0.087 af
Routed to Reach 2R : Total Existing Conditions
Secondary = 0.65 cfs @ 12.00 hrs, Volume= 0.007 af
Routed to Reach 2R : Total Existing Conditions

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.79' @ 12.00 hrs Surf.Area= 952 sf Storage= 1,308 cf

Plug-Flow detention time= 131.7 min calculated for 0.095 af (78% of inflow)
Center-of-Mass det. time= 47.0 min (843.1 - 796.0)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

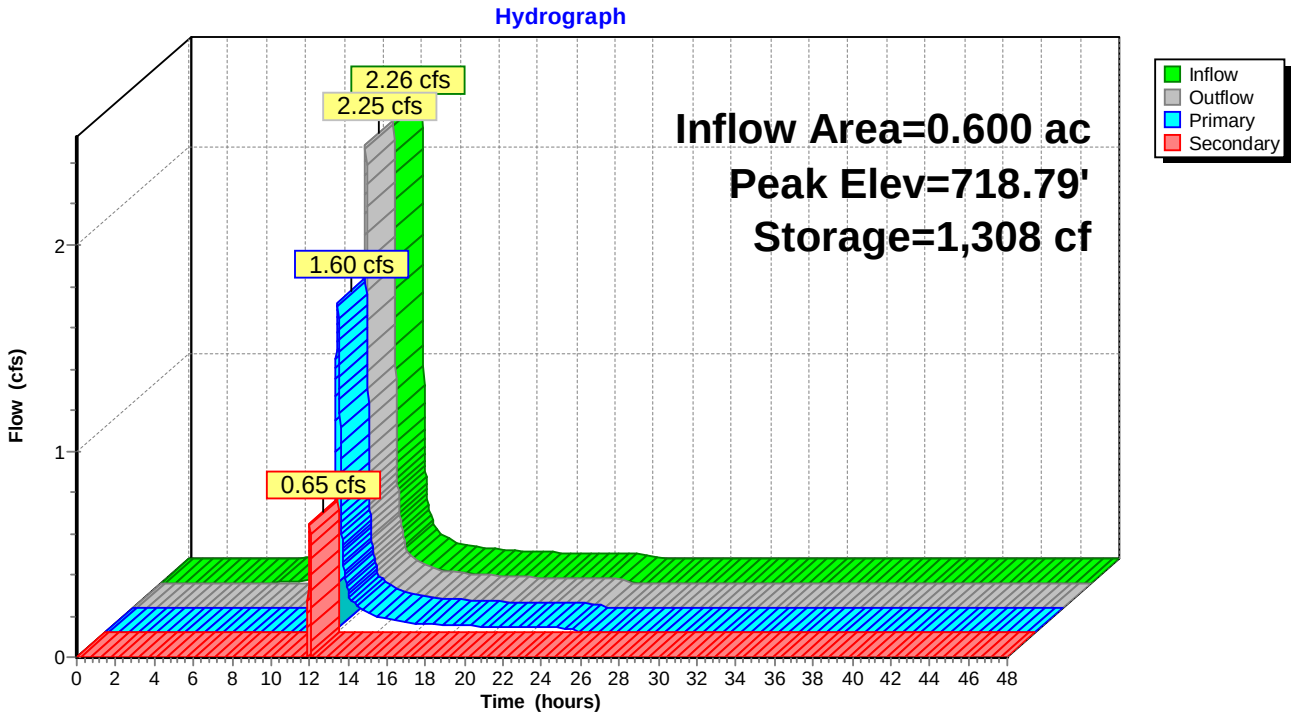
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.60 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**1=Culvert** (Passes 1.60 cfs of 4.19 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.60 cfs @ 1.29 fps)

Secondary OutFlow Max=0.61 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.61 cfs @ 0.44 fps)

Pond 4P: Existing Organic Filter



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1: EXDA-1 Runoff Area=4.340 ac 9.22% Impervious Runoff Depth=2.69"
Flow Length=677' Tc=32.0 min CN=73 Runoff=9.63 cfs 0.972 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=4.59"
Flow Length=230' Tc=8.5 min CN=92 Runoff=4.11 cfs 0.229 af

Reach 2R: Total Existing Conditions Inflow=10.31 cfs 1.174 af
Outflow=10.31 cfs 1.174 af

Pond 4P: Existing Organic Filter Peak Elev=718.82' Storage=1,345 cf Inflow=4.11 cfs 0.229 af
Primary=2.22 cfs 0.173 af Secondary=1.87 cfs 0.030 af Outflow=4.10 cfs 0.203 af

Total Runoff Area = 4.940 ac Runoff Volume = 1.201 af Average Runoff Depth = 2.92"
82.39% Pervious = 4.070 ac 17.61% Impervious = 0.870 ac

Summary for Subcatchment 1: EXDA-1

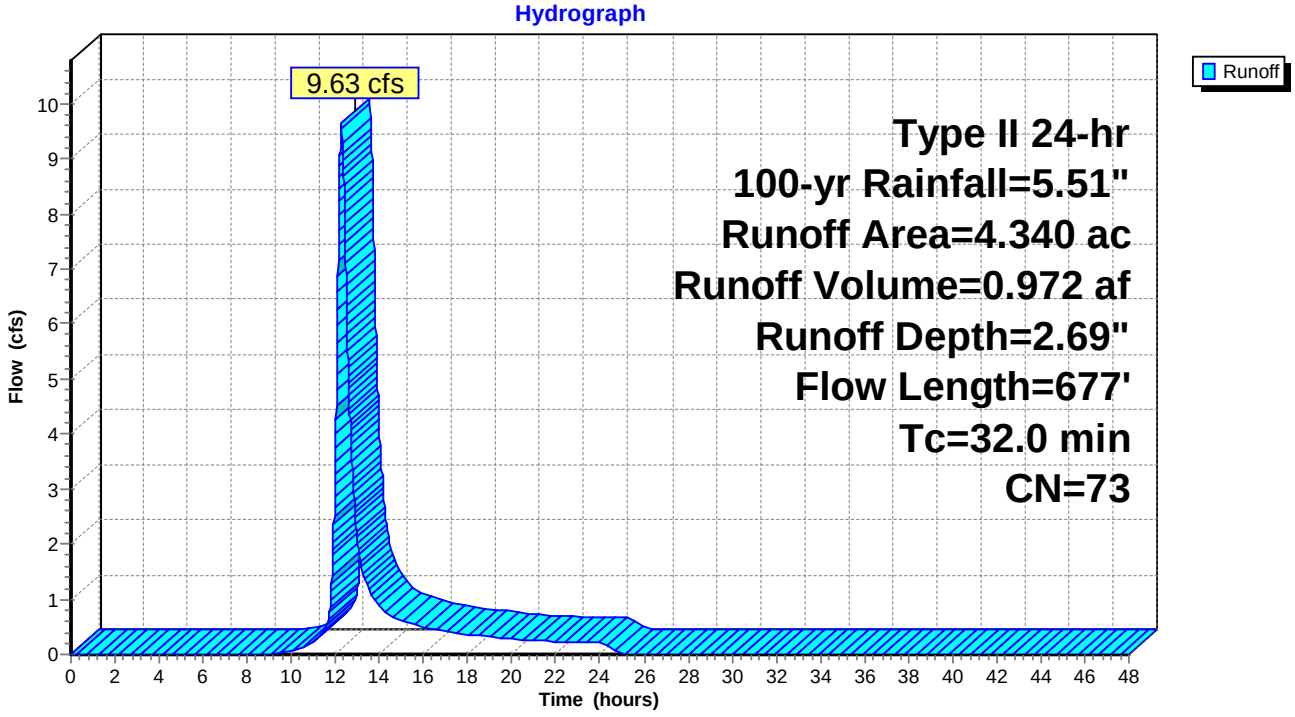
Runoff = 9.63 cfs @ 12.27 hrs, Volume= 0.972 af, Depth= 2.69"
Routed to Reach 2R : Total Existing Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.560	74	>75% Grass cover, Good, HSG C
	3.380	70	Woods, Good, HSG C
*	0.400	98	Impervious Surface, HSG C
	4.340	73	Weighted Average
	3.940		90.78% Pervious Area
	0.400		9.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
14.4	526	0.0590	0.61		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
32.0	677	Total			

Subcatchment 1: EXDA-1



Summary for Subcatchment 2: PRPDA-2

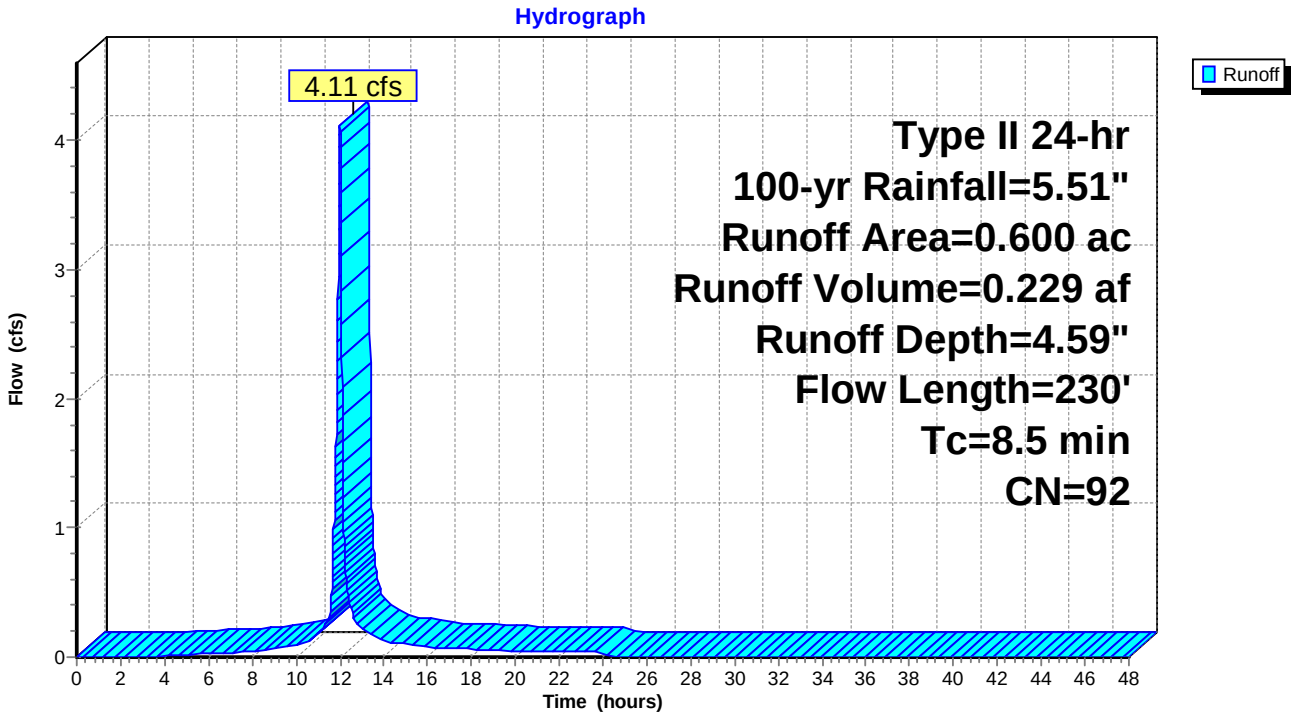
Runoff = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af, Depth= 4.59"
Routed to Pond 4P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

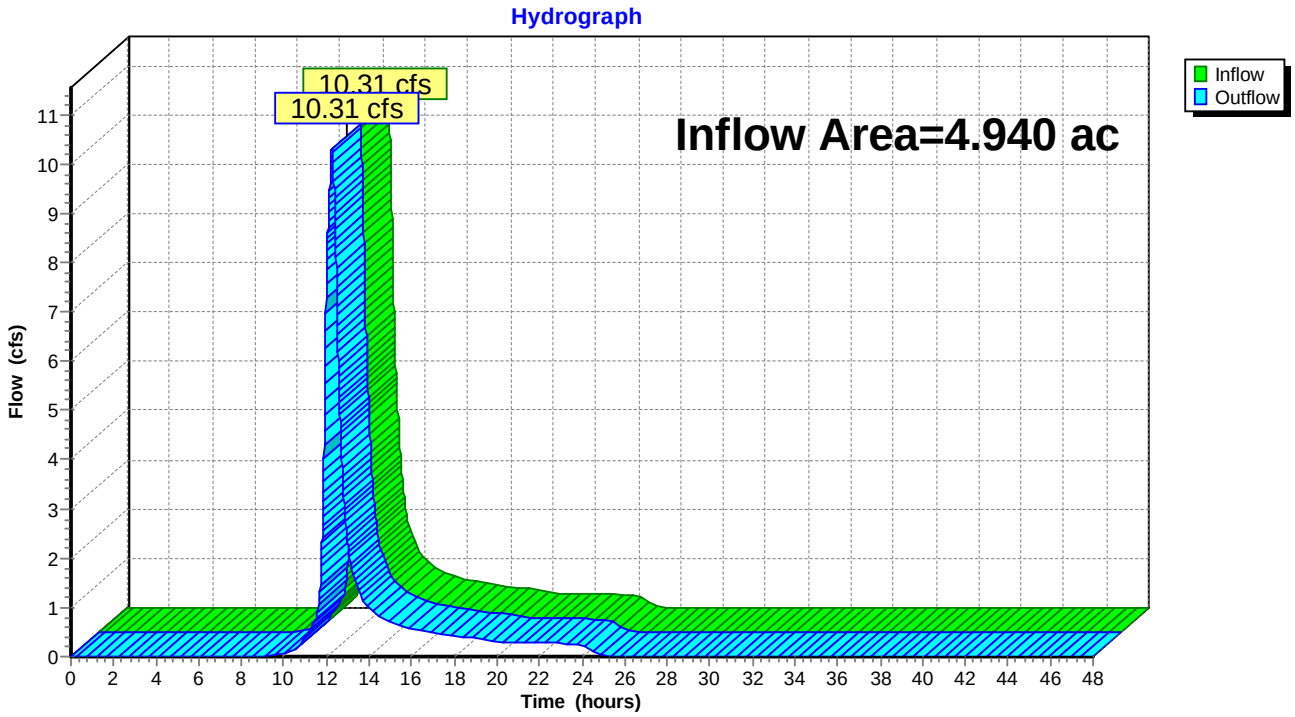


Summary for Reach 2R: Total Existing Conditions

Inflow Area = 4.940 ac, 17.61% Impervious, Inflow Depth = 2.85" for 100-yr event
Inflow = 10.31 cfs @ 12.27 hrs, Volume= 1.174 af
Outflow = 10.31 cfs @ 12.27 hrs, Volume= 1.174 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Existing Conditions



Summary for Pond 4P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 4.59" for 100-yr event
Inflow = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af
Outflow = 4.10 cfs @ 12.00 hrs, Volume= 0.203 af, Atten= 0%, Lag= 0.3 min
Primary = 2.22 cfs @ 12.00 hrs, Volume= 0.173 af
Routed to Reach 2R : Total Existing Conditions
Secondary = 1.87 cfs @ 12.00 hrs, Volume= 0.030 af
Routed to Reach 2R : Total Existing Conditions

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.82' @ 12.00 hrs Surf.Area= 967 sf Storage= 1,345 cf

Plug-Flow detention time= 93.8 min calculated for 0.203 af (88% of inflow)
Center-of-Mass det. time= 36.4 min (815.1 - 778.6)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

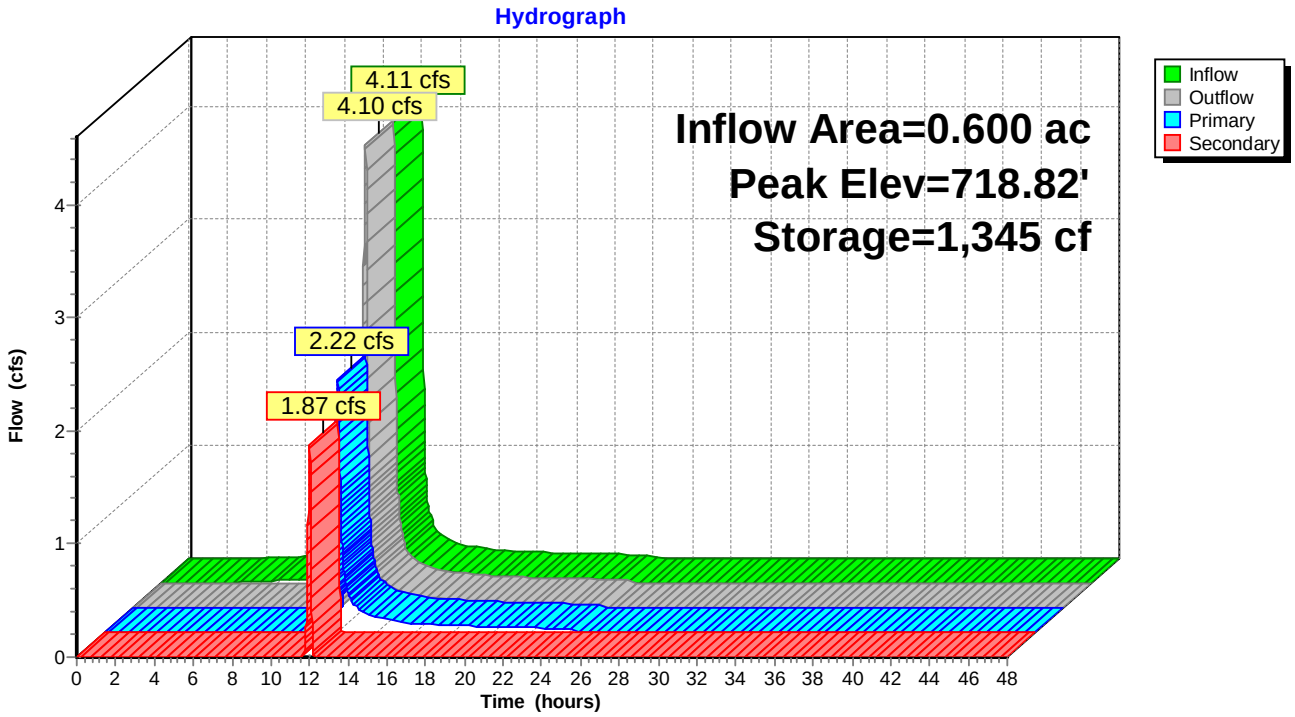
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

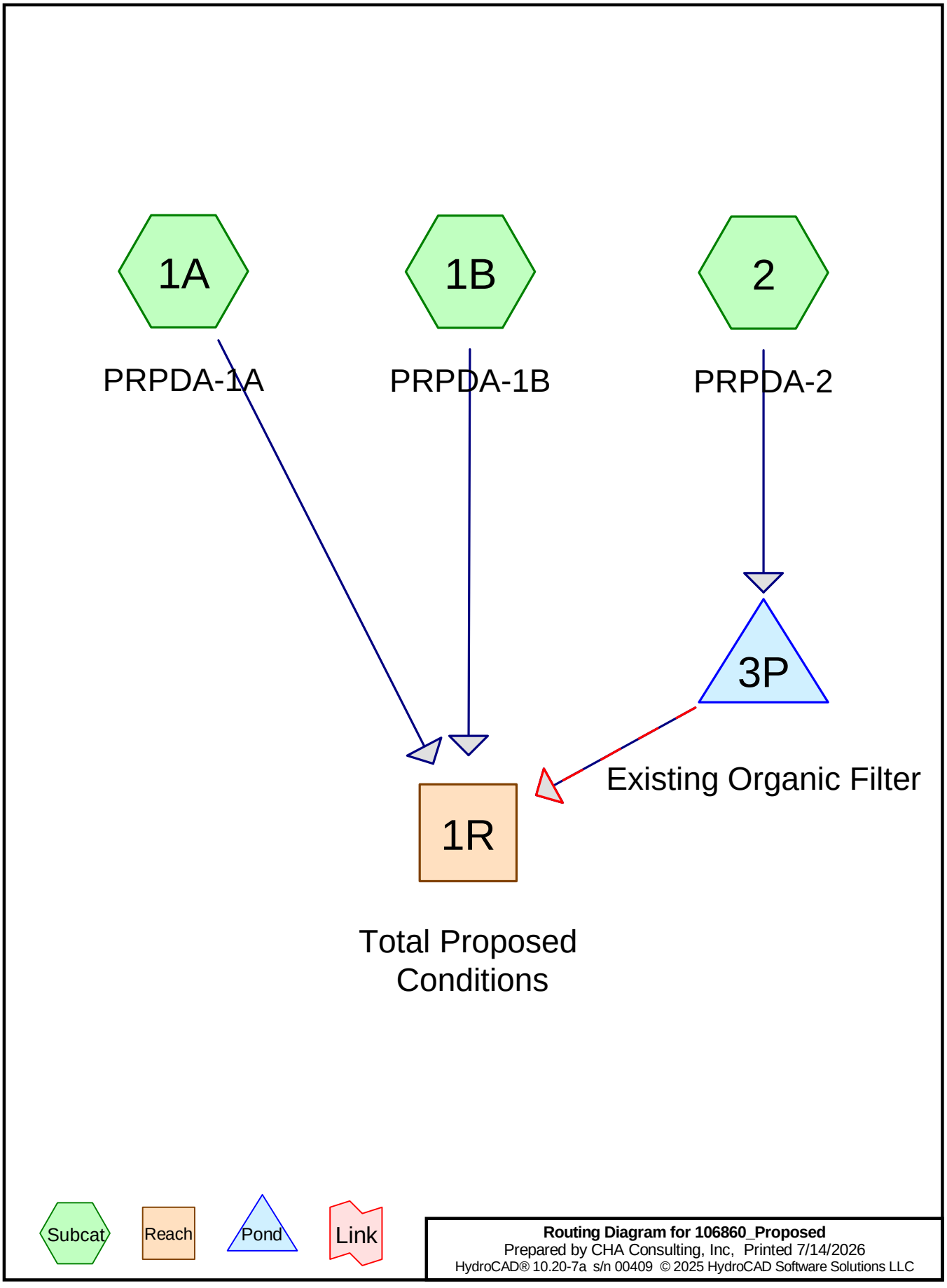
Primary OutFlow Max=2.22 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**1=Culvert** (Passes 2.22 cfs of 4.23 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.22 cfs @ 1.44 fps)

Secondary OutFlow Max=1.87 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 1.87 cfs @ 0.63 fps)

Pond 4P: Existing Organic Filter



HydroCAD Output – Proposed Conditions


1A
1B
2
PRPDA-1A
PRPDA-1B
PRPDA-2
3P
Existing Organic Filter
1R
Total Proposed Conditions
Subcat
Reach
Pond
Link
Routing Diagram for 106860_Proposed
Prepared by CHA Consulting, Inc, Printed 7/14/2026
HydroCAD® 10.20-7a s/n 00409 © 2025 HydroCAD Software Solutions LLC

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=0.62"
Flow Length=541' Tc=19.9 min CN=82 Runoff=1.42 cfs 0.112 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=0.76"
Flow Length=262' Tc=8.1 min CN=85 Runoff=2.71 cfs 0.137 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=1.19"
Flow Length=230' Tc=8.5 min CN=92 Runoff=1.15 cfs 0.060 af

Reach 1R: Total Proposed Conditions Inflow=3.58 cfs 0.282 af
Outflow=3.58 cfs 0.282 af

Pond 3P: Existing Organic Filter Peak Elev=718.70' Storage=1,230 cf Inflow=1.15 cfs 0.060 af
Primary=0.51 cfs 0.033 af Secondary=0.00 cfs 0.000 af Outflow=0.51 cfs 0.033 af

Total Runoff Area = 4.950 ac Runoff Volume = 0.309 af Average Runoff Depth = 0.75"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

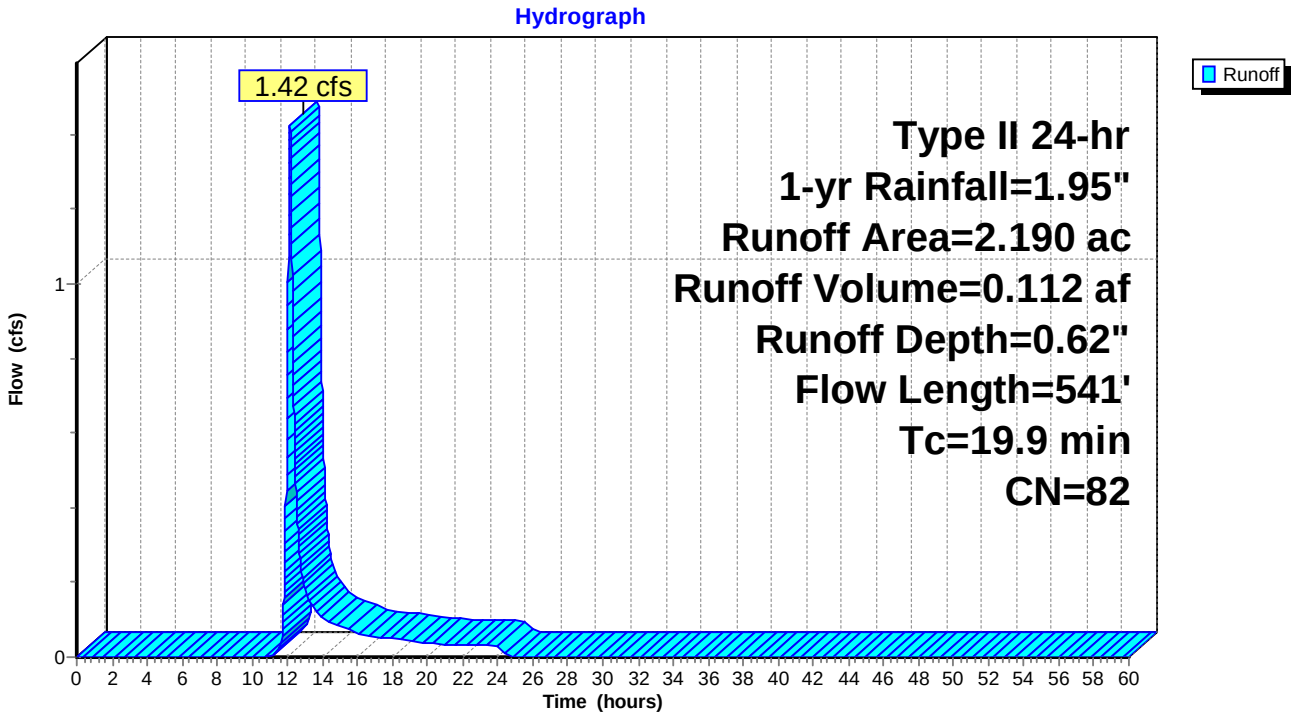
Runoff = 1.42 cfs @ 12.14 hrs, Volume= 0.112 af, Depth= 0.62"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

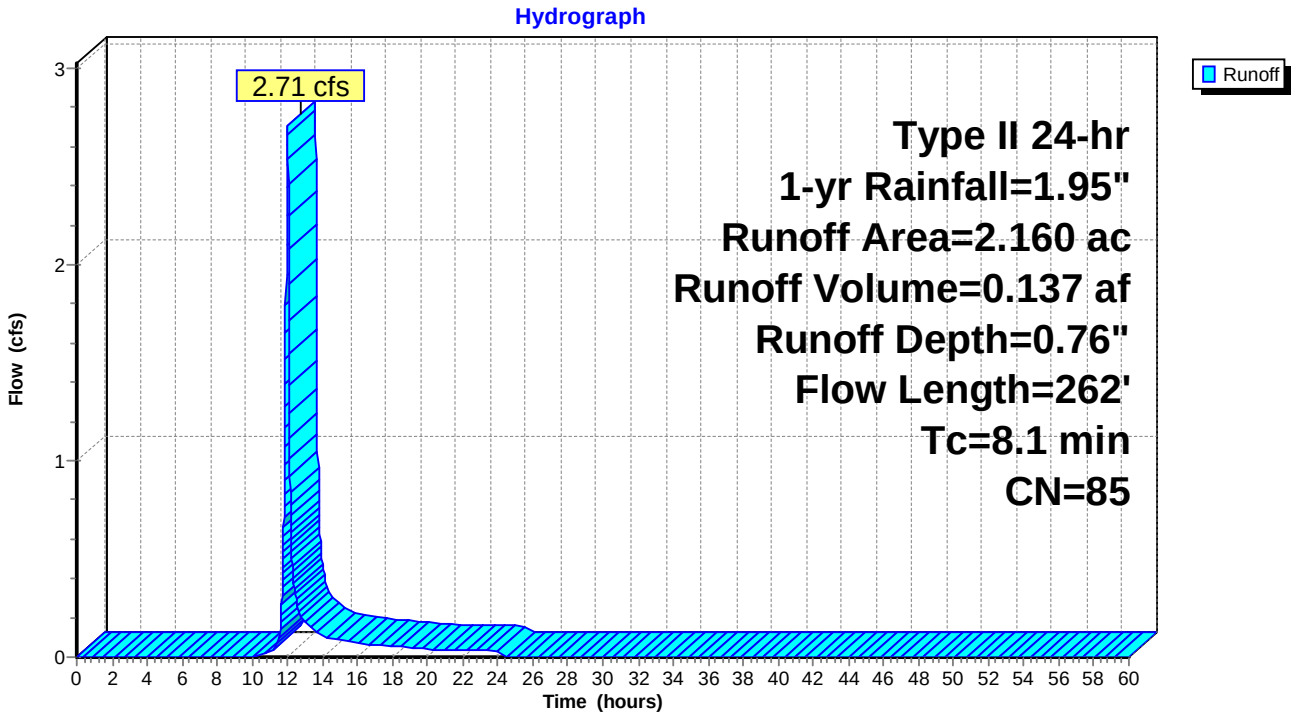
Runoff = 2.71 cfs @ 12.00 hrs, Volume= 0.137 af, Depth= 0.76"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

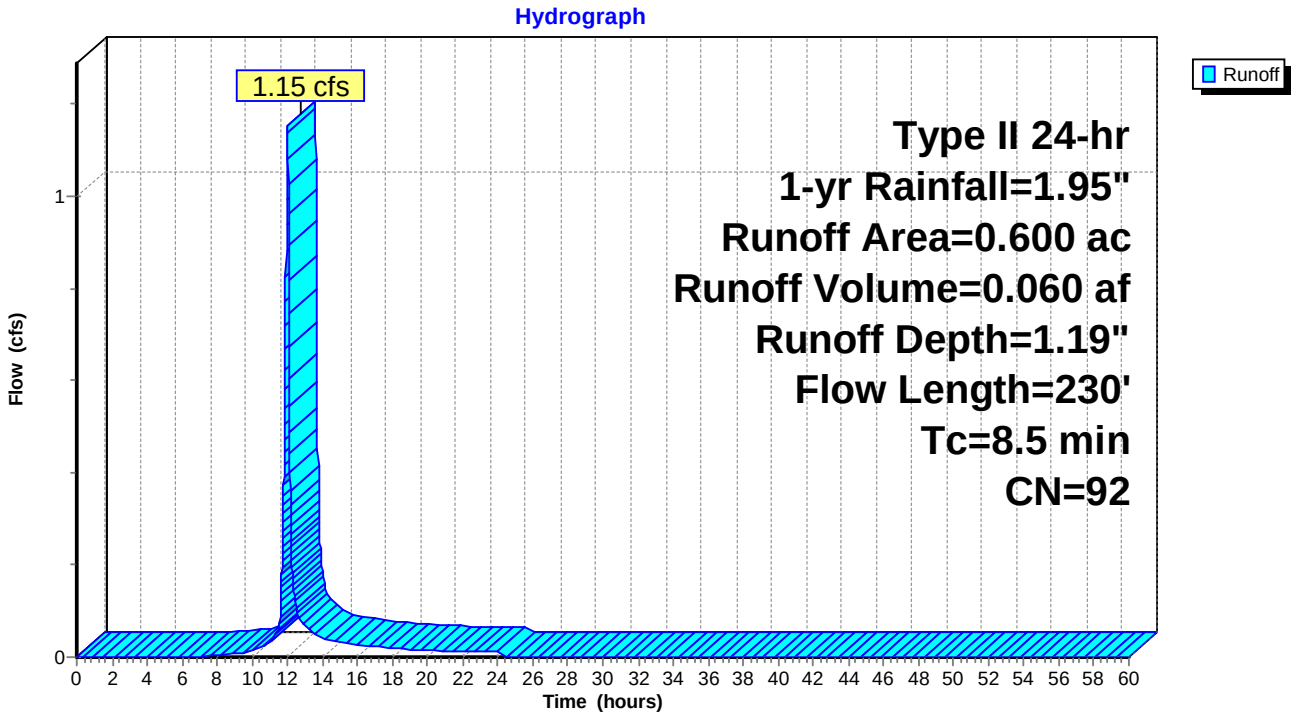
Runoff = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af, Depth= 1.19"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

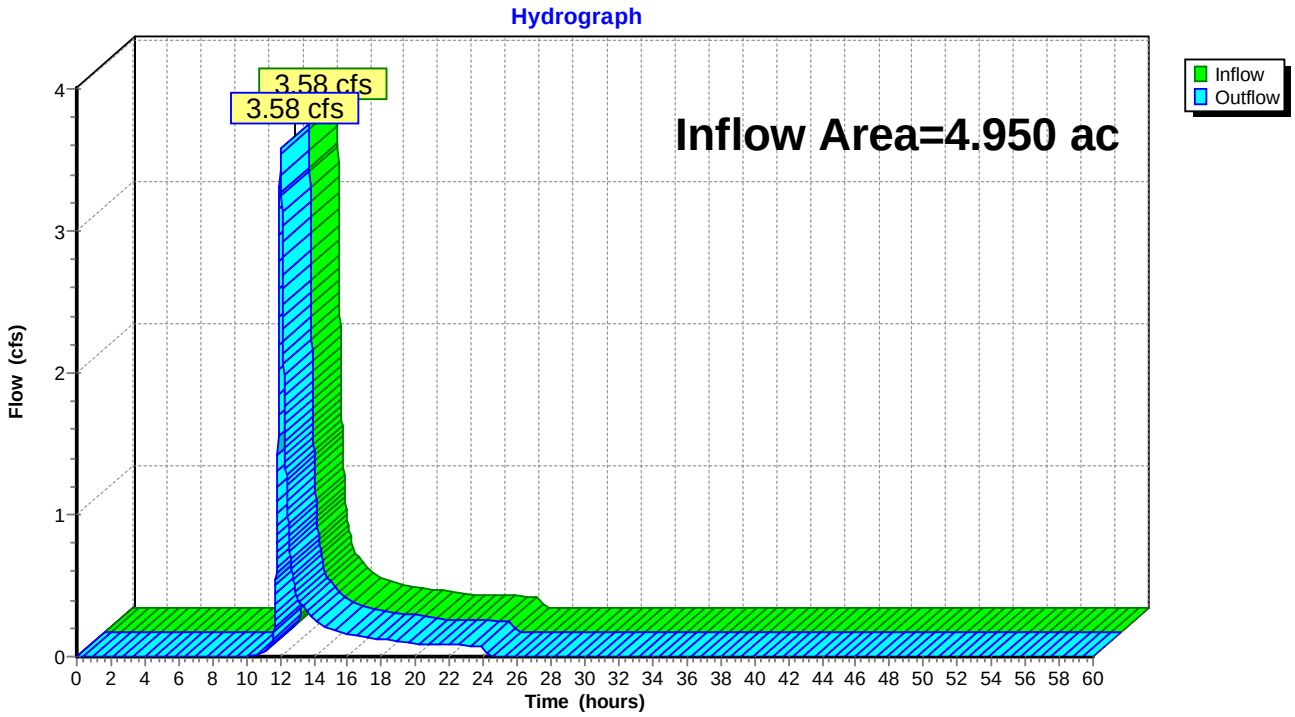


Summary for Reach 1R: Total Proposed Conditions

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 0.68" for 1-yr event
Inflow = 3.58 cfs @ 12.02 hrs, Volume= 0.282 af
Outflow = 3.58 cfs @ 12.02 hrs, Volume= 0.282 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Proposed Conditions



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 1.19" for 1-yr event
Inflow = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af
Outflow = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af, Atten= 55%, Lag= 7.0 min
Primary = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af
Routed to Reach 1R : Total Proposed Conditions
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Total Proposed Conditions

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.70' @ 12.12 hrs Surf.Area= 922 sf Storage= 1,230 cf

Plug-Flow detention time= 212.8 min calculated for 0.033 af (55% of inflow)
Center-of-Mass det. time= 100.0 min (916.2 - 816.2)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

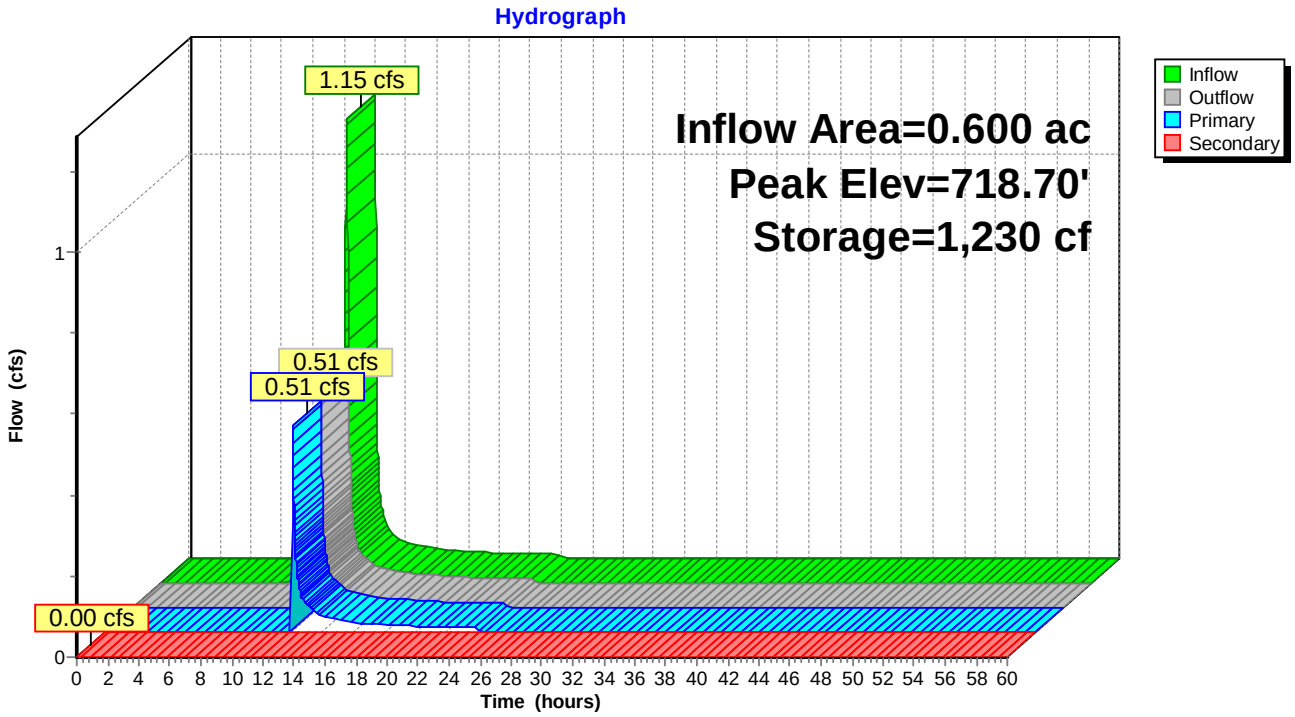
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.50 cfs @ 12.12 hrs HW=718.70' (Free Discharge)
└**1=Culvert** (Passes 0.50 cfs of 4.10 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.50 cfs @ 0.87 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=715.50' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Existing Organic Filter



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=1.60"
Flow Length=541' Tc=19.9 min CN=82 Runoff=3.90 cfs 0.292 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=1.83"
Flow Length=262' Tc=8.1 min CN=85 Runoff=6.49 cfs 0.329 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=2.43"
Flow Length=230' Tc=8.5 min CN=92 Runoff=2.26 cfs 0.121 af

Reach 1R: Total Proposed Conditions Inflow=11.37 cfs 0.716 af
Outflow=11.37 cfs 0.716 af

Pond 3P: Existing Organic Filter Peak Elev=718.79' Storage=1,308 cf Inflow=2.26 cfs 0.121 af
Primary=1.60 cfs 0.087 af Secondary=0.65 cfs 0.007 af Outflow=2.25 cfs 0.095 af

Total Runoff Area = 4.950 ac Runoff Volume = 0.743 af Average Runoff Depth = 1.80"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

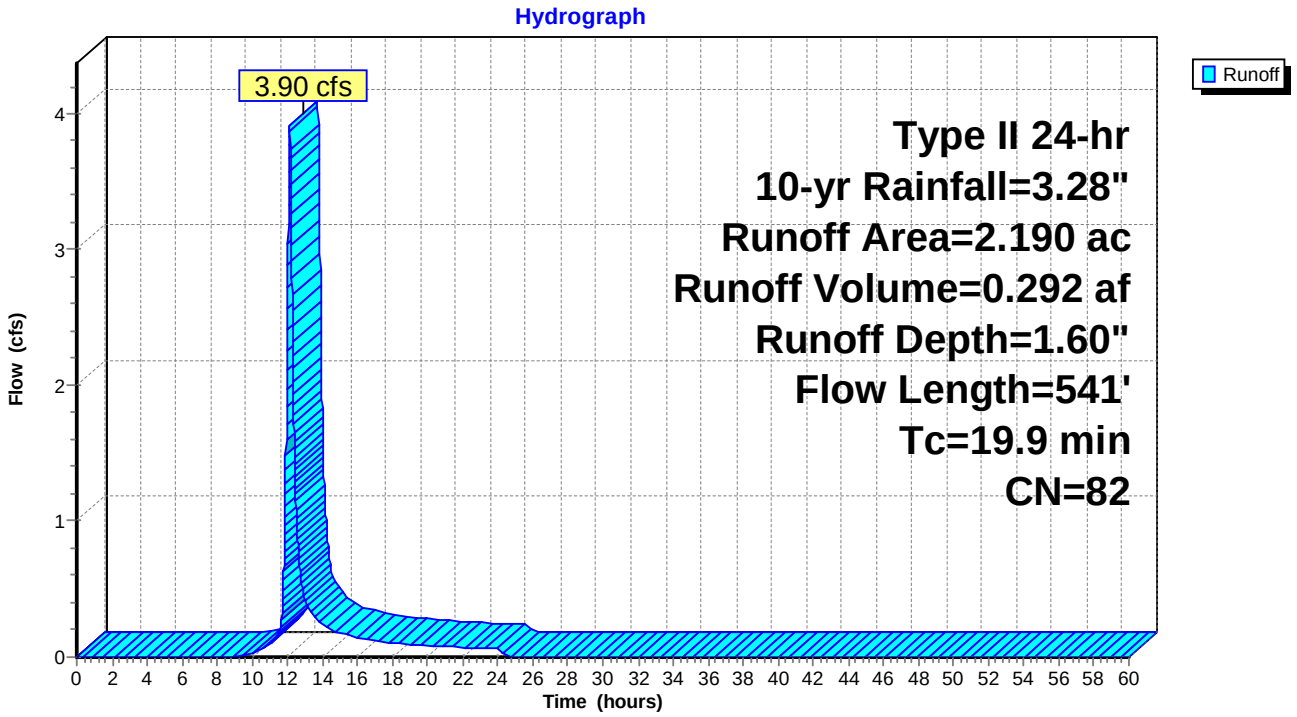
Runoff = 3.90 cfs @ 12.13 hrs, Volume= 0.292 af, Depth= 1.60"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

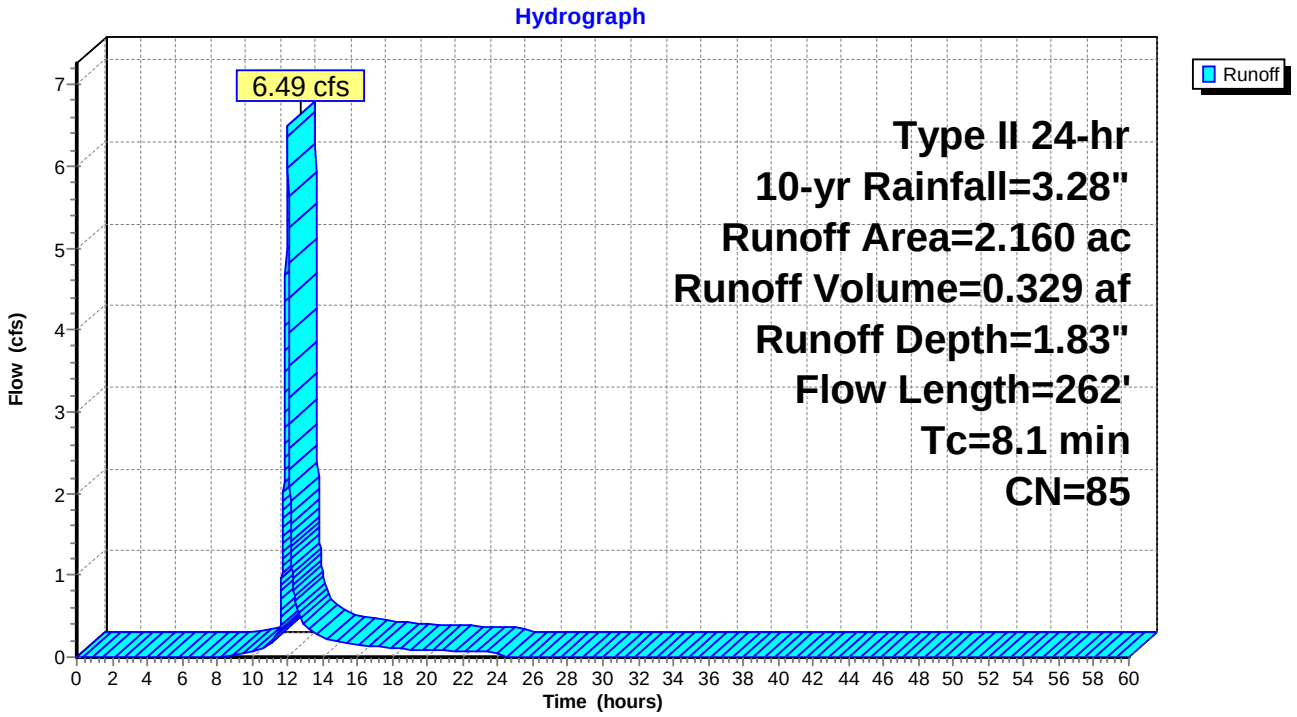
Runoff = 6.49 cfs @ 12.00 hrs, Volume= 0.329 af, Depth= 1.83"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

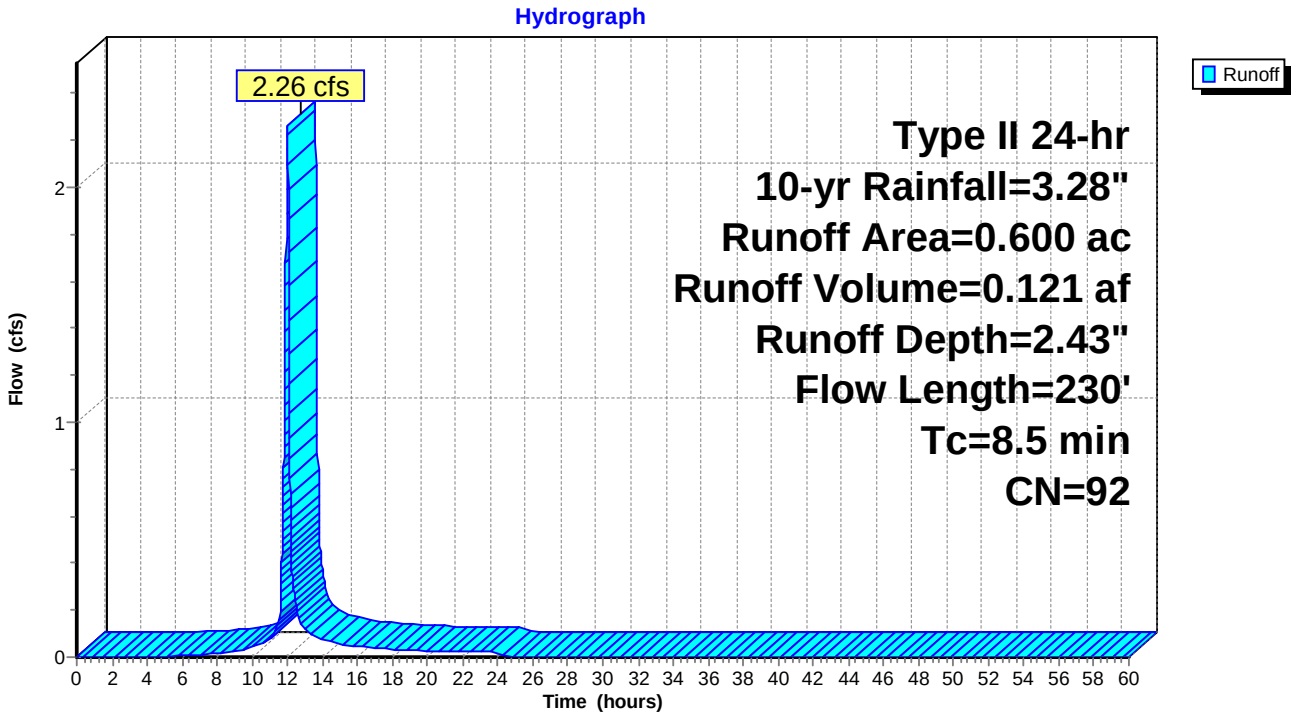
Runoff = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af, Depth= 2.43"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

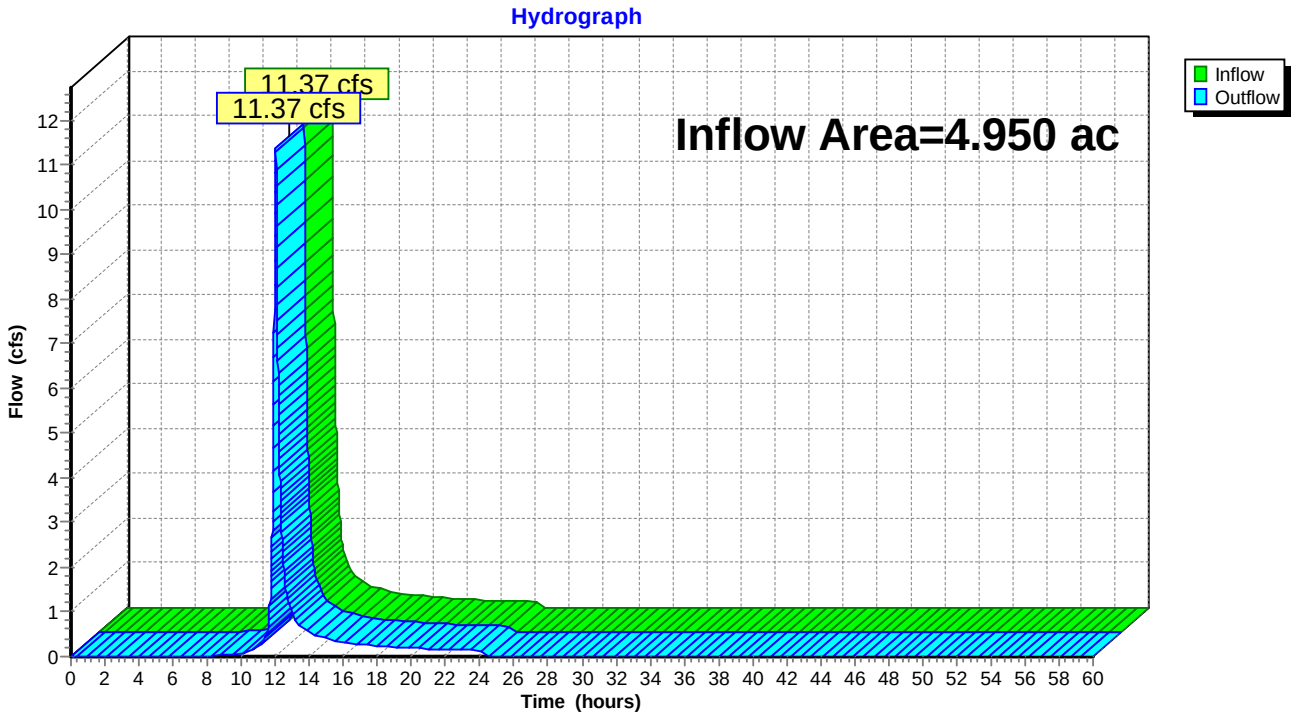


Summary for Reach 1R: Total Proposed Conditions

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 1.74" for 10-yr event
Inflow = 11.37 cfs @ 12.01 hrs, Volume= 0.716 af
Outflow = 11.37 cfs @ 12.01 hrs, Volume= 0.716 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Proposed Conditions



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 2.43" for 10-yr event
Inflow = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af
Outflow = 2.25 cfs @ 12.00 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.4 min
Primary = 1.60 cfs @ 12.00 hrs, Volume= 0.087 af
Routed to Reach 1R : Total Proposed Conditions
Secondary = 0.65 cfs @ 12.00 hrs, Volume= 0.007 af
Routed to Reach 1R : Total Proposed Conditions

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.79' @ 12.00 hrs Surf.Area= 952 sf Storage= 1,308 cf

Plug-Flow detention time= 131.6 min calculated for 0.095 af (78% of inflow)
Center-of-Mass det. time= 47.0 min (843.1 - 796.0)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

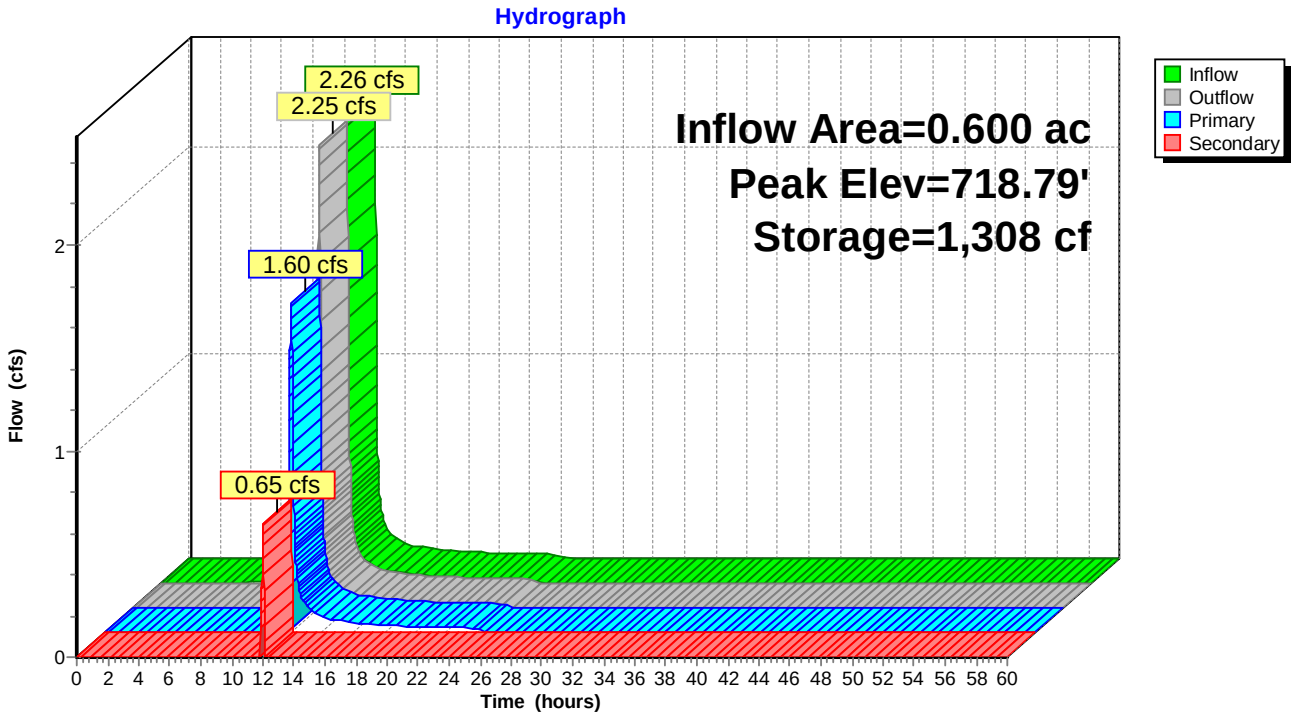
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.60 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**1=Culvert** (Passes 1.60 cfs of 4.19 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.60 cfs @ 1.29 fps)

Secondary OutFlow Max=0.61 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.61 cfs @ 0.44 fps)

Pond 3P: Existing Organic Filter



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=3.54"
Flow Length=541' Tc=19.9 min CN=82 Runoff=8.61 cfs 0.646 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=3.84"
Flow Length=262' Tc=8.1 min CN=85 Runoff=13.24 cfs 0.692 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=4.59"
Flow Length=230' Tc=8.5 min CN=92 Runoff=4.11 cfs 0.229 af

Reach 1R: Total Proposed Conditions Inflow=23.42 cfs 1.540 af
Outflow=23.42 cfs 1.540 af

Pond 3P: Existing Organic Filter Peak Elev=718.82' Storage=1,345 cf Inflow=4.11 cfs 0.229 af
Primary=2.22 cfs 0.173 af Secondary=1.87 cfs 0.030 af Outflow=4.10 cfs 0.203 af

Total Runoff Area = 4.950 ac Runoff Volume = 1.567 af Average Runoff Depth = 3.80"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

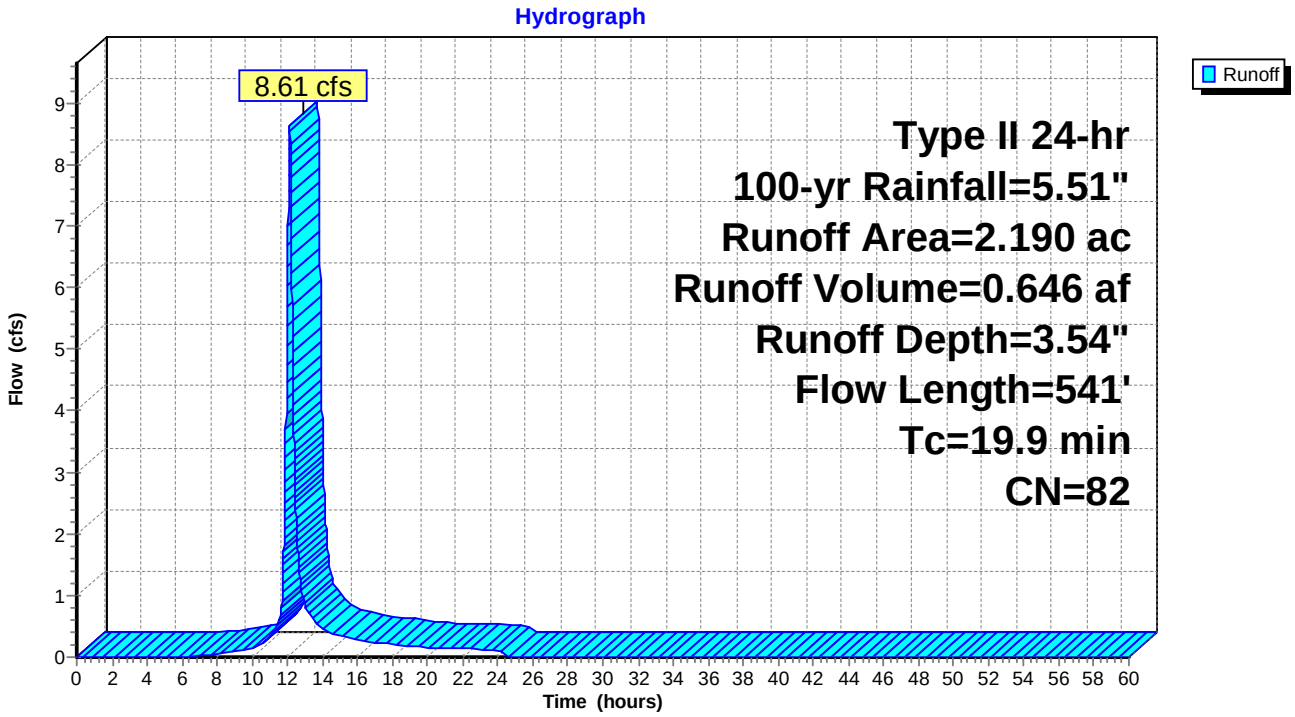
Runoff = 8.61 cfs @ 12.12 hrs, Volume= 0.646 af, Depth= 3.54"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

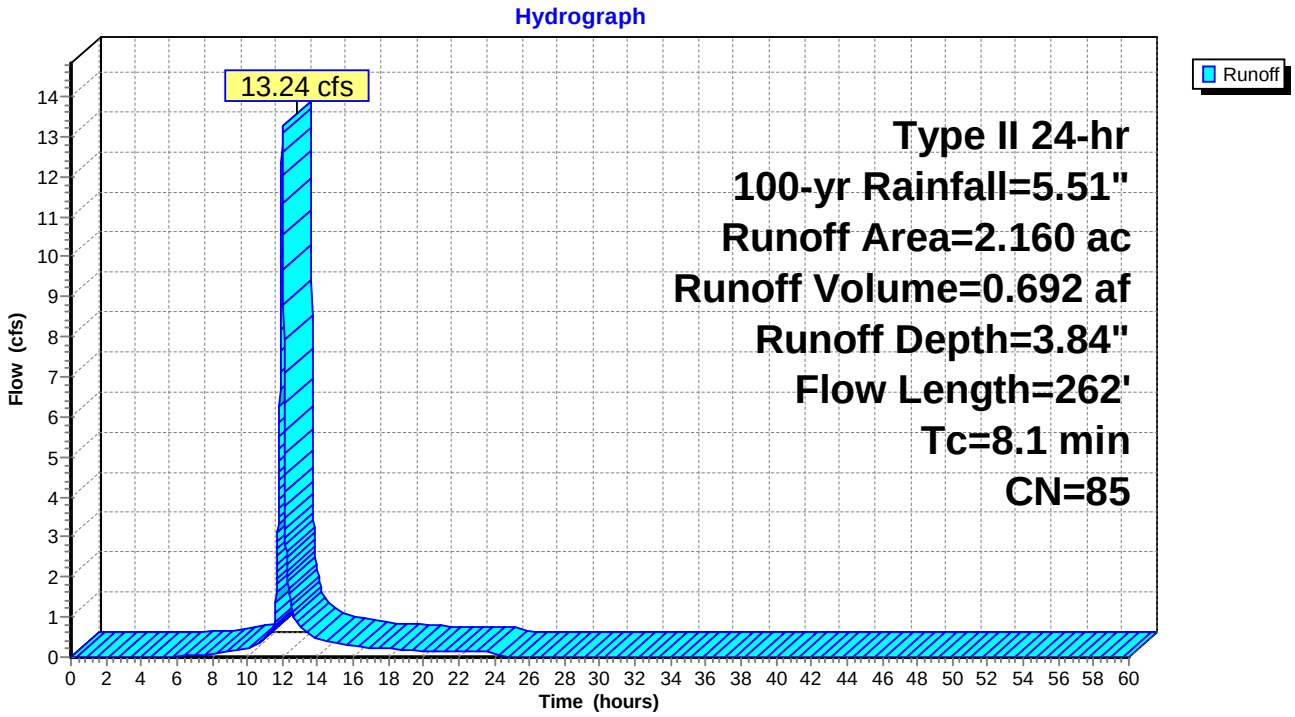
Runoff = 13.24 cfs @ 11.99 hrs, Volume= 0.692 af, Depth= 3.84"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

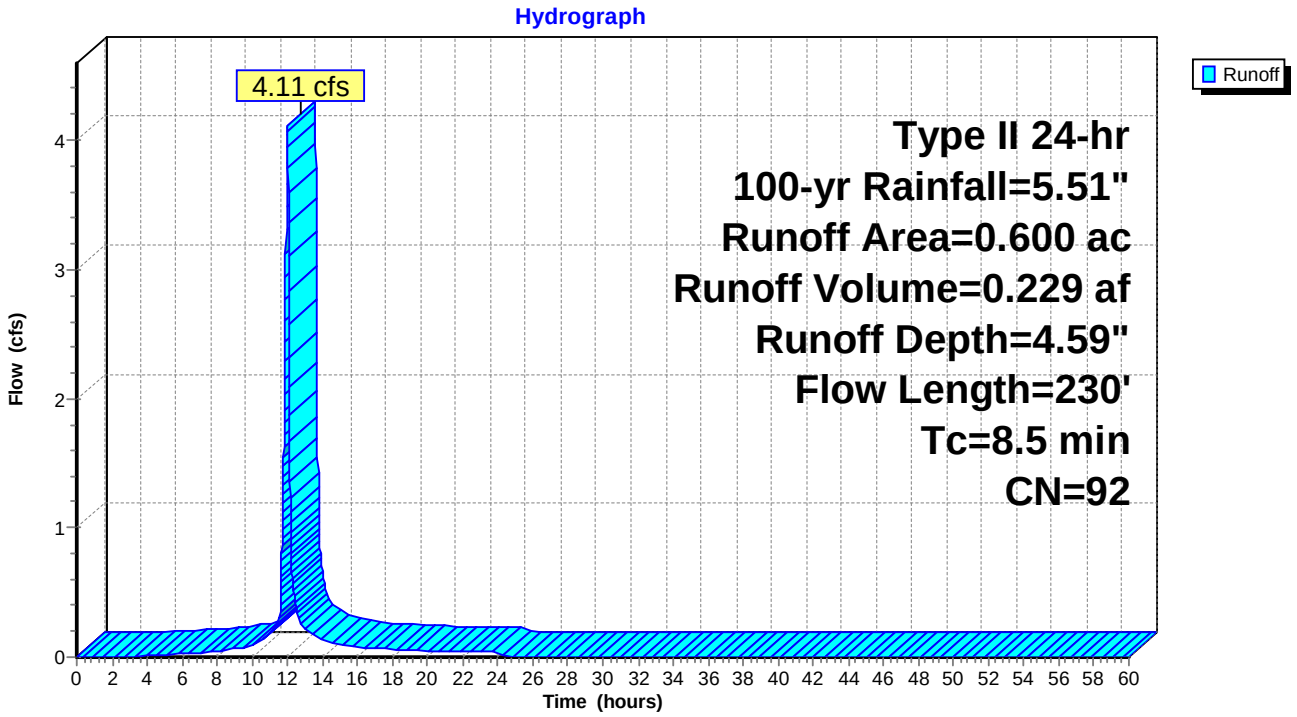
Runoff = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af, Depth= 4.59"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

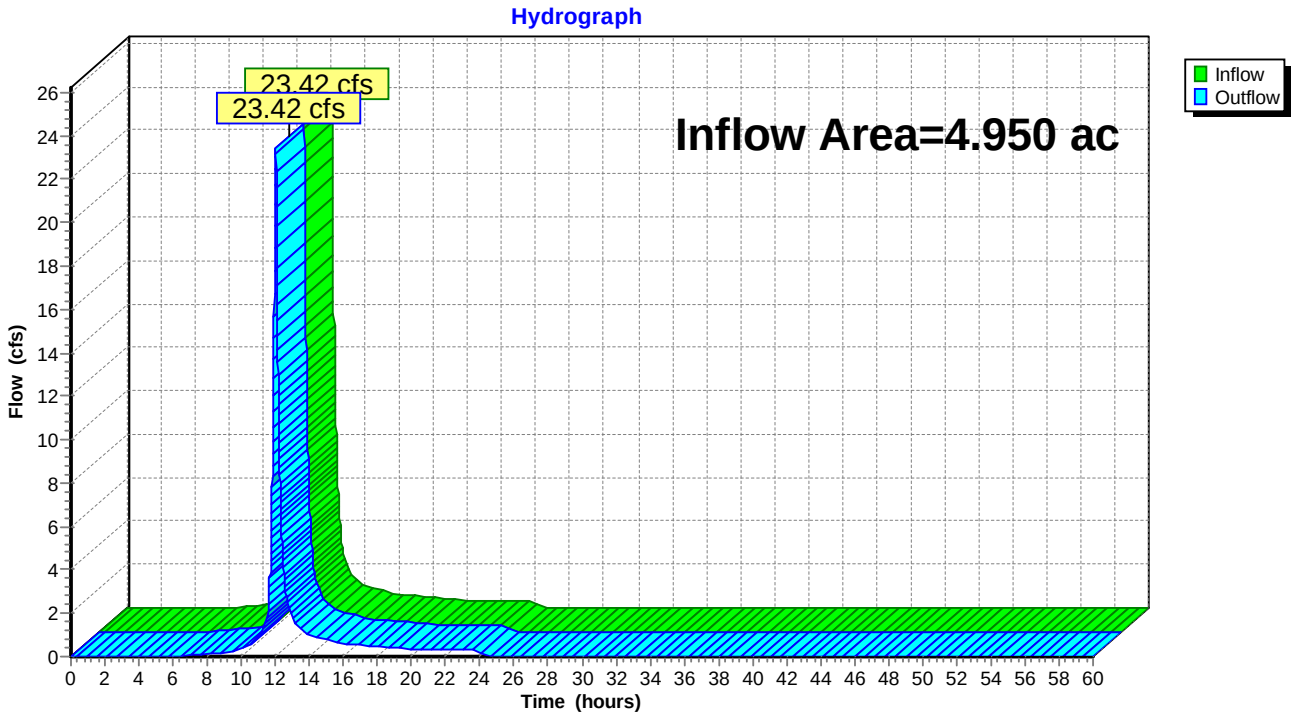


Summary for Reach 1R: Total Proposed Conditions

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 3.73" for 100-yr event
Inflow = 23.42 cfs @ 12.01 hrs, Volume= 1.540 af
Outflow = 23.42 cfs @ 12.01 hrs, Volume= 1.540 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Proposed Conditions



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 4.59" for 100-yr event
Inflow = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af
Outflow = 4.10 cfs @ 12.00 hrs, Volume= 0.203 af, Atten= 0%, Lag= 0.3 min
Primary = 2.22 cfs @ 12.00 hrs, Volume= 0.173 af
Routed to Reach 1R : Total Proposed Conditions
Secondary = 1.87 cfs @ 12.00 hrs, Volume= 0.030 af
Routed to Reach 1R : Total Proposed Conditions

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.82' @ 12.00 hrs Surf.Area= 967 sf Storage= 1,345 cf

Plug-Flow detention time= 93.8 min calculated for 0.203 af (88% of inflow)
Center-of-Mass det. time= 36.4 min (815.1 - 778.6)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

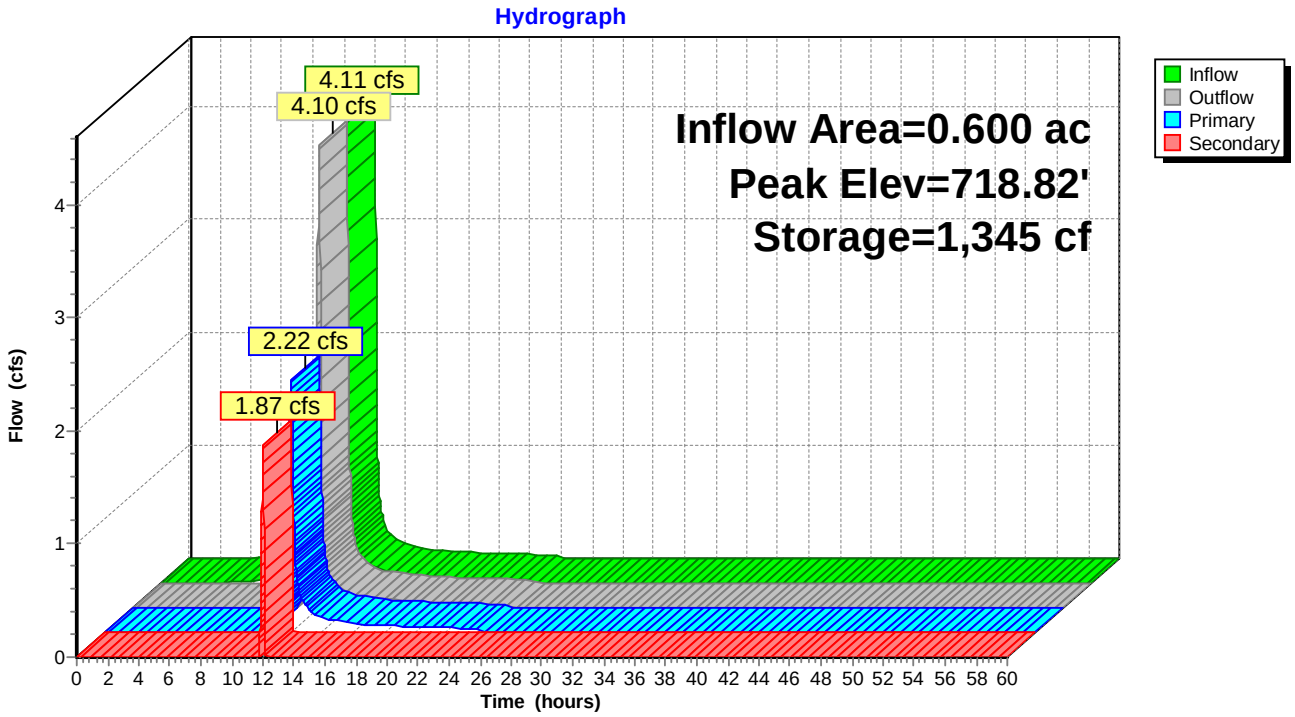
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.22 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**1=Culvert** (Passes 2.22 cfs of 4.23 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.22 cfs @ 1.44 fps)

Secondary OutFlow Max=1.87 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 1.87 cfs @ 0.63 fps)

Pond 3P: Existing Organic Filter



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=4.40"
Flow Length=541' Tc=19.9 min CN=82 Runoff=10.65 cfs 0.804 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=4.73"
Flow Length=262' Tc=8.1 min CN=85 Runoff=16.11 cfs 0.851 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=5.51"
Flow Length=230' Tc=8.5 min CN=92 Runoff=4.88 cfs 0.276 af

Reach 1R: Total Proposed Conditions Inflow=28.57 cfs 1.904 af
Outflow=28.57 cfs 1.904 af

Pond 3P: Existing Organic Filter Peak Elev=718.84' Storage=1,357 cf Inflow=4.88 cfs 0.276 af
Primary=2.46 cfs 0.208 af Secondary=2.41 cfs 0.041 af Outflow=4.87 cfs 0.249 af

Total Runoff Area = 4.950 ac Runoff Volume = 1.930 af Average Runoff Depth = 4.68"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

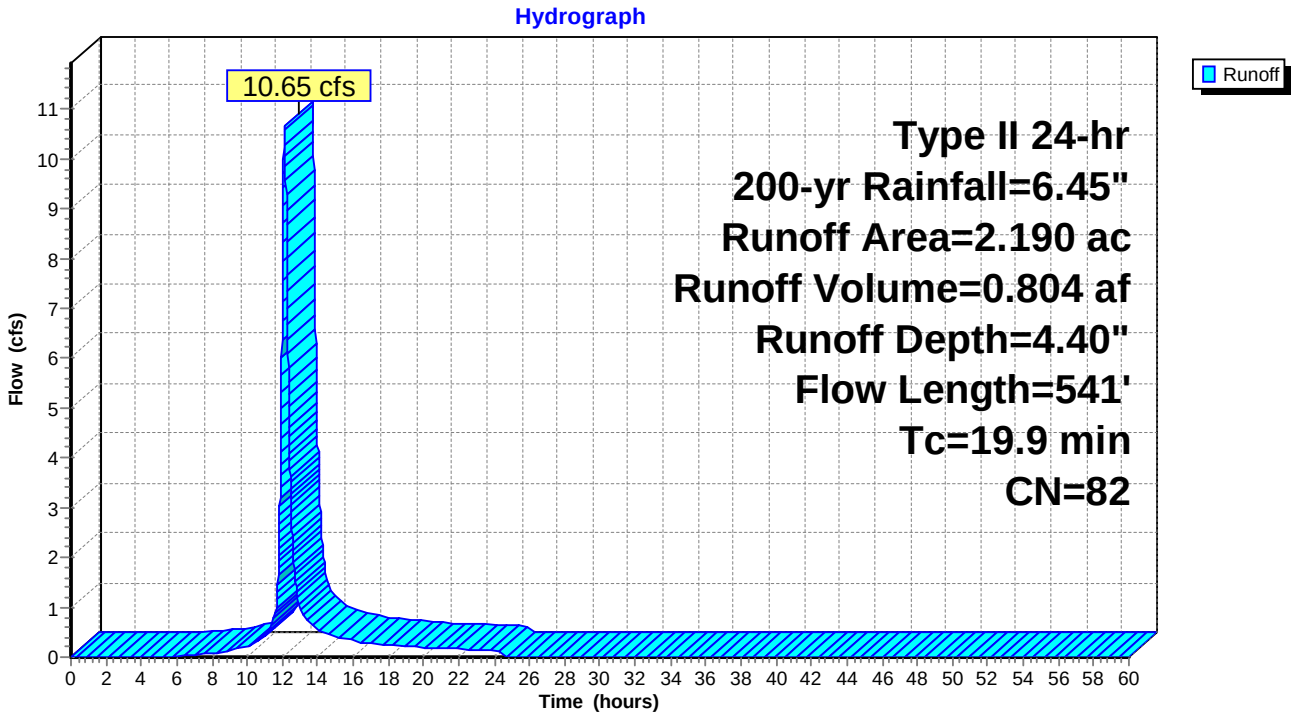
Runoff = 10.65 cfs @ 12.12 hrs, Volume= 0.804 af, Depth= 4.40"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 200-yr Rainfall=6.45"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

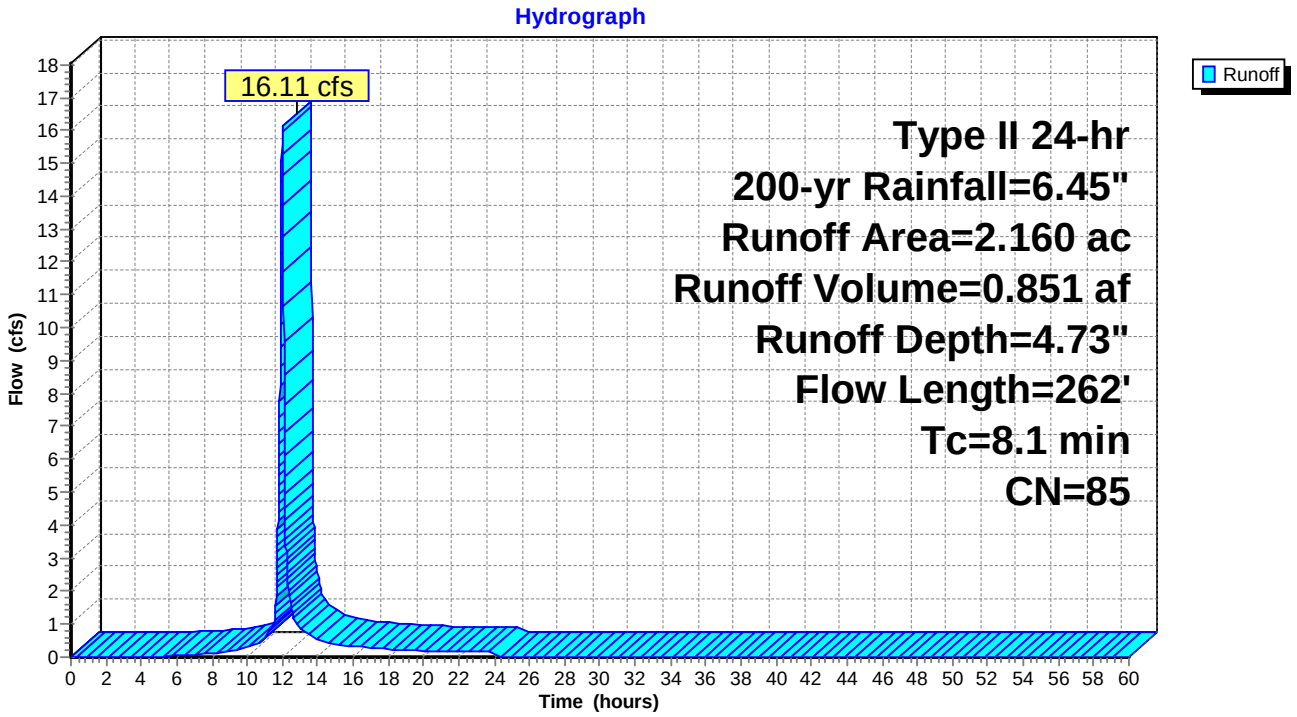
Runoff = 16.11 cfs @ 11.99 hrs, Volume= 0.851 af, Depth= 4.73"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 200-yr Rainfall=6.45"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

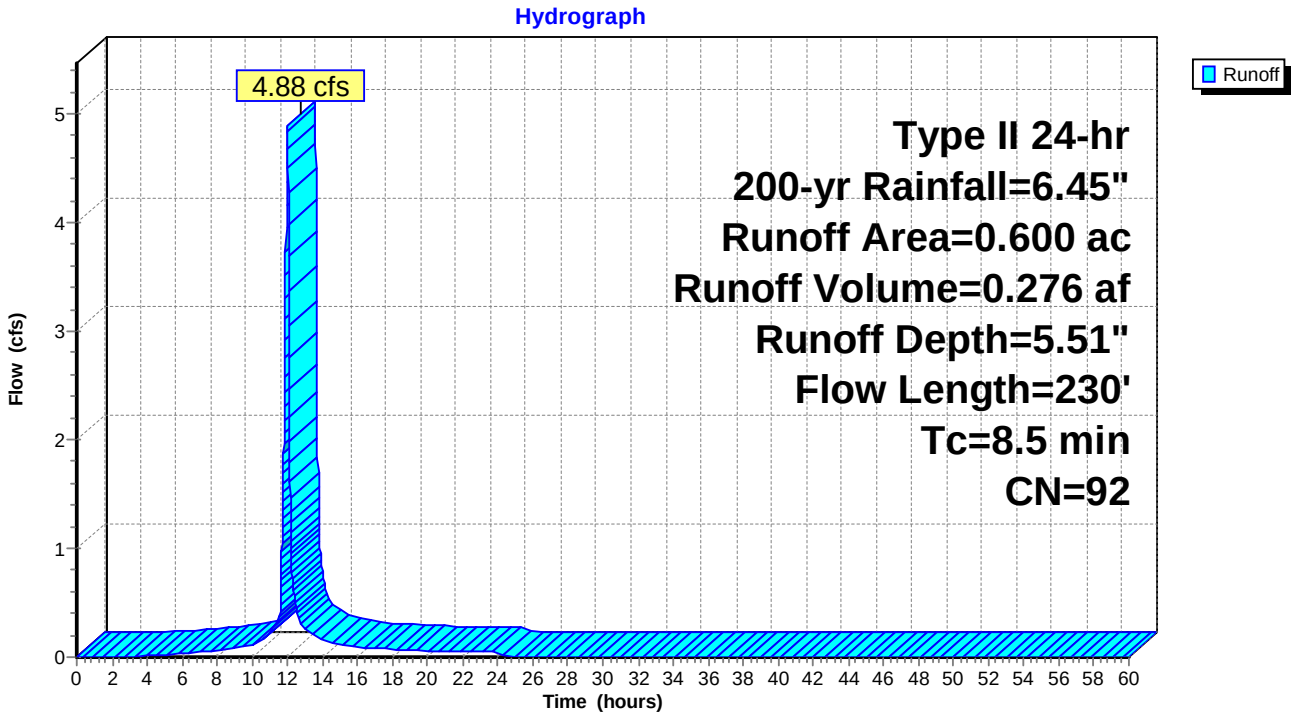
Runoff = 4.88 cfs @ 12.00 hrs, Volume= 0.276 af, Depth= 5.51"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 200-yr Rainfall=6.45"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

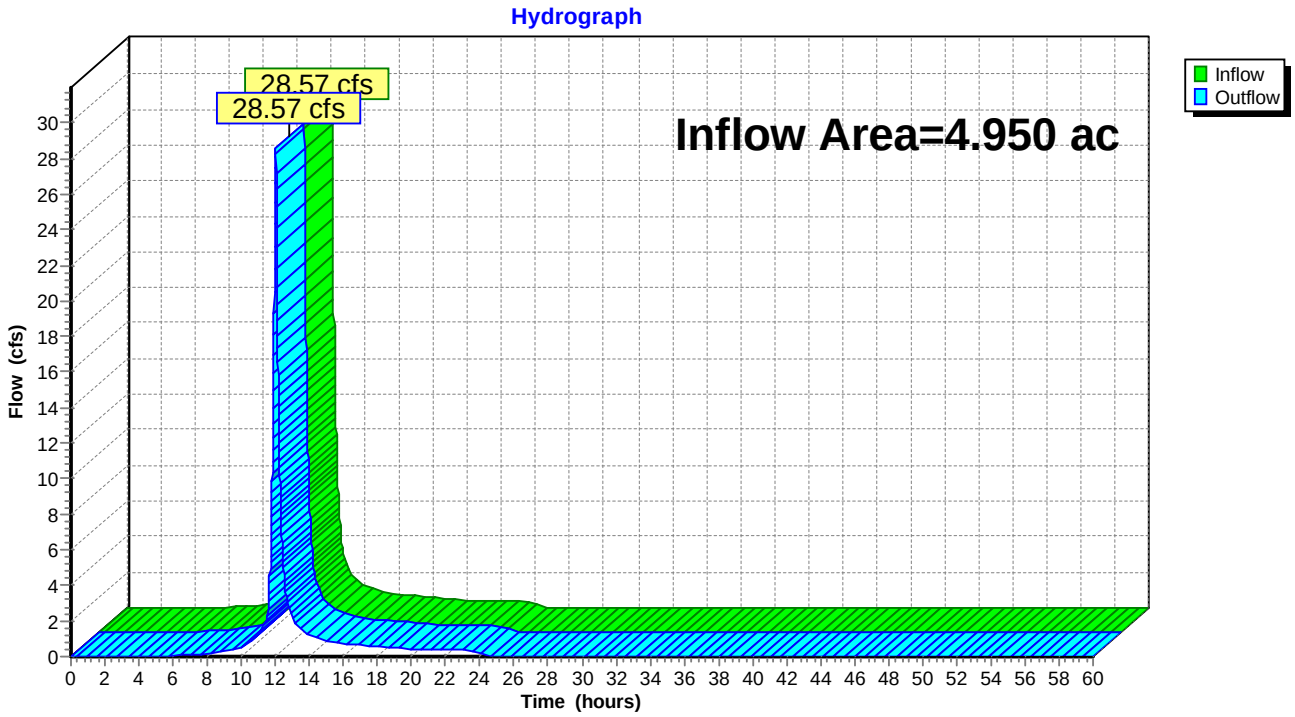


Summary for Reach 1R: Total Proposed Conditions

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 4.61" for 200-yr event
Inflow = 28.57 cfs @ 12.01 hrs, Volume= 1.904 af
Outflow = 28.57 cfs @ 12.01 hrs, Volume= 1.904 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Proposed Conditions



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 5.51" for 200-yr event
Inflow = 4.88 cfs @ 12.00 hrs, Volume= 0.276 af
Outflow = 4.87 cfs @ 12.00 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.2 min
Primary = 2.46 cfs @ 12.00 hrs, Volume= 0.208 af
Routed to Reach 1R : Total Proposed Conditions
Secondary = 2.41 cfs @ 12.00 hrs, Volume= 0.041 af
Routed to Reach 1R : Total Proposed Conditions

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.84' @ 12.00 hrs Surf.Area= 971 sf Storage= 1,357 cf

Plug-Flow detention time= 84.7 min calculated for 0.249 af (90% of inflow)
Center-of-Mass det. time= 34.2 min (808.1 - 773.9)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

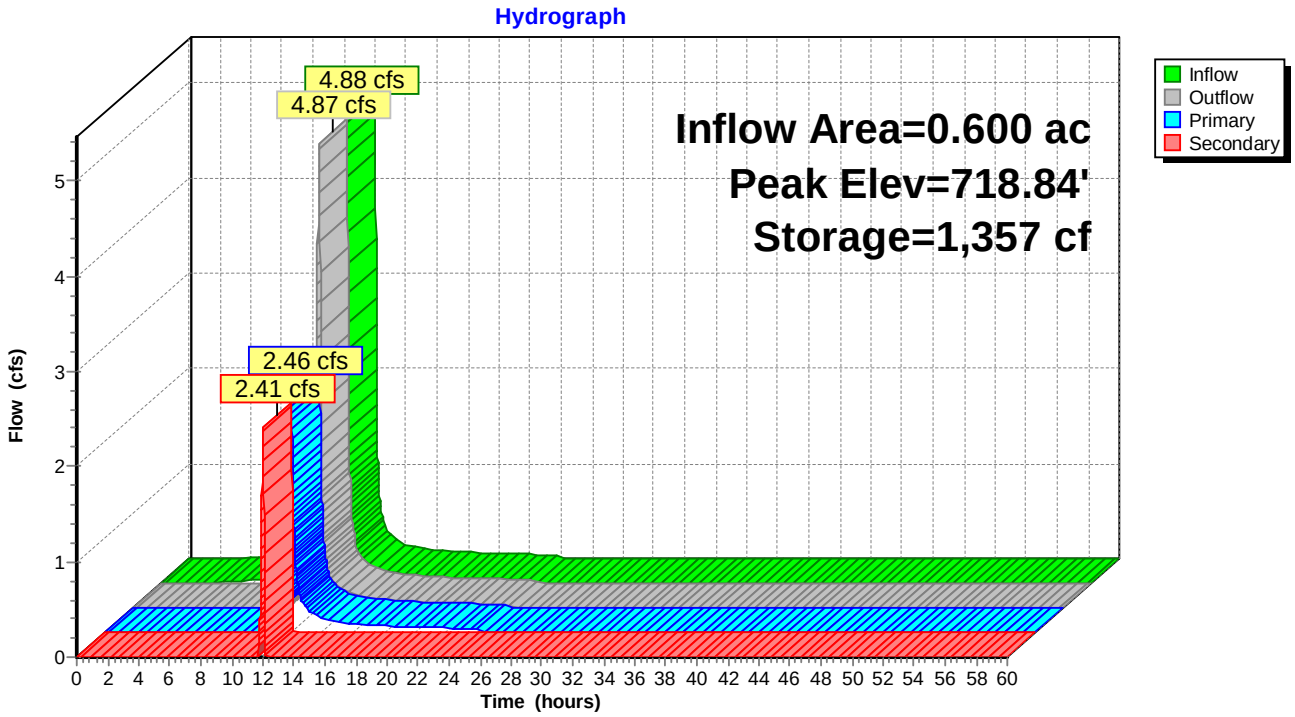
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.45 cfs @ 12.00 hrs HW=718.84' (Free Discharge)
└**1=Culvert** (Passes 2.45 cfs of 4.24 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.45 cfs @ 1.48 fps)

Secondary OutFlow Max=2.38 cfs @ 12.00 hrs HW=718.84' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 2.38 cfs @ 0.69 fps)

Pond 3P: Existing Organic Filter



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=5.80"
Flow Length=541' Tc=19.9 min CN=82 Runoff=13.90 cfs 1.059 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=6.16"
Flow Length=262' Tc=8.1 min CN=85 Runoff=20.63 cfs 1.108 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=6.98"
Flow Length=230' Tc=8.5 min CN=92 Runoff=6.09 cfs 0.349 af

Reach 1R: Total Proposed Conditions Inflow=36.73 cfs 2.489 af
Outflow=36.73 cfs 2.489 af

Pond 3P: Existing Organic Filter Peak Elev=718.86' Storage=1,377 cf Inflow=6.09 cfs 0.349 af
Primary=2.81 cfs 0.262 af Secondary=3.27 cfs 0.060 af Outflow=6.08 cfs 0.322 af

Total Runoff Area = 4.950 ac Runoff Volume = 2.516 af Average Runoff Depth = 6.10"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

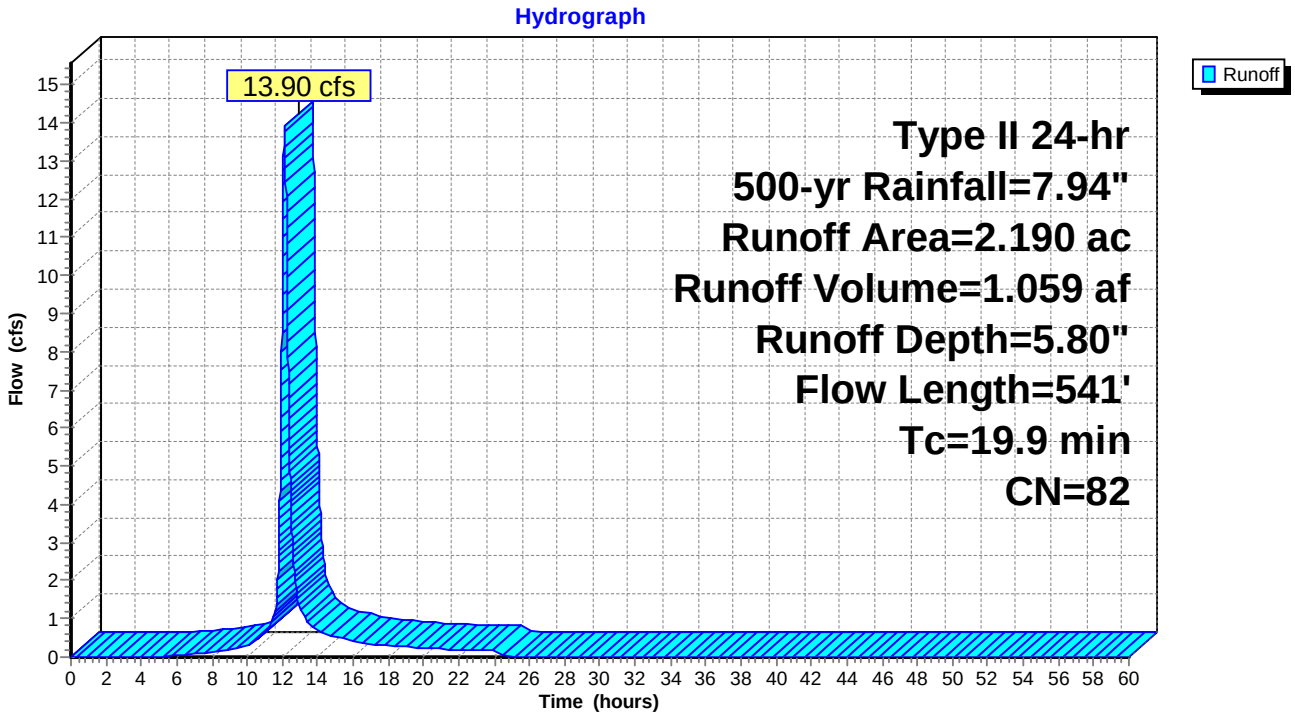
Runoff = 13.90 cfs @ 12.12 hrs, Volume= 1.059 af, Depth= 5.80"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 500-yr Rainfall=7.94"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

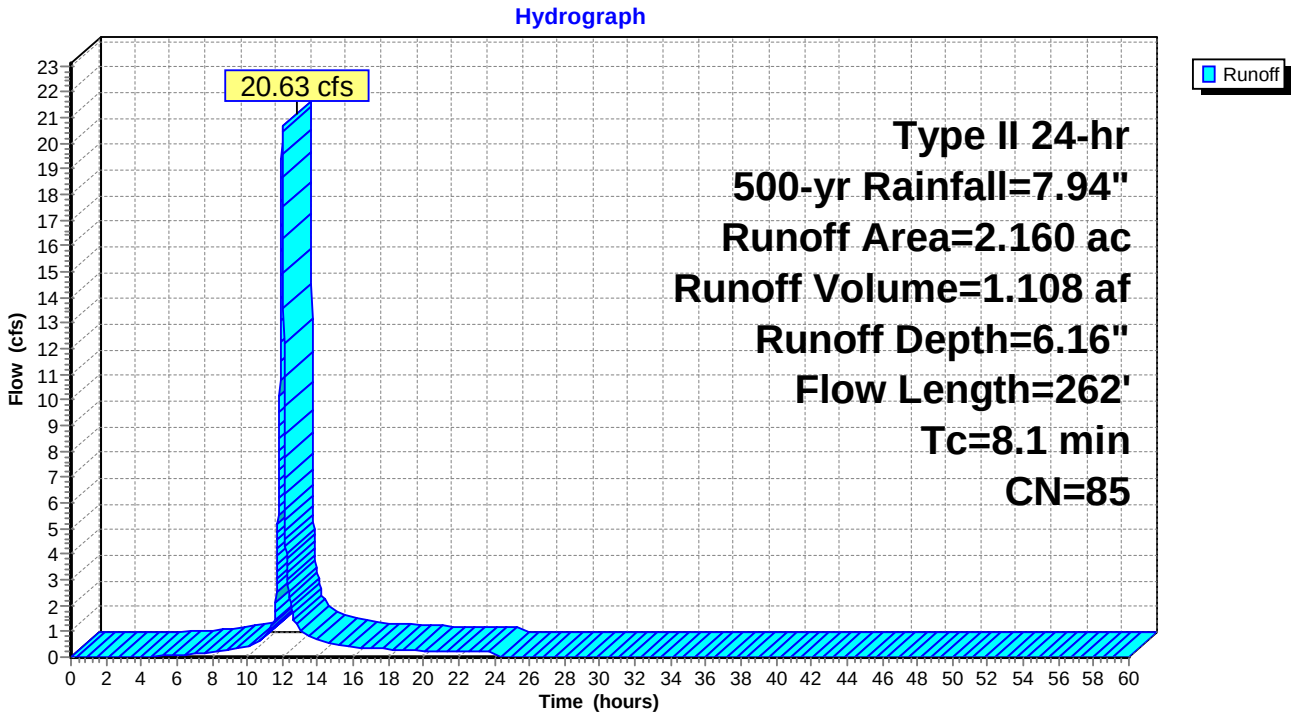
Runoff = 20.63 cfs @ 11.99 hrs, Volume= 1.108 af, Depth= 6.16"
Routed to Reach 1R : Total Proposed Conditions

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 500-yr Rainfall=7.94"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

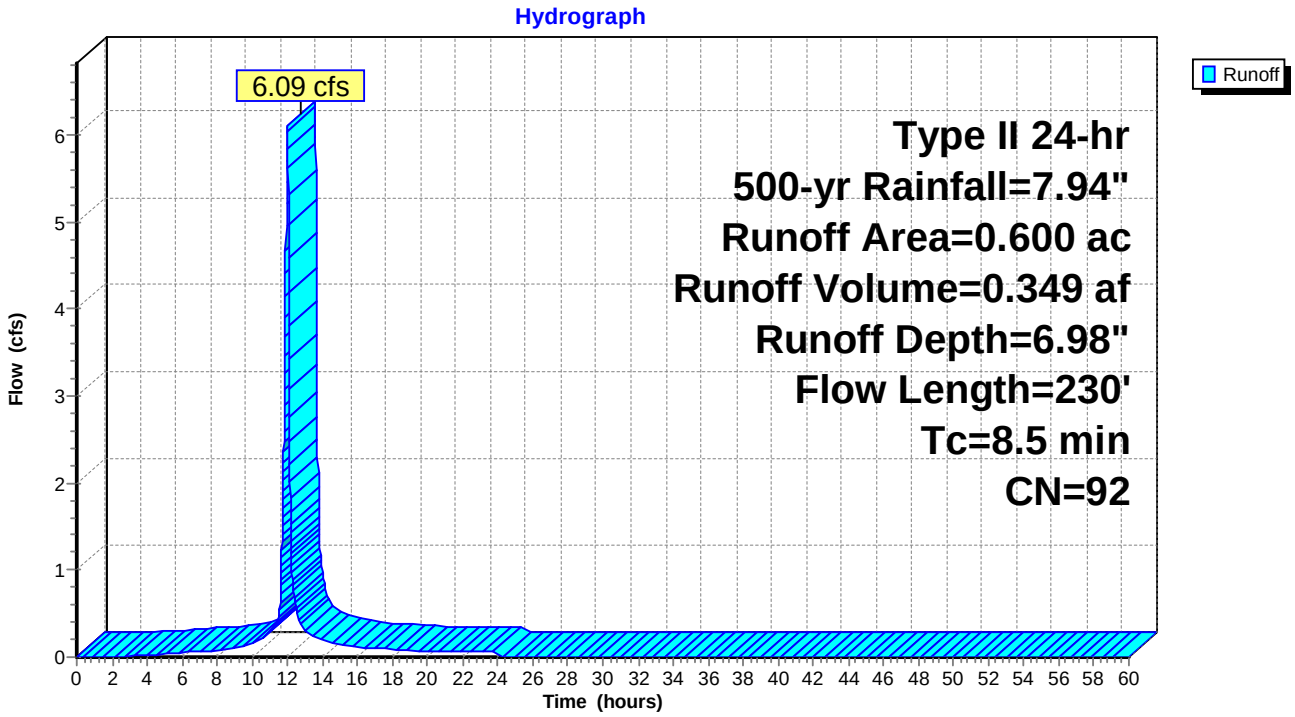
Runoff = 6.09 cfs @ 11.99 hrs, Volume= 0.349 af, Depth= 6.98"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 500-yr Rainfall=7.94"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

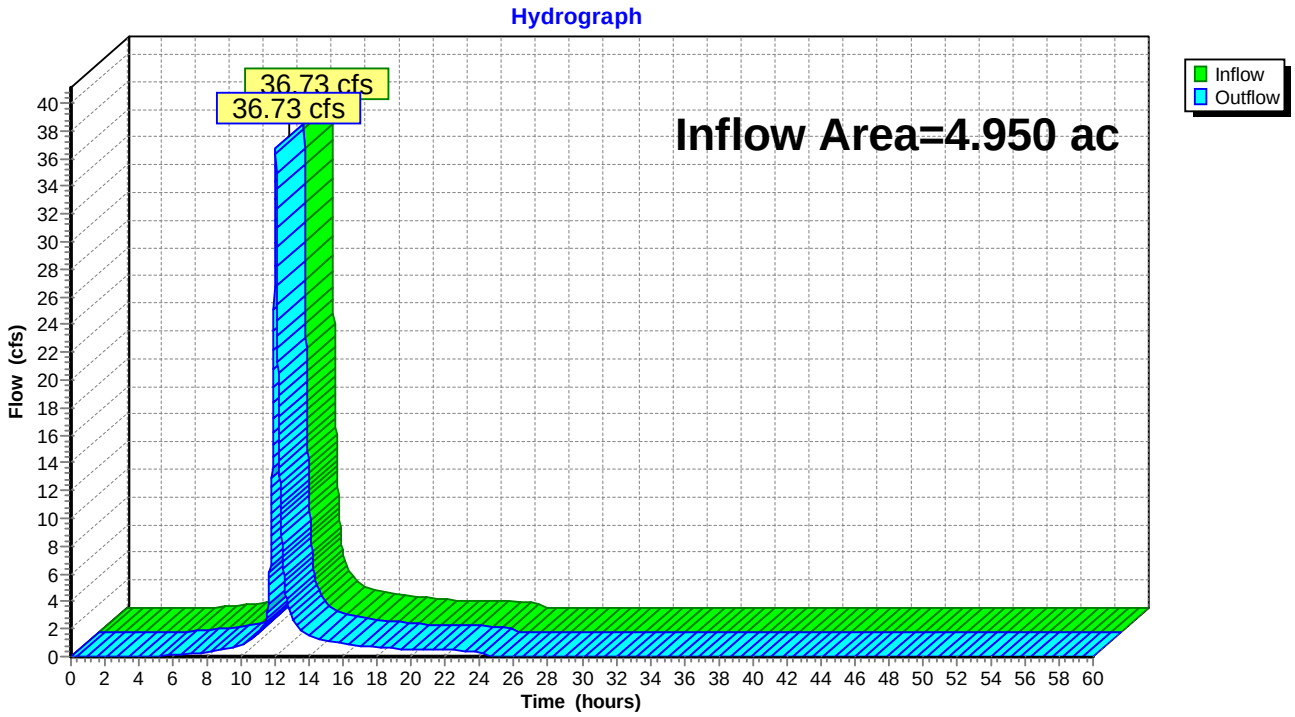


Summary for Reach 1R: Total Proposed Conditions

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 6.04" for 500-yr event
Inflow = 36.73 cfs @ 12.01 hrs, Volume= 2.489 af
Outflow = 36.73 cfs @ 12.01 hrs, Volume= 2.489 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Proposed Conditions



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 6.98" for 500-yr event
Inflow = 6.09 cfs @ 11.99 hrs, Volume= 0.349 af
Outflow = 6.08 cfs @ 12.00 hrs, Volume= 0.322 af, Atten= 0%, Lag= 0.2 min
Primary = 2.81 cfs @ 12.00 hrs, Volume= 0.262 af
Routed to Reach 1R : Total Proposed Conditions
Secondary = 3.27 cfs @ 12.00 hrs, Volume= 0.060 af
Routed to Reach 1R : Total Proposed Conditions

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.86' @ 12.00 hrs Surf.Area= 979 sf Storage= 1,377 cf

Plug-Flow detention time= 73.3 min calculated for 0.322 af (92% of inflow)
Center-of-Mass det. time= 31.1 min (799.1 - 768.0)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

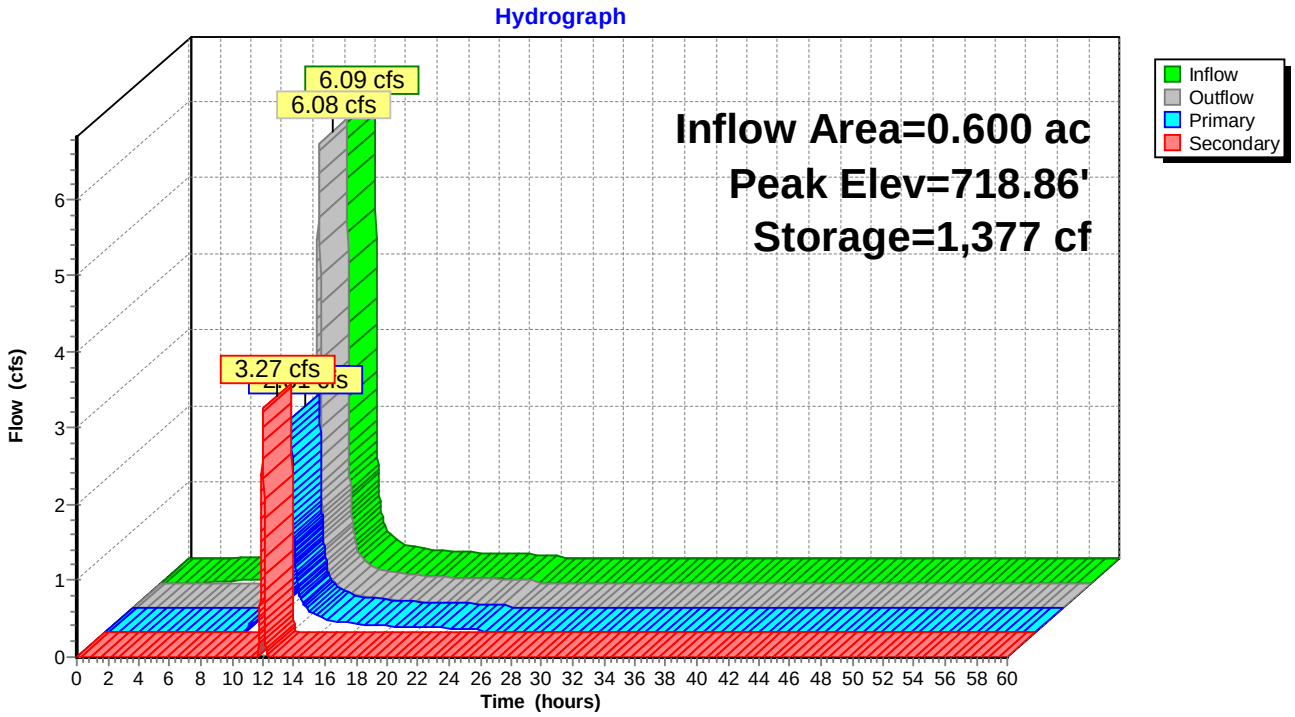
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

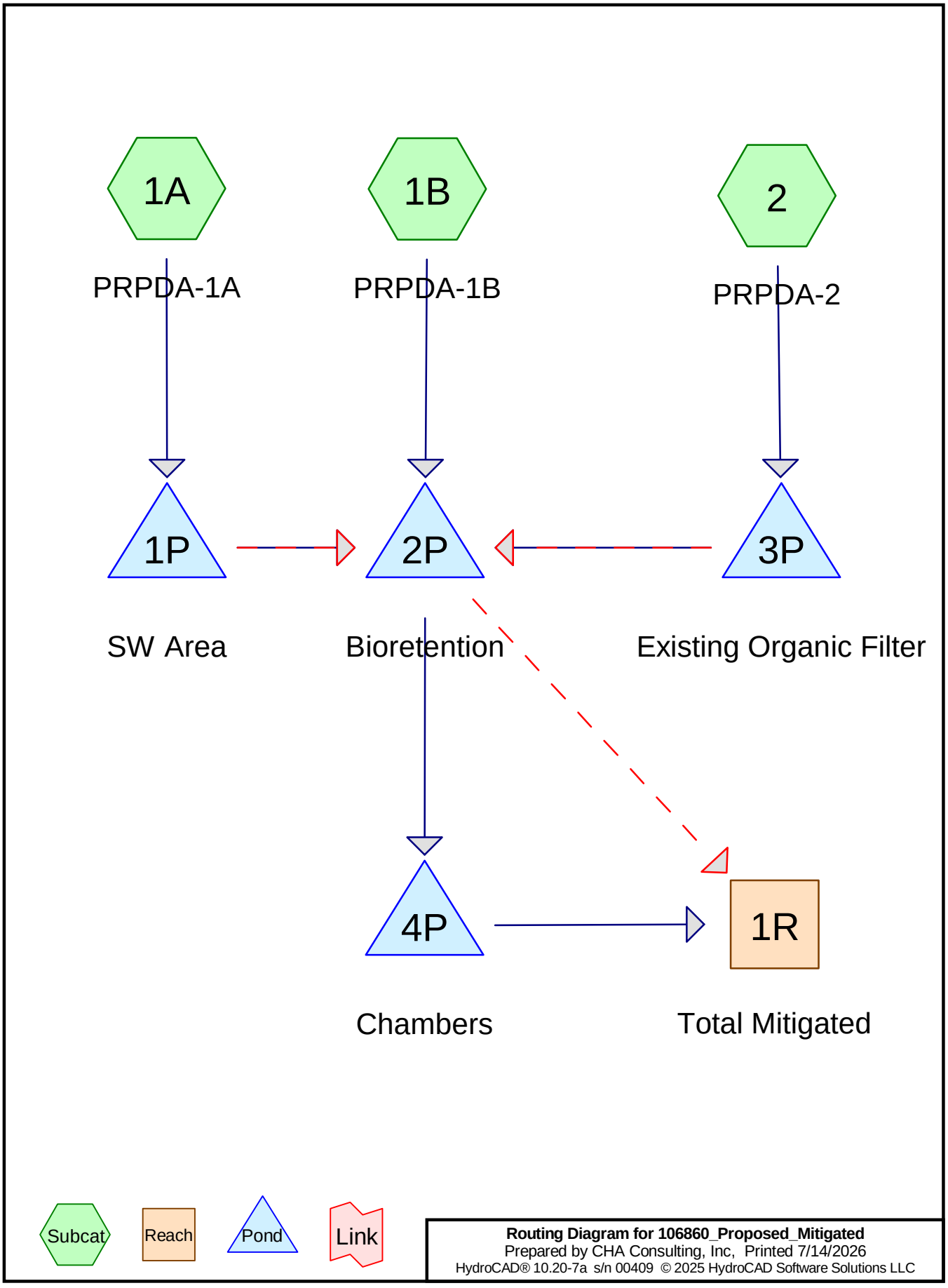
Primary OutFlow Max=2.81 cfs @ 12.00 hrs HW=718.86' (Free Discharge)
└**1=Culvert** (Passes 2.81 cfs of 4.26 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.81 cfs @ 1.55 fps)

Secondary OutFlow Max=3.25 cfs @ 12.00 hrs HW=718.86' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 3.25 cfs @ 0.76 fps)

Pond 3P: Existing Organic Filter



HydroCAD Output – Proposed Mitigated Conditions


1A
1B
2
PRPDA-1A
PRPDA-1B
PRPDA-2
1P
2P
3P
SW Area
Bioretention
Existing Organic Filter
4P
1R
Chambers
Total Mitigated
Subcat
Reach
Pond
Link
Routing Diagram for 106860_Proposed_Mitigated
Prepared by CHA Consulting, Inc, Printed 7/14/2026
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Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=0.62"
Flow Length=541' Tc=19.9 min CN=82 Runoff=1.42 cfs 0.112 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=0.76"
Flow Length=262' Tc=8.1 min CN=85 Runoff=2.71 cfs 0.137 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=1.19"
Flow Length=230' Tc=8.5 min CN=92 Runoff=1.15 cfs 0.060 af

Reach 1R: Total Mitigated Inflow=0.88 cfs 0.267 af
Outflow=0.88 cfs 0.267 af

Pond 1P: SW Area Peak Elev=707.32' Storage=1,395 cf Inflow=1.42 cfs 0.112 af
Primary=0.42 cfs 0.112 af Secondary=0.00 cfs 0.000 af Outflow=0.42 cfs 0.112 af

Pond 2P: Bioretention Peak Elev=706.08' Storage=2,594 cf Inflow=2.89 cfs 0.282 af
Primary=1.44 cfs 0.268 af Secondary=0.00 cfs 0.000 af Outflow=1.44 cfs 0.268 af

Pond 3P: Existing Organic Filter Peak Elev=718.70' Storage=1,230 cf Inflow=1.15 cfs 0.060 af
Primary=0.51 cfs 0.033 af Secondary=0.00 cfs 0.000 af Outflow=0.51 cfs 0.033 af

Pond 4P: Chambers Peak Elev=699.50' Storage=876 cf Inflow=1.44 cfs 0.268 af
Outflow=0.88 cfs 0.267 af

Total Runoff Area = 4.950 ac Runoff Volume = 0.309 af Average Runoff Depth = 0.75"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

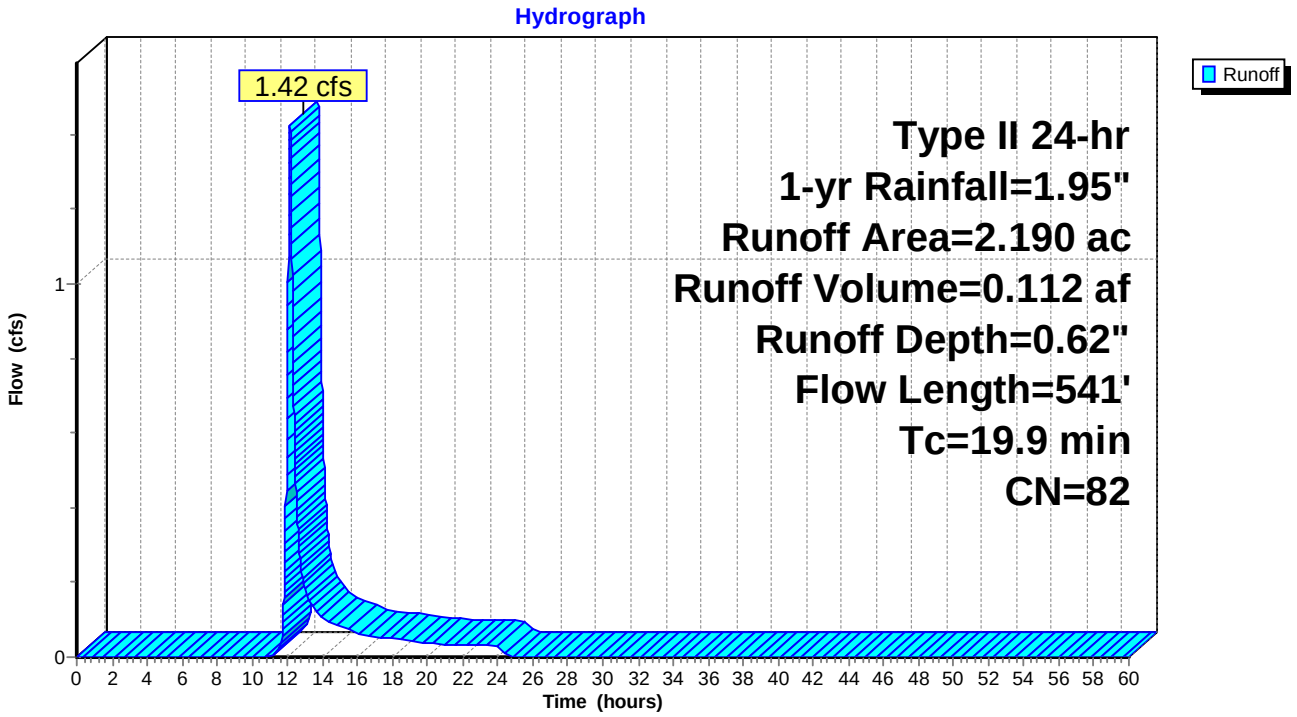
Runoff = 1.42 cfs @ 12.14 hrs, Volume= 0.112 af, Depth= 0.62"
Routed to Pond 1P : SW Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

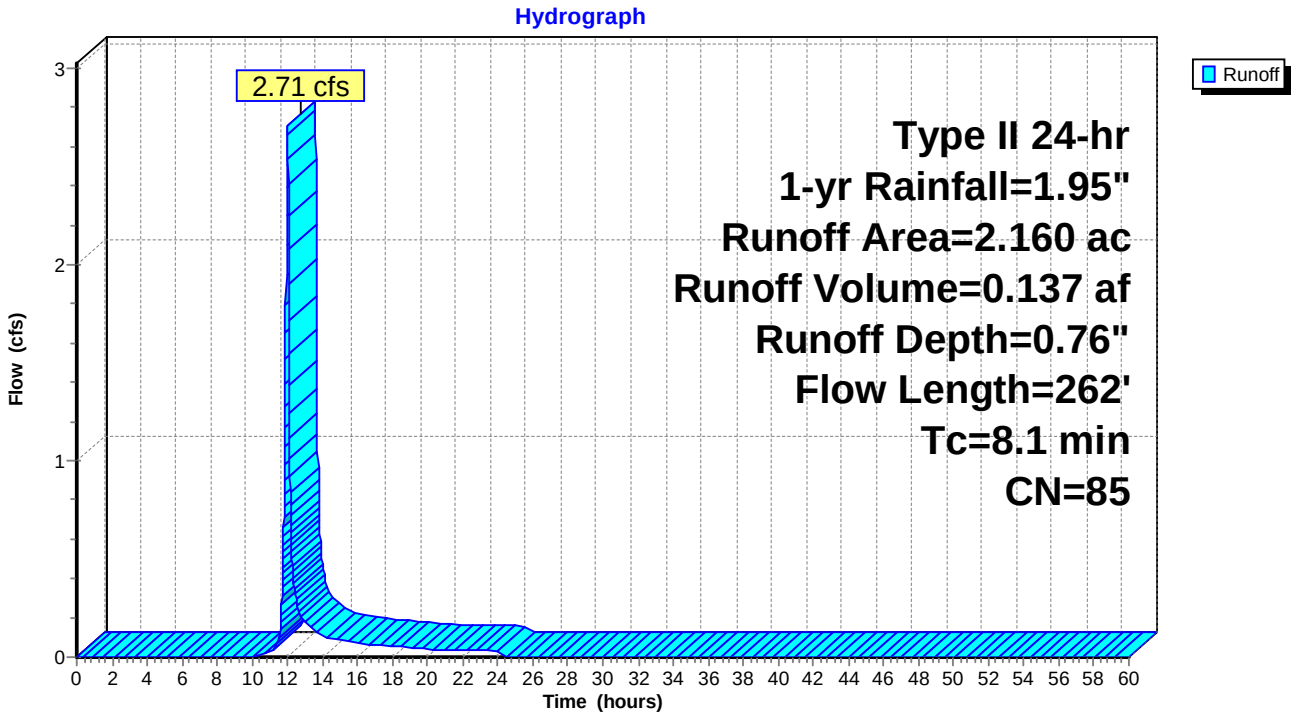
Runoff = 2.71 cfs @ 12.00 hrs, Volume= 0.137 af, Depth= 0.76"
Routed to Pond 2P : Bioretention

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

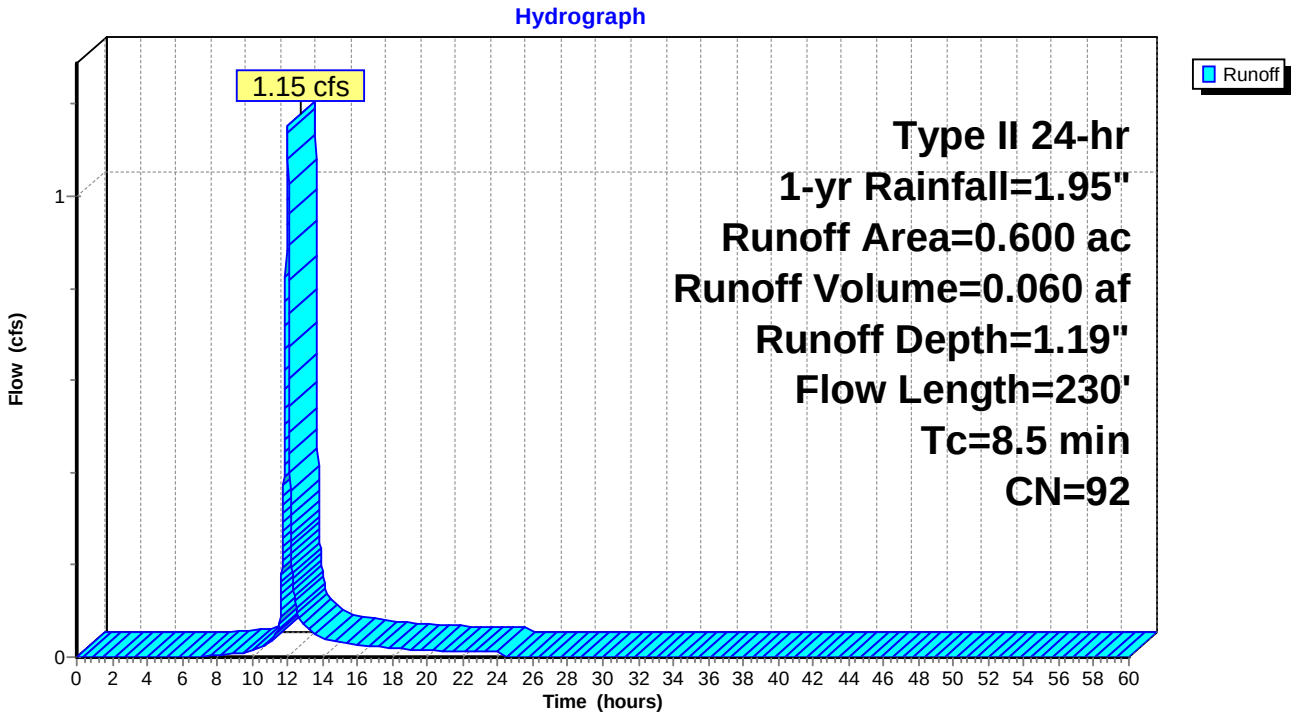
Runoff = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af, Depth= 1.19"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-yr Rainfall=1.95"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

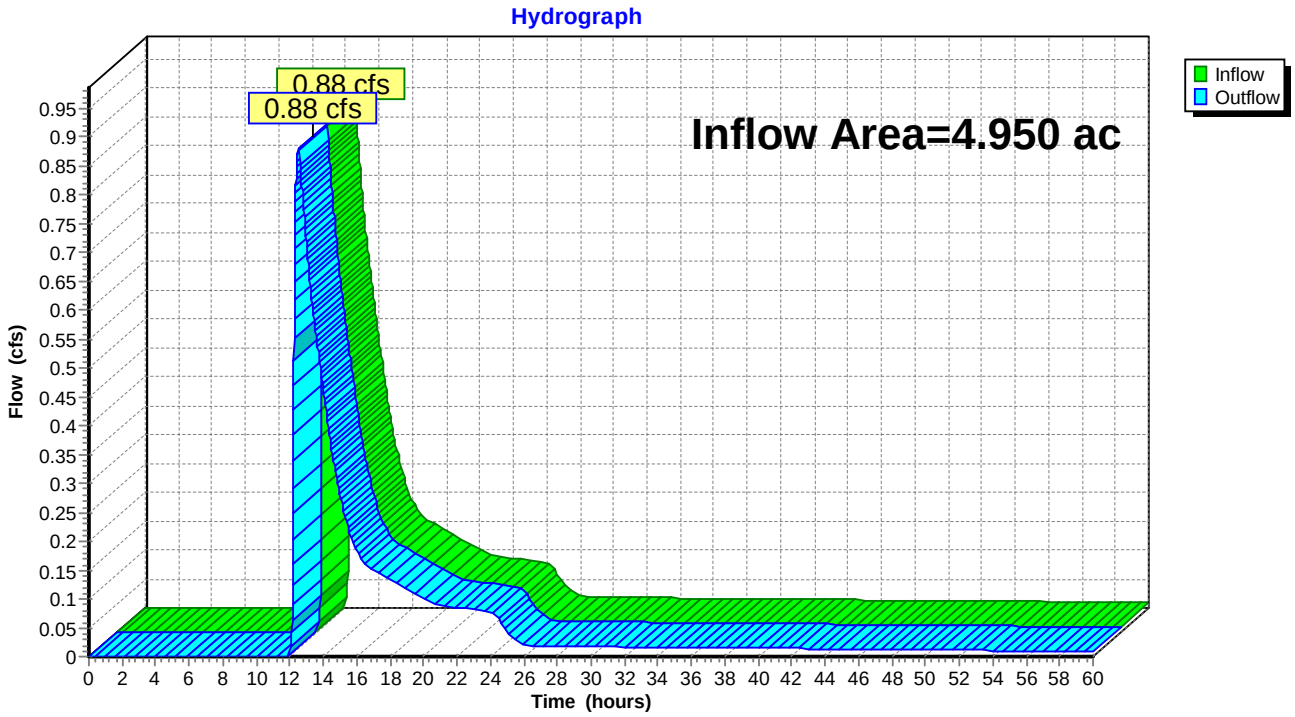


Summary for Reach 1R: Total Mitigated

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 0.65" for 1-yr event
Inflow = 0.88 cfs @ 12.51 hrs, Volume= 0.267 af
Outflow = 0.88 cfs @ 12.51 hrs, Volume= 0.267 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Mitigated



Summary for Pond 1P: SW Area

Inflow Area = 2.190 ac, 38.36% Impervious, Inflow Depth = 0.62" for 1-yr event
Inflow = 1.42 cfs @ 12.14 hrs, Volume= 0.112 af
Outflow = 0.42 cfs @ 12.52 hrs, Volume= 0.112 af, Atten= 70%, Lag= 23.0 min
Primary = 0.42 cfs @ 12.52 hrs, Volume= 0.112 af
Routed to Pond 2P : Bioretention
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 707.32' @ 12.52 hrs Surf.Area= 1,363 sf Storage= 1,395 cf

Plug-Flow detention time= 40.7 min calculated for 0.112 af (100% of inflow)
Center-of-Mass det. time= 40.6 min (913.8 - 873.2)

Volume	Invert	Avail.Storage	Storage Description
#1	706.00'	6,507 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

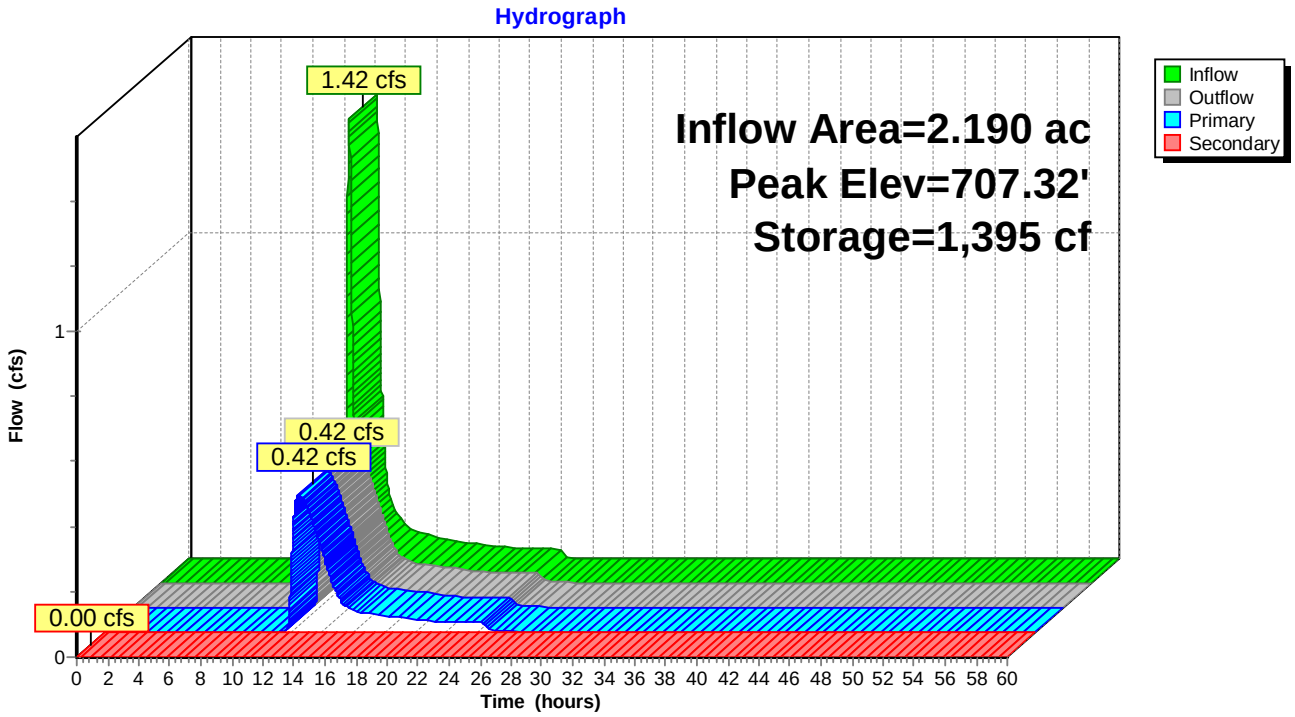
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
706.00	780	120.0	0	0	780
707.00	1,200	147.0	982	982	1,369
708.00	1,740	175.0	1,462	2,444	2,104
709.00	2,365	205.0	2,045	4,489	3,031
709.30	2,660	215.0	753	5,242	3,371
709.75	2,967	225.0	1,265	6,507	3,735

Device	Routing	Invert	Outlet Devices
#1	Primary	706.00'	**12.0" Round Culvert** L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 706.00' / 705.52' S= 0.0040 '/' Cc= 0.900 n= 0.011, Flow Area= 0.79 sf
#2	Device 1	706.00'	**2.7" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Device 1	708.80'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	709.55'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.42 cfs @ 12.52 hrs HW=707.32' (Free Discharge)
└**1=Culvert** (Passes 0.42 cfs of 2.70 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 0.42 cfs @ 5.30 fps)
└**3=Orifice/Grate** (Controls 0.00 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=706.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: SW Area



Summary for Pond 2P: Bioretention

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 0.68" for 1-yr event
Inflow = 2.89 cfs @ 12.00 hrs, Volume= 0.282 af
Outflow = 1.44 cfs @ 12.17 hrs, Volume= 0.268 af, Atten= 50%, Lag= 10.0 min
Primary = 1.44 cfs @ 12.17 hrs, Volume= 0.268 af
Routed to Pond 4P : Chambers
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 706.08' @ 12.17 hrs Surf.Area= 4,962 sf Storage= 2,594 cf

Plug-Flow detention time= 281.9 min calculated for 0.268 af (95% of inflow)
Center-of-Mass det. time= 255.0 min (1,137.8 - 882.8)

Volume	Invert	Avail.Storage	Storage Description
#1	705.50'	7,792 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

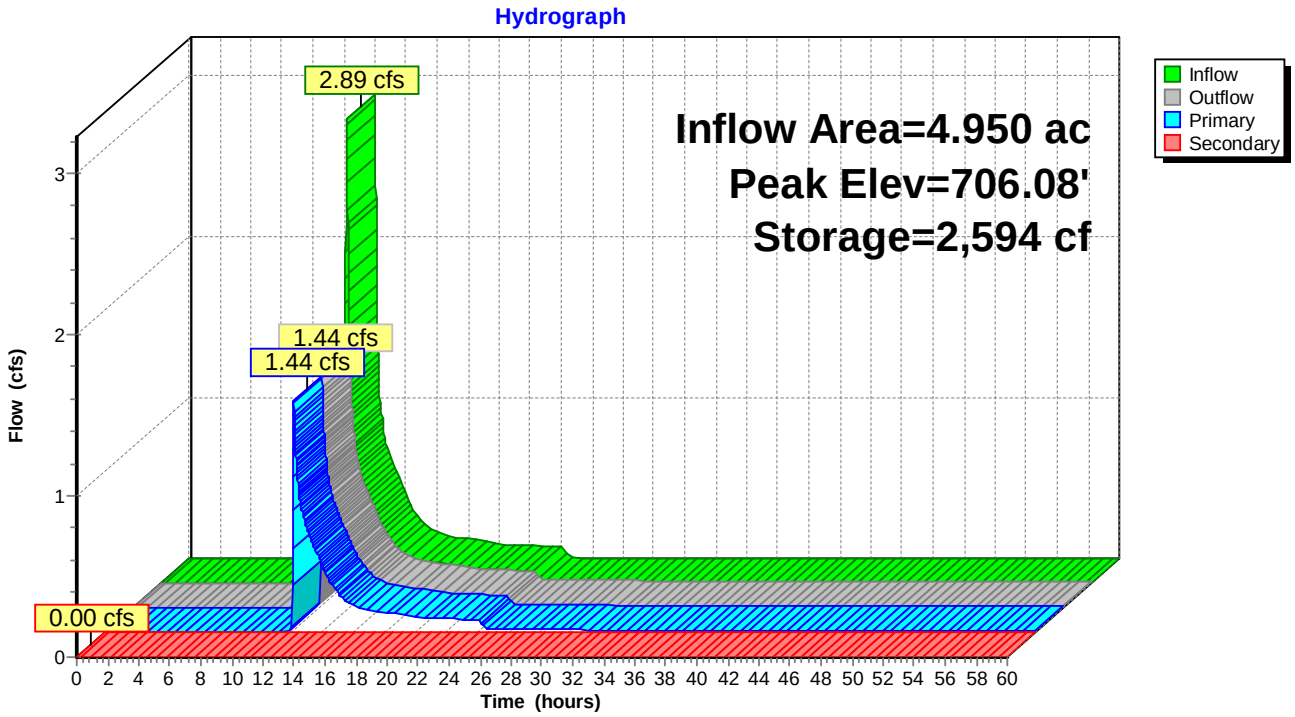
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
705.50	4,010	432.0	0	0	4,010
706.00	4,854	459.0	2,213	2,213	5,937
707.00	6,338	469.0	5,580	7,792	6,809

Device	Routing	Invert	Outlet Devices
#1	Primary	705.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	706.00'	**30.0" x 30.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Secondary	706.50'	**18.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.43 cfs @ 12.17 hrs HW=706.08' (Free Discharge)
1=Orifice/Grate (Orifice Controls 0.02 cfs @ 3.52 fps)
2=Orifice/Grate (Weir Controls 1.41 cfs @ 0.91 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=705.50' (Free Discharge)
3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Bioretention



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 1.19" for 1-yr event
Inflow = 1.15 cfs @ 12.00 hrs, Volume= 0.060 af
Outflow = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af, Atten= 55%, Lag= 7.0 min
Primary = 0.51 cfs @ 12.12 hrs, Volume= 0.033 af
Routed to Pond 2P : Bioretention
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.70' @ 12.12 hrs Surf.Area= 922 sf Storage= 1,230 cf

Plug-Flow detention time= 212.8 min calculated for 0.033 af (55% of inflow)
Center-of-Mass det. time= 100.0 min (916.2 - 816.2)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

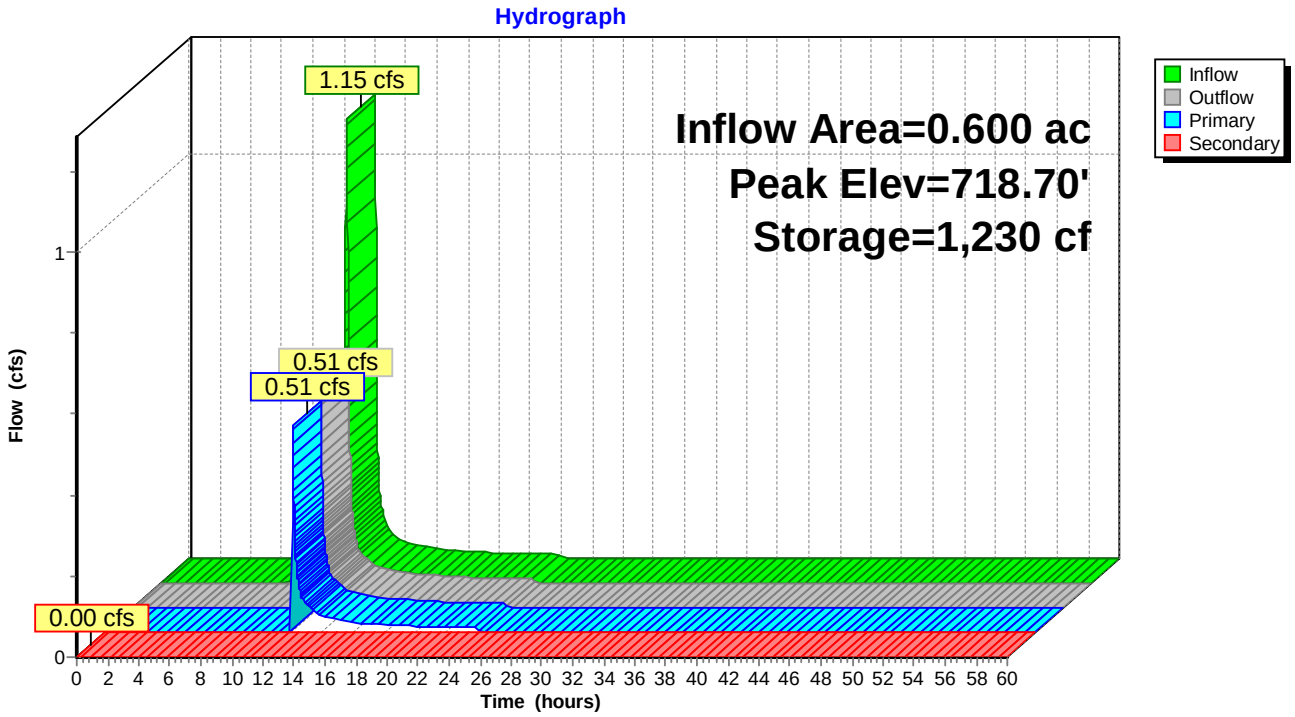
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=0.50 cfs @ 12.12 hrs HW=718.70' (Free Discharge)
└**1=Culvert** (Passes 0.50 cfs of 4.10 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 0.50 cfs @ 0.87 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=715.50' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: Existing Organic Filter



Summary for Pond 4P: Chambers

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 0.65" for 1-yr event
Inflow = 1.44 cfs @ 12.17 hrs, Volume= 0.268 af
Outflow = 0.88 cfs @ 12.51 hrs, Volume= 0.267 af, Atten= 39%, Lag= 20.3 min
Primary = 0.88 cfs @ 12.51 hrs, Volume= 0.267 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 699.50' @ 12.51 hrs Surf.Area= 4,348 sf Storage= 876 cf

Plug-Flow detention time= 40.5 min calculated for 0.267 af (100% of inflow)
Center-of-Mass det. time= 29.1 min (1,166.9 - 1,137.8)

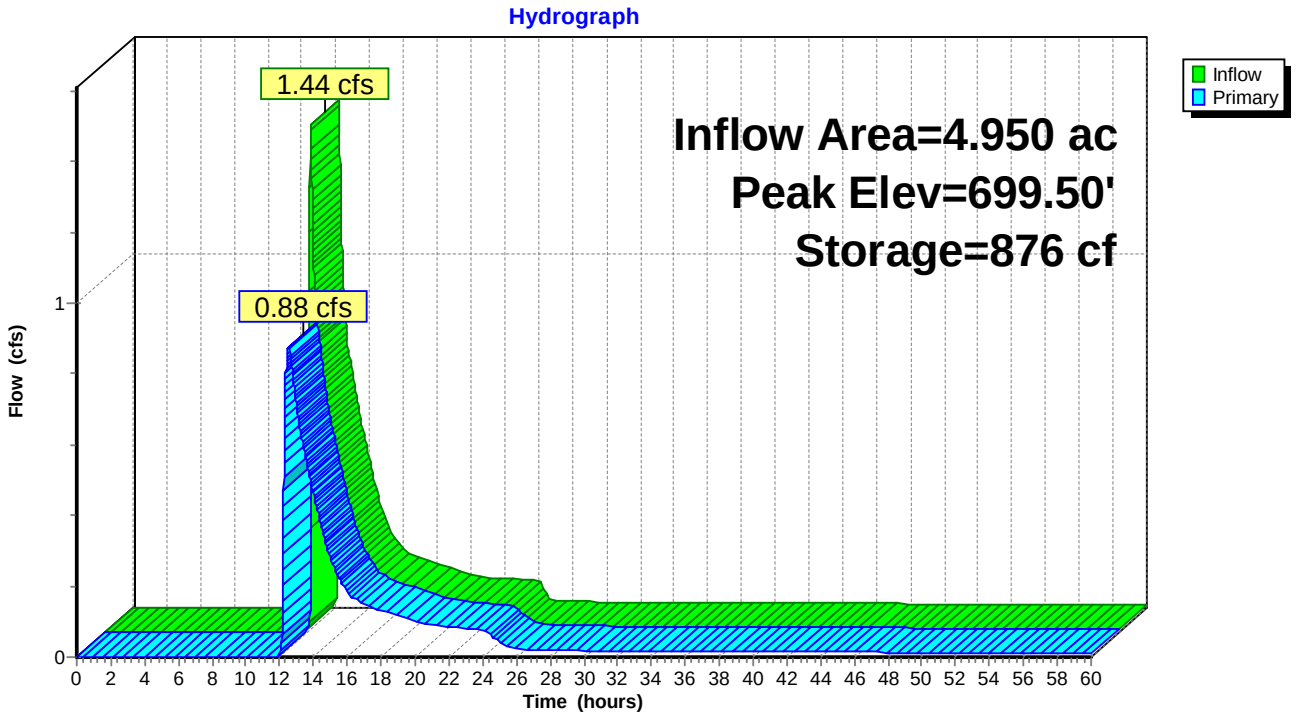
Volume	Invert	Avail.Storage	Storage Description
#1A	699.00'	4,075 cf	**34.75'W x 124.75'L x 3.75'H Field A** 16,256 cf Overall - 6,068 cf Embedded = 10,188 cf x 40.0% Voids
#2A	699.50'	6,068 cf	**ADS_StormTech SC-800 +Cap** x 119 Inside #1 Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap 119 Chambers in 7 Rows Cap Storage= 3.4 cf x 2 x 7 rows = 47.9 cf
#3	699.50'	82 cf	**4.00'D x 6.50'H Vertical Cone/Cylinder**
#4	702.75'	2,188 cf	**35.00'W x 125.00'L x 2.50'H Prismatoid** 10,938 cf Overall x 20.0% Voids
		12,413 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	699.00'	**15.0" Round Culvert** L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 699.00' / 698.75' S= 0.0357 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	699.00'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	701.15'	**18.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	702.25'	**4.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)

Primary OutFlow Max=0.88 cfs @ 12.51 hrs HW=699.50' (Free Discharge)
└**1=Culvert** (Inlet Controls 0.88 cfs @ 1.91 fps)
  ├**2=Orifice/Grate** (Passes 0.88 cfs of 0.95 cfs potential flow)
  ├**3=Orifice/Grate** (Controls 0.00 cfs)
  └**4=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

Pond 4P: Chambers



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=1.60"
Flow Length=541' Tc=19.9 min CN=82 Runoff=3.90 cfs 0.292 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=1.83"
Flow Length=262' Tc=8.1 min CN=85 Runoff=6.49 cfs 0.329 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=2.43"
Flow Length=230' Tc=8.5 min CN=92 Runoff=2.26 cfs 0.121 af

Reach 1R: Total Mitigated Inflow=3.80 cfs 0.701 af
Outflow=3.80 cfs 0.701 af

Pond 1P: SW Area Peak Elev=708.90' Storage=4,262 cf Inflow=3.90 cfs 0.292 af
Primary=1.73 cfs 0.292 af Secondary=0.00 cfs 0.000 af Outflow=1.73 cfs 0.292 af

Pond 2P: Bioretention Peak Elev=706.26' Storage=3,522 cf Inflow=9.12 cfs 0.716 af
Primary=8.70 cfs 0.702 af Secondary=0.00 cfs 0.000 af Outflow=8.70 cfs 0.702 af

Pond 3P: Existing Organic Filter Peak Elev=718.79' Storage=1,308 cf Inflow=2.26 cfs 0.121 af
Primary=1.60 cfs 0.087 af Secondary=0.65 cfs 0.007 af Outflow=2.25 cfs 0.095 af

Pond 4P: Chambers Peak Elev=700.51' Storage=4,452 cf Inflow=8.70 cfs 0.702 af
Outflow=3.80 cfs 0.701 af

Total Runoff Area = 4.950 ac Runoff Volume = 0.743 af Average Runoff Depth = 1.80"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

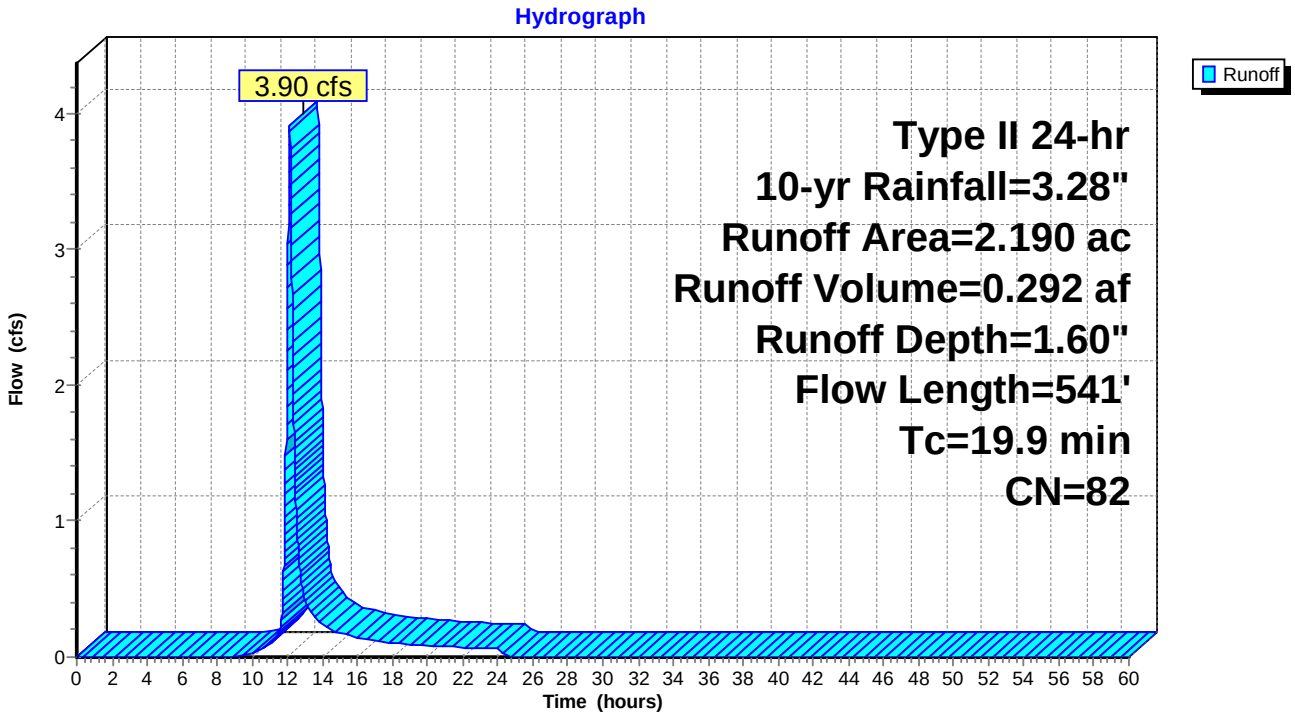
Runoff = 3.90 cfs @ 12.13 hrs, Volume= 0.292 af, Depth= 1.60"
Routed to Pond 1P : SW Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

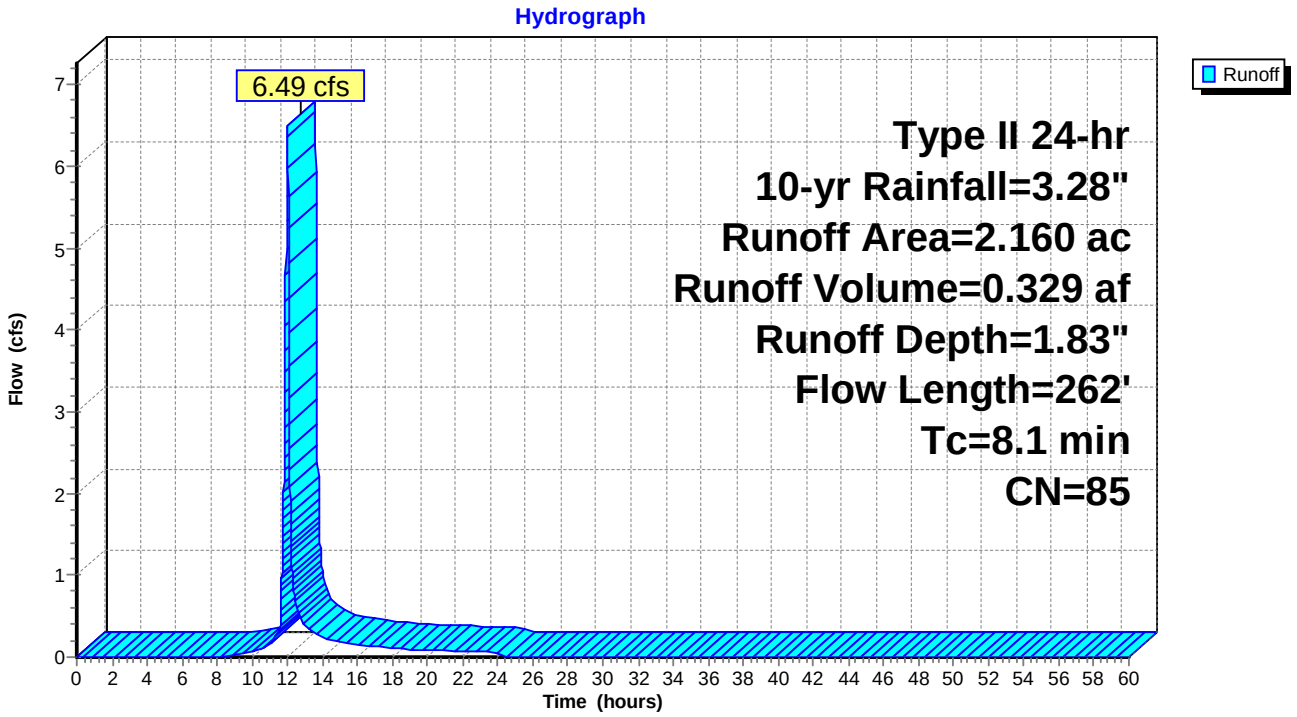
Runoff = 6.49 cfs @ 12.00 hrs, Volume= 0.329 af, Depth= 1.83"
Routed to Pond 2P : Bioretention

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

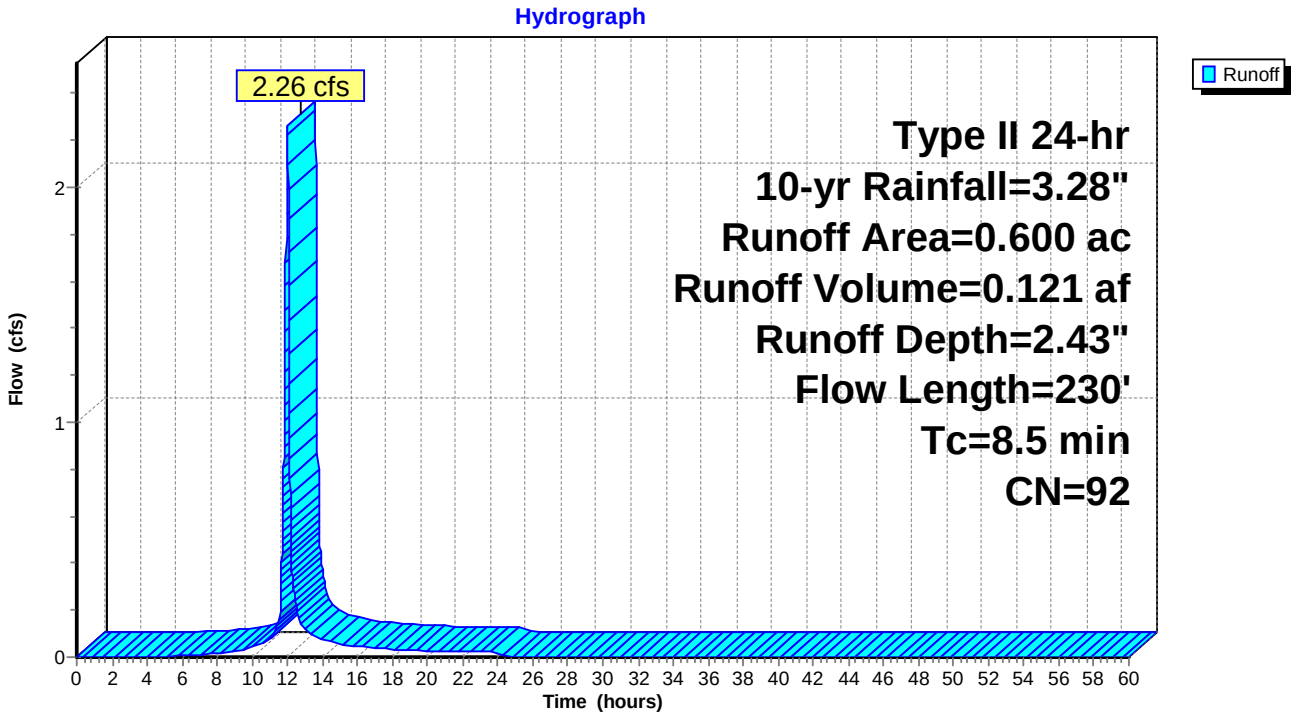
Runoff = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af, Depth= 2.43"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-yr Rainfall=3.28"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

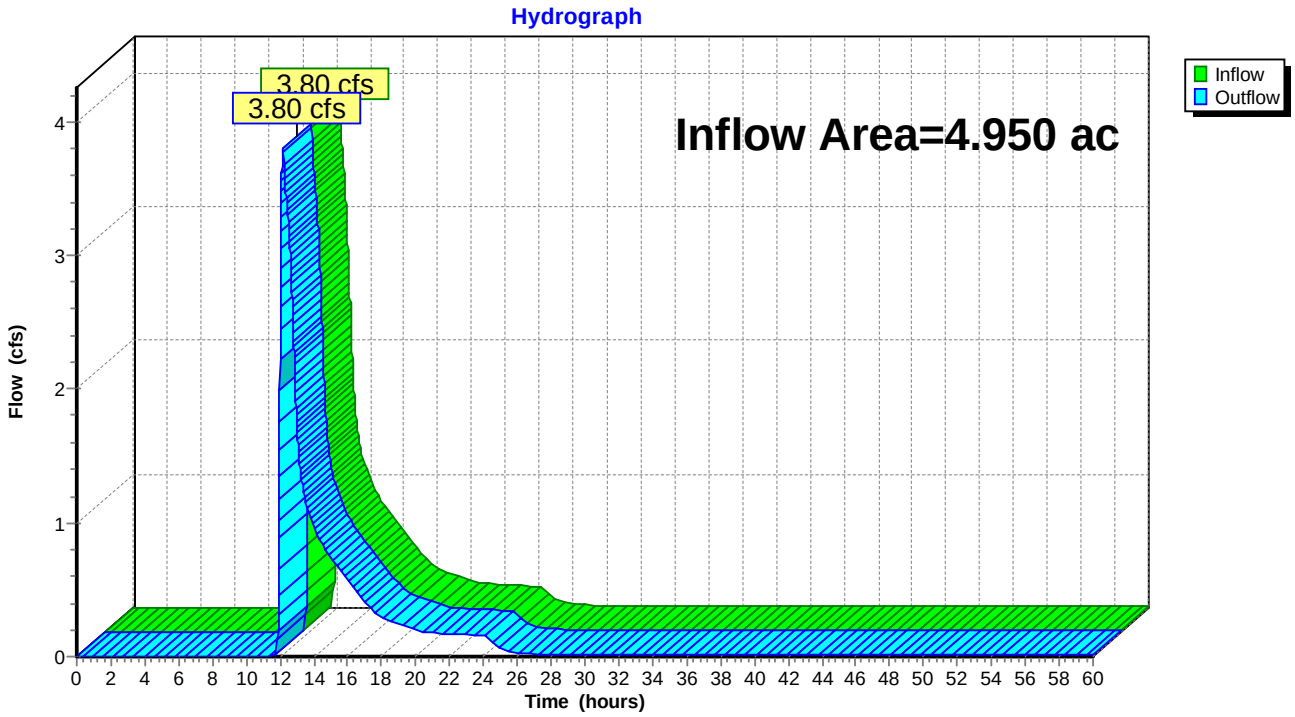


Summary for Reach 1R: Total Mitigated

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 1.70" for 10-yr event
Inflow = 3.80 cfs @ 12.17 hrs, Volume= 0.701 af
Outflow = 3.80 cfs @ 12.17 hrs, Volume= 0.701 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Mitigated



Summary for Pond 1P: SW Area

Inflow Area = 2.190 ac, 38.36% Impervious, Inflow Depth = 1.60" for 10-yr event
Inflow = 3.90 cfs @ 12.13 hrs, Volume= 0.292 af
Outflow = 1.73 cfs @ 12.37 hrs, Volume= 0.292 af, Atten= 56%, Lag= 14.2 min
Primary = 1.73 cfs @ 12.37 hrs, Volume= 0.292 af
Routed to Pond 2P : Bioretention
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 708.90' @ 12.37 hrs Surf.Area= 2,300 sf Storage= 4,262 cf

Plug-Flow detention time= 61.1 min calculated for 0.292 af (100% of inflow)
Center-of-Mass det. time= 60.9 min (905.7 - 844.7)

Volume	Invert	Avail.Storage	Storage Description
#1	706.00'	6,507 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

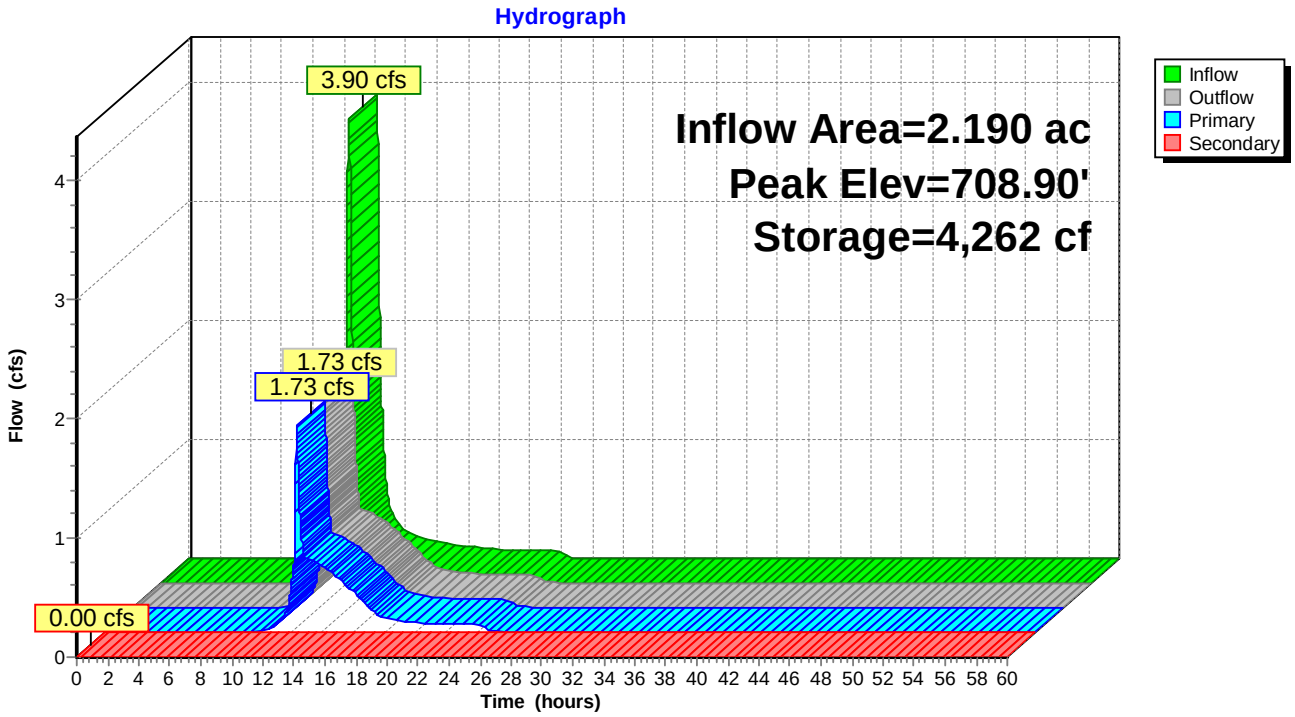
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
706.00	780	120.0	0	0	780
707.00	1,200	147.0	982	982	1,369
708.00	1,740	175.0	1,462	2,444	2,104
709.00	2,365	205.0	2,045	4,489	3,031
709.30	2,660	215.0	753	5,242	3,371
709.75	2,967	225.0	1,265	6,507	3,735

Device	Routing	Invert	Outlet Devices
#1	Primary	706.00'	**12.0" Round Culvert** L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 706.00' / 705.52' S= 0.0040 '/' Cc= 0.900 n= 0.011, Flow Area= 0.79 sf
#2	Device 1	706.00'	**2.7" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Device 1	708.80'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	709.55'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.72 cfs @ 12.37 hrs HW=708.90' (Free Discharge)
└**1=Culvert** (Passes 1.72 cfs of 4.54 cfs potential flow)
└**2=Orifice/Grate** (Orifice Controls 0.64 cfs @ 8.04 fps)
└**3=Orifice/Grate** (Weir Controls 1.08 cfs @ 1.05 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=706.00' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 1P: SW Area



Summary for Pond 2P: Bioretention

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 1.74" for 10-yr event
Inflow = 9.12 cfs @ 12.00 hrs, Volume= 0.716 af
Outflow = 8.70 cfs @ 12.03 hrs, Volume= 0.702 af, Atten= 5%, Lag= 1.6 min
Primary = 8.70 cfs @ 12.03 hrs, Volume= 0.702 af
Routed to Pond 4P : Chambers
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 706.26' @ 12.03 hrs Surf.Area= 5,221 sf Storage= 3,522 cf

Plug-Flow detention time= 113.8 min calculated for 0.702 af (98% of inflow)
Center-of-Mass det. time= 102.7 min (962.6 - 859.8)

Volume	Invert	Avail.Storage	Storage Description
#1	705.50'	7,792 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

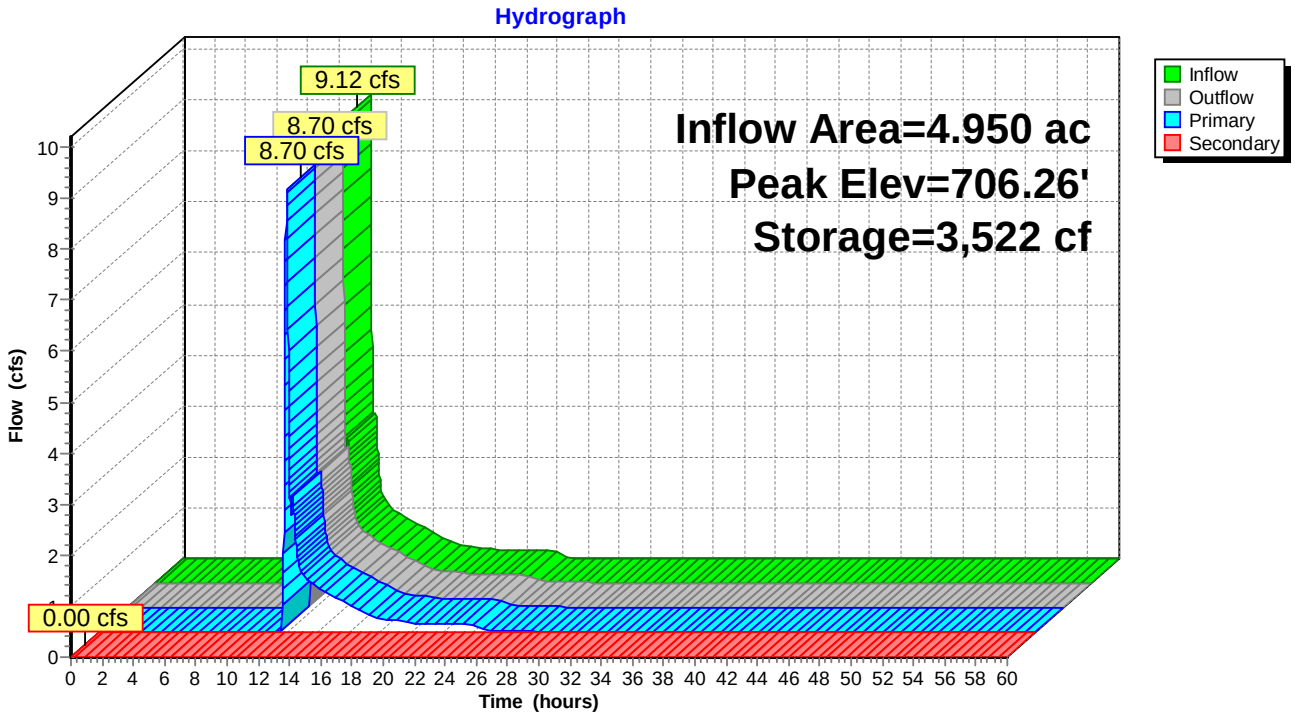
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
705.50	4,010	432.0	0	0	4,010
706.00	4,854	459.0	2,213	2,213	5,937
707.00	6,338	469.0	5,580	7,792	6,809

Device	Routing	Invert	Outlet Devices
#1	Primary	705.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	706.00'	**30.0" x 30.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Secondary	706.50'	**18.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=8.68 cfs @ 12.03 hrs HW=706.26' (Free Discharge)
└**1=Orifice/Grate** (Orifice Controls 0.02 cfs @ 4.08 fps)
└**2=Orifice/Grate** (Weir Controls 8.66 cfs @ 1.67 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=705.50' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 2P: Bioretention



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 2.43" for 10-yr event
Inflow = 2.26 cfs @ 12.00 hrs, Volume= 0.121 af
Outflow = 2.25 cfs @ 12.00 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.4 min
Primary = 1.60 cfs @ 12.00 hrs, Volume= 0.087 af
Routed to Pond 2P : Bioretention
Secondary = 0.65 cfs @ 12.00 hrs, Volume= 0.007 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.79' @ 12.00 hrs Surf.Area= 952 sf Storage= 1,308 cf

Plug-Flow detention time= 131.6 min calculated for 0.095 af (78% of inflow)
Center-of-Mass det. time= 47.0 min (843.1 - 796.0)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

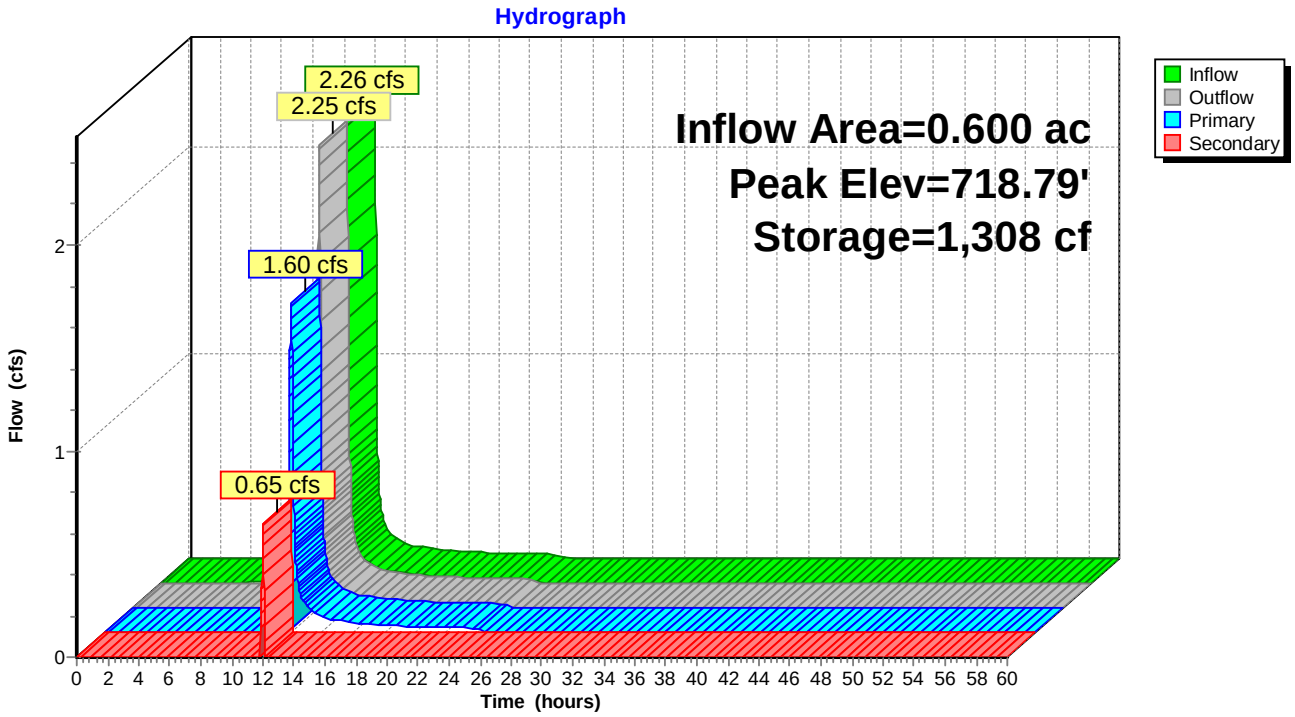
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=1.60 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**1=Culvert** (Passes 1.60 cfs of 4.19 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 1.60 cfs @ 1.29 fps)

Secondary OutFlow Max=0.61 cfs @ 12.00 hrs HW=718.78' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 0.61 cfs @ 0.44 fps)

Pond 3P: Existing Organic Filter



Summary for Pond 4P: Chambers

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 1.70" for 10-yr event
Inflow = 8.70 cfs @ 12.03 hrs, Volume= 0.702 af
Outflow = 3.80 cfs @ 12.17 hrs, Volume= 0.701 af, Atten= 56%, Lag= 8.8 min
Primary = 3.80 cfs @ 12.17 hrs, Volume= 0.701 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 700.51' @ 12.17 hrs Surf.Area= 4,348 sf Storage= 4,452 cf

Plug-Flow detention time= 25.7 min calculated for 0.701 af (100% of inflow)
Center-of-Mass det. time= 21.0 min (983.5 - 962.6)

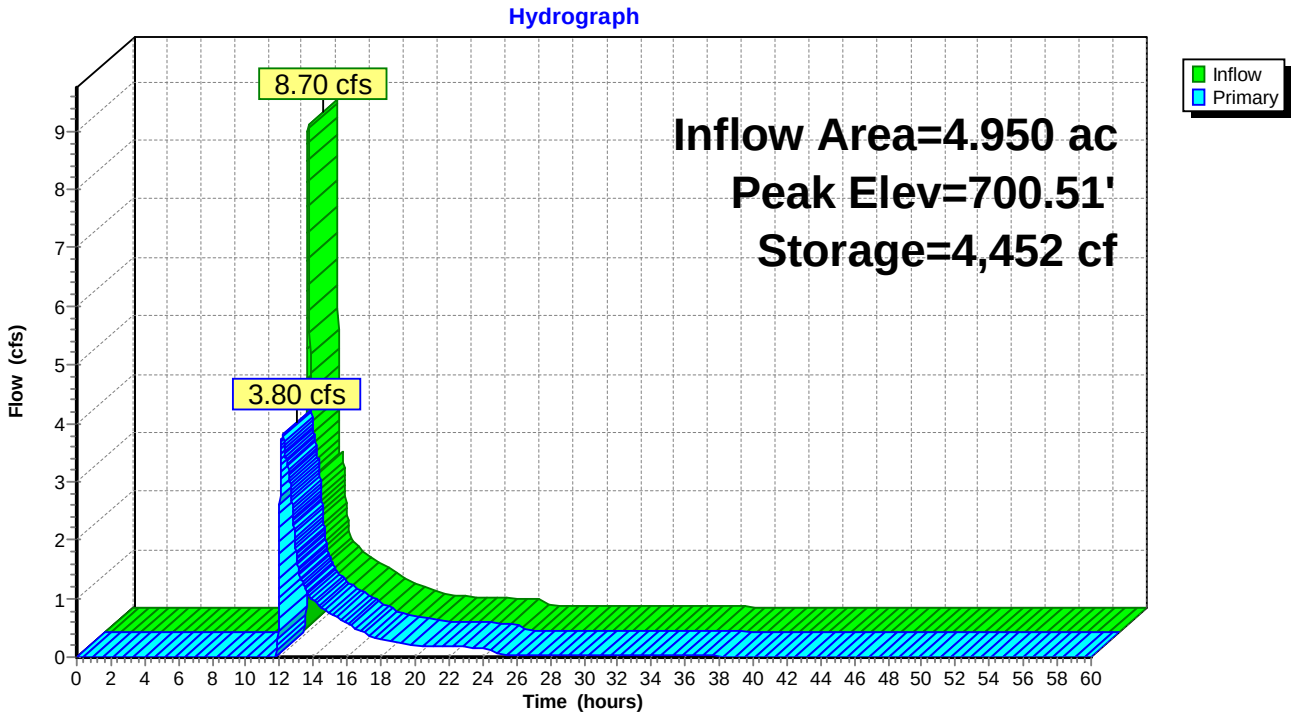
Volume	Invert	Avail.Storage	Storage Description
#1A	699.00'	4,075 cf	**34.75'W x 124.75'L x 3.75'H Field A** 16,256 cf Overall - 6,068 cf Embedded = 10,188 cf x 40.0% Voids
#2A	699.50'	6,068 cf	**ADS_StormTech SC-800 +Cap** x 119 Inside #1 Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap 119 Chambers in 7 Rows Cap Storage= 3.4 cf x 2 x 7 rows = 47.9 cf
#3	699.50'	82 cf	**4.00'D x 6.50'H Vertical Cone/Cylinder**
#4	702.75'	2,188 cf	**35.00'W x 125.00'L x 2.50'H Prismatoid** 10,938 cf Overall x 20.0% Voids
		12,413 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	699.00'	**15.0" Round Culvert** L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 699.00' / 698.75' S= 0.0357 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	699.00'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	701.15'	**18.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	702.25'	**4.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)

Primary OutFlow Max=3.80 cfs @ 12.17 hrs HW=700.51' (Free Discharge)
└**1=Culvert** (Passes 3.80 cfs of 4.39 cfs potential flow)
  ├**2=Orifice/Grate** (Orifice Controls 3.80 cfs @ 4.84 fps)
  ├**3=Orifice/Grate** (Controls 0.00 cfs)
  └**4=Sharp-Crested Vee/Trap Weir** (Controls 0.00 cfs)

Pond 4P: Chambers



Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1A: PRPDA-1A Runoff Area=2.190 ac 38.36% Impervious Runoff Depth=3.54"
Flow Length=541' Tc=19.9 min CN=82 Runoff=8.61 cfs 0.646 af

Subcatchment 1B: PRPDA-1B Runoff Area=2.160 ac 50.00% Impervious Runoff Depth=3.84"
Flow Length=262' Tc=8.1 min CN=85 Runoff=13.24 cfs 0.692 af

Subcatchment 2: PRPDA-2 Runoff Area=0.600 ac 78.33% Impervious Runoff Depth=4.59"
Flow Length=230' Tc=8.5 min CN=92 Runoff=4.11 cfs 0.229 af

Reach 1R: Total Mitigated Inflow=10.01 cfs 1.525 af
Outflow=10.01 cfs 1.525 af

Pond 1P: SW Area Peak Elev=709.73' Storage=6,441 cf Inflow=8.61 cfs 0.646 af
Primary=5.26 cfs 0.639 af Secondary=0.70 cfs 0.007 af Outflow=5.97 cfs 0.646 af

Pond 2P: Bioretention Peak Elev=706.41' Storage=4,336 cf Inflow=17.92 cfs 1.540 af
Primary=17.36 cfs 1.526 af Secondary=0.00 cfs 0.000 af Outflow=17.36 cfs 1.526 af

Pond 3P: Existing Organic Filter Peak Elev=718.82' Storage=1,345 cf Inflow=4.11 cfs 0.229 af
Primary=2.22 cfs 0.173 af Secondary=1.87 cfs 0.030 af Outflow=4.10 cfs 0.203 af

Pond 4P: Chambers Peak Elev=704.23' Storage=11,495 cf Inflow=17.36 cfs 1.526 af
Outflow=10.01 cfs 1.525 af

Total Runoff Area = 4.950 ac Runoff Volume = 1.567 af Average Runoff Depth = 3.80"
51.72% Pervious = 2.560 ac 48.28% Impervious = 2.390 ac

Summary for Subcatchment 1A: PRPDA-1A

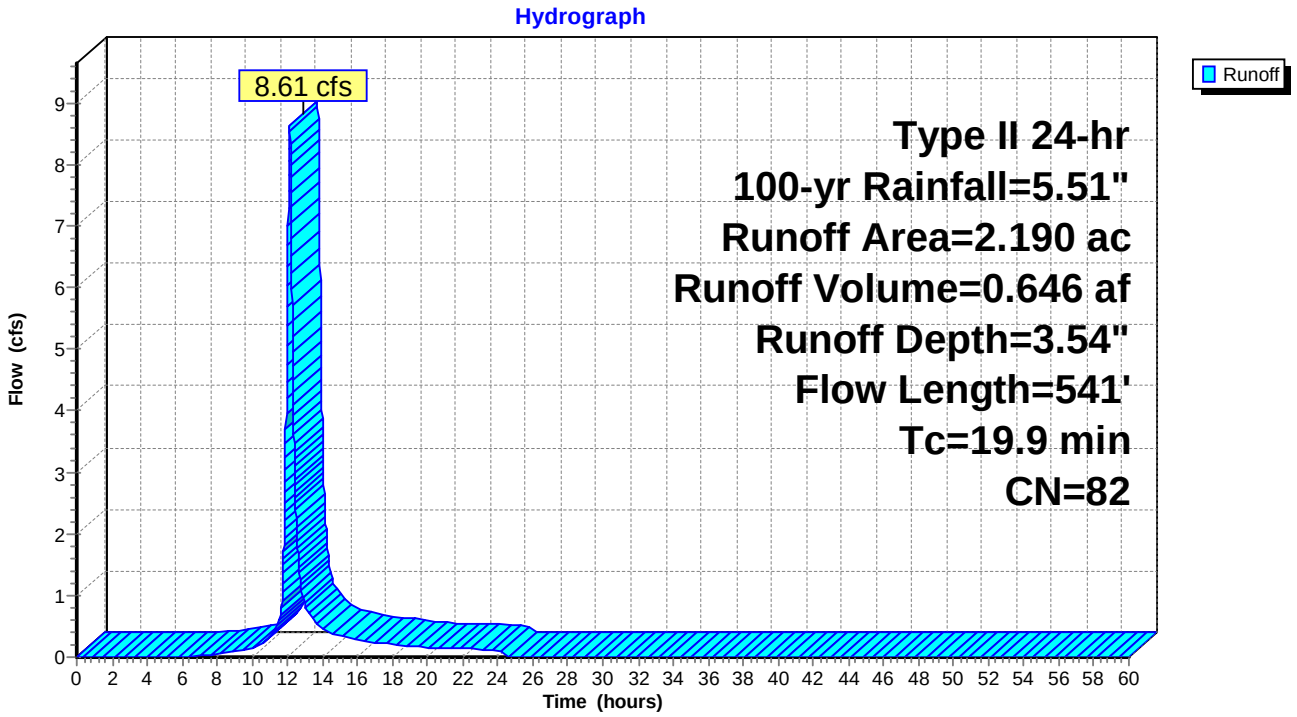
Runoff = 8.61 cfs @ 12.12 hrs, Volume= 0.646 af, Depth= 3.54"
Routed to Pond 1P : SW Area

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.520	74	>75% Grass cover, Good, HSG C
	0.830	70	Woods, Good, HSG C
*	0.840	98	Impervious Surface, HSG C
	2.190	82	Weighted Average
	1.350		61.64% Pervious Area
	0.840		38.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.1	78	0.0770	0.16		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
9.5	73	0.1250	0.13		**Sheet Flow,** Woods: Light underbrush n= 0.400 P2= 2.29"
1.1	49	0.0820	0.72		**Shallow Concentrated Flow,** Forest w/Heavy Litter Kv= 2.5 fps
0.1	16	0.0940	4.94		**Shallow Concentrated Flow,** Unpaved Kv= 16.1 fps
0.5	110	0.0390	4.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.6	215	0.0530	6.16	30.79	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
19.9	541	Total			

Subcatchment 1A: PRPDA-1A



Summary for Subcatchment 1B: PRPDA-1B

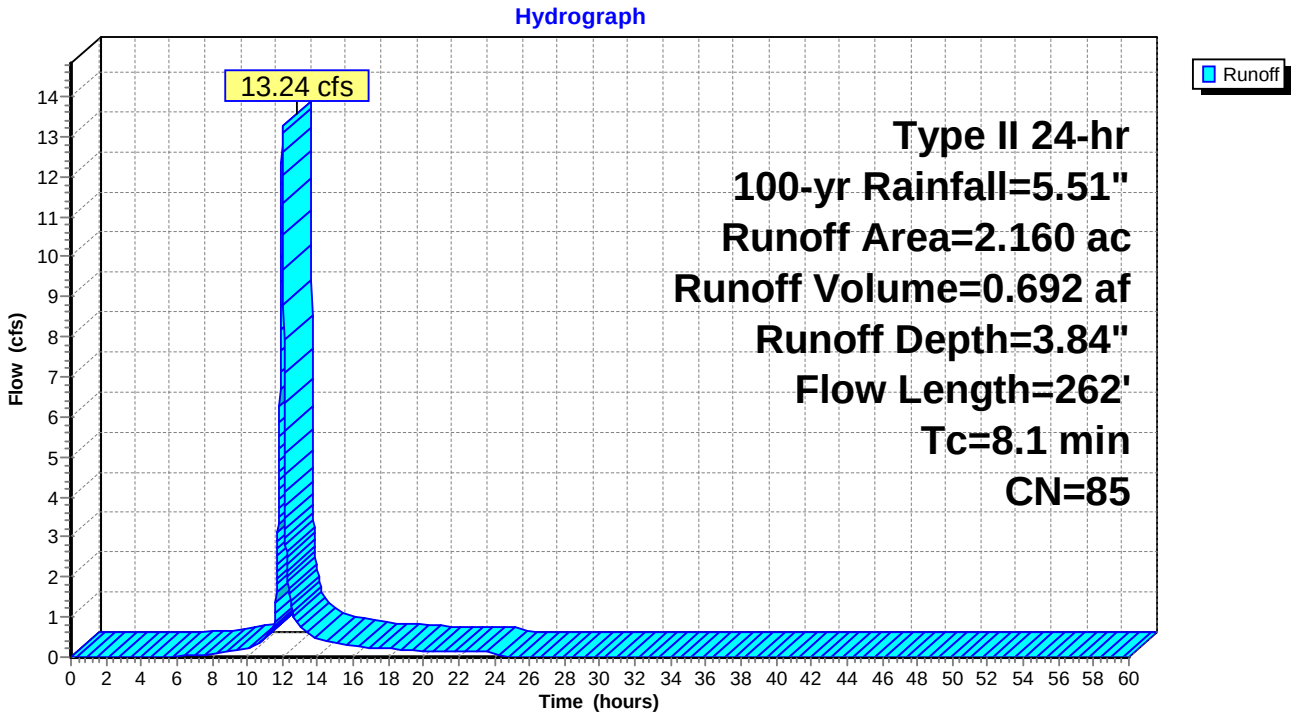
Runoff = 13.24 cfs @ 11.99 hrs, Volume= 0.692 af, Depth= 3.84"
Routed to Pond 2P : Bioretention

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.710	74	>75% Grass cover, Good, HSG C
	0.100	65	Brush, Good, HSG C
	0.270	70	Woods, Good, HSG C
*	1.080	98	Impervious, HSG C
	2.160	85	Weighted Average
	1.080		50.00% Pervious Area
	1.080		50.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.5	61	0.0570	0.14		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.4	139	0.0610	6.61	33.03	**Channel Flow,** Area= 5.0 sf Perim= 10.0' r= 0.50' n= 0.035
0.2	62	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.1	262	Total			

Subcatchment 1B: PRPDA-1B



Summary for Subcatchment 2: PRPDA-2

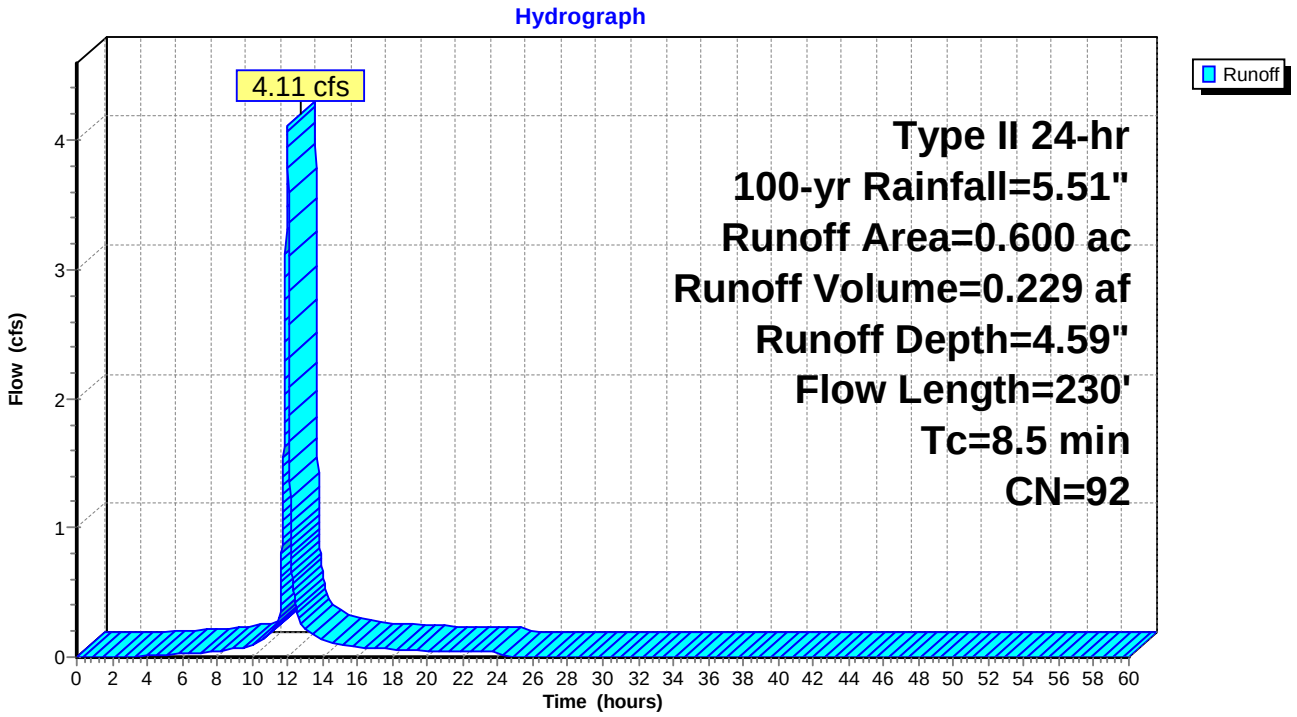
Runoff = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af, Depth= 4.59"
Routed to Pond 3P : Existing Organic Filter

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-yr Rainfall=5.51"

	Area (ac)	CN	Description
	0.100	74	>75% Grass cover, Good, HSG C
	0.030	65	Brush, Good, HSG C
*	0.470	98	Impervious, HSG C
	0.600	92	Weighted Average
	0.130		21.67% Pervious Area
	0.470		78.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	73	0.0890	0.17		**Sheet Flow,** Grass: Dense n= 0.240 P2= 2.29"
0.9	77	0.0390	1.44		**Sheet Flow,** Smooth surfaces n= 0.011 P2= 2.29"
0.2	32	0.0200	2.87		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.2	48	0.0100	4.91	3.86	**Pipe Channel,** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
8.5	230	Total			

Subcatchment 2: PRPDA-2

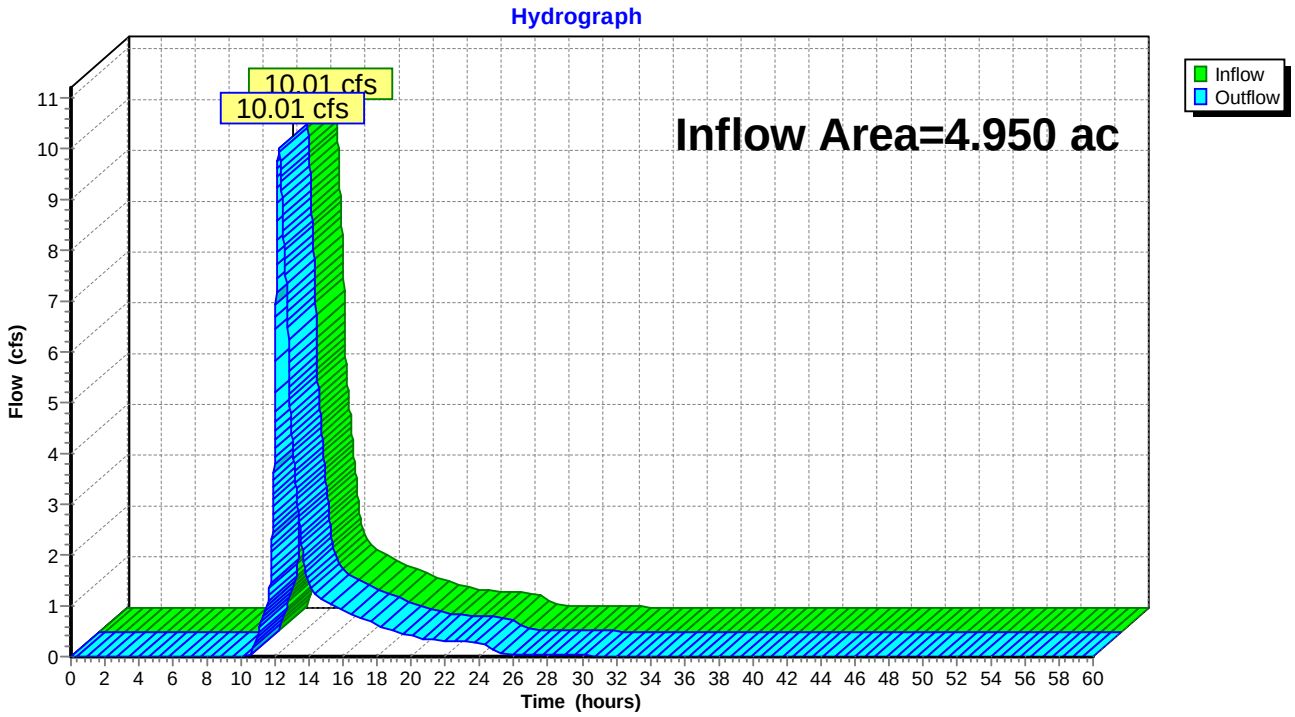


Summary for Reach 1R: Total Mitigated

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 3.70" for 100-yr event
Inflow = 10.01 cfs @ 12.19 hrs, Volume= 1.525 af
Outflow = 10.01 cfs @ 12.19 hrs, Volume= 1.525 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Reach 1R: Total Mitigated



Summary for Pond 1P: SW Area

Inflow Area = 2.190 ac, 38.36% Impervious, Inflow Depth = 3.54" for 100-yr event
Inflow = 8.61 cfs @ 12.12 hrs, Volume= 0.646 af
Outflow = 5.97 cfs @ 12.26 hrs, Volume= 0.646 af, Atten= 31%, Lag= 8.3 min
Primary = 5.26 cfs @ 12.26 hrs, Volume= 0.639 af
Routed to Pond 2P : Bioretention
Secondary = 0.70 cfs @ 12.26 hrs, Volume= 0.007 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 709.73' @ 12.26 hrs Surf.Area= 2,951 sf Storage= 6,441 cf

Plug-Flow detention time= 46.1 min calculated for 0.646 af (100% of inflow)
Center-of-Mass det. time= 46.2 min (868.4 - 822.1)

Volume	Invert	Avail.Storage	Storage Description
#1	706.00'	6,507 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

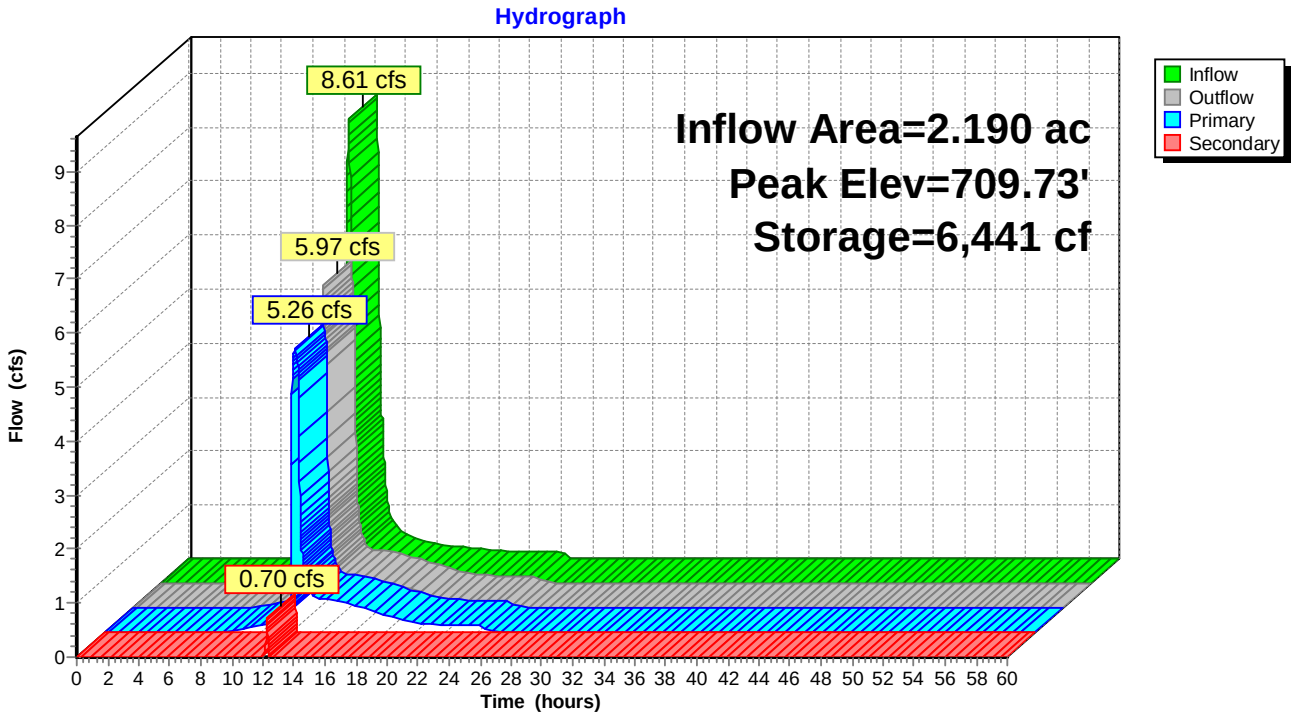
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
706.00	780	120.0	0	0	780
707.00	1,200	147.0	982	982	1,369
708.00	1,740	175.0	1,462	2,444	2,104
709.00	2,365	205.0	2,045	4,489	3,031
709.30	2,660	215.0	753	5,242	3,371
709.75	2,967	225.0	1,265	6,507	3,735

Device	Routing	Invert	Outlet Devices
#1	Primary	706.00'	**12.0" Round Culvert** L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 706.00' / 705.52' S= 0.0040 '/' Cc= 0.900 n= 0.011, Flow Area= 0.79 sf
#2	Device 1	706.00'	**2.7" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Device 1	708.80'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Secondary	709.55'	**4.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=5.26 cfs @ 12.26 hrs HW=709.73' (Free Discharge)
└**1=Culvert** (Barrel Controls 5.26 cfs @ 6.70 fps)
└**2=Orifice/Grate** (Passes < 0.73 cfs potential flow)
└**3=Orifice/Grate** (Passes < 28.98 cfs potential flow)

Secondary OutFlow Max=0.70 cfs @ 12.26 hrs HW=709.73' (Free Discharge)
└**4=Broad-Crested Rectangular Weir** (Weir Controls 0.70 cfs @ 0.99 fps)

Pond 1P: SW Area



Summary for Pond 2P: Bioretention

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth = 3.73" for 100-yr event
Inflow = 17.92 cfs @ 12.00 hrs, Volume= 1.540 af
Outflow = 17.36 cfs @ 12.02 hrs, Volume= 1.526 af, Atten= 3%, Lag= 1.3 min
Primary = 17.36 cfs @ 12.02 hrs, Volume= 1.526 af
Routed to Pond 4P : Chambers
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 706.41' @ 12.02 hrs Surf.Area= 5,442 sf Storage= 4,336 cf

Plug-Flow detention time= 58.5 min calculated for 1.526 af (99% of inflow)
Center-of-Mass det. time= 52.8 min (884.7 - 831.8)

Volume	Invert	Avail.Storage	Storage Description
#1	705.50'	7,792 cf	**Custom Stage Data (Irregular)** Listed below (Recalc)

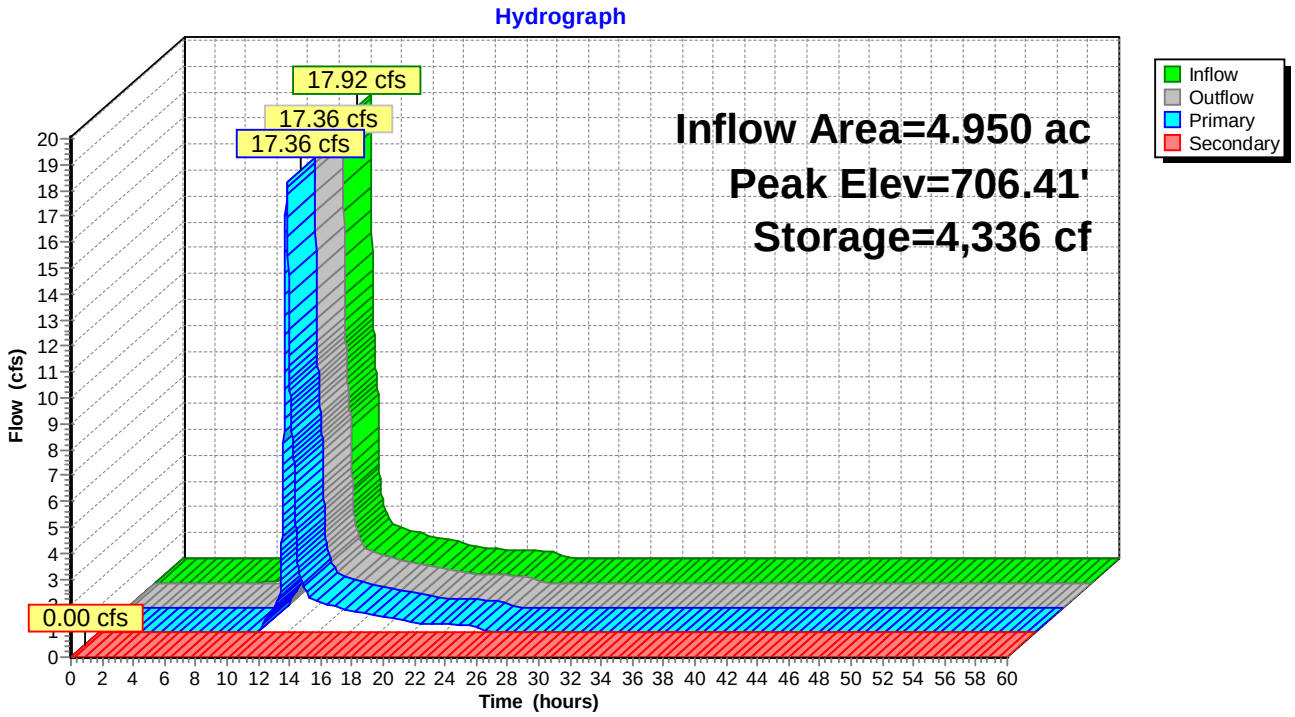
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
705.50	4,010	432.0	0	0	4,010
706.00	4,854	459.0	2,213	2,213	5,937
707.00	6,338	469.0	5,580	7,792	6,809

Device	Routing	Invert	Outlet Devices
#1	Primary	705.50'	**1.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	706.00'	**30.0" x 30.0" Horiz. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads
#3	Secondary	706.50'	**18.0' long x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=17.34 cfs @ 12.02 hrs HW=706.41' (Free Discharge)
1=Orifice/Grate (Orifice Controls 0.02 cfs @ 4.49 fps)
2=Orifice/Grate (Weir Controls 17.32 cfs @ 2.10 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=705.50' (Free Discharge)
3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 2P: Bioretention



Summary for Pond 3P: Existing Organic Filter

Inflow Area = 0.600 ac, 78.33% Impervious, Inflow Depth = 4.59" for 100-yr event
Inflow = 4.11 cfs @ 12.00 hrs, Volume= 0.229 af
Outflow = 4.10 cfs @ 12.00 hrs, Volume= 0.203 af, Atten= 0%, Lag= 0.3 min
Primary = 2.22 cfs @ 12.00 hrs, Volume= 0.173 af
Routed to Pond 2P : Bioretention
Secondary = 1.87 cfs @ 12.00 hrs, Volume= 0.030 af
Routed to Pond 2P : Bioretention

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 718.82' @ 12.00 hrs Surf.Area= 967 sf Storage= 1,345 cf

Plug-Flow detention time= 93.8 min calculated for 0.203 af (88% of inflow)
Center-of-Mass det. time= 36.4 min (815.1 - 778.6)

Volume	Invert	Avail.Storage	Storage Description
#1	715.50'	1,522 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

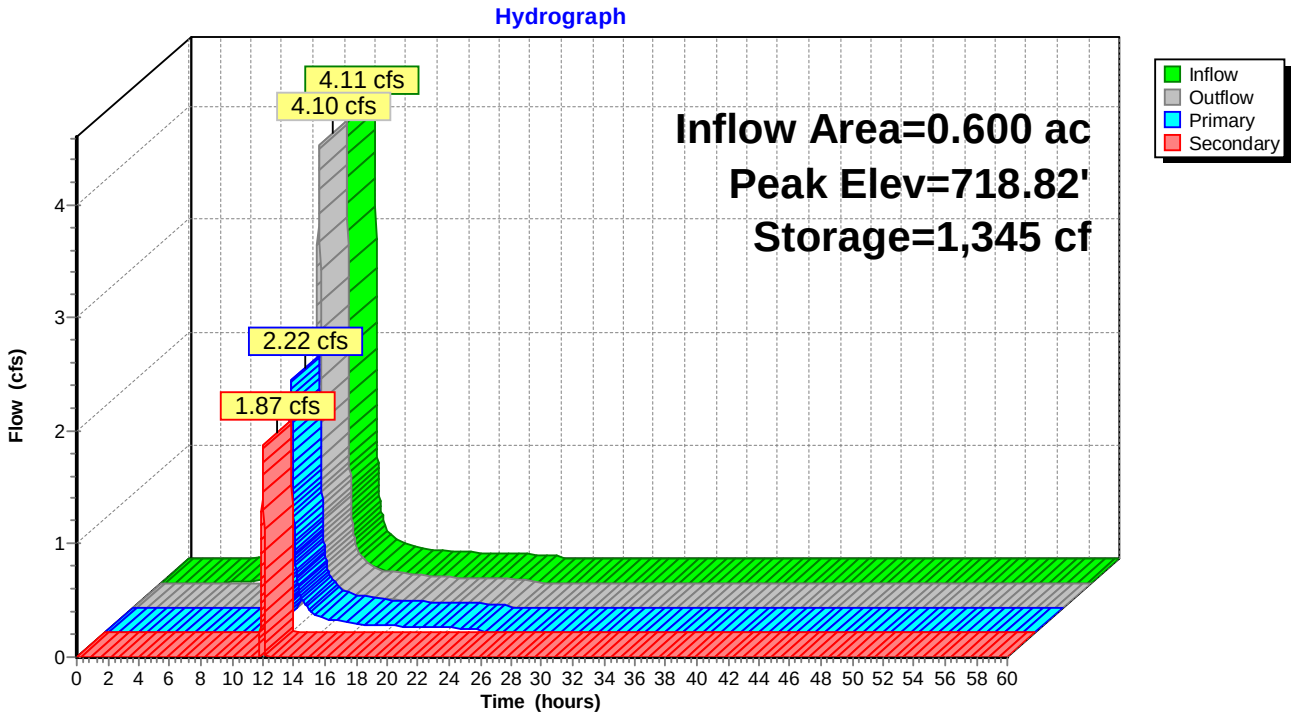
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
715.50	0	0	0
716.00	26	7	7
717.00	324	175	182
718.00	662	493	675
719.00	1,032	847	1,522

Device	Routing	Invert	Outlet Devices
#1	Primary	716.32'	**12.0" Round Culvert** L= 24.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 716.32' / 716.20' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	718.63'	**24.0" x 24.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Secondary	718.75'	**40.0' long + 3.0 '/' SideZ x 5.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88

Primary OutFlow Max=2.22 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**1=Culvert** (Passes 2.22 cfs of 4.23 cfs potential flow)
└**2=Orifice/Grate** (Weir Controls 2.22 cfs @ 1.44 fps)

Secondary OutFlow Max=1.87 cfs @ 12.00 hrs HW=718.82' (Free Discharge)
└**3=Broad-Crested Rectangular Weir** (Weir Controls 1.87 cfs @ 0.63 fps)

Pond 3P: Existing Organic Filter



Summary for Pond 4P: Chambers

Inflow Area = 4.950 ac, 48.28% Impervious, Inflow Depth > 3.70" for 100-yr event
Inflow = 17.36 cfs @ 12.02 hrs, Volume= 1.526 af
Outflow = 10.01 cfs @ 12.19 hrs, Volume= 1.525 af, Atten= 42%, Lag= 10.4 min
Primary = 10.01 cfs @ 12.19 hrs, Volume= 1.525 af
Routed to Reach 1R : Total Mitigated

Routing by Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs / 2
Peak Elev= 704.23' @ 12.19 hrs Surf.Area= 8,723 sf Storage= 11,495 cf

Plug-Flow detention time= 22.0 min calculated for 1.525 af (100% of inflow)
Center-of-Mass det. time= 19.8 min (904.5 - 884.7)

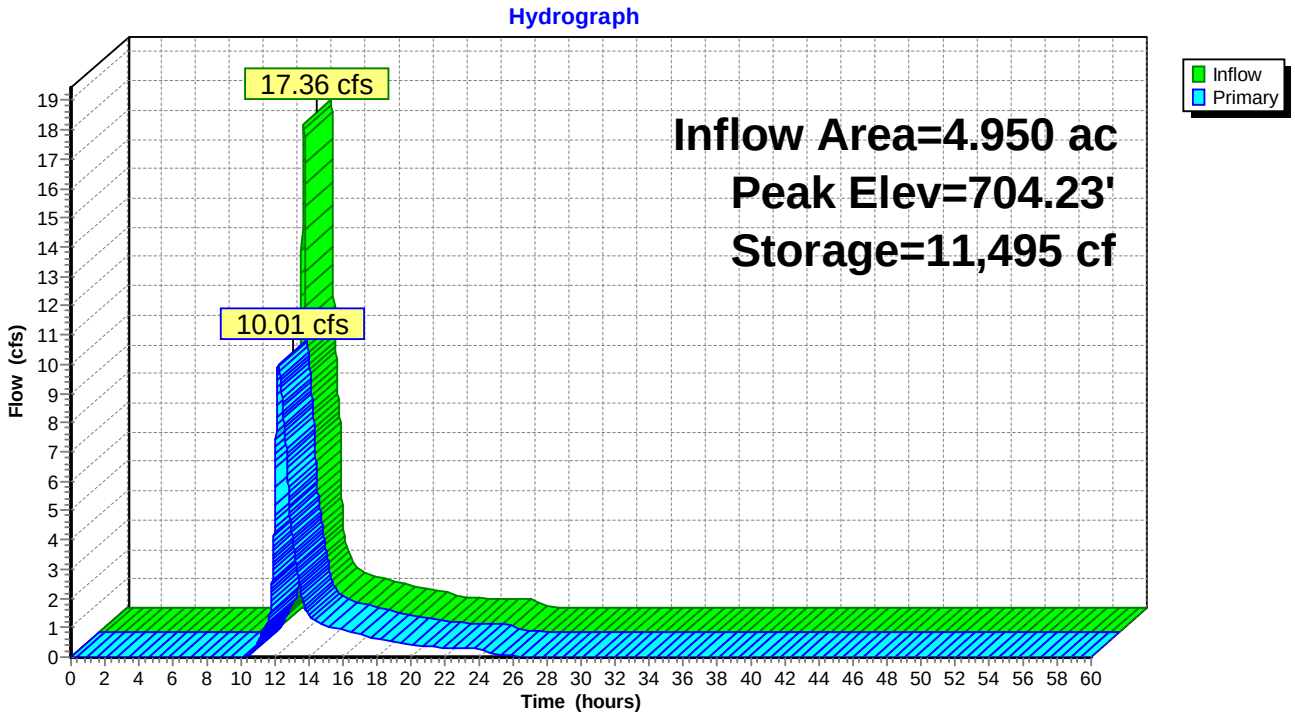
Volume	Invert	Avail.Storage	Storage Description
#1A	699.00'	4,075 cf	**34.75'W x 124.75'L x 3.75'H Field A** 16,256 cf Overall - 6,068 cf Embedded = 10,188 cf x 40.0% Voids
#2A	699.50'	6,068 cf	**ADS_StormTech SC-800 +Cap** x 119 Inside #1 Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap 119 Chambers in 7 Rows Cap Storage= 3.4 cf x 2 x 7 rows = 47.9 cf
#3	699.50'	82 cf	**4.00'D x 6.50'H Vertical Cone/Cylinder**
#4	702.75'	2,188 cf	**35.00'W x 125.00'L x 2.50'H Prismatoid** 10,938 cf Overall x 20.0% Voids
		12,413 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	699.00'	**15.0" Round Culvert** L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 699.00' / 698.75' S= 0.0357 '/' Cc= 0.900 n= 0.011, Flow Area= 1.23 sf
#2	Device 1	699.00'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Device 1	701.15'	**18.0" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	702.25'	**4.0' long Sharp-Crested Vee/Trap Weir** Cv= 2.62 (C= 3.28)

Primary OutFlow Max=10.01 cfs @ 12.19 hrs HW=704.23' (Free Discharge)
└**1=Culvert** (Inlet Controls 10.01 cfs @ 8.15 fps)
  ├**2=Orifice/Grate** (Passes < 8.22 cfs potential flow)
  ├**3=Orifice/Grate** (Passes < 11.57 cfs potential flow)
  └**4=Sharp-Crested Vee/Trap Weir** (Passes < 36.39 cfs potential flow)

Pond 4P: Chambers



Bioretention Sizing Calculations

Bioretention Sizing Worksheet

$$Af = WQv \times (df) / [k \times (hf + df)(tf)]$$

where:

Af = the required surface area (square feet)

WQv = water quality volume (cubic feet)

df = depth of soil medium (feet)

k = the hydraulic conductivity (ft/day), usually set at 4 ft/day when soil is loosely placed in the planter, but can be varied depending on the propoerties of the soil media. Some other reported conductivity values are:

Sand:	3.5 ft/day (Claytor and Schueler, 1996)
Peat:	2.0 ft/day (Galli 1990)
Leaf Compost:	8.7 ft/day (Claytor and Schueler, 1996)
Bioretention Soil:	1.0 ft/day (NYSSMDM, 2024)

hf = average height of water above the planter bed

tf = the design time to filter the treatment volume through the filter media

Sand Filters:	1.67 days (NYSSMDM, 2024)
Bioretention Soil:	2 days (NYSSMDM, 2024)

Step 1 - Determine WQv for Drainage to Bioretention Area

		value	units	*Restrictions*	
Enter Design Storm	P	1.00	in		
Enter Impervious Area	I	67,529	sf		
Enter Area	A	215,495	sf	*< 5 acres (217,800sq-ft)*	
Percent Impervious Area	%I	31%			
Runoff Volume	Rv	0.33			
WQv	WQv	5,963	cuft	0.137	acft

Step 2 - Calculate Minimum Filter Area

		value	units	*Restrictions*
Enter WQv	WQv	5,963	cuft	
Enter depth of soil media	df	2.5	ft	*2.5-4.0 feet*
Enter hydraulic conductivity	k	1	ft/day	
Enter average height of ponding	hf	0.5	ft	*6 inch maximum*
Enter filter time	tf	2	days	
Required Area of Filter	Af	2,484	sf	

Step 3 - Determine Actual Bioretention Area

Measured Filter Area	3,712	sf	
Maximum Treatment Volume	8,909	cuft	0.205 acft

Step 4 - Determine Runoff Reduction and Water Quality Volume

Total RRv Provided	0.082	ac-ft
Minimum RRv Required	0.037	ac-ft
WQv Considered	0.055	ac-ft
(based on tributary area)		
Total WQv/RRv Provided	0.137	ac-ft

Channel Protection Calculations

Channel Protection Volume

According to Appendix B of the New York State Stormwater Management Design Manual (NYSSMDM), the required storage volume can be calculated using the following formula:

$$Vs = \frac{(Vs/Vr)(Qd)(A)}{12}$$

Where:
- Vs = required storage volume (acre-feet)
- Vr = runoff volume (acre-feet)
- Qd = post-developed runoff for the design storm (inches)
- A = total drainage area (acres)

Vs/Vr can be calculated using the following formula:

$$Vs/Vr = 0.682 - 1.43(qo/qi) + 1.64(qo/qi)^2 - 0.804(qo/qi)^3$$

Where: Vs and Vr are defined above
- qo = peak outflow discharge (cfs)
- qi = peak inflow discharge (cfs)

In order to determine qo/qi, first calculate Unit Peak Discharge (qu), csm/in

qu = [qi / Drainage Area (sq mi)] / Qd

As shown in the hydrograph summary report in Appendix C of this SWPPP,

qi =	3.58	cfs
Post-Developed Runoff Volume =	0.249	acre-feet
Drainage Area =	4.35	acres

$$Qd = \frac{\text{Post-Developed Runoff Volume}}{\text{Drainage Area}} \times 12$$

Qd = 0.69 inches

Therefore,

qu = 767 csm/in

According to Figure B.1 of the NYSSMDM,

qo/qi = 0.030

Therefore,

Vs/Vr = 0.641

The required channel protection volume is as follows:

Vs = 0.159 acre-feet

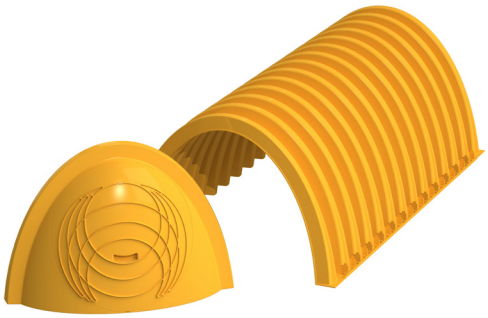
Provided RRv =	**0.082**	**acre-feet**
Remaining Required CPv =	**0.077**	**acre-feet**
Provided CPv =	**0.032**	**acre feet (Small SW Mgmt Pond)**
Provided CPv =	**0.060**	**acre-feet (Bioretention Ponding Area)**
Total CPv Provided =	**0.174**	**acre-feet**

APPENDIX D

Underground Detention System Information

StormTech® SC-800 Chamber

Designed to meet the most stringent industry performance standards for superior structural integrity while providing designers with a cost-effective method to save valuable land and protect water resources. The StormTech system is designed primarily to be used under parking lots, thus maximizing land usage for private (commercial) and public applications. StormTech chambers can also be used in conjunction with Green Infrastructure, thus enhancing the performance and extending the service life of these practices.



Nominal Chamber Specifications
(not to scale)

Size (L x W x H)
85.4" x 51" x 33"
2169 mm x 1295 mm x 838 mm

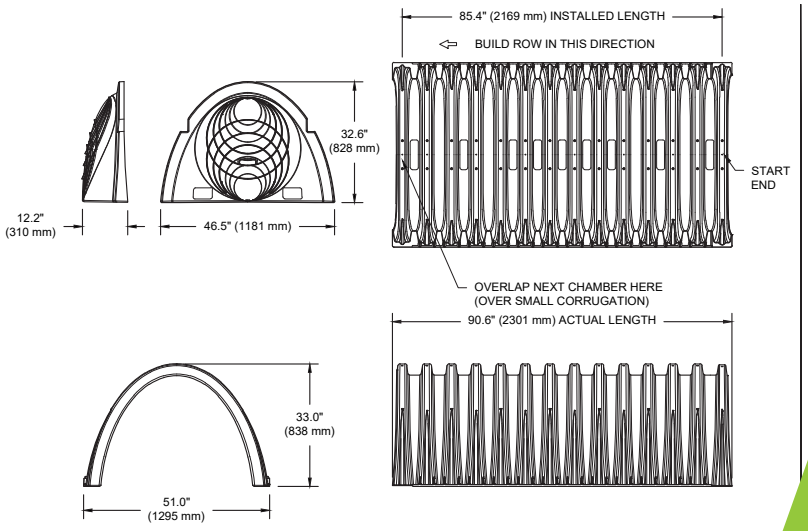
Chamber Storage
50.6 ft³ (1.43 m³)

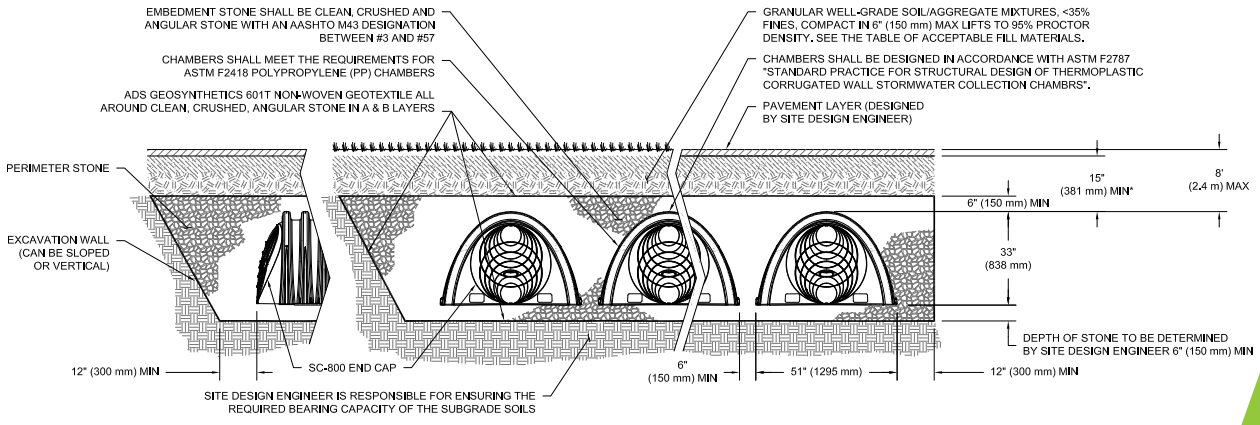
Min. Installed Storage*
81.0 ft³ (2.29 m³)

Weight
81.8 lbs (37.1 kg)

Shipping
30 chambers/pallet
60 end caps/pallet
12 pallets/truck

*Assumes 6" (150 mm) stone above, below and between chambers and 40% stone porosity.





*MINIMUM COVER TO BOTTOM OF FLEXIBLE PAVEMENT. FOR UNPAVED INSTALLATIONS WHERE RUTTING FROM VEHICLES MAY OCCUR, INCREASE COVER TO 21" (533 mm).

ADS StormTech™

StormTech SC-800 Specifications

Cumulative Storage Volumes Per Chamber

Assumes 40% Stone Porosity. Calculations are Based Upon a 6" (150 mm) Stone Base Under Chambers.

Depth of Water in System Inches (mm)	Cumulative Chamber Storage ft³ (m³)	Total System Cumulative Storage ft³ (m³)
45 (1143)	50.62 (1.433)	81.08 (2.296)
44 (1118)	50.62 (1.433)	79.96 (2.264)
43 (1092)	50.62 (1.433)	78.83 (2.232)
42 (1067)	50.62 (1.433)	77.70 (2.200)
41 (1041)	50.62 (1.433)	76.57 (2.168)
40 (1016)	50.62 (1.433)	75.44 (2.136)
39 (991)	50.62 (1.433)	74.31 (2.104)
38 (965)	50.55 (1.431)	73.14 (2.071)
37 (940)	50.35 (1.426)	71.90 (2.036)
36 (914)	50.07 (1.418)	70.60 (1.999)
35 (889)	49.56 (1.403)	69.17 (1.959)
34 (864)	48.82 (1.382)	67.60 (1.914)
33 (838)	47.93 (1.357)	65.94 (1.867)
32 (813)	46.91 (1.328)	64.20 (1.818)
31 (787)	45.79 (1.297)	62.40 (1.767)
30 (762)	44.58 (1.262)	60.55 (1.715)
29 (737)	43.28 (1.226)	58.65 (1.661)
28 (711)	41.91 (1.187)	56.70 (1.606)
27 (686)	40.47 (1.146)	54.71 (1.549)
26 (660)	38.96 (1.103)	52.68 (1.492)
25 (635)	37.40 (1.059)	50.61 (1.433)
24 (610)	35.78 (1.013)	48.51 (1.374)
23 (584)	34.10 (0.966)	46.38 (1.313)
22 (559)	32.38 (0.917)	44.22 (1.252)
21 (533)	30.61 (0.867)	42.03 (1.190)
20 (508)	28.80 (0.816)	39.82 (1.128)
19 (483)	26.95 (0.763)	37.58 (1.064)
18 (457)	25.06 (0.710)	35.32 (1.000)
17 (432)	23.13 (0.655)	33.04 (0.936)
16 (406)	21.17 (0.599)	30.74 (0.870)
15 (381)	19.17 (0.543)	28.42 (0.805)
14 (356)	17.14 (0.485)	26.08 (0.739)
13 (330)	15.09 (0.427)	23.72 (0.672)
12 (305)	13.00 (0.368)	21.34 (0.604)
11 (279)	10.89 (0.308)	18.95 (0.537)
10 (254)	8.76 (0.248)	16.54 (0.468)
9 (229)	6.60 (0.187)	14.12 (0.400)
8 (203)	4.42 (0.125)	11.69 (0.331)
7 (178)	2.22 (0.063)	9.24 (0.262)
6 (152)	0 (0)	6.78 (0.192)
5 (127)	0 (0)	5.65 (0.160)
4 (102)	0 (0)	4.52 (0.128)
3 (76)	0 (0)	3.39 (0.096)
2 (51)	0 (0)	2.26 (0.064)
1 (25)	0 (0)	1.13 (0.032)

Stone Cover

Stone Foundation

Note: Add 1.13 ft³ (0.032 m³) of storage for each additional inch (25 mm) of stone foundation.

Storage Volume Per Chamber ft³ (m³)

	Bare Chamber Storage ft³ (m³)	Chamber and Stone Foundation Depth in. (mm)		
		6 (150)	12 (300)	18 (450)
SC-800 Chamber	50.6 (1.43)	81.0 (2.29)	87.8 (2.48)	94.6 (2.6)

Note: Assumes 6" (150 mm) stone above chambers, 6" (150 mm) row spacing and 40% stone porosity.

Amount of Stone Per Chamber

English Tons (yds³)	Stone Foundation Depth		
	6"	12"	18"
SC-800	3.9 (2.8)	4.8 (3.4)	5.7 (4.1)
Metric Kilograms (m³)	**150 mm**	**300 mm**	**450 mm**
SC-800	3580 (2.2)	4380 (2.6)	5170 (3.1)

Note: Assumes 6" (150 mm) of stone above and between chambers.

Volume Excavation Per Chamber yd³ (m³)

	Stone Foundation Depth		
	6" (150 mm)	12" (300 mm)	18" (450 mm)
SC-800	5.6 (4.3)	6.3 (4.8)	6.9 (5.3)

Note: Assumes 6" (150 mm) of row separation and 15" (375 mm) of cover. The volume of excavation will vary as depth of cover increases.

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APPENDIX E

Notice of Intent

SWPPP Preparer Certification Form

Owner/Operator Certification Form

Construction General Permit (CGP) Electronic Notice of Intent (eNOI) GP-0-25-001

version 1.18

(Submission #: HQQ-0ZM3-X4155, version 1)

Details

Originally Started By	Kristy Harris
Alternate Identifier	Auburn Self Storage—Region 7
Submission ID	HQQ-0ZM3-X4155
Status	Draft

Form Input

Eligibility

Disturbance Threshold

1. Will the construction activity involve soil disturbances listed in Part I.A.1 of GP-0-25-001?
Yes

1.a. Will any runoff from the site enter a sewer system classified as a combined sewer?
No

1.b. Is this a remediation project being done under a Department approved work plan (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) with a SWPPP which meets the substantive requirements of GP-0-25-001?
No

1.c. Is the construction activity related to a stormwater discharge that does not require a permit as described in 40 CFR 122.3(e), e.g. non-point source agriculture or silviculture activities?
No

Other SPDES Permits

2. Will the discharge from the construction activity meet all conditions listed in Part I.A.2 of GP-0-25-001?
Yes

Threatened and Endangered Species

3. Will the construction activity potentially adversely affect a species that is endangered or threatened per Part I.A.3.?
No

State Historic Preservation Act (SHPA)

4. Is the construction activity designated by the Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP), pursuant to 9 NYCRR §§428.12 or 428.13 as exempt from the SHPA review (see Attachment 2 of the Letter of Resolution between NYSDEC and OPRHP, dated January 9, 2015)?
No

4.a. Will the construction activity:

a) occur within an archeologically sensitive area indicated on the sensitivity map, or

b) have the potential to affect a property that is listed or determined to be eligible for listing on the National or State Registers of Historic Places, or

c) include a new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old and OPRHP, a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined is a historically/archeologically significant building, structure, or object:

- 1-5 acres of disturbance—20 feet
- 5-20 acres of disturbance—50 feet
- 20+ acres of disturbance—100 feet?

No

4.b. Is there documentation at the construction site demonstrating:

a) that the construction activity is not within an archeologically sensitive area indicated on the sensitivity map, and that the construction activity is not immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and

b) that there is no new permanent building to be built 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 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?

Yes

State Environmental Quality Review (SEQR)

5. Is the construction activity subject to SEQR (Part I.A.5.), or the equivalent environmental review from another NYS or federal agency (Part I.A.6.)?
Yes

5.a. Has the owner/operator obtained documentation that the project review pursuant to SEQR, or the equivalent, has been satisfied per Part I.A.5. or I.A.6. of GP-0-25-001?
Yes

Uniform Procedures Act (UPA) Permits

6. Has the owner/operator obtained all necessary UPA permits from NYSDEC, or the equivalent from another NYS or federal agency per Part I.A.7.a. of GP-0-25-001? Select "Yes" if no UPA permits, or the equivalent, are required for this construction activity.
Yes

Steep Slope

7. Is the construction activity within the watershed of surface waters of the State classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website?
No

Owner/Operator Information

8. Owner/Operator Name
Horizon Storage Group, LLC

9. Owner/Operator Contact Person Information

First and Last Name	Phone	E-mail
Josh Sullivan	6037706885	josh@horizonstoragegroup.com

10. Owner/Operator Mailing Address

1216 Broadway
2nd Floor
New York, NY 10001
USA

11. Is the billing contact different from the Owner/Operator Contact?
No

12. What type of organization is the owner/operator?
Corporation

12.b. Is the owner/operator registered with the Department of State to do business in New York State?
Yes

12.b.i. Department of State ID #
7814644

The Department of State ID can be found using the following link:
Department of State | Division of Corporations

Site Information

13. Project/Site Name
Auburn Self Storage

14. Site Address

121-139 Grant Avenue
Auburn, NY 13021
Cayuga

DEC Region
7

15. Site Latitude & Longitude
42.943,-76.553

Project Details

16. This eNOI submission is for:
An entire common plan of development or sale in accordance with Part I.D.1.b.

17. Does the project type fall under Table 1 or Table 2 of Appendix B of GP-0-25-001? If any portion of the construction activity falls under Table 2, regardless of the size of the disturbance, select "Table 2".
Table 2

18. Consistent with Part III.B.1.c.i. of GP-0-25-001, provide a concise overview of the project. Describe existing and proposed conditions, and include any other relevant information.
Project includes the demolition of two existing dwellings and outbuildings for the construction of a new 3-story, approx. 100,000 SF building (33,000 SF building footprint) climate-controlled storage facility on 4 parcels (to be combined). Parking will be provided for approximately 20 cars with maneuvering space for loading/unloading. New landscaping will provide buffers to residential neighbors and stormwater will be handled via a bioretention basin and underground stormwater management system. Majority of existing site is wooded with smaller areas of impervious surface and open space.

Enter the total project site acreage, the acreage to be disturbed, and the future impervious area (acreage) within the disturbed area, rounded to the nearest tenth of an acre.

19. Total Site Area (acres)
3.6

20. Total Area to be Disturbed (acres)
2.6

21. Existing Impervious Area to be Disturbed (acres)
0.1

22. Future Impervious Area Within Disturbed Area (acres)
1.6

Nature of the project:
Redevelopment with increase in impervious area

23. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

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

A (%)
0

B (%)
0

C (%)
100

D (%)
0

25. Enter the planned start and end dates of the disturbance activities.

Start Date
09/01/2026

End Date
08/31/2027

26. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Cold Spring/North Brook and minor tribs - 0701-0038

27. Type of waterbody identified in question 26?
Stream/Creek Off Site

28. Has the surface waterbody in question 26 been identified as a 303(d) segment in Appendix D of GP-0-25-001?
No

29. Is this project located in one of the Watersheds identified in Appendix C of GP-0-25-001?
No

30. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

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

31.a. What is the name of the municipality/entity that owns the separate storm sewer system? If the separate sewer system is owned by an MS4 Operator, enter the MS4 Operator name.
City of Auburn

32. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

33. Is this property owned by a state authority, state agency, federal government or local government?
No

Required SWPPP Components

General SWPPP Requirements

34. Has a SWPPP been developed in conformance with the requirements in Part III. of GP-0-25-001?
Yes

35. Does the SWPPP demonstrate consideration of the future physical risks due to climate change pursuant to the CRRA, 6 NYCRR Part 490, and associated guidance per Part III.A.2. of GP-0-25-001?
Yes

36. 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

37. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the NYS Stormwater Management Design Manual?
Yes

37.a. Which version of the NYS Stormwater Management Design Manual was used to develop the SWPPP?
2024

SWPPP Preparer

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

40. Name of the person who prepared the SWPPP
James Trasher

41. SWPPP Preparer Organization Name
CHA Consulting Inc.

42. SWPPP Preparer Contact Information

First and Last Name	Phone	E-mail
Kristy Harris	3152576901	kharris@chaconsulting.com

43. SWPPP Preparer Address

300 South State Street
Suite 600
Syracuse, NY 13202

Download SWPPP Preparer Certification Form

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

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form
3) Upload the completed form
Download SWPPP Preparer Certification Form

44. Please upload the SWPPP Preparer Certification

SWPPP Preparer Form_Signed.pdf - 07/13/2026 01:35 PM
Comment
NONE PROVIDED

44.a. Has the SWPPP Preparer Certification Form been signed by the SWPPP preparer in accordance with Part VII.J of GP-0-25-001?
Yes

Erosion & Sediment Control Criteria

45. Has a construction sequence schedule for the planned management practices been prepared?
Yes

Post-Construction Criteria

Site Planning and Soil Restoration

46. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Locating Development in Less Sensitive Areas

47. 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.
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).

Water Quality Criteria

49. Water Quality Sizing Criteria

Total WQv required (acre-feet)	Total RRv provided (acre-feet)	Minimum RRv (acre-feet)	Total WQv provided (acre-feet)	Sum of RRv and WQv provided
0.137	0.082	0.037	0.137	0.219

Water Quantity Criteria

50. Per Section 9.2.1.C.VI and VII of the 2024 Design Manual, is there 0% change to hydrology that increases the discharge rate and volume from the project site?
No

51. Does one of the waiver conditions apply to the channel protection for this construction activity?
No

51.b.i. CPv Required (acre-feet)
0.159

51.b.ii. CPv Provided (acre-feet)
0.174

52. Does one of the waiver conditions apply to the Qp and Qf for this construction activity?
No

Overbank Flood Control Criteria (Qp)

52.b.i. Pre-Development (CFS)
3.82

52.b.ii. Post-Development (CFS)
3.80

Total Extreme Flood Control Criteria (Qf)

52.b.iii. Pre-Development (CFS)
10.31

52.b.iv. Post-Development (CFS)
10.01

Operation and Maintenance

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

53.a. Identify the entity responsible for the long-term Operation and Maintenance.
Property Owner

Post-Construction SMP Identification

54. Post-Construction RR Techniques and Standard SMPs

RR Techniques and SMPs	Contributing Impervious Area (acres)	Total Contributing Area (acres)
Filtration Bioretention (F-5)	1.55	
Underground Infiltration System (I-4)	0.84	

55. Alternative SMPs

Type of Alternative SMP	Manufacturer of the Alternative SMP	Name of the Alternative SMP	Contributing Impervious Area (acres)
NONE PROVIDED	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*

Other Permits

56. Identify other permits, existing and new, that are required for this project/facility.
None

57. Is this NOI for a change in owner/operator per Part I.G.?
No

MS4 SWPPP Acceptance

59. Will the construction activities be within the municipal boundary(ies) of Traditional Land Use Control MS4 Operator(s) and discharge to the MS4(s)?
No

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the Owner/Operator Certification Form by clicking the link below.
Owner/Operator Certification Form

61. Upload Owner/Operator Certification Form
NONE PROVIDED
Comment
NONE PROVIDED

61.a. Has the Owner/Operator Certification Form from Appendix J been signed by the owner/operator, or a representative of the owner/operator in accordance with Part VII.J of GP-0-25-001 and uploaded to the eNOI?
NONE PROVIDED

Additional Project Information

62. Enter any additional pertinent project information in the text box below.
NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
7/13/2026 1:35 PM	SWPPP Preparer Form_Signed.pdf	Attachment	Kristy Harris

SWPPP Preparer Certification Form

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

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

Project/Site Name:	Auburn Self-Storage
eNOI Submission ID:	HQQ-0ZM3-X4155
Owner/Operator Name:	Horizon Storage Group, LLC

Certification Statement – SWPPP Preparer

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

James	F	Trasher
SWPPP Preparer First Name	MI	SWPPP Preparer Last Name



Signature

7/13/2026

Date

Revised: January 2025

Owner/Operator Certification Form

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

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

Project/Site Name: Auburn Self-Storage

eNOI Submission ID: HQQ-0ZM3-X4155

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

Certification Statement - Owner/Operator

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

Josh _____ ____ Sullivan _____

Owner/Operator First Name MI Owner/Operator Last Name

_____

Signature

_____

Date

Revised: January 2025

APPENDIX F

SPDES General Permit (GP-0-25-001)

TO BE INCLUDED WITH FINAL SUBMISSION

APPENDIX G

Inspection Forms and Maintenance Requirements

PERMIT NUMBER: NYR-

PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____

GP-0-25-001 Permit No. _____ **Date of Authorization** _____

Name of Owner/Operator _____

General Contractor _____

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

Site Assessment and Inspections -

a. The Owner or Operator agrees to have a Qualified Inspector[1] conduct an assessment of the site prior to the commencement of construction. The Qualified Inspector shall certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

b. 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 owner or operator can stop conducting inspections. The owner or operator shall resume inspections as soon as soil disturbance activities are reinitiated.

c. For construction sites where soil disturbance activities have been shut down with partial project completion, the owner or operator 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.

d. Following the commencement of construction, site inspections shall be conducted by the Qualified Inspector to ensure that erosion and sediment controls are being maintained in effective operating condition at all times. Inspections shall occur at least: (i) once every 7 calendar days for construction sites where soil disturbance activities are occurring; (ii) twice every 7 calendar days for construction sites where soil disturbance activities are occurring and the Owner/Operator has received authorization to disturb greater than five (5) acres of soil at any one time, the site is located within a TMDL watershed, or the site directly discharges to a 303(d) listed water; (iii) once every thirty (30) calendar days for construction sites where soil disturbance activities have been temporarily suspended and temporary stabilization measures have been applied to all disturbed areas; and (iv) 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 for the completed portion of the project have been constructed in conformance with the SWPPP and are operational.

e. The owner or operator shall notify the Regional Office and/or the MS4 stormwater contact person in writing prior to reducing the frequency of any inspections.

f. The Owner/Operator shall maintain a record of all inspection reports in the site log book. The site log book shall be maintained on site and be made available to the permitting authorities upon request. Prior to the commencement of construction,[2] the Owner/Operator shall certify in the site log book that the SWPPP is prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

g. Prior to filing of the Notice of Termination or the end of permit term, the Owner/Operator shall have the Qualified Inspector perform a final site inspection. The Qualified Inspector shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed.

[1]"Qualified Inspector" means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed Professional Engineer (PE), licensed Landscape Architect, or other Department endorsed individual(s). It may also mean someone working under the direct supervision of a licensed Professional Engineer, Certified Professional in Erosion and Sediment Control (CPESC), or soil scientist provided that person has training in the principles and practices of erosion and sediment control. Training means that person has received four (4) hours of training endorsed by the Department and shall receive four (4) hours of training every three (3) years after the initial training session.
[2]"Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.
[3]"Final stabilization" means that all soil disturbance activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent over the entire pervious surface has been established, or equivalent stabilization measures (such as the use of mulches or geotextiles, rock rip-rap or washed/crushed stone) have been employed on all disturbed areas that are not covered by permanent structures, concrete or pavement.

PRE-CONSTRUCTION SITE ASSESSMENT FORM

Inspector Name and Title	Date and Time of Inspection
Qualified Inspector	**Qualified Inspector Signature**

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

a. Notice of Intent, SWPPP, and Contractors' Certification:

Yes	No	NA	
☐	☐	☐	Has a Notice of Intent been filed with the NYS Department of Conservation?
☐	☐	☐	Is the SWPPP on-site? Where? _____
☐	☐	☐	Is the Plan current? What is the latest revision date? _____
☐	☐	☐	Have all contractors involved with implementing the erosion and sediment control portions of the SWPPP signed the contractor's certification?

b. Resource Protection

Yes	No	NA	
☐	☐	☐	Are construction limits clearly flagged or fenced?
☐	☐	☐	Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, etc. have been flagged for protection.
☐	☐	☐	Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

c. Surface Water Protection

Yes	No	NA	
☐	☐	☐	Clean stormwater runoff has been diverted away from areas to be disturbed.
☐	☐	☐	Bodies of water located either on site or in the vicinity of the site have been identified and protected.
☐	☐	☐	Appropriate practices to protect on-site or downstream surface waters are installed.

d. Stabilized Construction Entrance

Yes	No	NA	
☐	☐	☐	A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
☐	☐	☐	Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
☐	☐	☐	Sediment tracked onto public streets is removed or cleaned on a regular basis.

e. Perimeter Sediment Controls

Yes	No	NA	
☐	☐	☐	Silt fence material and installation comply with the standard drawing and specifications.
☐	☐	☐	Silt fences are installed at appropriate spacing intervals
☐	☐	☐	Sediment/detention basin was installed
☐	☐	☐	Sediment traps and barriers are installed.

Project Name:

PERMIT NUMBER: NYR

INSPECTION REPORT #__:

Location	Date and Time of Inspection
Qualified Inspector (name and title)	**Qualified Inspector Signature**

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

☐ **Weekly Inspection**
☐ **2x/Week Inspection (TMDL or +5 ac)**
☐ **Monthly Inspection**

Current Phase of Construction (if applicable):

Estimated Current Total Disturbed Area:
Estimated Inactive Soil Disturbance:
Estimated Temporary Stabilization Area:
Estimated Final Stabilization Area:

IMMEDIATE ACTION ITEMS / INSPECTION SUMMARY:

It is the responsibility of the Qualified Inspector to notify the owner/operator and appropriate contractor of any corrective actions that need to be taken within one (1) business day of the completion of an inspection. It is the responsibility of the contractor (subcontractor) to begin implementing the corrective actions within one (1) business day of this notification and complete the corrective action within a reasonable time frame. If there are action items from the previous inspection which have not been addressed, so note.

Per the GP-0-25-001, Digital photographs with date stamp, that clearly show the condition of all practices that have been identified as needing corrective actions shall be included with each inspection report. 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. Paper color copies of these digital photographs shall be attached to the inspection report, documenting the completion of the corrective action work within seven (7) calendar days of that inspection.

1. GENERAL HOUSEKEEPING

Includes description of the weather and soil conditions (e.g. dry, wet, saturated) during the time of the inspection, a description of the condition of the runoff at all points of discharge from the construction site (including identification of any discharges of sediments from construction site), inspection for stream/pond turbidity, oil and floating substances, visible oil film, or globules or grease, contractor preparedness for implementation of erosion and sediment control, impact on adjacent property, and dust control.

Yes **No**

☐ ☐ Is there immediate action required regarding General Housekeeping?

Notes:

2. EXCAVATION DEWATERING

Includes inspection ensuring that clean water from upstream pool is being pumped to the downstream pool, that sediment laden water from work area is being discharged to a silt-trapping device, and that constructed upstream berm has one-foot minimum freeboard.

Yes **No**

☐ ☐ Is there immediate action required regarding Excavation Dewatering?

Notes:

3. INTERCEPTOR DIKES AND SWALES

Includes inspection ensuring that dikes and swales are installed per plan with minimum side slopes 2H:1V or flatter, are stabilized by geotextile fabric, seed, or mulch with no erosion occurring, and that sediment-laden runoff is directed to sediment trapping structure.

Yes **No**

☐ ☐ Is there immediate action required regarding an Interceptor Dike or Swale?

Notes:

4. EROSION & SEDIMENT CONTROL

Includes inspection ensuring that erosion and sediment control practices are located and installed correctly, BMPs are maintained per specifications, stockpiles are stabilized and contained, de-watering operations prevent direct discharges to sensitive features, and that clearing and grading operations are divided into stages for large areas. Identification of all erosion and sediment control practices that need repair or maintenance.

Yes	No	
☐	☐	Is there immediate action required regarding Erosion & Sediment Control?

Notes:

5. AREAS OF DISTURBANCE

Includes description and sketch of areas that are disturbed at the time of the inspection and areas that have been stabilized (temporary and/or final) since last inspection.

Yes	No	
☐	☐	Is there immediate action required regarding stabilizing disturbed areas?

Notes:

6. STABILIZED CONSTRUCTION ENTRANCE

Includes inspection ensuring that stone is clean enough to effectively remove mud from vehicles, is installed per standards and specifications, that all traffic use the stabilized entrance to enter and leave site, and that adequate drainage is provided to prevent ponding at entrance.

Yes	No	
☐	☐	Is there immediate action required regarding a Stabilized Construction Entrance?

Notes:

7. REINFORCED SILT FENCE

Includes inspection ensuring that silt fence is installed on contour, 10 feet from toe of slope, joints are constructed by wrapping the two ends together for continuous support, steel posts installed (if applicable), installed on downstream side of slope, maximum 6' intervals with 6 x 6 inch 14 gage wire, fabric is buried minimum of 6 inches, posts are stable, fabric is tight and without rips or frayed areas, and that sediment accumulation is less than 1/3 the height of the silt fence.

Yes **No**

☐ ☐ Is there immediate action required regarding Silt Fence?

Notes:

8. STONE CHECK DAM

Includes inspection ensuring that stone check dam channels are without erosion (i.e., flow is not eroding soil underneath or around the structure), that check dam is in good condition (i.e., rocks have not been displaced and no permanent pools behind the structure), and that sediment accumulation is less than design capacity.

Yes **No**

☐ ☐ Is there immediate action required regarding a Stone Check Dam?

Notes:

9. COMPOST FILTER SOCK

Includes inspection ensuring that compost filter sock is anchored in earth with 2-inch x 2-inch wooden stakes driven 12 inches into the soil on 10-foot centers along the centerline of the sock. On uneven terrain, effective ground contact can be enhanced by the placement of a fillet or filter media on the disturbed area side of the compost sock. Damaged filter socks shall be replaced or repaired according to manufacturer's recommendations.

Yes **No**

☐ ☐ Is there immediate action required regarding Compost Filter Sock?

Notes:

10. FILTER FABRIC (DROP) INLET PROTECTION

Includes inspection ensuring that protection is installed with 2-inch x 4-inch wood frame and wood posts, with maximum 3-foot spacing, is buried a minimum of 8 inches and secured to frame/posts with staples at max 8-inch spacing, has posts with 3-foot maximum spacing between posts, has posts that are stable, fabric is tight and without rips or frayed areas, and that sediment accumulation is within design capacity.

Yes **No**

☐ ☐ Is there immediate action required regarding Filter Fabric (Drop) Inlet Protection?

Notes:

11. SILTSACK® INLET PROTECTION

Includes inspection ensuring that protection is installed per manufacturers specifications and is maintained per manufacturers recommendations.

Yes **No**

☐ ☐ Is there immediate action required regarding the Inlet Protection?

Notes:

12. TEMPORARY SEDIMENT TRAP

Includes inspection ensuring that outlet structure is constructed per the approved plan or drawing, that geotextile fabric has been placed beneath rock fill, and that sediment accumulation is within design capacity.

Yes **No**

☐ ☐ Is there immediate action required regarding Temporary Sediment Traps?

Notes:

13. CONCRETE WASHOUT

Includes inspection ensuring that the concrete washout is constructed and maintained per the approved plan or drawing.

Yes	No	
☐	☐	Is there immediate action required regarding Concrete Washouts?

Notes:

14. STORMWATER BASIN

Includes inspection ensuring that Permanent Stormwater Basins are installed per plans and specifications.

Yes	No	
☐	☐	Is there immediate action required regarding Stormwater Basins?

Notes:

15. CURRENT PHASE OF POST-CONSTRUCTION STORMWATER PRACTICES

Includes inspection of current phase of all post-construction stormwater management practices, identification of all construction that is not in conformance with the SWPPP and technical standards, identify corrective action(s) that must be taken to install, repair, replace or maintain erosion and sediment control practices, and to correct deficiencies identified with the construction of post-construction stormwater management practice(s).

Yes	No	
☐	☐	Is there immediate action required regarding the current phase of post-construction stormwater management practices?

Notes:

Project Name:

ADDITIONAL NOTES / MODIFICATIONS

Bioretention Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

BR Drainage Area

Look for areas that are uphill from the Bioretention cell.

Problem (Check if Present)	**Follow-Up Actions**
 ☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and seed and straw to establish vegetation. ☐ 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. ☐ Other:

BR Drainage Area

Look for areas that are uphill from the Bioretention cell.

Problem (Check if Present)	Follow-Up Actions
	☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

BR Inlets

Stand in the Bioretention cell itself and look for all the places where water flows in. Often there will be multiple points of inflow to the practice.

Problem (Check if Present)	Follow-Up Actions
 ☐ Inlets collect grit and debris or grass/weeds. Some water may not be getting into the Bioretention cell. The objective is to have a clear pathway for water to flow into the cell.	☐ 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. ☐ Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Bioretention cell. ☐ Dispose of all material properly where it will not re-enter the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the Bioretention cell.
 ☐ 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 Bioretention cell.	☐ 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. ☐ 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. ☐ Other: ☐ 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.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ Mulch (if used) needs to be replaced or replenished. The mulch layer had decomposed or is less than 1-inch thick.	☐ Add new mulch to a total depth (including any existing mulch that is left) of 2 to 3 inches. The mulch should be shredded hardwood mulch that is less likely to float away during rainstorms. ☐ Avoid adding too much mulch so that inlets are obstructed or certain areas become higher than the rest of the Bioretention surface. ☐ Other:
 ☐ Minor areas of sediment, grit, trash, or other debris are accumulating on the bottom.	☐ 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 Bioretention cell . ☐ If removing the material creates a hole or low area, fill with soil mix that matches original mix and cover with mulch so that the Bioretention surface area is as flat as possible. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 2-inches deep and covers 25% or more of the Bioretention surface. ☐ Kick-Out to Level 2 Inspection: The Bioretention cell is too densely vegetated to assess sediment accumulation or ponding; see BR-4, Vegetation.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows across the Bioretention surface or on the slopes, or sinkholes are forming in certain areas. ☐ Source: Stormwater Maintenance, LLC.	☐ Try filling the eroded areas with clean topsoil or sand, and cover with mulch. ☐ If the problem recurs, you may have to use stone (e.g., river cobble) to fill in problem areas. ☐ If the erosion is on a side slope, fill with clay that can be compacted and seed and mulch the area. ☐ Other: ☐ 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 Bioretention cell. ☐ 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.
 ☐ The bottom of the Bioretention cell is not flat, and the water pools at one end, along an edge, or in certain pockets. The whole bottom is not uniformly covered with water. See design plan to verify that bioretention surface is intended to be flat. Check during or immediately after a rainstorm.	☐ If the problem is minor (just small, isolated areas are not covered with water), try raking the surface OR adding mulch to low spots to create a more level surface. You may need to remove and replace plantings in order to properly even off the surface. ☐ Check the surface with a string and bubble level to get the surface as flat as possible. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Ponding water is isolated to less than half of the Bioretention surface area, and there seem to be elevation differences of more than a couple of inches across the surface.

BR Ponding Area

Examine the entire Bioretention surface and side slopes

Problem (Check if Present)	Follow-Up Actions
 ☐ Water stands on the surface more than 72 hours after a rainstorm and /or wetland-type vegetation is present. The Bioretention cell does not appear to be draining properly.	☐ Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.

BR Vegetation

Examine all Bioretention cell vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance—pulling weeds, removing dead and diseased plants, replacing mulch around plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole Bioretention cell , bush-hog the entire area before seedheads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Re-plant with species that are aesthetically pleasing and seem to be doing well in the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design, or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.

BR Vegetation

Examine all Bioretention cell vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the Bioretention cell . If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other: ☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., rain gardens), this task will likely require a landscape design professional or horticulturalist.

BR Outlets

Examine outlets that release water out of the Bioretention cell.

Problem (Check if Present)	Follow-Up Actions
☐ Erosion at outlet	☐ Add stone to reduce the impact from the water flowing out of the outlet pipe or weir during storms. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Rills have formed and erosion problem becomes more severe.
 ☐ Outlet obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the Bioretention cell . ☐ Other: ☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Bioretention Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: BIORETENTION NOTE: Key Source for this Information *(CSN, 2013)*	
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 soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have bad soil media, try scraping off top 3 inches of media and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Clogged underdrain? • Filter fabric between soil media and underdrain stone? • Need to install underdrain if not present? • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper soil media?	• Soil media is clogged and problem is 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. ☐ Level 3 inspection necessary
Observed Condition: Vegetation is sparse or out of control	
☐ Condition 1: Original design planting plan seems good but has not been maintained, so there are many invasives and/or dead plants Will require some horticultural experience to restore vegetation to intended condition by weeding, pruning, removing plants, and adding new plants. ☐ Condition 2: Original design planting plan is unknown or cannot be actualized A landscape architect or horticulturalist will be needed to redo the planting plan. Will likely require analysis of soil pH, moisture, organic content, sun/shade, and other conditions to make sure plants match conditions. Plan should include invasive plant management and maintenance plan to include mulching, watering, disease intervention, periodic thinning/pruning, etc.	• Vegetation deviates significantly from original planting plan; Bioretention has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. ☐ Level 3 inspection necessary
Observed Condition: Bioretention does not conform to original design plan in surface area or storage	
☐ Condition 1: Level 2 Inspection reveals that practice is too small based on design dimension, does not have adequate storage (e.g., ponding depth) based on the plan, and/or does not treat the drainage area runoff as indicated on the plan Small areas of deviation can be corrected by the property owner or responsible party, but it is likely that a Qualified Professional will have to revisit the design and attempt a redesign that meets original objectives or that can be resubmitted to the municipality for approval.	• More than a 25% departure from the approved plan in surface area, storage, or drainage area; sometimes less than this threshold at the discretion of the Level 2 inspector. ☐ Level 3 inspection necessary

Level 2 Inspection: BIORETENTION NOTE: Key Source for this Information *(CSN, 2013)*	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Severe erosion of filter bed, inlets, or around outlets	
☐ Condition 1: Erosion at inlets 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 more non-erosive lining and/or to extend the lining further down to where inlet slopes meet the Bioretention surface. If problem persists, analysis by a Qualified Professional is warranted. ☐ Condition 2: Erosion of Bioretention filter bed This is often caused by "preferential flow paths" through and along the Bioretention 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). ☐ Condition 3: Erosion on side slopes Again, the issue is likely linked with unanticipated flow paths down the side slopes (probably overland flow that concentrates as it hits the edge of the slope). For small or isolated areas, try filling, compacting, and re-establishing healthy ground cover vegetation. If the problem is more widespread, further analysis is required to determine how to redirect the flow.	• Erosion (rills, gullies) is more than 12 inches deep at inlets or the filter bed or more than 3 inches deep on side slopes. • If the issue is not caused by moving water but some sort of subsurface defect. This may manifest as a sinkhole or linear depression and be associated with problems with the underdrain stone or pipe or underlying soil. ☐ Level 3 inspection necessary
Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment	
☐ Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep Sediment source may be from a one-time or isolated event. Remove accumulated sediment and top 2 to 3 inches of Bioretention soil media; replace with clean material. Check drainage area for any ongoing sources of sediment. ☐ Condition 2: Majority of the surface is caked with "hard pan" (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of Bioretention soil media) or another chronic source of sediment in the drainage area. 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 as the problem does not recur.	• More than 2 inches of accumulated sediment cover 25% or more of the Bioretention surface area. • "Hard pan" of thin, crusty layer covers majority of Bioretention 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. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

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Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Pond and Wetland Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

PW Drainage Area

Look for areas that are uphill from the pond.

Problem (Check if Present)	**Follow-Up Actions**
☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and straw areas of bare soil to establish vegetation. ☐ Fill in eroded areas with soil, compact, seed and mulch with straw to establish vegetation. ☐ Other:

☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Kick-Out to Level 2 Inspection: 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. ☐ If large areas of soil have been eroded or larger channels are forming, this may require rerouting of flow paths or use of an erosion-control seed mat or blanket to reestablish acceptable ground cover or anchor sod where it is practical.
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Remove excessive vegetation or woody debris that can block drainage systems. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances exposed to rain in the drainage area	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

Pond Inlets

Look for all areas where water flows into the pond during storms. Note that there may be multiple points of inflow and types of structures (e.g., pipes, open ditches, etc.).

Problem (Check if Present)	Follow-Up Actions
 ☐ Inlets are buried, covered or filled with silt, debris, or trash, or blocked by excessive vegetation.	☐ If the problem can be remedied with hand tools and done in a safe manner, remove vegetation, trash, woody debris, etc. from blocking inlet structures. ☐ Other: ☐ Kick-Out to Level 2 or 3 Inspection: If the amount of material is too large to handle OR there are ANY safety concerns about working in standing water, soft sediment, etc., the work will likely have to be performed by a qualified contractor.

Pond Inlets

Look for all areas where water flows into the pond during storms. Note that there may be multiple points of inflow and types of structures (e.g., pipes, open ditches, etc.).

Problem (Check if Present)		Follow-Up Actions
	☐ Inlets are buried, covered or filled with silt, debris, or trash, or blocked by excessive vegetation.	☐ Kick-Out to Level 2 or 3 Inspection: If the amount of material is too large to handle OR there are ANY safety concerns about working in standing water, soft sediment, etc., the work will likely have to be performed by a qualified contractor.
	☐ Inlets are broken, and, with pieces of pipe or concrete falling into the pond, there is erosion around the inlet, there is open space under the pipe, or there is erosion where the inlet meets the pond	☐ Kick-Out to Level 2 Inspection: These types of structural or erosion problems are more serious and will require a qualified contractor to repair.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The pretreatment area(s) or forebay(s) are filled with sediment, trash, vegetation, or other debris.	☐ If the problem can be remedied with hand tools and done in a safe manner, use a flat shovel or other equipment to remove small amounts of sediment. ☐ Remove trash and excessive vegetation from forebays if this can be done in a safe manner. ☐ Other:

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The pretreatment area(s) or forebay(s) are filled with sediment, trash, vegetation, or other debris.	☐ Kick-Out to Level 2 Inspection: Large amounts of sediment or debris will have to be removed by a qualified contractor. ANY condition that poses a safety concern for working in standing water or soft sediments should be referred to a Level 2 Inspection or qualified contractor.
	☐ The pond area itself has accumulated sediment, trash, debris, or excessive vegetation that is choking the flow of the water, OR the pond area is covered with algae or aquatic plants.	☐ Level 1 includes handling only small amounts of material that can be removed by hand, or with rakes or other hand tools. Do not attempt any repair that poses a safety issue. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Most cases will call for a Level 2 Inspection and/or a qualified contractor. ☐ You are not sure what type and amount of vegetation is supposed to be in the pond. ☐ The algae or aquatic plants should be identified so that proper control techniques can be applied.
	☐ The side slopes of the pond are unstable, eroding, and have areas of bare dirt.	☐ If there are only minor areas, try filling in small rills or gullies with topsoil, compacting, and seeding and mulching all bare dirt areas with an appropriate seed. Alternatively, try using herbaceous plugs to get vegetation established in tricky areas, such as steep slopes. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Erosion and many bare dirt areas on steep side slopes will require a Level 2 Inspection and repair by a qualified contractor.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
 	☐ The riser structure is clogged with trash, debris, sediment, vegetation, etc., OR is open, unlocked, or has a steep drop and poses a safety concern. The pond level may have dropped below its "normal" level.	☐ If you can safely access the riser on foot or with a small boat, clear minor amounts of debris and remove it from the pond area for safe disposal. ☐ Other: ☐ Kick-Out to Level 2 Inspection: The riser cannot be accessed safely, the amount of debris is substantial, or the riser seems to be completely clogged and the water level has risen too high. ☐ There are safety issues with the riser and concern about access to pipes, drops, or any other life safety concern. ☐ The riser is leaning, broken, settling or slumping, corroded, eroded or any other structural problem.
	☐ The dam/embankment is slumping, sinking, settling, eroding, or has medium or large trees growing on it.	☐ If there are small isolated areas, try to fix them by adding clean material (clay and topsoil) and seeding and mulching. ☐ Periodically mow embankments to enable inspection of the banks and to minimize establishment of woody vegetation. ☐ Remove any woody vegetation that has already established on embankments. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Most of these situations will require a Level 2 Inspection or evaluation and repair by a qualified contractor. Seepage through the dam or problems with the pipe through the dam can be a serious issue that should be addressed to avoid possible dam failure.

PW Pond Area and Embankments

Examine both interior and exterior pond banks as well as the pond body. Observe from the inlet pipes to the outfall structure and emergency overflow.

Problem (Check if Present)		Follow-Up Actions
	☐ The emergency spillway or outfall (if it exists) has	☐ Clear light debris and vegetation. ☐ Other:
	☐ Erosion, settlement, or loss of material. Rock-lined spillways have excessive debris or vegetation.	☐ Kick-Out to Level 2 Inspection: Displacement of rock lining, excessive vegetation and erosion/settlement may warrant review and decision by Level 2 Inspector to check against original plan. ☐ Any uncertainty about the integrity of the emergency spillway should be referred to a Level 2 Inspector. ☐ Erosion or settlement such that design has been compromised should be reviewed by an engineer.

PW Pond Outlet

Examine the outlet of the pipe on the downstream side of the dam/embankment where it empties into a stream, channel, or drainage system.

Problem (Check if Present)	Follow-Up Actions
 ☐ The pond outlet is clogged with sediment, trash, debris, vegetation, or is eroding, caving in, slumping, or falling apart.	☐ If there is a minor blockage, remove the debris or vegetation to allow free flow of water. ☐ Remove any accumulated trash at the outlet. ☐ Outlet:
	☐ Kick-Out to Level 2 Inspection: ☐ If the area at the outlet cannot be easily accessed or if the blockage is substantial, a Level 2 Inspection is warranted. ☐ Erosion at and downstream of the outfall should be evaluated by a qualified professional. ☐ 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. ☐ The pool of water at the outlet pipe is discolored, has an odor, or has excessive algae or vegetative growth.

Additional Notes:

Inspector:_____ Date: _____

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Inspector/Operator: _____ Date: _____

Pond and Wetland Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: PONDS and WETLANDS

Recommended Repairs and Required Skills	Triggers for Level 3 Inspection
Observed Condition: Bare Soil or Erosion in the Drainage Area	
☐ Condition 1: Extensive problem spots, but no channels or rills forming Reseed problem areas. If problem persists or grass does not take, consider hiring a landscape contractor. ☐ Condition 2: Problem is extensive, and rills/channels are beginning to form May be necessary to divert or redirect water that is causing the erosion problem. If it appears that simple regrading—such as installing a berm or leveling a low spot–will fix the problem, make repairs and ensure that the problem is repaired after the next storm.	• Large rills or gullies are forming in the drainage area. • An attempt to regrade the drainage area has been unsuccessful. • Fixing the problem would require major regrading (i.e., redirecting more than a 100-square-foot area. • It is not clear why the problem is occurring. ☐ Level 3 inspection necessary
Observed Condition: Manholes or Inlet Pipe Buried or Covered with Vegetation	
☐ Condition 1: Nearest manhole and inlet pipe not found Consult as-built drawings to get to closest suspected location and use metal detector to search for metal manhole cover. If unsuccessful, identify nearest drain inlets and approximate pipe direction to locate next manhole. ☐ Condition 2: Manhole located and inspected Never enter a manhole, except by following confined-space entry protocols. If outlet pipe is not visible or greater than 25% full of sediment/debris or trash, it will typically require a qualified contractor to flush, clean and clear blockages. ☐ Condition 3: Inlet pipe not found at pond Clear vegetation and brush that may be covering the inlet pipe. Buried inlet pipes may be found through use of a metal probe. ☐ Condition 4: Inlet pipe buried in sediment or blocked by vegetation Once located, the pipe path can be cleared of vegetation with brush hook or other brush tools. Light digging may clear sediment from the end of the pipe.	• To locate buried manholes and lost storm lines, it is sometimes necessary to hire a pipeline inspection contractor with televising equipment or ground-penetrating radar and enter at the closest upstream access point. • Locating a buried inlet pipe may require wading in the edge of the pond and using a metal probe and brush axe to find and expose the pipe. • If other than light digging is necessary to remove accumulated sediment, a contractor with heavy equipment may be required. ☐ Level 3 inspection necessary

Level 2 Inspection: PONDS and WETLANDS	
Recommended Repairs and Required Skills	**Triggers for Level 3 Inspection**
Observed Condition: Pipe or Headwall Settlement, Erosion, Corrosion or Failure	
☐ Condition 1: Pipe or headwall settlement or failure Severe sinkholes, settlement or corrosion should be kicked out to Level 3 Inspection. ☐ Condition 2: Flow not confined to pipe and visible outside pipe wall 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.	• 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. • 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. ☐ Level 3 inspection necessary
Observed Condition: Pond Conditions	
☐ Condition 1: Pond pre-treatment zone is full of sediment or not constructed as shown on as-built drawings. ☐ Condition 2: Excessive buildup of sediment or overgrowth 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.	• It may require inspection by an engineer to determine next steps for clearing, replanting or reconstruction. • 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. • If sediment has filled more than 50% of the pond's capacity, dredging is likely needed and should be evaluated by a qualified contractor. • Removal or control of excessive algae or aquatic plants can be assessed by a qualified pond maintenance company. ☐ Level 3 inspection necessary

Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Swale Stormwater Management Practices Level 1 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

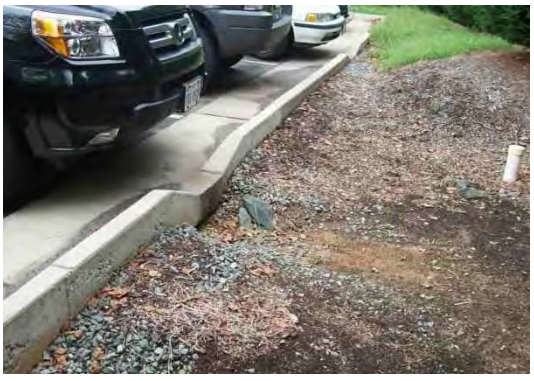
SW Drainage Area

Look at areas that are uphill from the swale.

Problem (Check if Present)	Follow-Up Actions
 ☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch or sod areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and add seed and straw to establish vegetation. ☐ 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. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths
 ☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
 ☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous.
☐ Grass dying at edge of road	☐ Seed and mulch; add topsoil or compost if needed. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Grass on edge of pavement continues to die off for unknown reasons. Swale edge may need to be replaced with other materials (e.g., stone diaphragm).

SW Inlets

Stand in the swale and look for all the places where water flows in.

Problem (Check if Present)	Follow-Up Actions
☐ Inlets or the swale edge are collecting grit, grass clippings, or debris or have grass/weeds growing. Some water may not be getting into the swale. The objective is to have a clear pathway for water to flow into the swale.	☐ Use a flat shovel to remove grit and debris (especially at curb inlets or opening). Parking lots will generate fine grit that will accumulate at these spots. ☐ Pull out clumps of growing grass or weeds, and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets or along the edge of the swale where water is supposed to enter. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the swale. ☐ Dispose of all material properly in an area where it will not re-enter the swale. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the swale.
 ☐ Some or all of the inlets are eroding so that rills, gullies, and other erosion are present, or there is bare dirt that is washing into the swale.	☐ 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. ☐ In some cases, reseeding and applying an 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. ☐ Other:
	☐ Level 2 Inspection: Erosion is occurring at most of the inlets or along much of the swale edge. The inlet design may have to be modified.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
☐ Minor areas of sediment, grit, trash, or other debris are accumulating in the swale.	☐ 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 swale. ☐ If removing the material creates a hole or low area, fill with good topsoil and add seed and straw to re-vegetate. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ If the swale is densely vegetated, it may be difficult to do the maintenance; check for excessive ponding or other issues described in this section to see if the accumulated material is causing a problem. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 3 inches deep and covers 25% or more of the swale surface. ☐ The source of sediment is unknown or cannot be controlled with simple measures.
 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows through the swale or on the slopes.	☐ Try filling the eroded areas with clean topsoil, and then seed and mulch to establish vegetation. ☐ If the problem recurs, you may have to use some type of matting, stone (e.g., river cobble), or other material to fill in eroded areas. ☐ If the erosion is on a side slope, fill with soil and cover with erosion-control matting or at least straw mulch after re-seeding. ☐ 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 swale. ☐ 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.
☐ Water does not flow evenly down the length of the swale, but ponds in certain areas for long periods of time (e.g., 72 hours after a storm). The swale does not seem to have “positive drainage.” Check during or immediately after a rain storm.	☐ If the problem is minor (just small, isolated areas), try using a metal rake or other tools to create a more even flow path; remove excessive vegetative growth, sediment, or other debris that may be blocking the flow. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Water ponds in more than 25% of the swale for three days or more after a storm. The issue may be with the underlying soil or the grade of the swale. ☐ Water ponds behind check dams for three days or more after a storm. Check dams may be clogged or not functioning properly.

SW Surface Area

Examine the entire swale surface and side slopes.

Problem (Check if Present)	Follow-Up Actions
 ☐ Check dams (if present): water is flowing around the edges of check dams, creating erosion or sinkholes on the uphill or downhill side, or the check dams are breaking apart or breaching .	☐ If the problem is isolated to just a few check dams, try simple repairs. ☐ It is very important for the center of each check dam (where most of the water flows) to be lower (by at least several inches) than the edges of the check dams where they meet the side slopes. Also, the check dams should be keyed into side slopes so water does not flow between the check dam and side slope. ☐ Use a level to check the right check-dam configuration, as noted above. Repair by moving around stone, filling and compacting soil, or adding new material so that water will be directed to the center of the check dam instead of the edges. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Many check dams are impacted and/or the problem seems to be a design issue with height, spacing, shape, or materials used to construct them.

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation is too overgrown to access swale for maintenance activities	☐ Mow or bush-hog the path. ☐ Other:

SW Vegetation

Assess the swale vegetation.

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance: pulling weeds, removing dead and diseased plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, block flow, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole swale, bush-hog the entire area before seed heads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Replant with species that are aesthetically pleasing and seem to be doing well in the swale. ☐ Other: ☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.
☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the swale. If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other: ☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., in residential yards), this task will likely require a landscape design professional or horticulturalist.

SW Outlets

Examine outlets that release water out of the swale.

Problem (Check if Present)	Follow-Up Actions
☐ Outlet is obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the swale. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

Additional Notes:

Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

"I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Swale Stormwater Management Practices Level 2 Inspection Checklist

SMP ID #		**SMP Owner**		☐ Private ☐ Public
SMP Location (Address; Latitude & Longitude)				
	Latitude		**Longitude**	

Party Responsible for Maintenance	**System Type**		**Type of Site**
☐ Same as SMP Owner ☐ Other _____	☐ Seasonal ☐ Continuous Use ☐ Other	☐ Above Ground ☐ Below Ground	☐ Commercial ☐ Industrial ☐ Residential ☐ State

Inspection Date		**Inspection Time**	
Inspector			
Date of Last Inspection			

Level 2 Inspection: SWALE	
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 soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have compacted soil, try scraping off top 3 to 6 inches of soil and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. ☐ Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Bad or compacted soil • Filter fabric on the swale bottom • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Longitudinal slope is too flat?	• Soil is overly compacted or clogged and problem is 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 (e.g., not enough slope down through the swale). ☐ Level 3 inspection necessary
Observed Condition: Vegetation is predominantly weeds and invasive species	
For a small area, weed and dig up invasive plants. Replant with natives or plants from original planting plan. If longer than 100 feet, develop a new planting plan and have it professionally reviewed.	• Vegetation deviates significantly from original planting plan; swale has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice. • For large area, hire a professional to develop a grading plan and develop a planting plan. ☐ Level 3 inspection necessary

Notes:



Inspector:_____ Date: _____

Complete the following if follow-up/corrective actions were identified during this inspection:

Certified Completion of Follow-Up Actions:

> "I hereby certify that the follow-up/corrective actions identified in the inspection performed on _____ (DATE) have been completed and any required maintenance deficiencies have been adequately corrected."

Inspector/Operator: _____ Date: _____

Isolator® Row Plus
O&M Manual



ADS StormTech™

The Isolator® Row Plus

Introduction

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row Plus is a technique to inexpensively enhance Total Suspended Solids (TSS), Total Phosphorus (TP), Total Petroluem Hydrocarbons (TPH) and Total Nitrogen (TN) removal with easy access for inspection and maintenance.

The Isolator Row Plus

The Isolator Row Plus is a row of StormTech chambers, either SC-160, SC-310, SC-310-3, SC-740, DC-780, SC-800, MC-3500, MC-4500 or MC-7200 models, are lined with filter fabric and connected to a closely located manhole for easy access. The fabric lined chambers provide for sediment settling and filtration as stormwater rises in the Isolator Row Plus and passes through the filter fabric. The open bottom chambers allow stormwater to flow vertically out of the chambers. Sediments are captured in the Isolator Row Plus protecting the adjacent stone and chambers storage areas from sediment accumulation.

ADS Isolator Row and Plus fabric are placed between the stone and the Isolator Row Plus chambers. The woven geotextile provides a media for stormwater filtration, a durable surface for maintenance, prevents scour of the underlying stone and remains intact during high pressure jetting.

The Isolator Row Plus is designed to capture the “first flush” runoff and offers the versatility to be sized on a volume basis or a flow-rate basis. An upstream manhole provides access to the Isolator Row Plus and includes a high/low concept such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row Plus bypass through a manifold to the other chambers. This is achieved with an elevated bypass manifold or a high-flow weir. This creates a differential between the Isolator Row Plus row of chambers and the manifold to the rest of the system, thus allowing for settlement time in the Isolator Row Plus. After Stormwater flows through the Isolator Row Plus and into the rest of the chamber system it is either exfiltrated into the soils below or passed at a controlled rate through an outlet manifold and outlet control structure.

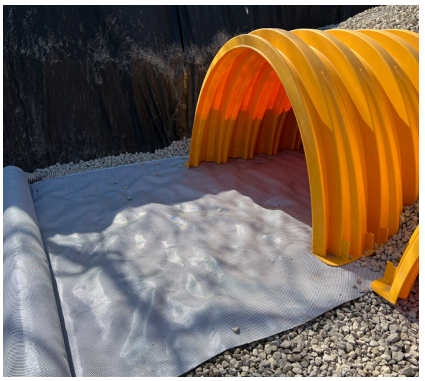
The Isolator Row Plus Flamp™ is a flared end ramp apparatus attached to the inlet pipe on the inside of the chamber end cap. The FLAMP provides a smooth transition from pipe invert to fabric bottom. It is configured to improve chamber function performance by enhancing outflow of solid debris that would otherwise collect at the chamber's end, or more difficult to remove and require confined space entry into the chamber area. It also serves to improve the fluid and solid flow into the access pipe during maintenance and cleaning and to guide cleaning and inspection equipment back into the inlet pipe when complete.

The Isolator Row Plus may be part of a treatment train system. The treatment train design and pretreatment device selection by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, StormTech recommend using the Isolator Row Plus to minimize maintenance requirements and maintenance costs.

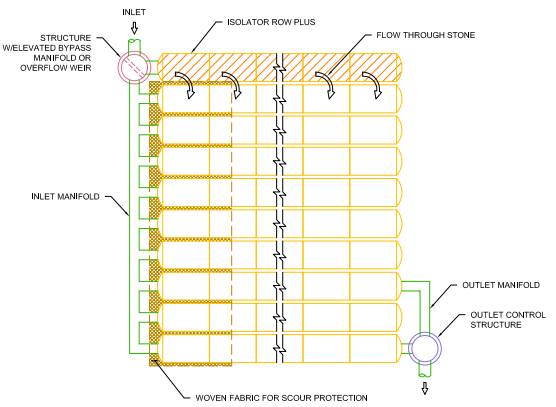
Note: *See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row Plus.*



Looking down the Isolator Row Plus from the manhole opening, ADS Plus Fabric is shown between the chamber and stone base.



StormTech Isolator Row Plus with Overflow Structure (not to scale)



Isolator Row Plus Inspection/Maintenance

Inspection

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row Plus should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

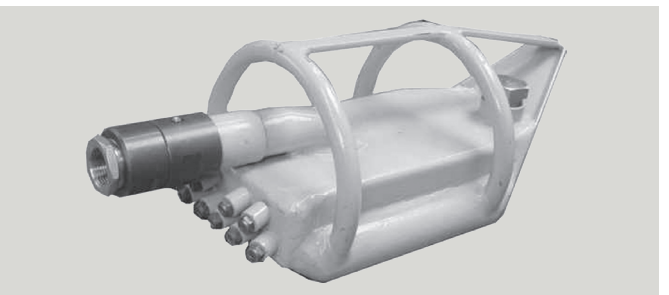
The Isolator Row Plus incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3" (75 mm) throughout the length of the Isolator Row Plus, clean-out should be performed.

Maintenance

The Isolator Row Plus was designed to reduce the cost of periodic maintenance. By “isolating” sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entry.

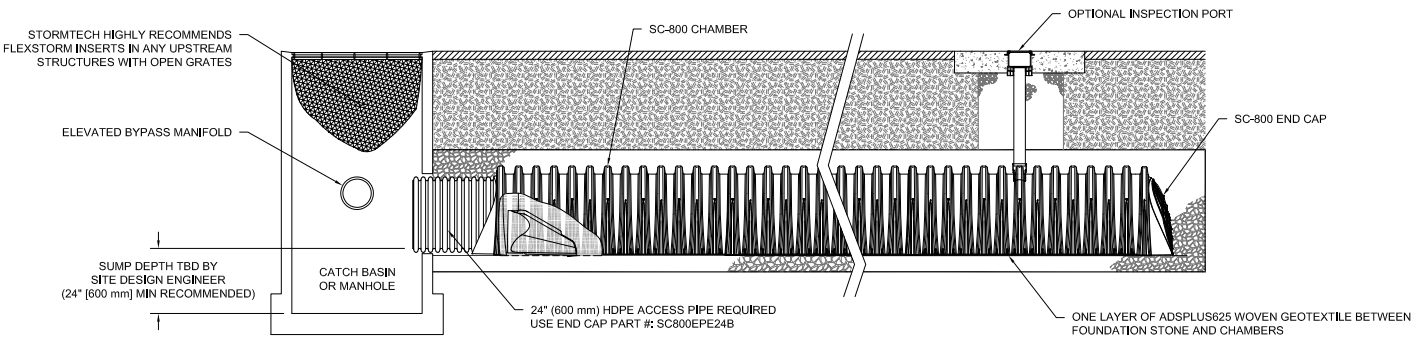
Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row Plus while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45” are best. StormTech recommends a maximum nozzle pressure of 2000 psi be utilized during cleaning. JetVac reels can vary in length. For ease of maintenance, ADS recommends Isolator Row Plus lengths up to 200' (61 m). **The JetVac process shall only be performed on StormTech Isolator Row Plus that have ADS Plus Fabric (as specified by StormTech) over their angular base stone.**







StormTech Isolator Row Plus (*not to scale*)



Isolator Row Plus Step By Step Maintenance Procedures

Step 1

Inspect Isolator Row Plus for sediment.

A) Inspection ports (if present)
   i. Remove lid from floor box frame
   ii. Remove cap from inspection riser
   iii. Using a flashlight and stadia rod,measure depth of sediment and record results on maintenance log.
   iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.

B) All Isolator Row Plus
   i. Remove cover from manhole at upstream end of Isolator Row Plus
   ii. Using a flashlight, inspect down Isolator Row Plus through outlet pipe
      1. Mirrors on poles or cameras may be used to avoid a confined space entry
      2. Follow OSHA regulations for confined space entry if entering manhole
   iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2.
   If not, proceed to Step 3.

Step 2

Clean out Isolator Row Plus using the JetVac process.

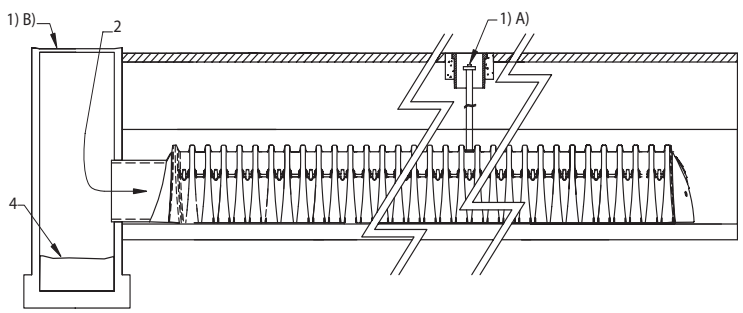
A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
B) Apply multiple passes of JetVac until backflush water is clean
C) Vacuum manhole sump as required

Step 3

Replace all caps, lids and covers, record observations and actions.

Step 4

Inspect & clean catch basins and manholes upstream of the StormTech system.



Sample Maintenance Log

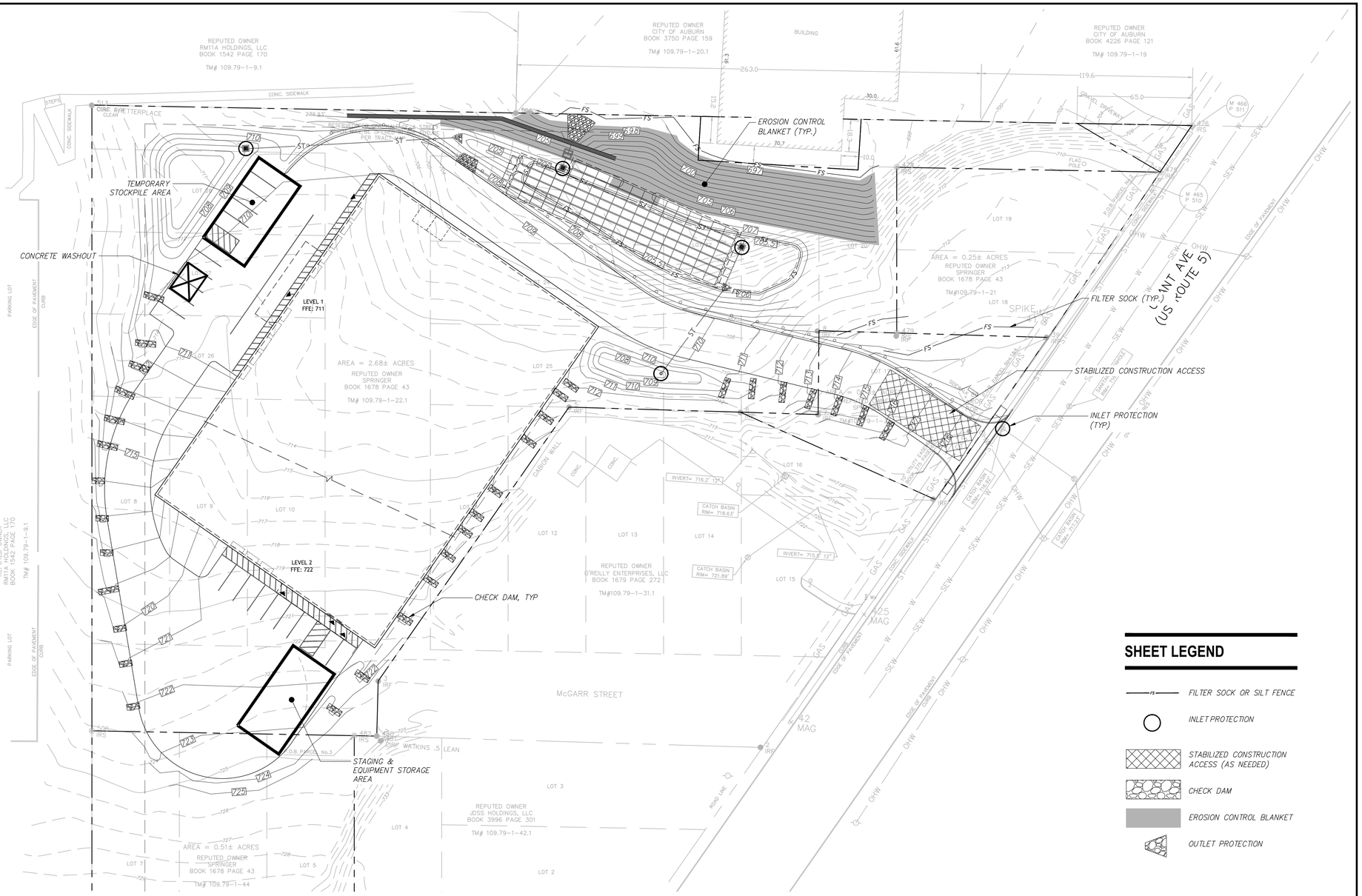
Date	Stadia Rod Readings		Sedi-ment Depth (1)–(2)	Observations/Actions	Inspector
	Fixed point to chamber bottom (1)	Fixed point to top of sediment (2)			
3/15/11	6.3 ft	none		New installation. Fixed point is CI frame at grade	DJM
9/24/11		6.2	0.1 ft	Some grit felt	SM
6/20/13		5.8	0.5 ft	Mucky feel, debris visible in manhole and in Isolator Row Plus, maintenance due	NV
7/7/13	6.3 ft		0	System jetted and vacuumed	DJM

ADS "Terms and Conditions of Sale" are available on the ADS website, www.adspipe.com
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StormTech® and the Isolator® Row Plus are registered trademarks of StormTech, Inc.
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adspipe.com
800-821-6710

APPENDIX H

Erosion and Sediment Control Plan and Details



SHEET LEGEND

- FILTER SOCK OR SILT FENCE
- INLET PROTECTION
- STABILIZED CONSTRUCTION ACCESS (AS NEEDED)
- CHECK DAM
- EROSION CONTROL BLANKET
- OUTLET PROTECTION

EROSION & SEDIMENT CONTROL SPECIFICATION

ONE WEEK PRIOR TO BEGINNING EARTHWORK OPERATIONS, A PRE-CONSTRUCTION MEETING WILL BE HELD TO DISCUSS THE EROSION AND SEDIMENT CONTROL PLAN, AND TO FINALIZE THE PAPER WORK FOR THE STORM WATER POLLUTION PREVENTION PLAN AS SPECIFIED IN THE NYSDEC STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES) GENERAL PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES (GP-0-25-001).

EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROVIDED PRIOR TO BEGINNING ANY LAND DISTURBANCE ACTIVITIES. THE DEVICES PROVIDING PROTECTION TO A GIVEN AREA SHALL NOT BE REMOVED UNTIL THE LANDS IN THAT AREA ARE STABILIZED.

NO DISTURBED AREA SHALL REMAIN EXPOSED FOR MORE THAN 7 CALENDAR DAYS, EXCEPT FOR PORTIONS OF THE SITE IN WHICH WORK WILL BE CONTINUOUS BEYOND 7 DAYS (I.E. THE BUILDING FOOTPRINT).

CONSTRUCTION SEQUENCE:

GENERAL NOTES:

- CONTROLS SHOWN ON PLAN ARE MINIMUM. ADDITIONAL CONTROLS SHALL BE INSTALLED AS WARRANTED BY SITE CONDITIONS AND/OR WEATHER TO PREVENT SEDIMENT TRANSPORT TO UNDISTURBED AREAS.
- SEDIMENT TRAPS MAY BE CONSTRUCTED AS NECESSARY.
- SILT FENCE/FILTER SOCK MUST BE INSTALLED AT THE TOE OF SLOPES WITH BUFFER AREAS PER BLUE BOOK GUIDELINES. ADDITIONAL FENCING SHALL BE INSTALLED AS NECESSARY AS CONSTRUCTION PROGRESSES.
- BACKFILL SHALL BE PLACED ON THE UPSTREAM SIDE OF ALL TRENCHES DURING UTILITY CONSTRUCTION.
- PROTECT ALL EXISTING STORM SEWER FACILITIES AND WATERWAYS SURROUNDING THE SITE FROM SEDIMENT TRANSPORT.

GENERAL CONSTRUCTION SEQUENCE:

1. INSTALL CONSTRUCTION ENTRANCE AS SHOWN. LIMIT ALL VEHICULAR TRAFFIC TO THIS ENTRANCE ONLY.
2. INSTALL SILT FENCE AND/OR FILTER SOCK.
3. CLEAR AND GRUB SITE PER DISTURBANCE LIMITS. DO NOT CLEAR OR DISTURB ANY AREAS OUTSIDE OF THE DISTURBANCE LIMITS.
4. ROUGH GRADE SITE PER DESIGN.
5. ESTABLISH STAGING AND STOCKPILE AREAS. PROVIDE SILT FENCING AROUND PERIMETER OF STAGED/STOCKPILED TOP SOIL AND/OR TEMPORARY STAGED PILE OR FILL.
6. INSTALL UTILITIES. TRENCHES SHALL BE BACKFILLED/COMPACTED AND STABILIZED IMMEDIATELY AFTER BACKFILL OPERATION.
7. INSTALL STORM SYSTEM. STABILIZE SLOPE WITH EROSION CONTROL BLANKET.
8. CONSTRUCT BUILDING.
9. ALL GRADED AREAS ARE TO BE SEEDED AND MULCHED FOR VEGETATIVE COVER IMMEDIATELY UPON COMPLETION OF EARTHWORK OPERATION.
10. CONSTRUCT PARKING LOTS AND ACCESS DRIVES.
11. CONSTRUCT AND STABILIZE BIORETENTION AREA. USE EXTREME CARE TO PREVENT SEDIMENT TRANSPORT TO FILTER AREA. IMMEDIATELY INSTALL SILT SOCK AND STABILIZE UPSTREAM AREAS.
12. COMPLETE FINAL GRADING AND INSTALL PERMANENT SEEDING AND MULCH.
13. WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND GROUND IS STABILIZED, REMOVE EROSION CONTROL MEASURES AND RESEED ANY DISTURBED AREAS CREATED BY THEIR REMOVAL.

INSPECTION PROCEDURES & MAINTENANCE:

1. DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING THE TEMPORARY EROSION CONTROL FACILITIES. ALSO, AREAS THAT HAVE BEEN SEEDED WILL BE INSPECTED REGULARLY AFTER SEED GERMINATION TO ENSURE COMPLETE COVERAGE OF EXPOSED AREAS.
2. INSPECTIONS OF ALL DEVICES SHALL BE COMPLETED WEEKLY AT MINIMUM. REPAIRS SHOULD BE COMPLETED IMMEDIATELY UPON DISCOVERY OF DEFICIENCIES.
3. THE OWNER WILL DESIGNATE A QUALIFIED PERSON(S) TO PERFORM THE FOLLOWING INSPECTIONS:
   - A. STABILIZATION MEASURES: DISTURBED AREAS AND AREAS USED FOR STORAGE OF MATERIALS THAT ARE EXPOSED TO PRECIPITATION WILL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM. AFTER A PORTION OF THE SITE IS FINALLY STABILIZED, INSPECTIONS WILL BE CONDUCTED AT LEAST ONCE EVERY MONTH THROUGHOUT THE LIFE OF THE PROJECT.
   - B. STRUCTURAL CONTROLS: ALL EROSION AND SEDIMENT CONTROL MEASURES IDENTIFIED IN THE PLAN WILL BE INSPECTED REGULARLY FOR PROPER POSITIONING, ANCHORING, AND EFFECTIVENESS IN TRAPPING SEDIMENTS. SEDIMENT WILL BE REMOVED FROM THE UPSTREAM OR UP-SLOPE SIDE OF THE FILTER FABRIC.
   - C. DISCHARGE POINTS: DISCHARGE POINTS OR LOCATIONS WILL BE INSPECTED TO DETERMINE WHETHER EROSION CONTROL MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT AMOUNTS OF POLLUTANTS FROM ENTERING RECEIVING WATERS.
   - D. CONSTRUCTION ENTRANCES: LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE WILL BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
4. ALL SEEDED AREAS SHALL BE MAINTAINED AS FOLLOWS:
   - A. IDENTIFY SEEDED AREAS WITH STAKES, STRING AND BRIGHTLY COLORED FLAGGING. PROTECT SEEDED AREAS UNTIL VEGETATION HAS BEEN ESTABLISHED.
   - B. IMMEDIATELY RESEED AREAS WHICH DO NOT ESTABLISH VEGETATION.

PERMANENT EROSION CONTROL MEASURES NOTES

PERMANENT STABILIZATION NOTES: DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES PERMANENTLY CEASE SHALL BE STABILIZED WITH PERMANENT SEED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

TOPSOIL SHALL HAVE AT LEAST TWO (2) PERCENT BY WEIGHT OF FINE TEXTURED STABLE ORGANIC MATERIAL, AND NO GREATER THAN SIX (6) PERCENT. MUCK SOIL SHALL NOT BE CONSIDERED TOPSOIL. TOPSOIL SHALL NOT HAVE LESS THAN 20 PERCENT FINE TEXTURES MATERIAL (PASSING THE No. 200 SIEVE) AND NOT MORE THAN 15 PERCENT CLAY. TOPSOIL SHALL BE FREE OF STONES OVER 1.5 INCHES IN DIAMETER, TRASH, NOXIOUS WEEDS SUCH AS NUT SEDGE AND QUACKGRASS, AND WILL HAVE LESS THAN 10 PERCENT GRAVEL BY VOLUME. REFER TO THE NYSSMDM FOR INFORMATION ON TOPSOIL APPLICATION AND GRADING.

THE PERMANENT SEED MIX SHALL BE AS FOLLOWS:

SPECIES	RATE PER ACRE (LBS.)	RATE PER 1,000 SQ.FT. (LBS.)
KENTUCKY BLUEGRASS	115	2.6
PERENNIAL RYE	35	0.8
FINE FESCUE	25	0.6

FERTILIZER SHALL BE COMMERCIAL FERTILIZER (5-0-5) INORGANIC, OR ORGANIC, CONTAINING NOT LESS THAN FIVE (5) PERCENT NITROGEN, AND FIVE (5) PERCENT WATER SOLUBLE POTASH.

PROVIDE AND INSTALL A MULCH ADEQUATE TO PROTECT THE SEEDING DURING ITS GROWING PERIOD. REFER TO THE NYSSMDM TO DETERMINE THE APPROPRIATE MULCHING TECHNIQUES FOR THE PARTICULAR SITE CONDITIONS.

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N

0 30 60
Scale in feet

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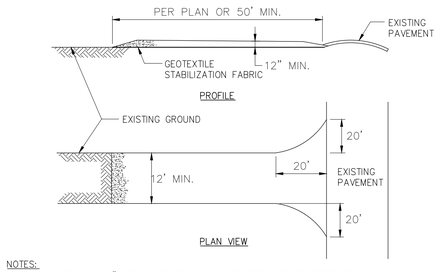
No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE
EROSION & SEDIMENT CONTROL PLAN

Designed By:	Drawn By:	Checked By:
AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

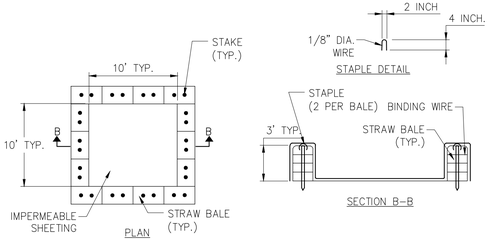
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NOTES:
1. STONE SIZE–USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. THICKNESS–NOT LESS THAN 12".
3. WOVEN GEOTEXTILE FABRIC WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
4. EXISTING ROAD SIDE DRAINAGE SHALL BE MAINTAINED.
5. MAINTENANCE–THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT OR STONE SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS–OF–WAY MUST BE REMOVED IMMEDIATELY.
6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

1 STABILIZED CONSTRUCTION ENTRANCE
SCALE: N.T.S.



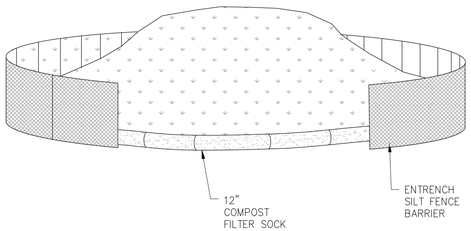
NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT. DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 30 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLAND,S BUFFERS, AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEET, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGE (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET–VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

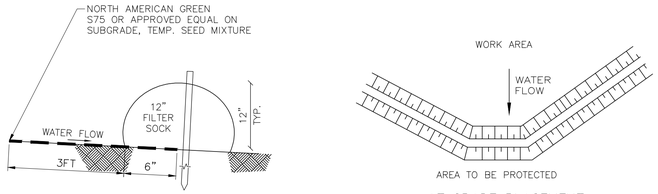
4 CONCRETE WASHOUT
SCALE: N.T.S.



INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
3. UPON COMPLETION OF STOCKPILING, EACH PILE SHALL BE SURROUNDED WITH COMOST FILTER SOCK, THEN STABILIZED WITH VEGETATION, OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF COMPOST FILTER SOCKS.

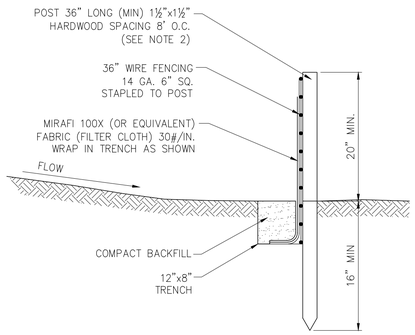
8 SOIL STOCKPILE
SCALE: N.T.S.



AT GRADE PLACEMENT

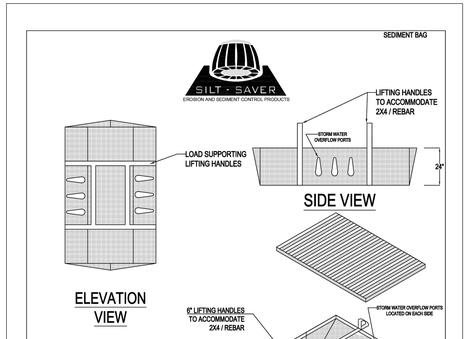
NOTES:
1. ALL MATERIAL TO MEET MANUFACTURER SPECIFICATIONS.
2. ALL FILTER SOCKS SHALL BE 12" DIAMETER.
3. INSTALL PERPENDICULAR TO FLOW.
4. SOCKS MAY BE USED AROUND PERIMETER OF CATCH BASINS (STAKES NOT NECESSARY).
5. THE CONTRACTOR SHALL MAINTAIN SOCK IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED.
6. DAMAGED SOCKS SHALL BE REPAIRED IN THE MANNER REQUIRED BY THE MANUFACTURER OR REPLACED WITHIN 24 HOURS OF INSPECTION NOTIFICATION.
7. THE CONTRACTOR SHALL REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE SOCK WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OF THE SOCK, OR AS DIRECTED BY THE REPRESENTATIVE.
8. UPON STABILIZATION OF THE AREA CONTRIBUTORY TO THE SOCK, STAKES SHALL BE REMOVED. THE INTERNAL COMPOST MATERIAL WITHIN THE SOCK SHALL BE DISPERSED ON SITE.

2 COMPOST FILTER SOCK DETAIL
SCALE: N.T.S.



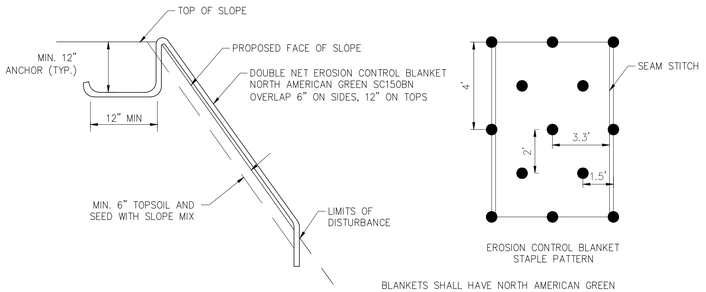
NOTES:
1. TIE FABRIC TO WIRE FENCE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
2. IF EXTRA STRENGTH FABRIC (GREATER THAN 50#/INCH) IS USED, WIRE CAN BE DELETED IF POST SPACING IS REDUCED TO 6' O.C.
3. AT THE ENDS OF THE FENCING THE FIRST 20' SHALL BE TURNED UP THE SLOPE 2'.
4. POSTS SHOULD BE INCLINED TOWARD THE DIRECTION FLOW CAME FROM.
5. OVERLAP FABRIC A MINIMUM OF 6" AND FOLDED AT JOINTS. ATTACH FILTER FABRIS TO STAKES ALLOWING EXTENSION INTO TRENCH AS SHOWN; SECURE TO STAKES AS NOTED.
6. THE MAXIMUM AREA OF RUNOFF PER 100LF. OF FENCE SHALL NOT EXCEED 0.25 ACRES.
7. MAINTENANCE SHALL BE PERFORMED AS NECESSARY. THE FENCING SHALL BE CHECKED AFTER EVERY STORM TO ENSURE THEIR PROPER FUNCTIONING.
8. WHEN FENCE IS NO LONGER NEEDED, THE ACCUMULATED SILT, THE POSTS AND FABRIC SHALL BE REMOVED AND TRENCH BACK FILLED WITH TOPSOIL AND SEEDED.
9. FENCING SHOULD BE PLACED AS SHOWN ON THE DRAWING OR IF NOT SHOWN, 10' BEYOND THE TOE OF THE OF THE SLOPE AND AT A SPACING IN ACCORDANCE WITH THE TABLE.
10. EXCAVATE TRENCH AS PER DETAIL AND SET POSTS AT 10' O.C.
11. BACKFILL WITH COMPACTED, EXCAVATED SOIL FROM TRENCH.

5 SILT FENCE
SCALE: N.T.S.



NOTE:
USE SILT–SAVER SEDIMENT BAG OR APPROVED EQUIVALENT FOR ALL EXISTING CATCH BASINS AS SHOWN ON PLAN.

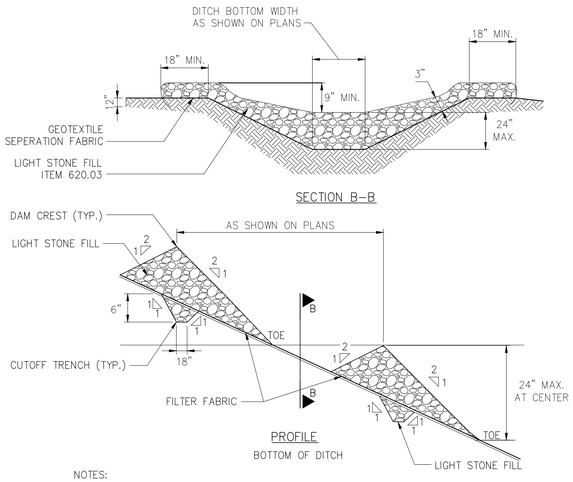
6 SEDIMENT BAG INLET PROTECTION
SCALE: N.T.S.



BLANKETS SHALL HAVE NORTH AMERICAN GREEN DOT SYSTEM TO ENSURE ADHERENCE TO THE ABOVE PATTERN.

9 EROSION CONTROL BLANKET
SCALE: N.T.S.

3 FILTER SOCK INLET PROTECTION
SCALE: N.T.S.



NOTES:

SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.

EXTEND THE STONE A MINIMUM OF 18" BEYOND THE DITCH BANKS.

7 CHECK DAM
SCALE: N.T.S.

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AUBURN, NY 13021

No.	Submittal / Revision	Apv	By	Date
1	SITE PLAN APPLICATION	LC	AMV	07/13/26

SHEET TITLE
EROSION & SEDIMENT CONTROL DETAILS

Designed By:	Drawn By:	Checked By:
AMV	AMV	LC
Issue Date:	Project No.:	Scale:
07/13/26	106860	AS SHOWN

Drawing No.:
C-502

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1 FIRST FLOOR - UNIT LAYOUT PLAN

SCALE: 1/8" = 1'-0"

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FIRST FLOOR - UNIT LAYOUT PLAN

A-100



1 SECOND FLOOR - UNIT LAYOUT PLAN

SCALE: 1/8" = 1'-0"

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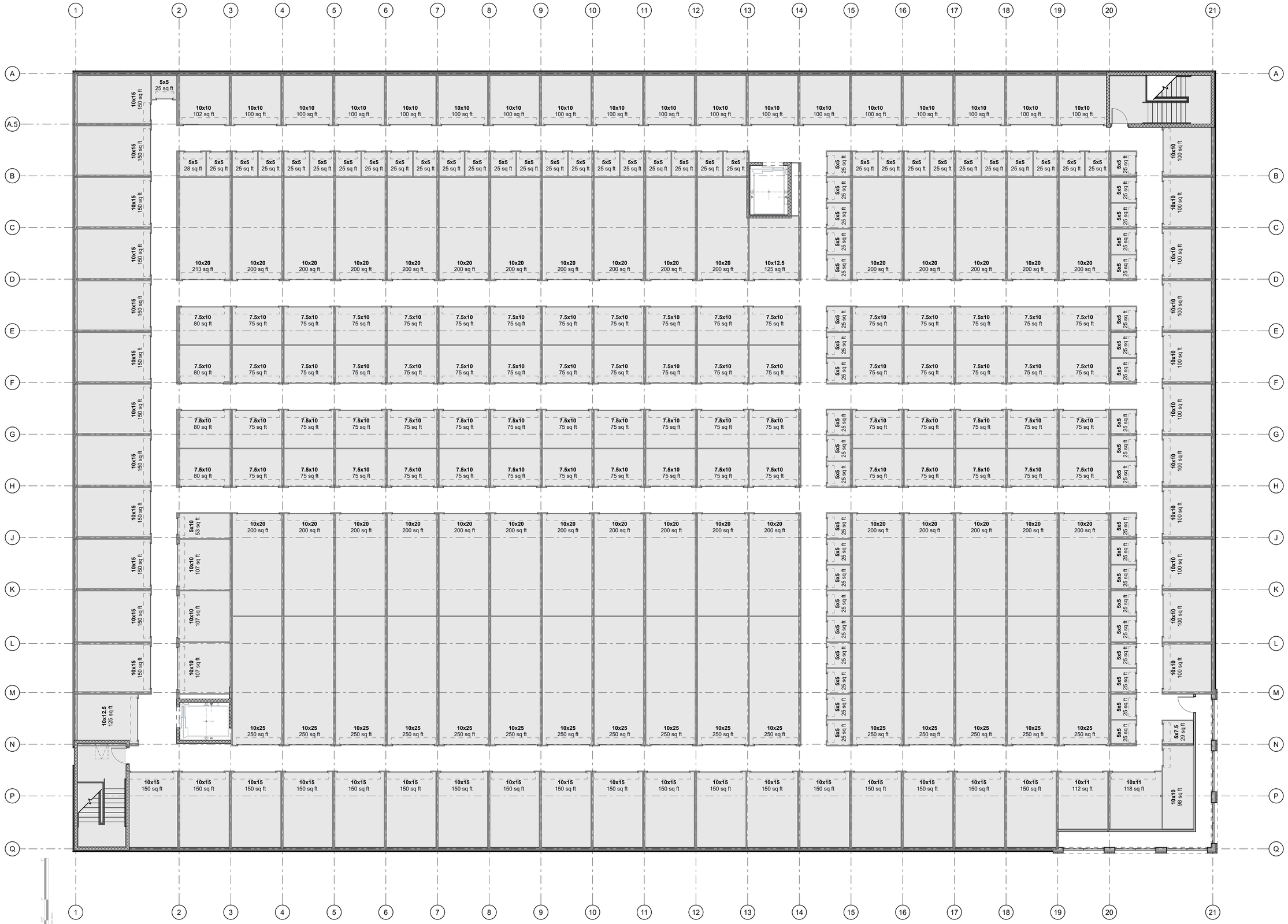
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SECOND FLOOR - UNIT LAYOUT PLAN

A-101



1 THIRD FLOOR - UNIT LAYOUT PLAN

SCALE: 1/8" = 1'-0"

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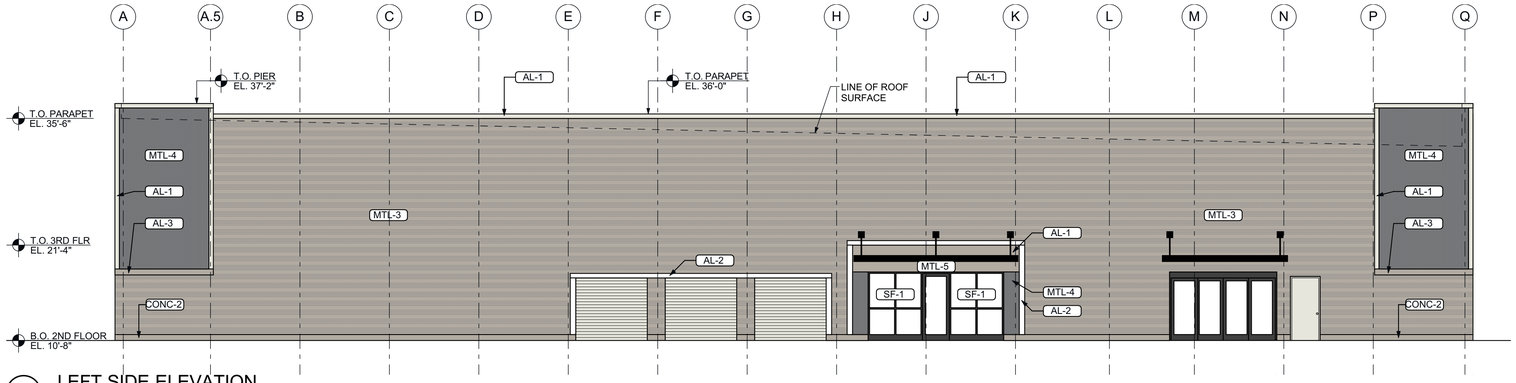
THIRD FLOOR - UNIT LAYOUT PLAN

A-102

EXTERIOR FINISH MATERIALS LIST

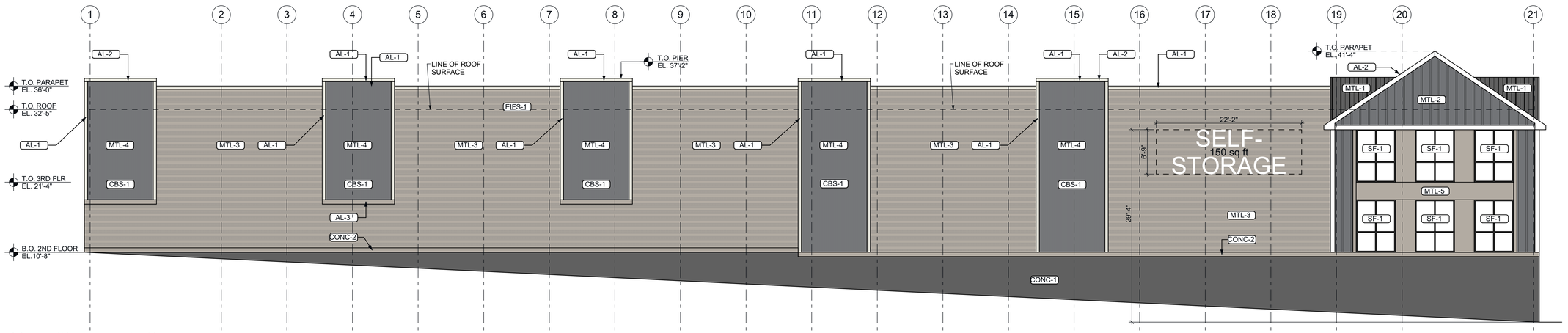
MARK INDICATES FINISH

MARK / DESCRIPTION	MATERIAL INFO	MATERIAL IMAGE
AL-1	**ALUMINUM COPING** MANUFACTURER: PAC-CLAD MODEL: .040" SMOOTH COLOR: STONE WHITE FINISH: PREFINISHED, INCLUDES FLASHING & TRIM	
AL-2	**ALUMINUM COPING** MANUFACTURER: PAC-CLAD MODEL: .040" SMOOTH COLOR: WHITE FINISH: PREFINISHED, INCLUDES FLASHING & TRIM	
AL-3	**ALUMINUM COPING** MANUFACTURER: PAC-CLAD MODEL: .040" SMOOTH COLOR: GRANITE FINISH: PREFINISHED, INCLUDES FLASHING & TRIM	
CONC-1	**PARGED CONCRETE** COLOR: DARK GREY FINISH: ROUGH PARGE	
CONC-2	**PARGED CONCRETE** COLOR: TO MATCH GRANITE FINISH: ROUGH PARGE	
MTL-1	**METAL PANEL FACADE** MANUFACTURER: ATAS MODEL: 2" FEILD LOK COLOR: BLACK	
MTL-2	**METAL PANEL FACADE** MANUFACTURER: PAC-CLAD MODEL: METAL BOARD AND BATTEN COLOR: MUSKET GRAY	
MTL-3	**METAL PANEL FACADE** MANUFACTURER: TBD MODEL: SQUARE RIBBED METAL PANEL HORIZONTAL COLOR: GRANITE	
MTL-4	**METAL PANEL FACADE** MANUFACTURER: TBD MODEL: SQUARE RIBBED METAL PANEL VERTICAL COLOR: MUSKET GRAY	
MTL-5	**METAL PANEL FACADE** MANUFACTURER: TBD MODEL: SMOOTH METAL PANEL COLOR: GRANITE	
FW-1	**FAUX WINDOW** MATERIAL: ALUM TUBES OVER SHEET ALUM COLOR: BLACK	
SF	**STOREFRONT** COLOR: PREFINISHED AL & GL FINISH: BLACK ANODIZED FINISH (SEE DOOR SCHEDULE)	



7 LEFT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



1 FRONT ELEVATION

SCALE: 1/8" = 1'-0"

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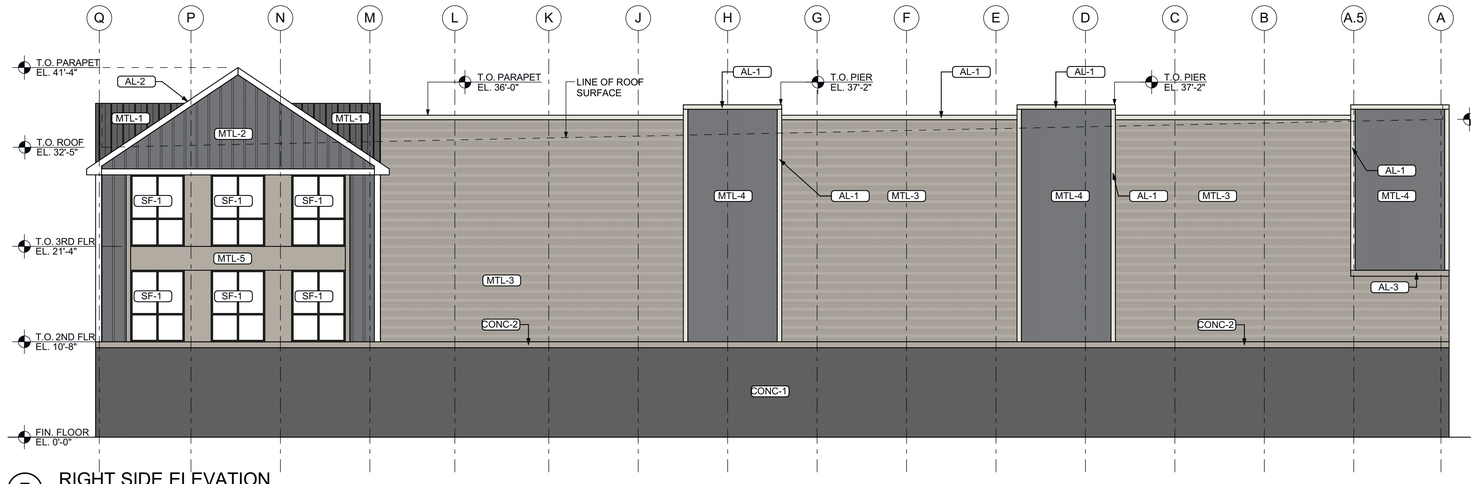
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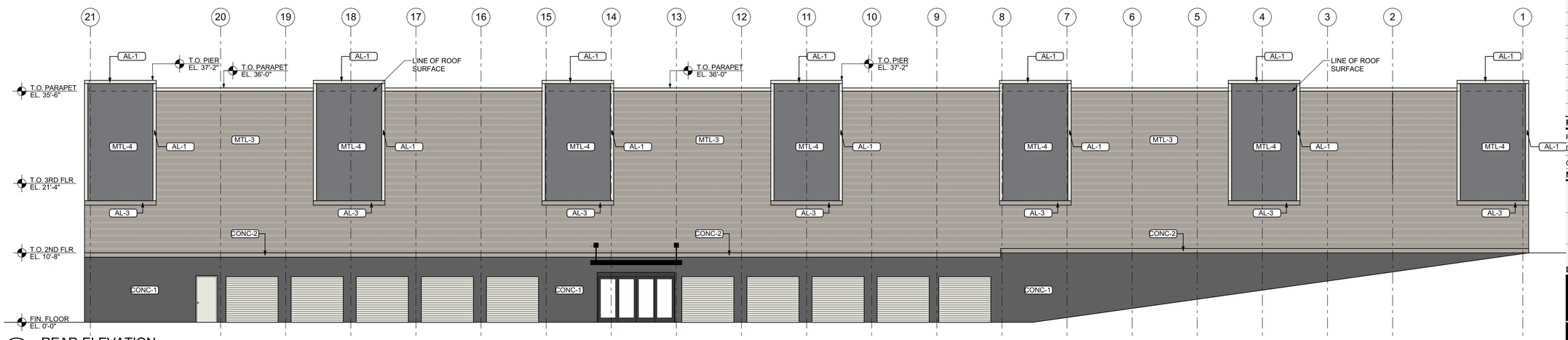
SCHEMATIC ELEVATIONS

SD-3



7 RIGHT SIDE ELEVATION

SCALE: 1/8" = 1'-0"



REAR ELEVATION

SCALE: 1/8" = 1'-0"

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REGISTERED ARCHITECT
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035808-1
STATE OF NEW YORK

Joseph M Davidson AIA
NY 035808-1

ENTRUST DIGITAL SIGNATURE

CLIENT + PROJECT

HORIZON STORAGE GROUP
1216 BROADWAY 2ND FLOOR
NEW YORK, NY 10001

GROUND-UP STORAGE
HORIZON SS AUBURN
121-139 GRANT AVE
AUBURN, NY 13021

DISTRIBUTION: **DATE:**

PROJECT INFO:

PROJECT NUMBER: 10411
DRAWN BY: DGR
CHECKED BY: JKM

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DRAWING NAME + NUMBER

SCHEMATIC ELEVATIONS

SD-4



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GROUND-UP STORAGE
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121-139 GRANT AVE
AUBURN, NY 13021

DISTRIBUTION:		DATE:
01	CLIENT REVIEW	05.11.2026

PROJECT INFO:

PROJECT NUMBER: 10411
DRAWN BY: DGR
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DRAWING NAME + NUMBER

SCHEMATIC RENDERINGS

SD-5



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AUBURN, NY 13021

DISTRIBUTION:	DATE:
01 CLIENT REVIEW	05.11.2026

PROJECT INFO:

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DRAWING NAME + NUMBER

SCHEMATIC RENDERINGS

SD-6

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the applicant or project sponsor to verify that the information contained in Part 1is accurate and complete.

A. Project and Applicant/Sponsor Information.

Revised 6/10/26

Name of Action or Project: Auburn Community Hospital Health Campus		
Project Location (describe, and attach a general location map): **See Appendix A for a location map*** 23 Peerine St., 147 North St., 143 North St., 1 West Park Avenue Auburn, Cayuga County, NY		
Brief Description of Proposed Action (include purpose or need): **See Appendix B for project site plans*** The proposed project involves the construction of a new medical office building for Auburn Community Hospital Health Campus located in the City of Auburn, Cayuga County, New York. The project site consists of approximately 5.4 acres with 4.9 acres of proposed disturbance and includes multiple parcels located along Perrine Street, North Street (NYS Route 34), and West Park Avenue. Tax IDs include: 115.28-1-82.1, 116.21-1-41, 116.21-1-42.1, and 115-28-1-82.2 that will be combined in order to facilitate the redevelopment. . Project development will require the demolition of existing buildings and associated site features located within the proposed disturbance area to accommodate the new development. Following demolition, site improvements will include construction of internal access drives, parking areas, sidewalks, landscaped areas, and utility connections to support the proposed building. The development will include the construction of a three-story medical office building with an approximate footprint of 30,700 square feet and a total building area of approximately 80,750 square feet. The building will serve as a medical office facility supporting Auburn Medical Center and will include patient access areas, medical office space, and associated support services. See Appendix B for project site plans.		
Name of Applicant/Sponsor: Park Grove Reality LLC	Telephone: E-Mail:	
Address: 46 Prince Street		
City/PO: Rochester	State: NY	Zip Code: 14607
Project Contact (if not same as sponsor; give name and title/role): Carly Kremer, Passero Associates, on behalf of Park Grove Reality	Telephone: 585-760-8501 E-Mail: ckremer@passero.com	
Address: 242 West Main Street, Suite 100		
City/PO: Rochester	State: NY	Zip Code: 14614
Property Owner (if not same as sponsor): Auburn Community Hospital	Telephone: E-Mail:	
Address: 17 Lansing Street		
City/PO: Auburn	State: NY	Zip Code: 13021

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Counsel, Town Board, or Village Board of Trustees ☐Yes ☑No		
b. City, Town or Village Planning Board or Commission ☑Yes ☐No	City of Auburn - Site Plan Review	04/14/2026
c. City, Town or Village Zoning Board of Appeals ☐Yes ☑No		
d. Other local agencies ☐Yes ☑No		
e. County agencies ☑Yes ☐No	Cayuga County - 239-m referral	April 2026
f. Regional agencies ☐Yes ☑No		
g. State agencies ☑Yes ☐No	NYSDEC - SWPPP	April 2026
h. Federal agencies ☐Yes ☑No		

i. Coastal Resources.

i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? ☐Yes ☑No

ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? ☐Yes ☑No

iii. Is the project site within a Coastal Erosion Hazard Area? ☐Yes ☑No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐Yes ☑No

- **If Yes,** complete sections C, F and G.
- **If No,** proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐Yes ☑No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway; Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐Yes ☑No

If Yes, identify the plan(s):

_____

_____

_____

C.3. Zoning **See Appendix C for a zoning map***

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☑ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?
C - General Commercial

b. Is the use permitted or allowed by a special or conditional use permit? ☑ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☑ No
If Yes,
i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? Auburn City School District

b. What police or other public protection forces serve the project site?
Cayuga County Sheriff Department, & Auburn Police Department

c. Which fire protection and emergency medical services serve the project site?
Auburn Community Hospital & Auburn Fire Department

d. What parks serve the project site?
Osborne Park, Freedom Park, Seminary Park, Veteran's Memorial Park, Lincoln Playground, Casey Park & Hoopes Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Commercial - Medical Office

b. a. Total acreage of the site of the proposed action? 5.4 acres
b. Total acreage to be physically disturbed? 4.9 acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? 5.4 acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☑ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☑ No
If Yes,
i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No
iii. Number of lots proposed? _____
iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will the proposed action be constructed in multiple phases? ☐ Yes ☑ No
i. If No, anticipated period of construction: 12 months
ii. If Yes:
- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? ☐ Yes ☑ No

If Yes, show numbers of units proposed.

	One Family	Two Family	Three Family	Multiple Family (four or more)
Initial Phase	_____	_____	_____	_____
At completion of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? ☑ Yes ☐ No

If Yes,

i. Total number of structures 1

ii. Dimensions (in feet) of largest proposed structure: 30' height; ~120' width; and ~270' length

iii. Approximate extent of building space to be heated or cooled: 80,750 square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? ☐ Yes ☑ No

If Yes,

i. Purpose of the impoundment: _____

ii. If a water impoundment, the principal source of the water: ☐ Ground water ☐ Surface water streams ☐ Other specify:

_____

iii. If other than water, identify the type of impounded/contained liquids and their source.

_____

iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres

v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

_____

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) ☐ Yes ☑ No

If Yes:

i .What is the purpose of the excavation or dredging? _____

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): _____
- Over what duration of time? _____

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.

_____

_____

i*v.* Will there be onsite dewatering or processing of excavated materials? ☐ Yes ☐ No

If yes, describe. _____

_____

v. What is the total area to be dredged or excavated? _____acres

vi. What is the maximum area to be worked at any one time? _____ acres

vii. What would be the maximum depth of excavation or dredging? _____ feet

viii. Will the excavation require blasting? ☐ Yes ☐ No

ix. Summarize site reclamation goals and plan: _____

_____

_____

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? ☐ Yes ☑ No

If Yes: **See Appendix D for NWI and NYSDEC wetland maps***

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____

_____

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

_____

_____

_____

_____

iii. Will the proposed action cause or result in disturbance to bottom sediments? ☐Yes ☐No

If Yes, describe: _____

iv. Will the proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐No

If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

_____

- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

_____

c. Will the proposed action use, or create a new demand for water? ☑Yes ☐No

If Yes:

i. Total anticipated water usage/demand per day: 11,340 gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☑Yes ☐No

If Yes:

- Name of district or service area: City of Auburn Water Department
- Does the existing public water supply have capacity to serve the proposal? ☑Yes ☐ No
- Is the project site in the existing district? ☑Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☑ No
- Do existing lines serve the project site? ☑Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐Yes ☑No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

_____

- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐No

If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

_____

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☑Yes ☐No

If Yes:

i. Total anticipated liquid waste generation per day: 11,340 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

Sanitary Waste Water

_____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☑Yes ☐No

If Yes:

- Name of wastewater treatment plant to be used: Auburn Waste Water Treatment Plant
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☑Yes ☐No
- Is the project site in the existing district? ☑Yes ☐No
- Is expansion of the district needed? ☐Yes ☑No

- Do existing sewer lines serve the project site? ☑ Yes ☐ No
- Will a line extension within an existing district be necessary to serve the project? ☐ Yes ☑ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☑ No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge or describe subsurface disposal plans):

_____

vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☑ Yes ☐ No **See Appendix E***

If Yes:

i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or 4.9 acres (impervious surface)

_____ Square feet or 5.4 acres (parcel size)

ii. Describe types of new point sources. Connection to existing storm water infrastructure.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Stormwater will be directed to a bioretention area on site that discharges to existing infrastructure operated by the Fifth Ward Sewer District located on the adjacent property

- If to surface waters, identify receiving water bodies or wetlands: Stormwater is not directed to any surface waters.
- Will stormwater runoff flow to adjacent properties? ☑ Yes ☐ No

iv. Does the proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☑ Yes ☐ No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☑ No

If Yes, identify:

i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☑ No

If Yes:

i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

ii. In addition to emissions as calculated in the application, the project will generate:

- _____Tons/year (short tons) of Carbon Dioxide (CO_2)
- _____Tons/year (short tons) of Nitrous Oxide (N_2O)
- _____Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____Tons/year (short tons) of Sulfur Hexafluoride (SF_6)
- _____Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs)
- _____Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐Yes ☑No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

_____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐Yes ☑No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

_____

_____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? **See Appendix F*** ☐Yes ☑No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐Weekend ☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): _____

_____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐Yes ☐No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

_____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐Yes ☐No

vii Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐Yes ☐No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐Yes ☐No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☐Yes ☑No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____

_____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):

_____

iii. Will the proposed action require a new, or an upgrade, to an existing substation? ☐Yes ☐No

l. Hours of operation. Answer all items which apply.

i. During Construction:

- Monday - Friday: 7 AM - 5 PM
- Saturday: None
- Sunday: None
- Holidays: None

ii. During Operations:

- Monday - Friday: 8 AM- 8 PM
- Saturday: 8 AM- 8 PM
- Sunday: None
- Holidays: None

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? ☑ Yes ☐ No

If yes:

i. Provide details including sources, time of day and duration:

Temporary increases in noise will occur during construction from equipment, trucks, and site development activities. These activities will occur during typical daytime construction hours and will be temporary. Operation of the medical building is not expected to generate noise above ambient levels.

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen? ☐ Yes ☑ No

Describe: The site is largely disturbed and does not contain significant natural vegetation or landforms that function as noise barriers.

n. Will the proposed action have outdoor lighting? ☑ Yes ☐ No

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:

Outdoor lighting will be provided for parking areas, pedestrian walkways, and building entrances. Fixtures will be downward-directed to illuminate the site while minimizing light spillover onto adjacent properties.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? ☐ Yes ☑ No

Describe: The site does not contain significant natural vegetation that functions as a light screen.

o. Does the proposed action have the potential to produce odors for more than one hour per day? ☐ Yes ☑ No

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? ☐ Yes ☑ No

If Yes:

i. Product(s) to be stored _____

ii. Volume(s) _____ per unit time _____ (e.g., month, year)

iii. Generally, describe the proposed storage facilities: _____

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? ☐ Yes ☑ No

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices? ☐ Yes ☐ No

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? ☐ Yes ☑ No

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: _____ tons per _____ (unit of time)
- Operation : _____ tons per _____ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction: _____
- Operation: _____

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction: _____
- Operation: _____

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

_____

_____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

_____

_____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

_____

_____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

_____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

_____

_____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

☑ Urban ☑ Industrial ☑ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)

☐ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

_____

_____

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	3.3	4.6	+1.3
• Forested	2.1	0.6	-1.5
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	0.2	0.1	-0.1
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	0	0.17	+0.17
• Wetlands (freshwater or tidal)	0	0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: _____ _____			

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☑ No

i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☑ Yes ☐ No

If Yes,

i. Identify Facilities:

Auburn Community Hospital, Finger Lakes Center For Living & Finger Lakes Hearing Center, E. John Gavras Center

e. Does the project site contain an existing dam? ☐ Yes ☑ No

If Yes:

i. Dimensions of the dam and impoundment:

- Dam height: _____ feet
- Dam length: _____ feet
- Surface area: _____ acres
- Volume impounded: _____ gallons OR acre-feet

ii. Dam's existing hazard classification: _____

iii. Provide date and summarize results of last inspection:

_____

_____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☑ No

If Yes:

i. Has the facility been formally closed? ☐ Yes ☐ No

- If yes, cite sources/documentation: _____

ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:

_____

_____

iii. Describe any development constraints due to the prior solid waste activities: _____

_____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☑ No

If Yes:

i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

_____

_____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☑ No

If Yes: **See Appendix G for a remediation site map***

i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No

☐ Yes – Spills Incidents database Provide DEC ID number(s): _____

☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____

☐ Neither database

ii. If site has been subject of RCRA corrective activities, describe control measures:_____

_____

_____

iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☑ No

If yes, provide DEC ID number(s): _____

iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):

_____

_____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☑ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site **See Appendix H for a soil map***

a. What is the average depth to bedrock on the project site? >6 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☑ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____%

c. Predominant soil type(s) present on project site:

CeB - Cazenovia silt loam	32.2 %
Uc - Urban land-Cazenovia Complex	67.8 %
	%

d. What is the average depth to the water table on the project site? Average: 4.4 feet

e. Drainage status of project site soils:
☑ Well Drained: 100 % of site
☐ Moderately Well Drained: _____% of site
☐ Poorly Drained _____% of site

f. Approximate proportion of proposed action site with slopes:
☑ 0-10%: 100 % of site
☐ 10-15%: _____% of site
☐ 15% or greater: _____% of site

g. Are there any unique geologic features on the project site? ☐ Yes ☑ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☐ Yes ☑ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☐ Yes ☑ No

If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☐ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name _____ Classification _____
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name _____ Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☑ No

If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? **See Appendix I for a FEMA map*** ☐ Yes ☑ No

j. Is the project site in the 100-year Floodplain? ☐ Yes ☑ No

k. Is the project site in the 500-year Floodplain? ☐ Yes ☑ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☐ Yes ☑ No
If Yes:

i. Name of aquifer: _____

See Appendix J for Aquifer maps*

m. Identify the predominant wildlife species that occupy or use the project site:

Squirrels, Mice

Chipmunks, Insects

Various bird species

n. Does the project site contain a designated significant natural community? ☐ Yes ☑ No

If Yes:

i. Describe the habitat/community (composition, function, and basis for designation): _____

ii. Source(s) of description or evaluation: _____

iii. Extent of community/habitat:

- Currently: _____ acres
- Following completion of project as proposed: _____ acres
- Gain or loss (indicate + or -): _____ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? ☐ Yes ☑ No

If Yes:

i. Species and listing (endangered or threatened): _____

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? ☐ Yes ☑ No

If Yes:

i. Species and listing: _____

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? ☐ Yes ☑ No

If yes, give a brief description of how the proposed action may affect that use: _____

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? ☐ Yes ☑ No

If Yes, provide county plus district name/number: _____

b. Are agricultural lands consisting of highly productive soils present? ☐ Yes ☑ No

i. If Yes: acreage(s) on project site? _____

ii. Source(s) of soil rating(s): _____

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? ☐ Yes ☑ No

If Yes:

i. Nature of the natural landmark: ☐ Biological Community ☐ Geological Feature

ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? ☐ Yes ☑ No

If Yes:

i. CEA name: _____

ii. Basis for designation: _____

iii. Designating agency and date: _____

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? ☑ Yes ☐ No

If Yes:

i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District

ii. Name: Listed Property: Charles Chauncey Dwight House (149 North St), Eligible Property: 175 North St, Eligible Property: 165 North St, Eligible Property: 161 North St, Eligible Property:POWERS INSURANCE, Eligible property:161 North St, Eligible property:165 North St., Eligible propert... Property:157 North St, Eligible Property: 139 North St, Eligible Property: POWERS INSURANCE (129 North St)

iii. Brief description of attributes on which listing is based:

SHPO Letter has been provided

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☐ Yes ☑ No

If Yes:

i. Describe possible resource(s): _____

ii. Basis for identification: _____

h. Is the project site within fives miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☐ Yes ☑ No

If Yes:

i. Identify resource: _____

ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____

iii. Distance between project and resource: _____ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☐ Yes ☑ No

If Yes:

i. Identify the name of the river and its designation: _____

ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

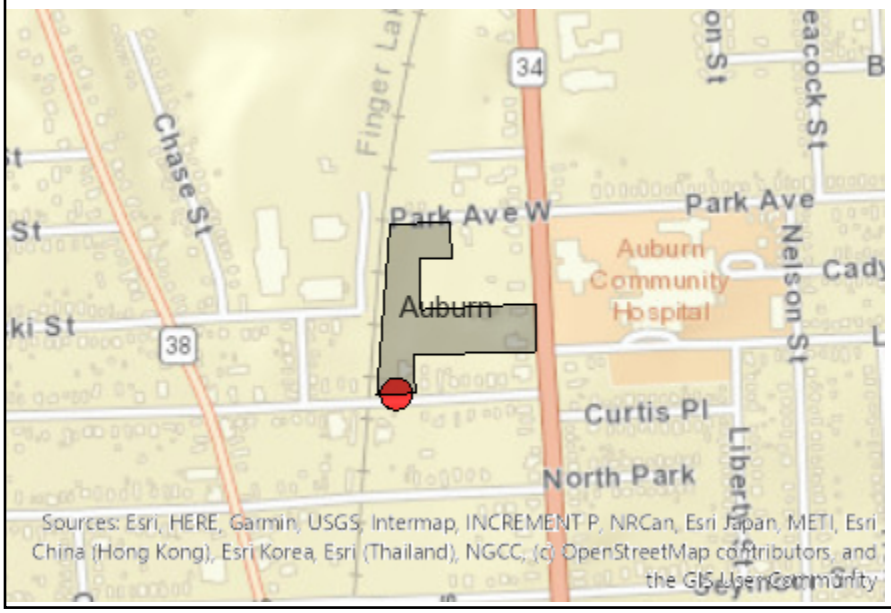
G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name Carly Kremer, Passero Associates, on behalf of Park Grove Reality LLC Date _____

Signature Carly Kremer Title Environmental Scientist

PRINT FORM



Disclaimer: The EAF Mapper is a screening tool intended to assist project sponsors and reviewing agencies in preparing an environmental assessment form (EAF). Not all questions asked in the EAF are answered by the EAF Mapper. Additional information on any EAF question can be obtained by consulting the EAF Workbooks. Although the EAF Mapper provides the most up-to-date digital data available to DEC, you may also need to contact local or other data sources to confirm data provided by the Mapper or to obtain data not provided by the Mapper.



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.h.ii [Surface Water Features]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.h.iii [Surface Water Features]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Yes - Digital mapping data for archaeological site boundaries are not available. Refer to EAF Workbook.
E.3.e.ii [National or State Register of Historic Places or State Eligible Sites - Name]	Eligible property:POWERS INSURANCE, Eligible property:161 North St, Eligible property:165 North St., Eligible property:157 North St, Eligible property:139 North St, Charles Chauncey Dwight House
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No

Exhibit A

Site Plan Set

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS

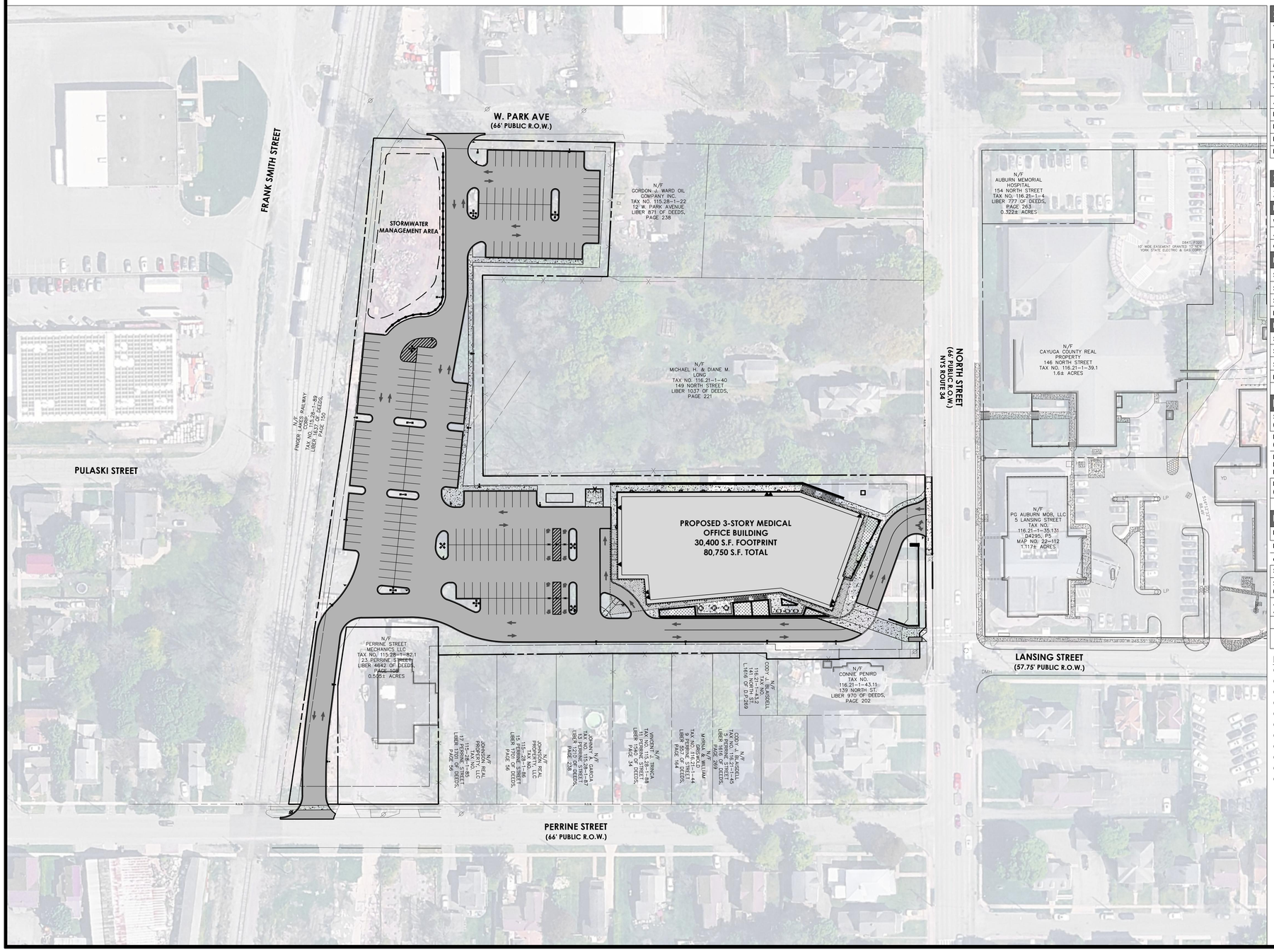
SITE DEVELOPMENT PLANS

CITY OF AUBURN | CAYUGA | NEW YORK

PN: 20255046.0001

60 0 30 60 120

HORIZONTAL SCALE: 1"=60'



SITE DATA	
TAX ACCOUNT NUMBER:	115.28-1-82.1, 116.21-1-41, 116.21-1-42.1, 115-28-1-82.2
PARCEL ADDRESS:	23 PERRINE ST., 147 NORTH ST., 143 NORTH ST., W. PARK AVENUE
MUNICIPALITY:	CITY OF AUBURN
COUNTY:	CAYUGA
TOTAL PARCEL AREA:	5.417 ACRES
AREA OF DISTURBANCE:	4.912 ACRES
EXISTING ZONING:	C-GENERAL COMMERCIAL
PROPOSED ZONING:	C-GENERAL COMMERCIAL
EXISTING USE:	MIXED USE
PROPOSED USE:	MEDICAL OFFICE BUILDING

ZONING DATA	REQUIRED	PROPOSED
ZONING DISTRICT: C-GENERAL COMMERCIAL		
LOT		
WIDTH	75'	208'
AREA	20,000 SF	235,965 SF
COVERAGE	80% MAX	78.80%
BUILDING		
SETBACK - FRONT	20'	65.4'
SETBACK - SIDE	10'	18'
SETBACK - REAR	10'	326'
HEIGHT	35' MAX.	30'
PARKING		
SETBACK	10'	10'
STALLS QTY	2 PER 1,000 SF=150	202
STALL SIZE - PERPENDICULAR	9' x 18'	9'X18'
DRIVE AISLE WIDTH - 90 DEG	24'	24'

ENVIRONMENTAL DATA	NO	YES
STATE REGULATED WETLANDS (NYSDEC ERM):	X	
FEDERALLY REGULATED WETLANDS (USFWS NWI):	X	
FLOOD PLAIN (FEMA NFHL): FIRM PANEL: 36011C0305E DATED: 8/2/2007	X	
ENDANGERED SPECIES (NYSDEC ERM):	X	

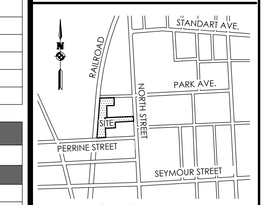
UTLITIES DATA	
PUBLIC WATER PROVIDED BY:	CITY OF AUBURN
ELECTRIC SERVICE PROVIDED BY:	NYSEG
GAS SERVICE SUPPLIED BY:	NYSEG
SANITARY SEWER PROVIDED BY:	CITY OF AUBURN
STORM SEWER & DRAINAGE WILL BE: (MAINTAINED BY THE OWNER)	PRIVATE
ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE CURRENT DEVELOPMENT STANDARDS AND SPECIFICATIONS OF THE MUNICIPALITY	

DRAWING INDEX

C-101 COVER
C-102 SITE PLAN
C-103 EXISTING CONDITIONS & DEMOLITION PLAN
C-104 UTILITY PLAN
C-105 GRADING & EROSION CONTROL PLAN
C-106 LANDSCAPING PLAN
C-107 FOUNDATION PLANTING PLAN
C-108 LIGHTING PLAN
C-109 FIRE APPARATUS ACCESS ROAD PLAN
C-201 NOTES
C-202 - 205 DETAILS

DESIGN DEVELOPMENT

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CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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COVER

AUBURN, NY

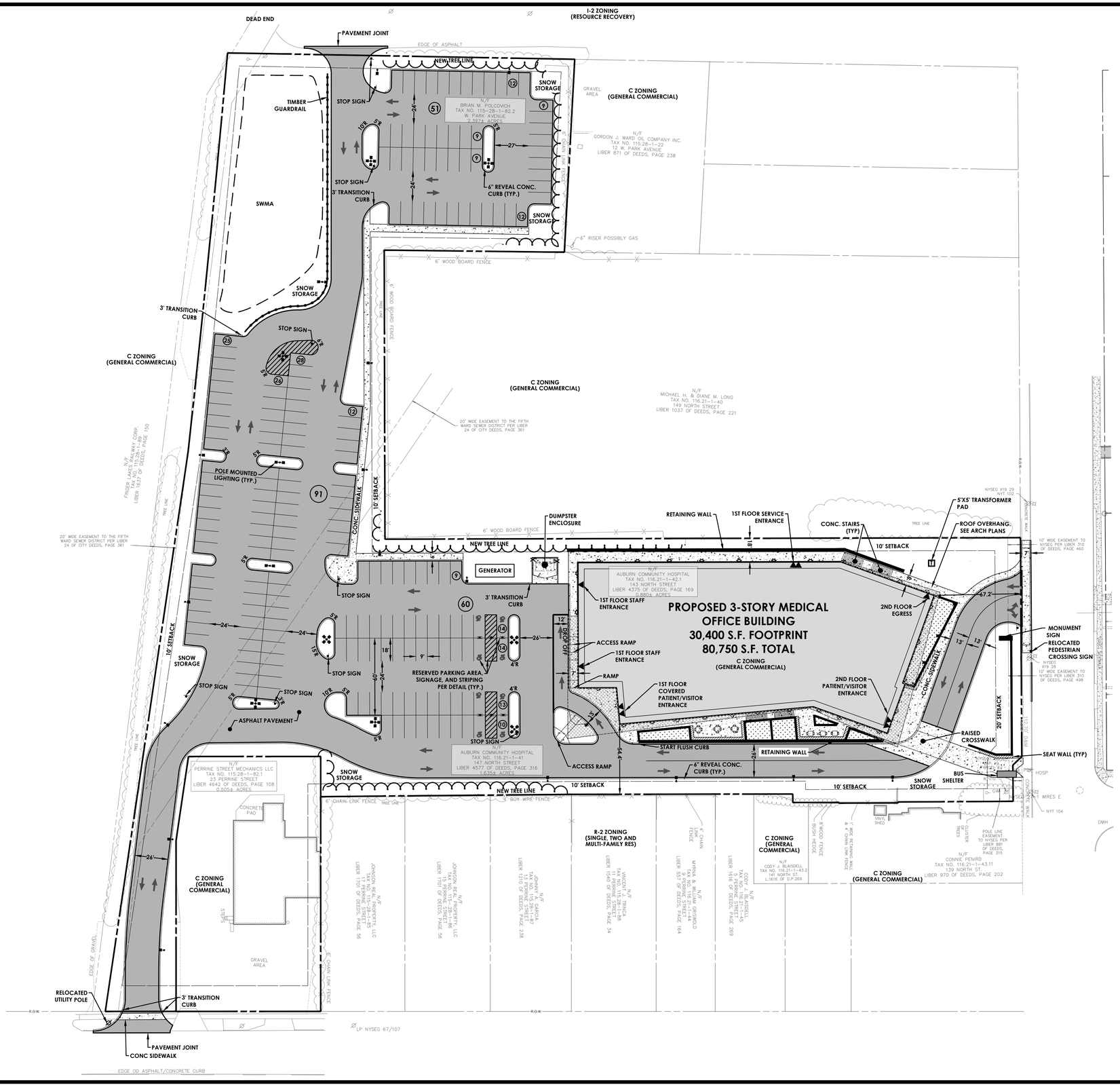
AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-101**

DATE: **APRIL 2026**

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LEGEND - SITE:

- PROPERTY BOUNDARY
- R.O.W. — RIGHT OF WAY
- EXISTING CENTER LINE ROAD
- SETBACK
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING
- PROPOSED BUILDING
- (14) PROPOSED PARKING COUNT
- PROPOSED CONCRETE
- PROPOSED ACCESS RAMP
- PROPOSED PAVEMENT STRIPING
- PROPOSED CURB
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED LIGHT POLE
- PROPOSED TIMBER GUARD RAIL
- PROPOSED BUILDING MOUNTED LIGHT

40 0 20 40 80

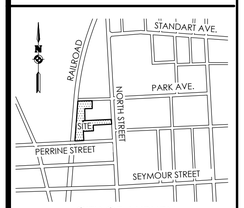
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DESIGN DEVELOPMENT

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ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
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DESIGNER JACOB LEWIS, E.I.T.

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SITE PLAN

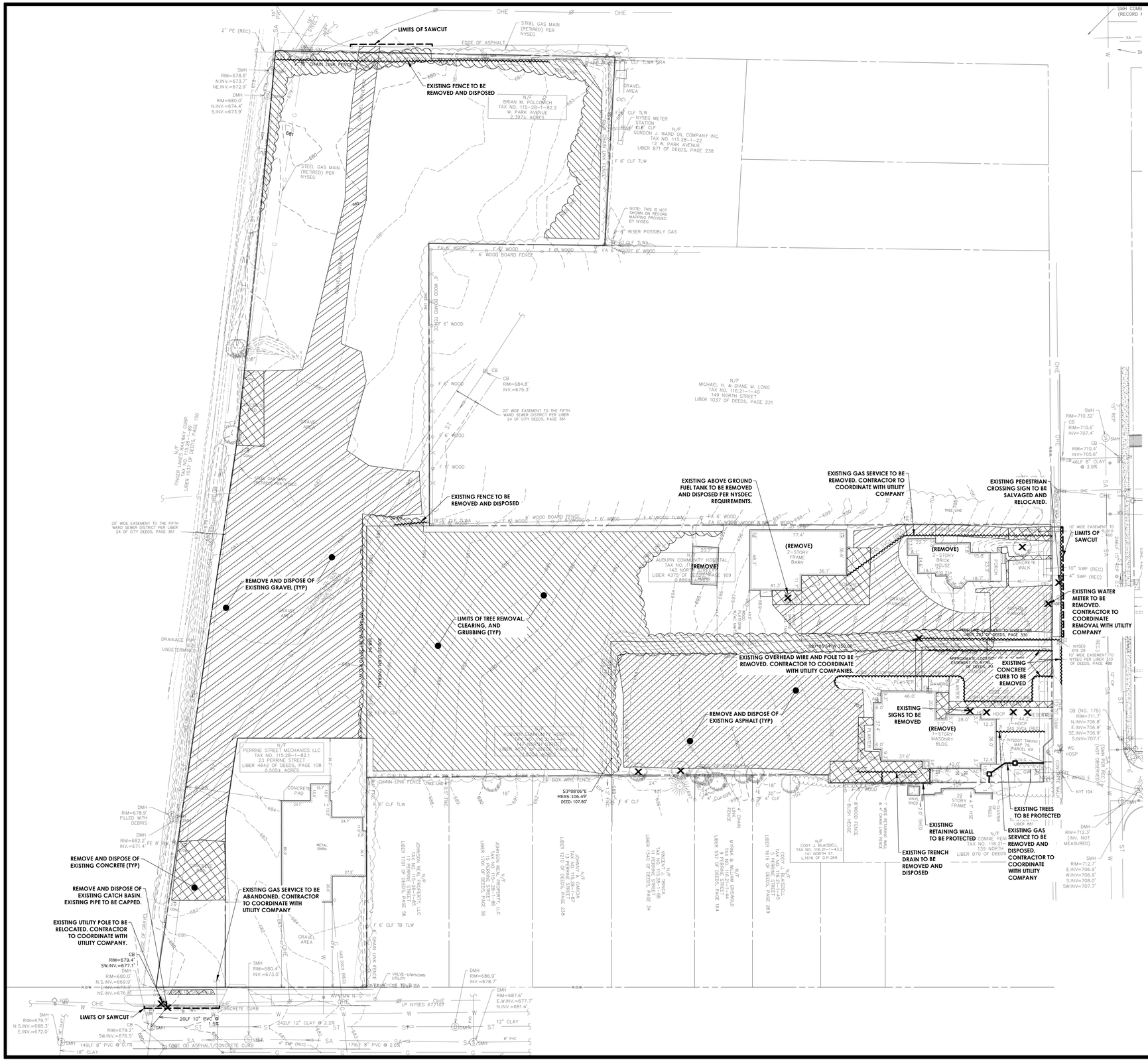
AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

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DATE: **APRIL 2026**



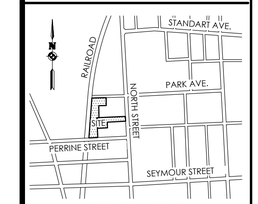
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- R.O.W.
- EXISTING CENTER LINE ROAD
- EXISTING BUILDING
- EXISTING FENCE
- EXISTING EASEMENT LINE
- SETBACK
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING STORM SEWER & MH
- EXISTING WATER SERVICE & VALVE
- EXISTING SIGN
- EXISTING SANITARY 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

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Dig Safely. New York
1-800-962-7962
i-Notice = www.DigSafelyNewYork.com



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(585) 325-1000 FAX: (585) 325-1691
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EXISTING CONDITIONS & DEMOLITION PLAN

AUBURN, NY

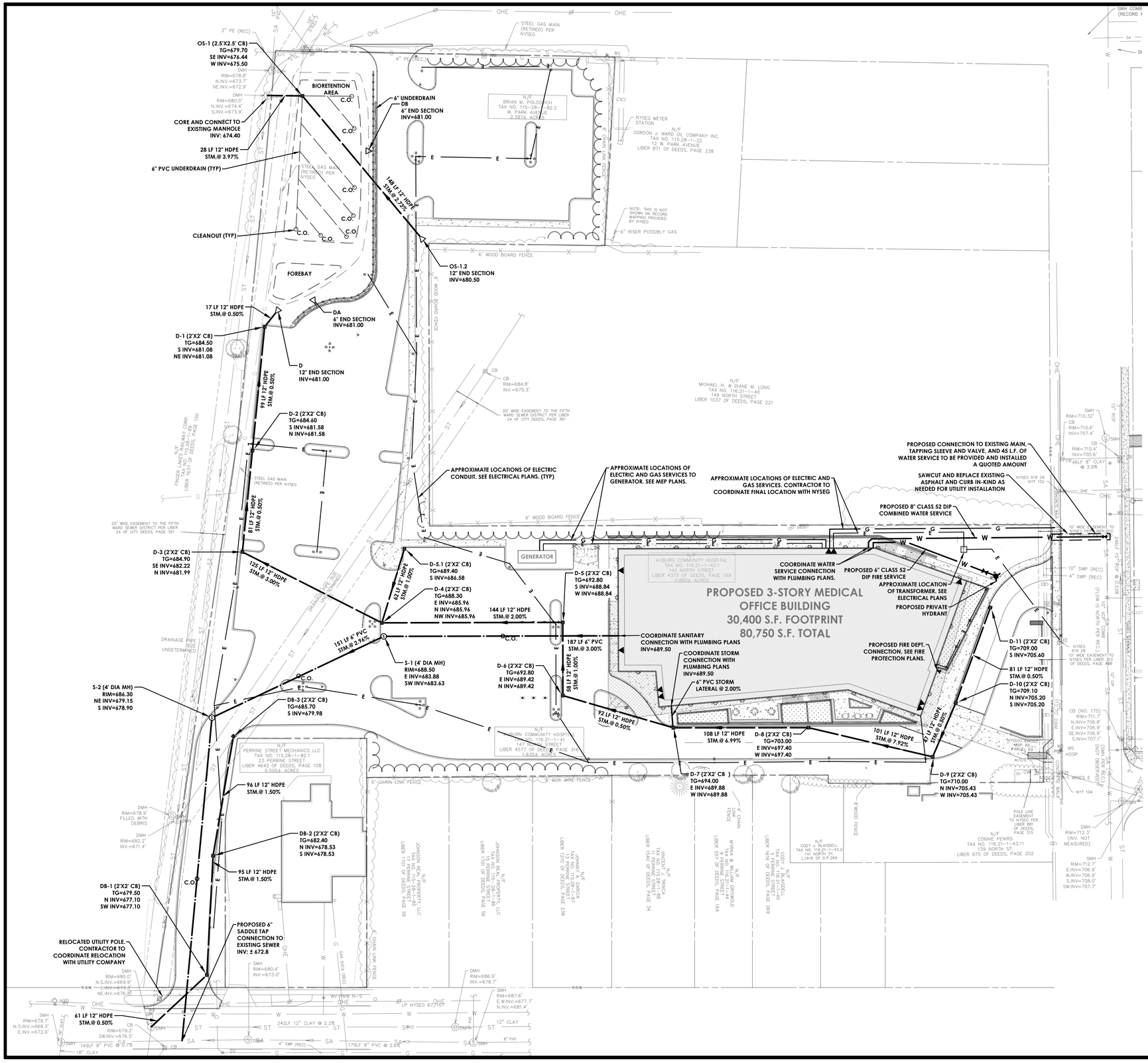
AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-103**

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LEGEND - UTILITIES:

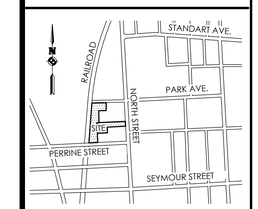
- PROPERTY BOUNDARY
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- EXISTING BUILDING
- EXISTING FENCE
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- PROPOSED EASEMENT LINE
- PROPOSED BUILDING
- PROPOSED CONCRETE
- PROPOSED SIGN
- PROPOSED LIGHT
- PROPOSED STORM SEWER, INLET MH, CB & END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

40 0 20 40 80

HORIZONTAL SCALE: 1"=40'

DESIGN DEVELOPMENT

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UTILITY PLAN

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-104**

DATE: **APRIL 2026**

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LEGEND - GRADING:

- 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
- 520 EXISTING MAJOR CONTOUR
- 521 EXISTING MINOR CONTOUR
- 520 PROPOSED MAJOR CONTOUR
- 521 PROPOSED MINOR CONTOUR
- SF SILT FENCE
- 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
- PROPOSED STONE CHECK DAM
- PROPOSED INLET PROTECTION
- PROPOSED TREE/BRUSH LINE
- EXISTING TREE/BRUSH LINE
- SF SILT FENCE
- TC:492.50 BC:492.40 (P) TOP (T) OF: CURB (C), WALL (W), STAIRS (S), RAMP (R)PAVEMENT BOTTOM (B) OF: CURB (C), WALL (W), STAIRS (S), RAMP (R) *RETAINING WALL DESIGN TO BE PREFORMED BY OTHERS AND BY A LICENSED ENGINEER. BOTTOM OF WALL ELEVATION TO BE ELEVATION AT GRADE, NOT BOTTOM FOUNDATION COURSE OF THE WALL
- 492.70 PROPOSED SPOT ELEVATION
- 492.70 EXISTING SPOT ELEVATION

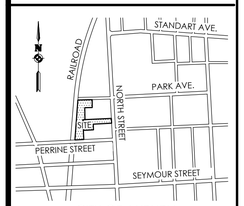
40 0 20 40 80

HORIZONTAL SCALE: 1"=40'

N

DESIGN DEVELOPMENT

PASSERO
engineering architecture



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100
ROCHESTER, NY 14614
(585) 325-1000
FAX: (585) 325-1691
PROJECT MANAGER: EDMUND MARTIN, P.E.
PROJECT ENGINEER: ANDREW BURNS, P.E.
DESIGNER: JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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GRADING & EROSION CONTROL PLAN

AUBURN, NY

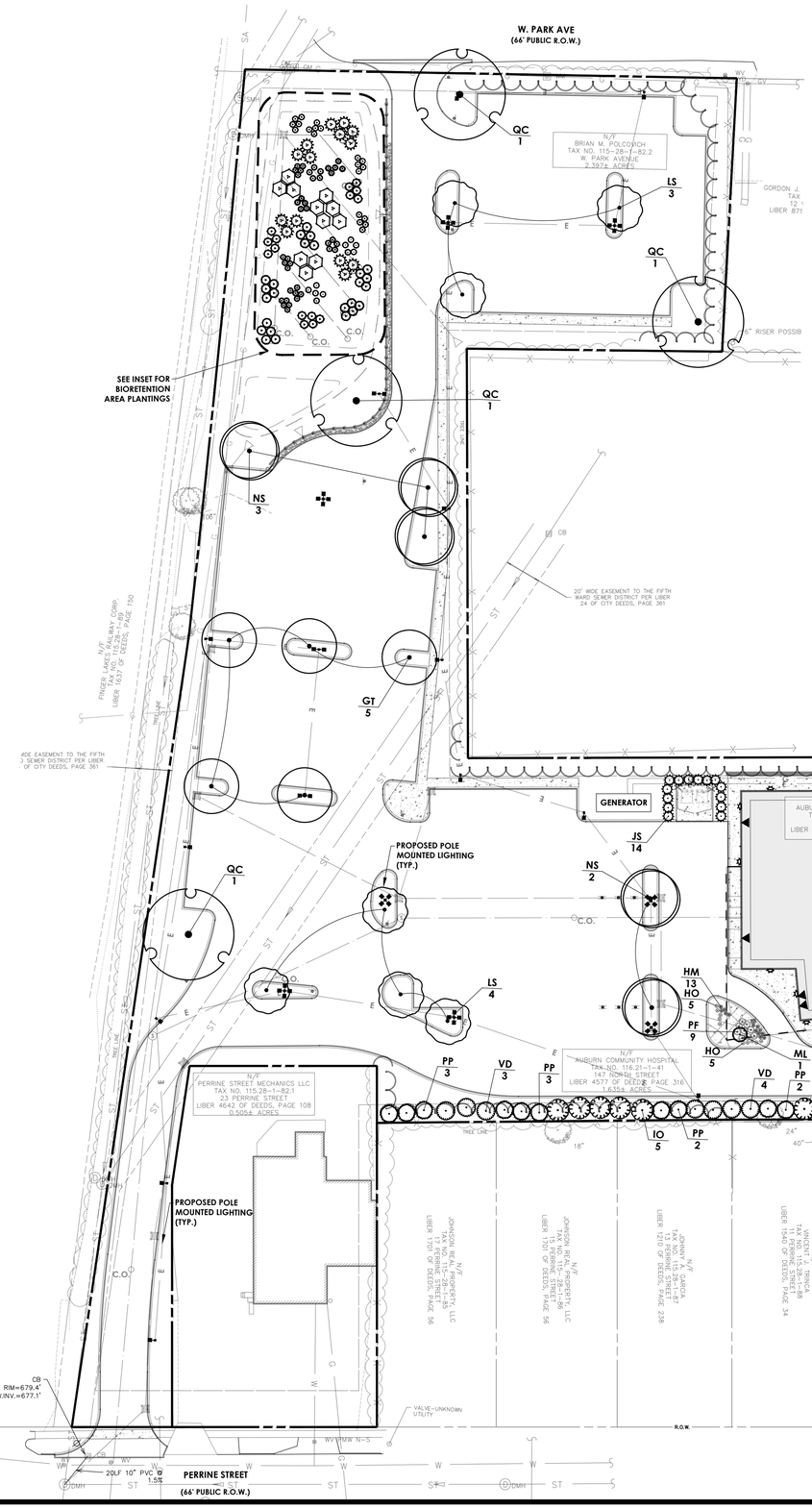
AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

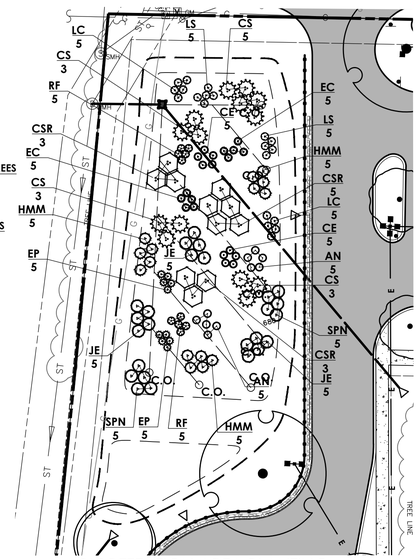
PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-105**

DATE: **APRIL 2026**

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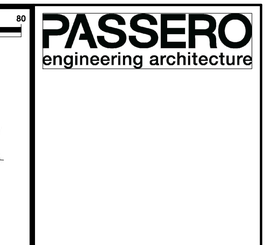


BIORETENTION AREA PLANTING
SCALE: 1"=30'

AUBURN COMMUNITY HOSPITAL PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HEIGHT	SPACING / SPREAD	REMARKS	NATIVE
DECIDUOUS TREES									
AC	6	Acer Campestre	Hedge Maple	3-3.5"	B&B	25-35'	As Shown		Y
GT	5	Gleditsia triacanthos inermis 'Impcole'	Imperial Honey Locust	3-3.5"	B&B	30-40'	As Shown		Y
LS	7	Liquidambar styraciflua 'Rotundiloba'	Round-Lobed Sweet Gum	3-3.5"	B&B	60-70'	As Shown	Fall Planting Hazard	Y
NS	7	Nyssa sylvatica 'Wildfire'	Wildfire Tupelo	3-3.5"	B&B	30-50'	As Shown	Fall Planting Hazard	Y
QC	4	Quercus coccinea	Scarlet Oak	3-3.5"	B&B	50-70'	As Shown	Fall Planting Hazard	Y
FLOWERING AND ORNAMENTAL TREES									
MJ		Magnolia x "Jane"	Jane Magnolia	5-6'	B&B	20-25'	15-20'		N
EVERGREEN TREES									
IO	8	Ilex opaca 'Greenleaf'	Greenleaf American Holly	3-3.5"	B&B	20-25'	As Shown	Spring Planting only	Y
JS	14	Juniperus scopulorum 'Witchita Blue'	Witchita Blue Juniper	5-6'	B&B	10-15'	As Shown		Y
PP	13	Picea pungens 'Fat Albert'	Fat Albert Colorado Blue Spruce	5-6'	B&B	10-15'	7-10'		Y
SHRUBS									
HP	39	Hydrangea paniculata "Ilvobo"	Bobo Panicle Hydrangea	18-24"	#5 cont.	3-4'	2-5'		N
PF	19	Potentilla Fruticosa "Longacre"	Longacre Bush Cinquefoil						N
RR	5	Rosa x "Knock-out"	Knockout Rose	18-24"	#3 cont.	18-36"			N
SP	18	Syringa patula "Miss Kim"	Miss Kim Korean Lilac	24-30"	#5 cont.	5-6'	5-6'		N
VD	10	Viburnum dentatum "Ralpf Senior"	Autumn Jazz Arrowwood Viburnum	4'	B&B	6-10'			Y
PERENNIALS/GRASSES									
HM	39	Hemerocallis x "Stella d'oro"	Star of Gold Dwarf Lily	10-12"	#2 Cont.	12-24"	12-24"		N
HO	10	Heuchera x Wildberry	Dolce Wildberry Coral Bells	10-14"	#2 Cont.	16-20"	16-20"		Y
PA	17	Perovskia atriplicifolia " Blue Jean Baby"	Blue Jean Baby Russian Sage	15-18"	#3 Cont.	18-36"			N
PLB	12	Pennisetum alopecuroides "Little Bunny"	Little Bunny Fountain Grass	10-12"	#2 Cont.	10-12"	10-12"		N
BIORETENTION									
AN	10	Aster Novae-Angliae	New England Aster	10-12"	1 QT	3-4'	1.5-2'		
CE	10	Carex Elata 'Aura'	Bowles Golden Sedge	10-12"	1 QT	1.5-2.5'	1.5-2'		
CS	14	Cornus Sericea 'Flaviramea'	Yellow Twig Dogwood	18-24"	B.R.	6-8'	6-8'		
CSR	11	Cornus Sericea 'Red Osier'	Red Oiser Dogwood	18-24"	B.R.	5-6'	5-6'		
EP	10	Echienacea Purpurea	Puprle Coneflower	10-12"	1 QT	2.5-3'	1.5-2'		
EC	10	Eupatorium Maculatum	Spotted Joe-Pye Weed	---	1 QT	1-2'	1.5-2'		
HMM	15	Hibiscus Moscheutos	March Mallow	2-3'	#2 Cont.	3-6'	2-4'		
JE	15	Juncus Effuses	Common Soft Rush	12-15"	#2 Cont.	2-4'	2-4'		
LS	10	Liatris Spicata	Blazing Star	10-12"	1 QT	2-4'	1-1.5'		
LC	5	Lobelia Cardinalis	Cardinal Flower	---	1 QT	2-3'	1.5-2'		
RF	10	Rudbeckia Speciosa	Black Eyes Susan	---	1 QT	2'	1.5-2'		
SPN	10	Salix Purpurea 'Nana"	Purple Willow	2-3'	#2 Cont.	3-5'	3-5'		

HORIZONTAL SCALE: 1"=40'





CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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LANDSCAPING PLAN

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-106**

DATE: **APRIL 2026**

DESIGN DEVELOPMENT

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AUBURN COMMUNITY HOSPITAL PLANT SCHEDULE

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	MATURE HEIGHT	SPACING / SPREAD	NATIVE
FLOWERING AND ORNAMENTAL TREES								
CC	2	Cercis Canandensis 'Pink Pom Poms'	Pink Pom Poms Redbud	1.5-2"	B&B	15-20'	15-20'	Y
CV	2	Chionanthus Virginicus	White Fringe Tree	5-6'	B&B	12-20'	12-20'	Y
MJ	1	Magnolia x "Jane"	Jane Magnolia	5-6'	B&B	20-25'	15-20'	N
MP	2	Malus X 'Prairifire	Prairifire Crabapple	1.5-2"	B&B	15-20'	15-20'	N
EVERGREEN SHRUBS								
BX	6	Buxus x 'Wilson'	Northern charm Boxwood	18-24"	B&B	3-4'	3-4'	N
JP	7	Juniperis x Phitzeriana 'Aurea Improved'	Gold Coast Phitzer Juniper	18-24"	#2 cont.	3-4'	3-4'	N
SHRUBS								
BT	6	Berberis Thunbergii 'Crimson Pygmy'	Crimson Pygmy Japanese Barberry	15-18"	#3 cont.	2-3'	2-3'	N
CS	6	Cotinus Coggygria 'COTSIDH5'	Velveteeny Smoke Bush					N
PA	12	Perovskia Atriplicifolia "Baby Blue Jean'	Baby Blue Jean Russian Sage					N
RR	5	Rosa x Knock-Out 'Radgor'	Knockout Rose					N
PERENNIALS								
EM	17	Echinacea Purpurea 'Magnus'	Magnus Purple Coneflower	10-12"	#2 cont.	2.5'	1-1.5'	Y
HM	20	Hemerocallis x "Stella d'oro"	Star of Gold Dwarf Lily	10-12"	#2 cont.	12-24"	12-24"	N
HO	17	Heuchera x Wildberry	Dolce Wildberry Coral Bells	10-14"	#2 cont.	16-20"	16-20"	Y
HX	14	Hosta 'Blue Mouse Ears'	Blue Mouse Ears Hosta		#1 cont.	6-10"	12"	N
ORNAMENTAL GRASSES								
PLB	27	Pennisetum alopecuroides "Little Bunny"	Little Bunny Fountain Grass	10-12"	#2 cont.	10-12"	10-12"	N
SS	20	Schizachyrium Scoparium 'Chameleon'	Chameleon Little Bluestem		#1 cont.	18"	18"	Y
GROUND COVERS								
AS	142	Alyssum Saxatile			#1 cont.	8"	12"	Y
SJ	53	Sedum Spurium 'John Creech'	John Creech Two Row Stonecrop	24 flat	#1 cont.	2-3"	9-12"	N

SYMBOL

TREES
- CC
- CV
- MJ
- ML
- MP

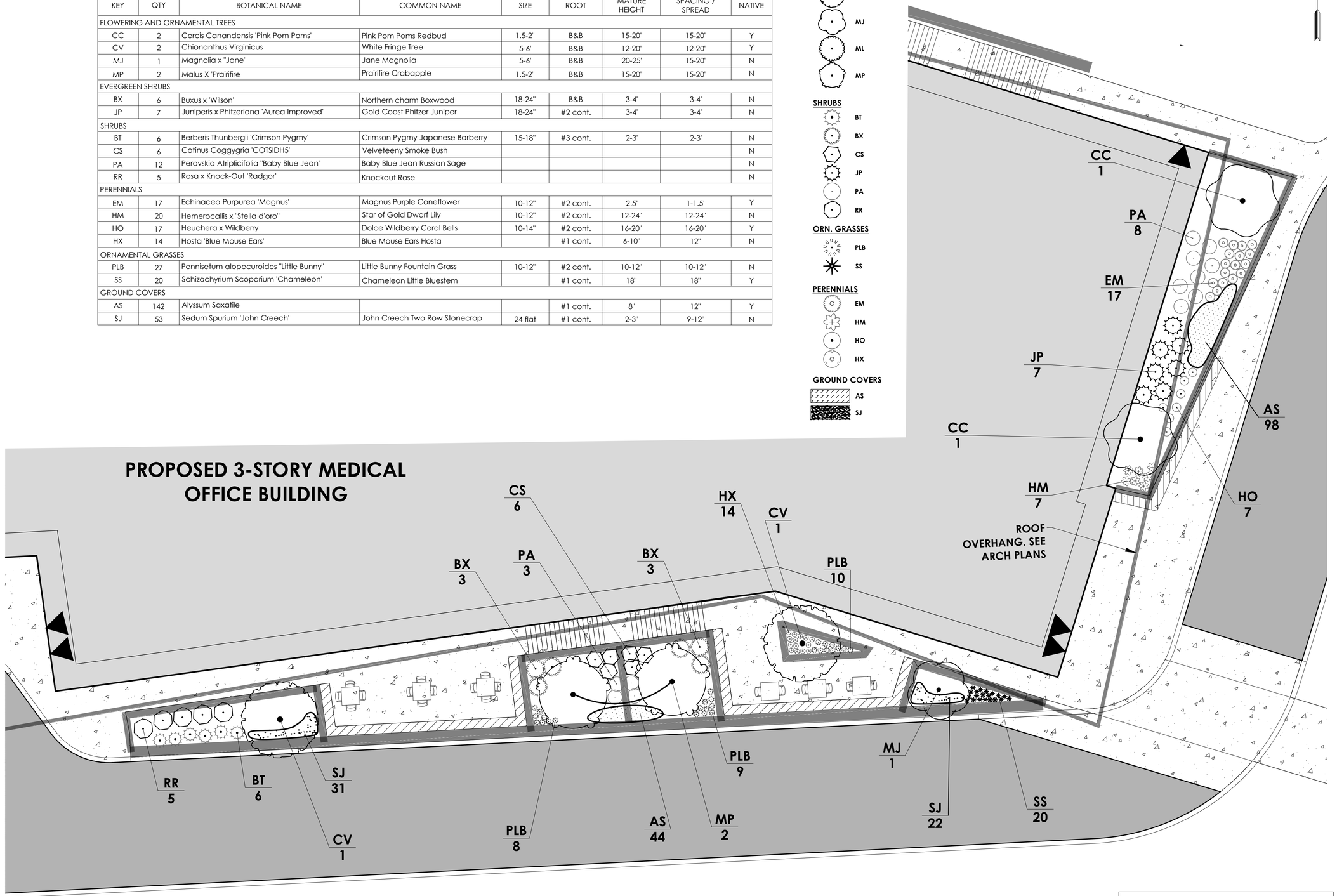
SHRUBS
- BT
- BX
- CS
- JP
- PA
- RR

ORN. GRASSES
- PLB
- SS

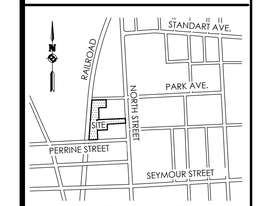
PERENNIALS
- EM
- HM
- HO
- HX

GROUND COVERS
- AS
- SJ

HORIZONTAL SCALE: 1"=10'



DESIGN DEVELOPMENT



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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FOUNDATION LANDSCAPING PLAN

AUBURN, NY

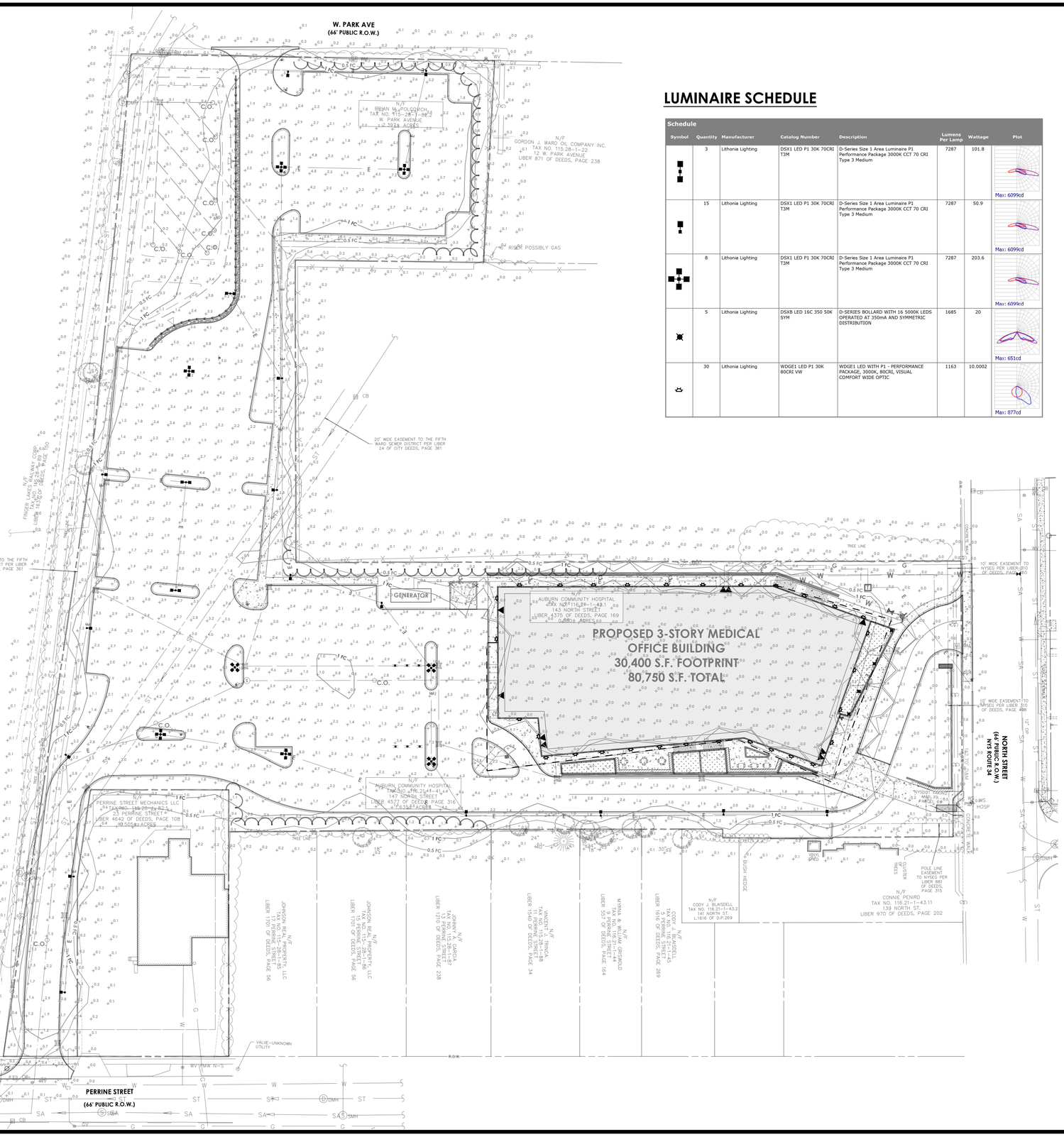
AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-107**

DATE: **APRIL 2026**

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LUMINAIRE SCHEDULE

Schedule

Symbol	Quantity	Manufacturer	Catalog Number	Description	Lumens Per Lamp	Wattage	Plot
	3	Lithonia Lighting	DSX1 LED P1 30K 70CRI T3M	D-Series Size 1 Area Luminaire P1 Performance Package 3000K CCT 70 CRI Type 3 Medium	7287	101.8	Max: 6099cd
	15	Lithonia Lighting	DSX1 LED P1 30K 70CRI T3M	D-Series Size 1 Area Luminaire P1 Performance Package 3000K CCT 70 CRI Type 3 Medium	7287	50.9	Max: 6099cd
	8	Lithonia Lighting	DSX1 LED P1 30K 70CRI T3M	D-Series Size 1 Area Luminaire P1 Performance Package 3000K CCT 70 CRI Type 3 Medium	7287	203.6	Max: 6099cd
	5	Lithonia Lighting	DSXB LED 16C 350 50K SYM	D-SERIES BOLLARD WITH 16 5000K LEDS OPERATED AT 350mA AND SYMMETRIC DISTRIBUTION	1685	20	Max: 651cd
	30	Lithonia Lighting	WDGE1 LED P1 30K 80CRI VW	WDGE1 LED WITH P1 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC	1163	10.0002	Max: 877cd

LEGEND - LIGHTING:

1 FC

0.5 FC

HORIZONTAL SCALE: 1"=40'



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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LIGHTING PLAN

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

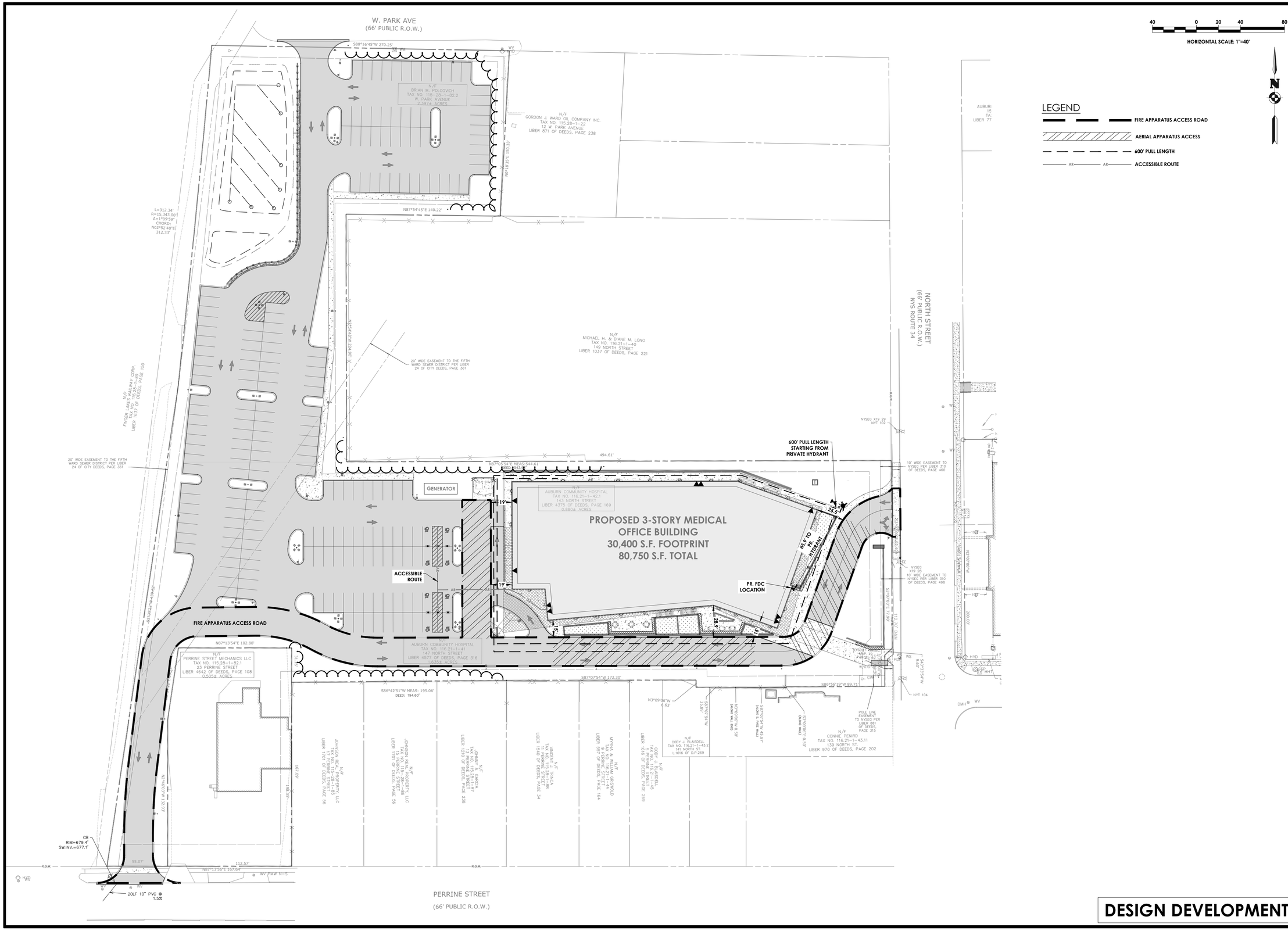
PROJECT NO.: **20255046.0001**

DRAWING NO.: C-108

DATE: **APRIL 2026**

DESIGN DEVELOPMENT

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W. PARK AVE
(66' PUBLIC R.O.W.)
S88°16'45"W 270.25'
N/F
BRIAN M. POLCOVICH
TAX NO. 115.-28-1-82.2
W. PARK AVENUE
2.397± ACRES
N/F
GORDON J. WARD OIL COMPANY INC.
TAX NO. 115.28-1-22
12 W. PARK AVENUE
LIBER 871 OF DEEDS, PAGE 238
N0°18'35"E 150.33'
N87°54'45"E 140.22'
L=312.34'
R=15,343.00'
Δ=1°09'59"
CHORD=
N02°52'48"E
312.33'
N/F
MICHAEL H. & DIANE M. LONG
TAX NO. 116.21-1-40
149 NORTH STREET
LIBER 1037 OF DEEDS, PAGE 221
20' WIDE EASEMENT TO THE FIFTH
WARD SEWER DISTRICT PER LIBER
24 OF CITY DEEDS, PAGE 361
N/F
FINGER LAKES NATIONAL BANK CORP.
TAX NO. 115.28-1-83
LIBER 1637 OF DEEDS, PAGE 150
20' WIDE EASEMENT TO THE FIFTH
WARD SEWER DISTRICT PER LIBER
24 OF CITY DEEDS, PAGE 361
GENERATOR
AUBURN COMMUNITY HOSPITAL
TAX NO. 116.21-1-42.1
143 NORTH STREET
LIBER 4375 OF DEEDS, PAGE 169
0.880± ACRES
PROPOSED 3-STORY MEDICAL
OFFICE BUILDING
30,400 S.F. FOOTPRINT
80,750 S.F. TOTAL
ACCESSIBLE
ROUTE
FIRE APPARATUS ACCESS ROAD
AUBURN COMMUNITY HOSPITAL
TAX NO. 116.21-1-41
147 NORTH STREET
LIBER 4577 OF DEEDS, PAGE 316
0.635± ACRES
N87°13'54"E 102.88'
N/F
PERRINE STREET MECHANICS LLC
TAX NO. 115.28-1-82.1
23 PERRINE STREET
LIBER 4642 OF DEEDS, PAGE 108
0.505± ACRES
S87°07'54"W 172.30'
S86°42'51"W MEAS: 195.06'
DEED: 194.60'
494.61'
N3°09'06"W
6.63'
S86°56'18"W 89.71'
N/F
CODY J. BLASDELL
TAX NO. 116.21-1-43.2
141 NORTH ST.
L.1616 OF D/P-269
N/F
CONNIE PENIRD
TAX NO. 116.21-1-43.11
139 NORTH ST.
LIBER 970 OF DEEDS, PAGE 202
POLE LINE
EASEMENT
TO NYSEG PER
LIBER 881
OF DEEDS,
PAGE 315
600' PULL LENGTH
STARTING FROM
PRIVATE HYDRANT
10' WIDE EASEMENT TO
NYSEG PER LIBER 310
OF DEEDS, PAGE 460
NYSEG
X19 28
10' WIDE EASEMENT TO
NYSEG PER LIBER 310
OF DEEDS, PAGE 498
NYSEG X19 29
NYT 102
NYT 104
85'± TO
FR.
HYDRANT
PR. FDC
LOCATION
19'
19'
5'
28'
15'
25'
N/F
PERRINE STREET MECHANICS LLC
TAX NO. 115.28-1-82.1
23 PERRINE STREET
LIBER 1170 OF DEEDS, PAGE 56
N/F
JOHNSON REAL PROPERTY, LLC
TAX NO. 115.28-1-86
13 PERRINE STREET
LIBER 1301 OF DEEDS, PAGE 56
N/F
JOHNNY A. GARCIA
TAX NO. 115.28-1-87
13 PERRINE STREET
LIBER 1210 OF DEEDS, PAGE 228
N/F
TYRON D. POWELL
TAX NO. 115.28-1-88
11 PERRINE STREET
LIBER 1249 OF DEEDS, PAGE 34
N/F
MYRNA & WILLIAM ORSWOLD
TAX NO. 116.21-1-44
9 PERRINE STREET
LIBER 527 OF DEEDS, PAGE 164
N/F
CODY J. BLASDELL
TAX NO. 116.21-1-45
5 PERRINE STREET
LIBER 1616 OF DEEDS, PAGE 269
CB
RIM=679.4'
SW.INV.=677.1'
20LF 10" PVC @
1.5%
N87°13'54"E 167.64'
112.57'
55.07'
187.69'
187.35'
R.O.W.
PERRINE STREET
(66' PUBLIC R.O.W.)
NORTH STREET
(66' PUBLIC R.O.W.)
NYS ROUTE 34
AUBURN
15
TA
LIBER 77
S45°33'31"W
112.57'
200.00'
N44°09'06"W
200.00'
S45°33'31"W
9.69'
S87°07'54"W 43.87'
(CALC'D, FACE WALL)
N3°09'06"W 0.50'
(CALC'D, BACK WALL)
S87°07'54"W 0.50'
(CALC'D, FACE WALL)
N87°07'54"E 0.50'
(CALC'D, BACK WALL)
S3°09'06"E

DEMOLITION NOTES:

1. CONTRACTOR IS RESPONSIBLE TO CALL DIG SAFE 811 PRIOR TO BEGINNING DEMOLITION.
2. WITHIN LIMIT LINES, ALL AT GRADE UTILITIES SUCH AS TRANSFORMERS, GENERATORS, HVAC UNITS, THE UNIT'S CONCRETE PAD AND ANY FENCING THAT SURROUNDS THE UNIT, TO BE REMOVED.
3. PRIOR TO ANY DEMOLITION TAKING PLACE, CONTRACTOR TO VERIFY LOCATION AND DEPTH OF ALL UTILITIES WITHIN THE WORK AREA OR THOSE EXPECTED TO BE AFFECTED BY NEW WORK, AND SUBSURFACE FEATURES.
4. CONTRACTOR TO COORDINATE ALL UTILITY SHUT DOWNS, RELOCATIONS, SERVICE INSTALLATIONS WITH THE LOCAL UTILITY COMPANIES.
5. CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL DEMOLISHED MATERIAL IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
6. ALL EXISTING FEATURES TO BE REMOVED ARE NOT SHOWN ON SUBSEQUENT PLANS FOR CLARITY.
7. CONTRACTOR SHALL PROTECT ALL EXISTING FEATURES TO REMAIN. DAMAGE TO EXISTING FEATURES TO REMAIN SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.
8. ALL SURFACES THAT ARE DISTURBED DUE TO UTILITY CONSTRUCTION, OUTSIDE OF THE MAJOR WORK AREAS, ARE TO BE RESTORED TO PRE-CONSTRUCTION CONDITION, IN ACCORDANCE WITH THE ASPHALT AND CONCRETE SECTION DETAILS INCLUDED IN THESE PLANS. LAWN AREAS ARE TO BE RE-ESTABLISHED WITH 4 INCHES OF TOPSOIL (MINIMUM) AND HYDROSEED.
9. ANY MATERIALS CONTAINING ASBESTOS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. NOTE THIS MAY INCLUDE UNDERGROUND UTILITIES.
10. ALL UTILITIES NOT SLATED FOR DEMOLITION ARE TO REMAIN FUNCTIONAL UPON COMPLETION OF DEMOLITION. THIS INCLUDES BYPASS PUMPING, IF NECESSARY.
11. EXISTING UTILITIES THAT ARE PROPOSED TO BE REMOVED, UNLESS OTHERWISE INDICATED, SHALL BE EXCAVATED, UTILITY MATERIAL REMOVED, AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE SPECIFICATIONS. ALL TRENCHES SHALL BE BACKFILLED WITH GRANULAR FILL, COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST. ALL DISTURBED AREAS SHALL BE RESTORED IN KIND IN ACCORDANCE WITH THE DETAILS IN THESE PLANS AND AT A MINIMUM TO THEIR ORIGINAL STATE.
12. AREAS OF ASPHALT AND CONCRETE REMOVAL SHALL BE SAWCUT WITH A NEAT STRAIGHT LINE AT ALL REMOVAL LIMITS.
13. CONTRACTOR RESPONSIBLE FOR OBTAINING ALL DEMOLITION PERMITS AND INCLUDE ALL FEES ASSOCIATED WITH THOSE PERMITS, IN HIS BID.
14. IF ANY ENVIRONMENTAL CONDITIONS OR ISSUES, NOT PREVIOUSLY IDENTIFIED, ARE ENCOUNTERED DURING DEMOLITION, THE OWNER AND THE CONTRACTORS(S) SHALL IMMEDIATELY NOTIFY THE CITY, CAYUGA COUNTY HEALTH DEPARTMENT AND NYSDEC BEFORE CONTINUING THE DEMOLITION PROCESS.
15. ALL MATERIALS SHALL BE RECYCLED, WHEN APPROPRIATE.
16. THE CONTRACTOR SHALL OBTAIN ALL SEWER PERMITS PRIOR TO DEMOLITION.
17. ALL SPOIL MATERIALS FROM DEMOLITION OR EARTHWORK, SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT THE CONTRACTORS EXPENSE.
18. ALL EXISTING STRUCTURES THAT ARE ABANDONED IN PLACE, SHALL BE REMOVED TO A DEPTH OF 2 FEET BELOW FINISHED GRADE. STRUCTURES SHALL BE FILLED WITH CRUSHED STONE, (MEETING NYSDOT STANDARD SPECIFICATION SECTION 304) COMPACTED IN 12" LIFTS TO 95% MODIFIED PROCTOR TEST.

UTILITY CONTRACTOR COORDINATION 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. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNERS ONSITE REPRESENTATIVE UPON COMPLETION OF COORDINATION WITH CONTRACTORS, AND PLANS.
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. PASSERO ASSOCIATES ASSUMES NO RESPONSIBILITY FOR THE DESIGN OR PERFORMANCE OF UTILITIES NOT SPECIFICALLY SHOWN WITHIN THIS PLAN SET.
3. PRIOR TO THE START OF UTILITY INSTALLATION THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY AND COORDINATE WITH EXISTING UTILITIES SHOWN ON THE PLANS AND REPORT ANY DISCREPANCIES TO THE DESIGN ENGINEER. THE CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROCEED WITH UTILITY INSTALLATION BY THE OWNERS ONSITE REPRESENTATIVE UPON COMPLETION EXISTING UTILITY VERIFICATION.
4. THE CONTRACTOR IS REQUIRED TO COORDINATE WITH SITE CONTRACTOR/PLUMBER & SEWER CONTRACTOR TO PREDETERMINE THE NECESSARY WYE & CLEANOUT LOCATION ON THE STORM SEWER SYSTEM. THE STORM SEWER SYSTEM IS RECOMMENDED AND MAY BE MODIFIED TO PROVIDE ADEQUATE ROOF DRAINAGE CONNECTIONS.
5. THRUST BLOCKS ON THE WATERMAIN ARE REQUIRED AT BENDS, TEES OR PLUGS. SEE DETAIL SHEETS FOR THRUST BLOCK DETAILS.

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). FOLLOWING DISINFECTION, THE WATER MAIN PIPELINE SHALL BE FLUSHED UNTIL THE CHLORINE CONCENTRATION IN THE WATER LEAVING THE MAIN IS NO HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM.
   ALL WATER MAIN PIPE FITTINGS NOT RECEIVING 24-HOUR CHLORINE DISINFECTION CONTACT TIME MUST BE SWAB-DISINFECTED 30 MINUTES PRIOR TO INSTALLATION.
   THE SAMPLING POINT(S) MUST BE DECONTAMINATED BY FLAMING.
   FIRE HYDRANTS ARE NOT ACCEPTABLE SAMPLING POINTS.
   THE CAYUGA COUNTY DEPARTMENT OF PUBLIC HEALTH MUST RECEIVE AT LEAST 48-HOUR ADVANCE NOTIFICATION REQUESTING SAMPLING SERVICES. SAMPLING WILL NOT BE PERFORMED PRIOR TO RECEIPT FROM A NEW YORK STATE LICENSED OR REGISTERED DESIGN PROFESSIONAL (ENGINEER, ARCHITECT OR LAND SURVEYOR WITH A SPECIAL EXEMPTION UNDER SECTION 7208(N) OF THE EDUCATION LAW) CERTIFYING THAT THE WATER SUPPLY IMPROVEMENTS, TESTING AND DISINFECTION PROCEDURES WERE COMPLETED IN ACCORDANCE WITH THE APPROVED PLANS, REPORTS, SPECIFICATIONS AND ANY APPROVED AMENDMENTS. THE DEPARTMENT WILL COLLECT SAMPLES FOR FREE CHLORINE RESIDUAL, TOTAL COLIFORM, ESCHERICHIA COLI (E. COLI) AND TURBIDITY.
   THE WATER MAIN PIPE AND APPURTENANCES SHALL NOT BE PLACED INTO SERVICE UNTIL SO AUTHORIZED BY THE CAYUGA 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. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN PIPE SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PIPELINE PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.
3. WHEN INSTALLING FIRE HYDRANTS, SHOULD GROUND WATER BE ENCOUNTERED WITHIN SEVEN (7) FEET OF THE FINISHED GRADE, FIRE HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED.
4. THE WATER MAIN PIPELINE AND APPURTENANCES SHALL BE PRESSURE/LEAKAGE TESTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE AWWA STANDARD C600, C602, C604, OR C605 (MOST RECENT VERSION AS APPLICABLE) OR IN ACCORDANCE WITH MORE STRINGENT REQUIREMENTS IMPOSED BY THE SUPPLIER OF WATER.

SANITARY NOTES

1. SANITARY SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST REGULATIONS OF THE STATE, COUNTY AND LOCAL MUNICIPALITY
2. MATERIALS
   - MAINS - PIPING SHALL BE POLYVINYL CHLORIDE (PVC) WITH ENDS SUITABLE FOR ELASTOMERIC GASKET JOINTS, AND A MINIMUM WALL THICKNESS OF SDR-35.
     PIPING AND FITTINGS SHALL MEET:
     ASTM D-3034 (4" THRU 15")
     ASTM F-679 (18" THRU 48")
   - LATERALS - 4" MIN. INSTALLED AT $\frac{1}{4}$" PER FOOT MIN. PIPING SHALL BE POLYVINYL CHLORIDE (PVC) WITH ENDS SUITABLE FOR ELASTOMERIC GASKET JOINTS, AND A MINIMUM WALL THICKNESS OF SDR-21. PIPING AND FITTINGS SHALL MEET ASTM D-2241.
   - JOINTING MATERIALS - SHALL BE BELL-AND-SPIGOT WITH INTEGRAL PUSH ON TYPE ELASTOMERIC GASKET JOINTS, GASKET MATERIAL TO BE NEOPRENE MEETING ASTM D-3212.
   - MANHOLES - SHALL BE PRECAST CONCRETE WITH NEOPRENE GASKETS MEETING ASTM C-478 & ASTM C-443.
3. INFILTRATION AND EXFILTRATION FOR SANITARY SEWERS SHALL BE LIMITED TO 100 GALLONS PER MILE PER INCH DIAMETER OF PIPE PER 24 HOURS.
4. IF AN AIR TEST IS USED, THE TEST AS A MINIMUM SHALL CONFORM TO THE PROCEDURE DESCRIBED IN ASTM C-828-80, ENTITLED STANDARD PRACTICE FOR LOW PRESSURE AIR TEST OF VITRIFIED CLAY PIPELINES; SANITARY MANHOLES SHALL BE TESTED FOR EXFILTRATION.
5. VACUUM TESTING OF MANHOLES IS ALLOWED. THE CONTRACTOR IS CAUTIONED TO SPEAK TO THE SUPERINTENDENT OF SEWERS PRIOR TO COMMENCING WITH PLANS TO VACUUM TEST.
6. DEFLECTION TEST - TEN STATE STANDARDS.
   6.A. DEFLECTION TESTS SHALL BE PERFORMED ON ALL FLEXIBLE PIPE. THE TEST SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.
   6.B. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDRELL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
   6.C. NO PIPE SHALL EXCEED A DEFLECTION OF 5%.
7. ALL SANITARY SEWER INSTALLATION SHALL BE MADE IN CONFORMANCE WITH THE SPECIFICATIONS, REGULATIONS, AND POLICIES OF THE CITY OF AUBURN.
8. FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY SEWER/COMBINATION SEWER. (FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS). ALL DISCHARGES TO THE SANITARY/ COMBINATION SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE CAYUGA COUNTY SEWER USE LAW.
9. SEPARATION - MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN PIPE SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PASSES UNDER A SEWER ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.
10. SEWER USE LAW: FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY/COMBINATION SEWER. FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS. NOTE: ALL DISCHARGES TO THE SANITARY/COMBINATION SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND OR CAYUGA COUNTY SEWER USE LAW.

STORM NOTES

1. STORM SEWERS AND APPURTENANCES SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST REGULATIONS OF THE MUNICIPALITY
2. PROPOSED STORM SEWER LATERAL MATERIAL:
   PVC SDR-35 6" MIN. SIZE & SHALL BE LAID AT A MINIMUM GRADE OF 1/4" PER FT.
   STORM SEWER MATERIAL:
   ADS HDPE 12" MIN.
3. FOUNDATION DRAINS SHALL BE CONNECTED TO STORM WATER SYSTEM VIA SUMP PUMPS. DOWNSPOUTS SHALL BE CONNECTED TO STORM SEWER WHERE APPLICABLE, WHERE NOTED ON THE PLANS DOWNSPOUTS SHALL DISCHARGE TO SPLASH BLOCKS.
4. UPON COMPLETION OF SYSTEM INSTALLATION, THE MAIN SEWER SYSTEM AND LEADS TO STRUCTURES SHALL BE FLUSHED AND LAMPED OR MANDREL TESTED TO THE SATISFACTION OF THE MUNICIPALITY.

SEWER USE LAW:

FLOOR DRAINS, IF CONSTRUCTED, SHALL BE CONNECTED TO THE SANITARY/COMBINATION SEWER. FLOOR DRAINS DO NOT INCLUDE FOUNDATION/FOOTER DRAINS.

NOTE: ALL DISCHARGES TO THE SANITARY/COMBINATION SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND OR CAYUGA COUNTY SEWER USE LAW.

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. SANITARY MANHOLES SHALL BE VISUALLY INSPECTED AND TESTED FOR LEAKAGE BY EXFILTRATION OR VACUUM. VACUUM TESTING OF MANHOLES SHALL COMPLY WITH THE METHOD OUTLINED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION - TECHNICAL INFORMATION PAMPHLET (TIP) NO. 15 (LATEST REVISION).
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. ALL DISCHARGES FROM THE FLOOR DRAINS TO THE SANITARY SEWER MUST COMPLY WITH THE EFFLUENT LIMITS OF THE LOCAL AND/OR THE CAYUGA COUNTY SEWER USE LAW.
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. NO PIPE SHALL EXCEED A DEFLECTION OF 5%. IF THE DEFLECTION TEST IS TO BE RUN USING A RIGID BALL OR MANDREL, IT SHALL HAVE A DIAMETER EQUAL TO 95% OF THE INSIDE DIAMETER OF THE PIPE. THE TEST SHALL BE PERFORMED WITHOUT MECHANICAL PULLING DEVICES.
4. MINIMUM VERTICAL SEPARATION BETWEEN WATER MAINS AND SEWER LINES SHALL BE 18 INCHES MEASURED FROM THE OUTSIDE OF THE PIPES AT THE POINT OF CROSSING. ONE FULL STANDARD LAYING LENGTH OF WATER MAIN PIPE SHALL BE CENTERED UNDER OR OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IN ADDITION, WHEN THE WATER MAIN PIPELINE PASSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT (COMPACTED SELECTED FILL) SHALL BE PROVIDED FOR THE SEWER TO PREVENT EXCESSIVE DEFLECTION OF JOINTS AND SETTLING OF THE SEWER ON THE WATER MAIN. MINIMUM HORIZONTAL SEPARATION BETWEEN PARALLEL WATER MAINS PIPES AND SEWER PIPES (INCLUDING MANHOLES AND VAULTS) SHALL BE 10 FEET MEASURED FROM THE OUTSIDE OF THE PIPES, MANHOLES OR VAULTS.

GENERAL NOTES

1. THE SANITARY WASTE DISPOSAL SYSTEM SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS OF THE NEW YORK STATE AND CAYUGA COUNTY HEALTH DEPARTAMENTS.
2. WATER SERVICE WILL BE INSTALLED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE CITY OF AUBURN
3. THE BUILDING CONSTRUCTION TO BE IN COMPLIANCE WITH THE NEW YORK STATE BUILDING CODE.
4. ANY COST RELATED TO THE RELOCATION OF ANY UTILITIES NECESSITATED BY THIS PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER OR THOSE REQUESTING THE RELOCATION OF THE UTILITY.
5. ANY AND ALL CULVERT LOCATIONS, SIZES OR TYPES, TO BE APPROVED BY THE CITY SUPERINTENDENT OF HIGHWAYS.
6. ALL PROPERTY CORNERS TO BE MARKED WITH IRON PINS.
7. THIS SUBDIVISION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE COUNTY MONUMENTATION LAW.
8. THE SUBDIVISION IS LESS THAN 1500 FEET FROM THE NEAREST CONTROL MONUMENT AND IS THEREFORE TIED INTO THE MONUMENTATION NETWORK.
9. THIS SUBDIVISION SHALL COMPLY WITH ANY COUNTY OR STATE AGENCIES HAVING JURISDICTION.
10. ALL SITE WORK TO BE IN COMPLIANCE WITH THE STANDARDS OF CHAPTER 29 - ARTICLE V OF THE CITY OF AUBURN.
11. ALL CONSTRUCTION WILL BE IN ACCORDANCE WITH THE DESIGN CRITERIA AND CONSTRUCTION SPECIFICATIONS FOR LAND DEVELOPMENT FOR THE CITY OF AUBURN DATED THE MOST CURRENT REVISION.
12. THIS PROJECT WILL BE IN ACCORDANCE WITH THE CITY OF AUBURN HIGHWAY FRONTAGE POLICY.

CONSTRUCTION SEQUENCE FOR GRADING AND EROSION CONTROL:

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2. CONSTRUCT STORMWATER MANAGEMENT AREA AND EROSION CONTROL MEASURES AS SHOWN ON THE PLANS.
3. CONSTRUCT DRAINAGE SWALES ALONG PROPERTY LINES AS SHOWN.
4. CLEAR AND GRUB THE PROJECT IMPROVEMENTS AREAS.
5. STRIP TOPSOIL AND STOCKPILE FOR LATER USE.
6. GRADE IMPROVEMENTS AREAS WITHIN THE PROJECT 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.
7. CONSTRUCT SEDIMENTATION BARRIERS AS SHOWN ON THIS PLAN.
8. REPLACE TOPSOIL AND FINE GRADE.
9. HYDRO-SEED ALL DISTURBED AREAS WITHIN 10 DAYS AFTER FINAL GRADING, CONTRACTOR IS RESPONSIBLE TO RESEED IF GRADING IS UNSATISFACTORY.
10. UPON APPROVAL OF THE CITY, REMOVE ALL TEMPORARY SILTATION CONTROLS.
11. SLOPES SHALL NOT EXCEED 1' VERTICAL TO 3' HORIZONTAL MAX. MAINTAIN 1:4 WHERE POSSIBLE.
12. MINIMUM OF 6" OF TOPSOIL IS TO BE PLACED ON ALL GRASS AREAS.
13. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON ACTUAL FIELD CONDITIONS AOBE. CONTRACTOR SHALL PROVIDE FOR THIS COST IN HIS CONTRACT.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SILTATION AND EROSION CONTROL MEASURES FROM INSTALLATION THROUGH MAINTENANCE AND REMOVAL AFTER REVEGETATION HAS BEEN ESTABLISHED.
15. ALL END SECTIONS WILL BE PROVIDED WITH RIP-RAP APRONS.
16. ALL EROSION AND SEDIMENT CONTROL METHODS WILL BE DESIGNED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.

CONSTRUCTION SEQUENCE FOR STEEP SLOPE STABILIZATION / JUTE MESH INSTALLATION FOR SLOPES OF 1:3 OR GREATER:

1. STRIP TOPSOIL ON SLOPE.
2. GRADE SLOPE PER PLAN. CONTRACTOR SHALL TAKE CARE TO NOT OVER EXCAVATE EMBANKMENT.
3. REPLACE TOPSOIL.
4. TRACK TOPSOIL WITH A BULLDOZER IN A DIRECTION PERPENDICULAR TO THE PROPOSED CONTOUR LINES.
5. IMMEDIATELY SEED AND FERTILIZE TOPSOIL PER PLAN.
6. IMMEDIATELY APPLY JUTE MESH BY UNROLLING THE PRODUCT DOWN THE SLOPE. DO NOT STRETCH THE MESH, ALLOWING IT TO FULLY CONTACT THE SOIL.
7. SECURE THE JUTE MESH WITH STAPLES (11 GAUGE - 8"x1"x8") 24" APART THOUGH OUT THE MATTING (APPROXIMATELY 200 STAPLES PER 100 SY). STAPLES SHOULD BE DRIVEN FLUSH WITH THE GROUND.
8. SECURE BEGINNING AND END OF ROLL BY ANCHORING THE MATTING INTO 6" DEEP SLOTS CUT INTO THE SOIL. THEN STAPLE MATTING AT CHECK SLOTS.

STABILIZATION STANDARDS AND SPECIFICATIONS :

A TEMPORARY OR PERMANENT PROTECTIVE COVERING PLACED ON A PREPARED, SEEDED PLANTING AREA THAT IS ANCHORED IN PLACE BY STAPLES OR OTHER MEANS TO AID IN CONTROLLING EROSION BY ABSORBING RAIN SPLASH ENERGY AND WITHSTAND OVERLAND FLOW AS WELL AS PROVIDE A MICROCLIMATE TO PROTECT AND PROMOTE SEED ESTABLISHMENT.

CONDITIONS WHERE PRACTICE APPLIES

ANCHORED STABILIZATION MATS ARE REQUIRED FOR SEEDED EARTHEN SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL; IN VEGETATED CHANNELS WHERE THE VELOCITY OF THE DESIGN FLOW EXCEEDS THE ALLOWABLE VELOCITY FOR VEGETATION ALONE (USUALLY GREATER THAN 5 FEET PER SECOND); ON STREAMBANKS AND SHORELINES WHERE MOVING WATER IS LIKELY TO ERODE NEWLY SEEDED OR PLANTED AREAS; AND IN AREAS WHERE WIND PREVENTS STANDARD MULCHING WITH STRAW. THIS STANDARD DOES NOT APPLY TO SLOPES STABILIZED WITH SOD, ROCK RIPRAP OR HARD ARMOR MATERIAL.

DESIGN CRITERIA

SLOPE APPLICATIONS - ANCHORED STABILIZATION MATS FOR USE ON SLOPES ARE PRIMARILY USED AS MULCH BLANKETS WHERE THE MESH MATERIAL IS WITHIN THE BLANKET OR AS A NETTING OVER PREVIOUSLY PLACED MULCH. THESE STABILIZATION MATS ARE NOT EFFECTIVE IN PREVENTING SLOPE FAILURES.

1. REQUIRED ON ALL SLOPES STEEPER THAN 3:1
2. MATTING WILL BE DESIGNED FOR PROPER LONGEVITY NEED AND STRENGTH BASED ON INTENDED USE.
3. ALL INSTALLATION DETAILS AND DIRECTIONS WILL BE INCLUDED ON THE SITE EROSION AND SEDIMENT CONTROL PLAN AND WILL FOLLOW MANUFACTURES SPECIFICATIONS.

CHANNEL APPLICATIONS - ANCHORED STABILIZATION MATS, FOR USE IN SUPPORTING VEGETATION IN FLOW CHANNELS, ARE GENERALLY A NON-DEGRADABLE, THREE DIMENSIONAL PLASTIC STRUCTURE WHICH CAN BE FILLED WITH SOIL PRIOR TO PLANTING. THIS STRUCTURE PROVIDES A MEDIUM FOR ROOT GROWTH WHERE THE MATTING AND ROOTS BECOME INTERTWINED FORMING A CONTINUOUS ANCHOR FOR THE VEGETATED LINING.

1. CHANNEL STABILIZATION SHALL BE BASED ON THE TRACTIVE FORCE METHOD.
2. FOR MAXIMUM DESIGN SHEAR STRESSES LESS THAN 2 POUNDS PER SQUARE FOOT, A TEMPORARY OR BIO-DEGRADABLE MAT MAY BE USED.
3. THE DESIGN OF THE FINAL MATTING SHALL BE BASED ON THE MATS ABILITY TO RESIST THE TRACTIVE SHEAR STRESS AT BANK FULL FLOW.
4. THE INSTALLATION DETAILS AND PROCEDURES SHALL BE INCLUDED ON THE SITE EROSION AND SEDIMENT CONTROL PLAN AND WILL FOLLOW MANUFACTURERS SPECIFICATIONS.

STANDARD AND SPECIFICATIONS FOR ANCHORED STABILIZATION MATTING

CONSTRUCTION SPECIFICATIONS

1. PREPARE SOIL BEFORE INSTALLING MATTING BY SMOOTHING THE SURFACE, REMOVING DEBRIS AND LARGE STONE, AND APPLYING LIME, FERTILIZER AND SEED. REFER TO MANUFACTURERS INSTALLATION DETAILS.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE MAT IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
3. IN CHANNELS OR SWALES, BEGIN AT THE DOWNSLOPE END, ANCHORING THE MAT AT THE BOTTOM AND TOP ENDS OF THE BLANKET. WHEN ANOTHER ROLL IS NEEDED, THE UPSLOPE ROLL SHOULD OVERLAY THE LOWER LAYER, SHINGLE STYLE, SO THAT CHANNEL FLOWS DO NOT PEEL BACK THE MATERIAL.
4. ROLL THE MATS DOWN A SLOPE WITH A MINIMUM 4" OVERLAP. ROLL CENTER MAT IN A CHANNEL IN DIRECTION OF WATER FLOW ON BOTTOM OF THE CHANNEL. DO NOT STRETCH BLANKETS. BLANKETS SHALL HAVE GOOD CONTINUOUS CONTACT WITH THE UNDERLYING SOIL THROUGHOUT ITS ENTIRE LENGTH.
5. PLACE MATS END OVER END (SHINGLE STYLE) WITH A 6" OVERLAP, USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE MATS.
6. FULL LENGTH EDGE OF MATS AT TOP OF SIDE SLOPES MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH; BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
7. MATS ON SIDE SLOPES OF A CHANNEL MUST BE OVERLAPPED 4" OVER THE CENTER MAT AND STAPLED.
8. IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
9. THE TERMINAL END OF THE MATS MUST BE ANCHORED IN A 6"X6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
10. STAPLING AND ANCHORING OF BLANKET SHALL BE DONE IN ACCORDANCE WITH THE MANUFACTURES RECOMMENDATIONS.

MAINTENANCE

BLANKETED AREAS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 80% COVERAGE THROUGHOUT THE BLANKETED AREA. DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 2 CALENDAR DAYS

SOIL RESTORATION NOTES:

1. TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12" USING CAT-MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS.
2. ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF 4" AND LARGER ARE CLEANED OFF SITE.
3. APPLY TOPSOIL TO A DEPTH OF 6 INCHES ON ALL AREAS BEING RETURNED TO GRASS.
4. VEGETATE AS REQUIRED BY APPROVED PLAN.

TEMPORARY CONSTRUCTION AREA SEEDING NOTES:

1. THE AREA MUST BE ROUGH GRADED AND SLOPES PHYSICALLY STABLE.
2. SEEDING MUST TAKE PLACE WITHIN 24 HOURS OF DISTURBANCE OR SCARIFICATION OF THE SOIL WILL BE NEEDED PRIOR TO SEEDING.
3. TYPICALLY FERTILIZER OR LIME IS NOT USED FOR TEMPORARY SEEDINGS.
4. ANY SEEDING METHOD MAY BE USED THAT PROVIDES UNIFORM APPLICATION OF SEED TO THE AREA.
5. SEEDING

PLANTING SEASON	SPECIES	RATE IN LBS./ACRE
SPRING, SUMMER, OR EARLY FALL	RYEGRASS (ANNUAL OR PERENNIAL)	30
LATE FALL OR EARLY WINTER	WINTER RYE (CEREAL RYE)	100

*MULCH THE AREA WITH HAY OR STRAW AT 2 TONS/ACRE. WOOD FIBER HYDROMULCH OR OTHER SPRAYABLE PRODUCTS APPROVED FOR EROSION CONTROL MAY BE USED IF APPLIED ACCORDING TO SPECIFICATIONS.

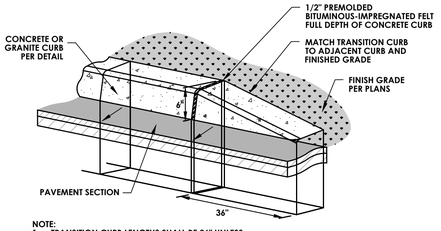
COMPACTION NOTES

1. THE CONTRACTOR SHALL STRIP THE TOPSOIL AND REMOVE ANY UNSUITABLE SOILS WITHIN THE PROPOSED GRADING LIMITS PRIOR TO PLACEMENT OF FILL MATERIAL.
2. ALL FILL AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% OF MAXIMUM DENSITY OF STANDARD PROCTOR TEST AT OPTIMUM MOISTURE CONTENT.
3. THE COMPACTION TESTS WILL BE CONDUCTED BY A LICENSED TESTING LABORATORY AND RESULTS SUBMITTED TO DESIGN ENGINEER.

EROSION AND SEDIMENT CONTROL NOTES:

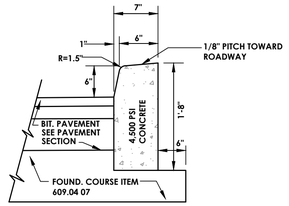
(OCTOBER 2021)

1. IN ACCORDANCE WITH SECTIONS 107-12 AND 209-3.01 OF THE NYSDOT STANDARD SPECIFICATIONS, THE CONTRACTOR SHALL REVIEW THE EROSION AND SEDIMENT CONTROL PLAN INCLUDED IN THE CONTRACT DOCUMENTS, AND IF NECESSARY, MODIFY THE PLAN WITH THE CONTRACTOR'S INTENDED SEQUENCE AND TYPES OF OPERATIONS. THE CONTRACTOR'S MODIFIED EROSION AND SEDIMENT CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL, ALONG

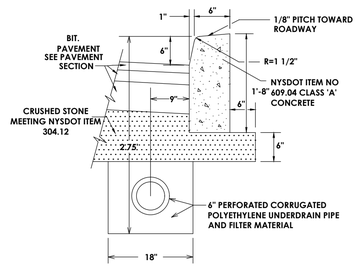


NOTE:
1. TRANSITION CURB LENGTHS SHALL BE 36" UNLESS OTHERWISE INDICATED IN THE DRAWINGS.

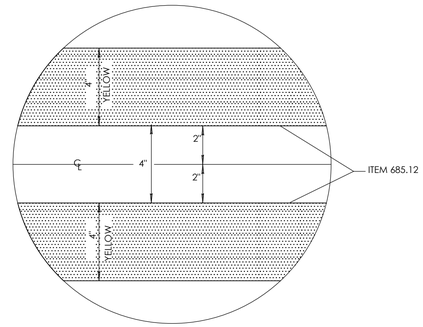
TRANSITION CURB TO GRADE
N.T.S.



CONCRETE CURB
N.T.S.



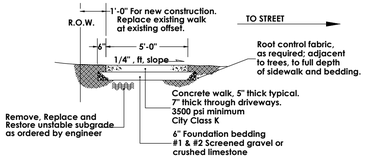
CONCRETE CURB WITH UNDERDRAIN
N.T.S.

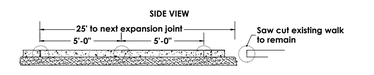


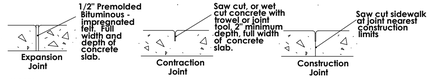
DOUBLE YELLOW CENTERLINE
N.T.S.



MODIFIED INTERNATIONAL SYMBOL OF ACCESS
N.T.S.







NOTES:
1) The gravel or stone base shall be placed on a well graded and compacted subgrade. The gravel or stone base shall be thoroughly compacted.

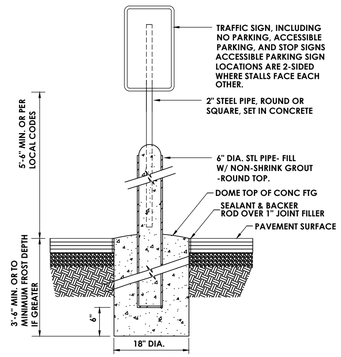
2) All exposed surfaces shall be broomed and edges finished with a 1.4" radius edging tool. The finished concrete surface shall be treated with a clear, non-yellowing curing compound.

3) No concrete shall be placed before April 20th, or after October 31st. No concrete shall be placed unless the ambient air surface temperature is above 40 degrees.

4) All work shall meet these specifications.

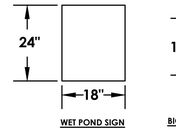
5) All work shall conform to ADA requirements.

TYPICAL SIDEWALK
N.T.S.



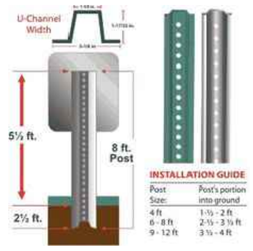
(SIGN IN PARKING LOT OR DRIVE)

TYPICAL POST MOUNT HANDICAP SIGN INSTALLATION
N.T.S.

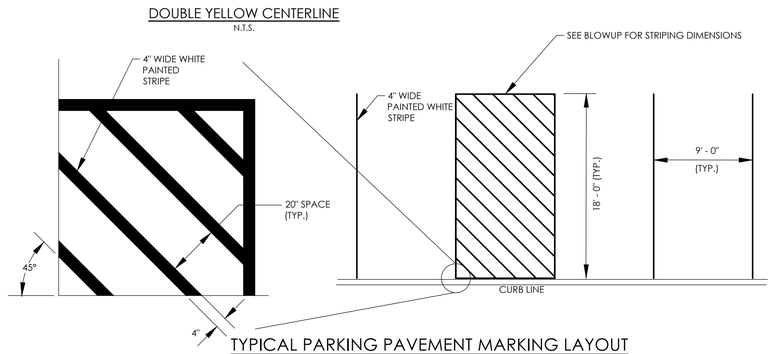


WET POND SIGN — BIORETENTION AREA SIGN

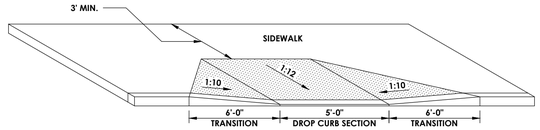
SMP SIGN INFORMATION
STORMWATER MANAGEMENT PRACTICE - BIORETENTION AREA / WET POND
PROJECT IDENTIFICATION - (SPDES CONSTRUCTION PERMIT #)
MUST BE MAINTAINED IN ACCORDANCE WITH O&M PLAN



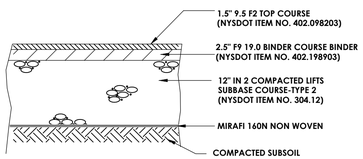
SMP SIGN
N.T.S.



TYPICAL PARKING PAVEMENT MARKING LAYOUT
N.T.S.

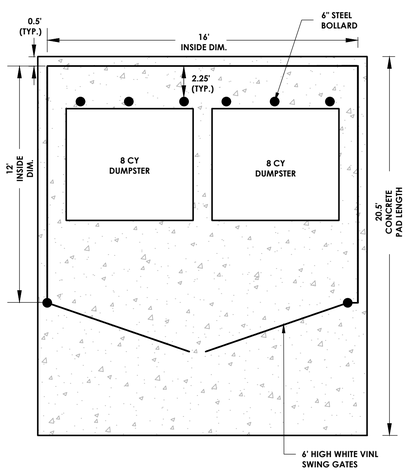


TYPICAL HANDICAP RAMP
N.T.S.

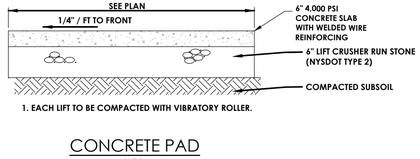


NOTE: ALL DEPTHS ARE COMPACTED THICKNESSES

PAVEMENT SECTION
N.T.S.

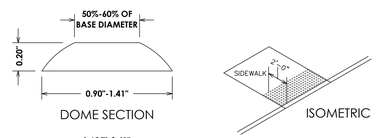


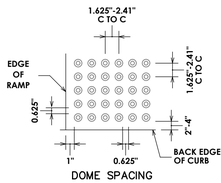
DUMPSTER ENCLOSURE
N.T.S.



1. EACH LIFT TO BE COMPACTED WITH VIBRATORY ROLLER.

CONCRETE PAD
N.T.S.





NOTES:

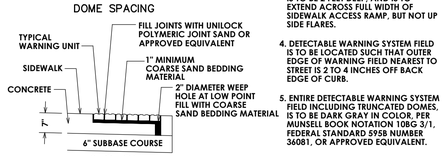
1. QUANTITY OF TRUNCATED DOMES SHOWN IS FOR ILLUSTRATIVE PURPOSES ONLY. TO DEPICT REQUIRED SQUARE GRID PATTERN.

2. TRUNCATED DOMES ARE TO BE ALIGNED IN SQUARE GRID PATTERN IN PREDOMINANT DIRECTION OF TRAVEL.

3. DETECTABLE WARNING SYSTEM FIELD IS TO BE 2 FEET DEEP, AND IS TO EXTEND ACROSS FULL WIDTH OF SIDEWALK ACCESS RAMP, BUT NOT UP SIDE FLARES.

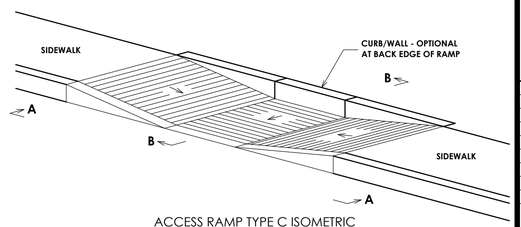
4. DETECTABLE WARNING SYSTEM FIELD IS TO BE LOCATED SUCH THAT OUTER EDGE OF WARNING FIELD NEAREST TO STREET IS 2 TO 4 INCHES OFF BACK EDGE OF CURB.

5. ENTIRE DETECTABLE WARNING SYSTEM FIELD INCLUDING TRUNCATED DOMES, IS TO BE DARK GRAY IN COLOR, PER MUNSELL BOOK NOTATION 10BG 3/1, FEDERAL STANDARD 595B NUMBER 36081, OR APPROVED EQUIVALENT.

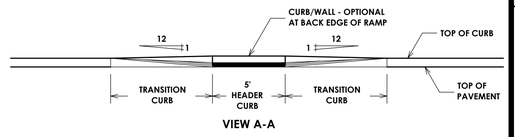


SECTION

DETECTABLE WARNING SURFACE
N.T.S.



ACCESS RAMP TYPE C ISOMETRIC



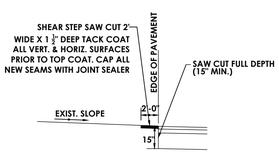
VIEW A-A

NOTES:

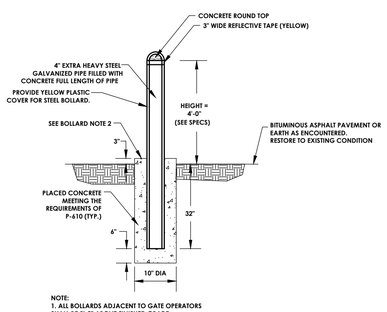
1. 1:12 IS MAXIMUM SLOPE OF ACCESS RAMP AND SIDE FLARES.

2. SURFACE OF ACCESS RAMP IS TO BE STABLE, FIRM AND SLIP-RESISTANT. TEXTURE SURFACE WITH COARSE BROOM RUNNING TRANSVERSE TO SLOPE OF ACCESS RAMP.

SIDEWALK ACCESS RAMP
N.T.S.



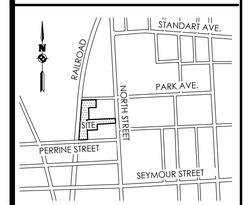
PAVEMENT KEY
(FOR CONNECTION TO EXISTING PAVEMENT)
N.T.S.



NOTE:
1. ALL BOLLARDS ADJACENT TO GATE OPERATORS SHALL BE 3'-0" ABOVE FINISHED GRADE.
2. ALL BOLLARDS TO BE SET PLUMB.

BOLLARD
N.T.S.

PASSERO
engineering architecture



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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

DETAILS

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

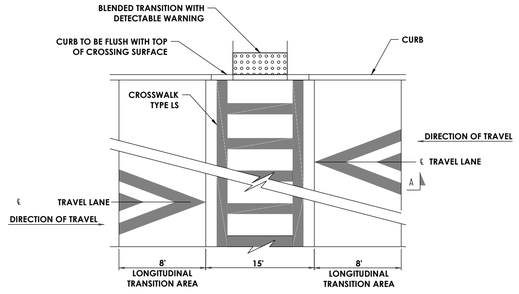
PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-202**

DATE: **APRIL 2026**

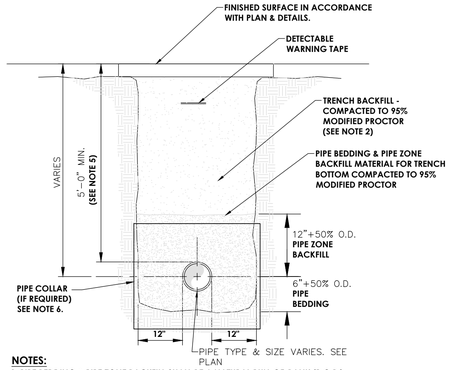
DESIGN DEVELOPMENT

Y:\PROJECTS-NEW\2025\20255046\20255046.0001\01 - CAD-BIM-MODELS\CIVIL\20255046.01_DETAILS.DWG 4/14/2026 2:57 PM Jacob Lewis



RAISED CROSSWALK DETAIL

N.T.S



NOTES:

1. PIPE BEDDING & PIPE ZONE BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) SAND OR A MIXTURE OF CRUSHED STONE AND GRAVEL, FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. BEDDING GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
3/4"	100%
NO. 40	0-70%
NO. 200	0-10%

2. TRENCH BACKFILL SHALL BE A NATURAL RUN-OF-BANK (R.O.B.) OR PROCESSED GRAVEL, OR EXCAVATED MATERIAL FREE OF SOFT, NONDURABLE PARTICLES, ORGANIC MATERIALS AND ELONGATED PARTICLES, AND SHALL BE WELL GRADED FROM FINE TO COARSE PARTICLES. TRENCH BACKFILL GRADATIONS SHALL BE APPROVED BY THE ENGINEER AND SHALL MEET THE FOLLOWING GRADATION REQUIREMENTS:

SIEVE DESIGNATION	% PASSING
4"	100%
NO. 40	0-70%
NO. 200	0-10%

IN NON-TRAFFIC UNPAVED AREAS TRENCH BACKFILL CAN BE MATERIALS EXCAVATED FROM THE TRENCH AS APPROVED BY THE ENGINEER AND COMPACTED TO 90% MODIFIED PROCTOR.

3. INSTALL CONTINUOUS DETECTABLE MARKING TAPE DURING BACKFILLING OF TRENCH FOR UNDERGROUND PIPING. LOCATE TAPE 12" BELOW FINISHED GRADE, DIRECTLY OVER PIPING, EXCEPT 6" BELOW SUBGRADE UNDER PAVEMENTS & SLAB.

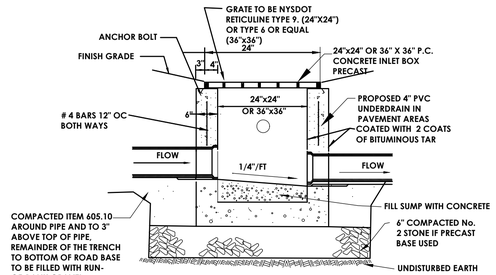
4. TRENCHING SHALL BE IMPLEMENTED IN ACCORDANCE WITH O.S.H.A. STANDARDS.

5. 5'-0" MIN COVER SHALL BE APPLIED TO WATER MAIN OR SANITARY SEWER FORCE MAINS ONLY. IF 5' COVER CANNOT BE ACHIEVED, INSULATION SHALL BE REQUIRED. INSULATION SHALL BE APPROVED BY THE AHJ WHERE INSTALLATION IS PUBLIC.

6. FOR SANITARY AND STORM PIPE RUNS STEEPER THAN 12%, 4'x4' PIPE COLLARS SHALL BE INSTALLED AT 100' MIN. INTERVALS.

PIPE TRENCH DETAIL (TYPICAL)

N.T.S.

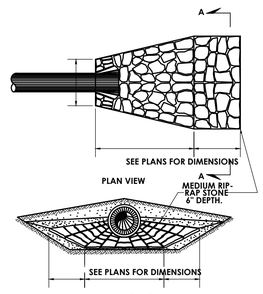


1. ALL CONCRETE TO BE 3500 psi CLASS A N.Y.S.D.O.T. ITEM 601.05

2. ALL CONCRETE IN CONTACT WITH ASPHALT PAVEMENT SHALL BE COVERED WITH A TACK COAT IN ACCORDANCE WITH N.Y.S.D.O.T. SECTION 407.

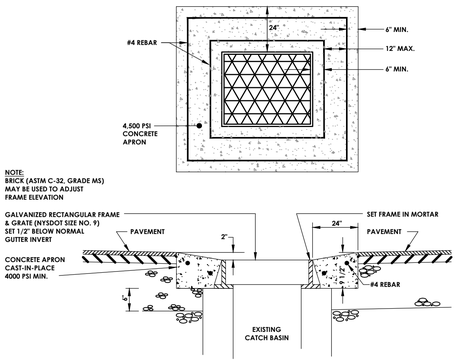
STANDARD CATCH BASIN

N.T.S.



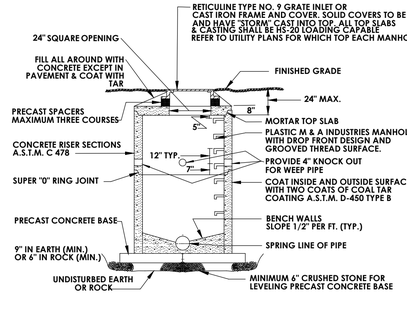
STONE RIP-RAP

N.T.S.



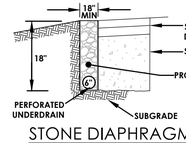
CONCRETE APRON FOR CATCH BASINS

N.T.S.



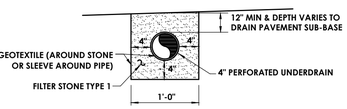
STANDARD STORM MANHOLE

N.T.S.



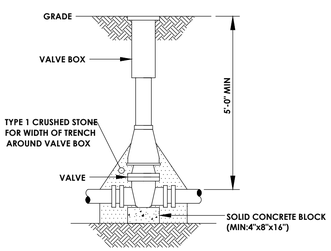
STONE DIAPHRAGM

N.T.S.



PAVEMENT AREA UNDERDRAIN

N.T.S.



NOTE:

1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL.
2. VALVE SHALL NOT SUPPORT VALVE BOX.
3. ALL BODY AND BONNET BOLTS SHALL BE STAINLESS STEEL.
4. ALL VALVES SHALL BE OPEN LEFT EXCEPT VALVES 12" AND SMALLER

WATER VALVE

N.T.S.

BIO-RETENTION BASIN SOIL MEDIA REQUIRED RATIOS

*per NYSDEC 2024 SWDM.

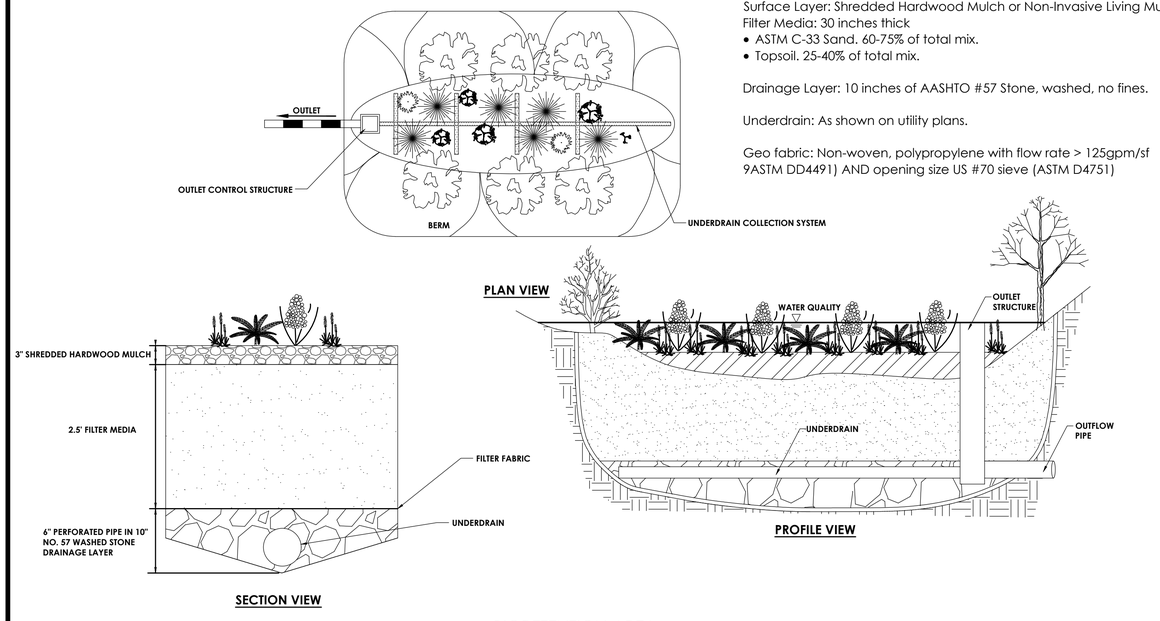
Surface Layer: Shredded Hardwood Mulch or Non-Invasive Living Mulch
Filter Media: 30 inches thick

- ASTM C-33 Sand. 60-75% of total mix.
- Topsoil. 25-40% of total mix.

Drainage Layer: 10 inches of AASHTO #57 Stone, washed, no fines.

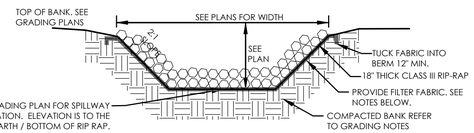
Underdrain: As shown on utility plans.

Geo fabric: Non-woven, polypropylene with flow rate > 125gpm/sf 9ASTM DD4491) AND opening size US #70 sieve (ASTM D4751)



BIORETENTION AREA

N.T.S.



NOTES:

FILTER FABRICS ARE TO MEET THE FOLLOWING CRITERIA:

- THICKNESS: 20-60 MILS
- GRAB STRENGTH 90-120 LBS

IF UNDERLYING SOIL IS <50% FINES.

- MAX OPENING EOS <= #100 SIEVE
- TOTAL OPEN AREA OF FABRIC CANNOT BE >32%

IF UNDERLYING SOIL IS >50% FINES.

- MAX OPENING EOS <=#70 SIEVE
- TOTAL OPEN AREA OF FABRIC CANNOT BE >10%

1. SOIL TO BE COMPACTED TO 95% STANDARD PROCTOR TEST OF USED MATERIAL. SEE GRADING NOTES FOR MORE INFORMATION.

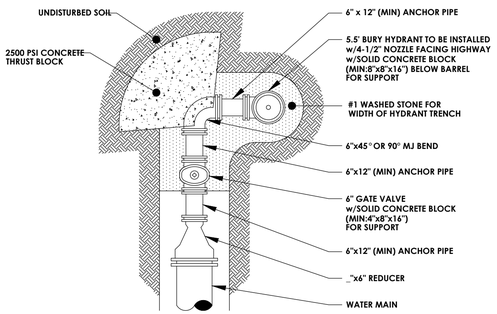
2. SIDE SLOPES SHALL BE GRADED TO 2:1 OR FLATTER PRIOR TO PLACING FILTER MATERIAL AND RIP RAP.

3. RIP RAP SHALL BE PLACED TO MAINTAIN A UNIFORM GRADATION. LARGER STONE SHALL BE PLACED AT THE TOE.

4. ENDS OF THE RIP RAP SHALL BE KEYED INTO A STABLE BANK. WHEN TYING INTO OTHER STRUCTURES, LARGER RIPRAP CAN BE LAID IN STEPS OR STACKED AS NEEDED TO FIT. STONES LARGER THAN THOSE DESIGNATED FOR FLOW (12') SHALL BE USED FOR THIS PURPOSE.

RIP RAP OVERFLOW

N.T.S.



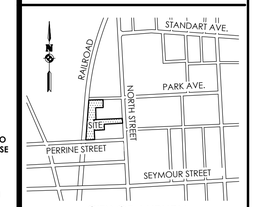
NOTE:TO BE USED WHEN WATER MAIN WILL NOT BE EXTENDED.

DEAD END PERPENDICULAR HYDRANT ASSEMBLY

N.T.S.

DESIGN DEVELOPMENT

PASSERO
engineering architecture



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100
ROCHESTER, NY 14614
(585) 325-1000
FAX: (585) 325-1691

PROJECT MANAGER — EDMUND MARTIN, P.E.
PROJECT ENGINEER — ANDREW BURNS, P.E.
DESIGNER — JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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DETAILS

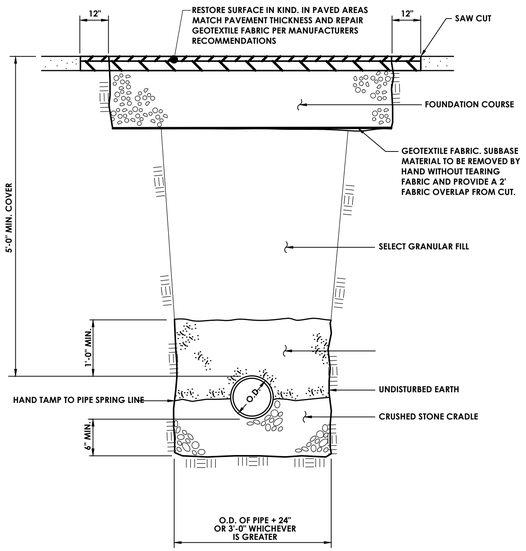
AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

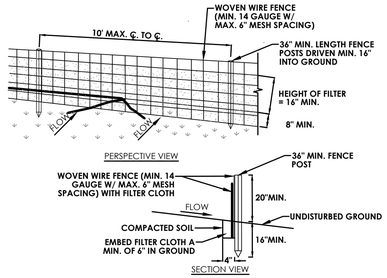
DRAWING NO.: **C-203**

DATE: **APRIL 2026**



TYPICAL SEWER TRENCH SECTION IN PAVEMENT AREAS

N.T.S.

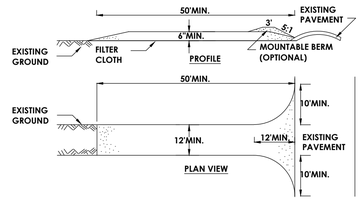


CONSTRUCTION SPECIFICATIONS

1. 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.
2. 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.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE

N.T.S.

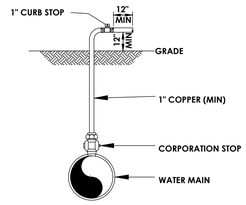


CONSTRUCTION SPECIFICATIONS

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

STABILIZED CONSTRUCTION ENTRANCE

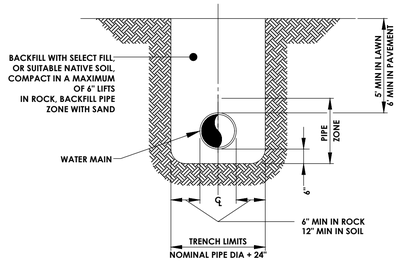
N.T.S.



NOTE:
IMMEDIATELY PRIOR TO THE AUTHORITY PLACING WATER MAIN IN SERVICE CONTRACTOR SHALL REMOVE ALL CORPORATIONS ASSOCIATED WITH TEMPORARY FACILITIES (I.E. SAMPLING TAPS, ETC.) AND REPLACE WITH THREADED BRASS PLUGS. PLACEMENT OF THREADED BRASS PLUG MUST BE WITNESSED BY A MCWA REPRESENTATIVE.

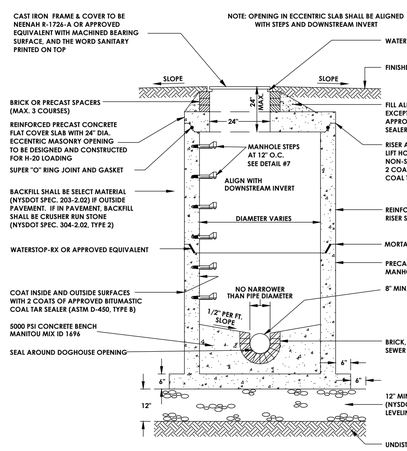
DISINFECTION / BLOW-OFF/ SAMPLING TAP

N.T.S.



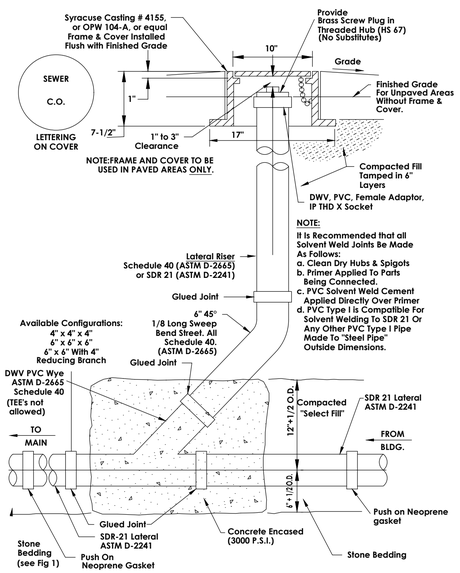
WATERMAIN TRENCH

N.T.S.



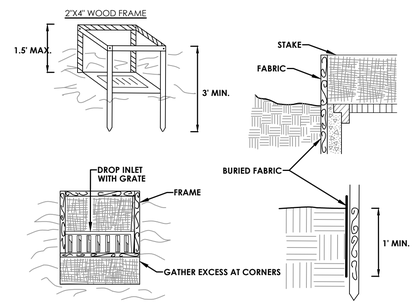
SANITARY SEWER MANHOLE

(N.T.S.)



6" P.V.C. CLEANOUT DETAIL FOR LATERAL CONNECTION

N.T.S.



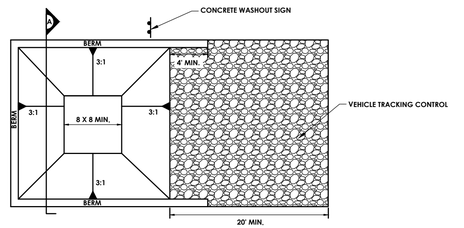
CONSTRUCTION SPECIFICATIONS:

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

MAXIMUM DRAINAGE AREA 1 ACRE

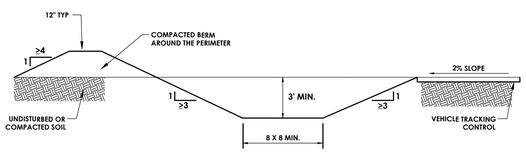
FILTER FABRIC DROP INLET PROTECTION

N.T.S.



CONCRETE WASHOUT AREA PLAN

N.T.S.



SECTION A

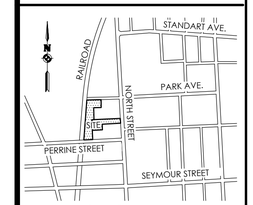
CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN FOR:
   - CWA INSTALLATION LOCATION.
2. 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 PREFRABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE SHOULD BE USED.
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. 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.
8. USE EXCAVATED MATERIAL FOR THE PERIMETER BERM CONSTRUCTION.

DESIGN DEVELOPMENT

PASSERO
engineering architecture



CITY OF AUBURN

LOCATION SKETCH

N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691
PROJECT MANAGER EDMUND MARTIN, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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DETAILS

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

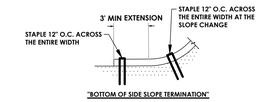
PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-204**

DATE: **APRIL 2026**

LIGHTPOLE BASE DEPTH

POLE HEIGHT	GROUND SLOPE	GROUND WATER BELOW FOUNDATION	GROUND WATER 2' BELOW SURFACE
LESS THAN 14'	NA	4'-0"	4'-0"
LESS THAN 30'	LESS THAN 1:4	5'-0"	6'-0"
LESS THAN 30'	GREATER THAN 1:4	6'-0"	7'-0"



EROSION CONTROL BLANKET INSTALLATION DETAIL
N.T.S.

NOTES:

1. PREPARE THE TOPSOIL (SEEDBED) FIRST BY RAKING, SHAPING, FINE GRADING, COMPACTING, SEEDING & FERTILIZING THE SLOPES.

2. USE THE TRENCHING & ANCHORING PROCEDURES DETAILED HEREIN TO SECURE ANY EXPOSED MATERIAL ENDS, SECURE ALL PRODUCT OVERLAPS, OVERLAP IN THE DIRECTION OF WATER FLOW, PERPENDICULAR TO THE SLOPE.

3. KEEP EROSION CONTROL BLANKET IN SOLID CONTACT WITH THE TOPSOIL.

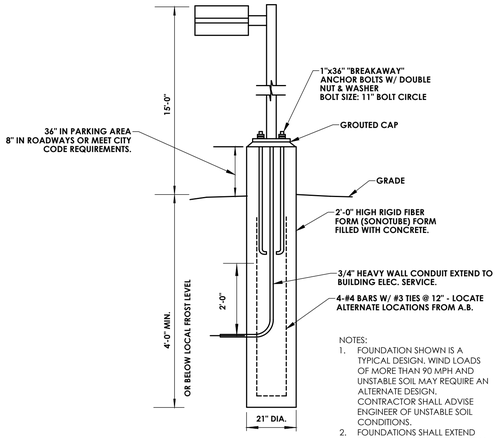
4. USE THE REQUIRED NUMBER OF STAPLES/STAKES TO SECURELY FASTEN THE EROSION CONTROL BLANKET TO THE SLOPE IN LOOSE SOIL CONDITIONS. THE USE OF STAPLES/STAKES LENGTHS GREATER THAN 6" MAYBE NECESSARY FOR PROPER SECURING. STAPLE PATTERNS & OVERLAPS ARE DEPENDENT ON SITE CONDITIONS & MANUFACTURER'S REQUIREMENTS. CONTRACTOR SHALL CONSULT WITH MANUFACTURER FOR ACTUAL SITE SPECIFIC REQUIREMENTS.

TRENCHING & ANCHORING PROCEDURE NOTES:

SIDE SEAM OVERLAP: THE EDGES OF PARALLEL BLANKETS SHALL BE STAPLED WITH A 5" OVERLAP.

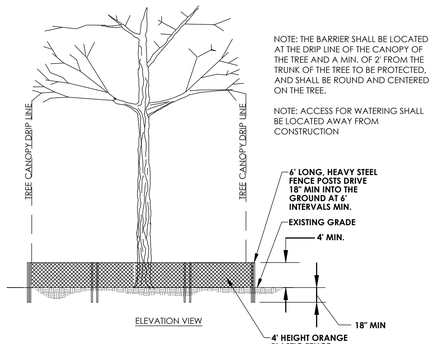
TOP OF SLOPE TRENCH: BEGIN AT THE TOP OF SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6"D X 6"W TRENCH WITH A 12" OVERLAP EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR WITH A ROW OF STAPLES/STAKES 12" O.C. IN THE BOTTOM OF THE TRENCH. BACKFILL & COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL & FOLD THE REMAINING 12" PORTION OF THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL. SECURE THE EROSION CONTROL BLANKET BACK OVER THE SEED & COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED 12" O.C. ACROSS THE ENTIRE WIDTH.

END ROLL OVERLAP: CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE SHALL BE PLACED END OVER END (SINGLE-STYLE) WITH A 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREAS, 12" APART ACROSS THE ENTIRE WIDTH.



NOTES:
1. FOUNDATION SHOWN IS A TYPICAL DESIGN. WIND LOADS OF MORE THAN 90 MPH AND UNSTABLE SOIL MAY REQUIRE AN ALTERNATE DESIGN. CONTRACTOR SHALL ADVISE ENGINEER OF UNSTABLE SOIL CONDITIONS.
2. FOUNDATIONS SHALL EXTEND BELOW FROST DEPTH PER LOCAL CODES.

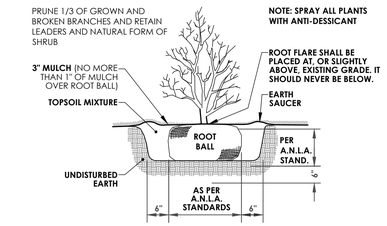
LIGHT POLE AND BASE DETAIL
N.T.S.



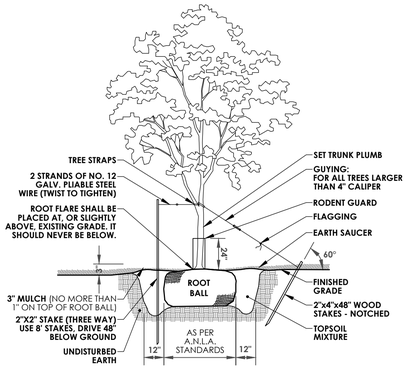
NOTE: THE BARRIER SHALL BE LOCATED AT THE DRIP LINE OF THE CANOPY OF THE TREE AND A MIN. OF 2' FROM THE TRUNK OF THE TREE TO BE PROTECTED, AND SHALL BE ROUND AND CENTERED ON THE TREE.

NOTE: ACCESS FOR WATERING SHALL BE LOCATED AWAY FROM CONSTRUCTION

TREE PROTECTION DETAIL
N.T.S.



SHRUB PLANTING DETAIL
N.T.S.



STAKING: FOR ALL TREES 4" CALIPER OR LESS AND EVERGREENS OVER 4' HEIGHT

TREE PLANTING DETAIL
N.T.S.



D-Series Size 1
LED Area Luminaire

d-series

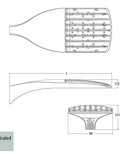
DSX1 LED P1 30K 70CRI T3M

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

EPA:	0.69 ft² (0.064 m²)
Length:	32.71" (83.1 cm)
Width:	14.26" (36.2 cm)
Height H1:	7.88" (20.0 cm)
Height H2:	2.73" (6.9 cm)
Weight:	34 lbs (15.4 kg)



DSX Select options indicated by this color background.

Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

Ordering Information

EXAMPLE: DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED

Series	LEDs	Color temperature*	Color Rendering Index*	Distribution	Voltage	Mounting
DSX1 LED	**Forward optics**	(this section 70CRI only)	70CRI	AFR Automotive front row	MVOLT (120V-277V)*	**Shipped included**
	P1 P6	30K 3000K		T1S Type 1 short	HVOLT (347V-480V)*	SPA Square pole mounting (#8 drilling)
	P2 P7	40K 4000K	70CRI	T2M Type 2 medium	XVOLT (277V - 480V)*	RPA Round pole mounting (#8 drilling)
	P3 P8	50K 5000K		T3M Type 3 medium	120 V,A	SPAS Square pole mounting (#5 drilling)
	P4 P9		80CRI	T4M Type 4 medium	208 V,A	RPAS Round pole mounting (#5 drilling)
	P5	27K 2700K		T5W Type 5W medium	240 V,A	SPABN Square narrow pole mounting (#8 drilling)
	Rotated optics	30K 3000K	80CRI	T5VW Type 5W medium	277 V,A	WBA Wall bracket
	P10* P12*	35K 3500K		T6S Type 6 short	347 V,A	MA Mast arm adapter (mounts on 2 1/2" OD horizontal tenon)
	P11* P13*	40K 4000K	80CRI	T6M Type 6 medium	480 V,A,B	
		50K 5000K		T6L Type 6 long		
				T6VW Type 6 very wide		
				TFTM Forward throw medium		
				T5LG Type 5W low glare*		
				T6MB Type 6T medium		
				T4FG Type 4V low glare*		
				TFTM Forward throw medium		
				TSM Type 'A' medium		
				T5LG Type 'A' low glare		
				T5W Type 'A' wide		
				BLC3 Type 3 backlight control*		
				BLC4 Type 'A' backlight control*		
				LCCO Left corner cutoff*		
				RCCO Right corner cutoff*		

Control options	Other options	Finish (required)
Shipped installed	**Shipped installed**	DDBXD Dark Bronze
NLTAIR2 PIRHN nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc,A,C,N,O	SPD280V 20KV surge protection	DBLXD Black
	HS Houseside shield (Black finish standard)*	DNAXD Natural Aluminum
	L90 Left-rotated optics*	DWHXD White
PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc,A,B,N	R90 Right rotated optics*	DDBTXD Textured dark bronze
	CCE Coastal Construction*	DBLBXD Textured black
PER NEMA twist-lock receptacle only (controls ordered separately)*	HA 50°C ambient operation*	DNATXD Textured natural aluminum
	BAA Buy America(n) Act and/or Build America Buy America Qualified	DWHGXD Textured white
PERS Five-pin receptacle only (controls ordered separately)*,N	SF Single fuse (120, 277, 347V)*	
	DF Double fuse (208, 240, 480V)*	
PE7 Seven-pin receptacle only (controls ordered separately)*,N,O	**Shipped separately**	
EAD Field adjustable output*,N,O	BSGR External Glare Shield (reversible, field install required, matches housing finish)	
BL30 Bi-level switched dimming, 30%*,N	BSDB Bird Spikes (field install required)	
BL50 Bi-level switched dimming, 50%*,N		
DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)*		
DS Dual switching*,N,O		

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D-Series
LED Bollard

d-series

DSXB LED 16C 350 50K SYM

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Diameter:	8" Round (20.3 cm)
Height:	42" (106.7 cm)
Weight (max):	27 lbs (12.25 kg)



Introduction

The D-Series LED Bollard is a stylish, energy-saving, long-life solution designed to perform the way a bollard should—with zero uplight. An optical leap forward, this full cut-off luminaire will meet the most stringent of lighting codes. The D-Series LED Bollard's rugged construction, durable finish and long-lasting LEDs will provide years of maintenance-free service.

Ordering Information

EXAMPLE: DSXB LED 16C 700 40K SYM MVOLT DDBXD

DSXB LED

Series	LEDs	Drive current	Color temperature	Distribution	Voltage	Control options	Other options	Finish (required)
DSXB LED	**Asymmetric**	350 350 mA	30K 3000 K	ASY Asymmetric	MVOLT 120-277V*	**Shipped installed**	**Shipped installed**	DWHXD White
	12C 12 LEDs'	450 450 mA	40K 4000 K	SYM Symmetric	120 *	PE Photoelectric cell, button type	SF Single fuse (120, 277, 347V) *	DNAXD Natural aluminum
	Symmetric	530 530 mA	50K 5000 K		208 *	DMG 0(-10)v dimming wires pulled outside fixture (for use with an external control, ordered separately)	DF Double fuse (208, 240)V *	DDBXD Dark bronze
	16C 16 LEDs'	700 700 mA	AMBPC Amber phosphor converted		240 *		H24 240 volt	DBLXD Black
			AMBLW Amber limited wavelength *		277 *		H30 30" overall height	DSSTD Textured dark bronze
					347 *		H36 36" overall height	DBLBXD Textured black
					480 *	ELCW Emergency battery backup	FG Ground-fault friction-outlet	DNATXD Textured natural aluminum
							L/ABA 4-bolt retrofit base without anchor bolts *	DWHGXD Textured white

Accessories
Ordered and shipped separately.
MABA U Anchor bolts for DSXB *

NOTES
1. Only available in the 12C, A07 version.
2. Only available in the 16C, 07M version.
3. Only available with 450 AMBLW version.
4. Not available with ELCW.
5. MVOLT driver operates on any voltage from 120-277V (50/60 Hz). 347V, 480V, 208V, 240V or 277V options only when ordering with fusing (SF, DF options), or photocontrol (PE option).
6. Not available with 347V. Not available with fusing. Not available with 450 AMBLW.
7. Single fuse (SF) requires 120, 277, or 347 voltage option. Double fuse (DF) requires 208 or 240 voltage option.
8. MABA U not available with LHAB4 option.

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WDGE1 LED
Architectural Wall Sconce

WDGE1 LED P1 30K 80CRI VW

Catalog Number
Notes
Type

Hit the Tab key or mouse over the page to see all interactive elements.

Specifications

Depth (D1):	5.5"
Depth (D2):	1.5"
Height:	8"
Width:	9"
Weight: (without options)	9 lbs



Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. *See ordering tree for details

WDGE LED Family Overview

Luminaire	Optics	Standard Eff., 0°C	Cold Eff., 20°C	Sensor	Approximate Lumens (4000K, 80CRI) P0	P1	P2	P3	P4	P5	P6
WDGE1 LED	Visual Comfort	49W		--	750	1,200	2,000	--	--	--	--
WDGE2 LED	Visual Comfort	109W	189W	Standalone / nLight	--	1,200	2,000	3,000	4,500	6,000	--
WDGE2 LED	Precision Refractive	109W	189W	Standalone / nLight	700	1,200	2,000	3,200	4,200	--	--
WDGE3 LED	Precision Refractive	159W	189W	Standalone / nLight	6,000	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	Precision Refractive			Standalone / nLight	--	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

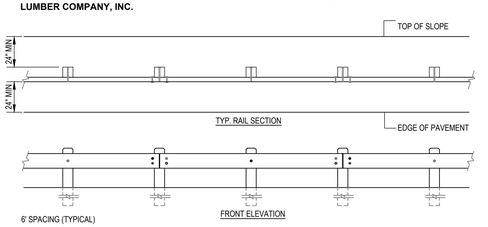
EXAMPLE: WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

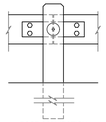
Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting
WDGE1 LED	P0 27K 2700K	30K 3000K	80CRI	VF Visual comfort forward throw	MVOLT	**Shipped included**
	P1 30K 3000K	35K 3500K	90CRI	VW Visual comfort wide	347*	SRM Surface mounting bracket
	P2 35K 3500K	40K 4000K				ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)*
	40K 4000K	50K* 5000K				**Shipped separately**
						AWS 3.5inch Architectural wall spacer *
						PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available *

Options	Finish
L4AW Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)*	DDBTXD Dark bronze
PE Photocell, Button Type*	DBLBXD Black
DS Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)*	DNAXD Natural aluminum
DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)	DWHXD White
BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.	DSSTD Sandstone
DSLE Dual Switching (1 Driver, 2 Light Engines)	
CCE Coastal Construction*	

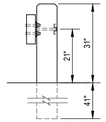
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ARMUCHEE, GA 30105-0099
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PHONE: (706) 234-1605
FAX: (706) 235-8132
www.timbarrier.com





POST CONNECTION
NOT TO SCALE



TYP. GUARDRAIL CROSS SECTION
1:10 SLOPE OR FLATTER
NOT TO SCALE

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. IF TOP OF SLOPE IS CLOSER THAN 24" INCREASE POST LENGTH TO 7'.
4. DRIVE POSTS OR AUGER, BACKFILL WITH NATIVE SOIL AND COMPACT EVERY 12".
5. ALL TIMBER #1 S4S SOUTHERN PINE, PRESSURE TREATED. AWPA-C14, WOOD FOR USE IN HWY. CONSTR.
6. TYP. POST: 8" X 8" X 6' - TYP. RAIL: 4" X 12" X 11' 11 1/2"
7. FASTENERS: ASTM A307; A242; F436 TYPE 3; A563 DH3.
8. TIMBARRIER™ SPLICE PLATE & PLATE WASHER ASTM-A588.
9. UNDER EACH BOLT HEAD ON FACE OF RAIL INSTALL ONE 7/8" WASHER.
10. REFER TO DRAWINGS 651-003b OR 651-003c FOR TERMINAL DETAILS
11. CONTRACTORS NOTE: FOR PRODUCT AND COMPANY INFORMATION VISIT www.CADdetails.com/info REFERENCE NUMBER 651-003.

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

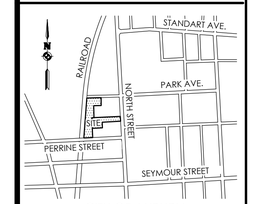
651-003

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DESIGN DEVELOPMENT

PASSERO
engineering architecture



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100
ROCHESTER, NY 14614
(585) 325-1000
FAX: (585) 325-1691

PROJECT MANAGER: EDMUND MARTIN, P.E.
PROJECT ENGINEER: ANDREW BURNS, P.E.
DESIGNER: JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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DETAILS

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-205**

DATE: **APRIL 2026**

Floor Plan Set

4/10/2026 11:07:10 AM



C1 FIRST FLOOR PLAN - OVERALL BY DEPARTMENTS
1/8" = 1'-0"

DEPARTMENT LEGEND

- 01 - ORTHOPEDICS
- 10 – REGISTRATION & WAITING
- 11 - SHARED SUPPORT
- 12 - STAFF SUPPORT
- 13 - BUILDING SUPPORT
- 14 – PUBLIC CIRCULATION
- 15 – STAFF CIRCULATION

2' 8'
0' 4' 16'

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NAME	DATE

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ACH HEALTH CAMPUS
147 NORTH ST, AUBURN, NEW YORK

DATE:	APRIL 10, 2026
PROJECT:	24089
OTHER:	
DRAWN BY:	Author

FIRST FLOOR PLAN - OVERALL

A110.

4/10/2026 11:07:54 AM



C1 SECOND FLOOR PLAN - OVERALL BY DEPARTMENTS
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REVISION SCHEDULE

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ACH HEALTH CAMPUS
147 NORTH ST, AUBURN, NEW YORK

DATE:	APRIL 10, 2026
PROJECT:	24089
OTHER:	
DRAWN BY:	Author

SECOND FLOOR PLAN - OVERALL

A120.

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C1 THIRD FLOOR PLAN - OVERALL BY DEPARTMENTS
1/8" = 1'-0"

DEPARTMENT LEGEND

- 06 – CARDIOLOGY
- 07 – PRIMARY CARE
- 10 – REGISTRATION & WAITING
- 11 - SHARED SUPPORT
- 12 - STAFF SUPPORT
- 13 - BUILDING SUPPORT
- 14 – PUBLIC CIRCULATION
- 15 – STAFF CIRCULATION

0' 2' 4' 8' 16'

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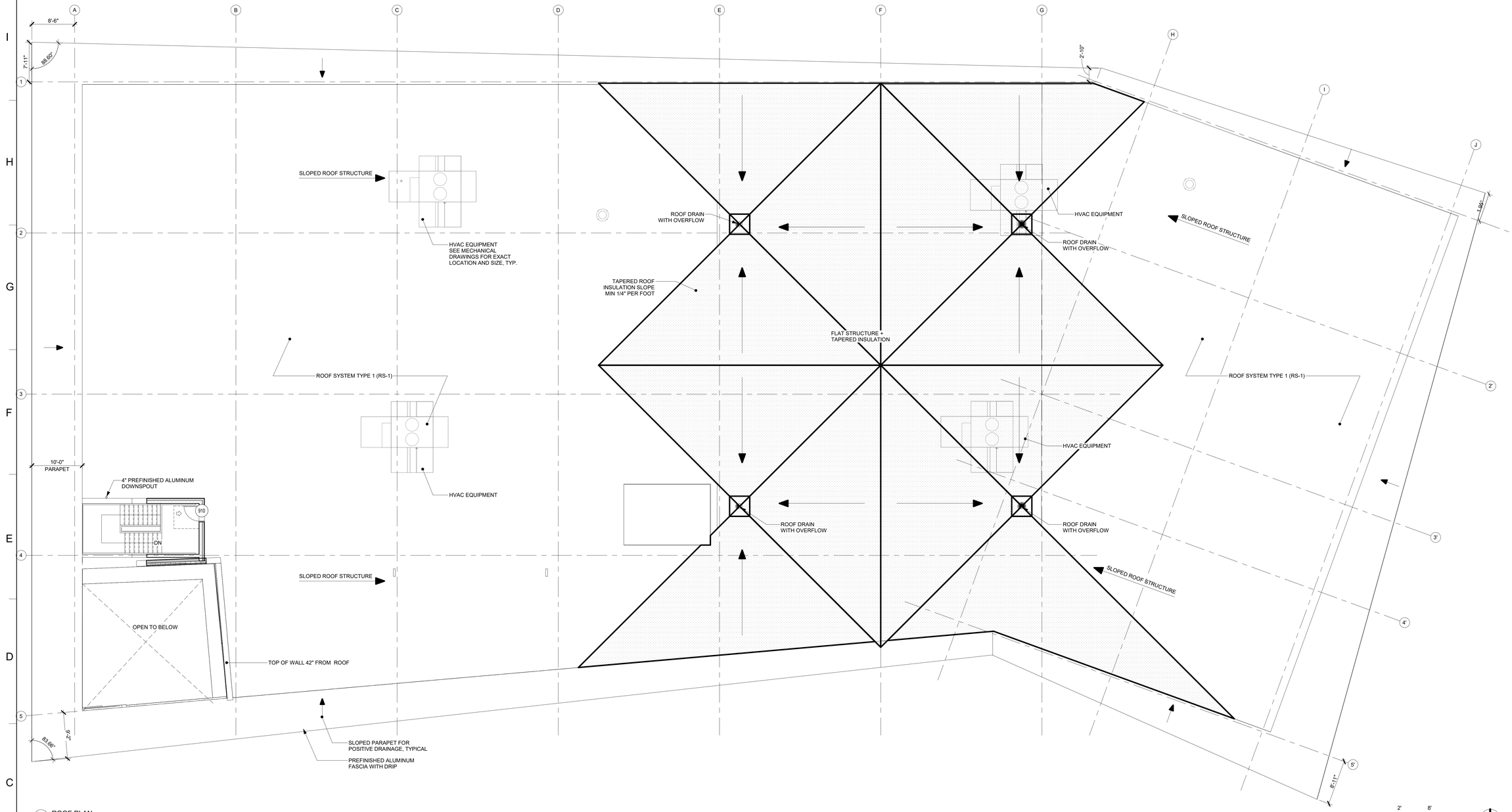
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147 NORTH ST, AUBURN, NEW YORK

DATE:	APRIL 10, 2026
PROJECT:	24089
OTHER:	
DRAWN BY:	Author

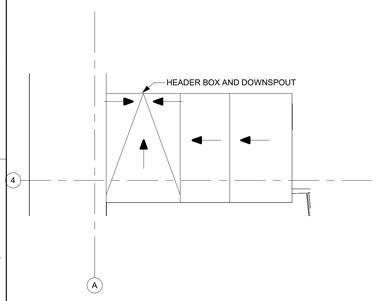
THIRD FLOOR PLAN - OVERALL

A130.

4/10/2026 11:08:21 AM



C1 ROOF PLAN
1/8" = 1'-0"



A1 STAIR 1 PENTHOUSE ROOF PLAN
1/8" = 1'-0"

KEYED ROOF NOTES

00

ROOF LEGEND

- ROOF VENT
- ROOF DRAIN
- EXHAUST FAN
- RTU — ROOF TOP UNIT
- RCU — ROOF CONDENSING UNIT
- ACCU — AIR COOLED CONDENSING UNIT
- DSCU — DUCTLESS SPLIT CONDENSING UNIT
- + x" — DEPTH OF ROOF INSULATION
- ROOF WALKWAY PAD
- SNOW GUARDS
- ROOF HATCH

GENERAL ROOF NOTES

1. CONTRACTOR TO PROVIDE CRICKETS AROUND ALL NEW ROOF CURBS AND NEW EQUIPMENT TAPERED AT A MINIMUM OF 1/4" PER FOOT TO ASSURE THE POSITIVE FLOW OF WATER. THIS NOTE APPLIES TO NEW ROOF CURBS AND NEW EQUIPMENT CONSTRUCTED ON BOTH NEW AND EXISTING ROOFS. CRICKET ROOF SYSTEM TO MATCH THE CONSTRUCTION OF THE ADJACENT ROOF.

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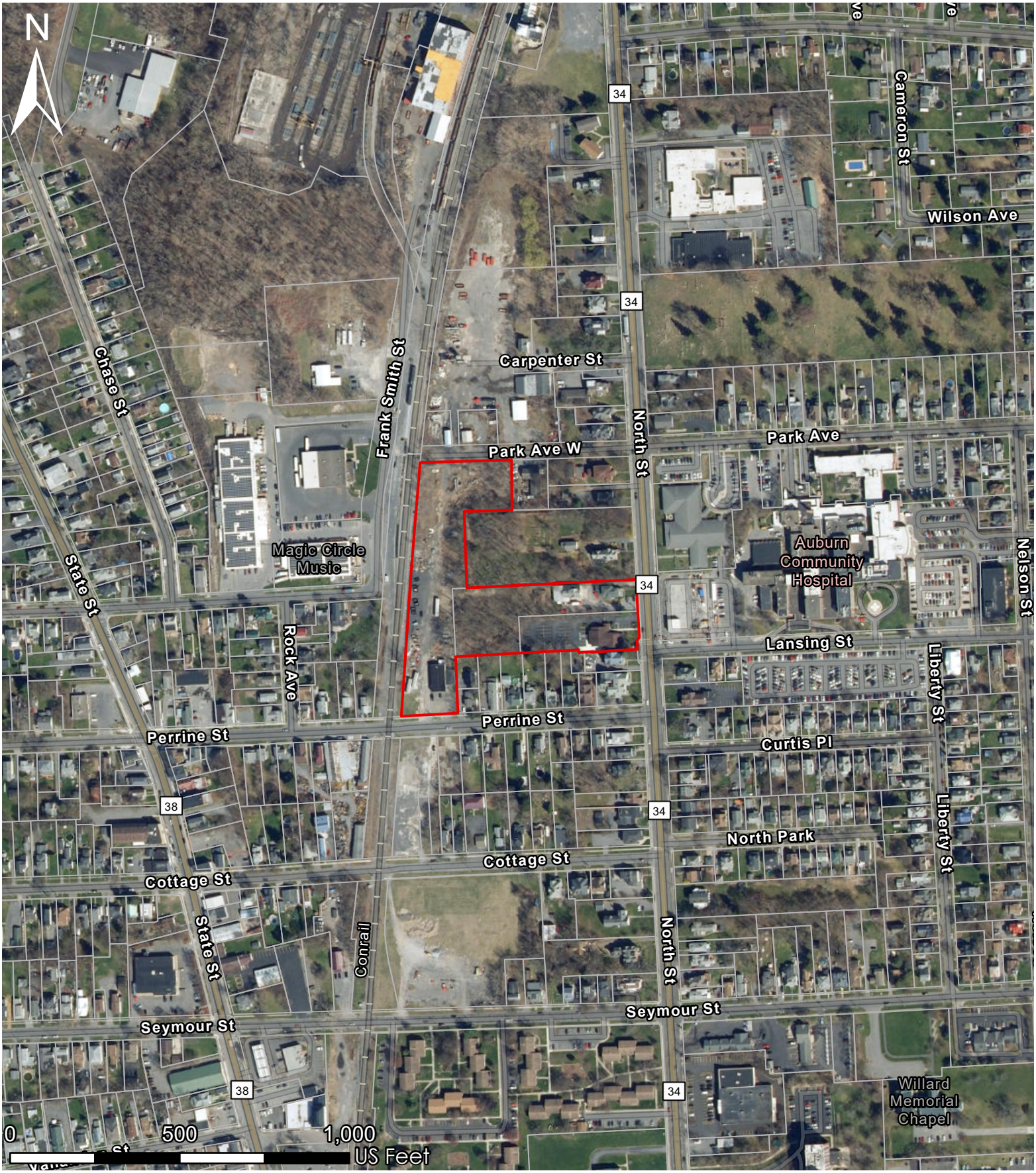
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ACH HEALTH CAMPUS
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DATE:	APRIL 10, 2026
PROJECT:	24089
OTHER:	
DRAWN BY:	BRB

ROOF PLAN

A190

Exhibit B



Legend

- Project Location
- Parcels

Location Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: Cayuga County GIS

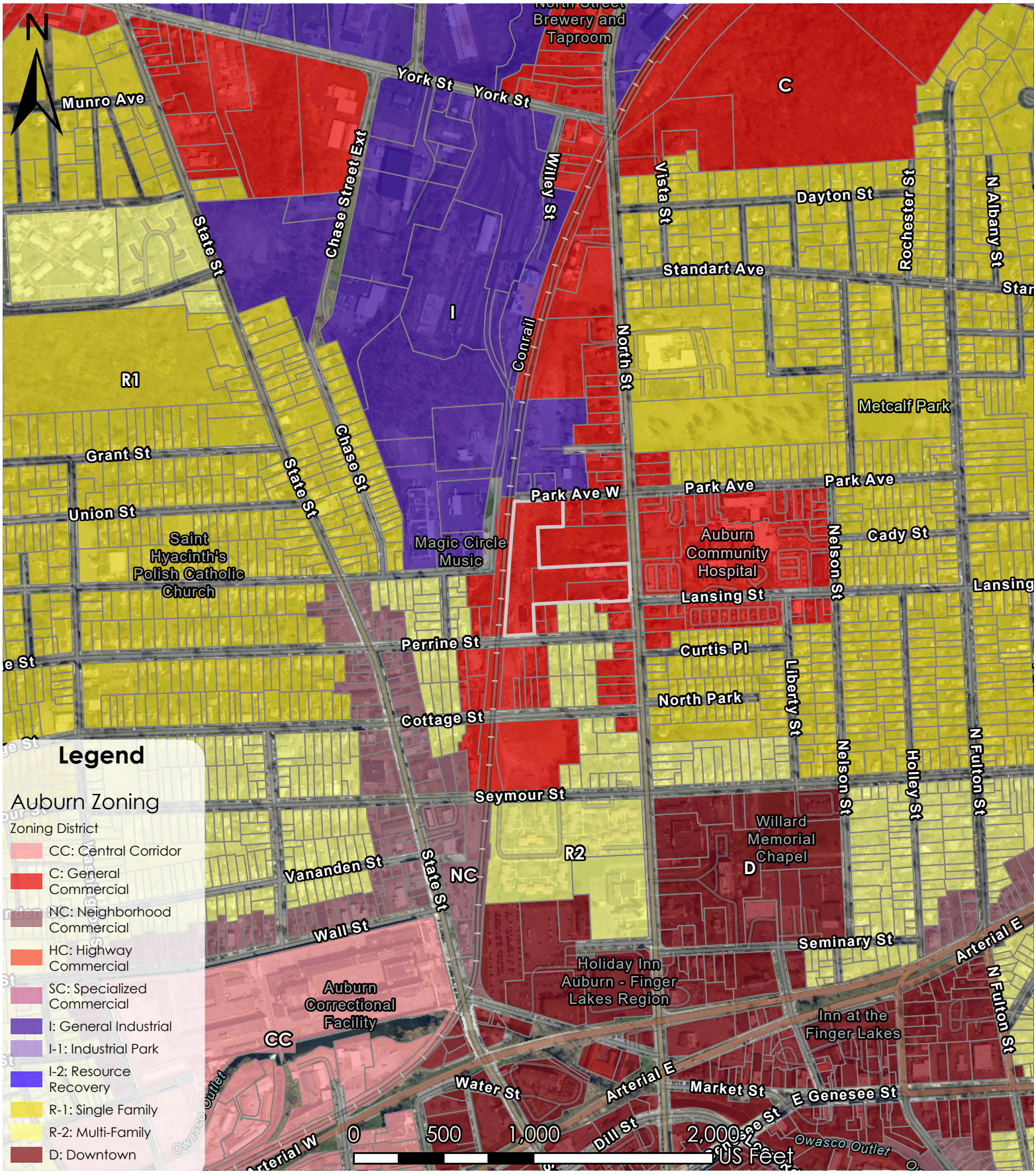
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Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Vantor

Date: 3/9/2026

Exhibit C



Legend

Project Location

Parcels

Zoning Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: City of Auburn

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Date: 3/9/2026

Exhibit D



Legend

- Project Location
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

USFWS National Wetlands Inventory

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: U.S. Fish and Wildlife Service

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Date: 3/6/2026



Legend

- Project Location
- Previously Mapped Freshwater Wetlands
- 100ft Buffer
- Informational Freshwater Wetland Mapping

NYSDEC Wetlands

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NYSDEC

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Service Credits:

New York State Department of Environmental Conservation, NYSDEC, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Microsoft, Vantor

Date: 3/6/2026

Exhibit E

SWPPP REPORT

April 10, 2026

20255046.0001

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS

AUBURN, NY

PREPARED FOR:
Park Grove Realty, LLC
46 Prince Street
Rochester, NY 14607

242 West Main Street, Suite 100 | Rochester, NY 14614 | 585.325.1000 | www.passero.com

PASSERO engineering architecture

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APPENDIX B: AERIAL PHOTOGRAPH
APPENDIX C: USGS QUADRANGLE MAP
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APPENDIX E: WETLAND MAPPING
APPENDIX F: SOILS MAP
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APPENDIX M: MS4 SWPPP ACCEPTANCE FORM
APPENDIX N: NOTICE OF INTENT, SWPPP PREPARER CERTIFICATION, OWNER CERTIFICATION FORMS.
APPENDIX O: NOTICE OF TERMINATION
APPENDIX P: EROSION CONTROL DETAILS
APPENDIX Q: MAINTENANCE/CONSTRUCTION INSPECTION REPORTS

1.0 EXECUTIVE SUMMARY

The proposed project is located along the North Street (NYS Route 34), W. Park Avenue, and Perrine Street right of ways in the City of Auburn, NY. The project involves the subdivision of four parcels (Tax Account Numbers 115.28-1-82.1, 116.21-1-41, 116.21-1-42.1, 115-28-1-82.2) situated on approximately 5.42 acres in order to redevelop the site. The redevelopment of the site will include the demolition of the existing buildings and infrastructure on the site followed by the construction of a Medical Office Building with a ± 30,400 sq. ft. footprint and a total building area of ± 80,750 sq. ft. Site improvements will include internal access drives, parking areas, sidewalks, landscaping and utility connections to serve the proposed building.

Stormwater generally drains to western boundaries of the site via sheet flow and shallow concentrated flow where it discharges either to the adjacent property or to the Perrine Street right of way, ultimately entering into the Fifth Ward Sewer District infrastructure.

Under developed conditions runoff generally flows to the proposed bioretention area located in the northwestern corner of the site. The stormwater management area will be discharged to the West. With stormwater storage and controlled outflow, there is a net decrease in the 1-year, 10-year, and 100-year storm events. 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. The summary table below shows the site water quantity and quality comparison between existing and proposed conditions:

Table 1: *Summary Table*

Summary Table

Water Quantity

	Existing	Proposed	Reduction (%)
1-Year Runoff (cfs)	10.59	6.940	34.47%
10-Year Runoff (cfs)	27.93	25.64	8.20%
100-Year Runoff (cfs)	60.540	50.41	16.73%

Water Quality

	Required	Provided
Water Quality Volume (WQv) (acre-ft)	0.091	0.091
Minimum Allowable Runoff Reduction Volume (RRv) (acre-ft)	0.011	0.091
Channel Protection Volume (CPv) (acre-ft)	0.319	0.408
Qp (cfs)	13.880	12.630
Qf (cfs)	30.130	23.780

2.0 INTRODUCTION

The proposed project is located along the North Street (NYS Route 34), W. Park Avenue, and Perrine Street right of ways in the City of Auburn, NY. The project involves the subdivision of three parcels (Tax Account Numbers 115.28-1-82.1, 116.21-1-41, 116.21-1-42.1, 115-28-1-82.2) situated on approximately 5.42 acres in order to redevelop the site. The redevelopment of the site will include the demolition of the existing buildings and infrastructure on the site followed by the construction of a Medical Office Building with a ± 30,400 sq. ft. footprint and a total building area of ± 80,750 sq. ft. Site improvements will include internal access drives, parking areas, sidewalks, landscaping and utility connections to serve the proposed building.

Public sewer, water, gas, electric and telecommunications/cable will be newly connected along North Street (NYS Route 34) and Perrine Street.

The provided Stormwater Pollution Prevention Plan (SWPPP) materials adhere to the State Pollutant Discharge Elimination System (SPDES) General Permit (GP-0-25-01) for Stormwater Discharges from Construction Activity. The guidelines specified by the *New York State Stormwater Management Design Manual, July 2024* (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 the SWPPP preparer certification form is included in Appendix N.

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
Park Grove Realty, LLC
46 Prince Street
Rochester, NY 14607
Contact: Andrew Bodewes

SWPPP Preparer
Passero Associates
242 West Main Street. Suite 100
Rochester, NY 14614
(585) 325-1000
Contact: Andrew Burns, P.E.

3.0 EXISTING SITE CONDITIONS

3.1 Topography/ Drainage

The parcel has varied land cover, which ranges from existing impervious, to woods. The land also varies in slope throughout the site, with slopes between 1% to 10%.

Stormwater generally drains to the West via sheet flow and shallow concentrated flow where it discharges either to the adjacent property owned by the Finger Lakes Railway Corporation or to the Perrine Street right of way, ultimately entering into the Fifth Ward Sewer District infrastructure.

There are two drainage areas on site that drain to two separate analysis points see below for descriptions of the existing drainage area:

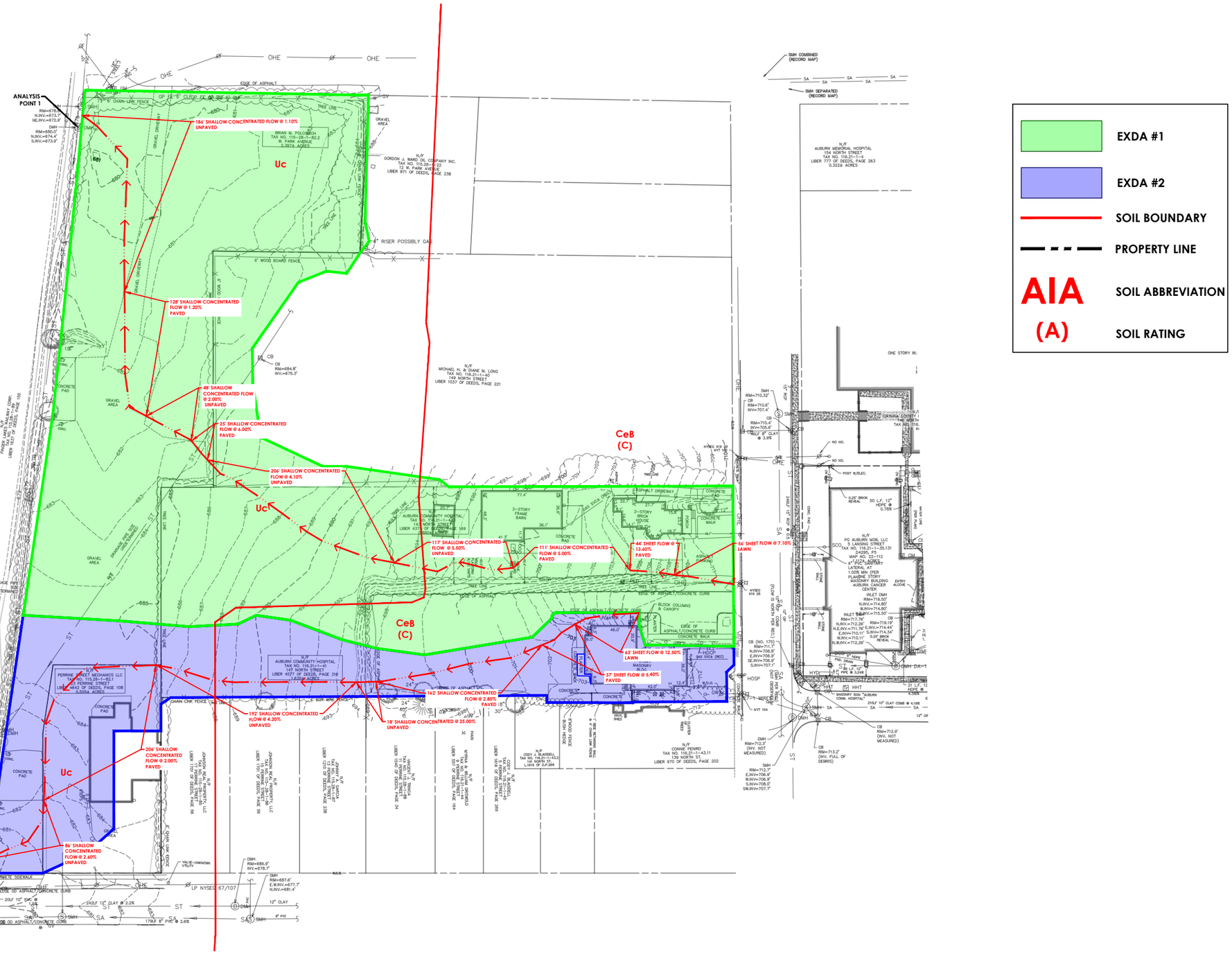
Existing Drainage Area 1:

This area encompasses the northern portion of the site, encompassing existing buildings and pavement areas, woods and gravel areas. In total the area is 4.20 acres. Stormwater generally sheet and shallow concentrated flows from East to West flowing to existing infrastructure in the adjacent property owned by the Finger Lakes Railway Corporation to analysis point 1 which ultimately terminates at the Fifth Ward Sewer District Infrastructure.

Existing Drainage Area 2:

This area encompasses the southern portion of the site, encompassing existing buildings and pavement areas, woods and gravel areas. In total the area is 1.43 acres. Stormwater generally sheet and shallow concentrated flows from East to West towards the Perrine Street right of way into existing infrastructure to analysis point 2, ultimately terminating at the Fifth Ward Sewer District Infrastructure.

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



AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS

EXISTING DRAINAGE MAP

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20255046.0001

APRIL, 2026

CITY OF AUBURN, NY

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. In addition to online mapping, a wetland delineation report was conducted.

Online wetland mapping is shown in appendix D and E.

3.3 Floodplain

Floodplains were researched using the online Firmette tools found at FEMA Map Service Center. Review of the mapping indicates the subject parcels are not located with a flood hazard area. The parcels are located within Flood Zone X, defined as areas determined to be outside the 0.2% annual chance floodplain per FEMA Map 36011C0305E dated August 2, 2007.

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 are no potential for rare and endangered animals in the vicinity of the project. The environmental mapper is shown on Appendix D.

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 but is adjacent to properties either listed or eligible for the National or State Register of Historic Places. The archeological sensitive areas map is included in Appendix H.

4.0 DEVELOPED SITE CONDITIONS

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

4.1 Proposed Drainage Area 1:

This area encompasses the majority of the proposed building, parking area and sidewalks. In total the area is 4.05 acres Stormwater will sheet flow to proposed stormwater infrastructure located on site which ultimately discharge to the proposed bioretention area. Here stormwater first discharges to the proposed forebay where sediment is allowed to settle out. It then overflows a rip rap spillway into the bioretention area where stormwater will filter through filter media and enter underdrain and enter into the outlet control structure. From the outlet control structure stormwater is conveyed to existing infrastructure on the adjacent property owned by the Finger Lakes Railway Corporation to analysis point 1 which ultimately terminates at the Fifth Ward Sewer District Infrastructure.

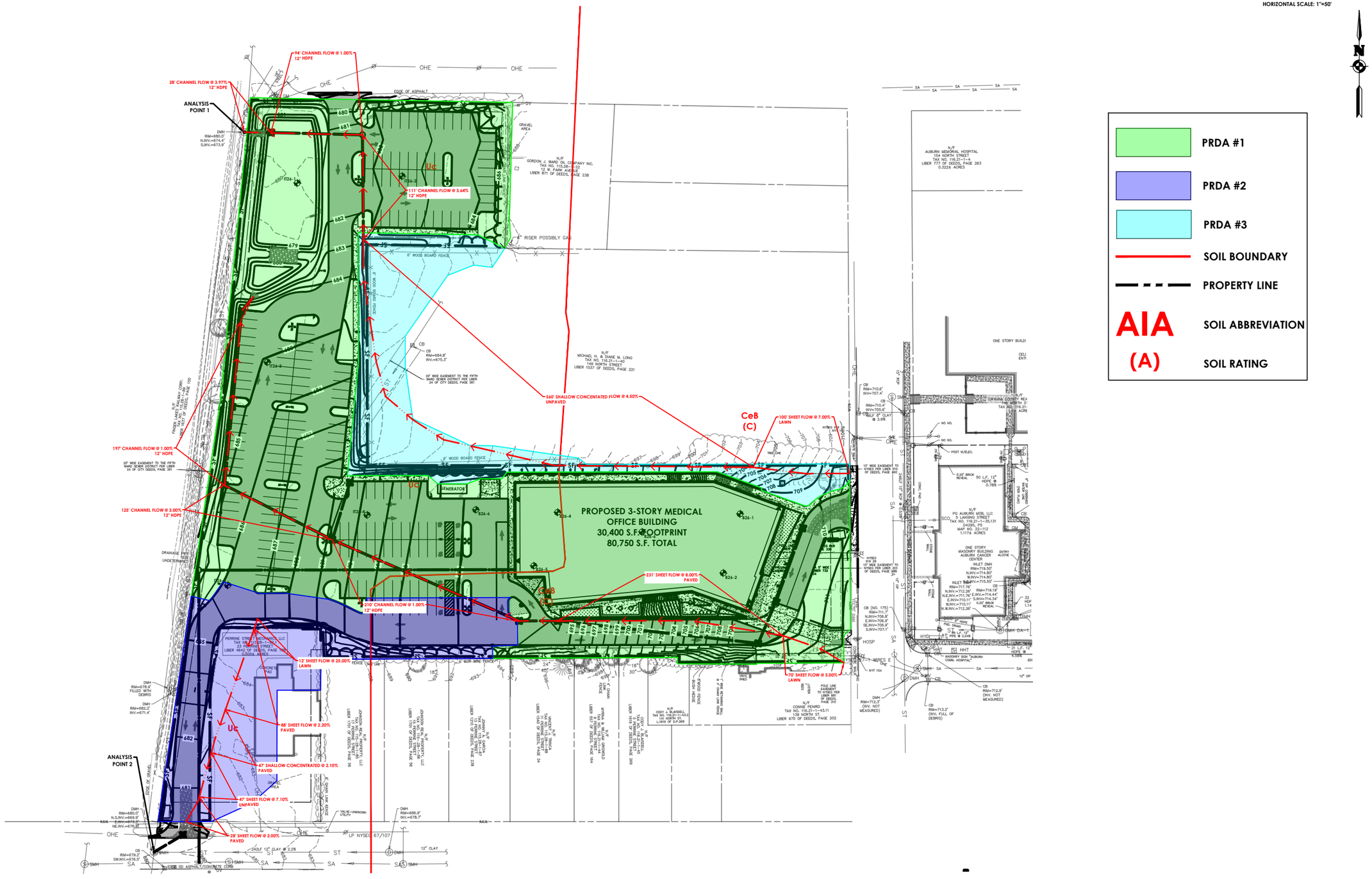
4.2 Proposed Drainage Area 2:

This area encompasses a portion of the proposed access road. In total the area is 0.92 acres. Stormwater will sheet flow to proposed stormwater infrastructure located in the Perrine Street right of way into existing infrastructure to analysis point 2, ultimately terminating at the Fifth Ward Sewer District Infrastructure.

4.3 Proposed Drainage Area 3:

This area encompasses offsite areas that under existing conditions flow onto our site. In total the area is 0.66 acres. Stormwater sheet flows to proposed stormwater infrastructure that will divert this water to conveyed to existing infrastructure on the adjacent property owned by the Finger Lakes Railway Corporation to analysis point 1 which ultimately terminates at the Fifth Ward Sewer District Infrastructure.

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



AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS

PROPOSED DRAINAGE MAP

PASSERO architecture engineering

20255046.0001

APRIL, 2026

CITY OF AUBURN, NY

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 filtration - bioretention to meet all NYSDEC requirements for stormwater quality.

5.1 Infrastructure Practice Type Example: Filtration - Bioretention:

The bioretention areas shown on the plans will treat runoff from a portion of the proposed roads, roofs, and parking areas. Water will discharge to a forebay where settlement is allowed time to settle out. The forebay will discharge via a rip rap lined overflow to the bioretention area where Water will filter through the soil media to underdrains, which connect to outlet control structures. A rip-rap lined overflow weir will be utilized to ensure excessive ponding does not occur in the filtration-bioretention area during extreme storm events which will allow stormwater to overflow the basin.

Table 2: *Stormwater Quality Comparison*

Water Quality		
Description:	**Required**	**Provided**
WQv Total (acre-ft)	0.091	0.091
Min RRv Total (acre-ft)	0.011	0.091
CPv Total (acre-ft)	0.319	0.408
Qp Total (cfs)	13.880	12.630
Qf Total (cfs)	30.130	23.780

See the Appendix I 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 & CLIMATE CHANGE

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 via an outlet control structure.

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	3.00	9.05	20.88
	PROPOSED	2.01	9.04	19.64
	PERCENT REDUCTION	**33.00%**	**0.11%**	**5.94%**
Analysis Point 2	EXISTING	2.35	5.00	9.53
	PROPOSED	2.13	3.97	6.99
	PERCENT REDUCTION	**9.36%**	**20.60%**	**26.65%**
Total Site	EXISTING	5.24	13.88	30.13
	PROPOSED	2.8	12.63	23.78
	PERCENT REDUCTION	**46.56%**	**9.01%**	**21.08%**

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. Refer to Appendix K for the HydroCAD analysis and the breakdown of each hydrograph.

6.1 Considerations for Climate Change

In accordance with Part III.A.2 of the General Permit, considerations must be made in SWPPP design to account for ongoing climate change across NYS. This SWPPP considered the following physical risks pursuant to the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490.

- Increasing temperatures and increasing precipitation
- Increasing variability in precipitation, including chance of drought
- Increasing frequency and severity of flooding and rising sea levels
- Increasing storm surge and shifting ecologies.

The following methods to consider and implement resiliency to combat climate change in NYS are below:

- *Accurate Rainfall Data* – This SWPPP utilizes the most up-to-date rainfall data provided by the "Extreme Precipitation in New York & New England" tool managed by Cornell University. This data is important for proper stormwater design of infrastructure to meet modern climate conditions.

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 City of Auburn 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 City, 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. 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. The timeline requirements for stabilization are below:

    - If not in a listed impaired watershed AND site is NOT under a 5-acre wavier, 14 days.
    - If inside an impaired watershed OR utilizing a 5-acre wavier, 7 days.
    - During the winter months, including sites under winter shutdown, 3 days.

- Check Dam → 24 inch high stone check dams will be installed in all temporary and permanent diversion swales. The check dams will be installed every 2 vertical feet. Once the site is stabilized, these check dams will be removed.

- Truck Washdown area → a truck washdown area will be provided adjacent to the construction entrance. This area will be constructed such that it drains to a sediment basin immediately adjacent prior to discharging offsite.

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

Additional measures may be required during construction at the guidance of the owner or certified SWPPP Inspector. The contractor shall begin to make all adjustments to the erosion control within 24 hours of receipt of any deficiencies. The owner will be responsible for providing weekly reports when the site disturbance totals less than 5 acres. Inspections are to be completed by a qualified inspector in accordance with the GP-0-25-001, during construction to the City of Auburn.

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-0-25-001 Part II.D.3, located as Appendix K 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 three (3) 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 July 2024.

3. In areas where soil disturbance and compaction due to construction activities has taken place and the final product is to be pervious soils, lawns, or soils underlying a pervious man-made surface (i.e. pervious pavement, etc) the contractor is required to restore the soil per table 5.2 of the NYSDEC Stormwater Design Manual (see below).

Table 5.2 Soil Restoration Requirements

Type of Soil Disturbance	Soil Restoration Requirement		Comments/Examples
No soil disturbance	Restoration not permitted		Preservation of Natural Features
Minimal soil disturbance	Restoration not required		Clearing and grubbing
Areas where topsoil is stripped only - no change in grade	HSG A &B	HSG C&D	Protect area from any ongoing construction activities.
	apply 6 inches of topsoil	Aerate* and apply 6 inches of topsoil	
Areas of cut or fill	HSG A &B	HSG C & D	
	Aerate and apply 6 inches of topsoil	Apply full Soil Restoration **	
Heavy traffic areas on site (especially in a zone 5-25 ft around buildings but not within a 5 ft perimeter around foundation walls)	Apply full Soil Restoration** de-compaction and compost enhancement)		
Areas where Runoff Reduction and/or Infiltration practices are applied	Restoration not required but may be applied to enhance the reduction specified for appropriate practices.		Keep construction equipment from crossing these areas. To protect newly installed practice from any ongoing construction activities construct a single-phase operation fence area
Redevelopment projects	Soil Restoration is required on redevelopment projects in areas where existing impervious area will be converted to pervious area as well as existing pervious areas.		

*Aeration includes the use of machines such as tractor-drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentations in the soil, or prongs which function like a mini-subsoiler.

** Refer to latest version of NYSDEC Deep-Ripping and Decompaction.

4. The owner or operator shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.

5. 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 City 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-0-25-001. Once the site has achieved 80% stabilization and ground cover, the City may sign off on the Notice of Termination prior to submission to the NYSDEC. Removal of all temporary erosion and sediment control practices is required prior to demobilization.

8.0 POST CONSTRUCTION

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

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

Additionally, annual monitoring of the storm sewer structures will be:

POST-CONSTRUCTION STORMWATER MANAGEMENT MAINTENANCE LIST

Practice	Requirement	Frequency
Project Area (entirety)	Contact and engage NYS Licensed Professional Engineer (PE) for Annual stormwater inspection per requirement of maintenance agreement with Dutchess County.	Annually.
Project area grass areas	Inspect for patchy/un-stabilized grass areas. Reseed as necessary	Monthly or as indicated by annual inspection report.
Project area pavement areas	Inspect for contaminants, trash and broken/damaged pavement. Soak up, remove and repair as necessary.	Weekly or as indicated by annual inspection report.
Storm structures	Clean/remove trash/blockages.	As found or as indicated by annual inspection report.
Filtration bio-retention	Inspect for bare soil, blocked inlets, sediment accumulation, and vegetation level. Remove sediment and reseed as necessary.	Annually or as indicated by annual inspection report.

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 City.

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)	Auburn Community Hospital Health Campus 23 Perrine Street, 147 North Street, 143 North Street W Park Avenue Auburn, NY 13021	Owner Name and Address:	Park Grove Realty, LLC 46 Prince Street Rochester, NY 14607
Description: (Purpose and Types of Soil Disturbing Activities)	Demolition of the existing buildings and infrastructure on the site followed by the construction of a Medical Office Building with a ± 30,400 sq. ft. footprint and a total building area of ± 80,750 sq. ft. Site improvements will include internal access drives, parking areas, sidewalks, landscaping and utility connections to serve the proposed building.		
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 Cazenovia silt loam with hydrologic soil class "C" and Urban land-Cazenovia complex.		
Site Area:	5.41 acres		

Sequence of Major Activities

The order of activities will be as follows:

1. **Install silt fences, stabilized construction entrance and other erosion control measures.**
2. **Protect vegetation to remain.**
3. **Construct temporary sediment basins including grading, and stabilization.**
4. **Demolish existing buildings and pavement areas.**
5. **Strip and stockpile topsoil as necessary.**
6. **Conduct mass earth moving activities.**
7. **Install utilities including storm sewers.**
8. **Box parking lot and access drives.**
9. **Install parking and access drive subbase and continue monitoring of erosion control.**
10. **Stabilize disturbed areas and stockpiles within 7 days of last construction activity in all areas.**
11. **Construct filtration bioretenion area.**
12. **Final grading, seeding, and mulching of all disturbed areas.**
13. **When all work areas are complete and the entire areas are stabilized, remove the erosion control measures.**

Name of Receiving Waters:	Fifth Ward Sewer District

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 Infiltration basin 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 Town in a format acceptable to their office.
- See attached GP-01-25-001 for additional inspection requirements
- Stormwater management areas shall be maintained a minimum of 3 times per growing season.

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.

POLLUTION PREVENTION PLAN CERTIFICATION

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

Signed:_____
Owner

Date:_____

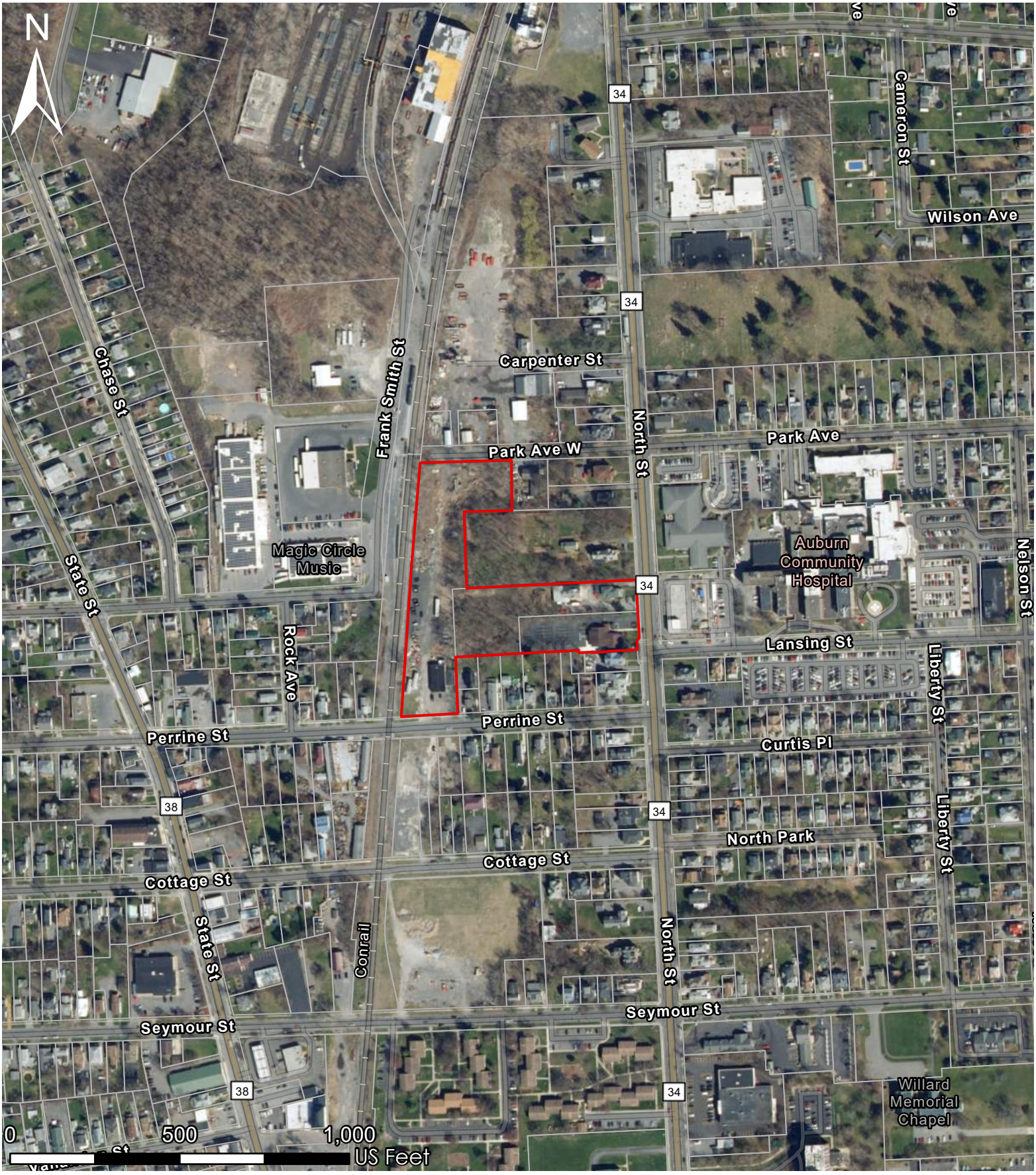
CONTRACTOR'S CERTIFICATION

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

Signature	For	Responsible for
Trained Contractor _____ Date:_____		
_____ Date:_____		
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Signature	For	Responsible for
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APPENDIX B: AERIAL PHOTOGRAPH



Legend

- Project Location
- Parcels

Location Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: Cayuga County GIS

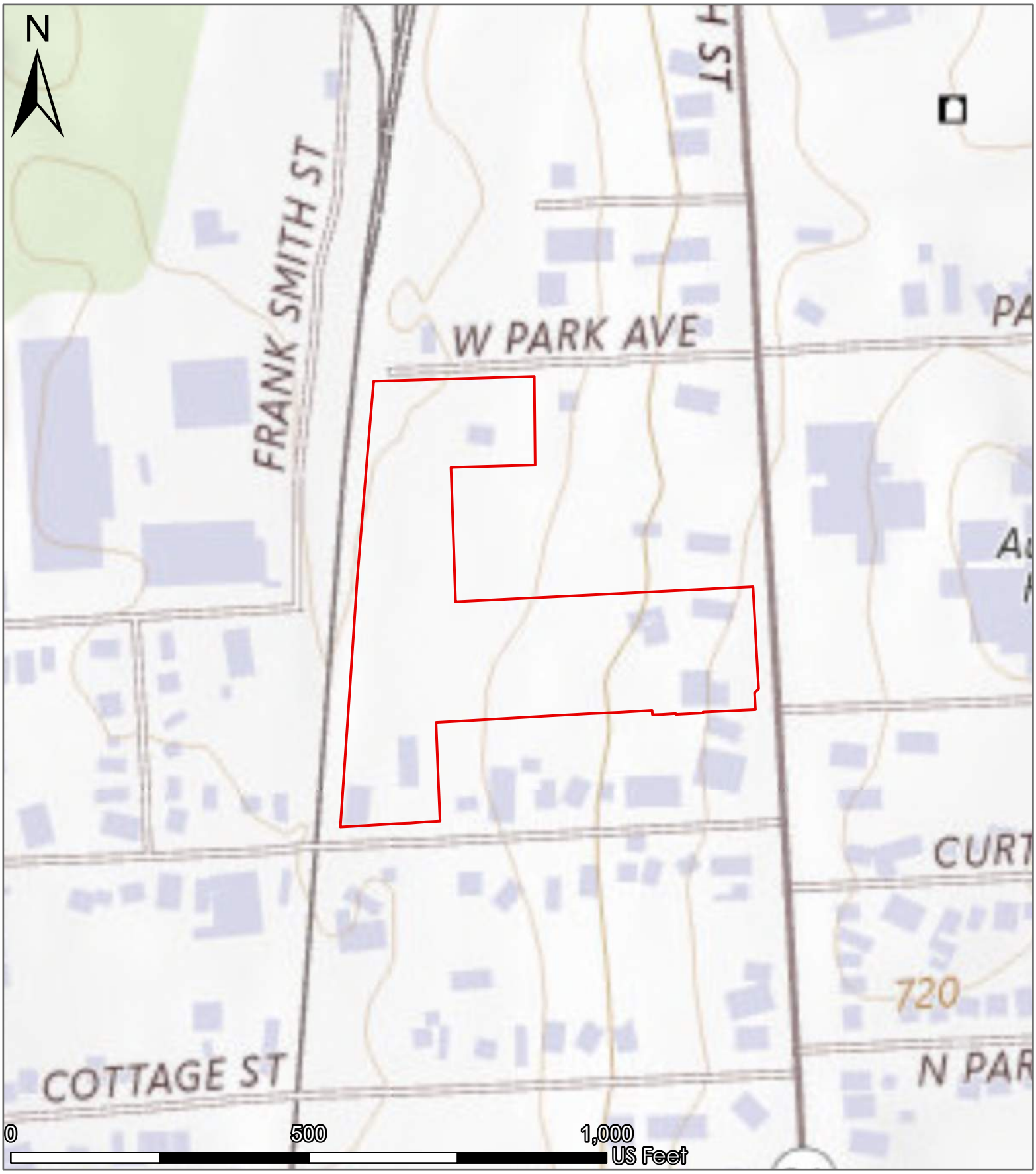
PASSERO
architecture engineering

Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Vantor

Date: 4/10/2026

APPENDIX C: USGS QUADRANGLE MAP



Legend

Project Location

USGS Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: United States Geological Survey

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architecture engineering

Service Credits:

USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National Hydrography Dataset, National Land Cover Database, National Structures Dataset, and National Transportation Dataset; USGS Global Ecosystems; U.S. Census Bureau TIGER/Line data; USFS Road data; Natural Earth Data; U.S. Department of State HIU; NOAA National Centers for Environmental Information. Data refreshed October 27, 2025.

Date: 4/10/2026

APPENDIX D: ENVIRONMENTAL RESOURCE MAPPER



Legend

- Streams & Rivers
- Project Location
- Informational Freshwater Wetland Mapping
- 100ft Buffer
- Previously Mapped Freshwater Wetlands
- NYS Natural Heritage Communities
- Rare Plants & Animals

Environmental Resource Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: Environmental Resource Mapper

PASSERO
architecture engineering

Service Credits:

New York State Department of Environmental Conservation, NYSDEC, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Microsoft, Vantor

Date: 4/10/2026

APPENDIX E: WETLAND MAPPING



Legend

- Project Location
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

USFWS National Wetlands Inventory

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: U.S. Fish and Wildlife Service

PASSERO architecture engineering

Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Vantor

Date: 4/10/2026

APPENDIX F: SOILS MAP



Legend

- Project Location

Soils

Hydrologic Group Rating

- C
- N/A

Soil Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NRCS Web Soil Survey

PASSERO
architecture engineering

Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Microsoft, Vantor

Date: 3/9/2026

APPENDIX G: FEMA MAPPING



Legend

- Project Location
- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area with Reduced Risk Due to Levee
- Special Floodway

FEMA Flood Areas Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: FEMA FIRMette 36011C0305E

PASSERO architecture engineering

Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Microsoft, Vantor

Date: 4/10/2026

APPENDIX H: ARCHEOLOGICAL SENSITIVE AREAS MAP



Legend

- Project Location
- National Register Building Listings

Historic Building Districts

- Eligible
- Listed

Historic Building Points

- Eligible
- Listed

Archeological Sensitive Areas

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: Cultural Resource Information System

PASSERO architecture engineering

Service Credits:

Division for Historic Preservation, New York State Office of Parks, Recreation and Historic Preservation, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, New York State, Microsoft, Vantor

Date: 4/10/2026

APPENDIX I: HYDROCAD 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	42.941 degrees North
Longitude	76.569 degrees West
Elevation	200 feet
Date/Time	Tue Mar 24 2026 16:24:15 GMT-0400 (Eastern Daylight Time)

Extreme Precipitation Estimates

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.27	0.41	0.52	0.68	0.84	1.04	**1yr**	0.73	0.93	1.17	1.40	1.66	1.95	2.19	**1yr**	1.72	2.11	2.52	3.04	3.50	**1yr**
2yr	0.32	0.49	0.61	0.81	1.01	1.25	**2yr**	0.88	1.13	1.41	1.67	1.96	2.28	2.55	**2yr**	2.02	2.46	2.88	3.44	3.96	**2yr**
5yr	0.38	0.59	0.74	0.99	1.27	1.56	**5yr**	1.09	1.40	1.77	2.09	2.44	2.80	3.15	**5yr**	2.48	3.03	3.53	4.13	4.74	**5yr**
10yr	0.43	0.67	0.85	1.16	1.50	1.86	**10yr**	1.30	1.64	2.11	2.49	2.87	3.28	3.69	**10yr**	2.90	3.55	4.12	4.74	5.43	**10yr**
25yr	0.51	0.81	1.03	1.42	1.89	2.35	**25yr**	1.63	2.03	2.65	3.11	3.57	4.03	4.55	**25yr**	3.56	4.38	5.05	5.69	6.50	**25yr**
50yr	0.57	0.92	1.18	1.66	2.24	2.80	**50yr**	1.94	2.40	3.17	3.70	4.22	4.71	5.34	**50yr**	4.17	5.14	5.90	6.54	7.44	**50yr**
100yr	0.66	1.07	1.38	1.96	2.67	3.34	**100yr**	2.30	2.83	3.77	4.38	4.96	5.51	6.27	**100yr**	4.88	6.03	6.88	7.52	8.53	**100yr**
200yr	0.76	1.23	1.60	2.30	3.18	3.98	**200yr**	2.74	3.34	4.50	5.20	5.85	6.44	7.36	**200yr**	5.70	7.07	8.04	8.64	9.78	**200yr**
500yr	0.91	1.50	1.96	2.85	4.00	5.03	**500yr**	3.45	4.17	5.66	6.51	7.27	7.94	9.10	**500yr**	7.02	8.75	9.87	10.38	11.73	**500yr**

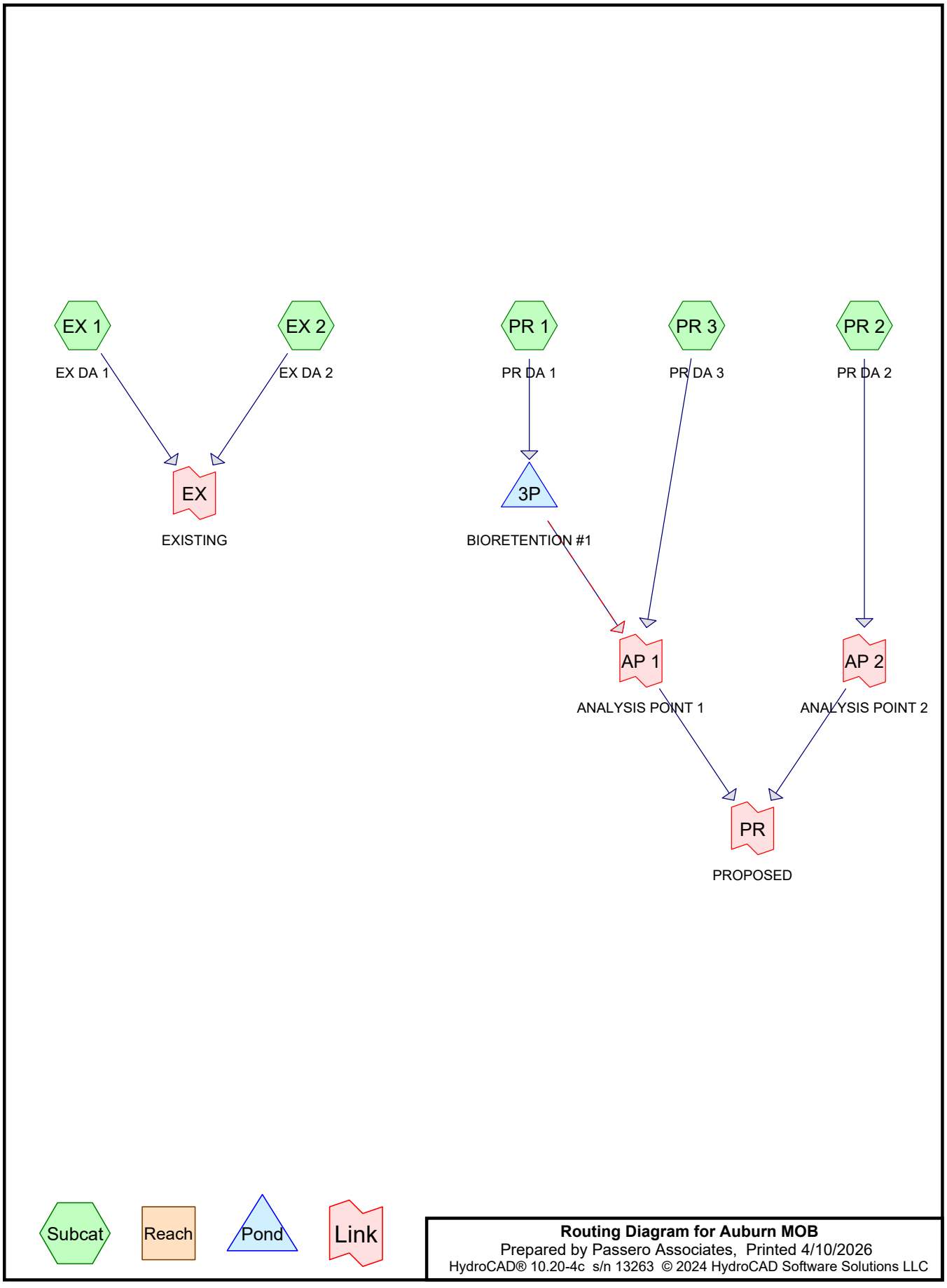
Lower Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.23	0.35	0.43	0.58	0.71	0.78	**1yr**	0.61	0.77	0.84	1.03	1.40	1.74	2.04	**1yr**	1.54	1.96	2.35	2.89	3.28	**1yr**
2yr	0.31	0.48	0.59	0.80	0.99	1.10	**2yr**	0.86	1.08	1.23	1.51	1.84	2.22	2.51	**2yr**	1.96	2.41	2.85	3.40	3.91	**2yr**
5yr	0.35	0.54	0.67	0.93	1.18	1.33	**5yr**	1.02	1.30	1.46	1.79	2.20	2.68	2.99	**5yr**	2.37	2.87	3.39	3.93	4.57	**5yr**
10yr	0.39	0.60	0.74	1.03	1.33	1.51	**10yr**	1.15	1.47	1.65	2.01	2.48	3.04	3.41	**10yr**	2.69	3.28	3.87	4.40	5.12	**10yr**
25yr	0.44	0.67	0.83	1.19	1.57	1.79	**25yr**	1.35	1.75	1.96	2.35	2.88	3.56	4.04	**25yr**	3.15	3.89	4.60	5.13	5.93	**25yr**
50yr	0.48	0.73	0.91	1.31	1.76	2.03	**50yr**	1.52	1.99	2.23	2.64	3.21	4.03	4.62	**50yr**	3.56	4.44	5.23	5.77	6.64	**50yr**
100yr	0.53	0.80	1.01	1.45	1.99	2.32	**100yr**	1.72	2.27	2.54	2.96	3.59	4.54	5.28	**100yr**	4.02	5.07	5.97	6.45	7.42	**100yr**
200yr	0.59	0.88	1.12	1.62	2.26	2.67	**200yr**	1.95	2.61	2.89	3.32	4.01	5.11	6.02	**200yr**	4.52	5.78	6.79	7.23	8.31	**200yr**
500yr	0.71	1.05	1.36	1.97	2.80	3.22	**500yr**	2.42	3.15	3.46	3.88	4.64	5.99	7.16	**500yr**	5.30	6.89	8.09	8.38	9.64	**500yr**

Upper Confidence Limits

	5min	10min	15min	30min	60min	120min		1hr	2hr	3hr	6hr	12hr	24hr	48hr		1day	2day	4day	7day	10day	
1yr	0.30	0.46	0.56	0.75	0.93	1.04	**1yr**	0.80	1.02	1.16	1.46	1.78	2.10	2.36	**1yr**	1.86	2.27	2.67	3.19	3.70	**1yr**
2yr	0.34	0.52	0.64	0.87	1.07	1.19	**2yr**	0.92	1.17	1.32	1.64	2.01	2.34	2.61	**2yr**	2.07	2.51	2.96	3.54	4.06	**2yr**
5yr	0.41	0.63	0.78	1.06	1.35	1.54	**5yr**	1.17	1.51	1.69	2.08	2.51	2.92	3.30	**5yr**	2.59	3.18	3.66	4.34	4.92	**5yr**
10yr	0.48	0.73	0.91	1.27	1.64	1.89	**10yr**	1.42	1.85	2.05	2.53	3.05	3.47	3.94	**10yr**	3.07	3.79	4.34	5.09	5.73	**10yr**
25yr	0.60	0.91	1.13	1.62	2.13	2.48	**25yr**	1.84	2.43	2.65	3.29	3.94	4.35	4.99	**25yr**	3.85	4.80	5.46	6.29	7.00	**25yr**
50yr	0.71	1.08	1.34	1.93	2.59	3.04	**50yr**	2.24	2.97	3.22	4.01	4.78	5.19	5.97	**50yr**	4.59	5.75	6.48	7.09	8.17	**50yr**
100yr	0.84	1.27	1.60	2.31	3.16	3.72	**100yr**	2.73	3.64	3.92	4.89	5.81	6.18	7.16	**100yr**	5.47	6.89	7.68	8.27	9.53	**100yr**
200yr	1.00	1.51	1.91	2.77	3.86	4.56	**200yr**	3.33	4.46	4.76	5.98	7.07	7.36	8.57	**200yr**	6.51	8.24	9.12	9.64	11.12	**200yr**
500yr	1.28	1.91	2.45	3.57	5.07	5.97	**500yr**	4.38	5.83	6.15	7.78	9.18	9.29	10.88	**500yr**	8.22	10.46	11.44	11.79	13.64	**500yr**

Powered by ACIS
Northeast Regional Climate Center


EX 1
EX 2
EX DA 1
EX DA 2
EX
EXISTING
PR 1
PR 3
PR 2
PR DA 1
PR DA 3
PR DA 2
3P
BIORETENTION #1
AP 1
AP 2
ANALYSIS POINT 1
ANALYSIS POINT 2
PR
PROPOSED
Subcat
Reach
Pond
Link
Routing Diagram for Auburn MOB
Prepared by Passero Associates, Printed 4/10/2026
HydroCAD® 10.20-4c s/n 13263 © 2024 HydroCAD Software Solutions LLC

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC	P2 (inches)
1	1-YEAR	Type II 24-hr		Default	24.00	1	1.95	2	2.28
2	10-YEAR	Type II 24-hr		Default	24.00	1	3.28	2	2.28
3	100-YEAR	Type II 24-hr		Default	24.00	1	5.51	2	2.28

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.654	74	>75% Grass cover, Good, HSG C (EX 1, EX 2, PR 1, PR 2, PR 3)
1.346	80	>75% Grass cover, Good, HSG D (EX 1, EX 2, PR 1, PR 2, PR 3)
1.890	98	Paved parking, HSG C (EX 1, EX 2, PR 1, PR 2)
3.611	98	Paved parking, HSG D (EX 1, EX 2, PR 1, PR 2)
1.467	70	Woods, Good, HSG C (EX 1, EX 2, PR 1)
1.304	77	Woods, Good, HSG D (EX 1, EX 2, PR 3)
11.272	**86**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
5.011	HSG C	EX 1, EX 2, PR 1, PR 2, PR 3
6.261	HSG D	EX 1, EX 2, PR 1, PR 2, PR 3
0.000	Other	
11.272		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	1.654	1.346	0.000	3.000	>75% Grass cover, Good	EX 1, EX 2, PR 1, PR 2, PR 3
0.000	0.000	1.890	3.611	0.000	5.501	Paved parking	EX 1, EX 2, PR 1, PR 2
0.000	0.000	1.467	1.304	0.000	2.771	Woods, Good	EX 1, EX 2, PR 1, PR 3
0.000	**0.000**	**5.011**	**6.261**	**0.000**	**11.272**	**TOTAL AREA**	

Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment EX 1: EX DA 1 Runoff Area=4.206 ac 20.23% Impervious Runoff Depth=0.49"
Flow Length=921' Tc=10.0 min CN=79 Runoff=3.00 cfs 0.173 af

Subcatchment EX 2: EX DA 2 Runoff Area=1.430 ac 63.78% Impervious Runoff Depth=0.99"
Flow Length=764' Tc=7.9 min CN=89 Runoff=2.35 cfs 0.118 af

Subcatchment PR 1: PR DA 1 Runoff Area=4.053 ac 73.82% Impervious Runoff Depth=1.27"
Flow Length=813' Tc=6.5 min CN=93 Runoff=8.78 cfs 0.429 af

Subcatchment PR 2: PR DA 2 Runoff Area=0.919 ac 81.18% Impervious Runoff Depth=1.35"
Flow Length=222' Tc=6.0 min CN=94 Runoff=2.13 cfs 0.103 af

Subcatchment PR 3: PR DA 3 Runoff Area=0.664 ac 0.00% Impervious Runoff Depth=0.42"
Flow Length=893' Tc=11.2 min CN=77 Runoff=0.37 cfs 0.023 af

Pond 3P: BIORETENTION#1 Peak Elev=679.82' Storage=7,516 cf Inflow=8.78 cfs 0.429 af
Primary=1.78 cfs 0.429 af Secondary=0.00 cfs 0.000 af Outflow=1.78 cfs 0.429 af

Link AP 1: ANALYSIS POINT 1 Inflow=2.01 cfs 0.452 af
Primary=2.01 cfs 0.452 af

Link AP 2: ANALYSIS POINT 2 Inflow=2.13 cfs 0.103 af
Primary=2.13 cfs 0.103 af

Link EX: EXISTING Inflow=5.24 cfs 0.291 af
Primary=5.24 cfs 0.291 af

Link PR: PROPOSED Inflow=2.80 cfs 0.555 af
Primary=2.80 cfs 0.555 af

Total Runoff Area = 11.272 ac Runoff Volume = 0.846 af Average Runoff Depth = 0.90"
51.20% Pervious = 5.771 ac 48.80% Impervious = 5.501 ac

Summary for Subcatchment EX 1: EX DA 1

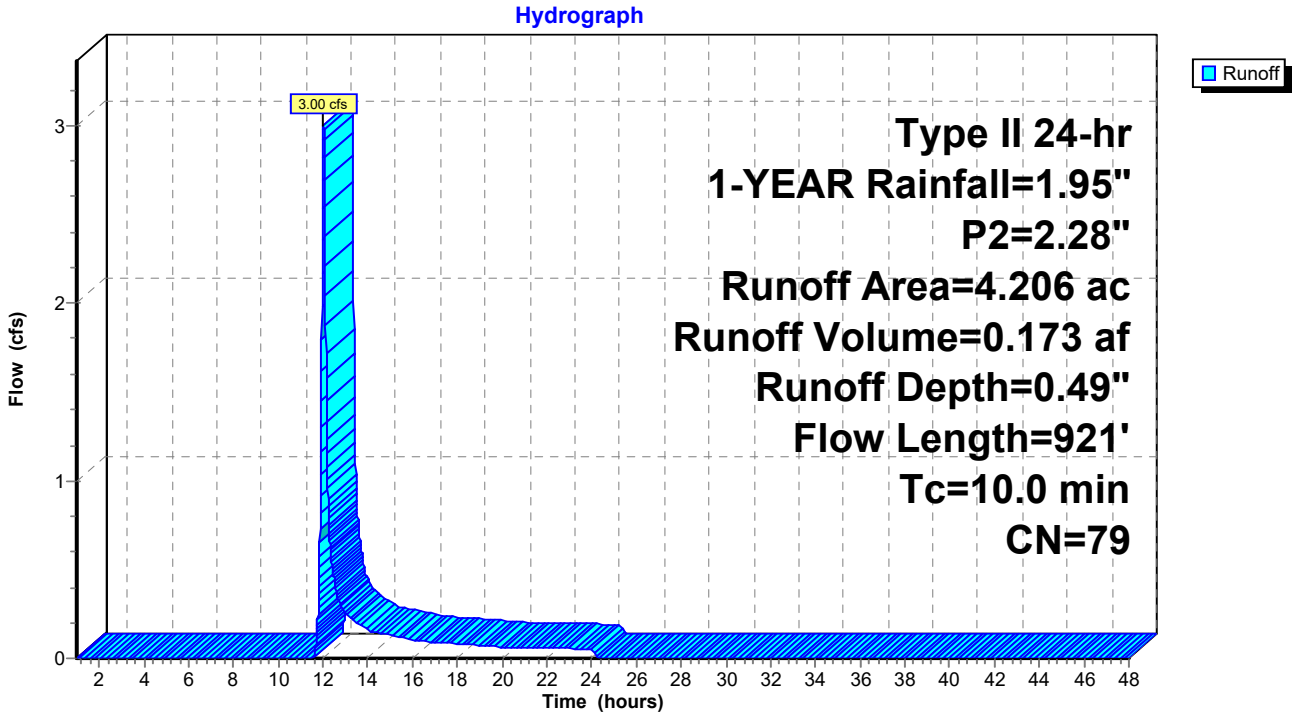
Runoff = 3.00 cfs @ 12.03 hrs, Volume= 0.173 af, Depth= 0.49"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=1.95", P2=2.28"

Area (ac)	CN	Description
1.095	74	>75% Grass cover, Good, HSG C
0.164	98	Paved parking, HSG C
1.233	70	Woods, Good, HSG C
0.238	80	>75% Grass cover, Good, HSG D
0.687	98	Paved parking, HSG D
0.789	77	Woods, Good, HSG D
4.206	79	Weighted Average
3.355		79.77% Pervious Area
0.851		20.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	56	0.0710	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.3	44	0.1360	2.12		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.4	111	0.0500	4.54		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.5	117	0.0550	3.78		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.1	206	0.0410	3.26		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
0.1	25	0.0600	4.97		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.4	48	0.0200	2.28		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	128	0.0120	2.22		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
1.8	186	0.0110	1.69		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
10.0	921	Total			

Subcatchment EX 1: EX DA 1



Summary for Subcatchment EX 2: EX DA 2

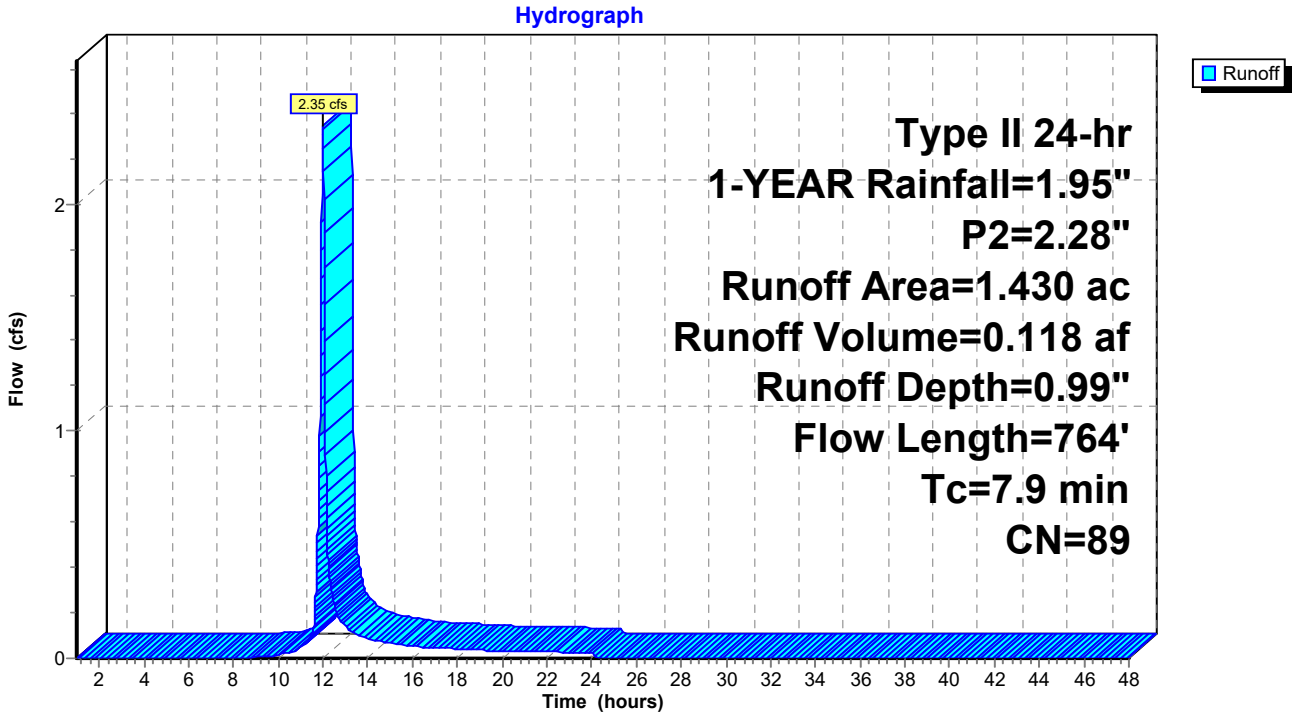
Runoff = 2.35 cfs @ 12.00 hrs, Volume= 0.118 af, Depth= 0.99"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=1.95", P2=2.28"

Area (ac)	CN	Description
0.122	74	>75% Grass cover, Good, HSG C
0.343	98	Paved parking, HSG C
0.224	70	Woods, Good, HSG C
0.079	80	>75% Grass cover, Good, HSG D
0.569	98	Paved parking, HSG D
0.093	77	Woods, Good, HSG D
1.430	89	Weighted Average
0.518		36.22% Pervious Area
0.912		63.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	63	0.1250	0.27		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.4	37	0.0540	1.42		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.8	162	0.0280	3.40		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.0	18	0.2500	8.05		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	192	0.0420	3.30		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.2	206	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.6	86	0.0260	2.60		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
7.9	764	Total			

Subcatchment EX 2: EX DA 2



Summary for Subcatchment PR 1: PR DA 1

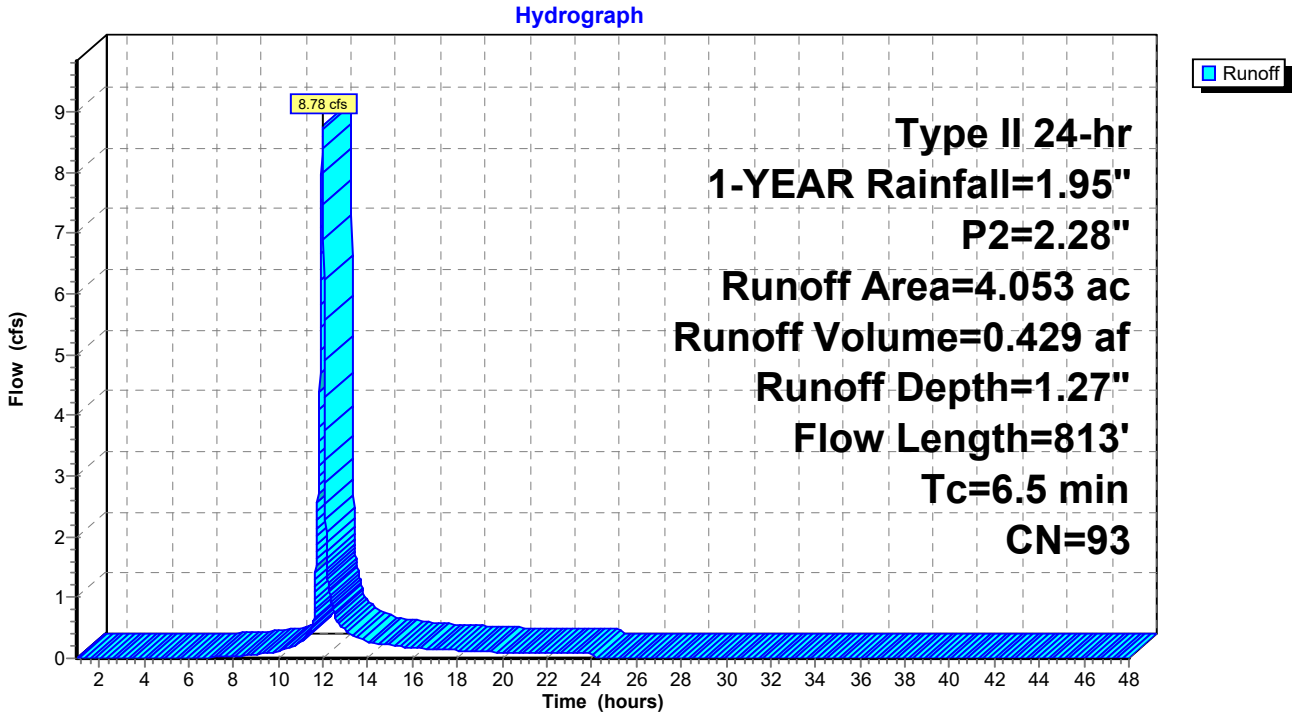
Runoff = 8.78 cfs @ 11.98 hrs, Volume= 0.429 af, Depth= 1.27"
Routed to Pond 3P : BIORETENTION #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=1.95", P2=2.28"

Area (ac)	CN	Description
0.774	80	>75% Grass cover, Good, HSG D
0.277	74	>75% Grass cover, Good, HSG C
1.774	98	Paved parking, HSG D
1.218	98	Paved parking, HSG C
0.010	70	Woods, Good, HSG C
4.053	93	Weighted Average
1.061		26.18% Pervious Area
2.992		73.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	50	0.0600	0.19		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.6	231	0.0860	5.95		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
0.7	210	0.0100	4.91	3.86	**Pipe Channel, PIPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.2	125	0.0300	8.51	6.69	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.7	197	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
6.5	813	Total			

Subcatchment PR 1: PR DA 1



Summary for Subcatchment PR 2: PR DA 2

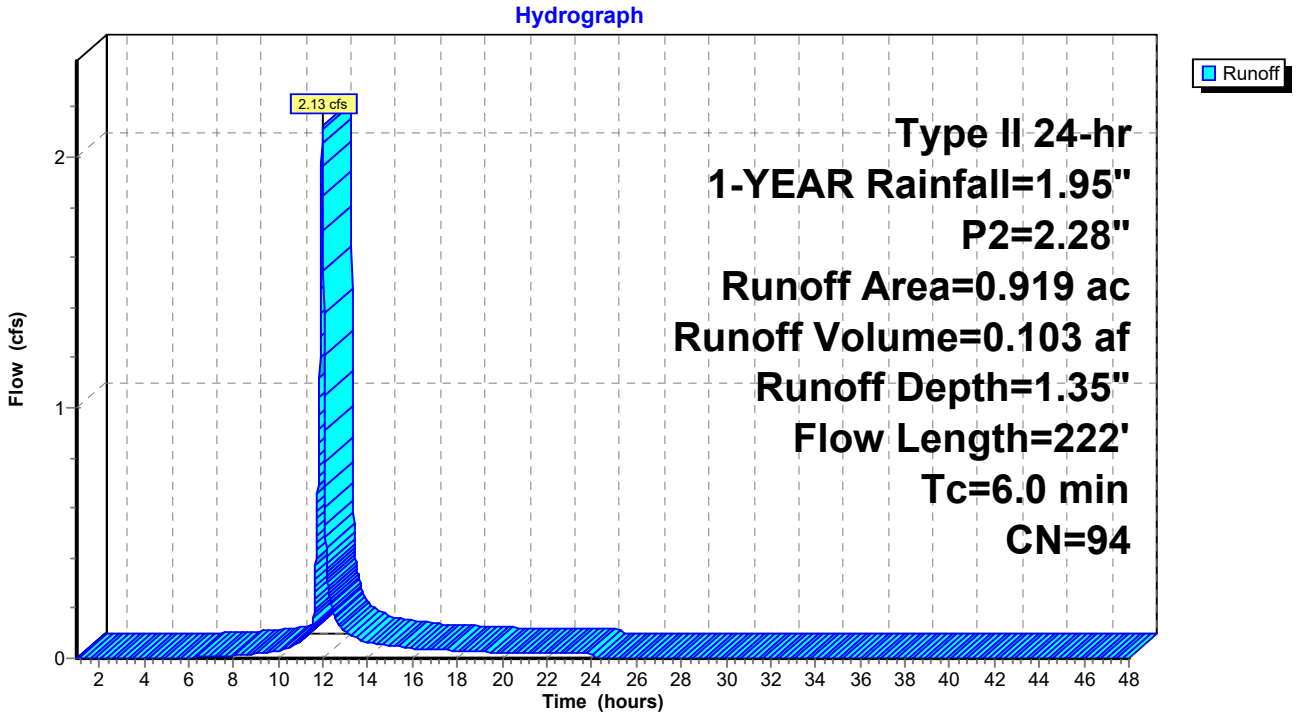
Runoff = 2.13 cfs @ 11.97 hrs, Volume= 0.103 af, Depth= 1.35"
Routed to Link AP 2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=1.95", P2=2.28"

Area (ac)	CN	Description
0.132	80	>75% Grass cover, Good, HSG D
0.041	74	>75% Grass cover, Good, HSG C
0.581	98	Paved parking, HSG D
0.165	98	Paved parking, HSG C
0.919	94	Weighted Average
0.173		18.82% Pervious Area
0.746		81.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	12	0.2500	0.18		**Sheet Flow, SHEET** Grass: Dense n= 0.240 P2= 2.28"
1.2	88	0.0220	1.18		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.3	47	0.0220	3.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.3	47	0.0210	2.33		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	28	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
3.1	222	Total, Increased to minimum Tc = 6.0 min			

Subcatchment PR 2: PR DA 2



Summary for Subcatchment PR 3: PR DA 3

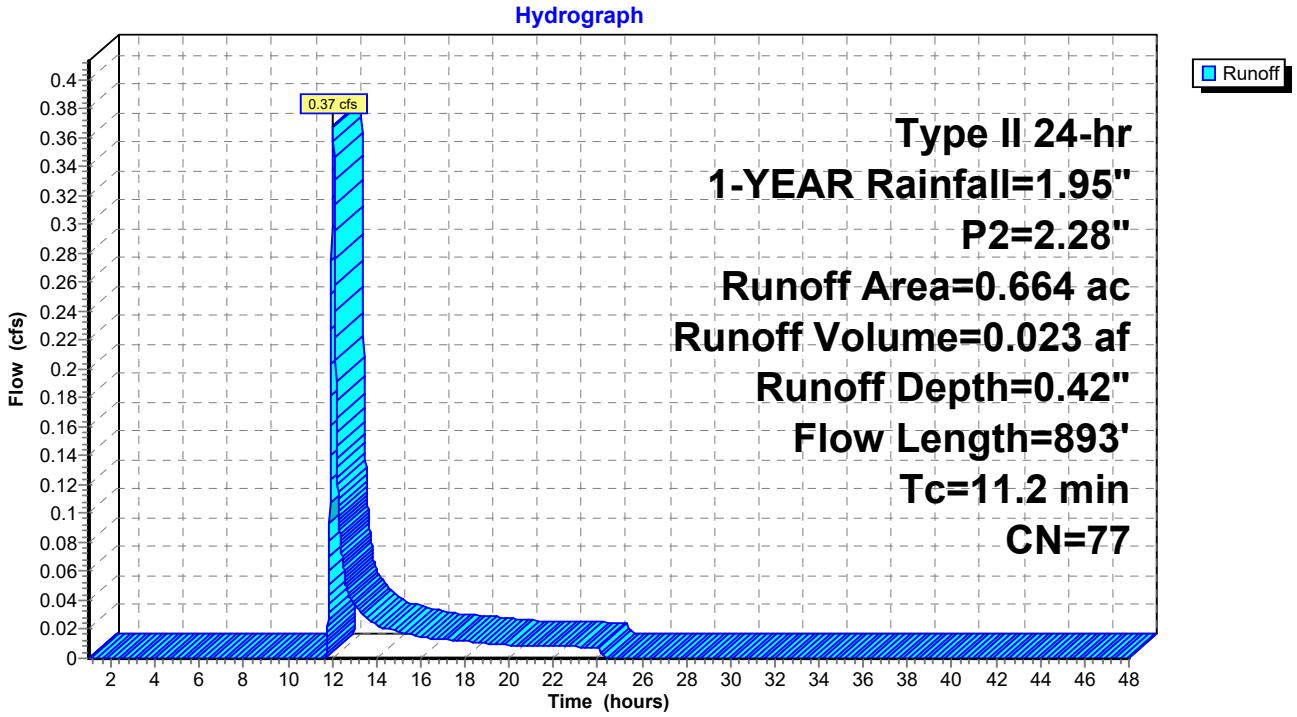
Runoff = 0.37 cfs @ 12.05 hrs, Volume= 0.023 af, Depth= 0.42"
Routed to Link AP 1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YEAR Rainfall=1.95", P2=2.28"

Area (ac)	CN	Description
0.119	74	>75% Grass cover, Good, HSG C
0.123	80	>75% Grass cover, Good, HSG D
0.422	77	Woods, Good, HSG D
0.664	77	Weighted Average
0.664		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0500	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
2.7	560	0.0450	3.42		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	111	0.0364	9.38	7.36	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.3	94	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.0	28	0.3970	30.96	24.32	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
11.2	893	Total			

Subcatchment PR 3: PR DA 3



Summary for Pond 3P: BIORETENTION #1

Inflow Area = 4.053 ac, 73.82% Impervious, Inflow Depth = 1.27" for 1-YEAR event
Inflow = 8.78 cfs @ 11.98 hrs, Volume= 0.429 af
Outflow = 1.78 cfs @ 12.15 hrs, Volume= 0.429 af, Atten= 80%, Lag= 10.6 min
Primary = 1.78 cfs @ 12.15 hrs, Volume= 0.429 af
Routed to Link AP 1 : ANALYSIS POINT 1
Secondary = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af
Routed to Link AP 1 : ANALYSIS POINT 1

Routing by Sim-Route method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 679.82' @ 12.15 hrs Surf.Area= 9,418 sf Storage= 7,516 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 130.8 min (939.3 - 808.4)

Volume	Invert	Avail.Storage	Storage Description
#1	679.00'	22,813 cf	**Bioretention (Irregular)**Listed below (Recalc)
#2	678.00'	3,226 cf	**Forebay (Irregular)**Listed below (Recalc)
		26,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
679.00	7,575	365.0	0	0	7,575
680.00	8,721	385.0	8,141	8,141	8,826
681.00	9,906	404.0	9,307	17,448	10,083
681.50	11,573	429.0	5,364	22,813	11,753

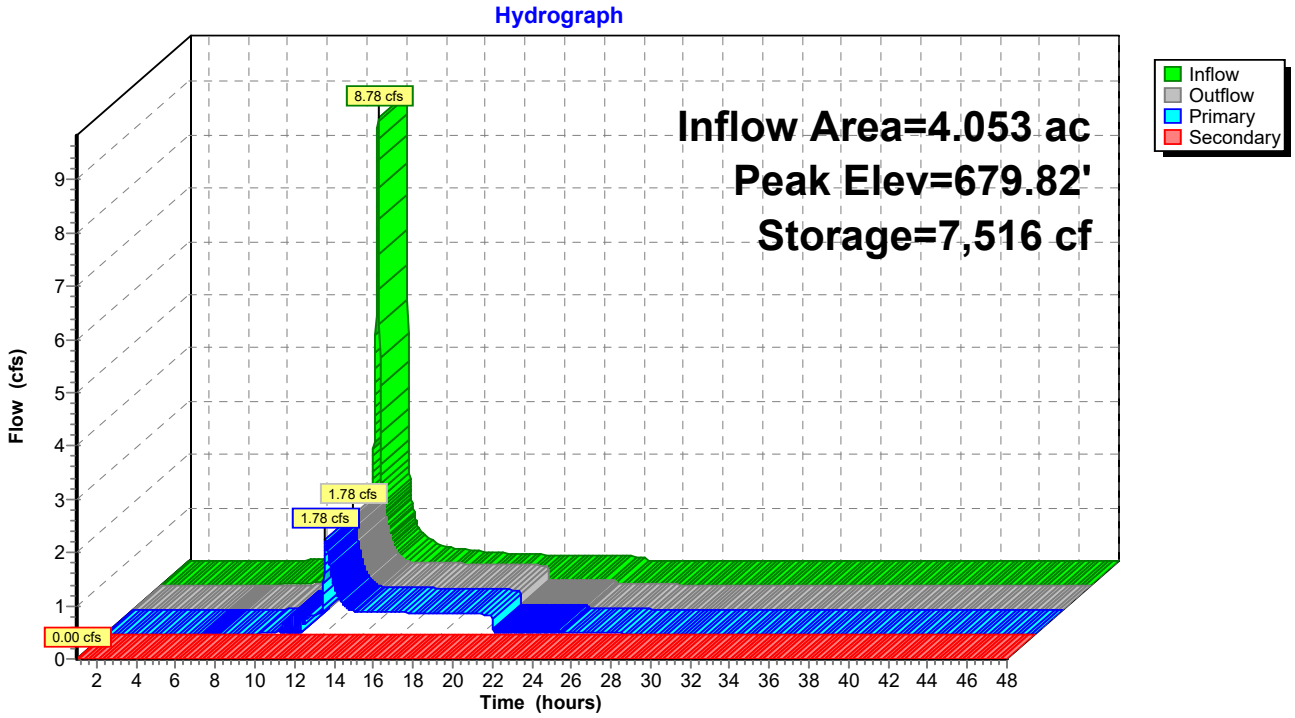
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
678.00	218	62.0	0	0	218
679.00	514	105.0	356	356	796
680.00	1,012	139.0	749	1,105	1,467
681.00	1,457	157.0	1,228	2,332	1,916
681.50	2,139	183.0	894	3,226	2,625

Device	Routing	Invert	Outlet Devices
#1	Device 3	678.00'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	680.50'	**5.0' long + 3.0 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#3	Primary	675.50'	**12.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 675.50' / 674.40' S= 0.0393 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#4	Device 3	679.70'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.78 cfs @ 12.15 hrs HW=679.82' TW=0.00' (Dynamic Tailwater)
└─**3=Culvert** (Passes 1.78 cfs of 7.39 cfs potential flow)
  └─**1=Exfiltration** (Exfiltration Controls 0.44 cfs)
  └─**4=Orifice/Grate** (Weir Controls 1.35 cfs @ 1.13 fps)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=678.00' TW=0.00' (Dynamic Tailwater)
└─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: BIORETENTION #1



Stage-Discharge for Pond 3P: BIORETENTION #1

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
678.00	0.00	0.00	0.00
678.05	0.01	0.01	0.00
678.10	0.01	0.01	0.00
678.15	0.01	0.01	0.00
678.20	0.01	0.01	0.00
678.25	0.01	0.01	0.00
678.30	0.01	0.01	0.00
678.35	0.01	0.01	0.00
678.40	0.01	0.01	0.00
678.45	0.02	0.02	0.00
678.50	0.02	0.02	0.00
678.55	0.02	0.02	0.00
678.60	0.02	0.02	0.00
678.65	0.02	0.02	0.00
678.70	0.02	0.02	0.00
678.75	0.02	0.02	0.00
678.80	0.02	0.02	0.00
678.85	0.02	0.02	0.00
678.90	0.02	0.02	0.00
678.95	0.02	0.02	0.00
679.00	0.37	0.37	0.00
679.05	0.38	0.38	0.00
679.10	0.38	0.38	0.00
679.15	0.39	0.39	0.00
679.20	0.39	0.39	0.00
679.25	0.39	0.39	0.00
679.30	0.40	0.40	0.00
679.35	0.40	0.40	0.00
679.40	0.40	0.40	0.00
679.45	0.41	0.41	0.00
679.50	0.41	0.41	0.00
679.55	0.41	0.41	0.00
679.60	0.42	0.42	0.00
679.65	0.42	0.42	0.00
679.70	0.43	0.43	0.00
679.75	0.80	0.80	0.00
679.80	1.47	1.47	0.00
679.85	2.34	2.34	0.00
679.90	3.37	3.37	0.00
679.95	4.53	4.53	0.00
680.00	5.82	5.82	0.00
680.05	7.23	7.23	0.00
680.10	7.66	7.66	0.00
680.15	7.70	7.70	0.00
680.20	7.75	7.75	0.00
680.25	7.80	7.80	0.00
680.30	7.84	7.84	0.00
680.35	7.89	7.89	0.00
680.40	7.93	7.93	0.00
680.45	7.98	7.98	0.00
680.50	8.02	8.02	0.00
680.55	8.22	8.07	0.15
680.60	8.55	8.11	0.44
680.65	8.99	8.15	0.83
680.70	9.51	8.20	1.31
680.75	10.12	8.24	1.88
680.80	10.81	8.29	2.53
680.85	11.59	8.33	3.26
680.90	12.44	8.37	4.07
680.95	13.37	8.41	4.96
681.00	14.37	8.46	5.92
681.05	15.46	8.50	6.96
681.10	16.62	8.54	8.08
681.15	17.81	8.58	9.23
681.20	19.07	8.62	10.45
681.25	20.39	8.66	11.73
681.30	21.78	8.71	13.07
681.35	23.30	8.75	14.55
681.40	24.90	8.79	16.11
681.45	26.57	8.83	17.75
681.50	**28.33**	**8.87**	**19.46**

Stage-Area-Storage for Pond 3P: BIORETENTION #1

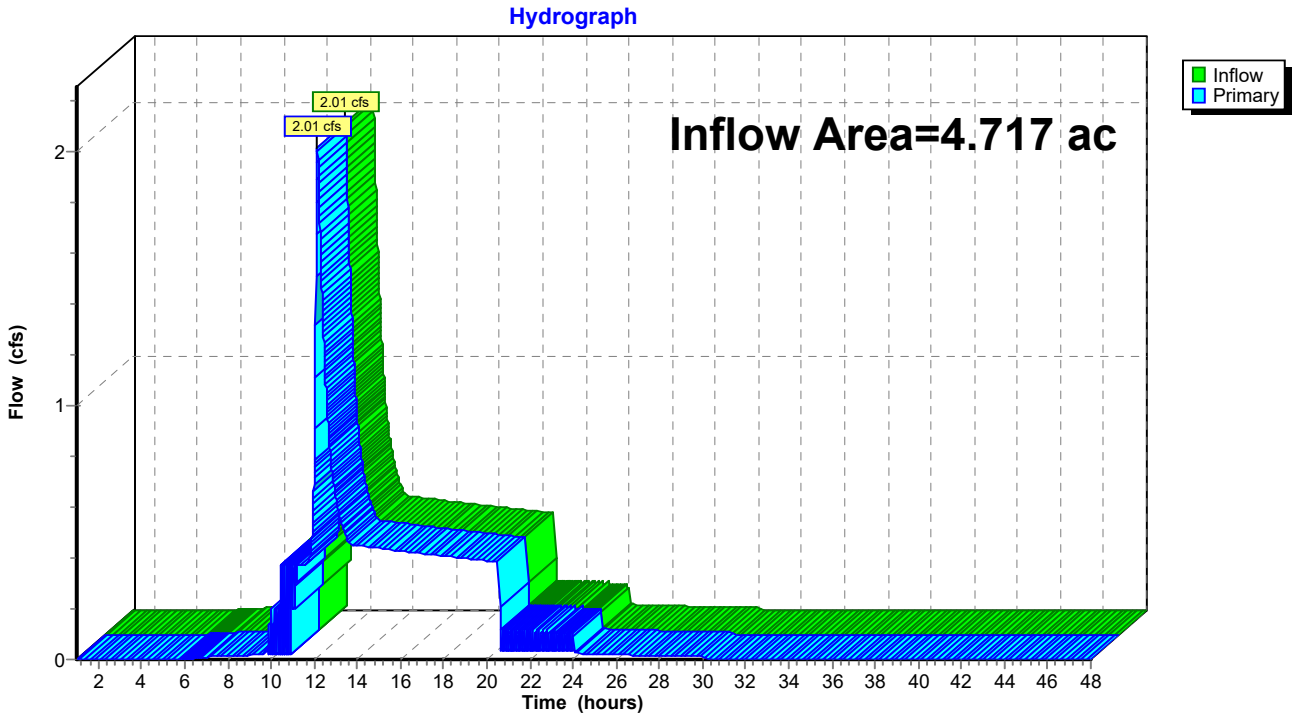
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
678.00	218	0
678.05	230	11
678.10	242	23
678.15	254	35
678.20	267	48
678.25	280	62
678.30	294	76
678.35	307	91
678.40	321	107
678.45	336	124
678.50	350	141
678.55	365	159
678.60	381	177
678.65	396	197
678.70	412	217
678.75	428	238
678.80	445	260
678.85	462	282
678.90	479	306
678.95	496	330
679.00	8,089	356
679.05	8,165	762
679.10	8,242	1,172
679.15	8,320	1,586
679.20	8,398	2,004
679.25	8,477	2,426
679.30	8,556	2,852
679.35	8,636	3,282
679.40	8,717	3,715
679.45	8,798	4,153
679.50	8,880	4,595
679.55	8,963	5,041
679.60	9,046	5,492
679.65	9,129	5,946
679.70	9,214	6,404
679.75	9,299	6,867
679.80	9,384	7,334
679.85	9,471	7,806
679.90	9,557	8,281
679.95	9,645	8,761
680.00	9,733	9,246
680.05	9,811	9,735
680.10	9,889	10,227
680.15	9,968	10,723
680.20	10,046	11,224
680.25	10,126	11,728
680.30	10,206	12,236
680.35	10,286	12,749
680.40	10,366	13,265
680.45	10,447	13,785
680.50	10,528	14,310
680.55	10,610	14,838
680.60	10,692	15,371
680.65	10,775	15,907
680.70	10,858	16,448
680.75	10,941	16,993
680.80	11,024	17,542
680.85	11,109	18,096
680.90	11,193	18,653
680.95	11,278	19,215
681.00	11,363	19,781
681.05	11,586	20,355
681.10	11,812	20,940
681.15	12,040	21,536
681.20	12,271	22,144
681.25	12,505	22,763
681.30	12,741	23,394
681.35	12,980	24,037
681.40	13,221	24,692
681.45	13,465	25,359
681.50	**13,712**	**26,039**

Summary for Link AP 1: ANALYSIS POINT 1

Inflow Area = 4.717 ac, 63.43% Impervious, Inflow Depth = 1.15" for 1-YEAR event
Inflow = 2.01 cfs @ 12.14 hrs, Volume= 0.452 af
Primary = 2.01 cfs @ 12.15 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 1: ANALYSIS POINT 1

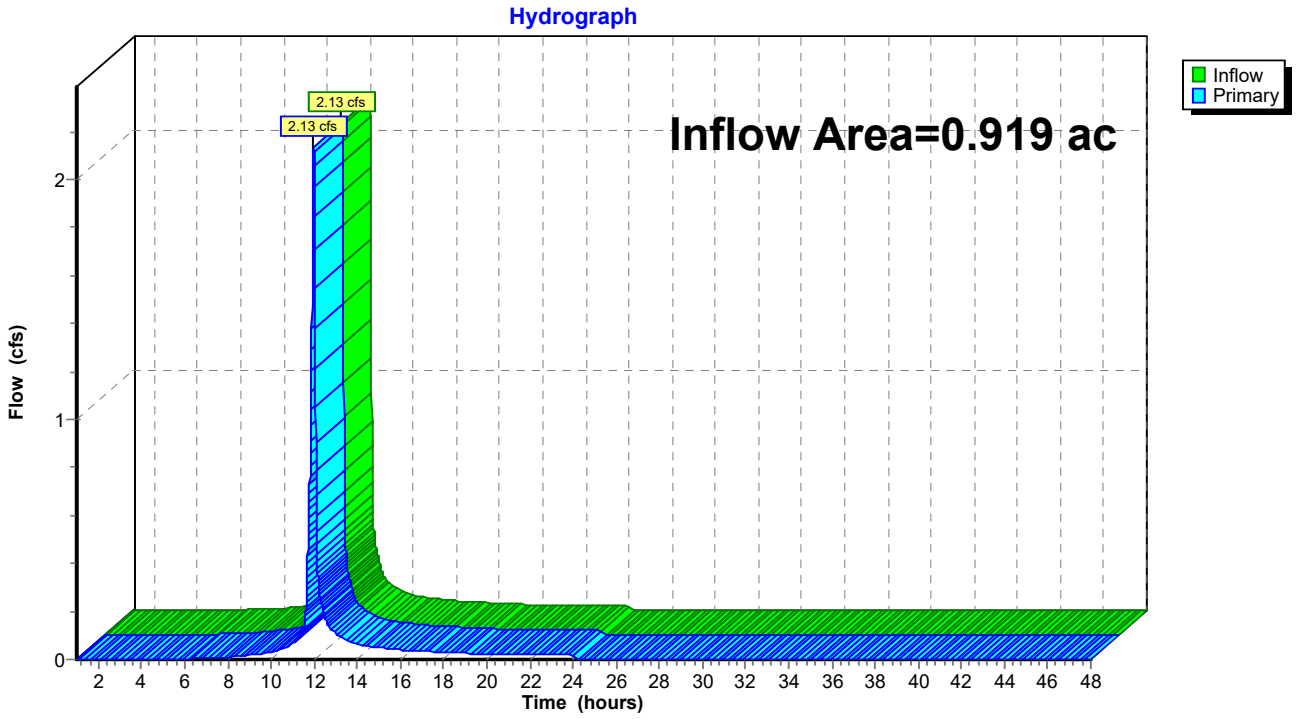


Summary for Link AP 2: ANALYSIS POINT 2

Inflow Area = 0.919 ac, 81.18% Impervious, Inflow Depth = 1.35" for 1-YEAR event
Inflow = 2.13 cfs @ 11.97 hrs, Volume= 0.103 af
Primary = 2.13 cfs @ 11.98 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 2: ANALYSIS POINT 2

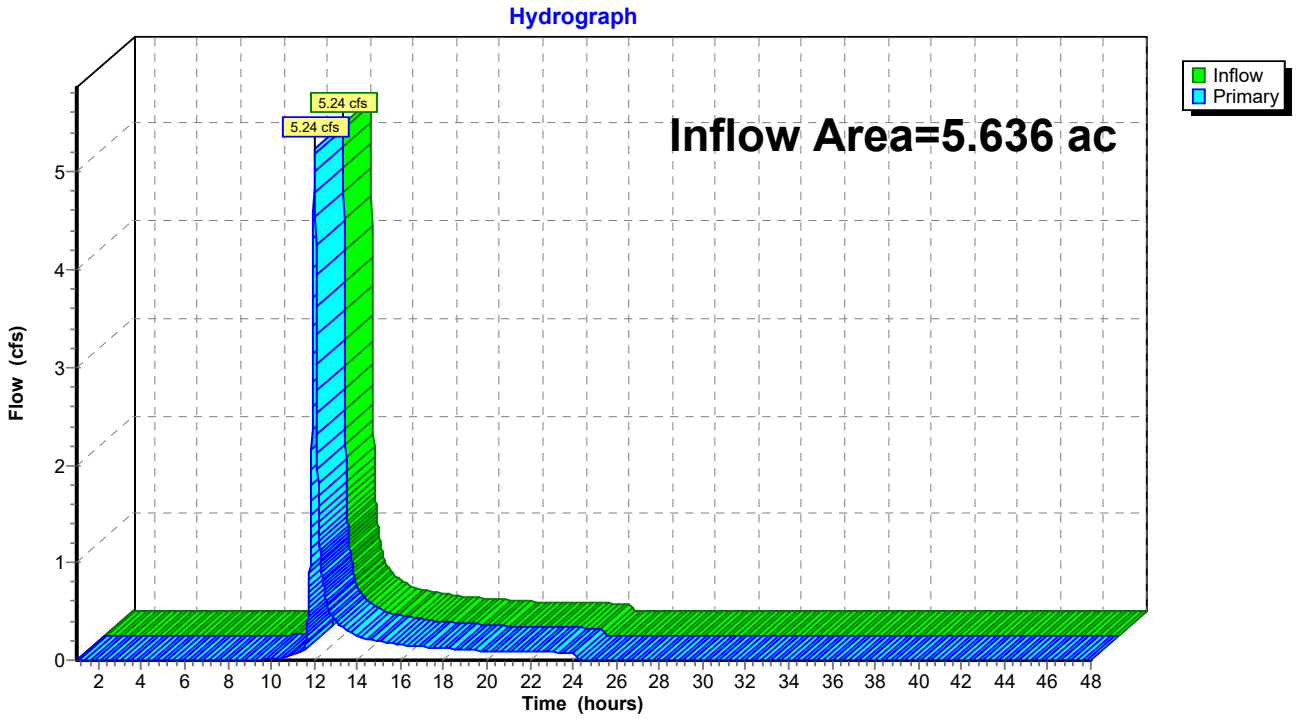


Summary for Link EX: EXISTING

Inflow Area = 5.636 ac, 31.28% Impervious, Inflow Depth = 0.62" for 1-YEAR event
Inflow = 5.24 cfs @ 12.01 hrs, Volume= 0.291 af
Primary = 5.24 cfs @ 12.02 hrs, Volume= 0.291 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link EX: EXISTING

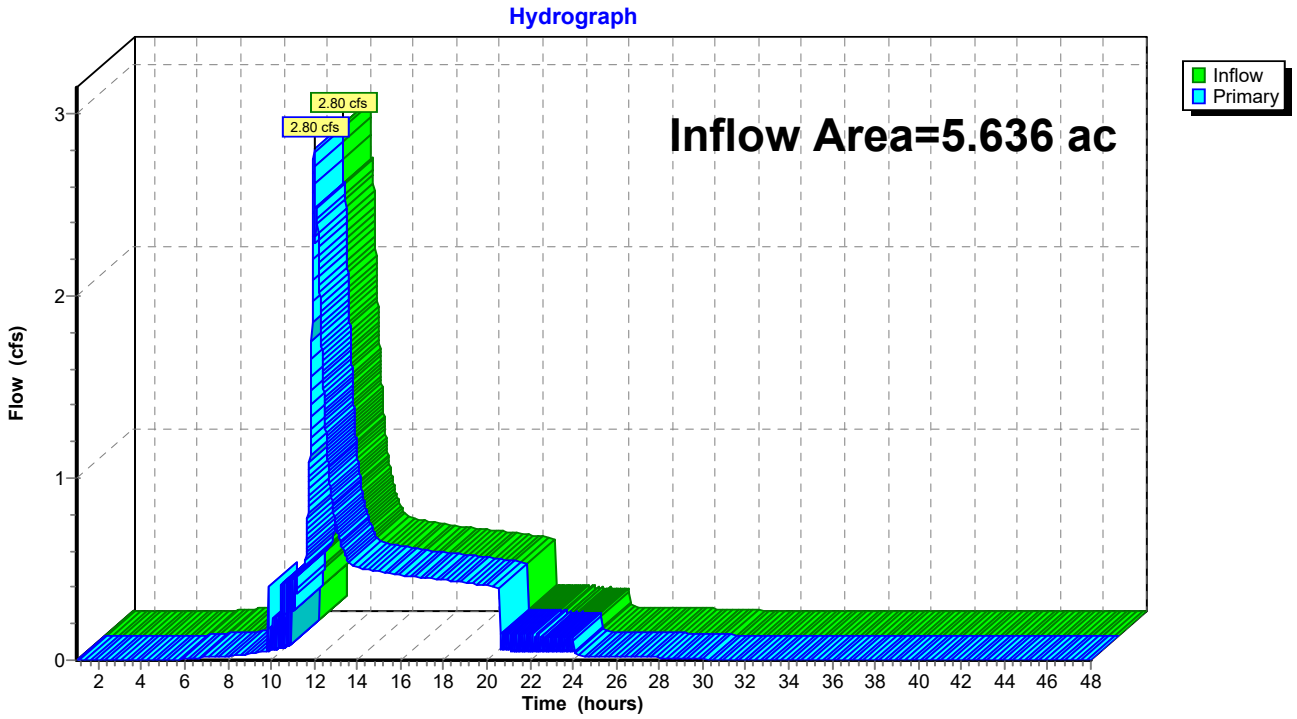


Summary for Link PR: PROPOSED

Inflow Area = 5.636 ac, 66.32% Impervious, Inflow Depth = 1.18" for 1-YEAR event
Inflow = 2.80 cfs @ 11.99 hrs, Volume= 0.555 af
Primary = 2.80 cfs @ 12.00 hrs, Volume= 0.555 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link PR: PROPOSED



Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment EX 1: EX DA 1 Runoff Area=4.206 ac 20.23% Impervious Runoff Depth=1.40"
Flow Length=921' Tc=10.0 min CN=79 Runoff=9.05 cfs 0.490 af

Subcatchment EX 2: EX DA 2 Runoff Area=1.430 ac 63.78% Impervious Runoff Depth=2.15"
Flow Length=764' Tc=7.9 min CN=89 Runoff=5.00 cfs 0.257 af

Subcatchment PR 1: PR DA 1 Runoff Area=4.053 ac 73.82% Impervious Runoff Depth=2.52"
Flow Length=813' Tc=6.5 min CN=93 Runoff=16.78 cfs 0.852 af

Subcatchment PR 2: PR DA 2 Runoff Area=0.919 ac 81.18% Impervious Runoff Depth=2.62"
Flow Length=222' Tc=6.0 min CN=94 Runoff=3.97 cfs 0.201 af

Subcatchment PR 3: PR DA 3 Runoff Area=0.664 ac 0.00% Impervious Runoff Depth=1.27"
Flow Length=893' Tc=11.2 min CN=77 Runoff=1.23 cfs 0.070 af

Pond 3P: BIORETENTION#1 Peak Elev=680.29' Storage=12,148 cf Inflow=16.78 cfs 0.852 af
Primary=7.83 cfs 0.852 af Secondary=0.00 cfs 0.000 af Outflow=7.83 cfs 0.852 af

Link AP 1: ANALYSIS POINT 1 Inflow=9.04 cfs 0.922 af
Primary=9.04 cfs 0.922 af

Link AP 2: ANALYSIS POINT 2 Inflow=3.97 cfs 0.201 af
Primary=3.97 cfs 0.201 af

Link EX: EXISTING Inflow=13.88 cfs 0.746 af
Primary=13.88 cfs 0.746 af

Link PR: PROPOSED Inflow=12.63 cfs 1.123 af
Primary=12.63 cfs 1.123 af

Total Runoff Area = 11.272 ac Runoff Volume = 1.869 af Average Runoff Depth = 1.99"
51.20% Pervious = 5.771 ac 48.80% Impervious = 5.501 ac

Summary for Subcatchment EX 1: EX DA 1

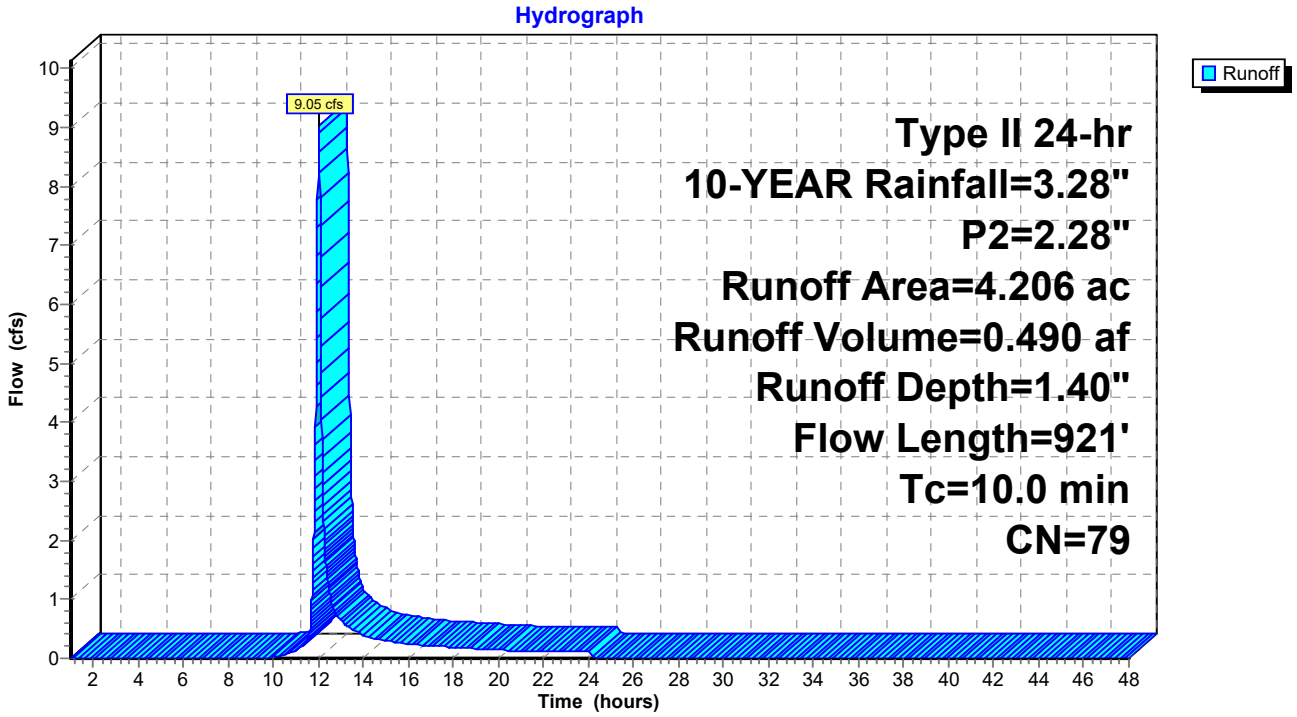
Runoff = 9.05 cfs @ 12.02 hrs, Volume= 0.490 af, Depth= 1.40"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.28", P2=2.28"

Area (ac)	CN	Description
1.095	74	>75% Grass cover, Good, HSG C
0.164	98	Paved parking, HSG C
1.233	70	Woods, Good, HSG C
0.238	80	>75% Grass cover, Good, HSG D
0.687	98	Paved parking, HSG D
0.789	77	Woods, Good, HSG D
4.206	79	Weighted Average
3.355		79.77% Pervious Area
0.851		20.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	56	0.0710	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.3	44	0.1360	2.12		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.4	111	0.0500	4.54		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.5	117	0.0550	3.78		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.1	206	0.0410	3.26		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
0.1	25	0.0600	4.97		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.4	48	0.0200	2.28		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	128	0.0120	2.22		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
1.8	186	0.0110	1.69		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
10.0	921	Total			

Subcatchment EX 1: EX DA 1



Summary for Subcatchment EX 2: EX DA 2

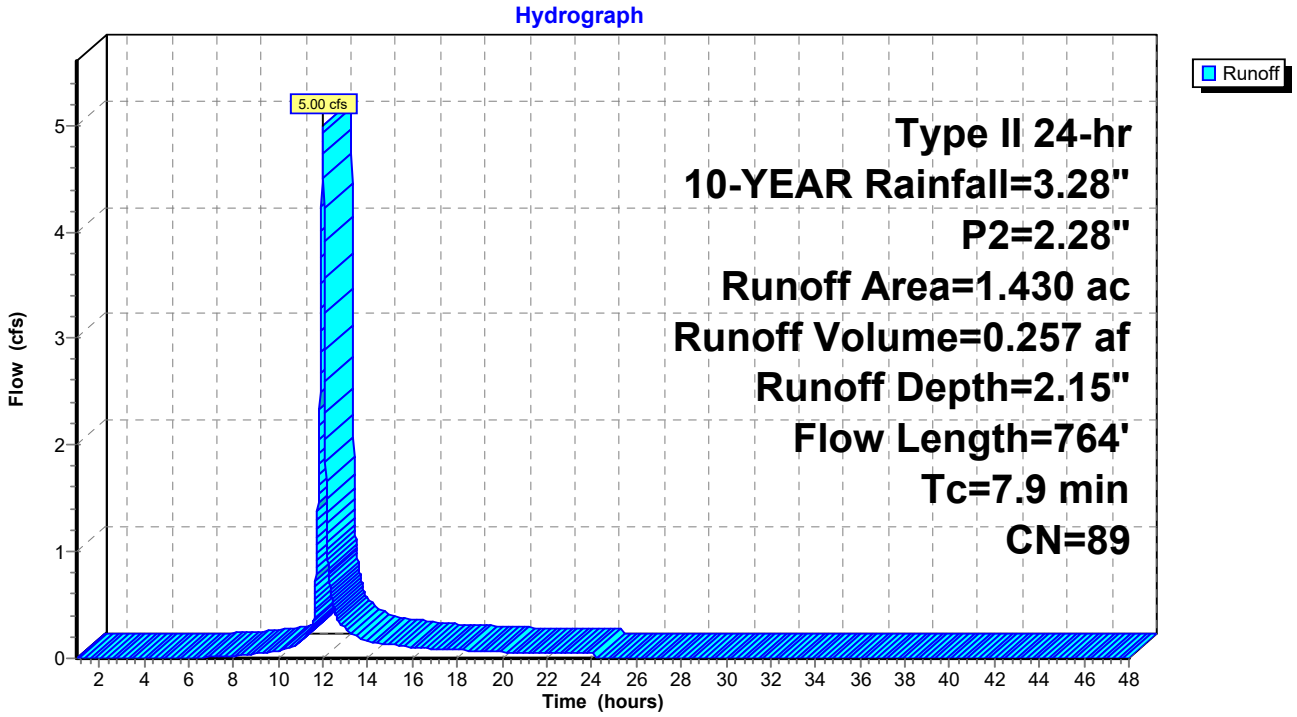
Runoff = 5.00 cfs @ 11.99 hrs, Volume= 0.257 af, Depth= 2.15"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.28", P2=2.28"

Area (ac)	CN	Description
0.122	74	>75% Grass cover, Good, HSG C
0.343	98	Paved parking, HSG C
0.224	70	Woods, Good, HSG C
0.079	80	>75% Grass cover, Good, HSG D
0.569	98	Paved parking, HSG D
0.093	77	Woods, Good, HSG D
1.430	89	Weighted Average
0.518		36.22% Pervious Area
0.912		63.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	63	0.1250	0.27		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.4	37	0.0540	1.42		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.8	162	0.0280	3.40		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.0	18	0.2500	8.05		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	192	0.0420	3.30		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.2	206	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.6	86	0.0260	2.60		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
7.9	764	Total			

Subcatchment EX 2: EX DA 2



Summary for Subcatchment PR 1: PR DA 1

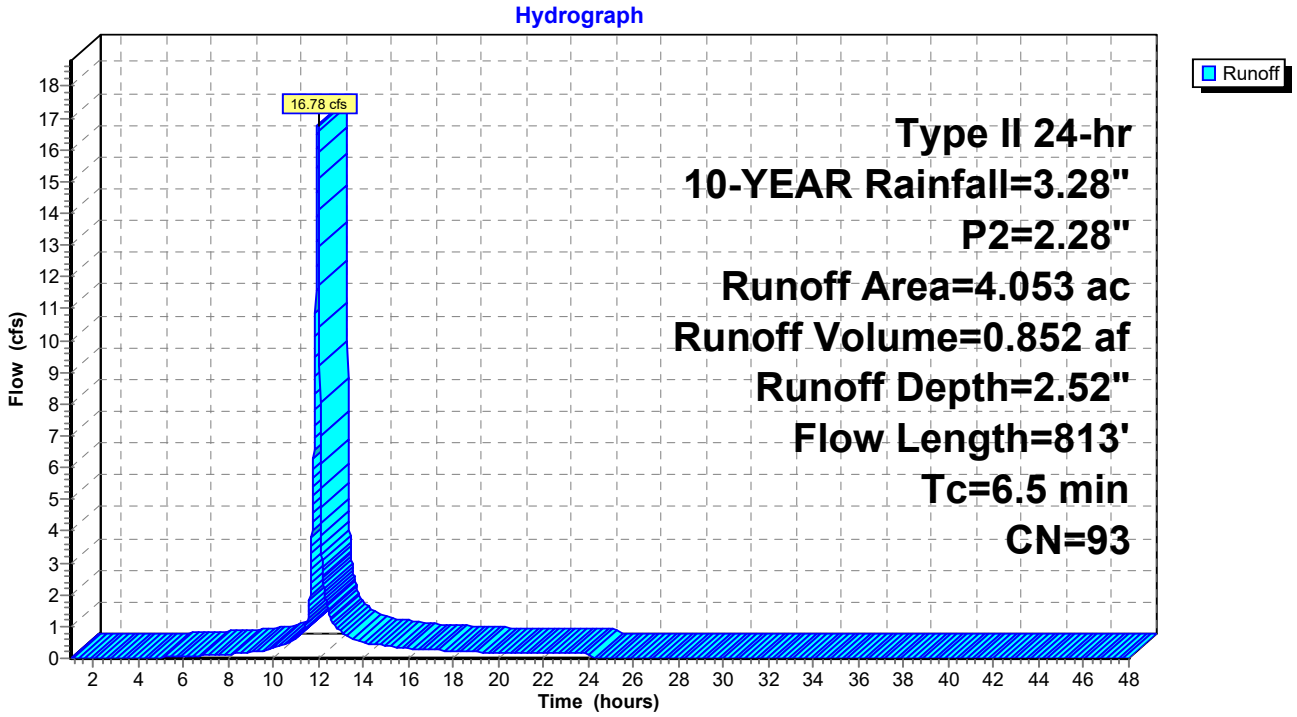
Runoff = 16.78 cfs @ 11.97 hrs, Volume= 0.852 af, Depth= 2.52"
Routed to Pond 3P : BIORETENTION #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.28", P2=2.28"

Area (ac)	CN	Description
0.774	80	>75% Grass cover, Good, HSG D
0.277	74	>75% Grass cover, Good, HSG C
1.774	98	Paved parking, HSG D
1.218	98	Paved parking, HSG C
0.010	70	Woods, Good, HSG C
4.053	93	Weighted Average
1.061		26.18% Pervious Area
2.992		73.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	50	0.0600	0.19		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.6	231	0.0860	5.95		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
0.7	210	0.0100	4.91	3.86	**Pipe Channel, PIPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.2	125	0.0300	8.51	6.69	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.7	197	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
6.5	813	Total			

Subcatchment PR 1: PR DA 1



Summary for Subcatchment PR 2: PR DA 2

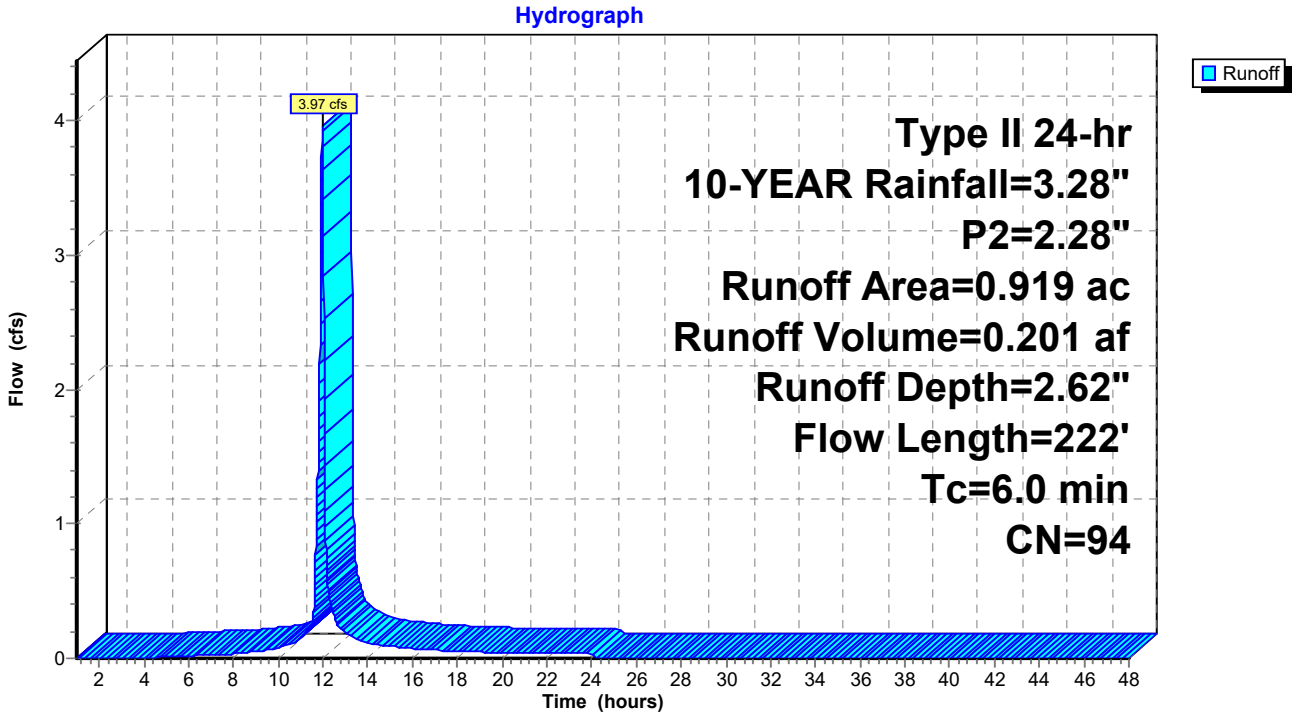
Runoff = 3.97 cfs @ 11.97 hrs, Volume= 0.201 af, Depth= 2.62"
Routed to Link AP 2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.28", P2=2.28"

Area (ac)	CN	Description
0.132	80	>75% Grass cover, Good, HSG D
0.041	74	>75% Grass cover, Good, HSG C
0.581	98	Paved parking, HSG D
0.165	98	Paved parking, HSG C
0.919	94	Weighted Average
0.173		18.82% Pervious Area
0.746		81.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	12	0.2500	0.18		**Sheet Flow, SHEET** Grass: Dense n= 0.240 P2= 2.28"
1.2	88	0.0220	1.18		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.3	47	0.0220	3.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.3	47	0.0210	2.33		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	28	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
3.1	222	Total, Increased to minimum Tc = 6.0 min			

Subcatchment PR 2: PR DA 2



Summary for Subcatchment PR 3: PR DA 3

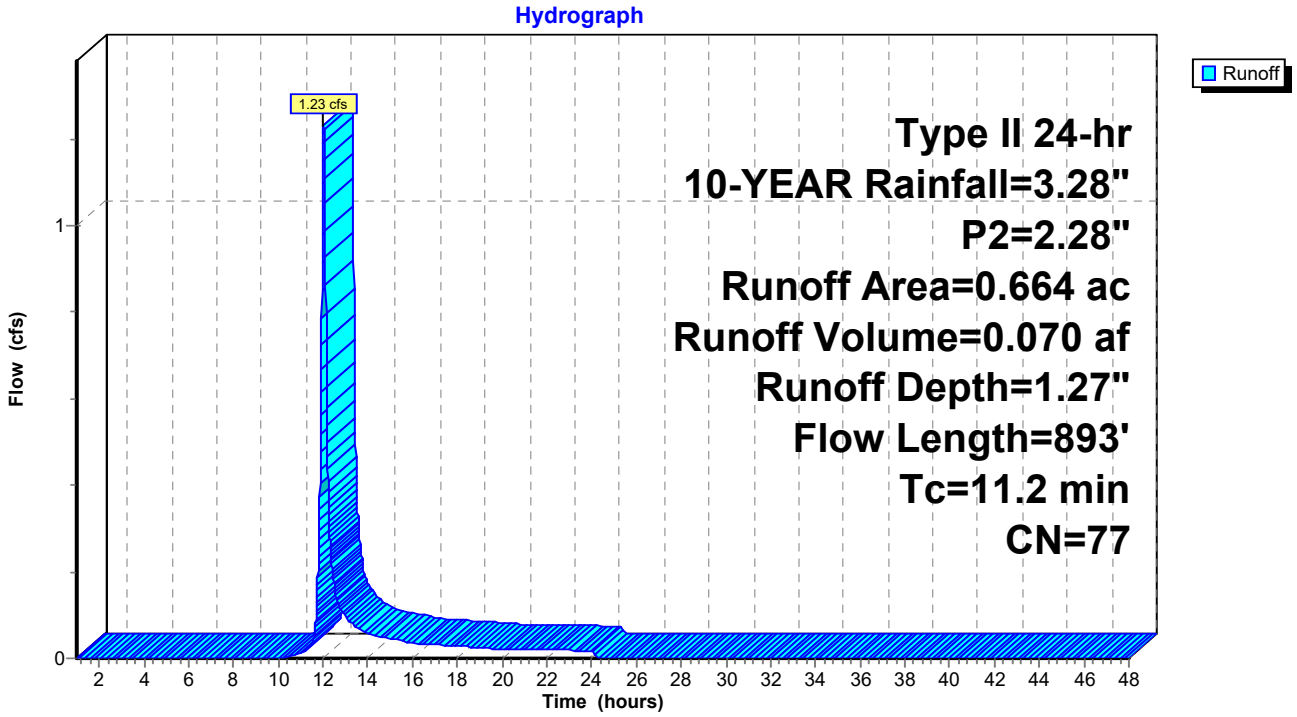
Runoff = 1.23 cfs @ 12.03 hrs, Volume= 0.070 af, Depth= 1.27"
Routed to Link AP 1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YEAR Rainfall=3.28", P2=2.28"

Area (ac)	CN	Description
0.119	74	>75% Grass cover, Good, HSG C
0.123	80	>75% Grass cover, Good, HSG D
0.422	77	Woods, Good, HSG D
0.664	77	Weighted Average
0.664		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0500	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
2.7	560	0.0450	3.42		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	111	0.0364	9.38	7.36	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.3	94	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.0	28	0.3970	30.96	24.32	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
11.2	893	Total			

Subcatchment PR 3: PR DA 3



Summary for Pond 3P: BIORETENTION #1

Inflow Area = 4.053 ac, 73.82% Impervious, Inflow Depth = 2.52" for 10-YEAR event
Inflow = 16.78 cfs @ 11.97 hrs, Volume= 0.852 af
Outflow = 7.83 cfs @ 12.08 hrs, Volume= 0.852 af, Atten= 53%, Lag= 6.1 min
Primary = 7.83 cfs @ 12.08 hrs, Volume= 0.852 af
Routed to Link AP 1 : ANALYSIS POINT 1
Secondary = 0.00 cfs @ 1.00 hrs, Volume= 0.000 af
Routed to Link AP 1 : ANALYSIS POINT 1

Routing by Sim-Route method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 680.29' @ 12.08 hrs Surf.Area= 10,192 sf Storage= 12,148 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 98.8 min (887.9 - 789.1)

Volume	Invert	Avail.Storage	Storage Description
#1	679.00'	22,813 cf	**Bioretention (Irregular)**Listed below (Recalc)
#2	678.00'	3,226 cf	**Forebay (Irregular)**Listed below (Recalc)
		26,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
679.00	7,575	365.0	0	0	7,575
680.00	8,721	385.0	8,141	8,141	8,826
681.00	9,906	404.0	9,307	17,448	10,083
681.50	11,573	429.0	5,364	22,813	11,753

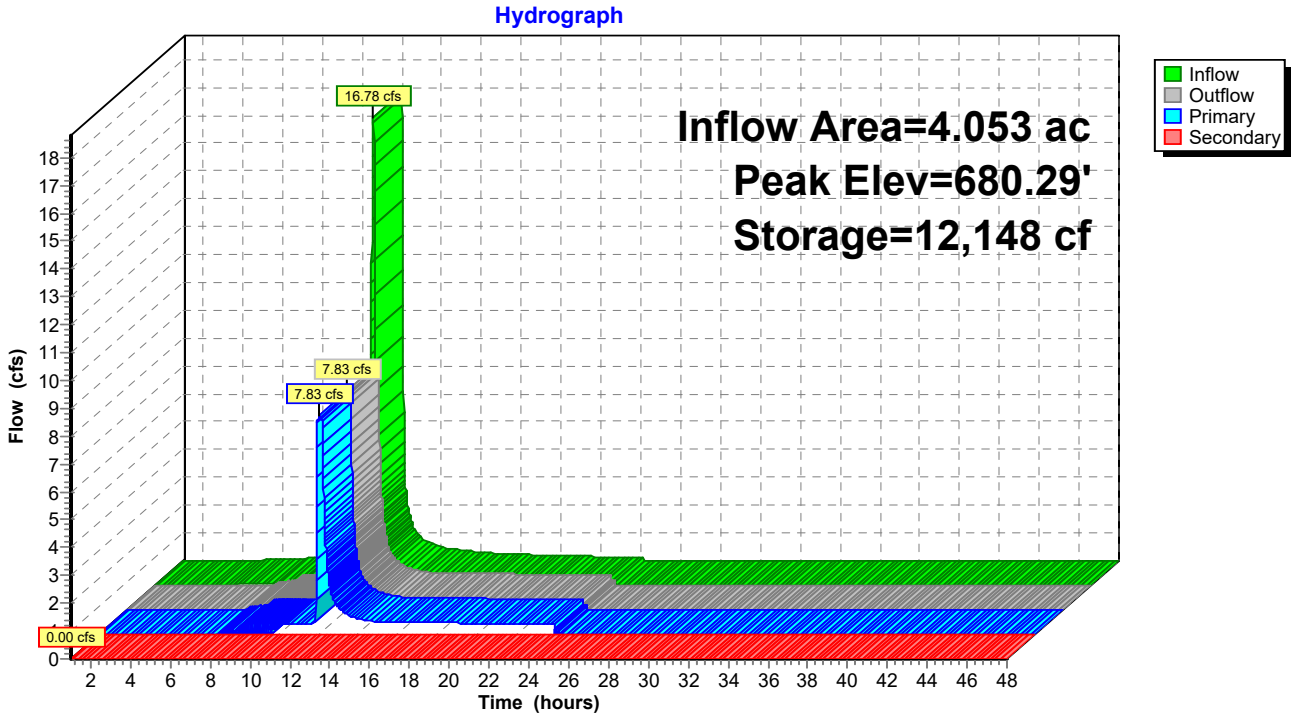
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
678.00	218	62.0	0	0	218
679.00	514	105.0	356	356	796
680.00	1,012	139.0	749	1,105	1,467
681.00	1,457	157.0	1,228	2,332	1,916
681.50	2,139	183.0	894	3,226	2,625

Device	Routing	Invert	Outlet Devices
#1	Device 3	678.00'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	680.50'	**5.0' long + 3.0 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#3	Primary	675.50'	**12.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 675.50' / 674.40' S= 0.0393 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#4	Device 3	679.70'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=7.83 cfs @ 12.08 hrs HW=680.29' TW=0.00' (Dynamic Tailwater)
└─**3=Culvert** (Inlet Controls 7.83 cfs @ 9.97 fps)
  ├─**1=Exfiltration** (Passes < 0.47 cfs potential flow)
  └─**4=Orifice/Grate** (Passes < 14.86 cfs potential flow)

Secondary OutFlow Max=0.00 cfs @ 1.00 hrs HW=678.00' TW=0.00' (Dynamic Tailwater)
└─**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 3P: BIORETENTION #1



Stage-Discharge for Pond 3P: BIORETENTION #1

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
678.00	0.00	0.00	0.00
678.05	0.01	0.01	0.00
678.10	0.01	0.01	0.00
678.15	0.01	0.01	0.00
678.20	0.01	0.01	0.00
678.25	0.01	0.01	0.00
678.30	0.01	0.01	0.00
678.35	0.01	0.01	0.00
678.40	0.01	0.01	0.00
678.45	0.02	0.02	0.00
678.50	0.02	0.02	0.00
678.55	0.02	0.02	0.00
678.60	0.02	0.02	0.00
678.65	0.02	0.02	0.00
678.70	0.02	0.02	0.00
678.75	0.02	0.02	0.00
678.80	0.02	0.02	0.00
678.85	0.02	0.02	0.00
678.90	0.02	0.02	0.00
678.95	0.02	0.02	0.00
679.00	0.37	0.37	0.00
679.05	0.38	0.38	0.00
679.10	0.38	0.38	0.00
679.15	0.39	0.39	0.00
679.20	0.39	0.39	0.00
679.25	0.39	0.39	0.00
679.30	0.40	0.40	0.00
679.35	0.40	0.40	0.00
679.40	0.40	0.40	0.00
679.45	0.41	0.41	0.00
679.50	0.41	0.41	0.00
679.55	0.41	0.41	0.00
679.60	0.42	0.42	0.00
679.65	0.42	0.42	0.00
679.70	0.43	0.43	0.00
679.75	0.80	0.80	0.00
679.80	1.47	1.47	0.00
679.85	2.34	2.34	0.00
679.90	3.37	3.37	0.00
679.95	4.53	4.53	0.00
680.00	5.82	5.82	0.00
680.05	7.23	7.23	0.00
680.10	7.66	7.66	0.00
680.15	7.70	7.70	0.00
680.20	7.75	7.75	0.00
680.25	7.80	7.80	0.00
680.30	7.84	7.84	0.00
680.35	7.89	7.89	0.00
680.40	7.93	7.93	0.00
680.45	7.98	7.98	0.00
680.50	8.02	8.02	0.00
680.55	8.22	8.07	0.15
680.60	8.55	8.11	0.44
680.65	8.99	8.15	0.83
680.70	9.51	8.20	1.31
680.75	10.12	8.24	1.88
680.80	10.81	8.29	2.53
680.85	11.59	8.33	3.26
680.90	12.44	8.37	4.07
680.95	13.37	8.41	4.96
681.00	14.37	8.46	5.92
681.05	15.46	8.50	6.96
681.10	16.62	8.54	8.08
681.15	17.81	8.58	9.23
681.20	19.07	8.62	10.45
681.25	20.39	8.66	11.73
681.30	21.78	8.71	13.07
681.35	23.30	8.75	14.55
681.40	24.90	8.79	16.11
681.45	26.57	8.83	17.75
681.50	**28.33**	**8.87**	**19.46**

Stage-Area-Storage for Pond 3P: BIORETENTION #1

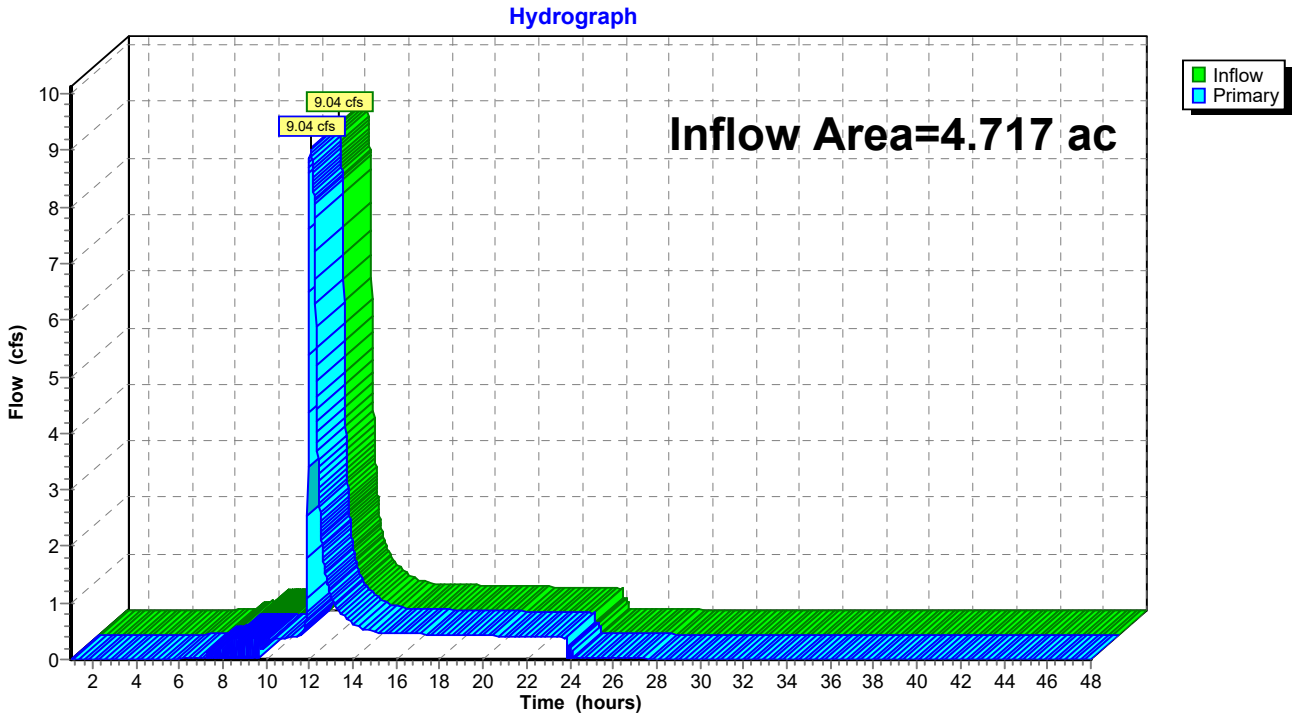
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
678.00	218	0
678.05	230	11
678.10	242	23
678.15	254	35
678.20	267	48
678.25	280	62
678.30	294	76
678.35	307	91
678.40	321	107
678.45	336	124
678.50	350	141
678.55	365	159
678.60	381	177
678.65	396	197
678.70	412	217
678.75	428	238
678.80	445	260
678.85	462	282
678.90	479	306
678.95	496	330
679.00	8,089	356
679.05	8,165	762
679.10	8,242	1,172
679.15	8,320	1,586
679.20	8,398	2,004
679.25	8,477	2,426
679.30	8,556	2,852
679.35	8,636	3,282
679.40	8,717	3,715
679.45	8,798	4,153
679.50	8,880	4,595
679.55	8,963	5,041
679.60	9,046	5,492
679.65	9,129	5,946
679.70	9,214	6,404
679.75	9,299	6,867
679.80	9,384	7,334
679.85	9,471	7,806
679.90	9,557	8,281
679.95	9,645	8,761
680.00	9,733	9,246
680.05	9,811	9,735
680.10	9,889	10,227
680.15	9,968	10,723
680.20	10,046	11,224
680.25	10,126	11,728
680.30	10,206	12,236
680.35	10,286	12,749
680.40	10,366	13,265
680.45	10,447	13,785
680.50	10,528	14,310
680.55	10,610	14,838
680.60	10,692	15,371
680.65	10,775	15,907
680.70	10,858	16,448
680.75	10,941	16,993
680.80	11,024	17,542
680.85	11,109	18,096
680.90	11,193	18,653
680.95	11,278	19,215
681.00	11,363	19,781
681.05	11,586	20,355
681.10	11,812	20,940
681.15	12,040	21,536
681.20	12,271	22,144
681.25	12,505	22,763
681.30	12,741	23,394
681.35	12,980	24,037
681.40	13,221	24,692
681.45	13,465	25,359
681.50	**13,712**	**26,039**

Summary for Link AP 1: ANALYSIS POINT 1

Inflow Area = 4.717 ac, 63.43% Impervious, Inflow Depth = 2.35" for 10-YEAR event
Inflow = 9.04 cfs @ 12.04 hrs, Volume= 0.922 af
Primary = 9.04 cfs @ 12.05 hrs, Volume= 0.922 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 1: ANALYSIS POINT 1

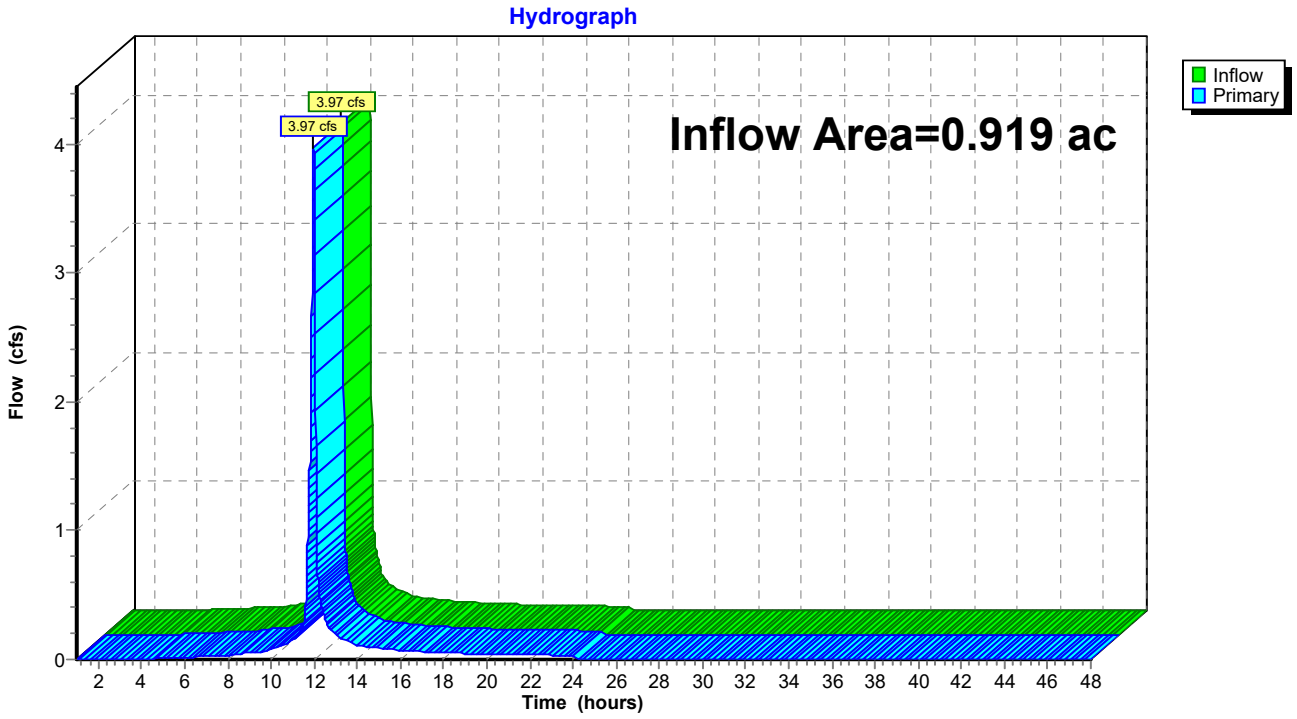


Summary for Link AP 2: ANALYSIS POINT 2

Inflow Area = 0.919 ac, 81.18% Impervious, Inflow Depth = 2.62" for 10-YEAR event
Inflow = 3.97 cfs @ 11.97 hrs, Volume= 0.201 af
Primary = 3.97 cfs @ 11.98 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 2: ANALYSIS POINT 2

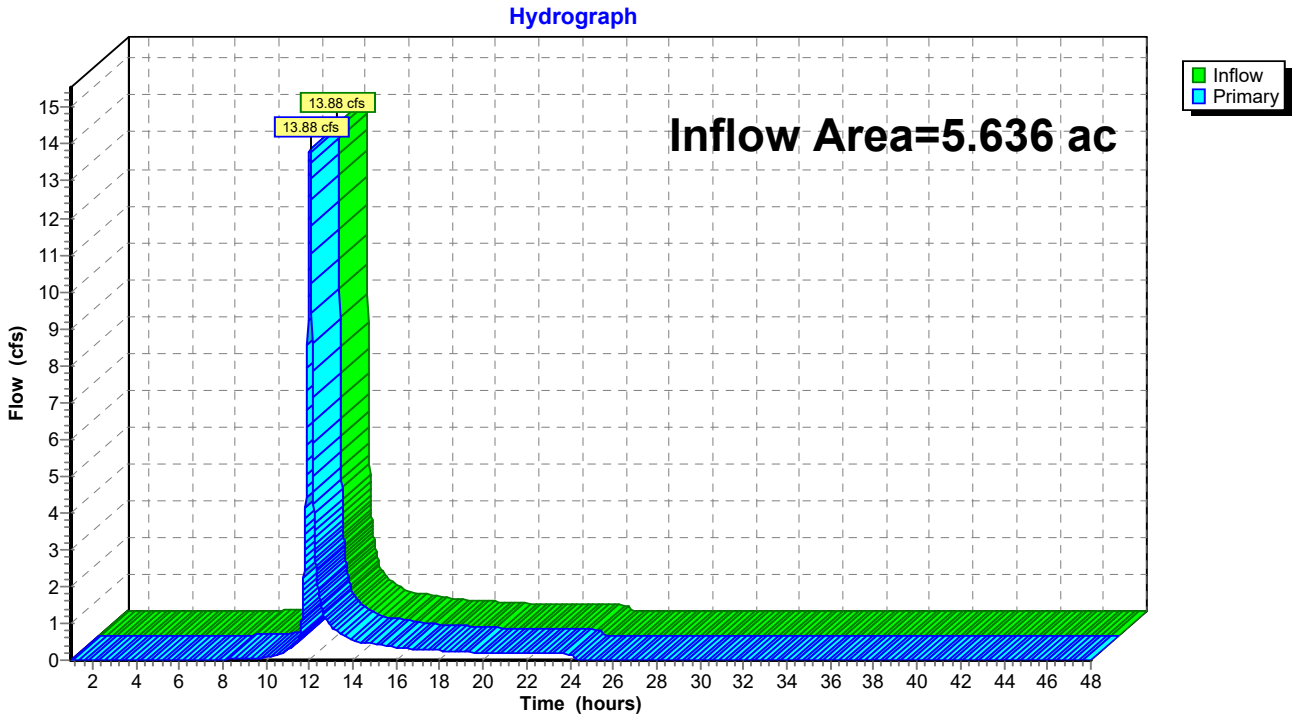


Summary for Link EX: EXISTING

Inflow Area = 5.636 ac, 31.28% Impervious, Inflow Depth = 1.59" for 10-YEAR event
Inflow = 13.88 cfs @ 12.01 hrs, Volume= 0.746 af
Primary = 13.88 cfs @ 12.02 hrs, Volume= 0.746 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link EX: EXISTING

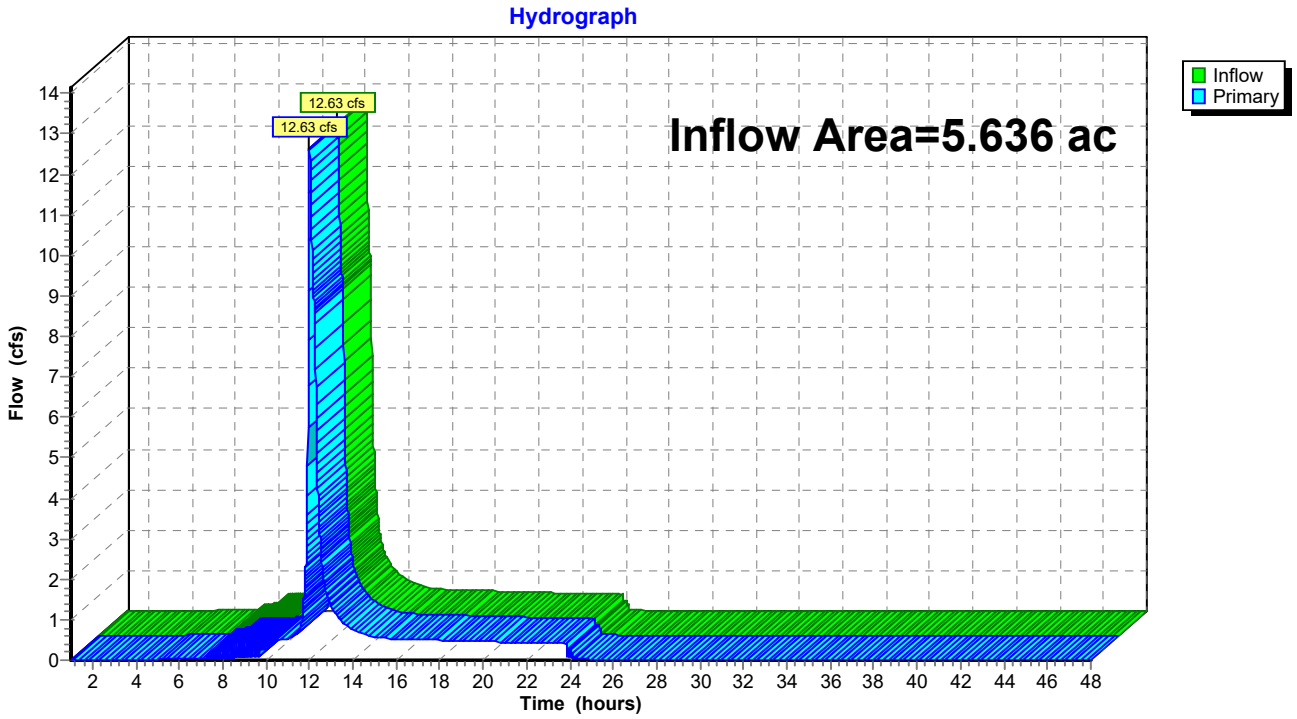


Summary for Link PR: PROPOSED

Inflow Area = 5.636 ac, 66.32% Impervious, Inflow Depth = 2.39" for 10-YEAR event
Inflow = 12.63 cfs @ 11.99 hrs, Volume= 1.123 af
Primary = 12.63 cfs @ 12.00 hrs, Volume= 1.123 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link PR: PROPOSED



Time span=1.00-48.00 hrs, dt=0.01 hrs, 4701 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Sim-Route method - Pond routing by Sim-Route method

Subcatchment EX 1: EX DA 1 Runoff Area=4.206 ac 20.23% Impervious Runoff Depth=3.25"
Flow Length=921' Tc=10.0 min CN=79 Runoff=20.88 cfs 1.138 af

Subcatchment EX 2: EX DA 2 Runoff Area=1.430 ac 63.78% Impervious Runoff Depth=4.26"
Flow Length=764' Tc=7.9 min CN=89 Runoff=9.53 cfs 0.508 af

Subcatchment PR 1: PR DA 1 Runoff Area=4.053 ac 73.82% Impervious Runoff Depth=4.70"
Flow Length=813' Tc=6.5 min CN=93 Runoff=30.01 cfs 1.587 af

Subcatchment PR 2: PR DA 2 Runoff Area=0.919 ac 81.18% Impervious Runoff Depth=4.81"
Flow Length=222' Tc=6.0 min CN=94 Runoff=6.99 cfs 0.368 af

Subcatchment PR 3: PR DA 3 Runoff Area=0.664 ac 0.00% Impervious Runoff Depth=3.06"
Flow Length=893' Tc=11.2 min CN=77 Runoff=2.99 cfs 0.169 af

Pond 3P: BIORETENTION#1 Peak Elev=681.11' Storage=21,023 cf Inflow=30.01 cfs 1.587 af
Primary=8.55 cfs 1.457 af Secondary=8.24 cfs 0.130 af Outflow=16.78 cfs 1.587 af

Link AP 1: ANALYSIS POINT 1 Inflow=19.63 cfs 1.756 af
Primary=19.63 cfs 1.756 af

Link AP 2: ANALYSIS POINT 2 Inflow=6.99 cfs 0.368 af
Primary=6.99 cfs 0.368 af

Link EX: EXISTING Inflow=30.13 cfs 1.645 af
Primary=30.13 cfs 1.645 af

Link PR: PROPOSED Inflow=23.78 cfs 2.125 af
Primary=23.78 cfs 2.125 af

Total Runoff Area = 11.272 ac Runoff Volume = 3.770 af Average Runoff Depth = 4.01"
51.20% Pervious = 5.771 ac 48.80% Impervious = 5.501 ac

Summary for Subcatchment EX 1: EX DA 1

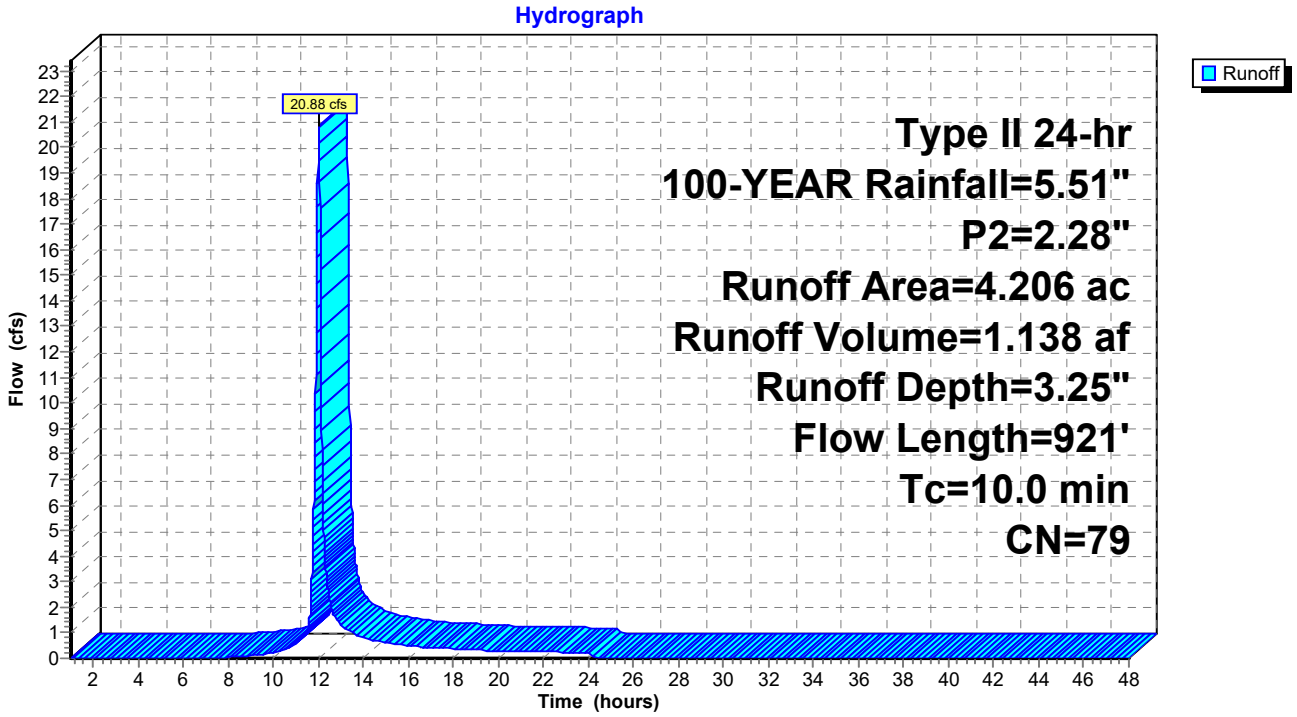
Runoff = 20.88 cfs @ 12.02 hrs, Volume= 1.138 af, Depth= 3.25"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=5.51", P2=2.28"

Area (ac)	CN	Description
1.095	74	>75% Grass cover, Good, HSG C
0.164	98	Paved parking, HSG C
1.233	70	Woods, Good, HSG C
0.238	80	>75% Grass cover, Good, HSG D
0.687	98	Paved parking, HSG D
0.789	77	Woods, Good, HSG D
4.206	79	Weighted Average
3.355		79.77% Pervious Area
0.851		20.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	56	0.0710	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.3	44	0.1360	2.12		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.4	111	0.0500	4.54		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.5	117	0.0550	3.78		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.1	206	0.0410	3.26		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
0.1	25	0.0600	4.97		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.4	48	0.0200	2.28		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	128	0.0120	2.22		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
1.8	186	0.0110	1.69		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
10.0	921	Total			

Subcatchment EX 1: EX DA 1



Summary for Subcatchment EX 2: EX DA 2

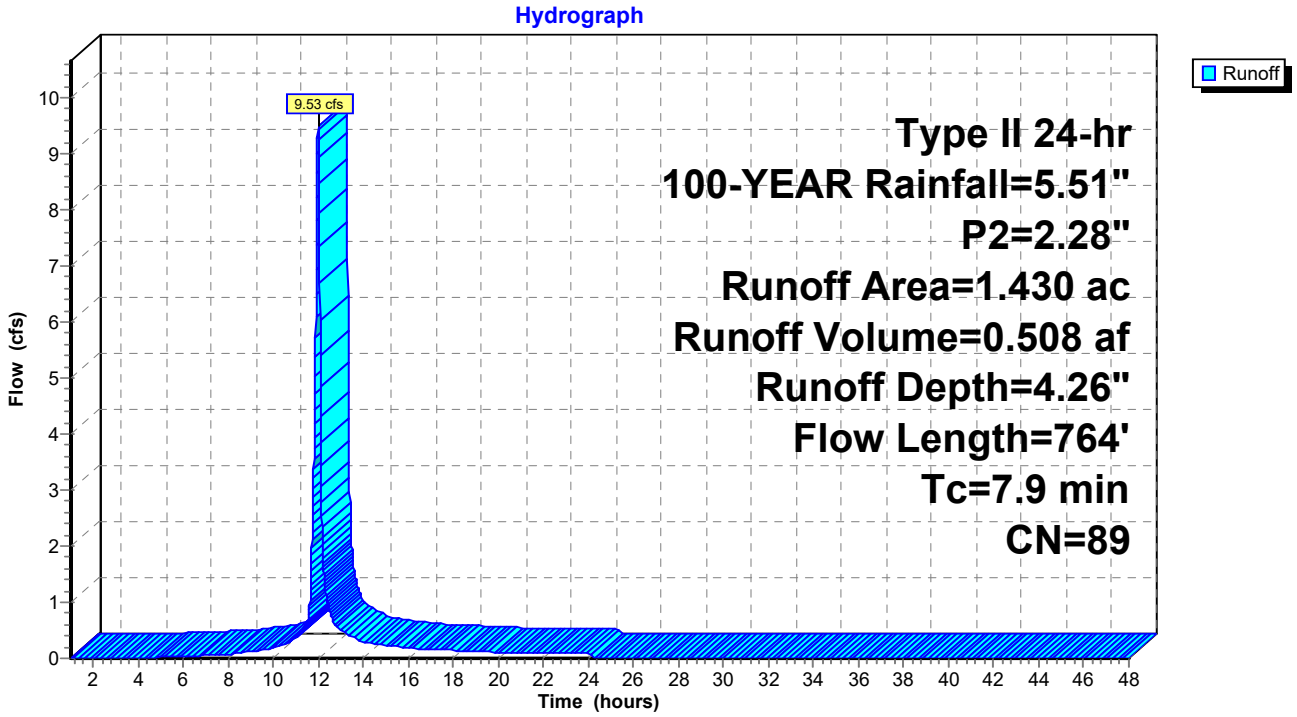
Runoff = 9.53 cfs @ 11.99 hrs, Volume= 0.508 af, Depth= 4.26"
Routed to Link EX : EXISTING

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=5.51", P2=2.28"

Area (ac)	CN	Description
0.122	74	>75% Grass cover, Good, HSG C
0.343	98	Paved parking, HSG C
0.224	70	Woods, Good, HSG C
0.079	80	>75% Grass cover, Good, HSG D
0.569	98	Paved parking, HSG D
0.093	77	Woods, Good, HSG D
1.430	89	Weighted Average
0.518		36.22% Pervious Area
0.912		63.78% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.9	63	0.1250	0.27		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.4	37	0.0540	1.42		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.8	162	0.0280	3.40		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.0	18	0.2500	8.05		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.0	192	0.0420	3.30		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
1.2	206	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW** Paved Kv= 20.3 fps
0.6	86	0.0260	2.60		**Shallow Concentrated Flow, SHALLOW** Unpaved Kv= 16.1 fps
7.9	764	Total			

Subcatchment EX 2: EX DA 2



Summary for Subcatchment PR 1: PR DA 1

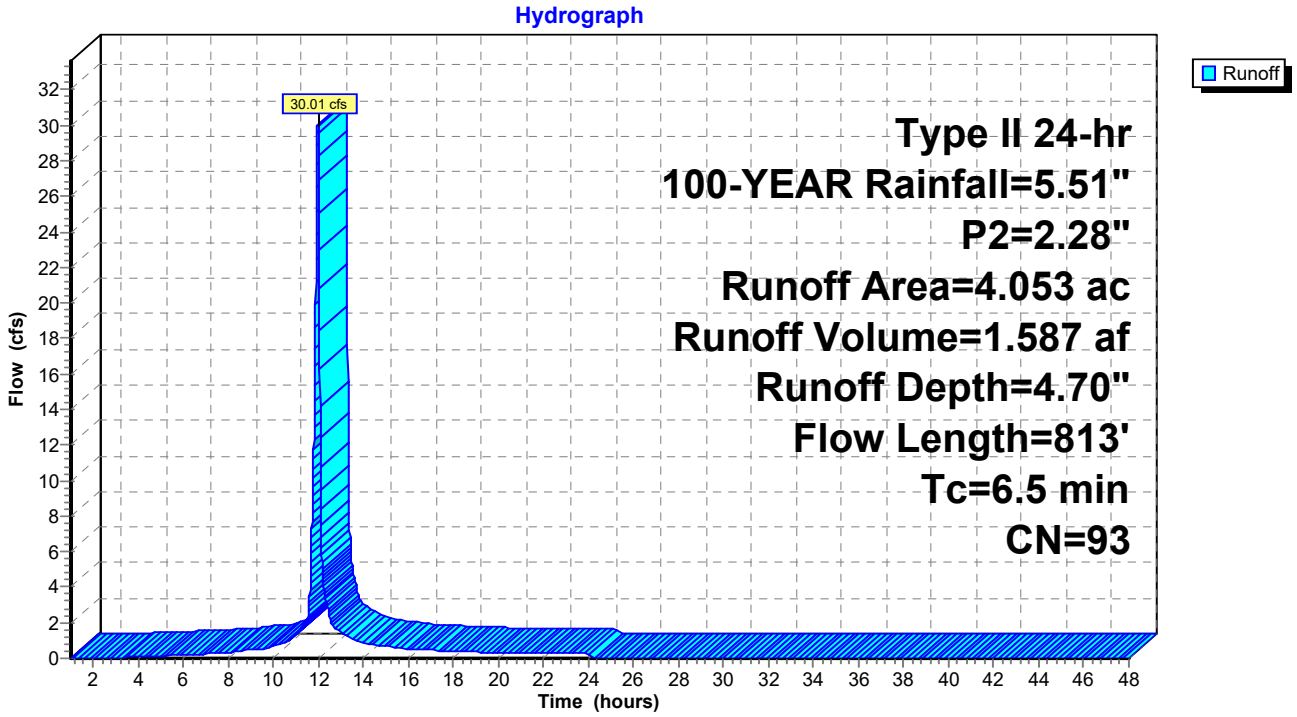
Runoff = 30.01 cfs @ 11.97 hrs, Volume= 1.587 af, Depth= 4.70"
Routed to Pond 3P : BIORETENTION #1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=5.51", P2=2.28"

Area (ac)	CN	Description
0.774	80	>75% Grass cover, Good, HSG D
0.277	74	>75% Grass cover, Good, HSG C
1.774	98	Paved parking, HSG D
1.218	98	Paved parking, HSG C
0.010	70	Woods, Good, HSG C
4.053	93	Weighted Average
1.061		26.18% Pervious Area
2.992		73.82% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.3	50	0.0600	0.19		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
0.6	231	0.0860	5.95		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
0.7	210	0.0100	4.91	3.86	**Pipe Channel, PIPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.2	125	0.0300	8.51	6.69	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.7	197	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
6.5	813	Total			

Subcatchment PR 1: PR DA 1



Summary for Subcatchment PR 2: PR DA 2

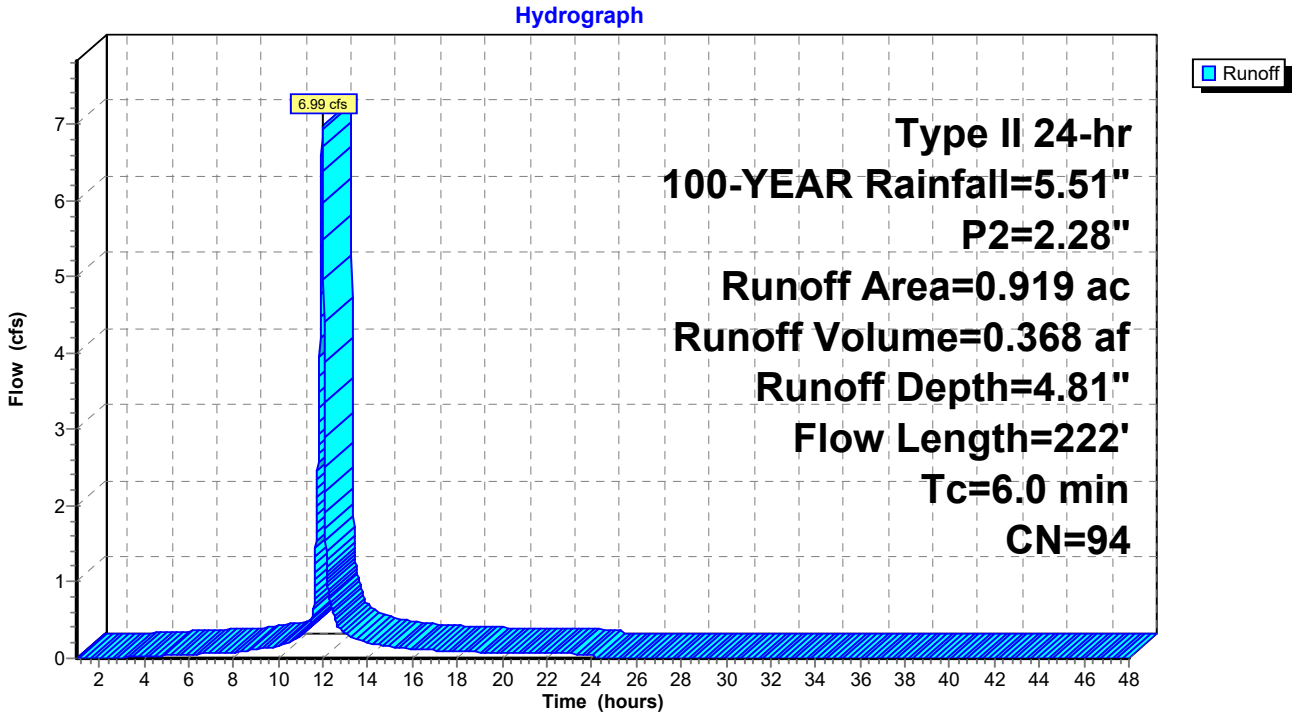
Runoff = 6.99 cfs @ 11.97 hrs, Volume= 0.368 af, Depth= 4.81"
Routed to Link AP 2 : ANALYSIS POINT 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=5.51", P2=2.28"

Area (ac)	CN	Description
0.132	80	>75% Grass cover, Good, HSG D
0.041	74	>75% Grass cover, Good, HSG C
0.581	98	Paved parking, HSG D
0.165	98	Paved parking, HSG C
0.919	94	Weighted Average
0.173		18.82% Pervious Area
0.746		81.18% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	12	0.2500	0.18		**Sheet Flow, SHEET** Grass: Dense n= 0.240 P2= 2.28"
1.2	88	0.0220	1.18		**Sheet Flow, SHEET** Smooth surfaces n= 0.011 P2= 2.28"
0.3	47	0.0220	3.01		**Shallow Concentrated Flow,** Paved Kv= 20.3 fps
0.3	47	0.0210	2.33		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	28	0.0200	2.87		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Paved Kv= 20.3 fps
3.1	222	Total, Increased to minimum Tc = 6.0 min			

Subcatchment PR 2: PR DA 2



Summary for Subcatchment PR 3: PR DA 3

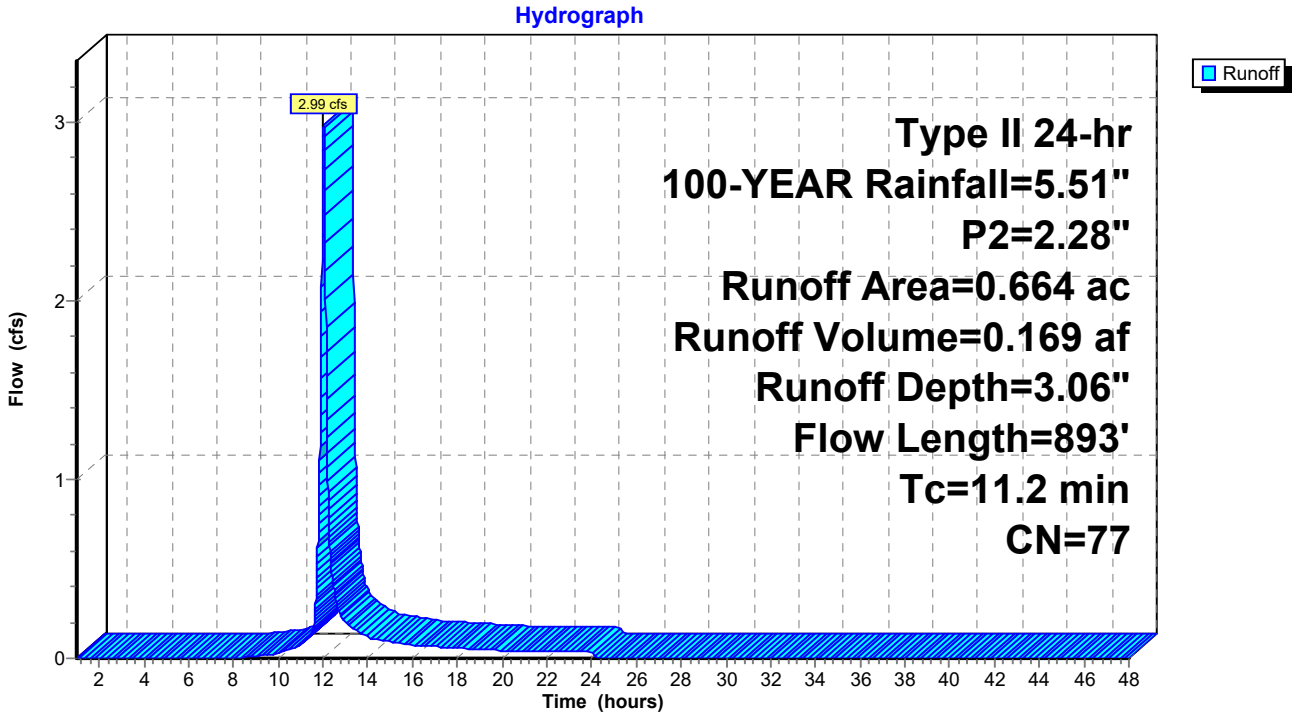
Runoff = 2.99 cfs @ 12.03 hrs, Volume= 0.169 af, Depth= 3.06"
Routed to Link AP 1 : ANALYSIS POINT 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YEAR Rainfall=5.51", P2=2.28"

Area (ac)	CN	Description
0.119	74	>75% Grass cover, Good, HSG C
0.123	80	>75% Grass cover, Good, HSG D
0.422	77	Woods, Good, HSG D
0.664	77	Weighted Average
0.664		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	100	0.0500	0.21		**Sheet Flow, SHEET** Grass: Short n= 0.150 P2= 2.28"
2.7	560	0.0450	3.42		**Shallow Concentrated Flow, SHALLOW CONCENTRATED** Unpaved Kv= 16.1 fps
0.2	111	0.0364	9.38	7.36	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.3	94	0.0100	4.91	3.86	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
0.0	28	0.3970	30.96	24.32	**Pipe Channel, 12" HDPE** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.012
11.2	893	Total			

Subcatchment PR 3: PR DA 3



Summary for Pond 3P: BIORETENTION #1

Inflow Area = 4.053 ac, 73.82% Impervious, Inflow Depth = 4.70" for 100-YEAR event
Inflow = 30.01 cfs @ 11.97 hrs, Volume= 1.587 af
Outflow = 16.78 cfs @ 12.06 hrs, Volume= 1.587 af, Atten= 44%, Lag= 5.4 min
Primary = 8.55 cfs @ 12.06 hrs, Volume= 1.457 af
Routed to Link AP 1 : ANALYSIS POINT 1
Secondary = 8.24 cfs @ 12.06 hrs, Volume= 0.130 af
Routed to Link AP 1 : ANALYSIS POINT 1

Routing by Sim-Route method, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 681.11' @ 12.06 hrs Surf.Area= 11,844 sf Storage= 21,023 cf

Plug-Flow detention time= 83.2 min calculated for 1.587 af (100% of inflow)
Center-of-Mass det. time= 83.3 min (855.7 - 772.4)

Volume	Invert	Avail.Storage	Storage Description
#1	679.00'	22,813 cf	**Bioretention (Irregular)**Listed below (Recalc)
#2	678.00'	3,226 cf	**Forebay (Irregular)**Listed below (Recalc)
		26,039 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
679.00	7,575	365.0	0	0	7,575
680.00	8,721	385.0	8,141	8,141	8,826
681.00	9,906	404.0	9,307	17,448	10,083
681.50	11,573	429.0	5,364	22,813	11,753

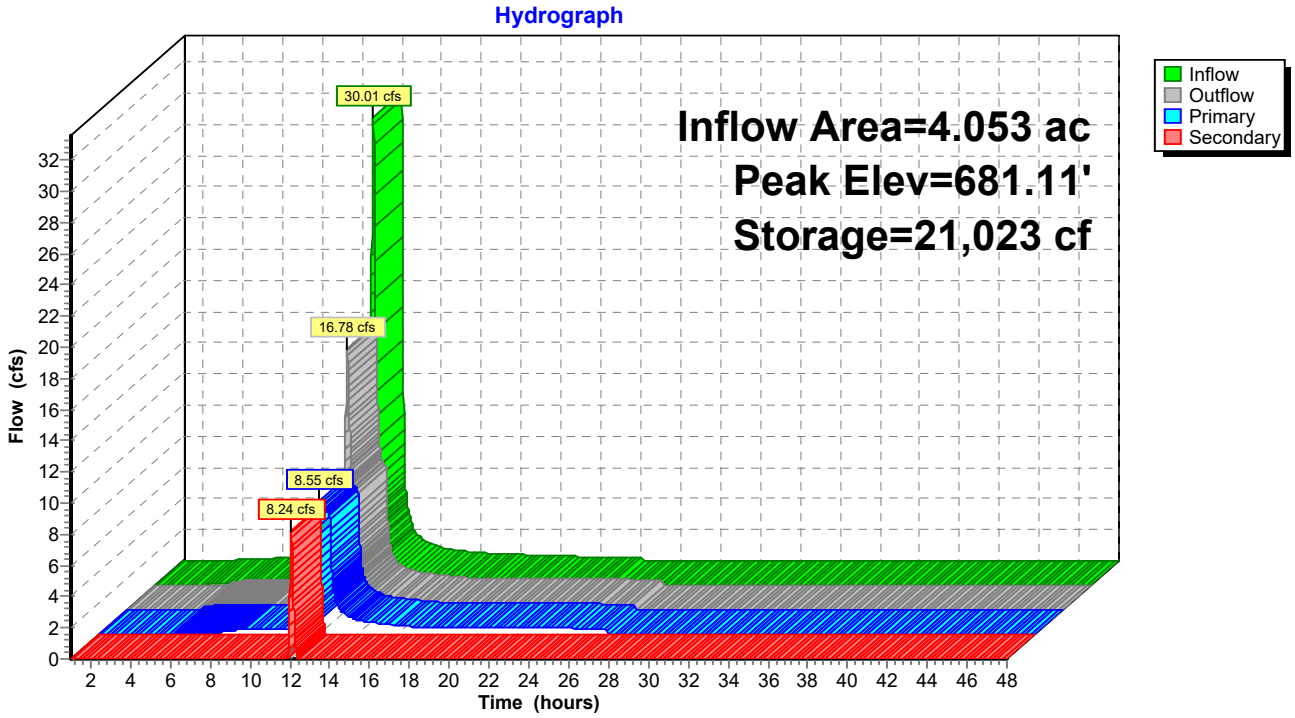
Elevation (feet)	Surf.Area (sq-ft)	Perim. (feet)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)	Wet.Area (sq-ft)
678.00	218	62.0	0	0	218
679.00	514	105.0	356	356	796
680.00	1,012	139.0	749	1,105	1,467
681.00	1,457	157.0	1,228	2,332	1,916
681.50	2,139	183.0	894	3,226	2,625

Device	Routing	Invert	Outlet Devices
#1	Device 3	678.00'	**2.000 in/hr Exfiltration over Surface area**
#2	Secondary	680.50'	**5.0' long + 3.0 '/' SideZ x 16.0' breadth Broad-Crested Rectangular Weir** Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.68 2.70 2.70 2.64 2.63 2.64 2.64 2.63
#3	Primary	675.50'	**12.0" Round Culvert** L= 28.0' Ke= 0.500 Inlet / Outlet Invert= 675.50' / 674.40' S= 0.0393 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#4	Device 3	679.70'	**30.0" x 30.0" Horiz. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=8.55 cfs @ 12.06 hrs HW=681.11' TW=0.00' (Dynamic Tailwater)
└─**3=Culvert** (Inlet Controls 8.55 cfs @ 10.88 fps)
  └─**1=Exfiltration** (Passes < 0.55 cfs potential flow)
  └─**4=Orifice/Grate** (Passes < 35.69 cfs potential flow)

Secondary OutFlow Max=8.22 cfs @ 12.06 hrs HW=681.11' TW=0.00' (Dynamic Tailwater)
└─**2=Broad-Crested Rectangular Weir** (Weir Controls 8.22 cfs @ 1.99 fps)

Pond 3P: BIORETENTION #1



Stage-Discharge for Pond 3P: BIORETENTION #1

Elevation (feet)	Discharge (cfs)	Primary (cfs)	Secondary (cfs)
678.00	0.00	0.00	0.00
678.05	0.01	0.01	0.00
678.10	0.01	0.01	0.00
678.15	0.01	0.01	0.00
678.20	0.01	0.01	0.00
678.25	0.01	0.01	0.00
678.30	0.01	0.01	0.00
678.35	0.01	0.01	0.00
678.40	0.01	0.01	0.00
678.45	0.02	0.02	0.00
678.50	0.02	0.02	0.00
678.55	0.02	0.02	0.00
678.60	0.02	0.02	0.00
678.65	0.02	0.02	0.00
678.70	0.02	0.02	0.00
678.75	0.02	0.02	0.00
678.80	0.02	0.02	0.00
678.85	0.02	0.02	0.00
678.90	0.02	0.02	0.00
678.95	0.02	0.02	0.00
679.00	0.37	0.37	0.00
679.05	0.38	0.38	0.00
679.10	0.38	0.38	0.00
679.15	0.39	0.39	0.00
679.20	0.39	0.39	0.00
679.25	0.39	0.39	0.00
679.30	0.40	0.40	0.00
679.35	0.40	0.40	0.00
679.40	0.40	0.40	0.00
679.45	0.41	0.41	0.00
679.50	0.41	0.41	0.00
679.55	0.41	0.41	0.00
679.60	0.42	0.42	0.00
679.65	0.42	0.42	0.00
679.70	0.43	0.43	0.00
679.75	0.80	0.80	0.00
679.80	1.47	1.47	0.00
679.85	2.34	2.34	0.00
679.90	3.37	3.37	0.00
679.95	4.53	4.53	0.00
680.00	5.82	5.82	0.00
680.05	7.23	7.23	0.00
680.10	7.66	7.66	0.00
680.15	7.70	7.70	0.00
680.20	7.75	7.75	0.00
680.25	7.80	7.80	0.00
680.30	7.84	7.84	0.00
680.35	7.89	7.89	0.00
680.40	7.93	7.93	0.00
680.45	7.98	7.98	0.00
680.50	8.02	8.02	0.00
680.55	8.22	8.07	0.15
680.60	8.55	8.11	0.44
680.65	8.99	8.15	0.83
680.70	9.51	8.20	1.31
680.75	10.12	8.24	1.88
680.80	10.81	8.29	2.53
680.85	11.59	8.33	3.26
680.90	12.44	8.37	4.07
680.95	13.37	8.41	4.96
681.00	14.37	8.46	5.92
681.05	15.46	8.50	6.96
681.10	16.62	8.54	8.08
681.15	17.81	8.58	9.23
681.20	19.07	8.62	10.45
681.25	20.39	8.66	11.73
681.30	21.78	8.71	13.07
681.35	23.30	8.75	14.55
681.40	24.90	8.79	16.11
681.45	26.57	8.83	17.75
681.50	**28.33**	**8.87**	**19.46**

Stage-Area-Storage for Pond 3P: BIORETENTION #1

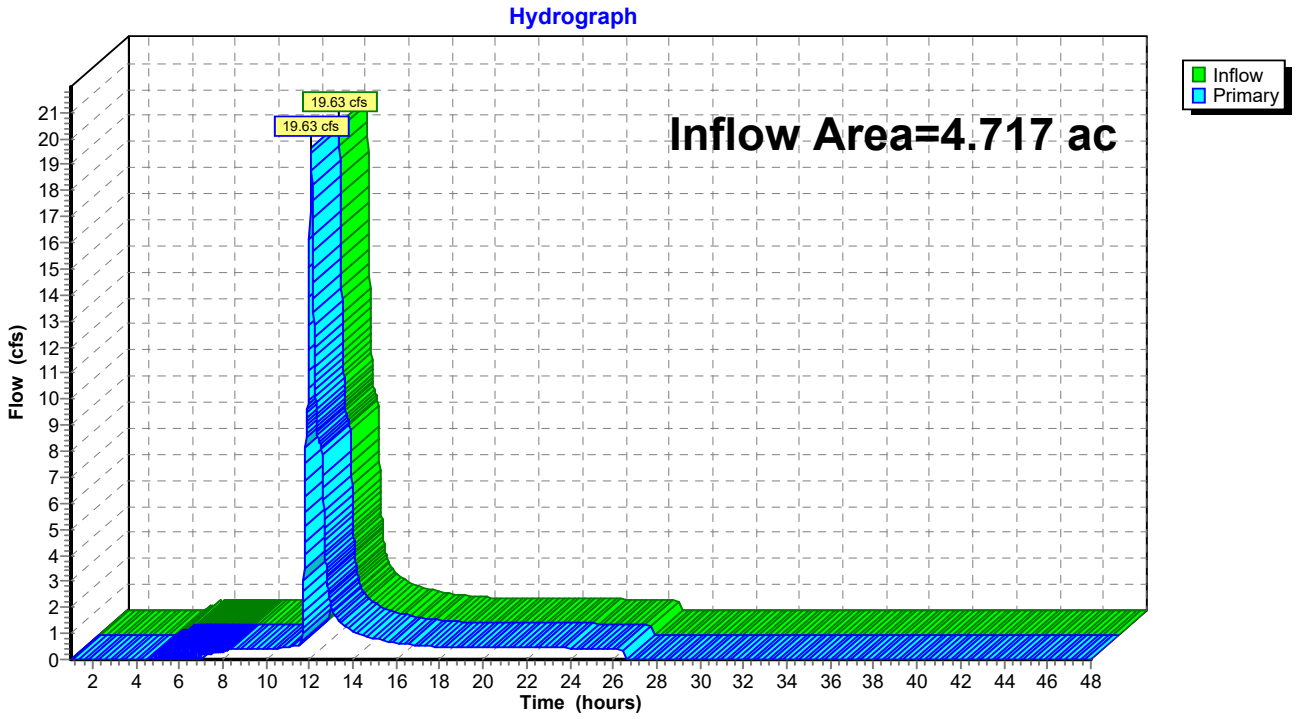
Elevation (feet)	Surface (sq-ft)	Storage (cubic-feet)
678.00	218	0
678.05	230	11
678.10	242	23
678.15	254	35
678.20	267	48
678.25	280	62
678.30	294	76
678.35	307	91
678.40	321	107
678.45	336	124
678.50	350	141
678.55	365	159
678.60	381	177
678.65	396	197
678.70	412	217
678.75	428	238
678.80	445	260
678.85	462	282
678.90	479	306
678.95	496	330
679.00	8,089	356
679.05	8,165	762
679.10	8,242	1,172
679.15	8,320	1,586
679.20	8,398	2,004
679.25	8,477	2,426
679.30	8,556	2,852
679.35	8,636	3,282
679.40	8,717	3,715
679.45	8,798	4,153
679.50	8,880	4,595
679.55	8,963	5,041
679.60	9,046	5,492
679.65	9,129	5,946
679.70	9,214	6,404
679.75	9,299	6,867
679.80	9,384	7,334
679.85	9,471	7,806
679.90	9,557	8,281
679.95	9,645	8,761
680.00	9,733	9,246
680.05	9,811	9,735
680.10	9,889	10,227
680.15	9,968	10,723
680.20	10,046	11,224
680.25	10,126	11,728
680.30	10,206	12,236
680.35	10,286	12,749
680.40	10,366	13,265
680.45	10,447	13,785
680.50	10,528	14,310
680.55	10,610	14,838
680.60	10,692	15,371
680.65	10,775	15,907
680.70	10,858	16,448
680.75	10,941	16,993
680.80	11,024	17,542
680.85	11,109	18,096
680.90	11,193	18,653
680.95	11,278	19,215
681.00	11,363	19,781
681.05	11,586	20,355
681.10	11,812	20,940
681.15	12,040	21,536
681.20	12,271	22,144
681.25	12,505	22,763
681.30	12,741	23,394
681.35	12,980	24,037
681.40	13,221	24,692
681.45	13,465	25,359
681.50	**13,712**	**26,039**

Summary for Link AP 1: ANALYSIS POINT 1

Inflow Area = 4.717 ac, 63.43% Impervious, Inflow Depth = 4.47" for 100-YEAR event
Inflow = 19.63 cfs @ 12.06 hrs, Volume= 1.756 af
Primary = 19.63 cfs @ 12.07 hrs, Volume= 1.756 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 1: ANALYSIS POINT 1

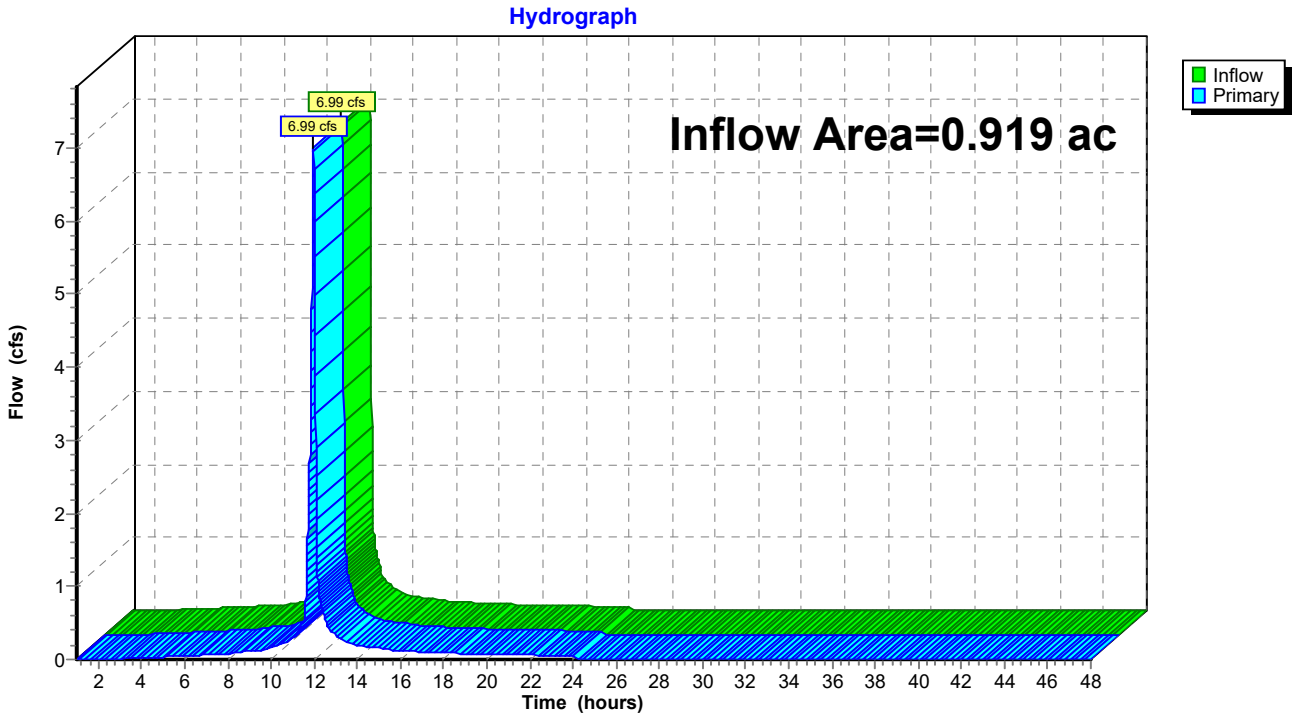


Summary for Link AP 2: ANALYSIS POINT 2

Inflow Area = 0.919 ac, 81.18% Impervious, Inflow Depth = 4.81" for 100-YEAR event
Inflow = 6.99 cfs @ 11.97 hrs, Volume= 0.368 af
Primary = 6.99 cfs @ 11.98 hrs, Volume= 0.368 af, Atten= 0%, Lag= 0.6 min
Routed to Link PR : PROPOSED

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link AP 2: ANALYSIS POINT 2

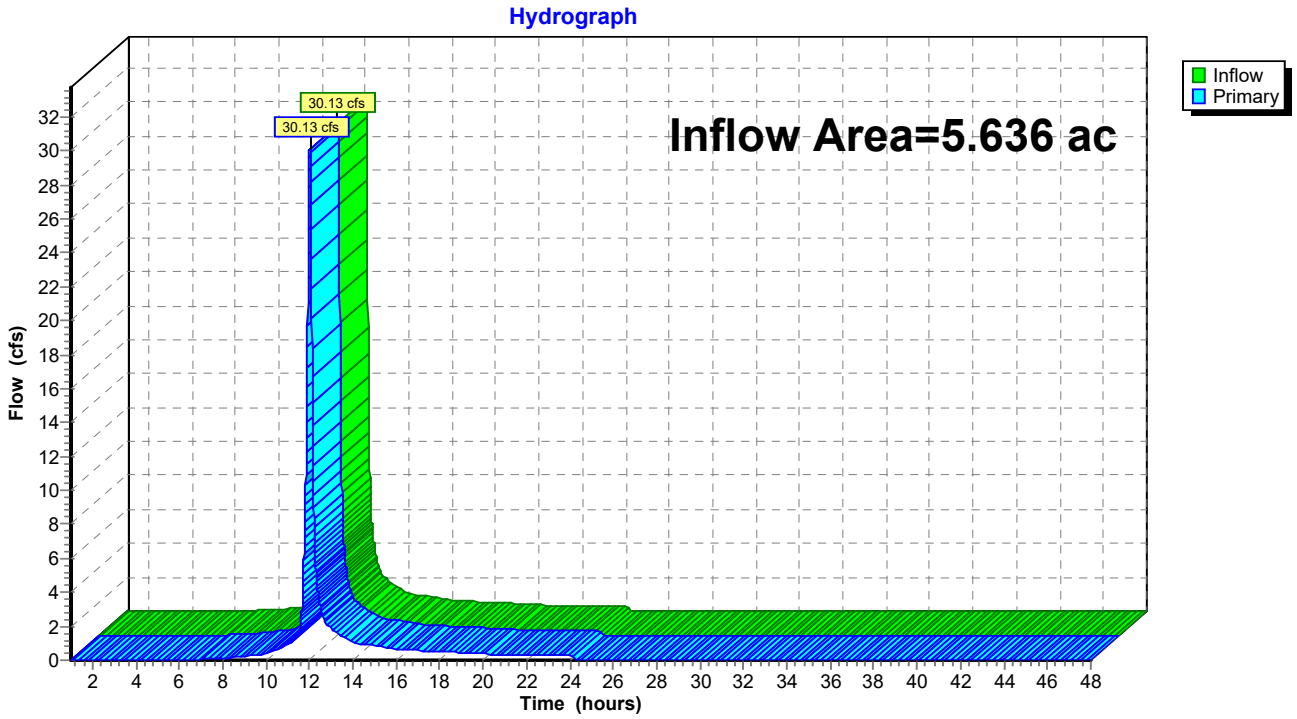


Summary for Link EX: EXISTING

Inflow Area = 5.636 ac, 31.28% Impervious, Inflow Depth = 3.50" for 100-YEAR event
Inflow = 30.13 cfs @ 12.01 hrs, Volume= 1.645 af
Primary = 30.13 cfs @ 12.02 hrs, Volume= 1.645 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link EX: EXISTING



Summary for Link PR: PROPOSED

Inflow Area = 5.636 ac, 66.32% Impervious, Inflow Depth = 4.52" for 100-YEAR event
Inflow = 23.78 cfs @ 12.04 hrs, Volume= 2.125 af
Primary = 23.78 cfs @ 12.05 hrs, Volume= 2.125 af, Atten= 0%, Lag= 0.6 min

Primary outflow = Inflow, Time Span= 1.00-48.00 hrs, dt= 0.01 hrs

Link PR: PROPOSED

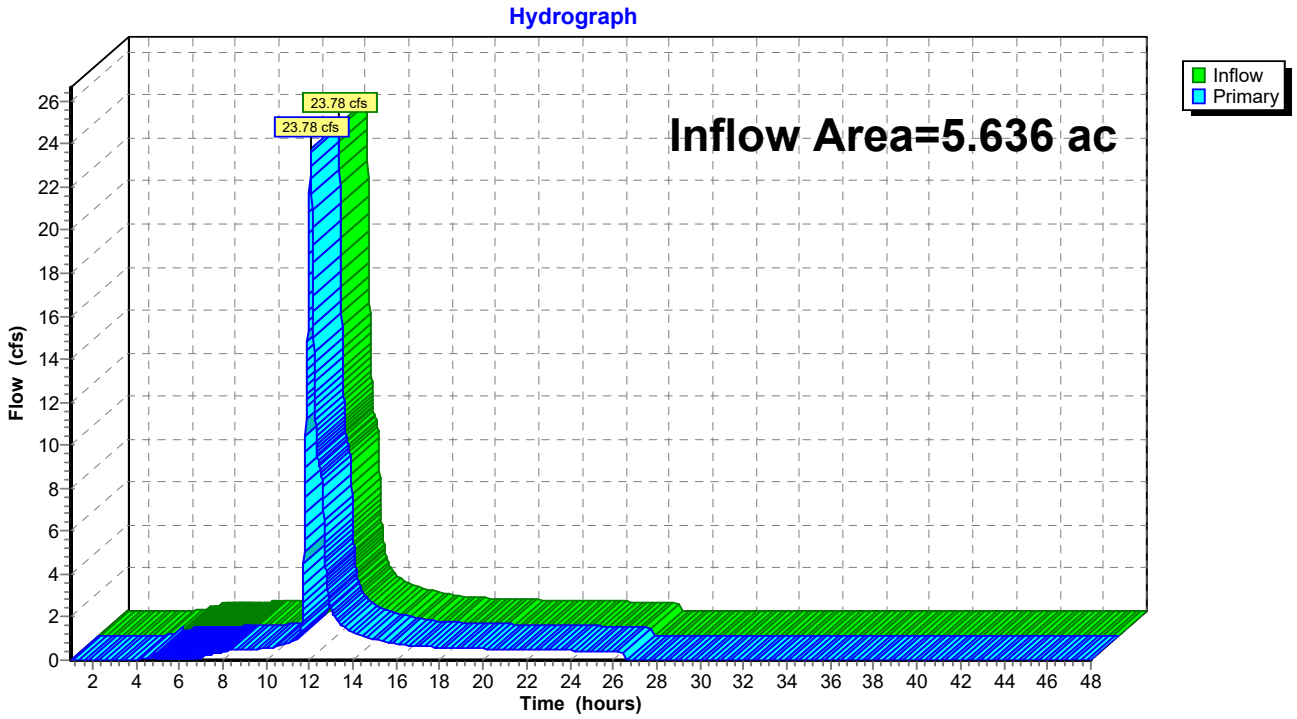


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APPENDIX J: WATER QUALITY CALCULATIONS

WQv Calculation for Redevelopment

Auburn Community Hospital Health Campus

Per Section 9.2B.II, the project contains both redevelopment and development. Therefore:

TOTAL WQv = (75% WQv of Existing, Disturbed Impervious Area) or (25% WQv of Existing, Disturbed Impervious Area with Green Infrastructure) + (WQv of the new development area) Or a weighted average per 9.2.1.B.IV

Total Site Area	**4.911**	acres	Reduction in impervious area	**-0.61**	acres
Total Pre Development Impervious Area	**2.045**	acres			X<0%, use calculations below
			Percent Reduction from existing	**-29.83%**	0%<X<25% use weighted average equation
Total Post Development Impervious Area	**2.655**	acres			X>25% WQv met, skip below calculations
New Impervious Area	**0.61**	acres	(if negative, see above IC Reduction)		
Redevelopment Impervious Area	**1.572**	acres	(Value of pre and post impervious area overlap)		
90% Rainfall Event	**1**	inch			

WQv Calculation for Redevelopment

Redevelopment Section				New Development Section			
WQv = P x Rv x A / 12				WQv = P x Rv x A / 12			
where:				where:			
P =	90% Rainfall Event Number	1.0	inch	P =	90% Rainfall Event Number	1.0	inch
Rv =	0.05 + (0.009 x I)	0.95		Rv =	0.05 + (0.009 x I)	0.214	
I =	Impervious Cover	100	%	I =	Impervious Cover	18.27	%
A =	Existing Disturbed Impervious Area	68,476	sf or	A =	Area of Development	145,447	sf or
		1.57	acres			3.34	acres
25% WQv of Existing, Disturbed Impervious Area		**0.031**	ac-ft or	WQv of the Development Area		**0.060**	ac-ft or
		1,355.3	cf			**2,598.9**	cf

Total WQv	**0.091 ac-ft or 3,954.2 cf**

RRv Calculation for Redevelopment

Redevelopment Section	New Development Section				
	RRv min = P x Rv x Aic x S / 12				
	where:				
	P =	90% Rainfall Event Number	1.0	inch	
	Rv =	0.05 + (0.009 x I)	0.950		
	I =	Impervious Cover	18.27	%	
	A =	Total Area of New Impervious Cover	145,447	sf or	
			0.61	acres	
	S =	HSG Specific Reduction Factor =			
Per Section 9.2B.II, RRv sizing criteria is not required for redevelopment		Soil Group	Acres	S	
		A		55%	
		B		40%	
		C	1.77	30%	
		D	3.14	20%	
		Weighted Avg	**0.24**		
	RRv min =		0.011	ac-ft or	
			496.5	cf	

#	NOI Question			
28	Total Water Quality (WQv) Required		0.091 ac-ft or	3,954 cf
30	Total RRv	**Filtration Bioretention**	0.091 ac-ft or	3,955 cf
31	Is RRv Provided ≥ WQv Required?		Yes	
32	Minimum RRv		0.011 ac-ft or	497 cf
32a	Is RRv Provided ≥ Minimum RRv Required?		Yes	
33a	Total WQv Treated		ac-ft or	cf
			ac-ft or	cf
		TOTAL	0.000 ac-ft or	- cf
34	Sum of Volume Reduced & Treated		0.091 ac-ft or	3,955 cf
35	Is Sum RRv Provided and WQv Provided ≥ WQv Required?		Yes	

Filtration Bioretention (F-5)

Design Point:	1

Enter Site Data For Drainage Area to be Treated by Practice							
Drainage Area Number	**Contributing Area** (Acres)	**Impervious Area** (Acres)	**Percent Impervious** %	**Rv**	**WQv** (cf)	**Precipitation** (in)	**Description**
1	4.91	0.83	17	0.20	3,955	1.10	0

Design Criteria		
Enter underlying soil infiltration rate (based on geotechnical testing, refer to Appendix D)	0	Underdrains required
Is the contributing area to the practice a stormwater hotspot?	No	
Is the practice the first in series for treatment of a Level 1 (Infiltration Restricted) hotspot?	No	
Is contributing area greater than max. contributing area?	No	
Enter depth to seasonal high water table (ft)	2	
Enter depth to bedrock (ft)	2	
Is pretreatment provided, in conformance with Section 6.4.3.1	Yes	
Enter average height of ponding (ft)	0.5	
Enter depth of surface layer (inches)	3	
Enter depth of filter media (ft)	2.5	
Enter depth of drainage layer (inches)	10	
Enter slope of maintenance access (%)	5	
Enter width of maintenance access (ft)	12	

Sizing Criteria				
		Value	Units	Notes
Permeability Flow Rate	k	1	ft/day	
Filter Time	tf	2	days	
Required Filter Area	Af	1648	sf	
Enter Provided Filter Area	Af	7575	sf	
Recalculated Water Quality Volume (based on provided filter area)	WQv calc	18180	cf	

Calculate Runoff Reduction			
RRv Provided	**3,955**	***cf***	
WQv Treated	0	cf	This is the portion of the WQv that is not reduced in the practice.

Compute Channel Protection Storage Volume		
Ia for Drainage Area		
Drainage Area	CN	Area (ac)
1	93.00	4.05
2	94.00	0.92
3	77.00	0.66
Weighted CN	91.28	
Corresponding Ia = (200/CN)-2		0.191
P, Precipitation, 1yr (in)		1.83
Ia/P		0.104
Tc for Drainage Area (hr)		0.10
From Exhibit 4-II, qu (csm/in)		1000
Figure 8.5, T = 24 hr, qo/qi		0.020
Vs/Vr		0.655
Q		1.04
Cpv Required (ac-ft)		**0.319**

Size of Secondary Orifice	RISER
Elevation of Secondary Orifice	679.7
CPv Provided (ac-ft)	0.408

APPENDIX K: NYSDEC SPEDES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY (PERMIT NO. GP-0-25-001)

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL
CONSERVATION (NYSDEC)

SPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES

From

CONSTRUCTION ACTIVITY

Permit No. GP-0-25-001

Construction General Permit (CGP)

Issued Pursuant to Article 17, Titles 7, 8 and Article 70

of the Environmental Conservation Law

Effective Date: January 29, 2025 Expiration Date: January 28, 2030

Scott E. Sheeley

Chief Permit Administrator

Scott E. Sheeley JAN. 29, 2025

Authorized Signature Date

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

PREFACE

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

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

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

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

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Part I. How to Obtain Coverage and General Requirements

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

A. Eligibility Requirements

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

1. The *owner's or operator's construction activities* involve soil disturbances of:

    a. one or more acres; or

    b. less than one acre which are part of a *common plan of development or sale* that will ultimately disturb one or more acres; or

    c. less than one acre where NYSDEC has determined that a SPDES permit is required for *stormwater discharges* based on the potential for contribution to a violation of a *water quality standard* or for significant contribution of pollutants to *surface waters of the State*.

        i. 5,000 square feet or more, but less than one acre, and are in the New York City Watershed located east of the Hudson River, Appendix C Figure 1; or

        ii. 20,000 square feet or more, but less than one acre, within the municipal boundaries of the City of New York (NYC); or

        iii. less than 20,000 square feet which are part of a *common plan of development or sale* that will ultimately disturb 20,000 square feet or more, but less than one acre, within the municipal boundaries of NYC; or

        iv. that creates 5,000 square feet or more of *impervious area* within the municipal boundaries of NYC.

2. *Discharges* from the *owner's or operator's construction activities* are/were not:

    a. already covered by a different SPDES permit; or

    b. covered under a different SPDES permit that was denied, terminated, or revoked; or

    c. identified in an expired individual SPDES permit that was not renewed; or

    d. required to obtain an individual SPDES permit or another general SPDES permit in accordance with Part VII.K.

3. If *construction activities* may adversely affect a species that is endangered or threatened, the *owner or operator* must obtain a:

    a. permit issued pursuant to 6 NYCRR Part 182 for the project; or

    b. letter issued by NYSDEC of non-jurisdiction pursuant to 6 NYCRR Part 182 for the project.

4. If *construction activities* have the potential to affect an *historic property*, the *owner or operator* must obtain one of the following:

    a. documentation that the *construction activity* is not within an archeological buffer area indicated on the sensitivity map, and that the *construction activity* is not located on or immediately adjacent to a property listed or determined to be eligible for listing on the National or State Registers of Historic Places, and that there is no new permanent building on the *construction site* within the following distances from a building, structure, or object that is more than 50 years old, or if there is such a new permanent building on the *construction site* within those parameters that NYS Office of Parks, Recreation and Historic Preservation (OPRHP), a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determined that the building, structure, or object more than 50 years old is not historically/archeologically significant:

        i. 1-5 acres of disturbance - 20 feet; or

        ii. 5-20 acres of disturbance - 50 feet; or

iii. 20+ acres of disturbance - 100 feet.

b. NYSDEC consultation form sent to OPRHP,[1] and copied to NYSDEC's Agency Historic Preservation Officer (APO), and

i. the State Environmental Quality Review Act (SEQR) Environmental Assessment Form (EAF) with a negative declaration or the Findings Statement, with documentation of OPRHP's agreement with the resolution; or

ii. documentation from OPRHP that the *construction activity* will result in No Impact; or

iii. documentation from OPRHP providing a determination of No Adverse Impact; or

iv. a Letter of Resolution signed by the *owner or operator*, OPRHP and the DEC APO which allows for this *construction activity* to be eligible for coverage under the general permit in terms of the State Historic Preservation Act (SHPA).

c. documentation of satisfactory compliance with Section 106 of the National Historic Preservation Act for a coterminous project area:

i. No Affect; or

ii. No Adverse Affect; or

iii. Executed Memorandum of Agreement.

d. documentation that SHPA Section 14.09 has been completed by NYSDEC or another state agency.

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

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

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

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

7. If *construction activities* require Uniform Procedures Act (UPA) Permits (see 6 NYCRR Part 621) from NYSDEC, or the equivalent from another New York State or federal agency, the *owner or operator* must:

    a. obtain all such necessary permits; or

    b. receive notification from NYSDEC pursuant to 6 NYCRR 621.3(a)(4) excepting Part I.A.7.a.

8. *Construction activities* are not eligible if they meet the following criteria in Part I.A.8.a. or b.:

    a. For linear transportation and linear utility project types, the *construction activities*:

        i. are within the watershed of *surface waters of the State* classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website; and

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb two or more acres of *steep slope*.

    b. For all other project types, the *construction activities*:

        i. are within the watershed of *surface waters of the State* classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website; and

        ii. are undertaken on land with no existing *impervious cover*; and

        iii. disturb one or more acres of *steep slope*.

B. Types of *Discharges* Authorized

1. The following *stormwater discharges* are authorized under this permit:

   a. *Stormwater discharges*, including *stormwater* runoff, snowmelt runoff, and surface runoff and drainage, associated with *construction activity*, are authorized under this permit provided that appropriate *stormwater* controls are designed, installed, and maintained in accordance with Part II. and Part III.

   b. *Stormwater discharges* from construction support activities at the *construction site* (including concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, and borrow areas) if the following requirements are met:

      i. The support activity is directly related to the *construction site* required to have permit coverage for *stormwater discharges*; and

      ii. The support activity is not a commercial operation, nor does it serve multiple unrelated *construction sites*; and

      iii. The support activity does not continue to operate beyond the completion of the *construction activity* at the site it supports; and

      iv. *Stormwater* controls are implemented in accordance with Part II. and Part III. for *discharges* from the support activity areas.

2. The following non-*stormwater discharges* associated with *construction activity* are authorized under this permit:

   a. Non-*stormwater discharges* listed in 6 NYCRR 750-1.2(a)(29)(vi), with the following exception: "*Discharges* from firefighting activities are authorized only when the firefighting activities are emergencies/unplanned"; and

   b. Non-*stormwater discharges* of waters to which other components have not been added that are used in accordance with the *SWPPP* to control dust or irrigate vegetation in stabilized areas; and

   c. Uncontaminated *discharges* from *dewatering* operations

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

C. Prohibited *Discharges*

1. Non-*stormwater discharges* prohibited under this permit include but are not limited to:

    a. Wastewater from washout of concrete; and

    b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials; and

    c. Fuels, oils, or other *pollutants* used in vehicle and equipment operation and maintenance; and

    d. Soaps, solvents, or detergents used in vehicle and equipment washing or external building washdown; and

    e. Toxic or hazardous substances from a spill or other release.

D. Electronic Notice of Intent (eNOI) Submittal

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

1. An eNOI may be submitted for:

    a. *construction activities* that are not part of a *common plan of development or sale*; or

b. an entire *common plan of development or sale*; or

c. separate *phase(s)* of a *common plan of development or sale* if the following requirements are met:

    i. the *common plan of development or sale* meets the eligibility requirements of Part I.A.5. or 6.; and

    ii. the *phase(s)* meet(s) all other eligibility requirements of Part I.A.; and

    iii. Part III.C. Required *SWPPP* Components by Project Type is based on the *common plan of development or sale*, not the *phase(s)*; or

d. *tree clearing* that is associated with, or will support, a *renewable energy* generation, transmission, or storage project that meets Part I.A.5. and 6., if the *tree clearing*:

    i. meets all other eligibility requirements of Part I.A.; and

    ii. will occur in NYSDEC's Regions 3-9; and

    iii. is not within ¼ mile of a bat hibernaculum protected pursuant to 6 NYCRR Part 182; and

    iv. will occur between November 1st and March 31st.

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

    a. prepare a *SWPPP* for Part I.D.1.a., b., c., or d. in accordance with Part III.; and

    b. based on the following criteria, upload the following signature forms signed in accordance with Part VII.J. to the eNOI prior to submission:

        i. for all eNOIs:

            1. the SWPPP Preparer Certification Form, Appendix F, signed by the *SWPPP* preparer; and

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

ii. if an eNOI includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that will *discharge* to the *MS4(s)*:

1. determine if the *Traditional Land Use Control MS4 Operator(s)* have review authority. A *Traditional Land Use Control MS4 Operator* does not have review authority where:

a. the *owner or operator* of the *construction activities* in Part I.D.2.b.ii. is the same entity as the *Traditional Land Use Control MS4 Operator* identified in Part I.D.2.b.ii.; or

b. there is a statute exempting the *owner or operator* from zoning review by the *Traditional Land Use Control MS4 Operator*; or

c. there is no such statute per Part I.D.2.b.ii.1.b., the *Traditional Land Use Control MS4 Operator* concludes, after public hearing, that it does not have zoning review authority in accordance with Legal Memorandum LU14 Updated January 2020 “Governmental Immunity from Zoning and Other Legislation”; and

2. if the *Traditional Land Use Control MS4 Operator(s)* have review authority, submit the *SWPPP* to the *Traditional Land Use Control MS4 Operator(s)* for review and have:

a. if outside the municipal boundaries of NYC: the MS4 SWPPP Acceptance Form, Appendix G, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.; or

b. if within the municipal boundaries of NYC: The City of New York Department of Environmental Protection (NYCDEP) SWPPP Acceptance/Approval Form, Appendix H, signed by the principal executive officer or ranking elected official from the Traditional Land Use Control MS4 Operator, or by a duly authorized representative of that person in accordance with Part VII.J.2.; and

3. if the *Traditional Land Use Control MS4 Operator* does not have review authority, have the MS4 No Jurisdiction Form, Appendix I, signed by the principal executive officer or ranking elected official from the *Traditional Land Use Control MS4 Operator,* or by a duly authorized representative of that person in accordance with Part VII.J.2.

3. Submitting an eNOI:

a. The *owner or operator* must submit a complete Notice of Intent electronically using a NYSDEC approved form.[2]

b. The *owner or operator* is authorized to *commence construction activity* as of the authorization date indicated in the Letter of Authorization (LOA), which is sent by NYSDEC after a complete eNOI is submitted.

i. If an eNOI is received for a *SWPPP* that deviates from one of the technical standards but demonstrates *equivalence* in accordance with Part III.B.1.a.ii. or Part III.B.2.b.ii., if the *SWPPP* includes *construction activities* that are not within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)*, and/or if the *SWPPP* includes *construction activities* within the municipal boundary(ies) of *Traditional Land Use Control MS4 Operator(s)* that do not have review authority in accordance with Part I.D.2.b.ii.1., the authorization date indicated in the LOA will be 60 business days after the eNOI submission date.

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

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

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

1. As of the date the LOA is received, the *owner or operator* must make the eNOI, *SWPPP*, and LOA available for review and copying in accordance with the requirements in Part VII.H. When applicable, as of the date an updated LOA is received, the *owner or operator* must make the updated LOA available for review and copying in accordance with the requirements in Part VII.H.

2. The *owner or operator* must ensure compliance with all requirements of this permit and that the provisions of the *SWPPP*, including any changes made to the *SWPPP* in accordance with Part III.A.5., are properly implemented and maintained from the *commencement of construction activity* until:

   a. all areas of disturbance have achieved *final stabilization;* and

   b. the owner's or operator's coverage under this permit is terminated in accordance with Part V.A.5.a.

3. As of the date of the *commencement of construction activities* until Part I.E.2.a. and b. have been met, the *owner or operator* must maintain at the *construction site*, a copy of:

   a. all documentation necessary to demonstrate eligibility with this permit; and

   b. this permit; and

   c. the *SWPPP*; and

   d. the signed SWPPP Preparer Certification Form; and

   e. the signed MS4 SWPPP Acceptance Form or signed NYCDEP SWPPP Acceptance/Approval Form or signed MS4 No Jurisdiction Form (when applicable); and

   f. the signed Owner/Operator Certification Form; and

g. the eNOI; and

h. the LOA; and

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

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

   a. responsible contractor's or subcontractor's certification statement(s) in accordance with Part III.A.7.; and

   b. inspection reports in accordance with Part IV.C.4. and 6.; and

   c. Request to Disturb Greater Than Five Acres and the Authorization Letter to Disturb Greater Than Five Acres in accordance with Part I.E.6. (when applicable); and

   d. Request to Continue Coverage and the Letter of Continued Coverage (LOCC) in accordance with Part I.F.2. and 4. (when applicable); and

   e. The updated LOA(s) in accordance with Part I.E.9. (when applicable).

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

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

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

i. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, if a *Traditional Land Use Control MS4 Operator* does not have review authority in accordance with Part I.D.2.b.ii.1.; or

ii. the *Traditional Land Use Control MS4 Operator*, if a *Traditional Land Use Control MS4 Operator* has review authority in accordance with Part I.D.2.b.ii.1.; or

iii. NYSDEC's Regional Office Division of Water staff based on the project location, Appendix E, and each involved *Traditional Land Use Control MS4 Operator*, if the project spans multiple municipalities with more than one *Traditional Land Use Control MS4 Operator* involved with review authority in accordance with Part I.D.2.b.ii.1.

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

i. The SPDES permit identification number (Permit ID); and

ii. Full technical justification demonstrating why alternative methods of construction that would result in five acres of soil disturbance or less at any one time are not feasible; and

iii. The phasing plan for the project and sequencing plans for all *phases* from the *SWPPP* in accordance with Part III.B.1.d.; and

iv. Plans with locations and details of erosion and sediment control practices such that the heightened concern for erosion when disturbing greater than five acres at one time has been addressed; and

v. Acknowledgment that "the *owner or operator* will comply with the requirements in Part IV.C.2.b."; and

vi. Acknowledgment that "the *owner or operator* will comply with the requirements in Part II.B.1.b."

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

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

i. NYSDEC, if Part I.E.6.a.i. or iii. apply; or

ii. the *Traditional Land Use Control MS4 Operator*, if Part I.E.6.a.ii. applies.

7. Upon a finding of significant non-compliance with the practices described in the *SWPPP* or violation of this permit, NYSDEC may order an immediate stop to all *construction activity* at the site until the non-compliance is remedied. The stop work order must be in writing, describe the non-compliance in detail, and be sent to the *owner or operator*.

8. If any human remains or archaeological remains are encountered during excavation, the *owner or operator* must immediately cease, or cause to cease, all *construction activity* in the area of the remains and notify the appropriate Regional Water Engineer (RWE).[3] *Construction activity* shall not resume until written permission to do so has been received from the RWE.

9. To be authorized to implement modifications to the information previously submitted in the eNOI, the *owner or operator* must:

   a. notify NYSDEC via email at Stormwater_info@dec.ny.gov requesting access to update the eNOI; and

   b. update the eNOI to reflect the modifications and resubmit the eNOI in accordance with Part I.D.; and

   c. receive an updated LOA.

10. The eNOI, *SWPPP*, LOA, updated LOAs (when applicable), and inspection reports required by this permit are public documents that the *owner or operator* must make available for review and copying by any person within five business days of the *owner or operator* receiving a written request by any such person to review these documents. Copying of documents will be done at the requester's expense.

[3] The Regional Water Manager where a DEC Region does not have a RWE.

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

When applicable:

1. Upon the effective date of this permit, an *owner or operator* of *a construction activity*, with coverage under GP-0-20-001, will have interim coverage under GP-0-25-001 for 45 calendar days starting on the effective date of GP-0-25-001 so long as the *owner or operator* maintains compliance with all applicable requirements of this permit.

2. Within 30 calendar days of the effective date of this permit, the *owner or operator*, with coverage under GP-0-20-001, must submit a complete Request to Continue Coverage electronically using a NYSDEC approved form,[4] which contains the information identified in Part I.F.3. below, if:

   a. the *owner or operator* continues to implement the SMP component in conformance with the technical standards in place at the time of initial project authorization; and

   b. the *owner or operator* will comply with all non-design requirements of GP-0-25-001.

3. The Request to Continue Coverage form contains questions to: ensure eligibility requirements in Part I.A. have been met; verify *owner or operator* contact information; verify the permit identification number; verify the original eNOI submission ID, if applicable; verify Part I.F.2.a. and b.; verify the version of the Design Manual that the technical/design components conform to; and receive an updated Owner/Operator Certification Form, Appendix I.

4. The *owner or operator* has obtained continued coverage under GP-0-25-001 as of the date indicated in the LOCC, which is sent by NYSDEC after a complete Request to Continue Coverage form is submitted.

5. If the owner or operator does not submit the Request to Continue Coverage form in accordance with Part I.F.2. and 3., coverage under this permit is automatically terminated after interim coverage expires.

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

G. Change of *Owner or Operator*

When applicable:

1. When property ownership changes, or when there is a change in operational control over the construction plans and specifications, the following process applies:

    a. The new *owner or operator* must meet the applicable prerequisites for submitting an eNOI in accordance with Part I.D.2.; and

    b. The new *owner or operator* must submit an eNOI in accordance with Part I.D.3.; and

    c. Permit coverage for the new *owner or operator* will be effective upon receipt of the LOA in accordance with Part I.D.3.b.; and

    d. The new *owner or operator*, upon receipt of their LOA, must provide their Permit ID to the original *owner or operator*; and

    e. If the original *owner or operator* will no longer be the *owner or operator* of the *construction activity* identified in the original *owner's or operator's* eNOI, the original *owner or operator*, upon receipt of the new *owner's or operator's* Permit ID in accordance with Part I.G.1.d., must submit to NYSDEC a completed eNOT in accordance with Part V. that includes the name and Permit ID of the new *owner or operator*; or

    f. If the original *owner or operator* maintains ownership of a portion of the *construction activity*, the original *owner or operator* must maintain their coverage under the permit by modifying their eNOI; modifications to the eNOI must include:

        i. the revised area of disturbance and/or *impervious area(s)*; and

        ii. the revised SMP information, if applicable; and

        iii. a narrative description of what has changed; and

        iv. the new *owner's or operator's* Permit ID for the portion of the project removed from the eNOI.

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

Part II. Water Quality-Based Effluent Limitations

A. Maintaining Water Quality

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

1. There must be no increase in turbidity that will cause a substantial visible contrast to natural conditions; and

2. There must be no increase in suspended, colloidal or settleable solids that will cause deposition or impair the waters for their best usages; and

3. There must be no residue from oil and floating substances, nor visible oil film, nor globules of grease.

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

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

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

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

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

1. Erosion and Sediment Control Requirements - The *owner or operator* must select, design, install, implement, and maintain control measures to *minimize* the *discharge* of *pollutants* and prevent a violation of the *water quality standards*. The selection, design, installation, implementation, and maintenance of these control measures must meet the non-numeric effluent limitations in Part II.B.1.a., b., c., d., and e. and be in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (BB), dated November 2016, using sound engineering judgment. Where control measures are not designed in conformance with the design criteria included in the technical standard, the *owner or operator* must include in *SWPPP* the reason(s) for the deviation, or alternative design, and provide information in the *SWPPP* demonstrating that the deviation or alternative design is *equivalent* to the technical standard.

    a. **Erosion and Sediment Controls.** At a minimum, erosion and sediment controls must be selected, designed, installed, implemented, and maintained to:

        i. *Minimize* soil erosion through application of runoff control and soil stabilization control measure to *minimize pollutant discharge*s; and

        ii. Control *stormwater discharge*s, including both peak flow rates and total *stormwater* volume, to *minimize* channel and *streambank* erosion and scour in the immediate vicinity of the *discharge* points; and

        iii. *Minimize* the amount of soil exposed during *construction activity*; and

        iv. *Minimize* the disturbance of *steep slope*; and

        v. *Minimize* sediment *discharge*s from the site; and

        vi. Provide and maintain *natural buffers* around surface waters, direct *stormwater* to vegetated areas and maximize *stormwater* infiltration to reduce *pollutant discharge*s, unless *infeasible*; and

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

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

viii. Unless *infeasible*, preserve a sufficient amount of topsoil to complete soil restoration and establish a uniform, dense vegetative cover; and

ix. *Minimize* dust. On areas of exposed soil, *minimize* dust through the appropriate application of water or other dust suppression techniques to control the generation of *pollutants* that could be discharged from the site.

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

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

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

i. *Minimize* the *discharge* of *pollutants* from equipment and vehicle washing, wheel wash water, and other wash waters. Soaps, detergents and solvents cannot be used; and

ii. *Minimize* the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, hazardous and toxic waste, and other materials present on the site to precipitation

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

iii. Prevent the *discharge* of *pollutants* from spills and leaks and implement chemical spill and leak prevention and response procedures.

e. **Surface Outlets.** When discharging from basins and impoundments, the surface outlets must be designed, constructed, and maintained in such a manner that sediment does not leave the basin or impoundment and that erosion at or below the outlet does not occur.

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

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

2. The *owner or operator* of a *construction activity*, that requires SMPs in accordance with Part III.C., must design the practices to meet the applicable *sizing criteria* in Part II.C.2.a., b., c., or d.

a. Sizing Criteria for *New Development*

i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the total WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv must be calculated in accordance with the criteria in Section 4.2 of the DM; or

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

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

ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:

   1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

   2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs without detention or velocity controls; or

   3. The site *directly discharges* into a fifth order or larger water body (stream, river, or lake), or tidal waters, where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams, or

2. A downstream analysis reveals that *overbank* control is not required.

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

i. Runoff Reduction Volume (RRv) and Water Quality Volume (WQv):

1. Reduce the WQv by application of RR techniques and standard SMPs with RRv capacity. The total WQv is the runoff volume from the 1-year, 24-hour design storm over the post-developed watershed and must be calculated in accordance with the criteria in Section 4.3 of the DM; or

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

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

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

ii. Channel Protection Volume (CPv): Provide 24 hour extended detention of the post-developed 1-year, 24-hour storm event, remaining after runoff reduction. Where a CPv control orifice is provided, the minimum orifice size must be 3 inches, with acceptable external trash rack or orifice protection. The CPv requirement does not apply when:

1. Reduction of the entire CPv is achieved by application of runoff reduction techniques or infiltration systems; or

2. The 1-year post-development peak *discharge* is less than or equal to 2.0 cfs; or

3. The site *directly discharges* to tidal waters, or a fifth order or larger water body (stream, river, or lake) where the increase in smaller flows will not impact the stream bank or channel integrity. However, the point of *discharge* must be adequately protected against scour and erosion by the increased peak *discharge*.

iii. *Overbank* Flood Control Criteria (Qp): Requires storage to attenuate the post-development 10-year, 24-hour peak *discharge* rate (Qp) to predevelopment rates. The Qp requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

iv. Extreme Flood Control Criteria (Qf): Requires storage to attenuate the post-development 100-year, 24-hour peak *discharge* rate (Qf) to predevelopment rates. The Qf requirement does not apply when:

1. the site *directly discharges* to tidal waters or fifth order or larger streams; or

2. A downstream analysis reveals that *overbank* control is not required.

c. *Sizing Criteria* for *Redevelopment Activity*

i. Water Quality Volume (WQv): The WQv treatment objective for *redevelopment activity* must be addressed by one of the following options, as outlined in Section 9.2.1. *Redevelopment activities* located in an Enhanced Phosphorus Removal Watershed (see Part III.B.3. and Appendix C) must calculate the WQv in accordance with Section 4.3 of the DM. All other *redevelopment activities* must calculate the WQv in accordance with Section 4.2 of the DM.

1. Reduce the existing *impervious cover* by a minimum of 25% of the total disturbed, *impervious area*. The Soil Restoration criteria in Section 5.1.6 of the DM must be applied to all newly created pervious areas; or

2. Capture and treat 100% of the required WQv, for a minimum of 25% of the disturbed redevelopment *impervious area*, by implementation of standard SMPs or reduced by application of runoff reduction techniques; or

3. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a volume-based alternative SMP, as defined in Section 9.4 of the DM; or

4. Capture and treat 100% of the required WQv, for a minimum of 75% of the disturbed redevelopment *impervious area*, by implementation of a flow-through alternative SMP sized to treat the peak rate of runoff from the WQv design storm; or

5. Application of a combination of 1 through 4 above that provide a weighted average of at least two of the above methods. Application of this method must be in accordance with the criteria in Section 9.2.1(A)(V) of the DM; or

6. If there is an existing SMP located on the site that captures and treats runoff from the *impervious area* that is being disturbed, the WQv treatment option selected must, at a minimum, provide treatment equal to the treatment that was being provided by the existing practice(s) if that treatment is greater than the treatment required by options 1 through 5 above.

ii. Channel Protection Volume (CPv) is not required if there is 0% change to hydrology that increases the *discharge* rate and volume from the project site.

iii. *Overbank* Flood Control (Qp) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

iv. Extreme Flood Control (Qf) is not required if there is 0% change to hydrology that increases the *discharge* rate from the project site.

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

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

Part III. Stormwater Pollution Prevention Plan (SWPPP)

A. General *SWPPP* Requirements

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

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

2. The *SWPPP* must demonstrate consideration in narrative format of the future physical risks due to climate change pursuant to the Community Risk and Resiliency Act (CRRA), 6 NYCRR Part 490, and associated guidance.

    a. The owner or operator must consider:

        i. the following physical risks due to climate change:

            (i) increasing temperature; and

            (ii) increasing precipitation; and

            (iii) increasing variability in precipitation, including chance of drought; and

            (iv) increasing frequency and severity of flooding; and

            (v) rising sea level; and

            (vi) increasing storm surge; and

            (vii) shifting ecology.

        ii. for each of the following:

            (i) overall site planning; and

            (ii) location, elevation, and sizing of:

                a. control measures and practices; and

                b. conveyance system(s); and

                c. detention system(s).

3. The *SWPPP* must describe the erosion and sediment control practices and where required, SMPs that will be used and/or constructed to reduce the *pollutants* in *stormwater discharges* and to assure compliance with the

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

4. All *SWPPPs*, that require the SMP component in accordance with Part III.B.2., must be prepared by a *qualified professional*.

5. The *owner or operator* must keep the *SWPPP* current so that, at all times, it accurately documents the erosion and sediment control practices that are being used or will be used during construction, and all SMPs that will be constructed on the site. At a minimum, the *owner or operator* must modify the *SWPPP*, including construction drawings:

   a. whenever the current provisions prove to be ineffective in *minimizing pollutants* in *stormwater discharges* from the site; and

   b. whenever there is a change in design, construction, or operation at the *construction site* that has or could have an effect on the *discharge* of *pollutants*; and

   c. to address issues or deficiencies identified during an inspection by the *qualified inspector,* NYSDEC, or other regulatory authority; and

   d. to document the final construction conditions in an as-built drawing.

6. NYSDEC may notify the *owner or operator* at any time that the *SWPPP* does not meet one or more of the minimum requirements of this permit. The notification must be in writing and identify the provisions of the *SWPPP* that require modification. Within fourteen (14) calendar days of such notification, or as otherwise indicated by NYSDEC, the *owner or operator* must make the required changes to the *SWPPP* and submit written notification to NYSDEC that the changes have been made. If the *owner or operator* does not respond to NYSDEC's comments in the specified time frame, NYSDEC may suspend the *owner's or operator's* coverage under this permit or require the *owner or operator* to obtain coverage under an individual SPDES permit in accordance with Part II.D.4.

7. Prior to the *commencement of construction activity*, the *owner or operator* must identify the contractor(s) and subcontractor(s) that will be responsible for installing, constructing, repairing, replacing, inspecting, and maintaining the erosion and sediment control practices included in the *SWPPP* and the

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

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

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

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

B. Required *SWPPP* Contents

1. Erosion and sediment control component - The *owner or operator* must prepare a *SWPPP* that includes erosion and sediment control practices.

    a. Erosion and sediment control practices must be designed:

        i. in conformance with the BB; or

        ii. *equivalent* to the BB if deviating from Part III.B.1.a.i.

    b. If the erosion and sediment control practices are designed in conformance with Part III.B.1.a.ii., the *SWPPP* must include a demonstration of *equivalence* to the BB.

    c. At a minimum, the erosion and sediment control component of the *SWPPP* must include the following:

        i. Background information about the scope of the project, including the location, type and size of project; and

        ii. A site map/construction drawing(s) with north arrows for the project, including a general location map. At a minimum, the site map must show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; existing vegetation; on-site and adjacent off-site surface water(s); floodplain/floodway boundaries; wetlands and drainage patterns that could be affected by the *construction activity*; existing and final contours; locations of different soil types with boundaries; material, waste, borrow or equipment storage areas located on adjacent properties; and location(s) of the *stormwater discharge*(s) and receiving surface water(s); and

        iii. A description of the soil(s) present at the site, including an identification of the Hydrologic Soil Group (HSG); and

        iv. A phasing plan for the project and sequencing plans for all *phases*, both of which must address clearing and grubbing, excavation and grading, utility and infrastructure installation, *final stabilization*,

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

1. The phasing plan must include:

    a. a map delineating and labeling the limits of soil disturbance for all *phases* of a project; and

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

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

    a. a table indicating the order and intended schedule of *construction activities* within a *phase*, and corresponding construction drawings with a description of the work to be performed; and

    b. all permanent and *temporary stabilization* measures; and

v. A description of the minimum erosion and sediment control practices to be installed or implemented for each *construction activity* that will result in soil disturbance. Include a schedule that identifies the timing of initial placement or implementation of each erosion and sediment control practice and the minimum time frames that each practice should remain in place or be implemented; and

vi. A site map/construction drawing(s) showing the specific location(s), size(s), and length(s) of each erosion and sediment control practice; and

vii. The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices. Include the location and sizing of any

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

viii. A maintenance inspection schedule for the contractor(s) and subcontractor(s) identified in Part III.A.7. to ensure continuous and effective operation of the erosion and sediment control practices. The maintenance inspection schedule must be in accordance with the requirements in the BB technical standard; and

ix. A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a *pollutant* source in the *stormwater discharges*; and

x. A description and location of any *stormwater discharges* associated with industrial activity other than construction at the site, including, but not limited to, *stormwater discharges* from asphalt plants and concrete plants located on the *construction site*; and

xi. Identification of any elements of the design that are not in conformance with the design criteria in the BB technical standard. Include the reason for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the technical standard.

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

   a. SMPs must be designed in conformance with the applicable *sizing criteria* in Part II.C.2.a., c., or d.; and

   b. SMPs must be designed in conformance with the *performance criteria*:

      i. in the DM; or

      ii. *equivalent* to the DM if deviating from Part III.B.2.b.i.; or

      iii. in the New York State Stormwater Management Design Manual, dated January 2015 (2015 Design Manual), or *equivalent* to it, if the following criteria are met:

1. The eNOI is submitted in accordance with Part I.D. before January 29, 2027 for *construction activities* that are either:

    a. subject to governmental review and approval:

        i. where the *owner or operator* made any application to that governmental entity prior to the effective date of this permit; and

        ii. such application included a *SWPPP* developed using the 2015 Design Manual or *equivalent* to it; or

    b. not subject to governmental review and approval:

        i. where a fiscal allocation for the *construction activities* has been developed and approved by a governmental entity; and

        ii. the *SWPPP* was developed using the 2015 Design Manual or *equivalent* to it; and

c. If SMPs are designed in conformance with Part III.B.2.b.ii., the *SWPPP* must include the reason(s) for the deviation or alternative design and a demonstration of *equivalence* to the DM; and

d. If SMPs are designed in conformance with Part III.B.2.b.iii., the *SWPPP* must include supporting information or documentation demonstrating that Part III.B.2.b.iii.1.a. or b. apply; and

e. The SMP component of the *SWPPP* must include the following:

    i. Identification of all SMPs to be constructed as part of the project, including which option the SMP designs conform to, either Part III.B.2.b.i., ii., or iii. Include the dimensions, material specifications and installation details for each SMP; and

    ii. A site map/construction drawing(s) showing the specific location and size of each SMP; and

iii. A Stormwater Modeling and Analysis Report that includes:

(i) Map(s) showing pre-development conditions, including watershed/subcatchments boundaries, flow paths/routing, and design points; and

(ii) Map(s) showing post-development conditions, including watershed/subcatchments boundaries, flow paths/routing, design points and SMPs; and

(iii) Results of *stormwater* modeling (i.e. hydrology and hydraulic analysis) for the required storm events. Include supporting calculations (model runs), methodology, and a summary table that compares pre- and post-development runoff rates and volumes for the different storm events; and

(iv) Summary table, with supporting calculations, which demonstrates that each SMP has been designed in conformance with the *sizing criteria* included in the DM; and

(v) Identification of any *sizing criteria* that is not required based on the requirements included in Part II.C.; and

(vi) Identification of any elements of the design that are not in conformance with the *performance criteria* in the DM. Include the reason(s) for the deviation or alternative design and provide information which demonstrates that the deviation or alternative design is *equivalent* to the DM.

iv. Soil testing results and locations (test pits, borings); and

v. Infiltration test results, when required in accordance with Part III.B.2.a.; and

vi. An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each SMP. The plan must identify the entity

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

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

C. Required *SWPPP* Components by Project Type

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

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

Part IV. Inspection and Maintenance Requirements

A. General Construction Site Inspection and Maintenance Requirements

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

B. Contractor Maintenance Inspection Requirements

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

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

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

    i. begin implementing corrective actions within one business day; and

    ii. complete the corrective actions within five business days; or

b. if the corrective action requires engineering design:

    i. begin the engineering design process within five business days; and

    ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

2. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. The *trained contractor* must begin conducting the maintenance inspections in accordance with Part IV.B.1. as soon as soil disturbance activities resume.

3. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the *trained contractor* can stop conducting the maintenance inspections in accordance with Part IV.B.1. if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational.

C. *Qualified Inspector* Inspection Requirements

1. With the exception of the following *construction activities* identified in Tables 1 and 2 of Appendix B, a *qualified inspector* must conduct site inspections for all other *construction activities* identified in Tables 1 and 2 of Appendix B:

    a. the construction of a single-family residential subdivision with 25% or less *impervious cover* at total site build-out that involves a soil disturbance of one (1) or more acres of land but less than or equal to five (5) acres and is

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

b. the construction of a single-family home that involves soil disturbances of one (1) or more acres but less than or equal to five (5) acres and is not located in one of the watersheds listed in Appendix C and not *directly discharging* to one of the 303(d) segments listed in Appendix D; and

c. construction on *agricultural property* that involves soil disturbances of one (1) or more acres but less than five (5) acres; and

d. *construction activities* located in the New York City Watershed located east of the Hudson River, see Appendix C Figure 1, that involve soil disturbances of 5,000 square feet or more, but less than one acre.

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

a. For *construction sites* where soil disturbance activities are on-going, the *qualified inspector* must conduct a site inspection at least once every seven (7) calendar days; or

b. For *construction sites* where soil disturbance activities are on-going and the *owner or operator* has received authorization in accordance with Part I.E.6. to disturb greater than five (5) acres of soil at any one time, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days; or

c. For *construction sites* where soil disturbance activities have been temporarily suspended (e.g. winter shutdown) and *temporary stabilization* measures have been applied to all disturbed areas, the *qualified inspector* must conduct a site inspection at least once every thirty (30) calendar days. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas under the jurisdiction of a *Traditional Land Use Control MS4 Operator,* the *Traditional Land Use Control MS4 Operator* (provided the *Traditional Land Use Control MS4 Operator* is not the *owner or operator* of the *construction activity*) by hard copy or email prior to reducing the inspections to this frequency and again by hard copy or email prior to re-commencing construction; or

d. For *construction sites* where soil disturbance activities have been shut down with partial project completion, the requirement to have the *qualified inspector* conduct inspections ceases if all areas disturbed as of the project shutdown date have achieved *final stabilization* and all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational. The *owner or operator* must notify the DOW Water (SPDES) Program contact at the Regional Office (see contact information in Appendix E) or, in areas subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1., the *Traditional Land Use Control MS4 Operator(s)* (provided the *Traditional Land Use Control MS4 Operator(s)* are not the *owners or operators* of the *construction activity*) in writing prior to the shutdown and again in writing prior to resuming *construction activity*. If soil disturbance activities are not resumed within 2 years from the date of shutdown, the *owner or operator* must terminate coverage by meeting the requirements of Part V; or

e. For *construction sites* involving soil disturbance of one (1) or more acres that *directly discharge* to one of the 303(d) segments listed in Appendix D or is located in one of the watersheds listed in Appendix C, the *qualified inspector* must conduct at least two (2) site inspections every seven (7) calendar days. The two (2) inspections must be separated by a minimum of two (2) full calendar days.

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

   a. all erosion and sediment control practices and pollution prevention measures to ensure integrity and effectiveness; and

   b. all SMPs under construction to ensure that they are constructed in conformance with the *SWPPP*; and

   c. all areas of disturbance that have not achieved *final stabilization*; and

   d. all points of *discharge* to *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site*; and

   e. all points of *discharge* from the *construction site*.

4. The *qualified inspector* must prepare an inspection report subsequent to each and every inspection. At a minimum, the inspection report must include and/or address all of the following, for all *construction activities* except those listed in Part IV.C.1.:

   a. Permit identification number; and

   b. Date and time of inspection; and

   c. Name and title of person(s) performing inspection; and

   d. A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection, including the temperature at the time of the inspection; and

   e. A description of the condition of the runoff at all points of *discharge* from the *construction site*. This must include identification of any *discharges* of sediment from the *construction site*. Include *discharges* from conveyance systems (i.e. pipes, culverts, ditches, etc.) and overland flow; and

   f. A description of the condition of all *surface waters of the State* located within, or immediately adjacent to, the property boundaries of the *construction site* which receive runoff from disturbed areas. This must include identification of any *discharges* of sediment to the *surface waters of the State*; and

   g. Identification of all erosion and sediment control practices and pollution prevention measures that need repair or maintenance; and

   h. Identification of all erosion and sediment control practices and pollution prevention measures that were not installed properly or are not functioning as designed and need to be reinstalled or replaced; and

   i. Description and sketch (map) of areas with active soil disturbance activity, areas that have been disturbed but are inactive at the time of the inspection, and areas that have been stabilized (temporary and/or final) since the last inspection; and

   j. Estimates, in square feet or acres, of the following areas:

i. Total area with active soil disturbance (not requiring either *temporary stabilization* or *final stabilization*); and

ii. Total area with inactive soil disturbance (requiring either *temporary stabilization* or *final stabilization*); and

iii. Total area that has achieved *temporary stabilization*; and

iv. Total area that has achieved *final stabilization*; and

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

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

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

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

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

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

i. begin implementing corrective actions within one business day; and

ii. complete the corrective actions within five business days; or

b. if the corrective action requires engineering design:

i. begin the engineering design process within five business days; and

ii. complete the corrective action in a reasonable time frame but no later than within 60 calendar days.

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

Part V. How to Terminate CGP Coverage

A. Electronic Notice of Termination (eNOT) Submittal

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

1. An *owner or operator* must terminate coverage when one or more of the following requirements have been met:

a. Total project completion:

i. all *construction activity* identified in the *SWPPP* has been completed; and

ii. all areas of disturbance have achieved *final stabilization*; and

iii. all temporary, structural erosion and sediment control measures have been removed; and

iv. all SMPs have been constructed in conformance with the *SWPPP* and are operational; and

v. an as-built drawing has been prepared; or

b. Planned shutdown with partial project completion:

   i. all soil disturbance activities have ceased; and

   ii. all areas disturbed as of the project shutdown date have achieved *final stabilization*; and

   iii. all temporary, structural erosion and sediment control measures have been removed; and

   iv. all SMPs required for the completed portion of the project have been constructed in conformance with the *SWPPP* and are operational; and

   v. an as-built drawing has been prepared; or

c. In accordance with Part I.G. Change of Owner or Operator; or

d. The *owner or operator* has obtained coverage under an alternative general SPDES permit or an individual SPDES permit.

2. For *construction activities* that require *qualified inspector* inspections in accordance with Part IV.C.1. and have met Part V.A.1.a. or b., the *owner or operator* must have the *qualified inspector* perform a final site inspection prior to submitting the eNOT. The *qualified inspector* must, by signing the "Final Stabilization" and "Post-Construction Stormwater Management Practice(s)" certification statements on the eNOT, certify that all the requirements in Part V.A.1.a. or b. have been achieved.

3. For *construction activities* that are subject to the review authority of *Traditional Land Use Control MS4 Operator(s)* in accordance with Part I.D.2.b.ii.1. and meet Part V.A.1.a. or b., the *owner or operator* must have the *Traditional Land Use Control MS4 Operator(s)* sign the "MS4 Acceptance" statement on the eNOT in accordance with the requirements in Part VII.J. A *Traditional Land Use Control MS4 Operator* official, by signing this statement, determined that it is acceptable for the *owner or operator* to submit the eNOT in accordance with the requirements of this Part. A *Traditional Land Use Control MS4 Operator* can make this determination by performing a final site inspection themselves or by accepting the *qualified inspector*'s final site inspection certification(s) when required in Part V.A.2.

4. For *construction activities* that require SMPs and meet Part V.A.1.a. or b., the *owner or operator* must, prior to submitting the eNOT, ensure one of the following:

    a. for SMP(s) that were constructed by a private entity, but will be owned, operated, and maintained by a public entity, the SMP(s) and any right-of-way(s) needed to operate and maintain such practice(s) have been deeded to the municipality in which the practice(s) is located; or

    b. for SMP(s) that are privately owned, but will be operated and maintained by a public entity, an executed operation and maintenance agreement is in place with the municipality that will operate and maintain the SMP(s); or

    c. for SMP(s) that are privately owned, the *owner or operator* has a mechanism in place that requires operation and maintenance of the practice(s) in accordance with the operation and maintenance plan, such as a deed covenant in the *owner or operator's* deed of record; or

    d. for SMP(s) that are owned by a public or private institution (e.g. school, university, hospital), government agency or authority, or public utility, the *owner or operator* has policies and procedures in place that ensure operation and maintenance of the practices in accordance with the operation and maintenance plan.

5. An *owner or operator* that has met the requirements of Part V.A.1., 2., 3., and 4. must request termination of coverage under this permit by submitting a complete Notice of Termination form electronically using a NYSDEC approved form.[5]

    a. The owner's or operator's coverage is terminated as of the termination date indicated in the Letter of Termination (LOT), which is sent by NYSDEC after a complete eNOT is submitted.

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

Part VI. Record Retention and Reporting

A. Record Retention

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

B. Reporting

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

Part VII. Standard Permit Requirements

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

A. Duty to Comply

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

B. Need to Halt or Reduce Activity Not a Defense

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

C. Penalties

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

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

D. False Statements

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

E. Re-Opener Clause

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

F. Duty to Mitigate

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

G. Requiring Another General Permit or Individual SPDES Permit

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

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

a. the *owner or operator* is not in compliance with the conditions of this permit or does not meet the requirements for coverage under this permit; and

b. a change has occurred in the availability of demonstrated technology or practices for the control or abatement of *pollutants* applicable to the *point source*; and

c. new effluent limitation guidelines or new source performance standards are promulgated that are applicable to *point sources* authorized to *discharge* in accordance with this permit; and

d. existing effluent limitation guidelines or new source performance standards that are applicable to *point sources* authorized to *discharge* in accordance with this permit are modified; and

e. a water quality management plan containing requirements applicable to such *point sources* is approved by NYSDEC; and

f. circumstances have changed since the time of the request to be covered so that the *owner or operator* is no longer appropriately controlled under this permit, or either a temporary or permanent reduction or elimination of the authorized *discharge* is necessary; and

g. the *discharge* is in violation of section 17-0501 of the ECL; and

h. the *discharge(s)* is a significant contributor of *pollutants*. In making this determination, NYSDEC may consider the following factors:

   i. the location of the *discharge(s)* with respect to *surface waters of the State*; and

   ii. the size of the *discharge(s)*; and

   iii. the quantity and nature of the *pollutants discharged* to *surface waters of the State*; and

   iv. other relevant factors including compliance with other provisions of ECL Article 17, or the CWA.

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

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

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

H. Duty to Provide Information

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

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

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

I. Extension

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

[6] The Regional Water Manager where a DEC Region does not have a RWE.

J. Signatories and Certification

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

1. All Notices of Intent and Notices of Termination must be signed as follows:

    a. For a corporation. By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

        (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

        (ii) the manager of one or more manufacturing, production or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for Notice of Intent or Notice of Termination requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

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

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

c. For a municipality, State, Federal, or other public agency. By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

    1. the chief executive officer of the agency; or

    2. a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

2. All reports required by this permit, and other information requested by NYSDEC, must be signed by a person described in Part VII.J.1., or by a duly authorized representative of that person. A person is a duly authorized representative only if:

    a. The authorization is made in writing by a person described in Part VII.J.1. or using the Duly Authorized Form, found on the DEC website; and

    b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

    c. The written authorization is submitted to NYSDEC.

3. Changes to authorization. If an authorization under Part VII.J.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the *construction activity*, a new authorization satisfying the requirements of Part VII.J.2. must be submitted to NYSDEC prior to or together with any reports, information, or applications to be signed by an authorized representative.

4. Certification. Any person signing a document under Part VII.J.1. or 2. must make the following certification:

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

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

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

K. Inspection and Entry

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

1. enter upon the *owner's or operator's* premises where a regulated facility or activity is located or conducted or where records must be kept under the requirements of this permit; and

2. have access to and copy at reasonable times, any records that must be kept under the requirements of this permit, including records required to be maintained for purposes of operation and maintenance; and

3. inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and

4. sample or monitor at reasonable times, for the purposes of assuring general SPDES permit compliance or as otherwise authorized by the CWA or ECL, any substances or parameters at any location; and

5. enter upon the property of any contributor to the regulated facility or activity under authority of the *owner or operator*.

L. Confidentiality of Information

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

M. Other Permits May Be Required

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

N. NYSDEC Orders or Civil Decrees/Judgments

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

O. Property Rights

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

P. Compliance with Interstate Standards

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

Q. Oil and Hazardous Substance Liability

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

R. Severability

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

S. NYSDEC Approved Forms

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

APPENDIX A – Abbreviations and Definitions

Abbreviations

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

Definitions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

1. owned or operated by a State, city, town, village, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, *stormwater*, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA, that *discharges* to *surface waters of the State*; and

2. designed or used for collecting or conveying *stormwater*; and

3. which is not a *combined sewer system*; and

4. which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX B – Required SWPPP Components by Project Type

Table 1
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

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

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

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

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

Within the municipal boundaries of NYC:

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

The following *construction activities*:

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

Table 1 (Continued)
CONSTRUCTION ACTIVITIES THAT REQUIRE THE PREPARATION OF A *SWPPP* THAT ONLY INCLUDES EROSION AND SEDIMENT CONTROLS

The following *construction activities*:

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

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

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

The following *construction activities*:

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

Table 2 (Continued)

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

The following *construction activities*:

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

APPENDIX C – Watersheds Requiring Enhanced Phosphorus Removal

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

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

Figure 1 - New York City Watershed East of the Hudson

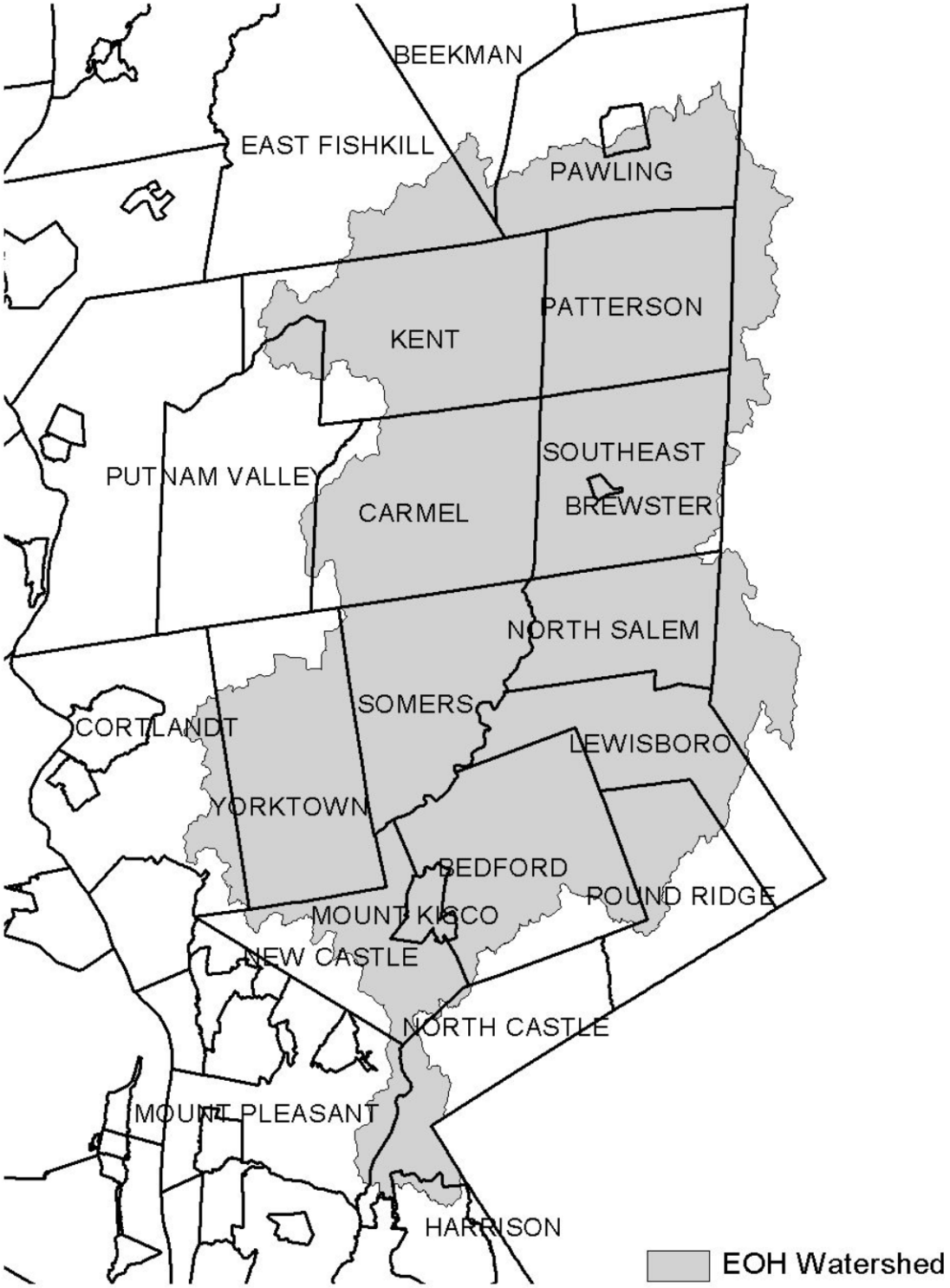


Figure 2 - Onondaga Lake Watershed



Figure 3 - Greenwood Lake Watershed

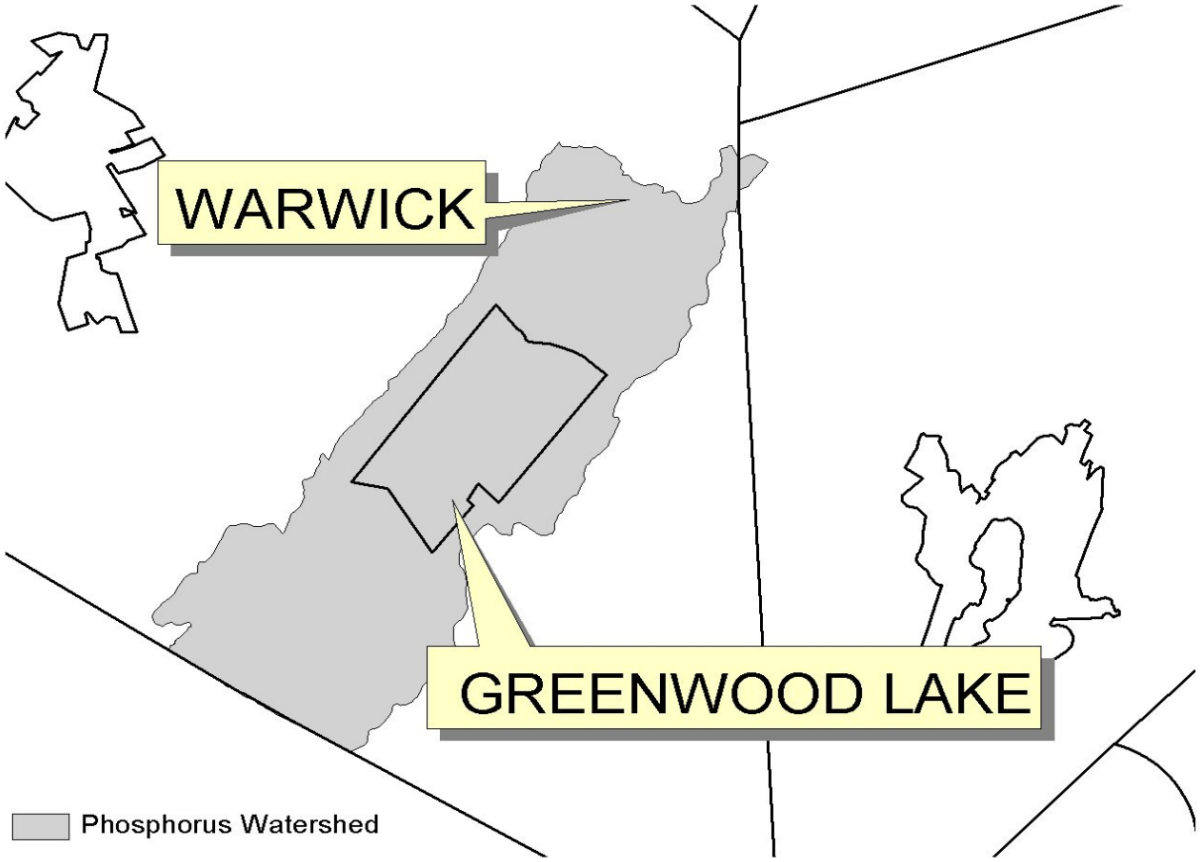


Figure 4 - Oscawana Lake Watershed

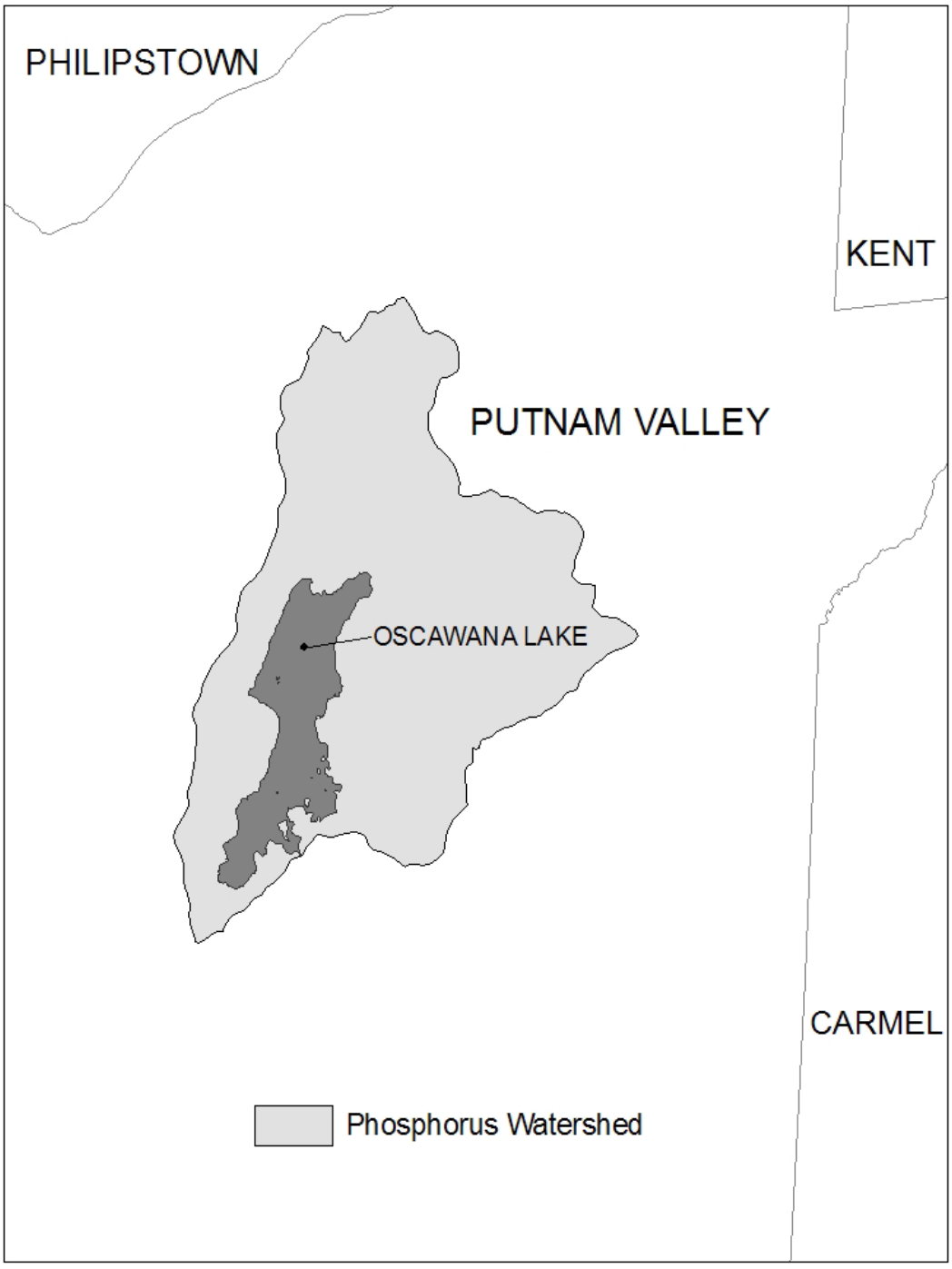
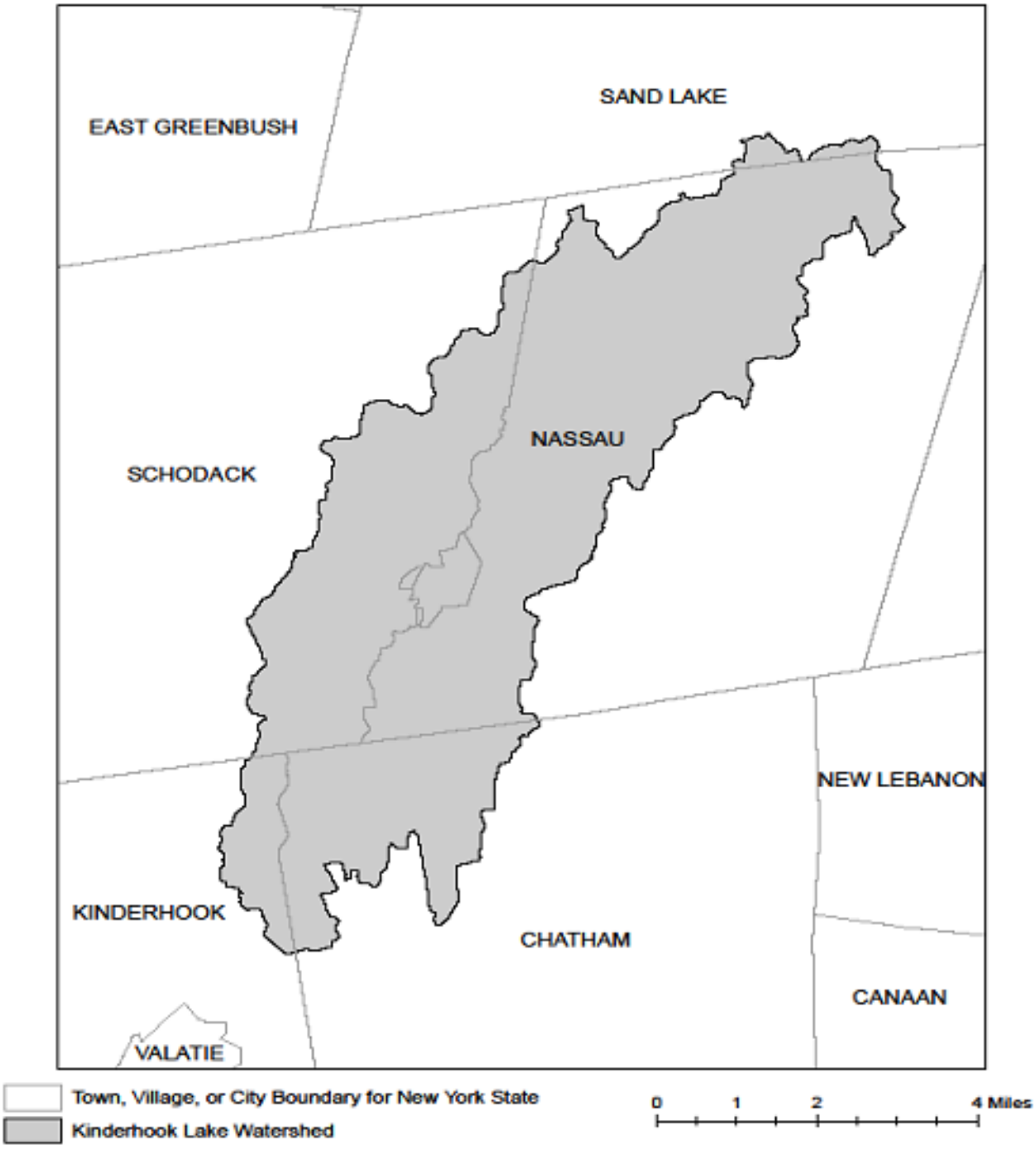


Figure 5 - Kinderhook Lake Watershed



APPENDIX D – Impaired Waterbodies (by Construction Related Pollutants)

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

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

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

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

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

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

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

APPENDIX E – List of NYSDEC Regional Offices

Region	Covering the following counties:	DIVISION OF ENVIRONMENTAL PERMITS (DEP) Permit Administrators	DIVISION OF WATER (DOW) Water (SPDES) Program
1	Nassau and Suffolk	50 Circle Road Stony Brook, NY 11790 Tel. (631) 444-0365	50 Circle Road Stony Brook, NY 11790-3409 Tel. (631) 444-0405
2	Bronx, Kings, New York, Queens and Richmond	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4997	1 Hunters Point Plaza, 47-40 21st St. Long Island City, NY 11101-5407 Tel. (718) 482-4933
3	Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster and Westchester	21 South Putt Corners Road New Paltz, NY 12561-1696 Tel. (845) 256-3059	220 White Plains Road, Suite 110 Tel. (914) 428 - 2505
4	Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady and Schoharie	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2069	1130 North Westcott Road Schenectady, NY 12306-2014 Tel. (518) 357-2045
5	Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren and Washington	1115 State Route 86, Po Box 296 Ray Brook, NY 12977-0296 Tel. (518) 897-1234	232 Golf Course Road Warrensburg, NY 12885-1172 Tel. (518) 623-1200
6	HERKIMER, JEFFERSON, LEWIS, ONEIDA AND ST. LAWRENCE	STATE OFFICE BUILDING 317 WASHINGTON STREET WATERTOWN, NY 13601-3787 TEL. (315) 785-2245	STATE OFFICE BUILDING 207 GENESEE STREET UTICA, NY 13501-2885 TEL. (315) 793-2554
7	BROOME, CAYUGA, CHENANGO, CORTLAND, MADISON, ONONDAGA, OSWEGO, TIOGA AND TOMPKINS	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7438	5786 WIDEWATERS PARKWAY SYRACUSE, NY 13214-1867 TEL. (315) 426-7500
8	CHEMUNG, GENESEE, LIVINGSTON, MONROE, ONTARIO, ORLEANS, SCHUYLER, SENECA, STEUBEN, WAYNE AND YATES	6274 EAST AVON-LIMA ROADAVON, NY 14414-9519 TEL. (585) 226-2466	6274 EAST AVON-LIMA RD. AVON, NY 14414-9519 TEL. (585) 226-2466
9	ALLEGANY, CATTARAUGUS, CHAUTAUQUA, ERIE, NIAGARA AND WYOMING	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7165	700 DELAWARE AVENUE BUFFALO, NY 14209-2999 TEL. (716) 851-7070

APPENDIX L: CONSTRUCTION SITE INSPECTION, WINTER SHUTDOWN AND SWPPP REVISION FORM

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

Standardized Qualified Inspector Form

Project Name and Location of Project: _____ _____ _____ Municipality:_____ County: _____ Qualified Inspector: _____ Qualified Inspector Title:_____	Date:	Weather:
	Permit #: **NYR10**	
	Entry Time:	Exit Time:
5 Acre Waiver: □ Yes □ No Name of SPDES Permittee:_____ Phone: _____Fax:_____ Name of Representative on Site: _____		

Qualified Inspector's Credentials & Certification

Qualified Inspector (QI) means a person that is knowledgeable in the principles and practices of erosion and sediment control (ESC). A person is considered qualified under the following conditions:

1. A licensed Professional Engineer; licensed Landscape Architect with documented training and education in the principles and practices of ESC;
2. An individual certified in ESC by CPESC, Incorporated or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources;
3. An individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect with documented training and education in the principles and practices of ESC **and has** completed the four (4) hour training program in the principles and practices of erosion and sediment control from either a Soil and Water Conservation District, CPESC or any other agency endorsed by the NYS Department of Environmental Conservation Office of Water Resources. This initial training must be completed no later than May 1, 2010. After receiving the initial training, an individual working under the direct supervision of a qualified licensed Professional Engineer or qualified licensed Landscape Architect must complete four (4) hours of training every three (3) years.
4. Any other individual endorsed by the NYS Department of Environmental Conservation by written documentation.
5. 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.1

Part I. CONSTRUCTION DURATION INSPECTIONS **Page 2 of _____**

a. Important Site Notes for Contractor. Failure to maintain these requirements may be subject to fines at discretion of NYS Dept. of Environmental Conservation.

#1: Is the most recent SWPPP book & SWPPP Mailbox on site?
- Or located inside job trailer & easily accessible?

#2: Is the most recent SWPPP inspection(s) located in the mailbox or on site?

#3: If the site has a 5 acre waiver, is the phasing plan located on site?
-Is the contractor following the approved phasing plan?

LIST OF DEFICIENCES NOTED BY INSPECTOR:
-
-
-
-
-
-
-

CONTRACTOR TO REFER TO ATTACHED SKETCH DRAWING FOR LOCATIONS, AS WELL AS FOLLOWING SHEETS.

b. Other Permit Required Reporting

Maintaining Water Quality - *Attach Color Photographs of the site documenting discharge points and site conditions.*
Describe the condition of runoff at all points of discharge.
Is there an increase in turbidity causing a substantial visible contrast to natural conditions? _____
Is there residue from oil and floating substances, visible oil film, or globules or grease? _____
Is there evidence of silt deposition from project in a stream, wetland, or other water body? _____
If yes, where? _____remedial measure needed? _____
Provide a description of the conditions of all natural water bodies within or immediately adjacent to the project. _____

Area of Disturbance
Total area of disturbance (as shown on sketch plan and not including areas that have temporary or permanent stabilization measures applied) _____
Are all disturbances within the limits of the SWPPP? _____

Weather Conditions
A description of the weather and soil conditions (e.g. dry, wet, saturated) at the time of the inspection;
_____
_____

General Housekeeping
Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?_____
Is construction impacting the adjacent property? _____
Is dust adequately controlled?_____
Describe corrective action(s): _____
Date correction needed: _____

c. Runoff Controls *Direct runoff away from exposed soil surfaces and control water that falls onto the site*

Runoff conveyance systems ☐ N A
Are all runoff conveyance systems called for in the SWPPP installed, stabilized and working? _____
If not, what specific areas need detailing?_____
With minimum side slopes 2H:1V or flatter? _____ Stabilized by geotextile fabric, seed, or mulch with no erosion occurring? _____Sediment-laden runoff directed to sediment trapping structure? _____
Describe corrective action(s): _____
Date correction needed: _____

Runoff Control Structures ☐ N A
Have all required runoff control structures (rock outlets and aprons) been installed and constructed per plan and according to the Blue Book?_____ Installed concurrently with pipe installation? _____
Describe corrective action(s): _____
Date correction needed: _____

Temporary Stream or Channel Crossing □ N A
Have construction crossings at concentrated flow areas been culverted?_____
Describe corrective action(s): _____
Date correction needed: _____

Stone Check Dam □ N A
Installed per standards? _____ channel stable (flow is not eroding soil underneath or around the structure). _____does sediment need to be removed? _____
Describe corrective action(s): _____
Date correction needed: _____

Excavation Dewatering □ N A
1. Flowing water □ N A – Upstream berm (sandbags, inflatable dams, etc. with one-foot minimum freeboard) and downstream berms are installed per plan? _____and functioning? (clean water from upstream pool is being pumped to the downstream pool)?
_____
2. Sediment laden water from work area □ N A - Is being discharged to a silt-trapping device? _____
3. Groundwater from excavations □ N A - is being managed properly (sumps and sediment control)? _____
Describe corrective action(s): _____
Date correction needed: _____

d. Soil Stabilization *Basic erosion control is achieved by covering all bare ground areas.*

Topsoil and Spoil Stockpiles □ N A
Stabilized - sediment controls at downhill slope? _____
Describe corrective action(s): _____
Date correction needed: _____

Revegetation/Stabilization □ N A
Has temporary or permanent seeding *and* mulch (as shown on site sketch plan) been applied to areas that have been inactive for 14 days or less (or, inactive for 7 days if over 5 acres disturbed)?_____
Has soil preparation been applied as specified in the SWPPP and in accordance with the Blue Book (Assure that all the necessary soil testing/fertilizer/lime, topsoil, decompaction has been applied)?
_____
Have rolled erosion control products specified for steep slopes or channels been installed? _____
Describe corrective action(s): _____
Date correction needed: _____

e. Sediment Controls

Stabilized Construction Entrance □ N A
Stone is clean and all access areas covered (entrances, construction routes, materials storage areas, equipment parking)?_____ Tracking onto public streets is minimized and cleaned daily? _____
Describe:_____
Date correction needed: _____

Silt Fence □ N A

Installed on contour? not across conveyance channels?_____ At least 10 feet from toe of slope?_____At appropriate spacing intervals based on slope?_____Wrapped ends for continuous support?_____Fabric is tight, without rips or frayed areas?_____Posts are stable?_____ buried 6 inches minimum?_____Any "bulges"?_____
Describe:_____
_____
Date correction needed: _____

Temporary Sediment Trap □ N A

Is outlet structure constructed properly?_____geotextile fabric has been placed beneath rock fill?_____Maintenance – depth of sediment in basin? _____ 50% capacity? _____
Describe:_____
_____
Date correction needed: _____

Temporary Sediment Basin □ N A

Is basin and outlet structure constructed per the approved plan? _____
Are basin side slopes stabilized with seed/mulch? _____
Maintenance – depth of sediment in basin? _____ 50% capacity? _____
Describe:_____
_____
Date correction needed: _____

Drop Inlet Protection □ N A

Type(s) of inlet control? _____
Installed per Blue Book specifications: drainage area (typically 1 acre)? _____
Appropriate for location? _____
Describe:_____
_____
Date correction needed: _____

f. 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.

g. 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.

h. 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):_____

_____
_____
_____

i. Revisions to SWPPP

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 other report, 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 and/or the MS4, they shall promptly submit such facts or information. 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 permit violation (GP-0-10-001 PartVII.G)

_____
_____
_____
_____

j. Inspection Notes and Signature

Inspection Notes:

_____
_____
_____
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_____
_____

Standardized Qualified Inspector Form

PART I. j. Signature

GP-0-10-001 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*:_____

Compliance certification:

Received and reviewed by_____Title:_____

The above signed acknowledges receipt of this inspection report

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 15th to the following April 1st.

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.

CONR 8
(1/21)

SPDES STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REVISION

JOB STAMP

Date: _____

Day of Week: S M T W T F S

Sheet No. ____ of ____

This form is to be used when revisions to the current Stormwater Pollution Prevention Plan (SWPPP) are required by SPDES General Permit for Stormwater Discharges from Construction Activity. The completed form must be filed in the Engineer's Field Office.

Reason for the Revision(s): Revision(s) were requested by NYSDEC: ☐ Yes ☐ No

Describe the Revision(s) to the SWPPP:

Engineer-in-Charge Signature: _____

EICs Name & Title: _____

Date Completed: _____

Print Form

Copy to Contractor: _____

APPENDIX M: MS4 SWPPP ACCEPTANCE FORM

MS4 SWPPP Acceptance Form

for construction activities seeking authorization under the

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

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

I. Project Owner/Operator Information	
1. Owner/Operator Name:	Park Grove Realty, LLC
2. Contact Person:	Andrew Bodewes
3. Street Address:	46 Prince Street
4. City/State/Zip:	Rochester, NY 14607
II. Project Site Information	
5. Project/Site Name:	Auburn Community Hospital Health Campus
6. Street Address:	23 Perrine Street, 147 North Street, 143 North Street W Park Avenue
7. City/State/Zip:	Auburn, NY 13021
III. Stormwater Pollution Prevention Plan (SWPPP) Review and Acceptance Information	
8. SWPPP Reviewed by:	
9. Title/Position:	
10. Date Final SWPPP Reviewed and Accepted:	
IV. Regulated MS4 Information	
11. Name of MS4 Operator:	
12. MS4 SPDES Permit Identification Number: NYR20A	
13. Street Address:	
14. City/State/Zip:	
15. Telephone Number:	

MS4 SWPPP Acceptance Form - continued

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

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

Printed Name[1]:

Title/Position:

Signature:

Date:

VI. Additional Information

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

(NYSDEC - MS4 SWPPP Acceptance Form - January 2025)

APPENDIX N: NOTICE OF INTENT, SWPPP PREPARER CERTIFICATION, OWNER CERTIFICATION FORMS.

Construction General Permit (CGP) Electronic Notice of Intent (eNOI) GP-0-25-001

version 1.17

(Submission #: HQM-SF4T-KB52S, version 1)

Details

Originally Started By	Pamela Freeman
Alternate Identifier	Auburn Community Hospital Health Campus—Region 7
Submission ID	HQM-SF4T-KB52S
Status	Draft

Form Input

Eligibility

Disturbance Threshold

1. Will the construction activity involve soil disturbances listed in Part I.A.1 of GP-0-25-001?
Yes

1.a. Will any runoff from the site enter a sewer system classified as a combined sewer?
No

1.b. Is this a remediation project being done under a Department approved work plan (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.) with a SWPPP which meets the substantive requirements of GP-0-25-001?
No

1.c. Is the construction activity related to a stormwater discharge that does not require a permit as described in 40 CFR 122.3(e), e.g. non-point source agriculture or silviculture activities?
No

Other SPDES Permits

2. Will the discharge from the construction activity meet all conditions listed in Part I.A.2 of GP-0-25-001?
Yes

Threatened and Endangered Species

3. Will the construction activity potentially adversely affect a species that is endangered or threatened per Part I.A.3.?
No

State Historic Preservation Act (SHPA)

4. Is the construction activity designated by the Commissioner of the Office of Parks, Recreation and Historic Preservation (OPRHP), pursuant to 9 NYCRR §§428.12 or 428.13 as exempt from the SHPA review (see Attachment 2 of the Letter of Resolution between NYSDEC and OPRHP, dated January 9, 2015)?
No

4.a. Will the construction activity:

a) occur within an archeologically sensitive area indicated on the sensitivity map, or

b) have the potential to affect a property that is listed or determined to be eligible for listing on the Na or State Registers of Historic Places, or

c) include a new permanent building on the construction site within the following distances from a building, structure, or object that is more than 50 years old and OPRHP, a Historic Preservation Commission of a Certified Local Government, or a qualified preservation professional has determinec historically/archeologically significant building, structure, or object:

- 1-5 acres of disturbance—20 feet
- 5-20 acres of disturbance—50 feet
- 20+ acres of disturbance—100 feet?

No

4.b. Is there documentation at the construction site demonstrating:

a) that the construction activity is not within an archeologically sensitive area indicated on the sensiti map, and that the construction activity is not immediately adjacent to a property listed or determined t eligible for listing on the National or State Registers of Historic Places, and

b) that there is no new permanent building to be built 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 OPRHP, a Historic Preserva Commission of a Certified Local Government, or a qualified preservation professional has determinec 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?

Yes

State Environmental Quality Review (SEQR)

5. Is the construction activity subject to SEQR (Part I.A.5.), or the equivalent environmental review from another NYS or federal agency (Part I.A.6.)?
Yes

5.a. Has the owner/operator obtained documentation that the project review pursuant to SEQR, or the equivalent, has been satisfied per Part I.A.5. or I.A.6. of GP-0-25-001?
Yes

Uniform Procedures Act (UPA) Permits

6. Has the owner/operator obtained all necessary UPA permits from NYSDEC, or the equivalent from another NYS or federal agency per Part I.A.7.a. of GP-0-25-001? Select "Yes" if no UPA permits, or the equivalent, are required for this construction activity.
Yes

Steep Slope

7. Is the construction activity within the watershed of surface waters of the State classified as AA or AA-S identified utilizing the Stormwater Interactive Map on NYSDEC's website?
No

Owner/Operator Information

8. Owner/Operator Name
Park Grove Realty

9. Owner/Operator Contact Person Information

First and Last Name	Phone	E-mail
Andrew Bodewes	585-435-4766	abodewes@parkgrovellc.com

10. Owner/Operator Mailing Address
46 Prince Street
Rochester, NY 14607
USA

11. Is the billing contact different from the Owner/Operator Contact?
No

12. What type of organization is the owner/operator?
Other: Private Entity

Site Information

13. Project/Site Name
Auburn Community Hospital Health Campus

14. Site Address
23 Peerine Street, 147 North Street, 143 North St., 1 West Park
Auburn, NY 13021
Cayuga

DEC Region
7

15. Site Latitude & Longitude
42.9411661,-76.56771619999999

Project Details

16. This eNOI submission is for:
A construction activity not part of a common plan of development or sale in accordance with Part I.D.1.a.

17. Does the project type fall under Table 1 or Table 2 of Appendix B of GP-0-25-001? If any portion of the construction activity falls under Table 2, regardless of the size of the disturbance, select "Table 2".
Table 2

18. Consistent with Part III.B.1.c.i. of GP-0-25-001, provide a concise overview of the project. Describe existing and proposed conditions, and include any other relevant information.
Demolition of the existing buildings and infrastructure on the site followed by the construction of a Medical Office Building with a +/- 30,400 sq. ft. footprint and a total building area of +/- 80,750 sq. ft. Site improvements will include internal access drives, parking areas, sidewalks, landscaping and utility connections to serve the proposed building.

Enter the total project site acreage, the acreage to be disturbed, and the future impervious area (acreage) within the disturbed area, rounded to the nearest tenth of an acre.

19. Total Site Area (acres)
5.4

20. Total Area to be Disturbed (acres)
5.0

21. Existing Impervious Area to be Disturbed (acres)
2.1

22. Future Impervious Area Within Disturbed Area (acres)
2.6

Nature of the project:
Redevelopment with increase in impervious area

23. Do you plan to disturb more than 5 acres of soil at any one time?
No

---

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

A (%)
0

B (%)
0

C (%)
33

D (%)
67

25. Enter the planned start and end dates of the disturbance activities.

Start Date
04/01/2027

End Date
04/01/2028

26. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
Owasco River

27. Type of waterbody identified in question 26?
River Off Site

28. Has the surface waterbody in question 26 been identified as a 303(d) segment in Appendix D of GP-0-25-001?
No

29. Is this project located in one of the Watersheds identified in Appendix C of GP-0-25-001?
No

30. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

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

31.a. What is the name of the municipality/entity that owns the separate storm sewer system? If the separate sewer system is owned by an MS4 Operator, enter the MS4 Operator name.
Fifth Ward Sewer District

32. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

33. Is this property owned by a state authority, state agency, federal government or local government?
No

Required SWPPP Components

General SWPPP Requirements

34. Has a SWPPP been developed in conformance with the requirements in Part III. of GP-0-25-001?
Yes

35. Does the SWPPP demonstrate consideration of the future physical risks due to climate change pursuant to the CRRA, 6 NYCRR Part 490, and associated guidance per Part III.A.2. of GP-0-25-001?
Yes

36. 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

37. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the NYS Stormwater Management Design Manual?
Yes

37.a. Which version of the NYS Stormwater Management Design Manual was used to develop the SWPPP?
2024

SWPPP Preparer

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

40. Name of the person who prepared the SWPPP
Andrew Burns

41. SWPPP Preparer Organization Name
Passero Associates

42. SWPPP Preparer Contact Information

First and Last Name	Phone	E-mail
Andrew Burns	585-325-1000	aburns@passero.com

43. SWPPP Preparer Address

242 West Main St., S100
Rochester, NY 14614

Download SWPPP Preparer Certification Form

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

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form
3) Upload the completed form
Download SWPPP Preparer Certification Form

44. Please upload the SWPPP Preparer Certification

Auburn appf_swppcertform.pdf - 04/13/2026 12:49 PM
Comment
NONE PROVIDED

44.a. Has the SWPPP Preparer Certification Form been signed by the SWPPP preparer in accordance with Part VII.J of GP-0-25-001?
Yes

Erosion & Sediment Control Criteria

45. Has a construction sequence schedule for the planned management practices been prepared?
Yes

Post-Construction Criteria

Site Planning and Soil Restoration

46. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Locating Development in Less Sensitive Areas

47. 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.
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).

Water Quality Criteria

49. Water Quality Sizing Criteria

Total WQv required (acre-feet)	Total RRv provided (acre-feet)	Minimum RRv (acre-feet)	Total WQv provided (acre-feet)	Sum of RRv and WQv provided
0.091	0.091			0.091

Water Quantity Criteria

50. Per Section 9.2.1.C.VI and VII of the 2024 Design Manual, is there 0% change to hydrology that increases the discharge rate and volume from the project site?
No

51. Does one of the waiver conditions apply to the channel protection for this construction activity?
No

51.b.i. CPv Required (acre-feet)
0.319

51.b.ii. CPv Provided (acre-feet)
0.408

52. Does one of the waiver conditions apply to the Qp and Qf for this construction activity?
No

Overbank Flood Control Criteria (Qp)

52.b.i. Pre-Development (CFS)
13.880

52.b.ii. Post-Development (CFS)
12.630

Total Extreme Flood Control Criteria (Qf)

52.b.iii. Pre-Development (CFS)
30.130

52.b.iv. Post-Development (CFS)
23.780

Operation and Maintenance

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

53.a. Identify the entity responsible for the long-term Operation and Maintenance.
Owner

Post-Construction SMP Identification

54. Post-Construction RR Techniques and Standard SMPs

RR Techniques and SMPs	Contributing Impervious Area (acres)	Total Contributing Area (acres)
Filtration Bioretention (F-5)	3.0	

55. Alternative SMPs

Type of Alternative SMP	Manufacturer of the Alternative SMP	Name of the Alternative SMP	Contributing Impervious Area (acres)
NONE PROVIDED	*NONE PROVIDED*	*NONE PROVIDED*	*NONE PROVIDED*

Other Permits

56. Identify other permits, existing and new, that are required for this project/facility.
None

57. Is this NOI for a change in owner/operator per Part I.G.?
No

MS4 SWPPP Acceptance

59. Will the construction activities be within the municipal boundary(ies) of Traditional Land Use Control MS4 Operator(s) and discharge to the MS4(s)?
Yes

59.a. Which form is required per Part I.D.2.b.ii.?
MS4 SWPPP Acceptance Form

MS4 SWPPP Acceptance Form Download

Download the MS4 SWPPP Acceptance Form from the link below.
MS4 SWPPP Acceptance Form

60. MS4 Acceptance or No Jurisdiction Form Upload

NONE PROVIDED

Comment

NONE PROVIDED

60.a. Has the form been signed by the principal executive officer or ranking elected official—or duly authorized representative of that person—in accordance with Part VII.J. and submitted along with this NOI?
Yes

Owner/Operator Certification

Owner/Operator Certification Form Download

Download the Owner/Operator Certification Form by clicking the link below.
Owner/Operator Certification Form

61. Upload Owner/Operator Certification Form

> Auburn appj_operatorcertform.pdf - 04/13/2026 01:16 PM
> **Comment**
> *NONE PROVIDED*

61.a. Has the Owner/Operator Certification Form from Appendix J been signed by the owner/operator, or a representative of the owner/operator in accordance with Part VII.J of GP-0-25-001 and uploaded to the eNOI?
Yes

Additional Project Information

62. Enter any additional pertinent project information in the text box below.
NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
4/13/2026 1:16 PM	Auburn appj_operatorcertform.pdf	Attachment	Pamela Freeman
4/13/2026 12:49 PM	Auburn appf_swppcertform.pdf	Attachment	Pamela Freeman

Owner/Operator Certification Form

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

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

Project/Site Name: Auburn Community Hospital Health Campus

eNOI Submission ID: _____

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

Certification Statement - Owner/Operator

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

Andrew		Bodewes
Owner/Operator First Name	MI	Owner/Operator Last Name

_____

Signature

_____

Date

Revised: January 2025

SWPPP Preparer Certification Form

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

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

Project/Site Name:	Auburn Community Hospital Health Campus
eNOI Submission ID:	
Owner/Operator Name:	Park Grove Realty, LLC

Certification Statement – SWPPP Preparer

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

Andrew		Burns
SWPPP Preparer First Name	MI	SWPPP Preparer Last Name

Signature Date

Revised: January 2025

APPENDIX O: NOTICE OF TERMINATION

eNOT Qualified Inspector Certification – Final Stabilization

for construction activities seeking termination from the

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

(The completed form must be attached to the eNOT, which must be submitted to NYSDEC electronically in accordance with CGP Part V.A.5.)

I. Project Owner/Operator Information

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

II. Project Site Information

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. CGP SPDES Permit ID:

III. Certification Statement

I hereby certify that all the requirements in CGP Part V.A.1.a.i., ii., and iii. or CGP Part V.A.1.b.i., ii., and iii. have been achieved. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the Qualified Inspector:

b. Title/Position:

c. Signature:

d. Date:

eNOT Qualified Inspector Certification – SMPs

for construction activities seeking termination from the

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

(The completed form must be attached to the eNOT, which must be submitted to NYSDEC electronically in accordance with CGP Part V.A.5.)

I. Project Owner/Operator Information

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

II. Project Site Information

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. CGP SPDES Permit ID:

III. Certification Statement

I hereby certify that all the requirements in CGP Part V.A.1.a.iv. or CGP Part V.A.1.b.iv. have been achieved. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the Qualified Inspector:

b. Title/Position:

c. Signature:

d. Date:

eNOT MS4 Acceptance

for construction activities seeking termination from the

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

(The completed form must be attached to the eNOT, which must be submitted to NYSDEC electronically in accordance with CGP Part V.A.5.)

I. Project Owner/Operator Information

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

II. Project Site Information

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. CGP SPDES Permit ID:

III. Traditional Land Use Control MS4 Operator Information

a. Name of MS4 Operator:

b. MS4 SPDES Permit ID Number: NYR20A

c. Street Address:

d. City/State/Zip:

e. Telephone Number:

IV. Certification Statement

I have determined that it is acceptable for the owner or operator of the construction project identified above to submit the electronic Notice of Termination in accordance with CGP Part V. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the principal executive officer or ranking elected official for the MS4 Operator or their duly authorized representative in accordance with CGP Part VII.J.2.:

b. Title/Position:

c. Signature:

d. Date:

eNOT Owner or Operator Certification

for construction activities seeking termination from the

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

(The completed form must be attached to the eNOT, which must be submitted to NYSDEC electronically in accordance with CGP Part V.A.5.)

I. Project Owner/Operator Information

a. Owner/Operator Name:

b. Contact Person:

c. Street Address:

d. City/State/Zip:

II. Project Site Information

a. Project/Site Name:

b. Street Address:

c. City/State/Zip:

d. CGP SPDES Permit ID:

III. Certification Statement

I certify that I have met the requirements of CGP Part V.A.1., 2., 3., and 4. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

a. Printed name of the Owner or Operator:

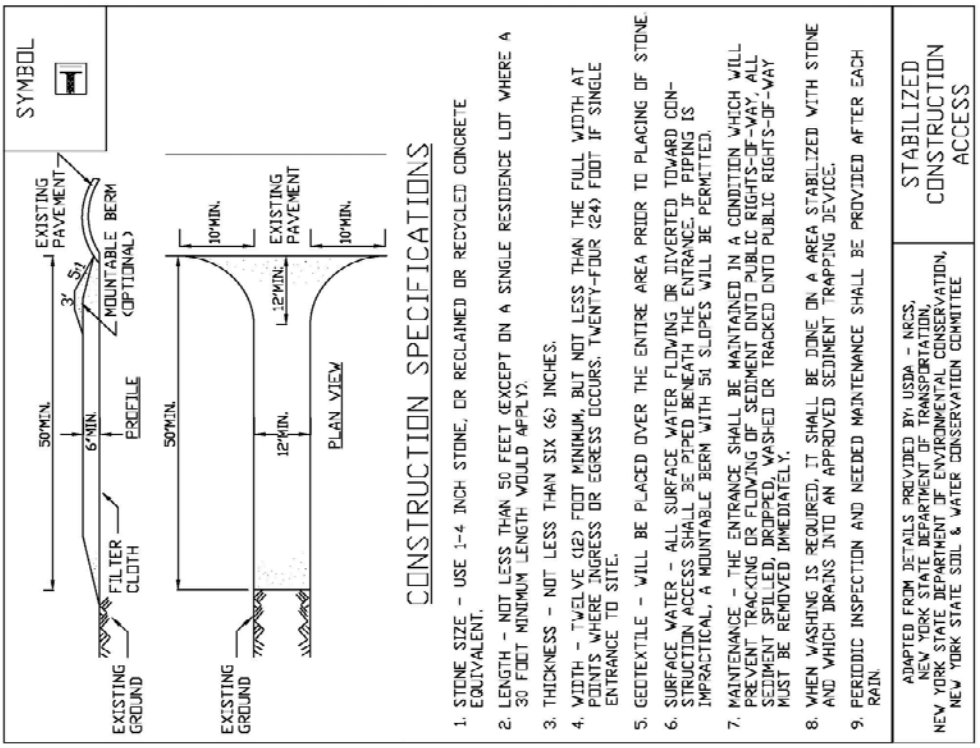
b. Title/Position:

c. Signature:

d. Date:

APPENDIX P: EROSION CONTROL DETAILS

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



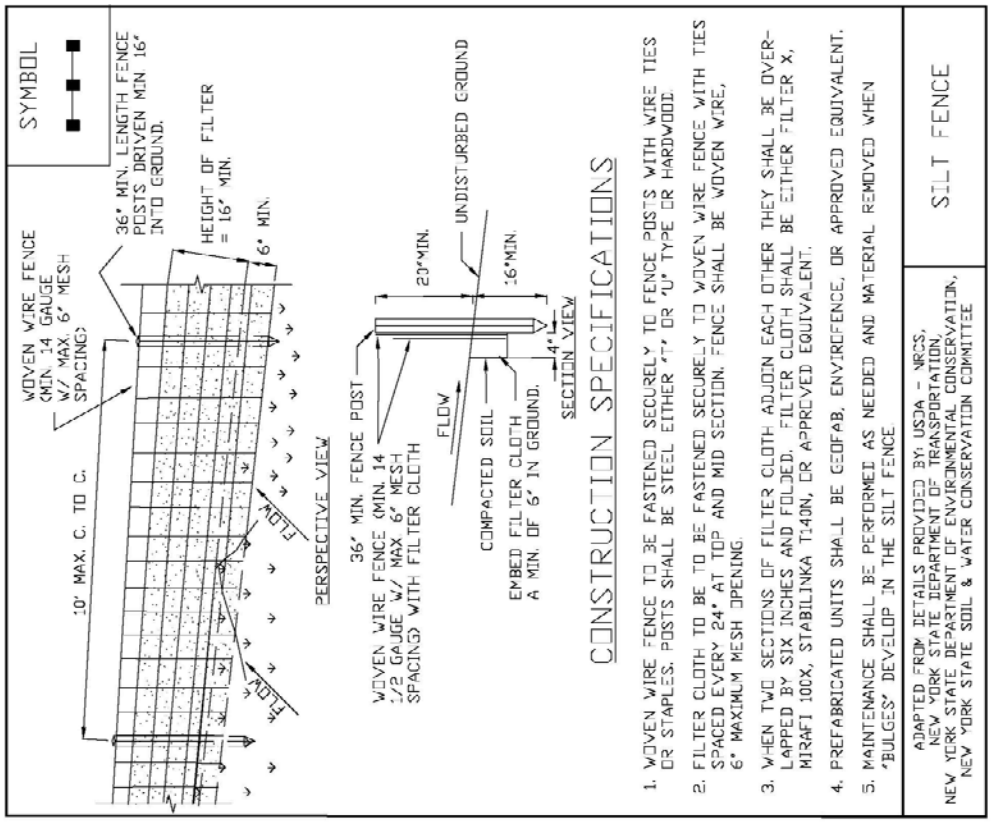


Figure 5.32
Fabric Drop Inlet Protection

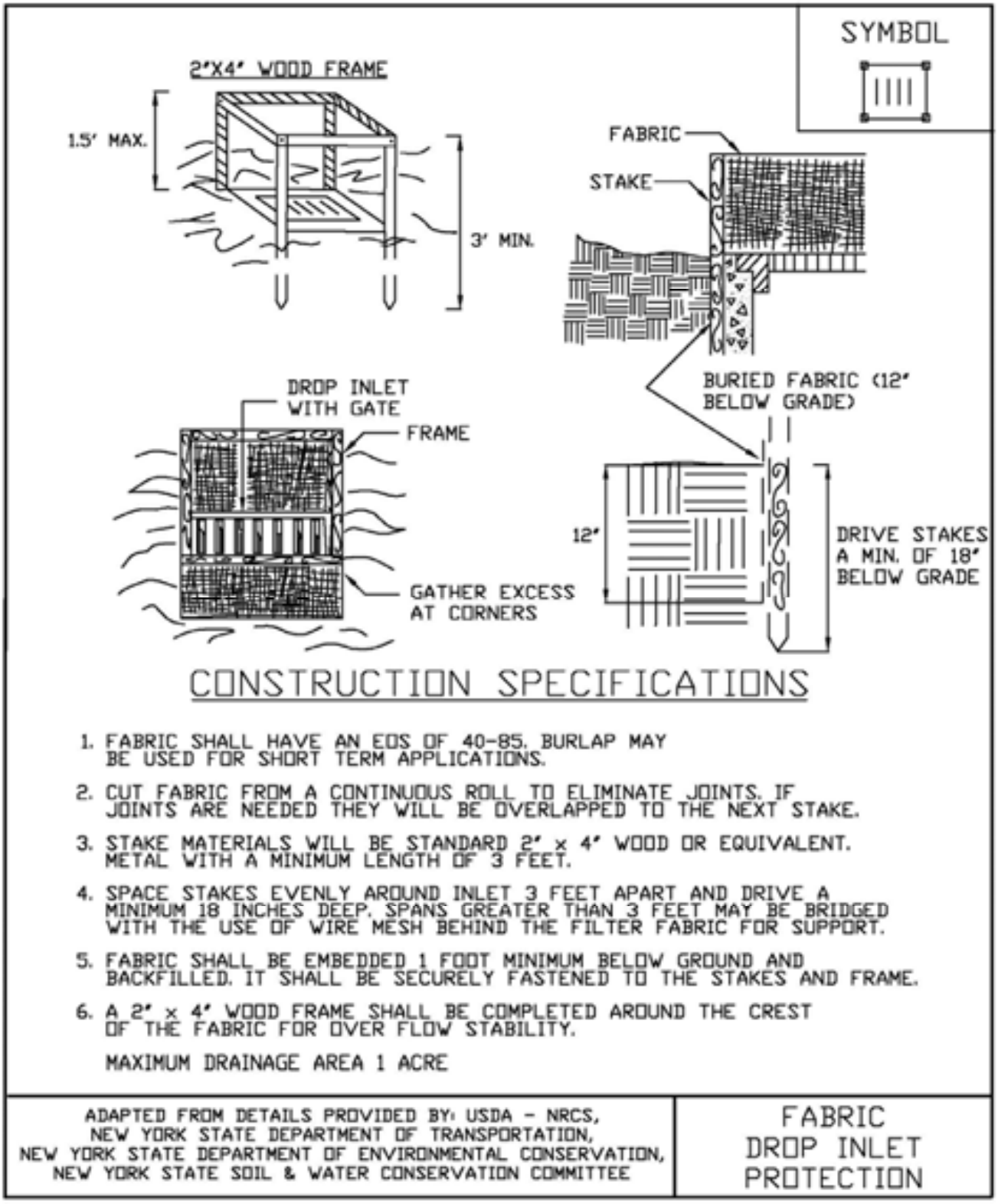
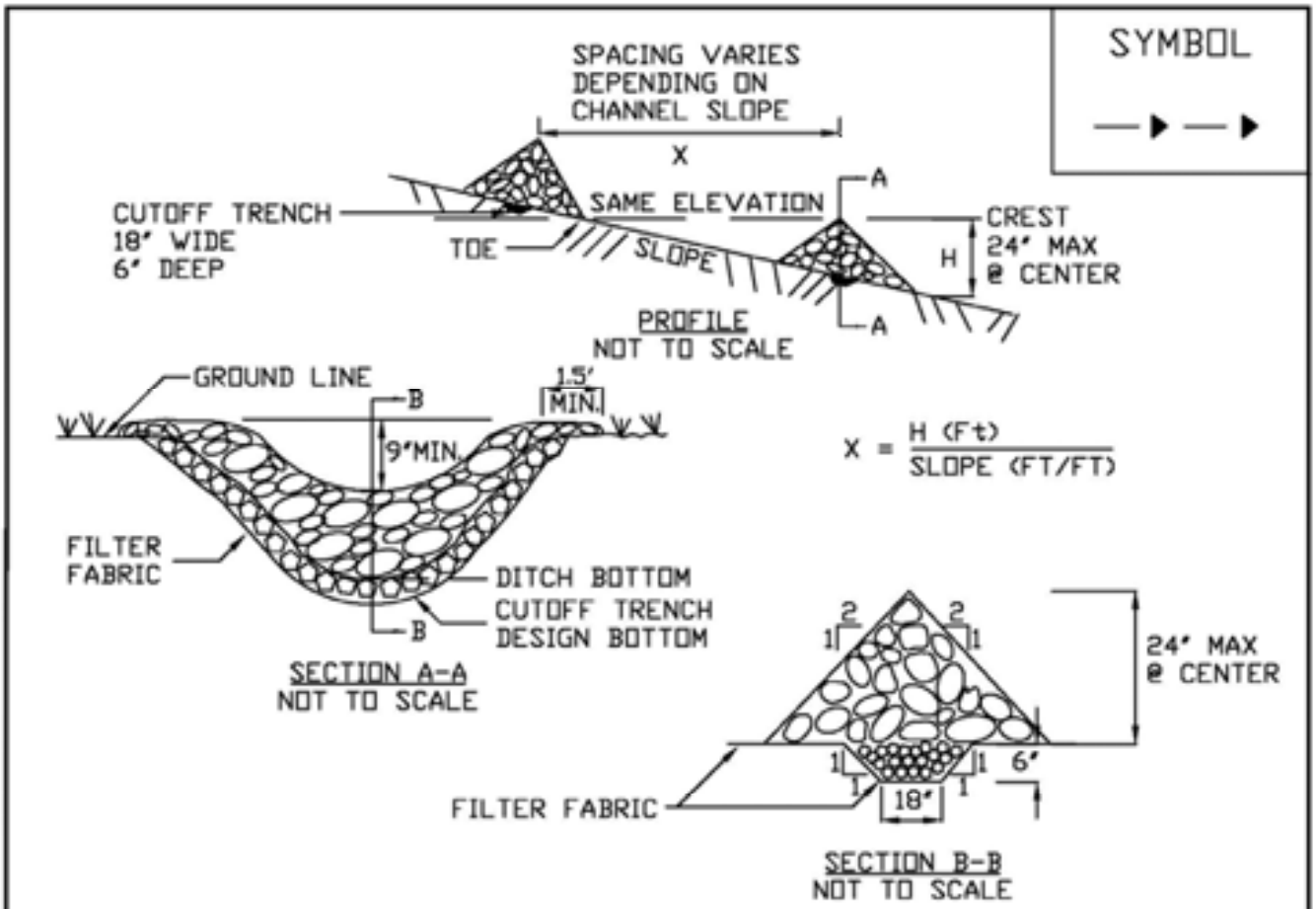


Figure 3.1
Stone Check Dam Detail



CONSTRUCTION SPECIFICATIONS

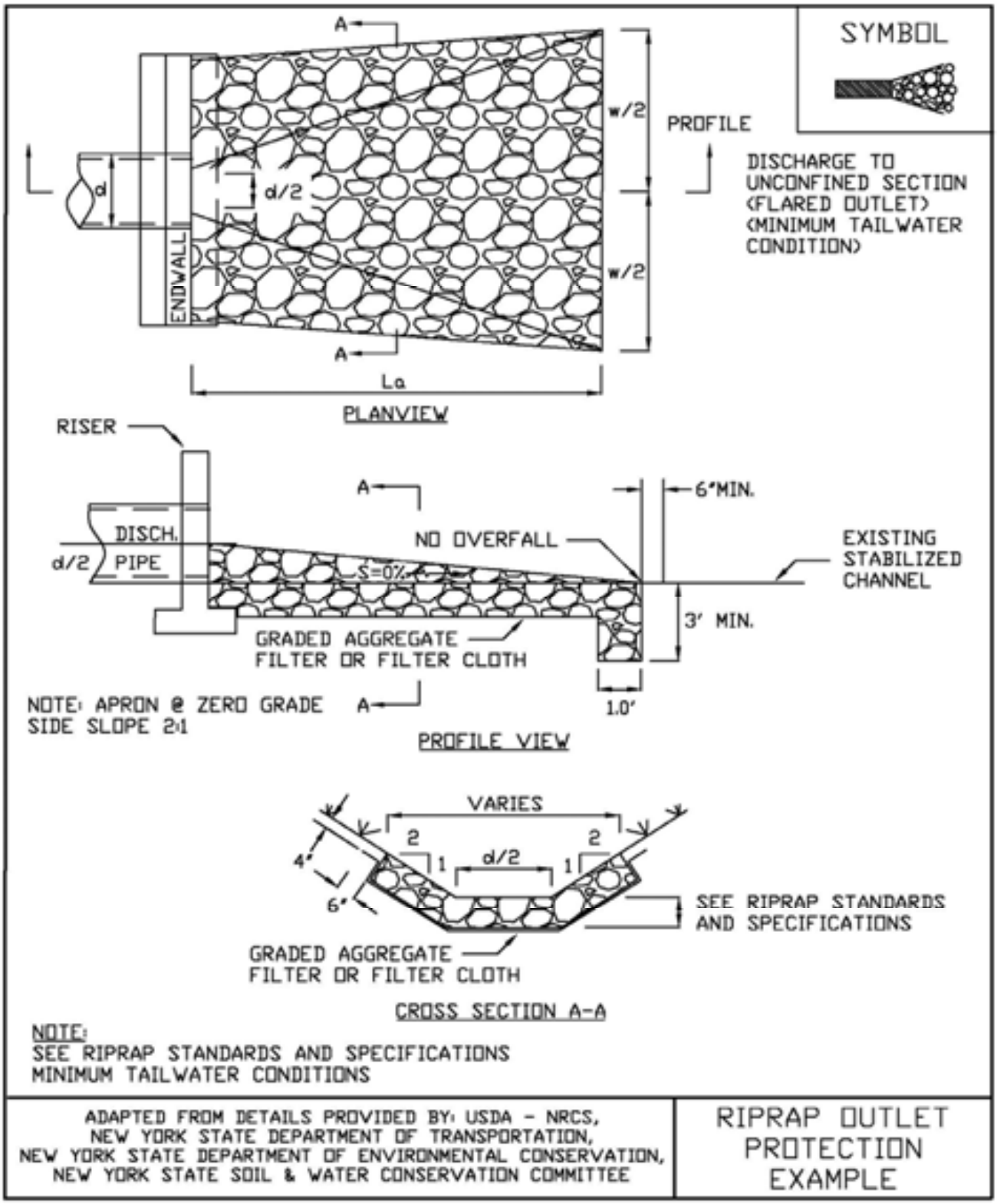
1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: USDA - NRCS,
NEW YORK STATE DEPARTMENT OF TRANSPORTATION,
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION,
NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

STONE CHECK DAM

Figure 3.18
Riprap Outlet Protection Detail (1)



APPENDIX Q: MAINTENANCE/CONSTRUCTION INSPECTION REPORTS

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

MAINTENANCE GUIDANCE

Stormwater Management Practices

March 31, 2017



FINAL

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2.7. Bioretention

Areas of Bioretention

Key areas to inspect for Bioretention include the following:

- BR 1. Drainage Area
- BR 2. Inlets
- BR 3. Bioretention Ponding Area
- BR 4. Vegetation
- BR 5. Outlets

Note: The category of Bioretention includes:

- Bioretention cells – areas of soil, mulch, and vegetation that treat runoff
- Dry swales – long, linear bioretention cells, sometimes with check dams along a mildly sloping swale
- Rain gardens – usually small-scale bioretention practices on residential or small commercial properties

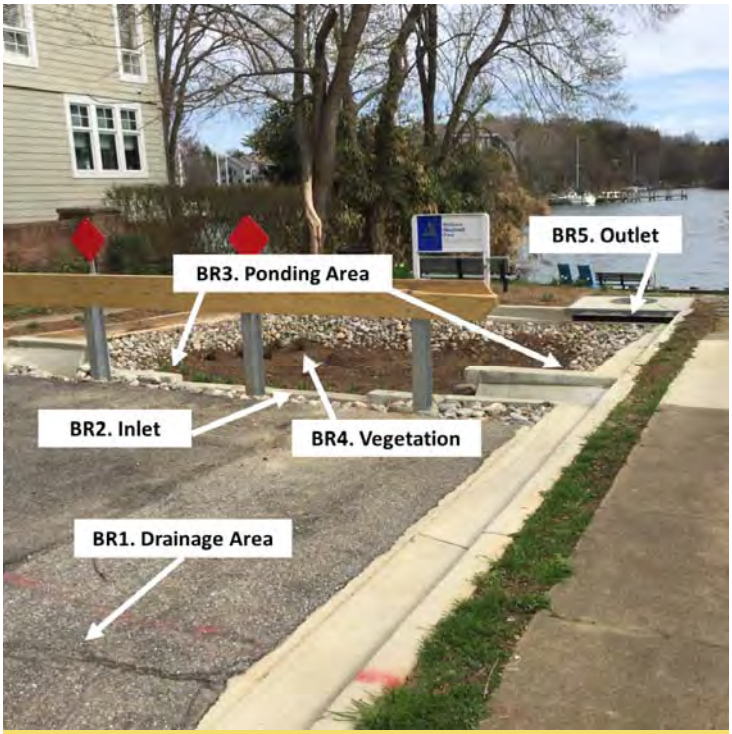


Figure 2.7.1. Key Areas for Level 1 Inspection of Bioretention

- Stormwater planters – usually in more urban settings, with soil and plants in a concrete box that receives roof runoff or perhaps other water from the site
- Tree pits – also a more urban practice where the bioretention is confined within some sort of box (e.g., concrete) and places along road curbs or other areas to treat runoff

For the purposes of this chapter, the term “Bioretention cell” will be used to generally describe these practices.

Bioretention Level 1 Inspection

The Level 1 Inspection focuses on the Drainage Area (BR1), Inlets (BR2), Bioretention Ponding Area (BR3), Vegetation (BR4), and Outlets (BR5). This inspection should be conducted on a regular basis, with an early spring inspection to ensure that the practice has survived the winter, particularly if there has been a significant amount of snow. An inspection during the growing season or in the early fall is also recommended to check on the health of vegetation.

BR 1. Drainage Area

Description: The drainage area sends runoff to and is uphill from the Bioretention cell. When it rains, water runs off and flows to the Bioretention cell and ponds within the cell temporarily (usually for no more than 48 hours). Sometimes, the runoff will contain dirt, grit, grass clippings, oil, or other substances that SHOULD NOT be directed to the Bioretention area.

Instruction: Look for areas that are uphill from the Bioretention cell. Consult **Table 2.7.1** below.

Table 2.7.1 BR Drainage Area

Problem (Check if Present)		Follow-Up Actions
	☐ Bare soil, erosion of the ground (rills washing out the dirt)	☐ Seed and mulch areas of bare soil to establish vegetation. ☐ Fill in erosion areas with soil, compact, and seed and straw to establish vegetation. ☐ 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. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Large areas of soil have been eroded, or larger channels are forming. May require rerouting of flow paths.
	☐ Piles of grass clippings, mulch, dirt, salt, or other materials	☐ Remove or cover piles of grass clippings, mulch, dirt, etc. ☐ Other:
	☐ Open containers of oil, grease, paint, or other substances	☐ Cover or properly dispose of materials; consult your local solid waste authority for guidance on materials that may be toxic or hazardous. ☐ Other:

BR 2. Inlets

Description: The inlets to a Bioretention cell are where water flows into the cell. Depending on the design, water can flow in through:

- Curb cuts or openings in a parking lot or roadway
- Pipes or ditches that carry water into the Bioretention cell from the drainage area
- Flow directly over the land surface (known as “sheetflow”), sometimes across a strip of rock or stone



Figure 2.7.2 Bioretention Cell Inlets

CSN, 2013

Instruction: Stand in the Bioretention cell itself and look for all the places where water flows in. Often there will be multiple points of inflow to the practice. Consult **Table 2.7.2** below for possible problems.

Table 2.7.2 BR Inlets

Problem (Check if Present)	Follow-Up Actions
 ☐ Inlets collect grit and debris or grass/weeds. Some water may not be getting into the Bioretention cell. The objective is to have a clear pathway for water to flow into the cell.	☐ 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. ☐ Pull out clumps of growing grass or weeds and scoop out the soil or grit that the plants are growing in. ☐ Remove any grass clippings, leaves, sticks, and other debris that is collecting at inlets. ☐ For pipes and ditches, remove sediment and debris that is partially blocking the pipe or ditch opening where it enters the Bioretention cell. ☐ Dispose of all material properly where it will not re-enter the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Inlets are blocked to the extent that most of the water does not seem to be entering the Bioretention cell.
 ☐ 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 Bioretention cell.	☐ 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. ☐ 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. ☐ Other: ☐ 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.

BR 3. Bioretention Ponding Area

Description: The ponding area fills up with water during a rainstorm. If you picture the Bioretention cell as a bathtub, there is the *bottom* (usually flat surface), *side slopes* (areas that slope down to the bottom from the surrounding ground), and *berms or structures that control the depth to which water ponds.*

Instruction: Examine the entire Bioretention surface and side slopes. Consult the table below for possible problems.

Table 2.7.3 BR Ponding Area

Problem (Check if Present)	Follow-Up Actions
 ☐ Mulch (if used) needs to be replaced or replenished. The mulch layer had decomposed or is less than 1-inch thick.	☐ Add new mulch to a total depth (including any existing mulch that is left) of 2 to 3 inches. The mulch should be shredded hardwood mulch that is less likely to float away during rainstorms. ☐ Avoid adding too much mulch so that inlets are obstructed or certain areas become higher than the rest of the Bioretention surface. ☐ Other:
 ☐ Minor areas of sediment, grit, trash, or other debris are accumulating on the bottom.	☐ 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 Bioretention cell. ☐ If removing the material creates a hole or low area, fill with soil mix that matches original mix and cover with mulch so that the Bioretention surface area is as flat as possible. ☐ Remove trash, vegetative debris, and other undesirable materials. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Sediment has accumulated more than 2-inches deep and covers 25% or more of the Bioretention surface. ☐ Kick-Out to Level 2 Inspection: The Bioretention cell is too densely vegetated to assess sediment accumulation or ponding; see BR-4, Vegetation.

 ☐ There is erosion in the bottom or on the side slopes. Water seems to be carving out rills as it flows across the Bioretention surface or on the slopes, or sinkholes are forming in certain areas. ☐ Source: Stormwater Maintenance, LLC.	☐ Try filling the eroded areas with clean topsoil or sand, and cover with mulch. ☐ If the problem recurs, you may have to use stone (e.g., river cobble) to fill in problem areas. ☐ If the erosion is on a side slope, fill with clay that can be compacted and seed and mulch the area. ☐ Other: ☐ 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 Bioretention cell. ☐ 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.
 ☐ The bottom of the Bioretention cell is not flat, and the water pools at one end, along an edge, or in certain pockets. The whole bottom is not uniformly covered with water. See design plan to verify that Bioretention surface is intended to be flat. Check during or immediately after a rainstorm.	☐ If the problem is minor (just small, isolated areas are not covered with water), try raking the surface OR adding mulch to low spots to create a more level surface. You may need to remove and replace plantings in order to properly even off the surface. ☐ Check the surface with a string and bubble level to get the surface as flat as possible. ☐ Other: ☐ Kick-Out to Level 2 Inspection: Ponding water is isolated to less than half of the Bioretention surface area, and there seem to be elevation differences of more than a couple of inches across the surface.
 ☐ Water stands on the surface more than 72 hours after a rainstorm and /or wetland-type vegetation is present. The Bioretention cell does not appear to be draining properly.	☐ Kick-Out to Level 2 Inspection: This is generally a serious problem, and it will be necessary to activate a Level 2 Inspection.

BR 4. Vegetation

Description: The health of vegetation within the Bioretention cell is perhaps the most critical maintenance item for the property owner or responsible party. Many Bioretention cells become overgrown, and "desirable" vegetation becomes choked out by weeds and invasive plants. It is important to know what the Bioretention cell is supposed to look like and what plants seem to be thriving or doing poorly. Periodic maintenance of vegetation will prevent larger problems that are more difficult and costly to manage.

Instruction: Examine all Bioretention cell vegetation. Consult the table below for possible problems.

Table 2.7.4 BR Vegetation

Problem (Check if Present)	Follow-Up Actions
 ☐ Vegetation requires regular maintenance—pulling weeds, removing dead and diseased plants, replacing mulch around plants, adding plants to fill in areas that are not well vegetated, etc.	☐ If you can identify which plants are weeds or not intended to be part of the planting plan, eliminate these, preferably by hand pulling. ☐ If weeds are widespread, check with the local stormwater authority and/or Extension Office about proper use of herbicides for areas connected with the flow of water. ☐ Even vegetation that is intended to be present can become large, overgrown, and/or crowd out surrounding plants. Prune and thin accordingly. ☐ If weeds or invasive plants have overtaken the whole Bioretention cell, bush-hog the entire area before seedheads form in the spring. It will be necessary to remove the root mat manually or with appropriate herbicides, as noted above. ☐ Re-plant with species that are aesthetically pleasing and seem to be doing well in the Bioretention cell. ☐ Other: ☐ Kick-Out to Level 2 Inspection: You are unsure of the original planting design, or the vegetation maintenance task is beyond your capabilities of time, expertise, or resources. If you are unsure of the health of the vegetation (e.g. salt damage, invasives, which plants are undesirable) or the appropriate season to conduct vegetation management, consult a landscape professional before undertaking any cutting, pruning, mowing, or brush hogging.
 ☐ Vegetation is too thin, is not healthy, and there are many spots that are not well vegetated.	☐ The original plants are likely not suited for the actual conditions within the Bioretention cell. If you are knowledgeable about plants, select and plant more appropriate vegetation (preferably native plants) so that almost the entire surface area will be covered by the end of the second growing season. ☐ Other: ☐ Kick-Out to Level 2 Inspection: For all but small practices (e.g., rain gardens), this task will likely require a landscape design professional or horticulturalist.

BR 5. Outlets

Description: Outlets are where water leaves the Bioretention cell when there is too much ponded water. There are various ways that outlets are configured. They can be a yard drain type of structure in the Bioretention cell itself or a rock weir where water flows during large storms. Many Bioretention practices have an underdrain, which is like a French drain, that helps the Bioretention cell drain properly after storms. The underdrain pipe may “daylight” (come to the ground surface) at some point downhill from the Bioretention cell.

Instruction: Examine outlets that release water out of the Bioretention cell. Consult the table below for possible problems.

Table 2.7.5 BR Outlets

Problem (Check if Present)	Follow-Up Actions
☐ Erosion at outlet	☐ Add stone to reduce the impact from the water flowing out of the outlet pipe or weir during storms. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Rills have formed and erosion problem becomes more severe.
 ☐ Outlet obstructed with mulch, sediment, debris, trash, etc.	☐ Remove the debris and dispose of it where it cannot re-enter the Bioretention cell. ☐ Other:
	☐ Kick-Out to Level 2 Inspection: Outlet is completely clogged or obstructed; there is too much material to remove by hand or with simple hand tools.

2.8. Green Roof

Areas of the Green Roof

Key areas to inspect for green roofs include the following:

GR 1. Vegetation and Surface
GR 2. Overflows and Drains

Note: Green Roofs consist of green infrastructure practices applied on rooftops, wherein stormwater is filtered through a vegetated planting bed. Green Roofs are a unique practice in that they are often covered by a professional ongoing maintenance contract, and their design is highly variable depending on the specific product. This section highlights some key inspection items.



Figure 2.8.1. Key Areas for Level 1 Inspection of Green Roof

3.6. Tree Planting – Level 2 Inspections and Triggers for Level 3

A Level 2 Tree Planting inspection should be conducted periodically during the growing season by the Cooperative Extension or an arborist.

Table 3.6.1 Level 2 Inspection: TREE PLANTING	
Recommended Repairs	**Triggers for Level 3 Inspection**
Observed Condition: Appearance of fungus or pest damage	
Condition 1: Fungus, discoloration, browning leaves or holes in leaves Check with arborist or other tree professional about the best way to proceed. This requires a Level 3 inspection. Condition 2: Burrowing insects, holes Check with arborist or other tree professional about the best way to proceed. This requires a Level 3 inspection.	• Any concerns about how to address infestation or disease

3.7. Bioretention – Level 2 Inspections and Triggers for Level 3

The most likely triggers for a Level 3 Inspection for Bioretention are:

- Standing water, clogged media
- Vegetation management
- Bioretention does not conform to original design plan in surface area or storage.
- Severe erosion of filter bed, inlets, or around outlets
- Significant sediment accumulation, indicating an uncontrolled source of sediment

Table 3.7.1 Level 2 Inspection: BIORETENTION NOTE: Key Source for this Information *(CSN, 2013)*	
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 soil profile. If isolated areas have accumulated grit, fines, or vegetative debris or have bad soil media, try scraping off top 3 inches of media and replacing with clean material. Also check to see that surface is level and water is not ponding selectively in certain areas. Condition 2: Standing water is widespread or covers entire surface Requires diagnosis and resolution of problem: • Clogged underdrain? • Filter fabric between soil media and underdrain stone? • Need to install underdrain if not present? • Too much sediment/grit washing in from drainage area? • Too much ponding depth? • Improper soil media?	• Soil media is clogged and problem is 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.

Observed Condition: Vegetation is sparse or out of control	
Condition 1: Original design planting plan seems good but has not been maintained, so there are many invasives and/or dead plants Will require some horticultural experience to restore vegetation to intended condition by weeding, pruning, removing plants, and adding new plants. Condition 2: Original design planting plan is unknown or cannot be actualized A landscape architect or horticulturalist will be needed to redo the planting plan. Will likely require analysis of soil pH, moisture, organic content, sun/shade, and other conditions to make sure plants match conditions. Plan should include invasive plant management and maintenance plan to include mulching, watering, disease intervention, periodic thinning/pruning, etc.	• Vegetation deviates significantly from original planting plan; Bioretention has been neglected and suffered from deferred maintenance. • Owner/responsible party does not know how to maintain the practice.
Observed Condition: Bioretention does not conform to original design plan in surface area or storage	
Condition 1: Level 2 Inspection reveals that practice is too small based on design dimension, does not have adequate storage (e.g., ponding depth) based on the plan, and/or does not treat the drainage area runoff as indicated on the plan Small areas of deviation can be corrected by the property owner or responsible party, but it is likely that a Qualified Professional will have to revisit the design and attempt a redesign that meets original objectives or that can be resubmitted to the municipality for approval.	• More than a 25% departure from the approved plan in surface area, storage, or drainage area; sometimes less than this threshold at the discretion of the Level 2 inspector.
Observed Condition: Severe erosion of filter bed, inlets, or around outlets	
Condition 1: Erosion at inlets 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 more non-erosive lining and/or to extend the lining further down to where inlet slopes meet the Bioretention surface. If problem persists, analysis by a Qualified Professional is warranted. Condition 2: Erosion of Bioretention filter bed This is often caused by “preferential flow paths” through and along the Bioretention 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). Condition 3: Erosion on side slopes Again, the issue is likely linked with unanticipated flow paths down the side slopes (probably overland flow that concentrates as it hits the edge of the slope). For small or isolated areas, try filling, compacting, and re-establishing healthy ground cover vegetation. If the problem is more widespread, further analysis is required to determine how to redirect the flow.	• Erosion (rills, gullies) is more than 12 inches deep at inlets or the filter bed or more than 3 inches deep on side slopes. • If the issue is not caused by moving water but some sort of subsurface defect. This may manifest as a sinkhole or linear depression and be associated with problems with the underdrain stone or pipe or underlying soil.
Observed Condition: Significant sediment accumulation, indicating an uncontrolled source of sediment	
Condition 1: Isolated areas of sediment accumulation, generally less than 3-inches deep Sediment source may be from a one-time or isolated event. Remove accumulated sediment and top 2 to 3 inches of Bioretention soil media; replace with clean material. Check drainage area for any ongoing sources of sediment. Condition 2: Majority of the surface is caked with “hard pan” (thin layer of clogging material) or accumulated sediment that is 3-inches deep or more This can be caused by an improper construction sequence (drainage area not fully stabilized prior to installation of Bioretention soil media) or another chronic source of sediment in the drainage area. 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 as the problem does not recur.	• More than 2 inches of accumulated sediment cover 25% or more of the Bioretention surface area. • “Hard pan” of thin, crusty layer covers majority of Bioretention 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.

3.10. Ponds & Wetlands – Level 2 Inspections and Triggers for Level 3

The most likely triggers for a Level 3 Inspection for Ponds and Wetlands are:

- Severe erosion
- Excessive algae or aquatic plants
- Settlement and pipe corrosion
- Major sediment buildup

Table 3.10.1 Level Inspection: PONDS and WETLANDS

Recommended Repairs and Required Skills	Triggers for Level 3 Inspection
Observed Condition: Bare Soil or Erosion in the Drainage Area	
Condition 1: Extensive problem spots, but no channels or rills forming Reseed problem areas. If problem persists or grass does not take, consider hiring a landscape contractor. Condition 2: Problem is extensive, and rills/channels are beginning to form May be necessary to divert or redirect water that is causing the erosion problem. If it appears that simple regrading—such as installing a berm or leveling a low spot–will fix the problem, make repairs and ensure that the problem is repaired after the next storm.	• Large rills or gullies are forming in the drainage area. • An attempt to regrade the drainage area has been unsuccessful. • Fixing the problem would require major regrading (i.e., redirecting more than a 100-square-foot area. • It is not clear why the problem is occurring.
Observed Condition: Manholes or Inlet Pipe Buried or Covered with Vegetation	
Condition 1: Nearest manhole and inlet pipe not found Consult as-built drawings to get to closest suspected location and use metal detector to search for metal manhole cover. If unsuccessful, identify nearest drain inlets and approximate pipe direction to locate next manhole. Condition 2: Manhole located and inspected Never enter a manhole, except by following confined-space entry protocols. If outlet pipe is not visible or greater than 25% full of sediment/debris or trash, it will typically require a qualified contractor to flush, clean and clear blockages. Condition 3: Inlet pipe not found at pond Clear vegetation and brush that may be covering the inlet pipe. Buried inlet pipes may be found through use of a metal probe. Condition 4: Inlet pipe buried in sediment or blocked by vegetation Once located, the pipe path can be cleared of vegetation with brush hook or other brush tools. Light digging may clear sediment from the end of the pipe.	• To locate buried manholes and lost storm lines, it is sometimes necessary to hire a pipeline inspection contractor with televising equipment or ground-penetrating radar and enter at the closest upstream access point. • Locating a buried inlet pipe may require wading in the edge of the pond and using a metal probe and brush axe to find and expose the pipe. • If other than light digging is necessary to remove accumulated sediment, a contractor with heavy equipment may be required.

Table 3.10.1 Level Inspection: PONDS and WETLANDS	
Recommended Repairs and Required Skills	**Triggers for Level 3 Inspection**
Observed Condition: Pipe or Headwall Settlement, Erosion, Corrosion or Failure	
Condition 1: Pipe or headwall settlement or failure Severe sinkholes, settlement or corrosion should be kicked out to Level 3 Inspection. Condition 2: Flow not confined to pipe and visible outside pipe wall 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.	• 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. • 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.
Observed Condition: Pond Conditions	
Condition 1: Pond pre-treatment zone is full of sediment or not constructed as shown on as-built drawings. Condition 2: Excessive buildup of sediment or overgrowth 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.	• It may require inspection by an engineer to determine next steps for clearing, replanting or reconstruction. • 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. • If sediment has filled more than 50% of the pond's capacity, dredging is likely needed and should be evaluated by a qualified contractor. • Removal or control of excessive algae or aquatic plants can be assessed by a qualified pond maintenance company.

Bioretention Construction Inspection Checklist

Project:
Location:
Site Status:

Date:

Time:

Inspector:

CONSTRUCTION SEQUENCE	SATISFACTORY/ UNSATISFACTORY	COMMENTS
1. Pre-Construction		
Pre-construction meeting		
Runoff diverted		
Facility area cleared		
If designed as exfilter, soil testing for permeability		
Facility location staked out		
2. Excavation		
Size and location		
Lateral slopes completely level		
If designed as exfilter, ensure that excavation does not compact susoils.		
Longitudinal slopes within design range		

CONSTRUCTION SEQUENCE	SATISFACTORY / UNSATISFACTORY	COMMENTS
3. Structural Components		
Stone diaphragm installed correctly		
Outlets installed correctly		
Underdrain		
Pretreatment devices installed		
Soil bed composition and texture		
4. Vegetation		
Complies with planting specs		
Topsoil adequate in composition and placement		
Adequate erosion control measures in place		
5. Final Inspection		
Dimensions		
Proper stone diaphragm		
Proper outlet		
Soil/ filter bed permeability testing		
Effective stand of vegetation and stabilization		
Construction generated sediments removed		
Contributing watershed stabilized before flow is diverted to the practice		

Comments:

Actions to be Taken:

Exhibit F

April 8, 2026

20255046.0001

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS

CITY OF AUBURN, NY

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1.0 EXECUTIVE SUMMARY

The purpose of this report is to evaluate the potential traffic impacts related to the proposed medical office located at 143-147 North Street in the City of Auburn, NY. Within this report, the operating characteristics of the proposed access points and impacts to the adjacent roadway network are evaluated. Mitigating measures are identified, if needed, to minimize operational concerns. To define traffic impact, this analysis establishes existing baseline traffic conditions, projects background traffic flow including area growth, and determines the traffic operations that would result from the proposed project. All figures and supporting calculations are included at the end of this report.

Project Location and Description

The project site is located along the west side of North Street to the north of Perrine Street, in the City of Auburn, Cayuga County, NY. The project comprises the following aspects:

- **Site Status:** Currently, a portion of the site is occupied by an existing medical office building and two single family homes but most of the site is occupied by vacant undeveloped land.
- **Site Boundary:**
  - **North:** Single Family Home.
  - **East:** North Street.
  - **South:** An existing medical office building and single family homes along Perrine St.
  - **West:** Railroad tracks.
- **Vicinity Land Uses:** There is a mix of land uses, including residential, medical, and service.

The proposed development consists of constructing a ±80,750 square foot (SF) three-story medical office building. The proposed building will contain ±54 offices and employ 162 staff members. The existing medical office building and single family homes on the property will be demolished as a part of the proposed development. Access to the proposed development will be provided via the existing driveway along North St, which will be redesigned as a part of the proposed project. Additionally, one proposed driveway will be constructed along Perrine St and another proposed driveway will be constructed along W Park Ave.

Study Area

To ensure a comprehensive analysis of potential traffic impacts, a study area was selected consisting of the following intersections. **Figure 1** illustrates the study area and project location.

1. North Street/Standart Avenue
2. North Street/143 North Street Driveway
3. North Street/Lansing Street
4. North Street/Perrine Street
5. North Street/Seymour Street
6. Perrine Street/State Street
7. Lansing Street/Grant Avenue

Existing and Background Conditions

Turning movement traffic counts were collected by Passero Associates on Wednesday, March 11, 2026, between 7:00-9:00 AM for the weekday AM peak period and 4:00-6:00 PM for the weekday PM peak period by Passero Associates at the study area intersections listed in Section 2.3. The peak hour traffic periods generally occurred between 7:45-8:45 AM for the AM peak hour, and 4:00-5:00 PM for the PM peak hour at the study intersections; these time periods were used for analysis purposes in this study.

The weekday turning movement count data was collected on a typical weekday while local schools were in session. No adverse weather conditions impacted the traffic counts. The traffic volumes were reviewed to confirm accuracy, seasonality, and relative balance between intersections. No seasonality adjustment was required. The actual differences in traffic volumes can be attributed to temporal variations in traffic volumes as well as activity related to driveways located in the segments between the study intersections.

Construction of the proposed project is anticipated to reach full build-out within approximately one year depending on market conditions.

To account for normal increases in background traffic growth, including any unforeseen developments in the study area, a growth rate of 1.0% was applied to the existing traffic volumes for the build out period.

Conclusions and Recommendations

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed medical office located at 143-147 North Street in the City of Auburn, NY. The results of this comprehensive study determined that the existing transportation network can adequately accommodate the projected traffic volumes and resulting minor impacts to study area intersections. The following sets forth the conclusions and recommendations based upon the results of the analyses:

1. The proposed project is estimated to generate 125 entering and 12 exiting vehicle trips during the AM peak hour, and 13 entering and 115 exiting vehicle trips during the PM peak hour.

2. Based on the results of crash analysis, there are no inherent safety deficiencies at any of the study intersections.

3. All movements generally operate at an acceptable LOS D or better under existing, projected background, and full build conditions (with proposed development) during both peak hours at all study intersections. No changes in level of service are anticipated at any of the study intersections.

4. The proposed driveway along Perrine St should consist of one enter and one exit lane.

5. The proposed driveway along W Park Ave should consist of one enter and one exit lane.

6. Pursuant to the State Environmental Quality Review Act (SEQRA), this detailed analysis demonstrates that the proposed project does not result in any significant adverse traffic impacts even at full development

2.0 INTRODUCTION

2.1 Study Purpose and Objectives

The purpose of this report is to evaluate the potential traffic impacts related to the proposed medical office located at 143-147 North Street in the City of Auburn, NY. Within this report, the operating characteristics of the proposed access points and impacts to the adjacent roadway network are evaluated. Mitigating measures are identified, if needed, to minimize operational concerns. To define traffic impact, this analysis establishes existing baseline traffic conditions, projects background traffic flow including area growth, and determines the traffic operations that would result from the proposed project. All figures and supporting calculations are included at the end of this report.

2.2 Project Location

The project site is located along the west side of North Street to the north of Perrine Street, in the City of Auburn, Cayuga County, NY. The project comprises the following aspects:

- **Site Status:** Currently, a portion of the site is occupied by an existing medical office building and two single family homes but most of the site is occupied by vacant undeveloped land.
- **Site Boundary:**
  - **North:** Single Family Home.
  - **East:** North Street.
  - **South:** An existing medical office building and single family homes along Perrine St.
  - **West:** Railroad tracks.
- **Vicinity Land Uses:** There is a mix of land uses, including residential, medical, and service.

2.3 Study Area

To ensure a comprehensive analysis of potential traffic impacts, a study area was selected consisting of the following intersections. **Figure 1** illustrates the study area and project location.

1. North Street/Standart Avenue
2. North Street/143 North Street Driveway
3. North Street/Lansing Street
4. North Street/Perrine Street
5. North Street/Seymour Street
6. Perrine Street/State Street
7. Lansing Street/Grant Avenue

3.0 TRANSPORTATION SETTING

3.1 Description of Study Area Roadways

The information outlined in **Table 1** provides a description of the existing roadway network within the study area. **Figure 2** illustrates the lane geometry and traffic controls at each of the study intersections and the Annual Average Daily Traffic (AADT) volumes on the study roadways. The AADTs, in vehicles per day (vpd), reflect the most recently collected data obtained from the NYSDOT or Passero Associates.

Table 1: *Existing Highway System*

Roadway	Class[1]	Agency[2]	Speed	Typical Cross Section[3]	AADT
North Street (NY-34)	14	NYSDOT	30 mph	4-lane undivided	10,487 (NYSDOT 2023)
Standart Avenue	17	City of Auburn	30 mph	2-lane undivided	7,378 (NYSDOT 2024)
Lansing Street	19	City of Auburn	30 mph	2-lane undivided	2,432 (Passero 2026)
Perrine Street	19	City of Auburn	30 mph	2-lane undivided	2,083 (NYSDOT 2022)
State Street (NY-38)	17	NYSDOT	30 mph	2-lane undivided	3,154 (NYSDOT 2024)
Grant Avenue (NY-5)	14	NYSDOT	30 mph	4-lane undivided	16,920 (NYSDOT 2023)

1. Functional Classification.
2. Roadway ownership.
3. Excludes turning lanes at intersections.

Functional classification of roadways is determined by the NYSDOT and the Federal Highway Administration (FHWA). Both the NYSDOT and FHWA groups roads, streets, and highways into different classes based on how they are used. This is called functional classification. Roads and streets do not work alone to move traffic. Instead, they form a network. Functional classification defines how each road or street fits into this network, how it provides access to nearby properties, and whether it is in an urban or rural area. In the study area, all the roadways are classified as urban.

The primary functional classification within the study area:

- Principal Arterial (Class 14)
- Major Collector (Class 17)
- Local (Class 19)

3.2 Description of Multimodal Network

Table 2 summarizes the traffic controls, pedestrian, bicycle, and transit accommodations within the study area.

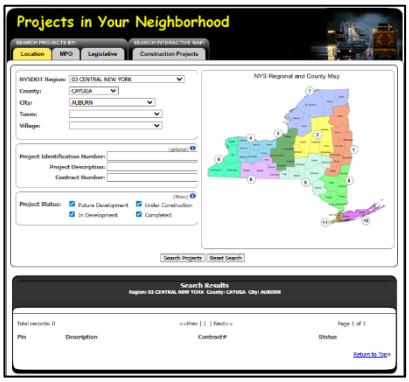
Table 2: *Multimodal Network*

Intersection	Traffic Control	Pedestrian			Bicycle		Transit
		Sidewalk	Crosswalk	Ped Signal	Lane	Other	
North St/Standart Ave	Signal	Fully present	Yes	No	No	In lane	Bus Route Aub 3
North St/143 North St Driveway	Sign	Fully present	No	No	No	In lane	No
North St/Lansing St	Signal	Fully present	Yes	Yes	No	In lane	Bus Route Aub 3
North St/Perrine St	Sign	Fully present	No	No	No	In lane	Bus Route Aub 3

Intersection	Traffic Control	Pedestrian			Bicycle		Transit
		Sidewalk	Crosswalk	Ped Signal	Lane	Other	
North St/Seymour St	Signal	Fully present	Yes	Yes	No	In lane	Bus Route Aub 3
Perine St/State St	Signal	Fully present	Yes	Yes	No	In lane	Bus Route Aub 3 & Aub 38
Lansing St/Grant Ave	Sign	Fully present	Yes	No	No	In lane	No

3.3 Planned/Programmed Highway Improvements

The NYSDOT *Projects in Your Neighborhood* web portal was reviewed and it was determined that there are no planned or ongoing projects within the study area.



4.0 EXISTING CONDITIONS ANALYSIS

4.1 Peak Intervals for Analysis

Given the functional characteristics of the corridors, adjacent land uses, and the proposed land use for the project site, the peak hours selected for analysis are the weekday morning (AM) and weekday afternoon (PM) peak periods. The combination of site traffic and adjacent street traffic produces the greatest demand during these time periods.

4.2 Existing Traffic Volume Data

Turning movement traffic counts were collected by Passero Associates on Wednesday, March 11, 2026, between 7:00-9:00 AM for the weekday AM peak period and 4:00-6:00 PM for the weekday PM peak period by Passero Associates at the study area intersections listed in Section 2.3. The peak hour traffic periods generally occurred between 7:45-8:45 AM for the AM peak hour, and 4:00-5:00 PM for the PM peak hour at the study intersections; these time periods were used for analysis purposes in this study.

The weekday turning movement count data was collected on a typical weekday while local schools were in session. No adverse weather conditions impacted the traffic counts. The traffic volumes were reviewed to confirm accuracy, seasonality, and relative balance between intersections. No seasonality adjustment was required. The actual differences in traffic volumes can be attributed to temporal variations in traffic volumes as well as activity related to driveways located in the segments between the study intersections. **Figures 3a and 3b** illustrate the 2026 existing balanced conditions for the AM and PM peak hours, respectively.

4.3 Field Observations

The study intersections were observed during peak intervals to assess current traffic operations. Signal timing and phasing information was obtained from the NYSDOT to determine peak hour phasing plans and phase durations during

each interval at the signalized intersections with the exception of the State St/Perrine St intersection. The City of Auburn did not have any signal timings for this intersection. Therefore, signal timing and phasing information for the State St/Perrine St intersection was obtained by Passero Associates in the field to determine peak hour phasing and phase durations during each peak hour. This information was used to support and/or calibrate capacity analysis models described in detail later in this report.

4.4 Existing Crash Investigation

The Federal Highway Administration (FHWA) and local agencies, such as NYSDOT, have adopted the Safe Systems Approach to roadway safety. This approach prioritizes the elimination of crashes that result in death and serious injuries. The safety evaluation process follows three general components: identification of safety problems, development of potential safety strategies, and selection and implementation of strategies.

Intersections are evaluated using the Potential for Safety Improvement (PSI) and Safety Performance Function (SPF) methodology described in the latest American Association of State Highway Transportation Officials (AASHTO) *Highway Safety Manual (2010)*, FHWA *Road Safety Fundamentals (2017)*, NYSDOT *Yellow Book (2023)*, and NYSDOT *Red Book (2023)*. The accompanying SPF worksheet can be obtained from the NYSDOT Crash Analysis Toolbox. NYSDOT defines PSI and SPF as:

- **Potential for Safety Improvement (PSI)** A comparison of the site-specific safety performance compared to the statewide average using either observed or expected crashes depending on whether traffic volume is available.
- **Safety Performance Function (SPF)** An equation used to estimate or predict the average crash frequency per year at a location as a function of traffic volume and, in some cases, roadway or intersection characteristics (e.g., number of lanes, traffic control, or type of median).

To support this effort on a site-level scale, Passero obtained crash history data using MV-104 Police Accident Reports provided by the NYSDOT *Crash Location & Engineering Analysis & Reporting (CLEAR)* database from **February 28, 2022, to February 28, 2025.**

Table 3 provides a summary of the crashes that occurred within the study area and resulting PSI. SPF Prediction, Expected Crashes, and Excess Expected Crashes are shown as crashes per year. NYSDOT suggests that intersections with positive values under Excess Expected Crashes per year greater than 5.0000 for total crashes and 1.0000 for injury crashes should be evaluated further for potential safety improvements.

Table 3: *Intersection Crash Rate Analysis*

Intersection	Crashes		SPF Prediction		Expected Crashes		Excess Expected Crashes	
	Total	Injury	Total	Injury	Total	Injury	Total	Injury
North St/Standart Ave	15	1	4.0785	1.6755	4.8403	0.8288	0.7619	-0.8467
North St/143 North St Driveway	0	0	0.5861	0.1633	0.2712	0.1170	-0.3149	-0.0464
North St/Lansing St	10	3	1.8355	0.6119	2.9456	0.7936	1.1101	0.1817
North St/Perrine St	5	1	1.1689	0.3416	1.5165	0.3379	0.3477	-0.0038
North St/Seymour St	28	6	3.2075	1.3148	8.0444	1.7073	4.8370	0.3925
Perrine St/State St	4	1	2.2054	0.8424	1.5111	0.4951	-0.6943	-0.3473
Lansing St/Grant Ave	0	0	0.5950	0.1343	0.2731	0.1013	-0.3219	-0.0330

North St/Standart Ave: The following crashes occurred at this intersection: rear end (5), left turn (2), right angle (2), right turn (1), and sideswipe (5). The following crash patterns were reported:

- Rear End
  - Northbound (three crashes)
- Sideswipe
  - Northbound (three crashes)

The reported rear end crashes (33%) are characteristic of moderate to heavily trafficked signalized intersections. The causes of the rear end crashes were generally driver inattention, driver error, unsafe speeds, or following too closely. The causes of the sideswipe crashes were generally driver inattention, unsafe lane changes, or turning improperly. Given the causes of the crash patterns and the low PSI values, no geometric improvements are recommended.

North St/143 North St Driveway: No crashes occurred at this intersection during the study period.

North St/Lansing St: The following crashes occurred at this intersection: left turn (1), right angle (1), sideswipe (6), fixed object (1), and bicycle/pedestrian (1). The only crash pattern reported was three southbound sideswipe crashes.

The causes of the sideswipe crashes were generally driver inattention or unsafe lane changes. Given the causes of the crash patterns and the low PSI values, no geometric improvements are recommended.

North St/Perrine St: The following crashes occurred at this intersection: rear end (1), left turn (1), and right angle (3). The only crash pattern reported was three eastbound right angle crashes.

The causes of the sideswipe crashes were generally driver inattention or failure to yield right of way. Given the causes of the crash patterns and the low PSI values, no geometric improvements are recommended.

North St/Seymour St: The following crashes occurred at this intersection: rear end (7), left turn (9), right angle (7), sideswipe (2), fixed object (1), and bicycle/pedestrian (2). The following crash patterns were reported:

- Left Turn
  - Northbound (five crashes)
  - Southbound (four crashes)
- Rear End
  - Southbound (three crashes)
  - Eastbound (three crashes)
- Right Angle
  - Northbound (three crashes)
  - Southbound (three crashes)

The reported rear end crashes (25%) are characteristic of moderate to heavily trafficked signalized intersections. The causes of the rear end crashes were generally driver inattention, driver error, unsafe speeds, or following too closely. The causes of the left turn crashes were generally driver inattention, failure to yield right of way, or disregard of traffic control device. The causes of the right angle crashes were generally driver inattention, disregard of traffic control device, or driver inexperience. Given the causes of the crash patterns and the low PSI values, no geometric improvements are recommended.

Perrine St/State St: The following crashes occurred at this intersection: rear end (1), right angle (3), sideswipe (1), fixed object (1), and bicycle/pedestrian (1). No crash patterns were reported at this intersection. Given the negative PSI values and that no discernible crash patterns exist, no geometric improvements are recommended.

Lansing St/Grant Ave: The following crashes occurred at this intersection: right angle (1), sideswipe (1), and backing (1). No crash patterns were reported at this intersection. Given the negative PSI values and that no discernible crash patterns exist, no geometric improvements are recommended.

5.0 BACKGROUND (NO BUILD) CONDITIONS

Construction of the proposed project is anticipated to reach full build-out within approximately one year depending on market conditions. The widely accepted methodology for preparing traffic impact studies requires that any projects in the study area that are currently approved and/or under construction must be considered in the traffic analysis. Projects that are contemplated but not yet approved are not included in a traffic analysis. Local municipal personnel were contacted to discuss any other specific projects that are currently approved or under construction that would generate additional traffic in the study area. No such information was provided.

A review of available historical NYSDOT traffic volume data in the vicinity of the site indicates that traffic has decreased between 2015 and 2025. To account for normal increases in background traffic growth, including any unforeseen developments in the study area, a growth rate of 1.0% was applied to the existing traffic volumes for the build out period. **Figures 4a & 4b** depict the 2027 peak hour background traffic volumes for the AM and PM peak hours, respectively.

6.0 PROPOSED DEVELOPMENT CONDITIONS

6.1 Project Description

The proposed development consists of constructing a ±80,750 square foot (SF) three-story medical office building. The proposed building will contain ±54 offices and employ 162 staff members. The existing medical office building and single family homes on the property will be demolished as a part of the proposed development. Access to the proposed development will be provided via the existing driveway along North St, which will be redesigned as a part of the proposed project. Additionally, one proposed driveway will be constructed along Perrine St and another proposed driveway will be constructed along W Park Ave.

6.2 Proposed Traffic Generation

The volume of traffic generated by a site is dependent on the intended land use and size of the development. Trip generation is an estimate of the number of trips generated by a specific building or land use. These trips represent the volume of traffic entering and exiting the development. *Trip Generation Manual* (12th Edition) published by the Institute of Transportation Engineers (ITE) is used as a reference for this information. The trip rate for the peak hour of the generator may or may not coincide in time or volume with the trip rate for the peak hour of adjacent street traffic. Volumes generated during the peak hour of the adjacent street traffic and proposed land uses, in this case, the weekday commuter AM and PM peak hours, represent a more critical volume when analyzing the capacity of the system; those intervals will provide the basis of this analysis.

Table 4: *Site Generated Trips*

Description	ITE Land Use Code	Size	AM Peak Hour		PM Peak Hour	
			Enter	Exit	Enter	Exit
Medical-Dental Office Building	720	162 Employees	125	12	13	115

The proposed project is estimated to generate 125 entering and 12 exiting vehicle trips during the AM peak hour, and 13 entering and 115 exiting vehicle trips during the PM peak hour.

6.3 Trip Distribution

The cumulative effect of site-generated traffic on the transportation network is dependent on the origins and destinations of that traffic and the location of the access drives serving the site. The proposed arrival and departure distribution of traffic generated by the proposed project is considered a function of several parameters, including:

- Residential and employment centers using US Census data.
- Surrounding roadway network.
- Site layout and access locations.
- Existing traffic patterns.
- Existing traffic conditions and controls.

Figure 5 shows the anticipated trip distribution pattern percentage for the project site. **Figures 6a and 6b** illustrate the peak hour project site-generated traffic during the AM and PM peak hours, respectively, based on the percentages in **Figure 5.**

6.4 Full Development Volumes

The proposed design hour traffic volumes are developed for the peak hours by combining the background traffic conditions (**Figures 4a & 4b**) and the new site-generated traffic volumes (**Figures 6a & 6b**) to yield the traffic volumes under full development conditions. It should be noted that since the existing medical office on the proposed site will be demolished, the existing site trips generated by this development have been subtracted from the full build traffic volumes. **Figures 7a & 7b** illustrate total anticipated full build peak hour volumes for the AM and PM peak hours, respectively.

7.0 TRAFFIC OPERATIONS AND ANALYSIS

7.1 Description of Capacity Analysis

Capacity analysis is a technique used for determining a measure of effectiveness for a section of roadway and/or intersection based on the number of vehicles during a specific time period. The measure of effectiveness used for the capacity analysis is referred to as a Level of Service (LOS). Levels of service are calculated to provide an indication of the amount of delay that a motorist experiences while traveling along a roadway or through an intersection. Since the most amount of delay to motorists usually occurs at intersections, capacity analysis focuses on intersections, as opposed to highway segments.

The standard procedure for capacity analysis of signalized and unsignalized intersections is outlined in the *Highway Capacity Manual (HCM) 7th Edition* published by the Transportation Research Board (TRB). Traffic analysis software,

Synchro 12, which is based on procedures and methodologies contained in the HCM, was used to analyze operating conditions at study area intersections. The procedure yields a level of service based on the HCM as an indicator of how well intersections operate.

Six levels of service are defined for analysis purposes. They are assigned letter designations, from A to F, with LOS A representing the conditions with little to no delay, and LOS F conditions with very long delays. Suggested ranges of service capacity and an explanation of levels of service are included in the Appendices. LOS C or better is desirable, but LOS D for signalized locations and LOS E for unsignalized locations are generally thresholds of acceptable operation during peak periods so long as the volume to capacity ratio (v/c) is below 1.0. **Table 5** depicts level of service criteria for both signalized and unsignalized intersections and associated delays per vehicle in seconds.

Table 5: *Level of Service Criteria*

Level of Service	Signalized Control	Unsignalized Control
A	< 10	< 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	> 80	> 50

Level of service for signalized intersections is defined in terms of delay specifically, average total delay per vehicle for a 15-minute analysis period. Level of service for unsignalized intersections, however, are different from a signalized intersection. The primary reason for this is driver expectation that a signalized intersection is designed to carry higher volumes than an unsignalized intersection. Unsignalized intersections are also associated with more uncertainty for users, as delays are less predictable than they are at signals.

The v/c ratio, also referred to as degree of saturation, represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay and queuing conditions may occur.

7.2 Capacity Analysis Results

Existing and background operating conditions during the peak study periods are evaluated to determine a basis for comparison with the projected future conditions. The future traffic conditions generated by the project were analyzed to assess the operation of the study area intersections. Capacity results for existing, background, and full build conditions are listed in **Table 6**. The discussion following the table summarizes capacity conditions. The detailed Synchro capacity analysis worksheets are provided after this report.

Table 6: *Capacity Analysis Results*

INTERSECTION	2026 EXISTING CONDITIONS						2027 BACKGROUND CONDITIONS						2027 FULL BUILD CONDITIONS					
	AM			PM			AM			PM			AM			PM		
	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c	LOS	Delay	v/c
1. North St at Standart Ave (S)																		
EB - Standart Ave	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
WB - Standart Ave	A	7.8	0.35	B	11.6	0.48	A	7.8	0.35	B	11.7	0.49	A	8.1	0.36	B	11.8	0.49
NB - North St	B	12.9	0.28	B	14.2	0.41	B	13.0	0.28	B	14.2	0.41	B	13.0	0.29	B	14.3	0.43
SB - North St	B	11.1	0.47	B	10.1	0.38	B	11.2	0.47	B	10.2	0.38	B	11.3	0.48	B	10.2	0.39
Overall LOS	**B**	**11.1**	**0.47**	**B**	**12.2**	**0.49**	**B**	**11.2**	**0.48**	**B**	**12.3**	**0.49**	**B**	**11.3**	**0.49**	**B**	**12.4**	**0.49**
2. North St at Exist Driveway (U)																		
EB - Exist Driveway	B	10.8	0.01	B	12.3	0.07	B	10.8	0.01	B	12.4	0.07	B	12.7	0.01	B	13.0	0.12
NB Left - North St	A	8.4	0.02	A	8.3	0.00	A	8.4	0.02	A	8.3	0.00	A	8.6	0.04	A	8.3	0.00
3. North St at Lansing St (S)																		
WB - Lansing St	B	18.5	0.36	C	22.9	0.54	B	18.8	0.37	C	22.9	0.55	B	19.9	0.43	C	22.9	0.55
NB - North St	A	4.0	0.23	A	5.8	0.26	A	4.0	0.23	A	5.8	0.27	A	4.3	0.24	A	5.8	0.28
SB - North St	A	4.6	0.23	A	5.8	0.24	A	4.7	0.23	A	5.9	0.24	A	4.9	0.24	A	6.0	0.25
Overall LOS	**A**	**5.9**	**0.37**	**A**	**8.6**	**0.55**	**A**	**5.9**	**0.37**	**A**	**8.7**	**0.55**	**A**	**6.5**	**0.43**	**A**	**8.7**	**0.55**
4. North St at Perrine St (U)																		
EB - Perrine St	C	20.0	0.26	C	17.5	0.19	C	20.2	0.27	C	17.7	0.20	C	24.3	0.32	C	18.8	0.31
WB - Exist Driveway	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
NB Left - North St	A	8.6	0.04	A	8.7	0.03	A	8.7	0.04	A	8.7	0.03	A	8.9	0.08	A	8.8	0.03
SB Left - North St	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00	A	0.0	0.00
5. North St at Seymour St (S)																		
EB - Seymour St	C	23.0	0.49	C	22.8	0.55	C	23.0	0.50	C	22.8	0.55	C	23.5	0.51	C	22.8	0.55
WB - Seymour St	C	21.0	0.41	B	19.4	0.36	C	21.0	0.41	B	19.4	0.36	C	20.6	0.43	B	19.4	0.36
NB - North St	A	7.5	0.27	A	8.8	0.33	A	7.5	0.27	A	8.8	0.33	A	7.9	0.30	A	8.9	0.34
SB - North St	A	7.4	0.27	A	8.1	0.28	A	7.5	0.27	A	8.2	0.29	A	7.7	0.28	A	8.5	0.32
Overall LOS	**B**	**11.6**	**0.57**	**B**	**12.3**	**0.56**	**B**	**11.6**	**0.50**	**B**	**12.3**	**0.56**	**B**	**11.9**	**0.52**	**B**	**12.3**	**0.56**
6. State St at Perrine St (S)																		
EB - Perrine St	A	8.7	0.28	A	6.8	0.15	A	8.8	0.28	A	6.8	0.15	A	9.2	0.29	A	6.7	0.15
WB - Perrine St	A	8.2	0.21	A	9.0	0.24	A	8.2	0.22	A	9.1	0.24	A	8.4	0.22	A	9.4	0.28
NB - State St	A	6.2	0.21	A	6.0	0.23	A	6.2	0.21	A	6.1	0.23	A	6.1	0.23	A	6.3	0.24
SB - State St	A	6.7	0.26	A	5.9	0.17	A	6.7	0.26	A	5.9	0.18	A	6.8	0.28	A	6.2	0.18
Overall LOS	**A**	**7.1**	**0.29**	**A**	**6.6**	**0.24**	**A**	**7.1**	**0.29**	**A**	**6.6**	**0.24**	**A**	**7.2**	**0.30**	**A**	**7.0**	**0.28**
7. Lansing St at Grant Ave (U)																		
EB - Lansing St	C	15.0	0.11	C	21.4	0.15	C	15.2	0.11	C	21.7	0.15	C	15.6	0.12	C	23.3	0.22
NB Left - Grant Ave	A	8.4	0.01	A	9.7	0.01	A	8.4	0.01	A	9.7	0.01	A	8.5	0.02	A	9.8	0.01
8. Perrine St at Proposed Driveway (U)																		
EB Left - Perrine St	N/A			N/A			N/A			N/A			A	7.6	0.02	A	7.4	0.00
SB - Proposed Driveway													A	9.7	0.01	A	9.6	0.08

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

N/A = Approach does not exist and/or was not analyzed during this condition

1. North St at Standart Ave (Signalized)
All approaches operate at an acceptable LOS B or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

2. North St at 143 North St Driveway (Signalized)
All approaches operate at an acceptable LOS B or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

3. North St at Lansing St (Signalized)
All approaches operate at an acceptable LOS C or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

4. North St at Perrine St (Unsignalized)
All approaches operate at an acceptable LOS C or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

5. North St at Seymour St (Signalized)
All approaches operate at an acceptable LOS C or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

6. State St at Perrine St (Signalized)
All approaches operate at an acceptable LOS A under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

7. Lansing St at Grant Ave (Unsignalized)
All approaches operate at an acceptable LOS C or better under all conditions during both peak hours. No changes in level of service are anticipated and no improvements are warranted nor recommended at this location.

8. Perrine St at Proposed Driveway (Signalized)
All approaches operate at an acceptable LOS A under full build conditions during both peak hours. The proposed westerly driveway should consist of one enter and one exit lane

8.0 CONCLUSIONS AND RECOMMENDATIONS

This Traffic Impact Study identified and evaluated the potential traffic impacts that can be expected from the proposed medical office located at 143-147 North Street in the City of Auburn, NY. The results of this comprehensive study determined that the existing transportation network can adequately accommodate the projected traffic volumes and resulting minor impacts to study area intersections. The following sets forth the conclusions and recommendations based upon the results of the analyses:

1. The proposed project is estimated to generate 125 entering and 12 exiting vehicle trips during the AM peak hour, and 13 entering and 115 exiting vehicle trips during the PM peak hour.

2. Based on the results of crash analysis, there are no inherent safety deficiencies at any of the study intersections.

3. All movements generally operate at an acceptable LOS D or better under existing, projected background, and full build conditions (with proposed development) during both peak hours at all study intersections. No changes in level of service are anticipated at any of the study intersections.

4. The proposed driveway along Perrine St should consist of one enter and one exit lane.

5. The proposed driveway along W Park Ave should consist of one enter and one exit lane.

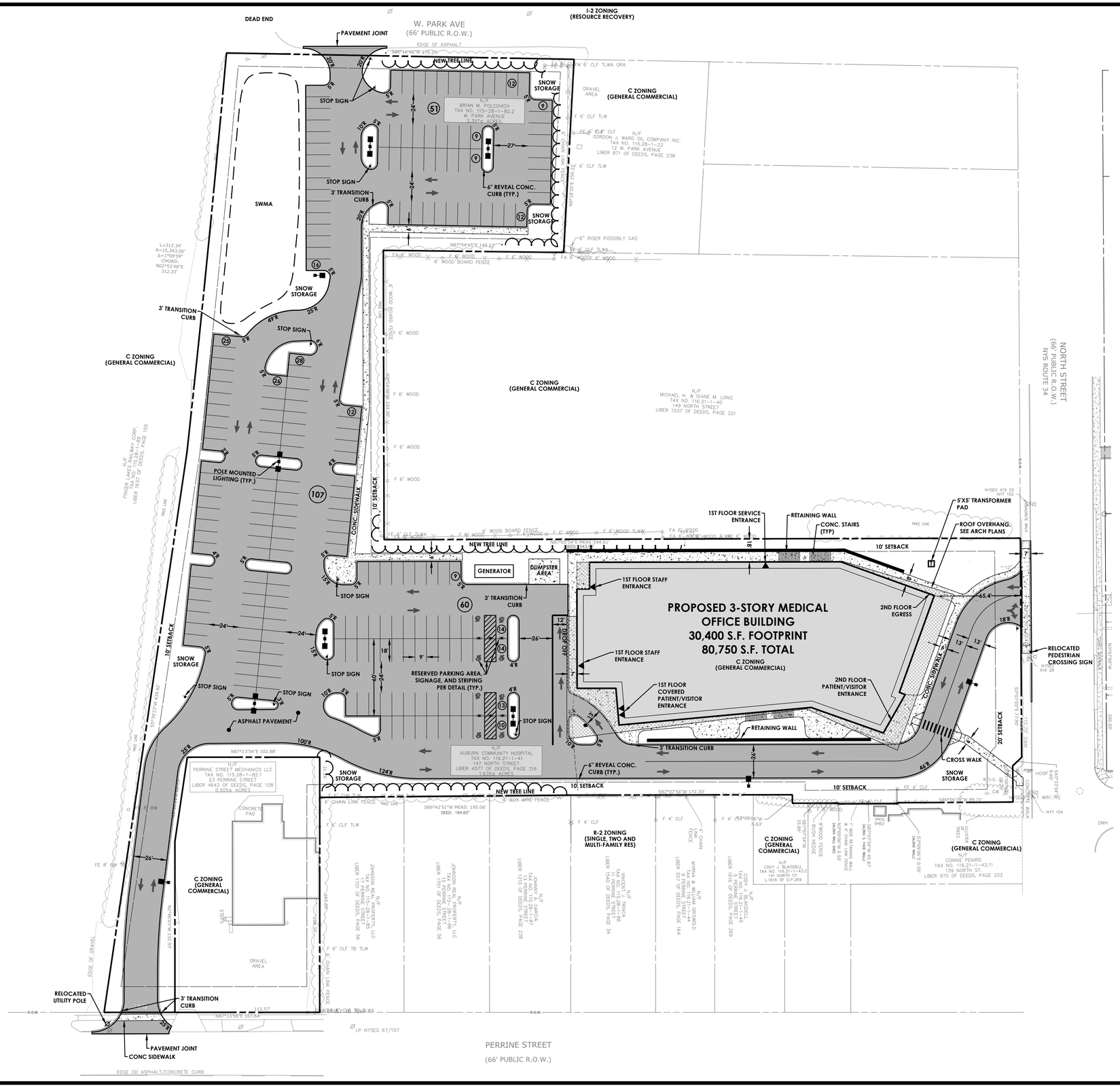
6. Pursuant to the State Environmental Quality Review Act (SEQRA), this detailed analysis demonstrates that the proposed project does not result in any significant adverse traffic impacts even at full development.

9.0 REFERENCES

- Synchro 12 Software. Cubic ITS.
- Highway Capacity Manual (7th Edition). Transportation Research Board (TRB). Washington, DC. 2022.
- Trip Generation Manual (12th Edition). Institute of Transportation Engineers (ITE). Washington, DC. 2025.
- Trip Generation Handbook (3rd Edition). Institute of Transportation Engineers (ITE). Washington, DC. 2017.
- OnTheMap. United States Census Bureau. 2024.
- Traffic Data Viewer. New York State Department of Transportation (NYSDOT). 2024.
- Highway Functional Classification Concepts, Criteria, and Procedures. Federal Highway Administration (FHWA). 2023.
- Manual on Uniform Traffic Control Devices (11th Edition). Federal Highway Administration. 2023

10.0 FIGURES

Figures 1 through 7b are included on the following pages.



LEGEND - SITE:

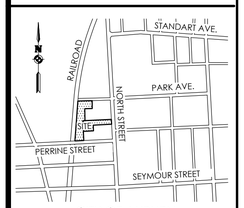
- PROPERTY BOUNDARY
- R.O.W. — RIGHT OF WAY
- EXISTING CENTER LINE ROAD
- SETBACK
- PROPOSED EASEMENT LINE
- EXISTING EASEMENT LINE
- EXISTING BUILDING
- PROPOSED BUILDING
- (14) PROPOSED PARKING COUNT
- PROPOSED CONCRETE
- PROPOSED ACCESS RAMP
- PROPOSED PAVEMENT STRIPING
- PROPOSED CURB
- PROPOSED SIGN
- EXISTING SIGN
- PROPOSED LIGHT POLE
- PROPOSED FENCE
- PROPOSED BUILDING MOUNTED LIGHT

40 0 20 40 80

HORIZONTAL SCALE: 1"=40'

N

PASSERO
engineering architecture



CITY OF AUBURN
LOCATION SKETCH
N.T.S.

STAMP:

CLIENT:
PARK GROVE REALTY, LLC
46 PRINCE STREET
ROCHESTER, NY 14607

Passero Associates
242 WEST MAIN ST., SUITE 100 (585) 325-1000
ROCHESTER, NY 14614 FAX: (585) 325-1691

PROJECT MANAGER ANDREW BURNS, P.E.
PROJECT ENGINEER ANDREW BURNS, P.E.
DESIGNER JACOB LEWIS, E.I.T.

NO.	DATE	BY	DESCRIPTION

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SITE PLAN

AUBURN, NY

AUBURN COMMUNITY HOSPITAL HEALTH CAMPUS
MUNICIPALITY: **AUBURN**
COUNTY: **CAYUGA** STATE: **NY**

PROJECT NO.: **20255046.0001**

DRAWING NO.: **C-102**

DATE: **MARCH 2026**

SCHEMATIC DESIGN

Y:\PROJECTS-NEW\2025\20255046\20255046.0001\01_CAD-BIM-MODELS\CIVIL\20255046.01_SITE.DWG 4/6/2026 4:07 PM Shari Kiels

Figure 1

PASSERO engineering architecture



Auburn Community Hospital Health Campus |
Cayuga County, City of Auburn, NY

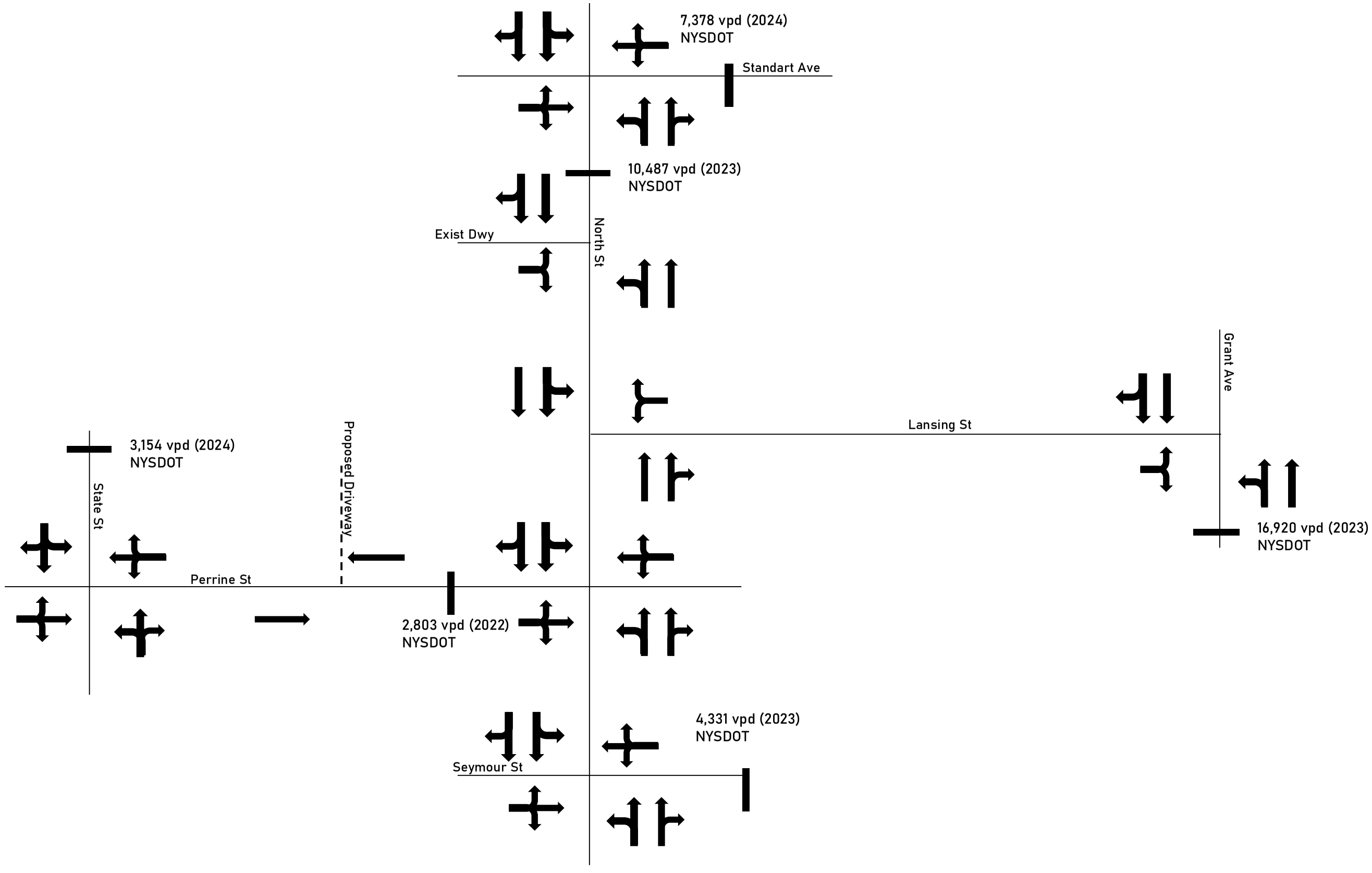
0 500 1,000 2,000 Feet

N

Site Location and Study Area

Key:
- # Study Intersection
- # Proposed Intersection
- Study Area
- Project Location

Project Number: 20255046.0001



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Rochester, NY 14614

Lane Geometry and Average Daily Traffic

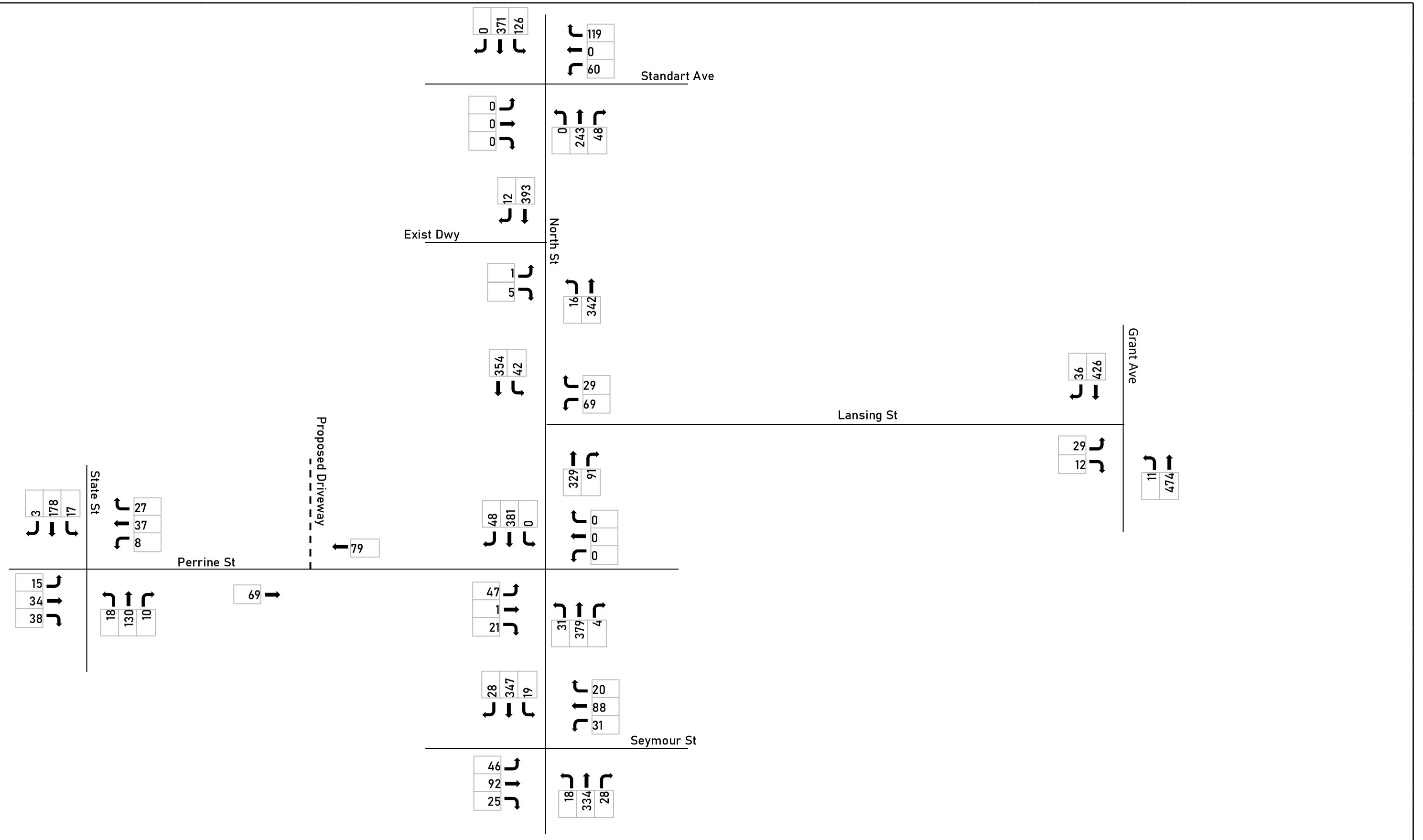
Auburn Community Hospital Health Campus

City of Auburn, NY

Notes:

Figure 2

PN: 20255046.0001



2026 Existing Conditions - Weekday AM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

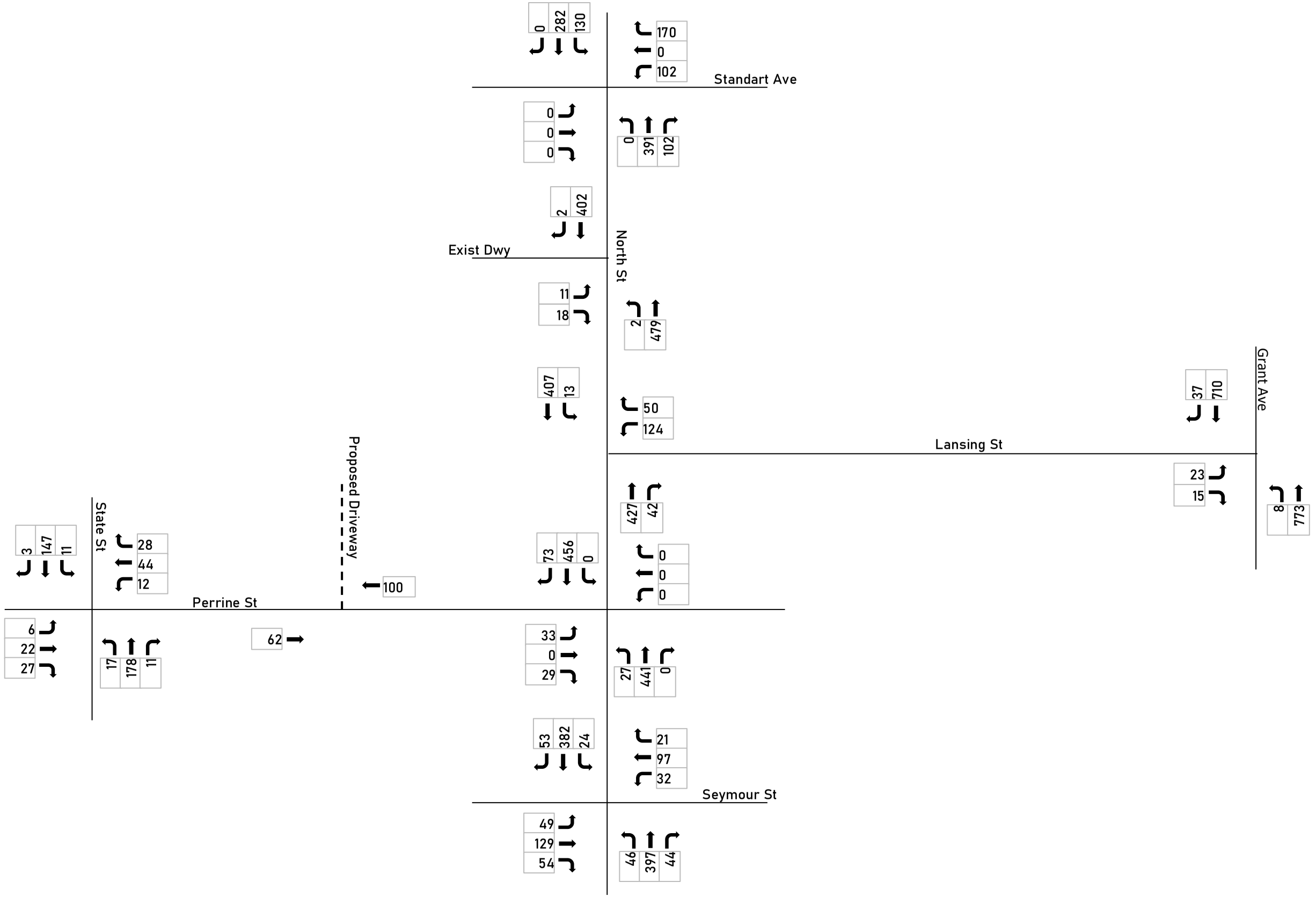
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Notes:

Figure 3a

PN: 20255046.0001



2026 Existing Conditions - Weekday PM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

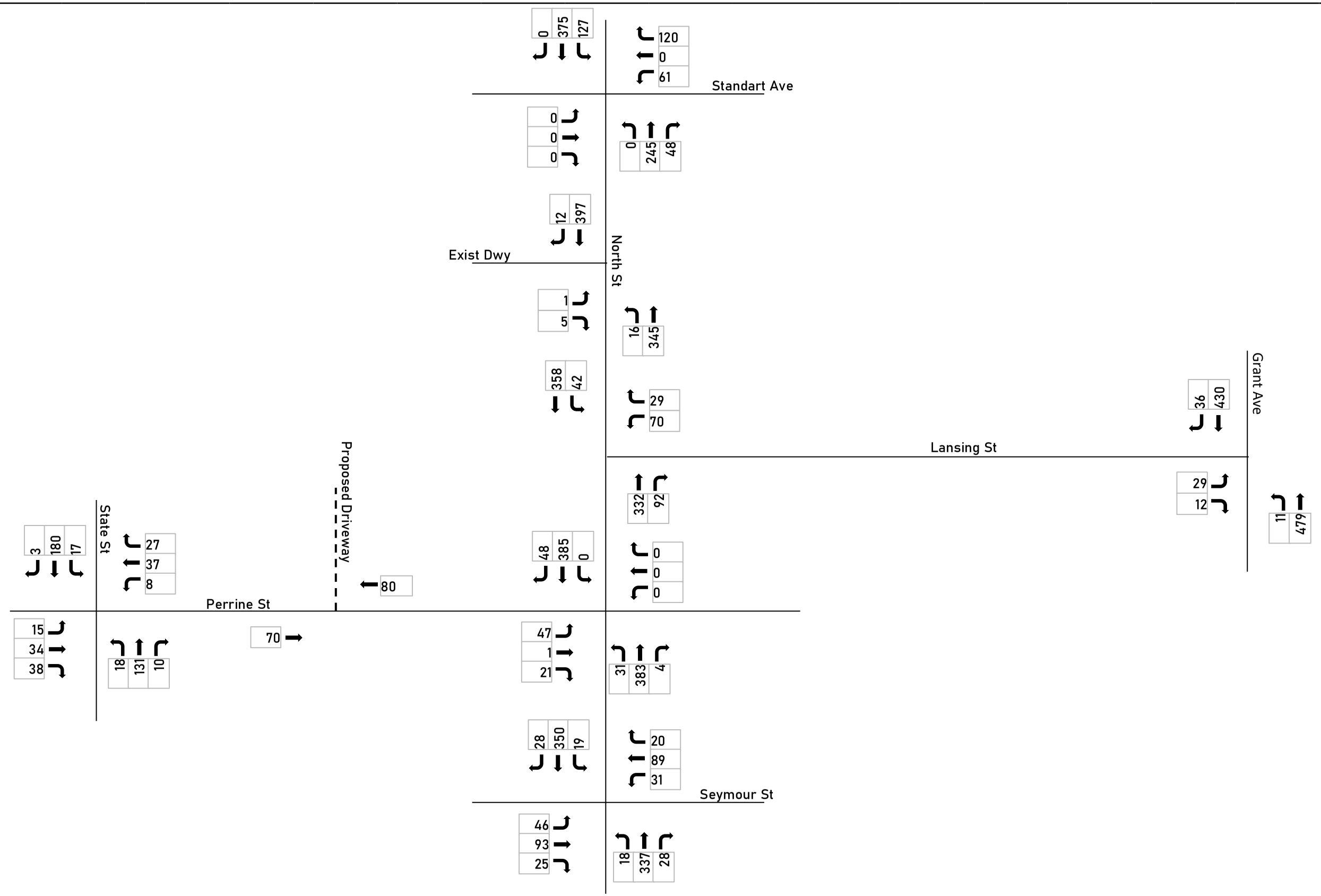
Notes:

Figure 3b

PN: 20255046.0001

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2027 Background Conditions - Weekday AM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

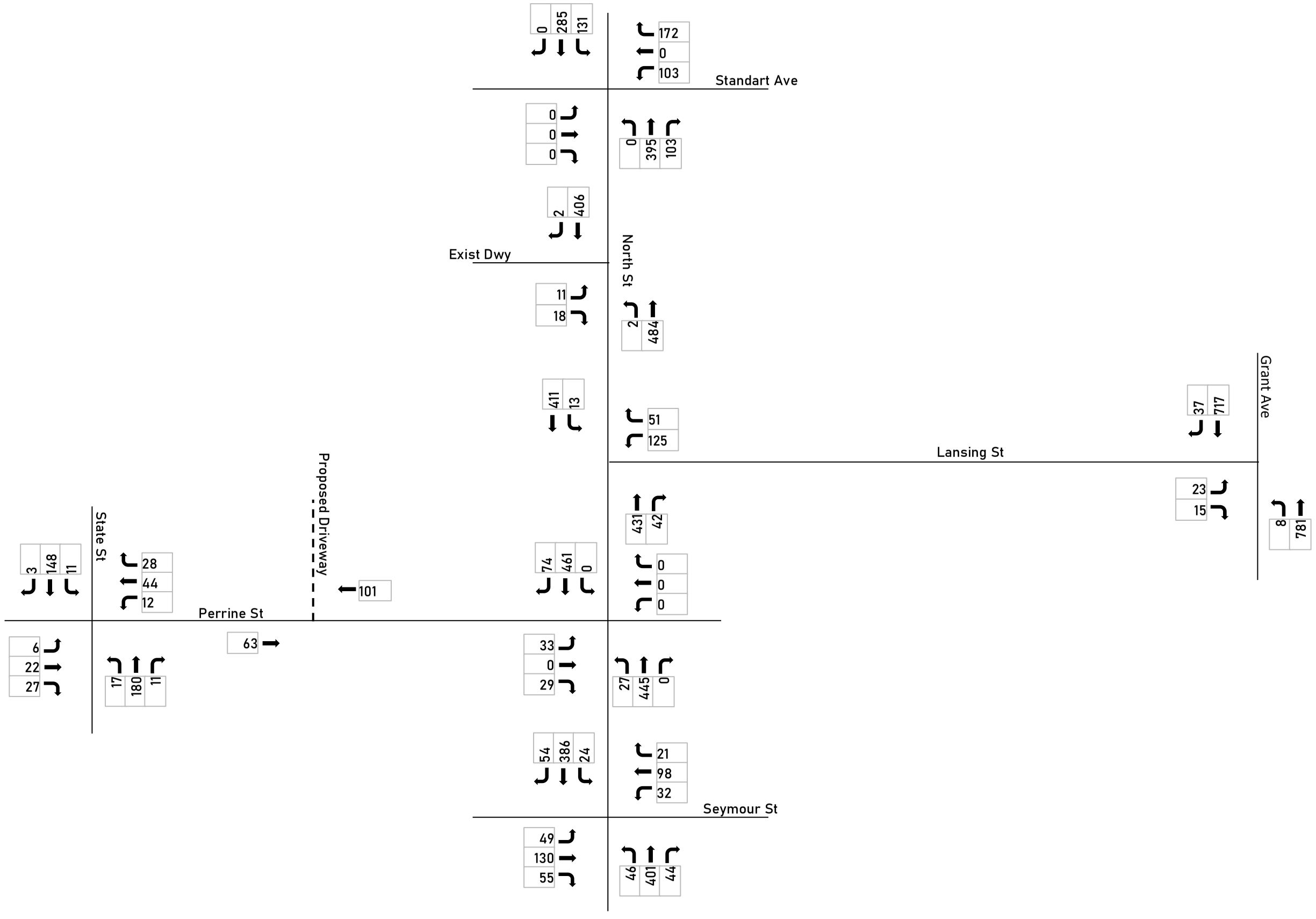
Notes:

Figure 4a

PN: 20255046.0001

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2027 Background Conditions - Weekday PM Peak Hour

Auburn Community Hospital Health Campus

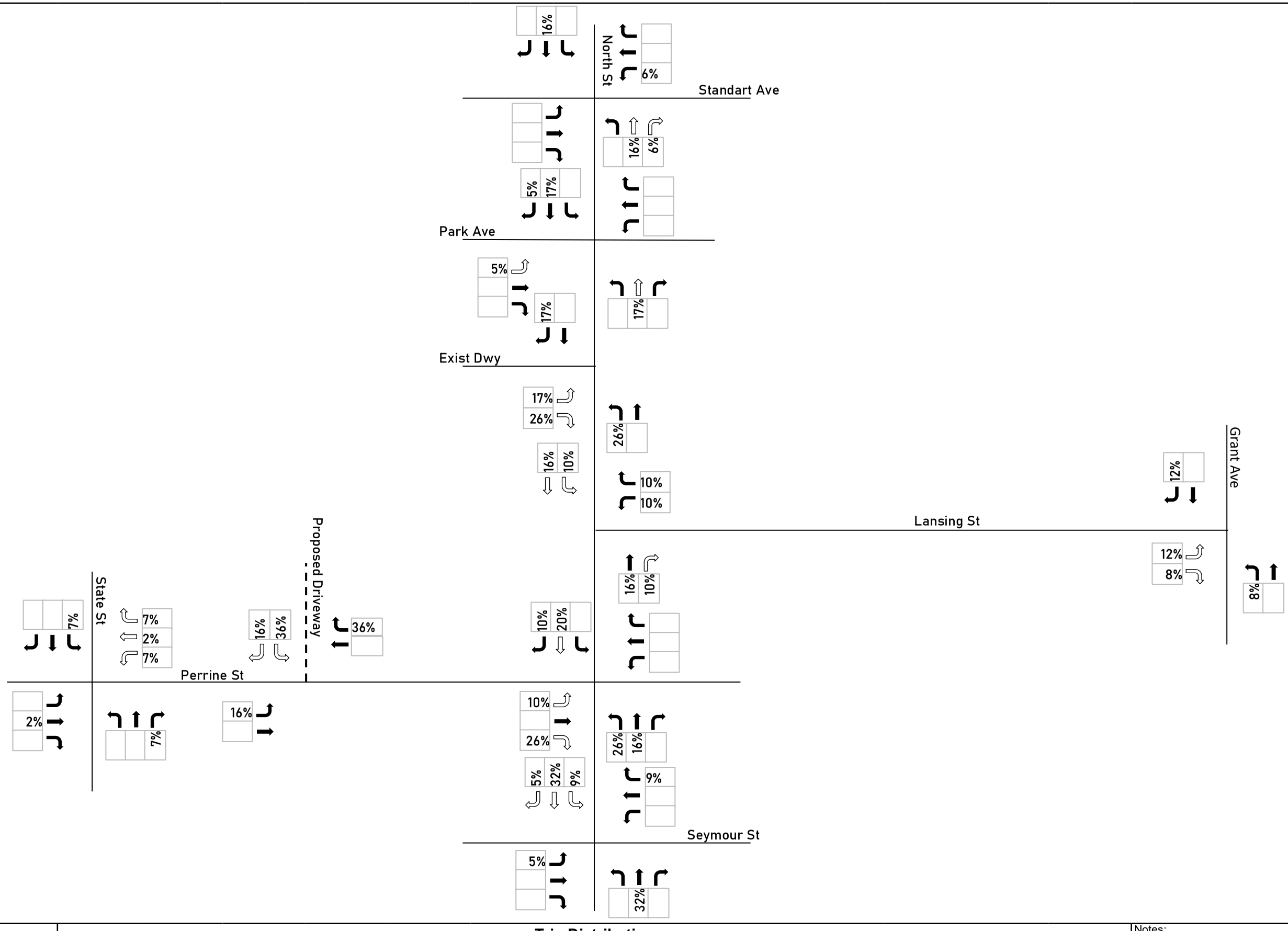
City of Auburn, NY

Notes:

Figure 4b

PN: 20255046.0001

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Trip Distribution

Auburn Community Hospital Health Campus

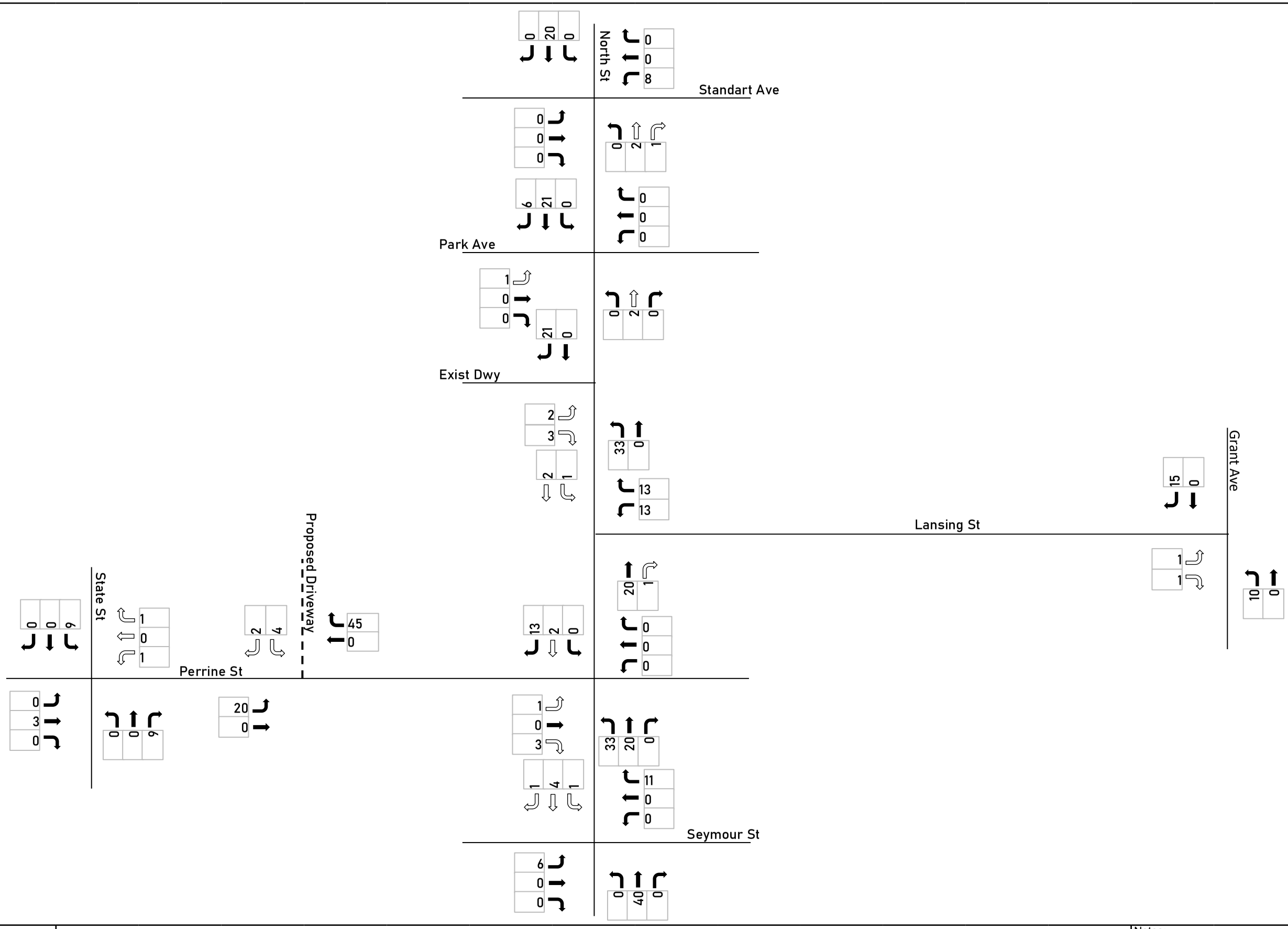
City of Auburn, NY

Notes:

Figure 5

PN: 20255046.0001

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Total Site Trip Assignment - Weekday AM Peak Hour

Auburn Community Hospital Health Campus

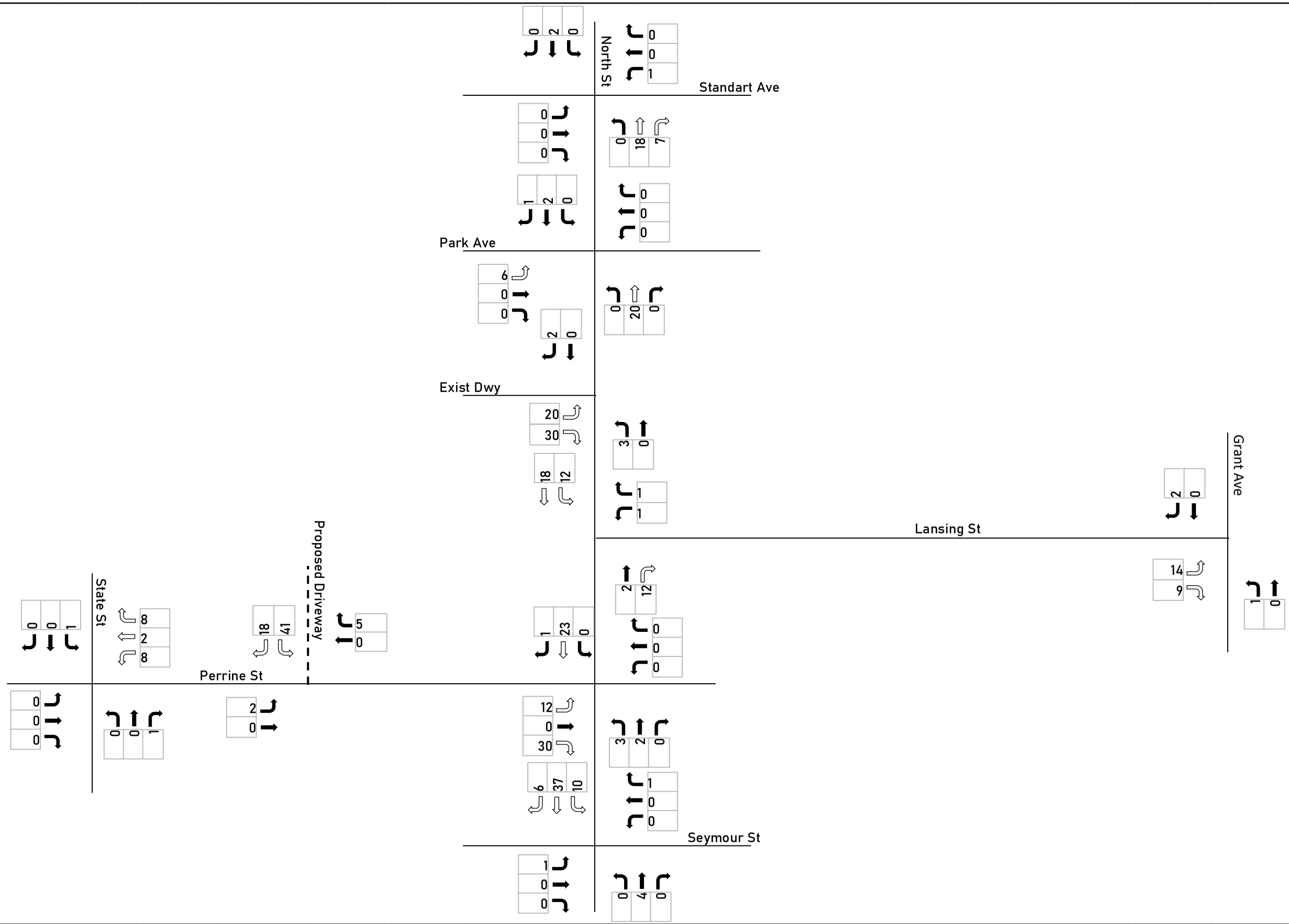
City of Auburn, NY

Notes:

Figure 6a

PN: 20255046.0001

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Total Site Trip Assignment - Weekday PM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

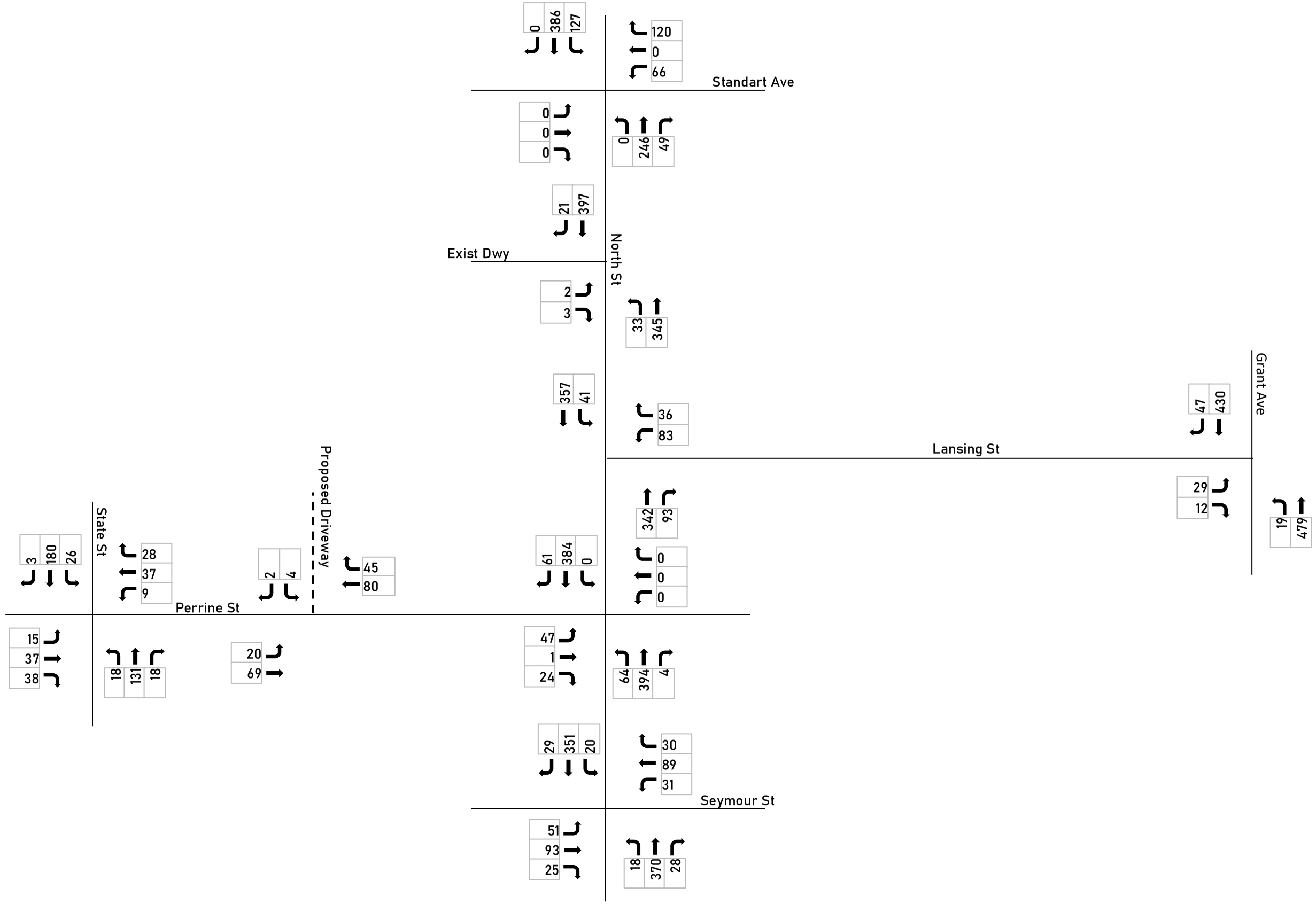
Notes:

Figure 6b

PN: 20255046.0001

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2027 Full Build Conditions - Weekday AM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

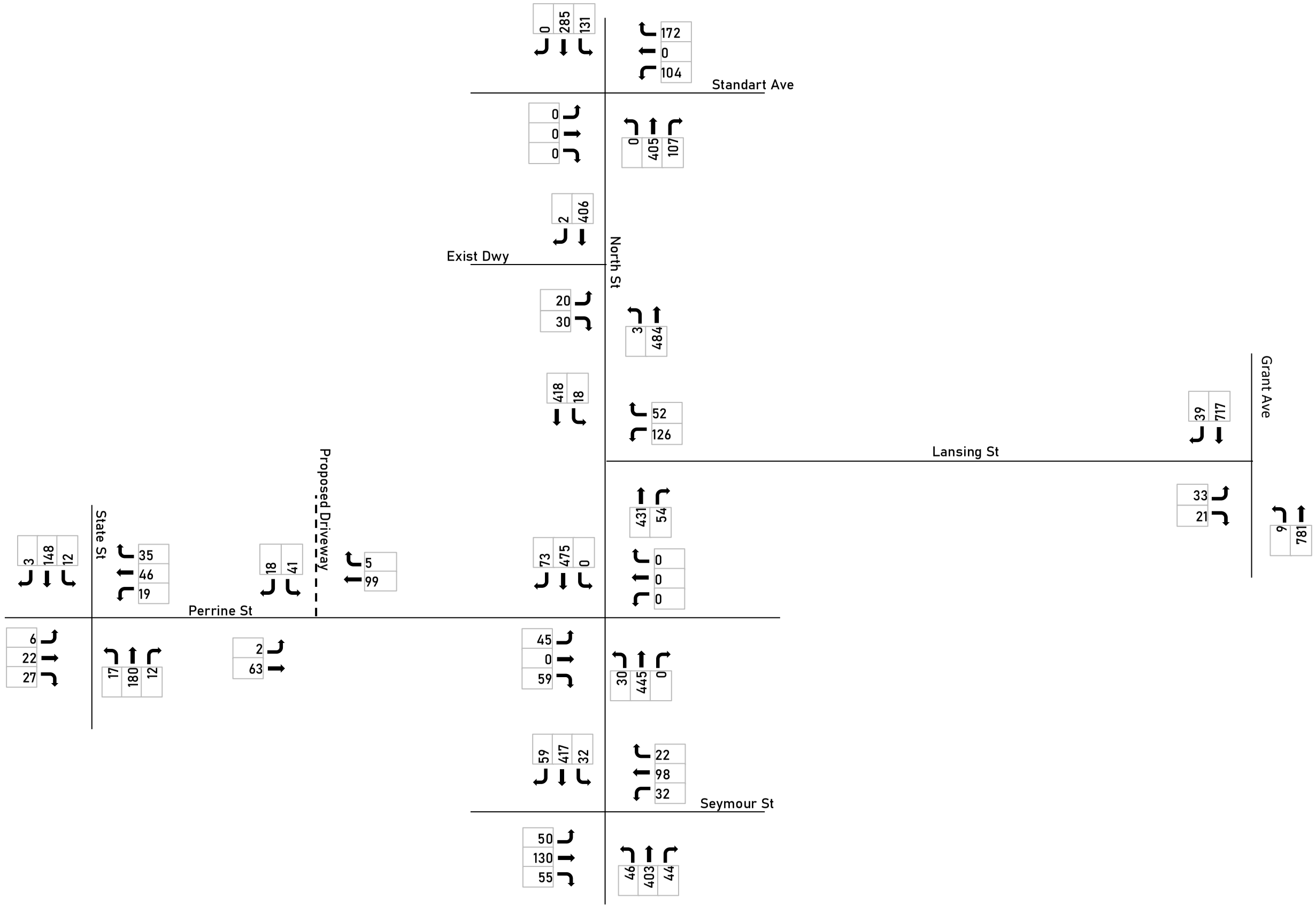
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Notes:

Figure 7a

PN: 20255046.0001



2027 Full Build Conditions - Weekday PM Peak Hour

Auburn Community Hospital Health Campus

City of Auburn, NY

Notes:

Figure 7b

PN: 20255046.0001

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Rochester, NY 14614

APPENDICES

APPENDIX A: EXISTING TRAFFIC COUNT DATA

Project Name Auburn Medical Office
Location Name North St at Standart Ave
Classification 7:00 AM
Project Date(s) 3/11/2026

		North St				Standart Ave				South St								
		North				East				South				West				
Date	Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Intersection Total
03/11/2026	7:00 AM	13	66	0	0	8	0	26	0	0	63	5	0	0	0	0	0	181
03/11/2026	7:15 AM	15	69	0	0	13	0	26	0	0	50	6	0	0	0	0	0	179
03/11/2026	7:30 AM	19	101	0	0	12	0	28	0	0	49	13	0	0	0	0	0	222
03/11/2026	7:45 AM	30	124	0	0	16	0	31	0	0	81	12	0	0	0	0	0	294
03/11/2026	7 AM Hourly Total	77	360	0	0	49	0	111	0	0	243	36	0	0	0	0	0	876
03/11/2026	8:00 AM	30	78	0	0	13	0	28	0	0	55	9	0	0	0	0	0	213
03/11/2026	8:15 AM	34	83	0	0	17	0	24	0	0	49	8	0	0	0	0	0	215
03/11/2026	8:30 AM	32	86	0	0	14	0	36	0	0	58	19	0	0	0	0	0	245
03/11/2026	8:45 AM	27	97	0	0	18	0	29	0	0	63	22	0	0	0	0	0	256
03/11/2026	8 AM Hourly Total	123	344	0	0	62	0	117	0	0	225	58	0	0	0	0	0	929
03/11/2026	4:00 PM	30	81	0	0	17	0	35	0	0	133	28	0	0	0	0	0	324
03/11/2026	4:15 PM	37	59	0	0	27	0	48	0	0	93	23	0	0	0	0	0	287
03/11/2026	4:30 PM	32	70	0	0	32	0	46	0	0	95	27	0	0	0	0	0	302
03/11/2026	4:45 PM	31	72	0	0	26	0	41	0	0	70	24	0	0	0	0	0	264
03/11/2026	4 PM Hourly Total	130	282	0	0	102	0	170	0	0	391	102	0	0	0	0	0	1177
03/11/2026	5:00 PM	24	76	0	0	31	0	34	0	0	69	15	0	0	0	0	0	249
03/11/2026	5:15 PM	23	58	0	0	22	0	31	0	0	68	19	0	0	0	0	0	221
03/11/2026	5:30 PM	32	59	0	0	15	0	30	0	0	54	16	0	0	0	0	0	206
03/11/2026	5:45 PM	27	59	0	0	18	0	32	0	1	50	17	0	0	0	1	0	205
03/11/2026	5 PM Hourly Total	106	252	0	0	86	0	127	0	1	241	67	0	0	0	1	0	881
03/11/2026	Project Total	436	1238	0	0	299	0	525	0	1	1100	263	0	0	0	1	0	3863

		North St				Standart Ave				South St								
		North				East				South				West				
Date	Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Intersection Total
03/11/2026	7:45 AM	30	124	0	0	16	0	31	0	0	81	12	0	0	0	0	0	294
03/11/2026	8:00 AM	30	78	0	0	13	0	28	0	0	55	9	0	0	0	0	0	213
03/11/2026	8:15 AM	34	83	0	0	17	0	24	0	0	49	8	0	0	0	0	0	215
03/11/2026	8:30 AM	32	86	0	0	14	0	36	0	0	58	19	0	0	0	0	0	245
03/11/2026	**AM PEAK HOUR**	**126**	**371**	**0**	**0**	**60**	**0**	**119**	**0**	**0**	**243**	**48**	**0**	**0**	**0**	**0**	**0**	**967** PHF = **0.82**
	HV%	1.6%	5.1%	#DIV/0!	#DIV/0!	6.7%	#DIV/0!	0.8%	#DIV/0!	#DIV/0!	13.2%	6.3%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	

03/11/2026	4:00 PM	30	81	0	0	17	0	35	0	0	133	28	0	0	0	0	0	324
03/11/2026	4:15 PM	37	59	0	0	27	0	48	0	0	93	23	0	0	0	0	0	287
03/11/2026	4:30 PM	32	70	0	0	32	0	46	0	0	95	27	0	0	0	0	0	302
03/11/2026	4:45 PM	31	72	0	0	26	0	41	0	0	70	24	0	0	0	0	0	264
03/11/2026	**PM PEAK HOUR**	**130**	**282**	**0**	**0**	**102**	**0**	**170**	**0**	**0**	**391**	**102**	**0**	**0**	**0**	**0**	**0**	**1177** PHF = **0.91**
	HV%	0.0%	2.8%	#DIV/0!	#DIV/0!	1.0%	#DIV/0!	0.6%	#DIV/0!	#DIV/0!	7.4%	1.0%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	


W
N
North St
S
South St
E
Standart Ave

Project Name Auburn Medical Office
Location Name North St at 143 North St
Classification 2 Class & NVC
Project Date(s) 3/11/2026

		North St			North St			143 North St Driveway			
		North			South			West			
Date	Start Time	Thru	Right	U-Turn	Left	Thru	U-Turn	Left	Right	U-Turn	Intersection Total
03/11/2026	7:00 AM	71	4	0	2	76	0	0	0	0	153
03/11/2026	7:15 AM	75	2	0	1	56	0	1	1	0	136
03/11/2026	7:30 AM	111	2	0	4	66	0	1	0	0	184
03/11/2026	7:45 AM	116	4	0	10	108	0	0	1	0	239
03/11/2026	7 AM Hourly Total	373	12	0	17	306	0	2	2	0	712
03/11/2026	8:00 AM	87	3	0	3	73	0	0	1	0	167
03/11/2026	8:15 AM	90	2	0	1	64	0	1	1	0	159
03/11/2026	8:30 AM	100	3	0	2	97	0	0	2	0	204
03/11/2026	8:45 AM	107	0	0	3	94	0	2	2	0	208
03/11/2026	8 AM Hourly Total	384	8	0	9	328	0	3	6	0	738
03/11/2026	4:00 PM	103	2	0	0	152	0	5	8	0	270
03/11/2026	4:15 PM	87	0	0	2	115	0	6	9	0	219
03/11/2026	4:30 PM	121	0	0	0	111	0	0	0	0	232
03/11/2026	4:45 PM	91	0	0	0	101	0	0	1	0	193
03/11/2026	4 PM Hourly Total	402	2	0	2	479	0	11	18	0	914
03/11/2026	5:00 PM	120	0	0	0	98	0	1	1	0	220
03/11/2026	5:15 PM	89	0	0	0	81	0	0	0	0	170
03/11/2026	5:30 PM	74	0	0	0	75	0	0	0	0	149
03/11/2026	5:45 PM	69	0	0	0	68	0	0	0	0	137
03/11/2026	5 PM Hourly Total	352	0	0	0	322	0	1	1	0	676
03/11/2026	Project Total	1511	22	0	28	1435	0	17	27	0	3040

		North St			North St			143 North St Driveway					
		North			South			West					
Date	Start Time	Thru	Right	U-Turn	Left	Thru	U-Turn	Left	Right	U-Turn	Intersection Total		
03/11/2026	7:45 AM	116	4	0	10	108	0	0	1	0	239		
03/11/2026	8:00 AM	87	3	0	3	73	0	0	1	0	167		
03/11/2026	8:15 AM	90	2	0	1	64	0	1	1	0	159		
03/11/2026	8:30 AM	100	3	0	2	97	0	0	2	0	204		
03/11/2026	**AM PEAK HOUR**	**393**	**12**	**0**	**16**	**342**	**0**	**1**	**5**	**0**	**769**	PHF =	**0.80**
	HV%	6.6%	0.0%	#DIV/0!	0.0%	11.1%	#DIV/0!	0.0%	0.0%	#DIV/0!			

03/11/2026	4:00 PM	103	2	0	0	152	0	5	8	0	270		
03/11/2026	4:15 PM	87	0	0	2	115	0	6	9	0	219		
03/11/2026	4:30 PM	121	0	0	0	111	0	0	0	0	232		
03/11/2026	4:45 PM	91	0	0	0	101	0	0	1	0	193		
03/11/2026	**PM PEAK HOUR**	**402**	**2**	**0**	**2**	**479**	**0**	**11**	**18**	**0**	**914**	PHF =	**0.85**
	HV%	2.0%	0.0%	#DIV/0!	0.0%	6.5%	#DIV/0!	0.0%	0.0%	#DIV/0!			


N
North St
W
143 North St Driveway
S
North St

Project Name Auburn Medical Office
Location Name North St at Lansing St
Classification 2 Class & NVC
Project Date(s) 3/11/2026

		North St North			Lansing St East			North St South			
Date	**Start Time**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Intersection Total**
03/11/2026	7:00 AM	11	61	0	23	8	0	70	19	0	192
03/11/2026	7:15 AM	7	68	0	18	7	0	50	15	0	165
03/11/2026	7:30 AM	18	93	0	15	6	0	64	25	0	221
03/11/2026	7:45 AM	12	103	0	16	7	0	112	32	0	282
03/11/2026	7 AM Hourly Total	48	325	0	72	28	0	296	91	0	860
03/11/2026	8:00 AM	13	74	0	19	6	0	68	22	0	202
03/11/2026	8:15 AM	8	84	0	13	7	0	60	19	0	191
03/11/2026	8:30 AM	9	93	0	21	9	0	89	18	0	239
03/11/2026	8:45 AM	13	95	0	19	4	0	95	28	0	254
03/11/2026	8 AM Hourly Total	43	346	0	72	26	0	312	87	0	886
03/11/2026	4:00 PM	4	105	0	41	28	0	124	10	0	312
03/11/2026	4:15 PM	3	93	0	33	9	0	107	14	0	259
03/11/2026	4:30 PM	3	119	0	31	9	0	101	6	0	269
03/11/2026	4:45 PM	3	90	0	19	4	0	95	12	0	223
03/11/2026	4 PM Hourly Total	13	407	0	124	50	0	427	42	0	1063
03/11/2026	5:00 PM	2	117	0	27	11	0	89	12	0	258
03/11/2026	5:15 PM	5	85	0	17	5	0	77	8	0	197
03/11/2026	5:30 PM	1	73	0	19	0	0	76	13	0	182
03/11/2026	5:45 PM	2	64	0	16	7	0	60	11	0	160
03/11/2026	5 PM Hourly Total	10	339	0	79	23	0	302	44	0	797
03/11/2026	Project Total	114	1417	0	347	127	0	1337	264	0	3606

		North St North			Lansing St East			North St South					
Date	**Start Time**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**	**U-Turn**	**Thru**	**Right**	**U-Turn**	**Intersection Total**		
03/11/2026	7:45 AM	12	103	0	16	7	0	112	32	0	282		
03/11/2026	8:00 AM	13	74	0	19	6	0	68	22	0	202		
03/11/2026	8:15 AM	8	84	0	13	7	0	60	19	0	191		
03/11/2026	8:30 AM	9	93	0	21	9	0	89	18	0	239		
03/11/2026	**AM PEAK HOUR**	**42**	**354**	**0**	**69**	**29**	**0**	**329**	**91**	**0**	**914**	PHF =	**0.81**
	HV%	2.4%	7.1%	#DIV/0!	11.6%	0.0%	#DIV/0!	11.6%	5.5%	#DIV/0!			

03/11/2026	4:00 PM	4	105	0	41	28	0	124	10	0	312		
03/11/2026	4:15 PM	3	93	0	33	9	0	107	14	0	259		
03/11/2026	4:30 PM	3	119	0	31	9	0	101	6	0	269		
03/11/2026	4:45 PM	3	90	0	19	4	0	95	12	0	223		
03/11/2026	**PM PEAK HOUR**	**13**	**407**	**0**	**124**	**50**	**0**	**427**	**42**	**0**	**1063**	PHF =	**0.85**
	HV%	0.0%	2.0%	#DIV/0!	6.5%	0.0%	#DIV/0!	7.3%	2.4%	#DIV/0!			


W
N
North St
S
North St
E
Lansing St

Project Name Auburn Medical Office
Location Name North St at Perrine St
Classification 2 Class & NVC
Project Date(s) 3/11/2026

		North St								North St				Perrine St				
		North				East				South				West				
Date	Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Intersection Total
03/11/2026	7:00 AM	0	81	4	0	0	0	0	0	5	76	0	0	9	0	4	0	179
03/11/2026	7:15 AM	0	85	2	0	0	0	0	0	5	57	0	0	8	0	1	0	158
03/11/2026	7:30 AM	0	101	6	0	0	0	0	0	8	76	0	0	13	0	6	0	210
03/11/2026	7:45 AM	0	112	12	0	0	0	0	0	5	138	0	0	6	0	7	0	280
03/11/2026	7 AM Hourly Total	0	379	24	0	0	0	0	0	23	347	0	0	36	0	18	0	827
03/11/2026	8:00 AM	0	81	11	0	0	0	0	0	8	83	0	0	9	0	4	0	196
03/11/2026	8:15 AM	0	90	10	0	0	0	0	0	10	71	3	0	8	1	2	0	195
03/11/2026	8:30 AM	0	98	15	0	0	0	0	0	8	87	1	0	24	0	8	0	241
03/11/2026	8:45 AM	0	100	15	0	0	0	0	0	6	108	0	0	13	0	7	0	249
03/11/2026	8 AM Hourly Total	0	369	51	0	0	0	0	0	32	349	4	0	54	1	21	0	881
03/11/2026	4:00 PM	0	128	17	0	0	0	0	0	5	133	0	0	5	0	7	0	295
03/11/2026	4:15 PM	0	101	23	0	0	0	0	0	9	110	0	0	9	0	9	0	261
03/11/2026	4:30 PM	0	132	19	0	0	0	0	0	6	101	0	0	7	0	8	0	273
03/11/2026	4:45 PM	0	95	14	0	0	0	0	0	7	97	0	0	12	0	5	0	230
03/11/2026	4 PM Hourly Total	0	456	73	0	0	0	0	0	27	441	0	0	33	0	29	0	1059
03/11/2026	5:00 PM	0	122	22	0	0	0	0	0	6	87	0	0	14	0	5	1	257
03/11/2026	5:15 PM	0	89	14	0	0	0	0	0	8	76	0	0	9	0	6	0	202
03/11/2026	5:30 PM	0	83	8	0	0	0	0	0	2	76	0	0	13	0	8	0	190
03/11/2026	5:45 PM	0	63	19	0	0	0	0	0	6	57	0	0	14	0	5	0	164
03/11/2026	5 PM Hourly Total	0	357	63	0	0	0	0	0	22	296	0	0	50	0	24	1	813
03/11/2026	Project Total	0	1561	211	0	0	0	0	0	104	1433	4	0	173	1	92	1	3580

		North St								North St				Perrine St				
		North				East				South				West				
Date	Start Time	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Intersection Total
03/11/2026	7:45 AM	0	112	12	0	0	0	0	0	5	138	0	0	6	0	7	0	280
03/11/2026	8:00 AM	0	81	11	0	0	0	0	0	8	83	0	0	9	0	4	0	196
03/11/2026	8:15 AM	0	90	10	0	0	0	0	0	10	71	3	0	8	1	2	0	195
03/11/2026	8:30 AM	0	98	15	0	0	0	0	0	8	87	1	0	24	0	8	0	241
03/11/2026	**AM PEAK HOUR**	**0**	**381**	**48**	**0**	**0**	**0**	**0**	**0**	**31**	**379**	**4**	**0**	**47**	**1**	**21**	**0**	**912**
	HV%	#DIV/0!	8.1%	4.2%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	3.2%	11.6%	0.0%	#DIV/0!	0.0%	0.0%	4.8%	#DIV/0!	

PHF = **0.81**

03/11/2026	4:00 PM	0	128	17	0	0	0	0	0	5	133	0	0	5	0	7	0	295
03/11/2026	4:15 PM	0	101	23	0	0	0	0	0	9	110	0	0	9	0	9	0	261
03/11/2026	4:30 PM	0	132	19	0	0	0	0	0	6	101	0	0	7	0	8	0	273
03/11/2026	4:45 PM	0	95	14	0	0	0	0	0	7	97	0	0	12	0	5	0	230
03/11/2026	**PM PEAK HOUR**	**0**	**456**	**73**	**0**	**0**	**0**	**0**	**0**	**27**	**441**	**0**	**0**	**33**	**0**	**29**	**0**	**1059**
	HV%	#DIV/0!	3.3%	1.4%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	0.0%	7.3%	#DIV/0!	#DIV/0!	0.0%	#DIV/0!	0.0%	#DIV/0!	

PHF = **0.90**


E
S
North St
W
Perrine St
N
North St

Project Name Auburn Medical Office
Location Name North St at Seymour St
Classificatiom 2 Class & NVC
Project Date(s) 3/11/2026

		North St North				Seymour St East				South St South				Seymour St West				
Date	**Start Time**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Intersection Total**
03/11/2026	7:00 AM	1	68	13	0	5	13	3	0	2	65	4	0	8	15	7	0	204
03/11/2026	7:15 AM	7	72	7	0	1	11	5	0	5	52	6	0	8	18	5	0	197
03/11/2026	7:30 AM	8	85	9	0	4	17	7	0	9	69	10	0	13	27	14	0	272
03/11/2026	7:45 AM	6	105	7	0	9	27	8	0	4	114	5	0	13	29	7	0	334
03/11/2026	7 AM Hourly Total	22	330	36	0	19	68	23	0	20	300	25	0	42	89	33	0	1007
03/11/2026	8:00 AM	9	73	6	0	5	23	8	0	4	69	11	0	8	17	5	0	238
03/11/2026	8:15 AM	1	75	7	0	7	18	2	0	3	68	8	0	12	22	7	0	230
03/11/2026	8:30 AM	3	94	8	0	10	20	2	0	7	83	4	0	13	24	6	0	274
03/11/2026	8:45 AM	4	105	8	0	10	23	7	0	5	95	6	0	9	41	6	0	319
03/11/2026	8 AM Hourly Total	17	347	29	0	32	84	19	0	19	315	29	0	42	104	24	0	1061
03/11/2026	4:00 PM	5	113	19	0	10	21	3	0	7	126	14	0	16	24	13	0	371
03/11/2026	4:15 PM	11	86	9	0	8	26	9	0	18	93	6	0	12	33	13	0	324
03/11/2026	4:30 PM	3	102	15	0	6	22	5	0	10	90	13	0	10	32	15	0	323
03/11/2026	4:45 PM	5	81	10	0	8	28	4	0	11	88	11	0	11	40	13	0	310
03/11/2026	4 PM Hourly Total	24	382	53	0	32	97	21	0	46	397	44	0	49	129	54	0	1328
03/11/2026	5:00 PM	6	98	17	0	6	28	8	0	9	78	15	0	9	27	15	0	316
03/11/2026	5:15 PM	5	77	11	0	7	28	10	0	19	65	10	0	12	41	11	0	296
03/11/2026	5:30 PM	6	67	8	0	6	29	3	0	7	67	11	0	8	30	7	0	249
03/11/2026	5:45 PM	4	62	7	0	5	25	5	0	12	48	10	0	4	24	11	0	217
03/11/2026	5 PM Hourly Total	21	304	43	0	24	110	26	0	47	258	46	0	33	122	44	0	1078
03/11/2026	Project Total	84	1363	161	0	107	359	89	0	132	1270	144	0	166	444	155	0	4474

		North St North				Seymour St East				South St South				Seymour St West					
Date	**Start Time**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Intersection Total**	
03/11/2026	7:45 AM	6	105	7	0	9	27	8	0	4	114	5	0	13	29	7	0	334	
03/11/2026	8:00 AM	9	73	6	0	5	23	8	0	4	69	11	0	8	17	5	0	238	
03/11/2026	8:15 AM	1	75	7	0	7	18	2	0	3	68	8	0	12	22	7	0	230	
03/11/2026	8:30 AM	3	94	8	0	10	20	2	0	7	83	4	0	13	24	6	0	274	
03/11/2026	**AM PEAK HOUR**	**19**	**347**	**28**	**0**	**31**	**88**	**20**	**0**	**18**	**334**	**28**	**0**	**46**	**92**	**25**	**0**	**1076**	PHF = **0.81**
	HV%	5.3%	10.4%	0.0%	#DIV/0!	0.0%	6.8%	5.0%	#DIV/0!	0.0%	12.0%	25.0%	#DIV/0!	4.3%	5.4%	8.0%	#DIV/0!		
03/11/2026	4:00 PM	5	113	19	0	10	21	3	0	7	126	14	0	16	24	13	0	371	
03/11/2026	4:15 PM	11	86	9	0	8	26	9	0	18	93	6	0	12	33	13	0	324	
03/11/2026	4:30 PM	3	102	15	0	6	22	5	0	10	90	13	0	10	32	15	0	323	
03/11/2026	4:45 PM	5	81	10	0	8	28	4	0	11	88	11	0	11	40	13	0	310	
03/11/2026	**PM PEAK HOUR**	**24**	**382**	**53**	**0**	**32**	**97**	**21**	**0**	**46**	**397**	**44**	**0**	**49**	**129**	**54**	**0**	**1328**	PHF = **0.89**
	HV%	0.0%	4.2%	0.0%	#DIV/0!	0.0%	0.0%	0.0%	#DIV/0!	0.0%	8.3%	13.6%	#DIV/0!	0.0%	0.0%	0.0%	#DIV/0!		

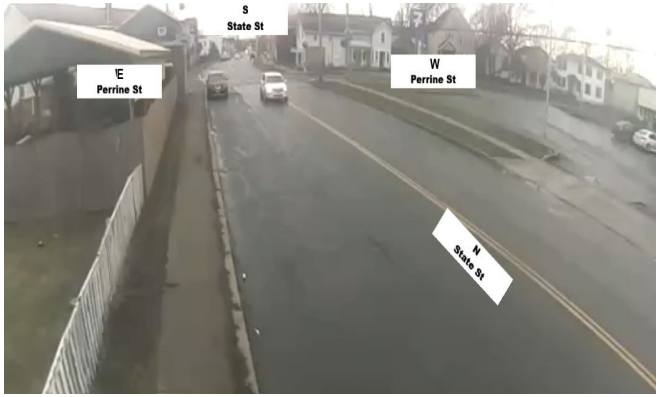

S
South St
W
Seymour St
E
Seymour St
N
North St

Project Name Auburn Medical Office
Location Name Perrine St at State St
Classification 2 Class & NVC
Project Date(s) 3/11/2026

		State St North				Perrine St East				State St South				Perrine St West				
Date	**Start Time**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Intersection Total**
03/11/2026	7:00 AM	3	24	0	0	0	6	2	0	0	17	3	0	1	3	3	0	62
03/11/2026	7:15 AM	2	48	1	0	0	2	2	0	1	14	1	0	0	7	3	0	81
03/11/2026	7:30 AM	6	51	0	0	6	1	10	0	2	28	1	0	1	6	2	0	114
03/11/2026	7:45 AM	2	66	2	0	2	3	10	0	3	33	3	0	0	5	5	0	134
03/11/2026	7 AM Hourly Total	13	189	3	0	8	12	24	0	6	92	8	0	2	21	13	0	391
03/11/2026	8:00 AM	6	42	0	0	2	9	5	0	3	40	3	0	2	2	2	0	116
03/11/2026	8:15 AM	2	28	1	0	3	14	7	0	4	31	2	0	1	7	6	0	106
03/11/2026	8:30 AM	7	42	0	0	1	11	5	0	8	26	2	0	12	20	25	0	159
03/11/2026	8:45 AM	0	40	0	0	4	10	5	0	3	25	5	0	7	11	12	0	122
03/11/2026	8 AM Hourly Total	15	152	1	0	10	44	22	0	18	122	12	0	22	40	45	0	503
03/11/2026	4:00 PM	3	48	2	0	2	10	4	0	1	57	1	0	2	5	8	0	143
03/11/2026	4:15 PM	2	33	1	0	4	11	10	0	4	49	4	0	3	6	2	0	129
03/11/2026	4:30 PM	3	35	0	0	5	12	6	0	6	32	2	0	0	4	8	0	113
03/11/2026	4:45 PM	3	31	0	0	1	11	8	0	6	40	4	0	1	7	9	0	121
03/11/2026	4 PM Hourly Total	11	147	3	0	12	44	28	0	17	178	11	0	6	22	27	0	506
03/11/2026	5:00 PM	6	35	2	0	2	14	7	0	6	31	1	0	1	7	10	0	122
03/11/2026	5:15 PM	3	40	1	0	7	11	6	0	5	33	6	0	0	9	7	0	128
03/11/2026	5:30 PM	2	33	3	0	1	9	1	0	7	37	3	0	2	14	6	0	118
03/11/2026	5:45 PM	8	23	1	0	2	12	5	0	0	26	2	0	0	9	5	0	93
03/11/2026	5 PM Hourly Total	19	131	7	0	12	46	19	0	18	127	12	0	3	39	28	0	461
03/11/2026	Project Total	58	619	14	0	42	146	93	0	59	519	43	0	33	122	113	0	1861

		State St North				Perrine St East				State St South				Perrine St West					
Date	**Start Time**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**Right**	**U-Turn**	**Intersection Total**	
03/11/2026	7:45 AM	2	66	2	0	2	3	10	0	3	33	3	0	0	5	5	0	134	
03/11/2026	8:00 AM	6	42	0	0	2	9	5	0	3	40	3	0	2	2	2	0	116	
03/11/2026	8:15 AM	2	28	1	0	3	14	7	0	4	31	2	0	1	7	6	0	106	
03/11/2026	8:30 AM	7	42	0	0	1	11	5	0	8	26	2	0	12	20	25	0	159	
03/11/2026	**AM PEAK HOUR**	**17**	**178**	**3**	**0**	**8**	**37**	**27**	**0**	**18**	**130**	**10**	**0**	**15**	**34**	**38**	**0**	**515**	PHF = **0.81**
	HV%	11.8%	5.6%	33.3%	#DIV/0!	0.0%	2.7%	7.4%	#DIV/0!	0.0%	9.2%	10.0%	#DIV/0!	26.7%	2.9%	10.5%	#DIV/0!		

03/11/2026	4:00 PM	3	48	2	0	2	10	4	0	1	57	1	0	2	5	8	0	143	
03/11/2026	4:15 PM	2	33	1	0	4	11	10	0	4	49	4	0	3	6	2	0	129	
03/11/2026	4:30 PM	3	35	0	0	5	12	6	0	6	32	2	0	0	4	8	0	113	
03/11/2026	4:45 PM	3	31	0	0	1	11	8	0	6	40	4	0	1	7	9	0	121	
03/11/2026	**PM PEAK HOUR**	**11**	**147**	**3**	**0**	**12**	**44**	**28**	**0**	**17**	**178**	**11**	**0**	**6**	**22**	**27**	**0**	**506**	PHF = **0.88**
	HV%	0.0%	1.4%	0.0%	#DIV/0!	0.0%	0.0%	3.6%	#DIV/0!	0.0%	2.8%	0.0%	#DIV/0!	0.0%	0.0%	0.0%	#DIV/0!		


S
State St
E
Perrine St
W
Perrine St
N
State St

Project Name Auburn Medical Office
Location Name Lansing St at Grant Ave
Classification 2 Class & NVC
Project Date(s) 3/11/2026

		Grant Ave North			Grant Ave South			Lansing Ave West			
Date	**Start Time**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**	**U-Turn**	**Intersection Total**
03/11/2026	7:00 AM	79	4	0	3	92	0	5	8	0	191
03/11/2026	7:15 AM	88	4	0	0	103	0	6	1	0	202
03/11/2026	7:30 AM	97	15	0	4	112	0	1	2	0	231
03/11/2026	7:45 AM	121	19	0	5	112	0	8	3	0	268
03/11/2026	7 AM Hourly Total	385	42	0	12	419	0	20	14	0	892
03/11/2026	8:00 AM	106	6	0	2	122	0	5	5	0	246
03/11/2026	8:15 AM	93	8	0	2	115	0	5	2	0	225
03/11/2026	8:30 AM	106	3	0	2	125	0	11	2	0	249
03/11/2026	8:45 AM	113	15	0	7	146	0	5	2	0	288
03/11/2026	8 AM Hourly Total	418	32	0	13	508	0	26	11	0	1008
03/11/2026	4:00 PM	168	5	0	1	206	0	7	6	0	393
03/11/2026	4:15 PM	175	9	0	2	208	0	6	4	0	404
03/11/2026	4:30 PM	181	11	0	2	174	0	3	3	0	374
03/11/2026	4:45 PM	186	12	0	3	185	0	7	2	0	395
03/11/2026	4 PM Hourly Total	710	37	0	8	773	0	23	15	0	1566
03/11/2026	5:00 PM	221	10	0	3	163	0	6	7	0	410
03/11/2026	5:15 PM	187	12	0	1	172	0	6	1	0	379
03/11/2026	5:30 PM	174	8	0	1	148	0	8	3	0	342
03/11/2026	5:45 PM	158	8	0	4	111	0	2	3	0	286
03/11/2026	5 PM Hourly Total	740	38	0	9	594	0	22	14	0	1417
03/11/2026	Project Total	2253	149	0	42	2294	0	91	54	0	4883

		Grant Ave North			Grant Ave South			Lansing Ave West				
Date	**Start Time**	**Thru**	**Right**	**U-Turn**	**Left**	**Thru**	**U-Turn**	**Left**	**Right**	**U-Turn**	**Intersection Total**	
03/11/2026	7:45 AM	121	19	0	5	112	0	8	3	0	268	
03/11/2026	8:00 AM	106	6	0	2	122	0	5	5	0	246	
03/11/2026	8:15 AM	93	8	0	2	115	0	5	2	0	225	
03/11/2026	8:30 AM	106	3	0	2	125	0	11	2	0	249	
03/11/2026	**AM PEAK HOUR**	**426**	**36**	**0**	**11**	**474**	**0**	**29**	**12**	**0**	**988**	PHF = **0.92**
	HV%	2.8%	0.0%	#DIV/0!	0.0%	3.4%	#DIV/0!	0.0%	8.3%	#DIV/0!		

03/11/2026	4:00 PM	168	5	0	1	206	0	7	6	0	393	
03/11/2026	4:15 PM	175	9	0	2	208	0	6	4	0	404	
03/11/2026	4:30 PM	181	11	0	2	174	0	3	3	0	374	
03/11/2026	4:45 PM	186	12	0	3	185	0	7	2	0	395	
03/11/2026	**PM PEAK HOUR**	**710**	**37**	**0**	**8**	**773**	**0**	**23**	**15**	**0**	**1566**	PHF = **0.97**
	HV%	1.0%	0.0%	#DIV/0!	12.5%	0.9%	#DIV/0!	0.0%	0.0%	#DIV/0!		


N
Grant Ave
W
Lansing Ave
S
Grant Ave

APPENDIX B: MISCELLANEOUS CALCULATIONS

Phase Times [1.1.1]

	1	2	3	4	5	6	7	8
Min Green	4	12	12			12	12	
Gap, Ext	1	6	6			6	6	
Max 1	9	29	32			42	32	
Max 2								
Yel Clearance	3.5	3.5	3	3.5	3.5	3.5	3	3.5
Red Clearance	2	2	2	1.5	1.5	2	2	1.5
Walk		16	13			16	13	
Ped Clearance		13	18			13	18	
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim								
Max Step								

Options [1.1.2]

	1	2	3	4	5	6	7	8
Enable	ON	ON	ON			ON	ON	
Min Recall								
Max Recall						ON		
Ped Recall								
Soft Recall								
Lock Calls		ON	ON				ON	
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		ON	ON			ON	ON	
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON
Gaurantee Passage								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]

	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Call Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

1901 34 @ SEYMOUR

Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1
2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1
4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1
5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1
6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1
7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1
8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1
9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1
10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1
11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1
12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coor	0	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
2	Coor	0	0	0	0	0	0	0	0	14	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
3	Coor	0	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
4	Coor	0	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
5	Coor	0	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
6	Coor	0	0	0	0	0	0	0	0	18	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON

Page#	
1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)
3	Detection; Sample Time and Unit Parameters related to detection
4	Preemption and Alternate Phase Time and Phase Options
5	Annual Schedule
6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)
7	Communications; Secutiry; I/O Setup
8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param

1901

Ring/Startup [1.1.4]

Phs	Ring	Start	Enable
1	1	Red	ON
2	1	Red	ON
3	1	Red	ON
4	1	Red	OFF
5	2	Red	OFF
6	2	Red	ON
7	2	Red	ON
8	2	Red	OFF

Coord Modes [2.1]

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX 1
Force-Off	Float
Closed Loop	ON
Stop-in-Walk	OFF
Auto Reset	ON
Expand Splt	
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	PH_OVLP
Flash Yel	45
Flash Red	20

Unit Params [1.2.1]

Phase Mode	STD8
IO Mode	User
Loc Flsh Start	Red
Start Flash(s)	0
Start AllRed(s)	6
Yellow < 3"	OFF
Display Time	20
Red Revert	3
MCE Timeout	0
Feature Profile	
Free Ring Seq	1
Auxswitch	STOPTM
SDLC Retry	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
SDLC Retry	0

01/07/26 **Page 1**

Overlap 1-16 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

Overlap Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF

	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
1	Modifier Ø								Grn		9	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
A	Conflict Olap								Red	1.5	I	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
2	Modifier Ø								Grn		10	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
B	Conflict Olap								Red	1.5	J	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
3	Modifier Ø								Grn		11	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
C	Conflict Olap								Red	1.5	K	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
4	Modifier Ø								Grn		12	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
D	Conflict Olap								Red	1.5	L	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
5	Modifier Ø								Grn		13	Modifier Ø									Grn	
	Conflo0l								Yel	3.5		Conflict Ø									Yel	3.5
E	Conflict Olap								Red	1.5	M	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
6	Modifier Ø								Grn		14	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
F	Conflict Olap								Red	1.5	N	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
7	Modifier Ø								Grn		15	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
G	Conflict Olap								Red	1.5	O	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
8	Modifier Ø								Grn		16	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
H	Conflict Olap								Red	1.5	P	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	1	6	2	7	2	3	3		6															
Channel Type	VEH	VEH	VEH	VEH	PED	PED	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovrd																								

Coord Transition, CoorPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22							EndGRN				
2	12	22							EndGRN				
3	12	22							EndGRN				
4	12	22							EndGRN				
5	12	22							EndGRN				
6	12	22							EndGRN				
7	12	22							EndGRN				
8	12	22							EndGRN				
9	12	22							EndGRN				
10	12	22							EndGRN				
11	12	22							EndGRN				
12	12	22							EndGRN				
13	12	22							EndGRN				
14	12	22							EndGRN				
15	12	22							EndGRN				
16	12	22							EndGRN				
17	12	22							EndGRN				
18	12	22							EndGRN				
19	12	22							EndGRN				
20	12	22							EndGRN				
21	12	22							EndGRN				
22	12	22							EndGRN				
23	12	22							EndGRN				
24	12	22							EndGRN				
25									BegGRN				
26									BegGRN				
27									BegGRN				
28									BegGRN				
29									BegGRN				
30									BegGRN				
31									BegGRN				
32									BegGRN				
33									BegGRN				
34									BegGRN				
35									BegGRN				
36									BegGRN				
37									BegGRN				
38									BegGRN				
39									BegGRN				
40									BegGRN				
41									BegGRN				
42									BegGRN				
43									BegGRN				
44									BegGRN				
45									BegGRN				
46									BegGRN				
47									BegGRN				
48									BegGRN				

Channel Params[1.8.3]

C1 IO Mode	User	Single BIU Map	DEFAULT	Invert Rail Input	OFF

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
1	1						45	50	2
2	6						45	50	2
3	3						45	50	2
4	7						45	50	2
5	2						45	50	2
6							45	50	2
7							45	50	2
8							45	50	2
9							45	50	2
10							45	50	2
11							45	50	2
12							45	50	2
13							45	50	2
14							45	50	2
15							45	50	2
16							45	50	2
17							45	50	2
18							45	50	2
19							45	50	
20							45	50	
21							45	50	
22							45	50	
23							45	50	
24							45	50	
25							45	50	
26							45	50	
27							45	50	
28							45	50	
29							45	50	
30							45	50	
31							45	50	
32							45	50	

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
33							45	50	
34							45	50	
35							45	50	
36							45	50	
37							45	50	
38							45	50	
39							45	50	
40							45	50	
41							45	50	
42							45	50	
43							45	50	
44							45	50	
45							45	50	
46							45	50	
47							45	50	
48							45	50	
49							45	50	
50							45	50	
51							45	50	
52							45	50	
53							45	50	
54							45	50	
55							45	50	
56							45	50	
57							45	50	
58							45	50	
59							45	50	
60							45	50	
61							45	50	
62							45	50	
63							45	50	
64							45	50	

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol
1	ON	ON		ON				
2	ON	ON		ON				
3	ON	ON		ON				
4	ON	ON		ON				
5	ON	ON		ON				
6	ON	ON		ON				
7	ON	ON		ON				
8	ON	ON		ON				
9	ON	ON		ON				
10	ON	ON		ON				
11	ON	ON		ON				
12	ON	ON		ON				
13	ON	ON		ON				
14	ON	ON		ON				
15	ON	ON		ON				
16	ON	ON		ON				
17	ON	ON		ON				
18	ON	ON		ON				
19	ON	ON		ON				
20	ON	ON		ON				
21	ON	ON		ON				
22	ON	ON		ON				
23	ON	ON		ON				
24	ON	ON		ON				
25	ON	ON		ON				
26	ON	ON		ON				
27	ON	ON		ON				
28	ON	ON		ON				
29	ON	ON		ON				
30	ON	ON		ON				
31	ON	ON		ON				
32	ON	ON		ON				

Vehicle Options 1-64 [5.2]

Det #	vol	occ	Yell Lock	Red Lock	Ext	Add Init	Que	Call
33					ON	ON		ON
34					ON	ON		ON
35					ON	ON		ON
36					ON	ON		ON
37					ON	ON		ON
38					ON	ON		ON
39					ON	ON		ON
40					ON	ON		ON
41					ON	ON		ON
42					ON	ON		ON
43					ON	ON		ON
44					ON	ON		ON
45					ON	ON		ON
46					ON	ON		ON
47					ON	ON		ON
48					ON	ON		ON
49					ON	ON		ON
50					ON	ON		ON
51					ON	ON		ON
52					ON	ON		ON
53					ON	ON		ON
54					ON	ON		ON
55					ON	ON		ON
56					ON	ON		ON
57					ON	ON		ON
58					ON	ON		ON
59					ON	ON		ON
60					ON	ON		ON
61					ON	ON		ON
62					ON	ON		ON
63					ON	ON		ON
64					ON	ON		ON

Parameters+ 1-64 [5.3]

Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1						NORM	
2						NORM	
3						NORM	
4						NORM	
5						NORM	
6						NORM	
7						NORM	
8						NORM	
9						NORM	
10						NORM	
11						NORM	
12						NORM	
13						NORM	
14						NORM	
15						NORM	
16						NORM	
17						NORM	
18						NORM	
19						NORM	
20						NORM	
21						NORM	
22						NORM	
23						NORM	
24						NORM	
25						NORM	
26						NORM	
27						NORM	
28						NORM	
29						NORM	
30						NORM	
31						NORM	
32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM	
34						NORM	
35						NORM	
36						NORM	
37						NORM	
38						NORM	
39						NORM	
40						NORM	
41						NORM	
42						NORM	
43						NORM	
44						NORM	
45						NORM	
46						NORM	
47						NORM	
48						NORM	
49						NORM	
50						NORM	
51						NORM	
52						NORM	
53						NORM	
54						NORM	
55						NORM	
56						NORM	
57						NORM	
58						NORM	
59						NORM	
60						NORM	
61						NORM	
62						NORM	
63						NORM	
64						NORM	

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1	2		15	
2	2		15	
3	3		15	
4	3		15	
5			15	
6			15	
7			15	
8			15	

Unit Paramters [1.2.1]

TS2 Det Faults		ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

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Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	ON	RAIL	Dwell		
2	ON	RAIL	Dwell		
3	ON	EMERG	Dwell		
4	ON	EMERG	Dwell		
5	ON	EMERG	Dwell		
6	ON	EMERG	Dwell		

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					ON
2					ON
3					ON
4					ON
5					ON
6					ON

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr+	Yel
1		2			
2		2			
3		2			
4		2			
5		2			
6		2			

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max
7	OFF		
8	OFF		
9	OFF		
10	OFF		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	

Channel Parameters [1.8.3]

D Conn Mappings	OFF
Pre Invert Rail Input	None

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Track Phases				Track Overlaps											
1																
2																
3																
4																
5																
6																

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #														
1	Phases													
	Overlaps													
	Peds													
2	Phases													
	Overlaps													
	Peds													
3	Phases													
	Overlaps													
	Peds													
4	Phases													
	Overlaps													
	Peds													
5	Phases													
	Overlaps													
	Peds													
6	Phases													
	Overlaps													
	Peds													

Exit Phases [3.2]

Pre #	Exit Phase			
1				
2				
3				
4				
5				
6				

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh		Override Higher		Flsh Dwell	Link
1	ON		ON		ON		OFF	
2	ON		ON		ON		OFF	
3	ON		ON		ON		OFF	
4	ON		ON		ON		OFF	
5	ON		ON		ON		OFF	
6	ON		ON		ON		OFF	

Alt# 1 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	ON	ON	ON	ON	ON	ON	ON	ON
Soft Recall								
Dual Enrty								
Enabl SimGap	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

Annual Schedule [4.3] **Month of Year** **Day of Week** **Date** **Day Plan** **Link To**

	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	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	31	Day Plan	Link To
1																																																			1	
2																																																			1	
3																																																			1	
4																																																			1	
5																																																			1	
6																																																			1	
7																																																			1	
8																																																			1	
9																																																			1	
10																																																			1	
11																																																			1	
12																																																			1	
13																																																			1	
14																																																			1	
15																																																			1	
16																																																			1	
17																																																			1	
18																																																			1	
19																																																			1	
20																																																			1	
21																																																			1	
22																																																			1	
23																																																			1	
24																																																			1	

Day Plans [4.4]

Day Plan 1

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 2

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 3

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 4

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 5

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 6

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 7

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 8

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 9

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 10

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 11

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 12

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 13

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 14

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 15

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
48												
98												
99												
100	255											

Coord Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	Call Inh	CIC	CNA1	Overlap Off 1	2	3	4	5	6	7	8	Dia	Max2
1															DFT	
2															DFT	
3															DFT	
4															DFT	
5															DFT	
6															DFT	
7															DFT	
8															DFT	
9															DFT	
10															DFT	
11															DFT	
12															DFT	
13															DFT	
14															DFT	
15															DFT	
16															DFT	
17															DFT	
18															DFT	
19															DFT	
20															DFT	
21															DFT	
22															DFT	
23															DFT	
24															DFT	
25															DFT	
26															DFT	
27															DFT	
28															DFT	
29															DFT	
30															DFT	
31															DFT	
32															DFT	
33															DFT	
34															DFT	
35															DFT	
36															DFT	
37															DFT	
38															DFT	
39															DFT	
40															DFT	
41															DFT	
42															DFT	
43															DFT	
44															DFT	
45															DFT	
46															DFT	
47															DFT	
48															DFT	

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#	Event / Alarm	Ev	Alr
1	Power Up Alarm.	ON	ON
2	Stop Timing	ON	ON
3	TS1 Cabinet Door	ON	ON
4	Coordination Failure	ON	ON
5	External Alarm # 1	ON	ON
6	External Alarm # 2	ON	ON
7	External Alarm # 3	ON	ON
8	External Alarm # 4	ON	ON
9	Closed Loop Disabled	ON	ON
10	External Alarm # 5	ON	ON
11	External Alarm # 6	ON	ON
12	Manual Control Enable	ON	ON
13	Coord Free Input	ON	ON
14	Local Flash Input	ON	ON
15	MMU Flash	ON	ON
16	CMU Flash	ON	ON
17	Cycle Fault	ON	ON
18	Cycle Failure	ON	ON
19	Coordination Fault	ON	ON
20	Controller Fault	ON	ON
21	Detector SDLC Failure	ON	ON
22	MMU SDLC Failure	ON	ON
23	Critical SDLC Failure	ON	ON
24	Reserved	ON	ON
25	EEPROM CRC Fault	ON	ON
26	Detector Diagnostic Failure	ON	ON
27	BIU Detector Failure	ON	ON
28	Queue detector alarm	ON	ON
29	Ped Detector Fault	ON	ON
30	Coord Diagnostic Fault	ON	ON
41	TempAlert Probe Ch. A	ON	ON
42	TempAlert Probe Ch. B	ON	ON
47	Coord Active	ON	ON
48	Preempt Active	ON	ON
49	Preempt 1 Input	ON	ON
50	Preempt 2 Input	ON	ON
51	Preempt 3 Input	ON	ON
52	Preempt 4 Input	ON	ON
53	Preempt 5 Input	ON	ON
54	Preempt 6 Input	ON	ON
55	Preempt 7 Input	ON	ON
56	Preempt 8 Input	ON	ON
57	Preempt 9 Input	ON	ON
58	Preempt 10 Input	ON	ON
61	In Transition	ON	ON
81	FIO Status Alarm	ON	ON

Call Phases[1.1.5]

Ø	Phases Called By Ø			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø					From	To	From	To	From	To	From	To
1						1								
2						2								
3						3								
4						4								
5						5								
6						6								
7						7								
8						8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø					From	To	From	To	From	To	From	To
1						1								
2						2								
3						3								
4						4								
5						5								
6						6								
7						7								
8						8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø								
Yel (olaps)								

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	
TOD Dim Enable	OFF	Cycle Fault Action	Alarm
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	900		
Disable Init Ped	OFF		
Cycle Fault Action	Alarm		
Enable Run Timer	ON		

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C1-USER IO Map [1.8.9.1 In]

I1-1	1	Veh Call 1
I1-2	2	Veh Call 2
I1-3	3	Veh Call 3
I1-4	4	Veh Call 4
I1-5	5	Veh Call 5
I1-6	189	Unused
I1-7	189	Unused
I1-8	189	Unused
I2-1	189	Unused
I2-2	189	Unused
I2-3	189	Unused
I2-4	189	Unused
I2-5	129	Ped Call 1
I2-6	130	Ped Call 2
I2-7	131	Ped Call 3
I2-8	132	Ped Call 4
I3-1	189	Unused
I3-2	189	Unused
I3-3	189	Unused
I3-4	189	Unused
I3-5	189	Unused
I3-6	189	Unused
I3-7	189	Unused
I3-8	189	Unused
I4-1	189	
I4-2		
I4-3		
I4-4		
I4-5	189	Unused
I4-6	189	Unused
I4-7	229	33xCMUStop
I4-8	228	33xFlashSns
I5-1	189	Unused
I5-2	189	Unused
I5-3	189	Unused
I5-4	189	Unused
I5-5	189	Unused
I5-6	189	Unused
I5-7	189	Unused
I5-8	189	Unused
I6-1	189	Unused
I6-2	189	Unused
I6-3	189	Unused
I6-4	189	Unused
I6-5	189	Unused
I6-6	189	Unused
I6-7	189	Unused
I6-8	189	Unused

C1-USER IO Map [1.8.9.2 Out]

O1-1	1	Ch1 Red
O1-2	49	Ch1 Green
O1-3	2	Ch2 Red
O1-4	26	Ch2 Yellow
O1-5	50	Ch2 Green
O1-6	3	Ch3 Red
O1-7	27	Ch3 Yellow
O1-8	51	Ch3 Green
O2-1	4	Ch4 Red
O2-2	52	Ch4 Green
O2-3	5	Ch5 Red
O2-4	29	Ch5 Yellow
O2-5	53	Ch5 Green
O2-6	6	Ch6 Red
O2-7	30	Ch6 Yellow
O2-8	54	Ch6 Green
O3-1	7	Ch7 Red
O3-2	55	Ch7 Green
O3-3	8	Ch8 Red
O3-4	32	Ch8 Yellow
O3-5	56	Ch8 Green
O3-6	9	Ch9 Red
O3-7	33	Ch9 Yellow
O3-8	57	Ch9 Green
O4-1	10	Ch10 Red
O4-2	58	Ch10 Green
O4-3	11	Ch11 Red
O4-4	35	Ch11 Yellow
O4-5	59	Ch11 Green
O4-6	12	Ch12 Red
O4-7	36	Ch12 Yellow
O4-8	60	Ch12 Green
O5-1	28	Ch4 Yellow
O5-2	34	Ch10 Yellow
O5-3	25	Ch1 Yellow
O5-4	31	Ch7 Yellow
O5-5	115	Not Used
O5-6	115	Not Used
O5-7	115	Not Used
O5-8	114	Watchdog
O6-1	115	Not Used
O6-2	115	Not Used
O6-3	13	Ch13 Red
O6-4	37	Ch13 Yellow
O6-5	61	Ch13 Green
O6-6	14	Ch14 Red
O6-7	38	Ch14 Yellow
O6-8	62	Ch14 Green

C1-USER IO Map [1.8.9.2 Out]

O7-1	115	Not Used
O7-2	115	Not Used
O7-3	115	Not Used
O7-4	115	Not Used
O7-5	115	Not Used
O7-6	115	Not Used
O7-7	115	Not Used
O7-8	115	Not Used

C11S-USER IO Map [1.8.9.1 In]

I4-1		
I4-2		
I4-3		
I4-4		
I7-1	189	Unused
I7-2	189	Unused
I7-3	189	Unused
I7-4	189	Unused
I7-5	189	Unused
I7-6	189	Unused
I7-7	189	Unused
I7-8	189	Unused
I8-1	189	Unused
I8-2	189	Unused
I8-3	189	Unused
I8-4	189	Unused
I8-5	189	Unused
I8-6	189	Unused
I8-7	189	Unused
I8-8	189	Unused

C11S-USER IO Map [1.8.9.2 Out]

O8-1	115	Not Used
O8-2	115	Not Used
O8-3	115	Not Used
O8-4	115	Not Used
O8-5	115	Not Used
O8-6	115	Not Used
O8-7	115	Not Used
O8-8	115	Not Used

IO Logic [1.8.7]

Op1	Result		O1Fcn	Inv1	Src1	IO1	Fun1	O2Fcn	Inv2	Src2	IO2	Fun2	O3Fcn	Inv3	Src3	IO3	Fun3	Dly	Sec
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0

Security Access Levels [8.2]

1	SWLOAD
2	SECURE
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None
14	None
15	None
16	None
17	None
18	None
19	None
20	None
21	None
22	None
23	None
24	None
25	None
26	None
27	None
28	None
29	None
30	None
31	None
32	None
33	None
34	None
35	None
36	None
37	None
38	None
39	None
40	None
41	None
42	None
43	None
44	None
45	None
46	None
47	None
48	None
49	None
50	None
51	None
52	None
53	None
54	None
55	None
56	None
57	None
58	None
59	None
60	None
61	None
62	None
63	None
64	None

Com Parameters [6.1]

Station ID	1901
Group ID	0
Master ID	0
Backup Time	900

SysUp Modem [6.1]

Enable Modem	None
Idle Time	0
Dial Time	0
Tel:	
Alt:	

2070 Port Parms [6.2]

Port	Baud Rate	FCM
SP1	9600	6
SP2	9600	6
SP3	19200	6
SP4	38400	6
SP5	1200	0
SP6	1200	0
SP7	1200	0
SP8	1200	0

2070 IP 1 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	###			

2070 IP 2 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	5001			

2070 Port Binding Ports [6.6]

	Port	Echo	Mode
ASYNC1	SP1	None	0
ASYNC2	SP2	None	0
ASYNC3	SP3	None	0
ASYNC4	SP4	None	0
SYNC1	SP5	SYNC3	OFF
SYNC2	OFF	SYNC4	OFF

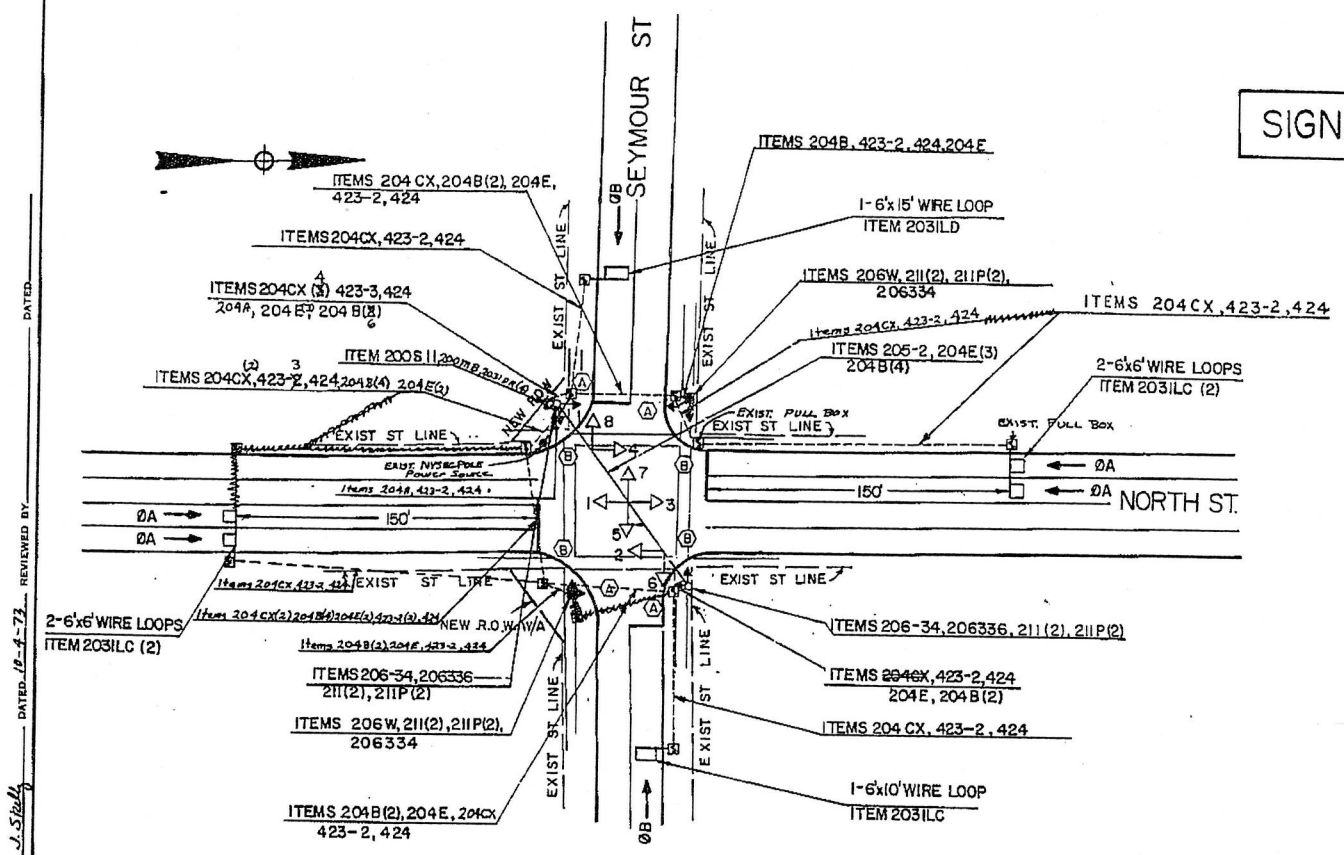
2070 Port Binding Functions [6.6]

Functio	Channel	Functio	Channel
TS2/CVN	None	SYSUp	ASYNC2
CMU/MM	None	SYSDow	ASYNC1
Opticom	None	Shell	None
Loop De	None		
GPS	None		

F.A.R.C. 74-2 F.A.C. 74-2, 3, 4, 5

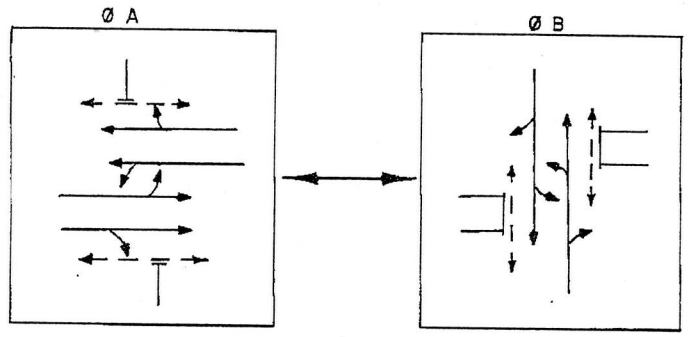
FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
1	N.Y.		165 RI	249
CITY OF AUBURN				
NORTH STREET ARTERIAL				

SIGNAL NO IA



TRAFFIC SIGNAL LEGEND	
PB	PULL BOX, ITEMS 102DRS, 30C2, 102333
▷	TRAFFIC SIGNAL FACE, ITEMS 202AB(2), AABB
C	CONTROLLER (POLE MTD) ITEM 200S
▶	PEDESTRIAN "WALK-DON'T WALK" SIGNAL HEAD- ITEM 211

SEQUENCE OF OPERATION



TABLE

~~ESTIMATE~~ OF QUANTITIES

ITEM NO	DESCRIPTION	UNIT	QUANTITY
3002	FRAMES & GRATES CASTING (3.3 S.F.)	S.F.	~~33.0~~ 26.4
102 DRS	PULL BOXES	L.F.	~~36.0~~ 32.0
*102333	PULL BOX EXCAVATION & BACKFILL	EA.	~~10~~ 8
200SII	SOLID STATE CONTROLLER	EA.	1
202AB	TRAFFIC SIGNAL HEAD, TWO WAY, FACES A, B	EA.	2
202AABB	TRAFFIC SIGNAL HEAD FOUR WAY, FACES A, A, B, B	EA.	1
2031DR	INDUCTANCE LOOP VEHICLE DETECTOR	EA.	4
*423-3	GALVANIZED RIGID STEEL CONDUIT 3" I.D.	L.F.	~~10~~ 42.9
*424	CONDUIT EXCAVATION & BACKFILL	L.F.	~~576~~ 422.8
204A	POWER CABLE, TWO CONDUCTOR, NO. 10	L.F.	~~100~~ 86.0
204CX	CABLE, TWO CONDUCTOR, NO 14 SHIELDED	L.F.	~~765~~ 841.0
204E	CABLE SEVEN CONDUCTOR, NO14 SHIELDED	L.F.	~~1050~~ 650.0
205-2	SPAN WIRE ASSEMBLY, TWO PTS. OF ATTACHMENT	EA.	1
206-34	STEEL SIGNAL POLE, 34FT. LONG	EA.	2
206336	SIGNAL POLE EXCAVATION AND CONCRETE FOR FOUNDATION	EA.	2
* 423-2	GALVANIZED RIGID STEEL CONDUIT, 2" I.D.	L.F.	~~660~~ 654.3
*2031LC	WIRE LOOP FOR INDUCTANCE LOOP VEHICLE DETECTOR UNIT, 20'-40' PERIMETER	EA	5
* 2031LD	WIRE LOOP FOR INDUCTANCE LOOP VEHICLE DETECTOR UNIT, OVER 40' PERIMETER	EA	1
* 204B	CABLE, TWO CONDUCTOR NO. 14	EA.	~~860~~ 950.0
* 206W	PEDESTRIAN SIGNAL POLE, 18' LONG	EA.	2
* 211	PEDESTRIAN "WALK-DON'T WALK" SIGNAL HEAD	EA.	8
* 211P	PEDESTRIAN PUSH BUTTON WITH SIGN	EA.	8
*206334	SIGNAL POLE EXCAVATION AND CONCRETE FOR FOUNDATION	EA.	2
200 MB	METER BASE INSTALLATION & WIRING	EA.	1

* OUT OF SEQUENCE

→ 28' Above Ground
6' Below Ground

TABLE OF OPERATION

FACE	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G	R Y G		
PHASE:	1	2	3	4	5	6	7	8	⟨A⟩	⟨B⟩
A	G	G	G	G	R	R	R	R	DW†	DW
1 ST CL TO B	Y	Y	Y	Y	R	R	R	R	DW	DW
2 ND CL TO B	R	R	R	R	R	R	R	R	DW	DW
B	R	R	R	R	G	G	G	G	DW	DW†
1 ST CL TO A	R	R	R	R	Y	Y	Y	Y	DW	DW
2 ND CL TO A	R	R	R	R	R	R	R	R	DW	DW
FLASHER	FY	FY	FY	FY	FR	FR	FR	FR		

† "THIS WILL BE FLASHING "WALK" FOLLOWED BY A FLASHING "DON'T WALK" PEDESTRIAN CLEARANCE INTERVAL IF A PEDESTRIAN PUSH BUTTON HAS BEEN ACTUATED.

12" LENS

8" LENS

As Built Revisions
1) Revise Final Table of Quantities
2) Modify intersection to reflect AS-BUILT Quantity locations.

IN CHARGE OF ____ DESIGNED BY J. Stelly DATED 12-4-73 REVIEWED BY ____ DATED ____ CHECKED BY ____ DATED ____

SIGNAL NO IA AT
NORTH ST & SEYMOUR ST

DWG. NO.	SCALE	SHEET NO.
TS-9	1" = 40'	

SIGNAL NO 1A COUNTY Cayuga

SWITCH PACK	FUNCTION	FACE NOS	FLASH PLUG	INDICATIONS	TERMINAL WIRING BOARD TERMINAL	TERMINAL WIRING BOARD WIRE COLOR CODE
SP 1	ϕ1	3	W		SP 1R	
				~~Y~~	SP 1Y	14/19C-1-B
				~~G~~	SP 1G	14/19C-1-BL
				GRND WIRE	GRND BUS	14/19C-1-BL/B
SP 2	ϕ6	1,2	R	R	SP 2R	14/19C-1-R
				Y	SP 2Y	14/19C-1-O
				G	SP 2G	14/19C-1-G
				GRND WIRE	GRND BUS	14/19C-1-W
SP 3	ϕ2	3,4	R	R	SP 3R	14/19C-1-R/B
				Y	SP 3Y	14/19C-1-O/B
				G	SP 3G	14/19C-1-G/B
				GRND WIRE	GRND BUS	14/19C-1-W/B
SP 4	ϕ7	5,6	R	R	SP 4R	14/19C-1-R/W
				Y	SP 4Y	14/19C-1-BL/W
				G	SP 4G	14/19C-1-G/W
				GRND WIRE	GRND BUS	14/19C-1-B/W
SP 5	Ped A (ϕ2)		W	Walk	SP 5R	
					SP 5Y	
				Don't Walk	SP 5G	
				GRND WIRE	GRND BUS	
SP 6	Ped B (ϕ3)		W	Walk	SP 6R	
					SP 6Y	
				Don't Walk	SP 6G	
				GRND WIRE	GRND BUS	
SP 7	ϕ3	7,8	R	R	SP 7R	14/19C-1-B/R
				Y	SP 7Y	14/19C-1-O/R
				G	SP 7G	14/19C-1-BL/R
				GRND WIRE	GRND BUS	14/19C-1-W/R
SP 8					SP 8R	
					SP 8Y	
					SP 8G	
				GRND WIRE	GRND BUS	
SP 9					SP 9R	
					SP 9Y	
					SP 9G	
				GRND WIRE	GRND BUS	
SP 10					SP 10R	
					SP 10Y	
					SP 10G	
				GRND WIRE	GRND BUS	
SP 11					SP 11R	
					SP 11Y	
					SP 11G	
				GRND WIRE	GRND BUS	
SP 12					SP 12R	
					SP 12Y	
					SP 12G	
				GRND WIRE	GRND BUS	
SP 13					SP 13R	
					SP 13Y	
					SP 13G	
				GRND WIRE	GRND BUS	
SP 14					SP 14R	
					SP 14Y	
					SP 14G	
				GRND WIRE	GRND BUS	
SP 15					SP 15R	
					SP 15Y	
					SP 15G	
				GRND WIRE	GRND BUS	
SP 16					SP 16R	
					SP 16Y	
					SP 16G	
				GRND WIRE	GRND BUS	

no changes to existing wiring

Seymour - Rt 34

84-1 (12/80)

NEMA 170

STUDY NO: 3830047
FILE: 75-5-3-3

SIGNAL OPERATION SPECIFICATIONS
TABLE OF SWITCH PACKS

17 SIGNAL NO. | CAYUGA COUNTY | 9/21/83 DATE | PAGE 4 OF ____ PAGES 7

CONFLICT MONITOR	SWITCH PACK	FUNCTION	FACE NUMBERS	INDICATIONS	TERMINAL WIRING BOARD Terminal	Wire Color Code
Diodes to be Cut (List Below)*	SP 1	ϕ1 Y		R	SP 1 R	Wired as per field
				Y	SP 1 Y	
				G	SP 1 G	
				Grnd Wire	Grnd Bus	
1-5 6-7	SP 2	ϕ6			SP 2 R	
					SP 2 Y	
					SP 2 G	
				Grnd Wire	Grnd Bus	
	SP 3	ϕ2			SP 3 R	
					SP 3 Y	
					SP 3 G	
				Grnd Wire	Grnd Bus	
	SP 4	ϕ7			SP 4 R	
					SP 4 Y	
					SP 4 G	
				Grnd Wire	Grnd Bus	
	SP 5	Ped A W ϕ2		Fl. DW	SP 5 R	
				—	SP 5 Y	
				Fl. W	SP 5 G	
				Grnd Wire	Grnd Bus	
	SP 6	Ped B W ϕ3		Fl. DW	SP 6 R	
				—	SP 6 Y	
				Fl. W	SP 6 G	
				Grnd Wire	Grnd Bus	
	SP 7	ϕ3 R		R	SP 7 R	
				Y	SP 7 Y	
				G	SP 7 G	
				Grnd Wire	Grnd Bus	
	SP 8				SP 8 R	
					SP 8 Y	
					SP 8 G	
				Grnd Wire	Grnd Bus	
	SP 9				SP 9 R	
					SP 9 Y	
					SP 9 G	
				Grnd Wire	Grnd Bus	
To Omit Yellow Monitoring — Add Jumpers — (List Below) 5 6	SP 10	ϕ5			SP 10 R	
					SP 10 Y	
					SP 10 G	
				Grnd Wire	Grnd Bus	
	SP 11	TELL TALE			SP 11 R	
				Blue Light	SP 11 Y	
					SP 11 G	
			Blue Light	Grnd Wire	Grnd Bus	
	SP 12				Grnd Bus	
					SP 12 R	
					SP 12 Y	
					SP 12 G	
				Grnd Wire	Grnd Bus	

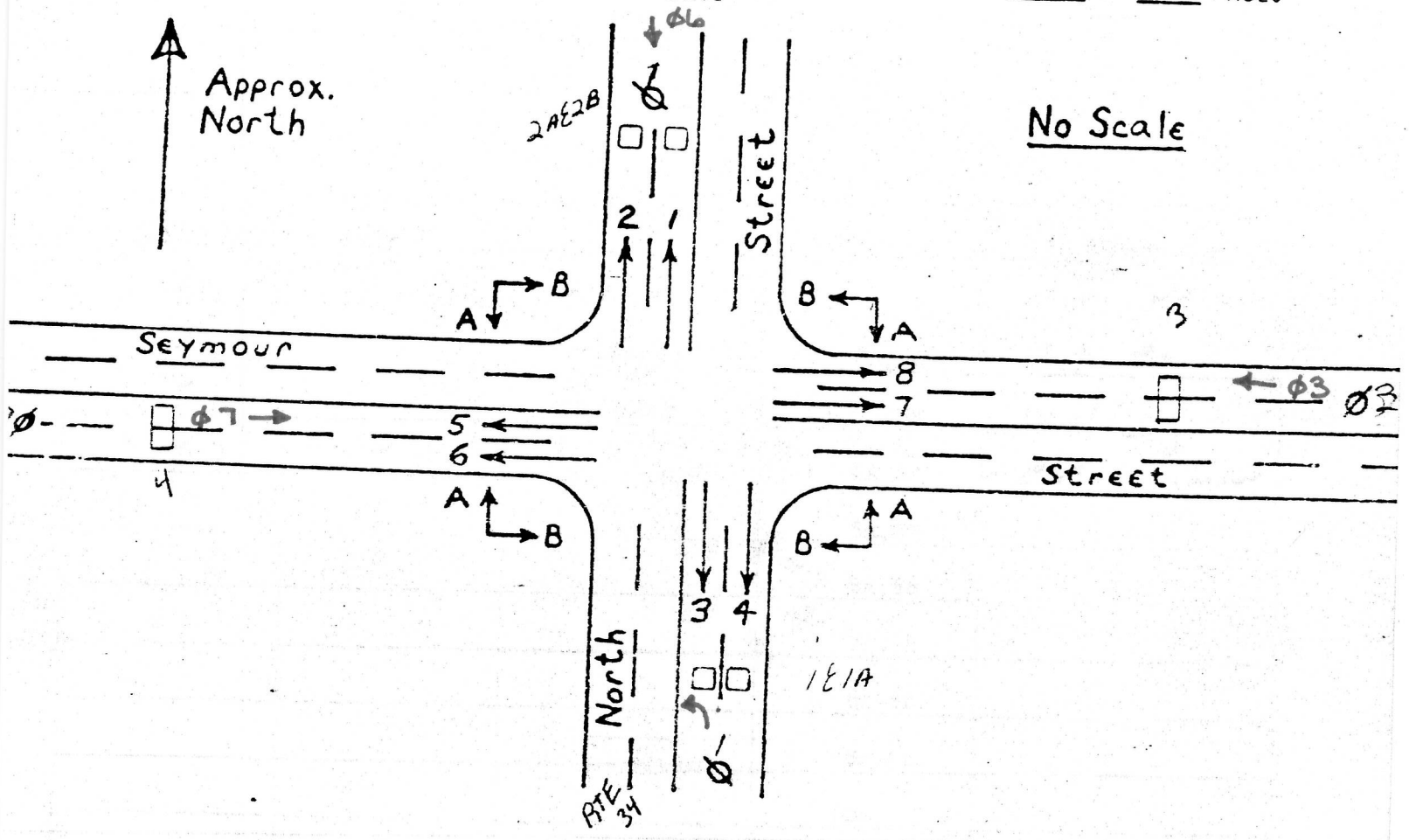
*This list reflects those pairs of switch packs which may display green indications concurrently.

STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION
DIVISION OF TRAFFIC ENGINEERING AND SAFETY

CASE: 23300 47
FILE: 75-5-3-3

SIGNAL OPERATION SPECIFICATIONS (CONTINUED)

1A — SIGNAL NO. | Cayuga — COUNTY | 9/21/83 — DATE | PAGE 2 OF 1 PAGES



FACES

Phase	1,2,3,4	5,6,7,8	A	B
1				
1st Clearance to 2	Green	Red	DONT WALK*	DONT WALK
2nd Clearance to 2	Yellow	Red	DONT WALK	DONT WALK
	Red	Red	DONT WALK	DONT WALK
2				
1st Clearance to 1	Red	Green	DONT WALK	DONT WALK*
2nd Clearance to 1	Red	Yellow	DONT WALK	DONT WALK
	Red	Red	DONT WALK	DONT WALK
Emergency	Flashing Yellow	Flashing Red	Inoperative	Inoperative

* This will be a flashing "WALK" followed by a flashing "DONT WALK" and "DONT WALK" interval upon actuation of a pedestrian push-button.

(A) (C)

01-1(12/80)

NEMA 170

STUDY NO 3B7004?
FILE: 75-5-3-3

SIGNAL OPERATION SPECIFICATIONS
TABLE OF INPUT WIRING

1A
SIGNAL NO

CAYUGA
COUNTY

9/21/83
DATE

PAGE 3 OF 7 PAGES

FUNCTION	DETECTOR NUMBER	DETECTOR TYPE	TERMINALS	REMARKS
Ø1	1	pt. loop	1A,1B	N.B. Rt 34
Ø6	2	pt loop	2A,2B	S.B. Rt 34
Ø3	3	pt. loop	3A,3B	W.B. Seymour
Ø7	4	pt. loop	4A,4B	E.B. Seymour
			5A,5B	
			6A,6B	
			7A,7B	
			8A,8B	
			9A,9B	
			10A,10B	
			11A,11B	
			12A,12B	
Ø X 62	ped A	push button	13A,13B	crossing Seymour
Ø3	ped B	push button	14A,14B	crossing Rt 34
			15A,15B	
			16A,16B	

NOTES:

Phase Times [1.1.1]

	1	2	3	4	5	6	7	8
Min Green		15		10		15		
Gap, Ext				3				
Max 1		40		35		40		
Max 2								
Yel Clearance		3.5		3.5		3.5		
Red Clearance		1.5		2		1.5		
Walk		8		7				
Ped Clearance		11		15				
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim								
Max Step								

Options [1.1.2]

	1	2	3	4	5	6	7	8
Enable		ON		ON		ON		
Min Recall								
Max Recall		ON				ON		
Ped Recall								
Soft Recall		ON				ON		
Lock Calls								
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		ON				ON		
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON
Gaurantee Passage								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]

	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Call Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay				5				

1918 34 @ LANSING

Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1
2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1
4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1
5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1
6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1
7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1
8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1
9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1
10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1
11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1
12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coor	0	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
2	Coor	0	0	0	0	0	0	0	0	14	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
3	Coor	0	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
4	Coor	0	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
5	Coor	0	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
6	Coor	0	0	0	0	0	0	0	0	18	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON

Page#	
1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)
3	Detection; Sample Time and Unit Parameters related to detection
4	Preemption and Alternate Phase Time and Phase Options
5	Annual Schedule
6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)
7	Communications; Secutiry; I/O Setup
8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param

1918

Ring/Startup [1.1.4]

Phs	Ring	Start	Enable
1	1	Red	OFF
2	1	Red	ON
3	1	Red	OFF
4	1	Red	ON
5	2	Red	OFF
6	2	Red	ON
7	2	Red	OFF
8	2	Red	OFF

Coord Modes [2.1]

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX 1
Force-Off	Float
Closed Loop	ON
Stop-in-Walk	OFF
Auto Reset	ON
Expand Splt	
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	Channel
Flash Yel	45
Flash Red	20

Unit Params [1.2.1]

Phase Mode	STD8
IO Mode	User
Loc Flsh Start	Red
Start Flash(s)	0
Start AllRed(s)	6
Yellow < 3"	OFF
Display Time	20
Red Revert	3
MCE Timeout	0
Feature Profile	
Free Ring Seq	1
Auxswitch	STOPTM
SDLC Retry	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
SDLC Retry	0

01/09/26 **Page 1**

Overlap 1-16 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

Overlap Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF

	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
1	Modifier Ø								Grn		9	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
A	Conflict Olap								Red	1.5	I	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
2	Modifier Ø								Grn		10	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
B	Conflict Olap								Red	1.5	J	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
3	Modifier Ø								Grn		11	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
C	Conflict Olap								Red	1.5	K	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
4	Modifier Ø								Grn		12	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
D	Conflict Olap								Red	1.5	L	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
5	Modifier Ø								Grn		13	Modifier Ø									Grn	
	Conflo0l								Yel	3.5		Conflict Ø									Yel	3.5
E	Conflict Olap								Red	1.5	M	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
6	Modifier Ø								Grn		14	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
F	Conflict Olap								Red	1.5	N	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
7	Modifier Ø								Grn		15	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
G	Conflict Olap								Red	1.5	O	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
8	Modifier Ø								Grn		16	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
H	Conflict Olap								Red	1.5	P	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	2	4	6	2	4	4																		
Channel Type	VEH	VEH	VEH	PED	PED	PED	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	YEL	Red	YEL	DRK	DRK	DRK	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovrd																								

Coord Transition, CoorPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22							EndGRN				
2	12	22							EndGRN				
3	12	22							EndGRN				
4	12	22							EndGRN				
5	12	22							EndGRN				
6	12	22							EndGRN				
7	12	22							EndGRN				
8	12	22							EndGRN				
9	12	22							EndGRN				
10	12	22							EndGRN				
11	12	22							EndGRN				
12	12	22							EndGRN				
13	12	22							EndGRN				
14	12	22							EndGRN				
15	12	22							EndGRN				
16	12	22							EndGRN				
17	12	22							EndGRN				
18	12	22							EndGRN				
19	12	22							EndGRN				
20	12	22							EndGRN				
21	12	22							EndGRN				
22	12	22							EndGRN				
23	12	22							EndGRN				
24	12	22							EndGRN				
25									BegGRN				
26									BegGRN				
27									BegGRN				
28									BegGRN				
29									BegGRN				
30									BegGRN				
31									BegGRN				
32									BegGRN				
33									BegGRN				
34									BegGRN				
35									BegGRN				
36									BegGRN				
37									BegGRN				
38									BegGRN				
39									BegGRN				
40									BegGRN				
41									BegGRN				
42									BegGRN				
43									BegGRN				
44									BegGRN				
45									BegGRN				
46									BegGRN				
47									BegGRN				
48									BegGRN				

Channel Params[1.8.3]

C1 IO Mode	User	Single BIU Map	DEFAULT	Invert Rail Input	OFF

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
1	4						45	50	2
2							45	50	2
3							45	50	2
4							45	50	2
5							45	50	2
6							45	50	2
7							45	50	2
8							45	50	2
9							45	50	2
10							45	50	2
11							45	50	2
12							45	50	2
13							45	50	2
14							45	50	2
15							45	50	2
16							45	50	2
17							45	50	2
18							45	50	2
19							45	50	
20							45	50	
21							45	50	
22							45	50	
23							45	50	
24							45	50	
25							45	50	
26							45	50	
27							45	50	
28							45	50	
29							45	50	
30							45	50	
31							45	50	
32							45	50	

Veh Par 1-64 [5.1]

Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time
33							45	50	
34							45	50	
35							45	50	
36							45	50	
37							45	50	
38							45	50	
39							45	50	
40							45	50	
41							45	50	
42							45	50	
43							45	50	
44							45	50	
45							45	50	
46							45	50	
47							45	50	
48							45	50	
49							45	50	
50							45	50	
51							45	50	
52							45	50	
53							45	50	
54							45	50	
55							45	50	
56							45	50	
57							45	50	
58							45	50	
59							45	50	
60							45	50	
61							45	50	
62							45	50	
63							45	50	
64							45	50	

Vehicle Options 1-64 [5.2]

Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol
1	ON	ON		ON				
2	ON	ON		ON				
3	ON	ON		ON				
4	ON	ON		ON				
5	ON	ON		ON				
6	ON	ON		ON				
7	ON	ON		ON				
8	ON	ON		ON				
9	ON	ON		ON				
10	ON	ON		ON				
11	ON	ON		ON				
12	ON	ON		ON				
13	ON	ON		ON				
14	ON	ON		ON				
15	ON	ON		ON				
16	ON	ON		ON				
17	ON	ON		ON				
18	ON	ON		ON				
19	ON	ON		ON				
20	ON	ON		ON				
21	ON	ON		ON				
22	ON	ON		ON				
23	ON	ON		ON				
24	ON	ON		ON				
25	ON	ON		ON				
26	ON	ON		ON				
27	ON	ON		ON				
28	ON	ON		ON				
29	ON	ON		ON				
30	ON	ON		ON				
31	ON	ON		ON				
32	ON	ON		ON				

Vehicle Options 1-64 [5.2]

Det #	vol	occ	Yell Lock	Red Lock	Ext	Add Init	Que	Call
33					ON	ON		ON
34					ON	ON		ON
35					ON	ON		ON
36					ON	ON		ON
37					ON	ON		ON
38					ON	ON		ON
39					ON	ON		ON
40					ON	ON		ON
41					ON	ON		ON
42					ON	ON		ON
43					ON	ON		ON
44					ON	ON		ON
45					ON	ON		ON
46					ON	ON		ON
47					ON	ON		ON
48					ON	ON		ON
49					ON	ON		ON
50					ON	ON		ON
51					ON	ON		ON
52					ON	ON		ON
53					ON	ON		ON
54					ON	ON		ON
55					ON	ON		ON
56					ON	ON		ON
57					ON	ON		ON
58					ON	ON		ON
59					ON	ON		ON
60					ON	ON		ON
61					ON	ON		ON
62					ON	ON		ON
63					ON	ON		ON
64					ON	ON		ON

Parameters+ 1-64 [5.3]

Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1						NORM	
2						NORM	
3						NORM	
4						NORM	
5						NORM	
6						NORM	
7						NORM	
8						NORM	
9						NORM	
10						NORM	
11						NORM	
12						NORM	
13						NORM	
14						NORM	
15						NORM	
16						NORM	
17						NORM	
18						NORM	
19						NORM	
20						NORM	
21						NORM	
22						NORM	
23						NORM	
24						NORM	
25						NORM	
26						NORM	
27						NORM	
28						NORM	
29						NORM	
30						NORM	
31						NORM	
32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM	
34						NORM	
35						NORM	
36						NORM	
37						NORM	
38						NORM	
39						NORM	
40						NORM	
41						NORM	
42						NORM	
43						NORM	
44						NORM	
45						NORM	
46						NORM	
47						NORM	
48						NORM	
49						NORM	
50						NORM	
51						NORM	
52						NORM	
53						NORM	
54						NORM	
55						NORM	
56						NORM	
57						NORM	
58						NORM	
59						NORM	
60						NORM	
61						NORM	
62						NORM	
63						NORM	
64						NORM	

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1	2		15	
2	4		15	
3	4		15	
4			15	
5			15	
6			15	
7			15	
8			15	

Unit Paramters [1.2.1]

TS2 Det Faults		ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

1918 34 @ LANSING

Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	ON	RAIL	Dwell		
2	ON	RAIL	Dwell		
3	ON	EMERG	Dwell		
4	ON	EMERG	Dwell		
5	ON	EMERG	Dwell		
6	ON	EMERG	Dwell		

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					ON
2					ON
3					ON
4					ON
5					ON
6					ON

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr+	Yel
1		2			
2		2			
3		2			
4		2			
5		2			
6		2			

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max
7	OFF		
8	OFF		
9	OFF		
10	OFF		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	

Channel Parameters [1.8.3]

D Conn Mappings	OFF
Pre Invert Rail Input	None

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Track Phases				Track Overlaps											
1																
2																
3																
4																
5																
6																

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #														
1	Phases													
	Overlaps													
	Peds													
2	Phases													
	Overlaps													
	Peds													
3	Phases													
	Overlaps													
	Peds													
4	Phases													
	Overlaps													
	Peds													
5	Phases													
	Overlaps													
	Peds													
6	Phases													
	Overlaps													
	Peds													

Exit Phases [3.2]

Pre #	Exit Phase			
1				
2				
3				
4				
5				
6				

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh		Override Higher		Flsh Dwell	Link
1	ON		ON		ON		OFF	
2	ON		ON		ON		OFF	
3	ON		ON		ON		OFF	
4	ON		ON		ON		OFF	
5	ON		ON		ON		OFF	
6	ON		ON		ON		OFF	

Alt# 1 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	ON	ON	ON	ON	ON	ON	ON	ON
Soft Recall								
Dual Enrty								
Enabl SimGap	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

Annual Schedule [4.3] **Month of Year** **Day of Week** **Date** **Day Plan** **Link To**

	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	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	31	Day Plan	Link To
1																																																			1	
2																																																			1	
3																																																			1	
4																																																			1	
5																																																			1	
6																																																			1	
7																																																			1	
8																																																			1	
9																																																			1	
10																																																			1	
11																																																			1	
12																																																			1	
13																																																			1	
14																																																			1	
15																																																			1	
16																																																			1	
17																																																			1	
18																																																			1	
19																																																			1	
20																																																			1	
21																																																			1	
22																																																			1	
23																																																			1	
24																																																			1	

Day Plans [4.4]

Day Plan 1

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 2

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 3

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 4

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 5

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 6

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 7

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 8

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 9

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 10

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 11

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 12

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 13

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 14

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 15

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
48												
98												
99												
100	255											

Coord Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	Call Inh	CIC	CNA1	Overlap Off 1	2	3	4	5	6	7	8	Dia	Max2
1															DFT	
2															DFT	
3															DFT	
4															DFT	
5															DFT	
6															DFT	
7															DFT	
8															DFT	
9															DFT	
10															DFT	
11															DFT	
12															DFT	
13															DFT	
14															DFT	
15															DFT	
16															DFT	
17															DFT	
18															DFT	
19															DFT	
20															DFT	
21															DFT	
22															DFT	
23															DFT	
24															DFT	
25															DFT	
26															DFT	
27															DFT	
28															DFT	
29															DFT	
30															DFT	
31															DFT	
32															DFT	
33															DFT	
34															DFT	
35															DFT	
36															DFT	
37															DFT	
38															DFT	
39															DFT	
40															DFT	
41															DFT	
42															DFT	
43															DFT	
44															DFT	
45															DFT	
46															DFT	
47															DFT	
48															DFT	

1918 34 @ LANSING

01/09/26 Page 6

#	Event / Alarm	Ev	Alr
1	Power Up Alarm.	ON	ON
2	Stop Timing	ON	ON
3	TS1 Cabinet Door		
4	Coordination Failure	ON	ON
5	External Alarm # 1	ON	ON
6	External Alarm # 2	ON	ON
7	External Alarm # 3		
8	External Alarm # 4		
9	Closed Loop Disabled	ON	
10	External Alarm # 5		
11	External Alarm # 6		
12	Manual Control Enable	ON	ON
13	Coord Free Input		
14	Local Flash Input	ON	ON
15	MMU Flash		
16	CMU Flash		
17	Cycle Fault	ON	
18	Cycle Failure	ON	
19	Coordination Fault	ON	
20	Controller Fault	ON	ON
21	Detector SDLC Failure		
22	MMU SDLC Failure		
23	Critical SDLC Failure		
24	Reserved		
25	EEPROM CRC Fault	ON	ON
26	Detector Diagnostic Failure		ON
27	BIU Detector Failure	ON	ON
28	Queue detector alarm	ON	
29	Ped Detector Fault	ON	ON
30	Coord Diagnostic Fault		
41	TempAlert Probe Ch. A		
42	TempAlert Probe Ch. B		
47	Coord Active		
48	Preempt Active	ON	
49	Preempt 1 Input	ON	
50	Preempt 2 Input	ON	
51	Preempt 3 Input	ON	
52	Preempt 4 Input	ON	
53	Preempt 5 Input	ON	
54	Preempt 6 Input	ON	
55	Preempt 7 Input	ON	
56	Preempt 8 Input	ON	
57	Preempt 9 Input	ON	
58	Preempt 10 Input	ON	
61	In Transition	ON	
81	FIO Status Alarm		

Call Phases[1.1.5]

Ø	Phases Called By Ø			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø				
1						
2						
3						
4						
5						
6						
7						
8						

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø								
Yel (olaps)								

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	
TOD Dim Enable	OFF	Cycle Fault Action	Alarm
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	900		
Disable Init Ped	OFF		
Cycle Fault Action	Alarm		
Enable Run Timer	ON		

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C1-USER IO Map [1.8.9.1 In]

I1-1	1	Veh Call 1
I1-2	189	Unused
I1-3	129	Ped Call 1
I1-4	130	Ped Call 2
I1-5	131	Ped Call 3
I1-6	189	Unused
I1-7	189	Unused
I1-8	189	Unused
I2-1	189	Unused
I2-2	189	Unused
I2-3	189	Unused
I2-4	189	Unused
I2-5	189	Unused
I2-6	189	Unused
I2-7	189	Unused
I2-8	189	Unused
I3-1	189	Unused
I3-2	189	Unused
I3-3	189	Unused
I3-4	189	Unused
I3-5	189	Unused
I3-6	189	Unused
I3-7	189	Unused
I3-8	189	Unused
I4-1	189	
I4-2		
I4-3		
I4-4		
I4-5	189	Unused
I4-6	189	Unused
I4-7	229	33xCMUStop
I4-8	228	33xFlashSns
I5-1	189	Unused
I5-2	189	Unused
I5-3	189	Unused
I5-4	189	Unused
I5-5	189	Unused
I5-6	189	Unused
I5-7	189	Unused
I5-8	189	Unused
I6-1	189	Unused
I6-2	189	Unused
I6-3	189	Unused
I6-4	189	Unused
I6-5	189	Unused
I6-6	189	Unused
I6-7	189	Unused
I6-8	189	Unused

C1-USER IO Map [1.8.9.2 Out]

O1-1	1	Ch1 Red
O1-2	49	Ch1 Green
O1-3	2	Ch2 Red
O1-4	26	Ch2 Yellow
O1-5	50	Ch2 Green
O1-6	3	Ch3 Red
O1-7	27	Ch3 Yellow
O1-8	51	Ch3 Green
O2-1	4	Ch4 Red
O2-2	52	Ch4 Green
O2-3	5	Ch5 Red
O2-4	29	Ch5 Yellow
O2-5	53	Ch5 Green
O2-6	6	Ch6 Red
O2-7	30	Ch6 Yellow
O2-8	54	Ch6 Green
O3-1	7	Ch7 Red
O3-2	55	Ch7 Green
O3-3	8	Ch8 Red
O3-4	32	Ch8 Yellow
O3-5	56	Ch8 Green
O3-6	9	Ch9 Red
O3-7	33	Ch9 Yellow
O3-8	57	Ch9 Green
O4-1	10	Ch10 Red
O4-2	58	Ch10 Green
O4-3	11	Ch11 Red
O4-4	35	Ch11 Yellow
O4-5	59	Ch11 Green
O4-6	12	Ch12 Red
O4-7	36	Ch12 Yellow
O4-8	60	Ch12 Green
O5-1	28	Ch4 Yellow
O5-2	34	Ch10 Yellow
O5-3	25	Ch1 Yellow
O5-4	31	Ch7 Yellow
O5-5	115	Not Used
O5-6	115	Not Used
O5-7	115	Not Used
O5-8	114	Watchdog
O6-1	115	Not Used
O6-2	115	Not Used
O6-3	13	Ch13 Red
O6-4	37	Ch13 Yellow
O6-5	61	Ch13 Green
O6-6	14	Ch14 Red
O6-7	38	Ch14 Yellow
O6-8	62	Ch14 Green

C1-USER IO Map [1.8.9.2 Out]

O7-1	115	Not Used
O7-2	115	Not Used
O7-3	115	Not Used
O7-4	115	Not Used
O7-5	115	Not Used
O7-6	115	Not Used
O7-7	115	Not Used
O7-8	115	Not Used

C11S-USER IO Map [1.8.9.1 In]

I4-1		
I4-2		
I4-3		
I4-4		
I7-1	189	Unused
I7-2	189	Unused
I7-3	189	Unused
I7-4	189	Unused
I7-5	189	Unused
I7-6	189	Unused
I7-7	189	Unused
I7-8	189	Unused
I8-1	189	Unused
I8-2	189	Unused
I8-3	189	Unused
I8-4	189	Unused
I8-5	189	Unused
I8-6	189	Unused
I8-7	189	Unused
I8-8	189	Unused

C11S-USER IO Map [1.8.9.2 Out]

O8-1	115	Not Used
O8-2	115	Not Used
O8-3	115	Not Used
O8-4	115	Not Used
O8-5	115	Not Used
O8-6	115	Not Used
O8-7	115	Not Used
O8-8	115	Not Used

IO Logic [1.8.7]

Op1	Result		O1Fcn	Inv1	Src1	IO1	Fun1	O2Fcn	Inv2	Src2	IO2	Fun2	O3Fcn	Inv3	Src3	IO3	Fun3	Dly	Sec
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0

Security Access Levels [8.2]

1	SWLOAD
2	SECURE
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None
14	None
15	None
16	None
17	None
18	None
19	None
20	None
21	None
22	None
23	None
24	None
25	None
26	None
27	None
28	None
29	None
30	None
31	None
32	None
33	None
34	None
35	None
36	None
37	None
38	None
39	None
40	None
41	None
42	None
43	None
44	None
45	None
46	None
47	None
48	None
49	None
50	None
51	None
52	None
53	None
54	None
55	None
56	None
57	None
58	None
59	None
60	None
61	None
62	None
63	None
64	None

Com Parameters [6.1]

Station ID	1918
Group ID	0
Master ID	0
Backup Time	900

SysUp Modem [6.1]

Enable Modem	None
Idle Time	0
Dial Time	0
Tel:	
Alt:	

2070 Port Parms [6.2]

Port	Baud Rate	FCM
SP1	9600	6
SP2	9600	6
SP3	19200	6
SP4	38400	6
SP5	1200	0
SP6	1200	0
SP7	1200	0
SP8	1200	0

2070 IP 1 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	###			

2070 IP 2 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	5001			

2070 Port Binding Ports [6.6]

	Port	Echo	Mode
ASYNC1	SP1	None	0
ASYNC2	SP2	None	0
ASYNC3	SP3	None	0
ASYNC4	SP4	None	0
SYNC1	SP5S	SYNC3	OFF
SYNC2	OFF	SYNC4	OFF

2070 Port Binding Functions [6.6]

Functio	Channel	Functio	Channel
TS2/CVN	None	SYSUp	ASYNC2
CMU/MM	None	SYSDow	ASYNC1
Opticom	None	Shell	None
Loop De	None		
GPS	None		

NOTES:

1. THE VIDEO DETECTION SYSTEM INSTALLED UNDER ITEM 680.05010007 SHALL BE CONNECTED TO THE CONTROLLER THROUGH THE SDLC CONNECTOR (INPUTS 33 TO 64).

2. THE CONTRACTOR SHALL PROGRAM THE VIDEO DETECTION ZONES AS SHOWN ON THE PLANS.

3. THE MANUFACTURER OF THE VIDEO DETECTION SYSTEM OR THEIR REPRESENTATIVE SHALL DESIGN THE VIDEO DETECTION SYSTEM LAYOUT/PLACEMENT AND SUPERVISE THE INSTALLATION AND TESTING OF THE VIDEO DETECTION EQUIPMENT.

4. THE CONTRACTOR SHALL PROVIDE 14 DAYS NOTICE TO THE REGIONAL TRAFFIC SAFETY AND MOBILITY GROUP AT (315) 426-2131 PRIOR TO INSTALLING THE VIDEO DETECTION EQUIPMENT TO CONFIRM THE OPTIMAL DETECTOR LOCATION.

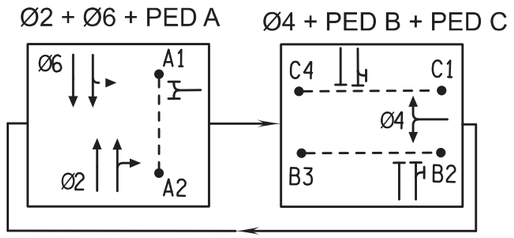
5. THE VIDEO DETECTION SYSTEM MAY BE INSTALLED AND ENABLED PRIOR TO DISABLING THE EXISTING DETECTION SYSTEM. IF THIS CAN NOT BE ACHIEVED, ALTERNATIVE METHODS OF DETECTION MUST BE ESTABLISHED AT THE CONTRACTOR'S EXPENSE. THE INTERSECTION SHALL NOT REMAIN WITHOUT DETECTION FOR MORE THAN TWO WEEKS.

6. UNDER ITEM 680.79002305 - REMOVE TRAFFIC SIGNAL INSTALLATION, LOCATION 0023. THIS ITEM SHALL INCLUDE:

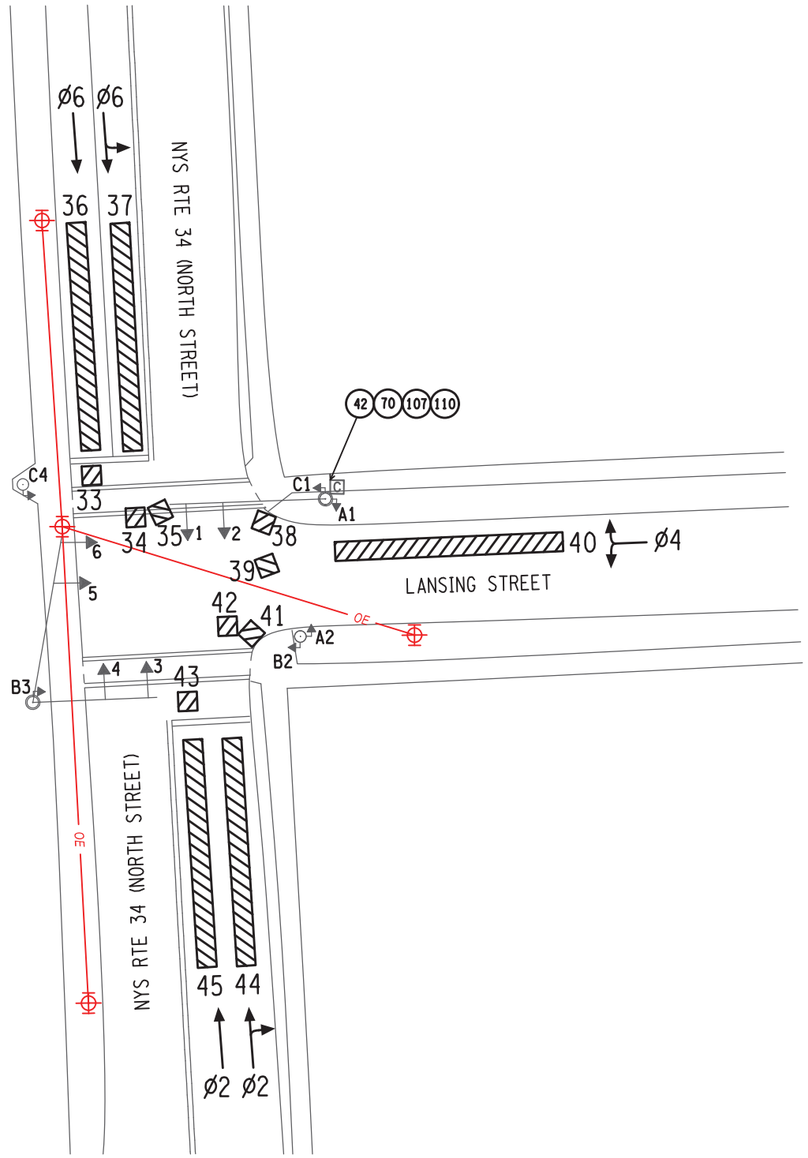
DISCONNECTION OF ALL SHIELDED LEAD-IN WIRES FROM THEIR TERMINALS. THE DISCONNECTED WIRES SHALL THEN BE COILED UP AND ABANDONED IN THE PULL BOX CLOSEST TO THE CONTROLLER CABINET. ENSURE ALL WIRES ARE LABELED WITH THE INPUT THEY WERE REMOVED FROM.

REMOVAL AND DELIVERY OF THE CONTROLLER CABINET, AND ALL ITS CONTENTS DIRECTLY TO STATE FORCES. PLEASE CONTACT NYSDOT TRAFFIC SIGNAL MAINTENANCE AT (315) 426-2131 TO SCHEDULE DROP-OFF TIME TO THE NYSDOT SIGNAL SHOP IN NORTH SYRACUSE, NY. TRAFFIC SIGNAL MAINTENANCE SHALL VERIFY ALL SIGNAL EQUIPMENT WITH QUANTITIES THAT HAVE BEEN DELIVERED FOR THIS SPECIFIC LOCATION.

THE CONTRACTOR SHALL REMOVE ALL DECOMMISSIONED PULLBOXES. EXCEPT IN ROADWAY SECTIONS, THE CONTRACTOR SHALL EXCAVATE ALL DECOMMISSIONED PULLBOXES TO A DEPTH OF 6" BELOW EXISTING GRADE AND BACKFILL WITH MATERIAL IN KIND. THE CHARACTER AND CONDITION SHALL MATCH THAT SURROUNDING THE STRUCTURE OR AOBE. FOR CLARITY OF THE PLAN, DECOMMISSIONED PULLBOXES ARE NOT SHOWN AND SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.



PHASE DIAGRAM



20 0 20 40 60 80'

1" = 40'

ESTIMATE OF QUANTITIES				
KEY NO.	ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY
42	619.1613	MAINTAIN TRAFFIC SIGNAL EQUIPMENT (REQUIREMENT C)	INTM	3
70	680.05010007	360 DEGREE CAMERA VIDEO DETECTION SYSTEM	EA	1
107	680.79002305	REMOVE TRAFFIC SIGNAL INSTALLATION - LOCATION 0023	ELOC	1
110	680.80324515	INSTALL MICROCOMPUTER CABINET	EA	1

SIGNAL NO. 18A
CAYUGA COUNTY

AFFIX SEAL: 7/24/2025
ON:

ALTERED BY:
ON:

STATE OF NEW YORK
SCOTT ROBERT BATES
080916
LICENSED PROFESSIONAL ENGINEER

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NYS RTE 34 (NORTH STREET) AT LANSING STREET
CITY OF AUBURN
SIGNAL VIDEO DETECTION
S.H. 60-5
COUNTY: CAYUGA REGION: 03

PIN 380725
NY 34
UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL NO. 18A - PLAN

CONTRACT NUMBER
D265574

DRAWING NO. TSP-60
SHEET NO. 78

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

NEW YORK STATE Department of Transportation

DESIGN SUPERVISOR P. LO GALLO
JOB MANAGER N. BOULTON
DESIGN N. BOULTON
CHECK M. VONDEN STEINEN
DRAFTING C.DOGGETT
PROJECT MANAGER N. BOULTON
CHECK B. LEBBON

FILE NAME =
DATE/TIME = 21-JUL-2025 13:46
USER = DOTOGrebenevich

SIGNAL OPERATIONS SPECIFICATIONS
TABLE OF SWITCHPACKS

Signal No. 18A — Cayuga County

SWITCH PACK	FUNCTION	FACE NO.'s	FLASH PLUG	INDICATIONS	TERMINAL WIRING BOARD	
					TERMINAL	WIRING COLORING CODE
SP 1	Ø 2	1, 2	R	R Y G GROUND WIRE	SP 1R SP 1Y SP 1G GROUND BUS	MATCH EXISTING
SP 2	Ø 4	5, 6	R	R Y G GROUND WIRE	SP 2R SP 2Y SP 2G GROUND BUS	MATCH EXISTING
SP 3	Ø 6	3, 4	R	R Y G GROUND WIRE	SP 3R SP 3Y SP 3G GROUND BUS	MATCH EXISTING
SP 4	PED A (Ø 2)	A1 A2	W	HAND MAN GROUND WIRE	SP 4R SP 4Y SP 4G GROUND BUS	MATCH EXISTING
SP 5	PED B (Ø 4)	B2 B3	W	HAND MAN GROUND WIRE	SP 5R SP 5Y SP 5G GROUND BUS	MATCH EXISTING
SP 6	PED C (Ø 4)	C4 C1	W	HAND MAN GROUND WIRE	SP 6R SP 6Y SP 6G GROUND BUS	MATCH EXISTING
SP 7						
SP 8						
SP 9						
SP 10						
SP 11						
SP 12				GROUND WIRE	SP 12R SP 12Y SP 12G GROUND BUS	
SP 13				GROUND WIRE	SP 13R SP 13Y SP 13G GROUND BUS	
SP 14				GROUND WIRE	SP 14R SP 14Y SP 14G GROUND BUS	
SP 15				GROUND WIRE	SP 15R SP 15Y SP 15G GROUND BUS	
SP 16				GROUND WIRE	SP 16R SP 16Y SP 16G GROUND BUS	

TABLE OF OPERATIONS

PHASE \ FACE	(R)(Y)(G) 1	(R)(Y)(G) 2	(R)(Y)(G) 3	(R)(Y)(G) 4	(R)(Y)(G) 5	(R)(Y)(G) 6	PED A	PED B	PED C
	1	2	3	4	5	6	A1 - A2	B2 - B3	C1 - C4
Ø 2 + Ø 6 + PED A	G	G	G	G	R	R	DW*	DW	DW
Ø 4 + PED B + PED C	R	R	R	R	G	G	DW	DW*	DW*
EMERGENCY FLASH	FR	FR	FR	FR	FR	FR	DK	DK	DK

*UPON ACTUATION OF A PEDESTRIAN PUSH BUTTON, A "WALKING MAN" INDICATION FOLLOWED BY A FLASHING "HAND" INDICATION FOLLOWED BY A STEADY "HAND" WILL BE DISPLAYED, AND COUNTDOWN TIMER IS INITIATED.

SIGNAL OPERATIONS SPECIFICATIONS
TABLE OF INPUTS

Signal No. 18A — Cayuga County

INPUT	FUNCTION	TERMINAL BOARD WIRING / SDLC CHANNEL	SIZE	REMARKS
A1 - A2	PED A (Ø2)	1A, 1B	-	CROSSING LANSING STREET EASTERN LEG
B2 - B3	PED B (Ø4)	2A, 2B	-	CROSSING ROUTE 34 (NORTH ST) SOUTHERN LEG
C1 - C4	PED C (Ø4)	3A, 3B	-	CROSSING ROUTE 34 (NORTH ST) NORTHERN LEG
33	Ø 6	33	6' X 6'	ROUTE 34 (NORTH ST) SB THRU COUNT
34	Ø 6	34	6' X 6'	ROUTE 34 (NORTH ST) SB THRU COUNT
35	Ø 6	35	6' X 6'	ROUTE 34 (NORTH ST) SB LEFT TURN COUNT
36	Ø 6	36	6' X 60'	ROUTE 34 (NORTH ST) SB THRU PRESENCE
37	Ø 6	37	6' X 60'	ROUTE 34 (NORTH ST) SB LEFT/THRU PRESENCE
38	Ø 4	38	6' X 6'	LANSING ST WB RIGHT TURN COUNT
39	Ø 4	39	6' X 6'	LANSING ST WB LEFT TURN COUNT
40	Ø 4	40	6' X 60'	LANSING ST LEFT/RIGHT TURN PRESENCE
41	Ø 2	41	6' X 6'	ROUTE 34 (NORTH ST) NB RIGHT TURN COUNT
42	Ø 2	42	6' X 6'	ROUTE 34 (NORTH ST) NB THRU COUNT
43	Ø 2	43	6' X 6'	ROUTE 34 (NORTH ST) NB THRU COUNT
44	Ø 2	44	6' X 60'	ROUTE 34 (NORTH ST) THRU/RIGHT PRESENCE
45	Ø 2	45	6' X 60'	ROUTE 34 (NORTH ST) THRU PRESENCE

TABLE OF CLEARANCES

TO \ FROM	R	G
R	X	Y
	X	R
G	R	X
	R	X

PROJECT MANAGER N. BOULTON
CHECK M. VONDEN STEINEN
DRAFTING C. DOGGETT
CHECK B. LEBBON
DESIGN N. BOULTON
JOB MANAGER N. BOULTON
DESIGN SUPERVISOR P. LO GALLO

FILE NAME =
DATE/TIME = 22-JUL-2025 08:31
USER = DOTOGrebenevich

AFFIX SEAL: 7/24/2025
ON:

ALTERED BY:
ON:

STATE OF NEW YORK · SCOTT ROBERT BATES · 080916 · LICENSED PROFESSIONAL ENGINEER

SIGNAL NO. 18A
CAYUGA COUNTY

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NY RTE 34 (NORTH STREET) AT LANSING STREET
CITY OF AUBURN
SIGNAL VIDEO DETECTION
S.H. 60-5
COUNTY: ONONDAGA REGION: 03

PIN 380725
NY 34
UTILITY QUALITY LEVEL D

BRIDGES

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

TRAFFIC SIGNAL NO. 18A - TABLES

CONTRACT NUMBER D265574

DRAWING NO. TSP-61

SHEET NO. 79

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

NEW YORK STATE | Department of Transportation

Phase Times [1.1.1]

	1	2	3	4	5	6	7	8
Min Green	8	30	22			30		
Gap, Ext			4.5					
Max 1	8	30	35			30		
Max 2								
Yel Clearance	3.5	3.2	3.2	3.5	3.5	3.2	3.5	3.5
Red Clearance	1	2	1	1.5	1.5	2	1.5	1.5
Walk								
Ped Clearance								
Red Revert								
Add Initial								
Max Initial								
Time B4 Reduct								
Cars B4 Reduct								
Time To Reduce								
Reduce By								
Min Gap								
DyMaxLim								
Max Step								

Options [1.1.2]	1	2	3	4	5	6	7	8
Enable	ON	ON	ON			ON		
Min Recall	ON	ON				ON		
Max Recall								
Ped Recall								
Soft Recall								
Lock Calls								
Auto Flash Entry								
Auto Flash Exit								
Dual Entry		ON		ON		ON		ON
Enable Simul Gap	ON	ON	ON	ON	ON	ON	ON	ON
Gaurantee Passage								
Rest In Walk								
Conditon Service								
Non-Actuated 1								
Non-Actuated 2								
Add Init Calc								

Options+ [1.1.3]	1	2	3	4	5	6	7	8
Reservice								
PedClr Thru Yel								
Skip Red No Call								
Red Rest								
Max II								
Call Phase								
Conflicting Phase								
Omit Yellow								
Ped Delay								
Grn/Ped Delay								

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Coordination Patterns [2.4] and Coordination Split Tables [2.7.1]

Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq	Pat#	Cyc	Off	Split	Seq
1	0	0	1	1	13	0	0	13	1	25	0	0	0	1	37	0	0	0	1
2	0	0	2	1	14	0	0	14	1	26	0	0	0	1	38	0	0	0	1
3	0	0	3	1	15	0	0	15	1	27	0	0	0	1	39	0	0	0	1
4	0	0	4	1	16	0	0	16	1	28	0	0	0	1	40	0	0	0	1
5	0	0	5	1	17	0	0	17	1	29	0	0	0	1	41	0	0	0	1
6	0	0	6	1	18	0	0	18	1	30	0	0	0	1	42	0	0	0	1
7	0	0	7	1	19	0	0	19	1	31	0	0	0	1	43	0	0	0	1
8	0	0	8	1	20	0	0	20	1	32	0	0	0	1	44	0	0	0	1
9	0	0	9	1	21	0	0	21	1	33	0	0	0	1	45	0	0	0	1
10	0	0	10	1	22	0	0	22	1	34	0	0	0	1	46	0	0	0	1
11	0	0	11	1	23	0	0	23	1	35	0	0	0	1	47	0	0	0	1
12	0	0	12	1	24	0	0	24	1	36	0	0	0	1	48	0	0	0	1

Split		1	2	3	4	5	6	7	8	Split		1	2	3	4	5	6	7	8
1	Coor	0	0	0	0	0	0	0	0	13	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
2	Coor	0	0	0	0	0	0	0	0	14	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
3	Coor	0	0	0	0	0	0	0	0	15	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
4	Coor	0	0	0	0	0	0	0	0	16	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
5	Coor	0	0	0	0	0	0	0	0	17	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
6	Coor	0	0	0	0	0	0	0	0	18	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
7	Coor	0	0	0	0	0	0	0	0	19	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
8	Coor	0	0	0	0	0	0	0	0	20	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
9	Coor	0	0	0	0	0	0	0	0	21	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
10	Coor	0	0	0	0	0	0	0	0	22	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
11	Coor	0	0	0	0	0	0	0	0	23	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON
12	Coor	0	0	0	0	0	0	0	0	24	Coor	0	0	0	0	0	0	0	0
		NON	NON	NON	NON	NON	NON	NON	NON			NON	NON	NON	NON	NON	NON	NON	NON

Page#	
1	8 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
1A&1B	16 Phase Times/Options; Patterns/Splits; Ring Startup; Coord/Flash Mode; Unit Param
2	Overlaps; Channel Settings; Coord Alt Table+ (values not associated with time-of-day)
3	Detection; Sample Time and Unit Parameters related to detection
4	Preemption and Alternate Phase Time and Phase Options
5	Annual Schedule
6	Day Plans; Action Tables; Coord Alt Table+ (values varied by time-of-day)
7	Communications; Secutiry; I/O Setup
8	Misc - Events/Alarms; Call/Inhibit/Redirect; P/OLAP Auto Flash; CIC; Misc Unit Param

1923

Ring/Startup [1.1.4]

Phs	Ring	Start	Enable
1	1	Red	ON
2	1	Red	ON
3	1	Red	ON
4	1	Red	OFF
5	2	Red	OFF
6	2	Red	ON
7	2	Red	OFF
8	2	Red	OFF

Coord Modes [2.1]

Test OpMode	0
Correction	SHRT/LNG
Maximum	MAX 1
Force-Off	Float
Closed Loop	ON
Stop-in-Walk	OFF
Auto Reset	ON
Expand Splt	
Ped Recycle	NO_RECYCLE
Before	TIMED
After	TIMED

Auto Flash [1.4.1]

Auto Flash	PH_OVLP
Flash Yel	45
Flash Red	20

Unit Params [1.2.1]

Phase Mode	STD8
IO Mode	User
Loc Flsh Start	Red
Start Flash(s)	0
Start AllRed(s)	6
Yellow < 3"	OFF
Display Time	20
Red Revert	3
MCE Timeout	0
Feature Profile	
Free Ring Seq	1
Auxswitch	STOPTM
SDLC Retry	0
TS2 Det Faults	ON
Auto Ped Clear	OFF
SDLC Retry	0

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Overlap 1-16 Program Parms & Parm+ [1.5.2.1] [1.5.2.2]

Overlap Conflict Lock	OFF	Overlap Lock Inhibit	OFF	Parent Ph Clearance	ON	Extra Included Ph	OFF

	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
1	Modifier Ø								Grn		9	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
A	Conflict Olap								Red	1.5	I	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
2	Modifier Ø								Grn		10	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
B	Conflict Olap								Red	1.5	J	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
3	Modifier Ø								Grn		11	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
C	Conflict Olap								Red	1.5	K	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
4	Modifier Ø								Grn		12	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
D	Conflict Olap								Red	1.5	L	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
5	Modifier Ø								Grn		13	Modifier Ø									Grn	
	Conflo0l								Yel	3.5		Conflict Ø									Yel	3.5
E	Conflict Olap								Red	1.5	M	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
6	Modifier Ø								Grn		14	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
F	Conflict Olap								Red	1.5	N	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
7	Modifier Ø								Grn		15	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
G	Conflict Olap								Red	1.5	O	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	
	Included Ø								Type	NORMAL		Included Ø									Type	NORMAL
8	Modifier Ø								Grn		16	Modifier Ø									Grn	
	Conflict Ø								Yel	3.5		Conflict Ø									Yel	3.5
H	Conflict Olap								Red	1.5	P	Conflict Olap									Red	1.5
	Conflict Ped								LG			Conflict Ped									LG	

Channel Settings [1.8.1]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Phase / Olap #	1	2					3	3	6															
Channel Type	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH	VEH
Channel Flash	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	DRK	DRK	DRK	DRK	DRK	DRK	DRK	DRK
Alt Hz																								

Channel+ Settings [1.8.4]

.....Channel ->>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Flash Red+																								
Flash Yellow+																								
Flash Green+																								
Flash Inh Red+																								
Olap Ovrd																								

Coord Transition, CoorPhs [2.5]

Pat#	Short	Long	Dwell	No Shortway Ø				E-Yld	Offset	RetHld	Float	Min Veh Perm	Min Ped Perm
1	12	22							EndGRN				
2	12	22							EndGRN				
3	12	22							EndGRN				
4	12	22							EndGRN				
5	12	22							EndGRN				
6	12	22							EndGRN				
7	12	22							EndGRN				
8	12	22							EndGRN				
9	12	22							EndGRN				
10	12	22							EndGRN				
11	12	22							EndGRN				
12	12	22							EndGRN				
13	12	22							EndGRN				
14	12	22							EndGRN				
15	12	22							EndGRN				
16	12	22							EndGRN				
17	12	22							EndGRN				
18	12	22							EndGRN				
19	12	22							EndGRN				
20	12	22							EndGRN				
21	12	22							EndGRN				
22	12	22							EndGRN				
23	12	22							EndGRN				
24	12	22							EndGRN				
25									BegGRN				
26									BegGRN				
27									BegGRN				
28									BegGRN				
29									BegGRN				
30									BegGRN				
31									BegGRN				
32									BegGRN				
33									BegGRN				
34									BegGRN				
35									BegGRN				
36									BegGRN				
37									BegGRN				
38									BegGRN				
39									BegGRN				
40									BegGRN				
41									BegGRN				
42									BegGRN				
43									BegGRN				
44									BegGRN				
45									BegGRN				
46									BegGRN				
47									BegGRN				
48									BegGRN				

Channel Params[1.8.3]

C1 IO Mode	User	Single BIU Map	DEFAULT	Invert Rail Input	OFF

Veh Par 1-64 [5.1]										Veh Par 1-64 [5.1]										Vehicle Options 1-64 [5.2]										Vehicle Options 1-64 [5.2]										Parameters+ 1-64 [5.3]							
Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call Ø	Swi Ø	Dlay	Ext	Que	No Act	Max Pres	Err Cnt	Fail Time	Det #	Call	Ext	Que	Add Init	Red Lock	Yell Lock	occ	vol	Det #	vol	occ	Yell Lock	Red Lock	Ext	Add Init	Que	Call	Det #	oc G	oc Y	oc R	Dlay 1	Dlay 2	Type	Src
1	3						45	50	2	33							45	50		1	ON	ON		ON					33					ON	ON		ON	1						NORM	
2							45	50	2	34							45	50		2	ON	ON		ON					34					ON	ON		ON	2						NORM	
3							45	50	2	35							45	50		3	ON	ON		ON					35					ON	ON		ON	3						NORM	
4							45	50	2	36							45	50		4	ON	ON		ON					36					ON	ON		ON	4						NORM	
5							45	50	2	37							45	50		5	ON	ON		ON					37					ON	ON		ON	5						NORM	
6							45	50	2	38							45	50		6	ON	ON		ON					38					ON	ON		ON	6						NORM	
7							45	50	2	39							45	50		7	ON	ON		ON					39					ON	ON		ON	7						NORM	
8							45	50	2	40							45	50		8	ON	ON		ON					40					ON	ON		ON	8						NORM	
9							45	50	2	41							45	50		9	ON	ON		ON					41					ON	ON		ON	9						NORM	
10							45	50	2	42							45	50		10	ON	ON		ON					42					ON	ON		ON	10						NORM	
11							45	50	2	43							45	50		11	ON	ON		ON					43					ON	ON		ON	11						NORM	
12							45	50	2	44							45	50		12	ON	ON		ON					44					ON	ON		ON	12						NORM	
13							45	50	2	45							45	50		13	ON	ON		ON					45					ON	ON		ON	13						NORM	
14							45	50	2	46							45	50		14	ON	ON		ON					46					ON	ON		ON	14						NORM	
15							45	50	2	47							45	50		15	ON	ON		ON					47					ON	ON		ON	15						NORM	
16							45	50	2	48							45	50		16	ON	ON		ON					48					ON	ON		ON	16						NORM	
17							45	50	2	49							45	50		17	ON	ON		ON					49					ON	ON		ON	17						NORM	
18							45	50	2	50							45	50		18	ON	ON		ON					50					ON	ON		ON	18						NORM	
19							45	50		51							45	50		19	ON	ON		ON					51					ON	ON		ON	19						NORM	
20							45	50		52							45	50		20	ON	ON		ON					52					ON	ON		ON	20						NORM	
21							45	50		53							45	50		21	ON	ON		ON					53					ON	ON		ON	21						NORM	
22							45	50		54							45	50		22	ON	ON		ON					54					ON	ON		ON	22						NORM	
23							45	50		55							45	50		23	ON	ON		ON					55					ON	ON		ON	23						NORM	
24							45	50		56							45	50		24	ON	ON		ON					56					ON	ON		ON	24						NORM	
25							45	50		57							45	50		25	ON	ON		ON					57					ON	ON		ON	25						NORM	
26							45	50		58							45	50		26	ON	ON		ON					58					ON	ON		ON	26						NORM	
27							45	50		59							45	50		27	ON	ON		ON					59					ON	ON		ON	27						NORM	
28							45	50		60							45	50		28	ON	ON		ON					60					ON	ON		ON	28						NORM	
29							45	50		61							45	50		29	ON	ON		ON					61					ON	ON		ON	29						NORM	
30							45	50		62							45	50		30	ON	ON		ON					62					ON	ON		ON	30						NORM	
31							45	50		63							45	50		31	ON	ON		ON					63					ON	ON		ON	31						NORM	
32							45	50		64							45	50		32	ON	ON		ON					64					ON	ON		ON	32						NORM	

Parameters+ 1-64 [5.3]

Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src	Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src	Det #	occ Grn	occ Yell	occ Red	Dlay 1	Dlay 2	Type	Src
33						NORM		44						NORM		55						NORM	
34						NORM		45						NORM		56						NORM	
35						NORM		46						NORM		57						NORM	
36						NORM		47						NORM		58						NORM	
37						NORM		48						NORM		59						NORM	
38						NORM		49						NORM		60						NORM	
39						NORM		50						NORM		61						NORM	
40						NORM		51						NORM		62						NORM	
41						NORM		52						NORM		63						NORM	
42						NORM		53						NORM		64						NORM	
43						NORM		54						NORM									

Ped Det Parms [5.4]

Det #	Call Ø	No Act	Max Pres	Err Cnt
1			15	
2			15	
3			15	
4			15	
5			15	
6			15	
7			15	
8			15	

Unit Paramters [1.2.1]

TS2 Det Faults		ON

Vol/Occ Report Parm [1.5.8]

Vol/Occ Period Minutes	0
Vol/Occ Period Minutes	15

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Preemption Times [3.1], Options+ [3.6]

Pre #	Enable	Type	Output	Delay	MinDura
1	ON	RAIL	Dwell		
2	ON	RAIL	Dwell		
3	ON	EMERG	Dwell		
4	ON	EMERG	Dwell		
5	ON	EMERG	Dwell		
6	ON	EMERG	Dwell		

Pre #	MaxPres	MinGrn	MinWlk	PedClr	Co+Pre
1					ON
2					ON
3					ON
4					ON
5					ON
6					ON

Pre #	Track Grn	Min Dwell	Ext Dwell	PedClr+	Yel
1		2			
2		2			
3		2			
4		2			
5		2			
6		2			

Pre #	Red	Pattern	Skip
1			OFF
2			OFF
3			OFF
4			OFF
5			OFF
6			OFF

Low Priority Preempts

Pre #	Type	Min	Max
7	OFF		
8	OFF		
9	OFF		
10	OFF		

Unit Parameters [1.2.1]

Stop Timer Over Preempt	OFF
Preempt or Ext Output	PRE
Max Seek Track Time	
Max Seek Dwell Time	

Channel Parameters [1.8.3]

D Conn Mappings	OFF
Pre Invert Rail Input	None

Track Clear Phases [3.2], Track Clear Overlaps+ [3.5]

Pre #	Track Phases				Track Overlaps											
1																
2																
3																
4																
5																
6																

Dwell Phases [3.2] and Overlaps+ [3.5]

Pre #														
1	Phases													
	Overlaps													
	Peds													
2	Phases													
	Overlaps													
	Peds													
3	Phases													
	Overlaps													
	Peds													
4	Phases													
	Overlaps													
	Peds													
5	Phases													
	Overlaps													
	Peds													
6	Phases													
	Overlaps													
	Peds													

Exit Phases [3.2]

Pre #	Exit Phase			
1				
2				
3				
4				
5				
6				

Preemption 1, Options+ [3.6]

Pre #	Lock	Override Auto Flsh		Override Higher		Flsh Dwell	Link
1	ON		ON		ON		OFF	
2	ON		ON		ON		OFF	
3	ON		ON		ON		OFF	
4	ON		ON		ON		OFF	
5	ON		ON		ON		OFF	
6	ON		ON		ON		OFF	

Alt# 1 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 2 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 3 Times Table [1.1.6.1]

Column#.. ->	1	2	3	4	5	6	7	8
Assign Ø								
Min Grn								
Gap, Ext								
Max 1								
Max 2								
Yel Clr								
Red Clr								
Walk								
Ped Clr								

Alt# 1 Options Table [1.1.6.2]

Column # ->	1	2	3	4	5	6	7	8
Assign Ø								
Lock Calls	ON	ON	ON	ON	ON	ON	ON	ON
Soft Recall								
Dual Enrty								
Enabl SimGap	ON	ON	ON	ON	ON	ON	ON	ON
Guar Passage								
Rest In Walk								
Cond Service								
Reservice								
Non-Act 1								
Red Rest								
Max2								
Ped Delay								
Conflicting Ø1								

Annual Schedule [4.3] **Month of Year** **Day of Week** **Date** **Day Plan** **Link To**

	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	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	31	Day Plan	Link To
1																																																			1	
2																																																			1	
3																																																			1	
4																																																			1	
5																																																			1	
6																																																			1	
7																																																			1	
8																																																			1	
9																																																			1	
10																																																			1	
11																																																			1	
12																																																			1	
13	J	F	M	A	M	J	J	A	S	O	N	D	S	M	T	W	T	F	S	1	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	31		
14																																																			1	
15																																																			1	
16																																																			1	
17																																																			1	
18																																																			1	
19																																																			1	
20																																																			1	
21																																																			1	
22																																																			1	
23																																																			1	
24																																																			1	

Day Plans [4.4]

Day Plan 1

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 2

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 3

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 4

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 5

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 6

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 7

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 8

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 9

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 10

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 11

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 12

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 13

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 14

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Day Plan 15

	Hour	Min	Act		Hour	Min	Act
1	0	0	0	9	0	0	0
2	0	0	0	10	0	0	0
3	0	0	0	11	0	0	0
4	0	0	0	12	0	0	0
5	0	0	0	13	0	0	0
6	0	0	0	14	0	0	0
7	0	0	0	15	0	0	0
8	0	0	0	16	0	0	0

Action Table [4.5]

Act#	Pat#	A1	A2	A3	S1	S2	S3	S4	S5	S6	S7	S8
1	1											
2	2											
3	3											
4	4											
5	5											
6	6											
7	7											
8	8											
9	9											
10	10											
11	11											
12	12											
13	13											
14	14											
15	15											
16	16											
17	17											
18	18											
19	19											
20	20											
21	21											
22	22											
23	23											
24	24											
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
48												
98												
99												
100	255											

Coord Alternate Tables - Pat+ [2.6]

Pat#	ØOpt	ØTime	DetG	Call Inh	CIC	CNA1	Overlap Off 1	2	3	4	5	6	7	8	Dia	Max2
1															DFT	
2															DFT	
3															DFT	
4															DFT	
5															DFT	
6															DFT	
7															DFT	
8															DFT	
9															DFT	
10															DFT	
11															DFT	
12															DFT	
13															DFT	
14															DFT	
15															DFT	
16															DFT	
17															DFT	
18															DFT	
19															DFT	
20															DFT	
21															DFT	
22															DFT	
23															DFT	
24															DFT	
25															DFT	
26															DFT	
27															DFT	
28															DFT	
29															DFT	
30															DFT	
31															DFT	
32															DFT	
33															DFT	
34															DFT	
35															DFT	
36															DFT	
37															DFT	
38															DFT	
39															DFT	
40															DFT	
41															DFT	
42															DFT	
43															DFT	
44															DFT	
45															DFT	
46															DFT	
47															DFT	
48															DFT	

#	Event / Alarm	Ev	Alr
1	Power Up Alarm.	ON	ON
2	Stop Timing	ON	ON
3	TS1 Cabinet Door	ON	ON
4	Coordination Failure	ON	ON
5	External Alarm # 1	ON	ON
6	External Alarm # 2	ON	ON
7	External Alarm # 3	ON	ON
8	External Alarm # 4	ON	ON
9	Closed Loop Disabled	ON	ON
10	External Alarm # 5	ON	ON
11	External Alarm # 6	ON	ON
12	Manual Control Enable	ON	ON
13	Coord Free Input	ON	ON
14	Local Flash Input	ON	ON
15	MMU Flash	ON	ON
16	CMU Flash	ON	ON
17	Cycle Fault	ON	ON
18	Cycle Failure	ON	ON
19	Coordination Fault	ON	ON
20	Controller Fault	ON	ON
21	Detector SDLC Failure	ON	ON
22	MMU SDLC Failure	ON	ON
23	Critical SDLC Failure	ON	ON
24	Reserved	ON	ON
25	EEPROM CRC Fault	ON	ON
26	Detector Diagnostic Failure	ON	ON
27	BIU Detector Failure	ON	ON
28	Queue detector alarm	ON	ON
29	Ped Detector Fault	ON	ON
30	Coord Diagnostic Fault	ON	ON
41	TempAlert Probe Ch. A	ON	ON
42	TempAlert Probe Ch. B	ON	ON
47	Coord Active	ON	ON
48	Preempt Active	ON	ON
49	Preempt 1 Input	ON	ON
50	Preempt 2 Input	ON	ON
51	Preempt 3 Input	ON	ON
52	Preempt 4 Input	ON	ON
53	Preempt 5 Input	ON	ON
54	Preempt 6 Input	ON	ON
55	Preempt 7 Input	ON	ON
56	Preempt 8 Input	ON	ON
57	Preempt 9 Input	ON	ON
58	Preempt 10 Input	ON	ON
61	In Transition	ON	ON
81	FIO Status Alarm	ON	ON

Call Phases[1.1.5]

Ø	Phases Called By Ø			
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

Redirect Phases[1.1.5]

	From	To	From	To	From	To	From	To
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								

Inhibit Phases[1.1.5]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																

Alt Call & Redirect # 1 [1.1.6.3]

Col	Ø	Phases Called By Ø					From	To	From	To	From	To	From	To
1						1								
2						2								
3						3								
4						4								
5						5								
6						6								
7						7								
8						8								

Alt Inhibit Phases # 1 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Alt Call & Redirect # 2 [1.1.6.3]

Col	Ø	Phases Called By Ø					From	To	From	To	From	To	From	To
1						1								
2						2								
3						3								
4						4								
5						5								
6						6								
7						7								
8						8								

Alt Inhibit Phases # 2 [1.1.6.3]

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
5																
6																
7																
8																

Auto Flash Phase/Olap Settings [1.4.2]

Yel Ø								
Yel (olaps)								

Unit Parameters [1.2.1]

Allow Skip Yellow	OFF	Max Cycle Time	
TOD Dim Enable	OFF	Cycle Fault Action	Alarm
Tone Disable	OFF		
Diamond Mode	4Ph		
Backup Time (s)	900		
Disable Init Ped	OFF		
Cycle Fault Action	Alarm		
Enable Run Timer	ON		

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C1-USER IO Map [1.8.9.1 In]

I1-1	1	Veh Call 1
I1-2	189	Unused
I1-3	189	Unused
I1-4	189	Unused
I1-5	189	Unused
I1-6	189	Unused
I1-7	189	Unused
I1-8	189	Unused
I2-1	189	Unused
I2-2	189	Unused
I2-3	189	Unused
I2-4	189	Unused
I2-5	189	Unused
I2-6	189	Unused
I2-7	189	Unused
I2-8	189	Unused
I3-1	189	Unused
I3-2	189	Unused
I3-3	189	Unused
I3-4	189	Unused
I3-5	189	Unused
I3-6	189	Unused
I3-7	189	Unused
I3-8	189	Unused
I4-1	189	
I4-2		
I4-3		
I4-4		
I4-5	189	Unused
I4-6	189	Unused
I4-7	229	33xCMUStop
I4-8	228	33xFlashSns
I5-1	189	Unused
I5-2	189	Unused
I5-3	189	Unused
I5-4	189	Unused
I5-5	189	Unused
I5-6	189	Unused
I5-7	189	Unused
I5-8	189	Unused
I6-1	189	Unused
I6-2	189	Unused
I6-3	189	Unused
I6-4	189	Unused
I6-5	189	Unused
I6-6	189	Unused
I6-7	189	Unused
I6-8	189	Unused

C1-USER IO Map [1.8.9.2 Out]

O1-1	1	Ch1 Red
O1-2	49	Ch1 Green
O1-3	2	Ch2 Red
O1-4	26	Ch2 Yellow
O1-5	50	Ch2 Green
O1-6	3	Ch3 Red
O1-7	27	Ch3 Yellow
O1-8	51	Ch3 Green
O2-1	4	Ch4 Red
O2-2	52	Ch4 Green
O2-3	5	Ch5 Red
O2-4	29	Ch5 Yellow
O2-5	53	Ch5 Green
O2-6	6	Ch6 Red
O2-7	30	Ch6 Yellow
O2-8	54	Ch6 Green
O3-1	7	Ch7 Red
O3-2	55	Ch7 Green
O3-3	8	Ch8 Red
O3-4	32	Ch8 Yellow
O3-5	56	Ch8 Green
O3-6	9	Ch9 Red
O3-7	33	Ch9 Yellow
O3-8	57	Ch9 Green
O4-1	10	Ch10 Red
O4-2	58	Ch10 Green
O4-3	11	Ch11 Red
O4-4	35	Ch11 Yellow
O4-5	59	Ch11 Green
O4-6	12	Ch12 Red
O4-7	36	Ch12 Yellow
O4-8	60	Ch12 Green
O5-1	28	Ch4 Yellow
O5-2	34	Ch10 Yellow
O5-3	25	Ch1 Yellow
O5-4	31	Ch7 Yellow
O5-5	115	Not Used
O5-6	115	Not Used
O5-7	115	Not Used
O5-8	114	Watchdog
O6-1	115	Not Used
O6-2	115	Not Used
O6-3	13	Ch13 Red
O6-4	37	Ch13 Yellow
O6-5	61	Ch13 Green
O6-6	14	Ch14 Red
O6-7	38	Ch14 Yellow
O6-8	62	Ch14 Green

C1-USER IO Map [1.8.9.2 Out]

O7-1	115	Not Used
O7-2	115	Not Used
O7-3	115	Not Used
O7-4	115	Not Used
O7-5	115	Not Used
O7-6	115	Not Used
O7-7	115	Not Used
O7-8	115	Not Used

C11S-USER IO Map [1.8.9.1 In]

I4-1		
I4-2		
I4-3		
I4-4		
I7-1	189	Unused
I7-2	189	Unused
I7-3	189	Unused
I7-4	189	Unused
I7-5	189	Unused
I7-6	189	Unused
I7-7	189	Unused
I7-8	189	Unused
I8-1	189	Unused
I8-2	189	Unused
I8-3	189	Unused
I8-4	189	Unused
I8-5	189	Unused
I8-6	189	Unused
I8-7	189	Unused
I8-8	189	Unused

C11S-USER IO Map [1.8.9.2 Out]

O8-1	115	Not Used
O8-2	115	Not Used
O8-3	115	Not Used
O8-4	115	Not Used
O8-5	115	Not Used
O8-6	115	Not Used
O8-7	115	Not Used
O8-8	115	Not Used

IO Logic [1.8.7]

Op1	Result		O1Fcn	Inv1	Src1	IO1	Fun1	O2Fcn	Inv2	Src2	IO2	Fun2	O3Fcn	Inv3	Src3	IO3	Fun3	Dly	Sec
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0
I	0	=	----	-	0	I	0	----	-	0	I	0	----	-	0	I	0	DLY	0

Security Access Levels [8.2]

1	SWLOAD
2	SECURE
3	None
4	None
5	None
6	None
7	None
8	None
9	None
10	None
11	None
12	None
13	None
14	None
15	None
16	None
17	None
18	None
19	None
20	None
21	None
22	None
23	None
24	None
25	None
26	None
27	None
28	None
29	None
30	None
31	None
32	None
33	None
34	None
35	None
36	None
37	None
38	None
39	None
40	None
41	None
42	None
43	None
44	None
45	None
46	None
47	None
48	None
49	None
50	None
51	None
52	None
53	None
54	None
55	None
56	None
57	None
58	None
59	None
60	None
61	None
62	None
63	None
64	None

Com Parameters [6.1]

Station ID	1923
Group ID	0
Master ID	0
Backup Time	900

SysUp Modem [6.1]

Enable Modem	None
Idle Time	0
Dial Time	0
Tel:	
Alt:	

2070 Port Parms [6.2]

Port	Baud Rate	FCM
SP1	9600	6
SP2	9600	6
SP3	19200	6
SP4	38400	6
SP5	1200	0
SP6	1200	0
SP7	1200	0
SP8	1200	0

2070 IP 1 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	###			

2070 IP 2 Addressing [6.5]

	Addressing			
Addr	192	168	10	100
Mask	255	255	255	0
Brdcst	0	0	0	0
GtWay	192	168	10	1
Port	5001			

2070 Port Binding Ports [6.6]

	Port	Echo	Mode
ASYNC1	SP1	None	0
ASYNC2	SP2	None	0
ASYNC3	SP3	None	0
ASYNC4	SP4	None	0
SYNC1	SP5S	SYNC3	OFF
SYNC2	OFF	SYNC4	OFF

2070 Port Binding Functions [6.6]

Functio	Channel	Functio	Channel
TS2/CVN	None	SYSUp	ASYNC2
CMU/MM	None	SYSDow	ASYNC1
Opticom	None	Shell	None
Loop De	None		
GPS	None		

CLEARANCES

1. ALL SIGNALS IN THIS CONTRACT SHALL BE A MINIMUM OF 16.5 FEET ABOVE THE HIGH POINT OF THE ROADWAY, WITH ALL RED INDICATIONS LEVEL ACROSS THE INTERSECTION. NO EXCEPTIONS SHALL BE MADE FOR SIGNALS MOUNTED BELOW 16.5 FEET.

PULLBOXES

1. PULLBOXES SHALL HAVE A TWO-FOOT MINIMUM DRAINAGE BED OF NO. 2 CRUSHED STONE OR GRAVEL PLACED BELOW THE PULLBOX, AOBE. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 680.510501 - "PULLBOX, RECTANGULAR 26" X 18" REINFORCED CONCRETE."
2. ON STANDARD SHEET NO. 680-04, ALL PULLBOXES SHALL BE SET TO 1/2 INCH BELOW GRADE WITH ALL THE SURROUNDING SURFACES, EXCEPT SIDEWALKS, WHERE THEY SHALL BE FLUSH.

PAVEMENT MARKINGS

1. PAVEMENT MARKINGS SHOWN ON THE TRAFFIC SIGNAL PLANS, UNLESS OTHERWISE NOTED, ARE FOR DESIGN PURPOSES ONLY.

CONDUITS

1. WHERE CONDUIT IS TO BE PLACED UNDER THE ROADWAY, THE CONTRACTOR SHALL USE A 3" DIAMETER CONDUIT, UNLESS OTHERWISE SHOWN ON THE PLAN SHEET.
2. ALL SIGNAL CONDUITS SHALL BE BONDED WITH A #6 BARE STRANDED COPPER GROUND WIRE.
3. ALL COUPLINGS AND BUSHINGS SHALL BE MECHANICALLY THREADED. COMPRESSION OR SLIP TYPE COUPLINGS OR BUSHINGS SHALL NOT BE ALLOWED.

UTILITIES

1. THE APPROXIMATE LOCATION OF UNDERGROUND UTILITIES MAY BE SHOWN ON THE PLANS. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION BEFORE COMMENCING WORK. BEFORE ANY PIPE IS PLACED, THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AT PIPE CROSSINGS TO ENABLE THE ENGINEER TO VERIFY THE PROPOSED PIPE WITH GRADES SHOWN ON THE PLANS IS NOT OBSTRUCTED BY EXISTING UTILITIES.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL UTILITY WORK WITH THE RESPECTIVE OWNERS DURING CONSTRUCTION. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
3. ALL SIGNAL EQUIPMENT SHALL BE PLACED IN A LOCATION THAT COMPLIES WITH THE NYS HIGH VOLTAGE PROXIMITY ACT. THIS INCLUDES, BUT IS NOT LIMITED TO, KEEPING ALL SIGNAL EQUIPMENT A MINIMUM OF 10 FT FROM PRIMARY LINES, AND 2 FT FROM SECONDARY AND ALL OTHER LINES.
4. CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 811 FOR MARK OUT OF ALL UNDERGROUND SIGNAL CONDUIT AND LOOP WIRE PRIOR TO ANY DIGGING. ANY BROKEN SIGNAL WIRE CANNOT BE SPLICED. A NEW RUN OF WIRE FROM THE POLE TO THE FURTHEST END MUST BE REPLACED.
5. UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED, NOR IS THERE ANY GUARANTEE THAT ALL EXISTING UTILITIES, WHETHER FUNCTIONAL OR ABANDONED, WITHIN THE PROJECT AREA ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE STARTING WORK AND SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM THEIR WORK. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT 811 IN ACCORDANCE WITH 16 NYCRR PART 753.

LOOPS

1. IN NEW CONSTRUCTION OF ASPHALT PAVEMENTS, THE LOOP SHOULD BE PLACED BELOW THE TOP COURSE, PREFERABLY IN THE BINDER.
2. EIC SHALL RECORD LOCATIONS OF LOOPS AND LEAD-INS AND SUBMIT TO NYSDOT FOR MAINTENANCE RECORDS.
3. THIS IS ONLY A TYPICAL DETAIL AND THE LOOP LAYOUTS AND DIMENSIONS MAY VARY BASED ON INTERSECTION LOCATION. CONTRACTOR SHALL FIRST VERIFY LOOP LOCATIONS, AND DIMENSIONS ON EACH INTERSECTION TRAFFIC SIGNAL PLAN SHEET PRIOR TO BEGINNING ANY LOOP INSTALLATION WORK.

CONTRACTOR

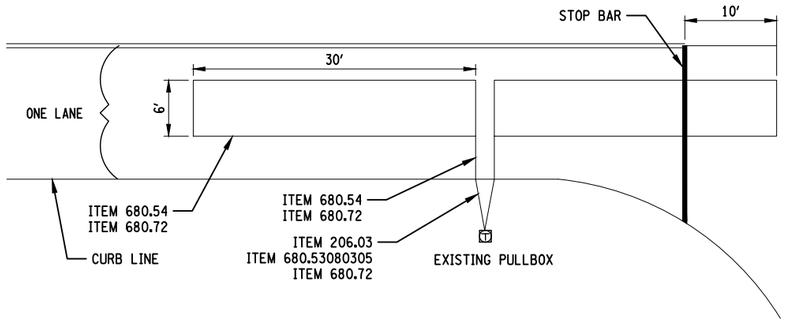
1. NO PROPOSAL WHICH MODIFIES THE APPROVED DESIGN PLAN SUGGESTED BY EITHER THE CONTRACTOR, OR CONSTRUCTION PERSONNEL SHALL BE MADE IN THE FIELD WITHOUT FIRST CONSULTING WITH THE E.I.C. THESE CHANGES INCLUDE, BUT ARE NOT LIMITED TO, 90-DEGREE BENDS IN THE CONDUITS.
2. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THERE MAY BE OTHER CONTRACTORS WORKING WITHIN THE LIMITS OF WORK FOR THIS CONTRACT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE THE WORK OF THIS CONTRACT WITH THAT OF OTHERS SO THERE IS NO CONFLICT.

HIGHWAY MAINTENANCE

1. UPON COMPLETION AND ACCEPTANCE OF THIS CONTRACT, THE HIGHWAY WILL CONTINUE TO BE MAINTAINED BY THOSE AGENCIES WHICH HAD JURISDICTION PRIOR TO THIS CONTRACT.

NYSDOT FUTURE WORK

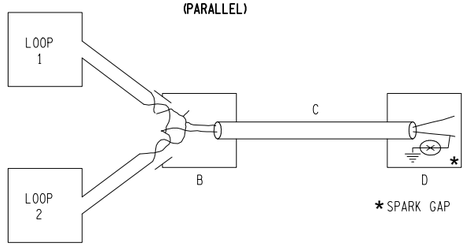
1. A COMPLETE SIGNAL REPLACEMENT PROJECT IS CURRENTLY BEING PROGRESSED BY NYSDOT REGION 3. LAYOUT OF PULLBOXES AND CONDUIT SHALL BE CONFIRMED PRIOR TO PLACEMENT TO ENSURE COMPATIBILITY WITH FINAL NYSDOT SIGNAL LAYOUT.



INDUCTANCE LOOP INSTALLATION

NOT TO SCALE

TABLE OF TRAFFIC SIGNAL QUANTITIES FOR SIGNAL NO. 23A CAYUGA COUNTY			
ITEM	DESCRIPTION	UNIT	QUANTITY
206.03	CONDUIT EXCAVATION AND BACKFILL INCLUDING SURFACE RESTORATION	LF	103
619.1613	MAINTAIN TRAFFIC SIGNAL EQUIPMENT (REQUIREMENT C)	INTM	2
680.510501	PULLBOX-RECTANGULAR, 26 X 18 INCH, REINFORCED CONCRETE	EA	2
680.520106	CONDUIT, METAL STEEL, ZINC COATED, 2"	LF	21
680.520108	CONDUIT, METAL STEEL, ZINC COATED, 3"	LF	64
680.53080305	CONDUIT, FLEXIBLE, LIQUID TIGHT NON METALLIC, 1"	LF	36
680.54	INDUCTANCE LOOP INSTALLATION	LF	82
680.72	INDUCTANCE LOOP WIRE	LF	504
680.77000105	MODIFY TRAFFIC SIGNAL INSTALLATION, LOCATION 1	ELOC	1
680.8111	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY	EA	4



NOTE: THE TOTAL COMBINED LENGTH OF THE TWISTED PAIR IS 100 FEET MAX.

TWO ROAD LOOPS WHEN LOCATED ADJACENT TO EACH OTHER. THESE ENCAPSULATED LOOP AND LOOP LEAD-IN WIRES (TWISTED PAIR) ARE CONNECTED IN PARALLEL WITHIN THE CURBSIDE JUNCTION BOX AND THEN PROCEED THROUGH THE SHIELDED LEAD-IN CABLE WHICH IN TURN GOES TO THE TERMINAL BLOCK IN THE MAIN CABINET.

THE CONFIGURATION OF FIGURE 2 MAY BE EXPANDED TO ACCOMMODATE ADDITIONAL LOOPS (UP TO 4) OF THE SAME PHASE.

LEGEND

A - TWISTED PAIR LEAD-IN
B - CURBSIDE JUNCTION BOX
C - SHIELDED LEAD-IN CABLE
D - MAIN CABINET & MAIN CABINET PULL BOX
E - FLEXIBLE LIQUID-TIGHT CONDUIT

INDUCTANCE LOOP WIRING

NOT TO SCALE

C&S COMPANIES
C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
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STATE OF NEW YORK
JEFFREY M. REINA
No. 081990
LICENSED PROFESSIONAL ENGINEER

CITY OF AUBURN NEW YORK

STANDART AVENUE INTERSECTION WIDENING

CITY OF AUBURN
AUBURN, NY

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	155.033.001
DATE:	JUNE 2, 2025
DRAWN BY:	M. ANASTAS
DESIGNED BY:	M. ANASTAS
CHECKED BY:	J. REINA

NO ALTERATION PERMITTED HEREON EXCEPT AS PROVIDED UNDER SECTION 7209 SUBDIVISION 2 OF THE NEW YORK EDUCATION LAW

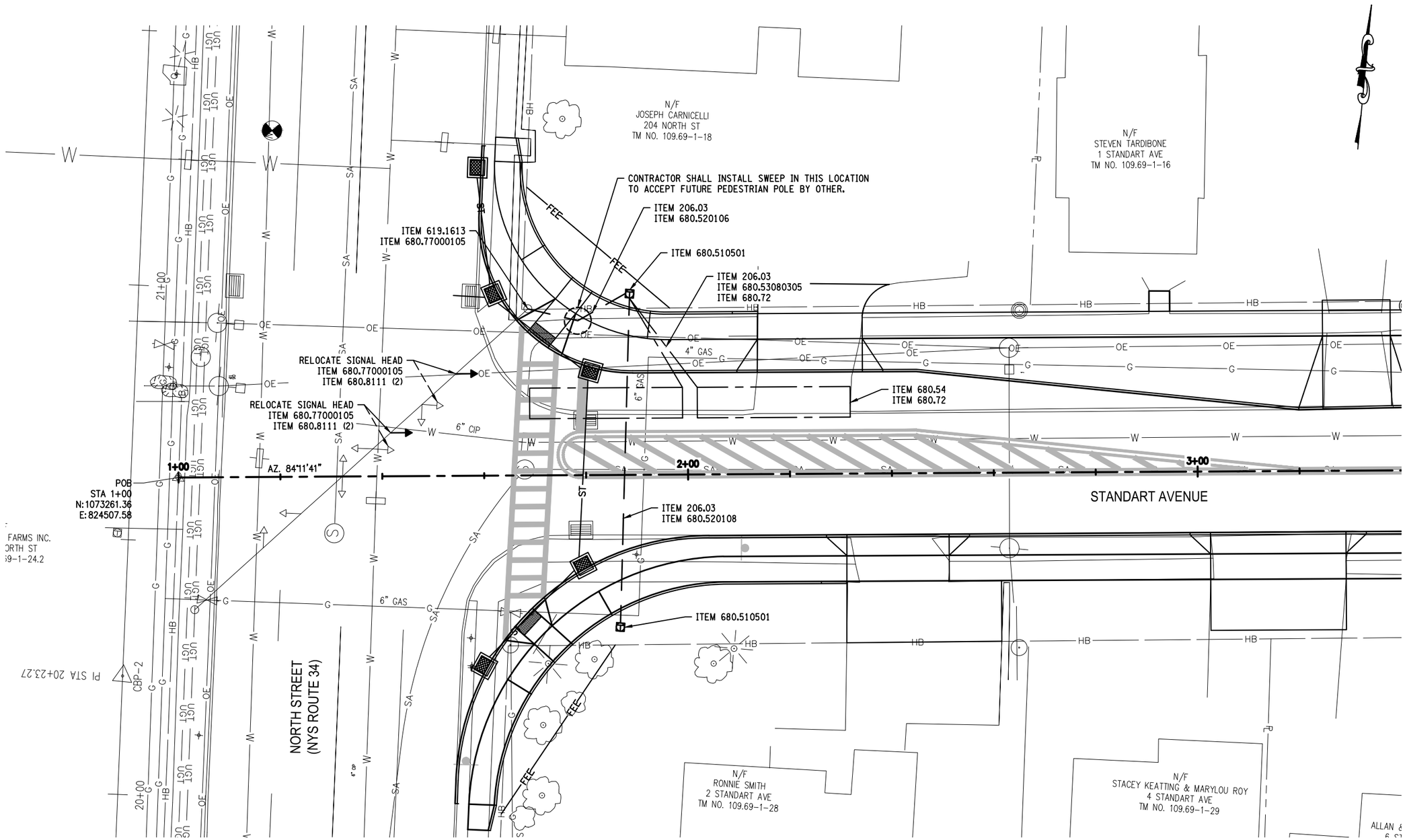
TRAFFIC SIGNAL DETAILS & NOTES

TSD-01

SHEET 24 of 26

Jun 03, 2025 - 7:40am
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NOTE: ITEM 680.77000101 - MODIFY TRAFFIC SIGNAL EQUIPMENT, LOCATION 1 INCLUDES

1. THE RELOCATION, WIRING AND PROGRAMMING OF RELOCATING TRAFFIC SIGNALS TO LINE UP WITH ROAD WIDENING LANE.
2. PROGRAMMING AND INSTALLING NEW LOOP VEHICLE DETECTION.

SIGNAL NO. 23A
CAYUGA COUNTY

10 0 10 20

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TRAFFIC SIGNAL PLAN

TSP-01

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Jun 03, 2025 - 7:41am
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TABLE OF QUANTITIES

ITEM	DESCRIPTION	UNIT	QUANTITIES	
			PROP.	AS-BUILT
201.06	CLEARING AND GRUBBING	LS	NEC	
203.02	UNCLASSIFIED EXCAVATION AND DISPOSAL	CY	710	
203.07	SELECT GRANULAR FILL	CY	160	
206.0201	TRENCH AND CULVERT EXCAVATION	CY	270	
206.03	CONDUIT EXCAVATION AND BACKFILL INCLUDING SURFACE RESTORATION	LF	103	
207.21	GEOTEXTILE SEPARATION	SY	565	
209.11010024	TEMPORARY CATCH BASIN INSERT TRASH, SEDIMENT, AND DEBRIS REMOVAL	EA	8	
209.2301	SEDIMENT FILTER LOG-TEMPORARY, 12"	LF	450	
304.12	SUBBASE COURSE, TYPE 2	CY	332	
404.00001	PLANT PRODUCTION QUALITY ADJUSTMENT TO WMA ITEMS	QU	24	
404.0982	9.5 F2 TOP COURSE ASPHALT, 80 SERIES COMPACTION	TON	80	
404.1989	19 F9 BINDER COURSE ASPHALT, 80 SERIES COMPACTION	TON	130	
404.2589	25 F9 BASE ASPHALT, 80 SERIES COMPACTION	TON	260	
407.0102	DILUTED TACK COAT	GAL	143	
418.7603	ASPHALT PAVEMENT JOINT ADHESIVE	LF	510	
490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	SY	305	
552.17	SHIELDS AND SHORING	SF	1895	
603.77	CONCRETE COLLARS	EA	2	
603.9815	SMOOTH INTERIOR CORRUGATED POLYETHYLENE CULVERT AND STORMDRAIN 15 INCH DIAMETER	LF	106	
604.070301	ALTERING DRAINAGE STRUCTURES, LEACHING BASINS AND MANHOLES	EA	1	
604.302192	RECTANGULAR DRAINAGE STRUCTURE TYPE U FOR PARALLEL BAR #12PCB FRAME	LF	39.2	
605.0901	UNDERDRAIN FILTER TYPE 1	CY	45	
605.1701	OPTIONAL UNDERDRAIN PIPE, 4 INCH DIAMETER	LF	500	
608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	CY	38	
608.21000003	CAST IRON EMBEDDED DETECTABLE WARNING UNITS	SY	2.2	
608.020102	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS, AND VEGETATION CONTROL STRIPS	TON	35	
609.0212	STONE CURB NEAR VERTICAL FACE (NVF)	LF	669	
610.1605	TURF ESTABLISHMENT - PERFORMANCE	SY	600	
619.01	BASIC WORK ZONE TRAFFIC CONTROL	LS	NEC	
619.04	TYPE III CONSTRUCTION BARRICADE	EA	31	
619.1613	MAINTAIN TRAFFIC SIGNAL EQUIPMENT (REQUIREMENT C)	INTM	2	
625.01	SURVEY OPERATIONS	LS	NEC	
627.50140008	CUTTING PAVEMENT	LF	285	
637.12	ENGINEER'S FIELD OFFICE - TYPE 2	MNTH	2	
637.34	OFFICE TECHNOLOGY AND SUPPLIES	DC	1000	
645.81	TYPE A SIGN POSTS	EA	2	
647.31	RELOCATE SIGN PANEL, SIGN PANEL ASSEMBLY SIZE I (UNDER 30 SF)	EA	2	
655.0903	PARALLEL BAR FRAME 12 PCB & PARALLEL BAR GRATE 12 PCB	EA	5	
663.33	ADJUST EXISTING VALVE BOX ELEVATION	EA	1	
680.510501	PULLBOX-RECTANGULAR, 26 X 18 INCH, REINFORCED CONCRETE	EA	2	
680.520106	CONDUIT, METAL STEEL, ZINC COATED, 2"	LF	21	
680.520108	CONDUIT, METAL STEEL, ZINC COATED, 3"	LF	64	
680.53080305	CONDUIT, FLEXIBLE, LIQUID TIGHT NON METALLIC, 1"	LF	36	
680.54	INDUCTANCE LOOP INSTALLATION	LF	82	
680.72	INDUCTANCE LOOP WIRE	LF	504	
680.77000105	MODIFY TRAFFIC SIGNAL INSTALLATION, LOCATION 1	ELOC	1	
680.8111	TRAFFIC SIGNAL BRACKET ASSEMBLY - 1 WAY	EA	4	
685.1202	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MIL	LF	700	
685.3104	WHITE EPOXY REFLECTORIZED PAVEMENT SPECIAL STRIPES - 20 MILS PORTABLE/HAND APPLICATION	LF	700	
686.3204	YELLOW EPOXY REFLECTORIZED PAVEMENT SPECIAL STRIPES - 20 MILS PORTABLE/HAND APPLICATION	LF	600	
697.03	FIELD CHANGE PAYMENT	DC	43000	
698.04	ASPHALT PRICE ADJUSTMENT	DC	1100	
698.05	FUEL PRICE ADJUSTMENT	DC	400	
699.040001	MOBILIZATION	LS	NEC	

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STANDART AVENUE
INTERSECTION WIDENING
CITY OF AUBURN
AUBURN, NY

MARK	DATE	DESCRIPTION
		REVISIONS

PROJECT NO:	155.033.001
DATE:	JUNE 2, 2025
DRAWN BY:	M. ANASTAS
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ESTIMATE OF QUANTITIES

EOQ-01

SHEET 26 of 26

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Passero Associates
Engineering Architecture

242 West Main Street, Suite 100
Rochester, New York 14614
(585) 505-6010 (Phone)

Project: Auburn MOB

Project No: 20250416.0001
Date: 3/11/26
Observer: NGM
Peak: Am

Signal Timing Worksheet

Street: State

			33
			72
			156
			17
			35
			137
			59
			51

Street: Perrine

			18
			14
			18
			15
			18
			15
			17
			18

Average Timings

			70

			17

Phasing Plan

			↓

			←
			→

Passero Associates Engineering Architecture 242 West Main Street, Suite 100 Rochester, New York 14614 (585) 505-6010 (Phone)	Project: Auburn MOB	Project No: 20250416.0001 Date: 3/11/26 Observer: NGM Peak: PM

Signal Timing Worksheet

Street: State			
↰ ↘	↓ ↘	↰ ↑	↓ ↑
			108
			104
			38
			75
			65
			41
			37
			94

Street: Perrine			
↑ ↳	→ ↑	← ↘	←
			22
			20
			19
			19
			24
			18
			22
			17

Average Timings

			70

			20

Phasing Plan

			↓9

			← →

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Auburn Community Hospital Health Campus, City of Auburn, NY
Documentation of Ambient Traffic Volume Growth

Roadway	Segment starts at	Segment end at	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	Annual Growth
North St	NY-5	York St									10,318		10,487		10,422	-0.31%
Standart Ave	North St	Grant Ave						7,323		6,892			7,506	7,378		0.12%
Perrine St	North St	State St					1,919					2,083				1.65%
State St	RR X-ing	York St						4,268		2,492			2,752	3,154		-4.92%
Seymour St	North St	Grant Ave			4,847			5,132		4,356				4,331		-2.79%
Seymour St	Washington St	North St				5,699				5,954			6,666			2.26%
Grant Ave	N Fulton St	Standart Ave									17,891		16,920			-2.75%
															AVERAGE	**-0.96%**

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Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #1: North St at Standart Ave

Number of Crashes: 15
Number of Injuries: 1
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3

Intersection Type: 4 Legged
Area Type: Urban
Control Type: Signal 1-4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn		2				2
Rear-end	3	2				5
Overtaking						0
Right Angle	1			1		2
Right Turn				1		1
Head On						0
Side-swipe	3	1	1			5
Fixed Object						0
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	7	5	1	2	0	15

PDO	14
Injury	1
Injury + PDO	
Fatal	
NR	
Total	15

Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #2: North St at 143 North St Dwy

Number of Crashes: 0
Number of Injuries: 0
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3

Intersection Type: 3 Legged
Area Type: Urban
Control Type: Sign 4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn						0
Rear-end						0
Overtaking						0
Right Angle						0
Right Turn						0
Head On						0
Side-swipe						0
Fixed Object						0
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	0	0	0	0	0	0

PDO	
Injury	
Injury + PDO	
Fatal	
NR	
Total	0

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Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #3: North St at Lansing St

Number of Crashes: 10
Number of Injuries: 2
Number of Fatalities: 1

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3

Intersection Type: 3 Legged
Area Type: Urban
Control Type: Signal 1-4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn		1				1
Rear-end						0
Overtaking						0
Right Angle	1					1
Right Turn						0
Head On						0
Side-swipe	1	3	1	1		6
Fixed Object	1					1
Backing						0
Other						0
Bike/Ped	1					1
Animal						0
Totals	4	4	1	1	0	10

PDO	7
Injury	2
Injury + PDO	
Fatal	1
NR	
Total	10

Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #4: North St at Perrine St

Number of Crashes: 5
Number of Injuries: 1
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3
Intersection Type: 3 Legged
Area Type: Urban
Control Type: Sign 4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn			1			1
Rear-end			1			1
Overtaking						0
Right Angle			3			3
Right Turn						0
Head On						0
Side-swipe						0
Fixed Object						0
Backing						0
Other						0
Bike/Ped						0
Animal						0
Totals	0	0	5	0	0	5

PDO	4
Injury	1
Injury + PDO	
Fatal	
NR	
Total	5

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Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #5: North St at Seymour St

Number of Crashes: 28
Number of Injuries: 6
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3

Intersection Type: 4 Legged
Area Type: Urban
Control Type: Signal 1-4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn	5	4				9
Rear-end	1	3	3			7
Overtaking						0
Right Angle	3	3		1		7
Right Turn						0
Head On						0
Side-swipe	1	1				2
Fixed Object		1				1
Backing						0
Other						0
Bike/Ped	2					2
Animal						0
Totals	12	12	3	1	0	28

PDO	22
Injury	6
Injury + PDO	
Fatal	
NR	
Total	28

Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #6: State St at Perrine St

Number of Crashes: 7
Number of Injuries: 1
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3

Intersection Type: 4 Legged
Area Type: Urban
Control Type: Signal 1-4 Lanes

	Direction					Totals
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	
Left turn						0
Rear-end			1			1
Overtaking						0
Right Angle	2			1		3
Right Turn						0
Head On						0
Side-swipe			1			1
Fixed Object	1					1
Backing						0
Other						0
Bike/Ped				1		1
Animal						0
Totals	3	0	2	2	0	7

PDO	6
Injury	1
Injury + PDO	
Fatal	
NR	
Total	7

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Intersection Crash Rate Calculations

Auburn Community Hospital Health Campus

Intersection #7: Lansing St at Grant Ave

Number of Crashes: 3
Number of Injuries: 1
Number of Fatalities: 0

Start Date: February 28, 2022
End Date: February 28, 2025
Number of Years: 3
Intersection Type: 3 Legged
Area Type: Urban
Control Type: Sign 4 Lanes

	Direction					
Type	Northbound	Southbound	Eastbound	Westbound	Unknown	Totals
Left turn						0
Rear-end						0
Overtaking						0
Right Angle			1			1
Right Turn						0
Head On						0
Side-swipe		1				1
Fixed Object						0
Backing			1			1
Other						0
Bike/Ped						0
Animal						0
Totals	0	1	2	0	0	3

PDO	2
Injury	1
Injury + PDO	
Fatal	
NR	
Total	3

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

The table below is a list of the parameters used by CLEAR Safety to calculate SPFs for each facility type. There is more information in NYSDOT's "HSIP Procedures and Techniques" (also called 'The Red Book').

NOTES: TT (‡) = Major Road is Two-Way, Minor Road is Two-Way • TO (‡) = Major Road is Two-Way, Minor Road is One-Way • OT (‡) = Major Road is One-Way, Minor Road is Two-Way • OO (‡) = Major Road is One-Way, Minor Road is One-Way

Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Total Crashes	1.0000	1.0000	-7.6010	0.5390	0.4510	0.0000	0	0.3900	0.0000	0.0000	2
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-8.8040	0.5690	0.4550	0.0000	0	0.3400	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
10487	7378	N/A	4.0785	0.3900	15	3	12.2355	0.1733	14.5210	4.8403	0.7619	3.8205	0.2580	7.8990	3
10487	7378	N/A	1.6755	0.3400	1	3	5.0264	0.3691	2.4863	0.8288	-0.8467	1.4654	0.2100	3.1409	2

Alpha	Beta	10th	90th	Advanced LOSS
2.5641	1.5906	1.3394	7.4912	3
2.9412	0.5697	0.6073	2.9853	2

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

The table below is a list of the parameters used by CLEAR Safety to calculate SPFs for each facility type. There is more information in NYSDOT's "HSIP Procedures and Techniques" (also called 'The Red Book').

NOTES: TT (‡) = Major Road is Two-Way, Minor Road is Two-Way • TO (‡) = Major Road is Two-Way, Minor Road is One-Way • OT (‡) = Major Road is One-Way, Minor Road is Two-Way • OO (‡) = Major Road is One-Way, Minor Road is One-Way

Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Total Crashes	1.0000	1.0000	-8.1720	0.5760	0.3920	0.0000	0	0.6603	0.0000	0.0000	2
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-11.4600	0.7760	0.4190	0.0000	0	0.8090	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
10487	358	N/A	0.5861	0.6603	0	3	1.7583	0.4627	0.8136	0.2712	-0.3149	0.7144	-0.1283	1.3005	2
10487	358	N/A	0.1633	0.8090	0	3	0.4900	0.7161	0.3509	0.1170	-0.0464	0.2204	-0.0570	0.3837	2

Alpha	Beta	10th	90th	Advanced LOSS
1.5144	0.3870	0.1155	1.2185	2
1.2361	0.1321	0.0245	0.3569	2

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

The table below is a list of the parameters used by CLEAR Safety to calculate SPFs for each facility type. There is more information in NYSDOT's "HSIP Procedures and Techniques" (also called 'The Red Book').

NOTES: TT (‡) = Major Road is Two-Way, Minor Road is Two-Way • TO (‡) = Major Road is Two-Way, Minor Road is One-Way • OT (‡) = Major Road is One-Way, Minor Road is Two-Way • OO (‡) = Major Road is One-Way, Minor Road is One-Way

Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	109	Urban 3-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Signal	N/A	*	Total Crashes	1.0000	1.0000	-8.6580	0.7010	0.3560	0.0000	0	0.5200	0.0000	0.0000	2
Int	109	Urban 3-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Signal	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-9.4900	0.7000	0.3230	0.0000	0	0.4795	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
10487	2432	N/A	1.8355	0.5200	10	3	5.5065	0.2588	8.8369	2.9456	1.1101	1.9854	-0.1499	3.8209	3
10487	2432	N/A	0.6119	0.4795	3	3	1.8356	0.5319	2.3807	0.7936	0.1817	0.6356	-0.0237	1.2474	3

Alpha	Beta	10th	90th	Advanced LOSS
1.9231	0.9545	0.4700	3.6030	3
2.0855	0.2934	0.1691	1.1784	3

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

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Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Total Crashes	1.0000	1.0000	-8.1720	0.5760	0.3920	0.0000	0	0.6603	0.0000	0.0000	2
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-11.4600	0.7760	0.4190	0.0000	0	0.8090	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
10487	2083	N/A	1.1689	0.6603	5	3	3.5066	0.3016	4.5496	1.5165	0.3477	1.4248	-0.2559	2.5936	3
10487	2083	N/A	0.3416	0.8090	1	3	1.0249	0.5467	1.0136	0.3379	-0.0038	0.4609	-0.1193	0.8025	2

Alpha	Beta	10th	90th	Advanced LOSS
1.5144	0.7719	0.2304	2.4300	3
1.2361	0.2764	0.0512	0.7465	2

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

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Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Total Crashes	1.0000	1.0000	-7.6010	0.5390	0.4510	0.0000	0	0.3900	0.0000	0.0000	2
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-8.8040	0.5690	0.4550	0.0000	0	0.3400	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
10487	4331	N/A	3.2075	0.3900	28	3	9.6224	0.2104	24.1332	8.0444	4.8370	3.0046	0.2029	6.2120	4
10487	4331	N/A	1.3148	0.3400	6	3	3.9445	0.4271	5.1220	1.7073	0.3925	1.1500	0.1648	2.4648	3

Alpha	Beta	10th	90th	Advanced LOSS
2.5641	1.2509	1.0533	5.8913	4
2.9412	0.4470	0.4766	2.3427	3

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

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Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Total Crashes	1.0000	1.0000	-7.6010	0.5390	0.4510	0.0000	0	0.3900	0.0000	0.0000	2
Int	111	Urban 4-Leg Signalized TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	4	Signal	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-8.8040	0.5690	0.4550	0.0000	0	0.3400	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
3154	2803	N/A	1.3794	0.3900	7	3	4.1382	0.3826	5.9052	1.9684	0.5890	1.2922	0.0872	2.6716	3
3154	2803	N/A	0.5445	0.3400	1	3	1.6335	0.6429	1.4073	0.4691	-0.0754	0.4762	0.0683	1.0207	2

Alpha	Beta	10th	90th	Advanced LOSS
2.5641	0.5380	0.4530	2.5336	3
2.9412	0.1851	0.1974	0.9702	2

Safety Performance Function (SPF) Parameters for Intersections, Ramps, and Segments

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Screen Type	Facility Type	Description	Area Type	Directional / Bidirectional	Number of Lanes	Median Type	Access	Major Road Operation	Minor Road Operation	Number of Approaches	Traffic Control	Ramp Type (Entrance / Exit)	Year	Severity	Long-Term Calibration Factor (CA)	Long-Term Functional Form Adjustment Factor (CB)	Constant (BC)	Coefficient for Major Road AADT (B1)	Coefficient for Minor Road AADT (B2; intersections only)	Coefficient for Hoerl Functional Form (B2; segments and ramps only)	Coefficient for Segment Length (BL)	Overdispersion parameter A (D1)	Overdispersion parameter B (D2)	Overdispersion parameter C (D3)	AADT Presence (2 = major and minor; 1 = major only; 0 = not available)
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Total Crashes	1.0000	1.0000	-8.1720	0.5760	0.3920	0.0000	0	0.6603	0.0000	0.0000	2
Int	86	Urban 3-Leg Two-Way Stop-Controlled TT(‡)	Urban	N/A	N/A	N/A	N/A	2-way	2-way	3	Minor Road Stop	N/A	*	Fatal and Injury Crashes	1.0000	1.0000	-11.4600	0.7760	0.4190	0.0000	0	0.8090	0.0000	0.0000	2

For intersections: SPF = CA * (MajorAADT^B1 * MinorAADT^B2 * exp(BC))^CBDispersion parameter = D1

For segments and ramps: SPF = CA * (AADT^B1 * Length^BL * exp(BC+B2*AADT))^CBDispersion parameter = D1 * Length^D2 * exp(D3)

Major Road AADT (veh/day)	Minor Road AADT (veh/day)	Segment Length (miles)	SPF Prediction (crashes/year)	Dispersion Parameter	Observed Crashes (over study period)	Study Period (years)	Predicted Crashes (over study period)	EB weight (w)	Expected Crashes (over study period)	Expected Crashes (crashes/year)	Excess Expected Crashes (crashes/year)	1.5 Sigma	LOSS 1/2	LOSS 3/4	Basic LOSS
16920	926	N/A	1.1205	0.6603	3	3	3.3615	0.3106	3.1123	1.0374	-0.0831	1.3658	-0.2453	2.4863	2
16920	926	N/A	0.3526	0.8090	1	3	1.0577	0.5389	1.0311	0.3437	-0.0089	0.4757	-0.1231	0.8282	2

Alpha	Beta	10th	90th	Advanced LOSS
1.5144	0.7399	0.2208	2.3295	2
1.2361	0.2852	0.0528	0.7704	2

Project: Auburn Community Hospital Health Campus
Location: City of Auburn, NY
Peak Hour: Weekday AM
Condition: Proposed Action

Figure:		3a	4a	5				6		7
			# of Years							
			1							
Location Number	Intersection	2026 Collected Volumes	No-Build Volumes 1.00%	Trip Generation and Distribution				Total Site Trips	143 North Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 125	Trips OUT 12			
1	North Street/ Standart Ave									
	SR	0	0					0		0
	ST	371	375	16%		20		20	-9	386
	SL	126	127					0		127
	WR	119	120					0		120
	WT	0	0					0		0
	WL	60	61	6%		8		8	-3	66
	NR	48	48		6%		1	1		49
	NT	243	245		16%		2	2	-1	246
	NL	0	0					0		0
	ER	0	0					0		0
	ET	0	0					0		0
	EL	0	0					0		0
2	North Street/ 143 North St Driveway									
	SR	12	12	17%		21		21	-12	21
	ST	393	397					0		397
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT	342	345					0		345
	NL	16	16	26%		33		33	-16	33
	ER	5	5		26%		3	3	-5	3
	ET		0					0		0
	EL	1	1		17%		2	2	-1	2
3	North Street/ Lansing Street									
	SR		0					0		0
	ST	354	358		16%		2	2	-3	357
	SL	42	42		10%		1	1	-2	41
	WR	29	29	10%		13		13	-6	36
	WT		0					0		0
	WL	69	70	10%		13		13		83
	NR	91	92		10%		1	1		93
	NT	329	332	16%		20		20	-10	342
	NL		0					0		0
	ER		0					0		0
	ET		0					0		0
	EL		0					0		0
4	North Street/ Perrine Street									
	SR	48	48	10%		13		13		61
	ST	381	385		20%		2	2	-3	384
	SL	0	0					0		0
	WR	0	0					0		0
	WT	0	0					0		0
	WL	0	0					0		0
	NR	4	4					0		4
	NT	379	383	16%		20		20	-9	394
	NL	31	31	26%		33		33		64
	ER	21	21		26%		3	3		24
	ET	1	1					0		1
	EL	47	47		10%		1	1	-1	47
5	North Street/ Seymour Street									
	SR	28	28		5%		1	1		29
	ST	347	350		32%		4	4	-3	351
	SL	19	19		9%		1	1		20
	WR	20	20	9%		11		11	-1	30
	WT	88	89					0		89
	WL	31	31					0		31
	NR	28	28					0		28
	NT	334	337	32%		40		40	-7	370
	NL	18	18					0		18
	ER	25	25					0		25
	ET	92	93					0		93
	EL	46	46	5%		6		6	-1	51

Project: Auburn Community Hospital Health Campus
Location: City of Auburn, NY
Peak Hour: Weekday AM
Condition: Proposed Action

Figure:		3a	4a	5				6		7
			# of Years							
			1							
Location Number	Intersection	2026 Collected Volumes	No-Build Volumes 1.00%	Trip Generation and Distribution				Total Site Trips	143 North Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 125	Trips OUT 12			
6	Perrine Street/ State Street									
	SR	3	3					0		3
	ST	178	180					0		180
	SL	17	17	7%		9		9		26
	WR	27	27		7%		1	1		28
	WT	37	37		2%		0	0		37
	WL	8	8		7%		1	1		9
	NR	10	10	7%		9		9	-1	18
	NT	130	131					0		131
	NL	18	18					0		18
	ER	38	38					0		38
	ET	34	34	2%		3		3		37
	EL	15	15					0		15
7	Lansing Street/ Grant Ave									
	SR	36	36	12%		15		15	-4	47
	ST	426	430					0		430
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT	474	479					0		479
	NL	11	11	8%		10		10	-2	19
	ER	12	12		8%		1	1	-1	12
	ET		0					0		0
	EL	29	29		12%		1	1	-1	29
8	Perrine Street/ Proposed Driveway									
	SR		0		16%		2	2		2
	ST		0					0		0
	SL		0		36%		4	4		4
	WR		0	36%		45		45		45
	WT	79	80					0		80
	WL		0					0		0
	NR		0					0		0
	NT		0					0		0
	NL		0					0		0
	ER		0					0		0
	ET	69	70					0	-1	69
	EL		0	16%		20		20		20
9	North Street/ Park Ave									
	SR		0	5%		6		6		6
	ST		0	17%		21		21		21
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT		0		17%		2	2		2
	NL		0					0		0
	ER		0					0		0
	ET		0					0		0
	EL		0		5%		1	1		1

Project: Auburn Community Hospital Health Campus
Location: City of Auburn, NY
Peak Hour: Weekday PM
Condition: Proposed Action

Figure: 3b 4b 5 7

# of Years: 1

Location Number	Intersection	2026 Collected Volumes	No-Build Volumes 1.00%	Trip Generation and Distribution				Total Site Trips	143 North Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 13	Trips OUT 115			
1	North Street/ Standart Ave									
	SR	0	0					0		0
	ST	282	285	16%		2		2	-2	285
	SL	130	131					0		131
	WR	170	172					0		172
	WT	0	0					0		0
	WL	102	103	6%		1		1		104
	NR	102	103		6%		7	7	-3	107
	NT	391	395		16%		18	18	-8	405
	NL	0	0					0		0
	ER	0	0					0		0
	ET	0	0					0		0
	EL	0	0					0		0
2	North Street/ 143 North St Driveway									
	SR	2	2	17%		2		2	-2	2
	ST	402	406					0		406
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT	479	484					0		484
	NL	2	2	26%		3		3	-2	3
	ER	18	18		26%		30	30	-18	30
	ET		0					0		0
	EL	11	11		17%		20	20	-11	20
3	North Street/ Lansing Street									
	SR		0					0		0
	ST	407	411		16%		18	18	-11	418
	SL	13	13		10%		12	12	-7	18
	WR	50	51	10%		1		1		52
	WT		0					0		0
	WL	124	125	10%		1		1		126
	NR	42	42		10%		12	12		54
	NT	427	431	16%		2		2	-2	431
	NL		0					0		0
	ER		0					0		0
	ET		0					0		0
	EL		0					0		0
4	North Street/ Perrine Street									
	SR	73	74	10%		1		1	-2	73
	ST	456	461		20%		23	23	-9	475
	SL	0	0					0		0
	WR	0	0					0		0
	WT	0	0					0		0
	WL	0	0					0		0
	NR	0	0					0		0
	NT	441	445	16%		2		2	-2	445
	NL	27	27	26%		3		3		30
	ER	29	29		26%		30	30		59
	ET	0	0					0		0
	EL	33	33		10%		12	12		45
5	North Street/ Seymour Street									
	SR	53	54		5%		6	6	-1	59
	ST	382	386		32%		37	37	-6	417
	SL	24	24		9%		10	10	-2	32
	WR	21	21	9%		1		1		22
	WT	97	98					0		98
	WL	32	32					0		32
	NR	44	44					0		44
	NT	397	401	32%		4		4	-2	403
	NL	46	46					0		46
	ER	54	55					0		55
	ET	129	130					0		130
	EL	49	49	5%		1		1		50

Project: Auburn Community Hospital Health Campus
Location: City of Auburn, NY
Peak Hour: Weekday PM
Condition: Proposed Action

Figure: 3b 4b 5 7

# of Years: 1

Location Number	Intersection	2026 Collected Volumes	No-Build Volumes 1.00%	Trip Generation and Distribution				Total Site Trips	143 North Trips	Full Build Volumes
				Enter Dist. %	Exit Dist. %	Trips IN 13	Trips OUT 115			
6	Perrine Street/ State Street									
	SR	3	3					0		3
	ST	147	148					0		148
	SL	11	11	7%		1		1		12
	WR	28	28		7%		8	8	-1	35
	WT	44	44		2%		2	2		46
	WL	12	12		7%		8	8	-1	19
	NR	11	11	7%		1		1		12
	NT	178	180					0		180
	NL	17	17					0		17
	ER	27	27					0		27
	ET	22	22	2%		0		0		22
	EL	6	6					0		6
7	Lansing Street/ Grant Ave									
	SR	37	37	12%		2		2		39
	ST	710	717					0		717
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT	773	781					0		781
	NL	8	8	8%		1		1		9
	ER	15	15		8%		9	9	-3	21
	ET		0					0		0
	EL	23	23		12%		14	14	-4	33
8	Perrine Street/ Proposed Driveway									
	SR		0		16%		18	18		18
	ST		0					0		0
	SL		0		36%		41	41		41
	WR		0	36%		5		5		5
	WT	100	101					0	-2	99
	WL		0					0		0
	NR		0					0		0
	NT		0					0		0
	NL		0					0		0
	ER		0					0		0
	ET	62	63					0		63
	EL		0	16%		2		2		2
9	North Street/ Park Ave									
	SR		0	5%		1		1		1
	ST		0	17%		2		2		2
	SL		0					0		0
	WR		0					0		0
	WT		0					0		0
	WL		0					0		0
	NR		0					0		0
	NT		0		17%		20	20		20
	NL		0					0		0
	ER		0					0		0
	ET		0					0		0
	EL		0		5%		6	6		6

PROJECT DETAILS

Project Name:	Auburn Community Hospital Health Campus	Type of Project:	
Project No:		City:	
Country:		Built-up Area(Sq.ft):	
Analyst Name:	Amy Dake	Clients Name:	
Date:	3/23/2026	ZIP/Postal Code:	
State/Province:		No. of Scenarios:	2
Analysis Region:			

SCENARIO SUMMARY

Scenarios	Name	No. of Land Uses	Phases of Development	No. of Years to Project Traffic	User Group	Estimated New Vehicle Trips		
						Entry	Exit	Total
Scenario - 1	AM Peak	1	1	0		125	12	137
Scenario - 1	PM Peak	1	1	0		13	115	128

Scenario - 1

Scenario Name: AM Peak
User Group:
Dev. phase: 1
No. of Years to Project Traffic : 0
Analyst Note:
Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
720(1) - Medical-Dental Office Building -	General	Employees	162	Weekday, Peak Hour of	Average	125	12	137
Data Source: Trip Generation Manual, 12th Ed	Urban/Suburban			Adjacent Street Traffic,	0.85	91%	9%	

VEHICLE TO PERSON TRIP CONVERSION

BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
720(1) - Medical-Dental Office Building - Within/Near Hospital Campus	100	100	1	1	91	9

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
720(1) - Medical-Dental Office Building - Within/Near Hospital Campus	125	12	0	0	125	12
	137		0		137	

Scenario - 2

Scenario Name: PM Peak
User Group:
Dev. phase: 1
No. of Years to Project Traffic : 0
Analyst Note:
Warning:

VEHICLE TRIPS BEFORE REDUCTION

Land Use & Data Source	Location	IV	Size	Time Period	Method	Entry	Exit	Total
					Rate/Equation	Split%	Split%	
720(1) - Medical-Dental Office Building -	**General**	**Employees**	**162**	**Weekday, Peak Hour of**	**Average**	**13**	**115**	**128**
Data Source: Trip Generation Manual, 12th Ed	**Urban/Suburban**			**Adjacent Street Traffic,**	0.79	10%	90%	

VEHICLE TO PERSON TRIP CONVERSION

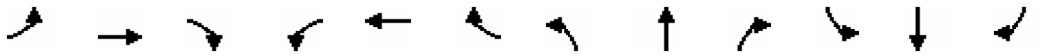
BASELINE SITE VEHICLE CHARACTERISTICS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
720(1) - Medical-Dental Office Building - Within/Near Hospital Campus	100	100	1	1	10	90

ESTIMATED BASELINE SITE PERSON TRIPS:

Land Use	Baseline Site Vehicle Mode Share		Baseline Site Vehicle Occupancy		Baseline Site Vehicle Directional Split	
	Entry (%)	Exit (%)	Entry	Exit	Entry (%)	Exit (%)
720(1) - Medical-Dental Office Building - Within/Near Hospital Campus	13	115	0	0	13	115
	128		0		128	

APPENDIX C: LOS CALCULATIONS – EXISTING CONDITIONS

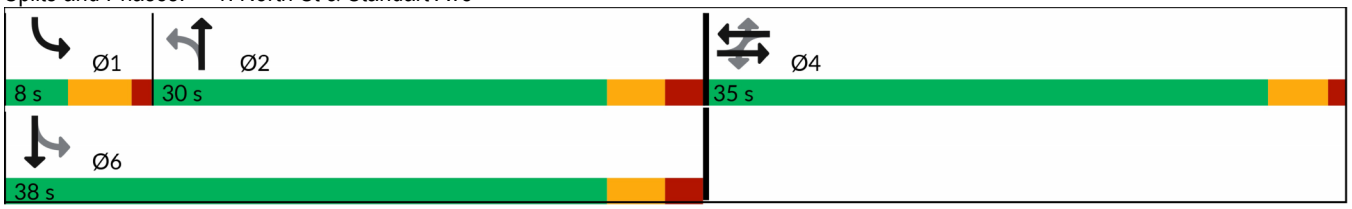


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	60	0	119	0	243	48	126	371	0
Future Volume (vph)	0	0	0	60	0	119	0	243	48	126	371	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.910			0.975				
Flt Protected					0.984						0.987	
Satd. Flow (prot)	0	1900	0	0	1652	0	0	3147	0	0	3418	0
Flt Permitted					0.907						0.703	
Satd. Flow (perm)	0	1900	0	0	1522	0	0	3147	0	0	2435	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					145			34				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1725			287	
Travel Time (s)		3.8			7.5			39.2			6.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	7%	0%	1%	0%	13%	6%	2%	5%	0%
Adj. Flow (vph)	0	0	0	73	0	145	0	296	59	154	452	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	218	0	0	355	0	0	606	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.35			0.28			0.47	
Control Delay (s/veh)					7.8			12.9			11.1	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					7.8			12.9			11.1	
LOS					A			B			B	
Approach Delay (s/veh)					7.8			13.0			11.2	
Approach LOS					A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay (s/veh): 11.1		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	5	16	342	393	12
Future Volume (vph)	1	5	16	342	393	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.884				0.996	
Flt Protected	0.993			0.998		
Satd. Flow (prot)	1668	0	0	3260	3367	0
Flt Permitted	0.993			0.998		
Satd. Flow (perm)	1668	0	0	3260	3367	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			90	1725	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	11%	7%	0%
Adj. Flow (vph)	1	6	20	428	491	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	448	506	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	16	342	393	12
Future Vol, veh/h	1	5	16	342	393	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	11	7	0
Mvmt Flow	1	6	20	428	491	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	753	253	506	0	-	0
Stage 1	499	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	350	752	1069	-	-	-
Stage 1	581	-	-	-	-	-
Stage 2	771	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	343	752	1069	-	-	-
Mov Cap-2 Maneuver	343	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	771	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.81	0.53	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	161	-	627	-	-
HCM Lane V/C Ratio	0.019	-	0.012	-	-
HCM Control Delay (s/veh)	8.4	0.2	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

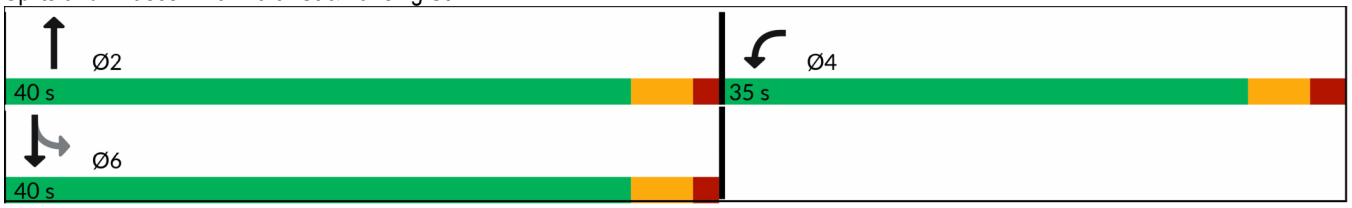


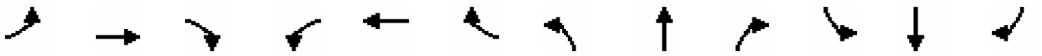
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	69	29	329	91	42	354
Future Volume (vph)	69	29	329	91	42	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.960		0.968			
Flt Protected	0.966					0.995
Satd. Flow (prot)	1625	0	3157	0	0	3374
Flt Permitted	0.966					0.868
Satd. Flow (perm)	1625	0	3157	0	0	2943
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	34		63			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			90
Travel Time (s)	13.3		4.5			2.0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	12%	0%	12%	6%	2%	7%
Adj. Flow (vph)	85	36	406	112	52	437
Shared Lane Traffic (%)						
Lane Group Flow (vph)	121	0	518	0	0	489
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	10.4		39.1			39.1
Actuated g/C Ratio	0.19		0.70			0.70
v/c Ratio	0.36		0.23			0.23
Control Delay (s/veh)	18.5		4.0			4.6
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	18.5		4.0			4.6
LOS	B		A			A
Approach Delay (s/veh)	18.6		4.1			4.7
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 55.8			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	1	21	0	0	0	31	379	4	0	381	48
Future Volume (vph)	47	1	21	0	0	0	31	379	4	0	381	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.959						0.999			0.983	
Flt Protected		0.967						0.996				
Satd. Flow (prot)	0	1735	0	0	1900	0	0	3230	0	0	3299	0
Flt Permitted		0.967						0.996				
Satd. Flow (perm)	0	1735	0	0	1900	0	0	3230	0	0	3299	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	3%	12%	0%	0%	8%	4%
Adj. Flow (vph)	58	1	26	0	0	0	38	468	5	0	470	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	0	0	0	511	0	0	529	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.5%		ICU Level of Service A	
Analysis Period (min) 15			

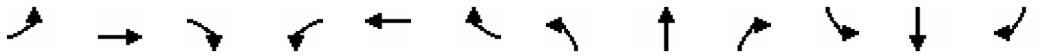
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	1	21	0	0	0	31	379	4	0	381	48
Future Vol, veh/h	47	1	21	0	0	0	31	379	4	0	381	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	5	0	0	0	3	12	0	0	8	4
Mvmt Flow	58	1	26	0	0	0	38	468	5	0	470	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	810	1049	265	783	1077	236	530	0	0	473	0	0
Stage 1	500	500	-	547	547	-	-	-	-	-	-	-
Stage 2	310	549	-	236	530	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7	7.5	6.5	6.9	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.35	3.5	4	3.3	2.23	-	-	2.2	-	-
Pot Cap-1 Maneuver	275	229	725	288	221	771	1027	-	-	1100	-	-
Stage 1	527	546	-	494	521	-	-	-	-	-	-	-
Stage 2	680	519	-	752	530	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	263	219	725	264	211	771	1027	-	-	1100	-	-
Mov Cap-2 Maneuver	263	219	-	264	211	-	-	-	-	-	-	-
Stage 1	527	546	-	473	498	-	-	-	-	-	-	-
Stage 2	651	497	-	723	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.97	0	0.94	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	266	-	-	325	-	1100	-	-
HCM Lane V/C Ratio	0.037	-	-	0.262	-	-	-	-
HCM Control Delay (s/veh)	8.6	0.3	-	20	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	-	0	-	-



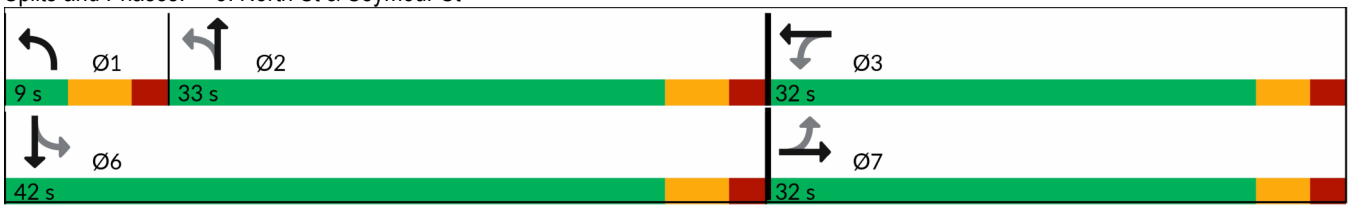
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	92	25	31	88	20	18	334	28	19	347	28
Future Volume (vph)	46	92	25	31	88	20	18	334	28	19	347	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979			0.980			0.989			0.989	
Flt Protected		0.986			0.989			0.998			0.998	
Satd. Flow (prot)	0	1744	0	0	1745	0	0	3170	0	0	3268	0
Flt Permitted		0.883			0.910			0.924			0.924	
Satd. Flow (perm)	0	1562	0	0	1605	0	0	2935	0	0	3025	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			14			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	5%	8%	5%	7%	0%	0%	12%	25%	5%	10%	0%
Adj. Flow (vph)	57	114	31	38	109	25	22	412	35	23	428	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	202	0	0	172	0	0	469	0	0	486	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

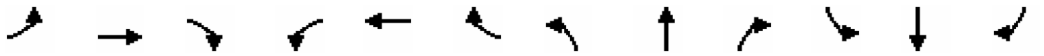
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		16.0			16.0			36.6			36.6	
Actuated g/C Ratio		0.25			0.25			0.58			0.58	
v/c Ratio		0.49			0.41			0.27			0.27	
Control Delay (s/veh)		23.0			21.0			7.5			7.4	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		23.0			21.0			7.5			7.4	
LOS		C			C			A			A	
Approach Delay (s/veh)		23.0			21.1			7.5			7.5	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 63.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 46.5%		ICU Level of Service A	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	34	38	8	37	27	18	130	10	17	178	3
Future Volume (vph)	15	34	38	8	37	27	18	130	10	17	178	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941			0.950			0.992			0.998	
Flt Protected		0.991			0.994			0.994			0.996	
Satd. Flow (prot)	0	1600	0	0	1723	0	0	1734	0	0	1766	0
Flt Permitted		0.917			0.943			0.951			0.967	
Satd. Flow (perm)	0	1481	0	0	1634	0	0	1659	0	0	1714	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37			28			11			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			1485			423			379	
Travel Time (s)		6.7			33.8			9.6			8.6	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	27%	3%	11%	0%	3%	7%	0%	9%	10%	12%	6%	33%
Adj. Flow (vph)	19	42	47	10	46	33	22	160	12	21	220	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	89	0	0	194	0	0	245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	17.0	17.0		17.0	17.0		70.0	70.0		70.0	70.0	
Total Split (%)	19.5%	19.5%		19.5%	19.5%		80.5%	80.5%		80.5%	80.5%	
Maximum Green (s)	12.0	12.0		12.0	12.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		6.8			6.8			15.5			15.5	
Actuated g/C Ratio		0.23			0.23			0.53			0.53	
v/c Ratio		0.28			0.21			0.21			0.26	
Control Delay (s/veh)		8.7			8.2			6.2			6.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		8.7			8.2			6.2			6.7	
LOS		A			A			A			A	
Approach Delay (s/veh)		8.8			8.2			6.2			6.7	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 29			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 29.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	12	11	474	426	36
Future Volume (vph)	29	12	11	474	426	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961				0.988	
Flt Protected	0.966			0.999		
Satd. Flow (prot)	1724	0	0	3504	3471	0
Flt Permitted	0.966			0.999		
Satd. Flow (perm)	1724	0	0	3504	3471	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	0%	3%	3%	0%
Adj. Flow (vph)	32	13	12	515	463	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	0	527	502	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.0%		ICU Level of Service A	
Analysis Period (min) 15			

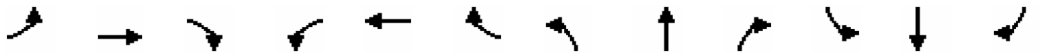
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	12	11	474	426	36
Future Vol, veh/h	29	12	11	474	426	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	0	3	3	0
Mvmt Flow	32	13	12	515	463	39

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	764	251	502	0	-	0
Stage 1	483	-	-	-	-	-
Stage 2	282	-	-	-	-	-
Critical Hdwy	6.8	7.06	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.38	2.2	-	-	-
Pot Cap-1 Maneuver	344	731	1073	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	747	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	731	1073	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	747	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.05	0.29	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	82	-	403	-	-
HCM Lane V/C Ratio	0.011	-	0.111	-	-
HCM Control Delay (s/veh)	8.4	0.1	15	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

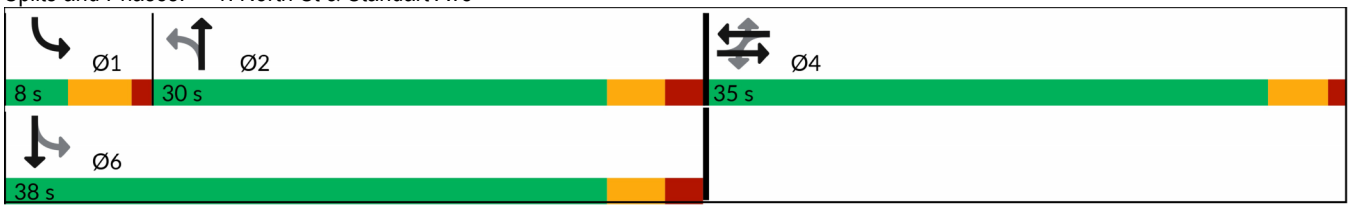


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	102	0	170	0	391	102	130	282	0
Future Volume (vph)	0	0	0	102	0	170	0	391	102	130	282	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.916			0.969				
Flt Protected					0.982						0.984	
Satd. Flow (prot)	0	1900	0	0	1692	0	0	3308	0	0	3481	0
Flt Permitted					0.886						0.625	
Satd. Flow (perm)	0	1900	0	0	1527	0	0	3308	0	0	2211	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					142			48				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1725			287	
Travel Time (s)		3.8			7.5			39.2			6.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	7%	1%	0%	3%	0%
Adj. Flow (vph)	0	0	0	112	0	187	0	430	112	143	310	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	299	0	0	542	0	0	453	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.48			0.41			0.38	
Control Delay (s/veh)					11.6			14.2			10.1	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.6			14.2			10.1	
LOS					B			B			B	
Approach Delay (s/veh)					11.6			14.2			10.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 12.2		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	11	18	2	479	402	2
Future Volume (vph)	11	18	2	479	402	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.917				0.999	
Flt Protected	0.981					
Satd. Flow (prot)	1709	0	0	3375	3536	0
Flt Permitted	0.981					
Satd. Flow (perm)	1709	0	0	3375	3536	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			90	1725	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	7%	2%	0%
Adj. Flow (vph)	13	21	2	564	473	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	0	0	566	475	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	18	2	479	402	2
Future Vol, veh/h	11	18	2	479	402	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	2	0
Mvmt Flow	13	21	2	564	473	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	761	238	475	0	-	0
Stage 1	474	-	-	-	-	-
Stage 2	286	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	346	770	1097	-	-	-
Stage 1	598	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	345	770	1097	-	-	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	743	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.34	0.06	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	15	-	525	-	-
HCM Lane V/C Ratio	0.002	-	0.065	-	-
HCM Control Delay (s/veh)	8.3	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

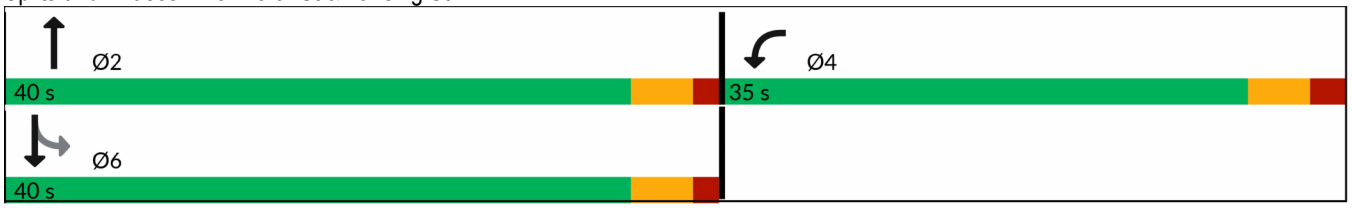


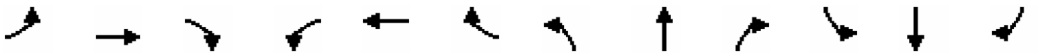
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	124	50	427	42	13	407
Future Volume (vph)	124	50	427	42	13	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961		0.987			
Flt Protected	0.966					0.998
Satd. Flow (prot)	1680	0	3344	0	0	3534
Flt Permitted	0.966					0.937
Satd. Flow (perm)	1680	0	3344	0	0	3318
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	32		18			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			90
Travel Time (s)	13.3		4.5			2.0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	7%	0%	7%	2%	0%	2%
Adj. Flow (vph)	146	59	502	49	15	479
Shared Lane Traffic (%)						
Lane Group Flow (vph)	205	0	551	0	0	494
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	12.0		35.0			35.0
Actuated g/C Ratio	0.21		0.61			0.61
v/c Ratio	0.54		0.26			0.24
Control Delay (s/veh)	22.9		5.8			5.8
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	22.9		5.8			5.8
LOS	C		A			A
Approach Delay (s/veh)	22.9		5.8			5.9
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 57.5			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 8.6		Intersection LOS: A	
Intersection Capacity Utilization 39.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	0	29	0	0	0	27	441	0	0	456	73
Future Volume (vph)	33	0	29	0	0	0	27	441	0	0	456	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.937									0.979	
Flt Protected		0.974						0.997				
Satd. Flow (prot)	0	1734	0	0	1900	0	0	3376	0	0	3440	0
Flt Permitted		0.974						0.997				
Satd. Flow (perm)	0	1734	0	0	1900	0	0	3376	0	0	3440	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	3%	1%
Adj. Flow (vph)	37	0	32	0	0	0	30	490	0	0	507	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	0	0	0	520	0	0	588	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.5%		ICU Level of Service A	
Analysis Period (min) 15			

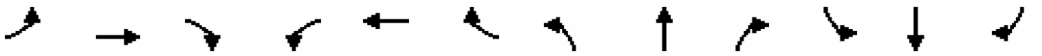
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	0	29	0	0	0	27	441	0	0	456	73
Future Vol, veh/h	33	0	29	0	0	0	27	441	0	0	456	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	3	1
Mvmt Flow	37	0	32	0	0	0	30	490	0	0	507	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	852	1097	294	803	1138	245	588	0	0	490	0	0
Stage 1	547	547	-	550	550	-	-	-	-	-	-	-
Stage 2	305	550	-	253	588	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	256	215	709	278	203	762	997	-	-	1084	-	-
Stage 1	494	521	-	492	519	-	-	-	-	-	-	-
Stage 2	685	519	-	734	499	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	247	207	709	256	196	762	997	-	-	1084	-	-
Mov Cap-2 Maneuver	247	207	-	256	196	-	-	-	-	-	-	-
Stage 1	494	521	-	475	501	-	-	-	-	-	-	-
Stage 2	661	501	-	701	499	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.54	0	0.76	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	208	-	-	356	-	1084	-	-
HCM Lane V/C Ratio	0.03	-	-	0.194	-	-	-	-
HCM Control Delay (s/veh)	8.7	0.3	-	17.5	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	-	0	-	-



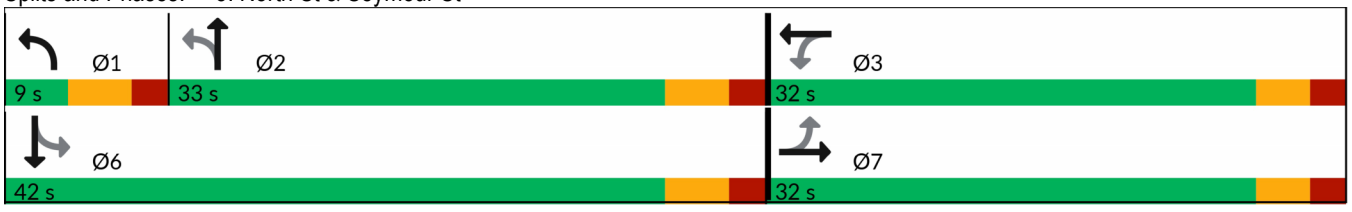
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	129	54	32	97	21	46	397	44	24	382	53
Future Volume (vph)	49	129	54	32	97	21	46	397	44	24	382	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.968			0.981			0.987			0.983	
Flt Protected		0.990			0.989			0.995			0.997	
Satd. Flow (prot)	0	1821	0	0	1843	0	0	3289	0	0	3424	0
Flt Permitted		0.909			0.903			0.867			0.913	
Satd. Flow (perm)	0	1672	0	0	1683	0	0	2866	0	0	3136	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23			13			17			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	8%	14%	0%	4%	0%
Adj. Flow (vph)	55	145	61	36	109	24	52	446	49	27	429	60
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	261	0	0	169	0	0	547	0	0	516	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

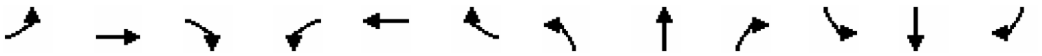
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		17.6			17.6			36.7			36.7	
Actuated g/C Ratio		0.27			0.27			0.57			0.57	
v/c Ratio		0.55			0.36			0.33			0.28	
Control Delay (s/veh)		22.8			19.4			8.8			8.1	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		22.8			19.4			8.8			8.1	
LOS		C			B			A			A	
Approach Delay (s/veh)		22.9			19.4			8.8			8.2	
Approach LOS		C			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 64.8			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 57.1%		ICU Level of Service B	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	22	27	12	44	28	17	178	11	11	147	3
Future Volume (vph)	6	22	27	12	44	28	17	178	11	11	147	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.955			0.992			0.998	
Flt Protected		0.994			0.993			0.996			0.996	
Satd. Flow (prot)	0	1764	0	0	1778	0	0	1830	0	0	1872	0
Flt Permitted		0.945			0.936			0.971			0.974	
Satd. Flow (perm)	0	1677	0	0	1676	0	0	1784	0	0	1830	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			24			8			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			1485			423			379	
Travel Time (s)		6.7			33.8			9.6			8.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	1%	0%
Adj. Flow (vph)	7	25	31	14	50	32	19	202	13	13	167	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	96	0	0	234	0	0	183	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	20.0	20.0		20.0	20.0		70.0	70.0		70.0	70.0	
Total Split (%)	22.2%	22.2%		22.2%	22.2%		77.8%	77.8%		77.8%	77.8%	
Maximum Green (s)	15.0	15.0		15.0	15.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		6.8			6.8			16.8			16.8	
Actuated g/C Ratio		0.23			0.23			0.56			0.56	
v/c Ratio		0.15			0.24			0.23			0.17	
Control Delay (s/veh)		6.8			9.0			6.0			5.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		6.8			9.0			6.0			5.9	
LOS		A			A			A			A	
Approach Delay (s/veh)		6.8			9.1			6.1			6.0	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 30.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 6.6		Intersection LOS: A	
Intersection Capacity Utilization 30.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	23	15	8	773	710	37
Future Volume (vph)	23	15	8	773	710	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.948				0.993	
Flt Protected	0.970					
Satd. Flow (prot)	1747	0	0	3570	3551	0
Flt Permitted	0.970					
Satd. Flow (perm)	1747	0	0	3570	3551	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	13%	1%	1%	0%
Adj. Flow (vph)	24	15	8	797	732	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	805	770	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

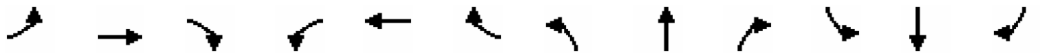
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	15	8	773	710	37
Future Vol, veh/h	23	15	8	773	710	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	13	1	1	0
Mvmt Flow	24	15	8	797	732	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1166	385	770	0	-	0
Stage 1	751	-	-	-	-	-
Stage 2	415	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.36	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.33	-	-	-
Pot Cap-1 Maneuver	190	619	772	-	-	-
Stage 1	432	-	-	-	-	-
Stage 2	641	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	187	619	772	-	-	-
Mov Cap-2 Maneuver	187	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	641	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	21.39	0.23	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	37	-	259	-	-
HCM Lane V/C Ratio	0.011	-	0.151	-	-
HCM Control Delay (s/veh)	9.7	0.1	21.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

APPENDIX D: LOS CALCULATIONS – BACKGROUND CONDITIONS

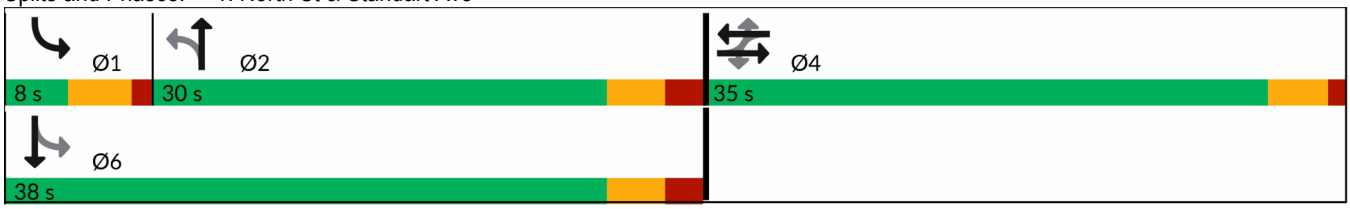


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	61	0	120	0	245	48	127	375	0
Future Volume (vph)	0	0	0	61	0	120	0	245	48	127	375	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.910			0.975				
Flt Protected					0.983						0.987	
Satd. Flow (prot)	0	1900	0	0	1650	0	0	3147	0	0	3418	0
Flt Permitted					0.907						0.701	
Satd. Flow (perm)	0	1900	0	0	1522	0	0	3147	0	0	2428	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					146			34				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1725			287	
Travel Time (s)		3.8			7.5			39.2			6.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	7%	0%	1%	0%	13%	6%	2%	5%	0%
Adj. Flow (vph)	0	0	0	74	0	146	0	299	59	155	457	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	220	0	0	358	0	0	612	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.35			0.28			0.47	
Control Delay (s/veh)					7.8			13.0			11.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					7.8			13.0			11.2	
LOS					A			B			B	
Approach Delay (s/veh)					7.9			13.0			11.2	
Approach LOS					A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay (s/veh): 11.2		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1	5	16	345	397	12
Future Volume (vph)	1	5	16	345	397	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.884				0.996	
Flt Protected	0.993			0.998		
Satd. Flow (prot)	1668	0	0	3260	3367	0
Flt Permitted	0.993			0.998		
Satd. Flow (perm)	1668	0	0	3260	3367	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			90	1725	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	11%	7%	0%
Adj. Flow (vph)	1	6	20	431	496	15
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	451	511	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	16	345	397	12
Future Vol, veh/h	1	5	16	345	397	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	11	7	0
Mvmt Flow	1	6	20	431	496	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	759	256	511	0	-	0
Stage 1	504	-	-	-	-	-
Stage 2	256	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	347	750	1064	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	339	750	1064	-	-	-
Mov Cap-2 Maneuver	339	-	-	-	-	-
Stage 1	565	-	-	-	-	-
Stage 2	770	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	10.84	0.53	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	160	-	624	-	-
HCM Lane V/C Ratio	0.019	-	0.012	-	-
HCM Control Delay (s/veh)	8.4	0.2	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

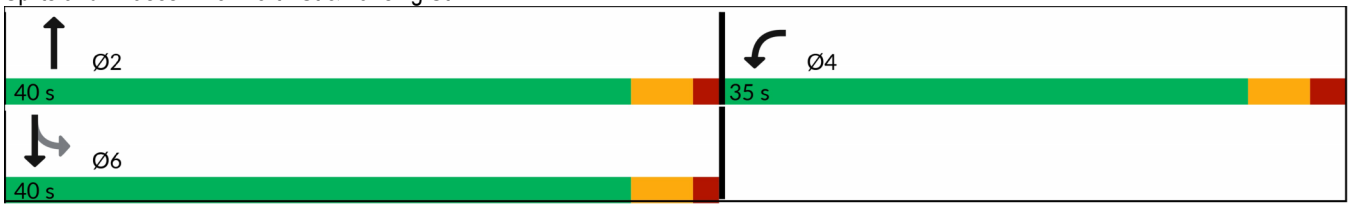


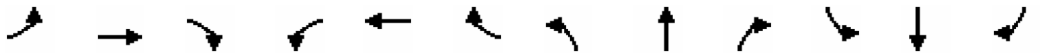
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	70	29	332	92	42	358
Future Volume (vph)	70	29	332	92	42	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.960		0.967			
Flt Protected	0.966					0.995
Satd. Flow (prot)	1625	0	3154	0	0	3374
Flt Permitted	0.966					0.867
Satd. Flow (perm)	1625	0	3154	0	0	2940
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		63			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			90
Travel Time (s)	13.3		4.5			2.0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	12%	0%	12%	6%	2%	7%
Adj. Flow (vph)	86	36	410	114	52	442
Shared Lane Traffic (%)						
Lane Group Flow (vph)	122	0	524	0	0	494
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	10.4		39.1			39.1
Actuated g/C Ratio	0.19		0.70			0.70
v/c Ratio	0.37		0.23			0.23
Control Delay (s/veh)	18.8		4.0			4.7
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	18.8		4.0			4.7
LOS	B		A			A
Approach Delay (s/veh)	18.8		4.1			4.7
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 55.8			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.37			
Intersection Signal Delay (s/veh): 5.9		Intersection LOS: A	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	1	21	0	0	0	31	383	4	0	385	48
Future Volume (vph)	47	1	21	0	0	0	31	383	4	0	385	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.959						0.999			0.983	
Flt Protected		0.967						0.996				
Satd. Flow (prot)	0	1735	0	0	1900	0	0	3230	0	0	3299	0
Flt Permitted		0.967						0.996				
Satd. Flow (perm)	0	1735	0	0	1900	0	0	3230	0	0	3299	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	3%	12%	0%	0%	8%	4%
Adj. Flow (vph)	58	1	26	0	0	0	38	473	5	0	475	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	85	0	0	0	0	0	516	0	0	534	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.7%		ICU Level of Service A	
Analysis Period (min) 15			

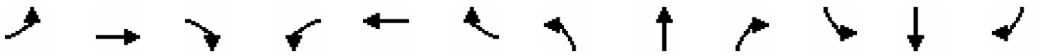
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	1	21	0	0	0	31	383	4	0	385	48
Future Vol, veh/h	47	1	21	0	0	0	31	383	4	0	385	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	5	0	0	0	3	12	0	0	8	4
Mvmt Flow	58	1	26	0	0	0	38	473	5	0	475	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	818	1059	267	790	1086	239	535	0	0	478	0	0
Stage 1	505	505	-	552	552	-	-	-	-	-	-	-
Stage 2	313	554	-	238	535	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7	7.5	6.5	6.9	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.35	3.5	4	3.3	2.23	-	-	2.2	-	-
Pot Cap-1 Maneuver	271	226	722	284	218	768	1022	-	-	1095	-	-
Stage 1	523	544	-	491	518	-	-	-	-	-	-	-
Stage 2	678	517	-	749	527	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	260	216	722	261	209	768	1022	-	-	1095	-	-
Mov Cap-2 Maneuver	260	216	-	261	209	-	-	-	-	-	-	-
Stage 1	523	544	-	470	496	-	-	-	-	-	-	-
Stage 2	649	495	-	721	527	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.2	0	0.94	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	263	-	-	321	-	1095	-	-
HCM Lane V/C Ratio	0.037	-	-	0.265	-	-	-	-
HCM Control Delay (s/veh)	8.7	0.3	-	20.2	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1	-	0	-	-



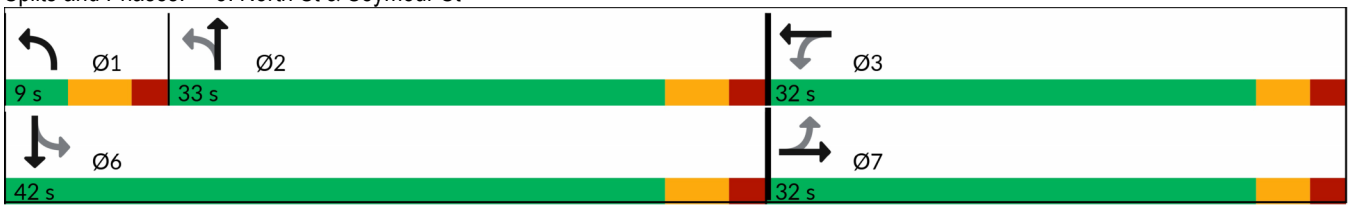
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	93	25	31	89	20	18	337	28	19	350	28
Future Volume (vph)	46	93	25	31	89	20	18	337	28	19	350	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.979			0.980			0.989			0.989	
Flt Protected		0.986			0.989			0.998			0.998	
Satd. Flow (prot)	0	1744	0	0	1745	0	0	3170	0	0	3267	0
Flt Permitted		0.883			0.910			0.924			0.924	
Satd. Flow (perm)	0	1562	0	0	1605	0	0	2935	0	0	3025	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		14			13			14			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	5%	8%	5%	7%	0%	0%	12%	25%	5%	10%	0%
Adj. Flow (vph)	57	115	31	38	110	25	22	416	35	23	432	35
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	203	0	0	173	0	0	473	0	0	490	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

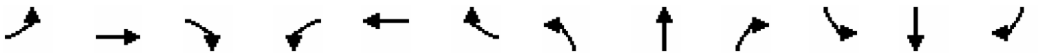
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		16.0			16.0			36.6			36.6	
Actuated g/C Ratio		0.25			0.25			0.58			0.58	
v/c Ratio		0.50			0.41			0.27			0.27	
Control Delay (s/veh)		23.0			21.0			7.5			7.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		23.0			21.0			7.5			7.5	
LOS		C			C			A			A	
Approach Delay (s/veh)		23.0			21.1			7.5			7.5	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 63.1			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay (s/veh): 11.6		Intersection LOS: B	
Intersection Capacity Utilization 46.6%		ICU Level of Service A	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	34	38	8	37	27	18	131	10	17	180	3
Future Volume (vph)	15	34	38	8	37	27	18	131	10	17	180	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.941			0.950			0.992			0.998	
Flt Protected		0.991			0.994			0.994			0.996	
Satd. Flow (prot)	0	1600	0	0	1723	0	0	1734	0	0	1766	0
Flt Permitted		0.917			0.943			0.951			0.967	
Satd. Flow (perm)	0	1481	0	0	1634	0	0	1659	0	0	1715	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		37			28			11			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			1485			423			379	
Travel Time (s)		6.7			33.8			9.6			8.6	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	27%	3%	11%	0%	3%	7%	0%	9%	10%	12%	6%	33%
Adj. Flow (vph)	19	42	47	10	46	33	22	162	12	21	222	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	89	0	0	196	0	0	247	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	17.0	17.0		17.0	17.0		70.0	70.0		70.0	70.0	
Total Split (%)	19.5%	19.5%		19.5%	19.5%		80.5%	80.5%		80.5%	80.5%	
Maximum Green (s)	12.0	12.0		12.0	12.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		6.8			6.8			15.5			15.5	
Actuated g/C Ratio		0.23			0.23			0.53			0.53	
v/c Ratio		0.28			0.22			0.21			0.26	
Control Delay (s/veh)		8.8			8.2			6.2			6.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		8.8			8.2			6.2			6.7	
LOS		A			A			A			A	
Approach Delay (s/veh)		8.8			8.2			6.2			6.7	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 29			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.29			
Intersection Signal Delay (s/veh): 7.1		Intersection LOS: A	
Intersection Capacity Utilization 29.1%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	12	11	479	430	36
Future Volume (vph)	29	12	11	479	430	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961				0.988	
Flt Protected	0.966			0.999		
Satd. Flow (prot)	1724	0	0	3504	3471	0
Flt Permitted	0.966			0.999		
Satd. Flow (perm)	1724	0	0	3504	3471	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	0%	3%	3%	0%
Adj. Flow (vph)	32	13	12	521	467	39
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	0	533	506	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 31.1%		ICU Level of Service A	
Analysis Period (min) 15			

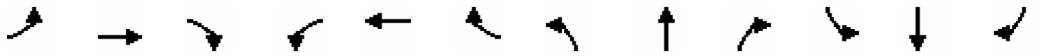
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	12	11	479	430	36
Future Vol, veh/h	29	12	11	479	430	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	0	3	3	0
Mvmt Flow	32	13	12	521	467	39

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	771	253	507	0	-	0
Stage 1	487	-	-	-	-	-
Stage 2	284	-	-	-	-	-
Critical Hdwy	6.8	7.06	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.38	2.2	-	-	-
Pot Cap-1 Maneuver	341	728	1069	-	-	-
Stage 1	589	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	336	728	1069	-	-	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	582	-	-	-	-	-
Stage 2	745	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.15	0.29	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	81	-	399	-	-
HCM Lane V/C Ratio	0.011	-	0.112	-	-
HCM Control Delay (s/veh)	8.4	0.1	15.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

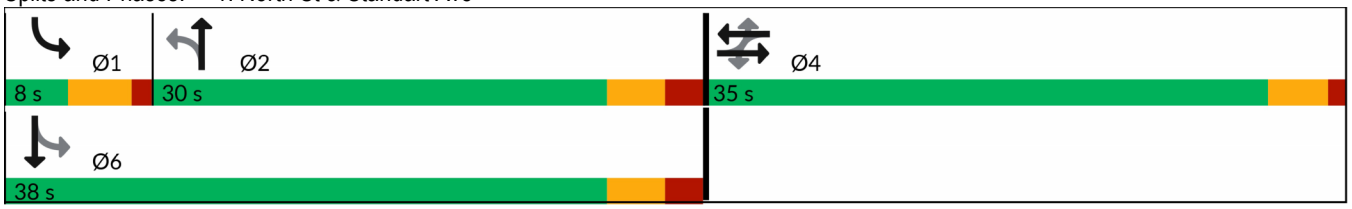


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	103	0	172	0	395	103	131	285	0
Future Volume (vph)	0	0	0	103	0	172	0	395	103	131	285	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.916			0.969				
Flt Protected					0.982						0.984	
Satd. Flow (prot)	0	1900	0	0	1692	0	0	3308	0	0	3481	0
Flt Permitted					0.885						0.622	
Satd. Flow (perm)	0	1900	0	0	1525	0	0	3308	0	0	2200	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					143			48				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1725			287	
Travel Time (s)		3.8			7.5			39.2			6.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	7%	1%	0%	3%	0%
Adj. Flow (vph)	0	0	0	113	0	189	0	434	113	144	313	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	302	0	0	547	0	0	457	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.49			0.41			0.38	
Control Delay (s/veh)					11.7			14.2			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.7			14.2			10.2	
LOS					B			B			B	
Approach Delay (s/veh)					11.7			14.3			10.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	11	18	2	484	406	2
Future Volume (vph)	11	18	2	484	406	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.917				0.999	
Flt Protected	0.981					
Satd. Flow (prot)	1709	0	0	3375	3536	0
Flt Permitted	0.981					
Satd. Flow (perm)	1709	0	0	3375	3536	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			90	1725	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	7%	2%	0%
Adj. Flow (vph)	13	21	2	569	478	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	34	0	0	571	480	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 24.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	18	2	484	406	2
Future Vol, veh/h	11	18	2	484	406	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	2	0
Mvmt Flow	13	21	2	569	478	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	768	240	480	0	-	0
Stage 1	479	-	-	-	-	-
Stage 2	289	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	342	767	1093	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	341	767	1093	-	-	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.4	0.06	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	15	-	521	-	-
HCM Lane V/C Ratio	0.002	-	0.066	-	-
HCM Control Delay (s/veh)	8.3	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

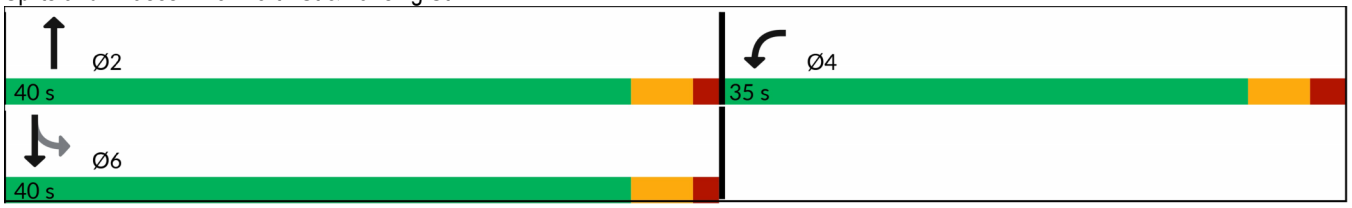


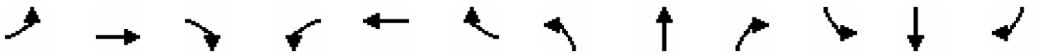
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	125	51	431	42	13	411
Future Volume (vph)	125	51	431	42	13	411
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961		0.987			
Flt Protected	0.966					0.998
Satd. Flow (prot)	1680	0	3344	0	0	3534
Flt Permitted	0.966					0.937
Satd. Flow (perm)	1680	0	3344	0	0	3318
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	32		18			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			90
Travel Time (s)	13.3		4.5			2.0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	7%	0%	7%	2%	0%	2%
Adj. Flow (vph)	147	60	507	49	15	484
Shared Lane Traffic (%)						
Lane Group Flow (vph)	207	0	556	0	0	499
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	12.0		35.0			35.0
Actuated g/C Ratio	0.21		0.61			0.61
v/c Ratio	0.55		0.27			0.24
Control Delay (s/veh)	22.9		5.8			5.9
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	22.9		5.8			5.9
LOS	C		A			A
Approach Delay (s/veh)	23.0		5.9			5.9
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 57.6			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 8.7		Intersection LOS: A	
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	0	29	0	0	0	27	445	0	0	461	74
Future Volume (vph)	33	0	29	0	0	0	27	445	0	0	461	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.937									0.979	
Flt Protected		0.974						0.997				
Satd. Flow (prot)	0	1734	0	0	1900	0	0	3376	0	0	3440	0
Flt Permitted		0.974						0.997				
Satd. Flow (perm)	0	1734	0	0	1900	0	0	3376	0	0	3440	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		1485			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	3%	1%
Adj. Flow (vph)	37	0	32	0	0	0	30	494	0	0	512	82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	69	0	0	0	0	0	524	0	0	594	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	0	29	0	0	0	27	445	0	0	461	74
Future Vol, veh/h	33	0	29	0	0	0	27	445	0	0	461	74
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	3	1
Mvmt Flow	37	0	32	0	0	0	30	494	0	0	512	82

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	861	1108	297	811	1149	247	594	0	0	494	0	0
Stage 1	553	553	-	554	554	-	-	-	-	-	-	-
Stage 2	307	554	-	256	594	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	253	212	705	275	200	759	992	-	-	1080	-	-
Stage 1	490	517	-	489	517	-	-	-	-	-	-	-
Stage 2	683	517	-	732	496	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	244	204	705	253	193	759	992	-	-	1080	-	-
Mov Cap-2 Maneuver	244	204	-	253	193	-	-	-	-	-	-	-
Stage 1	490	517	-	472	499	-	-	-	-	-	-	-
Stage 2	659	499	-	698	496	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.73	0	0.76	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	206	-	-	351	-	1080	-	-
HCM Lane V/C Ratio	0.03	-	-	0.196	-	-	-	-
HCM Control Delay (s/veh)	8.7	0.3	-	17.7	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	-	0	-	-

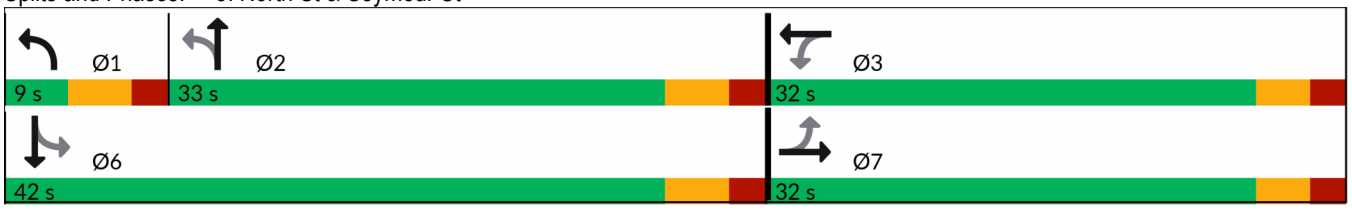
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	130	55	32	98	21	46	401	44	24	386	54
Future Volume (vph)	49	130	55	32	98	21	46	401	44	24	386	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.968			0.981			0.987			0.982	
Flt Protected		0.990			0.990			0.995			0.997	
Satd. Flow (prot)	0	1821	0	0	1845	0	0	3289	0	0	3421	0
Flt Permitted		0.909			0.903			0.867			0.913	
Satd. Flow (perm)	0	1672	0	0	1683	0	0	2866	0	0	3132	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			13			17			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	8%	14%	0%	4%	0%
Adj. Flow (vph)	55	146	62	36	110	24	52	451	49	27	434	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	263	0	0	170	0	0	552	0	0	522	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		17.6			17.6			36.7			36.7	
Actuated g/C Ratio		0.27			0.27			0.57			0.57	
v/c Ratio		0.55			0.36			0.33			0.29	
Control Delay (s/veh)		22.8			19.4			8.8			8.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		22.8			19.4			8.8			8.2	
LOS		C			B			A			A	
Approach Delay (s/veh)		22.8			19.4			8.9			8.3	
Approach LOS		C			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 64.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 57.5%		ICU Level of Service B	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	22	27	12	44	28	17	180	11	11	148	3
Future Volume (vph)	6	22	27	12	44	28	17	180	11	11	148	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.955			0.993			0.998	
Flt Protected		0.994			0.993			0.996			0.996	
Satd. Flow (prot)	0	1764	0	0	1778	0	0	1832	0	0	1872	0
Flt Permitted		0.945			0.936			0.971			0.974	
Satd. Flow (perm)	0	1677	0	0	1676	0	0	1786	0	0	1830	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			24			8			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			1485			423			379	
Travel Time (s)		6.7			33.8			9.6			8.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	1%	0%
Adj. Flow (vph)	7	25	31	14	50	32	19	205	13	13	168	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	96	0	0	237	0	0	184	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	20.0	20.0		20.0	20.0		70.0	70.0		70.0	70.0	
Total Split (%)	22.2%	22.2%		22.2%	22.2%		77.8%	77.8%		77.8%	77.8%	
Maximum Green (s)	15.0	15.0		15.0	15.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		6.7			6.7			16.8			16.8	
Actuated g/C Ratio		0.22			0.22			0.56			0.56	
v/c Ratio		0.15			0.24			0.23			0.18	
Control Delay (s/veh)		6.8			9.1			6.1			5.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		6.8			9.1			6.1			5.9	
LOS		A			A			A			A	
Approach Delay (s/veh)		6.9			9.1			6.1			5.9	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 30.1			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.24			
Intersection Signal Delay (s/veh): 6.6		Intersection LOS: A	
Intersection Capacity Utilization 30.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	23	15	8	781	717	37
Future Volume (vph)	23	15	8	781	717	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.948				0.993	
Flt Protected	0.970					
Satd. Flow (prot)	1747	0	0	3570	3551	0
Flt Permitted	0.970					
Satd. Flow (perm)	1747	0	0	3570	3551	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	13%	1%	1%	0%
Adj. Flow (vph)	24	15	8	805	739	38
Shared Lane Traffic (%)						
Lane Group Flow (vph)	39	0	0	813	777	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.2%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	15	8	781	717	37
Future Vol, veh/h	23	15	8	781	717	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	13	1	1	0
Mvmt Flow	24	15	8	805	739	38

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1177	389	777	0	-	0
Stage 1	758	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.36	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.33	-	-	-
Pot Cap-1 Maneuver	187	616	767	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	184	616	767	-	-	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	423	-	-	-	-	-
Stage 2	638	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	21.68	0.23	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	37	-	255	-	-
HCM Lane V/C Ratio	0.011	-	0.154	-	-
HCM Control Delay (s/veh)	9.7	0.1	21.7	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

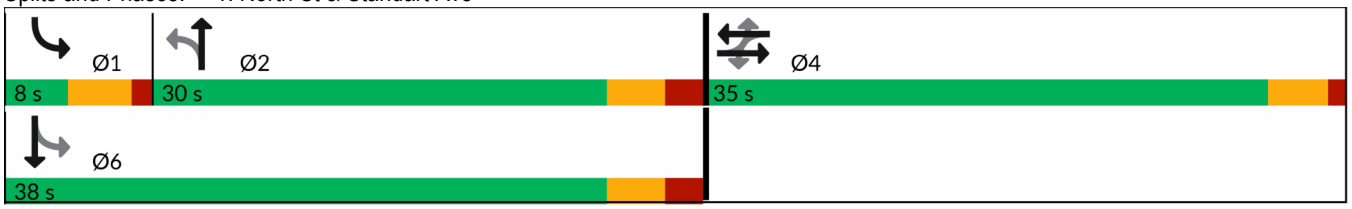
APPENDIX E: LOS CALCULATIONS – FULL BUILD CONDITIONS

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	66	0	120	0	246	49	127	386	0
Future Volume (vph)	0	0	0	66	0	120	0	246	49	127	386	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.913			0.975				
Flt Protected					0.983						0.988	
Satd. Flow (prot)	0	1900	0	0	1654	0	0	3147	0	0	3421	0
Flt Permitted					0.900						0.703	
Satd. Flow (perm)	0	1900	0	0	1514	0	0	3147	0	0	2434	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					146			35				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1647			287	
Travel Time (s)		3.8			7.5			37.4			6.5	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Heavy Vehicles (%)	0%	0%	0%	7%	0%	1%	0%	13%	6%	2%	5%	0%
Adj. Flow (vph)	0	0	0	80	0	146	0	300	60	155	471	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	226	0	0	360	0	0	626	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.36			0.29			0.48	
Control Delay (s/veh)					8.1			13.0			11.3	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					8.1			13.0			11.3	
LOS					A			B			B	
Approach Delay (s/veh)					8.2			13.0			11.4	
Approach LOS					A			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 11.3		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	3	33	345	397	21
Future Volume (vph)	2	3	33	345	397	21
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.923				0.993	
Flt Protected	0.979			0.996		
Satd. Flow (prot)	1717	0	0	3267	3361	0
Flt Permitted	0.979			0.996		
Satd. Flow (perm)	1717	0	0	3267	3361	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			169	1647	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles (%)	0%	0%	0%	11%	7%	0%
Adj. Flow (vph)	3	4	41	431	496	26
Shared Lane Traffic (%)						
Lane Group Flow (vph)	7	0	0	472	522	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 35.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	3	33	345	397	21
Future Vol, veh/h	2	3	33	345	397	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	80	80	80	80	80	80
Heavy Vehicles, %	0	0	0	11	7	0
Mvmt Flow	3	4	41	431	496	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	808	261	523	0	-	0
Stage 1	509	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	323	744	1054	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	733	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	744	1054	-	-	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	733	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.67	1.04	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	314	-	476	-	-
HCM Lane V/C Ratio	0.039	-	0.013	-	-
HCM Control Delay (s/veh)	8.6	0.3	12.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0	-	-

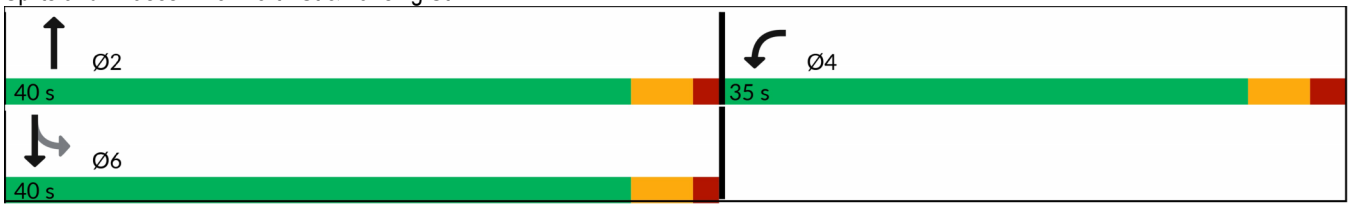


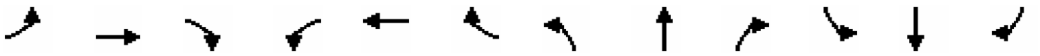
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	83	36	342	93	41	357
Future Volume (vph)	83	36	342	93	41	357
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.959		0.968			
Flt Protected	0.966					0.995
Satd. Flow (prot)	1624	0	3156	0	0	3373
Flt Permitted	0.966					0.867
Satd. Flow (perm)	1624	0	3156	0	0	2939
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	34		62			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			169
Travel Time (s)	13.3		4.5			3.8
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	12%	0%	12%	6%	2%	7%
Adj. Flow (vph)	102	44	422	115	51	441
Shared Lane Traffic (%)						
Lane Group Flow (vph)	146	0	537	0	0	492
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	10.7		39.1			39.1
Actuated g/C Ratio	0.19		0.70			0.70
v/c Ratio	0.43		0.24			0.24
Control Delay (s/veh)	19.9		4.3			4.9
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	19.9		4.3			4.9
LOS	B		A			A
Approach Delay (s/veh)	20.0		4.3			4.9
Approach LOS	B		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 56.2			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.43			
Intersection Signal Delay (s/veh): 6.5		Intersection LOS: A	
Intersection Capacity Utilization 46.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	47	1	24	0	0	0	64	394	4	0	384	61
Future Volume (vph)	47	1	24	0	0	0	64	394	4	0	384	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.954						0.999			0.980	
Flt Protected		0.968						0.993				
Satd. Flow (prot)	0	1726	0	0	1900	0	0	3237	0	0	3292	0
Flt Permitted		0.968						0.993				
Satd. Flow (perm)	0	1726	0	0	1900	0	0	3237	0	0	3292	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		671			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	0%	0%	5%	0%	0%	0%	3%	12%	0%	0%	8%	4%
Adj. Flow (vph)	58	1	30	0	0	0	79	486	5	0	474	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	0	0	0	0	0	570	0	0	549	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 39.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	1	24	0	0	0	64	394	4	0	384	61
Future Vol, veh/h	47	1	24	0	0	0	64	394	4	0	384	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	5	0	0	0	3	12	0	0	8	4
Mvmt Flow	58	1	30	0	0	0	79	486	5	0	474	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	913	1161	275	885	1196	246	549	0	0	491	0	0
Stage 1	512	512	-	647	647	-	-	-	-	-	-	-
Stage 2	401	649	-	238	549	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	7	7.5	6.5	6.9	4.16	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.35	3.5	4	3.3	2.23	-	-	2.2	-	-
Pot Cap-1 Maneuver	232	197	714	243	188	761	1009	-	-	1082	-	-
Stage 1	518	540	-	431	470	-	-	-	-	-	-	-
Stage 2	602	468	-	750	519	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	211	179	714	210	171	761	1009	-	-	1082	-	-
Mov Cap-2 Maneuver	211	179	-	210	171	-	-	-	-	-	-	-
Stage 1	518	540	-	392	427	-	-	-	-	-	-	-
Stage 2	547	426	-	717	519	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	24.28	0	1.75	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	492	-	-	274	-	1082	-	-
HCM Lane V/C Ratio	0.078	-	-	0.324	-	-	-	-
HCM Control Delay (s/veh)	8.9	0.6	-	24.3	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.3	-	-	1.4	-	0	-	-

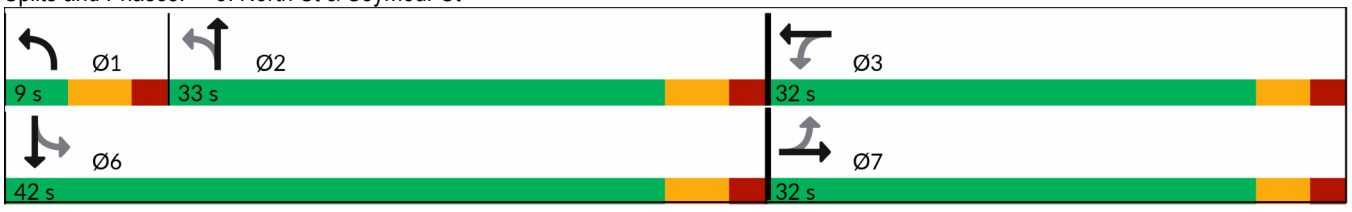
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	93	25	31	89	30	18	370	28	20	351	29
Future Volume (vph)	51	93	25	31	89	30	18	370	28	20	351	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.980			0.973			0.990			0.989	
Flt Protected		0.985			0.990			0.998			0.997	
Satd. Flow (prot)	0	1744	0	0	1740	0	0	3174	0	0	3265	0
Flt Permitted		0.865			0.914			0.926			0.918	
Satd. Flow (perm)	0	1532	0	0	1606	0	0	2945	0	0	3006	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13			19			12			15	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	4%	5%	8%	5%	7%	0%	0%	12%	25%	5%	10%	0%
Adj. Flow (vph)	63	115	31	38	110	37	22	457	35	25	433	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	209	0	0	185	0	0	514	0	0	494	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

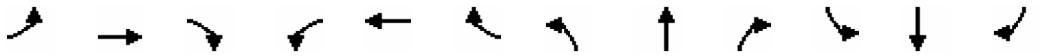
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		16.3			16.3			36.6			36.6	
Actuated g/C Ratio		0.26			0.26			0.58			0.58	
v/c Ratio		0.51			0.43			0.30			0.28	
Control Delay (s/veh)		23.5			20.6			7.9			7.7	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		23.5			20.6			7.9			7.7	
LOS		C			C			A			A	
Approach Delay (s/veh)		23.5			20.6			7.9			7.8	
Approach LOS		C			C			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 63.5			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay (s/veh): 11.9		Intersection LOS: B	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	37	38	9	37	28	18	131	18	26	180	3
Future Volume (vph)	15	37	38	9	37	28	18	131	18	26	180	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.943			0.949			0.986			0.998	
Flt Protected		0.992			0.994			0.995			0.994	
Satd. Flow (prot)	0	1610	0	0	1721	0	0	1724	0	0	1759	0
Flt Permitted		0.919			0.938			0.952			0.947	
Satd. Flow (perm)	0	1491	0	0	1624	0	0	1649	0	0	1676	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			29			20			3	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			813			423			379	
Travel Time (s)		6.7			18.5			9.6			8.6	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	27%	3%	11%	0%	3%	7%	0%	9%	10%	12%	6%	33%
Adj. Flow (vph)	19	46	47	11	46	35	22	162	22	32	222	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	112	0	0	92	0	0	206	0	0	258	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	17.0	17.0		17.0	17.0		70.0	70.0		70.0	70.0	
Total Split (%)	19.5%	19.5%		19.5%	19.5%		80.5%	80.5%		80.5%	80.5%	
Maximum Green (s)	12.0	12.0		12.0	12.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		6.9			6.9			15.6			15.6	
Actuated g/C Ratio		0.24			0.24			0.53			0.53	
v/c Ratio		0.29			0.22			0.23			0.28	
Control Delay (s/veh)		9.2			8.4			6.1			6.8	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		9.2			8.4			6.1			6.8	
LOS		A			A			A			A	
Approach Delay (s/veh)		9.2			8.4			6.1			6.9	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 87			
Actuated Cycle Length: 29.2			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay (s/veh): 7.2		Intersection LOS: A	
Intersection Capacity Utilization 31.3%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	29	12	19	479	430	47
Future Volume (vph)	29	12	19	479	430	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961				0.985	
Flt Protected	0.966			0.998		
Satd. Flow (prot)	1724	0	0	3502	3462	0
Flt Permitted	0.966			0.998		
Satd. Flow (perm)	1724	0	0	3502	3462	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	0%	8%	0%	3%	3%	0%
Adj. Flow (vph)	32	13	21	521	467	51
Shared Lane Traffic (%)						
Lane Group Flow (vph)	45	0	0	542	518	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.1%		ICU Level of Service A	
Analysis Period (min) 15			

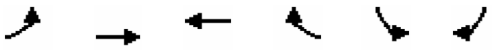
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	12	19	479	430	47
Future Vol, veh/h	29	12	19	479	430	47
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	0	3	3	0
Mvmt Flow	32	13	21	521	467	51

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	795	259	518	0	-	0
Stage 1	493	-	-	-	-	-
Stage 2	302	-	-	-	-	-
Critical Hdwy	6.8	7.06	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.38	2.2	-	-	-
Pot Cap-1 Maneuver	329	722	1058	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	730	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	322	722	1058	-	-	-
Mov Cap-2 Maneuver	322	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	730	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.6	0.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	137	-	384	-	-
HCM Lane V/C Ratio	0.02	-	0.116	-	-
HCM Control Delay (s/veh)	8.5	0.2	15.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	20	69	80	45	4	2
Future Volume (vph)	20	69	80	45	4	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.951		0.961	
Flt Protected		0.989			0.966	
Satd. Flow (prot)	0	1856	1739	0	1729	0
Flt Permitted		0.989			0.966	
Satd. Flow (perm)	0	1856	1739	0	1729	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		813	671		362	
Travel Time (s)		18.5	15.3		8.2	
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81
Heavy Vehicles (%)	2%	1%	5%	2%	2%	2%
Adj. Flow (vph)	25	85	99	56	5	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	110	155	0	7	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.0%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	69	80	45	4	2
Future Vol, veh/h	20	69	80	45	4	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	2	1	5	2	2	2
Mvmt Flow	25	85	99	56	5	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	154	0	-	0	261	127
Stage 1	-	-	-	-	127	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1426	-	-	-	728	924
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	892	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1426	-	-	-	715	924
Mov Cap-2 Maneuver	-	-	-	-	715	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	892	-

Approach	EB	WB	SB
HCM Control Delay, s/v	1.7	0	9.7
HCM LOS			A

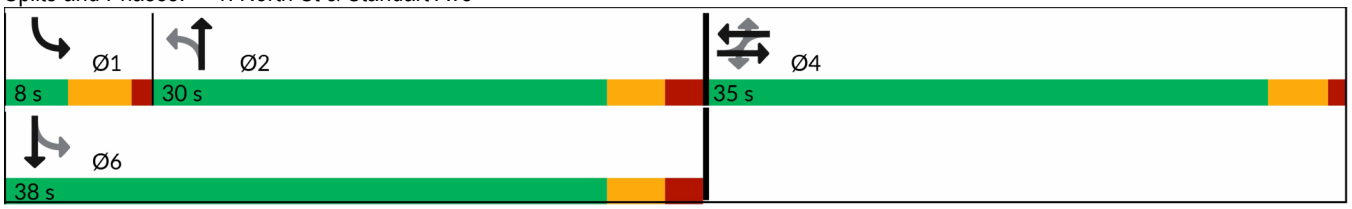
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	404	-	-	-	773
HCM Lane V/C Ratio	0.017	-	-	-	0.01
HCM Control Delay (s/veh)	7.6	0	-	-	9.7
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	104	0	172	0	405	107	131	285	0
Future Volume (vph)	0	0	0	104	0	172	0	405	107	131	285	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt					0.916			0.969				
Flt Protected					0.982						0.984	
Satd. Flow (prot)	0	1900	0	0	1692	0	0	3308	0	0	3481	0
Flt Permitted					0.885						0.617	
Satd. Flow (perm)	0	1900	0	0	1525	0	0	3308	0	0	2183	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					141			50				
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		167			331			1639			287	
Travel Time (s)		3.8			7.5			37.3			6.5	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles (%)	0%	0%	0%	1%	0%	1%	0%	7%	1%	0%	3%	0%
Adj. Flow (vph)	0	0	0	114	0	189	0	445	118	144	313	0
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	0	303	0	0	563	0	0	457	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type				Perm	NA			NA		pm+pt	NA	
Protected Phases		4			4			2		1	6	
Permitted Phases	4			4			2			6		
Detector Phase	4	4		4	4		2	2		1	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	22.0	22.0		22.0	22.0		30.0	30.0		8.0	30.0	
Minimum Split (s)	26.2	26.2		26.2	26.2		35.2	35.2		12.5	35.2	
Total Split (s)	35.0	35.0		35.0	35.0		30.0	30.0		8.0	38.0	
Total Split (%)	47.9%	47.9%		47.9%	47.9%		41.1%	41.1%		11.0%	52.1%	
Maximum Green (s)	30.8	30.8		30.8	30.8		24.8	24.8		3.5	32.8	
Yellow Time (s)	3.2	3.2		3.2	3.2		3.2	3.2		3.5	3.2	
All-Red Time (s)	1.0	1.0		1.0	1.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		4.2			4.2			5.2			5.2	
Lead/Lag							Lag	Lag		Lead		
Lead-Lag Optimize?							Yes	Yes		Yes		
Vehicle Extension (s)	4.5	4.5		4.5	4.5		0.2	0.2		0.2	0.2	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Act Effct Green (s)					22.0			24.8			32.8	
Actuated g/C Ratio					0.34			0.39			0.51	
v/c Ratio					0.49			0.43			0.39	
Control Delay (s/veh)					11.8			14.3			10.2	
Queue Delay					0.0			0.0			0.0	
Total Delay (s/veh)					11.8			14.3			10.2	
LOS					B			B			B	
Approach Delay (s/veh)					11.9			14.4			10.2	
Approach LOS					B			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 73			
Actuated Cycle Length: 64.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay (s/veh): 12.4		Intersection LOS: B	
Intersection Capacity Utilization 80.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: North St & Standart Ave





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	30	3	484	406	2
Future Volume (vph)	20	30	3	484	406	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.920				0.999	
Flt Protected	0.980					
Satd. Flow (prot)	1713	0	0	3375	3536	0
Flt Permitted	0.980					
Satd. Flow (perm)	1713	0	0	3375	3536	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	199			176	1639	
Travel Time (s)	4.5			2.0	39.2	
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	0%	0%	0%	7%	2%	0%
Adj. Flow (vph)	24	35	4	569	478	2
Shared Lane Traffic (%)						
Lane Group Flow (vph)	59	0	0	573	480	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 25.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	3	484	406	2
Future Vol, veh/h	20	30	3	484	406	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	0	7	2	0
Mvmt Flow	24	35	4	569	478	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	771	240	480	0	-	0
Stage 1	479	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	341	767	1093	-	-	-
Stage 1	595	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	767	1093	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	738	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12.97	0.08	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	22	-	510	-	-
HCM Lane V/C Ratio	0.003	-	0.115	-	-
HCM Control Delay (s/veh)	8.3	0	13	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

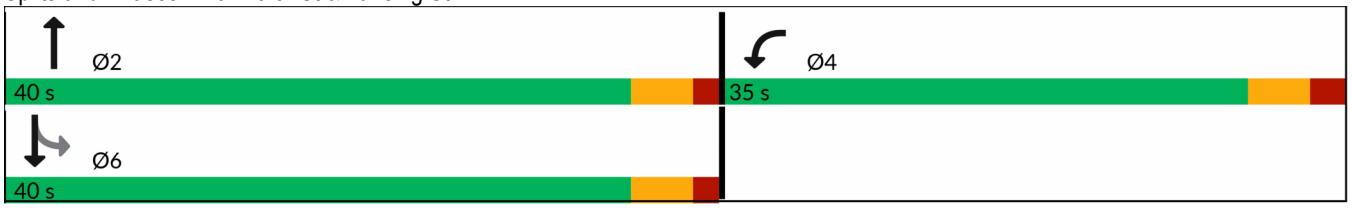


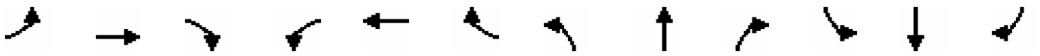
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	126	52	431	54	18	418
Future Volume (vph)	126	52	431	54	18	418
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.961		0.983			
Flt Protected	0.966					0.998
Satd. Flow (prot)	1681	0	3334	0	0	3535
Flt Permitted	0.966					0.926
Satd. Flow (perm)	1681	0	3334	0	0	3280
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)	33		24			
Link Speed (mph)	30		30			30
Link Distance (ft)	585		196			176
Travel Time (s)	13.3		4.5			4.0
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles (%)	7%	0%	7%	2%	0%	2%
Adj. Flow (vph)	148	61	507	64	21	492
Shared Lane Traffic (%)						
Lane Group Flow (vph)	209	0	571	0	0	513
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			0
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Number of Detectors	1		2		1	2
Detector Template	Left		Thru		Left	Thru
Leading Detector (ft)	20		100		20	100
Trailing Detector (ft)	0		0		0	0
Detector 1 Position(ft)	0		0		0	0
Detector 1 Size(ft)	20		6		20	6
Detector 1 Type	Cl+Ex		Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0		0.0		0.0	0.0
Detector 1 Queue (s)	0.0		0.0		0.0	0.0
Detector 1 Delay (s)	0.0		0.0		0.0	0.0
Detector 2 Position(ft)			94			94
Detector 2 Size(ft)			6			6
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Prot		NA		Perm	NA
Protected Phases	4		2			6
Permitted Phases					6	
Detector Phase	4		2		6	6
Switch Phase						

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Minimum Initial (s)	10.0		15.0		15.0	15.0
Minimum Split (s)	27.5		24.0		20.0	20.0
Total Split (s)	35.0		40.0		40.0	40.0
Total Split (%)	46.7%		53.3%		53.3%	53.3%
Maximum Green (s)	29.5		35.0		35.0	35.0
Yellow Time (s)	3.5		3.5		3.5	3.5
All-Red Time (s)	2.0		1.5		1.5	1.5
Lost Time Adjust (s)	0.0		0.0			0.0
Total Lost Time (s)	5.5		5.0			5.0
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		0.2		0.2	0.2
Recall Mode	None		Max		Max	Max
Walk Time (s)	7.0		8.0			
Flash Dont Walk (s)	15.0		11.0			
Pedestrian Calls (#/hr)	0		0			
Act Effct Green (s)	12.1		35.0			35.0
Actuated g/C Ratio	0.21		0.61			0.61
v/c Ratio	0.55		0.28			0.25
Control Delay (s/veh)	22.9		5.8			6.0
Queue Delay	0.0		0.0			0.0
Total Delay (s/veh)	22.9		5.8			6.0
LOS	C		A			A
Approach Delay (s/veh)	23.0		5.9			6.0
Approach LOS	C		A			A

Intersection Summary			
Area Type:	Other		
Cycle Length: 75			
Actuated Cycle Length: 57.6			
Natural Cycle: 55			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay (s/veh): 8.7		Intersection LOS: A	
Intersection Capacity Utilization 43.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 3: North St & Lansing St





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	0	59	0	0	0	30	445	0	0	475	73
Future Volume (vph)	45	0	59	0	0	0	30	445	0	0	475	73
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.923									0.980	
Flt Protected		0.979						0.997				
Satd. Flow (prot)	0	1717	0	0	1900	0	0	3378	0	0	3444	0
Flt Permitted		0.979						0.997				
Satd. Flow (perm)	0	1717	0	0	1900	0	0	3378	0	0	3444	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		732			208			873			196	
Travel Time (s)		33.8			0.0			19.8			4.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	7%	0%	0%	3%	1%
Adj. Flow (vph)	50	0	66	0	0	0	33	494	0	0	528	81
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	0	0	0	0	0	527	0	0	609	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			0			0			0	
Link Offset(ft)		0			15			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.7%		ICU Level of Service A	
Analysis Period (min) 15			

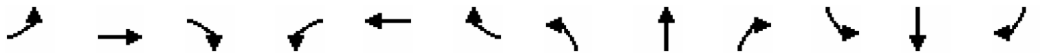
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	0	59	0	0	0	30	445	0	0	475	73
Future Vol, veh/h	45	0	59	0	0	0	30	445	0	0	475	73
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0	0	7	0	0	3	1
Mvmt Flow	50	0	66	0	0	0	33	494	0	0	528	81

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	882	1129	304	825	1170	247	609	0	0	494	0	0
Stage 1	568	568	-	561	561	-	-	-	-	-	-	-
Stage 2	314	561	-	264	609	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	244	206	698	268	195	759	980	-	-	1080	-	-
Stage 1	480	509	-	485	513	-	-	-	-	-	-	-
Stage 2	677	513	-	724	489	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	234	197	698	233	187	759	980	-	-	1080	-	-
Mov Cap-2 Maneuver	234	197	-	233	187	-	-	-	-	-	-	-
Stage 1	480	509	-	465	493	-	-	-	-	-	-	-
Stage 2	650	493	-	656	489	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.78	0	0.84	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	227	-	-	376	-	1080	-	-
HCM Lane V/C Ratio	0.034	-	-	0.307	-	-	-	-
HCM Control Delay (s/veh)	8.8	0.3	-	18.8	0	0	-	-
HCM Lane LOS	A	A	-	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.3	-	0	-	-



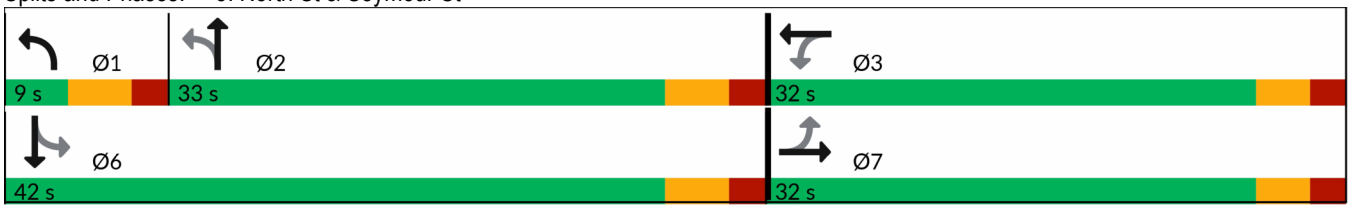
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	130	55	32	98	22	46	403	44	32	417	59
Future Volume (vph)	50	130	55	32	98	22	46	403	44	32	417	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	0.95	0.95	0.95	0.95
Frt		0.968			0.980			0.987			0.983	
Flt Protected		0.990			0.990			0.995			0.997	
Satd. Flow (prot)	0	1821	0	0	1843	0	0	3289	0	0	3425	0
Flt Permitted		0.908			0.904			0.860			0.898	
Satd. Flow (perm)	0	1670	0	0	1683	0	0	2843	0	0	3085	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		24			13			17			27	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		341			331			256			873	
Travel Time (s)		7.8			7.5			5.8			19.8	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	8%	14%	0%	4%	0%
Adj. Flow (vph)	56	146	62	36	110	25	52	453	49	36	469	66
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	264	0	0	171	0	0	554	0	0	571	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		pm+pt	NA		Perm	NA	
Protected Phases		7			3		1!	2			6!	
Permitted Phases	7			3			2			6		
Detector Phase	7	7		3	3		1	2		6	6	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	12.0	12.0		12.0	12.0		4.0	12.0		12.0	12.0	
Minimum Split (s)	17.0	17.0		17.0	17.0		9.5	17.5		17.5	17.5	
Total Split (s)	32.0	32.0		32.0	32.0		9.0	33.0		42.0	42.0	
Total Split (%)	43.2%	43.2%		43.2%	43.2%		12.2%	44.6%		56.8%	56.8%	
Maximum Green (s)	27.0	27.0		27.0	27.0		3.5	27.5		36.5	36.5	
Yellow Time (s)	3.0	3.0		3.0	3.0		3.5	3.5		3.5	3.5	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.5			5.5	
Lead/Lag							Lead	Lag				
Lead-Lag Optimize?							Yes	Yes				
Vehicle Extension (s)	6.0	6.0		6.0	6.0		1.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		None	None		Max	Max	
Walk Time (s)	13.0	13.0		13.0	13.0			16.0		16.0	16.0	
Flash Dont Walk (s)	18.0	18.0		18.0	18.0			13.0		13.0	13.0	
Pedestrian Calls (#/hr)	0	0		0	0			0		0	0	
Act Effct Green (s)		17.7			17.7			36.7			36.7	
Actuated g/C Ratio		0.27			0.27			0.57			0.57	
v/c Ratio		0.55			0.36			0.34			0.32	
Control Delay (s/veh)		22.8			19.4			8.9			8.5	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		22.8			19.4			8.9			8.5	
LOS		C			B			A			A	
Approach Delay (s/veh)		22.9			19.4			8.9			8.6	
Approach LOS		C			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 74			
Actuated Cycle Length: 64.9			
Natural Cycle: 45			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay (s/veh): 12.3		Intersection LOS: B	
Intersection Capacity Utilization 59.0%		ICU Level of Service B	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 5: North St & Seymour St



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	22	27	19	46	35	17	180	12	12	148	3
Future Volume (vph)	6	22	27	19	46	35	17	180	12	12	148	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.934			0.953			0.992			0.998	
Flt Protected		0.994			0.990			0.996			0.996	
Satd. Flow (prot)	0	1764	0	0	1768	0	0	1830	0	0	1872	0
Flt Permitted		0.942			0.917			0.971			0.971	
Satd. Flow (perm)	0	1672	0	0	1637	0	0	1784	0	0	1825	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		31			26			9			2	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		293			753			423			379	
Travel Time (s)		6.7			17.1			9.6			8.6	
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles (%)	0%	0%	0%	0%	0%	4%	0%	3%	0%	0%	1%	0%
Adj. Flow (vph)	7	25	31	22	52	40	19	205	14	14	168	3
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	63	0	0	114	0	0	238	0	0	185	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			4			2			2	
Permitted Phases	4			4			2			2		
Detector Phase	4	4		4	4		2	2		2	2	
Switch Phase												

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	20.0	20.0		20.0	20.0		70.0	70.0		70.0	70.0	
Total Split (%)	22.2%	22.2%		22.2%	22.2%		77.8%	77.8%		77.8%	77.8%	
Maximum Green (s)	15.0	15.0		15.0	15.0		65.0	65.0		65.0	65.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
Lost Time Adjust (s)		0.0			0.0			0.0			0.0	
Total Lost Time (s)		5.0			5.0			5.0			5.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)		7.0			7.0			16.0			16.0	
Actuated g/C Ratio		0.24			0.24			0.54			0.54	
v/c Ratio		0.15			0.28			0.24			0.18	
Control Delay (s/veh)		6.7			9.4			6.3			6.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay (s/veh)		6.7			9.4			6.3			6.2	
LOS		A			A			A			A	
Approach Delay (s/veh)		6.7			9.5			6.4			6.2	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 29.5			
Natural Cycle: 50			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.28			
Intersection Signal Delay (s/veh): 7.0		Intersection LOS: A	
Intersection Capacity Utilization 32.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 6: State St & Perrine St





Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	33	21	9	781	717	39
Future Volume (vph)	33	21	9	781	717	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	0.95	0.95	0.95
Frt	0.947				0.992	
Flt Protected	0.971			0.999		
Satd. Flow (prot)	1747	0	0	3566	3547	0
Flt Permitted	0.971			0.999		
Satd. Flow (perm)	1747	0	0	3566	3547	0
Link Speed (mph)	30			30	30	
Link Distance (ft)	444			330	272	
Travel Time (s)	10.1			7.5	6.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles (%)	0%	0%	13%	1%	1%	0%
Adj. Flow (vph)	34	22	9	805	739	40
Shared Lane Traffic (%)						
Lane Group Flow (vph)	56	0	0	814	779	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

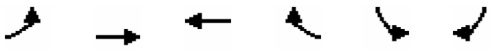
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	33	21	9	781	717	39
Future Vol, veh/h	33	21	9	781	717	39
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	13	1	1	0
Mvmt Flow	34	22	9	805	739	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1180	390	779	0	-	0
Stage 1	759	-	-	-	-	-
Stage 2	421	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.36	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.33	-	-	-
Pot Cap-1 Maneuver	186	615	766	-	-	-
Stage 1	428	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	183	615	766	-	-	-
Mov Cap-2 Maneuver	183	-	-	-	-	-
Stage 1	421	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	23.3	0.26	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	41	-	252	-	-
HCM Lane V/C Ratio	0.012	-	0.221	-	-
HCM Control Delay (s/veh)	9.8	0.1	23.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	2	63	99	5	41	18
Future Volume (vph)	2	63	99	5	41	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.994		0.958	
Flt Protected		0.999			0.967	
Satd. Flow (prot)	0	1897	1869	0	1726	0
Flt Permitted		0.999			0.967	
Satd. Flow (perm)	0	1897	1869	0	1726	0
Link Speed (mph)		30	30		30	
Link Distance (ft)		753	732		491	
Travel Time (s)		17.1	16.6		11.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	0%	1%	2%	2%	2%
Adj. Flow (vph)	2	68	108	5	45	20
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	70	113	0	65	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Free	Free		Stop	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 15.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	63	99	5	41	18
Future Vol, veh/h	2	63	99	5	41	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	0	1	2	2	2
Mvmt Flow	2	68	108	5	45	20

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	113	0	-	0	183	110
Stage 1	-	-	-	-	110	-
Stage 2	-	-	-	-	73	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1476	-	-	-	806	943
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	950	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1476	-	-	-	805	943
Mov Cap-2 Maneuver	-	-	-	-	805	-
Stage 1	-	-	-	-	913	-
Stage 2	-	-	-	-	950	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.23	0	9.62
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	55	-	-	-	843
HCM Lane V/C Ratio	0.001	-	-	-	0.076
HCM Control Delay (s/veh)	7.4	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Exhibit G



Legend

- Project Location
- Remediation Parcels

Remediation Sites

- Active Sites
- No-Action Sites
- Closed Sites

Remediation Sites Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NYSDEC

PASSERO architecture engineering

Service Credits:

1. The NYS DEC asks to be credited in derived products., Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Microsoft, Vantor

Date: 3/9/2026

Exhibit H



Legend

- Project Location

Soils

Hydrologic Group Rating

- C
- N/A

Soil Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NRCS Web Soil Survey

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architecture engineering

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Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Microsoft, Vantor

Date: 3/9/2026

Exhibit I



Legend

- Project Location
- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Area with Reduced Risk Due to Levee
- Special Floodway

FEMA Flood Areas Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: FEMA FIRMette 36011C0305E

PASSERO architecture engineering

Service Credits:

Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Microsoft, Vantor

Date: 3/9/2026

Exhibit J



Legend

- Project Location
- Principal Aquifers

Principal Aquifer Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NYS GIS Clearinghouse

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Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Microsoft, Vantor

Date: 3/9/2026



Legend

- Project Location
- Sole Source Aquifers

Sole Source Aquifer Map

Maps created by: Passero Associates GIS, AV
CRS: NAD83 State Plane New York Central
Municipality: City of Auburn
Source: NYS GIS Clearinghouse

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Date: 3/9/2026