

TOWN OF NISKAYUNA
Planning Board and Zoning Commission

Agenda

December 11, 2023

7:00 PM

REGULAR AGENDA MEETING

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

1. November 27, 2023

IV. PUBLIC HEARINGS

V. PRIVILEGE OF THE FLOOR

VI. UNFINISHED BUSINESS

VII. NEW BUSINESS

1. RESOLUTION: 2023 – 30: A resolution for site plan approval for renovations to replace the existing front and side roof facias / facades at 3514 State St.
2. RESOLUTION: 2023 – 31: A Resolution for approval of a lot line adjustment at 2660 Rosendale / 225 Agostino Ave.

VIII. DISCUSSION ITEMS

1. 2890 River Rd. – A site plan application for a 3-lot minor subdivision.
2. 1430 Balltown Rd. – A site plan application for an addition to the existing building and expansion of the parking lot.
3. 2333 Nott St. E. – A site plan application for a tenant change to a Market32 grocery store.

IX. REPORTS

X. COMMISSION BUSINESS

XI. ADJOURNMENT

NEXT MEETING: January 8, 2024 at 7 PM

To be Held in the Town Board Room
& via Remote Software

TOWN OF NISKAYUNA
Planning and Zoning Commission
Hybrid Meeting
Meeting Minutes
November 27, 2023

Members Present:

Kevin Walsh, Chairman
Chris LaFlamme
Genghis Khan
Patrick McPartlon
David D'Arpino
Leslie Gold
Nancy Strang (virtual)

Also Present:

Laura Robertson, Town Planner
Clark Henry (virtual)
Trisha Bergami, Planning Dept

I. CALL TO ORDER

Chairman Walsh called the hybrid meeting to order at 7:00 P.M.

II. ROLL CALL

Michael Skrebutenas and Joseph Drescher were absent/excused.

III. APPROVAL OF MINUTES

1. November 13, 2023

Mr. D'Arpino made a motion to approve the minutes from the 11/13/23 meeting. Ms. Gold seconded. All were in favor.

IV. PUBLIC HEARINGS

1. One Research Circle – An Application for Approval of Plat Plan – Minor Subdivision, for a 2-lot minor subdivision at One Research Circle.

The following Public Notice was read by Mr. Henry:

“NOTICE IS HEREBY GIVEN that pursuant to the Code of the Town of Niskayuna, New York and the applicable provisions of the Town Law of the State of New York, a public hearing will be held by the Planning Board and Zoning Commission of the Town of Niskayuna in the Town Board Meeting Room at One Niskayuna Circle on the twenty-seventh (27th) day of November 2023 at 7:00 p.m. to consider an application from Charles B. Dumas, representing the General Electric Company (property owner), for a 2-lot minor subdivision in the Town of Niskayuna (Tax Parcel ID#40.-1-45.3). The property is located within the I-R Research and Development zoning district. A copy of the Application for Approval of Plat Plan – Minor Subdivision will be available for inspection at the Planning Department in the Niskayuna Town Hall and can be viewed at <https://www.niskayuna.org/pbnotices> under the “Public Hearings” tab and will be shown electronically during the public hearing. If you wish to express an opinion regarding the public hearing you may do so at the above-mentioned time and place. If you cannot be present, you may request a virtual login to the meeting by emailing lrobertson@niskayuna.org or calling 518-386-4531 or you may set forth your opinion in a letter which will be made part of the permanent record. Please note

there is a five (5) minute time limit for each speaker at the public hearing and submitted letters will not be read out loud at the public hearing, but such letters will be included in the minutes and added to the record. The Planning Board and Zoning Commission of the Town of Niskayuna will hear all persons interested during the aforementioned public hearing. **BY ORDER** of the Planning Board of the Town of Niskayuna, New York. Kevin A. Walsh, Chairman, Planning Board and Zoning Commission.”

Mr. Dumas the applicant for GE introduced Mr. Ray Liuzzo from CT Male, surveyor, and Ms. Karen Simons, Managing Attorney for Real Estate of GE, who were with him in the audience tonight in case there were any questions. Mr. Dumas states this is a simple 2 lot subdivision. The subdivision is to go along with the reconstruction of the GE Corporation into three separate companies. Mr. Dumas stated there is no site plan work or disturbance to the property, it is just a division of property.

Chairman Walsh stated Mr. Khan has recused himself from any matters related to GE and Ms. Strang will be taking his seat. Chairman Walsh asked if there was any member of the public who wished to speak. There were none. Chairman Walsh asked Ms. Robertson if the Town had received any other comments. There were none. Seeing no one wishing to comment, the Public Hearing was closed.

V. PRIVILEGE OF THE FLOOR

No one for Privilege of the Floor

VI. UNFINISHED BUSINESS

No Unfinished Business.

VII. NEW BUSINESS

1. RESOLUTION: 2023 – 27: A Resolution for approval of plat plan for a 2-lot minor subdivision at GE Global Research Center at One Research Circle

Chairman Walsh read the following into the record:

“RESOLVED, that the Planning Board and Zoning Commission does hereby grant minor subdivision approval for a 2-Lot subdivision at 1 Research Circle as shown on the aforementioned a 2-page drawing set by C.T. Male Associates dated 10/2/23 subject to the following conditions:

1. Prior to recording the plat, any minor textual changes to the subdivision map will be addressed to the satisfaction of the Town Planning Department.
2. Prior to July 1, 2023 General Electric or it’s representative, Mr. Dumas, will coordinate a meeting between GE, Town of Niskayuna staff, and members of the Planning Board / Conservation Advisory Committee to discuss conservation related initiatives and the removal / replanting on the crab apple trees near the solar farm.”

A motion to approve was moved by Mr. LaFlamme, Mr. D’Arpino seconded the motion.

Chairman Walsh made a motion to include the two amendments to the resolution as written. He motioned to change the date in condition 2 to July 1, 2024 and to strike the name of Mr. Dumas from the condition.

Chairman Walsh made a motion to amend and Mr. McPartlon seconded. All were in favor of the amendments.

Chairman Walsh stated the Board now has an amended resolution to discuss and condition number two was successfully modified.

Ms. Gold asked if there was any tax implications to this subdivision that could impact the Town of Niskayuna.

Ms. Robertson said she can’t answer that question because that is a question for the Tax Assessor.

Chairman Walsh stated we have a modified resolution and move to second.

86 Mr. Henry called roll:

87 Mr. LaFlamme Aye

88 Mr. McPartlon Aye

89 Mr. D'Arpino Aye

90 Ms. Gold Abstain. Ms. Gold stated she is abstaining from the vote because she did not have
91 an answer about the tax question.

92 Ms. Strang Aye

93 Chairman Walsh Aye

94 Chairman Walsh stated the resolution was approved and thanked the applicant for their attendance.

95 2. RESOLUTION: 2023 – 28: A Resolution for sketch plan approval of a 3-lot
96 minor subdivision at 2890 River Rd

97 Chairman Walsh introduced the next agenda item and read into the record:

98 “RESOLVED, that this Planning Board and Zoning Commission does hereby classify this sketch plan as
99 a minor subdivision as defined by Chapter 189 of the Code of the Town of Niskayuna; and be it

100 FURTHER RESOLVED, that the Planning Board and Zoning Commission does hereby grant sketch plan
101 approval for the concept subdivision drawing entitled “Subdivision Plan 2890 River Rd.” by Engineering
102 Ventures, P.C. dated 11/3/23 with no further revisions, with the following conditions:

103 1. Sketch plan approval is a conceptual review of the proposed lot division for the purposes
104 of classification and preliminary discussion as described in the Town of Niskayuna
105 Zoning Sections 189-6 and 189-22. The location of proposed boundary lines,
106 infrastructure, utilities and improvements are subject to change during the environmental
107 review, engineering, public hearing and subdivision review process.
108

109 Chairman Walsh asked for a motion on the resolution.

110 Mr. Khan made a motion that the resolution be adopted, seconded by Ms. Gold.

111 Chairman Walsh asked if there was any further discussion. Hearing none, Mr. Henry called the roll:

112 Mr. LaFlamme Aye

113 Mr. Khan Aye

114 Mr. McPartlon Aye

115 Mr. D'Arpino Aye

116 Ms. Gold Aye

117 Ms. Strang Aye

118 Chairman Walsh Aye

119 Chairman Walsh stated the resolution was approved.

120 3. RESOLUTION: 2023 – 29: A Resolution for site plan approval for a tenant change to
121 Brianna Ryan Dance ME LLC dance studio at 2141 Eastern Parkway.

122 Chairman Walsh introduced the next agenda item and read into the record:

“RESOLVED, that the Planning Board and Zoning Commission finds the above referenced site plan meets the requirements of the Zoning Code and previous site plan approvals, and therefore, hereby approves the site plan with the following conditions:

1. Signage: Prior to issuance of a building permit the Planning Office will review and approve any proposed code compliant signage.
2. City of Schenectady: Any requirements from the City of Schenectady for the use of the parking spaces within its City limits shall be made a requirement of the Town of Niskayuna’s site plan approval.

Chairman Walsh called for a motion on the resolution. It was moved for adoption from Mr. McPartlon, seconded by Mr. LaFlamme

Ms. Stephanie Bitter, representative for the applicant, stated she and her client had reached out to the City of Schenectady and they did confirm to here that nothing further was needed on her end for the parking that was contained within their property.

Ms. Robertson said her discussion with the City of Schenectady on this project was verbal and she recommended that the applicant get something in writing to cover their bases.

Ms. Bitter stated she has an email and will attach it to the file.

Hearing no further discussion on the project, Mr. Walsh asked for a vote.

Mr. Henry called the roll:

Mr. LaFlamme Aye

Mr. Khan Aye

Mr. McPartlon Aye

Mr. D’Arpino Aye

Ms. Gold Aye

Ms. Strang Aye

Chairman Walsh Aye

Chairman Walsh stated the resolution was approved and welcomed the Dance studio to Niskayuna.

VIII. DISCUSSION ITEM

1. 1430 Balltown Rd. – A site plan application for an addition to the existing building and expansion of the parking lot.

Ms. Robertson stated the applicant had notified her they would not be present tonight and that the first round of TDE comments had been sent to the applicant.

Chairman Walsh stated this project will be on the agenda for next meeting to discuss those comments. Chairman Walsh also stated one of the biggest questions would be impact on the traffic based on the increased usage of the site.

Mr. McPartlon wanted to know how their underground storm water detention practice works. He stated he knows the underground storm water detention requires a certain amount of maintenance. He said it is not maintenance free and someone cannot visually observe it for inspection because it is buried under a parking lot. Mr. McPartlon stated it would have to have a scheduled maintenance plan.

Chairman Walsh said if there is specific maintenance and the engineers feel it will function, the Board could include that maintenance as a condition of approval if they get to that point. He stated there would be more to come on this item at the next meeting.

2.3514 State St. – Mohawk Army / Navy – A site plan application for renovations to replace the existing front and side roof facias / facades.

Mr. Sammy Salem and Ms. Cris Vargus were attending virtually on behalf of Army Navy.

Mr. Salem stated when the old buildings come up for tenant renewal, the plan is to keep their tenants as long-term tenants and refresh the buildings to meet the currant modern day world. He stated this proposal was to remove the stickers in the windows that were meant to look like cultured stone, add new siding to the top of the building, and match the freestanding sign to the new siding.

Chairman Walsh verified there would be no signage change just the façade update. Ms. Vargus confirmed the signage would remain the same.

Chairman Walsh asked if anyone had any more comments and stated that if everyone was in agreement, they can call for a resolution for next meeting approving the façade changes. All were in favor of a resolution at the December meeting.

3.2660 Rosendale / 225 Agostino Ave. – An application for lot line adjustment.

Mr. Christopher Longo, engineer, was present virtually, representing the applicant and the property owners for a lot line request. The lot long adjustment was presented for the Board to review.

Chairman Walsh said the only question he had was what was the reason for the lot line adjustment.

Mr. Longo said they are friendly neighbors and this was to give the smaller lot on Rosendale Road a bigger backyard.

Mr. McPartlon asked if there were any accessory structures involved with the lot line adjustment and how close it was to the building on the Agostino parcel. Mr. Longo stated there were no structure near the adjustment from the Agostino side.

Chairman Walsh asked the drawing be modified to show where the building and accessory structures were on both properties. Chairman Walsh said if they can get an updated drawing to show the structures on the Agostino lot, he is comfortable with a tentative resolution for approval at the next meeting.

IX. REPORTS

Ms. Robertson her and Mr. Henry have been working on the 2024 calendars and she will email them to the Board when they are ready for review.

X. COMMISSION BUSINESS

Ms. Gold asked if there were any training opportunities coming up in the next few weeks.

Ms. Robertson said there is a webinar that she sent out a few weeks ago, which covers a lot of what was covered in the in-person training at Hudson Valley many of the Board members had attended in the fall. She said the webinar takes place in early December.

Chairman Walsh said the Department of State website also has several one hour or so trainings available to meet the 4-hour requirements.

XI. ADJOURNMENT

Ms. Gold made a motion to adjourn, Mr. LaFlamme Seconded. The meeting was adjourned at 8:43 pm.

The video recording for this meeting can be found at: <https://www.youtube.com/watch?v=ncTJugYudPw&list>



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VII. 1

MEETING DATE: 12/11/2023

ITEM TITLE: RESOLUTION: 2023-30: A Resolution for site plan approval for renovations to replace the existing front and side roof facias / facades at 3514 State St.

PROJECT LEAD: TBD

APPLICANT: Cris Vargas, agent for the owner

SUBMITTED BY: Cris Vargas, agent for the owner

REVIEWED BY:

☐ Conservation Advisory Council (CAC) ☐ Zoning Board of Appeals (ZBA) ☐ Town Board
☐ OTHER:

ATTACHMENTS:

☒ Resolution ☒ Site Plan ☐ Map ☐ Report ☐ Other:

SUMMARY STATEMENT:

Mr. Vargas submitted an application to replace the existing metallic roof facia / façade panels with new laminated wood-like panels. The existing façade signage will be removed to enable the old panels to be removed and the new panels to be installed. The signage will then be remounted at the same locations on the building.

The applicant described the proposed project, and the renderings that were provided with the application, in detail at the 11/27/23 Planning Board meeting. After some discussion the Board called for a resolution for site plan approval for the 12/11/23 Planning Board meeting.

COMPREHENSIVE PLAN

The proposed application complies with the Economic Development section, beginning on page 73, of the 2013 Niskayuna Comprehensive Plan.

BACKGROUND INFORMATION

The property is located in the C-H Highway Commercial zoning district.

The following documents were provided with the site plan application.

1. A 6-page drawing set entitled "Mohawk Army Navy 3514 State Street Schenectady, NY" by Hamlin Design Group dated May 2023 with no subsequent revisions.
2. A 1-page photograph of the State St. façade as it currently exists.
3. A 1-page rendering of the State St. façade as it would appear if the site plan application is approved.

4. A 1-page rendering of the State St. façade as it would appear with the existing signage reinstalled on the proposed new façade.

Section 220-48.7 Architectural Review Standards in Article VIIIA Town Center Overlay District, Neighborhood Commercial and Highway Commercial Standards of the zoning code includes the following requirements.

220-48.7 B states: "...this section is applicable to all new building construction and building exterior renovations/modifications which require a building permit."

220-48.7 C (1) Colors states: "Colors utilized for building exteriors shall be compatible and shall visually reflect the traditional concept of the Town Center, the C-N and the C-H Districts' efforts to revitalize. Examples of incompatible colors include metallics, neon, and/or primary colors."

220-48.7 C (2) Materials states: "Traditional materials (masonry, wood and stone) are generally required in the Town Center, the C-N and the C-H Districts...Examples of incompatible materials include exposed concrete block, metal siding, and reflective glass."

11/27/23 Planning Board (PB) meeting – Mr. Sammy Salem and Ms. Cris Vargas described the proposed project, and the renderings that were provided with the application, in detail. They described the proposed material as being fabricated using re-sawn timber panels, eco-friendly and providing a more natural alternative to glossy metal or thermoplastic sheet sections. The applicants described some of the design details shown in the renderings to include: black vinyl around the window panels, removal of the stone sticker appliques currently on the facades near the ground and minor changes to the base area of the tall monument sign. They also confirmed that the existing signage will be removed, stored and then remounted to the new facias / facades in the same locations. The aforementioned document #4 is a rendering of how the building will appear with the new facades and the existing signage remounted. At the conclusion of the discussion the Board called for a resolution for site plan approval for the 12/11/23 meeting.

A resolution is included in the meeting packet.

AT A REGULAR MEETING OF THE PLANNING BOARD AND ZONING COMMISSION OF THE TOWN OF NISKAYUNA DULY CALLED AND HELD ON THE 11TH DAY OF DECEMBER 2023 AT THE NISKAYUNA TOWN OFFICE BUILDING, ONE NISKAYUNA CIRCLE, IN SAID TOWN AT 7:00 P.M., THE FOLLOWING MEMBERS WERE PRESENT VIRTUALLY OR IN PERSON:

HONORABLE: KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
MICHAEL A. SKREBUTENAS
CHRIS LAFLAMME
PATRICK MCPARTLON
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
JOSEPH DRESCHER

One of the purposes of the meeting was to take action on a final site plan approval.

The meeting was duly called to order by the Chairman.

The following resolution was offered by _____,
whom moved its adoption, and seconded by _____.

WHEREAS, Cris Vargas, agent for the property owner, made an application to the Planning Board and Zoning Commission for renovations to replace the existing front and side roof facias / facades at 3514 State St., and

WHEREAS, the following documents were provided with the site plan application:

1. A 6-page drawing set entitled “Mohawk Army Navy 3514 State St. Schenectady, NY” by Hamlin Design Group dated May 2023 with no subsequent revisions.
2. A 1-page photograph of the State St. façade as it currently exists.
3. A 1-page rendering of the State St. façade as it would appear if the site plan application is approved.
4. A 1-page rendering of the State St. façade as it would appear with the existing signage reinstalled on the proposed new façade, and

WHEREAS, the property is located in the C-H Commercial Highway zoning district, and

WHEREAS, retail and service stores are permitted principal uses in the district, and

WHEREAS, the Planning Board finds that the proposed application complies with the 2013 Niskayuna Comprehensive Plan, and

WHEREAS, the existing signage will be removed to facilitate installation of the new facias / façades and then reinstalled in the same locations resulting in what is shown in the rendering described as item #4, above, and

WHEREAS, this Board has carefully reviewed the proposal and by this resolution does set forth its decision heron,

NOW, THEREFORE, be it hereby

RESOLVED, that the Planning Board and Zoning Commission finds the above referenced site plan meets the requirements of the Zoning Code and therefore, hereby approves this site plan.

Upon roll call the foregoing resolution was adopted by the following vote:

KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
MICHAEL A. SKREBUTENAS
CHRIS LAFLAMME
PATRICK MCPARTLON
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
JOSEPH DRESCHER

The Chairman declared the same _____.



TOWN OF NISKAYUNA

One Niskayuna Circle
Niskayuna, New York 12309-4381

Phone: (518) 386-4530

Application for Site Plan Review

Applicant (Owner or Agent):

Name ALISUE LLC

Address 185 NW SPANISH RIVER BLVD
SUITE 100
BOCA RATON FL 33431

Email CMARGAS@KINPROPERTIES.COM

Telephone 701.961.9242 Fax 901.988.2822

Location:

Number & Street 3514 State Street

Section-Block-Lot - -

Zoning District

Proposal Description:

FACADE RENOVATION - REPLACE EXISTING FRONT AND
SIDE FACADE WITH NEW

ALISUE LLC, a Delaware limited liability company
By: Krisan Management Corp., Its Manager
Signature of applicant: [Signature] V.P. Date: 11/15/2023

Signature of owner (if different from applicant):

Date:

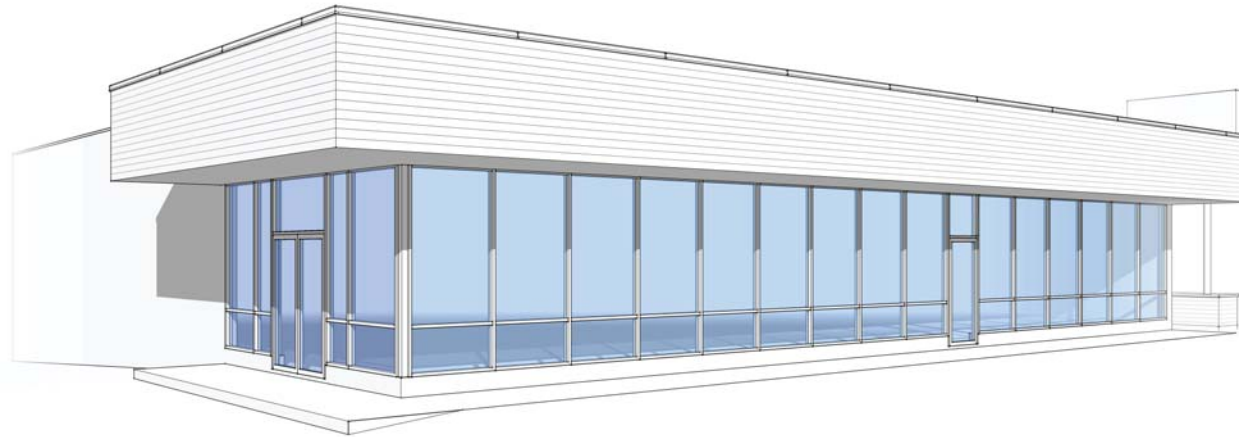
Each site plan application shall be accompanied by:

1. Digital copies in pdf format of all application forms and supporting documents.
2. A digital copy in pdf format and three (3) full size copies of any large scale plans or maps prepared by a licensed engineer, architect or surveyor.
 - a. The site plan shall include the following: the title of the drawing, including the name(s), address(es), phone and fax numbers of the applicant and the name address, phone and fax number of the person, firm or organization preparing the map.
 - b. The North point, date and scale.
 - c. Boundaries of the property.
 - d. Existing watercourses and direction of existing and proposed drainage flow.
 - e. The location of all proposed site improvements; proposed water and utility facilities; a description of the method of sewage disposal and location of such facilities; the location of all proposed signs; and location of proposed areas of vegetation.
2. A digital copy in pdf format of a lighting plan showing the lighting distribution of existing and proposed lights, specifications, photometric data, and catalog cuts of the proposed fixture(s) which meet the requirements of Article VIIB of the Zoning Ordinance of the Town of Niskayuna entitled "Guidelines for Lighting of Outdoor Areas under Site Plan Review".
3. One (1) copy of the short or long Environmental Assessment Form (EAF), as required by 6NYCRR Part 617, "State Environmental Quality Review", and Chapter 95, "Environmental Quality Review" of the Code of the Town of Niskayuna.
4. If the application is being made by someone other than the current property owner, the applicant or the agent for the applicant must provide proof that they are authorized to pursue this site plan approval. Such proof may be in the form of a contract for sale or letter by the current owner that the applicant/agent is authorized to proceed with this application.
5. Administration Fees: An application for site plan approval shall be submitted to the Planning Board at least ten (10) business days prior to a regular meeting of the Planning Board. Each petition shall be accompanied by a minimum fee of **\$200.00** plus an additional fee based on the square footage of new building construction. Fees are payable to the Town of Niskayuna.
6. Consulting Fees: The cost incurred by the Town for the review of an application by the Town Engineer, consulting engineering firm or other consulting fees, in connection with a Board's review of a proposed application shall be charged to the applicant. The Board to whom the application is made shall obtain an estimate from any designated consultant of the amount sufficient to defray the cost of such services and shall collect from the applicant the estimated charges. Any portion of the estimated charges so collected, which are not expended by the Town, shall be returned to the applicant. Any such costs incurred by the Town beyond the estimated charges initially collected from the applicant, shall be collected from the applicant prior to final action upon the application.

MOHAWK ARMY NAVY

3514 STATE STREET
SCHENECTADY, NY

LOCATION MAP



915 BROADWAY, STE 302
ALBANY, NY 12207
P: 518.724.5159
F: 518.320.8633
www.hamlindesigngroup.com

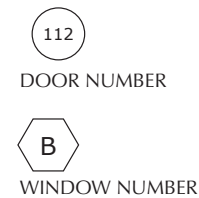
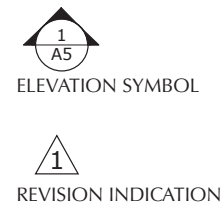
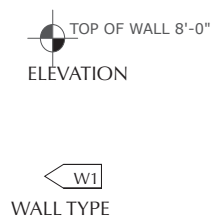
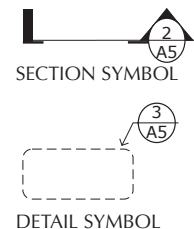
DRAWING LIST:

ARCHITECTURAL
A1.0: REMOVAL PLAN
A1.1: REMOVAL ELEVATIONS
A2.0: PROPOSED PLAN
A2.1: PROPOSED ELEVATIONS
A3.0: PROPOSED DETAILS

GENERAL NOTES:

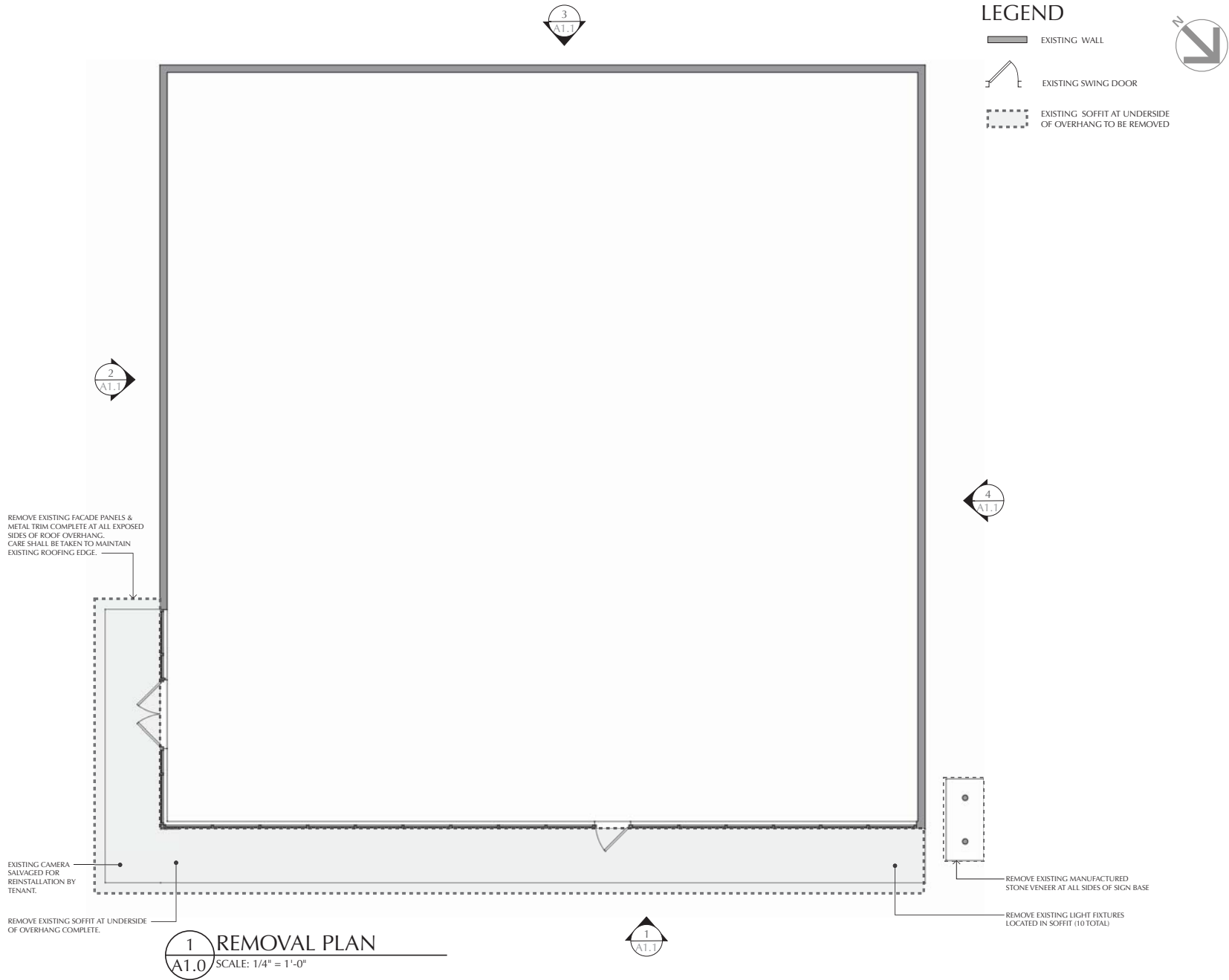
- G1. ALL DIMENSIONS ARE TO FACE OF FRAMING OR THE FACE OF CONCRETE. VARIANCES GREATER THAN 2" SHALL BE CALLED TO THE ARCHITECTS' ATTENTION FOR CLARIFICATION PRIOR TO PROCEEDING WITH RELATED CONSTRUCTION.
- G2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS, INSPECTIONS AND CERTIFICATES AS NECESSARY FOR THE TIMELY COMPLETION OF THE WORK AND ISSUANCE OF OCCUPANCY CERTIFICATE. THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES PERTAINING TO THE CONSTRUCTION.

LEGEND



DATE: MAY 2023





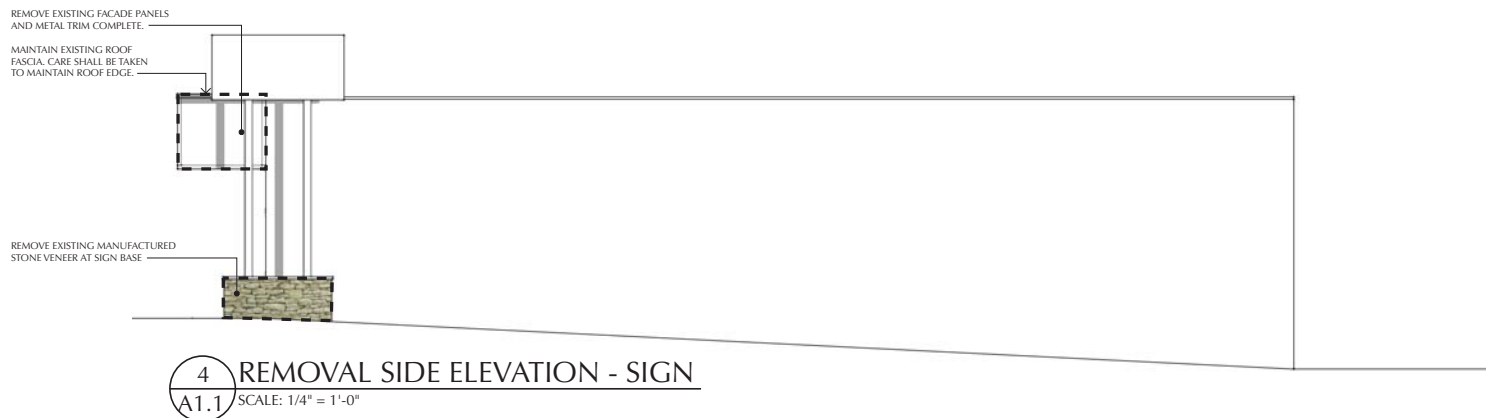
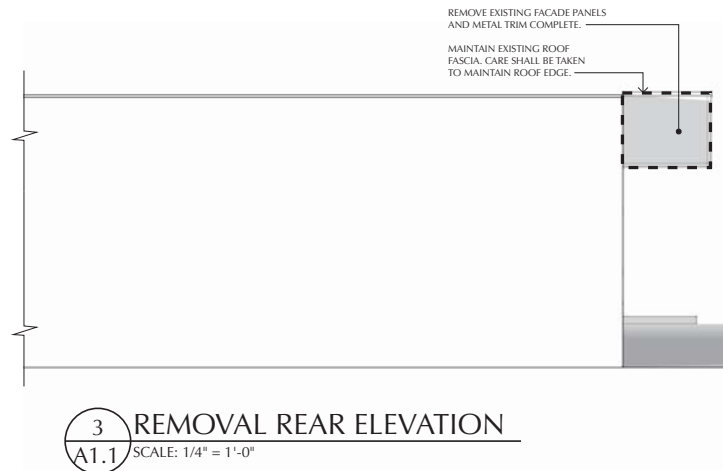
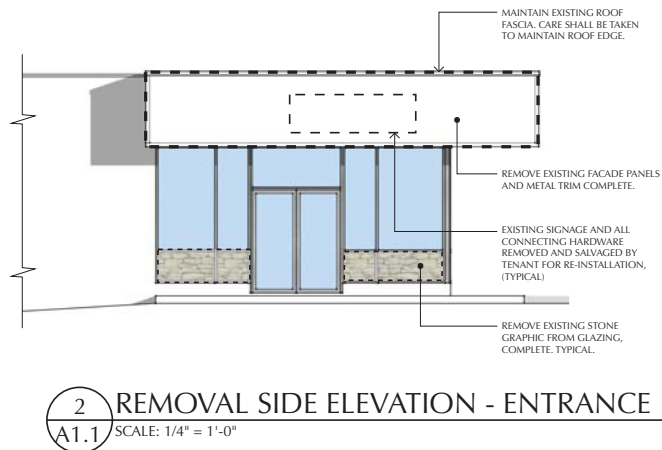
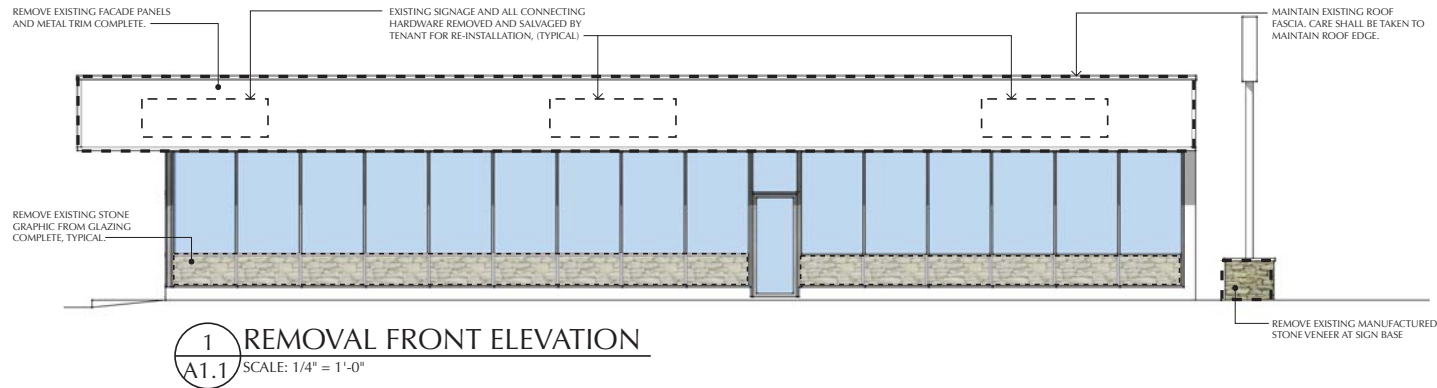
MOHAWK ARMY NAVY
3514 STATE STREET
SCHENECTADY, NY

DATE: MAY 2023



REMOVAL PLAN

A1.0



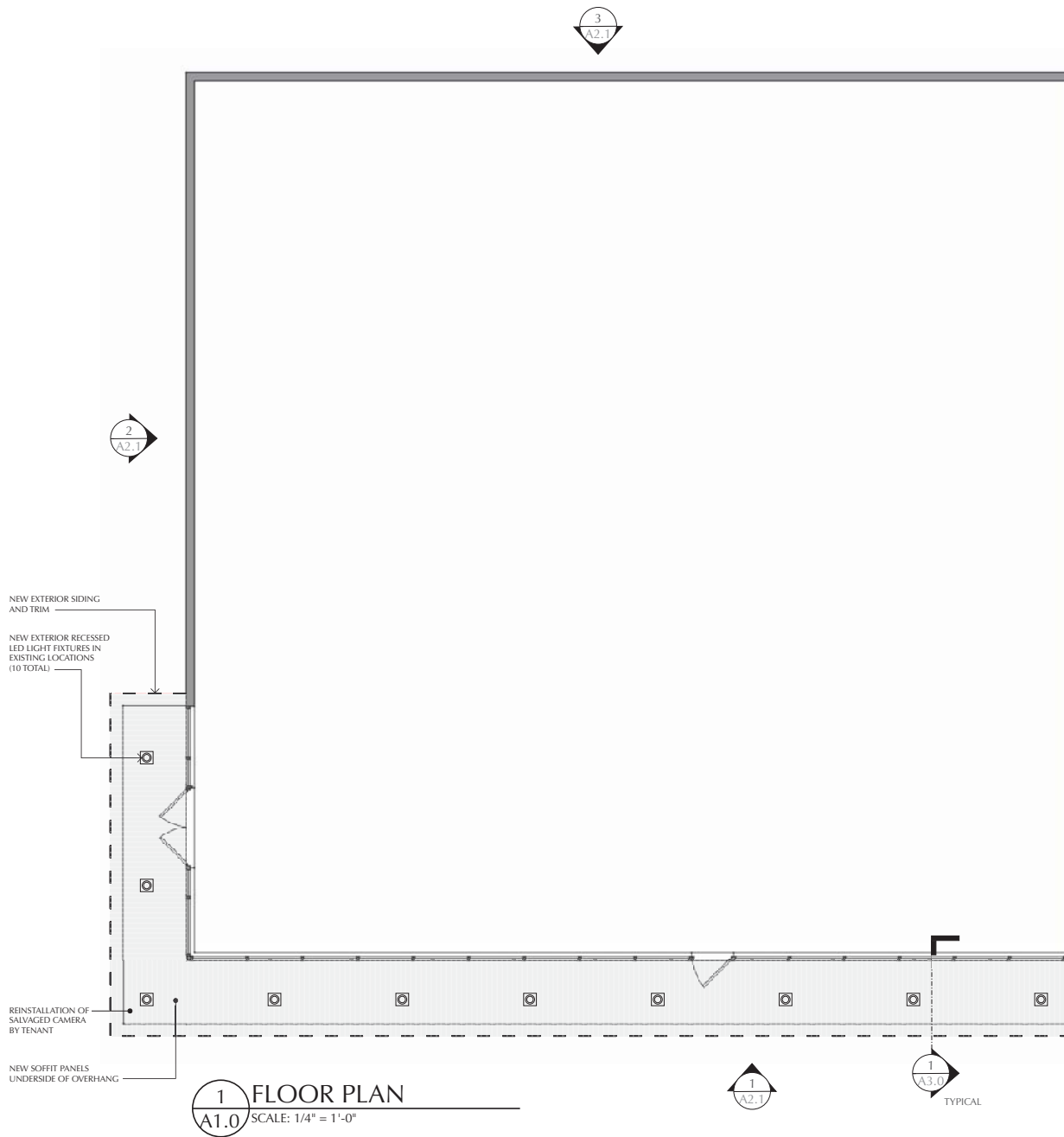
MOHAWK ARMY NAVY
3514 STATE STREET
SCHENECTADY, NY

DATE: MAY 2023



REMOVAL ELEVATIONS

A1.1







NEW EXTERIOR SIDING
AND TRIM

NEW EXTERIOR RECESSED
LED LIGHT FIXTURES IN
EXISTING LOCATIONS
(10 TOTAL)

REINSTALLATION OF
SALVAGED CAMERA
BY TENANT

NEW SOFFIT PANELS
UNDERSIDE OF OVERHANG

LEGEND

-  EXISTING WALL
-  EXISTING SWING DOOR
-  NEW SOFFIT
-  NEW LED RECESSED LIGHT FIXTURE

GENERAL NOTES:

- G1. SHEATHING
1" THICK HUNTER PANELS XCI CG
(POLYISO INSULATION BOARD)
WITH BUILDING WRAP AT EXTERIOR
- G2. SIDING
RESAWN TIMBER CO. - ABODO VULCAN CLADDING
WB10 VERTICAL GRAIN FINE SAWN FACE
PROVIDE EVEN MIX OF THE FOLLOWING:
GRAPHITE, TEAK, & WALNUT
ATTACHED W/ 6D (2" X 0.113") 304 S.S. NAIL AT 12" O.C.
- G3. SOFFIT
EXTERIOR LINEAR METAL SOFFIT SYSTEM,
CERTAINTED 150F.
COLOR: WHITE
- G4. LIGHT FIXTURES
LIGHTOLIER LED DOWNLIGHT W/ BLACK FLANGE
- CALCULITE 3" C3SA SQUARE ADJUSTABLE ACCENT



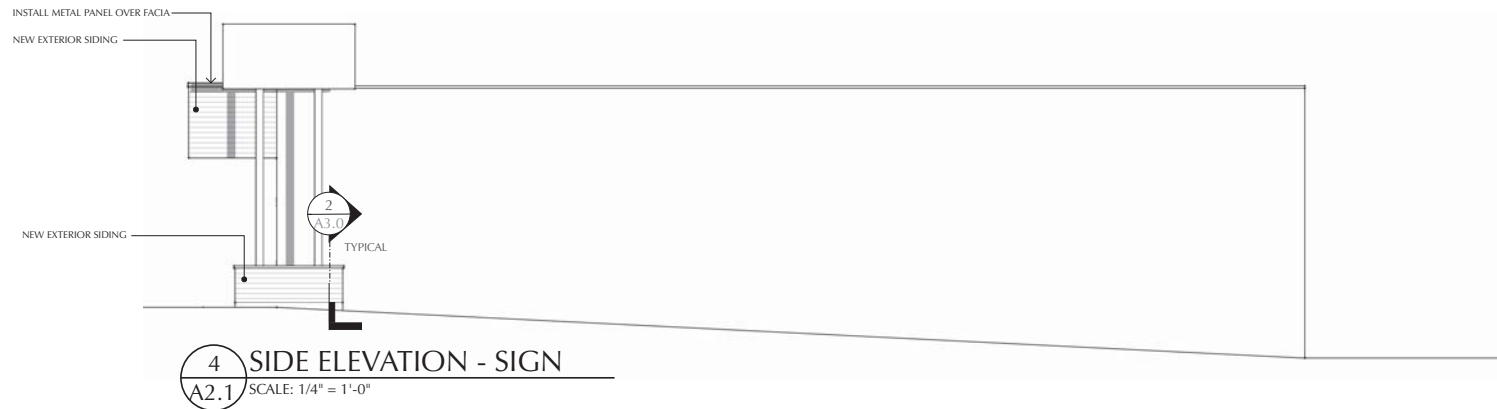
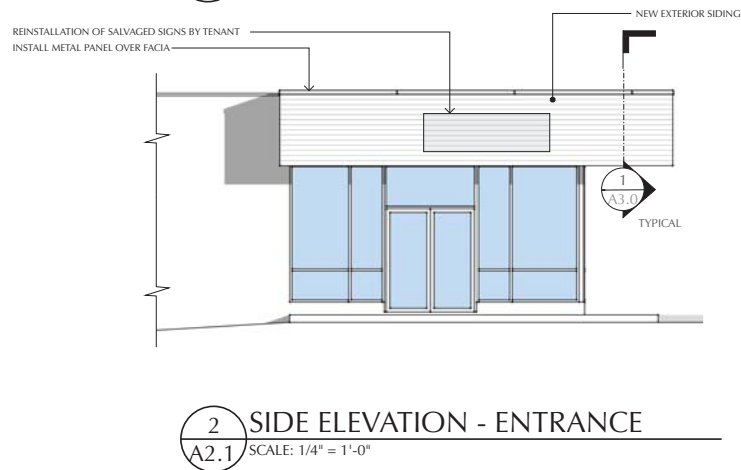
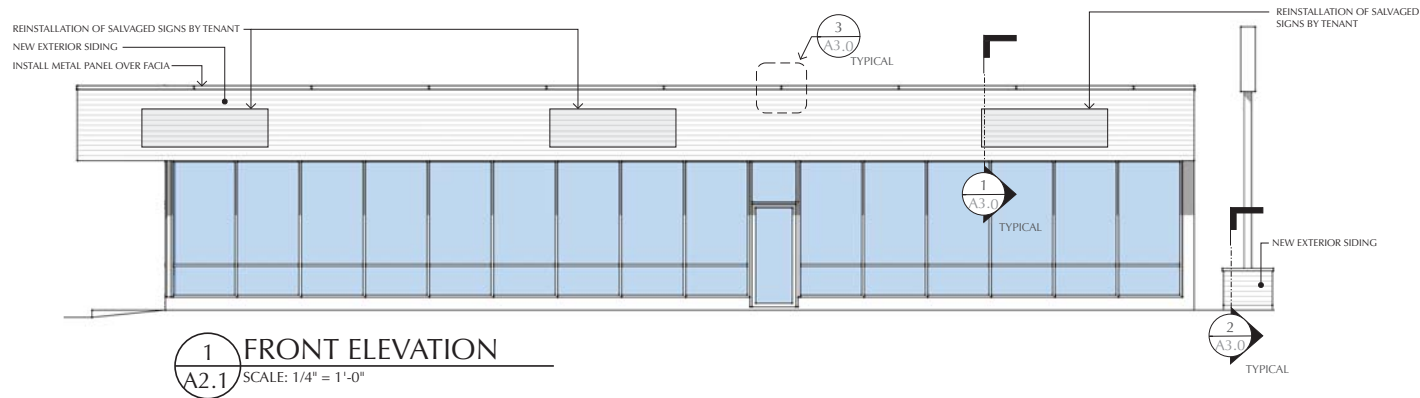
MOHAWK ARMY NAVY
3514 STATE STREET
SCHENECTADY, NY

DATE: MAY 2023



PROPOSED PLAN

A2.0



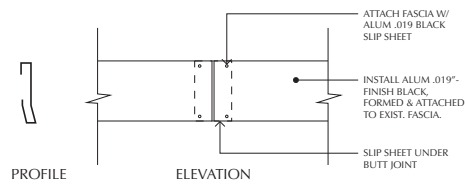
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3514 STATE STREET
SCHENECTADY, NY

DATE: MAY 2023

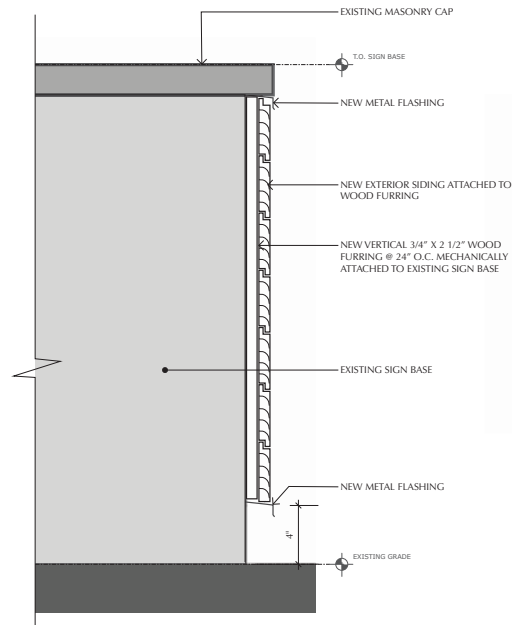
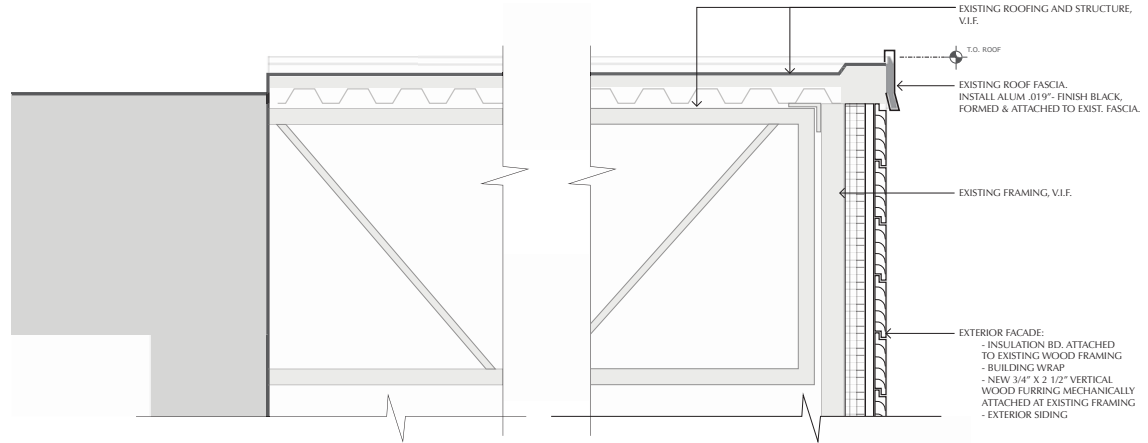


PROPOSED ELEVATIONS

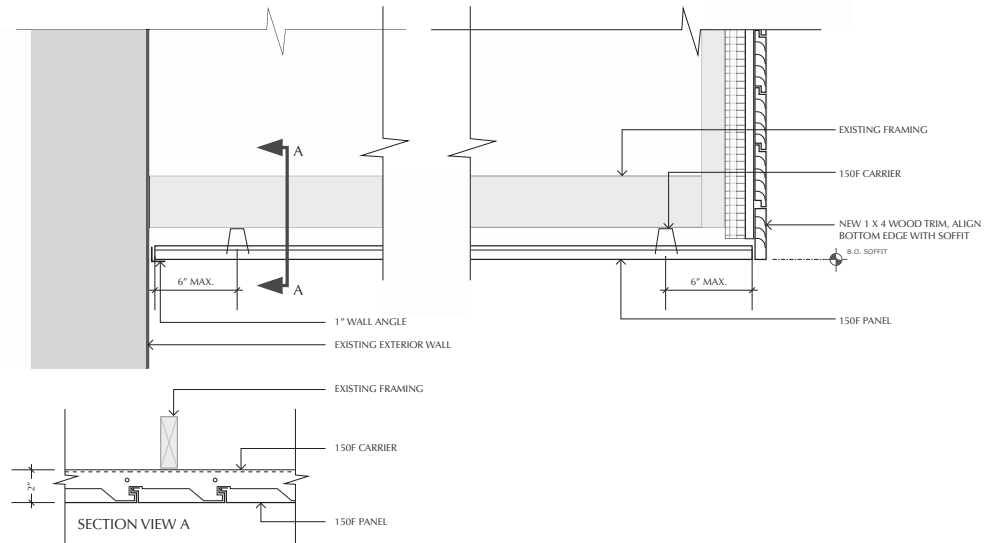
A2.1



3 FASCIA DETAIL
A3.0 SCALE: 3" = 1'-0"



2 SECTION DETAIL - SIGN BASE
A3.0 SCALE: 3" = 1'-0"



1 SECTION DETAIL - ROOF OVERHANG
A3.0 SCALE: 3" = 1'-0"

3553 NY-5



Exit Street View

carhartt

ARMY NAVY

ARMY NAVY
carhartt

RED WING
SHOES

OPEN

WATER

CAROLINA

© 2023 Google

Google Earth

42°46'14.58" N 73°53'36.47" W elev 383 ft eye alt 387 ft

[Report a problem](#)



ARMY NAVY
center

OPEN

BATH

CAROLINA







TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VII. 2

MEETING DATE: 12/11/2023

ITEM TITLE: RESOLUTION: 2023-31: A Resolution for lot line adjustment at 2660 Rosendale Rd. / 225 Agostino Ave.

PROJECT LEAD: TBD

APPLICANT: Willard & Bonnie Daggett and Leah Murphy

SUBMITTED BY: Willard & Bonnie Daggett and Leah Murphy

REVIEWED BY:

☐ Conservation Advisory Council (CAC) ☐ Zoning Board of Appeals (ZBA) ☐ Town Board
☐ OTHER:

ATTACHMENTS:

☒ Resolution ☒ Site Plan ☐ Map ☐ Report ☐ Other:

SUMMARY STATEMENT:

Mr. & Mrs. Daggett and Ms. Murphy submitted an application for lot line adjustment to annex approximately 4,470 +/- sq. ft. of land to 2660 Rosendale Rd. As a result of the proposed action 2660 Rosendale Rd. will increase from approximately 1.22 +/- Acres to approximately 1.32 +/- Acres and 225 Agostino will decrease accordingly.

Mr. Longo attended the meeting via. videoconference on behalf of the applicants and described the project. He indicated the lot line adjustment will result in a more desirable back yard for the smaller of the two lots. The Board requested that the existing structures on both properties be shown on the survey drawings for clarity. The discussions concluded with the Board calling for a resolution for approval for the 12/11/23 meeting.

COMPREHENSIVE PLAN

No references to lot line adjustments or the configuration of lots were found in the 2013 Comprehensive Plan.

BACKGROUND INFORMATION

The property is located in the R-1 Low Density Residential zoning district.

A 1-page site plan entitled "Lot Line Adjustment Between Lots 2 & 3 Daggett Subdivision" by Gilbert VanGuilder Land Surveyor, PLLC dated 7/11/23 and revised 12/4/2023 was provided with the application.

Section 189-19 Lots A (2) states: "Shapes of lots shall lend themselves to utilization of entire lots as building and yard space. Shapes such as triangles and quadrangles with small included angles

are discouraged.” As proposed, the lot line adjustment creates a step in the 225 Agostino Ave. However, the lot lines are still straight and do not include small included angles.

11/27/23 Planning Board (PB) meeting -- Mr. Longo attended the meeting via. videoconference on behalf of the applicants and described the project. He indicated the lot line adjustment will result in a more desirable back yard for the smaller of the two lots. The Board requested that the existing structures on both properties be shown on the survey drawings for clarity. The discussions concluded with the Board calling for a resolution for approval for the 12/11/23 meeting.

On December 4, 2023, the survey was updated to include the home and driveway for the Agostino parcel. There are no accessory structures associated with 225 Agostino Ave.

The proposed lot line adjustment does not create any zoning non-conformities. It will need a signature block, an overview map, and a few technical items added prior to recording. This has been made a condition in the proposed resolution.

A tentative resolution for the lot line adjustment is included in the meeting packet.

RESOLUTION NO. 2023-31

AT A REGULAR MEETING OF THE PLANNING BOARD AND ZONING COMMISSION OF THE TOWN OF NISKAYUNA DULY CALLED AND HELD ON THE 11TH DAY OF NOVEMBER 2023 AT THE NISKAYUNA TOWN OFFICE BUILDING, ONE NISKAYUNA CIRCLE, IN SAID TOWN AT 7:00 P.M., THE FOLLOWING MEMBERS WERE PRESENT VIRTUALLY OR IN PERSON:

HONORABLE: KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
MICHAEL A. SKREBUTENAS
CHRIS LAFLAMME
PATRICK MCPARTLON
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
JOSEPH DRESCHER

One of the purposes of the meeting was to take action on an application for a lot line adjustment.

The meeting was duly called to order by the Chairman.

The following resolution was offered by _____,
whom moved its adoption, and seconded by _____.

WHEREAS, William and Bonnie Daggett and Leah Murphy, property owners of 2660 Rosendale Rd. and 225 Agostino Ave. respectively, have made application to the Planning Board for a lot line adjustment between the two properties as noted in a 1-page site plan entitled "Lot Line Adjustment Between Lots 2 & 3 Daggett Subdivision" by Gilbert VanGuilder Land Surveyor, PLLC dated 7/11/23 and revised on 12/4/2023, and

WHEREAS, the zoning classification of the property is R-1: Low Density Residential, and

WHEREAS, the Planning Board has determined that the proposed lot line adjustments are classified as a Type II action under State Environmental Quality Review (SEQR) regulations and local law, and no further SEQR review is necessary, and

WHEREAS, the Board has carefully reviewed the proposal and by this resolution does set forth its decision hereon,

NOW, THEREFORE, be it hereby

RESOLVED, that the Planning Board and Zoning Commission does hereby grant final lot line adjustment approval for 2660 Rosendale Rd and 225 Agostino Ave as shown on the aforementioned 1-page survey drawing, with the following conditions:

1. Prior to recording the plat – the final lot line adjustment map shall be sent to the Planning Department for their review and approval. Any changes, additions or deletions requested shall be addressed to the satisfaction of the Planning Department before printing the mylars.

Upon roll call the foregoing resolution was adopted by the following vote:

KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
MICHAEL A. SKREBUTENAS
CHRIS LAFLAMME
PATRICK MCPARTLON
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
JOSEPH DRESCHER

The Chairman declared the same _____.



TOWN OF NISKAYUNA

Planning Department

One Niskayuna Circle

Niskayuna, New York 12309

Phone: (518) 386-4530

Fax: (518) 386-4592

APPLICATION FOR LOT LINE ADJUSTMENT

Building And Engineering Department Review

Each application shall be accompanied by:

1. Administration Fees: An application for lot line adjustment shall be submitted to the Planning Department. Each petition shall be accompanied by a fee of **\$100.00**. Fees are payable to the *Town of Niskayuna*.
2. Two (2) Copies of a Sketch Plan. Sketch Plan must include: Existing lot line locations, proposed lot lines, building envelopes, location of existing structures / fences with distances to lot lines where appropriate and any additional information requested by the Zoning Enforcement Officer in order to review the proposal for compliance with the Subdivision and Zoning codes.

Planning Board Review

After receiving sketch plan approval from the Zoning Enforcement Officer, a Final Map must be prepared by a licensed surveyor or engineer and submitted to the Town for Planning Board review.

Submit a digital copy, thirteen (13) 11x17 copies of the Final Map to the Planning Department at least ten (10) business days prior to a regular meeting of the Planning Board.

Final Map must include: A signed seal of a surveyor or engineer licensed in the State of New York, actual field survey of boundary lines of the amended parcels with bearings and distances and appropriate monumentation, and a signature block described below.

ALSO: include lines for signatures as shown below.

Planning Board Chairman

Date

Town Engineer

Date

The complete Lot Line Adjustment regulations can be found at the Niskayuna Town Code online, at: <http://lecode360.com/N110974>.



TOWN OF NISKAYUNA

Planning Department
One Niskayuna Circle
Niskayuna, New York 12309
Phone: (518) 386-4530
Fax: (518) 386-4592

Application For Lot Line Adjustments

Property Information

Physical Address(es): 2660 Rosendale Road
Section-Block-Lot(s): 51.-1-47.3 and 47.121
Number of Lots Involved: 2 Current Zoning(s): Residential-1
Approximate Acreage: Total of 1.32 +/- Acres

Additional Information: Existing lot is approximately 1.22+/- acres, lands to be annexed are 4,470+/- sf for a combined total of 1.32+/- acres. The to be annexed lot is a portion of a lot total of 6.12 +/- acre

Owner(S) Of Record (Attach additional sheets if necessary)

Section-Block-Lot: 51.-1-47.3

Name: Leah M. Murphy
Address: 2660 Rosendale Road
City/State: Nisky Zip: 12309
Phone: _____
E-Mail: _____

Name: Christopher A. Murphy
Address: 2660 Rosendale Road
City/State: Nisky Zip: 12309
Phone: _____
E-Mail: _____

Section-Block-Lot: 51.-1-47.121

Name: Willard Daggett
Address: 225 Agostino Ave.
City/State: Nisky Zip: 12309
Phone: _____
E-Mail: _____

Name: Bonnie Daggett
Address: 225 Agostino Ave.
City/State: Nisky Zip: 12309
Phone: _____
E-Mail: _____

Surveyor Or Engineer

Company: Empire Engineering
Name: Christopher Longo
Address: 1900 Duanesburg Rd.,
City/State: Duanes. Zip: 12056
Phone: 518-280-1371
E-Mail: CLongo@EmpireEng.net

Surveyor or engineer must have a current professional license with the State of New York.
LICENSE #: 095840



TOWN OF NISKAYUNA

Planning Department

One Niskayuna Circle

Niskayuna, New York 12309

Phone: (518) 386-4530

Fax: (518) 386-4592

Application For Lot Line Adjustments

Supplementary Information (Attach separate sheet if necessary)

1. What is the purpose of this adjustment? To increase the current lot depth from 221 feet to 246 feet.

2. What is the proposed timeline for adjustment completion? As soon as time permits

3. Is any part of the proposed adjustment within the regulated floodplain as designated by the Federal Insurance Rate Maps (FIRMs) adopted by the Town of Niskayuna on December 1983? Yes ___ NO X . If yes, explain what area is in the floodplain and how this is being accounted for in the adjustment process. _____

4. Is there additional information which may aid in the processing of this application (e.g., proposed variances, zoning change requests, building permit applications, etc.)? None

5. Are there any potential adverse environmental impacts that could be triggered by this lot line adjustment? Include any impacts to wetlands, surface water, groundwater, flooding, plants and animals, aesthetics, Historic sites, open space, recreation, transportation, noise, odor, light, geological features, etc. (Attach separate pages as necessary). None



TOWN OF NISKAYUNA

Planning Department

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Niskayuna, New York 12309

Phone: (518) 386-4530

Fax: (518) 386-4592

Notarized Owner's Acknowledgment/ Authorization For Lot Line Adjustment

Section-Block-Lot: 51.-1-47.121

Physical Address: 225 Agostino Ave.

Acknowledgments:

1. I am aware of and consent to the filing of this application.
2. I confirm that the information provided in this application is true and correct to the best of my knowledge and I assume all responsibility for the truth and validity of this application and all associated exhibits and documents submitted.
3. I agree to allow representatives of the Town of Niskayuna to go on or about the subject property for inspection purposes in connection with this application.
4. I confirm that I have uncontested legal ownership of the subject property, without any outstanding rights, reservations or encumbrances which could nullify the intended development and use of this lot line adjustment (if there is a loan or mortgage on the affected property, it is my responsibility to inform the appropriate party of the property changes and secure their consent).
5. If the owner is a corporation, partnership, limited liability company (LLC), governmental agency or other entity, I confirm that I am authorized to act on behalf of the corporation, partnership, LLC, governmental agency or other entity in processing this application.
6. I acknowledge that any potential or existing separate lots, land titles, partitions, previously subdivided lots or other such land units will be consolidated with this lot line adjustment and upon final approval only the newly created lot(s) will be recognized.

The undersigned hereby swears that the information provided on this application is true, correct and accurate.

Sworn to me on this 23rd day of October, 2023

Willard R. Daggett Bonnie Daggett
Signature of Applicant

WILLARD R. DAGGETT Bonnie Daggett
Printed Name

Debra O. Carrese

Notary Public, State of New York

10/23/23
Date

Each property owner is required to sign. Attach additional sheets if necessary

DEBRA O. CARRESE

Notary Public, State of New York

Qualified in Schenectady County

#04735073

Commission Expires February 28, 2026



TOWN OF NISKAYUNA

Planning Department
One Niskayuna Circle
Niskayuna, New York 12309
Phone: (518) 386-4530
Fax: (518) 386-4592

Notarized Owner's Acknowledgment/ Authorization For Lot Line Adjustment

Section-Block-Lot: 51.-1-47.121

Physical Address: 225 Agostino Ave.

Acknowledgments:

1. I am aware of and consent to the filing of this application.
2. I confirm that the information provided in this application is true and correct to the best of my knowledge and I assume all responsibility for the truth and validity of this application and all associated exhibits and documents submitted.
3. I agree to allow representatives of the Town of Niskayuna to go on or about the subject property for inspection purposes in connection with this application.
4. I confirm that I have uncontested legal ownership of the subject property, without any outstanding rights, reservations or encumbrances which could nullify the intended development and use of this lot line adjustment (if there is a loan or mortgage on the affected property, it is my responsibility to inform the appropriate party of the property changes and secure their consent).
5. If the owner is a corporation, partnership, limited liability company (LLC), governmental agency or other entity, I confirm that I am authorized to act on behalf of the corporation, partnership, LLC, governmental agency or other entity in processing this application.
6. I acknowledge that any potential or existing separate lots, land titles, partitions, previously subdivided lots or other such land units will be consolidated with this lot line adjustment and upon final approval only the newly created lot(s) will be recognized.

The undersigned hereby swears that the information provided on this application is true, correct and accurate.

Sworn to me on this 4 day of October

Leah Murphy
Signature of Applicant

Leah Murphy
Printed Name

10/4/23
Date

Morgan Weinberg
Notary Public, State of New York

Each property owner is required to sign. Attach additional sheets if necessary

MORGAN WEINBERG
NOTARY PUBLIC-STATE OF NEW YORK
No. 01WE6446156
Qualified in Albany County
My Commission Expires 01-17-2027



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VIII. 1

MEETING DATE: 12/11/2023

ITEM TITLE: DISCUSSION: An application for a 3-lot minor subdivision at 2890 River Rd.

PROJECT LEAD: Patrick McPartlon and Genghis Khan

APPLICANT: Michael Dussault, P.E., agent for the owner

SUBMITTED BY: Laura Robertson, Town Planner

REVIEWED BY:

☒ Conservation Advisory Council (CAC) ☐ Zoning Board of Appeals (ZBA) ☐ Town Board

☐ OTHER:

ATTACHMENTS:

☒ Resolution ☒ Site Plan ☐ Map ☐ Report ☐ Other:

SUMMARY STATEMENT:

Michael Dussault, P.E., of Engineering Ventures, P.C. and agent for Ryan Lucey, property owner, has made an application for Sketch Plan Approval – 4-Lots or Less for a 4-lot subdivision at 2890 River Rd. The proposed subdivision will divide the existing 5.26 Acre property at 2890 River Rd and the 0.83 Acre property contiguous to it along Seneca Rd into 4 lots of 0.46, 0.46, 2.64 and 2.53 Acres, respectively. The existing home at 2890 River Rd is in very poor condition and will be demolished.

The property is located within the R-1 Low Density Residential zoning district.

The Planning Board granted sketch plan approval at their 11/27/23 meeting. The applicant and his team attended the 12/6/23 CAC meeting and discussed revisions to the site plan that are in-process but are not documented and submitted yet. The CAC discussed the project and chose to defer making a SEQR recommendation until the updated documents were submitted and could be reviewed at their 1/4/24 meeting.

BACKGROUND INFORMATION

The property owner, Ryan Lucey, met with Department Heads of the Niskayuna Planning, Water, Sewer & Engineering and Highway Departments to discuss a proposed 4-lot subdivision as shown in the drawing entitled "Subdivision Plan 2890 River Rd." by Engineering Ventures, P.C. dated 6/23/23 with no subsequent revisions. At the time Mr. Lucey owned the 5.26 Acre property at 2890 River Road and was in the process of purchasing the 0.83 Acre property contiguous to it along Seneca Rd. The utility review performed by the Town representatives identified the project area as being susceptible to flooding during heavy rain events. It was noted that a thorough storm water review will be required. Mr. Lucey was informed that for his proposed subdivision to come before the Planning Board he would need to demonstrate site control by obtaining signature approval of the application from the current owner of the 0.83 Acre portion of land or wait until the sale of the land to him was completed.

On 8/23/23 Mr. Lucey provided with Planning Office with the following documents.

- A sketch plan application for a minor subdivision of 4-lots or less
- A “Contract For Purchase and Sale of Real Estate” dated 8/16/23 indicating that Mr. Lucey owned the 0.83 Acre parcel of land.
- A 1-page survey drawing entitled “Survey Lands of RPL Family Trust #2890 River Rd.” by Gilbert VanGuilder Land Surveyor, PLLC dated 12/1/2022 with no subsequent revisions.
- A 1-page subdivision site plan entitled “Subdivision Plan Proposed 4-Lot 2890 River Rd.” by Engineering Ventures P.C.” dated 8/23/23 with no subsequent revisions.
- A Short Environmental Assessment Form (EAF) – Part 1 dated 6/22/23.

6/23/23 Subdivision Drawing

This drawing includes 4 lots. Two (2) of the lots front River Road, one (1) lot fronts Seneca Road near its intersection with River Road and one (1) lot fronts Seneca Road near the cul-de-sac at the northeast end of the road.

8/23/23 Subdivision Drawing

This drawing includes 4 lots. Three (3) of the lots front River Road, the one (1) lot near the intersection of Seneca Rd and River Rd has been eliminated and the one (1) lot that fronts Seneca Rd. near the cul-de-sac at the northeast end of the road remains.

Mr. Lucey and his representatives are before the Board this evening to present and discuss his application. The Planning Board and Planning Office should review the application relative to Town codes and the current storm water conditions along Seneca Rd.

8/28/23 Planning Board (PB) meeting – Ryan Lucey and Michael Roman attended the meeting and presented the project to the Board. They explained the 6/23/23 4-lot subdivision drawing included two lots on Seneca Rd and two lots on River Rd. The 8/23/23 drawing includes one lot on Seneca Rd and 3 lots on River Rd. The Board and Planning Office discussed the history of storm water accumulation during storms in this general area and stated a through upstream and downstream storm water analysis will be needed. Mr. Khan stated that in other areas of Niskayuna the Board has essentially inherited storm water challenges – in this area, and on this project, they have the opportunity to avoid storm water related issues. The Board noted that the small strip of property along Seneca Rd near the intersection with River Rd may be able to be used to help mitigate storm water events. The Board concluded their discussion with a request that a few additional items be added to the site plan: the addition of limits of clearing and footprints of homes that are representative of the size the applicant intends to build.

9/6/23 PB Project Lead site walk – The PB project leads and Mr. Lucey walked the project site to obtain a first-hand look at the land, wetlands, grading, neighboring properties, etc.

9/6/23 Conservation Advisory Council (CAC) meeting – The CAC briefly reviewed the project at their regularly scheduled meeting. Ms. Robertson presented the site plan and provided background regarding the storm water challenges in the area. She asked the Board to familiarize themselves with the project details and the project site. She suggested they drive by the area to get a first-hand feel for the distances between houses, storm water drainage areas, etc. Chairman Strayer noted that he would like to see a multi-use path be included in the plan connecting Seneca Rd to River Road Park. He also noted that a Town access easement along River Road along the

project area would be helpful for the installation of a future sidewalk or multi-use path someday. Ms. Robertson said the CAC will be reviewing this again during the October 4, 2023 meeting.

9/11/23 Planning Board (PB) meeting – Mr. Roman and Mr. Lucey attended the meeting. The co-project leads, Patrick McPartlon and Genghis Khan updated the Board on their observations during the 9/6/23 site walk. They noted the upland properties, Iroquois and Rosendale schools, Campo Court, etc., and observed that water generally flows towards the existing culvert under Seneca Road and into the wetland area of 2890 River Road. Ms. Robertson noted that Niskayuna Zoning Code includes sections requiring the examination of upstream and downstream drainage when conducting a Stormwater Management Report. The discussion primarily focused on drainage and how to efficiently assess the existing condition and post-development condition. Ms. Robertson recommended that existing stormwater reports for the neighboring sites be reviewed by Mr. Lucey's engineer. Mr. McPartlon encouraged the Board members to visit the site and acquaint themselves with the grading, vegetation, etc. Ms. Finan noted that Mr. Lucey still needs to demonstrate full site control of the thin strip of land along Seneca Road via either signed approval of the current land owner or evidence that he is the landowner. Ms. Robertson noted that the Planning Office is in the process of securing quotes for a TDE review of the project.

A summary of actions that have occurred since the 9/11/23 meeting is as follows.

- Mr. Lucey submitted a FOIL request and received the Stormwater Management Report for the Iroquois Middle School project that is currently underway.
- The Planning Office has received 2 quotes for a TDE review of the proposed project.
 - One additional quotation is expected.
- The Planning Office has located the Storm Water Management Report for the Campo Court 7-lot major subdivision that is upstream from the proposed action.
 - Stormwater reports for other upstream areas are in the process of being located
- At the request of Mr. Lucey, a site walk with the Engineering and Highway Departments is planned for Thursday 10/5/23.

10/2/23 Planning Board (PB) meeting – Mr. Lucey and Mr. Roman attended the PB meeting. Chairman Walsh asked Mr. McPartlon, co-project lead of the project for the Planning Board, to provide a quick update since the last meeting. He stated that a Town Designated Engineer (TDE) was in the process of being selected and a site walk was being planned to familiarize everyone with the property. Mr. Roman added that the applicant's engineer was preparing a storm water management report.

10/4/23 Conservation Advisory Council (CAC) meeting – Laura Robertson, Town Planner, provided the CAC with background information on the proposed project. She described the slides and pictures that have been assembled documenting recent storm water related events in the area recently. A CAC member stressed that we need to make sure we are planning for the future and heeding storm water trends, etc. The CAC requested that the site plan drawings include representative footprints of the homes that are intended for the lots rather than small generic squares or rectangles. They also requested an inventory of animals that inhabit the area that may be impacted by the development of the land.

10/5/23 Site walk – A site walk was held at noon on 10/5/23. Participant's included Ms. Robertson, Town Planner, & Mr. Henry of the Planning Office, Mr. Doug Cole, the TDE from Prime

Engineering, Mr. Yetto Superintendent of Water, Sewer and Engineering, Mr. Smith Superintendent of the Highway Department, Mr. McPartlon and Mr. Khan of the Planning Board, Mr. Lucey and his team including his engineer and a few interested neighbors. The Planning Office explained the roles and responsibilities of each member of the project team and stressed the importance of how important communication between the applicant's engineer and the TDE will be to the success of the project. The group walked the upstream areas and discussed how storm water is managed and drains on the property. Prior to concluding the site walk meeting the group noted that the next step is for the applicant's engineer to complete and submit a storm water management report.

10/16/23 Planning Board (PB) meeting – Mr. Lucey and his design team were present at the meeting. Collectively, Mr. McPartlon, PB Project Co-Lead with Mr. Khan, Mr. Roman and Mr. Dussault, P.E. provided the Board with an update on the project.

- Mr. Roman noted that Mr. Lucey had closed on the purchase of the lot of land forming a thin strip along Seneca Rd.
- Mr. Dussault provided an update on the onsite and offsite stormwater analysis
 - He noted that he agreed with the analysis performed on the Iroquois Middle School
 - The upstream analysis was performed using the 25-year storm rainfall rates
 - His downstream analysis was performed using the 5-year storm rainfall rates
 - The analysis showed that the existing culverts under Seneca Rd. are undersized
 - With the assumptions noted in the report, the onsite stormwater discharge is essentially the same post-project as pre-project
- The Planning Board and Planning Office discussed how to best review and provide appropriate feedback to the applicant on the project at this stage (sketch plan stage) of the project.
- It was determined that TDE comments regarding the stormwater analysis and site plan would be valuable to help the applicant and the Board quantify potential challenges inherent in the site.
- The Board noted that a TDE had been selected and would begin the technical review as soon as an escrow account was set up.

The following activities and revisions to the site plan occurred since the 10/16/23 PB meeting.

- 10/27/23 – An escrow account was established and the TDE was immediately engaged.
- 11/6/23 – A revised site plan drawing was received (dated 11/3/23) consisting of 3-lots and is included in the packet for the 11/13/23 PB meeting.
- 11/8/23 – A 1st TDE comment letter was received by the Planning Office and is included in the packet for the 11/13/23 PB meeting.

11/8/23 Conservation Advisory Council (CAC) meeting – The Planning Office provided a general review of the history and status of the project and noted receipt of the 1st TDE comment letter and revised 3-lot subdivision site plan. Ms. Robertson noted that the CAC will be reviewing the project in more detail as the review process moves forward.

11/13/23 Planning Board (PB) meeting – Mr. Roman, agent for Mr. Lucey, and Mr. Dussault, of Engineering Ventures, attended the meeting and represented Mr. Lucey. They referenced the revised site plan drawings dated 11/3/23 which now depict a 3-lot subdivision. Mr. Cole, of Prime Engineering and TDE for the project, summarized his TDE response letter dated 11/8/23. A detailed discussion of the project ensued and the group agreed on the following.

- Site control for the application was established on 11/2/23 when Mr. Lucey's ownership of Tax Parcel 51.9-2-1.2, the lot of land along Seneca Rd. near the intersection of River Rd., was recorded in the Schenectady County Clerk's Office.

- Proposed design reduced from 4-lot subdivision to 3-lot subdivision.
- The new lots will include on-lot stormwater management practices (retention basins, etc.) such that the post development runoff will be equal to or less than the pre development runoff.
- Design includes an 80' wide easement to the Town that encompasses the ditch in the wetlands
- Stormwater report will have to be revised to reflect the 3-lot design.
- Stormwater analysis will be performed using 100 yr. rainfall rates.
- Mr. Lucey and the Town will explore a conservation easement, extending the 80' easement or deeding the land along Seneca Rd. near River Rd. to the Town to enable the land to be used as a stormwater management basin.
- Mr. Dussault will provide written responses to the TDE letter dated 11/8/23.
- The Town will include upstream and downstream analysis and culvert design in their town-wide drainage analysis project.

11/27/23 Planning Board (PB) meeting – The applicant and the Planning Board Project Leads provided the Board with an overview and update of the project. After a short discussion the PB approved Resolution 2023-28 granting sketch plan approval to the proposed 3-lot subdivision.

Since the 11/27/23 PB meeting the applicant has provided the following documents to the Planning Office.

- 11/28/23 – A 21-page report entitled “Endangered Species Habitat Suitability Assessment Report” by Gilbert VanGuilder Land Surveyor, PLLC dated 9/22/23.
- 11/28/23 – A 19-page report entitled “Phase 1 Archaeological Survey 2890 River Rd. Town of Niskayuna Schenectady County 23PR05721 by Timothy J. Abel, PhD 33512 SR 26 Carthage, NY 13619 dated 11/21/23.
- 12/5/23 – A 1-page letter entitled “USACE 2890 River Road Subdivision and Three New Single-effect Family Homes, 2890 River Rd, Niskayuna, NY 12309, 23PR05721 by Jessica Schreyer, Archaeology Unit Program Coordinator, of the New York State Parks, Recreation and Historic Preservation Department dated 12/4/23.

12/6/23 Conservation Advisory Council (CAC) meeting – The applicant and his engineer attended the meeting and updated the CAC on the proposed project. They noted that they are designing stormwater retention areas for each of the lots to control the post-development stormwater discharge to pre-development levels. They also noted that the basement elevation of the home on lot 2 will be 1' above the 100-year flood elevation. After a discussion the Council chose to table making a SEQR recommendation until they can review updated site plans that were discussed.

The next steps for the project are to close out the action items from the 11/13/23 PB meeting.



TOWN OF NISKAYUNA
WATER & SEWER DEPARTMENT
HIGHWAY DEPARTMENT

One Niskayuna Circle
Niskayuna, New York 12309

Matthew J. Yetto, P.E.
Superintendent of Water, Sewer,
and Engineering

(518) 386-4500

Ray Smith
Superintendent of Highway

December 5, 2023

RE: 2890 River Rd. 3-Lot Subdivision

The proposed plan dated 11/3/23 includes an 80' wide drainage easement to be granted to the Town. If possible, it would be preferable for the eastern portion of the site to be conveyed to the Town. This portion of the property already contains an easement for an existing sewer trunk main and a significant amount of federal wetlands. Ownership of this land would provide improved access for the maintenance of the sewer line as well provide space for any future drainage improvements that may be necessary.

The plan to utilize private stormwater control practices on the proposed building lots is the preferred method for handling the increased amount of stormwater expected to be generated by the development. The practices must be designed to handle the runoff from of a 100 year or greater storm event.

The addition of a multipurpose easement running between the River Road Park property and Seneca Road should be requested across the southwest corner of lot #3. The purpose of the easement would be to maintain the existing walking path to the park and for the installation of a water service to the River Road Park property from Seneca Road.

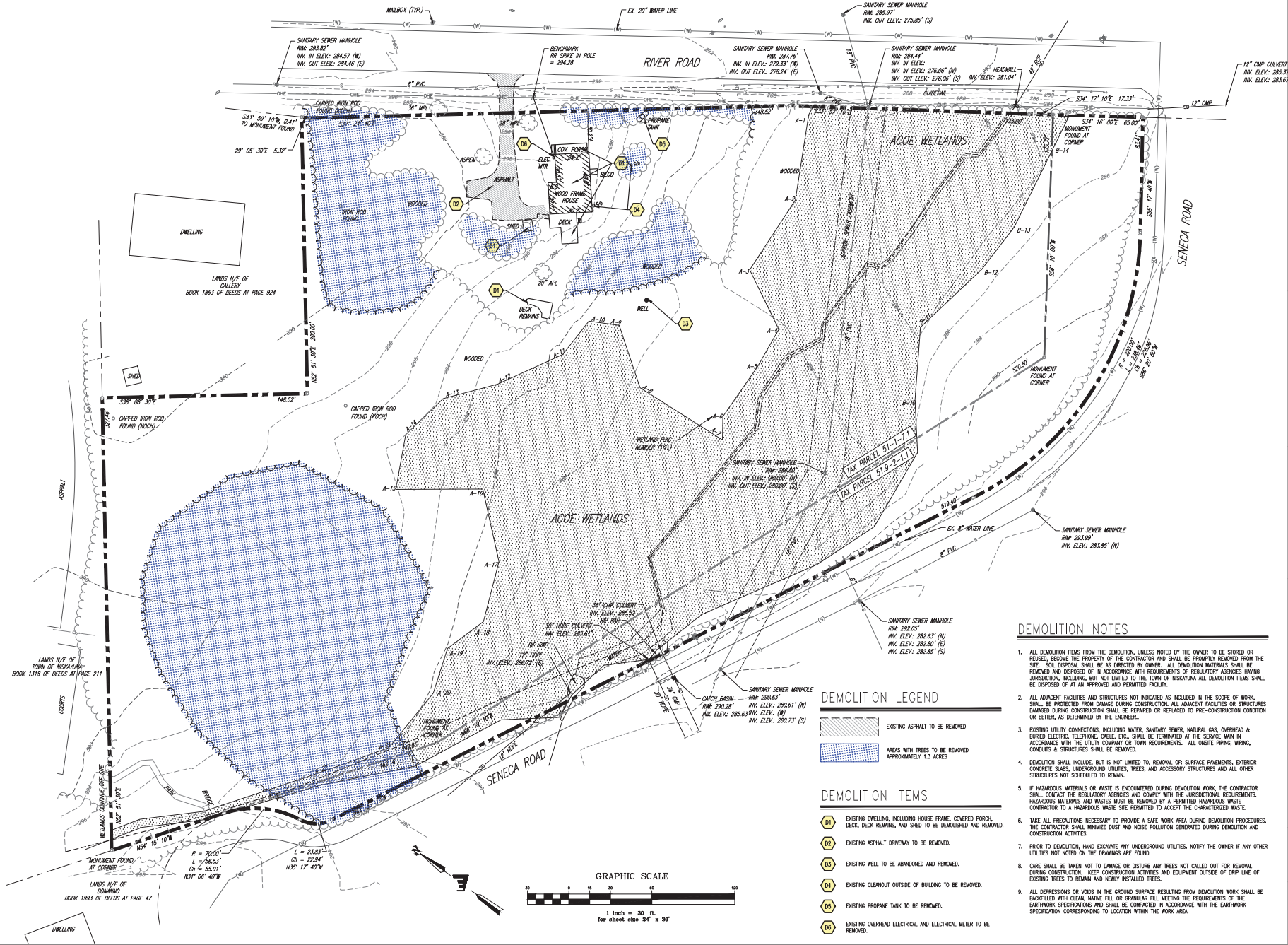
Sincerely,

Matthew J. Yetto, P.E.
Superintendent of Water, Sewer, and Engineering

Ray Smith
Superintendent of Highway



C001



DEMOLITION NOTES

1. ALL DEMOLITION ITEMS FROM THE DEMOLITION, UNLESS NOTED BY THE OWNER TO BE STOKED OR REUSED, BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE SITE. SOIL DISPOSAL SHALL BE AS DIRECTED BY OWNER. ALL DEMOLITION MATERIALS SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH REQUIREMENTS OF REGULATORY AGENCIES HAVING JURISDICTION, INCLUDING, BUT NOT LIMITED TO THE TOWN OF NISKAYUNA. ALL DEMOLITION ITEMS SHALL BE REMOVED BY AN APPROVED AND PERMITTED FACILITY.
2. ALL ADJACENT FACILITIES AND STRUCTURES NOT IDENTIFIED AS INCLUDED IN THE SCOPE OF WORK, SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. ALL ADJACENT FACILITIES OR STRUCTURES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO PRE-CONSTRUCTION CONDITION OR BETTER, AS DETERMINED BY THE ENGINEER.
3. EXISTING UTILITY CONNECTIONS, INCLUDING WATER, SANITARY SEWER, NATURAL GAS, OVERHEAD & BURIED ELECTRIC, TELEPHONE CABLE, ETC., SHALL BE TERMINATED AT THE SERVICE MAIN IN ACCORDANCE WITH THE UTILITY COMPANY OR TOWN REQUIREMENTS. ALL ONGITE PIPING, WIRING, CONDUITS & STRUCTURES SHALL BE REMOVED.
4. DEMOLITION SHALL INCLUDE, BUT IS NOT LIMITED TO, REMOVAL OF: SURFACE PAVEMENTS; EXTERIOR CONCRETE SLABS; UNDERGROUND UTILITIES; TREES; AND ACCESSORY STRUCTURES AND ALL OTHER STRUCTURES NOT SCHEDULED TO REMAIN.
5. IF HAZARDOUS MATERIALS OR WASTE IS ENCOUNTERED DURING DEMOLITION WORK, THE CONTRACTOR SHALL CONTACT THE REGULATORY AGENCIES AND COMPLY WITH THE JURISDICTIONAL REQUIREMENTS. HAZARDOUS MATERIALS AND WASTE MUST BE REMOVED BY A PERMITTED HAZARDOUS WASTE CONTRACTOR TO A HAZARDOUS WASTE SITE PERMITTED TO ACCEPT THE CHARACTERIZED WASTE.
6. TAKE ALL PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK AREA DURING DEMOLITION PROCEDURES. THE CONTRACTOR SHALL MAINTAIN EXIST AND NOISE POLLUTION GENERATED DURING DEMOLITION AND CONSTRUCTION ACTIVITIES.
7. PRIOR TO DEMOLITION, HAND EXCAVATE ANY UNDERGROUND UTILITIES. NOTIFY THE OWNER IF ANY OTHER UTILITIES NOT NOTED ON THE DRAWINGS ARE FOUND.
8. CARE SHALL BE TAKEN NOT TO DAMAGE OR DESTROY ANY TREES NOT CALLED OUT FOR REMOVAL DURING CONSTRUCTION. KEEP CONSTRUCTION ACTIVITIES AND EQUIPMENT OUTSIDE OF JUMP LINE OF EXISTING TREES TO REMAIN AND NEWLY INSTALLED TREES.
9. ALL DEPRESSIONS OR Voids IN THE GROUND SURFACE RESULTING FROM DEMOLITION WORK SHALL BE BACKFILLED WITH CLEAN, WETTED FILL OR GRANULAR FILL MEETING THE REQUIREMENTS OF THE EARTHWORK SPECIFICATIONS AND SHALL BE COMPLETED IN ACCORDANCE WITH THE EARTHWORK SPECIFICATION CORRESPONDING TO LOCATION WITHIN THE WORK AREA.

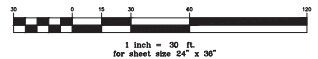
DEMOLITION LEGEND

- EXISTING ASPHALT TO BE REMOVED
- AREAS WITH TREES TO BE REMOVED APPROXIMATELY 1.3 ACRES

DEMOLITION ITEMS

- D1 EXISTING DWELLING, INCLUDING HOUSE FRAME, COVERED PORCH, DECK, DECK REMAINS, AND SHED TO BE DEMOLISHED AND REMOVED.
- D2 EXISTING ASPHALT DRIVEWAY TO BE REMOVED.
- D3 EXISTING WELL TO BE ABANDONED AND REMOVED.
- D4 EXISTING CLEANOUT OUTSIDE OF BUILDING TO BE REMOVED.
- D5 EXISTING PROPANE TANK TO BE REMOVED.
- D6 EXISTING OVERHEAD ELECTRICAL AND ELECTRICAL METER TO BE REMOVED.

GRAPHIC SCALE





STATE OF NEW YORK
COUNTY OF ALBANY

Date	Description	No.	By

ENGINEERING VENTURES PC

2877 Park Avenue, Suite 2A, Nanuet, NY 10946 • (845) 894-1232
 60 MacArthur Blvd., Suite 203, Elmsford, NY 10523 • (914) 833-0331
 4140 Route 9W, Suite 200, Nanuet, NY 10946 • (845) 894-1232

RPL Family Trust
 2505 Whitford Lane
 Nanuet, NY 12949

EXISTING CONDITIONS AND DEMOLITION PLAN

2890 RIVER ROAD

TOWN OF NISKAYUNA, SCHENECTADY COUNTY, NY

Sheet Title: **EXISTING CONDITIONS AND DEMOLITION PLAN**

Project Title: **2890 RIVER ROAD**

Scale: 1" = 30.00 FT.

Date: 11/20/2023

Sheet No.: 22/23

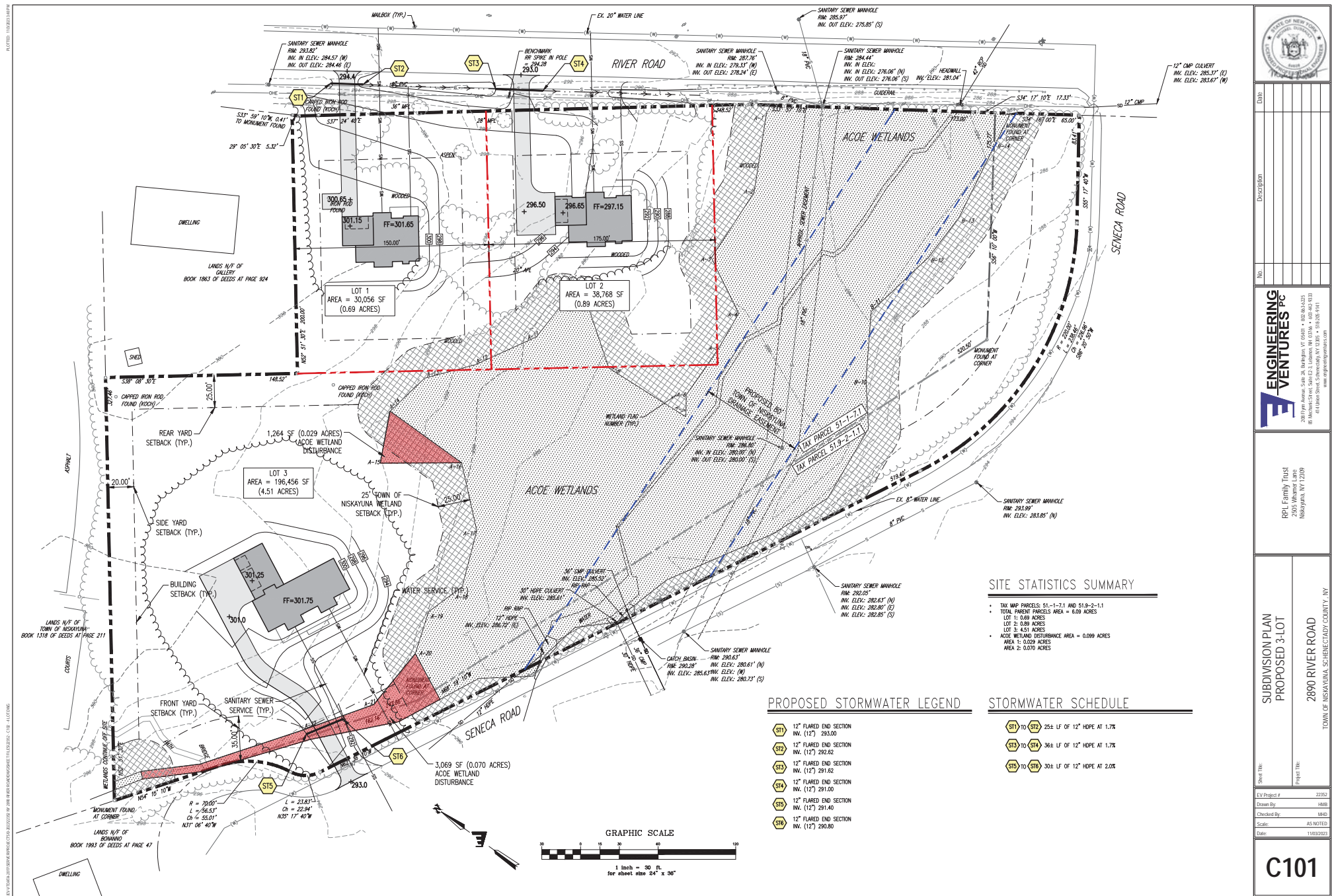
Drawn By: 1648


Checked By: 1640

Scale: 1" = 30.00 FT.


Date: 11/20/2023

C100





Date	Description	No.



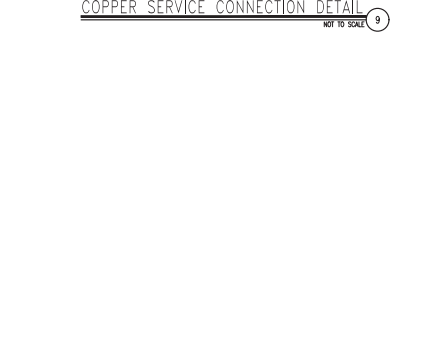
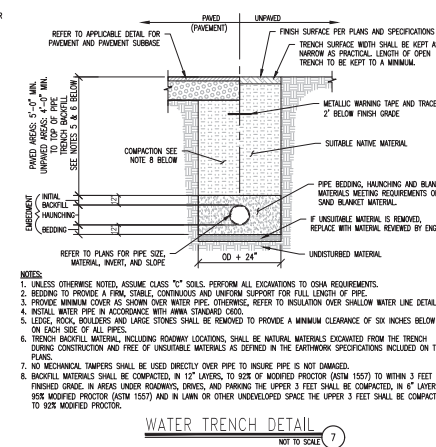
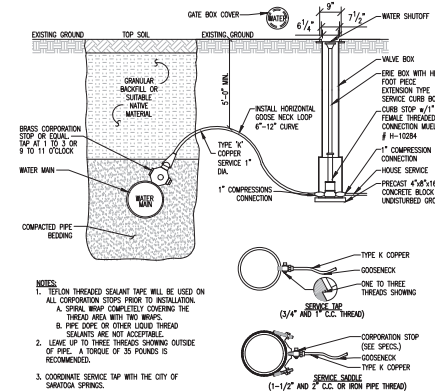
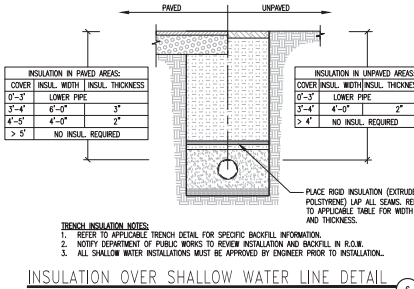
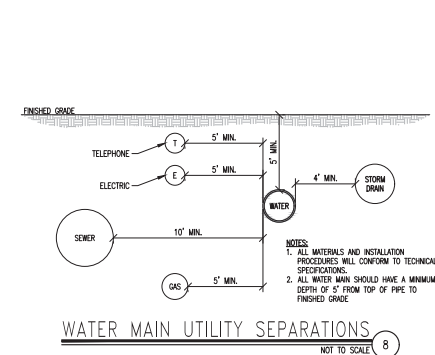
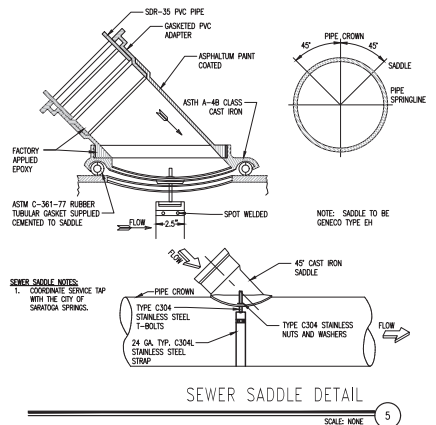
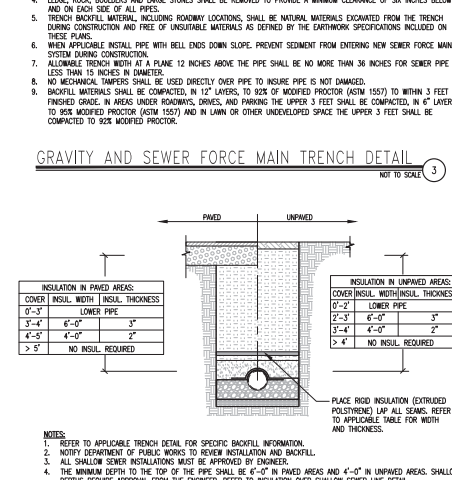
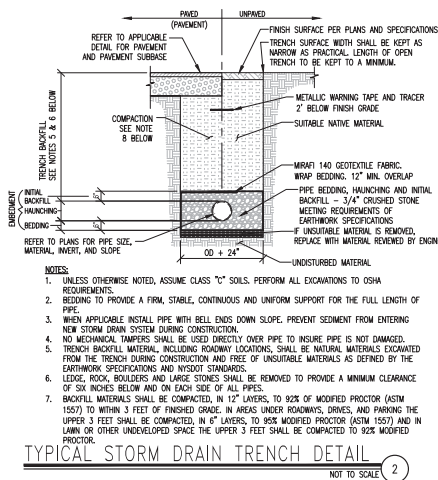
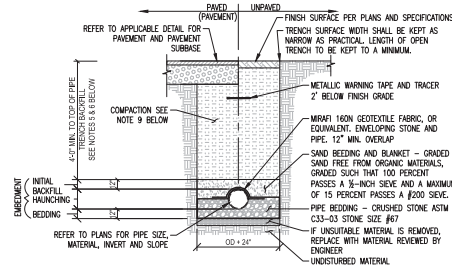
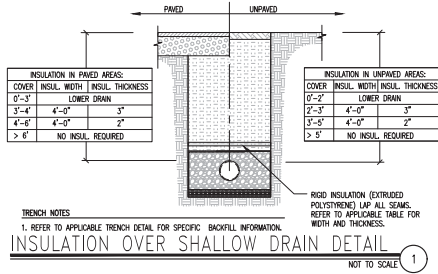
ENGINEERING VENTURES PC
2887 Park Avenue, Suite 2A, Manhattan, NY 10019 • (212) 680-1325
60 Madison Street, Suite 403, Elmwood Park, NY 11003 • (516) 443-0331
4140 Southpark Drive, Suite 100, Dallas, TX 75246 • (972) 242-7471
www.engr-ventures.com

RPL Family Trust
2505 Whitford Lane
Niskayuna, NY 12059

SUBDIVISION PLAN
PROPOSED 3-LOT
2890 RIVER ROAD
TOWN OF NISKAYUNA, SCHENECTADY COUNTY, NY

Sheet No.: 110030023
E.V. Project #: 22062
Drawn By: 16468
Checked By: 16460
Scale: AS NOTED
Date: 11/03/2023

C101



RPL ENGINEERING VENTURES PC

2897 River Road, Suite 2A, Mahanoy City, PA 17046 • (717) 261-1234
 6 Mahanoy City, PA 17046 • (717) 261-1234
 6 Mahanoy City, PA 17046 • (717) 261-1234

Project No: 2202

Drawn By: 1048

Checked By: 1048

Scale: AS NOTED

Date: 11/03/2023

Site Details

2890 RIVER ROAD

TOWN OF NISKAYUNA, SCHENECTADY COUNTY, NY



Albany Office

100 Great Oaks Boulevard, Suite 114, Albany, NY 12203

P: 1.833.723.4768

November 8, 2023

Laura Robertson, AICP
Town Planner
One Niskayuna Circle
Niskayuna, NY 12309

Re: Town of Niskayuna
2890 River Road Subdivision Review
Our Project No. 230322-000R

Dear Mrs. Robertson,

We are in receipt of Sketch Plan Application dated 6/22/2023, River Road Survey Drawing dated 12/1/2022, Subdivision Site Plan dated 11/3/2023, Short Form Environmental Assessment Form (SEAF) dated 6/22/2023, TDE Scope of Work dated 9/11/2023, River Road Drainage Report dated revised 10/17/2023, and Stormwater Flood Prone Areas revised 8/8/2023. The applicant proposes to construct up to three (3) new residential single-family homes on a total of 6.09 acres of land located at 2890 River Road tax parcels 51.-1-7.1 and 51.9-2-1.1, with 0.099 acres of ACOE wetland disturbance. Two homes will have frontage on River Road, and one will have frontage on Seneca Road. One home that would have had frontage on River Road has been removed from this updated plan we received on 11/6/2023 (previously 4 lot subdivision). Based on our review of the materials provided we have the following comments:

Short Environmental Assessment Form:

1. The Applicant has indicated in their answer to question 14 that wetlands and suburban habitats are typically found on the project site, however the Subdivision Site Plan shows large areas of wooded lands. We ask the Applicant to include Forest in their answer to question 14.

Applicant for Sketch Plan Approval-4 Lots or Less

1. No comments.

Site Plan:

1. The Site Plan scale is 1-inch equals 30 feet, meeting the Map Requirements for a Minor Subdivision of no less than 1-inch equals 100 feet.
2. The Town code requires direction of drainage flow to be indicated on the plan.
3. The Applicant has provided the Survey of the Lands of RPL Family Trust which includes the corner monuments for both parcels 51.-1-7.1 and 51.9-2-1.1, dated 12/1/2022 and prepared by Gilbert VanGuilder Land Surveyor, PLLC.
4. Sheet C100 Existing Conditions and Demolition Plan shows a wood framed home to be razed in the general location of the proposed home on Lot 2 with a similar first floor elevation of about 297'. If

this home has a basement that is accessible, it would be advisable to perform an inspection to look for past water intrusion.

5. We had originally begun review of the 4-Lot Subdivision Plan Sheet C101 dated 8/23/2023 which contained different lot layouts on the stand-alone version and the version included as Attachment 7 of the Drainage Report. The applicant has since provided a new version of the Plan dated 11/3/2023 which now shows only 3 Lots. The Plan in the Drainage Report will need to be replaced with the latest version.
6. The Site Plan does not show all structures, wooded areas, streams, and other significant physical features within 200ft of the portion to be subdivided, particularly the structures present along Seneca Road. The name of the owner and all adjoining property owners should be identified.
7. The area of proposed wetland disturbance near the edge of Seneca Road at lot 3 is approximately 235 ft long and the proposed driveway culvert pipe is 30 ft long. It is believed that a long stretch of the lot 3 parcel is planned to have the wetlands filled to create lawn area, however, fill is not specifically called for on the plan. We would ask the applicant to clarify the extent of wetland disturbance along the frontage for this lot, how the drainage will be maintained and how much wetland disturbance is actually necessary.
8. The proposed finished floor elevation for the house on lot 2 is 297.15, which has been raised by 3.4' over the previous plan and is now about 11' above the ground surface elevation of the existing wetland edge (286.0'). Additionally, the ground elevation at the southeast (rear) corner of the house is proposed to be 292.0', which is only 6' above the ground surface elevation of the existing wetland. The Town has indicated that the wetland often has standing water and does not completely drain. Furthermore, basement floor elevations are typically at least 8 feet below the first floor. Therefore, there is a possibility of basement flooding at the house on lot 2. The Applicant should indicate how this issue will be addressed to meet the applicable requirements of the Niskayuna Town Code (Building Construction subsection 75-40), which state that *"Buildings built in soil which is water-bearing at any time of the year shall be maintained so that ground- and surface water will not penetrate into the habitable space."*
9. The Site Plan states that the wetland disturbance area will be 0.099 acres, which is less than the 1/2 acre wetland disturbance threshold for Army Corps of Engineers Nationwide Permit #29 - Residential Developments and is therefore acceptable.
10. The Site Plan shows the 25' wetland setback at both of the proposed impact areas on lot 3 after the loss of wetlands. The applicant should show the 25' buffer along the existing wetland boundary for a true picture of the impact.
11. Sheet C500 contains details for "Insulation over shallow drain detail", "Shallow sewer line insulation detail" and "Insulation over shallow water line detail". It is not clear on the Site Plan where these details are proposed to be used. We will also have to check with the Town Engineering Department to see if these details are allowed.

River Road Drainage Report

1. The Report will need to be updated to account for the change from 4 lots to 3 lots. The following comments refer to the lot numbering shown on the 11/3/2023 drawings.

2. Study Point 1 in the report is the inlet of the 30" and 36" culverts under Seneca Road, which is upstream of the project area. This area has been included in the study due to existing drainage concerns that the Town has and with the intent to make sure they do not worsen due to this development project. The analysis was performed for the 25 year storm event, with and without improvements to the wetland "channel" between the outlet of the 2 culverts and the inlet of the 42" culvert (Study Point 2). Both conditions showed that the culverts are undersized for the 25 year storm event and Seneca Road would be overtopped by as much as 18" of water, with only slight improvement when the wetland "channel" was improved.
3. Study Point 2 is the inlet of the 42" culvert under River Road, which is downstream of the proposed development project. As such, the Town code only requires initial evaluation during the 5 year storm event. The result of this analysis shows that the culvert cannot handle the 5 year storm event flow under existing or proposed conditions and water would eventually overflow River Road. This situation will only worsen under higher intensity rainfall events that should be modeled to determine a proper culvert size. An increase in through-put of the 42" culvert would require further study of potential impacts downstream of the culvert outlet.
4. The report shows stormwater flowing directly offsite from all 3 proposed lots without any detention or treatment that would be necessary for the increased impervious surfaces of roofs and driveways, which is contrary to the requirements of the New York State Stormwater Design Manual (SWDM). Please recheck the CN for pre and post-development area F, as it is shown as 79 for both.
5. As the development of the three lots includes new impervious surfaces from roofs and driveways, the Applicant needs to provide peak flow numbers for the pre-developed and post-developed lots for the 1-year, 10-year, and 100-year storm events, as required by the SWDM, to show that the post-development peak flows will be less than or equal to the pre-development peak flows for each event, as other subdivisions have been required to do in the Town.
6. The Applicant needs to show stormwater management practices that will provide for water quality treatment in addition to the quantity controls. Sediment removal and clearing debris from the wetland to improve a "flow channel" should not be factored into the flow calculations because over time these conditions will return resulting in a reduction of the storage and transmission capacity of the wetland back to its current state or less, and periodic maintenance of a natural wetland cannot be assumed due to future State or Federal requirements. Thus, the existing wetland cannot be used as a "practice" for reducing flows leaving the developed areas of the site and the flows that would leave the proposed lots and enter the wetland after development must not exceed the existing flows leaving those same areas of the site and going into the wetland prior to development.
7. Proposed Lot 2 may be able to take advantage of the redevelopment section of the SWDM, as there is an existing home and driveway that are to be removed prior to construction of a new home.
8. The Applicant should provide analysis of the 100-year storm through the unimproved wetland and culverts to ensure that these existing features can pass the peak flows from upstream, the new lots, and the wetland itself without flooding the proposed houses and lots.
9. Additional materials, including as-built mapping, plans and reports for Iroquois Middle School, Campo Court and Owasco Court stormwater management systems would be helpful in checking accuracy of the HydroCAD model in the Report.

Laura Robertson
River Road 4-Lot Subdivision Review
November 8, 2023
Page 4



If you have any questions, please feel free to contact me.

Sincerely,

KB Group of NY, Inc. dba PRIME AE Group of NY

Douglas P. Cole, P.E.
Senior Director of Engineering

cc: Matthew Yetto, Superintendent of Water, Sewer, and Engineering
Clark A. Henry, Assistant Town Planner

Short Environmental Assessment Form

Part 1 - Project Information

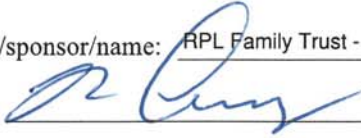
Instructions for Completing

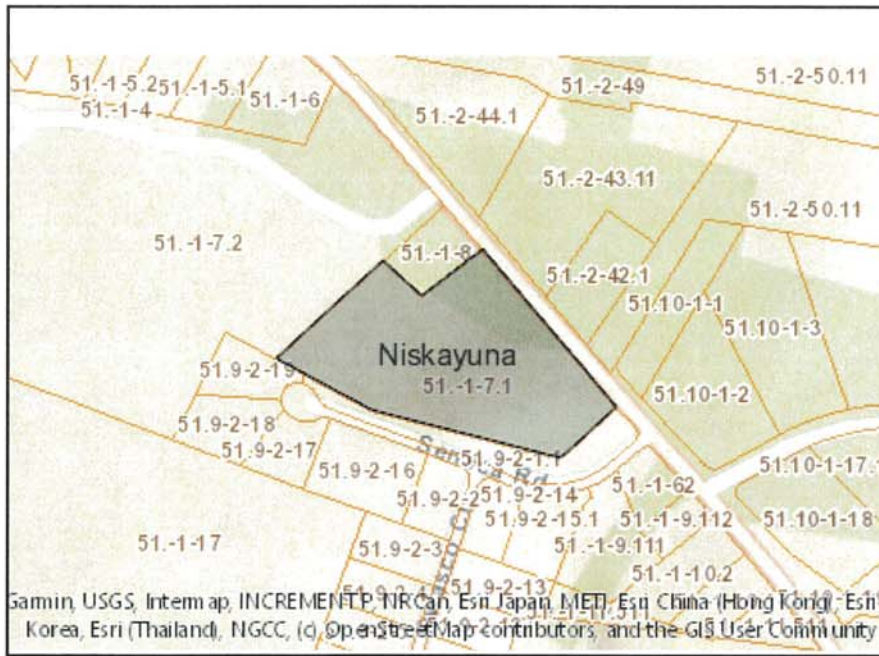
Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. 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: 2890 River Road Subdivision			
Project Location (describe, and attach a location map): 2890 River Rd, Niskayuna, New York 12309			
Brief Description of Proposed Action: The Applicant proposes a 4-lot subdivision of Town of Niskayuna tax parcels 51.-1-7.1 and 51.9-2-1.1. Each new lot will have a single family residence per lot. The proposed dwellings will be serviced by public water and sanitary sewer systems.			
Name of Applicant or Sponsor: RPL Family Trust		Telephone: 518-374-1461 E-Mail: ryan@midstateltd.com	
Address: 2505 Whamer Lane			
City/PO: Niskayuna		State: NY	Zip Code: 12309
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.		NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
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: US ACOE Nationwide Permit #29 for disturbance to freshwater wetlands.		NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
3. a. Total acreage of the site of the proposed action?		6.09 acres	
b. Total acreage to be physically disturbed?		2.00 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		6.09 acres	
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input checked="" type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input checked="" type="checkbox"/> Parkland			

5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Are public transportation services available at or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near the site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____ _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ The proposed action does not plan to exceed 0.1 acre of freshwater wetland disturbance. _____ _____			

14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input checked="" type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban		
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES
a. Will storm water discharges flow to adjacent properties?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe:	<input type="checkbox"/>	<input checked="" type="checkbox"/>
_____ Site storm water will be directed through roadside ditches and pipe conveyance systems to public storm sewer. _____		
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:	NO	YES
_____ _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe:	NO	YES
_____ _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe:	NO	YES
_____ _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>RPL Family Trust - Ryan Lucy</u> Date: <u>6/22/2023</u> Signature: <u></u> Title: <u>TRUSTEE</u>		



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 in order to obtain data not provided by the Mapper. Digital data is not a substitute for agency determinations.



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]	Yes
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to 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
Parks, Recreation and
Historic Preservation**

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

December 4, 2023

Hannah Buscemi
Staff Engineer
Engineering Ventures
414 Union St
Schenectady, NY 12305

Re: USACE
2890 River Road Subdivision and Three New Single-effect Family Homes
2890 River Rd, Niskayuna, NY 12309
23PR05721

Dear Hannah Buscemi:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the provided documentation in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project.

SHPO has reviewed the Phase I Archaeological Survey Report prepared for this project (November 2023; 23SR00626). No archaeological sites were identified by the survey. Therefore, it is the opinion of the New York SHPO that no historic properties, including archaeological and/or historic resources, will be affected by this undertaking.

If you have any questions, I can be reached at Jessica.Schreyer@parks.ny.gov.

Sincerely,

Jessica Schreyer
Archaeology Unit Program Coordinator

**PHASE 1 ARCHAEOLOGICAL SURVEY
2890 RIVER ROAD
TOWN OF NISKAYUNA
SCHENECTADY COUNTY
23PR05721**

prepared by

Timothy J. Abel, PhD
33512 SR 26
Carthage, NY 13619

for
RPL Family Trust
2505 Whamer Ln
Niskayuna, NY 12309

November 21, 2023

MANAGEMENT SUMMARY

PROJECT NAME/PIN: 2890 River Road/23PR05721

PROJECT TYPE/FUNDING: new construction/ private

CULTURAL RESOURCE SURVEY TYPE: Phase 1 archaeological survey

LOCATION: Town of Niskayuna, Schenectady County

SURVEY AREA (APE): 2.3 ha (5.7 ac)

U.S.G.S. QUAD NAME: Niskayuna, NY

SENSITIVITY ASSESSMENT:

Prehistoric: High based on proximity to known sites and streams

Historic: High based on MDS

ARCHAEOLOGICAL SURVEY METHODS:

Number of STPs: 66

Number of Units: 0

Surface survey: n/a

RESULTS OF ARCHAEOLOGICAL SURVEY:

Number of prehistoric sites identified: 0

Number of historic sites identified: 0

Number of NR listed/eligible sites that may be impacted: 0

AUTHOR: Timothy J. Abel, PhD

DATE: November 21, 2023

SPONSOR: SEQRA

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1.0 INTRODUCTION

This report documents a Phase 1 archaeological survey of 2890 River Road, Niskayuna, New York (NY), a residential parcel of 5.74 ac (tax lot 51.00-1-7.1) (Figure 1, Photo 1-2). The survey was requested by NYS Office of Parks, Recreation and Historic Preservation (OPRHP) to aid in their review of project 23PR05721, 2890 River Road Subdivision and One New Single Family Home. The survey was performed under contract with the lot owner, RPL Family Trust of Niskayuna, NY.

All aspects of the investigation were directed by Timothy J. Abel, PhD, who is the author of this report. The author is qualified as a consulting archaeologist under Section 36 CFR 61 of the National Parks Service Regulations, and under Section 14.09 of the State Parks, Recreation and Historic Preservation Law.

The purpose of the Phase 1 archaeological survey is to determine the effect of the proposed undertaking on archaeological resources within an area or potential effect (APE). The APE was defined based on client request and consultation with OPRHP. The survey was conducted in accordance with OPRHP's *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (OPRHP 1994).

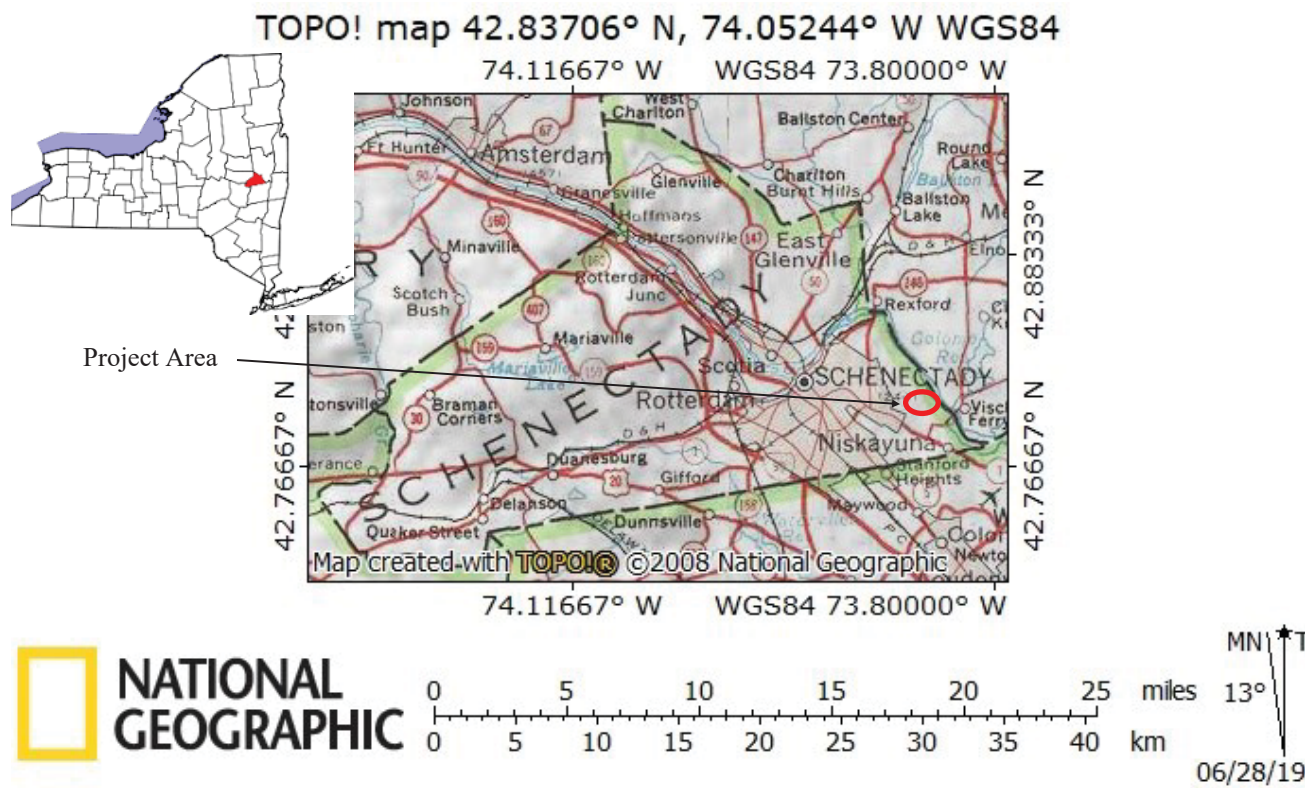


Figure 1— General project area location in Schenectady County.



Photo 1– View of typical ground cover within the PA.



Photo 2– View of overgrowth within the PA.

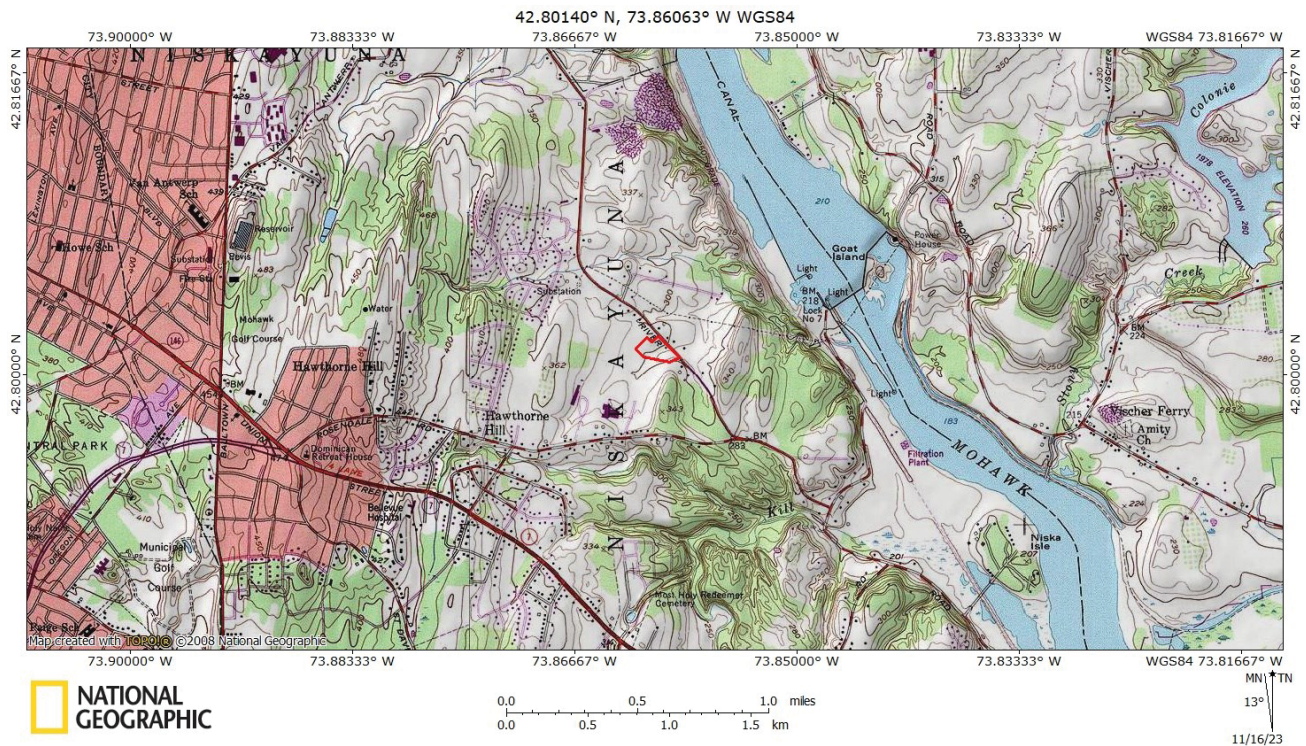


Figure 2– Project area location on the 1980 USGS 7.5" topographic map.

1.1 Project Area/Area of Potential Effect Definition

The project area (PA) is situated within the Town of Niskayuna, Schenectady County, NY, encompassing tax lot 51.00-1-7.1. The PA is located on the southwest side of River Road at the Seneca Road intersection. The lot encompasses 5.74 ac.

The area of potential effect (APE) for this undertaking was determined based on development plans provided by the client. It includes the entire tax parcel bounded by River Road on the northeast and parcel boundaries on all other sides. The APE encompasses 2.3 ha (5.74 ac) (Figure 3).

1.2 Physical Setting

The PA is situated within the Mohawk Valley section of the Hudson-Mohawk Lowland physiographic region (Cressey 1977). This region formed a significant corridor for transportation, commerce and communication throughout human history. The area is characterized by floodplains, terraces and lowland hills along the Mohawk River. Though the river flows in a narrow channel, the section is generally 16-48 km (10-30 mi) wide, bounded by steep erosion escarpments on either side that slope upward to the Appalachian and Adirondack Uplands.

The PA is situated on rolling lake plain topography between 86-91 m (282-300) ft above mean sea level (Figure 2). Slopes within the PA generally range from 3-8%. The PA drains into an unnamed wetland and swale that runs east-west through the PA and slopes eastward into the Mohawk River (Figure 2).

The soils of the PA are silt loams and channery silt loams created by run-off and sedimentation following the last deglaciation (Figure 4). These soils consist of a silty loam to loam topsoil, or in this case a plow zone, roughly 20-30 cm (10-12 in) in depth, above a silty loam to clay loam subsoil. Characteristics of the soils are summarized in Table 1. Deposition generally ended c. 15,300 cal BP with the drainage of the last of the pro-glacial lakes in the Mohawk Valley (Franzi, et al. 2016).

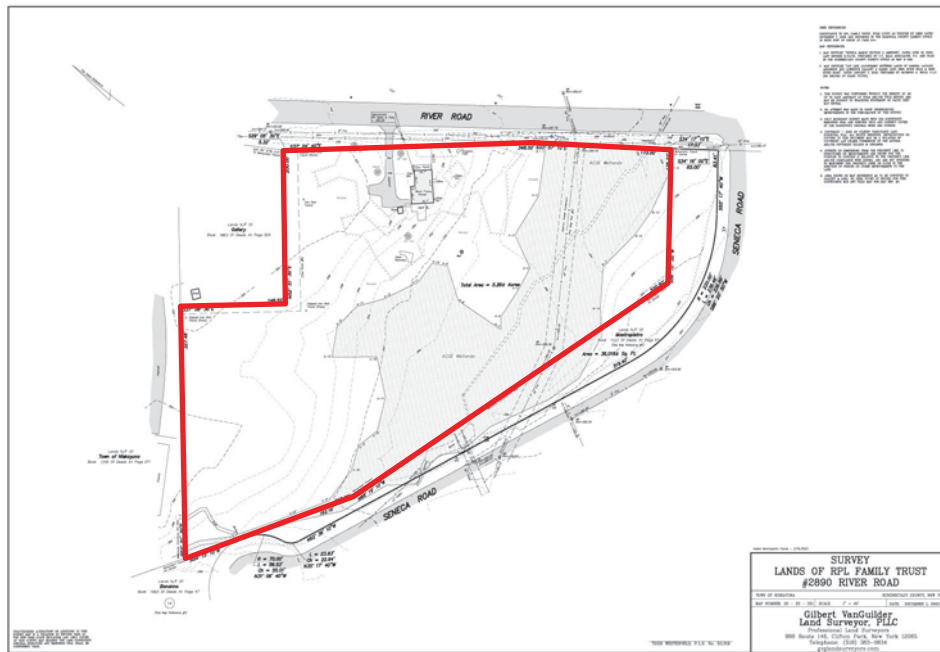


Figure 3—Project area boundaries.



Figure 4—Project area soils.

Table 1– Project area soils data summary.

Soil Type/ Symbol	Soil Horizon Depth	Color	Texture	Slope	Drainage	Landform
Fluvaquents, loamy; FL	A1- 0-13 cm (0-5 in) A2- 13-183 cm (5-72 in)	7.5YR2/1 10YR2/1	MuSiLo VGvSa	0-3%	Well	Floodplains
Madalin silt loam; Ma	Ap-0-23 cm (0-9 in) Eg-23-35 cm (9-14 in) Btg1-35-51 cm (14-20 in)	10YR3/2 10YR4/2 10YR5/2	SiLo SiLo SiCl	0%	poor to very poor	Lake Plains
Mardin chan- nery silt loam; MrD	Ap- 0-20 cm (0-8 in) BE- 20-30 cm (8-12 in) Bw1- 30-41 cm (12-16 in) Bw2- 41-51 cm (16-20 in) Bx1- 51-91 cm (20-36 in)	10YR4/3 2.5YR5/4 10YR5/4 10YR4/3 10YR4/4	Ch Si Lo Ch Si Lo Ch Si Lo Ch Si Lo Ch Si Lo	15-25%	Moderately well	Hills, slopes
Scio silt loam; ScB	Ap- 0-23 cm (0-9 in) Bw1- 23-48 cm (9-19 in) Bw2-48-79 cm (19-32 in) C- 79-102 cm (32-40 in) 2Cg- 102-183 cm (40-72 in)	10YR4/2 10YR5/6 10YR5/4 10YR5/3 2.5Y5/2	SiLo SiLo SiLo SiLo GvLoSa	3-8%	Moderately well	Outwash plains
Unadilla silt loam; UnB	Ap- 0-20 cm (0-8 in) Bw1- 20-30 cm (8-12 in) Bw2- 30-46 cm (12-18 in) Bw3- 46-79 cm (18-31 in) BC- 79-102 cm (31-42 in) 2C- 102-150 cm (42-65 in)	10YR4/3 10YR6/4 10YR5/6 10YR6/4 10YR5/4 10YR4/2	SiLo SiLo SiLo SiLo SaLo GvSa	3-8%	well	Lake Plain

1.3 Current Land Use and Integrity

The PA is situated in a suburban setting on a single residence lot. The residence at 2890 River Road has been unoccupied for some time, and is now condemned by the local Health Department. The rest of the lot is overgrown with woods and dense scrub thicket dominated by honeysuckle. There is a modern occupied residence adjacent to the north, and another across River Road to the east.

2.0 BACKGROUND RESEARCH

2.1 Site File Review

A search of the CRIS system at the time of survey revealed that the PA is within the polygon of one precontact archaeological site (NYSM 4750/9303.000128). The site is described as traces of occupation along the Mohawk River (Parker 1920). No further documentation is provided. These “traces” generally refer to reports of scattered artifact finds in an area, and not to discretely-defined sites. There may or may not be archaeological deposits present within the PA. There are five other inventoried archaeological sites within 1.6 km (1 mi) of the PA (Table 2).

There is one inventoried structure within the PA (2890 River Road/09303.000330). It is described as a single-family residence that has been determined National Register *not eligible*. There is one inventoried structure (2851 River Road/09303.000332) adjacent to the PA that is of undetermined National Register status. There are 25 other inventoried structures within 1.6 km (1 mi) of the PA. There are no properties listed on or eligible for the National Register of Historic Places within or adjacent to the PA.

2.2 Historic Map Review

Seven historic maps were reviewed for this survey ranging from 1856 to 1980 (Figures 2, 5-10). The lot appears in a rural agrarian setting from at least 1856. No structures are depicted within the PA on maps before 1930. Beginning in 1930, what is likely the extant residence at 2890 River Road is depicted consistently through 1980. Two farmsteads, one of which is consistent with the above inventoried structure at 2851 River Road, are depicted across River Road from the PA throughout the map sequence as W. van Vranken and J. van Vranken.

Table 2– List of known archaeological sites within 1.6 km (1 mi) of the project area.

USN	Name	Within/Adjacent	NR Status
9103.000102	UNNAMED SITE (NYSM 6235)		Undetermined
9303.000128	UNNAMED SITE (NYSM 4750)	Within	Undetermined
9303.000131	UNNAMED SITE (NYSM 6236)		Undetermined
9303.000132	UNNAMED SITE (NYSM 6237)		Undetermined
9303.000134	UNNAMED SITE (NYSM 6239)		Undetermined
9303.000245	Whitmyer Drive Precontact Site		Undetermined

2.3 Occupation History

There is little information available to assess the occupation history of the PA. Site file reviews document precontact occupation in the area generally, but few discrete archeological sites have been recorded. Though there are several pre-contact sites inventoried within 1.6 km (1 mi) of the PA, few have documented diagnostic artifacts associated with them. The area has generally been occupied by Native Americans since the end of the last glaciation c. 14,500 cal BP (Lothrop et al. 2016).

The Dutch, invited by the Mahicans, established Fort Orange at Albany in 1614. The Mahicans ceded territory in the lower Mohawk Valley to the Mohawk, and Fort Orange became a major trade link between the Mohawks and the Dutch. The Mohawk increasingly allowed Dutch settlement around the fort to develop. The settlement of Beverwijck around Fort Orange grew quickly, and Dutch settlers clamored for more land. Large parcels south of the Mohawk River and west of Beverwijck were secured by the Dutch Crown from the Mohawk by the mid-17th century and carved up for sale to Dutch aristocrats. Among the early settlers around the PA were the Clutes, Vedders, van Vrankens, Groots, Tymesons, Pearces, Jansens, and van Bockhoovens. The van Vrankens depicted on mid-19th century maps are no doubt descendants of those early van Vranken Dutch settlers (French 1860; Howell and Munsell 1886).

A major Dutch settlement developed at Schenectady beginning in 1661. When the English assumed control of Dutch lands in New York in 1664, they allowed Dutch settlers to stay, as long as they became English subjects. Schenectady gained municipal status in 1684. Throughout the early 18th century, the area was terrorized by attacks from French and French-allied Native Americans, and the city became a refuge for displaced area farmers and their families. These hostilities culminated in the French and Indian War, which ended in 1764 with the British in sole control of the northeast Americas. Schenectady was incorporated as a borough a year later.

With French depredations in the Valley resolved, settlement and development in the area resumed until the outbreak of hostilities between the colonies and Great Britain. The Mohawk sided with the British in the Revolutionary War and were forced to seek refuge with them in Canada. From bases in the St. Lawrence Valley, Mohawks under Joseph Brant and British under Sir John Johnson waged guerilla warfare against the Rebel settlers of the Mohawk Valley. Settlements were again abandoned or curtailed during the conflict.

After the Revolutionary War, settlement quickly returned to the Mohawk Valley. As a major artery into the western portions of New York, it was quickly developed as a transportation route bringing the young nation's rich agricultural produce to world markets. The Albany-Schenectady Turnpike opened in 1797, followed by the Erie Canal, completed in 1825. The Erie Canal crossed the Mohawk River on a great aqueduct just east of the PA. The Hudson-Mohawk Railroad followed in 1831. With these improvements, settlement in the Mohawk Valley exploded, and the infrastructure for manufacturing and freight transport was firmly developed.

The area that became the Town of Niskayuna remained in a rural agrarian setting throughout much of the 19th and early 20th century. Beginning in the mid-20th century, the area around the PA developed a suburban context as the City of Schenectady continued to grow. Much of what was farmland in the town is now, or soon will be consumed by housing developments.

3.0 ARCHAEOLOGICAL ASSESSMENT

3.1 Prior Surveys

A search within the CRIS system reveals that there have been no Phase 1b archaeological surveys conducted within the APE. No Phase 1b archaeological surveys have been conducted since 2000 in areas adjacent to the APE. There have been only two block Phase 1 archaeological surveys in the general vicinity, neither of which produced significant evidence of archaeological potential.



Figure 5— Project area location on the Fagan 1856 map..



Figure 6— Detail of the Beers and Beers 1866 map.

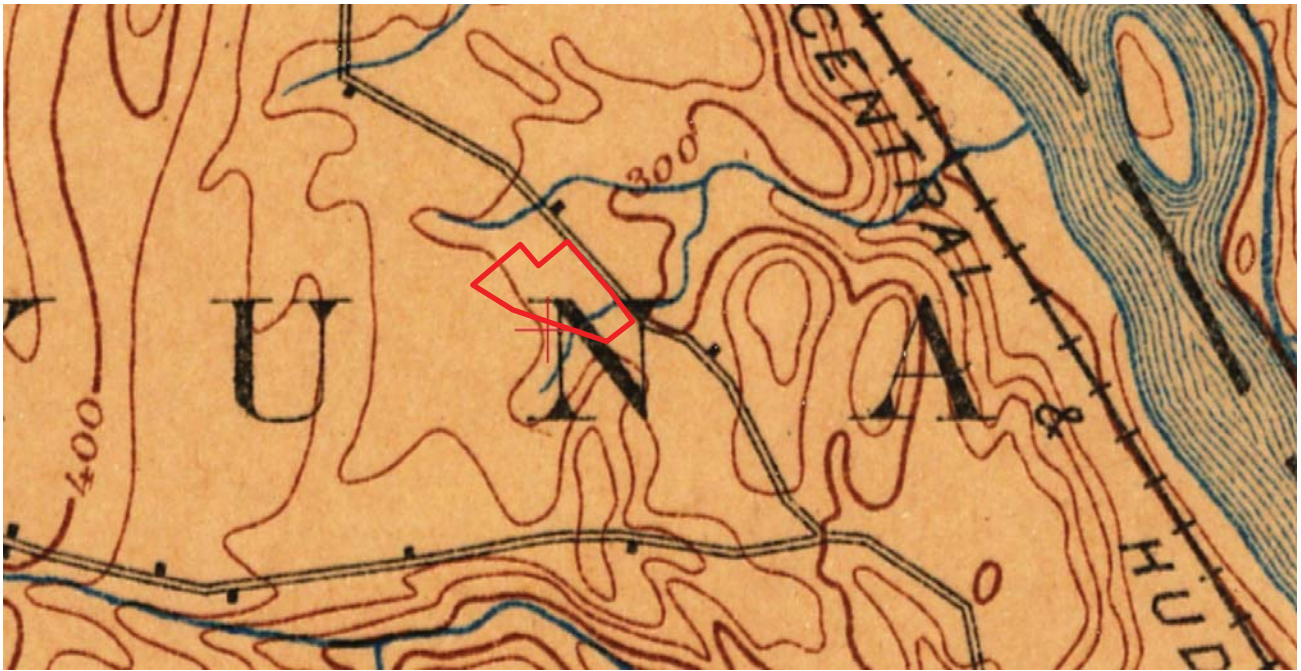


Figure 7– Detail of the 1895 USGS map.

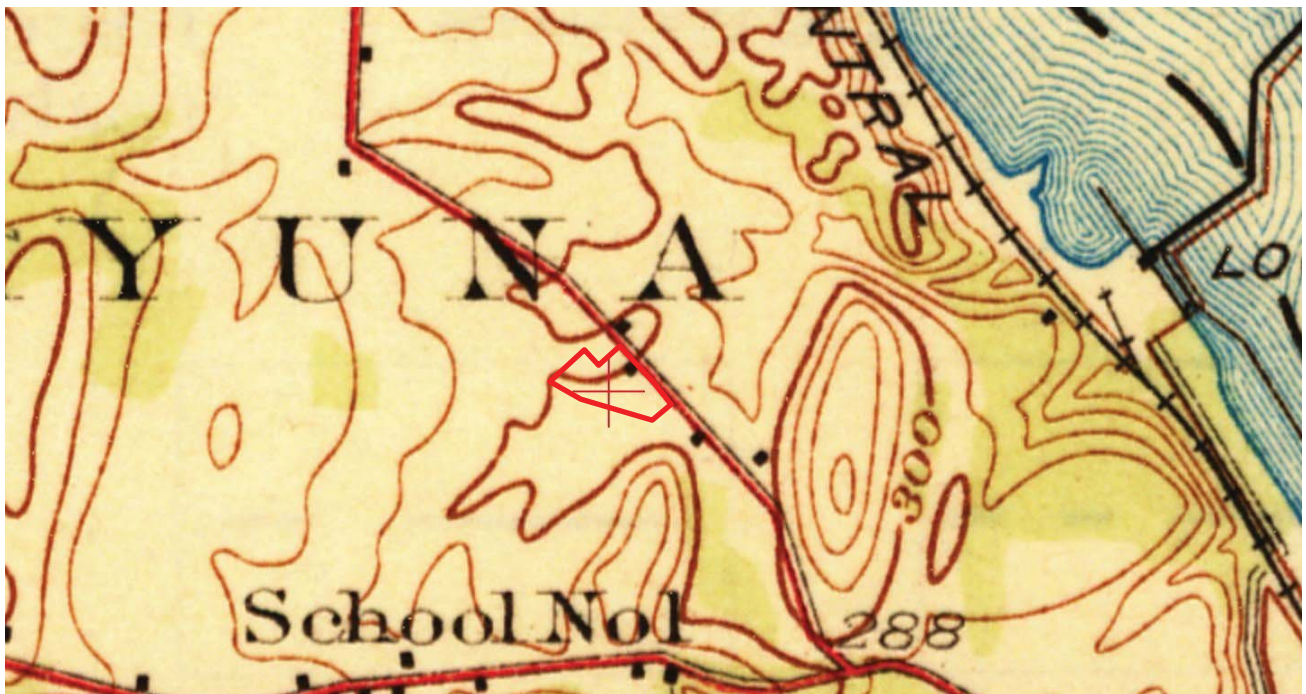


Figure 8– Detail of the 1930 USGS map.

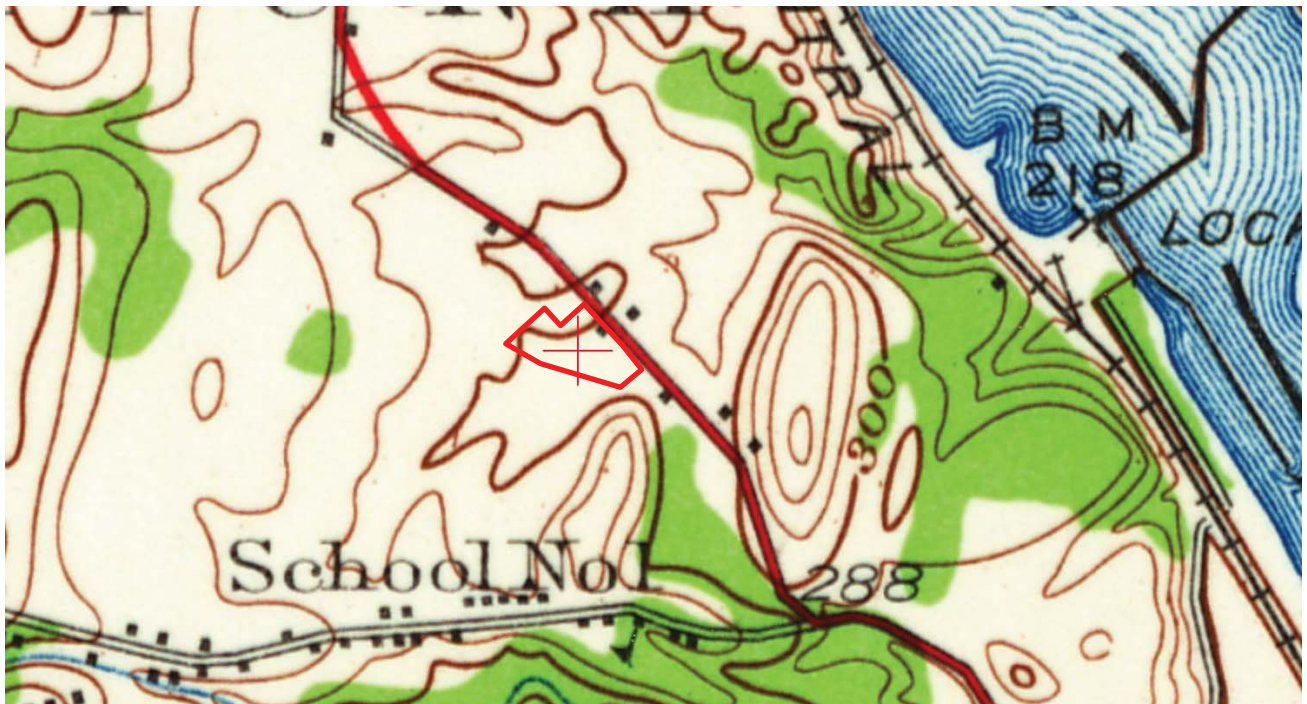


Figure 9– Detail of the 1947 USGS map.



Figure 10– Detail of the 1954 USGS map.

3.2 Site Walkover

Prior to survey the PA was walked to locate significant landmarks and define the PA boundary. Corners of the PA were located by survey markers. All landmarks were geo-referenced using a Trimble R1 handheld GPS receiver.

The residence at 2890 River Road was photodocumented (Photo 3-4). It is a two story, side-gable and rear wing frame house on a concrete foundation with cellar. The foundation appears to be plank-formed, which is consistent with a 1920s construction. The structure has seen a number of recent updates including vinyl windows, an asphalt shingle roof, vinyl siding and wood decks. It has been abandoned for some time. There is modern (less than 20 years old) trash strewn on the surface all around the structure.

3.3 Assessment

The PA has not been previously surveyed for archaeological deposits. Given its history, topography and the results of the CRIS and map review, it seems likely that there would be undocumented archaeological resources within the PA. The PA was likely deciduous mast forest prior to agricultural development in the early 19th century, but since then it appears to have remained consistently agricultural until the 1920s. The lack of archaeological sites in the area is likely due to the lack of systematic archaeological surveys. A Phase 1b field reconnaissance was determined to be warranted for this investigation.

4.0 ARCHAEOLOGICAL SURVEY

4.1 Survey methods

The field reconnaissance was conducted by the author and Ryan Devanny between 11/4-11/11/2023. All personnel meet 36CFR61 standards for their roles in this reconnaissance. Based on the topography and layout, it was determined that the archaeological reconnaissance of the PA could be best accomplished by a systematic shovel test survey.

Shovel test units (STPs) were excavated at 15 m (50 ft) intervals along each of 13 transects (A-M). Transects A-F were based 20 off Seneca Road from the north running south and heading 43° mag parallel to the north parcel boundary with the Town of Niskayuna recreation park. Transects G-M ran from north to south beginning 15 m (50 ft) off the shoulder of River Road. At the northeast corner of the APE. The STPs were numbered sequentially along each transect.

Each STP was excavated by hand to a depth sufficient to reach sterile subsoils, unless stopped by rocks or roots. Soils from each STP were screened through 1/4 inch mesh to search for artifacts. Notes were made of the depth and stratigraphy of each STP.

4.2 Survey results

Archaeologists excavated 66 STPs across the APE. The tested area covered 69% of the PA. The remaining 1.6 ac was not tested because it lay within delineated wetland and will not be developed, or it was at the east end of the APE, which will not be developed. Almost all STPs reached sterile subsoils. Those that did not could be explained by visual disturbance.

The STPs had a uniform profile characterized by 10-30 cm (4-12 in) of dark yellow-brown (10YR4/2) silty loam above a tan to brown (10YR6/4-6/6) silty loam subsoil. These profiles were considered to be typical for the soil types documented within the PA.

There were surprisingly few artifacts in any of the STs. ST B7 was disturbed and contained modern construction fill (PVC and modern nails). ST H2 encountered rock that may be part of a garage foundation. STs I2 and I3 contained 20th century window glass, coal and light bulb sockets consistent with the age of the residence. ST J2 contained coal ash. ST J3 contained modern glass and nails consistent with the age of the remodel. The cultural material evinces a light-density architectural midden within the A horizon of the parcel, concentrated around the structure. It is of limited research potential.

5.0 IMPACTS AND RECOMMENDATIONS

The Phase 1b systematic reconnaissance of the APE revealed evidence of a light density architectural midden within the A horizon surrounding the structure at 2890 River Road in Niskayuna, NY. The survey encountered no unexpected deposits. The midden is of limited research potential based on the recovered assemblage. No site was inventoried.



Photo 3– View of 2890 River Road, looking southwest.



Photo 4– View of 2890 River Road from the rear, looking toward the road.

Figure 11– Survey methodology and results

Based on this investigation, there appear to be no cultural resources within the APE eligible for listing on the National Register of Historic Places. It is recommended that the proposed undertaking will have no impact on any currently listed or eligible National Register properties. This recommendation refers to the area defined as the APE in Section 1.1, and is contingent upon this and any future undertakings remaining within the footprint of that APE. If future regulated undertakings are proposed that lie outside of the APE defined in Section 1.1, the OPRHP will need to be consulted for further action.

Like all surveys, this one has relied on a sampling of the project area based on an accepted standard methodology. No sampling strategy can be 100% failsafe against the possibility of cultural resources being actually found in the course of construction. Should this occur, the client is advised to stop construction and contact the OPRHP immediately for recommendations before continuing with construction. If any human remains should be discovered, all work should cease immediately. Contact the OPRHP and the local coroner to begin mitigation procedures.

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APPENDIX 1– SHOVEL TEST PROFILE DATA

STP	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS
A1	40 dk gr br si lo	50 yl br si lo	
A2	20 dk gr br si lo	30 yl br si lo	
A3	30 dk gr br si lo	40 yl br si lo	
A4	20 dk gr br si lo	30 yl br si lo	
A5	30 dk gr br si lo	40 yl br si lo	
A6	25 dk gr br si lo	35 yl br si lo	
A7	25 dk gr br si lo	35 yl br si lo	
B1	45 dk gr br si lo		
B2	25 dk gr br si lo	35 yl br si lo	
B3	20 dk gr br si lo	30 yl br si lo	
B4	20 dk gr br si lo	30 yl br si lo	
B5	20 dk gr br si lo	30 yl br si lo	
B6	25 dk gr br si lo	35 yl br si lo	
B7	30 mott dk gr br si lo	fill	
C1	50 dk gr br si lo		
C2	12 dk gr br si lo	25 yl br si lo	
C3	25 dk gr br si lo	35 yl br si lo	
C4	24 dk gr br si lo	35 yl br si lo	
C5	12 dk gr br si lo	25 yl br si lo	
C6	25 dk gr br si lo	35 yl br si lo	
D1	30 dk gr br si lo	40 yl br si lo	
D2	17 dk gr br si lo	27 yl br si lo	
D3	25 dk gr br si lo	35 yl br si lo	
D4	25 dk gr br si lo	35 yl br si lo	
D5	25 dk gr br si lo	35 yl br si lo	

STP	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS
D6	25 dk gr br si lo	35 yl br si lo	
E1	20 dk gr br si lo	30 yl br si lo	
E2	30 dk gr br si lo	40 yl br si lo	
E3	50 dk gr br si lo		
E4	30 dk gr br si lo	40 yl br si lo	
E5	20 dk gr br si lo	30 yl br si lo	
F2	20 dk gr br si lo	30 yl br si lo	
F3	20 dk gr br si lo	30 yl br si lo	
F4	20 dk gr br si lo	30 yl br si lo	
F5	23 dk gr br si lo	roots	
G1	30 dk gr br si lo	40 yl br si lo	
G2	20 dk gr br si lo	30 yl br si lo	
G3	20 dk gr br si lo	30 yl br si lo	
G4	30 dk gr br si lo	40 yl br si lo	
G5	30 mott dk gr br si lo	40 yl br si lo	
H1	30 dk gr br si lo	40 yl br si lo	
H2	30 dk gr br si lo	40 yl br si lo	poss foundation
H3	30 dk gr br si lo	40 yl br si lo	
H4	20 dk gr br si lo	30 yl br si lo	
H5	20 dk gr br si lo	30 yl br si lo	
I1	30 dk gr br si lo	40 yl br si lo	
I2	25 dk gr br si lo coal, window glass	35 yl br si lo	
I3	25 dk gr br si lo light bulb glass	35 yl br si lo	

STP	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS	DEPTH (cm) SOIL ARTIFACTS
I4	25 dk gr br si lo	35 yl br si lo	
I5	30 dk gr br si lo	40 yl br si lo	
J1	20 dk gr br si lo	30 yl br si lo	
J2	25 dk gr br si lo	35 yl br si lo	
J3	30 dk gr br si lo nails, glass	40 yl br si lo	
J4	40 dk gr br si lo	push	
K1	23 dk gr br si lo	33 yl br si lo	
K2	40 coal ash		
K3	35 dk gr br si lo	45 yl br si lo	
L1	30 dk gr br si lo	40 yl br si lo	
L2	15 dk gr br si lo	30 yl br si lo	
L3	20 dk gr br si lo	30 yl br si lo	
L4	23 dk gr br si lo	33 yl br si lo	
L5	25 dk gr br si lo	35 yl br si lo	
M1	45 dk gr br si lo	fill	
M2	30 dk gr br si lo	40 yl br si lo	
M3	30 dk gr br si lo	40 yl br si lo	
M4	27 dk gr br si lo	37 yl br si lo	

KEY :

dk-dark ; br=brown ; gr=grey ; yl=yellow ;
mott=mottled ; lo=loam ; si=silt

Gilbert VanGuilder
Land Surveyor, PLLC
988 Route 146, Clifton Park, NY 12065
383-0634
FAX 371-8437

Members

Robert Wilklow, PLS

Kevin Weed, PLS

September 22, 2023

**Endangered Species
Habitat Suitability Assessment Report**

To whom it may concern,

This letter and enclosed information were prepared in summary of a habitat study performed on September 22, 2023, TMP # 51.-1-7.1 (2890 River Road). The subject parcel is located on the southwest side of River Road, and the north side of Seneca Road in the Town of Niskayuna. The parcel is approximately 5.26± acres in size, currently consists of a single-family home, associated asphalt driveway, lawn area, brushy areas with the remaining land being forested. The proposed project includes approximately 1.30± acres of tree clearing/grubbing, with the construction of four single family residential homes, associated private driveways, with connection to public water and sanitary services.

An inquiry was submitted to U.S. Fish and Wildlife Service through the IPaC website to identify any potential threatened/endangered species that may occur within the subject parcel. The Service identified the Northern Long-eared Bat (*Myotis septentrionalis*) as potentially being present.

Species Requirements:

Northern Long- Eared Bat:

According to the U.S. Fish and Wildlife Service's website, "Suitable summer habitat for the NLEB consists of a wide variety of forested/wooded habitats where they roost, forage, and travel and may also include some adjacent and interspersed non-forested habitats such as emergent wetlands and adjacent edges of agricultural fields, old fields, and pastures. This includes forests and woodlots containing potential roosts (i.e., live trees and/or snags ≥3 inches DBH that have exfoliating bark, cracks, crevices, and/or cavities), as well as linear features such as fencerows, riparian forests, and other wooded corridors. These wooded areas may be dense or loose aggregates of trees with variable amounts of canopy closure. NLEBs are nocturnal foragers and use hawking (catching insects in flight) and gleaning (picking insects from surfaces) behaviors in conjunction with passive acoustic cues (Nagorsen and Brigham 1993, p. 88; Ratcliffe and Dawson 2003, p. 851). NLEB seem to prefer intact mixed-type forests with small gaps (i.e., forest trails, small roads, or forest-covered creeks) in forest with sparse or medium vegetation for foraging and commuting rather than fragmented habitat

or areas that have been clear cut (USFWS 2015, p. 17992). Individual trees may be considered suitable habitat when they exhibit characteristics of suitable roost trees and are within 1,000 feet of other forested/wooded habitat²⁸. The NLEB has also been observed roosting in human-made structures, such as buildings, barns, bridges, and bat houses; therefore, these structures should also be considered potential summer habitat. NLEBs typically occupy their summer habitat from mid-May through mid-August each year³⁰ and the species may arrive or leave some time before or after this period. Examples of unsuitable habitat: Individual trees that a greater than 1,000 feet from forested/wooded areas; Trees found in highly developed urban areas (e.g., street trees, downtown areas); and A pure stand of less than 3-inch DBH trees that are not mixed with larger trees. Suitable roosting habitat is defined as forest patches with trees of 5-inch (12.7 cm) DBH or larger.”

Habitat Suitability:

For the proposed project there is approximately 1.30± acres of tree clearing proposed. The majority of trees present within the project APE consist of trees with relatively smooth bark such as Red Maple (*Acer rubrum*), White Pine (*Pinus strobus*), Aspen Big Tooth (*Populus grandidentata*) and Northern Red Oak (*Quercus rubra*) which do not exhibit characteristics of suitable habitat. However, there are four trees within the project APE that possess exfoliating bark or crevice's that are proposed to be harvested. Within the wetland onsite there is an abundance of standing dead timber that possess crevices or exfoliating bark that are not proposed to be harvested and will remain intact. If tree clearing is conducted within winter months when Northern Long-eared Bats are likely to be in a hibernaculum and are not likely to occur in forested habitat (November 1 – March 31), we feel this project will have minimal effect on Northern Long-eared Bat roosting habitat.

The wetlands onsite will provide an abundance of flying insects, and therefore potential foraging habitat for the Bat. For the proposed project there are two small areas of wetland impact proposed, the majority of the wetlands onsite will remain intact. Therefore, we feel this project will have minimal effect on Northern Long-eared Bat foraging habitat for the Bat. There are no known maternal roost trees onsite, and the project site is not located within 0.25 miles of a hibernaculum.

The project sponsor proposes to minimize and mitigate for potential impacts by, 1.) Site clearing will occur during winter months November 1 – March 31. 2.) Installation of construction fence around the perimeter of the proposed clearing to eliminate incidental additional clearing. 3.) Prohibiting the use of pesticides and herbicides onsite. 4.) Construction activities will not be performed after sunset.

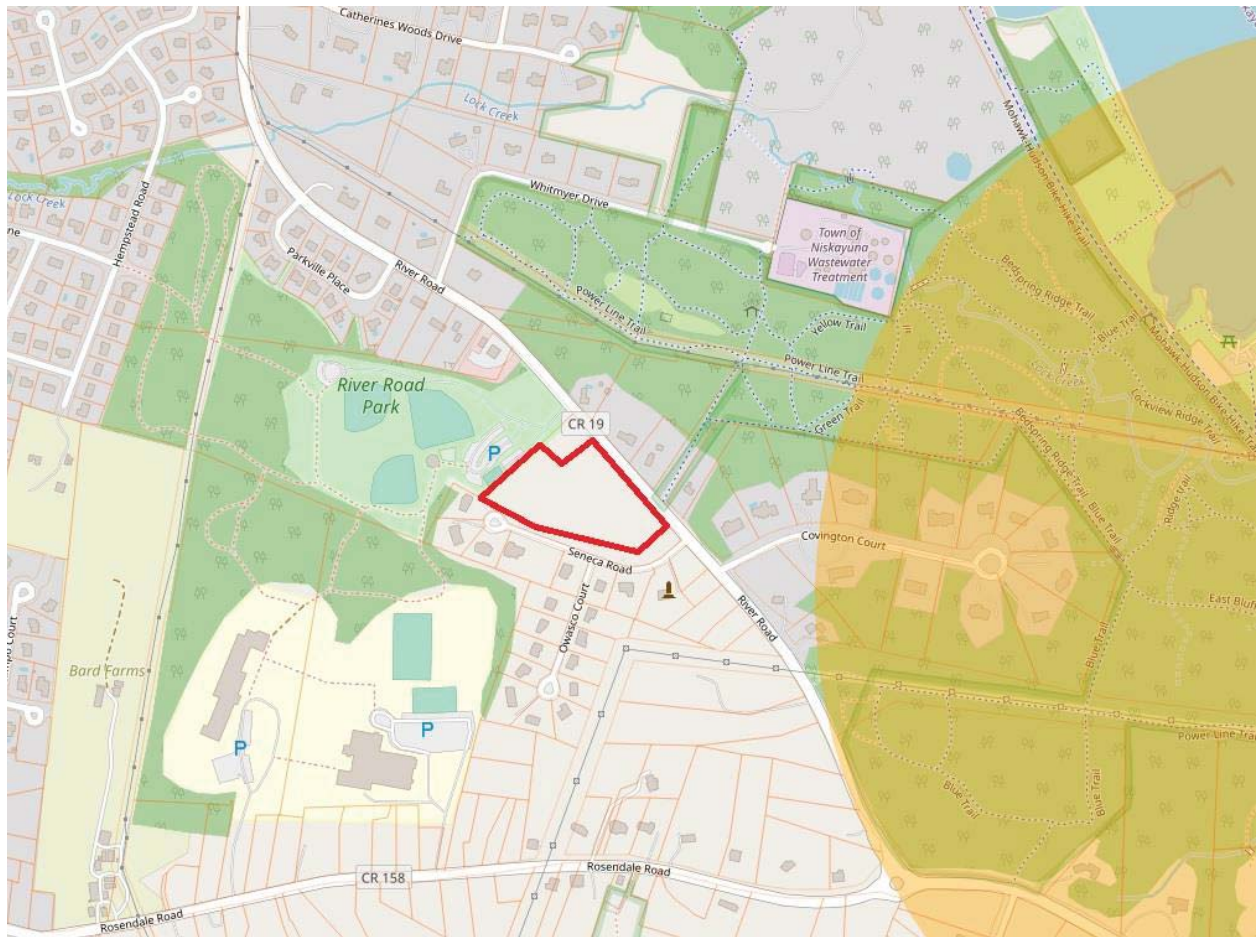
Respectfully,

Jackie Pitts

Jackie Pitts

Environmental Technician

Figure 1: N.Y.S.D.E.C. Rare Plant or Animals Mapping



NYSDEC Rare Plants or Animals Layer

Figure 2: IPaC Resource List

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Schenectady County, New York



Local office

New York Ecological Services Field Office

☎ (607) 753-9334

📅 (607) 753-9699

✉ fw5es_nyfo@fws.gov

3817 Luker Road
Cortland, NY 13045-9385

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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

The following species are potentially affected by activities in this location:

Mammals

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

Insects

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

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the [Bald and Golden Eagle Protection Act](#) and the [Migratory Bird Treaty Act](#).

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Golden Eagle <i>Aquila chrysaetos</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Jan 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

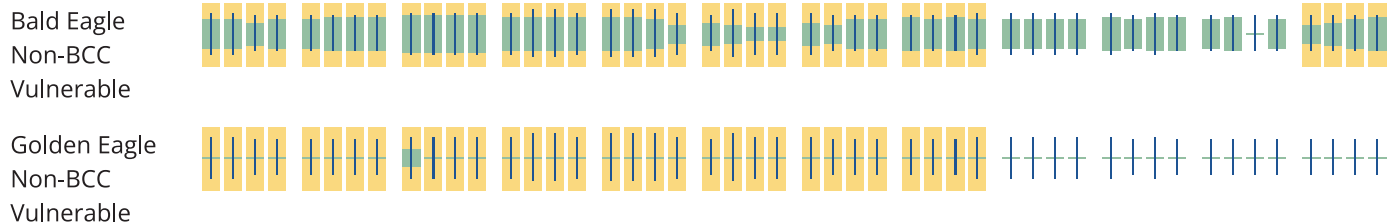
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <https://www.fws.gov/program/migratory-birds/species>
- Measures for avoiding and minimizing impacts to birds
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Dec 1 to Aug 31
Belted Kingfisher <i>Megasceryle alcyon</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 15 to Jul 25

Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Blue-winged Warbler <i>Vermivora pinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Jun 30
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
Cerulean Warbler <i>Dendroica cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 20 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Eastern Meadowlark <i>Sturnella magna</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 25 to Aug 31
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
Evening Grosbeak <i>Coccothraustes vespertinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 15 to Aug 10

Golden Eagle *Aquila chrysaetos*

Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1680>

Lesser Yellowlegs *Tringa flavipes*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Prairie Warbler *Dendroica discolor*

Breeds May 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker *Melanerpes erythrocephalus*

Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Upland Sandpiper *Bartramia longicauda*

Breeds May 1 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9294>

Wood Thrush *Hylocichla mustelina*

Breeds May 10 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey

effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

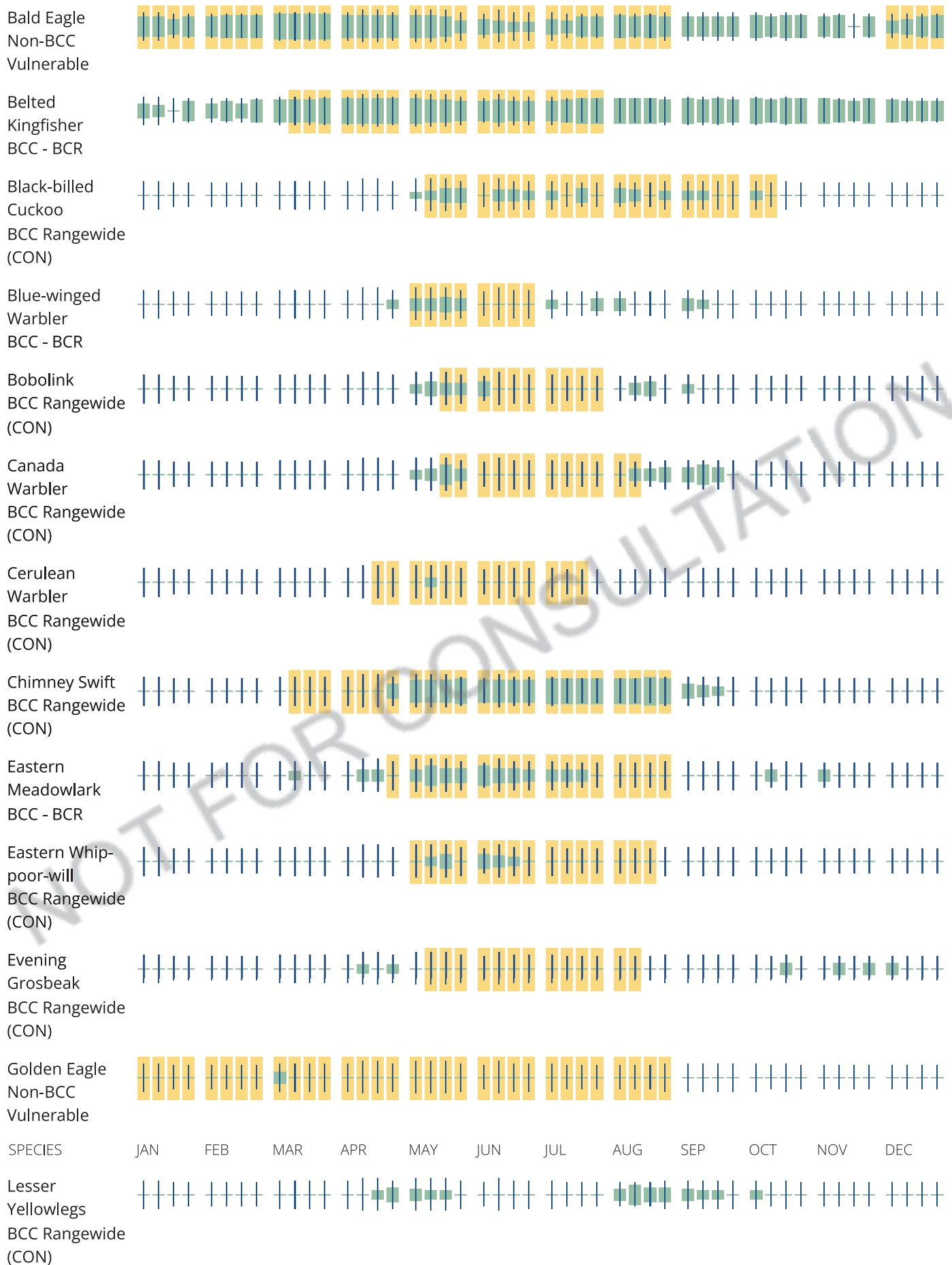
No Data (—)

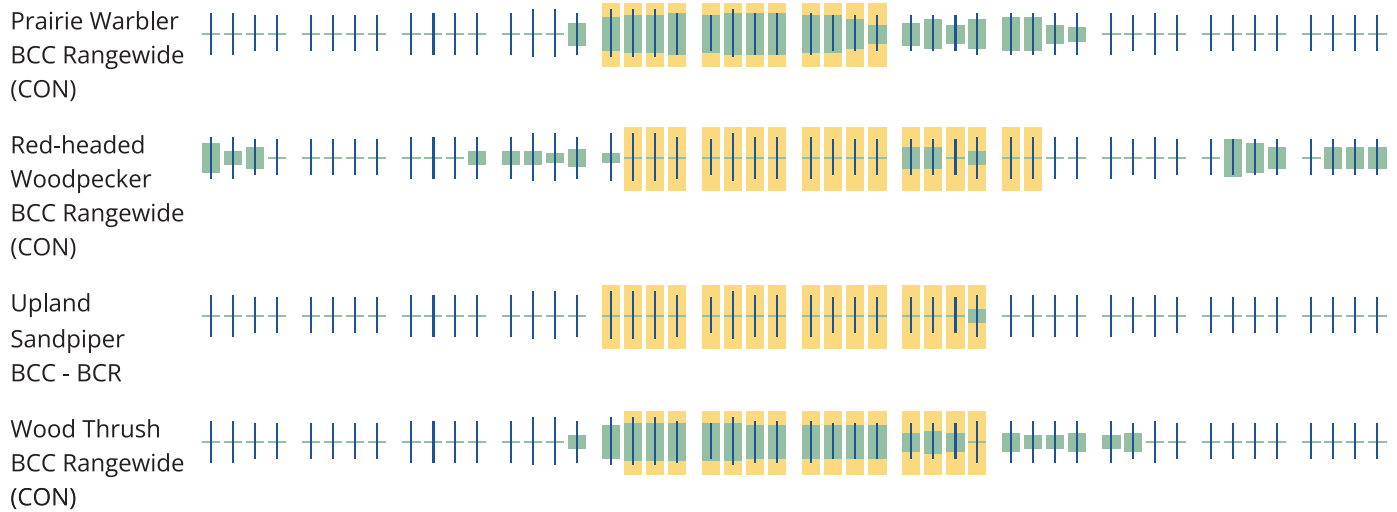
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.







Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies.

Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VIII. 2

MEETING DATE: 12/11/2023

ITEM TITLE: DISCUSSION: 1430 Balltown Rd. – A site plan application for an addition to the existing building and expansion of the parking lot.

PROJECT LEAD: Leslie Gold

APPLICANT: John Roth, Highbridge Development

SUBMITTED BY: John Roth

REVIEWED BY:

☒ Conservation Advisory Council (CAC) ☐ Zoning Board of Appeals (ZBA) ☐ Town Board
☐ OTHER:

ATTACHMENTS:

☐ Resolution ☒ Site Plan ☐ Map ☐ Report ☐ Other:

SUMMARY STATEMENT:

Mr. Roth submitted an application for an addition to expand the existing 9,980 sq. ft. building by 2,700 sq. ft. (27%) and expand the parking lot area from approximately 39 to 61 parking spaces (64%). The building was most recently used as a law office building.

The applicant provided updated design in drawing dated 12/1/23. The proposed underground stormwater holding tanks were replaced with an at grade stormwater retention basin. The TDE is currently reviewing the 12/1/23 site plan and Stormwater Management Report and will issue a 2nd comment letter. The Conservation Advisory Council (CAC) reviewed the project and recommended the Planning Board make a negative SEQR declaration.

COMPREHENSIVE PLAN

The 2013 Comprehensive Plan includes several references to the area encompassing 1430 Balltown Rd.

- Page 21 – The “Transportation” portion of the Comprehensive Plan states the importance of an efficient, safe and flexible system.
 - Page 22 states “The Balltown corridor continues to be an area of concern that affects the entire Town because it is the primary north south arterial. This is ranked as the highest priority for this section and encompasses the most complex set of problems.”
- Page 94 – Subarea Recommendations includes the following recommendation for subarea B5 (which includes the Town Center Overlay District (TCOD) and 1430 Balltown Rd.)
 - “Subarea B5: The Town Center is located in this subarea. The Town has adopted the Town Center Overlay District (TCOD) which includes design standards for any

type of construction or renovation for any building located in the TCOD. The Town should continue to uphold the existing zoning standards and encourage pedestrian friendly development.”

BACKGROUND INFORMATION

The property is located in the C-N Neighborhood Commercial zoning district and Town Center Overlay District. Professional offices, non-medical, are permitted principal uses in the C-N district.

The following drawings and documents were provided with the application.

1. A 2-page drawing set entitled “Preliminary Site Plan Layout Building Addition 1430 Balltown Rd.” by ABD Engineers and Surveyors dated 11/3/23 with no subsequent revisions.
2. A Short Form Environmental Assessment Form (EAF) signed by Luigi A. Palleschi P.E. dated 11/2/23 with no subsequent revisions.
3. A Stormwater Management Report entitled “2,700 sq. ft. Building Addition & Parking Lot Expansion 1430 Balltown Rd., Town of Niskayuna, Schenectady County, NY” by Luigi A. Palleschi, P.E. ABD Engineers & Surveyors, LLP dated 11/3/23 with no subsequent revisions.
4. A Stormwater Pollution Prevention Plan entitled “Basic Stormwater Pollution Prevention Plan Erosion & Sediment Controls Only for 2,700 sq. ft. Building Addition & Parking Lot Expansion 1430 Balltown Rd. Town of Niskayuna Schenectady County, New York” by Luigi A. Palleschi, P.E. ABD Engineers & Surveyors, LLP dated 11/3/23 with no subsequent revisions.
5. Two (2) colored elevation renderings showing the building with the proposed addition

The site plan drawing includes the following zoning code and pre and post development lot details.

ZONING:		C-N (NEIGHBORHOOD COMMERCIAL)	
	<u>REQUIRED</u>	<u>EXISTING</u>	<u>PROPOSED</u>
LOT SIZE:	15,000 SF MIN.	86,179± SF (1.98± AC)	
LOT WIDTH:	100' MIN.	435.01'	
BLDG. HEIGHT:	100' MAX.	XX'	XX'
BLDG. COVERAGE:	20% MAX	9,980± SF (11.6%)	12,680± SF (14.7%)
SETBACKS:			
FRONT:	15'	115.1'	109.5'
SIDE:	10' (20' BOTH)	44.8', 63.2'	44.8', 24.5'
REAR:	20' MIN.	154.4'	154.4'

Parking

Building Area (SF)	Actual Parking Spaces	Required Parking Spaces (1/225 SF)	Surplus / Deficit
9,980	39	45	-6
12,680	61	57	+4

Niskayuna Zoning Code Schedule I-D C-N District Column 8 item 8 reads as follows: “There shall be a minimum 25% of the total land area of the site reserved as landscaped open space. At the discretion of the Planning Board, a portion of this open space shall be used to provide landscaping internal to required off-street parking areas.” The proposed site plan should be reviewed relative to this requirement.

Article VIIIA Town Center Overlay District, Neighborhood Commercial and Highway Commercial Standards provides standards to “identify an identifiable center of the Town of Niskayuna”, “define a sense of community”, “promote a traditional architectural and visual environment” and “promote revitalization, not change it into a better place”. The proposed building addition and parking lot expansion should be reviewed relative to the sections of the zoning code within Article VIIIA, including but not limited to the following.

Section 220-48.5 Pedestrian and streetscape amenities

- C (1) Sidewalks
- C (3) lighting
- C (4) Amenities: benches, bike racks, trash receptacles.
- C (5) Parking: screening shall be applied in the parking lot design along parcel boundaries in order to maintain an aesthetic quality
- C (6) Landscaping

11/8/2023 Conservation Advisory Council (CAC) – The CAC looked at this project preliminarily and had the following initial comments:

1. Requested a map showing tree removal and tree planting – native species should be used
2. Recommend pesticide free practices for the property
3. Recommend installation of EV Charging stations at the parking lot
4. Requested whether new lighting will be added – should be dark skies friendly
5. Requested whether or not solar panels can be added to the new roof addition
6. Requested knowing what type of office use was proposed – wanted to know if it would increase the intensity of use of the building
7. Recommended more plantings and landscaping in front of the building to reduce the large lawn (lawns are high maintenance and poor habitat)

11/13/23 Planning Board (PB) meeting – Luigi Palleschi, P.E. of A.B.D. Engineers and Surveyors attended the meeting and presented the project to the Board. He noted that the investment in the building is part of a strategic plan to consolidate and relocate Niskayuna School District offices to this site for a period of approximately 8 – 10 years, until a permanent location is voted on in 2027 and ready to be occupied in approximately 2032. Mr. Palleschi referenced the site plan and systematically explained the following aspects of the design.

Stormwater

- The current parking lot drains to a small underground system that often overflows.
- A new system, designed to 25-year rainfall rates, is included in the proposed design
- The system includes underground stormwater storage in the southeast corner of the parking lot and a detention basin near the southeastern corner of the proposed addition.

Parking

- It was noted that additional parking spaces have been added to the site as required by the zoning code for the increase in gross floor area of the building.

Lighting

- It was noted that new lighting will be added.
- A photometric plot of light distribution was not included in the drawing set

Means of Access / Traffic

- Primary access to the site will remain off of Balltown Road.
- A trip count analysis or traffic study was not included in the documentation package.

Signage

- The rendering of the Balltown Road facing façade was displayed and it was noted that the Niskayuna logo would be added near the “1430” in the northwest corner of the façade.

Landscaping

- Mr. Palleschi noted that approximately 40% of the site is greenspace.
- It was noted that some existing trees and bushes will need to be removed for the proposed changes and the applicant will work with the Tree Council to develop a replanting plan.

Environmental Review

- Ms. Robertson summarized the comments from the 11/8/23 CAC meeting noted, above.

Town Designated Engineer (TDE) review

- Ms. Robertson noted a check for the fees associated with a TDE review of the proposed plan was expected on Tuesday 11/14/23 and the TDE would immediately be engaged.

After a discussion the Planning Board requested the following additional information.

- Stormwater analysis using 1, 10, 25 and 100-year rainfall rates.
- A photometric plot of the current and proposed light distribution on the site.
- A traffic count analysis based on the expanded building and proposed occupancy.
- Dimensioned drawings and renderings of proposed signage.

11/27/23 Planning Board (PB) meeting – Ms. Gold, PB project lead, provided a progress update on the project. It was noted that the TDE’s 1st comment letter (4-pages) was received on the afternoon of 11/27/23 and had not been reviewed yet. Ms. Robertson noted that she would like to see a traffic trip count for the proposed project. The Board also requested a presentation describing how the proposed underground stormwater system is sized and functions and if any maintenance is required.

12/1/23 – 12/4/23 – In response to the 11/27/23 PB meeting, the applicant’s engineer delivered a revised design package to the Planning Office that contained the following.

1. Revised site plan dated Rev. 1 12/1/23
2. Revised Stormwater Management Report dated 12/1/23
3. Revised SWPPP dated 12/1/23
4. A Traffic Summary dated 12/1/23
5. Revised renderings of the proposed building including signage

The Planning Office emailed the revised documents to the TDE for review. A preliminary videoconference review by office staff and the TDE revealed the following.

1. Revised site plan dated Rev. 1 12/1/23

- a. The underground stormwater storage tanks are replaced with a stormwater detention basin on the eastern side of the lot near Balltown Road.

2. Revised Stormwater Management Report – 12/1/23

- a. The peak discharge rates in cfs for the post-development condition are less than the pre-development condition for all storm events up to and including the 100-year event as shown in the table below.

Drainage Area	1-Year	10-Year	25-Year	100-Year
Total Pre	3.18	7.08	8.95	11.85
Total Post	2.58	5.61	7.02	9.17
Net change	-0.60	-1.47	-1.93	-2.68

3. Revised SWPPP – 12/1/23

- a. To be reviewed by the TDE

4. Traffic Summary – 12/1/23

- a. Ref. Trip Generation Manual, 9th Edition, published by the Institute of Transportation Engineers (ITE), based on data for Land Use Code (LUC) 710 – “General Office”
- b. The 11th Edition (newest version) of this manual should be used. This version subdivides “General Office” into more descriptive areas. This may impact the expected trips associated with the use.
- c. Proposed project expected to impact traffic as noted below. (9th edition data)

Trips	AM peak hr.	PM peak hr.
Total Pre	16	15
Total Post	20	19
Net change	+4	+4

5. Revised renderings / signage

- a. To be reviewed by the Planning Office

Several items listed in the TDE’s 1st comment letter dated 11/27/23 were not addressed in the revised design package dated 12/1/23. The Planning Office will work with the TDE to bring these issues to resolution. The list of areas to be addressed include but are not limited to: a photometric lighting plan, pedestrian access to the building from the parking lot and pedestrian and streetscape amenities as required in the Town Center Overlay District.

12/6/23 Conservation Advisory Council (CAC) meeting – The CAC reviewed the project and unanimously approved a motion to make a Negative SEQR recommendation to the Planning Board. In their opinion the project will not have a negative impact on the environment. During their review and discussion, the following comments and requests were made.

- Use white oaks for new tree plantings
- Minimize the visual impact of the stormwater basin to the Town Center Overlay District
- Include a sidewalk from Balltown Rd. up to the building
- Include EV charging stations on the site and continue exploring the use of green energy practices including solar panels.
- Consider a pesticide-free lawn maintenance program

The Council also noted the importance of managing the stormwater on the site. They requested that the Planning Office have the TDE review this portion of the site plan very carefully.

CAC SEQR
FINDINGS EAF
2023-10
1430 Balltown Road
12/6/2023

Part 2:

1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?

No.

2. Will the proposed action result in a change in the use or intensity of use of land?

Yes there would be a minimal change in intensity.

3. Will the proposed action impair the character or quality of the existing community?

There should be no impairment on the character of the community. The CAC recommended minimizing the visual impact of the stormwater basin on the aesthetics of the Town Center Overlay District.

4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?

No. There is no CEA in the area.

5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?

No or small impact. There won't be a significant increase in traffic trips. It is critical to this project to add a sidewalk from Balltown road to the entrance of the building on the south side of the driveway.

6. Will the proposed action cause an increase in the use of energy and/or does it fail to incorporate reasonably available energy conservation or renewable energy opportunities?

No or small impact. The CAC noted the EV ready charging stations is a good thing. They encouraged the applicant and Planning Board to continue looking at incorporating solar.

7. Will the proposed action impact existing: (a) public / private water supplies?(b) public / private wastewater treatment utilities?

No.

8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?

No to small impact. It is important to minimize the visual impact of the stormwater basin on the aesthetics of the Town Center Overlay District

9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?

No to small impact. The CAC requested the school sign it's pesticide free pledge. They worked with the applicant to agree to only native species for the new plantings and changing the new trees to white oaks (quercus Alba)

10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?

Yes, this was the biggest concern for the addition / parking upgrades. The CAC made sure the 100 year storm was used for the reviews and requested the TDE review the final details closely.

11. Will the proposed action create a hazard to environmental resources or human health?

No. The CAC did not identify any hazards to environmental resources or human health.

Part 3:

The Council discussed visualizing the impact of the stormwater basin through plantings and screenings. The applicant agreed to add a sidewalk from Balltown Road to the building. The EV Charging stations were important and solar should continue to be explored. They encouraged pesticide free maintenance of the property, dark skies friendly lighting and reminded the developer to stay within Town designated working hours and noise ordinance to protect the residential properties across the street. The developer stated the project should be completed by June 1, 2024.

Upon voting, the CAC voted unanimously to recommend a negative declaration to the Planning Board.

PARTNERS
LUIGI A. PALLESCHI, P.E.
JOSEPH J. BIANCHINE, P.E.
ROBERT D. DAVIS, JR., P.L.S.



411 Union Street

518-377-0315 Fax 518-377-0379

www.abdeng.com

ENGINEERS



SURVEYORS

Schenectady, N.Y. 12305

DEDICATED
RESPONSIVE
PROFESSIONAL

December 1, 2023

Re:

**1430 Balltown Road
Town of Niskayuna
Project #5618A**

Ms. Laura Robertson, Town Planner
Town of Niskayuna
One Niskayuna Circle
Niskayuna, NY 12309-4381

Dear Laura:

In response to the comments (*in italics*) of your Agenda Statement of November 27, 2023, we respond as follows (**in bold**):

Conservation Advisory Council (CAC) – *The CAC looked at this project preliminarily and had the following initial comments:*

1. *Requested a map showing tree removal and tree planting – native species should be used.*

Sheet 1 of the Layout, Lighting, and Landscaping plan has been added to the set.

2. *Recommend pesticide free practices for the property.*

The Applicant is aware of this request.

3. *Recommend installation of EV Charging stations at the parking lot.*

A note has been added to the site plan showing location of future EV stations. Conduit will be installed for future connections.

4. *Requested whether new lighting will be added – should be dark skies friendly.*
New lighting has been added to Sheet 1. They will all be LED down type lighting.

5. *Requested whether or not solar panels can be added to the new roof addition.*
Solar panels are not being considered due to existing structure constraints.

6. *Requested knowing what type of office use was proposed – wanted to know if it would increase the intensity of use of the building.*

Office use will be very similar. Formerly a lawyer's office with 25 employees and 50 visitors and new use is Niskayuna District office with 35 employees plus visitors.

7. *Recommended more plantings and landscaping in front of the building to reduce the large lawn (lawns are high maintenance and poor habitat).*

Two trees along the entrance have been added as well as a stormwater practice. This will help soften the large lawn area along the front yard.

Enclosed for further review and approval of the 1430 Balltown Road project are copies of the following materials:

1. Twelve (12) copies of the Revised site plans – dated Rev.#1 – December 1, 2023
2. Two (2) copies of the Stormwater Management Report – revised December 1, 2023
3. Two (2) copies of the Basic SWPPP – revised December 1, 2023
4. Two (2) copies of the traffic summary prepared by ABD Engineers & Surveyors, LLP
5. Two (2) copies of the renderings of proposed building signage

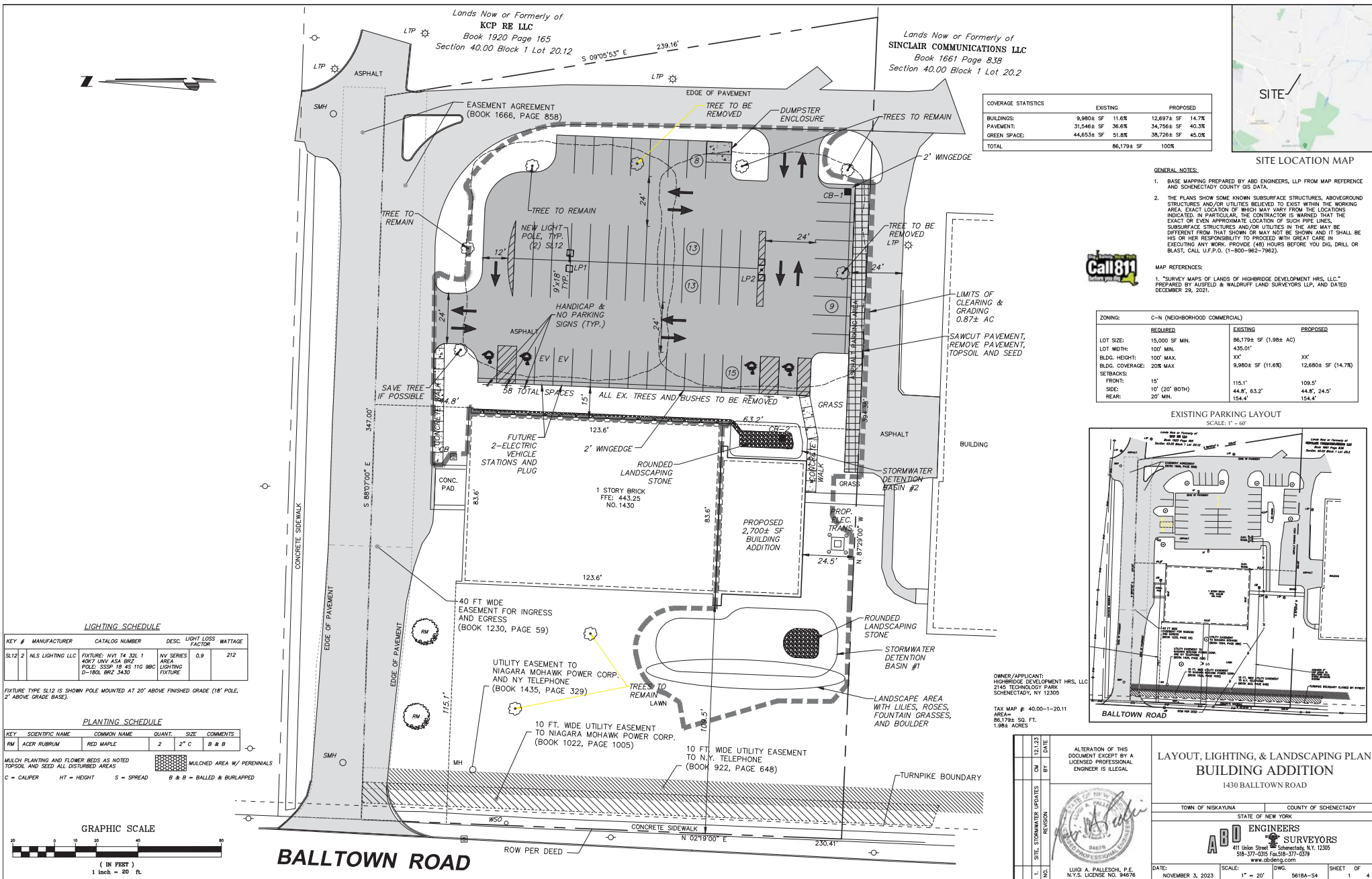
We appreciate being scheduled for the December 6, 2023 CAC and December 11, 2023 Planning Board meetings. Should you have any questions or need anything further, please do not hesitate to contact me.

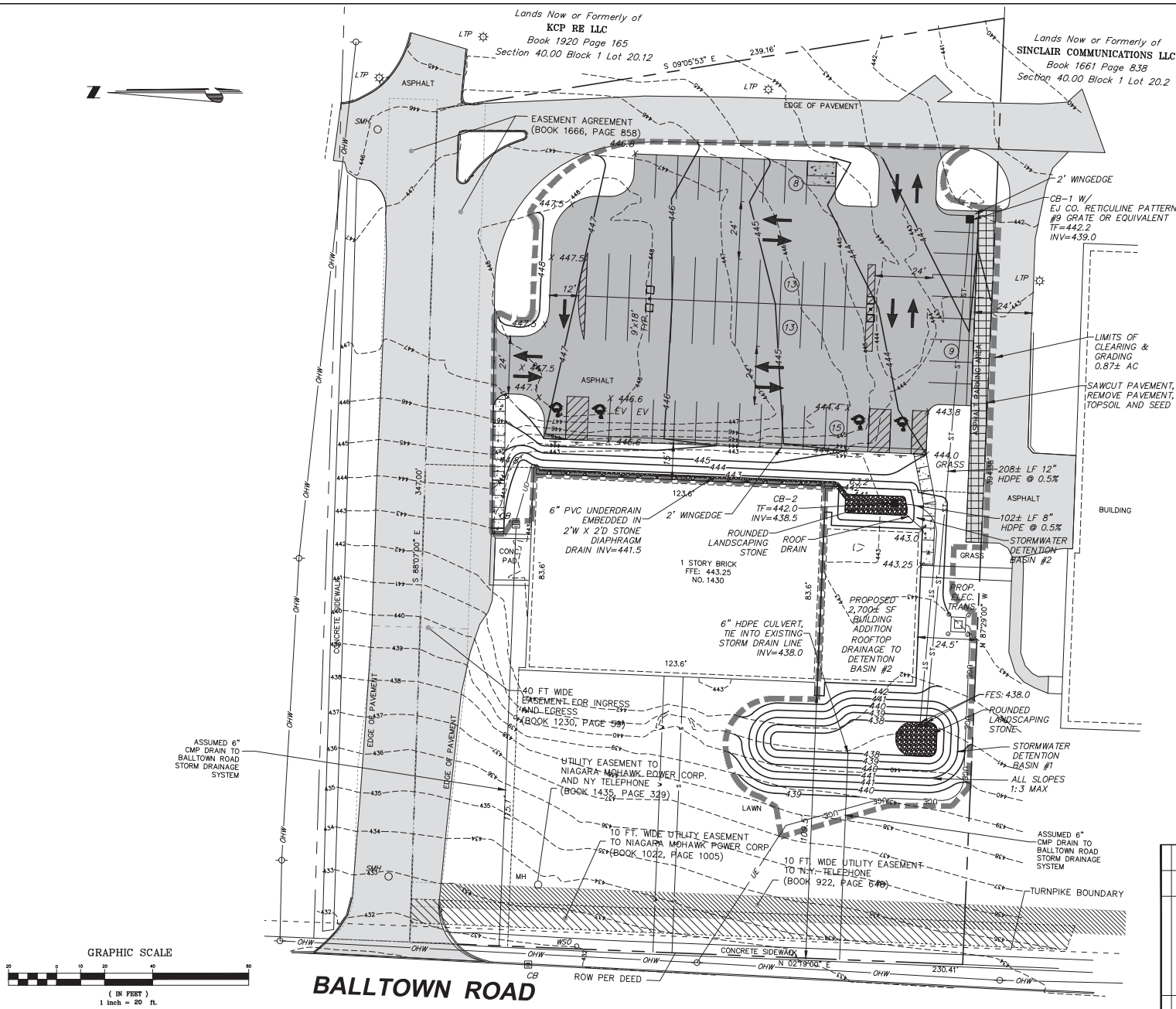
Very truly yours,
ABD ENGINEERS & SURVEYORS, LLP




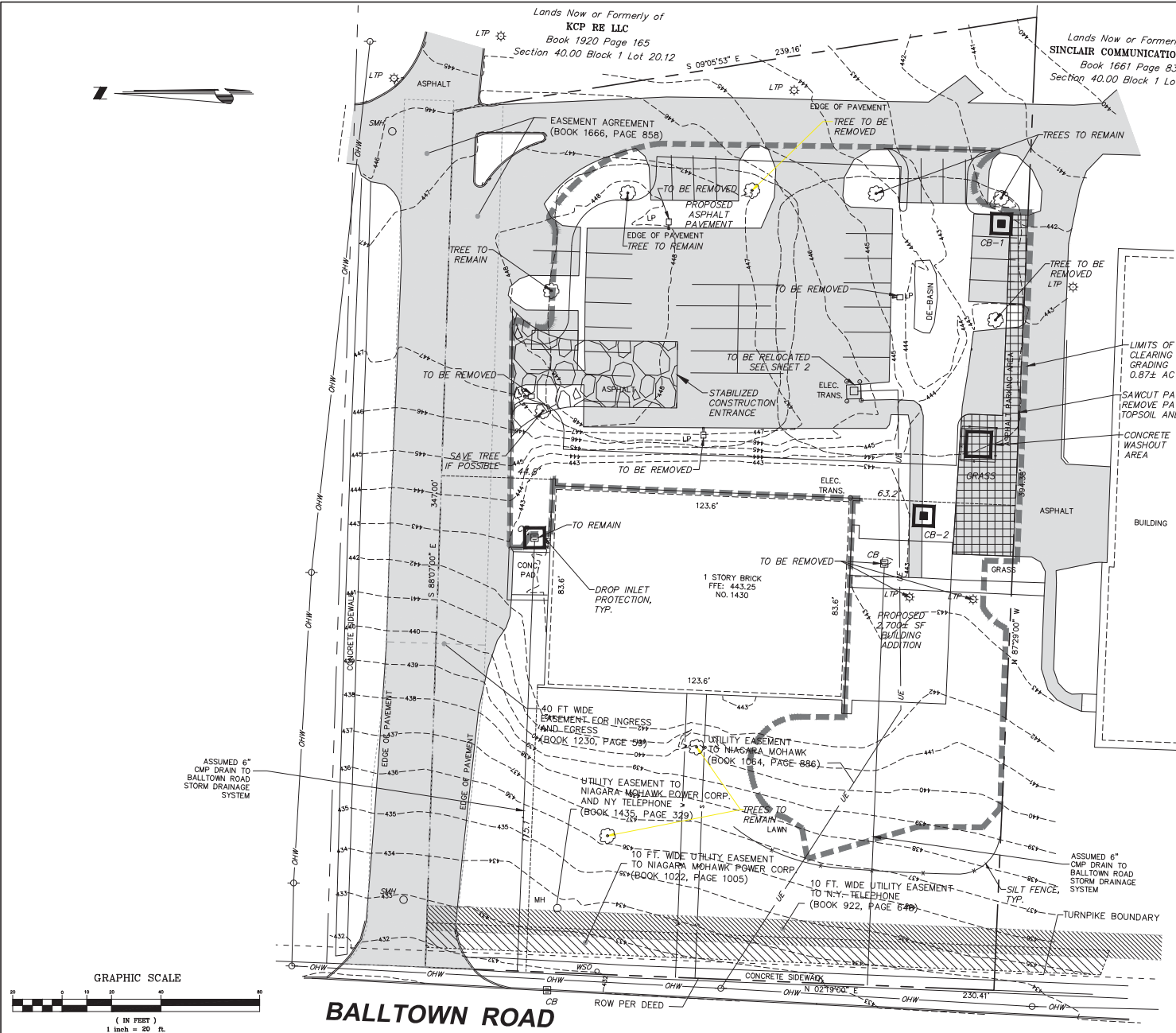
Luigi A. Palleschi, P.E.
Partner

LAP:clv
encl.
cc: John Roth w/encl. (via email)
5618A-2023-1201





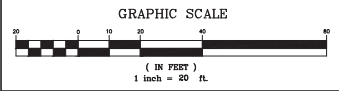
12/23	DATE
DM	BY
ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL.	
	
SITE, STORMWATER UPDATES	REVISION
1.	NO.
LUIGI A. PALESCHI, P.E. N.Y.S. LICENSE NO. 94676	
GRADING & UTILITIES PLAN BUILDING ADDITION 1430 BALLTOWN ROAD TOWN OF NISKAYUNA COUNTY OF SCHENECTADY	
STATE OF NEW YORK	
ABD ENGINEERS SURVEYORS 411 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdeng.com	
DATE:	SCALE:
NOVEMBER 3, 2023	1" = 20'
DWG.	SHEET
5618A-54	OF



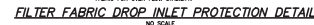
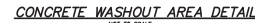
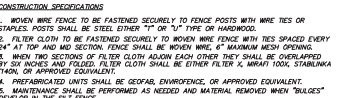
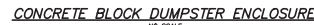
- GENERAL NOTES:**
1. BASE MAPS PREPARED BY ABD ENGINEERS, LLP FROM MAP REFERENCE AND SCHENECTADY COUNTY GIS DATA.
 2. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVEGROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST WITHIN THE WORKING AREA. EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPE LINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE DIFFERENT FROM THAT SHOWN OR MAY NOT BE SHOWN AND IT SHALL BE HIS OR HER RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. PROVIDE 148 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL U.F.P.O. (1-800-962-7862).
- MAP REFERENCES:**
1. "SURVEY MAPS OF LANDS OF HIGHBRIDGE DEVELOPMENT HHS, LLC," PREPARED BY AUSTRAL & WALDRUFF LAND SURVEYORS LLP, AND DATED DECEMBER 29, 2021.



- EROSION CONTROL NOTES**
- THE OWNER AND CONTRACTOR SHALL COMPLY WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THIS PROJECT AND AS A MINIMUM IMPLEMENT THE FOLLOWING EROSION AND SEDIMENT CONTROL MEASURES:
1. CONSTRUCTION AND MAINTENANCE OF EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL.
 2. INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLANS OR DETAILS AND AS NEEDED DURING THE GENERAL COURSE OF WORK.
 3. SOIL EROSION WILL OCCUR AFTER EVERY RAINFALL UNTIL TURF IS ESTABLISHED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR EROSION AFTER EVERY RAINFALL. FAILURE TO REPAIR MINOR EROSION WILL RESULT IN MAJOR EROSION AND POSSIBLY PAVEMENT AND STRUCTURE FAILURE. PRIOR TO SITE DISTURBANCE, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN-PLACE.
 4. TEMPORARY INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE PADS AT ALL LOCATION WHERE CONSTRUCTION VEHICLES WILL ENTER ONTO PUBLIC STREETS. ALL PUBLIC STREETS TO BE INSPECTED AND MAINTAINED CLEAR OF SOIL ACCUMULATION.
 5. EXCAVATION WORK CARRIED OUT DURING PERIODS OF INCLEMENT WEATHER SHALL REQUIRE ADDITIONAL EROSION CONTROL MEASURES AS MAY BE NECESSARY BASED ON CONDITIONS.
 6. ADDITIONAL EROSION CONTROL METHODS INCLUDING SOIL STABILIZATION MATS, PLACEMENT OF STONE, PLACEMENT OF SOIL MAY BE REQUIRED DUE TO CLIMATIC CONDITIONS (EXCESS RAIN, ETC).
 7. STABILIZATION OF DISTURBANCE AREAS TO BE PAVED BY COMPACTION AND APPLICATION OF SUBBASE WITHIN ONE MONTH AFTER UTILITIES ARE INSTALLED.
 8. VEGETATIVE STABILIZATION OF DISTURBED AREAS TO BE SEEDED INCLUDING ROWS AND EASEMENTS WITHIN TWO WEEKS OF FINAL GRADING.
 9. PLANS SHOW TEMPORARY SOIL EROSION AND STABILIZATION MEASURES WHICH SHALL BE MAINTAINED UNTIL ALL AREAS ARE STABILIZED.
 10. THE CONTRACTOR SHALL BE RESPONSIBLE TO SEED AND MULCH (OR HYDROSEED) AND TO PROVIDE AN ADEQUATE WATER SOURCE AND HOSES FOR GERMINATION OF THE SEED.
 11. IF THE CONTRACTOR ELECTS NOT TO INSTALL IMPORTED TOPSOIL OR SPREAD TOPSOIL FROM THE SITE THE SEEDING MAY NOT ESTABLISH ITSELF OR MAY BE SUBJECT TO STRESS FAILURE. THE OWNER SHALL TAKE COMPLETE RESPONSIBILITY FOR ESTABLISHING THE LAWN BY PROPER WATER AND FERTILIZING.



12.12.23		DATE	
CM	BT	ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL.	
SITE STORMWATER UPDATES		PERSON	
1	NO.	LUIGI A. PALLESCHI, P.E. N.Y.S. LICENSE NO. 94676	
EXISTING CONDITIONS, REMOVALS, & EROSION AND SEDIMENT CONTROL PLAN BUILDING ADDITION 1430 BALLTOWN ROAD			
TOWN OF NIAGARA		COUNTY OF SCHENECTADY	
STATE OF NEW YORK			
ABD ENGINEERS SURVEYORS 411 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdeng.com			
DATE: NOVEMBER 3, 2023		SCALE: 1" = 20'	DWG. 5618A-54
		SHEET 3	OF 4



NO SCALE



LUIGI A. PALLESCHI, P.E.



STORMWATER MANAGEMENT REPORT

FOR

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

Prepared For:

Highbridge Development HRS, LLC
2145 Technology Park
Schenectady, NY 12305

November 3, 2023

Revised December 1, 2023

Project No. 5618A

Prepared By:

Luigi A. Palleschi, P.E.
ABD Engineers & Surveyors, LLP
411 Union Street
Schenectady, NY 12305
(518) 377-0315

STORMWATER MANAGEMENT REPORT

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

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ANALYSIS	2
SUMMARY	5
EXHIBIT 1: SITE LOCATION MAP	Attached
EXHIBIT 2: PRE-DEVELOPMENT DRAINAGE MAP	Attached
EXHIBIT 3: POST-DEVELOPMENT DRAINAGE MAP	Attached
APPENDIX A: STORMWATER CALCULATIONS	Attached

STORMWATER MANAGEMENT REPORT

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION

1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

PROJECT LOCATION

The proposed facility is located on Balltown Road in the Town of Niskayuna, Schenectady County, New York (see Exhibit 1). The site is bordered on the north by Hatchet Hardware of Niskayuna, on the east by Niskayuna KinderCare, on the south by WRGB CBS 6, and on the west by Balltown Road.

GENERAL SITE DEVELOPMENT

The Owner/Applicant, Highbridge Development HRS, LLC is proposing to further develop the 1.98± acre parcel in order to construct a 2,700± SF addition to the existing office building, and to expand the existing parking lot from 39 spaces to 58 spaces, along with associated pavement, utilities, and stormwater management areas. Access to the site will continue to be provided off Balltown Road and through parking lot connections with neighboring properties.

SOIL TYPES, GROUNDWATER & TOPOGRAPHY

According to the Schenectady County NRCS, the primary hydrologic soil group is Type-C/D, channery silt loam. The site drains offsite to the Balltown Road stormwater drainage system.

STORMWATER MANAGEMENT PLAN

The stormwater management plan for the proposed project will utilize surface sheet flow across pavement, rooftop, and grass to the stormwater detention areas as shown on the site plans.

Total site disturbance is less than 1 acre, therefore NYSDEC Stormwater Regulations do not apply. However, the Town of Niskayuna requires that the site stormwater management system be designed to control peak discharge rates for the 1, 10,

and 25-year storm events to less than or equal to those of the pre-development condition. Post-development discharge within the drainage area is controlled to less than the pre-development condition with the retention and release of stormwater runoff up to and including the 100-year event.

ANALYSIS

The pre-development and post-development drainage maps are located in Exhibit 2 and 3. HydroCAD TR-20 method is utilized for the stormwater analysis. Stormwater calculations for the pre- and post-development conditions are presented in Appendix A. The entire site ultimately drains offsite to the Balltown Road stormwater drainage system and may be considered a single drainage area. However, the site was split into multiple drainage areas and each was modelled individually to accurately determine runoff and off-site discharge due to the existing stormwater management system and the wide variation in potential flow paths to the Balltown Road drainage system.

Pre-Development

In the **pre-development condition**, there are 3 drainage areas, with Pre Area 1 and Pre Area 2 each split into two subcatchments (refer to Exhibit 2).

Pre Area 1A is 0.28± acres and consists of rooftop, grass, and sidewalk. An area weighted CN value of 87 is used for the calculation. Stormwater runoff drains into the two existing catch basins at the north and south sides of the building to be conveyed off-site via culvert pipe to the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are 0.44± cfs, 1.01± cfs, 1.28± cfs, and 1.70± cfs respectively with a time of concentration of 10 minutes.

Pre Area 1B is 0.97± acres and consists of grass, asphalt pavement, rooftop, and sidewalk. An area weighted CN value of 82 is used for the calculation. Stormwater runoff is conveyed off-site via sheet flow directly into the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are 0.94± cfs, 2.51± cfs, 3.30± cfs, and 4.54± cfs respectively with a time of concentration of 15 minutes.

Pre Area 2A is 0.27± acres and consists of asphalt pavement, grass, and sidewalk. An area weighted CN value of 94 is used for the calculation. Stormwater runoff is conveyed via sheet flow to the existing on-site detention pond. Overflow is provided

for the pond by an emergency spillway which outlets off-site onto the adjacent property to the south, ultimately entering the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.73\pm$ cfs, $1.38\pm$ cfs, $1.68\pm$ cfs, and $2.13\pm$ cfs respectively with a time of concentration of 6 minutes. The detention pond controls peak discharge rates for the 1, 10, 25, and 100-year storm events to $0.72\pm$ cfs, $1.37\pm$ cfs, $1.67\pm$ cfs, and $2.12\pm$ cfs respectively.

Pre Area 2B is $0.42\pm$ acres and consists of asphalt pavement and grass. An area weighted CN value of 91 is used for the calculation. Stormwater runoff is conveyed off-site via sheet flow onto the adjacent property to the south, ultimately entering the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.97\pm$ cfs, $1.97\pm$ cfs, $2.44\pm$ cfs, and $3.15\pm$ cfs respectively with a time of concentration of 6 minutes.

Pre Area 3 is $0.04\pm$ acres and consists of asphalt pavement and grass. An area weighted CN value of 94 is used for the calculation. Stormwater runoff is conveyed via sheet flow off-site onto the adjacent property to the north, ultimately entering the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.11\pm$ cfs, $0.22\pm$ cfs, $0.26\pm$ cfs, and $0.34\pm$ cfs respectively with a time of concentration of 6 minutes.

Post-Development

In the **post-development condition**, there are 3 drainage areas, with Post Area 1 split into two subcatchments, with one of the subcatchments further subdivided in three, and Post Area 2 split into two subcatchments (refer to Exhibit 2).

Post Area 1A-1 is $0.12\pm$ acres and consists of rooftop, grass, and sidewalk. An area weighted CN value of 90 is used for the calculation. Stormwater runoff drains into the stone drip edge to be conveyed via underdrain into the existing catch basin at the north side of the building, where it is conveyed off-site via culvert pipe to the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.27\pm$ cfs, $0.56\pm$ cfs, $0.69\pm$ cfs, and $0.90\pm$ cfs respectively with a time of concentration of 6 minutes.

Add Post
Area 1A-3
here

Post Area 1A-2 is $0.20\pm$ acres and consists of rooftop, grass, and sidewalk. An area weighted CN value of 89 is used for the calculation. Stormwater runoff sheet flows and drains via roof drain into the proposed Detention Basin #2 at the south side of the building, where it is conveyed via culvert pipe into the proposed Detention Basin #1, before being released at a controlled rate via culvert pipe to the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.43\pm$ cfs, $0.91\pm$ cfs, $1.14\pm$ cfs, and $1.49\pm$ cfs respectively with a time of concentration of 6 minutes.

Post Area 2A is $0.49\pm$ acres and consists of asphalt pavement and grass. An area weighted CN value of 97 is used for the calculation. Stormwater runoff is conveyed via sheet flow into a proposed catch basin, where it is conveyed via culvert pipe to Detention Basin #1, before being released at a controlled rate via culvert pipe to the Balltown Road drainage system. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $1.45\pm$ cfs, $2.58\pm$ cfs, $3.10\pm$ cfs, and $3.91\pm$ cfs respectively with a time of concentration of 6 minutes.

Detention Basin #1 controls the combined peak discharge rates for Post Area 1A-2, 1A-3, and 2A for the 1, 10, 25, and 100-year storm events to $0.77\pm$ cfs, $1.20\pm$ cfs, $1.34\pm$ cfs, and $1.50\pm$ cfs respectively.

Post Area 1B is $0.74\pm$ acres and consists of grass, asphalt pavement, rooftop, and sidewalk. An area weighted CN value of 82 is used for the calculation. Stormwater runoff is conveyed off-site via sheet flow directly into the Balltown Road drainage system, as in the pre-development condition. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.99\pm$ cfs, $2.59\pm$ cfs, $3.39\pm$ cfs, and $4.63\pm$ cfs respectively with a time of concentration of 6 minutes.

Post Area 2B is $0.28\pm$ acres and consists of grass and asphalt pavement. An area weighted CN value of 84 is used for the calculation. Stormwater runoff is conveyed off-site via sheet flow onto the adjacent property to the south, ultimately entering the Balltown Road drainage system, as in the pre-development condition. The peak runoff rates for the 1, 10, 25, and 100-year storm events are $0.44\pm$ cfs, $1.07\pm$ cfs, $1.37\pm$ cfs, and $1.85\pm$ cfs respectively with a time of concentration of 6 minutes.

Post Area 3 is $0.04\pm$ acres and consists of asphalt pavement and grass. An area weighted CN value of 97 is used for the calculation. Stormwater runoff is conveyed off-

site via sheet flow onto the adjacent property to the north, ultimately entering the Balltown Road drainage system, as in the pre-development condition. The peak runoff rates for the 1, 10, 25, and 100-year storm events are 0.11± cfs, 0.19± cfs, 0.23± cfs, and 0.29± cfs respectively with a time of concentration of 6 minutes.

SUMMARY

Drainage Area	Peak Runoff Generated (cfs)				Peak Discharge (cfs)			
	1-Year	10-Year	25-Year	100-Year	1-Year	10-Year	25-Year	100-Year
Pre 1A	0.44	1.01	1.28	1.70	0.44	1.01	1.28	1.70
Pre 1B	0.94	2.51	3.30	4.54	0.94	2.51	3.30	4.54
Pre 2A	0.73	1.38	1.68	2.13	0.72	1.37	1.67	2.12
Pre 2B	0.97	1.97	2.44	3.15	0.97	1.97	2.44	3.15
Pre 3	0.11	0.22	0.26	0.34	0.11	0.22	0.26	0.34
Total Pre	3.19	7.09	8.96	11.86	3.18	7.08	8.95	11.85
Post 1A-1	0.27	0.56	0.69	0.90	0.27	0.56	0.69	0.90
Post 1A-2	0.43	0.91	1.14	1.49	0.77	1.20	1.34	1.50
Post 1A-3	0.08	0.28	0.29	0.57				
Post 2A	1.45	2.58	3.10	3.91	0.99	2.59	3.39	4.63
Post 1B	0.99	2.59	3.39	4.63	0.44	1.07	1.37	1.85
Post 2B	0.44	1.07	1.37	1.85	0.11	0.19	0.23	0.29
Post 3	0.11	0.19	0.23	0.29	2.58	5.61	7.02	9.17
Total Post	3.77	8.18	10.21	13.64	-0.60	-1.47	-1.93	-2.68
<i>Net Change</i>	<i>0.58</i>	<i>1.09</i>	<i>1.25</i>	<i>1.78</i>				

The peak discharge rates for the post-development condition are less than the pre-development condition for all storm events up to and including the 100-year event. The stormwater management plan will meet the needs of the project and the Town of Niskayuna. The stormwater management plan will function adequately and will not adversely affect adjacent or downstream properties.



Luigi A. Palleschi, P.E.

EXHIBIT 1:
SITE LOCATION MAP

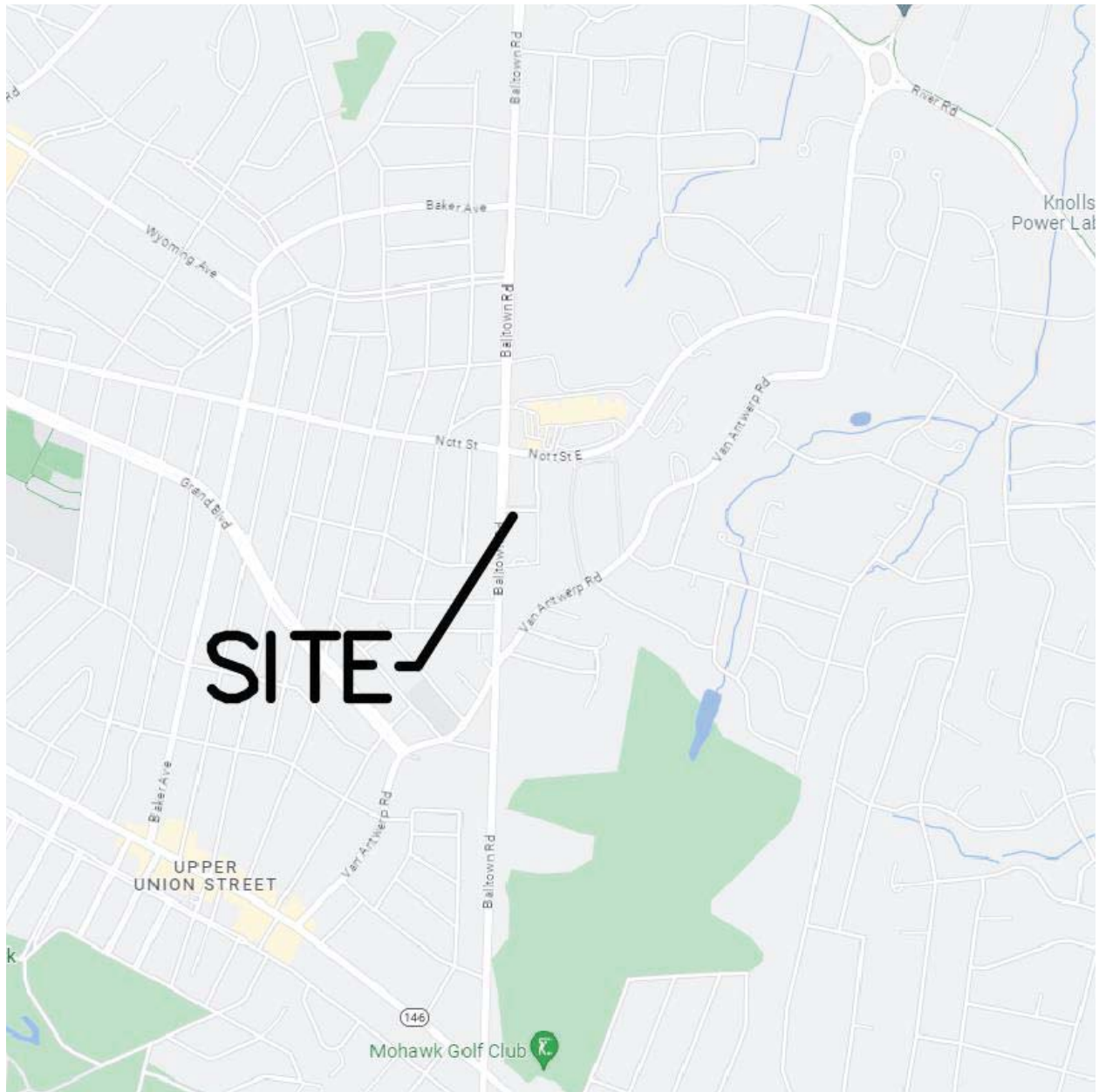


EXHIBIT 2:
PRE-DEVELOPMENT DRAINAGE MAP



PRE AREA 3
0.04± ACRES

PRE AREA 1B
0.97± ACRES

ASSUMED 6"
CMP DRAIN TO
BALLTOWN ROAD
STORM DRAINAGE
SYSTEM

BALLTOWN ROAD

Lands Now or Formerly of
KCP RE LLC
Book 1920 Page 165
Section 40.00 Block 1 Lot 20.12

PRE AREA 2B
0.42± ACRES

PRE AREA 2A
0.27± ACRES

PRE AREA 1A
0.28± ACRES

Lands Now or Formerly of
SINCLAIR COMMUNICATIONS LLC
Book 1661 Page 838
Section 40.00 Block 1 Lot 20.2

EASEMENT AGREEMENT
(BOOK 1666, PAGE 858)

40 FT WIDE
EASEMENT FOR INGRESS
AND EGRESS
(BOOK 1230, PAGE 588)

UTILITY EASEMENT TO
NIAGARA MOHAWK POWER CORP.
AND NY TELEPHONE
(BOOK 1435, PAGE 329)

10 FT. WIDE UTILITY EASEMENT
TO NIAGARA MOHAWK POWER CORP
(BOOK 1022, PAGE 1005)

10 FT. WIDE UTILITY EASEMENT
TO N.Y.-TELEPHONE
(BOOK 922, PAGE 648)

UTILITY EASEMENT
TO NIAGARA MOHAWK
(BOOK 1064, PAGE 886)

ASSUMED 6"
CMP DRAIN TO
BALLTOWN ROAD
STORM DRAINAGE
SYSTEM


1. SITE, STORMWATER, UTILITIES, AND EROSION CONTROL		12.1.23	DATE
ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL			
			
PRE-DEVELOPMENT DRAINAGE BUILDING ADDITION 1430 BALLTOWN ROAD			
TOWN OF NISKAYUNA		COUNTY OF SCHENECTADY	
STATE OF NEW YORK			
ABD ENGINEERS & SURVEYORS 411 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdeng.com			
DATE:	NOVEMBER 3, 2023	SCALE:	NO SCALE
DWG.	5618A-54	SHEET	OF 1 1

EXHIBIT 3:
POST-DEVELOPMENT DRAINAGE MAP

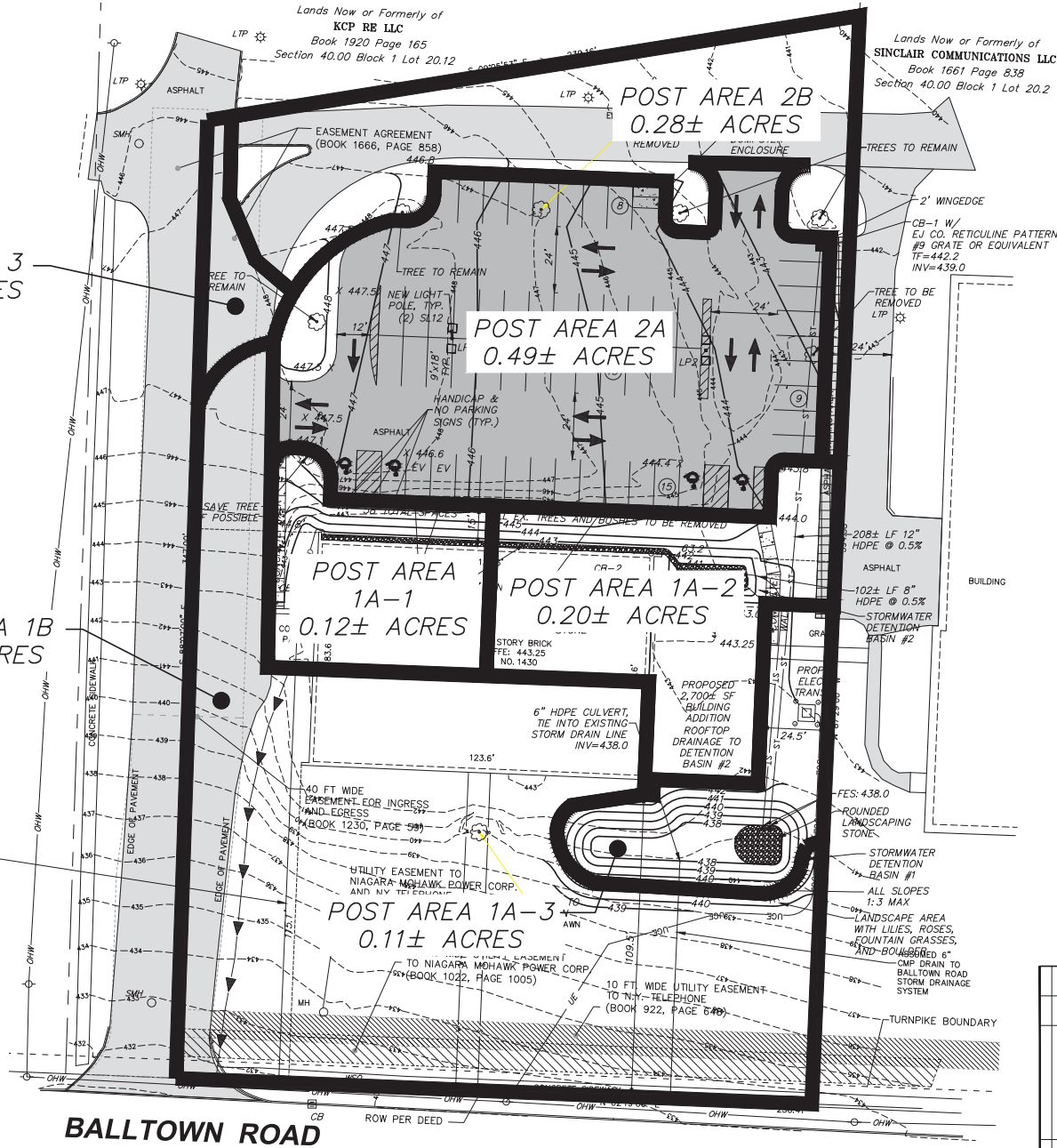



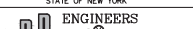
POST AREA 3
0.04± ACRES

POST AREA 1B
0.74± ACRES

ASSUMED 6"
CMP DRAIN TO
BALLTOWN ROAD
STORM DRAINAGE
SYSTEM

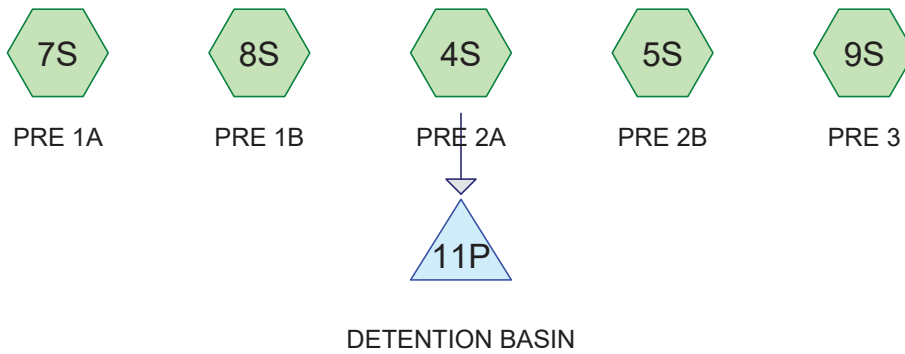
BALLTOWN ROAD



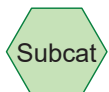
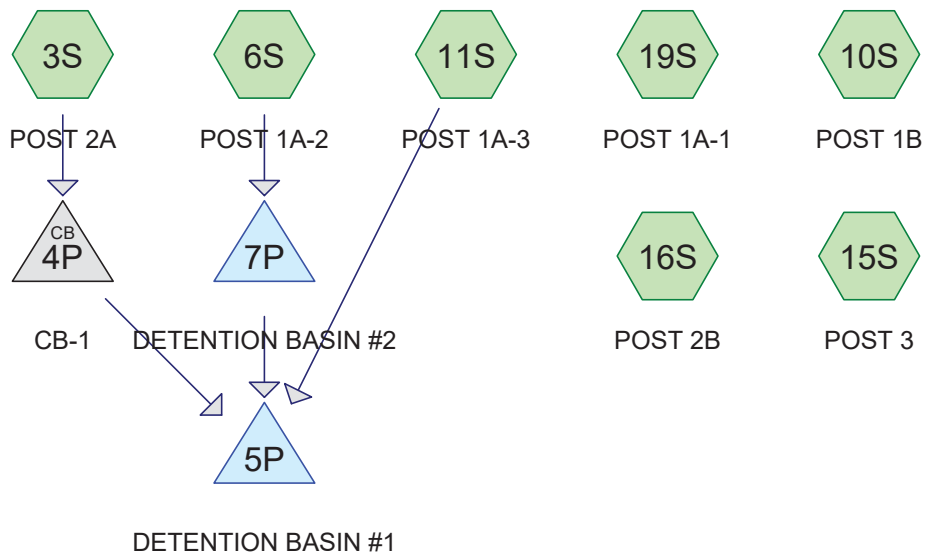
1.	SITE, STORMWATER UPDATES REVISION	12/23	DATE
		24	BY
ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL.			
			
LUIGI A. PALLESCHI, P.E. N.Y.S. LICENSE NO. 94676			
POST-DEVELOPMENT DRAINAGE BUILDING ADDITION 1430 BALLTOWN ROAD			
TOWN OF NISKAYUNA			
COUNTY OF SCHENECTADY			
STATE OF NEW YORK			
			
401 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdens.com			
1.		NO.	LUGI A. PALLESCHI, P.E. N.Y.S. LICENSE NO. 94676
DATE: NOVEMBER 3, 2023		SCALE: NO SCALE	DWG. 5618A-54
			SHEET OF 1

APPENDIX A:
STORMWATER CALCULATIONS

PRE-DEVELOPMENT



POST-DEVELOPMENT



Routing Diagram for 5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP, Printed 12/1/2023

HydroCAD® 10.00-26 s/n 00936 © 2020 HydroCAD Software Solutions LLC

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

HydroCAD® 10.00-26 s/n 00936 © 2020 HydroCAD Software Solutions LLC

Type II 24-hr 1-YR Rainfall=2.18"

Printed 12/1/2023

Page 2

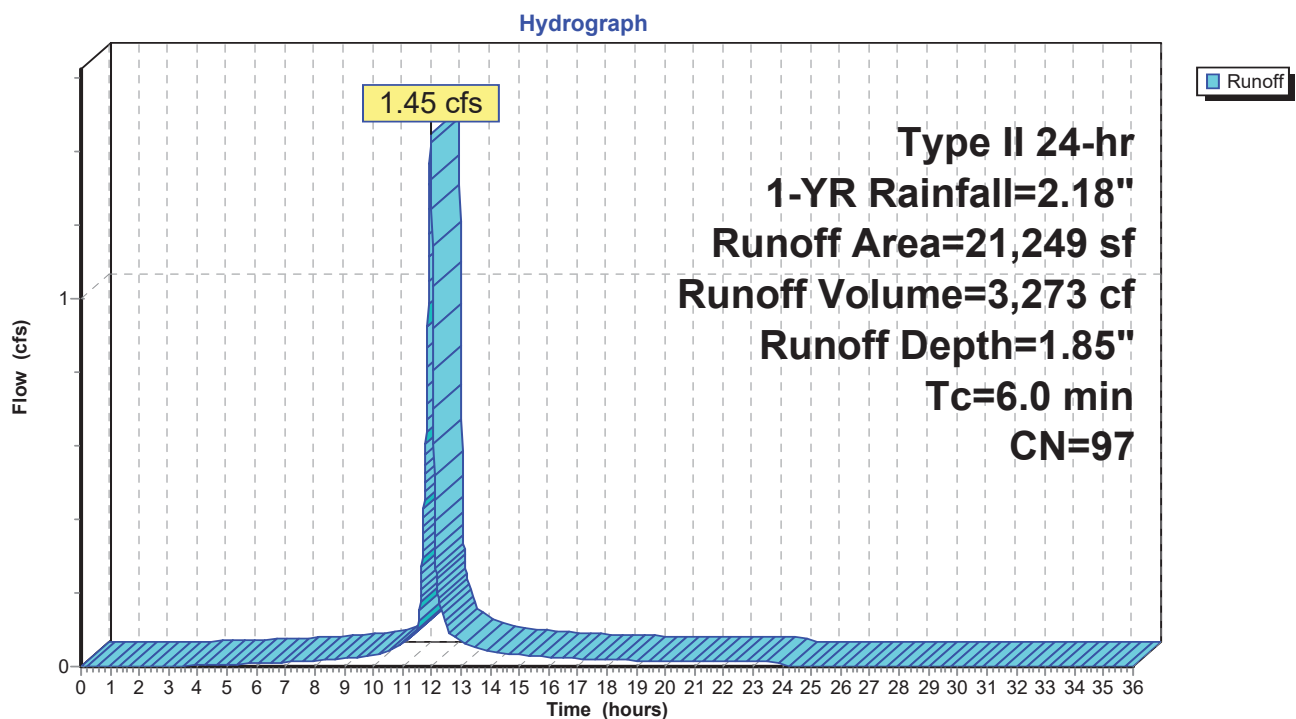
Summary for Subcatchment 3S: POST 2A

Runoff = 1.45 cfs @ 11.97 hrs, Volume= 3,273 cf, Depth= 1.85"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
20,418	98	Paved parking, HSG C
831	74	>75% Grass cover, Good, HSG C
21,249	97	Weighted Average
831		3.91% Pervious Area
20,418		96.09% Impervious Area

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

Subcatchment 3S: POST 2A

Summary for Subcatchment 4S: PRE 2A

Runoff = 0.73 cfs @ 11.97 hrs, Volume= 1,550 cf, Depth= 1.57"

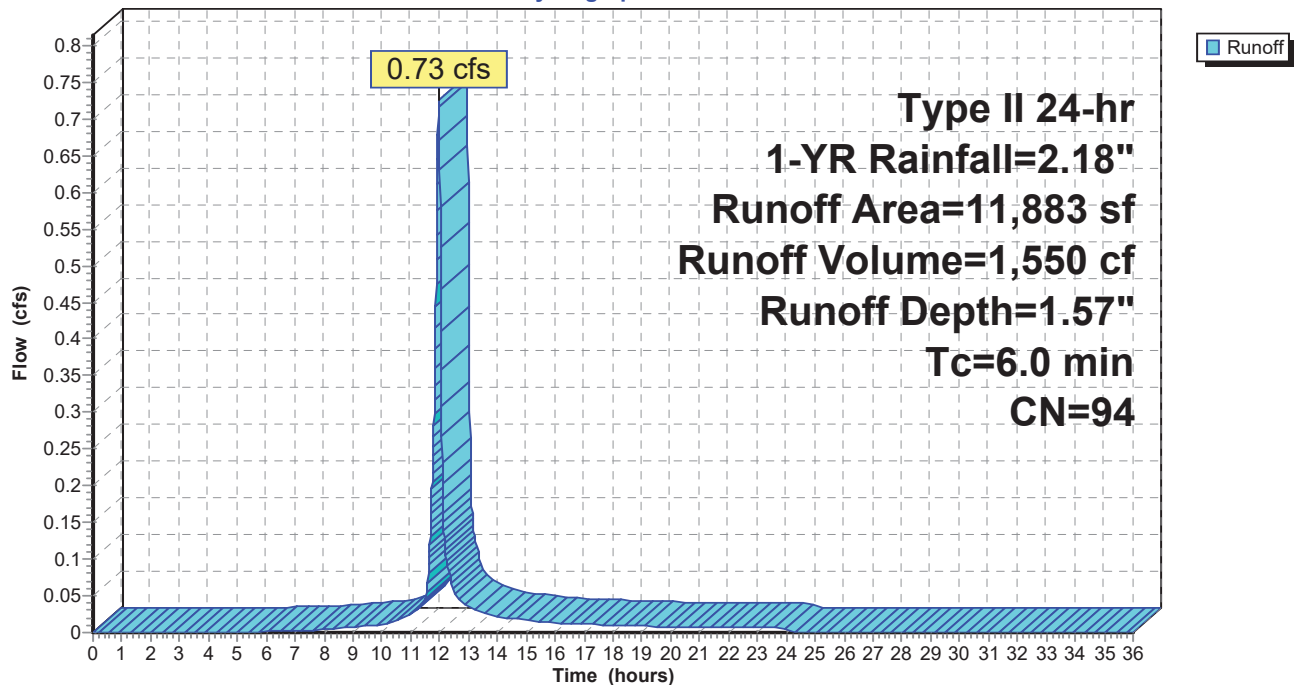
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
10,104	98	Paved parking, HSG C
1,779	74	>75% Grass cover, Good, HSG C
11,883	94	Weighted Average
1,779		14.97% Pervious Area
10,104		85.03% Impervious Area

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

Subcatchment 4S: PRE 2A

Hydrograph



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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Type II 24-hr 1-YR Rainfall=2.18"

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Page 4

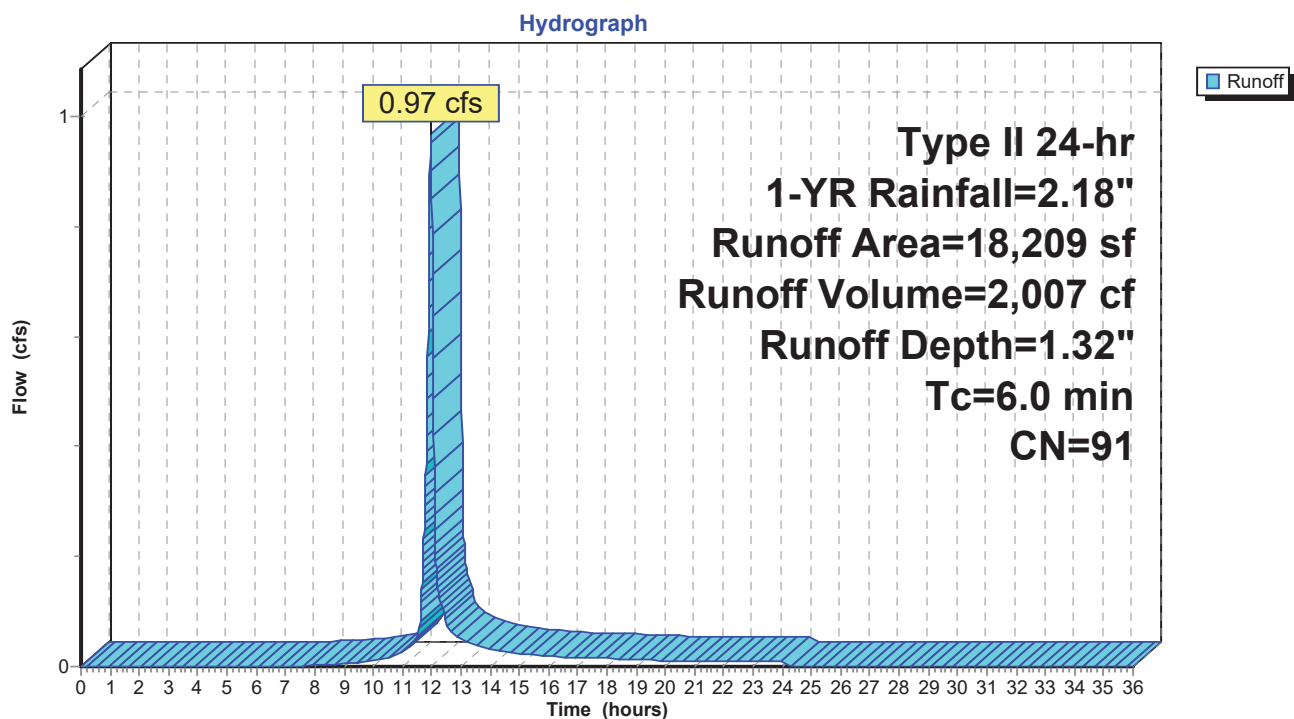
Summary for Subcatchment 5S: PRE 2B

Runoff = 0.97 cfs @ 11.97 hrs, Volume= 2,007 cf, Depth= 1.32"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
12,591	98	Paved parking, HSG C
5,618	74	>75% Grass cover, Good, HSG C
18,209	91	Weighted Average
5,618		30.85% Pervious Area
12,591		69.15% Impervious Area

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

Subcatchment 5S: PRE 2B

Summary for Subcatchment 6S: POST 1A-2

Runoff = 0.43 cfs @ 11.97 hrs, Volume= 873 cf, Depth= 1.18"

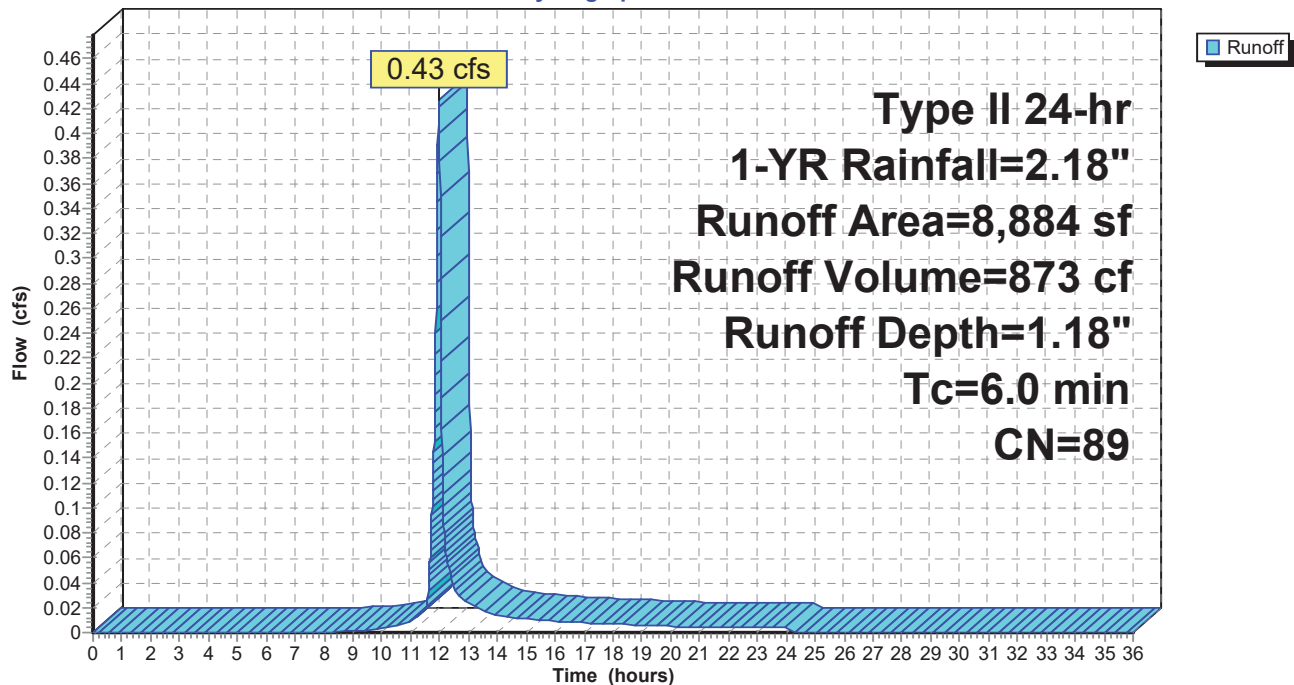
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
5,625	98	Roofs, HSG C
3,259	74	>75% Grass cover, Good, HSG C
8,884	89	Weighted Average
3,259		36.68% Pervious Area
5,625		63.32% Impervious Area

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

Subcatchment 6S: POST 1A-2

Hydrograph



5618A-S4-HydroCAD

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Type II 24-hr 1-YR Rainfall=2.18"

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Summary for Subcatchment 7S: PRE 1A

Runoff = 0.44 cfs @ 12.02 hrs, Volume= 1,056 cf, Depth= 1.05"

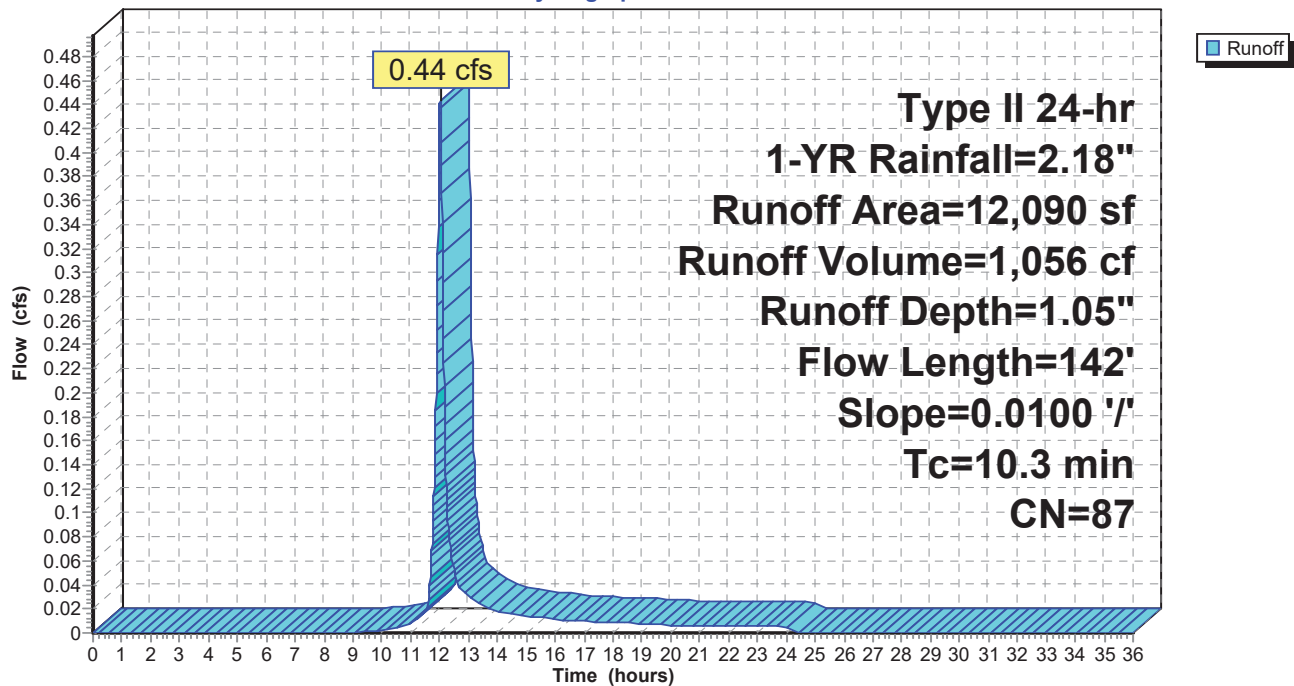
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
6,431	98	Paved parking, HSG C
5,659	74	>75% Grass cover, Good, HSG C
12,090	87	Weighted Average
5,659		46.81% Pervious Area
6,431		53.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	46	0.0100	0.83		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.80"
8.4	54	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.0	42	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	142	Total			

Subcatchment 7S: PRE 1A

Hydrograph



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Type II 24-hr 1-YR Rainfall=2.18"

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Summary for Subcatchment 8S: PRE 1B

Runoff = 0.94 cfs @ 12.08 hrs, Volume= 2,697 cf, Depth= 0.77"

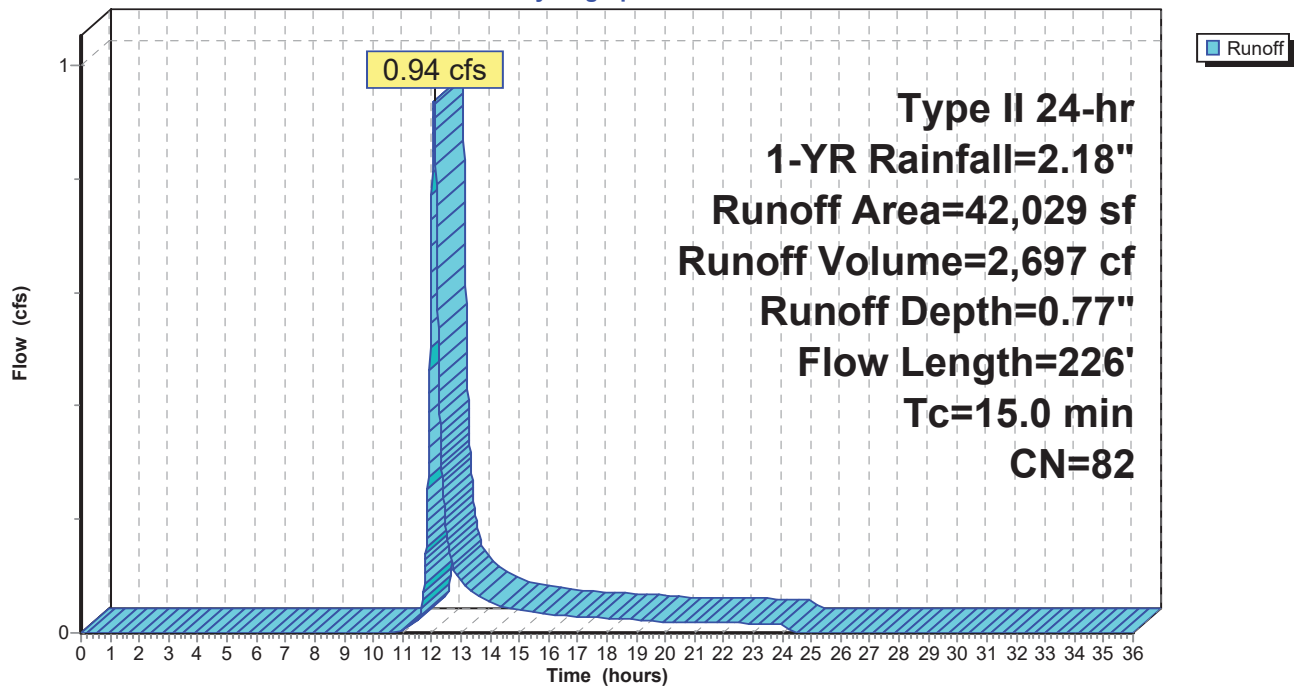
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
13,546	98	Paved parking, HSG C
28,483	74	>75% Grass cover, Good, HSG C
42,029	82	Weighted Average
28,483		67.77% Pervious Area
13,546		32.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0100	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.2	126	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.0	226	Total			

Subcatchment 8S: PRE 1B

Hydrograph



Summary for Subcatchment 9S: PRE 3

Runoff = 0.11 cfs @ 11.97 hrs, Volume= 245 cf, Depth= 1.57"

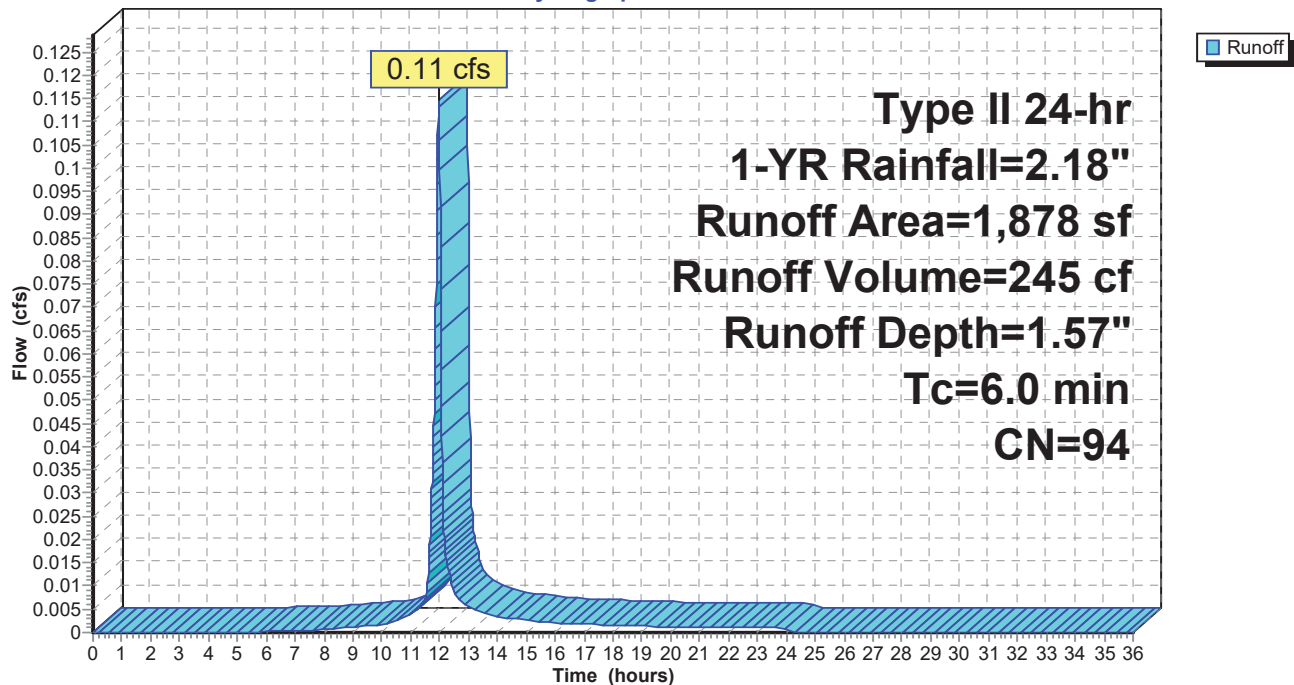
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
1,604	98	Paved parking, HSG C
274	74	>75% Grass cover, Good, HSG C
1,878	94	Weighted Average
274		14.59% Pervious Area
1,604		85.41% Impervious Area

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

Subcatchment 9S: PRE 3

Hydrograph



5618A-S4-HydroCAD

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Type II 24-hr 1-YR Rainfall=2.18"

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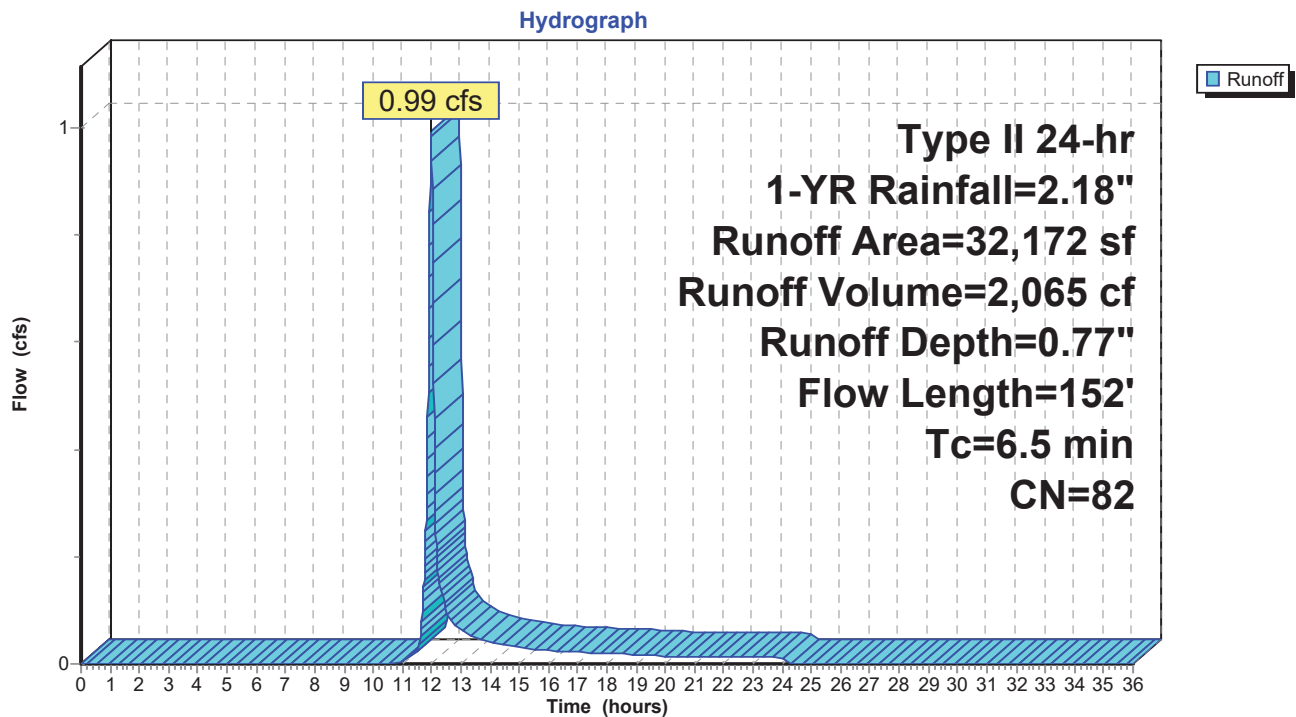
Summary for Subcatchment 10S: POST 1B

Runoff = 0.99 cfs @ 11.98 hrs, Volume= 2,065 cf, Depth= 0.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
10,909	98	Paved parking, HSG C
21,263	74	>75% Grass cover, Good, HSG C
32,172	82	Weighted Average
21,263		66.09% Pervious Area
10,909		33.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0800	0.28		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
0.5	52	0.0580	1.69		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.5	152	Total			

Subcatchment 10S: POST 1B

5618A-S4-HydroCAD

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Type II 24-hr 1-YR Rainfall=2.18"

Printed 12/1/2023

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Summary for Subcatchment 11S: POST 1A-3

Runoff = 0.08 cfs @ 11.99 hrs, Volume= 175 cf, Depth= 0.44"

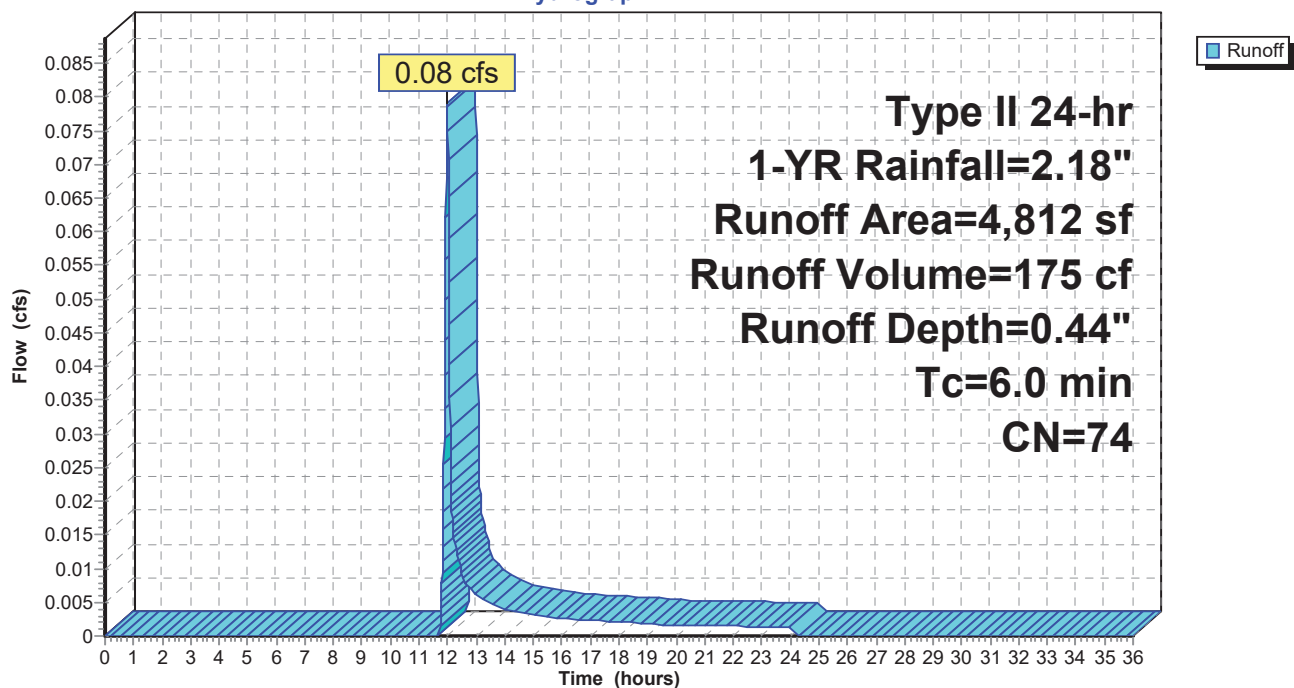
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
4,812	74	>75% Grass cover, Good, HSG C
4,812		100.00% Pervious Area

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

Subcatchment 11S: POST 1A-3

Hydrograph



Summary for Subcatchment 15S: POST 3

Runoff = 0.11 cfs @ 11.97 hrs, Volume= 244 cf, Depth= 1.85"

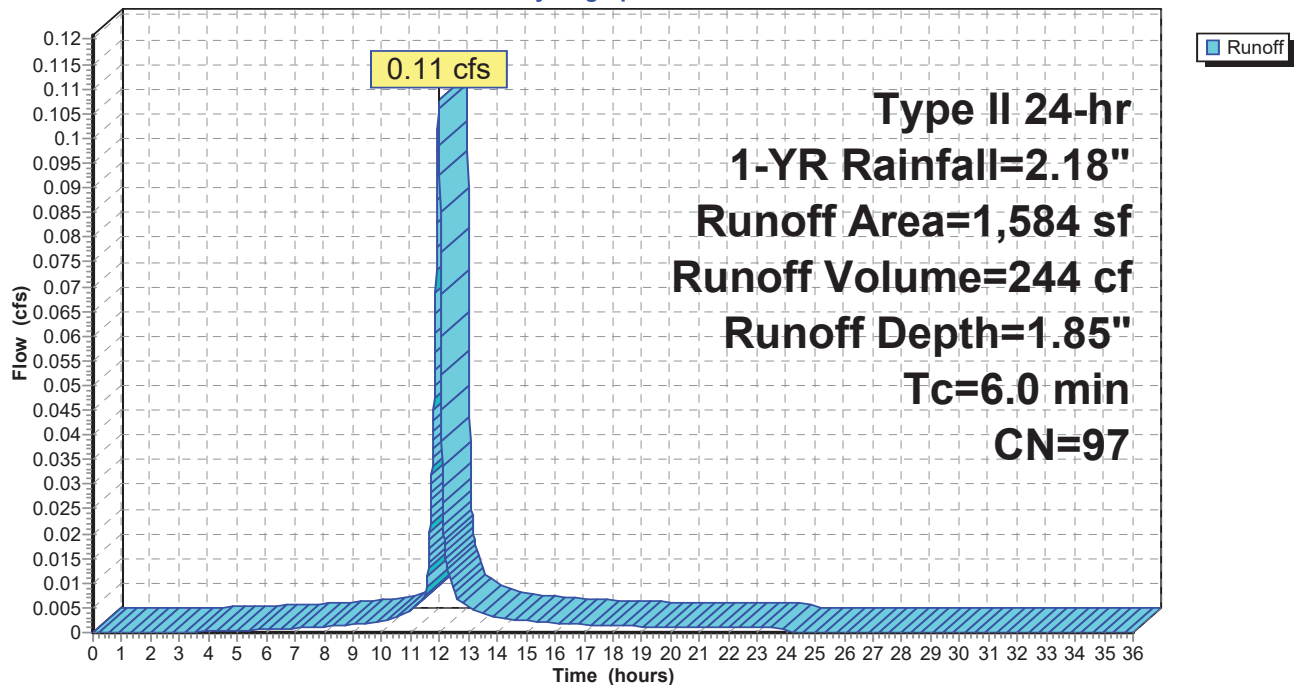
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
1,523	98	Paved parking, HSG C
61	74	>75% Grass cover, Good, HSG C
1,584	97	Weighted Average
61		3.85% Pervious Area
1,523		96.15% Impervious Area

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

Subcatchment 15S: POST 3

Hydrograph



Summary for Subcatchment 16S: POST 2B

Runoff = 0.44 cfs @ 11.98 hrs, Volume= 882 cf, Depth= 0.87"

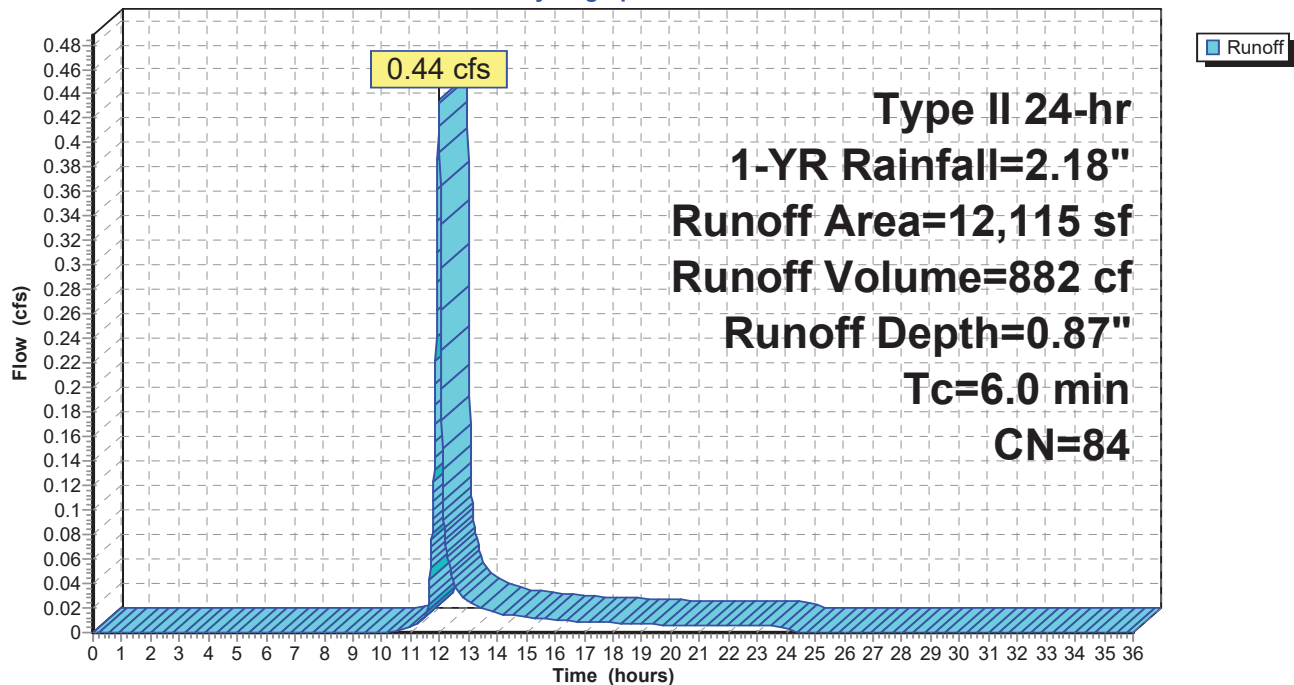
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
5,263	98	Paved parking, HSG C
6,852	74	>75% Grass cover, Good, HSG C
12,115	84	Weighted Average
6,852		56.56% Pervious Area
5,263		43.44% Impervious Area

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

Subcatchment 16S: POST 2B

Hydrograph



Summary for Subcatchment 19S: POST 1A-1

Runoff = 0.27 cfs @ 11.97 hrs, Volume= 548 cf, Depth= 1.25"

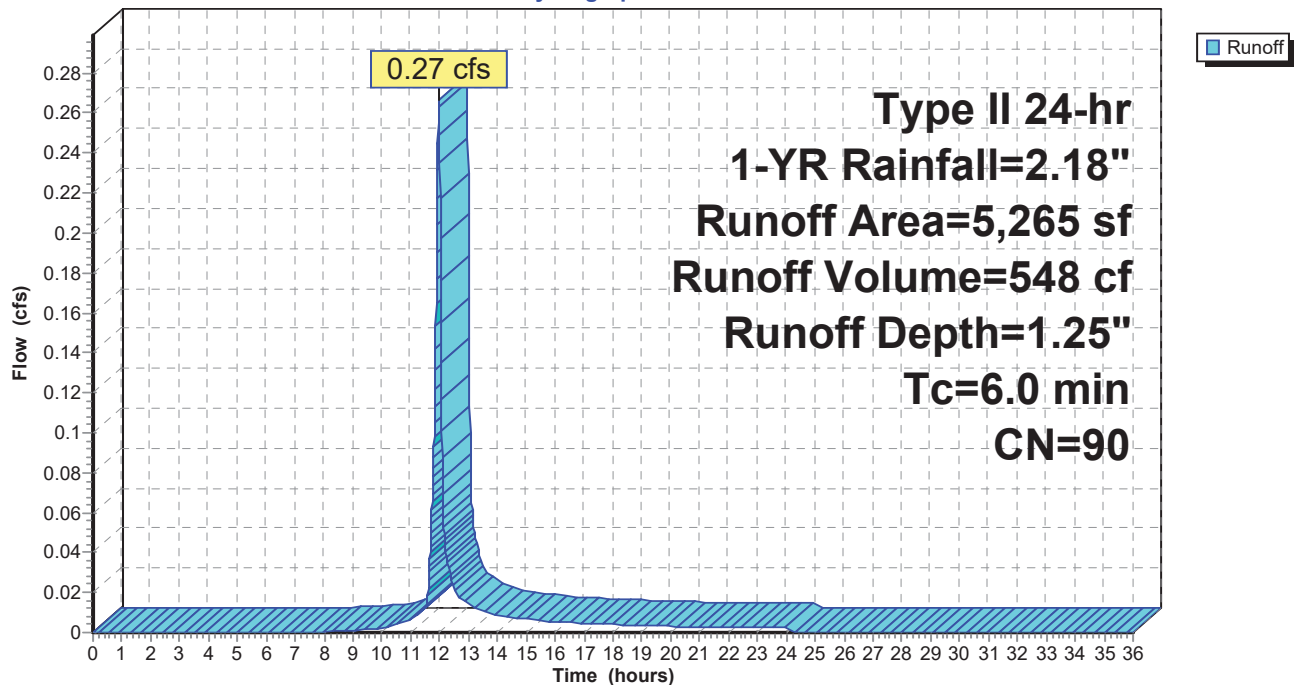
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

Area (sf)	CN	Description
3,584	98	Paved parking, HSG C
1,681	74	>75% Grass cover, Good, HSG C
5,265	90	Weighted Average
1,681		31.93% Pervious Area
3,584		68.07% Impervious Area

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

Subcatchment 19S: POST 1A-1

Hydrograph



Summary for Pond 4P: CB-1

Inflow Area = 21,249 sf, 96.09% Impervious, Inflow Depth = 1.85" for 1-YR event
 Inflow = 1.45 cfs @ 11.97 hrs, Volume= 3,273 cf
 Outflow = 1.45 cfs @ 11.97 hrs, Volume= 3,273 cf, Atten= 0%, Lag= 0.0 min
 Primary = 1.45 cfs @ 11.97 hrs, Volume= 3,273 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 439.74' @ 11.98 hrs

Flood Elev= 442.20'

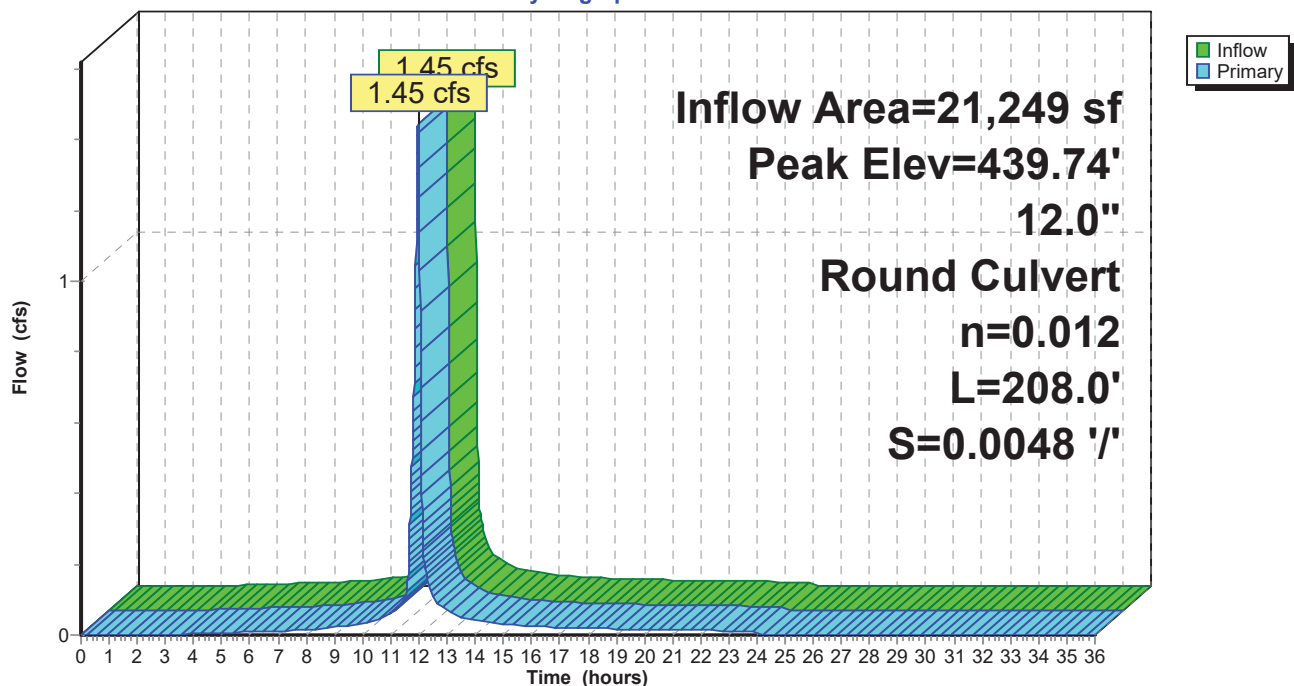
Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.43 cfs @ 11.97 hrs HW=439.74' TW=438.70' (Dynamic Tailwater)

1=Culvert (Outlet Controls 1.43 cfs @ 3.19 fps)

Pond 4P: CB-1

Hydrograph



Summary for Pond 5P: DETENTION BASIN #1

Inflow Area = 34,945 sf, 74.53% Impervious, Inflow Depth = 1.38" for 1-YR event
 Inflow = 1.63 cfs @ 12.00 hrs, Volume= 4,012 cf
 Outflow = 0.77 cfs @ 12.08 hrs, Volume= 4,008 cf, Atten= 53%, Lag= 4.6 min
 Primary = 0.77 cfs @ 12.08 hrs, Volume= 4,008 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 438.91' @ 12.08 hrs Surf.Area= 1,226 sf Storage= 912 cf

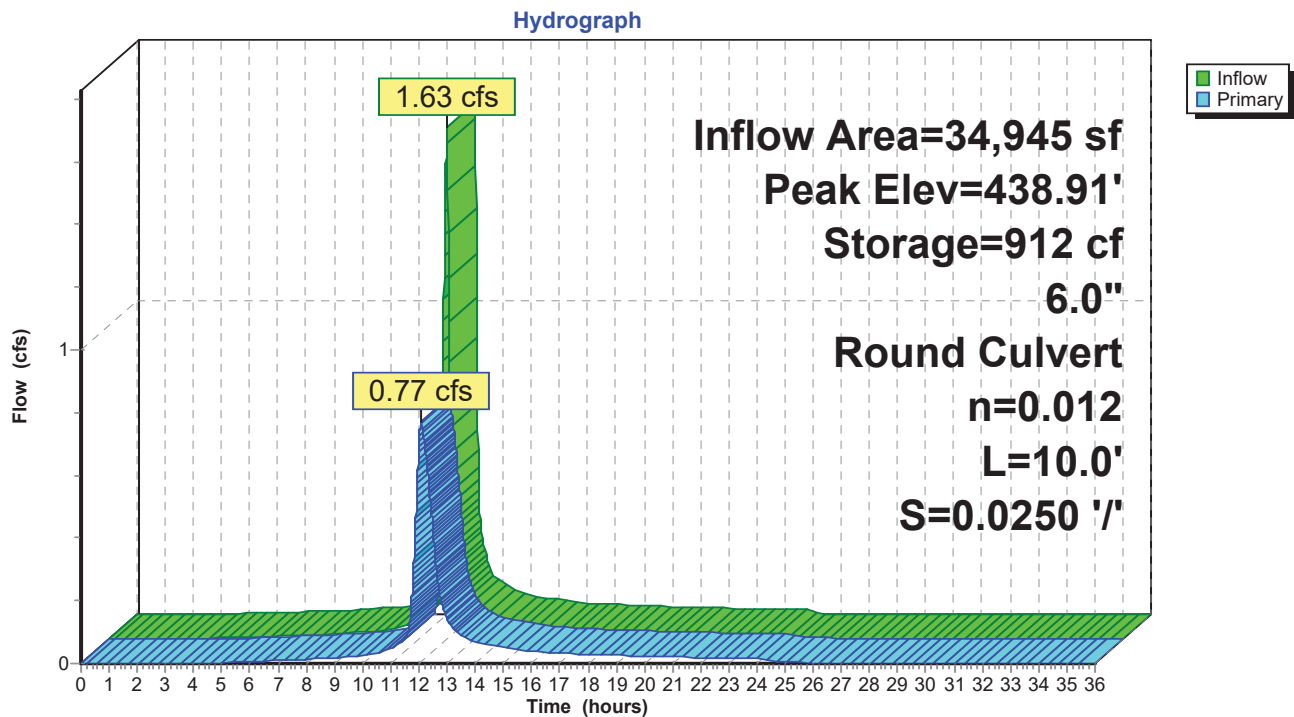
Plug-Flow detention time= 30.6 min calculated for 4,007 cf (100% of inflow)
 Center-of-Mass det. time= 30.1 min (825.6 - 795.5)

Volume	Invert	Avail.Storage	Storage Description
#1	438.00'	4,698 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
438.00	774	0	0
439.00	1,270	1,022	1,022
440.00	1,824	1,547	2,569
441.00	2,434	2,129	4,698

Device	Routing	Invert	Outlet Devices
#1	Primary	438.00'	6.0" Round Culvert L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.00' / 437.75' S= 0.0250 ' S Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=0.77 cfs @ 12.08 hrs HW=438.91' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.77 cfs @ 3.92 fps)

Pond 5P: DETENTION BASIN #1

Summary for Pond 7P: DETENTION BASIN #2

Inflow Area = 8,884 sf, 63.32% Impervious, Inflow Depth = 1.18" for 1-YR event
 Inflow = 0.43 cfs @ 11.97 hrs, Volume= 873 cf
 Outflow = 0.33 cfs @ 12.03 hrs, Volume= 564 cf, Atten= 22%, Lag= 3.2 min
 Primary = 0.33 cfs @ 12.03 hrs, Volume= 564 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 442.06' @ 12.03 hrs Surf.Area= 443 sf Storage= 337 cf

Plug-Flow detention time= 181.9 min calculated for 564 cf (65% of inflow)
 Center-of-Mass det. time= 72.6 min (896.8 - 824.2)

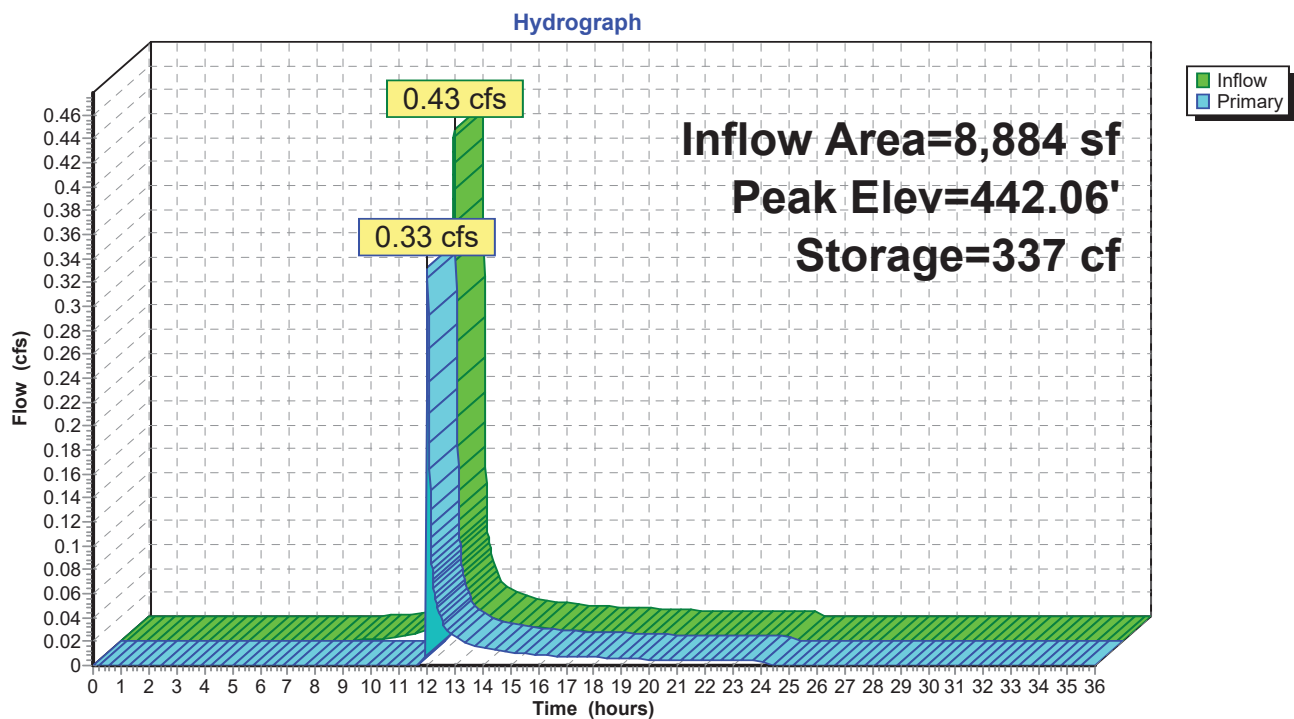
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
441.00	193	0	0
442.00	425	309	309
442.50	563	247	556

Device	Routing	Invert	Outlet Devices
#1	Primary	438.50'	8.0" Round Culvert L= 102.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.50' / 438.00' S= 0.0049 ' / ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Device 1	442.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.33 cfs @ 12.03 hrs HW=442.06' TW=438.85' (Dynamic Tailwater)

↑ **1=Culvert** (Passes 0.33 cfs of 2.02 cfs potential flow)
 ↑ **2=Orifice/Grate** (Weir Controls 0.33 cfs @ 0.83 fps)

Pond 7P: DETENTION BASIN #2

Summary for Pond 11P: DETENTION BASIN

Inflow Area = 11,883 sf, 85.03% Impervious, Inflow Depth = 1.57" for 1-YR event
 Inflow = 0.73 cfs @ 11.97 hrs, Volume= 1,550 cf
 Outflow = 0.72 cfs @ 11.98 hrs, Volume= 1,385 cf, Atten= 1%, Lag= 0.6 min
 Primary = 0.72 cfs @ 11.98 hrs, Volume= 1,385 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 443.81' @ 11.98 hrs Surf.Area= 721 sf Storage= 205 cf

Plug-Flow detention time= 80.7 min calculated for 1,385 cf (89% of inflow)
 Center-of-Mass det. time= 27.4 min (824.7 - 797.3)

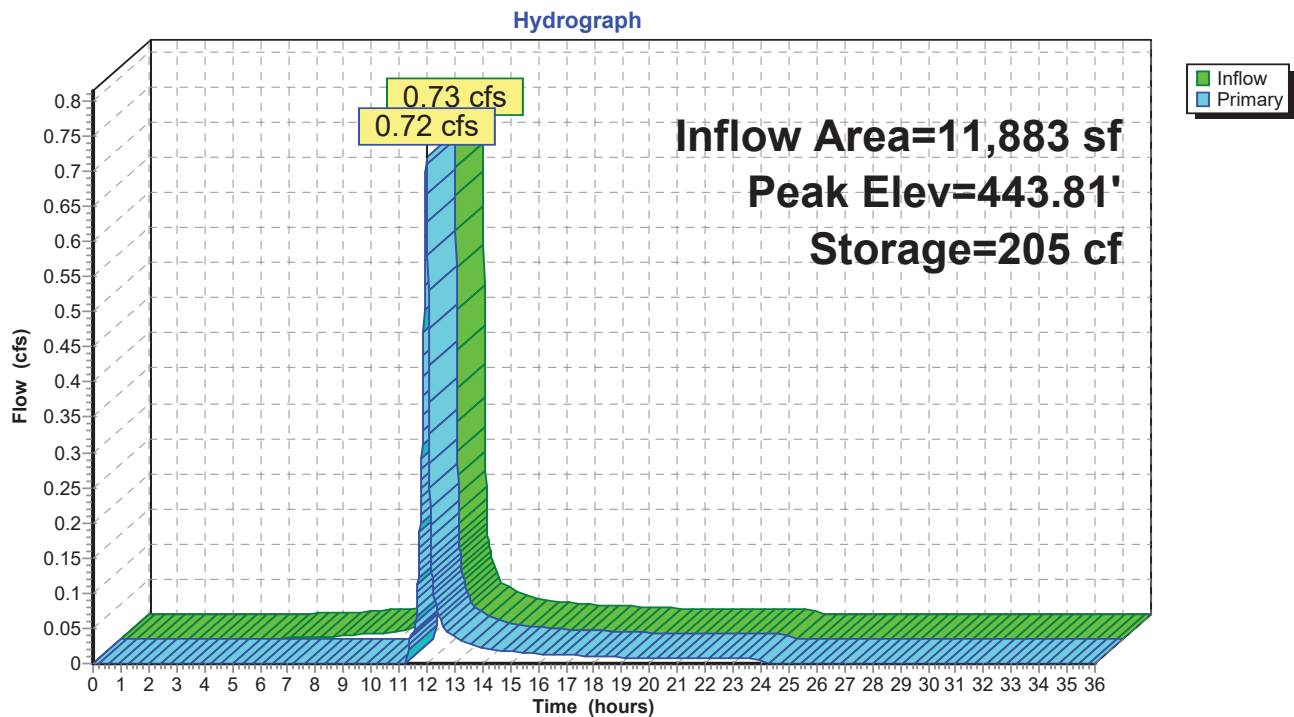
Volume	Invert	Avail.Storage	Storage Description
#1	443.50'	351 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.50	617	0	0
444.00	786	351	351

Device	Routing	Invert	Outlet Devices
#1	Primary	443.75'	22.0' long x 3.0' 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 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=0.72 cfs @ 11.98 hrs HW=443.81' (Free Discharge)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 0.72 cfs @ 0.58 fps)

Pond 11P: DETENTION BASIN

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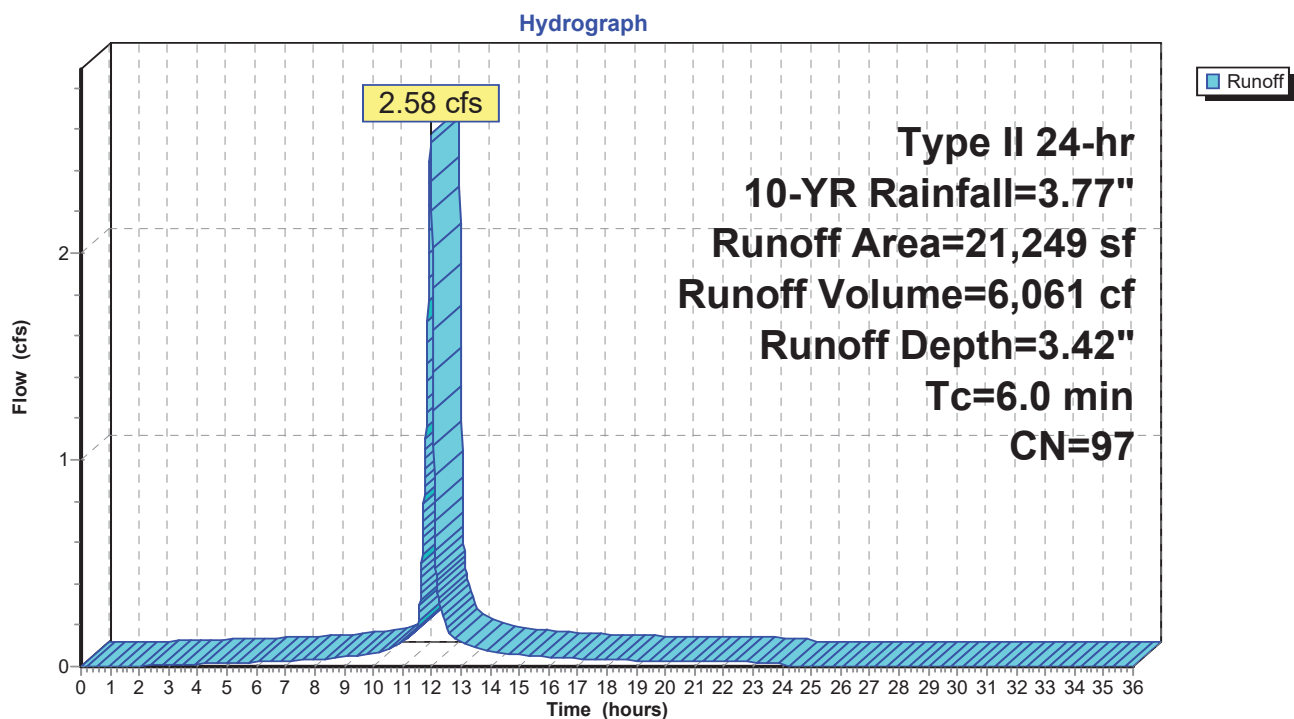
Summary for Subcatchment 3S: POST 2A

Runoff = 2.58 cfs @ 11.97 hrs, Volume= 6,061 cf, Depth= 3.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
20,418	98	Paved parking, HSG C
831	74	>75% Grass cover, Good, HSG C
21,249	97	Weighted Average
831		3.91% Pervious Area
20,418		96.09% Impervious Area

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

Subcatchment 3S: POST 2A

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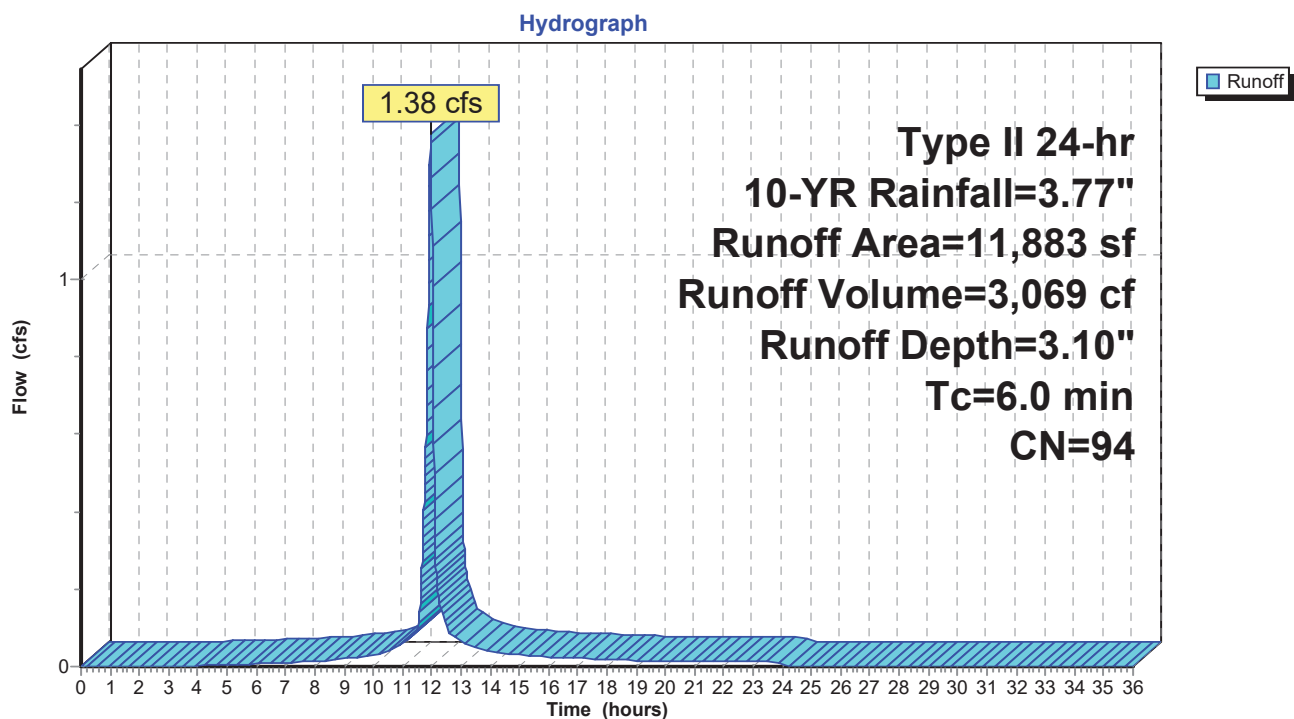
Summary for Subcatchment 4S: PRE 2A

Runoff = 1.38 cfs @ 11.97 hrs, Volume= 3,069 cf, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
10,104	98	Paved parking, HSG C
1,779	74	>75% Grass cover, Good, HSG C
11,883	94	Weighted Average
1,779		14.97% Pervious Area
10,104		85.03% Impervious Area

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

Subcatchment 4S: PRE 2A

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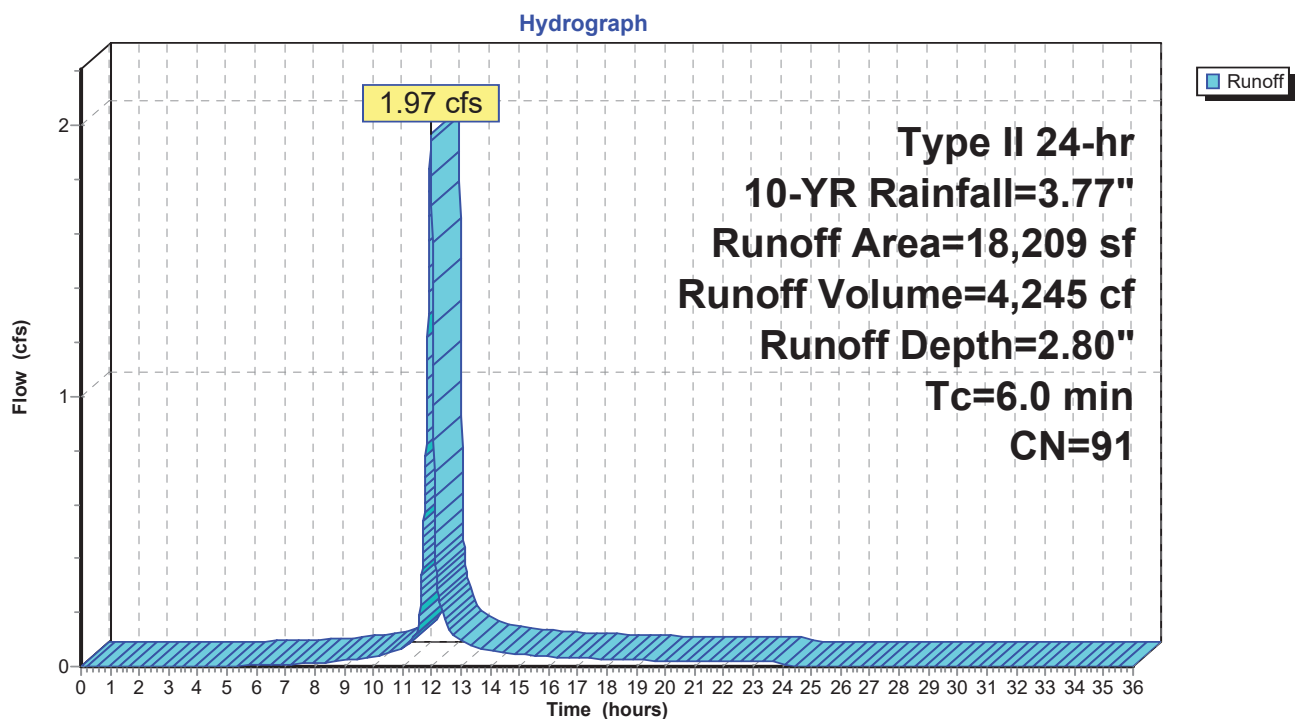
Summary for Subcatchment 5S: PRE 2B

Runoff = 1.97 cfs @ 11.97 hrs, Volume= 4,245 cf, Depth= 2.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
12,591	98	Paved parking, HSG C
5,618	74	>75% Grass cover, Good, HSG C
18,209	91	Weighted Average
5,618		30.85% Pervious Area
12,591		69.15% Impervious Area

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

Subcatchment 5S: PRE 2B

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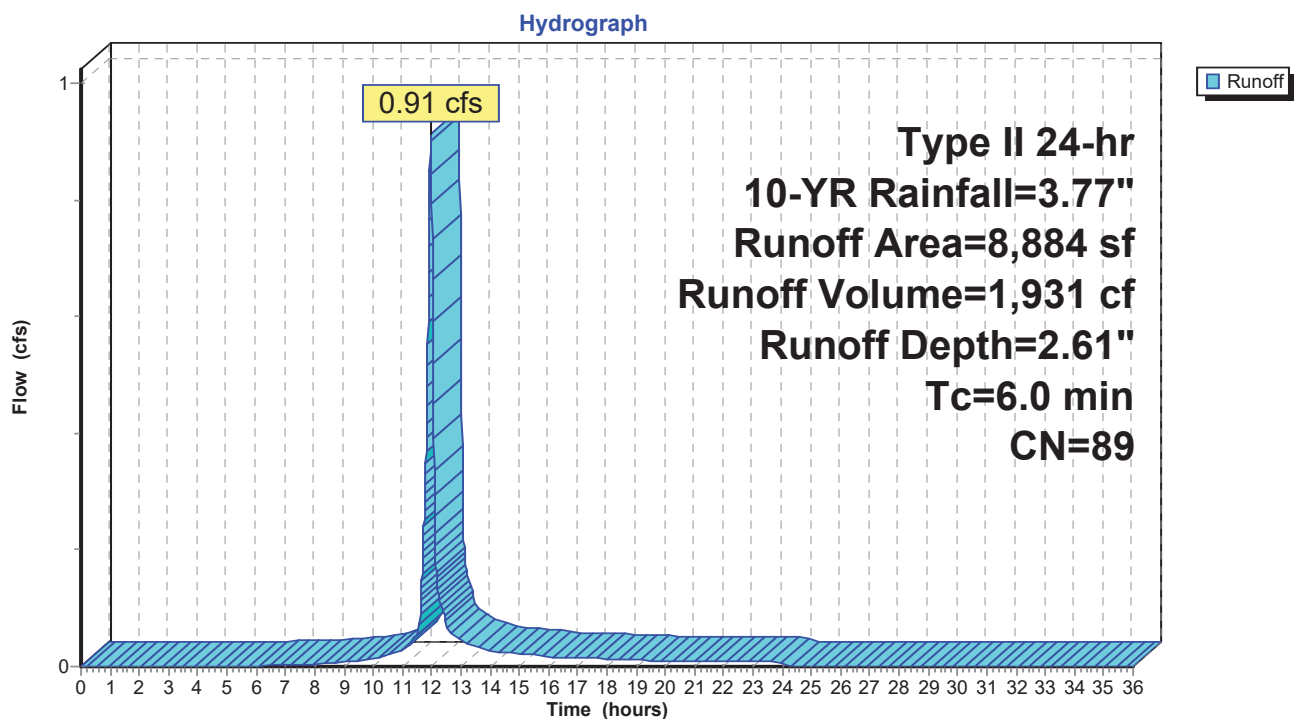
Summary for Subcatchment 6S: POST 1A-2

Runoff = 0.91 cfs @ 11.97 hrs, Volume= 1,931 cf, Depth= 2.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
5,625	98	Roofs, HSG C
3,259	74	>75% Grass cover, Good, HSG C
8,884	89	Weighted Average
3,259		36.68% Pervious Area
5,625		63.32% Impervious Area

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

Subcatchment 6S: POST 1A-2

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Type II 24-hr 10-YR Rainfall=3.77"

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Summary for Subcatchment 7S: PRE 1A

Runoff = 1.01 cfs @ 12.02 hrs, Volume= 2,445 cf, Depth= 2.43"

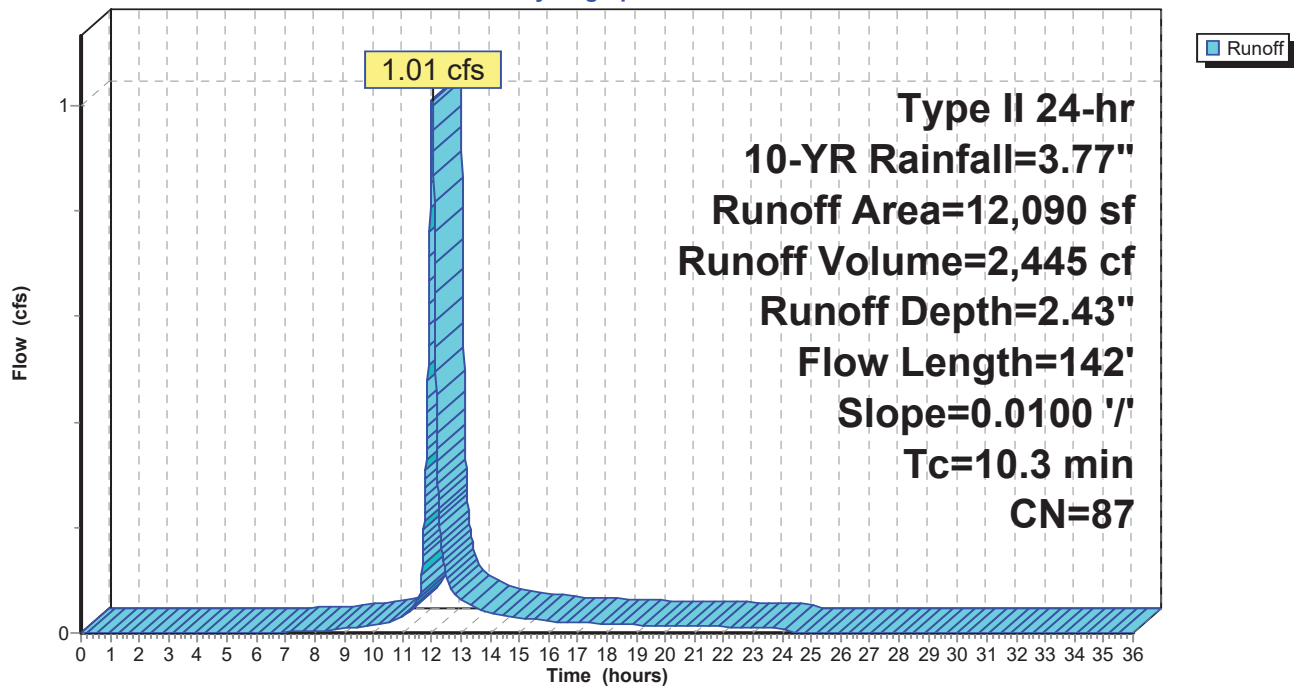
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
6,431	98	Paved parking, HSG C
5,659	74	>75% Grass cover, Good, HSG C
12,090	87	Weighted Average
5,659		46.81% Pervious Area
6,431		53.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	46	0.0100	0.83		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.80"
8.4	54	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.0	42	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	142	Total			

Subcatchment 7S: PRE 1A

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.77"

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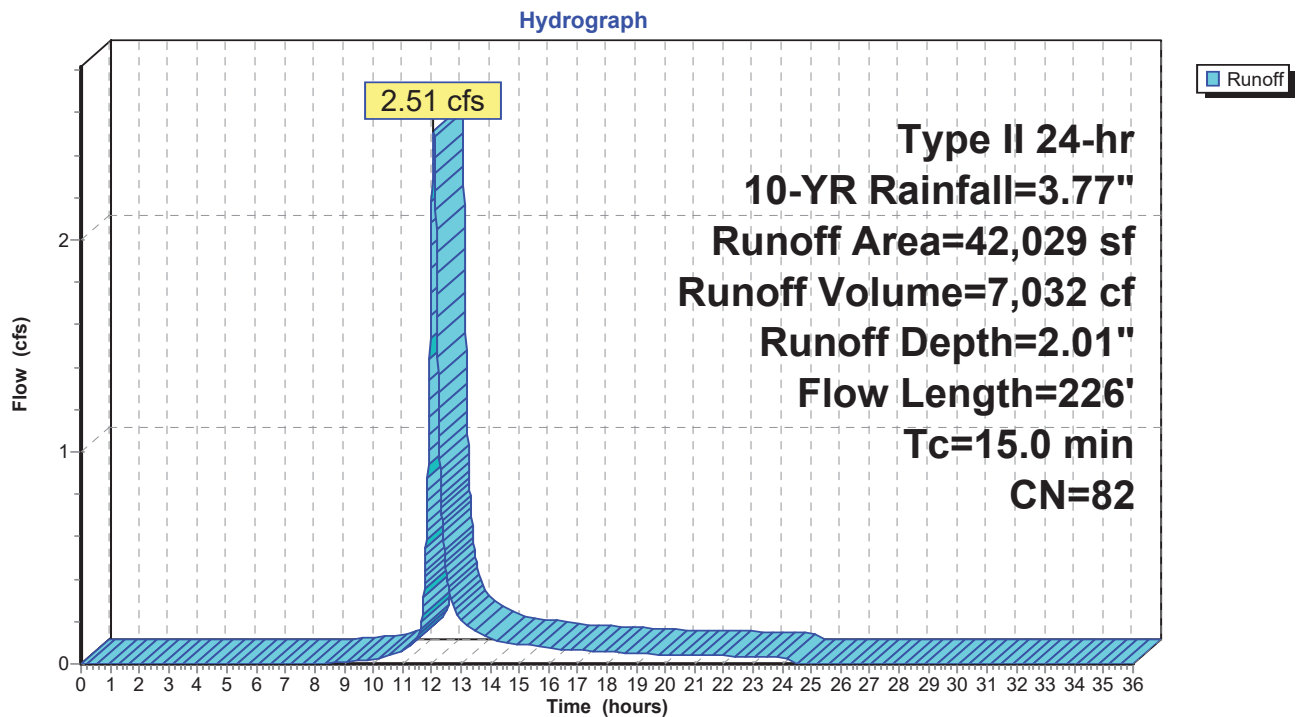
Summary for Subcatchment 8S: PRE 1B

Runoff = 2.51 cfs @ 12.07 hrs, Volume= 7,032 cf, Depth= 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
13,546	98	Paved parking, HSG C
28,483	74	>75% Grass cover, Good, HSG C
42,029	82	Weighted Average
28,483		67.77% Pervious Area
13,546		32.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0100	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.2	126	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.0	226	Total			

Subcatchment 8S: PRE 1B

Summary for Subcatchment 9S: PRE 3

Runoff = 0.22 cfs @ 11.97 hrs, Volume= 485 cf, Depth= 3.10"

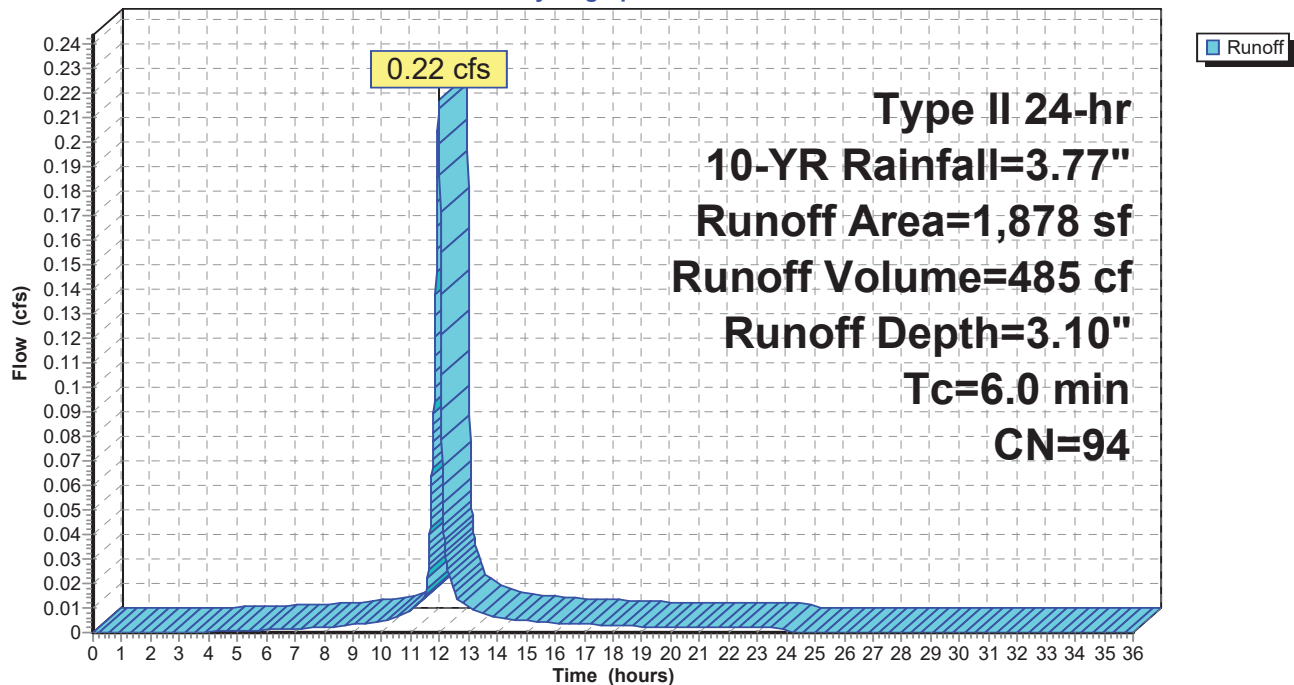
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
1,604	98	Paved parking, HSG C
274	74	>75% Grass cover, Good, HSG C
1,878	94	Weighted Average
274		14.59% Pervious Area
1,604		85.41% Impervious Area

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

Subcatchment 9S: PRE 3

Hydrograph



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Type II 24-hr 10-YR Rainfall=3.77"

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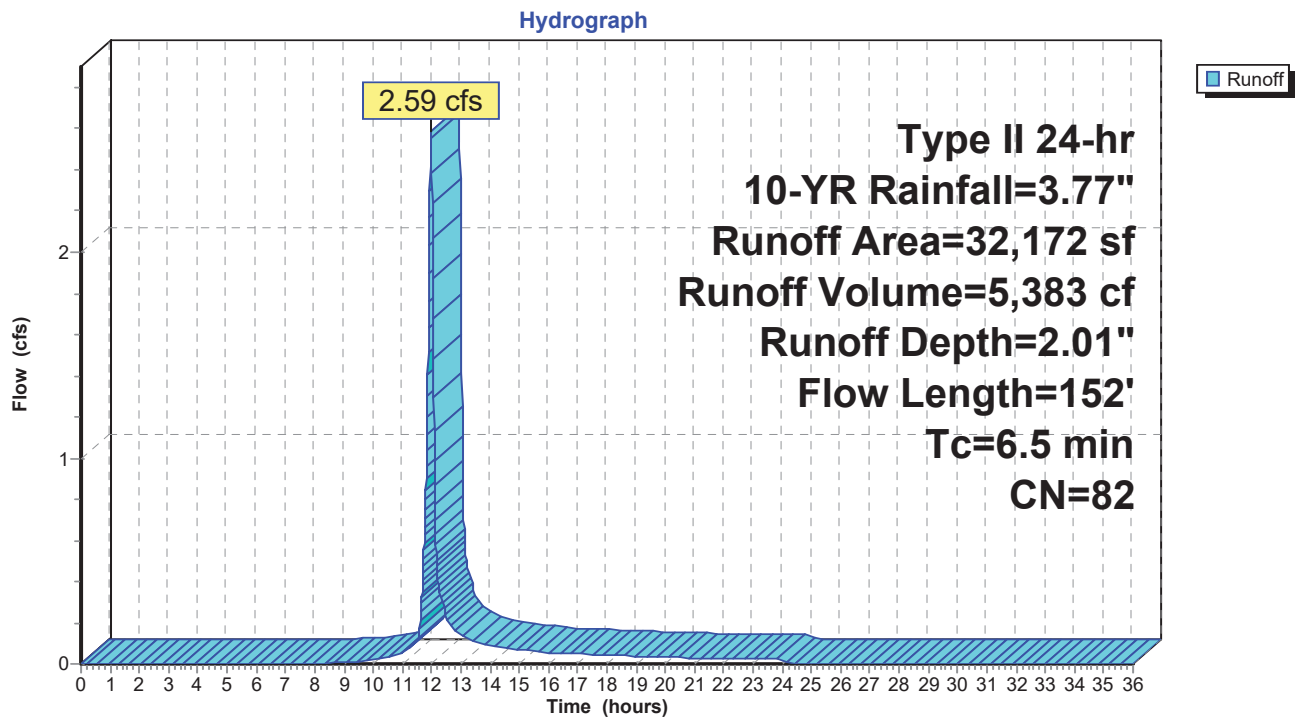
Summary for Subcatchment 10S: POST 1B

Runoff = 2.59 cfs @ 11.98 hrs, Volume= 5,383 cf, Depth= 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
10,909	98	Paved parking, HSG C
21,263	74	>75% Grass cover, Good, HSG C
32,172	82	Weighted Average
21,263		66.09% Pervious Area
10,909		33.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0800	0.28		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
0.5	52	0.0580	1.69		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.5	152	Total			

Subcatchment 10S: POST 1B

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Type II 24-hr 10-YR Rainfall=3.77"

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Summary for Subcatchment 11S: POST 1A-3

Runoff = 0.28 cfs @ 11.98 hrs, Volume= 573 cf, Depth= 1.43"

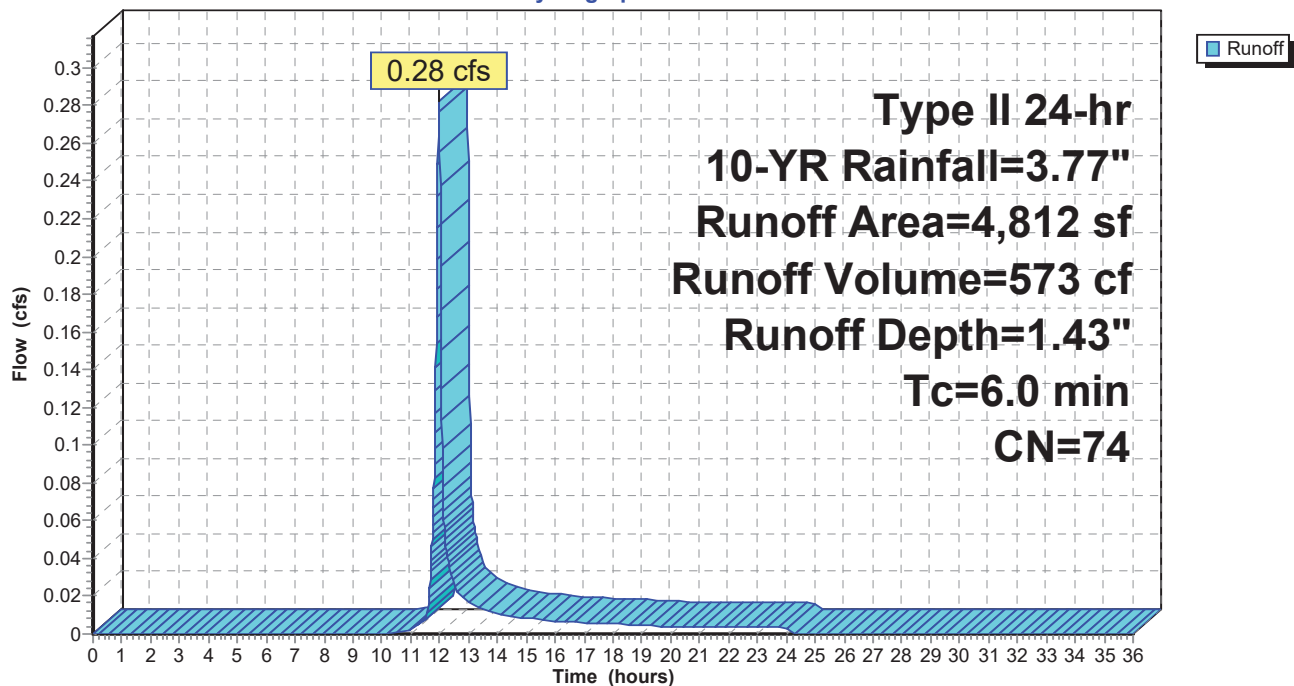
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
4,812	74	>75% Grass cover, Good, HSG C
4,812		100.00% Pervious Area

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

Subcatchment 11S: POST 1A-3

Hydrograph



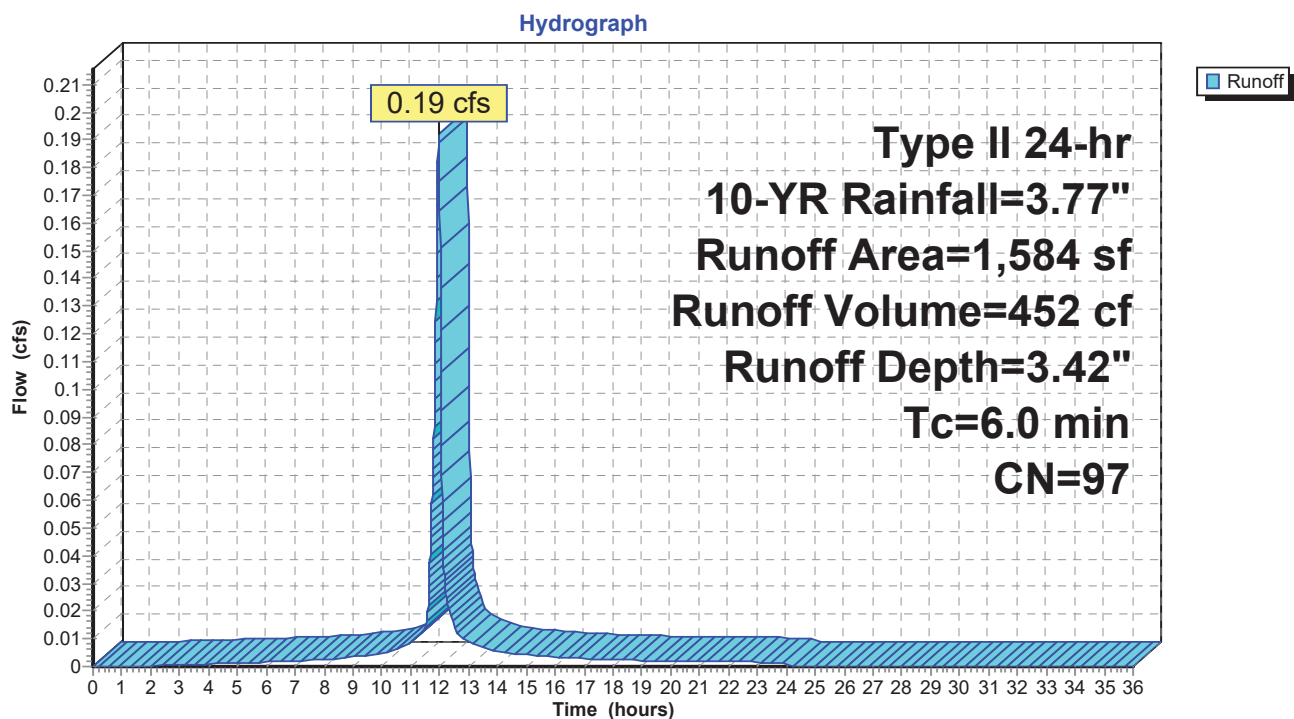
Summary for Subcatchment 15S: POST 3

Runoff = 0.19 cfs @ 11.97 hrs, Volume= 452 cf, Depth= 3.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
1,523	98	Paved parking, HSG C
61	74	>75% Grass cover, Good, HSG C
1,584	97	Weighted Average
61		3.85% Pervious Area
1,523		96.15% Impervious Area

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

Subcatchment 15S: POST 3

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Type II 24-hr 10-YR Rainfall=3.77"

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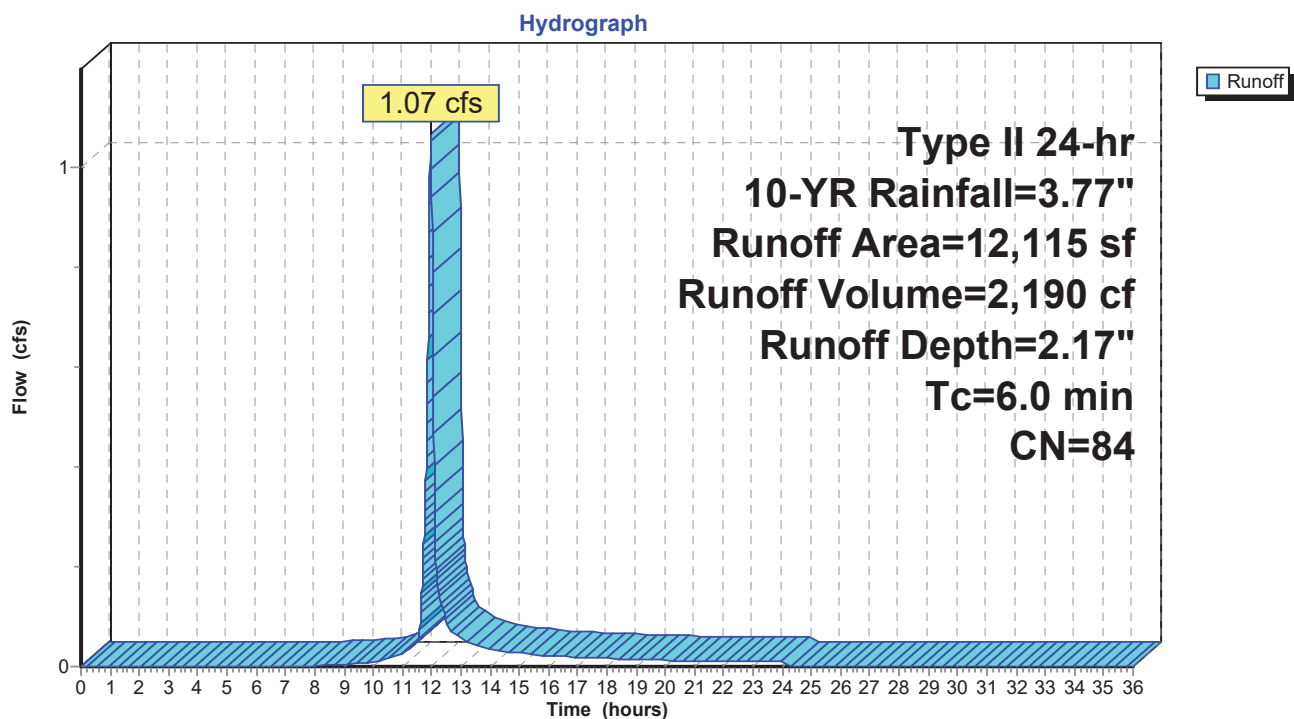
Summary for Subcatchment 16S: POST 2B

Runoff = 1.07 cfs @ 11.97 hrs, Volume= 2,190 cf, Depth= 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
5,263	98	Paved parking, HSG C
6,852	74	>75% Grass cover, Good, HSG C
12,115	84	Weighted Average
6,852		56.56% Pervious Area
5,263		43.44% Impervious Area

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

Subcatchment 16S: POST 2B

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Type II 24-hr 10-YR Rainfall=3.77"

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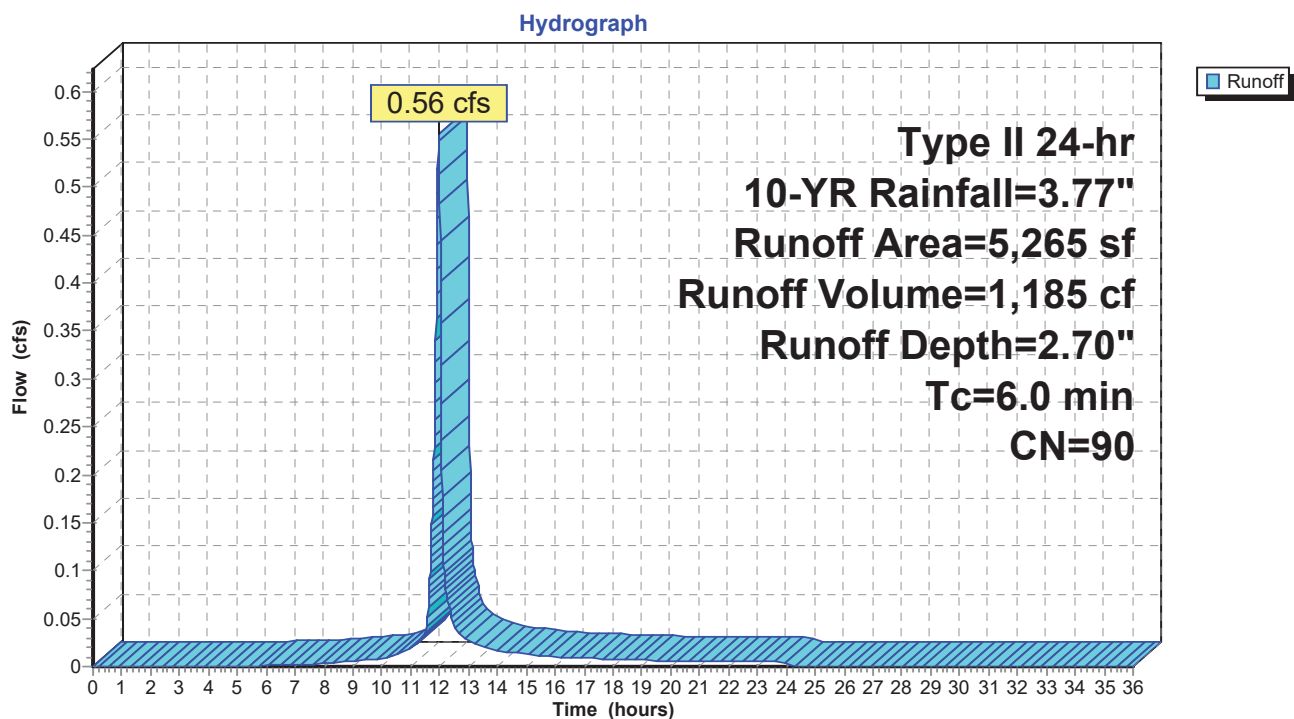
Summary for Subcatchment 19S: POST 1A-1

Runoff = 0.56 cfs @ 11.97 hrs, Volume= 1,185 cf, Depth= 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

Area (sf)	CN	Description
3,584	98	Paved parking, HSG C
1,681	74	>75% Grass cover, Good, HSG C
5,265	90	Weighted Average
1,681		31.93% Pervious Area
3,584		68.07% Impervious Area

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

Subcatchment 19S: POST 1A-1

Summary for Pond 4P: CB-1

Inflow Area = 21,249 sf, 96.09% Impervious, Inflow Depth = 3.42" for 10-YR event
 Inflow = 2.58 cfs @ 11.97 hrs, Volume= 6,061 cf
 Outflow = 2.58 cfs @ 11.97 hrs, Volume= 6,061 cf, Atten= 0%, Lag= 0.0 min
 Primary = 2.58 cfs @ 11.97 hrs, Volume= 6,061 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 440.61' @ 11.98 hrs

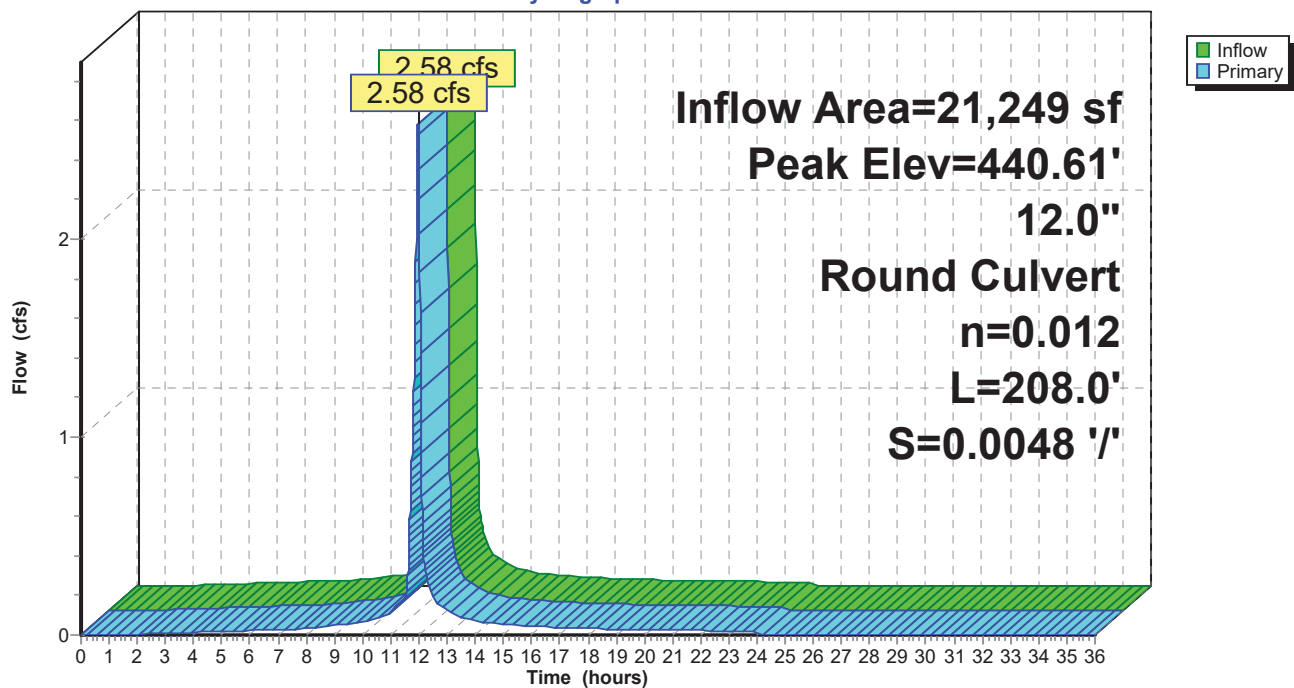
Flood Elev= 442.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.51 cfs @ 11.97 hrs HW=440.56' TW=439.44' (Dynamic Tailwater)
 ↳ **1=Culvert** (Outlet Controls 2.51 cfs @ 3.19 fps)

Pond 4P: CB-1

Hydrograph



Summary for Pond 5P: DETENTION BASIN #1

Inflow Area = 34,945 sf, 74.53% Impervious, Inflow Depth = 2.83" for 10-YR event
 Inflow = 3.76 cfs @ 11.97 hrs, Volume= 8,256 cf
 Outflow = 1.20 cfs @ 12.09 hrs, Volume= 8,251 cf, Atten= 68%, Lag= 7.4 min
 Primary = 1.20 cfs @ 12.09 hrs, Volume= 8,251 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 439.86' @ 12.09 hrs Surf.Area= 1,749 sf Storage= 2,328 cf

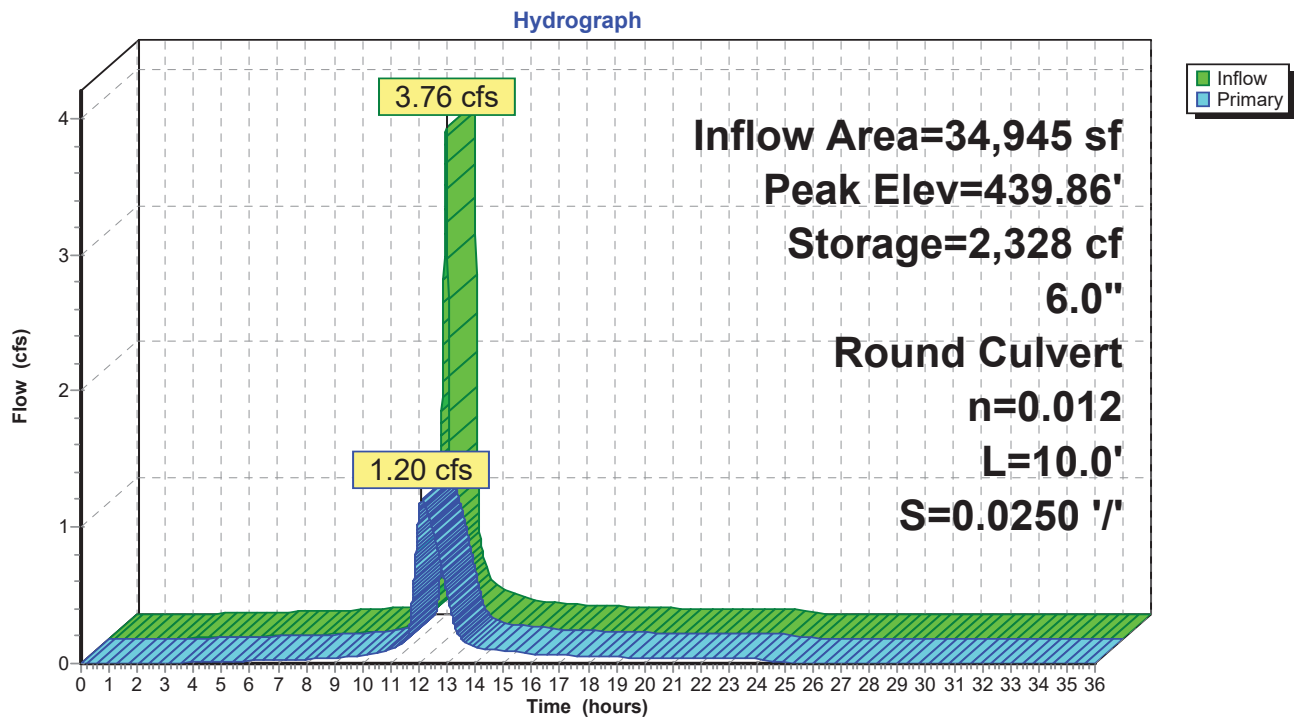
Plug-Flow detention time= 28.3 min calculated for 8,249 cf (100% of inflow)
 Center-of-Mass det. time= 28.1 min (808.0 - 779.9)

Volume	Invert	Avail.Storage	Storage Description
#1	438.00'	4,698 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
438.00	774	0	0
439.00	1,270	1,022	1,022
440.00	1,824	1,547	2,569
441.00	2,434	2,129	4,698

Device	Routing	Invert	Outlet Devices
#1	Primary	438.00'	6.0" Round Culvert L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.00' / 437.75' S= 0.0250 ' S Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=1.20 cfs @ 12.09 hrs HW=439.86' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.20 cfs @ 6.12 fps)

Pond 5P: DETENTION BASIN #1

Summary for Pond 7P: DETENTION BASIN #2

Inflow Area = 8,884 sf, 63.32% Impervious, Inflow Depth = 2.61" for 10-YR event
 Inflow = 0.91 cfs @ 11.97 hrs, Volume= 1,931 cf
 Outflow = 0.90 cfs @ 11.98 hrs, Volume= 1,622 cf, Atten= 1%, Lag= 0.7 min
 Primary = 0.90 cfs @ 11.98 hrs, Volume= 1,622 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 442.12' @ 11.98 hrs Surf.Area= 459 sf Storage= 364 cf

Plug-Flow detention time= 105.7 min calculated for 1,622 cf (84% of inflow)
 Center-of-Mass det. time= 34.6 min (836.2 - 801.6)

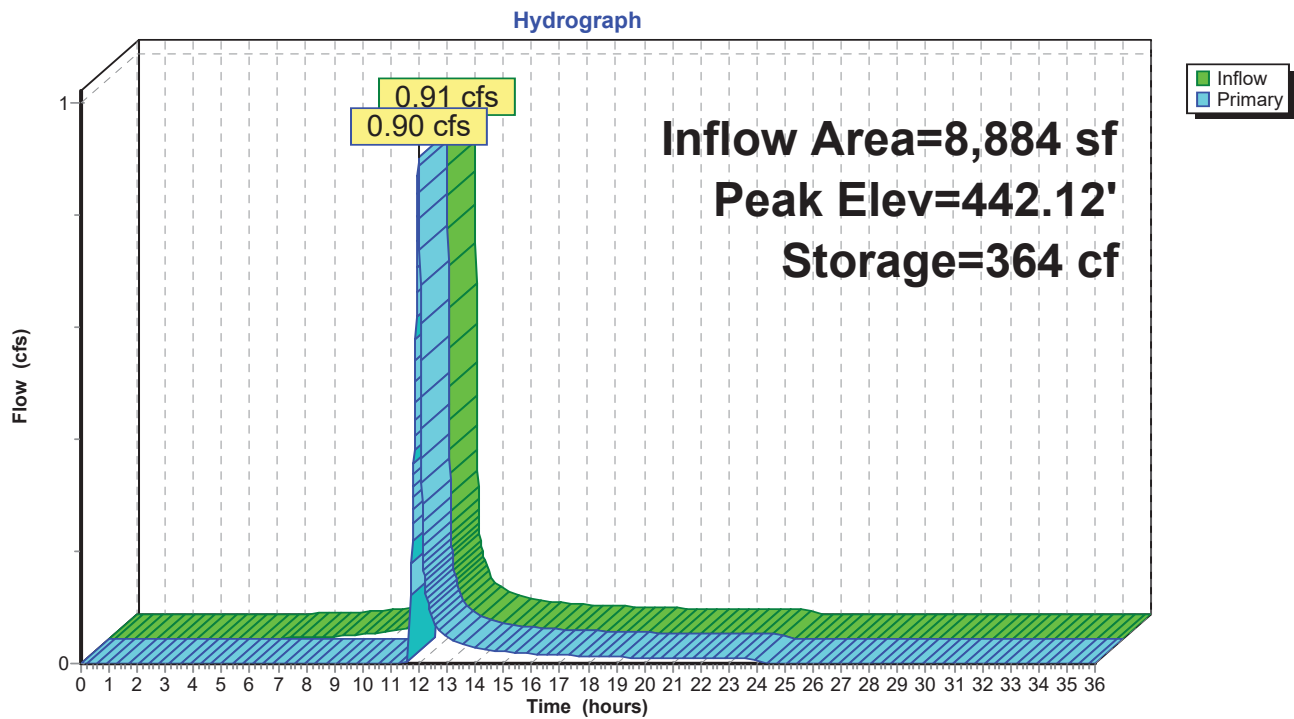
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
441.00	193	0	0
442.00	425	309	309
442.50	563	247	556

Device	Routing	Invert	Outlet Devices
#1	Primary	438.50'	8.0" Round Culvert L= 102.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.50' / 438.00' S= 0.0049 ' / Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Device 1	442.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.90 cfs @ 11.98 hrs HW=442.12' TW=439.53' (Dynamic Tailwater)

↑ **1=Culvert** (Passes 0.90 cfs of 1.81 cfs potential flow)
 ↑ **2=Orifice/Grate** (Weir Controls 0.90 cfs @ 1.15 fps)

Pond 7P: DETENTION BASIN #2

Summary for Pond 11P: DETENTION BASIN

Inflow Area = 11,883 sf, 85.03% Impervious, Inflow Depth = 3.10" for 10-YR event
 Inflow = 1.38 cfs @ 11.97 hrs, Volume= 3,069 cf
 Outflow = 1.37 cfs @ 11.98 hrs, Volume= 2,904 cf, Atten= 1%, Lag= 0.5 min
 Primary = 1.37 cfs @ 11.98 hrs, Volume= 2,904 cf

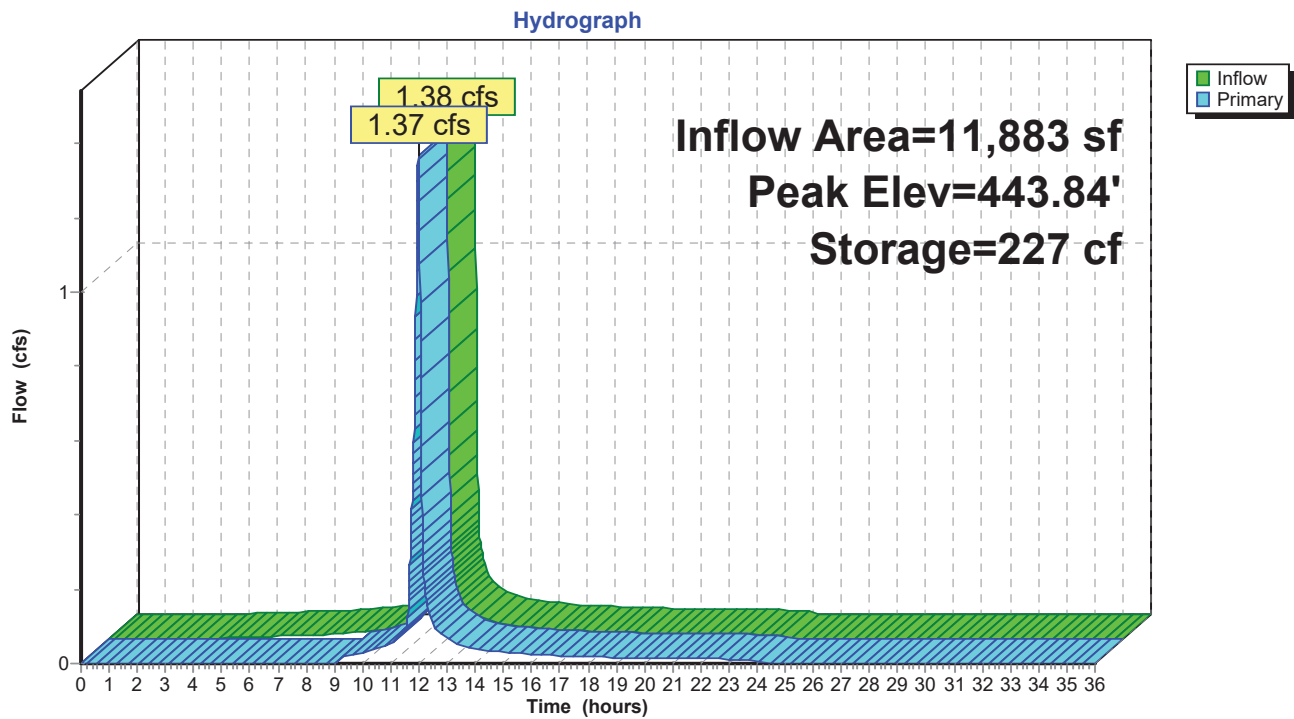
Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 443.84' @ 11.98 hrs Surf.Area= 731 sf Storage= 227 cf

Plug-Flow detention time= 52.7 min calculated for 2,904 cf (95% of inflow)
 Center-of-Mass det. time= 21.4 min (799.9 - 778.5)

Volume	Invert	Avail.Storage	Storage Description
#1	443.50'	351 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.50	617	0	0
444.00	786	351	351

Device	Routing	Invert	Outlet Devices
#1	Primary	443.75'	22.0' long x 3.0' 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 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=1.37 cfs @ 11.98 hrs HW=443.84' (Free Discharge)
 ↑1=**Broad-Crested Rectangular Weir** (Weir Controls 1.37 cfs @ 0.72 fps)

Pond 11P: DETENTION BASIN

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Type II 24-hr 25-YR Rainfall=4.51"

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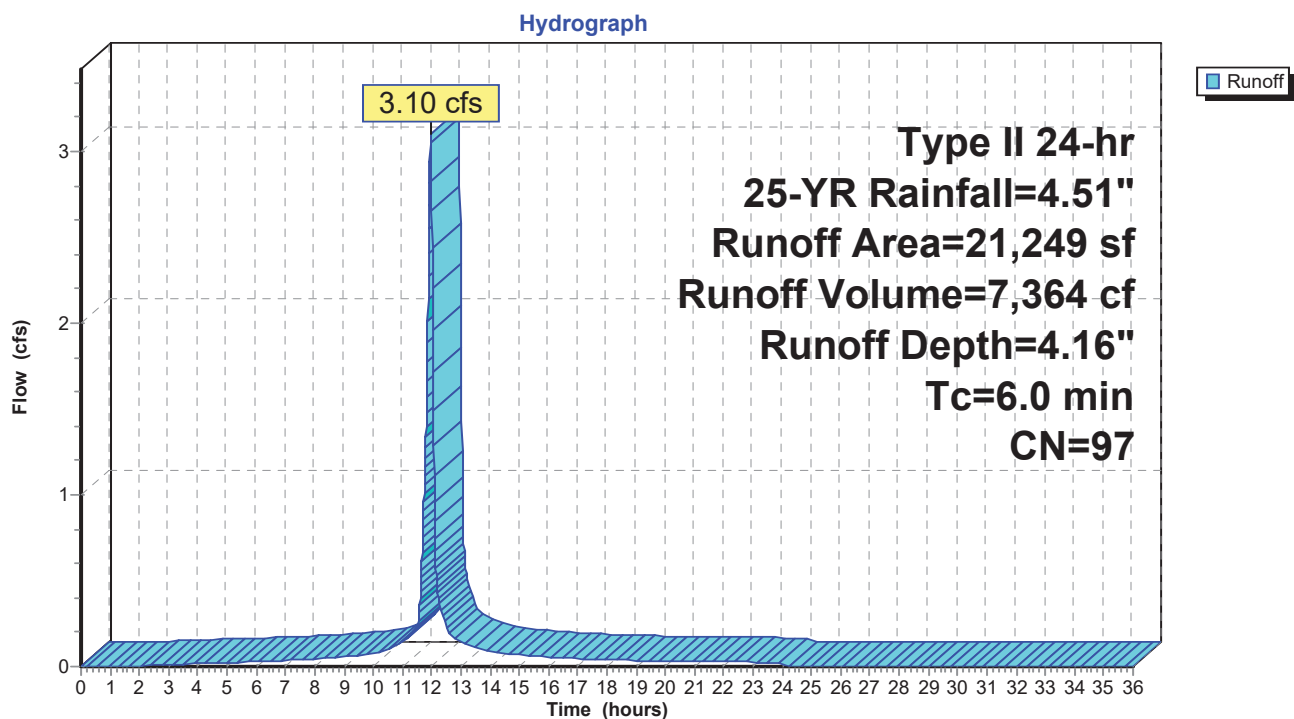
Summary for Subcatchment 3S: POST 2A

Runoff = 3.10 cfs @ 11.97 hrs, Volume= 7,364 cf, Depth= 4.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
20,418	98	Paved parking, HSG C
831	74	>75% Grass cover, Good, HSG C
21,249	97	Weighted Average
831		3.91% Pervious Area
20,418		96.09% Impervious Area

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

Subcatchment 3S: POST 2A

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Type II 24-hr 25-YR Rainfall=4.51"

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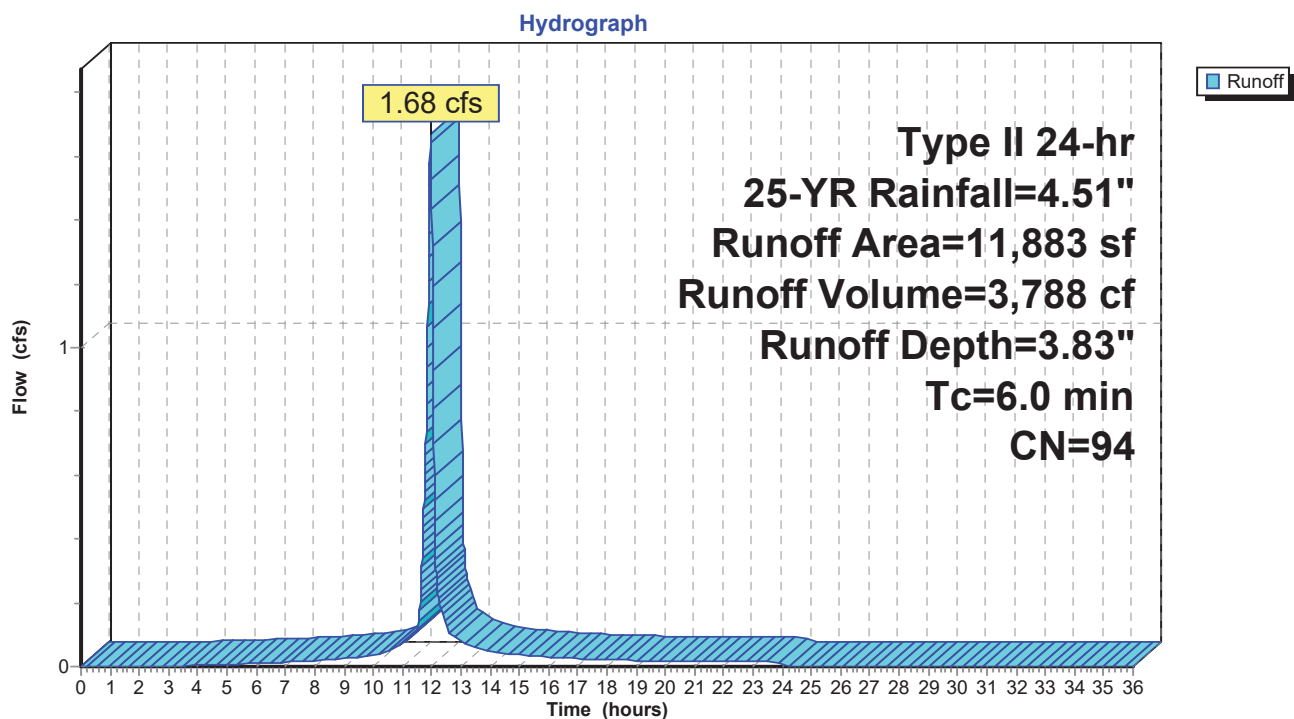
Summary for Subcatchment 4S: PRE 2A

Runoff = 1.68 cfs @ 11.97 hrs, Volume= 3,788 cf, Depth= 3.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
10,104	98	Paved parking, HSG C
1,779	74	>75% Grass cover, Good, HSG C
11,883	94	Weighted Average
1,779		14.97% Pervious Area
10,104		85.03% Impervious Area

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

Subcatchment 4S: PRE 2A

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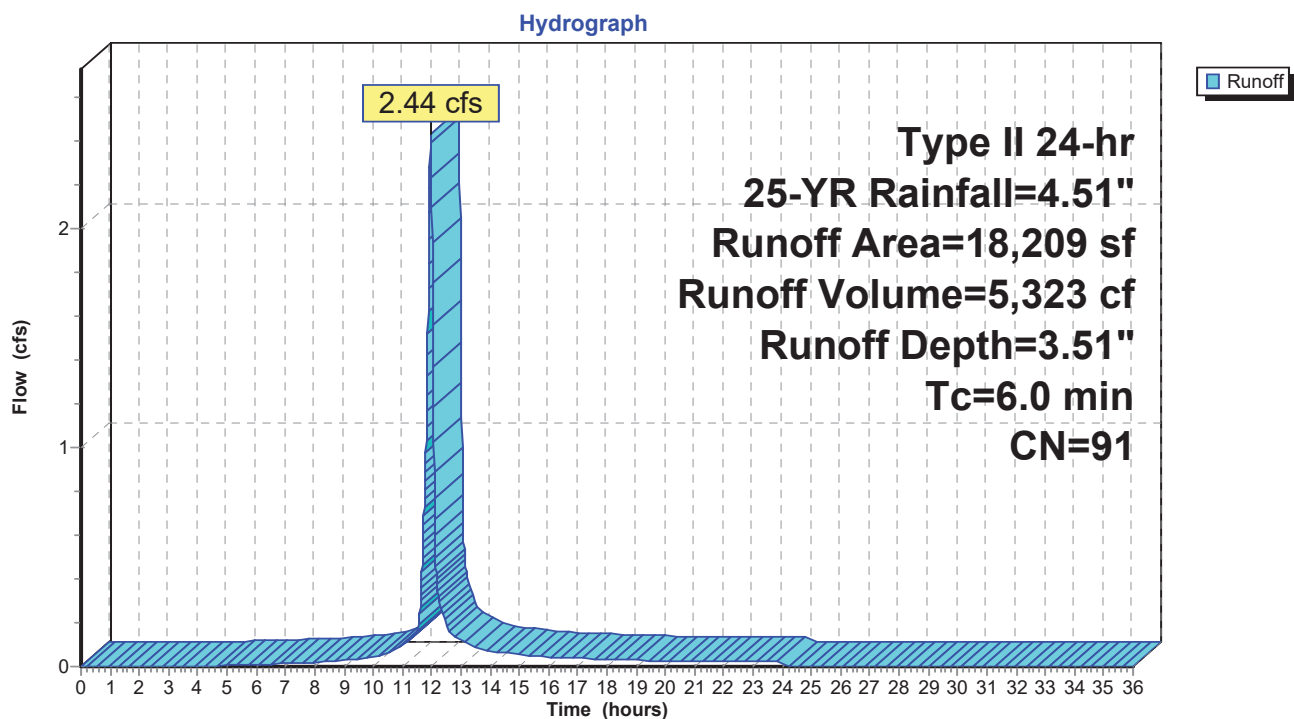
Summary for Subcatchment 5S: PRE 2B

Runoff = 2.44 cfs @ 11.97 hrs, Volume= 5,323 cf, Depth= 3.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
12,591	98	Paved parking, HSG C
5,618	74	>75% Grass cover, Good, HSG C
18,209	91	Weighted Average
5,618		30.85% Pervious Area
12,591		69.15% Impervious Area

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

Subcatchment 5S: PRE 2B

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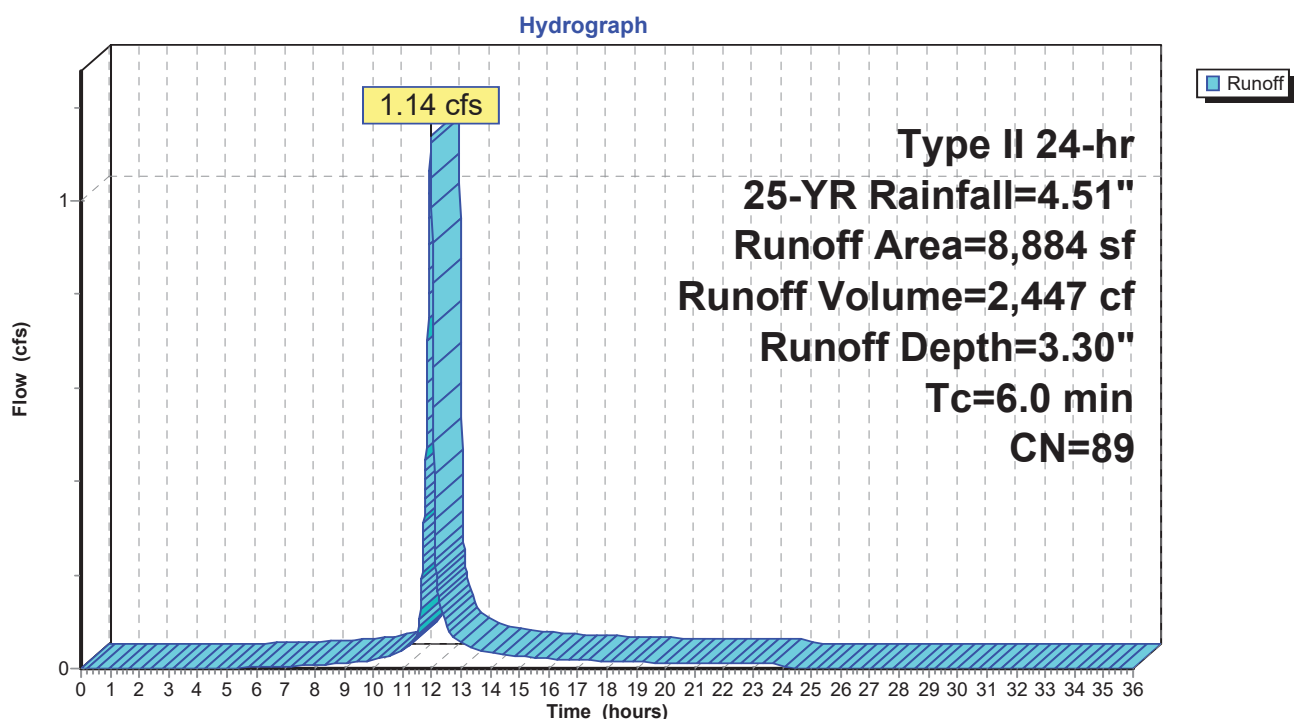
Summary for Subcatchment 6S: POST 1A-2

Runoff = 1.14 cfs @ 11.97 hrs, Volume= 2,447 cf, Depth= 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
5,625	98	Roofs, HSG C
3,259	74	>75% Grass cover, Good, HSG C
8,884	89	Weighted Average
3,259		36.68% Pervious Area
5,625		63.32% Impervious Area

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

Subcatchment 6S: POST 1A-2

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Type II 24-hr 25-YR Rainfall=4.51"

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Summary for Subcatchment 7S: PRE 1A

Runoff = 1.28 cfs @ 12.02 hrs, Volume= 3,132 cf, Depth= 3.11"

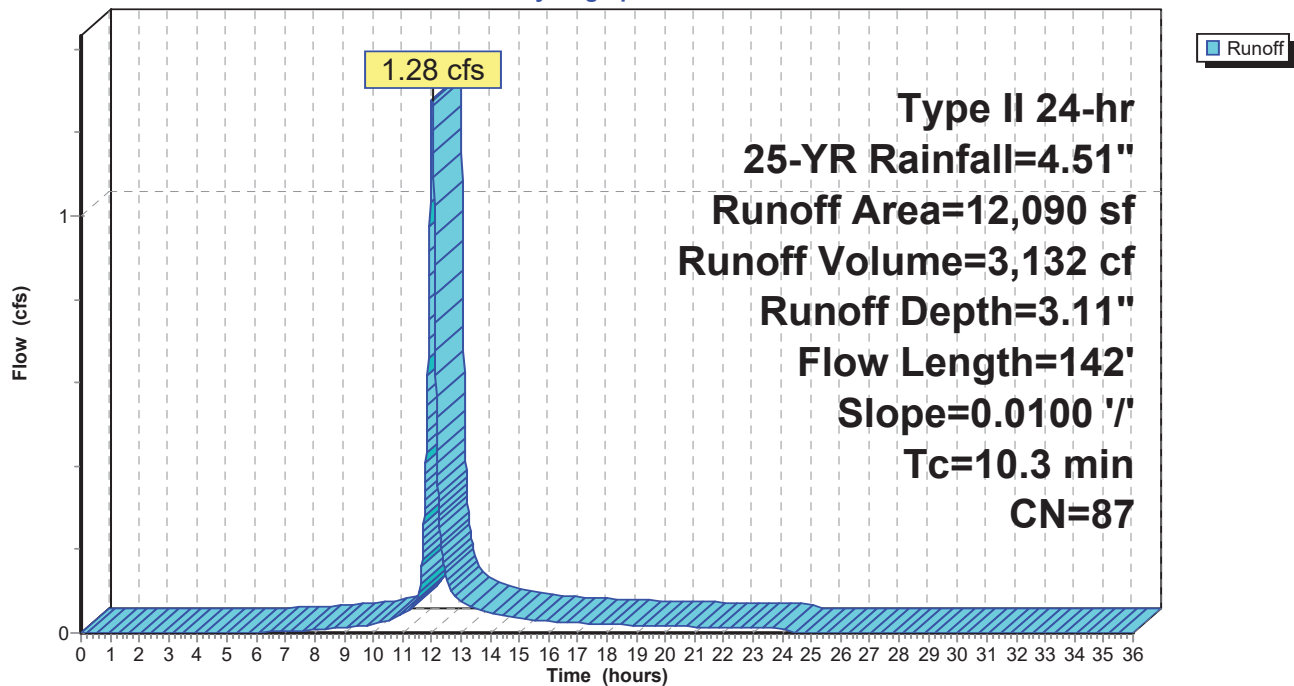
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
6,431	98	Paved parking, HSG C
5,659	74	>75% Grass cover, Good, HSG C
12,090	87	Weighted Average
5,659		46.81% Pervious Area
6,431		53.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	46	0.0100	0.83		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.80"
8.4	54	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.0	42	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	142	Total			

Subcatchment 7S: PRE 1A

Hydrograph



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Type II 24-hr 25-YR Rainfall=4.51"

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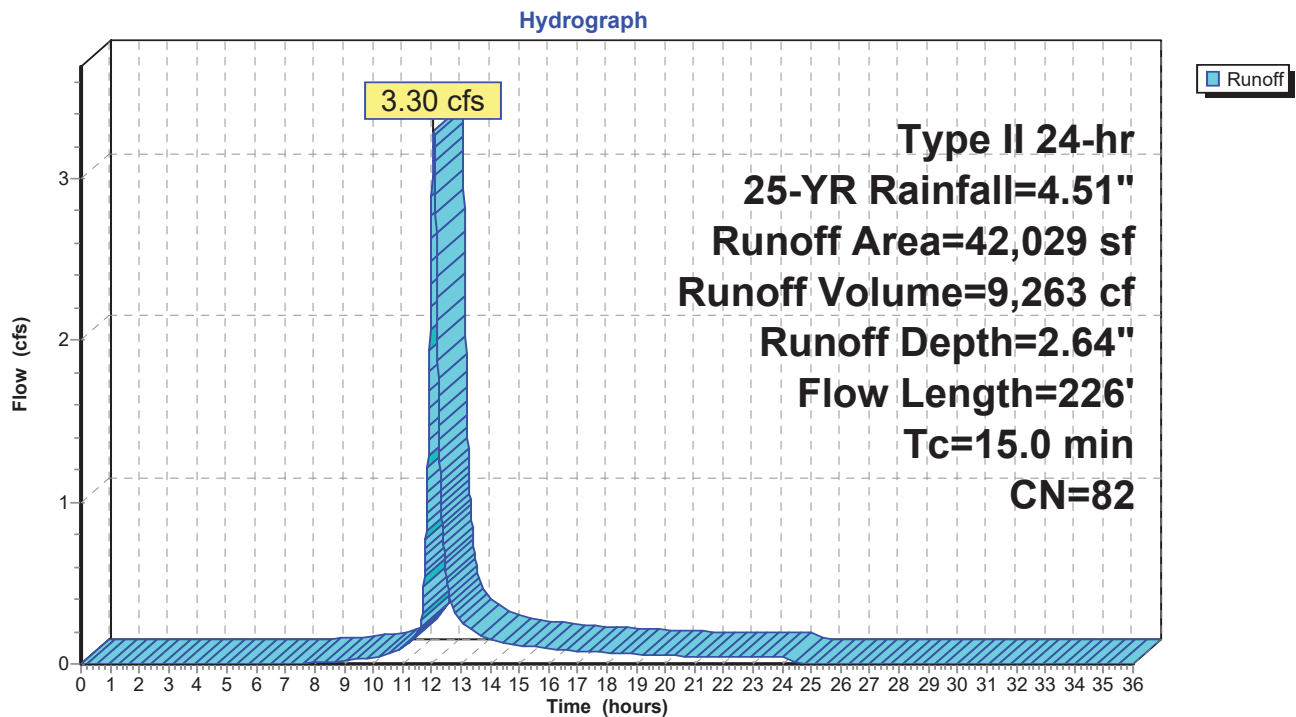
Summary for Subcatchment 8S: PRE 1B

Runoff = 3.30 cfs @ 12.07 hrs, Volume= 9,263 cf, Depth= 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
13,546	98	Paved parking, HSG C
28,483	74	>75% Grass cover, Good, HSG C
42,029	82	Weighted Average
28,483		67.77% Pervious Area
13,546		32.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0100	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.2	126	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.0	226	Total			

Subcatchment 8S: PRE 1B

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Type II 24-hr 25-YR Rainfall=4.51"

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Summary for Subcatchment 9S: PRE 3

Runoff = 0.26 cfs @ 11.97 hrs, Volume= 599 cf, Depth= 3.83"

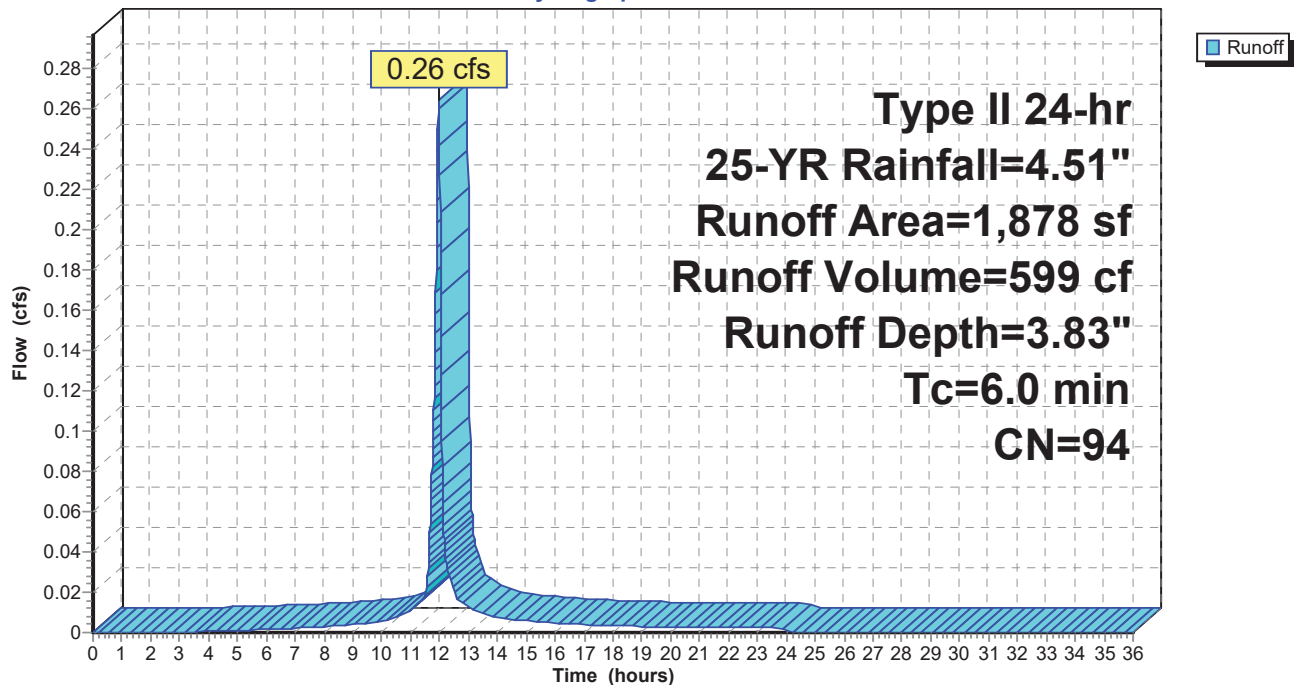
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
1,604	98	Paved parking, HSG C
274	74	>75% Grass cover, Good, HSG C
1,878	94	Weighted Average
274		14.59% Pervious Area
1,604		85.41% Impervious Area

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

Subcatchment 9S: PRE 3

Hydrograph



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Type II 24-hr 25-YR Rainfall=4.51"

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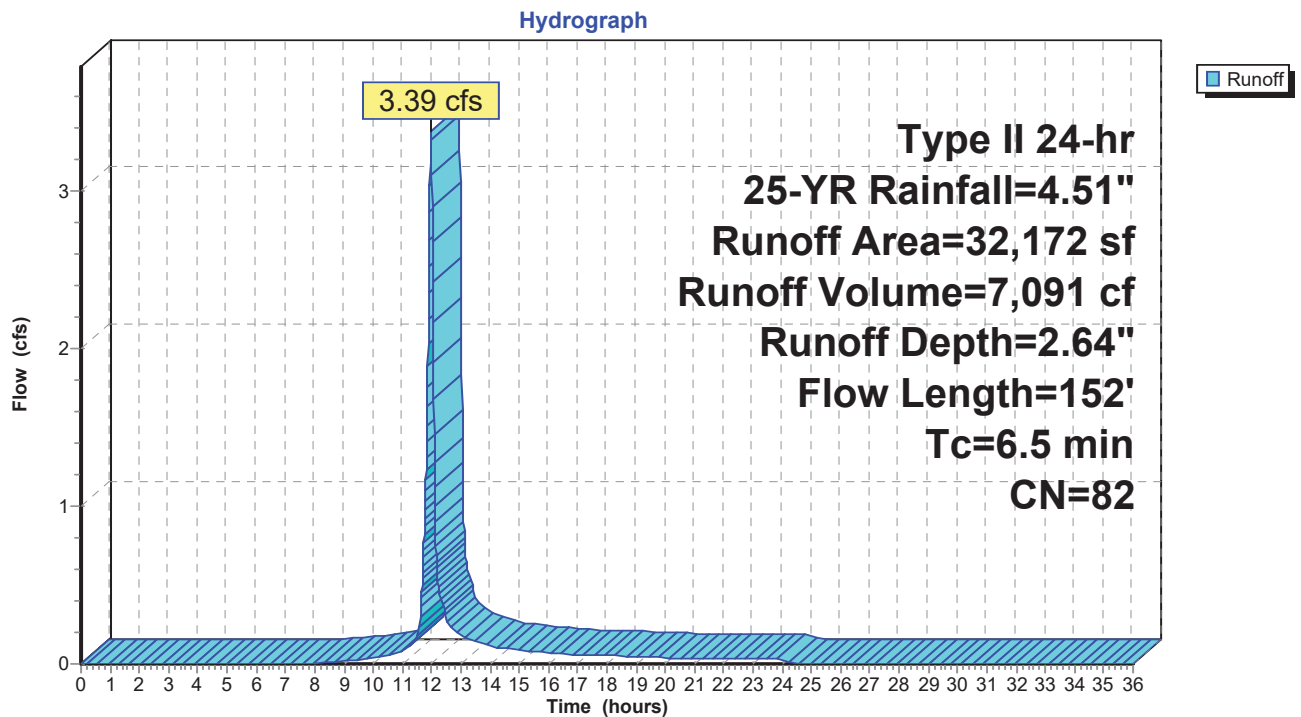
Summary for Subcatchment 10S: POST 1B

Runoff = 3.39 cfs @ 11.98 hrs, Volume= 7,091 cf, Depth= 2.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
10,909	98	Paved parking, HSG C
21,263	74	>75% Grass cover, Good, HSG C
32,172	82	Weighted Average
21,263		66.09% Pervious Area
10,909		33.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0800	0.28		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
0.5	52	0.0580	1.69		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.5	152	Total			

Subcatchment 10S: POST 1B

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Type II 24-hr 25-YR Rainfall=4.51"

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Summary for Subcatchment 11S: POST 1A-3

Runoff = 0.39 cfs @ 11.98 hrs, Volume= 794 cf, Depth= 1.98"

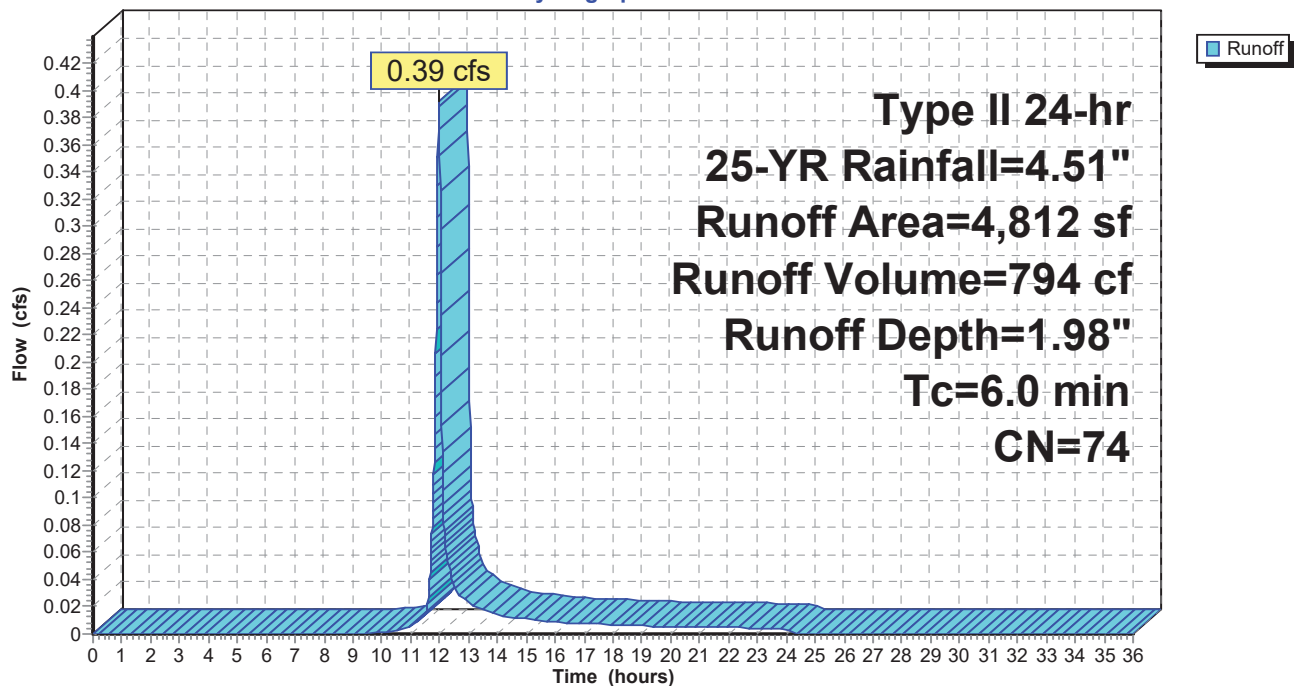
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
4,812	74	>75% Grass cover, Good, HSG C
4,812		100.00% Pervious Area

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

Subcatchment 11S: POST 1A-3

Hydrograph



Summary for Subcatchment 15S: POST 3

Runoff = 0.23 cfs @ 11.97 hrs, Volume= 549 cf, Depth= 4.16"

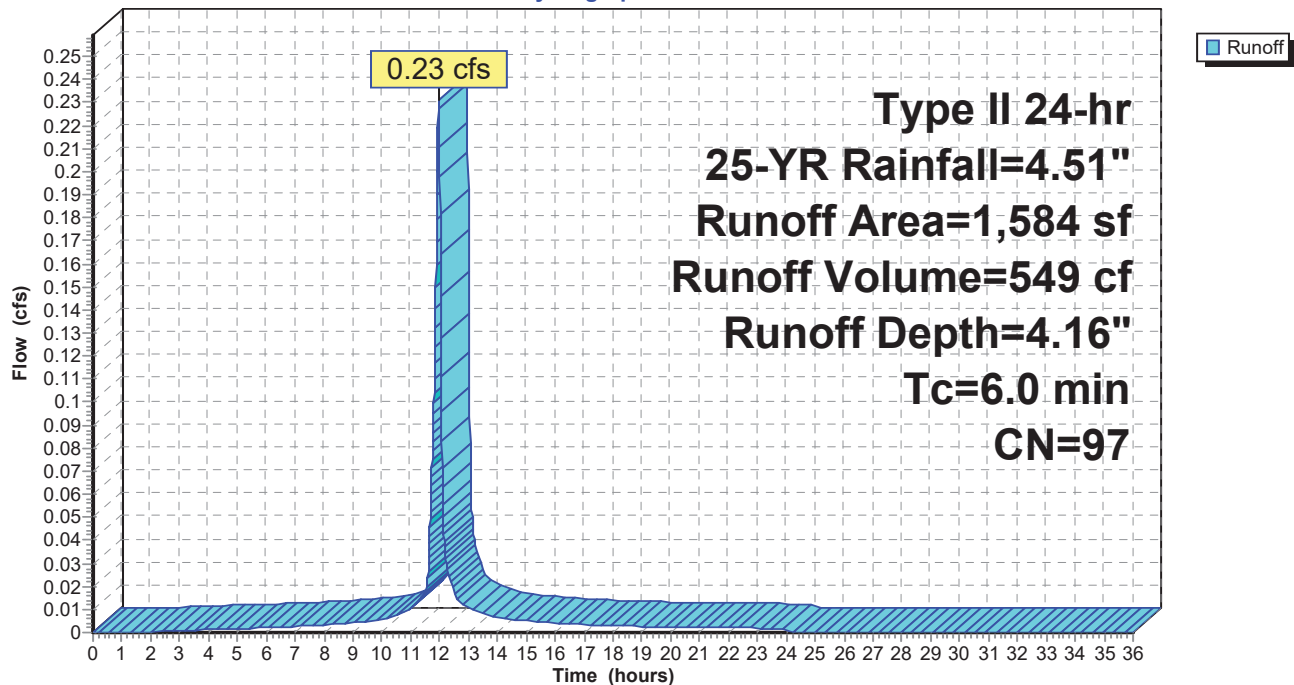
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
1,523	98	Paved parking, HSG C
61	74	>75% Grass cover, Good, HSG C
1,584	97	Weighted Average
61		3.85% Pervious Area
1,523		96.15% Impervious Area

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

Subcatchment 15S: POST 3

Hydrograph



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Type II 24-hr 25-YR Rainfall=4.51"

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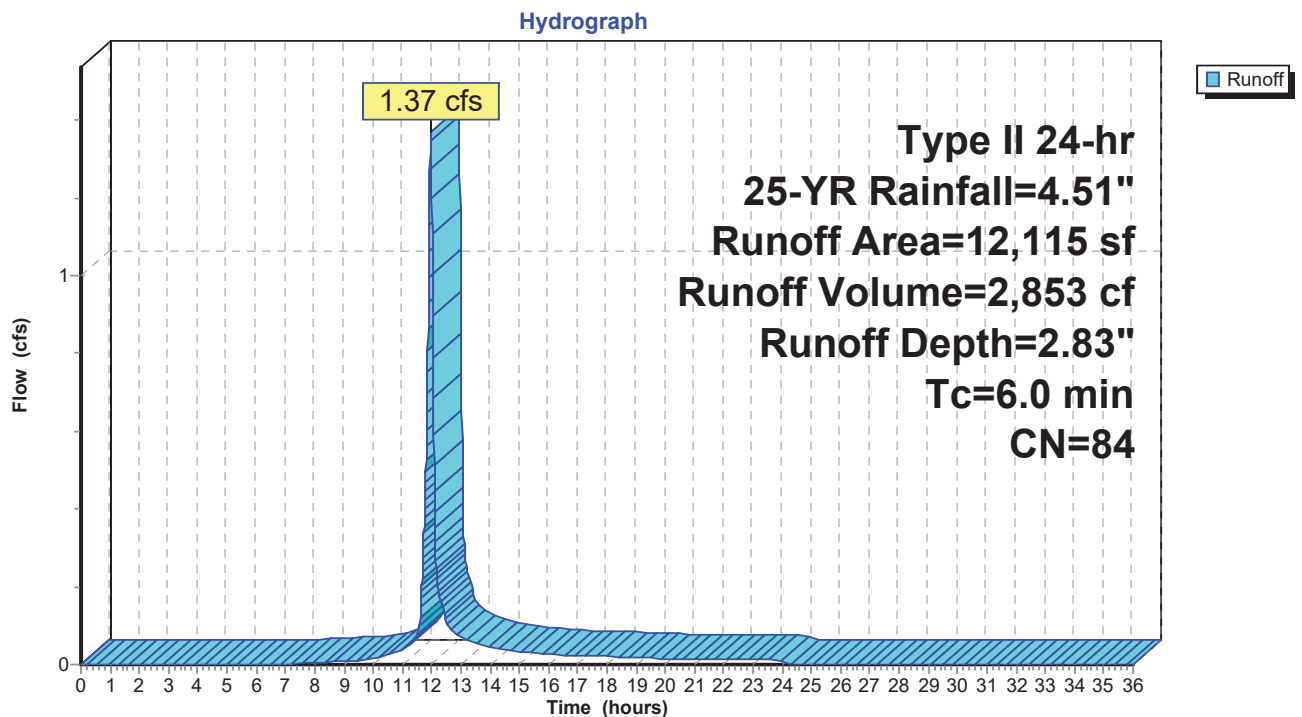
Summary for Subcatchment 16S: POST 2B

Runoff = 1.37 cfs @ 11.97 hrs, Volume= 2,853 cf, Depth= 2.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
5,263	98	Paved parking, HSG C
6,852	74	>75% Grass cover, Good, HSG C
12,115	84	Weighted Average
6,852		56.56% Pervious Area
5,263		43.44% Impervious Area

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

Subcatchment 16S: POST 2B

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Type II 24-hr 25-YR Rainfall=4.51"

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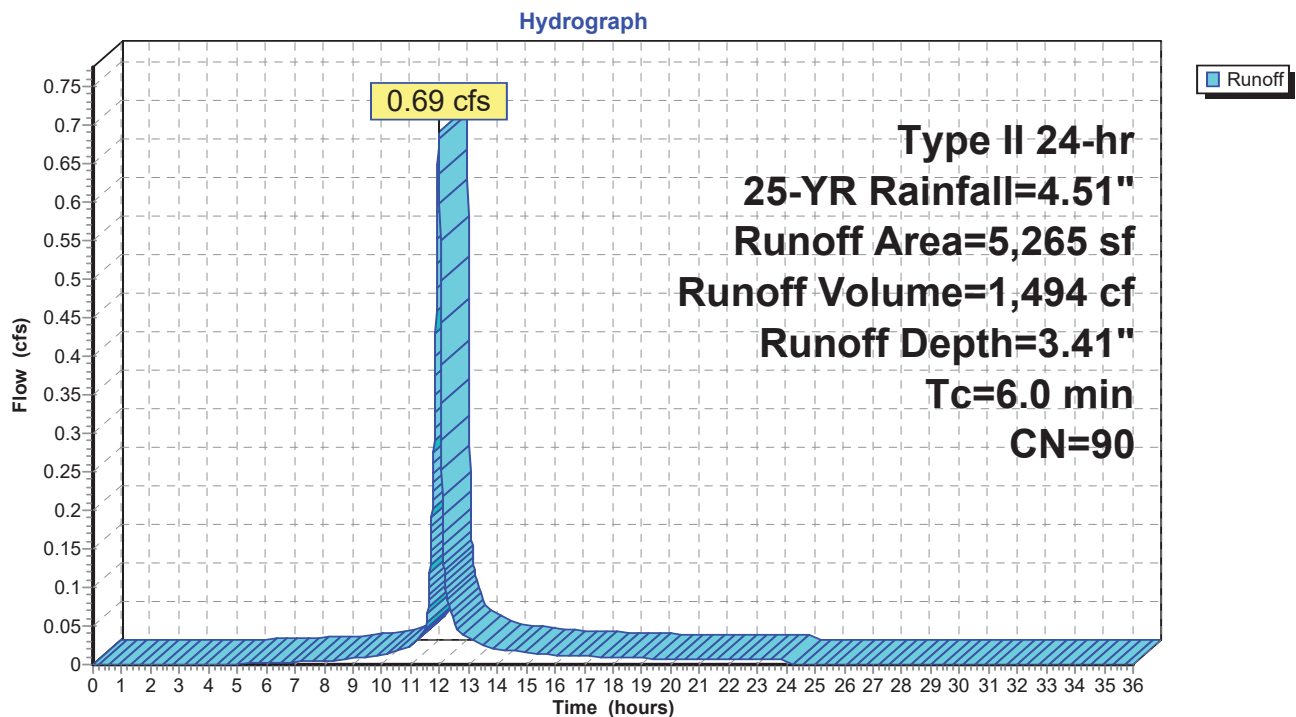
Summary for Subcatchment 19S: POST 1A-1

Runoff = 0.69 cfs @ 11.97 hrs, Volume= 1,494 cf, Depth= 3.41"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

Area (sf)	CN	Description
3,584	98	Paved parking, HSG C
1,681	74	>75% Grass cover, Good, HSG C
5,265	90	Weighted Average
1,681		31.93% Pervious Area
3,584		68.07% Impervious Area

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

Subcatchment 19S: POST 1A-1

Summary for Pond 4P: CB-1

Inflow Area = 21,249 sf, 96.09% Impervious, Inflow Depth = 4.16" for 25-YR event
 Inflow = 3.10 cfs @ 11.97 hrs, Volume= 7,364 cf
 Outflow = 3.10 cfs @ 11.97 hrs, Volume= 7,364 cf, Atten= 0%, Lag= 0.0 min
 Primary = 3.10 cfs @ 11.97 hrs, Volume= 7,364 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 441.43' @ 11.98 hrs

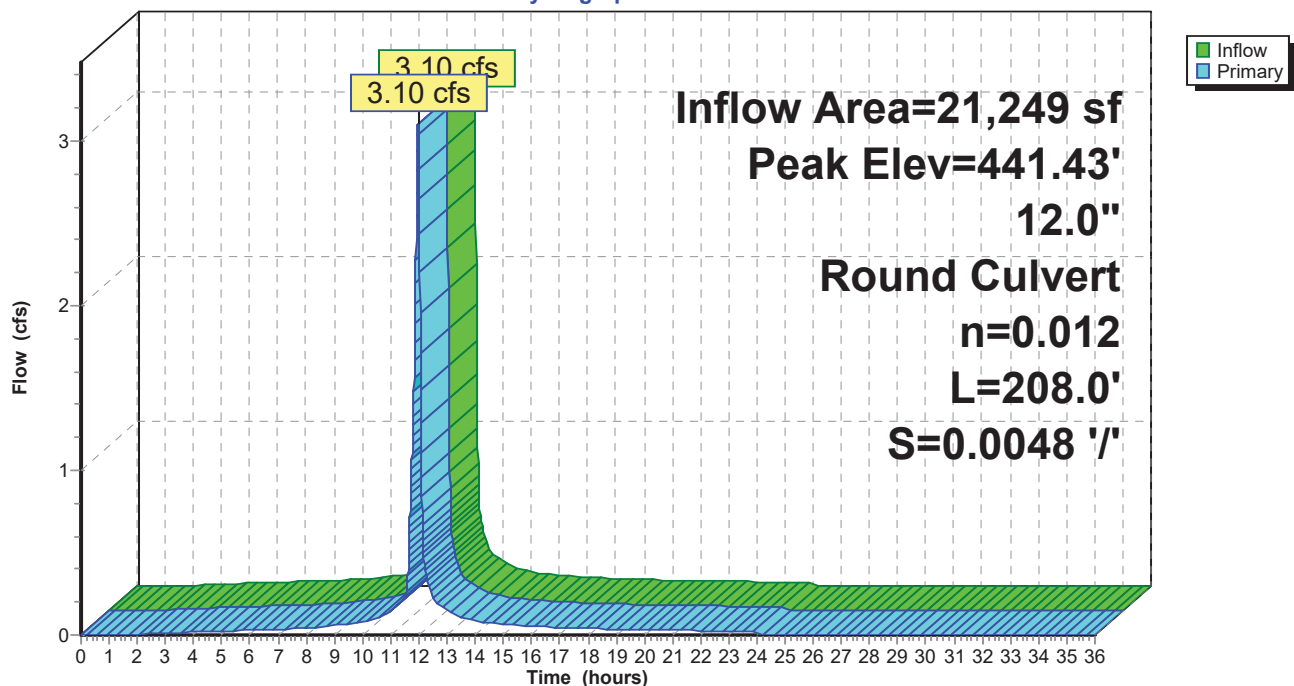
Flood Elev= 442.20'

Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.03 cfs @ 11.97 hrs HW=441.38' TW=439.75' (Dynamic Tailwater)
1=Culvert (Outlet Controls 3.03 cfs @ 3.86 fps)

Pond 4P: CB-1

Hydrograph



Summary for Pond 5P: DETENTION BASIN #1

Inflow Area = 34,945 sf, 74.53% Impervious, Inflow Depth = 3.54" for 25-YR event
 Inflow = 4.61 cfs @ 11.97 hrs, Volume= 10,296 cf
 Outflow = 1.34 cfs @ 12.10 hrs, Volume= 10,292 cf, Atten= 71%, Lag= 7.8 min
 Primary = 1.34 cfs @ 12.10 hrs, Volume= 10,292 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 440.25' @ 12.10 hrs Surf.Area= 1,974 sf Storage= 3,036 cf

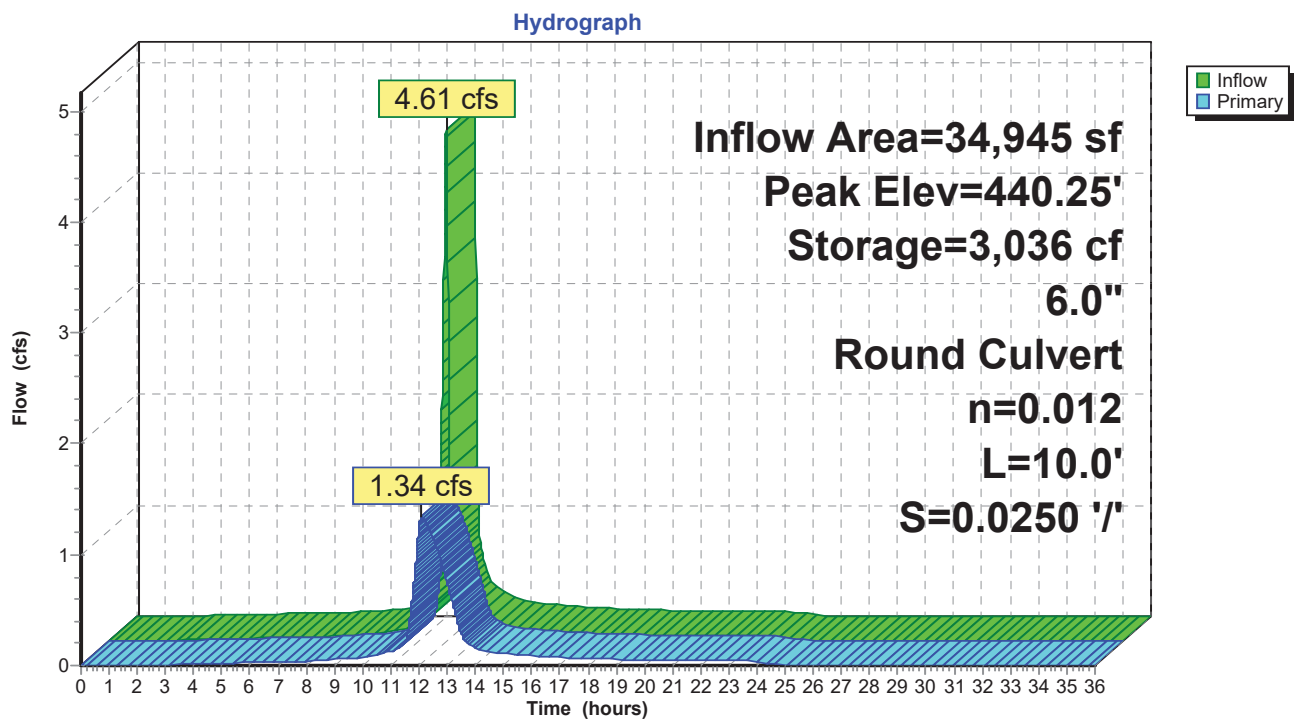
Plug-Flow detention time= 29.1 min calculated for 10,292 cf (100% of inflow)
 Center-of-Mass det. time= 28.8 min (804.4 - 775.6)

Volume	Invert	Avail.Storage	Storage Description
#1	438.00'	4,698 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
438.00	774	0	0
439.00	1,270	1,022	1,022
440.00	1,824	1,547	2,569
441.00	2,434	2,129	4,698

Device	Routing	Invert	Outlet Devices
#1	Primary	438.00'	6.0" Round Culvert L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.00' / 437.75' S= 0.0250 ' S Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=1.34 cfs @ 12.10 hrs HW=440.25' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.34 cfs @ 6.80 fps)

Pond 5P: DETENTION BASIN #1

Summary for Pond 7P: DETENTION BASIN #2

Inflow Area = 8,884 sf, 63.32% Impervious, Inflow Depth = 3.30" for 25-YR event
 Inflow = 1.14 cfs @ 11.97 hrs, Volume= 2,447 cf
 Outflow = 1.13 cfs @ 11.98 hrs, Volume= 2,138 cf, Atten= 1%, Lag= 0.6 min
 Primary = 1.13 cfs @ 11.98 hrs, Volume= 2,138 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 442.14' @ 11.98 hrs Surf.Area= 465 sf Storage= 373 cf

Plug-Flow detention time= 91.9 min calculated for 2,138 cf (87% of inflow)
 Center-of-Mass det. time= 31.3 min (826.2 - 794.9)

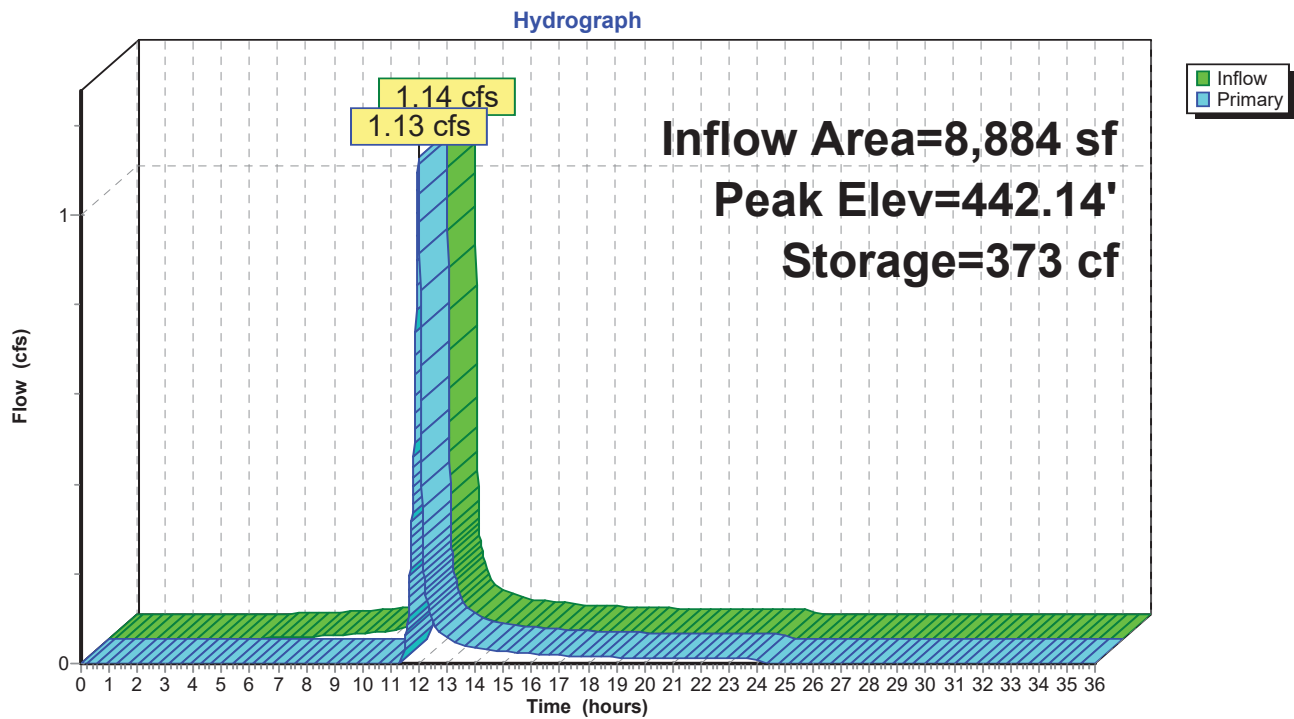
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
441.00	193	0	0
442.00	425	309	309
442.50	563	247	556

Device	Routing	Invert	Outlet Devices
#1	Primary	438.50'	8.0" Round Culvert L= 102.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.50' / 438.00' S= 0.0049 ' S Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Device 1	442.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.13 cfs @ 11.98 hrs HW=442.14' TW=439.84' (Dynamic Tailwater)

↑ **1=Culvert** (Passes 1.13 cfs of 1.71 cfs potential flow)
 ↑ **2=Orifice/Grate** (Weir Controls 1.13 cfs @ 1.24 fps)

Pond 7P: DETENTION BASIN #2

Summary for Pond 11P: DETENTION BASIN

Inflow Area = 11,883 sf, 85.03% Impervious, Inflow Depth = 3.83" for 25-YR event
 Inflow = 1.68 cfs @ 11.97 hrs, Volume= 3,788 cf
 Outflow = 1.67 cfs @ 11.98 hrs, Volume= 3,623 cf, Atten= 1%, Lag= 0.5 min
 Primary = 1.67 cfs @ 11.98 hrs, Volume= 3,623 cf

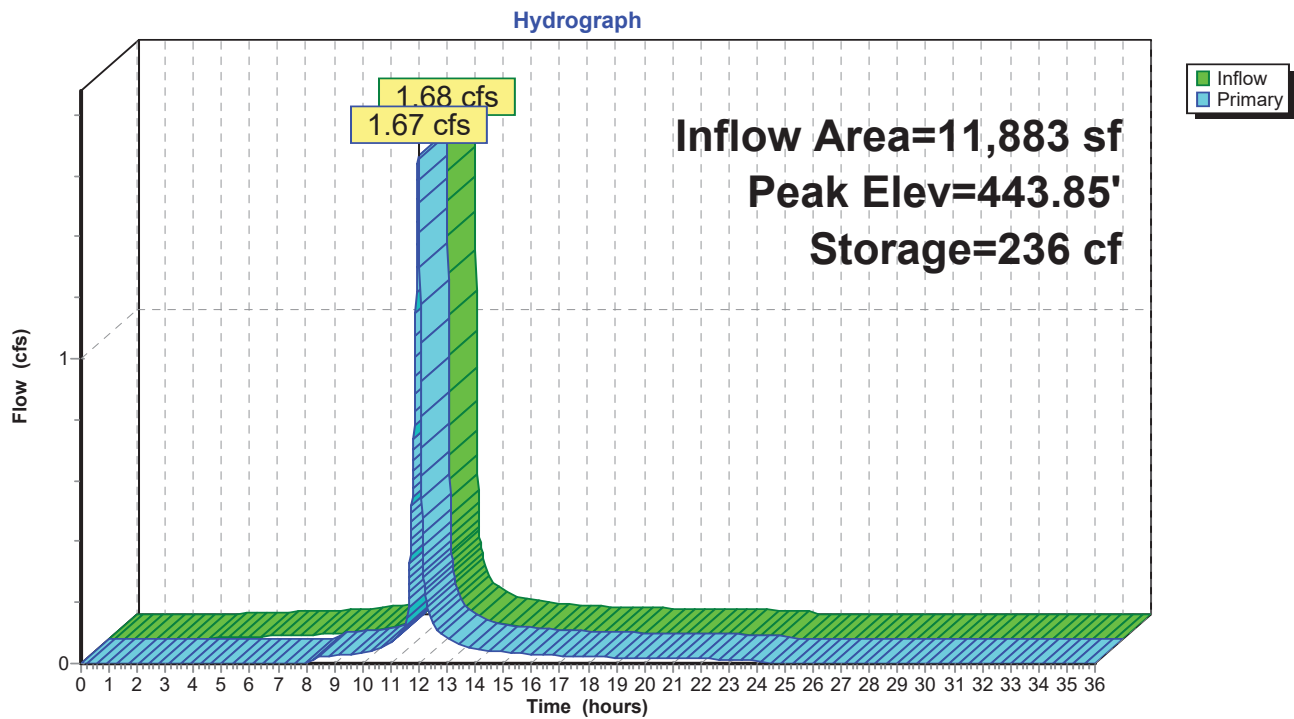
Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 443.85' @ 11.98 hrs Surf.Area= 735 sf Storage= 236 cf

Plug-Flow detention time= 45.5 min calculated for 3,622 cf (96% of inflow)
 Center-of-Mass det. time= 19.5 min (792.5 - 773.0)

Volume	Invert	Avail.Storage	Storage Description
#1	443.50'	351 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.50	617	0	0
444.00	786	351	351

Device	Routing	Invert	Outlet Devices
#1	Primary	443.75'	22.0' long x 3.0' 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 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=1.66 cfs @ 11.98 hrs HW=443.85' (Free Discharge)
 ↑1=**Broad-Crested Rectangular Weir** (Weir Controls 1.66 cfs @ 0.77 fps)

Pond 11P: DETENTION BASIN

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Type II 24-hr 100-YR Rainfall=5.65"

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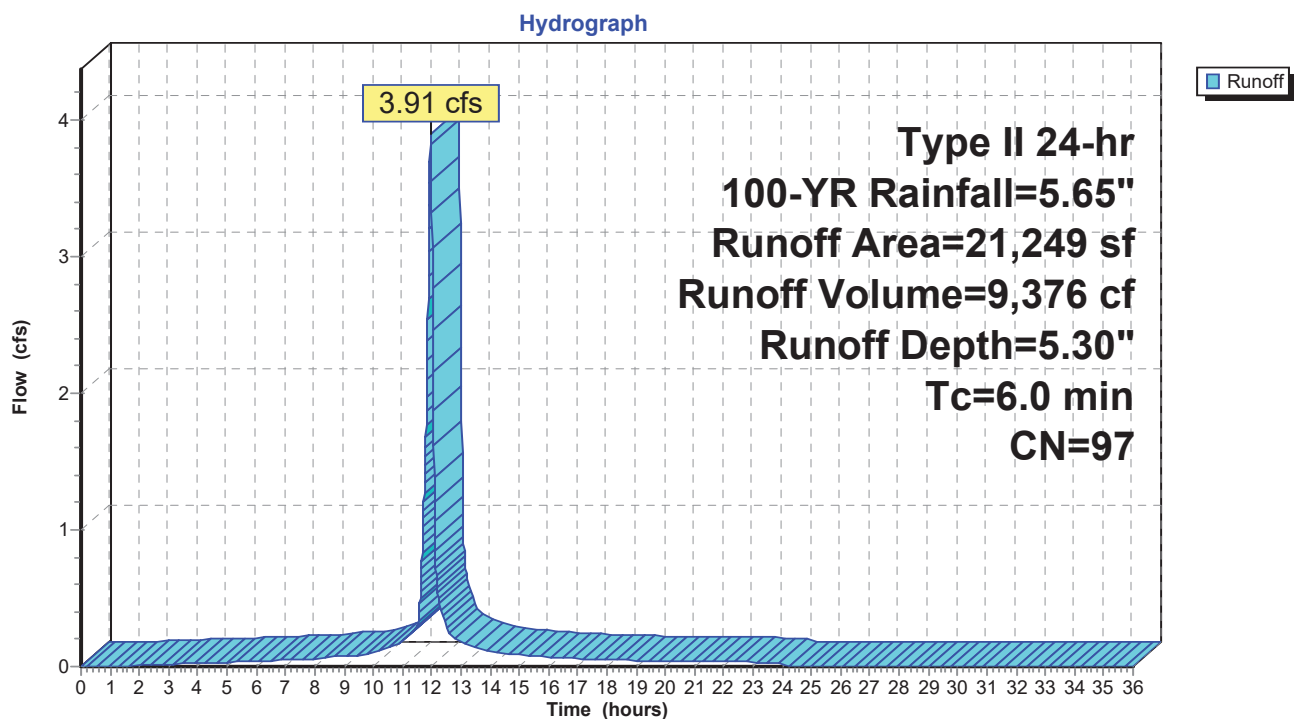
Summary for Subcatchment 3S: POST 2A

Runoff = 3.91 cfs @ 11.97 hrs, Volume= 9,376 cf, Depth= 5.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
20,418	98	Paved parking, HSG C
831	74	>75% Grass cover, Good, HSG C
21,249	97	Weighted Average
831		3.91% Pervious Area
20,418		96.09% Impervious Area

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

Subcatchment 3S: POST 2A

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Type II 24-hr 100-YR Rainfall=5.65"

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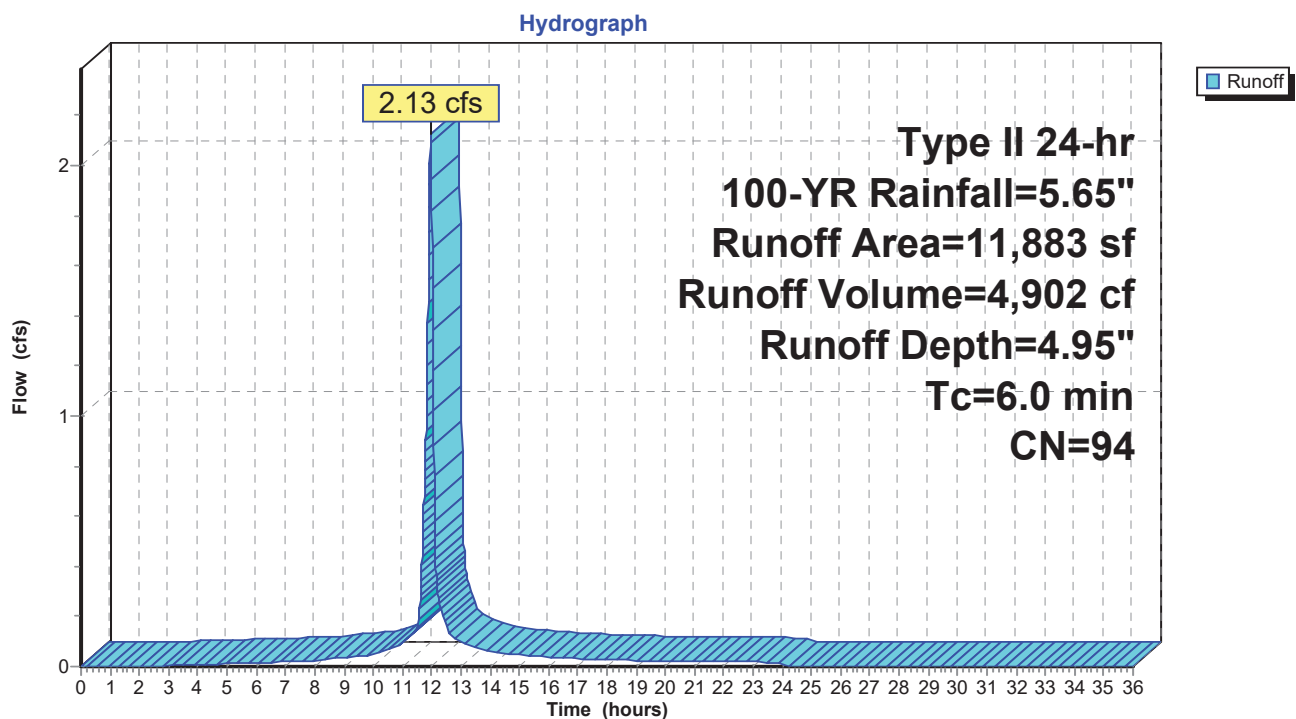
Summary for Subcatchment 4S: PRE 2A

Runoff = 2.13 cfs @ 11.97 hrs, Volume= 4,902 cf, Depth= 4.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
10,104	98	Paved parking, HSG C
1,779	74	>75% Grass cover, Good, HSG C
11,883	94	Weighted Average
1,779		14.97% Pervious Area
10,104		85.03% Impervious Area

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

Subcatchment 4S: PRE 2A

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Type II 24-hr 100-YR Rainfall=5.65"

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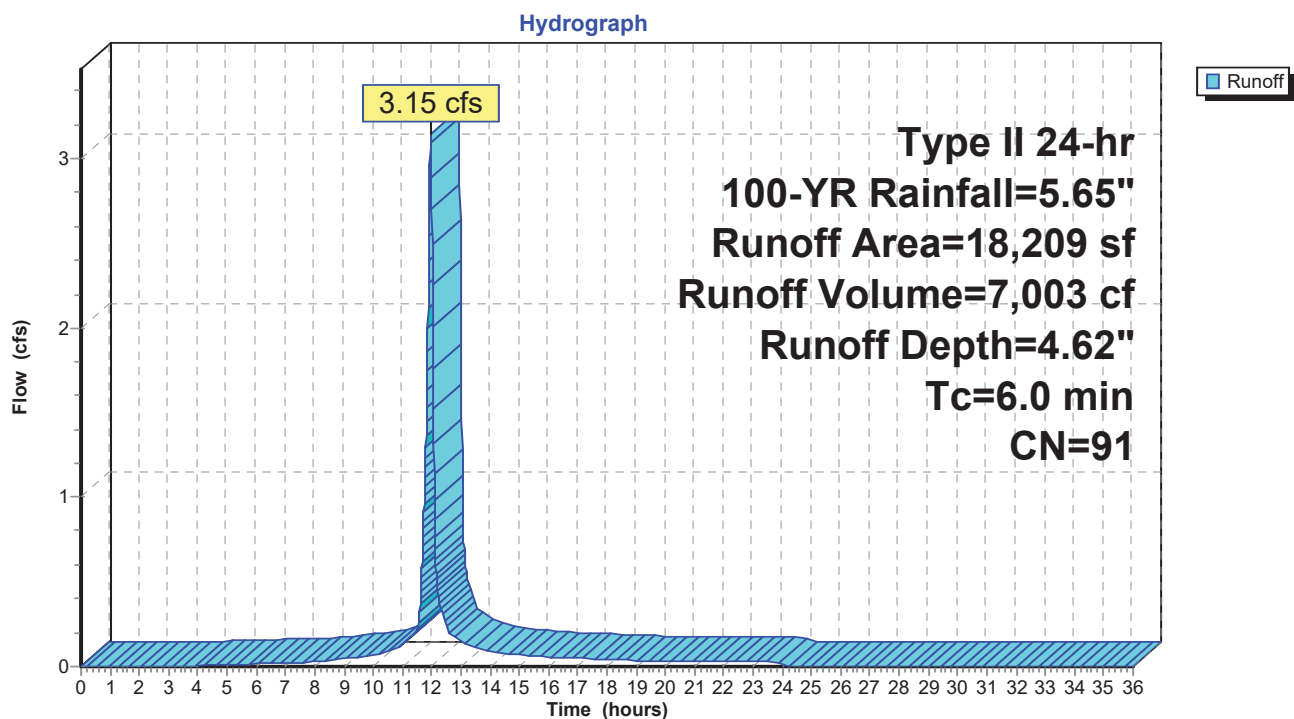
Summary for Subcatchment 5S: PRE 2B

Runoff = 3.15 cfs @ 11.97 hrs, Volume= 7,003 cf, Depth= 4.62"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
12,591	98	Paved parking, HSG C
5,618	74	>75% Grass cover, Good, HSG C
18,209	91	Weighted Average
5,618		30.85% Pervious Area
12,591		69.15% Impervious Area

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

Subcatchment 5S: PRE 2B

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Type II 24-hr 100-YR Rainfall=5.65"

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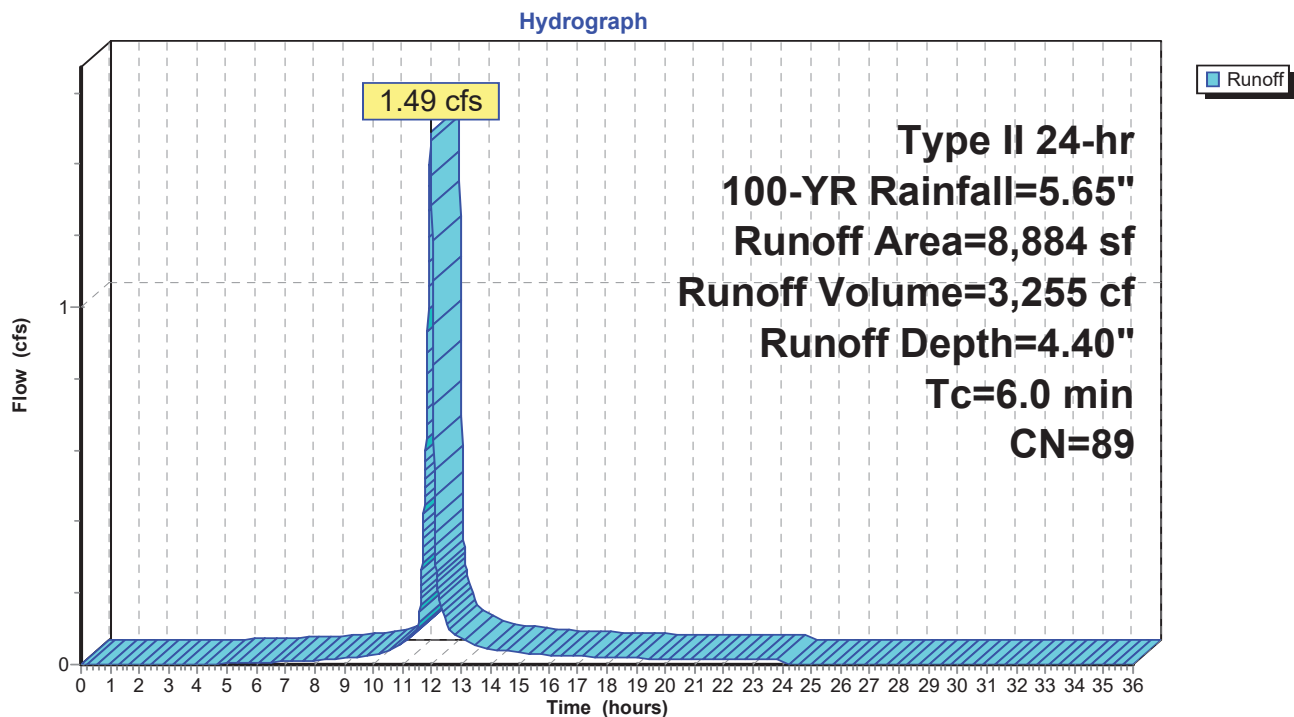
Summary for Subcatchment 6S: POST 1A-2

Runoff = 1.49 cfs @ 11.97 hrs, Volume= 3,255 cf, Depth= 4.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
5,625	98	Roofs, HSG C
3,259	74	>75% Grass cover, Good, HSG C
8,884	89	Weighted Average
3,259		36.68% Pervious Area
5,625		63.32% Impervious Area

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

Subcatchment 6S: POST 1A-2

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Type II 24-hr 100-YR Rainfall=5.65"

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Summary for Subcatchment 7S: PRE 1A

Runoff = 1.70 cfs @ 12.02 hrs, Volume= 4,214 cf, Depth= 4.18"

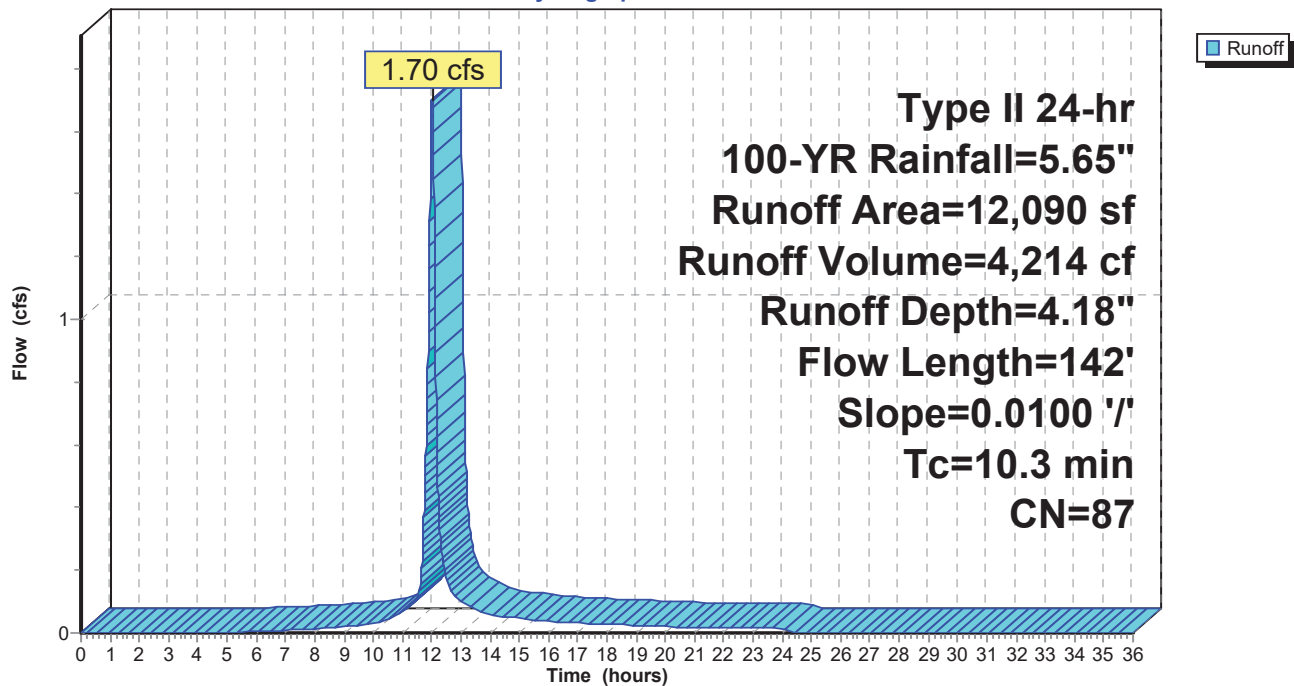
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
6,431	98	Paved parking, HSG C
5,659	74	>75% Grass cover, Good, HSG C
12,090	87	Weighted Average
5,659		46.81% Pervious Area
6,431		53.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	46	0.0100	0.83		Sheet Flow, Smooth surfaces n= 0.011 P2= 2.80"
8.4	54	0.0100	0.11		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.0	42	0.0100	0.70		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
10.3	142	Total			

Subcatchment 7S: PRE 1A

Hydrograph



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Type II 24-hr 100-YR Rainfall=5.65"

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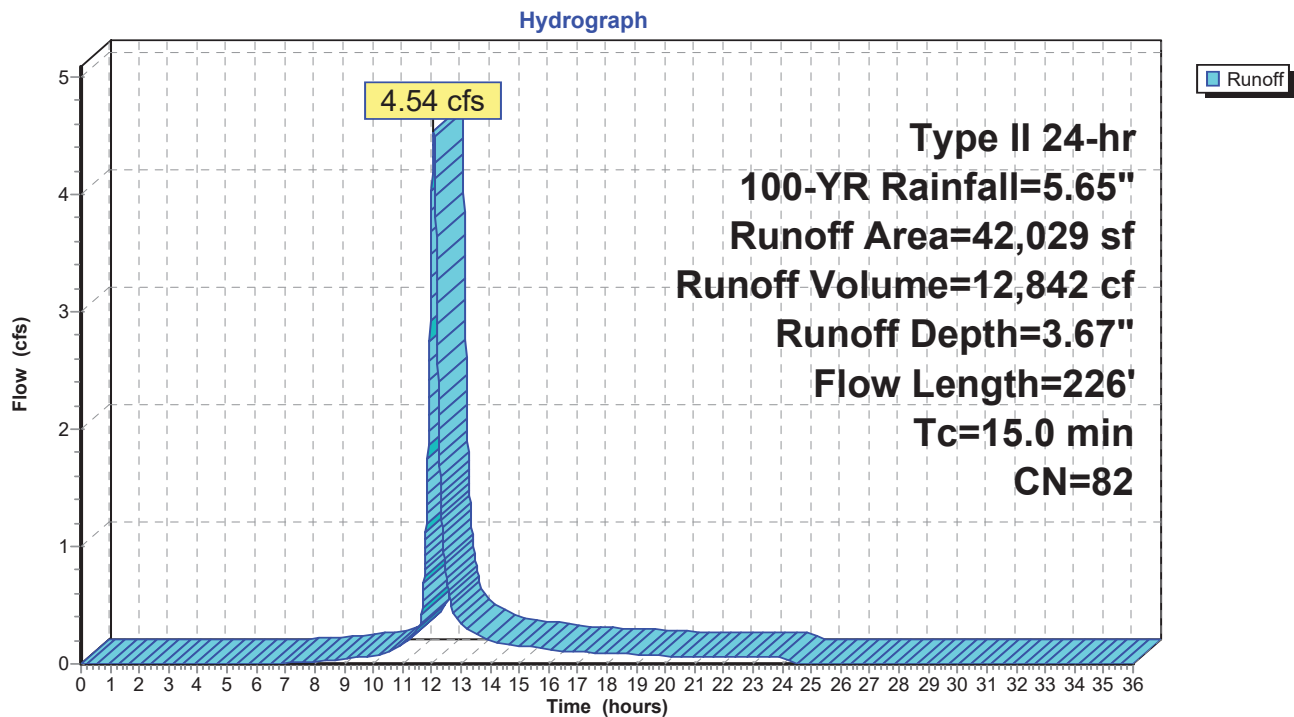
Summary for Subcatchment 8S: PRE 1B

Runoff = 4.54 cfs @ 12.07 hrs, Volume= 12,842 cf, Depth= 3.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
13,546	98	Paved parking, HSG C
28,483	74	>75% Grass cover, Good, HSG C
42,029	82	Weighted Average
28,483		67.77% Pervious Area
13,546		32.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.8	100	0.0100	0.12		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
1.2	126	0.0670	1.81		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
15.0	226	Total			

Subcatchment 8S: PRE 1B

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Type II 24-hr 100-YR Rainfall=5.65"

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Summary for Subcatchment 9S: PRE 3

Runoff = 0.34 cfs @ 11.97 hrs, Volume= 775 cf, Depth= 4.95"

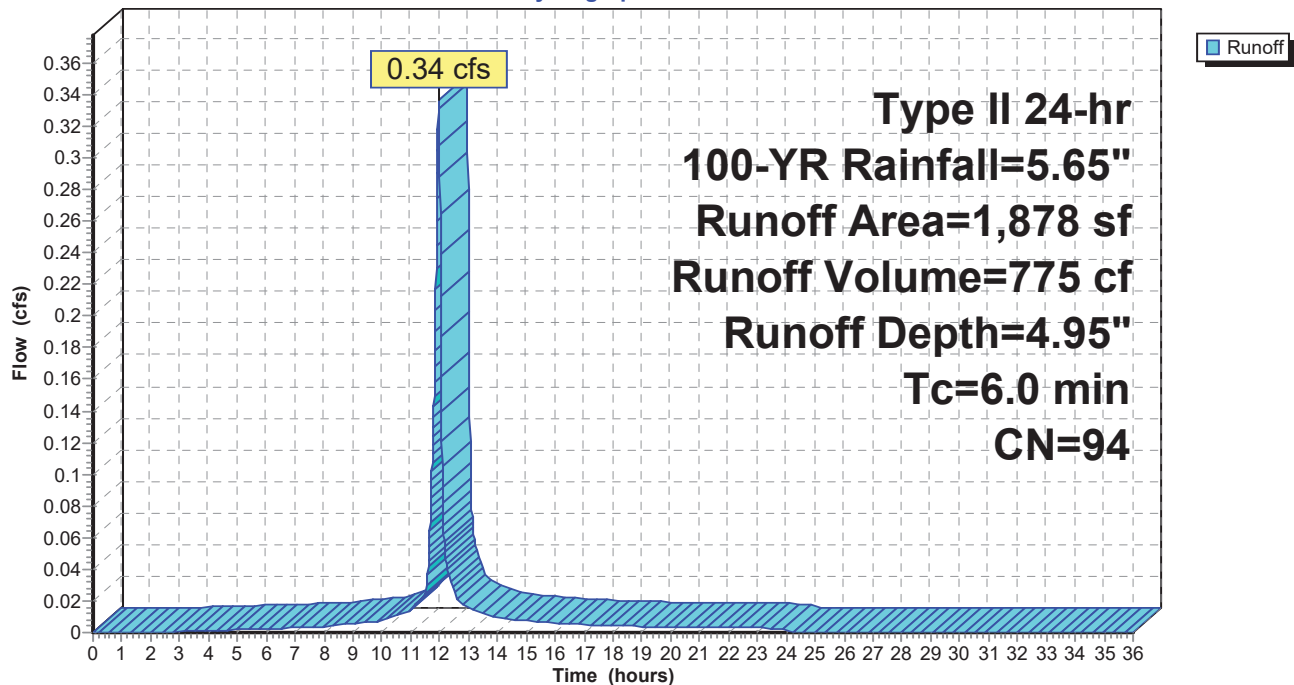
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
1,604	98	Paved parking, HSG C
274	74	>75% Grass cover, Good, HSG C
1,878	94	Weighted Average
274		14.59% Pervious Area
1,604		85.41% Impervious Area

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

Subcatchment 9S: PRE 3

Hydrograph



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Type II 24-hr 100-YR Rainfall=5.65"

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Summary for Subcatchment 10S: POST 1B

Runoff = 4.63 cfs @ 11.98 hrs, Volume= 9,830 cf, Depth= 3.67"

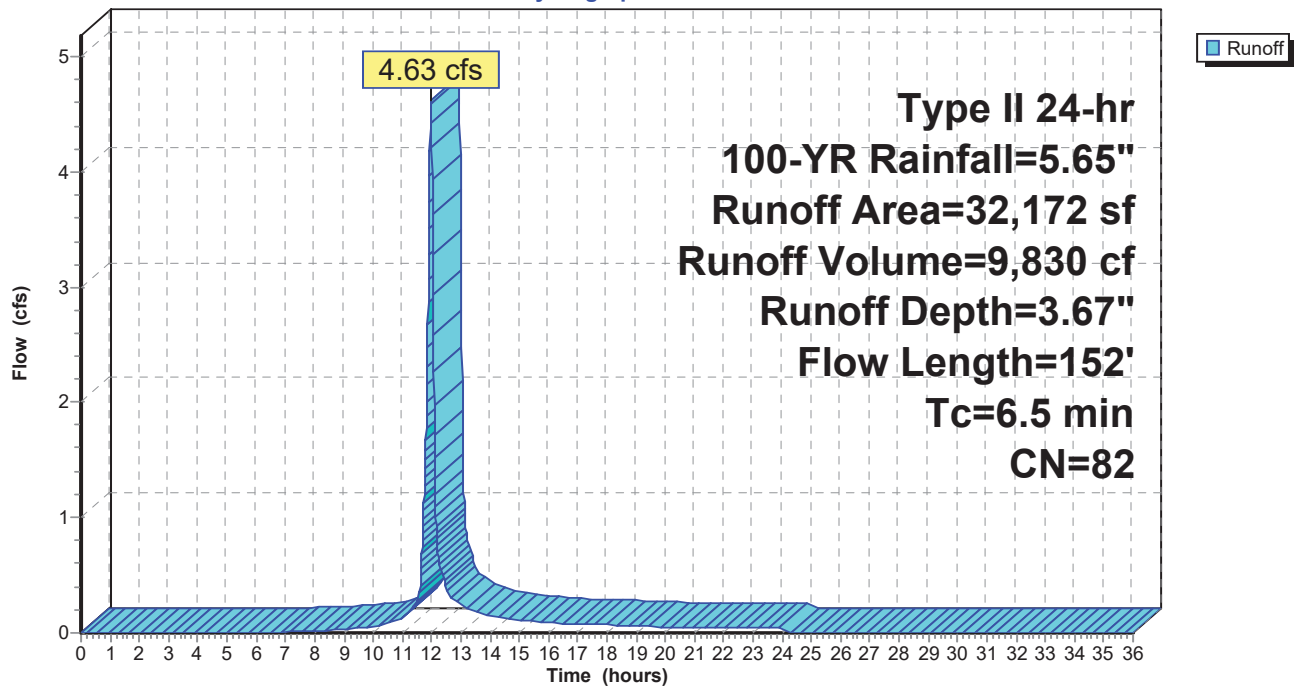
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
10,909	98	Paved parking, HSG C
21,263	74	>75% Grass cover, Good, HSG C
32,172	82	Weighted Average
21,263		66.09% Pervious Area
10,909		33.91% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	100	0.0800	0.28		Sheet Flow, Grass: Short n= 0.150 P2= 2.80"
0.5	52	0.0580	1.69		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
6.5	152	Total			

Subcatchment 10S: POST 1B

Hydrograph



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Type II 24-hr 100-YR Rainfall=5.65"

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Summary for Subcatchment 11S: POST 1A-3

Runoff = 0.57 cfs @ 11.97 hrs, Volume= 1,160 cf, Depth= 2.89"

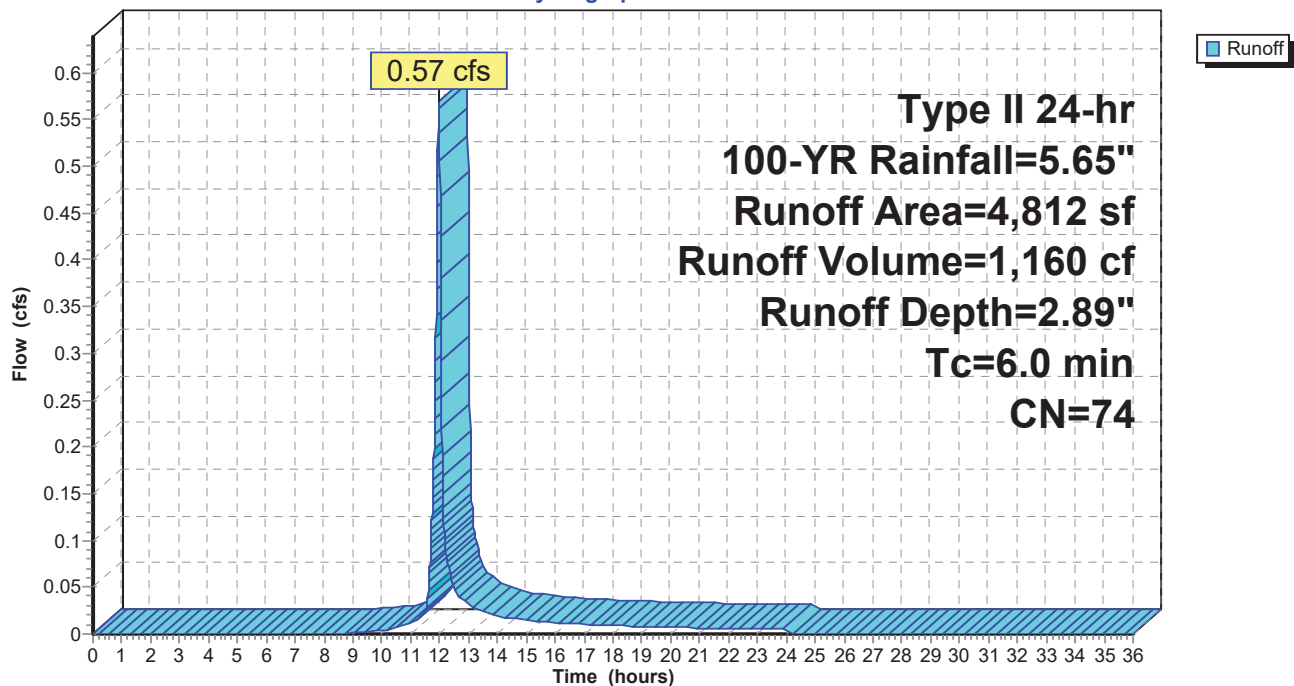
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
4,812	74	>75% Grass cover, Good, HSG C
4,812		100.00% Pervious Area

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

Subcatchment 11S: POST 1A-3

Hydrograph



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Type II 24-hr 100-YR Rainfall=5.65"

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Summary for Subcatchment 15S: POST 3

Runoff = 0.29 cfs @ 11.97 hrs, Volume= 699 cf, Depth= 5.30"

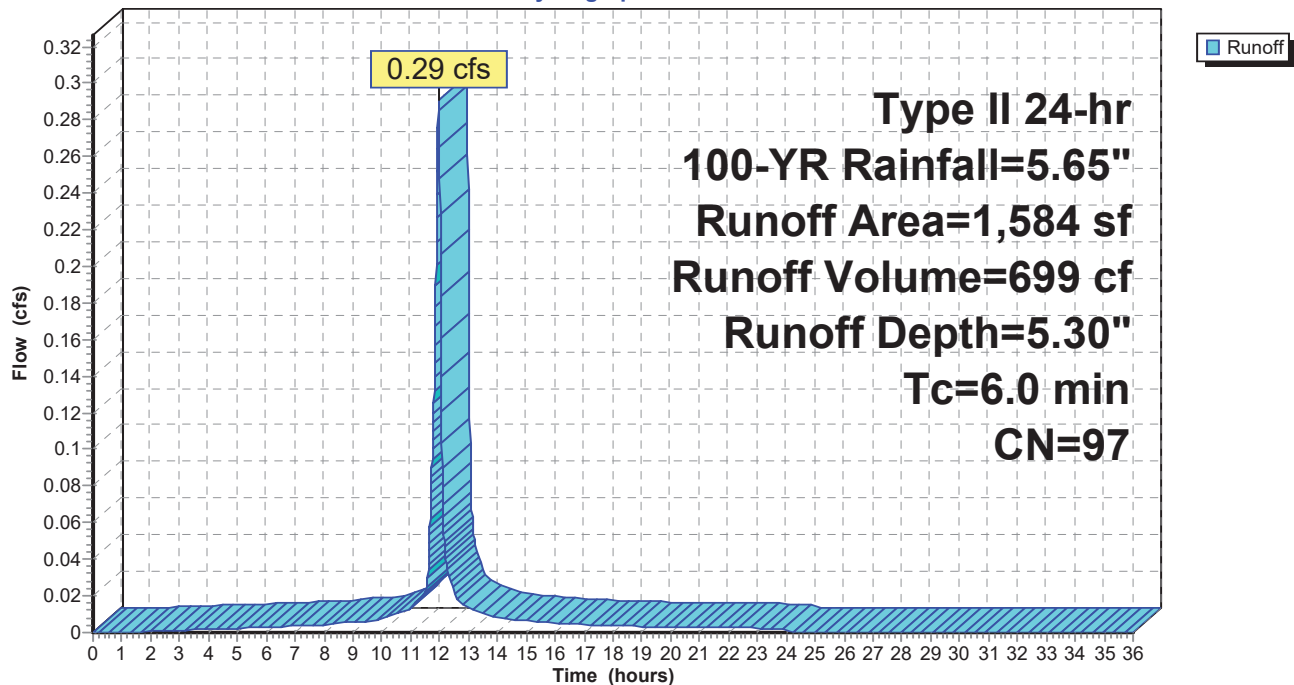
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
1,523	98	Paved parking, HSG C
61	74	>75% Grass cover, Good, HSG C
1,584	97	Weighted Average
61		3.85% Pervious Area
1,523		96.15% Impervious Area

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

Subcatchment 15S: POST 3

Hydrograph



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Type II 24-hr 100-YR Rainfall=5.65"

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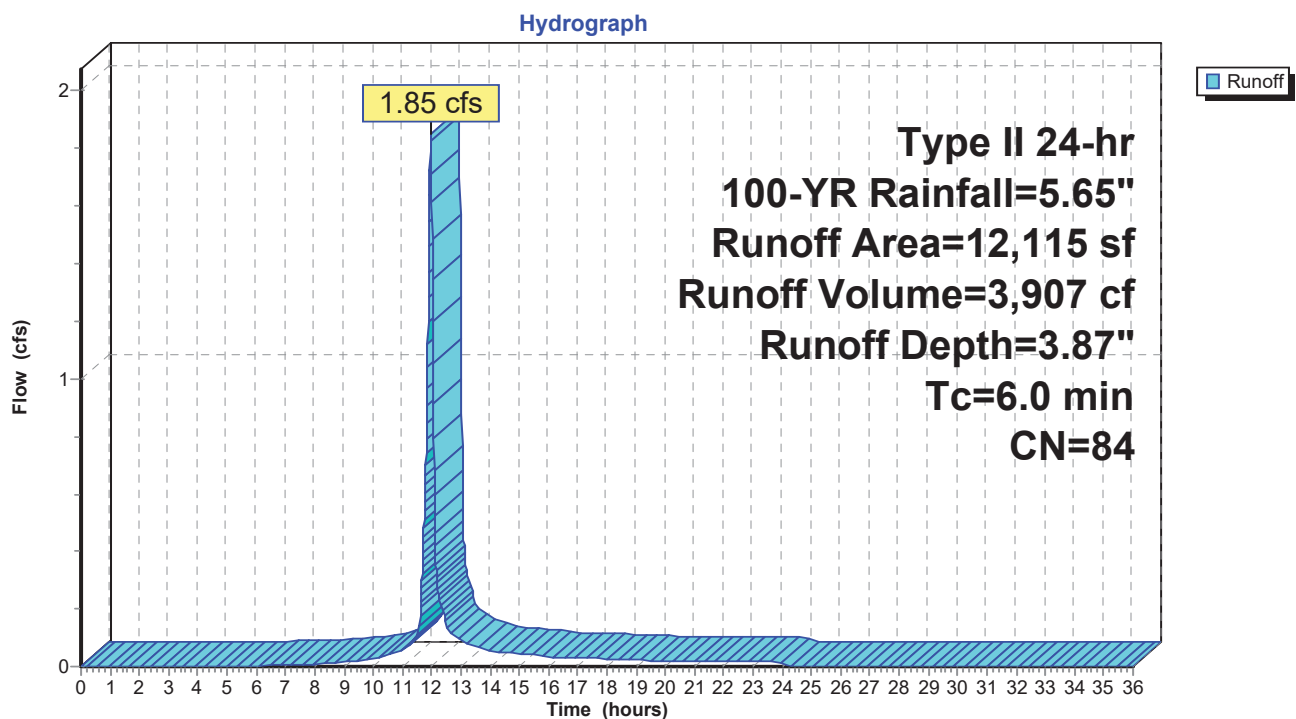
Summary for Subcatchment 16S: POST 2B

Runoff = 1.85 cfs @ 11.97 hrs, Volume= 3,907 cf, Depth= 3.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
5,263	98	Paved parking, HSG C
6,852	74	>75% Grass cover, Good, HSG C
12,115	84	Weighted Average
6,852		56.56% Pervious Area
5,263		43.44% Impervious Area

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

Subcatchment 16S: POST 2B

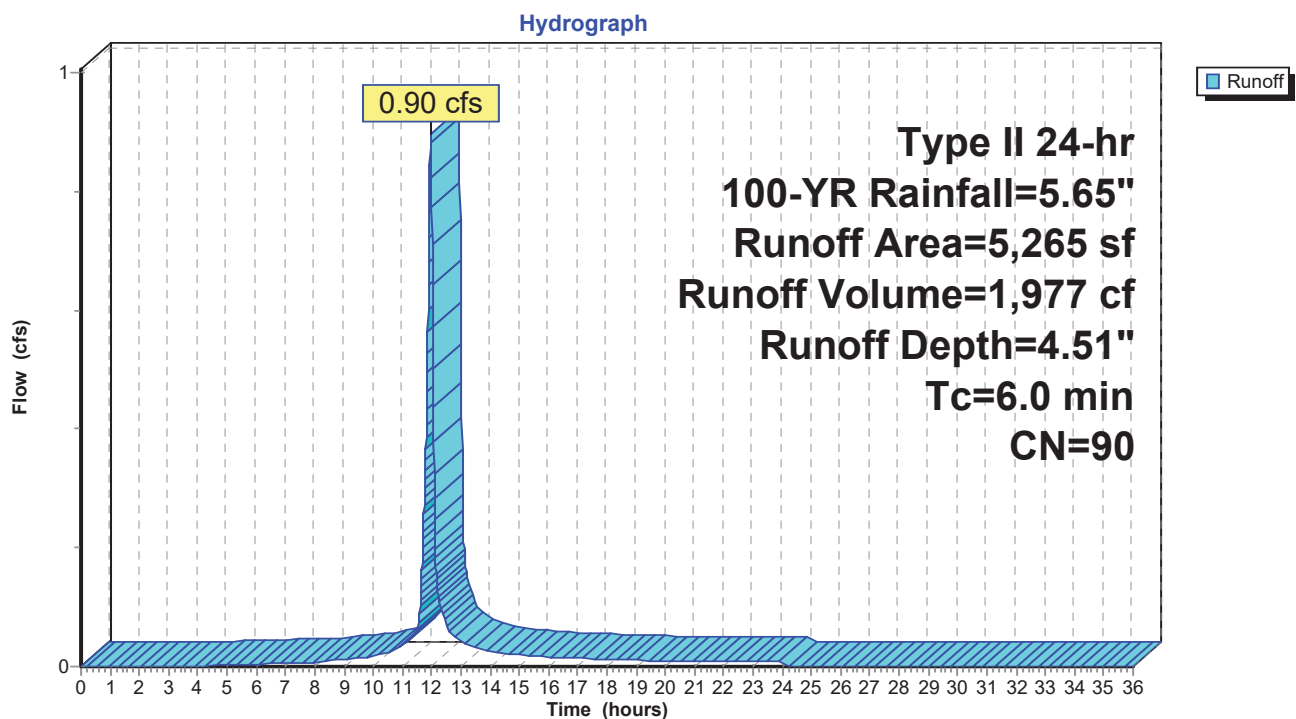
Summary for Subcatchment 19S: POST 1A-1

Runoff = 0.90 cfs @ 11.97 hrs, Volume= 1,977 cf, Depth= 4.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

Area (sf)	CN	Description
3,584	98	Paved parking, HSG C
1,681	74	>75% Grass cover, Good, HSG C
5,265	90	Weighted Average
1,681		31.93% Pervious Area
3,584		68.07% Impervious Area

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

Subcatchment 19S: POST 1A-1

Summary for Pond 4P: CB-1

[58] Hint: Peaked 0.63' above defined flood level

Inflow Area = 21,249 sf, 96.09% Impervious, Inflow Depth = 5.30" for 100-YR event
 Inflow = 3.91 cfs @ 11.97 hrs, Volume= 9,376 cf
 Outflow = 3.91 cfs @ 11.97 hrs, Volume= 9,376 cf, Atten= 0%, Lag= 0.0 min
 Primary = 3.91 cfs @ 11.97 hrs, Volume= 9,376 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs

Peak Elev= 442.83' @ 11.98 hrs

Flood Elev= 442.20'

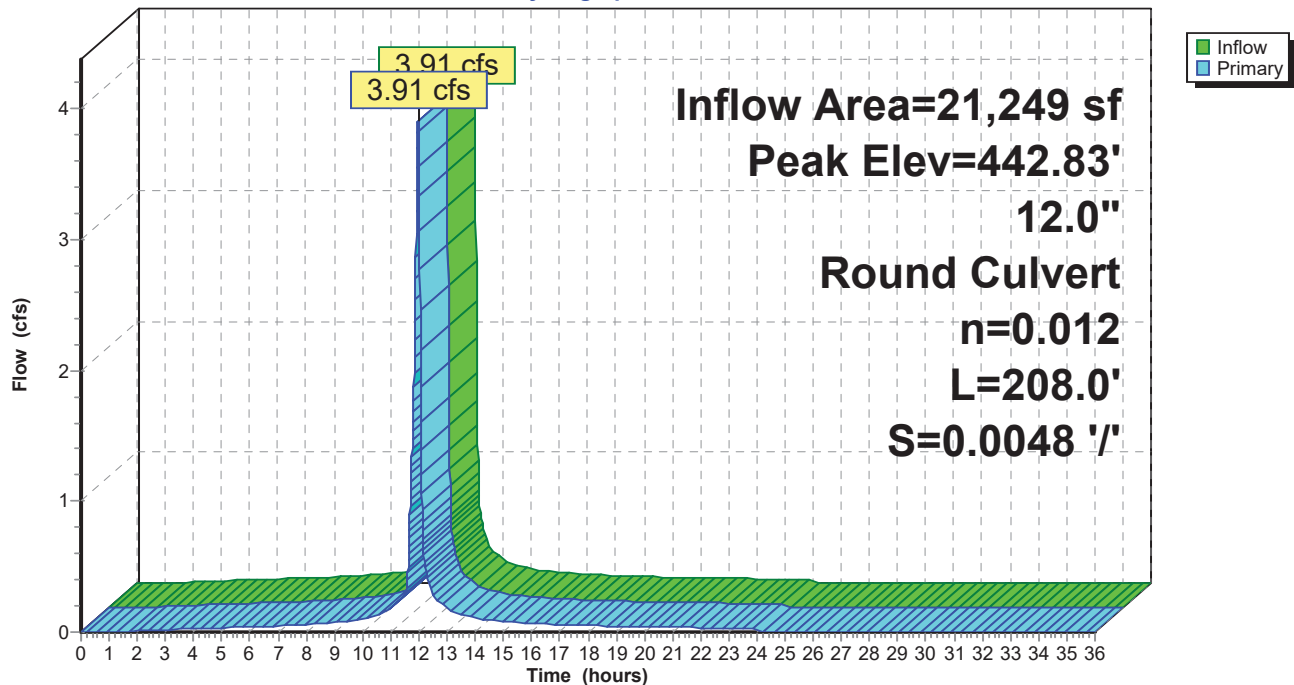
Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.84 cfs @ 11.97 hrs HW=442.78' TW=440.16' (Dynamic Tailwater)

1=Culvert (Outlet Controls 3.84 cfs @ 4.89 fps)

Pond 4P: CB-1

Hydrograph



Summary for Pond 5P: DETENTION BASIN #1

Inflow Area = 34,945 sf, 74.53% Impervious, Inflow Depth = 4.63" for 100-YR event
 Inflow = 5.94 cfs @ 11.97 hrs, Volume= 13,483 cf
 Outflow = 1.50 cfs @ 12.11 hrs, Volume= 13,478 cf, Atten= 75%, Lag= 8.5 min
 Primary = 1.50 cfs @ 12.11 hrs, Volume= 13,478 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 440.76' @ 12.11 hrs Surf.Area= 2,289 sf Storage= 4,138 cf

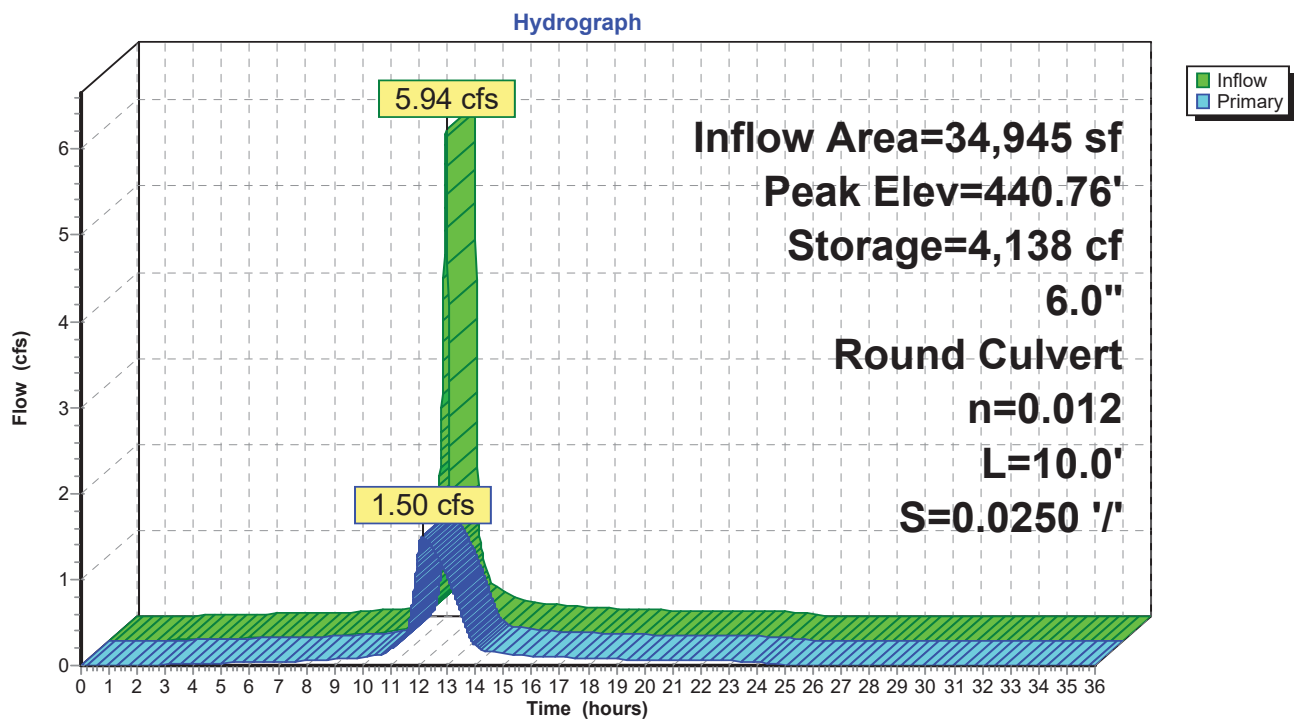
Plug-Flow detention time= 30.5 min calculated for 13,478 cf (100% of inflow)
 Center-of-Mass det. time= 30.3 min (800.9 - 770.6)

Volume	Invert	Avail.Storage	Storage Description
#1	438.00'	4,698 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
438.00	774	0	0
439.00	1,270	1,022	1,022
440.00	1,824	1,547	2,569
441.00	2,434	2,129	4,698

Device	Routing	Invert	Outlet Devices
#1	Primary	438.00'	6.0" Round Culvert L= 10.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.00' / 437.75' S= 0.0250 ' S Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.20 sf

Primary OutFlow Max=1.50 cfs @ 12.11 hrs HW=440.76' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.50 cfs @ 7.63 fps)

Pond 5P: DETENTION BASIN #1

Summary for Pond 7P: DETENTION BASIN #2

Inflow Area = 8,884 sf, 63.32% Impervious, Inflow Depth = 4.40" for 100-YR event
 Inflow = 1.49 cfs @ 11.97 hrs, Volume= 3,255 cf
 Outflow = 1.48 cfs @ 11.98 hrs, Volume= 2,946 cf, Atten= 1%, Lag= 0.6 min
 Primary = 1.48 cfs @ 11.98 hrs, Volume= 2,946 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 442.17' @ 11.98 hrs Surf.Area= 473 sf Storage= 387 cf

Plug-Flow detention time= 77.6 min calculated for 2,945 cf (90% of inflow)
 Center-of-Mass det. time= 28.4 min (815.4 - 787.0)

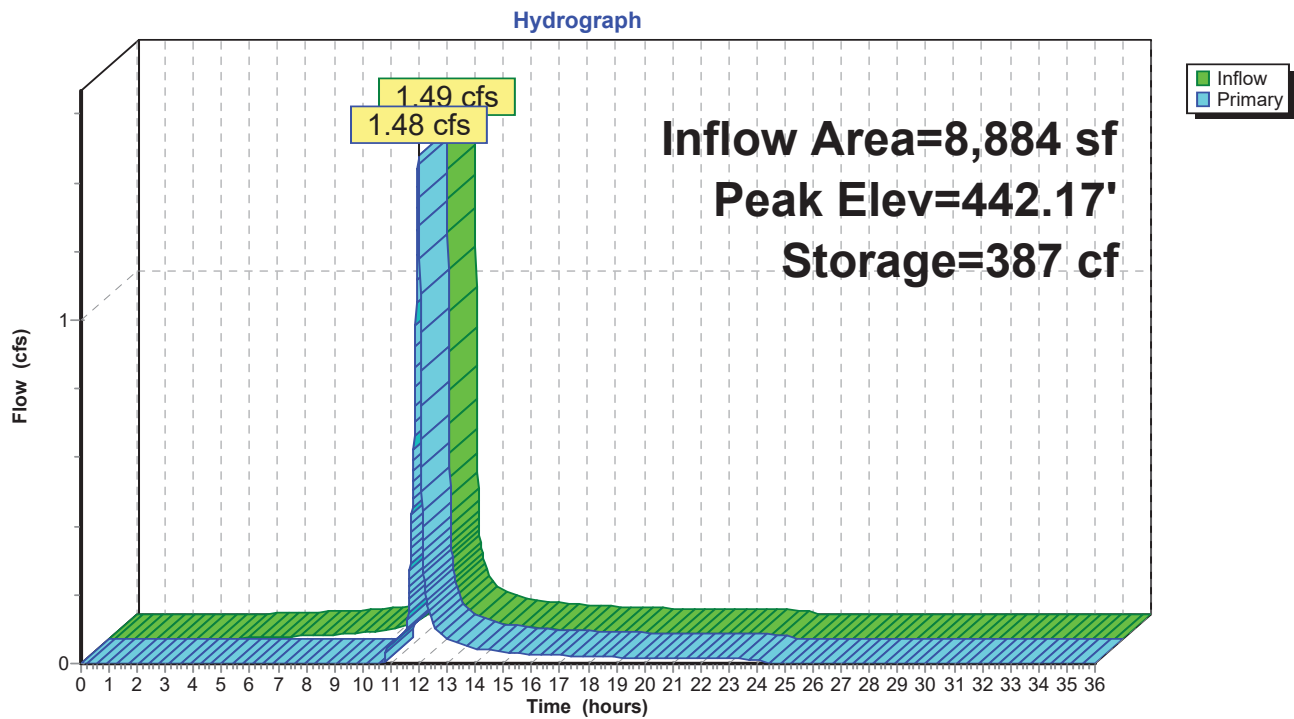
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
441.00	193	0	0
442.00	425	309	309
442.50	563	247	556

Device	Routing	Invert	Outlet Devices
#1	Primary	438.50'	8.0" Round Culvert L= 102.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 438.50' / 438.00' S= 0.0049 ' S= 0.0049 ' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.35 sf
#2	Device 1	442.00'	24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.48 cfs @ 11.98 hrs HW=442.17' TW=440.26' (Dynamic Tailwater)

↑ **1=Culvert** (Passes 1.48 cfs of 1.56 cfs potential flow)
 ↑ **2=Orifice/Grate** (Weir Controls 1.48 cfs @ 1.36 fps)

Pond 7P: DETENTION BASIN #2

Summary for Pond 11P: DETENTION BASIN

Inflow Area = 11,883 sf, 85.03% Impervious, Inflow Depth = 4.95" for 100-YR event
 Inflow = 2.13 cfs @ 11.97 hrs, Volume= 4,902 cf
 Outflow = 2.12 cfs @ 11.97 hrs, Volume= 4,737 cf, Atten= 0%, Lag= 0.4 min
 Primary = 2.12 cfs @ 11.97 hrs, Volume= 4,737 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 443.87' @ 11.97 hrs Surf.Area= 741 sf Storage= 248 cf

Plug-Flow detention time= 37.9 min calculated for 4,737 cf (97% of inflow)
 Center-of-Mass det. time= 17.0 min (783.5 - 766.5)

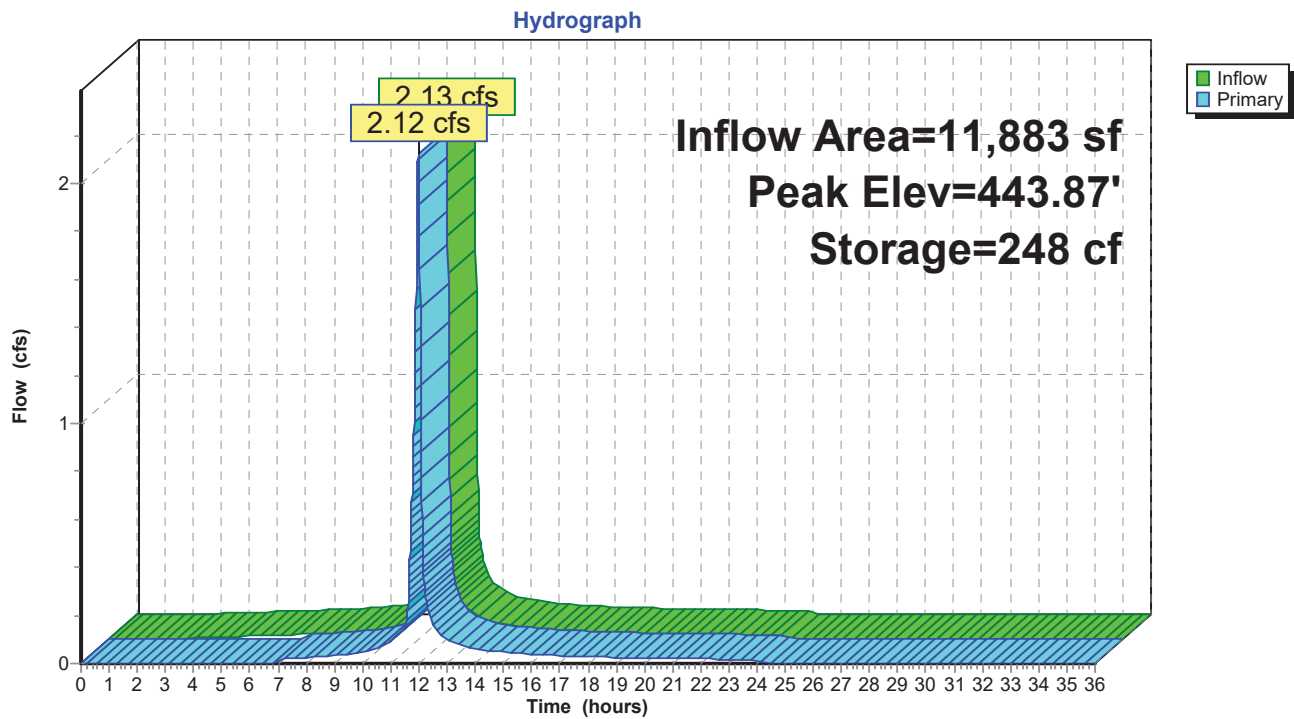
Volume	Invert	Avail.Storage	Storage Description
#1	443.50'	351 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
443.50	617	0	0
444.00	786	351	351

Device	Routing	Invert	Outlet Devices
#1	Primary	443.75'	22.0' long x 3.0' 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 Coef. (English) 2.44 2.58 2.68 2.67 2.65 2.64 2.64 2.68 2.68 2.72 2.81 2.92 2.97 3.07 3.32

Primary OutFlow Max=2.12 cfs @ 11.97 hrs HW=443.87' (Free Discharge)

↑1=**Broad-Crested Rectangular Weir** (Weir Controls 2.12 cfs @ 0.83 fps)

Pond 11P: DETENTION BASIN

**“BASIC”
STORMWATER POLLUTION PREVENTION PLAN
EROSION & SEDIMENT CONTROLS ONLY**

FOR

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

Prepared For:

Highbridge Development HRS, LLC
2145 Technology Park
Schenectady, NY 12305

November 3, 2023

Revised December 1, 2023

Project No. 5618A

Prepared By:

Luigi A. Palleschi, P.E.
ABD Engineers & Surveyors, LLP
411 Union Street
Schenectady, NY 12305
(518) 377-0315

**“BASIC”
STORMWATER POLLUTION PREVENTION PLAN
EROSION & SEDIMENT CONTROLS ONLY**

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

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APPENDICES

EXHIBIT 1-SITE LOCATION MAP & SOIL INFORMATION

APPENDIX A- EROSION AND SEDIMENT CONTROL STANDARDS AND
SPECIFICATIONS

APPENDIX B – OTHER DOCUMENTS

**“BASIC”
STORMWATER POLLUTION PREVENTION PLAN
EROSION & SEDIMENT CONTROLS ONLY**

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

1.0 SITE DESCRIPTION

1.1 PROJECT NAME AND LOCATION

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION
1430 Balltown Road
Town of Niskayuna
Schenectady County, New York

1.2 OWNER NAME AND ADDRESS

Highbridge Development HRS, LLC
376 Broadway
Schenectady, NY 12305

1.3 PLANS AND REPORTS

Plans and additional reports to be listed in conjunction with this Stormwater Management Pollution Prevention Plan are as follows:

- Plans entitled “Site Plan, Building Addition, 1430 Balltown Road, Town of Niskayuna, New York”, prepared by ABD Engineers & Surveyors, LLP, and dated November 3, 2023, as revised.
- Stormwater Management Report entitled “2,700± SF Building Addition & Parking Lot Expansion, 1430 Balltown Road, Town of Niskayuna, New York”, prepared by ABD Engineers & Surveyors, LLP, and dated November 3, 2023, as revised.

1.4 DESCRIPTION: (PURPOSE AND TYPES OF SOIL DISTURBING ACTIVITIES)

The proposed facility is located on Balltown Road in the Town of Niskayuna, Schenectady County, New York (see Exhibit 1). The site is bordered on the north by Hatchet Hardware of Niskayuna, on the east by Niskayuna KinderCare, on the south by WRGB CBS 6, and on the west by Balltown Road.

The Owner/Applicant, Highbridge Development HRS, LLC is proposing to further develop the 1.98± acre parcel in order to construct a 2,700± SF addition to the existing office building, and to expand the existing parking lot from 39 spaces to 58 spaces,

along with associated pavement, utilities, and stormwater management areas. Access to the site will continue to be provided off Balltown Road and through parking lot connections with neighboring properties. The total disturbance area proposed is 0.87± acres and is less than 1 acre which does not require the development of a SWPPP in accordance with the SPDES General Permit.

According to the Schenectady County NRCS, the primary hydrologic soil group is Type-C/D, channery silt loam. The site drains offsite to the Balltown Road stormwater drainage system.

Soil disturbing activities include cuts and fills to produce suitable grades for construction of the project components listed above. Installation of utilities will require trench excavation and backfilling. An area of about 0.87± acres will be disturbed during construction.

1.5 STORMWATER MANAGEMENT PLAN

See Stormwater Management Report separately attached.

1.6 SEQUENCE OF MAJOR ACTIVITIES

The following is the general sequence to complete the construction on the site:

1.61 Site Preparation. Silt fence along the disturbance limits will be installed and shall remain in place until all areas being served are stabilized. Perimeter sediment traps will be constructed prior to the commencement of construction activity. A temporary construction entrance will be installed within the site to complete the rough grading for the building. Clearing and earth disturbance shall be limited to that necessary to install temporary sediment control measures and stormwater detention areas.

1.62 Rough Grading. Additional trees and other vegetation will be removed from areas to be disturbed. Some topsoil stripping and stockpiling will take place to be used later in landscaped areas. Earthmoving to grade the site to approved finish grades may then occur. Any additional required silt fencing will be installed. Temporary sediment traps will be built to capture construction runoff and contain it onsite.

1.63 Site Preparation. Building location will be graded to establish the finished floor elevation. The construction of the building will occur concurrently with the remaining site work.

1.64 Utility Installation. Water, utilities, and drainage facilities will be installed once subgrades are established and fills are compacted.

1.65 Paving. The pavement will be installed. All pavement areas as shown on the plans will be paved.

1.66 Landscaping. All areas will be seeded in accordance with the plan. All disturbed areas must be stabilized. 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 fourteen (14) days from the date the current soil disturbance activity ceased.

1.7 NAME OF RECEIVING WATERS

The nearest surface body of water is a tributary of the Mohawk River.

2.0 CONTROLS

2.1 EROSION AND SEDIMENT CONTROLS. STABILIZATION PRACTICES.

Disturbed areas within the limits of grading will be stabilized by planting/seeding and mulching. Where seeding stabilization is needed, perennial rye grass applied at a rate of 150 pounds per acre may be used. All seeded areas are then to be mulched using straw mulch at a rate of 2 ton per acre. If anchoring of the straw mulch is needed, wood fiber mulch may then be applied at a rate of 500 pounds per acre.

2.2 STRUCTURAL PRACTICES.

Silt fence will be placed on the downhill side of exposed slopes and trenches before clearing or excavation take place. The silt fence shall Marafi 100X geotextile fabric, or equal, attached to 2"x2" minimum wooden stakes as per manufacturer's recommendations as shown on the "Erosion and Sediment Control Details". It shall remain and be inspected and maintained until the site is stabilized. Maintenance shall be performed as needed, and sediment material removed when "bulges" develop in the silt fence. Inspections shall be frequent, and repairs shall be made promptly as needed. Silt barriers will also be installed in the flow line of drainage channels and ditches. Erosion control barriers will be supplemented as necessary during construction and will be maintained throughout the duration of site construction activity by the Contractor.

Runoff will be directed away from excavated areas, and temporary swales will be installed with a minimum grade of one percent. Stabilization shall occur as soon as practicable.

Watering of excavation and fill areas to minimize wind erosion during construction should be accomplished as required.

Stabilization in areas where soil disturbance has temporarily or permanently ceased should be initiated by the end of the next business day and completed within 14 days. During winter construction from November 15 to the following April 1, the application of soil stabilization measures should be initiated by the end of the next business day and completed within three (3) days, in areas where soil disturbance activity has temporarily or permanently ceased.

At any location where surface runoff from disturbed or graded areas may flow off the construction area, temporary sediment control measures must be installed to prevent sediment from traveling off site. No grading, filling, or other disturbance is allowed within existing drainage swales.

At the end of each workday during earthwork, operators shall grade all areas to temporary sediment trap(s). Temporary and permanent sediment traps shall be dewatered after all rainfall events if captured water does not infiltrate within 24 hours after the end of rainfall. Traps should be dewatered to sediment bags located in relatively level areas, preferably undisturbed areas of native vegetation. At no time shall a trap be dewatered directly to a stream or wetland.

The onsite certified contractor is responsible to inspect all erosion control measures employed during construction activities to measure proper performance.

In areas where construction would take place in “wet soils”, curtain drains or subsurface drainage will be installed to de-water the soils.

The Contractor will be held responsible for any soil exposure and/or erosion that occurs outside the defined limits of work and haul roads, and will immediately install erosion and sediment control measures and stabilize disturbed areas. Furthermore, any fines that could arise as a result of improper implementation of this Stormwater Pollution Prevention Plan (SWPPP) will be the responsibility of the Contractor. Only the owner or his designated representative will have the authority to authorize Contractor-requested disturbance beyond the limits on these plans.

To prevent sediment laden water from entering the storm drain system through the inlets, all catch basins will be protected by the “fabric barrier drop inlet protection” practice until the drainage areas served by these catch basins are stabilized. The fabric barrier shall be inspected after each rain event and repairs made as needed. Sediment shall be removed as necessary and disposed of properly.

Locate temporary topsoil stockpiles in areas, which do not receive direct runoff from swales or streams. The temporary topsoil stockpiles shall be protected with diversion swales if necessary. Locate temporary topsoil stockpile areas beyond proposed grading activities. To minimize erosion potential, enclose temporary topsoil stockpile areas with silt fencing. Seed temporary topsoil stockpile areas to reduce erosion if stored for prolonged periods.

All silt or sediment accumulations will be cleaned from temporary sediment traps.

All temporary sediment traps and all drainage swales shall be kept free of debris and litter, and the vegetation should be maintained to allow unobstructed flow of stormwater.

Any slopes or embankments which have damaged vegetation will be reseeded as necessary.

All grass swale areas will be mowed so as to facilitate unobstructed flow of stormwater.

2.3 OTHER CONTROLS

2.31 Waste Disposal

2.311 *Waste Materials:*

All waste materials generated during site preparation and construction will be disposed of at a suitable landfill, transfer station or C & D landfill.

The contractors shall inspect for and have litter picked up on a daily basis.

2.312 *Hazardous Waste*

The project will not be a generator of hazardous waste and it is not anticipated that any hazardous waste will be generated during construction. If there are any materials generated, a licensed hazardous waste carrier will be contracted to dispose of the hazardous material at a suitable disposal site. If hazardous materials are discovered during construction, the work will be stopped until the issue is resolved.

2.313 *Sanitary Waste*

Portable sanitary facilities will be made available to construction personnel and will be serviced regularly.

2.32 Offsite Vehicle Tracking.

Earthwork equipment involved with the construction will remain on the project site and will not regularly egress or ingress the site. Any trucks used to bring in materials or remove materials will do so over a stabilized construction entrance so as to capture mud and debris before they enter the public highway. The stabilized construction entrance shall be 50 feet minimum in length by 24 feet minimum in width. Typar 3401, or equal, filter cloth will be placed over the entire area prior to the placement of 6 inches of 2" stone. The entrance shall be maintained in a condition that will prevent tracking, or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand. Periodic inspection and needed maintenance

shall be provided after each rain. If significant off-site vehicle tracking begins to occur, the contractor will be directed to institute a regular street sweeping program in the vicinity of the site.

3.0 TIMING OF CONTROLS/MEASURES

Prior to commencement of construction activity, 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 within this SWPPP. Temporary structural erosion controls will be installed prior to earthwork as per the aforementioned plans.

The Owner shall have the engineer conduct an assessment of the site prior to the commencement of construction, the appropriate erosion and sediment controls described in this SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Structural erosion controls and non-stabilized areas shall be inspected on a regular basis by a qualified contractor.

To prevent sediment laden water from entering the storm drain system through the inlets, all catch basins will be protected by the “fabric barrier drop inlet protection” practice until the drainage areas served by these catch basins are stabilized. The fabric barrier shall be inspected after each rain event and repairs made as needed. Sediment shall be removed as necessary and disposed of properly.

All temporary sediment traps shall be pumped out within 24 hours of the end of all rainfall events if stormwater has not drained or infiltrated.

Temporary erosion control devices will not be removed until the growth of vegetation or other erosion control measures stabilizes the area served.

In areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within fourteen (14) days from the date the current soil disturbance activity ceased.

The Owner and Contractor shall retain copies of the Stormwater Pollution Prevention Plan on site at all times.

During construction of the project, all inspection, maintenance, and repair procedures as stated in this Stormwater Pollution Prevention Plan are the ultimate responsibility of the Owner of the project, his heirs or assigns.

All temporary measures that were installed in accordance with this Stormwater Pollution Prevention Plan shall remain the ultimate responsibility of the Owner of the project, his heirs or assigns, until such time as all areas being served are stabilized. Only after this stabilization occurs may these temporary measures be removed. A site can be considered finally stabilized when all soil disturbing activities have been completed and a uniform perennial vegetative cover with a density of 80% for the unpaved areas and areas not covered by permanent structures has been established or equivalent permanent stabilization measures have been established.

The long term post-construction inspection, maintenance, and repair procedures as stated in this Stormwater Pollution Prevention Plan will be performed by the Owner of the project, his heirs or assigns.

The Owner of the project, his heirs or assigns, will have the ultimate responsibility of the long-term maintenance, and repair procedures for all of the entire stormwater system as shown on the plans.

4.0 CERTIFICATION OF COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS

The proposed development will disturb less than 1 acre of soil and SPDES General Permit coverage is not required. The standard methods for Erosion and Sediment Control do still apply as shown on the plans and defined within the SWPPP.

5.0 MAINTENANCE/INSPECTION PROCEDURES

5.1 EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES

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

- A trained individual, appointed by the Contractor's construction manager, will supervise day to day activities on the site during soil disturbing activities and inspect the erosion control devices.
- All measures will be maintained in good working order and be fully operational. If repair is necessary, it will be initiated within 24 hours of discovery.
- Inspection, must look for evidence of the soil erosion on the site, potential of pollutants entering drainage systems, and signs of soil and mud transport from the site to the public road at the entrance.
- Silt fence maintenance shall be performed as needed, and sediment material removed when "bulges" develop in the silt fence.
- Built up sediment will be removed from silt fence if it ever reaches one-third the height of the structural control.

- Silt fence will be inspected for depth of sediment, tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground.
- All temporary sediment traps should be inspected for stability and integrity once a week and after any storm event. Any structural failure in sediment traps or trenches that serve them will be repaired within 24 hours after detection.
- All temporary sediment traps shall be pumped dry after all rainfall events that cause water to accumulate in the trap. Traps shall be dewatered to an undisturbed upland area or to a sediment bag.
- All temporary sediment traps shall be cleaned out when one half the design depth of the basin has accumulated. All spoils shall be removed to a stabilized upland area.
- The “fabric barrier drop inlet protection”, installed at all catch basins to keep sediment from entering the storm drain system, shall be inspected after each rain event and repairs made as needed. Sediment shall be removed as necessary and disposed of properly.
- Stabilized construction entrance inspection and needed maintenance shall be provided after each rain.
- The trained individual shall inspect for and have litter picked up on a daily basis.
- Where seeding stabilization is needed, perennial ryegrass applied at a rate of 150 pounds per acre may be used. All seeded areas are then to be mulched using straw mulch at a rate of 2 ton per acre. If anchoring of the straw mulch is needed, wood fiber mulch may then be applied at a rate of 500 pounds per acre.
- Seeded and planted areas will be inspected for bare spots, washouts and healthy growth. If necessary, replanting, reseeding or sodding will be implemented.

6.0 INVENTORY FOR POLLUTION PREVENTION PLAN: SPILL PREVENTION

6.1 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.

6.11 Good Housekeeping

The following good housekeeping practices will be followed onsite during the construction project:

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

- All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers, and if possible, under a roof or other enclosure.
- 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 disposal.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The trained individual will inspect daily to ensure proper use and disposal of materials onsite.
- The contractor shall prohibit washing of tools, equipment and machinery in or within 100 feet of any watercourse or wetland and install sediment traps to filter runoff from washing operations that could enter any watercourse.

6.12 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 resealable.
- Original labels and material safety data sheets will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

6.2 PRODUCT SPECIFIC PRACTICES

The following product specific practices will be followed onsite:

6.21 Petroleum Products

- Construction personnel should be made aware that emergency telephone numbers are located in this SWPPP
- The contractor shall immediately contact NYSDEC in the event of a spill, and shall take all appropriate steps to contain the spill including constructing a dike around the spill and placing absorbent material over this spill. The sorbent material is to be swept up and disposed of legally offsite.
- The contractor shall instruct personnel that spillage of fuels, oils, and similar chemicals must be avoided.

- Fuels, oils and chemicals will be stored in appropriate and tightly capped containers. Containers shall not be disposed of on the project site.
- Store fuels, oils, chemicals, material and equipment and locate sanitary facilities away from trees and at least 100 feet from streams, wells, wet areas, and other environmentally sensitive sites.
- Dispose of chemical containers and surplus chemicals off the project site in accordance with label directions.
- Use tight connections and hoses with appropriate nozzles in all operations involving fuels, lubricating materials or chemicals.
- Use funnels when pouring fuels, lubricating materials or chemicals.
- Refueling and cleaning of construction equipment will take place from access roads, in staging areas along roadside areas whenever practical to provide rapid response to emergency situations.
- All onsite vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Any vehicle leaking fuel or hydraulic fuel will be immediately removed from the site.

6.22 Fertilizer

Fertilizer will be stored in original containers and on pallets. Proper delivery scheduling will minimize storage time. Any damaged containers will be repaired immediately upon discovery and any released fertilizer recovered to the fullest extent practicable. Fertilizers are not to be applied in rain nor when heavy rain is expected within 24 hours.

6.23 Paints

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

6.24 Concrete Trucks

Concrete trucks will not be allowed to wash out or discharge surplus concrete or drum wash water on the site except in a designated upland area.

Concrete truck washout will not be allowed to discharge into waters or wetlands at any time.

6.25 Asphalt Trucks

Asphalt trucks shall not discharge surplus asphalt on the site.

6.3 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 implemented for spill prevention and cleanup:

- Manufacturer's 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. Any spill in excess or suspected to be in excess of two gallons will be reported to the NYSDEC Spill Response Unit. Notification to NYSDEC (1-800-457-7362) must be completed within two hours of the discovery of the spill.
- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to: absorbent pads, brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with spilled substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size.
- 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 contractor/trained individual 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 on the onsite construction office or trailer.
- A *Spill Response Report* is contained in Appendix B.

7.0 LONG TERM POST-CONSTRUCTION INSPECTION AND MAINTENANCE

After the site is completely stabilized, inspections will be performed at least twice a year (after the spring thaw and in the fall). Inspections shall also occur after major rain events. All swales and stormwater management systems will be inspected on a regular basis. Sediments will be pumped out and/or removed based on the inspections. It will be the responsibility of The Owner, his heirs or assigns, for documenting these inspections and clean out work.

Post-construction regularly scheduled inspections and maintenance will be necessary to ensure the permanent structural features remain optimally functional.

The Owner shall overtake responsibility of inspecting and maintaining drainage and erosion control features over the lifetime of the structures and stormwater components. Maintenance personnel, employed by the Owner, must be aware of the SWPPP and should be trained to recognize signs that stabilization measures may not be performing optimally or are failing. The inspection of on-site stabilization measures will become part of routine preventative maintenance practiced by the Owner and his employees. Inspection and maintenance should be performed as described below.

Inspection

Overall Site Inspection

The overall site and vegetation should be inspected regularly after every major rain event and at least twice a year (after the spring thaw and in the fall). The inspection should include but are not limited to:

1. Density and condition of vegetation and ground cover.
2. Erosion, differential settlement or cracking of soils.
3. Bulging or sliding of toe of embankments.
4. Sedimentation of lawn areas, paved areas.
5. Accumulation of pollutants, including oils or grease.
6. Damage or fatigue of storm associated components.

Maintenance

Overall Site Maintenance

Maintenance vegetative and structural measures for soil protection is necessary to keep the storm water system functioning properly. Maintenance should occur on a regular basis and should include but is not limited to:

Seasonal Maintenance

1. Vegetated areas should be maintained to promote vigorous and dense growth. Lawn areas should be mowed at least three times a year but may require more frequent mowing depending on the growth rate.
2. Paved areas should be swept at least twice a year and in the early spring for removal of deicing materials.

3. Accumulation of litter and debris should be removed during each mowing or sweep operation.
4. Structural components of the storm system should be addressed immediately following identification.
5. Cleanout of accumulated sediments and debris should occur.
6. Signs of scour should be repaired. Weeds and brush growth should be controlled as needed.

Winter Maintenance

1. Remove snow and ice away from inlet grates.
2. Use of deicing materials should be limited to sand and environmentally friendly chemical products. Use of salt mixtures should be kept to a minimum.
3. Sand used for deicing should be clean, coarse material free of fines, silt, and clay.
4. Materials used for deicing should be removed during the early spring by sweeping and/or vacuuming.

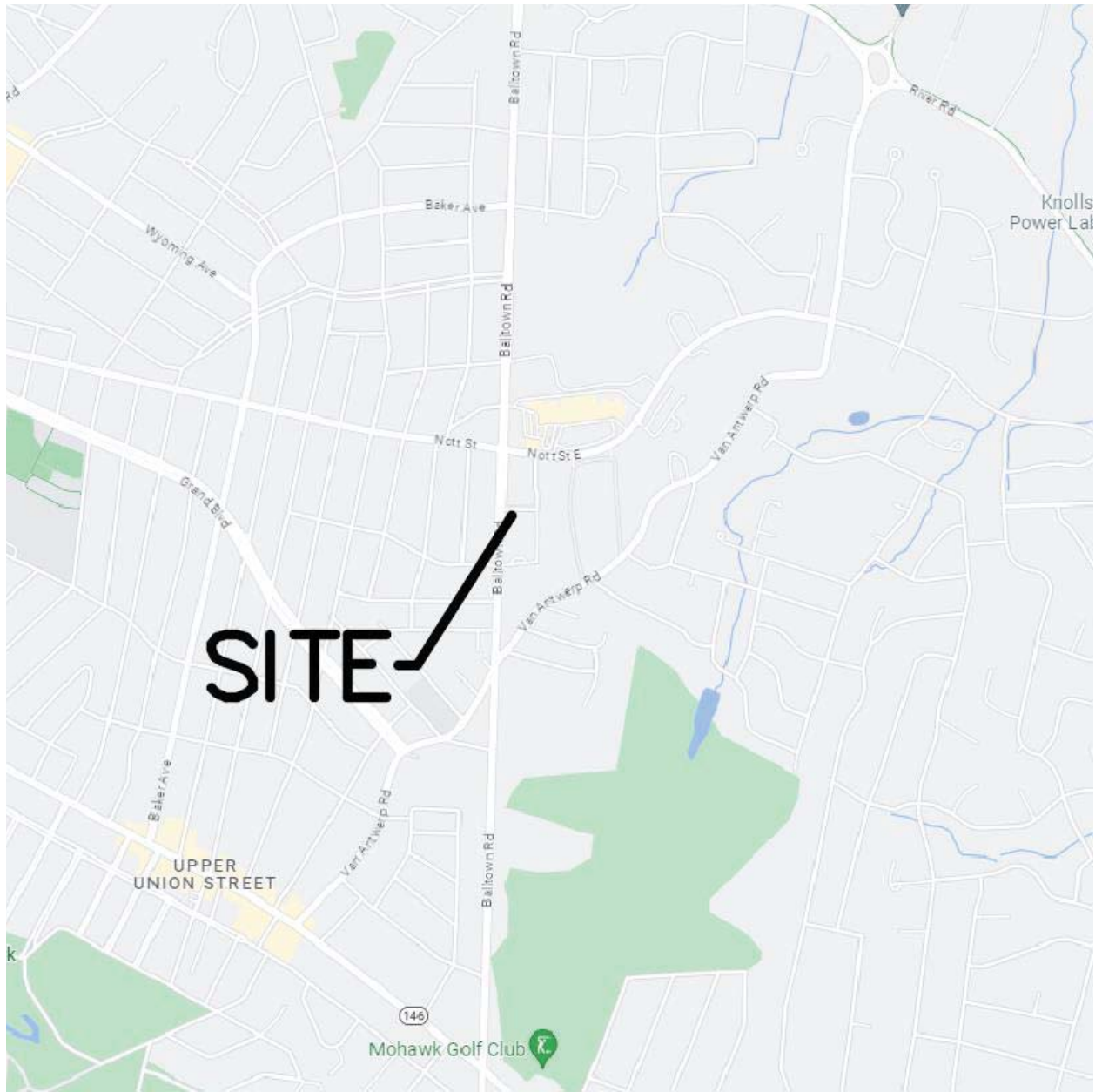
8.0 POLLUTION PREVENTION PLAN CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signed: _____
Name: Luigi A. Palleschi, P.E.
Title: Professional Engineer, ABD Engineers & Surveyors, LLP
Date: _____



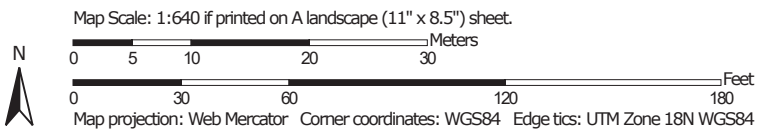
EXHIBIT 1
SITE LOCATION MAP &
SOIL INFORMATION



Soil Map—Schenectady County, New York



Soil Map may not be valid at this scale.




**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

10/17/2023
Page 1 of 3

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

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: Schenectady County, New York

Survey Area Data: Version 22, Sep 5, 2023

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

Date(s) aerial images were photographed: Aug 15, 2021—Nov 8, 2021

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
NuB	Nunda channery silt loam, 3 to 8 percent slopes	1.9	100.0%
Totals for Area of Interest		1.9	100.0%

Schenectady County, New York

NuB—Nunda channery silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: bd61

Elevation: 400 to 1,600 feet

Mean annual precipitation: 38 to 44 inches

Mean annual air temperature: 45 to 48 degrees F

Frost-free period: 110 to 170 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Nunda and similar soils: 75 percent

Minor components: 25 percent

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

Description of Nunda

Setting

Landform: Till plains, hills, drumlinoid ridges

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Crest

Down-slope shape: Concave

Across-slope shape: Convex

Parent material: A silty mantle over loamy till derived from calcareous shale and siltstone

Typical profile

H1 - 0 to 7 inches: channery silt loam

H2 - 7 to 25 inches: channery silt loam

H3 - 25 to 42 inches: gravelly silty clay loam

H4 - 42 to 60 inches: gravelly loam

Properties and qualities

Slope: 3 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately 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 15 to 24 inches

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate, maximum content: 10 percent

Available water supply, 0 to 60 inches: Moderate (about 7.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D

Ecological site: F101XY013NY - Moist Till
Hydric soil rating: No

Minor Components

Mohawk

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

Burdett

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

Lansing

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

Darien

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

Angola

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

Data Source Information

Soil Survey Area: Schenectady County, New York
Survey Area Data: Version 22, Sep 5, 2023

APPENDIX A
EROSION AND SEDIMENT CONTROL
STANDARDS AND SPECIFICATIONS

STANDARD AND SPECIFICATIONS FOR CONCRETE TRUCK WASHOUT



Definition & Scope

A temporary excavated or above ground lined constructed pit where concrete truck mixers and equipment can be washed after their loads have been discharged, to prevent highly alkaline runoff from entering storm drainage systems or leaching into soil.

Conditions Where Practice Applies

Washout facilities shall be provided for every project where concrete will be poured or otherwise formed on the site. This facility will receive highly alkaline wash water from the cleaning of chutes, mixers, hoppers, vibrators, placing equipment, trowels, and screeds. Under no circumstances will wash water from these operations be allowed to infiltrate into the soil or enter surface waters.

Design Criteria

Capacity: The washout facility should be sized to contain solids, wash water, and rainfall and sized to allow for the evaporation of the wash water and rainfall. Wash water shall be estimated at 7 gallons per chute and 50 gallons per hopper of the concrete pump truck and/or discharging drum. The minimum size shall be 8 feet by 8 feet at the bottom and 2 feet deep. If excavated, the side slopes shall be 2 horizontal to 1 vertical.

Location: Locate the facility a minimum of 100 feet from drainage swales, storm drain inlets, wetlands, streams and other surface waters. Prevent surface water from entering the structure except for the access road. Provide appropriate access with a gravel access road sloped down to the structure. Signs shall be placed to direct drivers to the facility after their load is discharged.

Liner: All washout facilities will be lined to prevent

leaching of liquids into the ground. The liner shall be plastic sheeting with a minimum thickness of 10 mils with no holes or tears, and anchored beyond the top of the pit with an earthen berm, sand bags, stone, or other structural appurtenance except at the access point.

If pre-fabricated washouts are used they must ensure the capture and containment of the concrete wash and be sized based on the expected frequency of concrete pours. They shall be sited as noted in the location criteria.

Maintenance

- All concrete washout facilities shall be inspected daily. Damaged or leaking facilities shall be deactivated and repaired or replaced immediately. Excess rainwater that has accumulated over hardened concrete should be pumped to a stabilized area, such as a grass filter strip.
- Accumulated hardened material shall be removed when 75% of the storage capacity of the structure is filled. Any excess wash water shall be pumped into a containment vessel and properly disposed of off site.
- Dispose of the hardened material off-site in a construction/demolition landfill. On-site disposal may be allowed if this has been approved and accepted as part of the projects SWPPP. In that case, the material should be recycled as specified, or buried and covered with a minimum of 2 feet of clean compacted earthfill that is permanently stabilized to prevent erosion.
- The plastic liner shall be replaced with each cleaning of the washout facility.
- Inspect the project site frequently to ensure that no concrete discharges are taking place in non-designated areas.

STANDARD AND SPECIFICATIONS FOR STABILIZED CONSTRUCTION ACCESS



Definition & Scope

A stabilized pad of aggregate underlain with geotextile located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk, or parking area. The purpose of stabilized construction access is to reduce or eliminate the tracking of sediment onto public rights-of-way or streets.

Conditions Where Practice Applies

A stabilized construction access shall be used at all points of construction ingress and egress.

Design Criteria

See Figure 2.1 on page 2.31 for details.

Aggregate Size: Use a matrix of 1-4 inch stone, or reclaimed or recycled concrete equivalent.

Thickness: Not less than six (6) inches.

Width: 12-foot minimum but not less than the full width of points where ingress or egress occurs. 24-foot minimum if there is only one access to the site.

Length: As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).

Geotextile: To be placed over the entire area to be covered with aggregate. Filter cloth will not be required on a single-family residence lot. Piping of surface water under entrance shall be provided as required. If piping is impossible, a mountable berm with 5:1 slopes will be permitted.

Criteria for Geotextile: The geotextile shall be woven or nonwoven fabric consisting only of continuous chain polymeric filaments or yarns of polyester. The fabric shall be

inert to commonly encountered chemicals, hydro-carbons, mildew, rot resistant, and conform to the fabric properties as shown:

Fabric Properties ³	Light Duty ¹ Roads Grade Sub-grade	Heavy Duty ² Haul Roads Rough Graded	Test Method
Grab Tensile Strength (lbs)	200	220	ASTM D1682
Elongation at Failure (%)	50	60	ASTM D1682
Mullen Burst Strength (lbs)	190	430	ASTM D3786
Puncture Strength (lbs)	40	125	ASTM D751 Modified
Equivalent	40-80	40-80	US Std Sieve
Opening Size			CW-02215
Aggregate Depth	6	10	-

¹Light Duty Road: Area sites that have been graded to subgrade and where most travel would be single axle vehicles and an occasional multi-axle truck. Acceptable materials are Trevira Spunbond 1115, Mirafi 100X, Typar 3401, or equivalent.

²Heavy Duty Road: Area sites with only rough grading, and where most travel would be multi-axle vehicles. Acceptable materials are Trevira Spunbond 1135, Mirafi 600X, or equivalent.

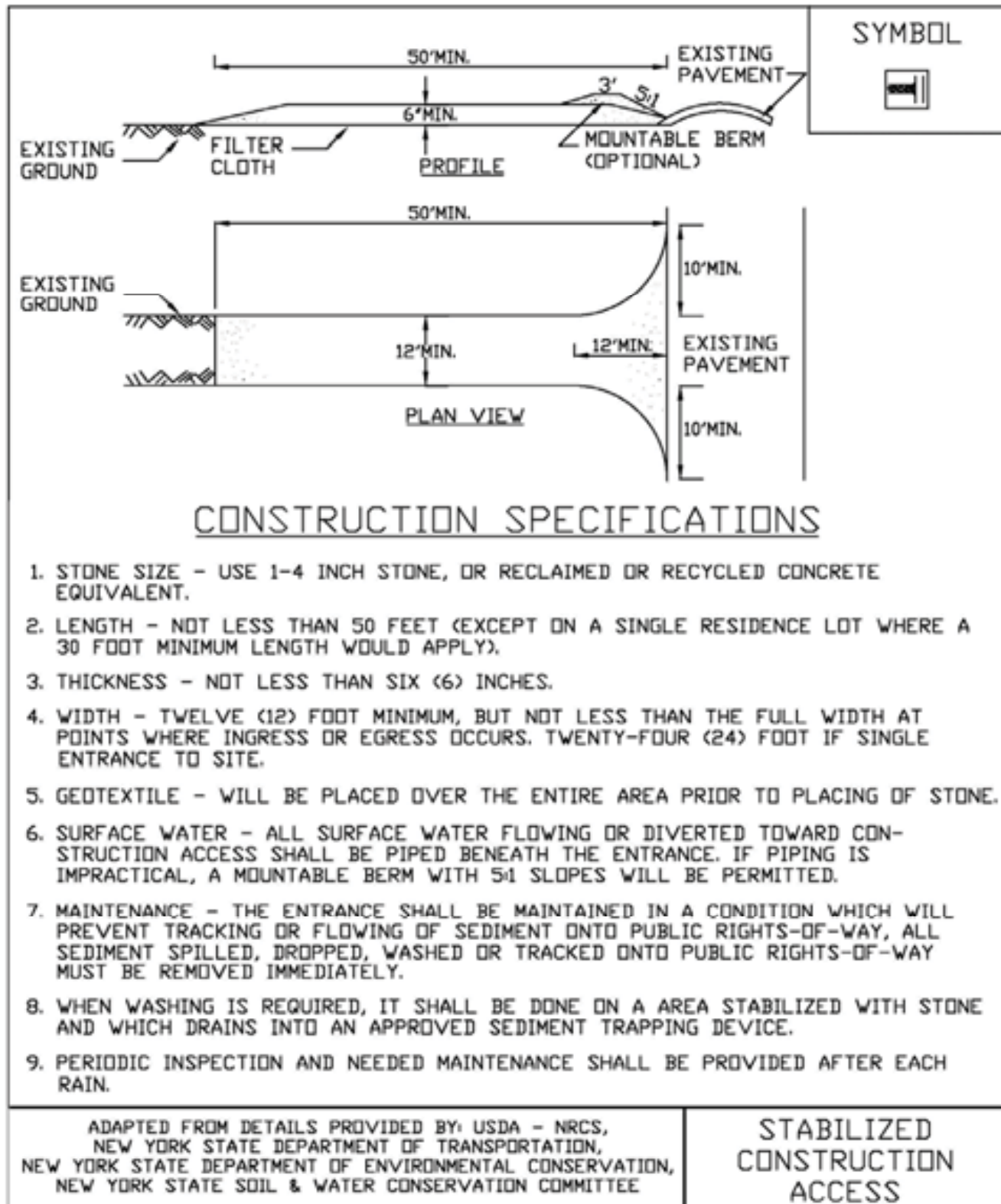
³Fabrics not meeting these specifications may be used only when design procedure and supporting documentation are supplied to determine aggregate depth and fabric strength.

Maintenance

The access shall be maintained in a condition which will prevent tracking of sediment onto public rights-of-way or streets. This may require periodic top dressing with additional aggregate. All sediment spilled, dropped, or washed onto public rights-of-way must be removed immediately.

When necessary, wheels must be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device. All sediment shall be prevented from entering storm drains, ditches, or watercourses.

Figure 2.1
Stabilized Construction Access



STANDARD AND SPECIFICATIONS FOR MULCHING



Definition and Scope

Applying coarse plant residue or chips, or other suitable materials, to cover the soil surface to provide initial erosion control while a seeding or shrub planting is establishing. Mulch will conserve moisture and modify the surface soil temperature and reduce fluctuation of both. Mulch will prevent soil surface crusting and aid in weed control. Mulch can also be used alone for temporary stabilization in non-growing months. Use of stone as a mulch could be more permanent and should not be limited to non-growing months.

Conditions Where Practice Applies

On soils subject to erosion and on new seedlings and shrub plantings. Mulch is useful on soils with low infiltration rates by retarding runoff.

Criteria

Site preparation prior to mulching requires the installation of necessary erosion control or water management practices and drainage systems.

Slope, grade and smooth the site to fit needs of selected mulch products.

Remove all undesirable stones and other debris to meet the needs of the anticipated land use and maintenance required.

Apply mulch after soil amendments and planting is accomplished or simultaneously if hydroseeding is used.

Select appropriate mulch material and application rate or material needs. Hay mulch shall not be used in wetlands or in areas of permanent seeding. Clean straw mulch is preferred alternative in wetland application. Determine local availability.

Select appropriate mulch anchoring material.

NOTE: The best combination for grass/legume establishment is straw (cereal grain) mulch applied at 2 ton/acre (90 lbs./1000sq.ft.) and anchored with wood fiber mulch (hydromulch) at 500 – 750 lbs./acre (11 – 17 lbs./1000 sq. ft.). The wood fiber mulch must be applied through a hydroseeder immediately after mulching.



Table 4.2
Guide to Mulch Materials, Rates, and Uses

Mulch Material	Quality Standards	per 1000 Sq. Ft.	per Acre	Depth of Application	Remarks
Wood chips or shavings	Air-dried. Free of objectionable coarse material	500-900 lbs.	10-20 tons	2-7"	Used primarily around shrub and tree plantings and recreation trails to inhibit weed competition. Resistant to wind blowing. Decomposes slowly.
Wood fiber cellulose (partly digested wood fibers)	Made from natural wood usually with green dye and dispersing agent	50 lbs.	2,000 lbs.	—	Apply with hydromulcher. No tie down required. Less erosion control provided than 2 tons of hay or straw.
Gravel, Crushed Stone or Slag	Washed; Size 2B or 3A—1 1/2"	9 cu. yds.	405 cu. yds.	3"	Excellent mulch for short slopes and around plants and ornamentals. Use 2B where subject to traffic. (Approximately 2,000 lbs./cu. yd.). Frequently used over filter fabric for better weed control.
Hay or Straw	Air-dried; free of undesirable seeds & coarse materials	90-100 lbs. 2-3 bales	2 tons (100-120 bales)	cover about 90% surface	Use small grain straw where mulch is maintained for more than three months. Subject to wind blowing unless anchored. Most commonly used mulching material. Provides the best micro-environment for germinating seeds.
Jute twisted yarn	Undyed, unbleached plain weave. Warp 78 ends/yd., Weft 41 ends/yd. 60-90 lbs./roll	48" x 50 yds. or 48" x 75 yds.	—	—	Use without additional mulch. Tie down as per manufacturers specifications. Good for center line of concentrated water flow.
Excelsior wood fiber mats	Interlocking web of excelsior fibers with photodegradable plastic netting	4' x 112.5' or 8' x 112.5'.	—	—	Use without additional mulch. Excellent for seeding establishment. Anchor as per manufacturers specifications. Approximately 72 lbs./roll for excelsior with plastic on both sides. Use two sided plastic for centerline of waterways.
Straw or coconut fiber, or combination	Photodegradable plastic net on one or two sides	Most are 6.5 ft. x 3.5 ft.	81 rolls	—	Designed to tolerate higher velocity water flow, centerlines of waterways, 60 sq. yds. per roll.

Table 4.3
Mulch Anchoring Guide

Anchoring Method or Material	Kind of Mulch to be Anchored	How to Apply
1. Peg and Twine	Hay or straw	After mulching, divide areas into blocks approximately 1 sq. yd. in size. Drive 4-6 pegs per block to within 2" to 3" of soil surface. Secure mulch to surface by stretching twine between pegs in criss-cross pattern on each block. Secure twine around each peg with 2 or more tight turns. Drive pegs flush with soil. Driving stakes into ground tightens the twine.
2. Mulch netting	Hay or straw	Staple the light-weight paper, jute, wood fiber, or plastic nettings to soil surface according to manufacturer's recommendations. Should be biodegradable. Most products are not suitable for foot traffic.
3. Wood cellulose fiber	Hay or straw	Apply with hydroseeder immediately after mulching. Use 500 lbs. wood fiber per acre. Some products contain an adhesive material ("tackifier"), possibly advantageous.
4. Mulch anchoring tool	Hay or straw	Apply mulch and pull a mulch anchoring tool (blunt, straight discs) over mulch as near to the contour as possible. Mulch material should be "tucked" into soil surface about 3".
5. Tackifier	Hay or straw	Mix and apply polymeric and gum tackifiers according to manufacturer's instructions. Avoid application during rain. A 24-hour curing period and a soil temperature higher than 45 ⁰ Fahrenheit are required.

STANDARD AND SPECIFICATIONS FOR TEMPORARY CONSTRUCTION AREA SEEDING



Definition & Scope

Providing temporary erosion control protection to disturbed areas and/or localized critical areas for an interim period by covering all bare ground that exists as a result of construction activities or a natural event. Critical areas may include but are not limited to steep excavated cut or fill slopes and any disturbed, denuded natural slopes subject to erosion.

Conditions Where Practice Applies

Temporary seedings may be necessary on construction sites to protect an area, or section, where final grading is complete, when preparing for winter work shutdown, or to provide cover when permanent seedings are likely to fail due to mid-summer heat and drought. The intent is to provide temporary protective cover during temporary shutdown of construction and/or while waiting for optimal planting time.

Criteria

Water management practices must be installed as appropriate for site conditions. The area must be rough graded and slopes physically stable. Large debris and rocks are usually removed. Seedbed must be seeded within 24 hours of disturbance or scarification of the soil surface will be necessary prior to seeding.

Fertilizer or lime are not typically used for temporary seedings.

IF: Spring or summer or early fall, then seed the area with ryegrass (annual or perennial) at 30 lbs. per acre (Approximately 0.7 lb./1000 sq. ft. or use 1 lb./1000 sq. ft.).

IF: Late fall or early winter, then seed Certified 'Aroostook' winter rye (cereal rye) at 100 lbs. per acre (2.5 lbs./1000 sq. ft.).

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.

Mulch the area with hay or straw at 2 tons/acre (approx. 90 lbs./1000 sq. ft. or 2 bales). Quality of hay or straw mulch allowable will be determined based on long term use and visual concerns. Mulch anchoring will be required where wind or areas of concentrated water are of concern. Wood fiber hydromulch or other sprayable products approved for erosion control (nylon web or mesh) may be used if applied according to manufacturers' specification. Caution is advised when using nylon or other synthetic products. They may be difficult to remove prior to final seeding and can be a hazard to young wildlife species.

STANDARD AND SPECIFICATIONS FOR TOPSOILING



Definition & Scope

Spreading a specified quality and quantity of topsoil materials on graded or constructed subsoil areas to provide acceptable plant cover growing conditions, thereby reducing erosion; to reduce irrigation water needs; and to reduce the need for nitrogen fertilizer application.

Conditions Where Practice Applies

Topsoil is applied to subsoils that are droughty (low available moisture for plants), stony, slowly permeable, salty or extremely acid. It is also used to backfill around shrub and tree transplants. This standard does not apply to wetland soils.

Design Criteria

1. Preserve existing topsoil in place where possible, thereby reducing the need for added topsoil.
2. Conserve by stockpiling topsoil and friable fine textured subsoils that must be stripped from the excavated site and applied after final grading where vegetation will be established. Topsoil stockpiles must be stabilized. Stockpile surfaces can be stabilized by vegetation, geotextile or plastic covers. This can be aided by orientating the stockpile lengthwise into prevailing winds.
3. Refer to USDA Natural Resource Conservation Service soil surveys or soil interpretation record sheets for further soil texture information for selecting appropriate design topsoil depths.

Site Preparation

1. As needed, install erosion and sediment control practices such as diversions, channels, sediment traps, and stabilizing measures, or maintain if already installed.
2. Complete rough grading and final grade, allowing for depth of topsoil to be added.
3. Scarify all compact, slowly permeable, medium and fine textured subsoil areas. Scarify at approximately right angles to the slope direction in soil areas that are steeper than 5 percent. Areas that have been overly compacted shall be decompact in accordance with the Soil Restoration Standard.
4. Remove refuse, woody plant parts, stones over 3 inches in diameter, and other litter.

Topsoil Materials

1. Topsoil shall have at least 6 percent by weight of fine textured stable organic material, and no greater than 20 percent. Muck soil shall not be considered topsoil.
2. Topsoil shall have not less than 20 percent fine textured material (passing the NO. 200 sieve) and not more than 15 percent clay.
3. Topsoil treated with soil sterilants or herbicides shall be so identified to the purchaser.
4. Topsoil shall be relatively free of stones over 1 1/2 inches in diameter, trash, noxious weeds such as nut sedge and quackgrass, and will have less than 10 percent gravel.
5. Topsoil containing soluble salts greater than 500 parts per million shall not be used.
6. Topsoil may be manufactured as a mixture of a mineral component and organic material such as compost.

Application and Grading

1. Topsoil shall be distributed to a uniform depth over the area. It shall not be placed when it is partly frozen, muddy, or on frozen slopes or over ice, snow, or standing water puddles.
2. Topsoil placed and graded on slopes steeper than 5 percent shall be promptly fertilized, seeded, mulched, and stabilized by "tracking" with suitable equipment.
3. Apply topsoil in the amounts shown in Table 4.7 below:

Table 4.7 - Topsoil Application Depth		
Site Conditions	Intended Use	Minimum Topsoil Depth
1. Deep sand or loamy sand	Mowed lawn	6 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	1 in.
2. Deep sandy loam	Mowed lawn	5 in.
	Tall legumes, unmowed	2 in.
	Tall grass, unmowed	none
3. Six inches or more: silt loam, clay loam, loam, or silt	Mowed lawn	4 in.
	Tall legumes, unmowed	1 in.
	Tall grass, unmowed	1 in.

STANDARD AND SPECIFICATIONS FOR SILT FENCE



Definition & Scope

A **temporary** barrier of geotextile fabric installed on the contours across a slope used to intercept sediment laden runoff from small drainage areas of disturbed soil by temporarily ponding the sediment laden runoff allowing settling to occur. The maximum period of use is limited by the ultraviolet stability of the fabric (approximately one year).

Conditions Where Practice Applies

A silt fence may be used subject to the following conditions:

1. Maximum allowable slope length and fence length will not exceed the limits shown in the Design Criteria for the specific type of silt fence used ; and
2. Maximum ponding depth of 1.5 feet behind the fence; and
3. Erosion would occur in the form of sheet erosion; and
4. There is no concentration of water flowing to the barrier; and
5. Soil conditions allow for proper keying of fabric, or other anchorage, to prevent blowouts.

Design Criteria

1. Design computations are not required for installations of 1 month or less. Longer installation periods should be designed for expected runoff.
2. All silt fences shall be placed as close to the disturbed area as possible, but at least 10 feet from the toe of a slope steeper than 3H:1V, to allow for maintenance and

roll down. The area beyond the fence must be undisturbed or stabilized.

3. The type of silt fence specified for each location on the plan shall not exceed the maximum slope length and maximum fence length requirements shown in the following table:

		Slope Length/Fence Length (ft.)		
Slope	Steepness	Standard	Reinforced	Super
<2%	< 50:1	300/1500	N/A	N/A
2-10%	50:1 to 10:1	125/1000	250/2000	300/2500
10-20%	10:1 to 5:1	100/750	150/1000	200/1000
20-33%	5:1 to 3:1	60/500	80/750	100/1000
33-50%	3:1 to 2:1	40/250	70/350	100/500
>50%	> 2:1	20/125	30/175	50/250

Standard Silt Fence (SF) is fabric rolls stapled to wooden stakes driven 16 inches in the ground.
Reinforced Silt Fence (RSF) is fabric placed against welded wire fabric with anchored steel posts driven 16 inches in the ground.
Super Silt Fence (SSF) is fabric placed against chain link fence as support backing with posts driven 3 feet in the ground.

4. Silt fence shall be removed as soon as the disturbed area has achieved final stabilization.

The silt fence shall be installed in accordance with the appropriate details. Where ends of filter cloth come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Butt joints are not acceptable. A detail of the silt fence shall be shown on the plan. See Figure 5.30 on page 5.56 for Reinforced Silt Fence as an example of details to be provided.

Criteria for Silt Fence Materials

1. Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	110	ASTM D 4632
Elongation at Failure (%)	20	ASTM D 4632
Mullen Burst Strength (PSI)	300	ASTM D 3786
Puncture Strength (lbs)	60	ASTM D 4833
Minimum Trapezoidal Tear Strength (lbs)	50	ASTM D 4533
Flow Through Rate (gal/min/sf)	25	ASTM D 4491
Equivalent Opening Size	40-80	US Std Sieve ASTM D 4751
Minimum UV Residual (%)	70	ASTM D 4355

2. Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.5 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot. Posts for super silt fence shall be standard chain link fence posts.
3. Wire Fence for reinforced silt fence: Wire fencing shall be a minimum 14 gage with a maximum 6 in. mesh opening, or as approved.
4. Prefabricated silt fence is acceptable as long as all material specifications are met.

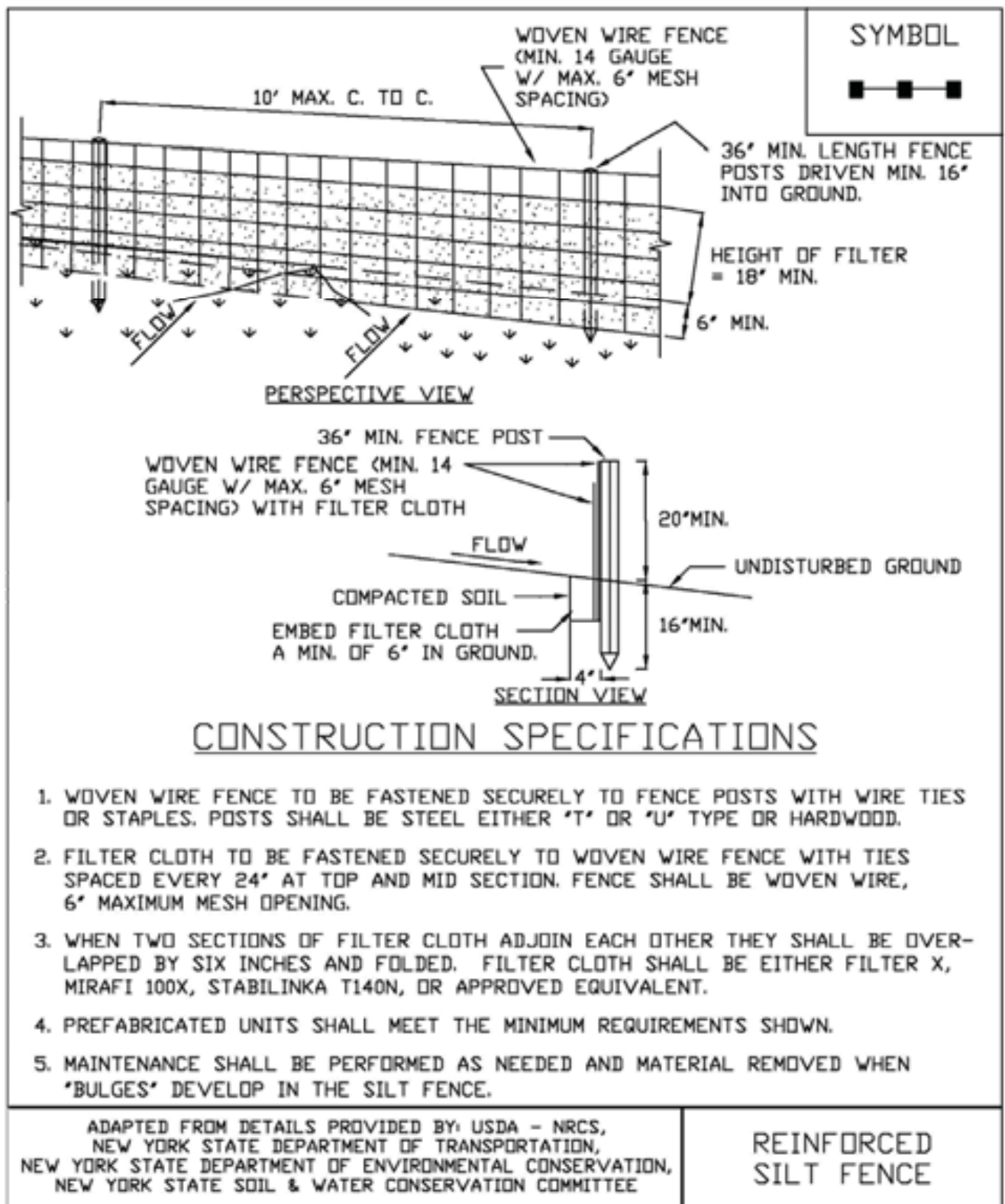
Super Silt Fence



Reinforced Silt Fence



Figure 5.30
Reinforced Silt Fence



APPENDIX B
OTHER DOCUMENTS

9.0 OWNER'S CERTIFICATION

2,700± SF BUILDING ADDITION & PARKING LOT EXPANSION

1430 Balltown Road

Town of Niskayuna

Schenectady County, New York

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

The Owner also certifies that all appropriate stormwater control measures will be in place before commencement of construction of any segment of the project that requires such measures.

Signature: _____

Name (printed): _____

Company Name: _____

Address: _____

Telephone No: _____

Title/Responsible For: _____

Certification Date: _____

**STORMWATER POLLUTION PREVENTION PLAN
SPILL RESPONSE REPORT**

Within 1 hour of a spill discovery less than 2 gallons in volume the following must be notified:

1. Highbridge Development HRS, LLC
2. ABD Engineers, LLP, 518-377-0315
3. Town of Niskayuna, 518-386-4500

Within 1 hour of a spill discovery greater than 2 gallons in volume the following must be notified:

1. NYSDEC Spill Response Hotline 800-457-7362
2. Highbridge Development HRS, LLC
3. ABD Engineers, LLP, 518-377-0315
4. Spill Response Contractor, *e.g.* Kleen Resources, 518-462-0400 or others by contractor.
5. Town of Niskayuna, 518-386-4500

Please complete following information:

1. Material Spilled: _____
2. Approximate Volume: _____
3. Location: _____
4. Distance to nearest down gradient drainage way: _____
5. Distance to nearest down gradient open water: _____
6. Temporary control measures in place: _____

SIGNATURE OF PERSON REPORTING SPILL AND COMPLETING FORM:

PRINT NAME, TITLE AND COMPANY:

DATE AND TIME OF SPILL:

DATE AND TIME REPORTED:

TRAFFIC SUMMARY

Office Building

1430 Balltown Road

At the Planning Board's request, ABD Engineers & Surveyors, LLP has reviewed the potential traffic impacts of the proposed use consisting of 12,680 sf of office space located at 1430 Balltown Road in the Town of Niskayuna. This assessment presents an estimate of the traffic this project would generate and compares it to the previous use.

The trip generation for the proposed uses was estimated using data found in the Trip Generation Manual, 9th Edition, published by the Institute of Transportation Engineers (ITE), based on data for Land Use Code (LUC) 710 – "General Office".

Existing Building

The existing building is 9,980 SF of office space and previously used for Attorneys. The previous building had 25 employees and 50 visitors daily. Based on the Owner's information, there were approximately 25-30 trips in both the AM and PM spread out over the normal arrival and departure times. However, based on ITE AM and PM peak hour generator, the comparison is as follows:

A COMPARISON OF ITE TRIP GENERATION IS AS FOLLOWS:

Existing 9,980 SF Office

AM peak	1.56/1,000 SF	16 trips
PM peak	1.49/1,000 SF	15 trips

Proposed Development AM Peak

12,680 SF Office	1.56/1,000 SF	20 trips
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Proposed Development PM Peak

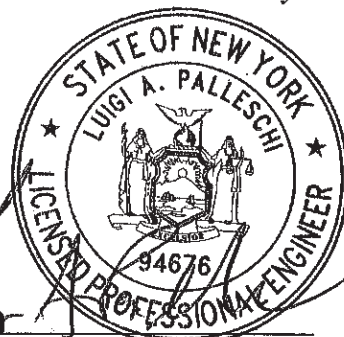
12,680 SF Office	1.49/1,000 SF	19 trips
------------------	---------------	----------

Summary based on ITE Prediction

	AM	PM
Existing Office	16	15
Proposed Development	20	19
Increase in trips	4	4

As compared above, this project is expected to generate a few more trips in the AM and PM peak hours similar to previous use, there will be about 4 additional trips.

Based on the traffic assessment, the proposed development will not result in any significant traffic impacts that would require mitigation.



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Luigi A. Palleschi, P.E.



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VIII. 3

MEETING DATE: 12/11/2023

ITEM TITLE: DISCUSSION -- A site plan application for a tenant change to a Market 32 grocery store.

PROJECT LEAD: TBD

APPLICANT: Kelly Oneill, agent for the owner

SUBMITTED BY: Kelly Oneill, agent for the owner

REVIEWED BY:

☐ Conservation Advisory Council (CAC) ☐ Zoning Board of Appeals (ZBA) ☐ Town Board
☐ OTHER:

ATTACHMENTS:

☐ Resolution ☒ Site Plan ☐ Map ☐ Report ☐ Other:

SUMMARY STATEMENT:

Kelly Oneill submitted a site plan application for a tenant change to a Market 32 grocery store at 2333 Nott St. E. The site was previously a Shop Rite grocery store until approximately 12/1/23.

Preliminary renderings of the proposed exterior and an interior floorplan of the proposed Market 32 were provided with the application.

This is the initial presentation of this project to the Planning Board.

COMPREHENSIVE PLAN

The proposed application complies with the Economic Development section, beginning on page 73, of the 2013 Niskayuna Comprehensive Plan.

BACKGROUND INFORMATION







The property is located in a Planned Development District (PDD) within the C-N Neighborhood Commercial zoning district and Town Center Overlay District (TCOD). Grocery stores are allowable uses in the PDD.

The following documents were provided with the site plan application.

1. An untitled and undated 1-page layout of the land formerly known as Shop Rite Plaza showing access roads and parking spaces.

2. A 1-page drawing entitled “Exterior Building Elevations Painting and Signage Scope of Work, Price Chopper 2333 Nott Street East, Niskayuna NY 12309” by Golub Corporation Engineering Department 461 Nott Street Schenectady NY 12308 dated 11/29/23 with no subsequent revisions.
3. A 1-page drawing with a file name including “demo work” and entitled “EQD1, General Equipment Plan – Proposed – Not For Construction, Price Chopper “Niskayuna” 2333 Nott Street East, Niskayuna, NY 12309” by Golub Corporation Engineering Department 461 Nott Street Schenectady, NY 12308 dated 11/28/23 with no subsequent revisions.
4. A 1-page drawing with a file name including “new plan” and entitled “EQ01, General Equipment Plan – Proposed – Not For Construction, Price Chopper “Niskayuna” 2333 Nott Street East, Niskayuna, NY 12309” by Golub Corporation Engineering Department 461 Nott Street Schenectady, NY 12308 dated 11/28/23 with no subsequent revisions.

The aforementioned “new plan” drawing includes the following statistics comparing the proposed Market 32 layout to the previous Shop Rite store.

NISKAYUNA, NY			
	EXISTING	PROPOSED	DIFFERENCE
TOTAL BUILDING	58,564 S.F.	58,564 S.F.	0 S.F.
SALES AREA	38,760 S.F.	38,760 S.F.	0 S.F.
LINEAR FT OF SHELVING	2,458 LFT	2,153 LFT	-305 LFT
CENTER STORE	2,458 LFT	1,710 LFT	-748 LFT
HBC	0 LFT	331 LFT	+331 LFT
GREETING CARDS	0 LFT	112 LFT	+112 LFT
FROZEN FOOD	147 DOORS	143 DOORS	-4 DOORS
DAIRY	12 DR COOLER, 36 LFT L/M DECK, 48 DOORS	12 DR COOLER, 36 LFT L/M DECK, 48 DOORS	0 DR COOLER, 0 LFT L/M DECK, 0 DOORS
BEVERAGE	15 DOORS (38 LFT)	15 DOORS (38 LFT)	0 DOORS (0 LFT)
STORE PLANNER: ERF			
MILLWORK  NEW  RELOCATE WITHIN STORE  RELOCATE to/ from OTHERS, I.E. BLDG. 13  DEMO  MAYBE REUSE 			

The applicant is appearing before the Board this evening to present the project and discuss typical site plan review topics including the following.

- Parking
- Site lighting
- Means of access
- Signs
- Landscaping
- Architectural features



TOWN OF NISKAYUNA

One Niskayuna Circle
Niskayuna, New York 12309-4381

Phone: (518) 386-4530

Application for Site Plan Review

Applicant (Owner or Agent):

Location:

Name Golub Corporation _____ Number & Street 2333 Nott Street East_

Address 461 Nott Street _____ Section-Block-Lot _____ - _____ - _____

Schenectady, NY 12308 _____

EMAIL:kellyoneill@pricechopper.com _____

Telephone 518-379-1293 _____ Fax _____ Zoning District _____

Proposal Description:

Interior renovations include: removal of and installation of new interior decor, paint, and cases. Removal or relocation of existing cases. Removal and addition of interior walls per proposed demo plan (minor).

Proposed exterior changes include paint, signage and new entrance changes.

Signature of applicant: Kelly O'Neill Date: 12/4/23

Signature of owner (if different from applicant): _____

Date: _____

DATE: December 4, 2023

TO: Town of Niskayuna
1 Niskayuna Circle
Niskayuna, NY 12309

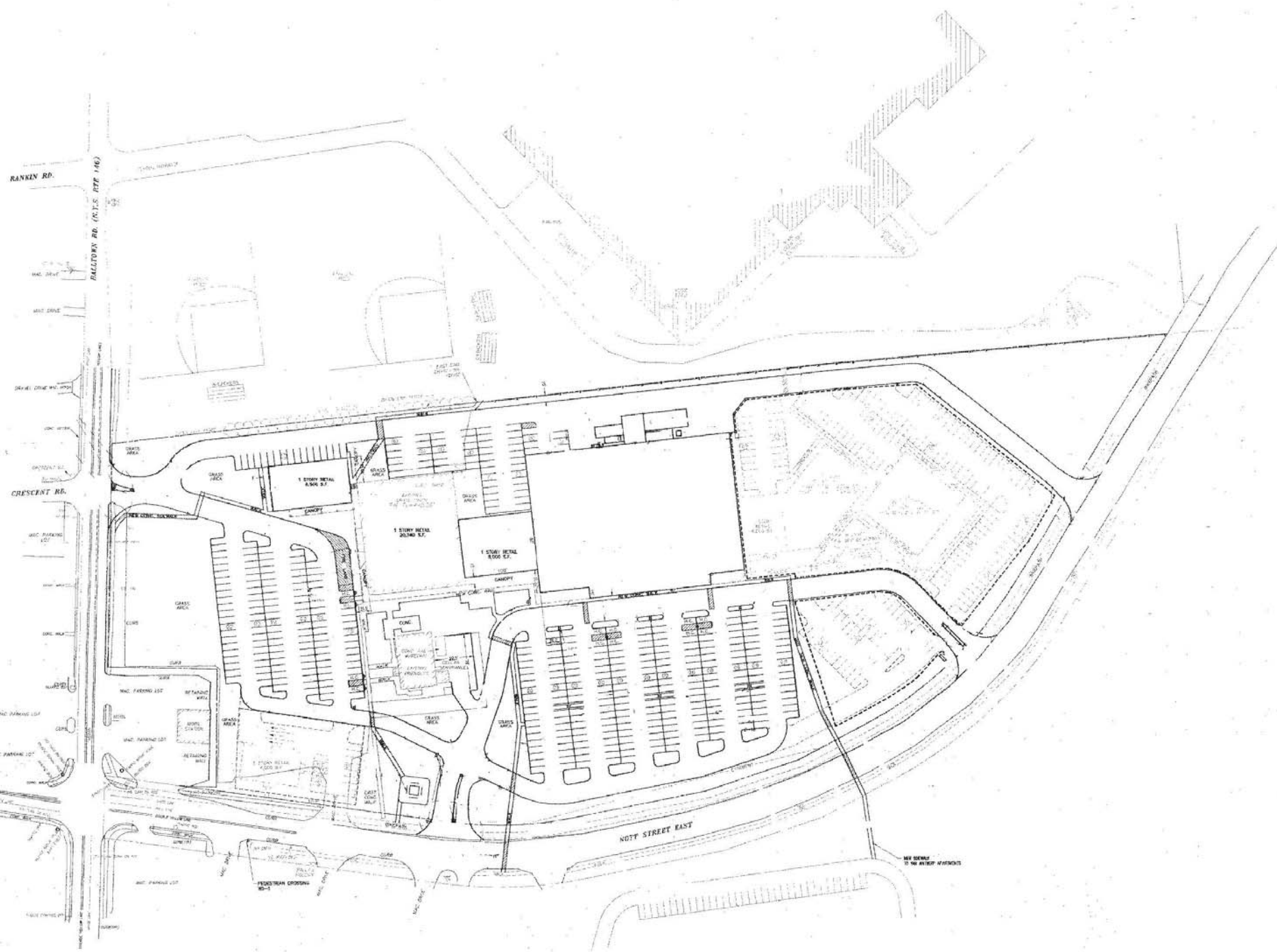
FROM: Niskayuna Shopping Center, LLC
C/O Robert Von Ancken
7 East 14th Street, Apt. 19S
New York, NY 10003

SUBJECT: Letter of Authorization/Consent
Price Chopper/Market 32 #047 Niskayuna Renovation

I, Robert Von Ancken, Principal, own the property at 2333 Nott St. East, Niskayuna, NY 12309. The property is a retail supermarket leased by Price Chopper/Market 32, 461 Nott Street, Schenectady, NY 12308. I authorize Price Chopper/Market 32 and their selected contractor, Huntington Construction, to commence construction at 2333 Nott St. East, Niskayuna NY 12309.



Robert Von Ancken





FIRST FLOOR EQUIPMENT NEW WORK
PLAN
3/32" = 1'-0"

NISKAYUNA, NY			
	EXISTING	PROPOSED	DIFFERENCE
TOTAL BUILDING	58,564 S.F.	58,564 S.F.	0 S.F.
SALES AREA	38,780 S.F.	38,780 S.F.	0 S.F.
LINEAR FT OF SHELVING	2,488 LFT	2,153 LFT	-335 LFT
CENTER STORE	2,488 LFT	1,718 LFT	-748 LFT
FRZ	182 LFT	309 LFT	+127 LFT
GREETING CARS	0 LFT	112 LFT	+112 LFT
FROZEN FOOD	147 DOORS	143 DOORS	-4 DOORS
DAIRY	12 DR COOLER, 36 LFT LM DECK, 48 DOORS	12 DR COOLER, 36 LFT LM DECK, 48 DOORS	0 DR COOLER, 0 LFT LM DECK, 0 DOORS
BEVERAGE	15 DOORS (38 LFT)	15 DOORS (38 LFT)	0 DOORS (0 LFT)

STORE PLANNER, ERF

MILLWORK: NEW (red), RELOCATE (green), RELOCATE for Item (blue), DEMO (purple), MAYBE REUSE (pink)

WITHIN STORE (green), OTHERS, I.E. BLDG. 13 (blue)

STATUS: PRELIMINARY - DATE: 11.28.2023

GOLOB CORPORATION
ENGINEERING DEPARTMENT
461 NOTT STREET
SCHENECTADY, NEW YORK 12308

No. Revision Date

Price Chopper
"Niskayuna"

2333 Nott Street East, Niskayuna, NY 12309

GENERAL EQUIPMENT
WORK
PROPOSED - NOT FOR CONSTRUCTION

Drawn By: EQ01

