

TOWN OF NISKAYUNA
Planning Board and Zoning Commission
Agenda
January 22, 2024
7:00 PM

REGULAR AGENDA MEETING

I. CALL TO ORDER

II. ROLL CALL

III. APPROVAL OF MINUTES

1. January 8, 2024

IV. PUBLIC HEARINGS

1. 2890 River Rd. – An application for Approval of Plat Plan – Minor Subdivision, for a 3-Lot minor subdivision

V. PRIVILEGE OF THE FLOOR

VI. UNFINISHED BUSINESS

VII. NEW BUSINESS

1. RESOLUTION: 2024-03: A Resolution for site plan approval for a 2,700 sq. ft. addition (27%) to the existing 9,980 sq. ft. office building and expansion of the parking lot at 1430 Balltown Rd.
2. RESOLUTION: 2024-04: A Resolution for site plan approval for a tenant change to a Market 32 grocery store at 2333 Nott St. E.

VIII. DISCUSSION ITEMS

1. 2890 River Rd. – An application for approval of Plat Plan – Minor Subdivision, for a 3-Lot minor subdivision

IX. REPORTS

1. 2690 Balltown Rd. – GE Vernova (see attached maps)
2. Project Submittal Timelines Update

X. COMMISSION BUSINESS

XI. ADJOURNMENT

NEXT MEETING: February 12, 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
January 8, 2024

Members Present:

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

Also Present:

Alaina Finan, Town Attorney
Laura Robertson, Town Planner
Clark Henry, Assistant Town Planner (virtual)
Trisha Bergami, Planning Department Secretary

I. CALL TO ORDER

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

II. ROLL CALL

All members were present.

III. APPROVAL OF MINUTES

1. January 8, 2024

Mr. McPartlon made a motion to approve the minutes, seconded by Mr. LaFlamme.

Chairman Walsh had a couple minor corrections. On line 48, Ms. Strang was not present to vote and line 68 both times Ms. Strang was mentioned it should be Mr. Drescher. Chairman Walsh made a motion that the minutes be modified to include the corrections, seconded by Mr. Khan. All were in favor of amending the minutes, with the abstention of Ms. Strang. All were in favor of approving the minutes as amended, with the abstention of Ms. Strang.

IV. PUBLIC HEARINGS

No Public Hearings

V. PRIVILEGE OF THE FLOOR

Ms. Tiberio of 8 Seneca Road said she had several questions for the Board.

Chairman Walsh said they would answer her questions at the end of the meeting.

Ms. Tiberio asked the following:

1. Are the three retention ponds for each home hooked up to storm sewers, if not, where does the water overflow go?
2. What is the difference between an easement vs the Town taking ownership vs it being put in a deed, in reference to the path to the park.

3. If the path is put in a private deed only, can the property owner prevent people from using it?

4. Is the Board's responsibility just the actual project or do they need to concern themselves with issues beyond the parcel?

Mr. Bonnano of Seneca Road spoke in favor of leaving the path in its natural state and wanted to know what guarantees there would be if the Town were to take control of it.

Ms. Irwin of Seneca Road stated she agreed with Mr. Bonnano concerns and liked the path in its natural state.

Mr. Bonnano stated he wanted clarification as to what can happen with a deed restriction vs Town ownership or an easement.

VI. UNFINISHED BUSINESS

No Unfinished Business.

VII. NEW BUSINESS

1. RESOLUTION: 2024-01: A Resolution for SEQR determination and call for a public hearing for a 3-Lot minor subdivision at 2890 River Rd.

Chairman Walsh read the following into record:

RESOLVED, that the Planning Board and Zoning Commission hereby determines that this project will not have a significant effect on the environment with the condition that the applicant provides a public access easement from the end of the Seneca Road cul-desac to the River Road Park (where the existing walk path currently exists) and conserve the remaining undisturbed lands of the subdivision through a conservation easement or deed to the Town of Niskayuna, and hereby directs the Town Planner to file a conditional negative SEQR declaration as noted above with the additional following comments from the CAC findings:

1. The Developer shall explore solar and EV ready options for the new homes as well as explore pesticide free options for lawn maintenance as the properties are directly adjacent to wetlands.
2. The Developer shall use native species wherever possible in their plantings plans.
3. Drainage is critical to the review of this subdivision, and the developer shall provide for ways to maintain the privately owned stormwater management practices in perpetuity.

, and be it hereby

FURTHER RESOLVED that this Planning Board does hereby call for a public hearing to be held on Monday, January 22, 2024 at 7:00 pm in the Niskayuna Town Hall, 1 Niskayuna Circle, to consider the application of Ryan Lucey for a 3-lot minor subdivision at 2890 River Rd. Niskayuna, NY.

Mr. Khan moved the resolution for adoption and it was seconded by Ms. Gold.

Mr. McPartlon expressed concern about the language of the conditional Negative Declaration and did not recommend adopting this resolution as written.

There was much discussion about the potential trail connection from Seneca to River Road park and the conditional Negative Declaration recommendation from the CAC and the language in the proposed resolution.

Town Attorney Finan requested an executive session to discuss litigation with Board prior to any action being taken.

Chairman Walsh stated he has one further question. He stated he can see the benefit of the trail connection to River Road park and understands the neighbors concerns about privacy, but the Board is

still in the process of working through where the path could be. Mr. Khan agreed and felt the language was too specific at this stage of review. Chairman Walsh stated the benefits of the trail remain the same even if the path is shifted slightly and he doesn't want to lock the applicant into a specific location if something else works better.

Chairman Walsh made a motion that the Board move into executive session to discuss legal matters pertaining to this subdivision. Ms. Gold seconded the motion, all were in favor.

Chairman Walsh asked if the Board could act on the second resolution under new business, prior to moving into executive session, to save time for members of the audience and applicants. Attorney Finan stated that would be allowable and the Board agreed.

2. RESOLUTION: 2024-02: An Amendment to Resolution 2023-26 for exterior façade renovations including new signage at 3631 State St.

Chairman Walsh read the following into record:

RESOLVED, that the Planning Board and Zoning Commission has determined that the proposed revised sign waiver as described above would have a minimum negative effect on aesthetics and compatibility with neighborhood character, and be it

FURTHER RESOLVED, that the Planning Board and Zoning Commission does hereby grant said revised waiver to allow for the signage as described above, and be it

FURTHER 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.

Mr. Khan made a motion for the approval of the resolution, seconded by Mr. D'Arpino.

Chairman Walsh summarized that the Board approved a sign package for this site at a previous meeting but, when submitting the Building Permit, the applicant substantially changed what they were asking for and therefore needed to return to the Planning Board. He stated most of the signs are actually smaller than what was approved but the main sign was slightly bigger and required an updated waiver. He stated there was summary of the size changes to the sign package in the packet.

The applicant, AJ Signs, stated they had nothing further to add. Hearing no more discussion, Chairman Walsh asked Mr. Henry to call the roll.

Mr. LaFlamme Aye

Ms. Strang Aye

Mr. Khan Aye

Mr. McPartlon Aye

Mr. D'Arpino Aye

Ms. Gold Aye

Chairman Walsh Aye

Chairman Walsh stated the resolution was approved and thanked the applicant.

Chairman Walsh stated that at this time the Board was going to move into Executive Session pursuant to their vote, to discuss legal matters that pertain to the minor subdivision. He stated the Board would return to the meeting shortly and the audience could remain where they were and the video recording could remain ongoing.

The Planning Board broke for Executive Session.

122 Following Executive Session, Chairman Walsh called the meeting back to order and thanked everyone for
123 their patience.

124 Chairman Walsh stated where they had left off in the discussion was the discussion of the CAC referral
125 and the structure they had recommended for the SEQR determination to the Planning Board. He stated he
126 was going to make a motion to amend the resolution as follows:

- 127 • Strike “the end” of Seneca from the proposed resolution
- 128 • Strike everything within the parenthesis in the proposed resolution, which states “(where the
129 existing walk path currently exists)”
- 130 • Strike the word Conditional from the sentence which states “directs the Town Planner to file a
131 Conditional Negative SEQR declaration” so that it reads “file a Negative SEQR Declaration”
- 132 • Move the Section concerning the Seneca Road connection into the CAC findings as the fourth
133 finding.

134 It shall therefore read as follows:

135 “RESOLVED, that the Planning Board and Zoning Commission hereby determines that this project will
136 not have a significant effect on the environment and hereby directs the Town Planner to file a negative
137 SEQR declaration as noted above with the additional following comments from the CAC findings:

- 138 1. The Developer shall explore solar and EV ready options for the new homes as well as explore
139 pesticide free options for lawn maintenance as the properties are directly adjacent to wetlands.
- 140 2. The Developer shall use native species wherever possible in their plantings plans.
- 141 3. Drainage is critical to the review of this subdivision, and the developer shall provide for ways to
142 maintain the privately owned stormwater management practices in perpetuity.
- 143 4. The applicant shall provide a public access easement from the Seneca Road cul-de-sac to the
144 River Road Park and conserve the remaining undisturbed lands of the subdivision through a
145 conservation easement or deed to the Town of Niskayuna”

146 Chairman Walsh asked if anybody had any additional questions. He stated he takes the CAC comments to
147 heart, he believes the Board takes the CAC comments to heart, and he is in favor of a walking connection
148 between Seneca and River Road Park and reminded the Board it is shown on the plans. Ms. Gold stated
149 she agreed. Hearing no further comments he made a motion to amend the resolution as previously stated,
150 seconded by Mr. Khan. All were in favor.

151 Chairman Walsh stated they now have an amended resolution that can be acted upon by the Board and
152 asked if there was any further comments or concerns. Ms. Strang stated she looked forward to working on
153 the items that the CAC has identified to ensure they are addressed by the Planning Board.

154 Hearing no further comments, roll was called:

155	Mr. LaFlamme	Aye
156	Ms. Strang	Aye
157	Mr. Khan	Aye
158	Mr. McPartlon	Aye
159	Mr. D’Arpino	Aye
160	Ms. Gold	Aye
161	Chairman Walsh	Aye

162 Chairman Walsh stated the amended Resolution was approved.

163

VIII. DISCUSSION ITEMS**1. 2890 River Rd. – A site plan application for a 3-lot minor subdivision.**

Mr. Roman, co-developer for the property, was present as well as Mr. Lucey (owner) and Mr. Dussault (engineer). The Town Designated Engineer for this project, Doug Cole from Prime Engineering, was also present to answer questions.

Mr. Dussault said as to the first question that was raised by the public tonight about where the bio retention ponds are and where they discharges to, lots one and two discharge to the roadside ditch on River Road which then flows to the 42 inch culvert under River Road. Lot three discharges towards the wetlands area onsite and then would flow through the wetland to the 42 inch culvert under River Road. Mr. Dussault said these were all sized to attenuate for the 100-year storms. Mr. Dussault said the driveway on lot 3 will be directed to the bio retention on lot 3.

Chairman Walsh said another question was the size of the home and garage on lot 3.

Mr. Lucey said there is a detached three stall garage and an attached garage with roughly a 3000 square foot house. He stated the house itself is a pretty standard size.

Chairman Walsh said the other concern he heard was for the path. Chairman Walsh stated this is something that is being worked through and doesn't need to be solved tonight. He recommend the applicant follow up with the Planning Department to work through the legal questions about easement, ownership or deed restriction and come back to the next meeting with the results of that discussion.

The Board discussed additional questions and concerns about drainage.

Mr. Cole, TDE for the Town, said the items from his December letter have been largely addressed by the applicant but one thing he would like them to add would be to upsize the driveway culvert to the 100 year storm. Mr. Cole said he would also like to see section drawings added for the bio retention and vegetated swales on the plans.

Ms. Robertson said they applicant also still needs to do their proposed street tree planting plan. She said when they are ready, they will need to flag their limits of clearing and the Tree Council will do a site visit. Mr. Roman stated they will work on that for the next meeting.

2. 1430 Balltown Rd. – A site plan application for an addition to the existing building and expansion of the parking lot.

Mr. Palleschi, Engineer for the applicant, said some minor changes were made to the plan since the last meeting. He stated the north side of the parking lot was a one way and has been changed to a two way. Another change was swapping out the trees from Red Maples to White Oaks. The additional sidewalk coming up from Balltown Road to the main entrance that was to be added is being changed because there is already a concrete sidewalk that leads into the site from Balltown Road on the North side of the driveway. The proposal is to continue that sidewalk and provide a crosswalk at the main entrance to guide the pedestrian traffic.

Ms. Robertson said if the sidewalk is not going to be build, she would like the Board to review the TDE comments and look at the intersection in the rear of the property where there is a concrete island and a slip lane that make for a confusing intersection. She suggested making it a regularly four legged intersection instead and adding additional greenspace to the site.

Mr. Palleschi said they would have to check the current easements that are in place before they can commit to doing that but he will look into it for the next meeting.

Chairman Walsh said they will plan for a tentative resolution for next meeting. If the Planning Department feels they don't have what they need or the applicant is cutting things too close to do a thorough job, the Planning Board will pull the resolution and put it on the February 12 meeting.

208 The Board agreed and the applicant stated he would have everything in on time and thanked the Board for
209 their review.

210 3. 2333 Nott St. E. – A site plan application for a tenant change to a Market32 grocery store.

211 Mr. Lee, Design Project Manager for Market 32, said they included signage information in this submittal
212 to the Board including size and placement. They would like to move the existing cart corrals closer to the
213 front of the store. The corrals will have the roofs painted and some sort of covering on the sides. Mr. Lee
214 said they are in negotiations with the landlord and will get the crosswalks painted and get the part of
215 sidewalk completed that was never finished with the last tenant. He said they are moving the main
216 entrance into the store so that it is more visible to their patrons. He is proposed to add stop signs on either
217 side of the crosswalk and committed to refreshing the landscape. Mr. Lee said the final exterior signage
218 package will be submitted at a later date and he would like to move forward with the tenant change for the
219 next meeting if possible.

220 Ms. D'Arpino discussed how pedestrians walk from end to end of the plaza and his concern with
221 changing the way pedestrians currently "pass through" Shoprite to get from one side to the other because
222 the sidewalk is often blocked. Mr. Lee committed to not storing anything on the sidewalk as it would be
223 the only way for pedestrians to walk across the plaza now. He stated they could look at widening the
224 sidewalk but it was tight with two lanes of traffic and a fire lane and the best he could do right now was to
225 commit to not blocking the sidewalk.

226 Chairman Walsh asked for a summary of the store facade colors.

227 Mr. Lee said they have two tones of gray that they use on the facades and they are proposing for black to
228 be used on the metal around the windows. The green roof will be staying the same.

229 Chairman Walsh asked if they could minimize some the signage or size of the signage it would save on
230 the waivers needed.

231 Mr. McPartlon asked about any treatment of the back of the building. He stated the back is currently very
232 visible to the Niskayuna High school campus and he would like to see it spruced up a little. Ms.
233 Robertson stated there is currently a large graffiti tag on the back of the building. Mr. Lee stated he would
234 look into that.

235 Chairman Walsh proposed a tentative said he is ok with having a resolution for the tenant change only
236 with the condition that the signage still has to be approved at a later date because he would like to move
237 the application forward. Mr. Lee stated they are aiming for a May/June opening.

238 Ms. Robertson stated she will have a tentative resolution for tenant change at the next meeting with the
239 site plan conditions and a condition that signage will have to return to the Board for a waiver.

240 IX. REPORTS

241 Nothing to report

242 X. COMMISSION BUSINESS

243 Mr. D'Arpino stated he wanted to keep open the discussion item on due dates for projects making it on
244 the Planning Board agenda. He felt this was an important topic to address. Ms. Gold stated she thinks the
245 cut off needs to be earlier than it is currently.

246 Ms. Robertson said her department has been working on this and Mr. Henry as made some flow charts to
247 help with this. She said the Planning Department will write up a proposal and bring it back to the
248 Planning Board when it is ready.

249 Chairman Walsh thanked Mr. McPartlon for his service over the last seven years on the Planning Board
250 and thanked him for going above and beyond on many occasions. Mr. LaFlamme and Ms. Robertson
251 agreed and thanked Mr. McPartlon for his service.

252 **XI. ADJOURNMENT**

253 Mr. LaFlamme made a motion to adjourn, Ms. Gold Seconded. All in favor, the meeting was adjourned
254 at 9:35 pm.

255 *The video recording for this meeting can be found at: <https://www.youtube.com/watch?v=qYepuG0pDas&list>*

DRAFT



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. IV. 1

MEETING DATE: 1/22/2024

ITEM TITLE: PUBLIC HEARING: An Application for Approval of Plat Plan – 2890 River Road: 3-Lot Minor Subdivision

PROJECT LEAD: Genghis Khan

APPLICANT: Ryan Lucey, owner.

SUBMITTED BY: Ryan Lucey, owner.

REVIEWED BY:

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

ATTACHMENTS:

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

SUMMARY STATEMENT:

Ryan Lucey, property owner, submitted an Application for Approval of Plat Plan – Minor Subdivision for a 3-Lot minor subdivision for 2890 River Road (parcel ID# 51-1-7.1 and 51.9-2-1.1). The properties are located within the R-1 Low Density Residential zoning district.

A 9-page drawing set entitled “2890 River Road Minor Subdivision” by Engineering Ventures, P.C. dated 12/6/23 with no subsequent revisions was provided with the application. The drawing shows the original 5.26 and 0.83 Acre +/- properties being subdivided as noted below.

1. Lot 1 – is 0.69 Acres +/- in size
2. Lot 2 – is 0.89 Acres +/- in size
3. Lot 3 – is 4.51 Acres +/- in size

BACKGROUND INFORMATION

The Public Hearing Notice is attached. The Planning Board will receive and weigh feedback at the Public Hearing and consider acting on a tentative resolution for plat plan approval.



NOTICE OF PUBLIC HEARING

TO BE HELD BY THE
PLANNING BOARD & ZONING COMMISSION
OF THE TOWN OF NISKAYUNA

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-second (22nd) day of January 2024 at 7:00 p.m. to consider an application from Ryan Lucey (property owner), for a 3-lot minor subdivision in the Town of Niskayuna (Tax Parcel ID#51-1-7.1 and 51.9-2-1.1). The properties are located within the R-1 Low Density Residential 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

PROPOSED STORMWATER LEGEND

1	UP RAIN EX. EXH. 1
2	UP RAIN EX. EXH. 2
3	UP RAIN EX. EXH. 3
4	UP RAIN EX. EXH. 4
5	UP RAIN EX. EXH. 5
6	UP RAIN EX. EXH. 6
7	UP RAIN EX. EXH. 7
8	UP RAIN EX. EXH. 8
9	UP RAIN EX. EXH. 9
10	UP RAIN EX. EXH. 10
11	UP RAIN EX. EXH. 11
12	UP RAIN EX. EXH. 12
13	UP RAIN EX. EXH. 13
14	UP RAIN EX. EXH. 14
15	UP RAIN EX. EXH. 15
16	UP RAIN EX. EXH. 16
17	UP RAIN EX. EXH. 17
18	UP RAIN EX. EXH. 18
19	UP RAIN EX. EXH. 19
20	UP RAIN EX. EXH. 20
21	UP RAIN EX. EXH. 21
22	UP RAIN EX. EXH. 22
23	UP RAIN EX. EXH. 23
24	UP RAIN EX. EXH. 24
25	UP RAIN EX. EXH. 25
26	UP RAIN EX. EXH. 26
27	UP RAIN EX. EXH. 27
28	UP RAIN EX. EXH. 28
29	UP RAIN EX. EXH. 29
30	UP RAIN EX. EXH. 30
31	UP RAIN EX. EXH. 31
32	UP RAIN EX. EXH. 32
33	UP RAIN EX. EXH. 33
34	UP RAIN EX. EXH. 34
35	UP RAIN EX. EXH. 35
36	UP RAIN EX. EXH. 36
37	UP RAIN EX. EXH. 37
38	UP RAIN EX. EXH. 38
39	UP RAIN EX. EXH. 39
40	UP RAIN EX. EXH. 40
41	UP RAIN EX. EXH. 41
42	UP RAIN EX. EXH. 42
43	UP RAIN EX. EXH. 43
44	UP RAIN EX. EXH. 44
45	UP RAIN EX. EXH. 45
46	UP RAIN EX. EXH. 46
47	UP RAIN EX. EXH. 47
48	UP RAIN EX. EXH. 48
49	UP RAIN EX. EXH. 49
50	UP RAIN EX. EXH. 50
51	UP RAIN EX. EXH. 51
52	UP RAIN EX. EXH. 52
53	UP RAIN EX. EXH. 53
54	UP RAIN EX. EXH. 54
55	UP RAIN EX. EXH. 55
56	UP RAIN EX. EXH. 56
57	UP RAIN EX. EXH. 57
58	UP RAIN EX. EXH. 58
59	UP RAIN EX. EXH. 59
60	UP RAIN EX. EXH. 60
61	UP RAIN EX. EXH. 61
62	UP RAIN EX. EXH. 62
63	UP RAIN EX. EXH. 63
64	UP RAIN EX. EXH. 64
65	UP RAIN EX. EXH. 65
66	UP RAIN EX. EXH. 66
67	UP RAIN EX. EXH. 67
68	UP RAIN EX. EXH. 68
69	UP RAIN EX. EXH. 69
70	UP RAIN EX. EXH. 70
71	UP RAIN EX. EXH. 71
72	UP RAIN EX. EXH. 72
73	UP RAIN EX. EXH. 73
74	UP RAIN EX. EXH. 74
75	UP RAIN EX. EXH. 75
76	UP RAIN EX. EXH. 76
77	UP RAIN EX. EXH. 77
78	UP RAIN EX. EXH. 78
79	UP RAIN EX. EXH. 79
80	UP RAIN EX. EXH. 80
81	UP RAIN EX. EXH. 81
82	UP RAIN EX. EXH. 82
83	UP RAIN EX. EXH. 83
84	UP RAIN EX. EXH. 84
85	UP RAIN EX. EXH. 85
86	UP RAIN EX. EXH. 86
87	UP RAIN EX. EXH. 87
88	UP RAIN EX. EXH. 88
89	UP RAIN EX. EXH. 89
90	UP RAIN EX. EXH. 90
91	UP RAIN EX. EXH. 91
92	UP RAIN EX. EXH. 92
93	UP RAIN EX. EXH. 93
94	UP RAIN EX. EXH. 94
95	UP RAIN EX. EXH. 95
96	UP RAIN EX. EXH. 96
97	UP RAIN EX. EXH. 97
98	UP RAIN EX. EXH. 98
99	UP RAIN EX. EXH. 99
100	UP RAIN EX. EXH. 100

STORMWATER SCHEDULE

LOT	STORMWATER SCHEDULE
1	UP RAIN EX. EXH. 1
2	UP RAIN EX. EXH. 2
3	UP RAIN EX. EXH. 3
4	UP RAIN EX. EXH. 4
5	UP RAIN EX. EXH. 5
6	UP RAIN EX. EXH. 6
7	UP RAIN EX. EXH. 7
8	UP RAIN EX. EXH. 8
9	UP RAIN EX. EXH. 9
10	UP RAIN EX. EXH. 10
11	UP RAIN EX. EXH. 11
12	UP RAIN EX. EXH. 12
13	UP RAIN EX. EXH. 13
14	UP RAIN EX. EXH. 14
15	UP RAIN EX. EXH. 15
16	UP RAIN EX. EXH. 16
17	UP RAIN EX. EXH. 17
18	UP RAIN EX. EXH. 18
19	UP RAIN EX. EXH. 19
20	UP RAIN EX. EXH. 20
21	UP RAIN EX. EXH. 21
22	UP RAIN EX. EXH. 22
23	UP RAIN EX. EXH. 23
24	UP RAIN EX. EXH. 24

This applicant, Ryan Lucey proposes to subdivide the existing 5.26 and 0.83 Acre properties into 3 lots of approximately 0.69, 0.89 and 4.51 Acres, respectively.



TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VII. 1

MEETING DATE: 1/22/2024

ITEM TITLE: RESOLUTION: 2024-03: A Resolution for site plan approval for a 2,700 sq. ft. addition (27%) to the existing 9,980 sq. ft. office building and expansion of the parking lot at 1430 Balltown Rd.

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 emailed a revised site plan and supporting materials to the Planning Office at 5 PM on 1/8/24. The materials were received too late to be included in the packet for the 1/8/24 meeting however, the Planning Office sent the email on to Board members. During the 1/8/24 PB meeting the applicant described the plan revisions documented in the email. After a discussion the Board and Planning Office created a short list of open action items for the applicant to address and based on the relative simplicity of the open items the Board called for a tentative resolution for site plan approval for the 1/22/24 meeting. A revised site plan and supporting materials were provided to the Planning Office and TDE on 1/9/24. The Niskayuna Tree Council reviewed the project at their 1/11/24 meeting and provided comments to the applicant on 1/16/24. The applicant submitted a revised site plan drawing on 1/18/24 that includes some of the Tree Council requests. A tentative resolution for site plan approval is included in the 1/22/24 meeting packet.

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.

12/11/23 Planning Board (PB) meeting – Mr. Palleschi, P.E. attended the meeting and provided an update to the Board. He referenced his letter to the Planning Office dated 12/1/23 that includes the following.

- Responses to the 7 initial comments provided by the CAC
- Revised site plans dated 12/1/23
- Revised SWPPP that now includes the SMR dated 12/1/23
- Traffic summary prepared by ABD Engineers & Surveyors, LLP
- Renderings of proposed building signage

Mr. Palleschi stated that the revised design utilizes an at-grade stormwater detention basin rather than the subterranean vault proposed in the previous design. He also noted that the basin was sized using 100-year storm rainfall data. Additional updates included a reduction in the number of light poles due to the use of 2 fixtures per pole, the addition of a sidewalk running parallel to the driveway providing a pedestrian connection to the building from Balltown Road, a negative SEQR recommendation (no negative impact on the environment) from the CAC and a desired timeline to have the project completed in June of 2024.

12/13/23 -- 2nd TDE comment letter – A 2nd TDE comment letter (4-pages) dated 12/13/23 was received by the Planning Office and circulated to the applicant. The letter notes that it is in response to the following documents.

- A memo to LR re: Responses to Agenda Statement dated 12/1/23 by ABD Engineers.
- Site Plan Set (4-pages) revised 12/1/23 by ABD Engineers
- Stormwater Management Report revised 12/1/23 by ABD Engineers
- Basic SWPPP revised 12/1/23 by ABD Engineers
- A Traffic Summary, no date by ABD Engineers

Notable comments in the letter include but are not limited to the following.

- Traffic Summary

- The applicant shall utilize the latest version (11th Edition) of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE). Current Land Use Codes (LUC's) shall be utilized for determining trips generated as a result of the proposed improvements.
- Site Plan Package
 - a. Sheet 1 of 4 – Applicant shall provide accessible route from public right-of-way to building entrance.
 - b. Sheet 1 of 4 – Applicant shall consider species besides Red Maple (*Acer rubrum*).
 - c. Sheet 1 of 4 – Applicant shall specify native landscape (species, size and quantities).
 - d. Sheet 1 of 4 – Applicant shall identify where mulched area with perennials is located on site, and specify native landscape (species, size, and quantities).
 - e. Sheet 2 of 4 – Applicant shall verify if easement with Stormwater Facility is acceptable by Utility provider.
 - f. Sheet 2 of 4 – An overflow crest shall be provided for detention basin #1.
 - g. Sheet 4 of 4 – Stormwater Detention Basin #1 – 10 yr. storm labeled as 439.85 compared to stormwater report of 439.86.
 - h. Sheet 4 of 4 – Stormwater Detention Basin #1 – 25 yr. storm labeled as 440.23 compared to stormwater report of 440.25.
 - i. Sheet 4 of 4 – Stormwater Detention Basin #1 – 100 yr. storm labeled as 440.74 compared to stormwater report of 440.76.
- Stormwater Management Report
 - Page 1 – Applicant shall correct sentence. *However, the Town of Niskayuna required that the site stormwater management system be designed to control peak discharge rates for the, 1, 10, **25 and 100**-year storm events to less than or equal to those of the predevelopment 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.*
 - Page 4 – Post Area 1A-3 is not described. Applicant shall provide additional information.
 - Applicant shall include Stormwater Management Maintenance Agreement with Town of Niskayuna for maintenance of proposed features.
- Basic SWPPP – Erosion & Sediment Controls Only
 - It is recommended that the SWPPP include the following components to ensure constructed measures area completed in compliance with the NYSDEC Stormwater Management Manual and proposed design plans. These components are to be submitted to the Town of Niskayuna for review/acceptance. (Note: NOI does not need to be submitted to NYSDEC, unless over 1 acre of disturbance.
 - Notice of Intent
 - Contractor Certification Statement
 - Notice of Termination
 - SWPPP Inspection Form
 - SWPPP Modification Form
 - Construction Inspection Checklist
 - Monthly Maintenance Inspection Checklist

1/8/24 Planning Board (PB) meeting – Luigi Palleschi, P.E. attended the meeting and spoke on behalf of the applicant. He noted that he emailed an updated documentation package to the Planning Office at 5 pm on 1/8/24. He then listed a series of updates that are included in the revised documents. The revisions are in response to the TDE letter dated 12/13/23 and include but are not limited to the following.

- The parking lot has been revised
- The species of proposed tree plantings has been revised to White Oak per CAC's request.
- The sidewalk from Balltown Rd. to the building at 1430 Balltown Rd. has been removed
- A crosswalk has been added from the existing sidewalk near 1448 Balltown Rd. and the entrance to 1430 Balltown Rd.
- Several typographical errors have been corrected in the Stormwater Report
- The applicant agrees to the need for a Stormwater Maintenance Agreement and has requested an example of a typical agreement for reference.

Ms. Robertson requested that Mr. Palleschi review the intersection where the driveway from Balltown Rd. intersects the other properties behind the building on 1430 Balltown Rd. She requested that these intersecting driveways and roads be squared off resulting in a more typical 4-way crossing. She noted that this will add definition to the intersection and may increase the greenspace in an area that is currently mostly impervious pavement. Mr. Palleschi agreed to look into this and if it could not be accomplished the current plan would be used as a backup plan.

Ms. Robertson also requested a more formal planting plan.

Mr. Palleschi agreed to provide an update plan addressing the comments from the 1/8/24 PB meeting by 1/12/24. The Planning Office agreed to forward them to the TDE for a final review. Based on the straightforwardness of the remaining action items, the Board called for a tentative resolution for site plan approval for the 1/22/24 Planning Board meeting.

On 1/9/24 the Planning Office provided Mr. Palleschi with a summary of the action items from the 1/8/24 meeting. They requested that he copy the Town's TDE directly on his response to expedite the final TDE review. On 1/9/24 Mr. Palleschi emailed the Planning Office, Town Engineer and TDE a link to a file with the following updated documents.

- A response letter from ABD Engineers and Surveyors dated "Revised 1/9/24"
- A 4-page site plan drawing set entitled Building Addition 1430 Balltown Rd., Rev 4, 1/9/24
- A 92-page Stormwater Management Report dated "Revised 1/9/24"
- A 1-page Site Lighting Layout drawing dated 12/1/23
- A 4-page Traffic Summary dated "Revised 1/9/24"

The TDE is currently reviewing the revised materials.

1/11/24 Niskayuna Tree Council (TC) meeting – the Tree Council reviewed the site plan dated 1/9/24. Ms. Robertson summarized the meeting in an email dated 1/16/24 that includes the following comments.

- The project site is quite large and can accommodate many more trees
 - A site plan was marked indicating proposed locations for approximately 18 new trees (attached to this agenda statement)
- The Council requests that trees be planted under the power lines.
 - Shorter tree species should be used so that they do not interfere with the power lines

- Vegetative screening of the stormwater pond was important to several of the Boards and Committees. The rendering of the proposed changes to the site and building includes 35+ specimens, 5 large boulders and 3 small boulders. However, the site plan dated 1/9/24 only includes 1 boulder and 22 plantings. The Council requested that the site plan be revised to match the rendering.

1/18/24 -- Mr. Palleschi provided the Planning Office with a site plan drawing that had been revised (Rev date 1/17/24) to include some of the tree planting requests of the Tree Council and updated Americans With Disabilities Act parking space markings.

1/18/24 – The TDE provided a comment letter dated 1/18/24 in response to the following documents that were provided by the applicant's engineer.

- Memo to Laura Robertson re: Responses to Weston & Sampson dated 1/9/24 by ABD Engineers
- Site Plan Set (4 sheets), revised 1/9/24 by ABD Engineers with updated Sheet 1 of 4, revised 1/17/24
- Stormwater Management Report, revised 1/9/24 by ABD Engineers
- Site Lighting Layout Plan, dated 12/1/23
- Traffic Summary, revised 1/9/24 by ABD Engineers.

The letter noted the following open items.

1. Applicant shall include Stormwater Management maintenance Agreement with Town of Niskayuna for maintenance of proposed features. Town to provide template.
2. Applicant shall modify lighting layout with house shields or adjust fixture configuration to minimize illuminance levels at property limit. Code establishes max level of 0.5 footcandles. Photometrics currently show over 1 footcandle at property limit adjacent to WRGB.

A draft resolution for site plan approval of the 2,700 sq. ft. addition is included in the packet for the 1/22/24 PB meeting.

RESOLUTION NO. 2024 – 03

AT A REGULAR MEETING OF THE PLANNING BOARD AND ZONING COMMISSION OF THE TOWN OF NISKAYUNA DULY CALLED AND HELD ON THE 22ND DAY OF JANUARY 2024 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
CHRIS LAFLAMME
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
SARAH BILOFSKY
EHASUYI GOMES

One of the purposes of the meeting was to take action on a resolution for 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, John Roth, agent for the property owner, made an application to the Planning Board and Zoning Commission for tenant change and approval for a 2,700 sq. ft. addition to the existing 9,980 sq. ft. office building at 1430 Balltown Road, and

WHEREAS, the following documents were provided with the application:

- 4-page site plan drawing set entitled, "Building Addition 1430 Balltown Rd." by ABD Engineers and Surveyors dated 11/3/23 with a most recent revision date of 1/17/24.
- A 92-page Stormwater Management Report entitled, "2,700+/- SF Building Addition & Parking Lot Expansion, 1430 Balltown Road, Town of Niskayuna, Schenectady County, New York" dated 11/3/23 with a most recent revision of 1/8/24.
- A 4-page traffic summary entitled, "Traffic Summary Office Building 1430 Balltown Road Revised January 9, 2024" by Luigi A. Palleschi, P.E.
- A 1-page site lighting layout entitled, "1430 Balltown Road Site Lighting Layout" by NLS Lighting dated 12/01/23.

WHEREAS, the property is located in the C-N Neighborhood Commercial zoning district and Town Center Overlay (TCOD), and

WHEREAS, professional offices, non-medical are permitted principal uses in the district, and

WHEREAS, the proposed application complies with the Economic Development section of the 2013 Niskayuna Comprehensive Plan, and

WHEREAS, the Planning Board referred this application to the Town's Superintendent of Water, Sewer and Engineering, the Fire District Chief and the Chief of Police and there were no objections to the proposal, and

WHEREAS, the Planning Board referred this application to the Town's Designated Engineer (TDE) for review and they have responded with comments, and

WHEREAS, the Planning Board referred the Environmental Assessment Form (EAF) to the Niskayuna Conservation Advisory Council (CAC) for their review and at their regularly scheduled meeting on 12/6/23, they recommended the Planning Board make a Negative SEQR Determination with the following recommendations:

- Use white oaks for tree plantings
- Minimize the visual impact of the stormwater basin to the Town Center Overlay District
- 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

, and

WHEREAS, the Planning Board, acting in accordance with the State Environmental Quality Review (SEQR) regulations and local law, has assumed position of lead agency for the site plan review, 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 hereby determined that this project will not have a significant effect on the environment and hereby directs the Town Planner to file a negative SEQR declaration with the following comments from the CAC findings:

1. Use white oaks for tree plantings
2. Minimize the visual impact of the stormwater basin to the Town Center Overlay District
3. Include EV charging stations on the site and continue exploring the use of green energy practices including solar panels.
4. Consider a pesticide-free lawn maintenance program

FURTHER 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 with the following conditions.

1. Signage: This resolution is for tenant change only. The Planning Board shall review and approve any proposed signage for the building at a later date.
2. Final Landscaping and tree planting plans shall be reviewed and approved by the Niskayuna Tree Council.
3. Prior to site disturbance, the applicant shall participate in a preconstruction meeting with the Town of Niskayuna and TDE and shall address any concerns raised by the Town.
4. Prior to the preconstruction meeting:
 - a. Any engineering and drainage concerns will be addressed to the satisfaction of the Town Superintendent of Water, Sewer and Engineering.
 - b. Any questions or concerns raised by the Town Designated Engineer (TDE) will be addressed by the applicant in a formal letter to the Town.
 - c. Any minor changes to the final site plans will be addressed to the satisfaction of the Town Planning Department.
5. Prior to site disturbance, the site plan drawings shall be modified to reflect agreed upon decisions of the preconstruction meeting, if any, and distributed as required to the town and to all involved contractors. Final site plans shall be submitted to the Town labeled "For Construction".
6. Prior to site disturbance, confirmation by the applicant from the Department of Public Works that material specifications and site details, including road and utility plan/profiles, meet Town standards.
7. In accordance with Chapter 180 of the Soil Erosion and Sediment Control Ordinance of the Town of Niskayuna, the applicant shall put in place soil erosion and sediment control measures sufficient to stabilize disturbed areas. These measures shall be satisfactory to the Superintendent of Water, Sewer and Engineering and shall remain in place until such time as natural vegetation has been successfully established.

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

KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
CHRIS LAFLAMME
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
SARAH BILOFSKY

EHASUYI GOMES

The Chairman declared the same _____.

January 18, 2024

1 Winners Circle, Suite 130, Albany, NY 12205
Tel: 518.463.4400

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

Re: 1430 Balltown Road
Applicant: Highbridge Development, John Roth
Technical Review Comment – Letter #3
Town of Niskayuna, NY
W&S Project No.: ENG23-3172

Dear Ms. Robertson:

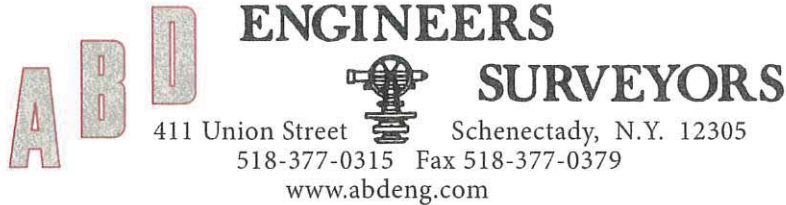
As requested, we have performed a Town Designated Engineer (TDE) review of the above-referenced project (Project) based on the following information made available to Weston & Sampson, PE, LS, LA, Architects, P.C. (Weston & Sampson, W&S) by the Town:

- Memo to Laura Robertson re: Responses to Weston & Sampson dated 1.9.24 by ABD Engineers
- Site Plan Set (4 sheets), revised 1.9.24 by ABD Engineers with updated Sheet 1 of 4, revised 1.17.24
- Stormwater Management Report, revised 1.9.24 by ABD Engineers
- Site Lighting Layout Plan, dated 12.1.23
- Traffic Summary, revised 1.9.24 by ABD Engineers

Based on our technical review of the available information listed above, please accept the following comments for the Planning Department and Planning Board's consideration of this Project:

- 1. Site Plan Package**
 - a. No comments
- 2. Stormwater Management Report**
 - a. Applicant shall include Stormwater Management Maintenance Agreement with Town of Niskayuna for maintenance of proposed features. Town to provide template.
- 3. Traffic Summary**
 - a. No comments

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



DEDICATED
RESPONSIVE
PROFESSIONAL

January 8, 2024

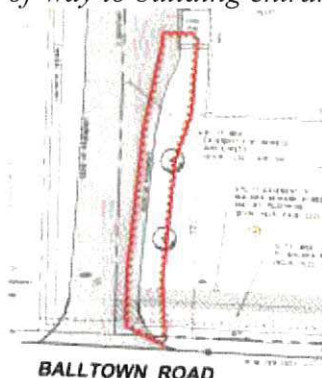
Re: **1430 Balltown Road**
Town of Niskayuna
Project #5618A

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

Dear Laura:

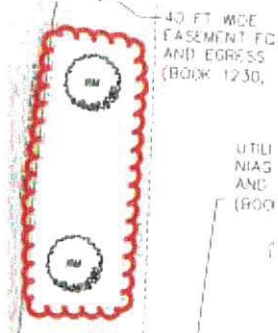
In response to the comments (*in italics*) of the letter from Weston & Sampson of December 13, 2023, we respond as follows (**in bold**):

1. *Comment Memo*
 - a. *No Comments.*
No response necessary.
2. *Traffic Summary*
 - a. *Applicant shall utilize the latest version (11th Edition) of the Trip Generation Manual, published by the Institute of Transportation Engineers (ITE). Current Land Use Codes (LUC's) shall be utilized for determining trips generated as a result of the proposed improvements.*
There are no big differences in this version. Conclusion will remain the same with no significant impacts to Balltown Road.
3. *Site Plan Package*
 - a. *Sheet 1 of 4 – Applicant shall provide accessible route from public right-of-way to building entrance.*



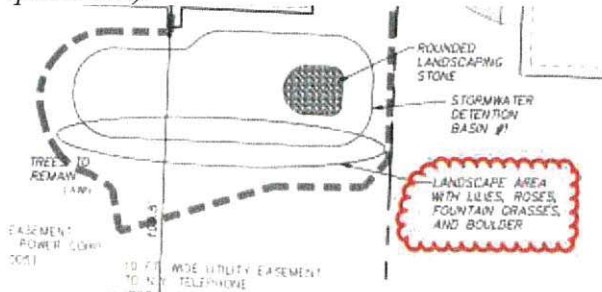
There is a sidewalk on the other side of the driveway. Site plan has been revised accordingly.

- b. Sheet 1 of 4 – Applicant shall consider species besides Red Maple (*Acer rubrum*).



Revised to White Oaks as requested.

- c. Sheet 1 of 4 – Applicant shall specify native landscape (species, size, and quantities).



These plants will be native as noted on the site plans.

- d. Sheet 2 of 4 – Applicant shall identify where mulched area with perennials is located on site, and specify native landscape (species, size, and quantities).

PLANTING SCHEDULE					
SCIENTIFIC NAME	COMMON NAME	QUANT.	SIZE	COMMENTS	
ICER RUBRUM	RED MAPLE	2	2" C	B & B	
PLANTING AND FLOWER BEDS AS NOTED AND SEED ALL DISTURBED AREAS					
LILIES		HT = HEIGHT	S = SPREAD	MULCHED AREA W/ PERENNIALS	
B = BOLLER, B = BOLLER					

Note has been removed on the site plans.

-
- The site plan illustrates the proposed development and its integration with existing infrastructure. Key features include:
- Proposed Building Footprint:** A large rectangular area outlined in red, labeled "PROPOSED FOOTPRINT OF BUILDING ADDITION".
 - Storm Drain System:** A network of lines representing storm drains, including an "EXISTING STORM DRAIN LINE" and a "NEW STORM DRAIN LINE".
 - Detention Basins:** Two circular areas labeled "STORMWATER DETENTION BASIN #1" and "STORMWATER DETENTION BASIN #2".
 - Other Features:** The plan also shows "REWORKED LANDSCAPE STRIVE", "ALL SLOPES 1:3 MAX", and various easements like "VEGETATION EASEMENT" and "UTILITY EASEMENT".

f. Sheet 2 of 4 – An overflow crest shall be provided for detention basin #1. Overflow area has been added as requested.

- Typo has been corrected on the site plan.**

- Typo has been corrected on the site plan.**

- Typo has been corrected on the site plan.**

a. *Page 1 – Applicant shall correct sentence. However, the Town of Niskayuna required that the site stormwater management system be designed to control peak discharge rates for the 1, 10, 25, and 100-year storm events to less than or equal to those of the predevelopment 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.*
Report revised as requested.

b. *Page 4 –Post Area 1A-3 is not described. Applicant shall provide additional information.*

Report revised as requested.

c. *Applicant shall include Stormwater Management Maintenance Agreement with Town of Niskayuna for maintenance of proposed features.*

Ok.

5. *Basic SWPPP – Erosion & Sediment Controls Only*

a. *It is recommended that the SWPPP include the following components to ensure constructed measures are completed in compliance with the NYSDEC Stormwater Management Manual and proposed design plans. These components are to be submitted to the Town of Niskayuna for review/acceptance. (Note: NOI does not need to be submitted to NYSDEC, unless over 1 acre of disturbance):*

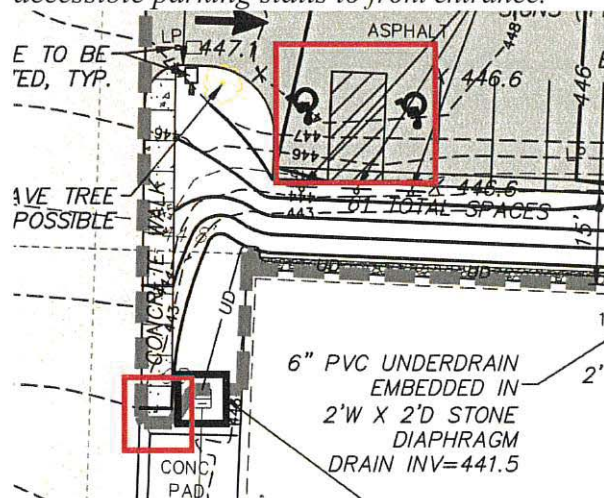
- i. *Notice of Intent*
- ii. *Contractor Certification Statement*
- iii. *Notice of Termination*
- iv. *SWPPP Inspection Form*
- v. *SWPPP Modification Form*
- vi. *Construction Inspection Checklist*
- vii. *Monthly Maintenance Inspection Checklist*

Project disturbs less than one acre, therefore, above items not necessary.

In response to the comments (*in italics*) of the letter from Weston & Sampson of November 27, 2023, we respond as follows (**in bold**):

1. *Site Plan Package*

a. *Sheet 1 of 2 – Provide a designated accessible route from accessible parking stalls to front entrance.*



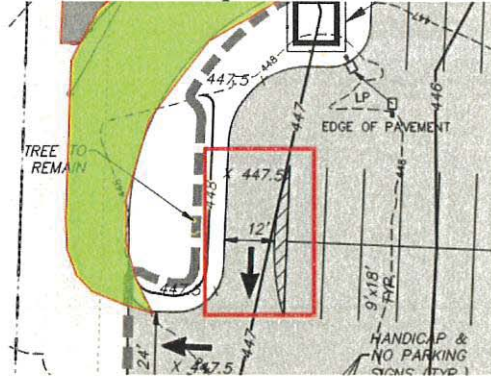
Accessible route will be to the south of the building.

- b. Sheet 1 of 2 – Applicant shall provide traffic analysis for potential impacts due to additional parking stalls.

Traffic analysis was provided.

- c. Sheet 1 of 2 – A single lane drive aisle may cause motorist confusion. Consider converting to bi-directional travel lane.

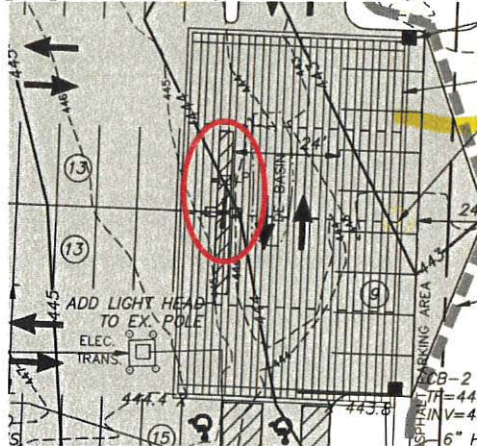
See revised site plan.



- d. Sheet 1 of 2 – Multiple post-top light fixtures are proposed/relocated. Applicant shall provide a photometric lighting plan.

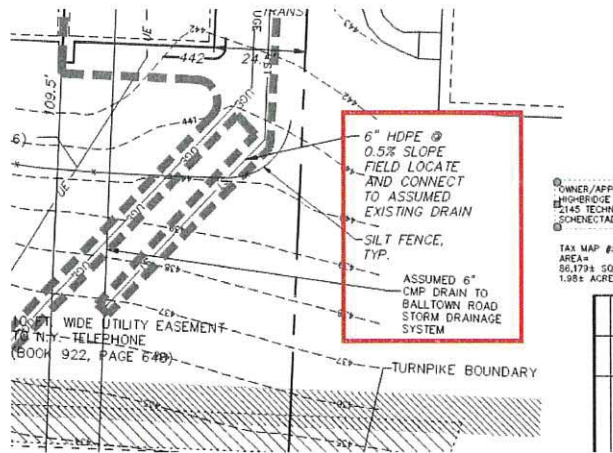
Lighting has been adjusted.

- e. Sheet 1 of 2 – A double headed light pole is proposed within the proposed subsurface chamber system. Applicant shall revise.



See response 1d above.

- f. Sheet 1 of 2 – 6" HDPE to be connected to assumed existing drain. (Assumed 6" CMP call-out points to UGE). Confirm that a 6" pipe size is sufficient for discharge, and what if assumed existing drain doesn't exist or is insufficient size.



See stormwater report.

- g. Sheet 1 of 2 – Illustrate existing storm drainage system lines to be removed/abandoned, etc. Specifically, lines extending from existing building to Balltown Road.

See revised stormwater report.

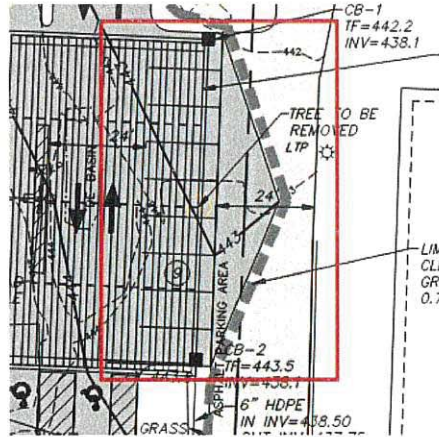
- h. Sheet 1 of 2 – Is existing Utility Easement to Niagara Mohawk (Book 1064, Page 886) from Balltown Road to existing building going to be extinguished or rededicated?

Redirected.

- i. Sheet 1 of 2 – Site improvements are proposed beyond property limits. Applicant shall provide agreement with adjacent landowner for temporary access/grading improvements on adjacent property.

Pavement will be sawcut at the property line.

- j. Sheet 1 of 2 – Existing parking along WRGB CBS6 (Sinclair Communications, LLC) driveway extend into area of new parking. Is this all going to be connected? How will parking areas be delineated from WRGB CBS 6 driveway? How is this all going to be striped.



See response to 1i above and revised site plan.

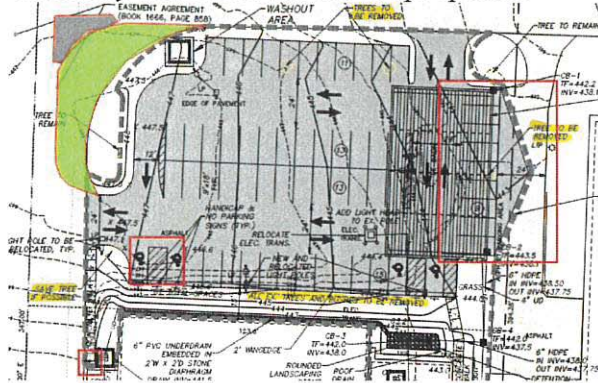
- k. Sheet 1 of 2 – Applicant shall provide pedestrian and streetscape amenities per Town Center Overlay District, Neighborhood Commercial, and Highway Commercial Standards, including amenities: benches, bike racks, trash receptacles, parking: screening shall be applied in the parking lot design along parcel boundaries, and Landscaping.

See revised site plan, attached.

- l. Sheet 1 of 2 – Improvements are proposed along properties lines and adjacent to operating driveways. Construction fencing or other means for delineating access points should be provided with site plans.

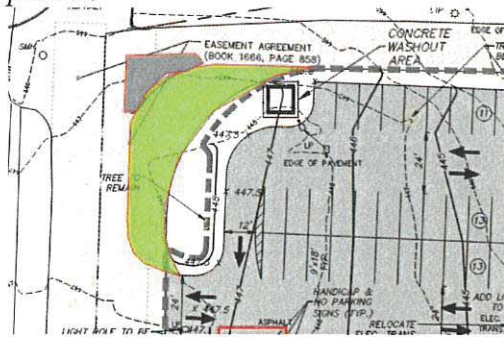
Construction fencing will be provided by the contractor.

- m. Sheet 1 of 2 – Applicant shall provide a landscape plan illustrating trees/shrubs to be provided in-lieu of tree removals on site, particularly to provide landscaping internal to required off-street parking areas. Currently no trees or shrubs are proposed.



See revised site plan.

- n. Sheet 1 of 2 – Restore green space and reduce unnecessary asphalt area within parcel.



Applicant does not intend to disturb this area.

2. Short EAF

- a. No Comments.

No response necessary.

3. Basic SWPPP – Erosion & Sediment Controls Only

- a. SWPPP currently only reflects E&S controls. SWPPP shall be updated to reflect Stormwater Management practices proposed, including post-construction inspection and maintenance.

See revised report.

4. Stormwater Management Report

- a. Provide stormwater calculations for 1, 10, 25, and 100 year rainfall events.

See revised report.

Enclosed for further review are electronic copies of the following materials:

1. Revised site plans – dated Rev.#3 – January 8, 2024
2. Stormwater Management Report – revised January 8, 2024

We look forward to discussing this at the January 8, 2023 Planning Board meeting. 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-2024-0108

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



ENGINEERS

SURVEYORS
411 Union Street Schenectady, N.Y. 12305
518-377-0315 Fax 518-377-0379
www.abdeng.com

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

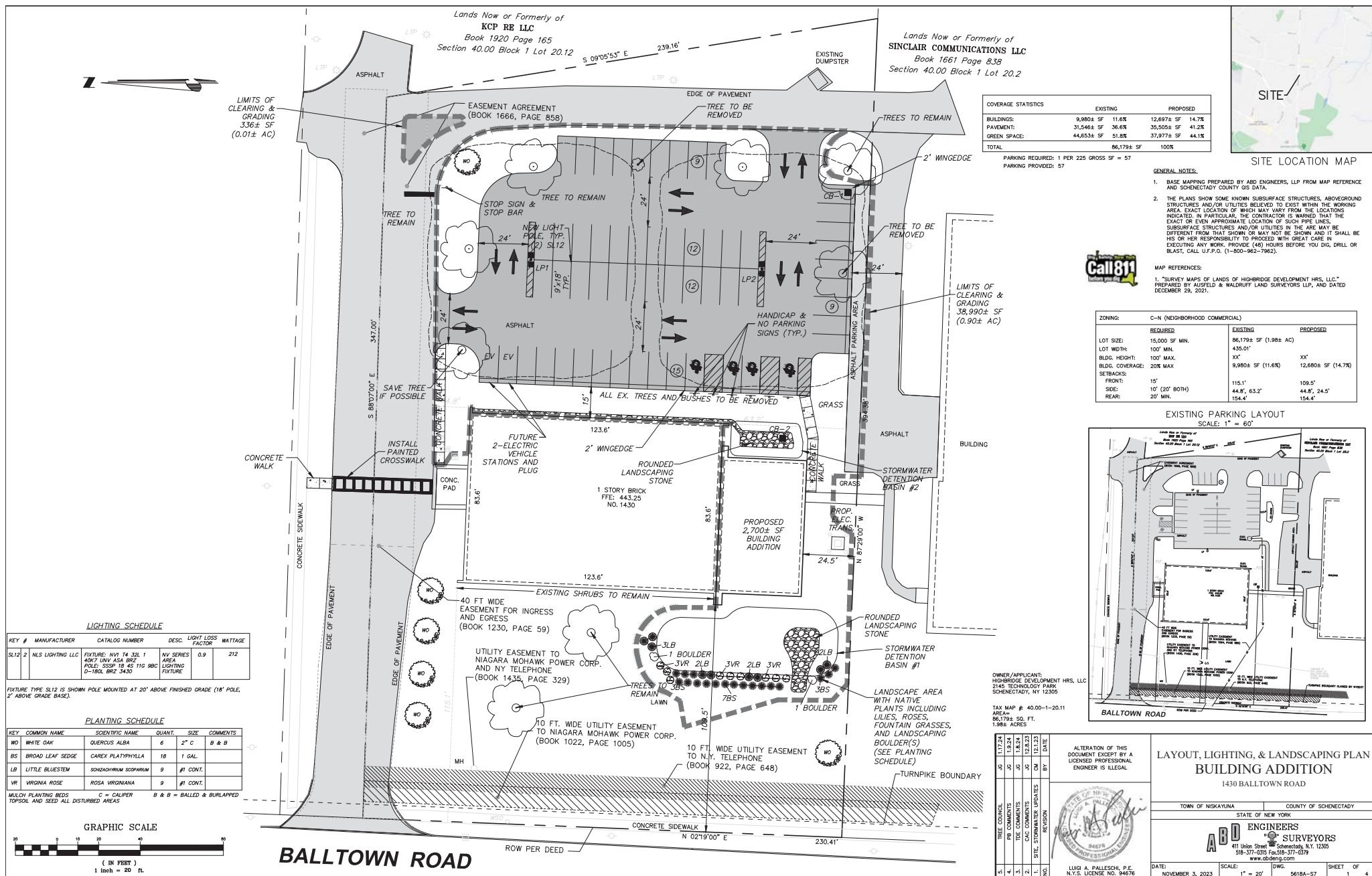
We appreciate being scheduled for the December 6, 2023 CAC and December 11, 2023 Planning Board meetings. Should you have any questions or need anything further, please do not hesitate to contact me.

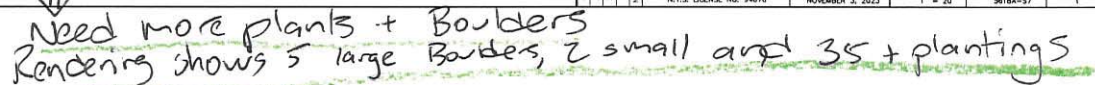
Very truly yours,
ABD ENGINEERS & SURVEYORS, LLP



Luigi A. Palleschi, P.E.
Partner

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











TRAFFIC SUMMARY

Office Building

1430 Balltown Road

Revised January 9, 2024

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, 11th 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	1.52/1,000 SF	16 trips
PM peak	1.44/1,000 SF	15 trips

Proposed Development AM Peak

12,680 SF Office	1.52/1,000 SF	20 trips
------------------	---------------	----------

Proposed Development PM Peak

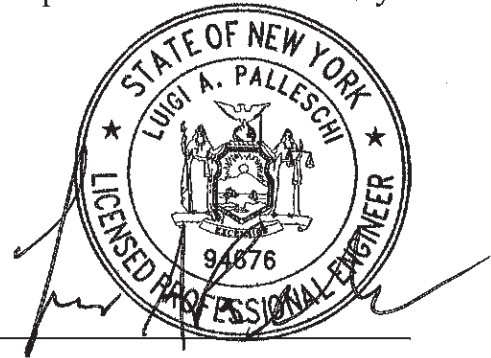
12,680 SF Office	1.44/1,000 SF	19 trips
------------------	---------------	----------

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.



Luigi A. Palleschi, P.E.

General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 221

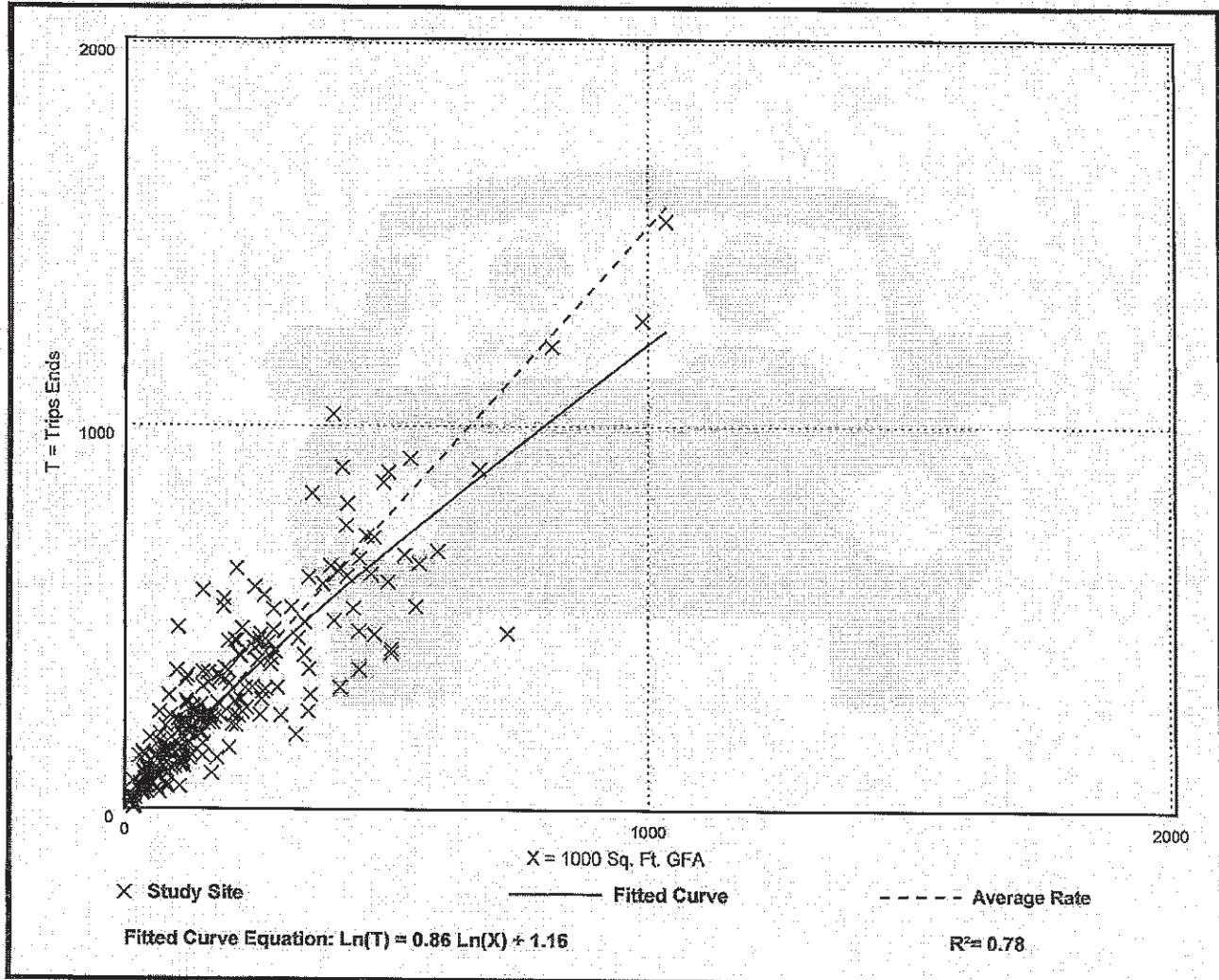
Avg. 1000 Sq. Ft. GFA: 201

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.52	0.32 - 4.93	0.58

Data Plot and Equation



General Office Building (710)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

On a: Weekday,

Peak Hour of Adjacent Street Traffic,

One Hour Between 4 and 6 p.m.

Setting/Location: General Urban/Suburban

Number of Studies: 232

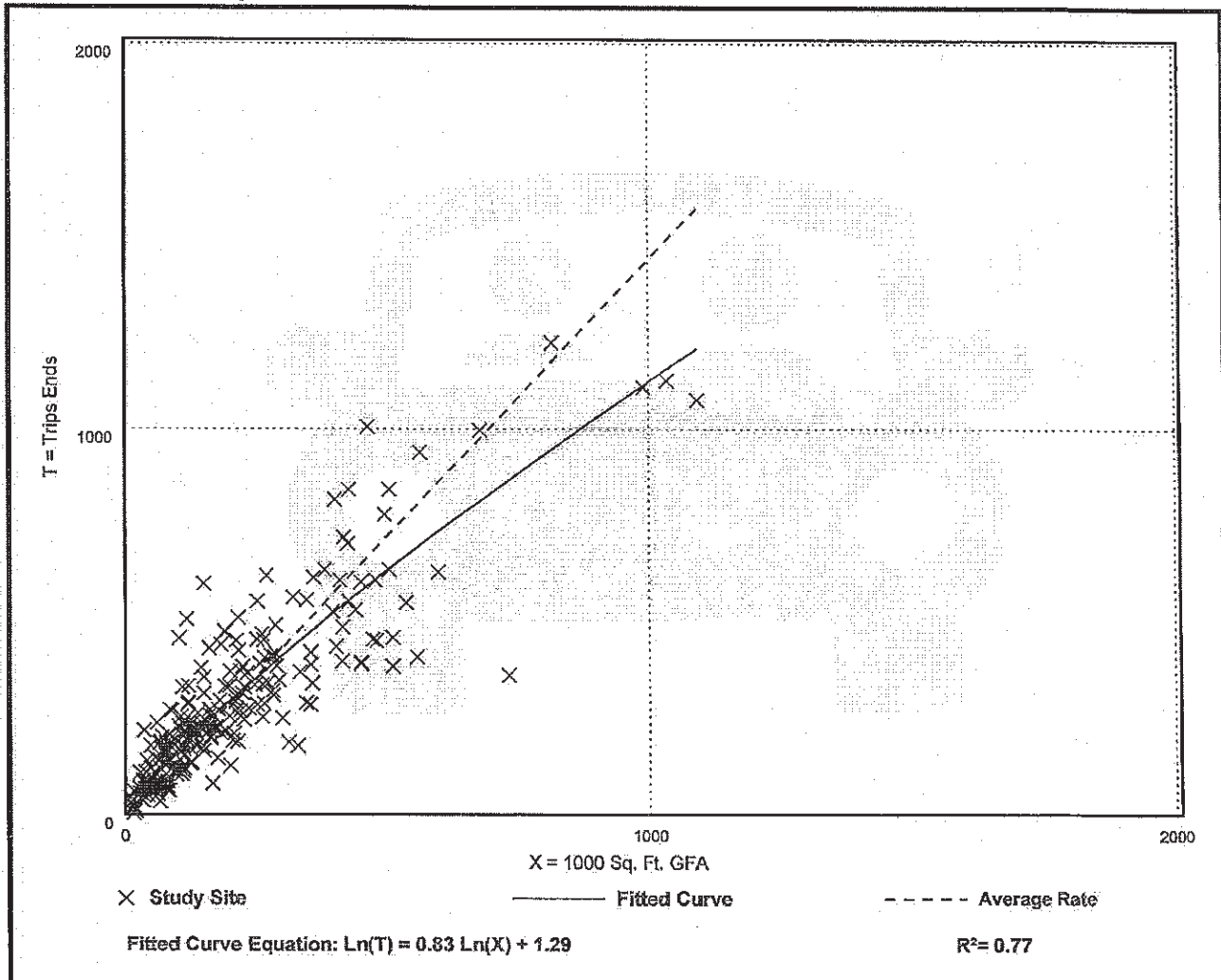
Avg. 1000 Sq. Ft. GFA: 199


Directional Distribution: 17% entering, 83% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.44	0.26 - 6.20	0.60

Data Plot and Equation



Schedule						
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Light Loss Factor Wattage
	SL12	2	NLS Lighting LLC	FIXTURE: NV1 T4 32L 1 4007 10V ASA BRZ POLE: SSSP 18 45 11G PSC D-180L BRZ 3430	NV Series Area Lighting Fixture	0.9 212

Note
1. FIXTURE TYPE SL12 IS SHOWN POLE MOUNTED AT 20' ABOVE FINISHED GRADE (18' POLE, 2' ABOVE GRADE BASE).



NV-1
AREA, SITE & ROADWAY

FORM AND FUNCTION

- Form and function are the primary considerations in the design of any lighting fixture.
- The fixture must be aesthetically pleasing and functional.
- The fixture must be durable and long-lasting.
- The fixture must be easy to install and maintain.
- The fixture must be safe and secure.
- The fixture must be compatible with the environment.
- The fixture must be compatible with the building.
- The fixture must be compatible with the landscape.
- The fixture must be compatible with the community.
- The fixture must be compatible with the culture.
- The fixture must be compatible with the climate.
- The fixture must be compatible with the economy.
- The fixture must be compatible with the environment.
- The fixture must be compatible with the building.
- The fixture must be compatible with the landscape.
- The fixture must be compatible with the community.
- The fixture must be compatible with the culture.
- The fixture must be compatible with the climate.
- The fixture must be compatible with the economy.



DESCRIPTION

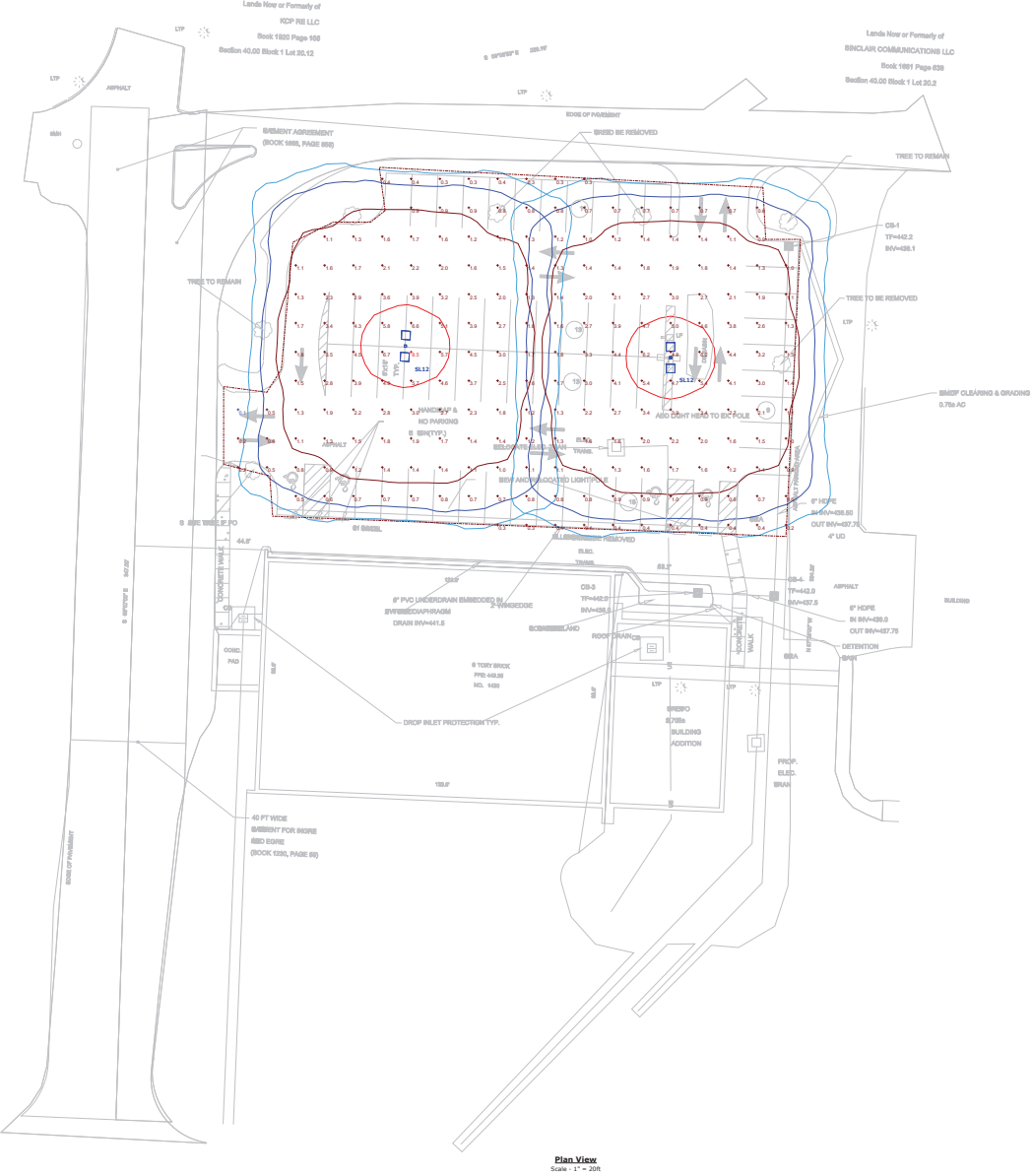
- The fixture is a modern, minimalist design.
- It features a sleek, curved arm and a cylindrical head.
- The head is adjustable and can be rotated 360 degrees.
- The fixture is made of high-quality materials.
- It is designed to be weather-resistant.
- The fixture is easy to install and maintain.
- It is compatible with a variety of lighting systems.
- The fixture is available in a variety of finishes.
- It is a versatile and functional lighting solution.

FEATURES

- Adjustable head
- Weather-resistant
- Easy to install and maintain
- Compatible with a variety of lighting systems
- Available in a variety of finishes
- Versatile and functional lighting solution

INSTALLATION

- The fixture should be installed in a well-ventilated area.
- It should be installed at a height of 10-12 feet.
- The fixture should be secured with a minimum of two screws.
- The wiring should be properly grounded.
- The fixture should be tested before use.
- It should be inspected regularly for damage.
- The fixture should be cleaned regularly.
- It should be stored properly when not in use.



Plan View
Scale: 1" = 20'



1430 BALLTOWN ROAD
SITE LIGHTING LAYOUT

Designer
Date
12/01/2023
Scale
Not to Scale
Drawing No.
Summary

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

Revised January 8, 2024

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

TABLE OF CONTENTS

<u>ITEM</u>	<u>PAGE</u>
PROJECT LOCATION	1
GENERAL SITE DEVELOPMENT	1
SOIL TYPES, GROUNDWATER & TOPOGRAPHY	1
STORMWATER MANAGEMENT PLAN	1
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,

25, and 100-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.

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 1A-3 is $0.11\pm$ acres and consists of grass and sidewalk. An area weighted CN value of 74 is used for the calculation. Stormwater runoff sheet flows into the proposed Detention Basin #1 at the south side of the building 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 $0.08\pm$ cfs, $0.28\pm$ cfs, $0.39\pm$ cfs, and $0.57\pm$ 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± cfs, 1.07± cfs, 1.37± cfs, and 1.85± cfs respectively with a time of concentration of 6 minutes.

Post Area 3 is 0.04± 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	0.39	0.57				
Post 2A	1.45	2.58	3.10	3.91				
Post 1B	0.99	2.59	3.39	4.63	0.99	2.59	3.39	4.63
Post 2B	0.44	1.07	1.37	1.85	0.44	1.07	1.37	1.85
Post 3	0.11	0.19	0.23	0.29	0.11	0.19	0.23	0.29
Total Post	3.77	8.18	10.31	13.64	2.58	5.61	7.02	9.17
<i>Net Change</i>	<i>0.58</i>	<i>1.09</i>	<i>1.35</i>	<i>1.78</i>	<i>-0.60</i>	<i>-1.47</i>	<i>-1.93</i>	<i>-2.68</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

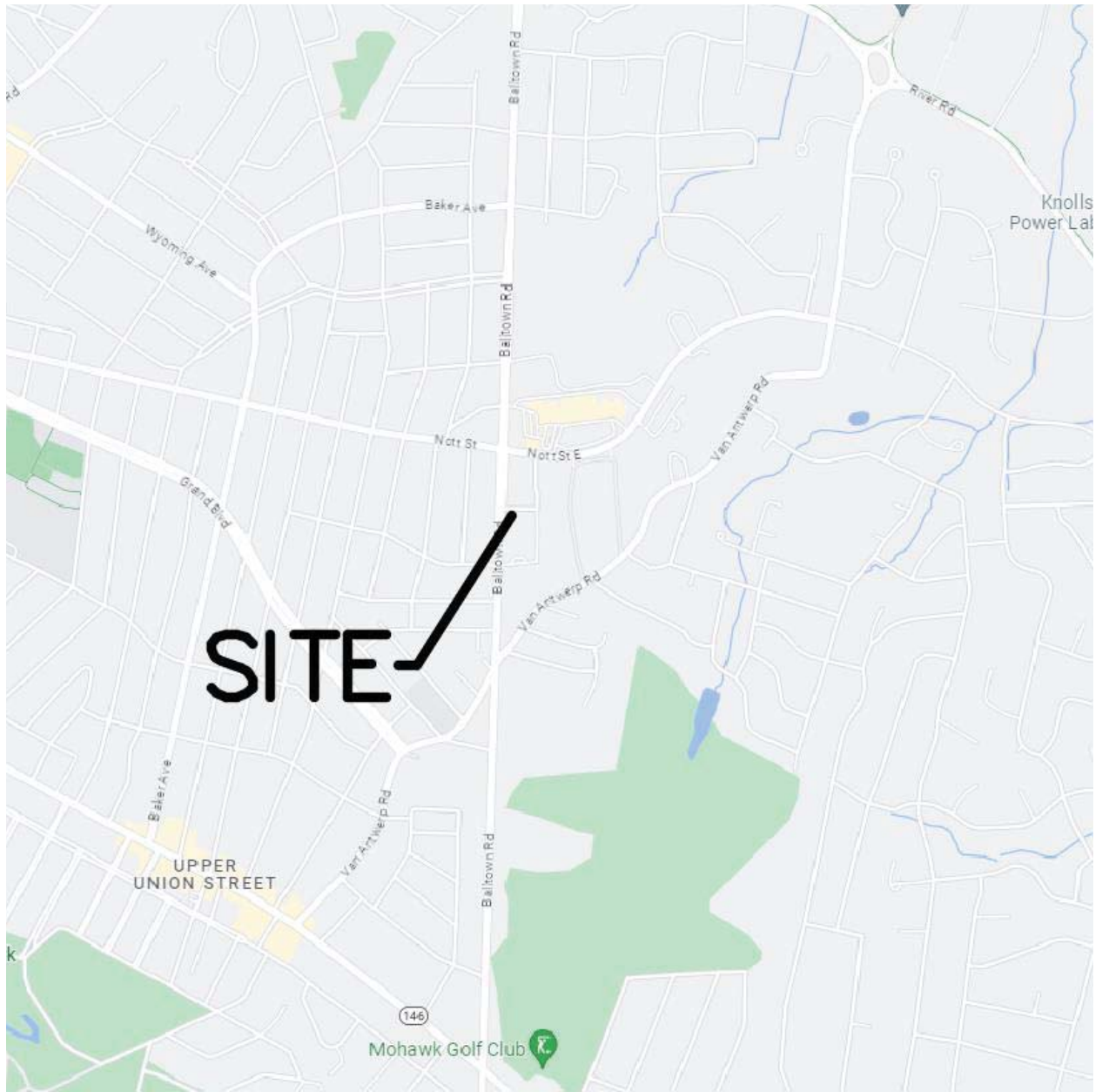


EXHIBIT 2:
PRE-DEVELOPMENT DRAINAGE MAP



PRE AREA 3
0.04± ACRES

PRE AREA 1B
0.97± ACRES

PRE AREA 2A
0.27± ACRES

PRE AREA 1A
0.28± ACRES

PRE AREA 2B
0.42± ACRES

ASSUMED 6"
CMP DRAIN TO
BALLTOWN ROAD
STORM DRAINAGE
SYSTEM

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

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 58)

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 646)

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

EXISTING
DUMPSTER

ELEC.
TRANS.

ELEC.
TRANS.

BUILDING

PAV'T PARKING AREA

GRAVEL

TURNPIKE BOUNDARY

ROW PER DEED


1. SITE, STANDARD, UPDATES, REVISION		22.12.23	DATE
2. DESIGN		22.12.23	DATE
<div><p>ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL</p></div>			
<p>PRE-DEVELOPMENT DRAINAGE BUILDING ADDITION 1430 BALLTOWN ROAD</p>			
TOWN OF NISKAYUNA		COUNTY OF SCHENECTADY	
STATE OF NEW YORK			
<p>ABD ENGINEERS & SURVEYORS 411 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdeng.com</p>			
DATE: NOVEMBER 3, 2023		SCALE: NO SCALE	DWG. 5618A-54
SHEET 1		OF 1	

EXHIBIT 3:
POST-DEVELOPMENT DRAINAGE MAP

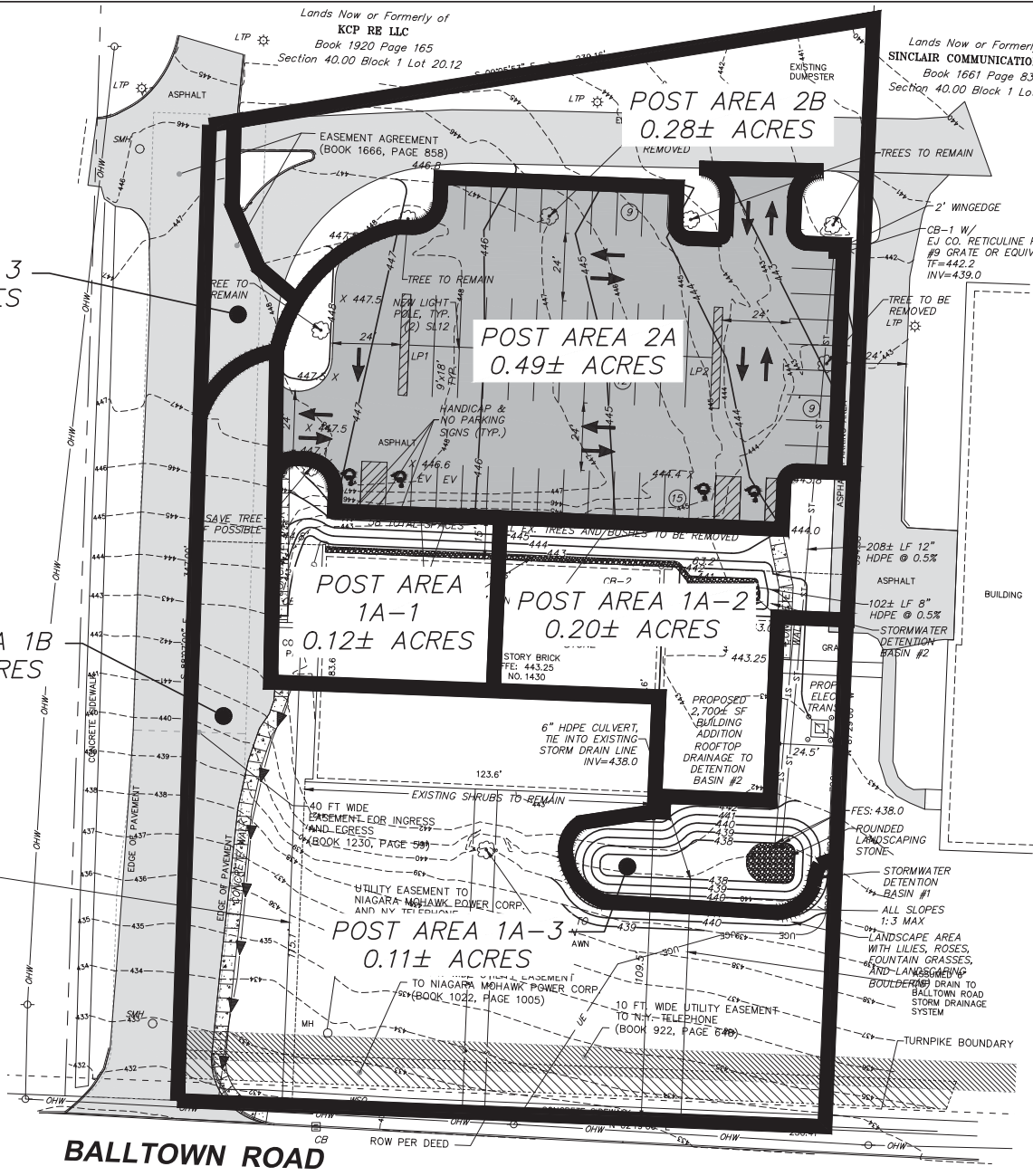



POST AREA 3
0.04± ACRES

POST AREA 1B
0.74± ACRES

ASSUMED 6" CMP DRAIN TO BALLTOWN ROAD STORM DRAINAGE SYSTEM

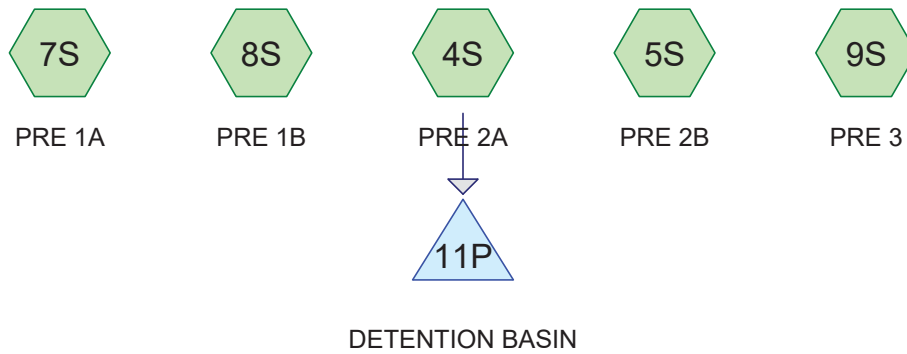
BALLTOWN ROAD



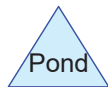
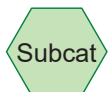
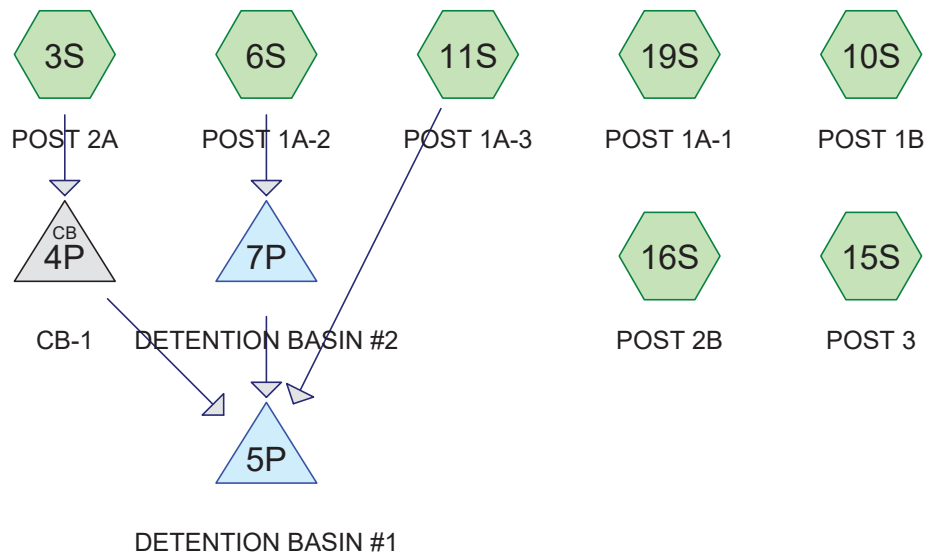
1.	SITE, STORMWATER, UTILITIES, & EROSION CONTROL	12/23	DATE	<div>ALTERATION OF THIS DOCUMENT EXCEPT BY A LICENSED PROFESSIONAL ENGINEER IS ILLEGAL.</div> <div></div>		
		2023	DATE			
				POST-DEVELOPMENT DRAINAGE BUILDING ADDITION 1430 BALLTOWN ROAD		
				TOWN OF NISKAYUNA COUNTY OF SCHENECTADY		
				STATE OF NEW YORK		
				ABD ENGINEERS & SURVEYORS 411 Union Street Schenectady, N.Y. 12305 518-377-0315 Fax 518-377-0379 www.abdens.com		
		DATE:	NOVEMBER 3, 2023	SCALE:	NO SCALE	
		DWG.	5618A-54	SHEET	OF 1 1	

APPENDIX A:
STORMWATER CALCULATIONS

PRE-DEVELOPMENT



POST-DEVELOPMENT



Routing Diagram for 5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP, Printed 1/8/2024

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 1/8/2024

Page 2

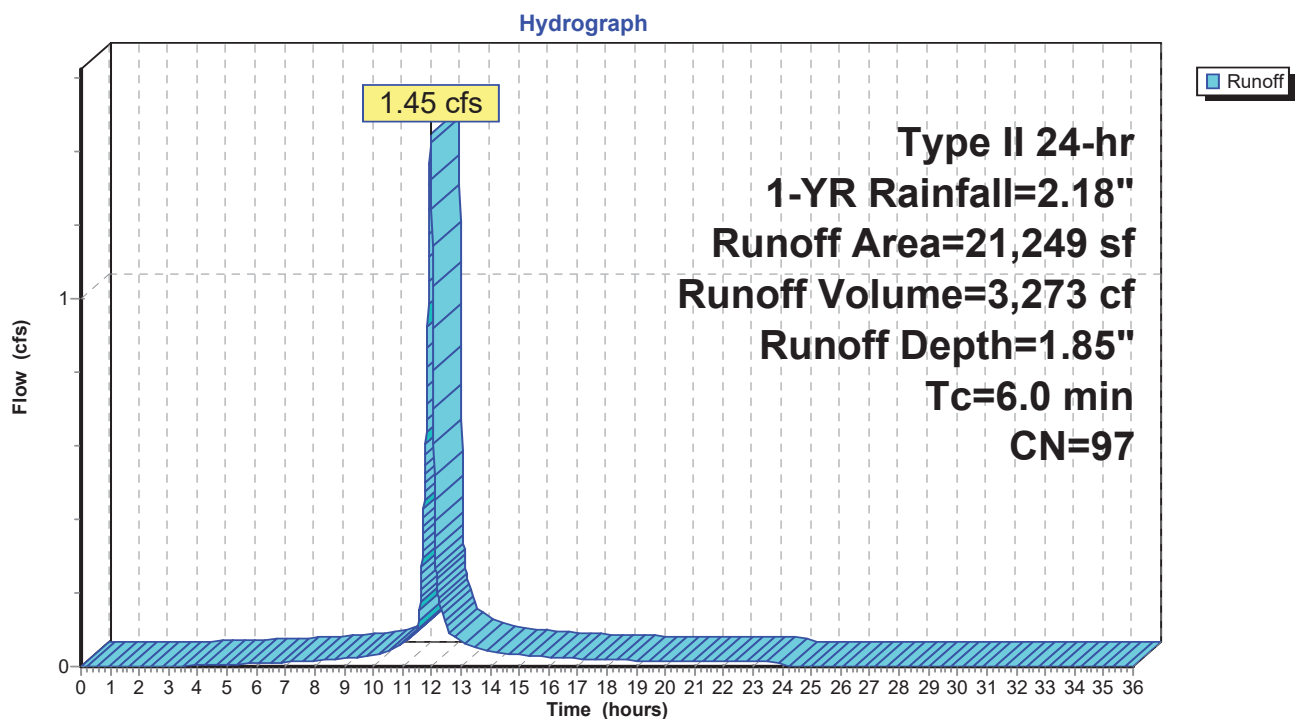
Summary for Subcatchment 3S: POST 2A

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"

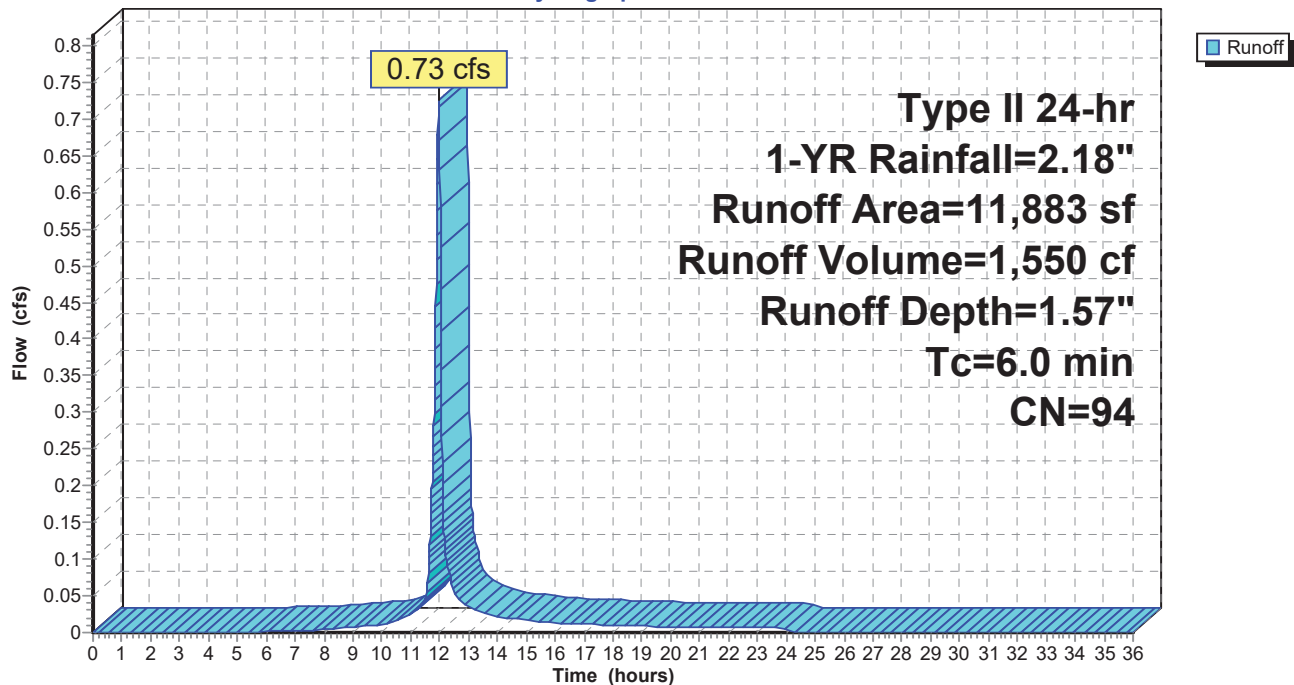
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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

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

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

Printed 1/8/2024

Page 4

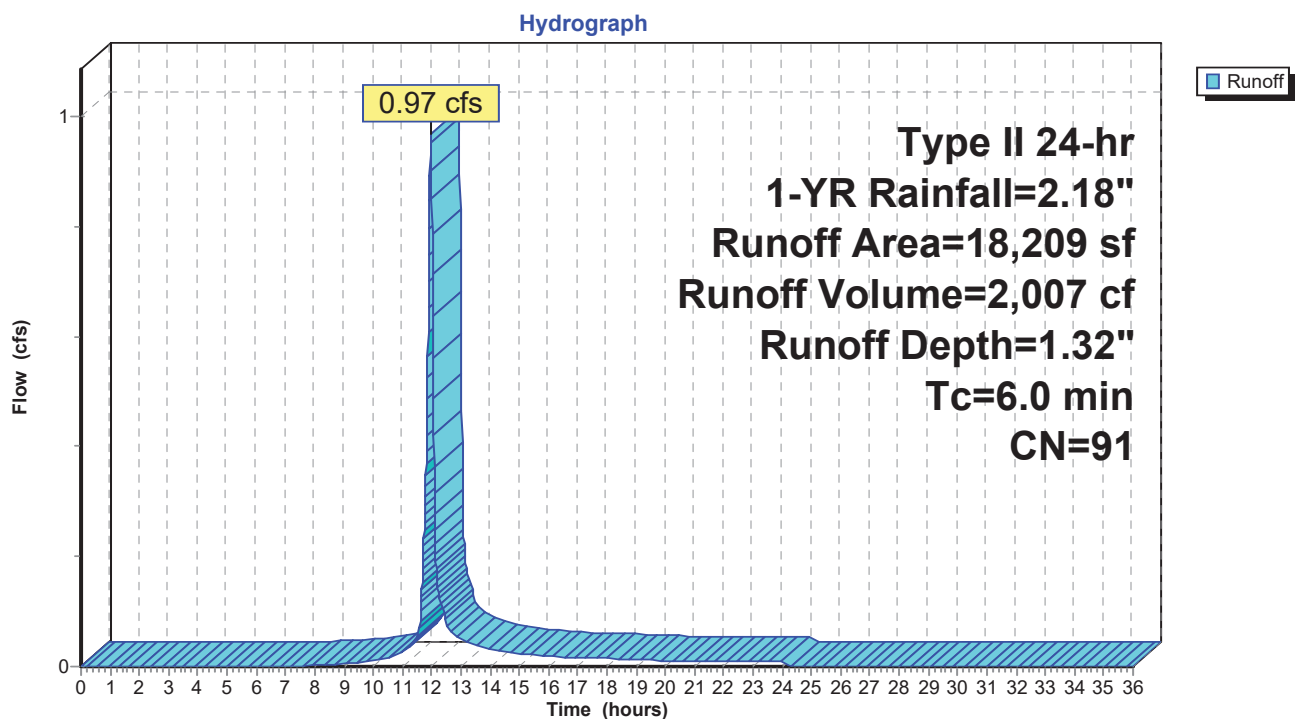
Summary for Subcatchment 5S: PRE 2B

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"

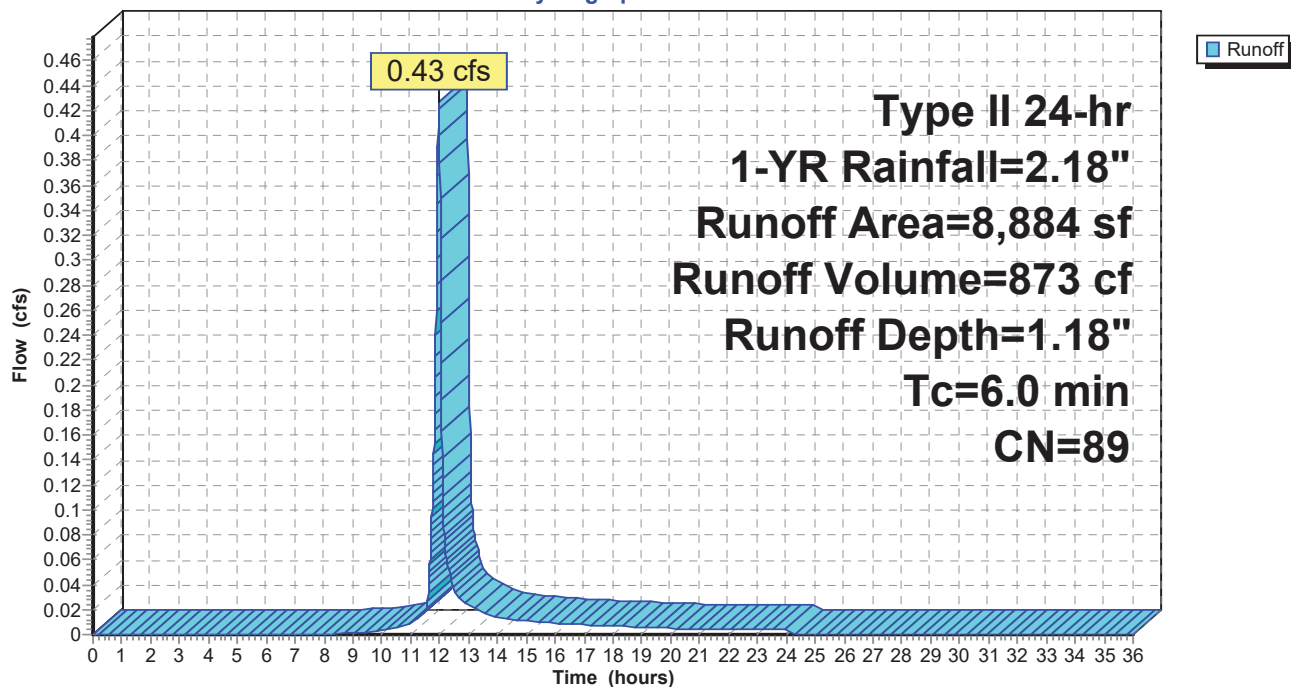
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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



Summary for Subcatchment 7S: PRE 1A

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

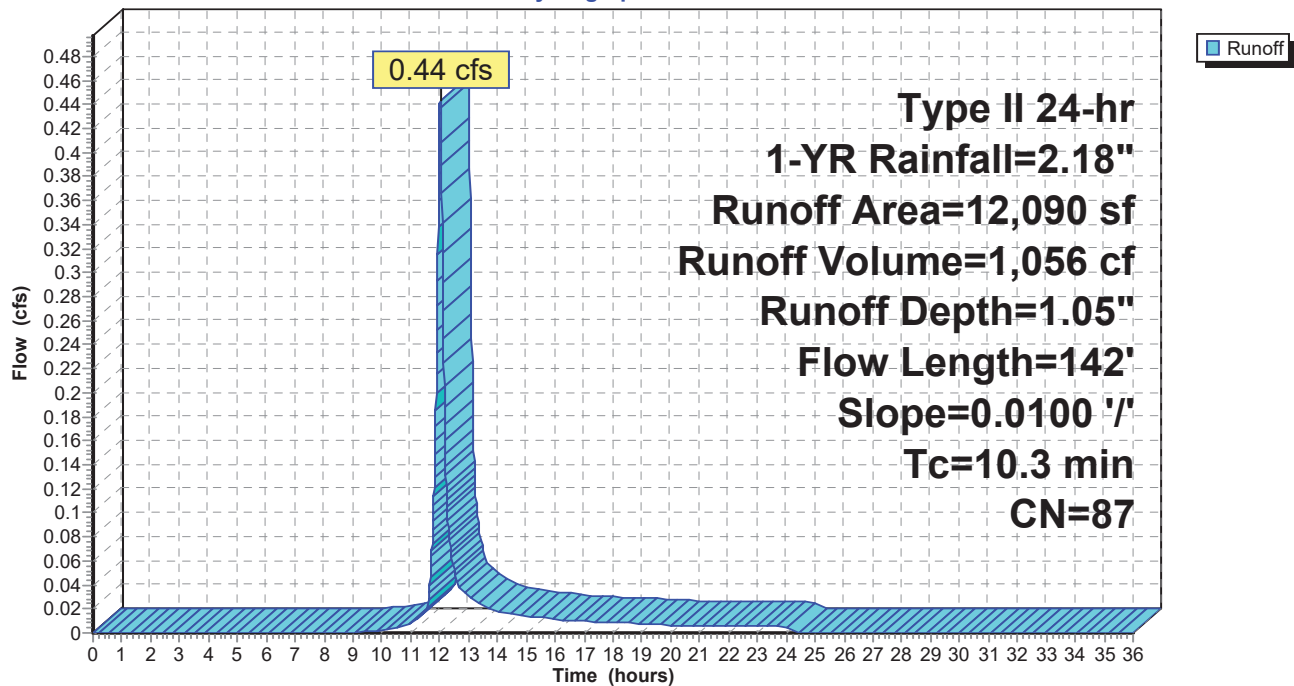
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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



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 1/8/2024

Page 7

Summary for Subcatchment 8S: PRE 1B

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

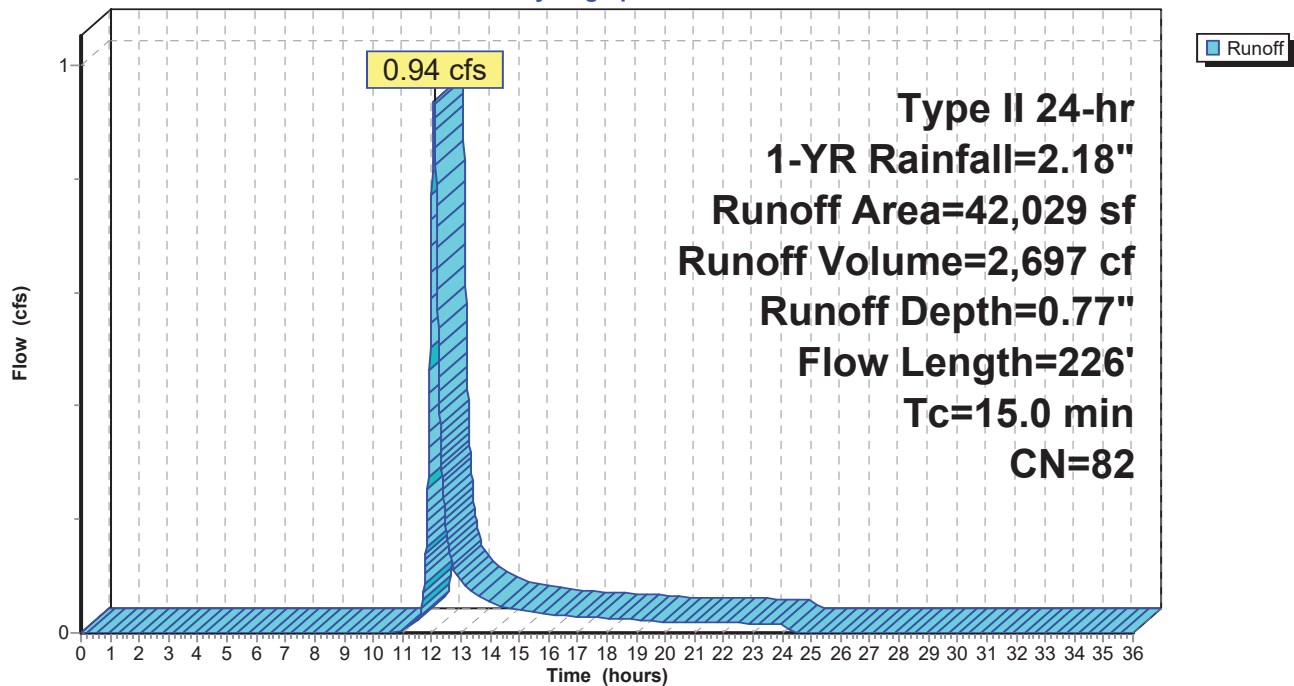
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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"

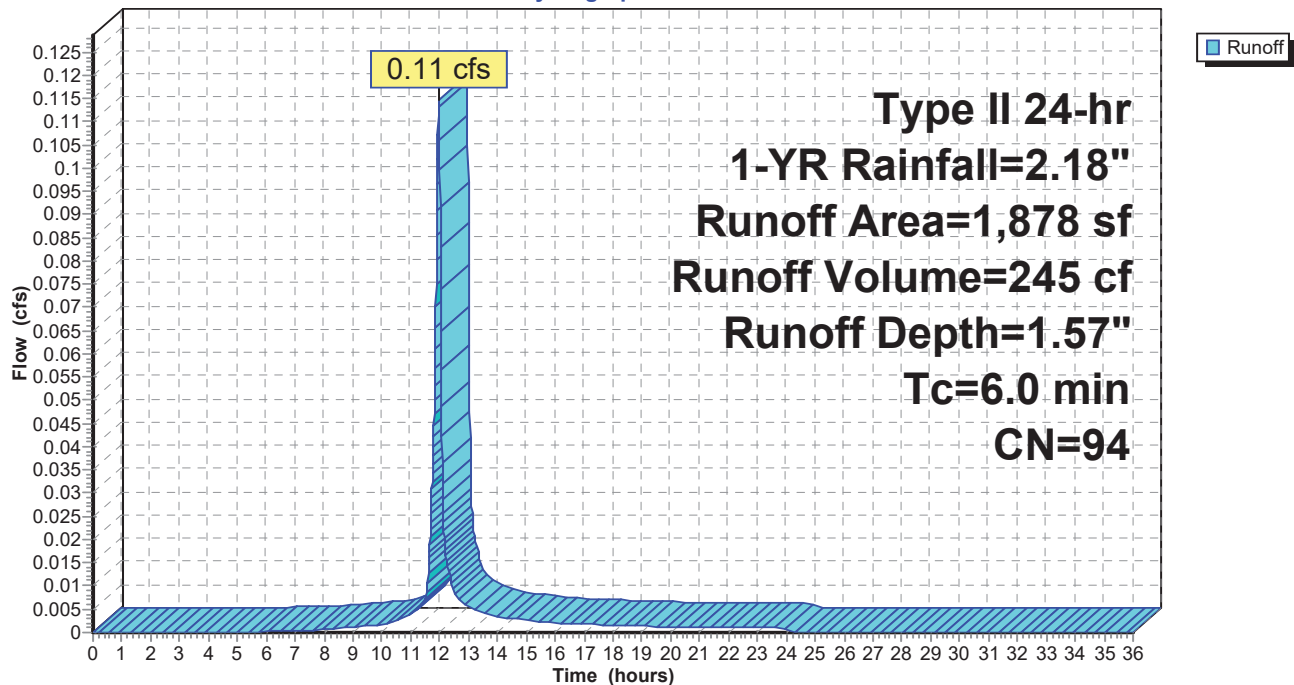
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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

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 1/8/2024

Page 9

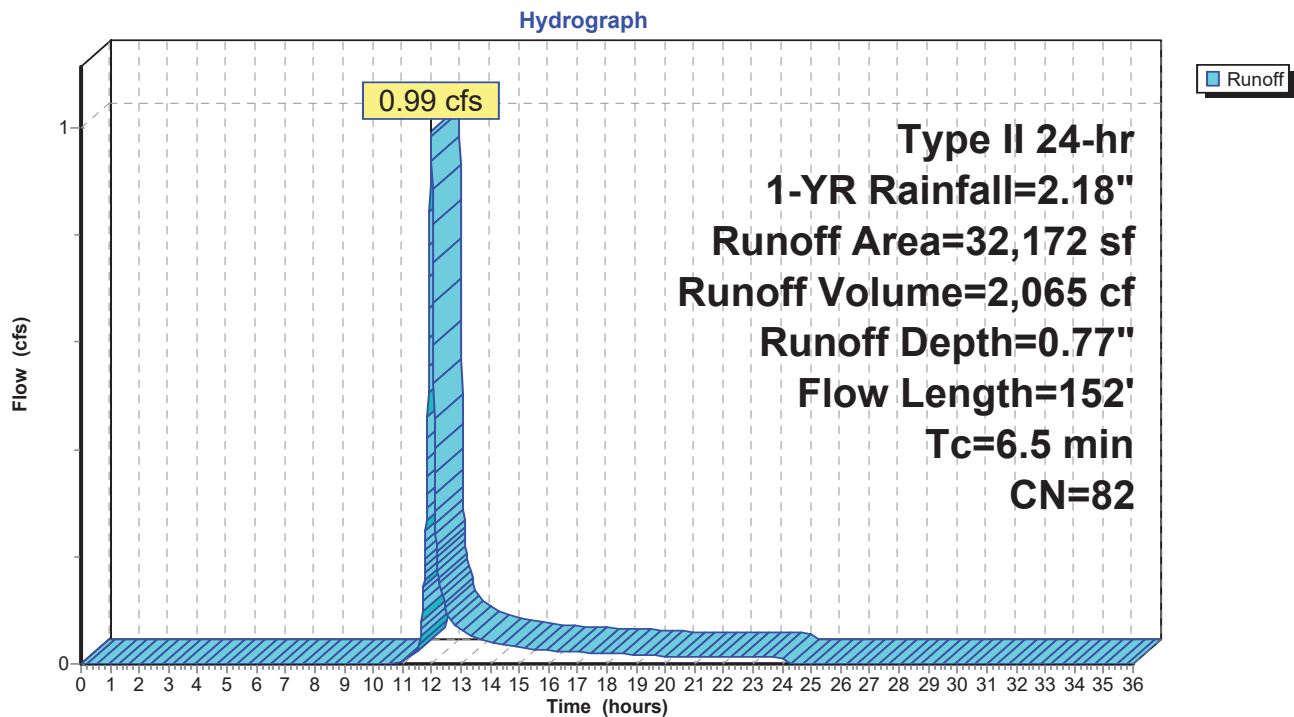
Summary for Subcatchment 10S: POST 1B

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

Summary for Subcatchment 11S: POST 1A-3

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

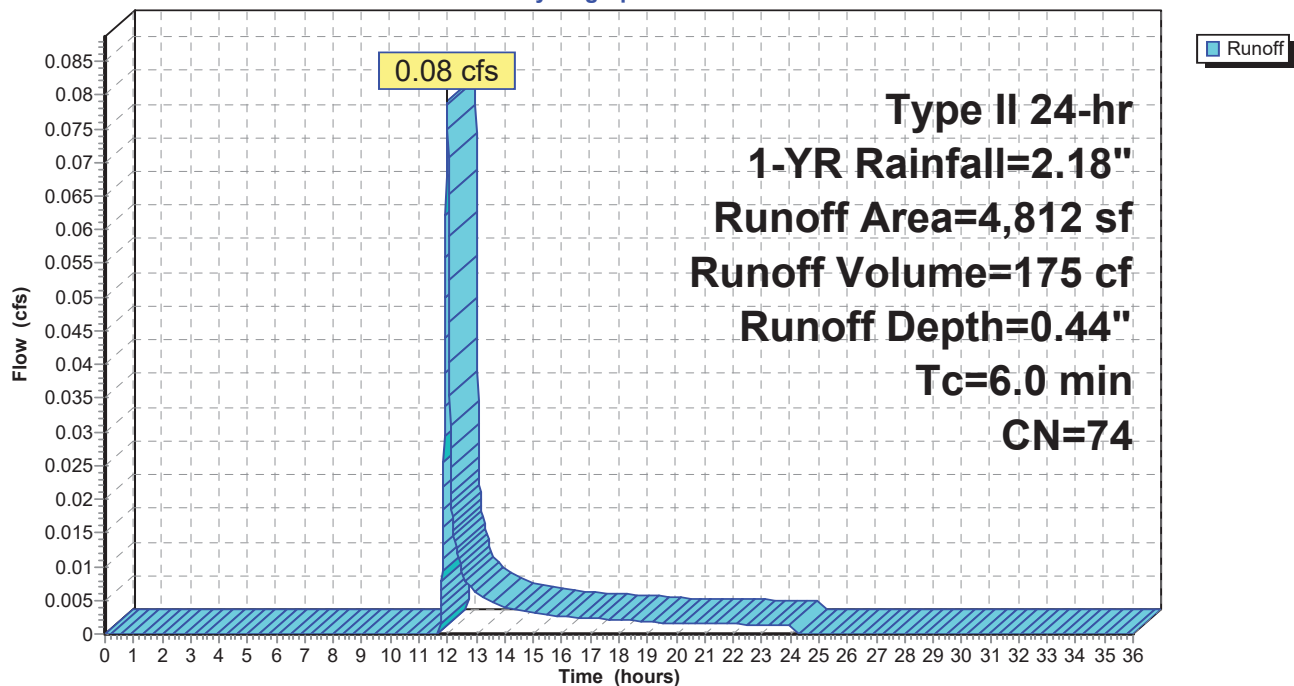
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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"

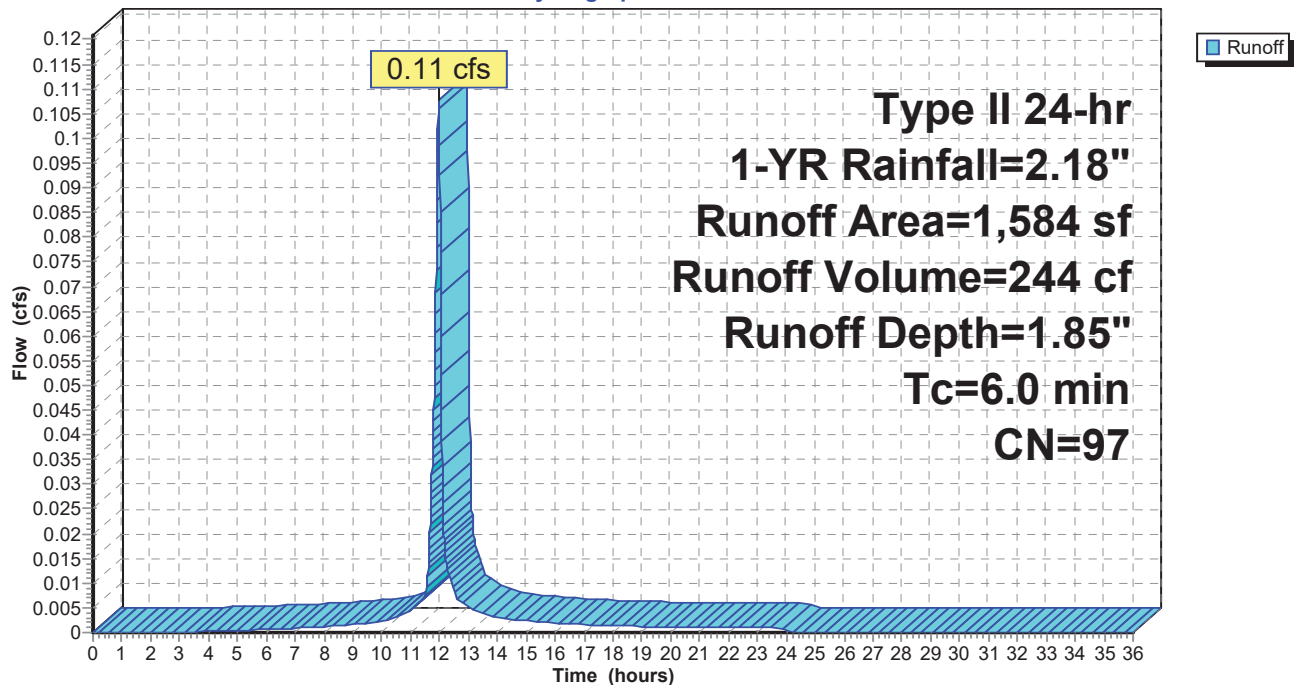
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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"

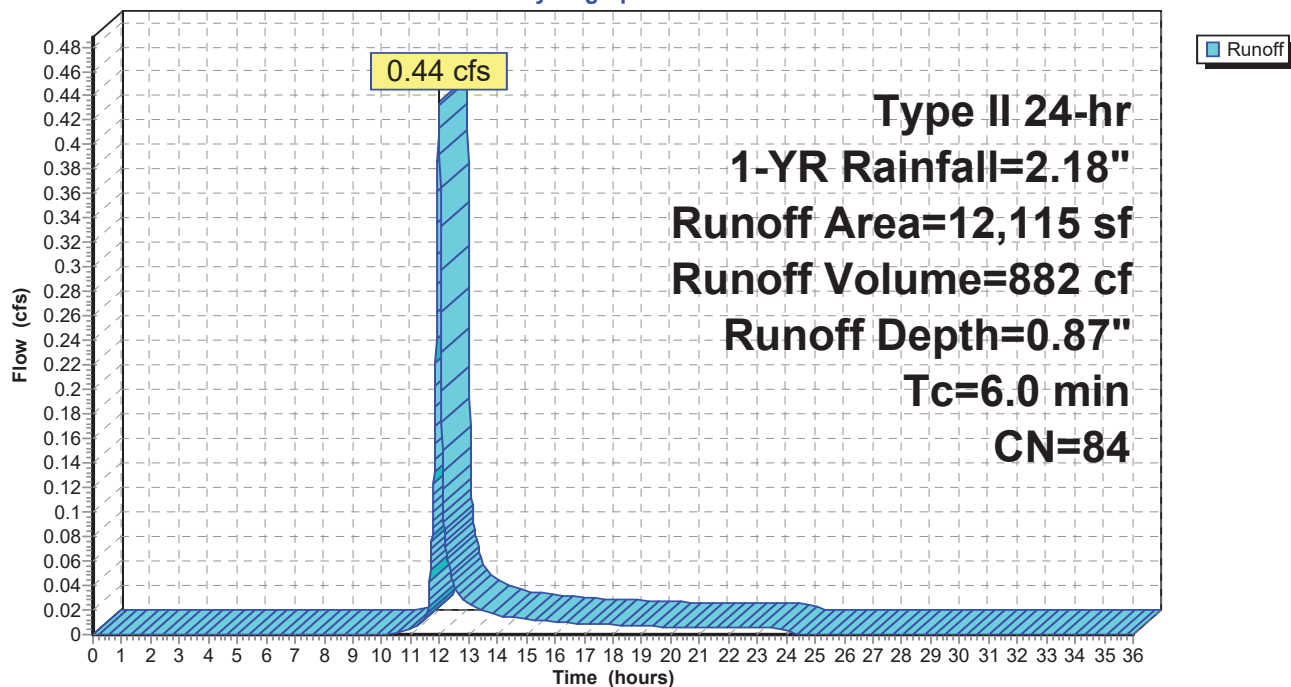
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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"

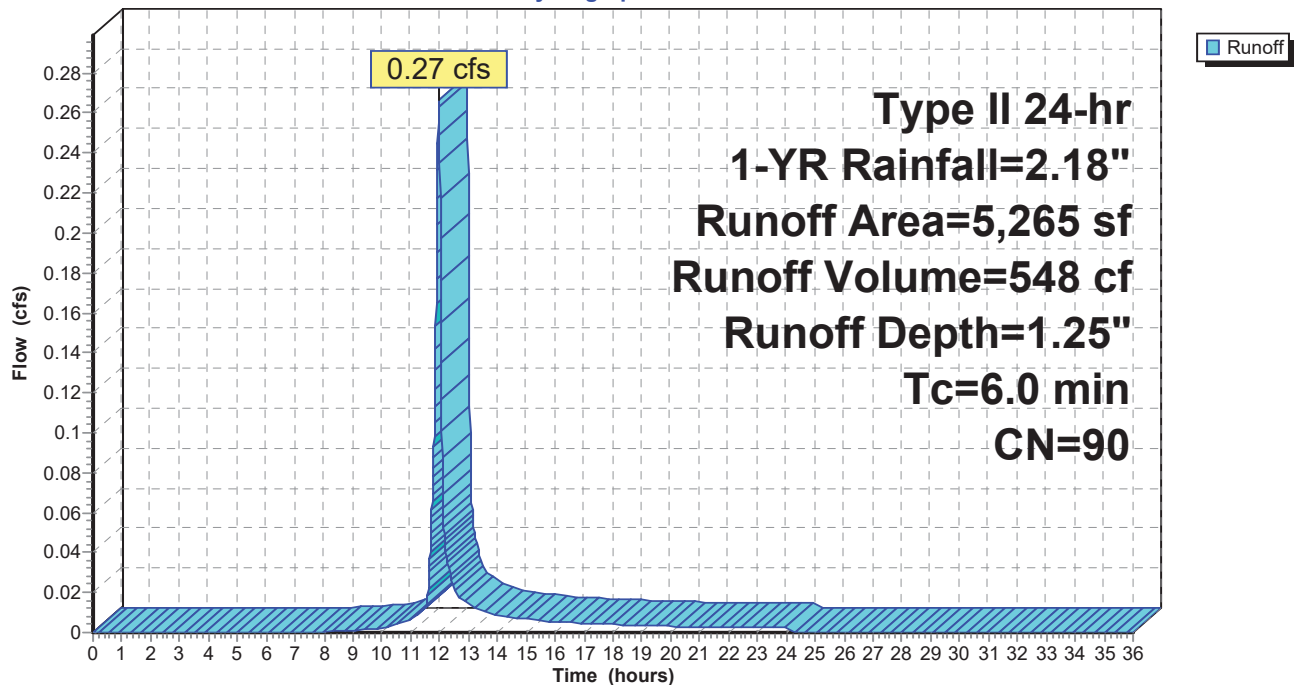
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 1-YR Rainfall=2.18"

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'

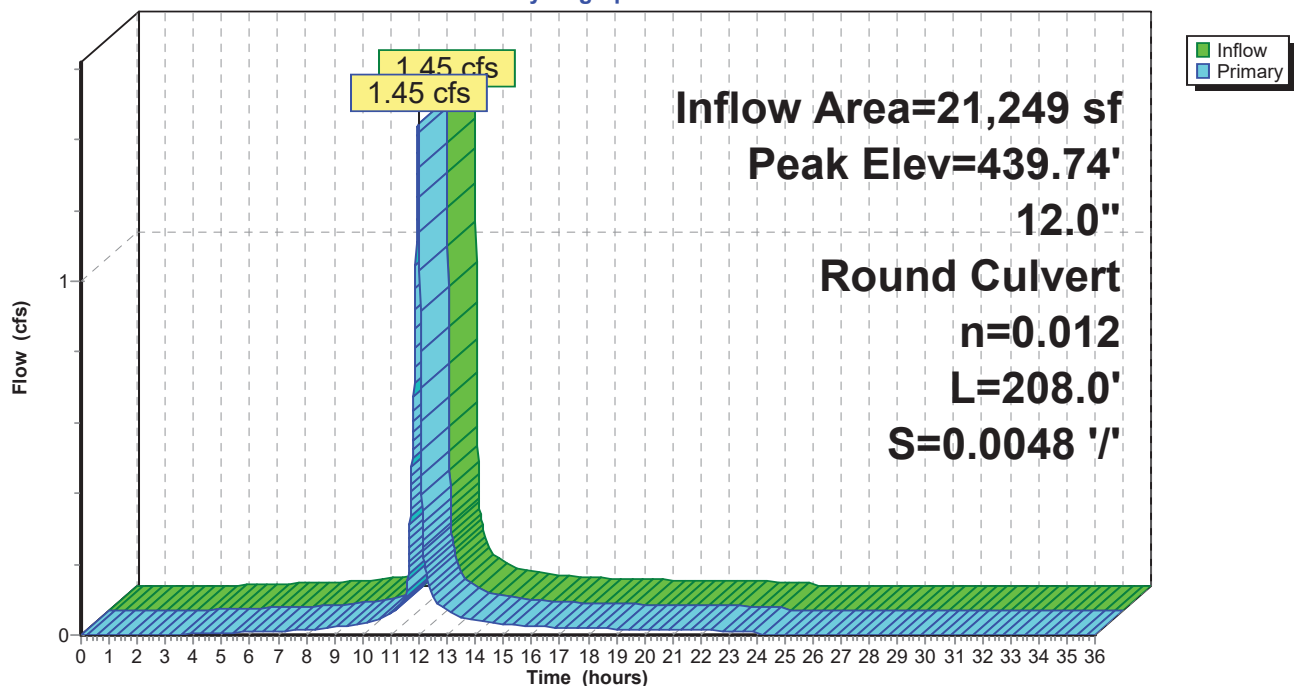
Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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

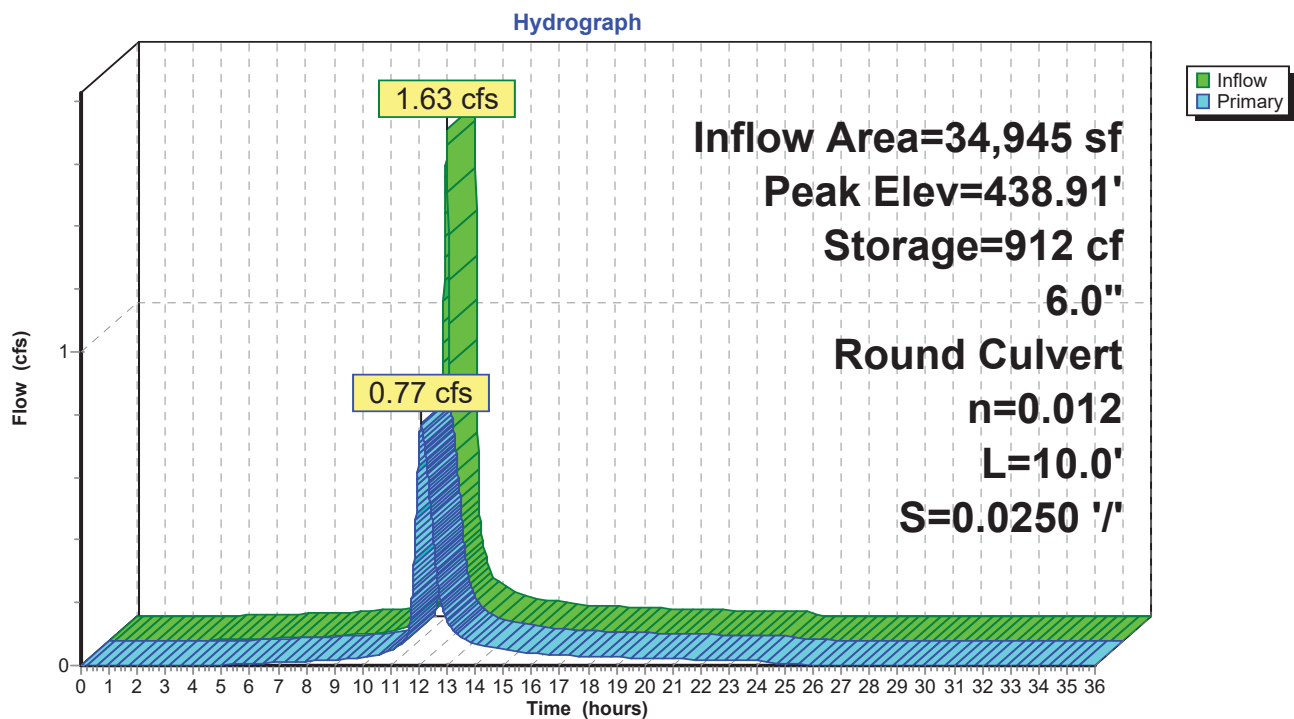
Plug-Flow detention time= 30.6 min calculated for 4,007 cf (100% of inflow)
 Center-of-Mass det. time= 30.1 min (825.6 - 795.5)

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)

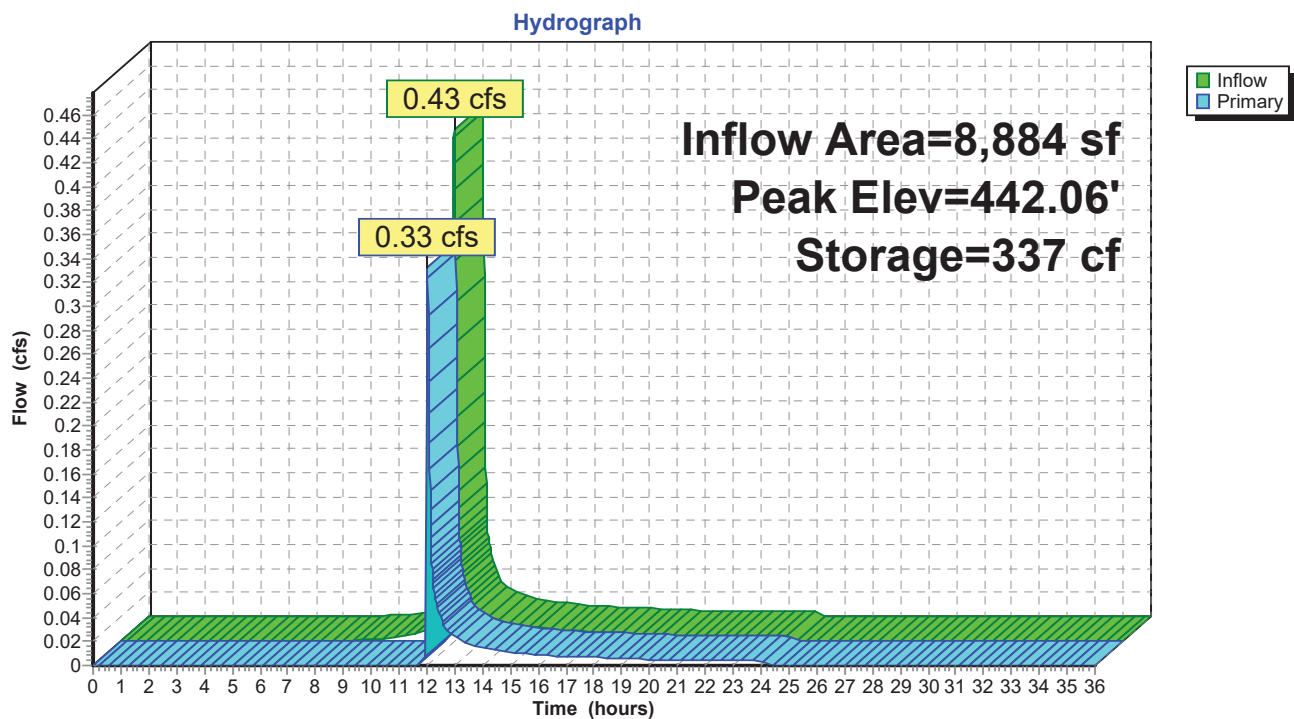
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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

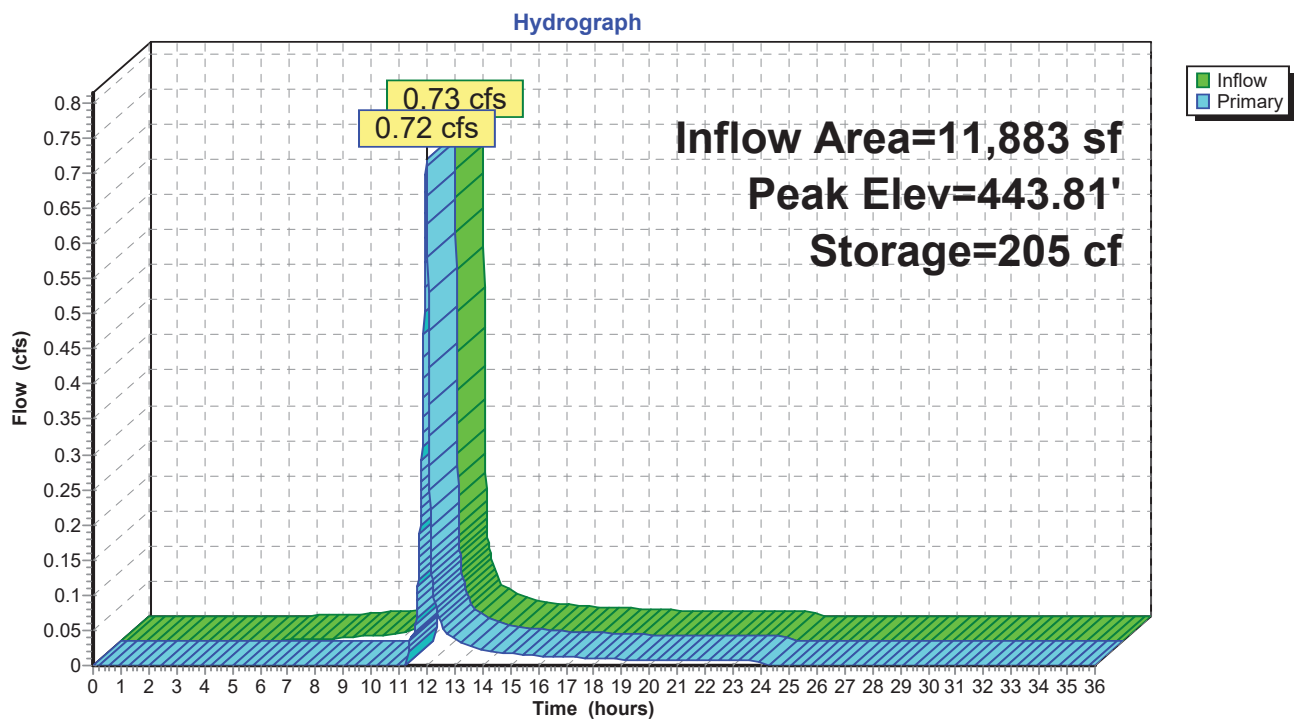
Plug-Flow detention time= 80.7 min calculated for 1,385 cf (89% of inflow)
 Center-of-Mass det. time= 27.4 min (824.7 - 797.3)

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 21

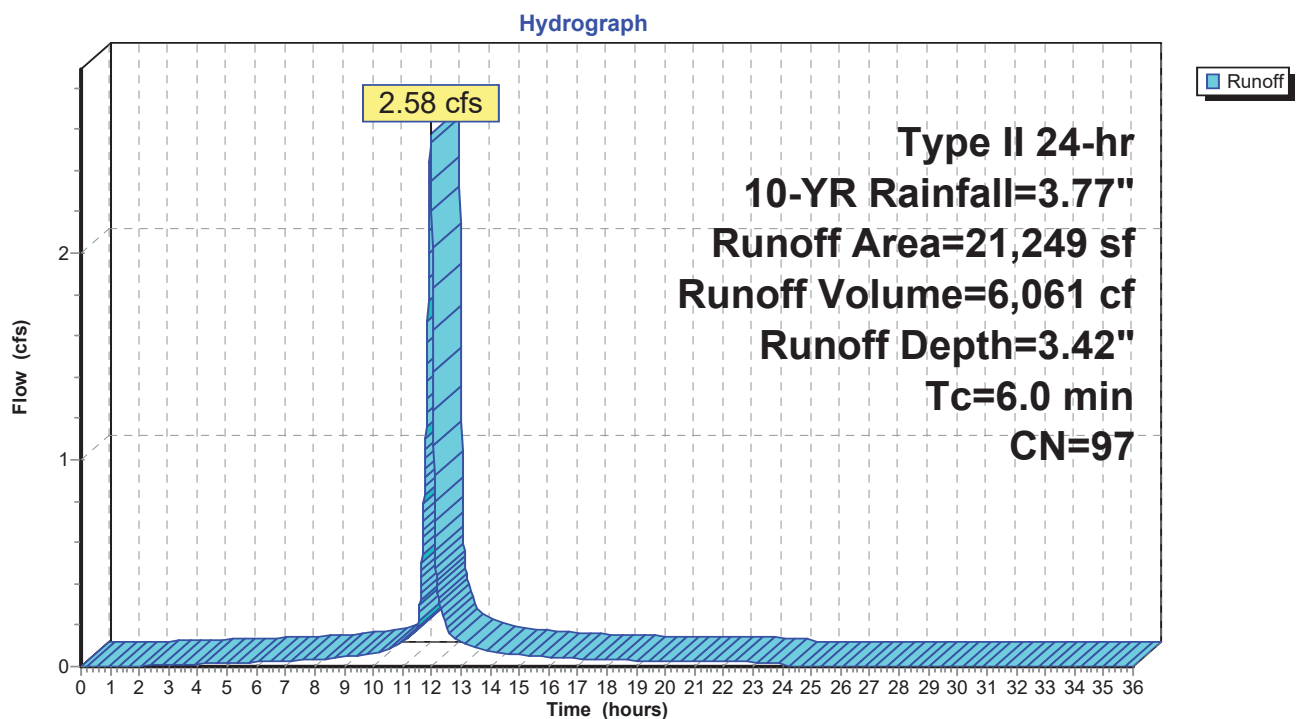
Summary for Subcatchment 3S: POST 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 22

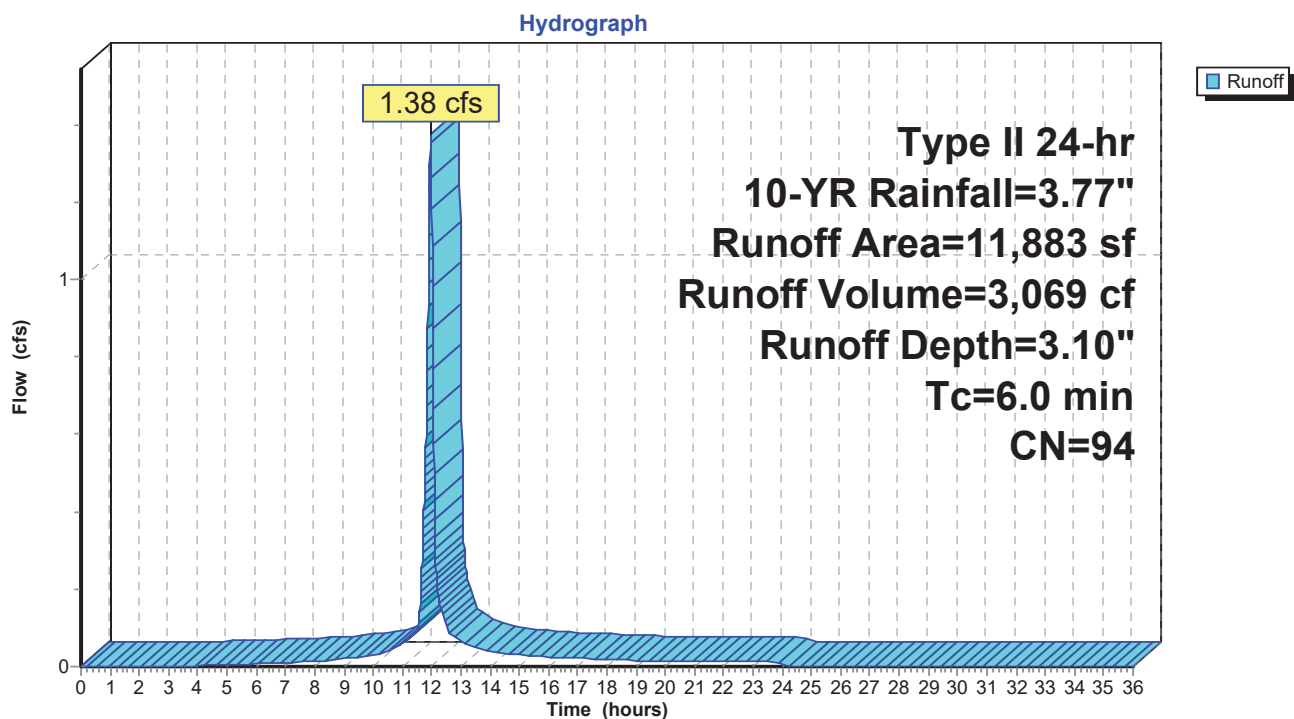
Summary for Subcatchment 4S: PRE 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 23

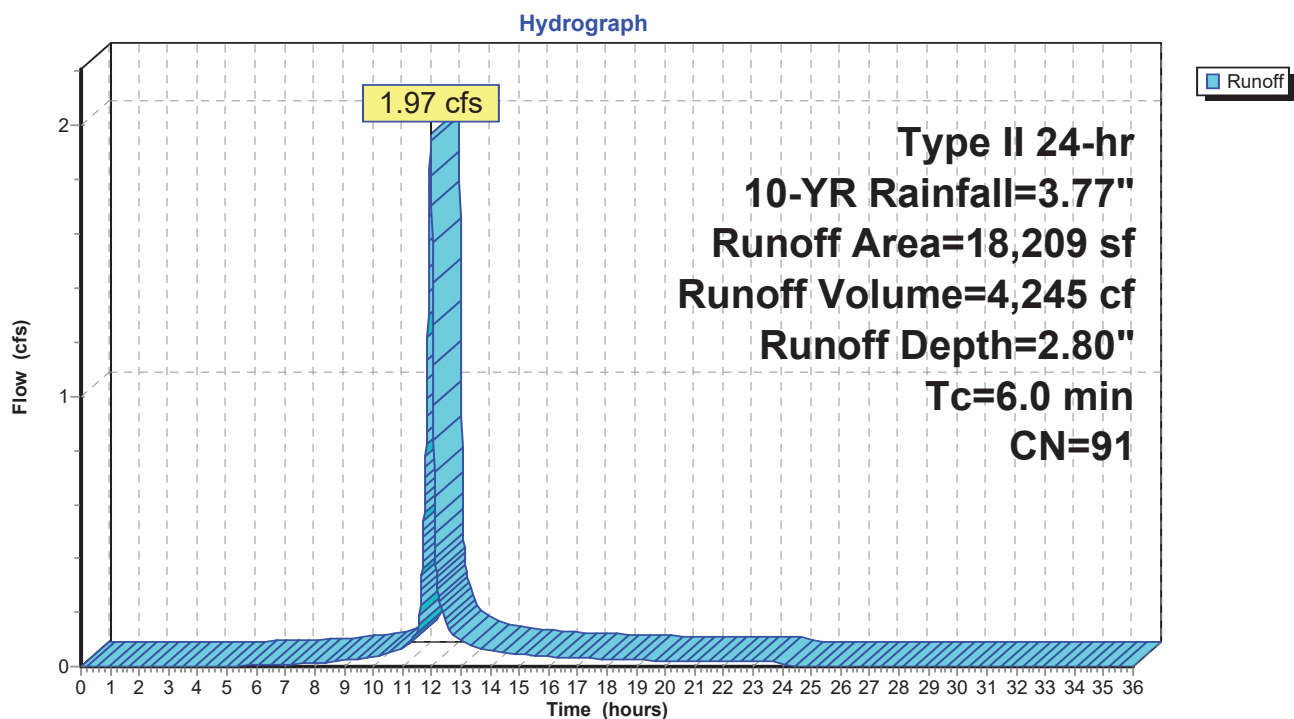
Summary for Subcatchment 5S: PRE 2B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 24

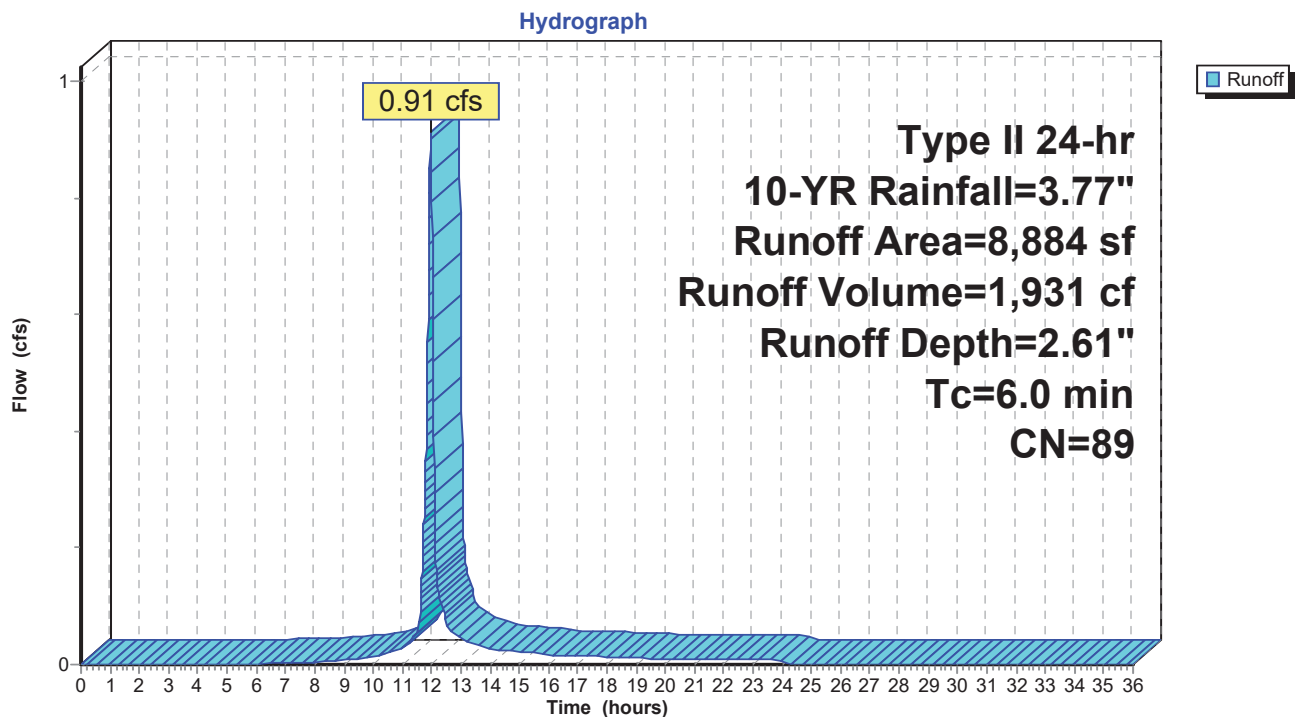
Summary for Subcatchment 6S: POST 1A-2

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 25

Summary for Subcatchment 7S: PRE 1A

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

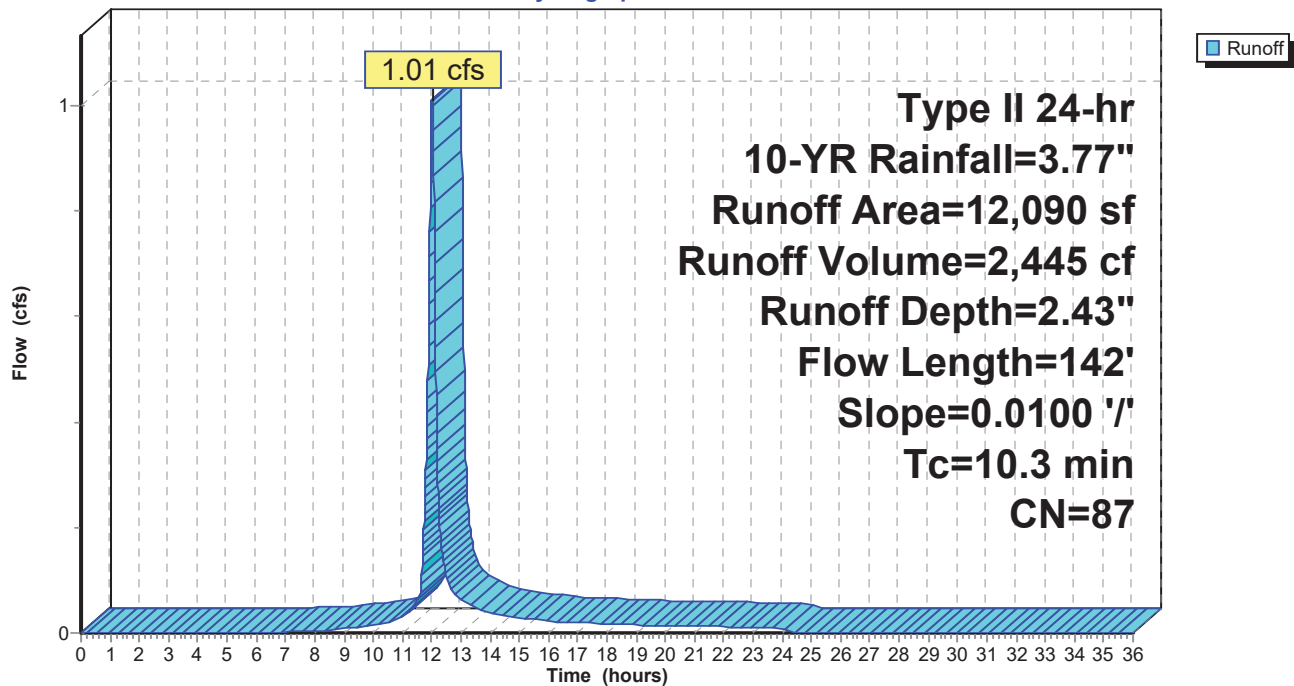
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 26

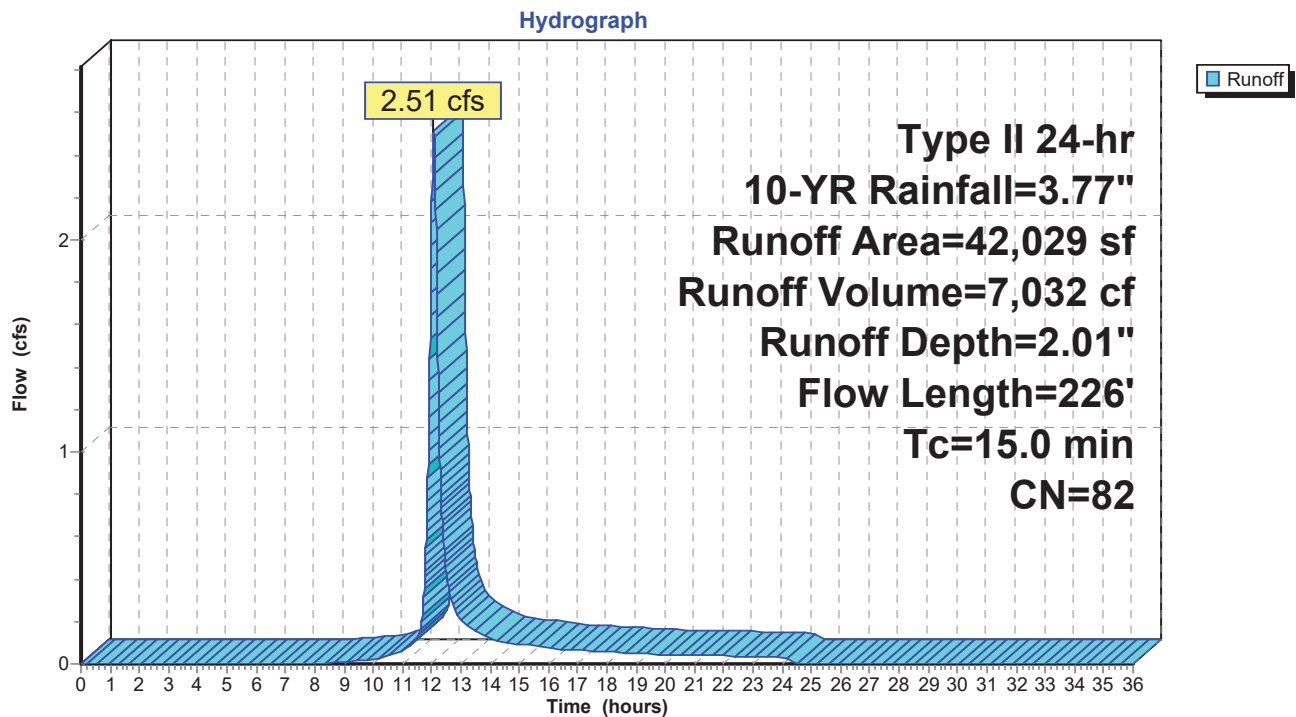
Summary for Subcatchment 8S: PRE 1B

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"

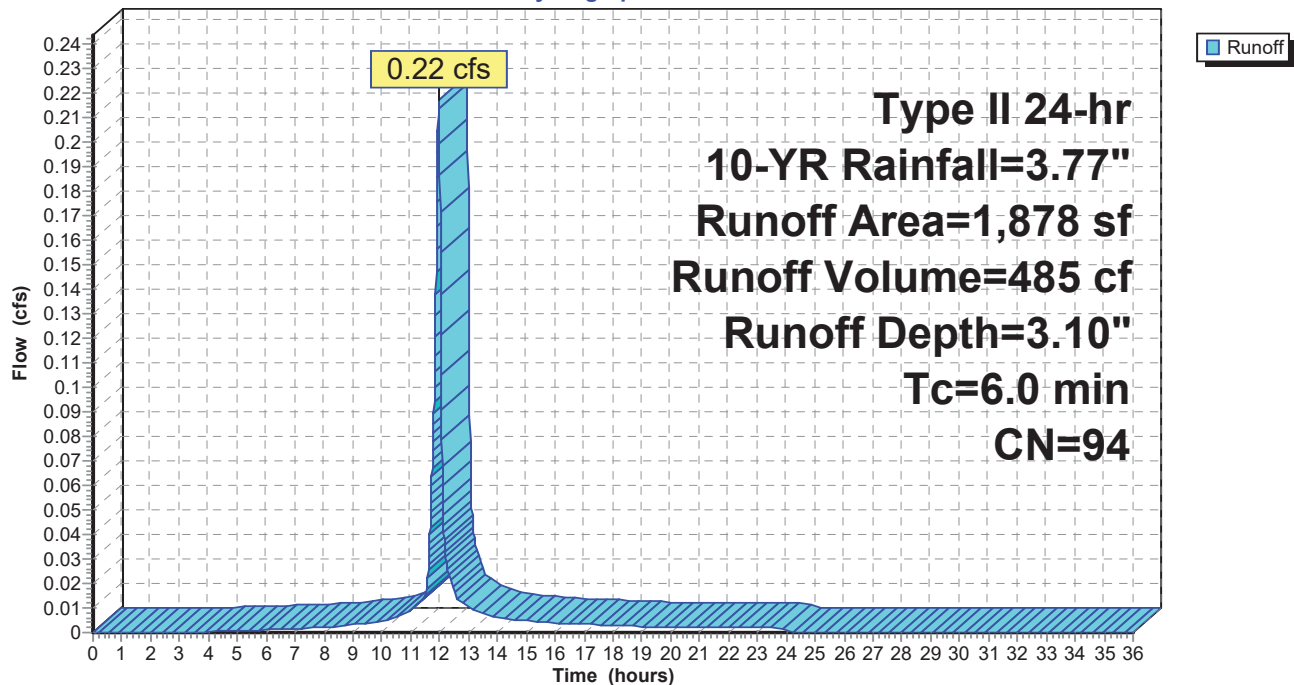
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 28

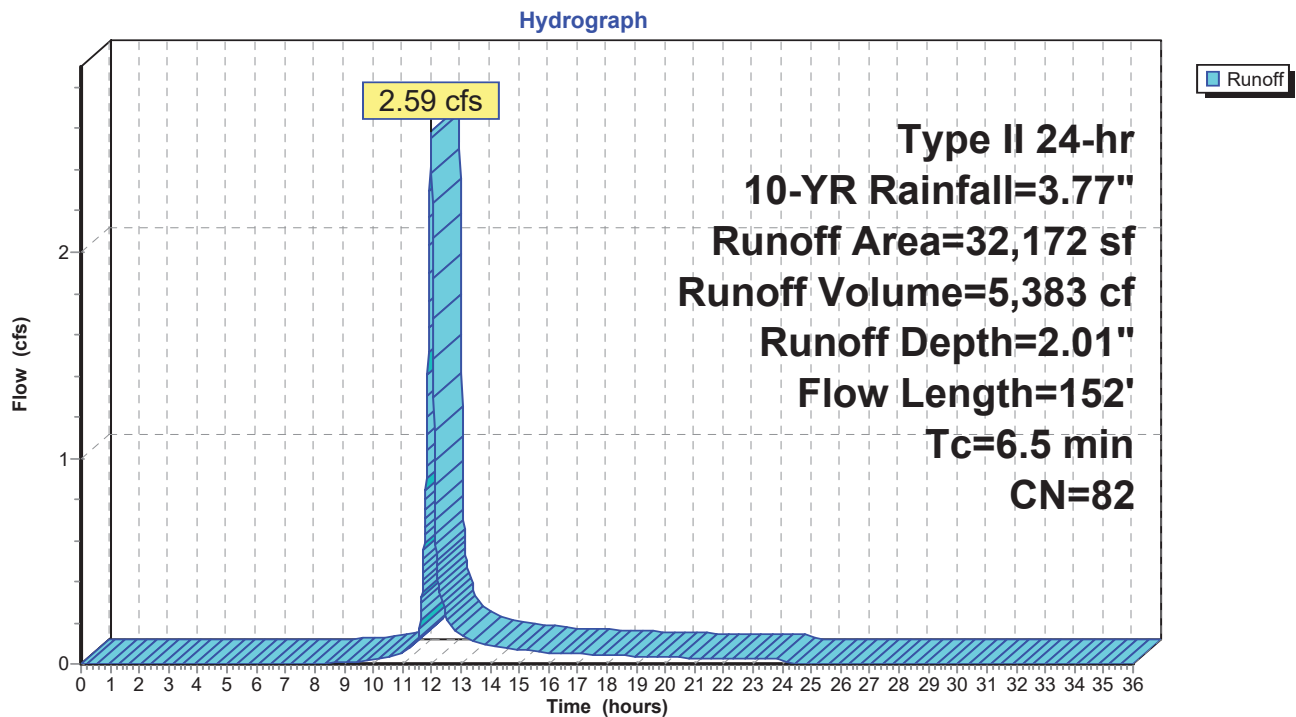
Summary for Subcatchment 10S: POST 1B

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

Summary for Subcatchment 11S: POST 1A-3

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

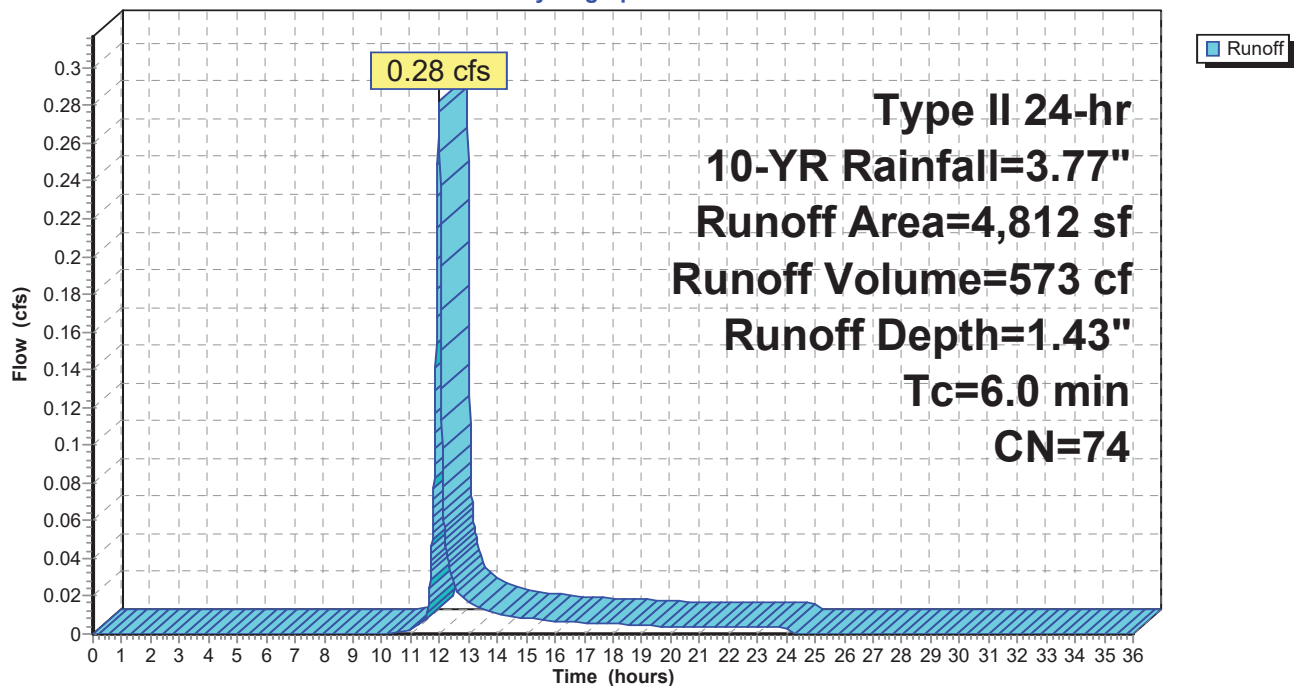
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

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"

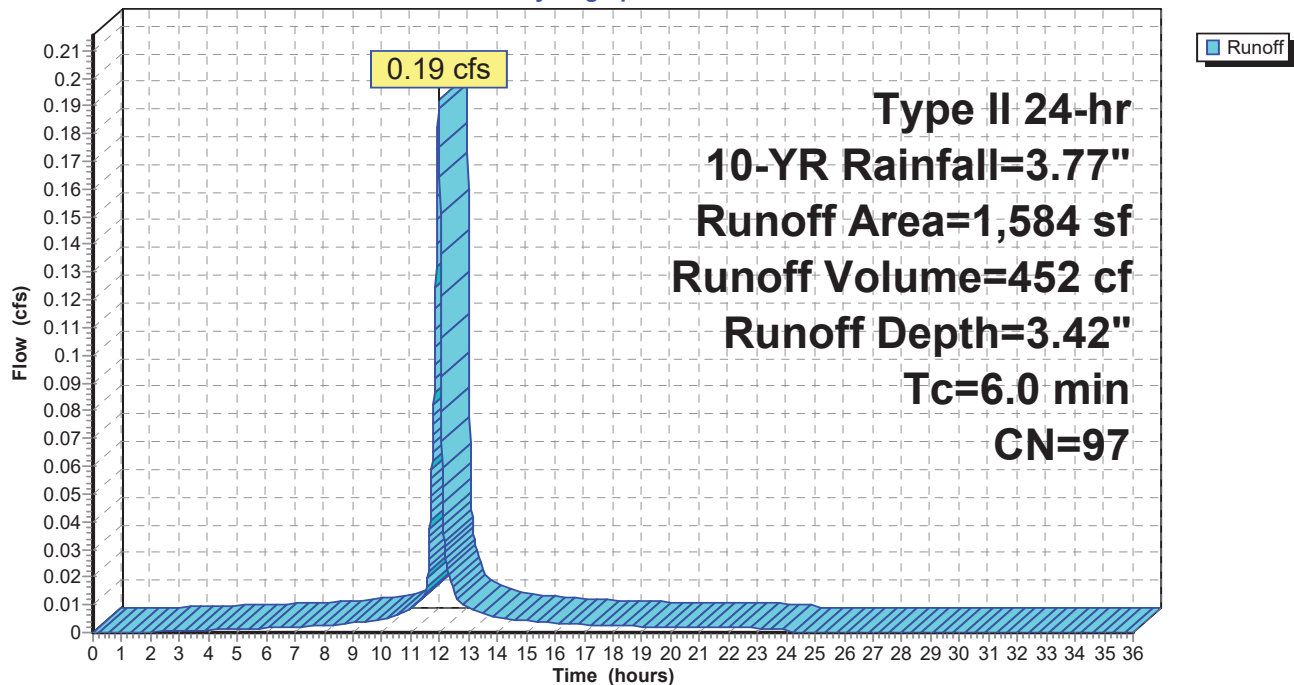
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 10-YR Rainfall=3.77"

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

Hydrograph



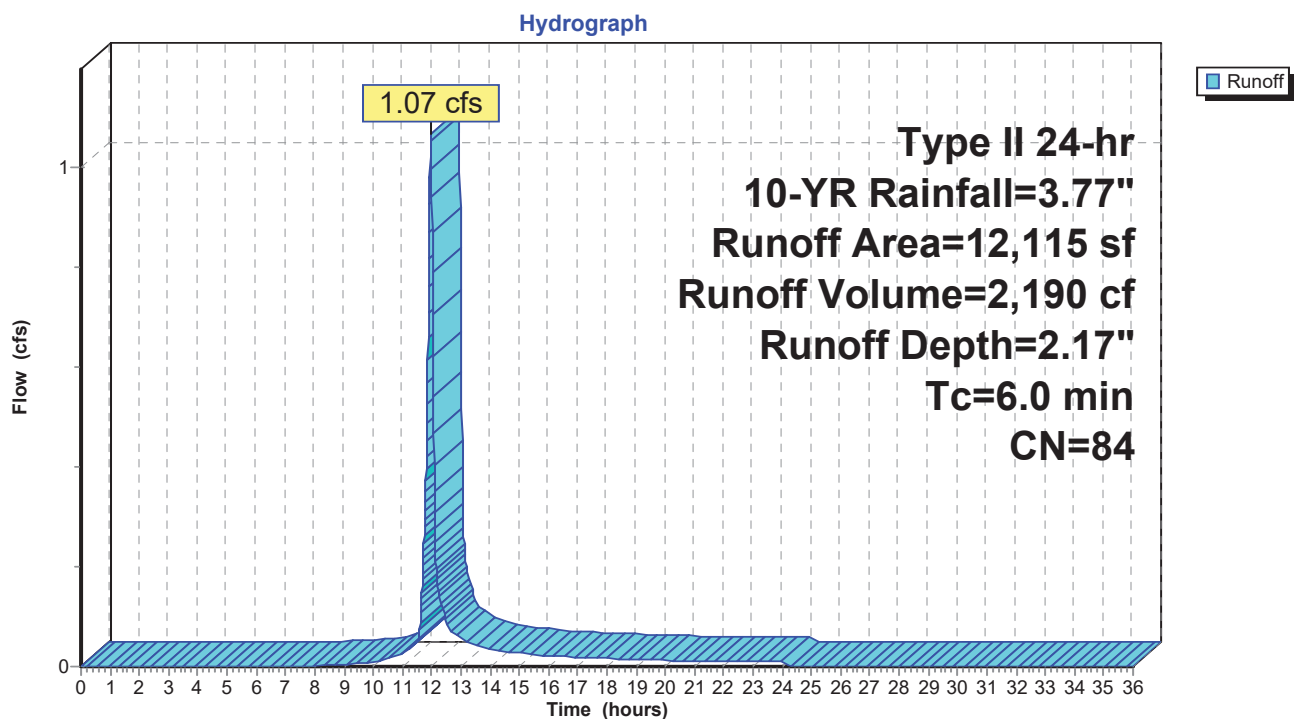
Summary for Subcatchment 16S: POST 2B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 32

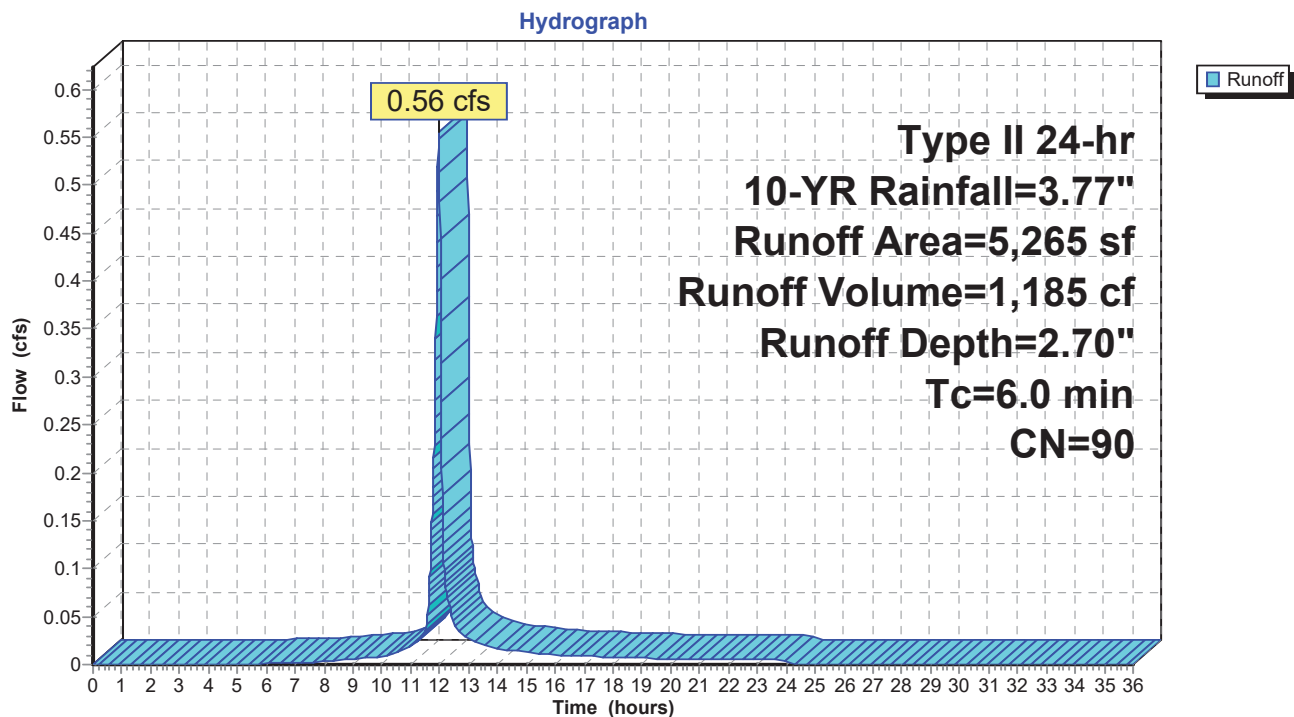
Summary for Subcatchment 19S: POST 1A-1

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

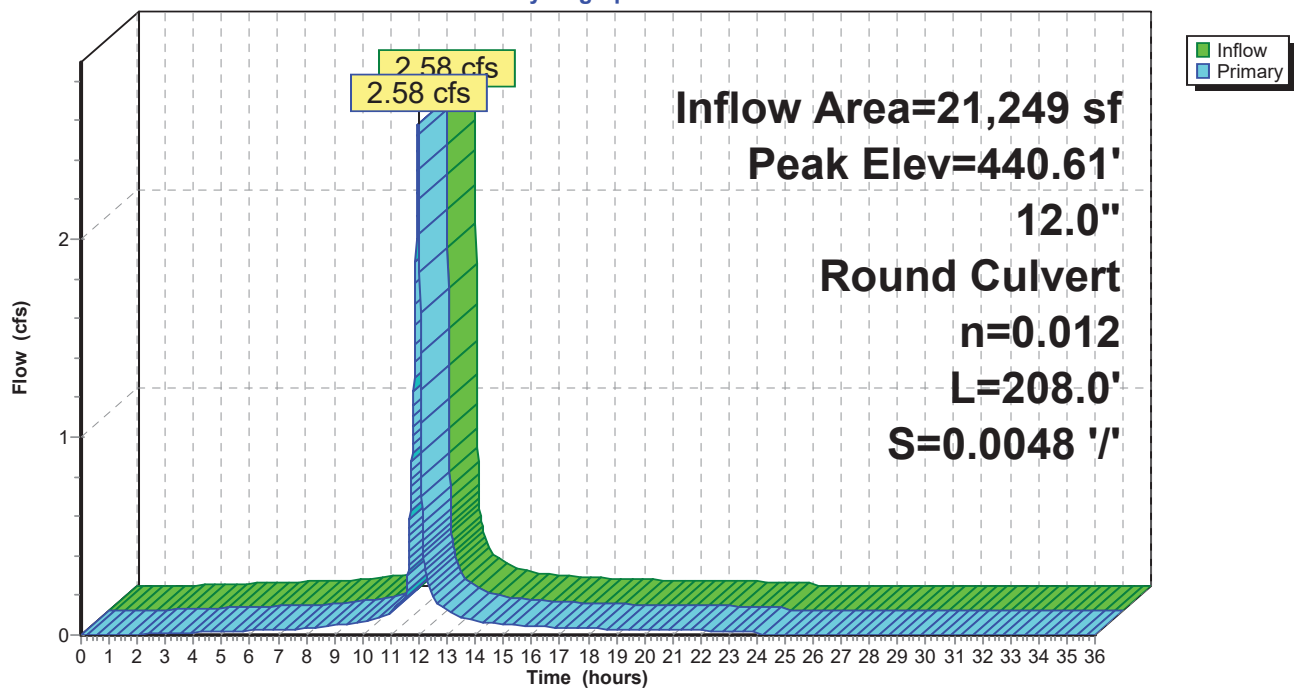
Flood Elev= 442.20'

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

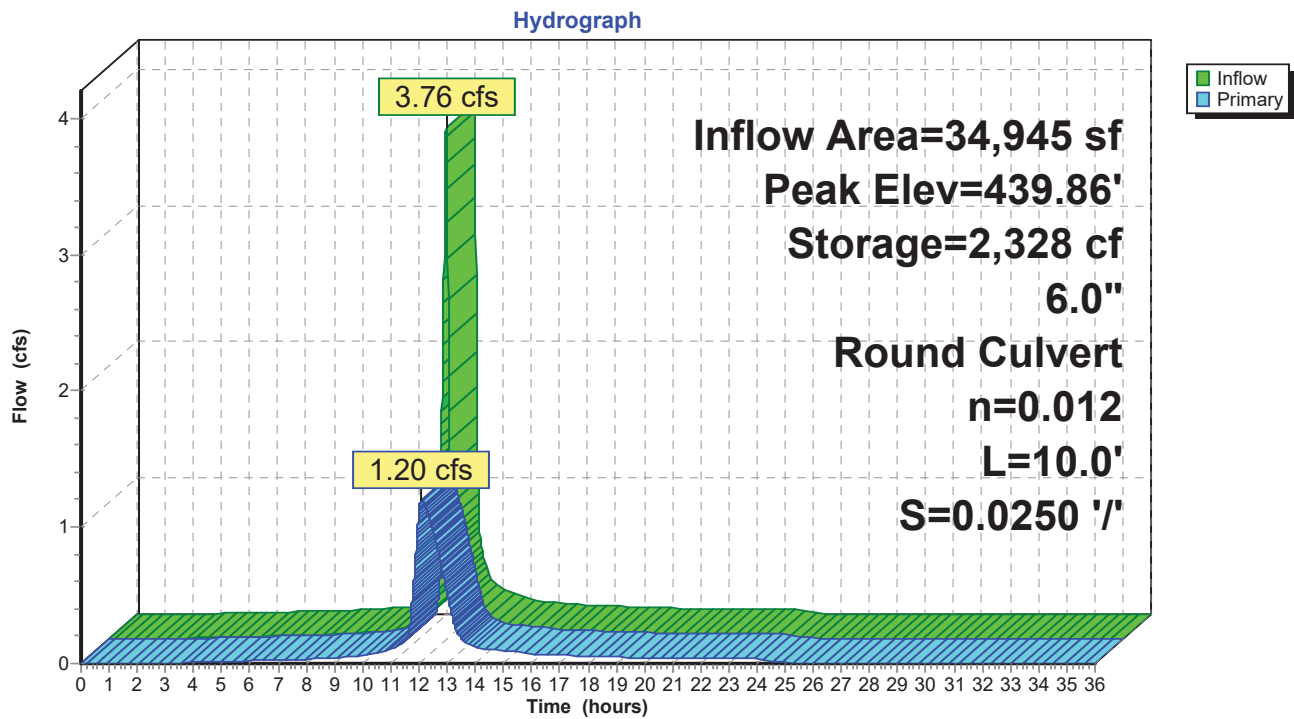
Plug-Flow detention time= 28.3 min calculated for 8,249 cf (100% of inflow)
 Center-of-Mass det. time= 28.1 min (808.0 - 779.9)

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)

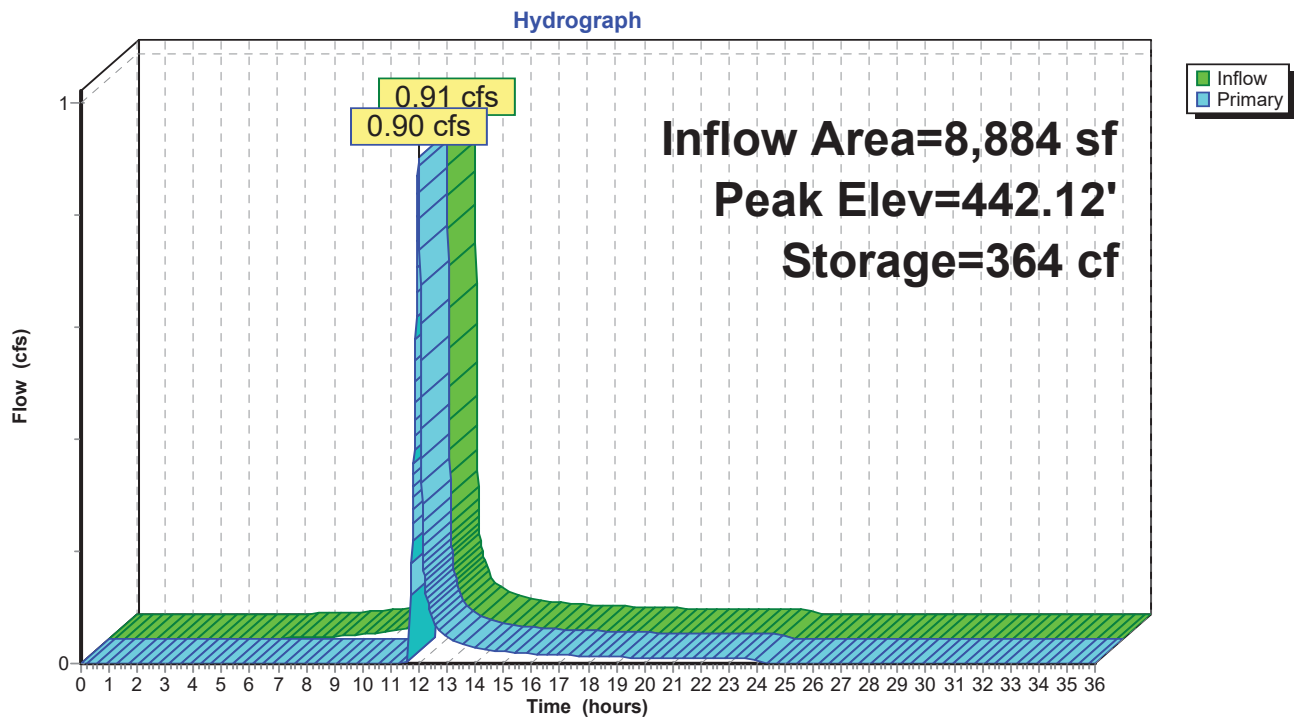
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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

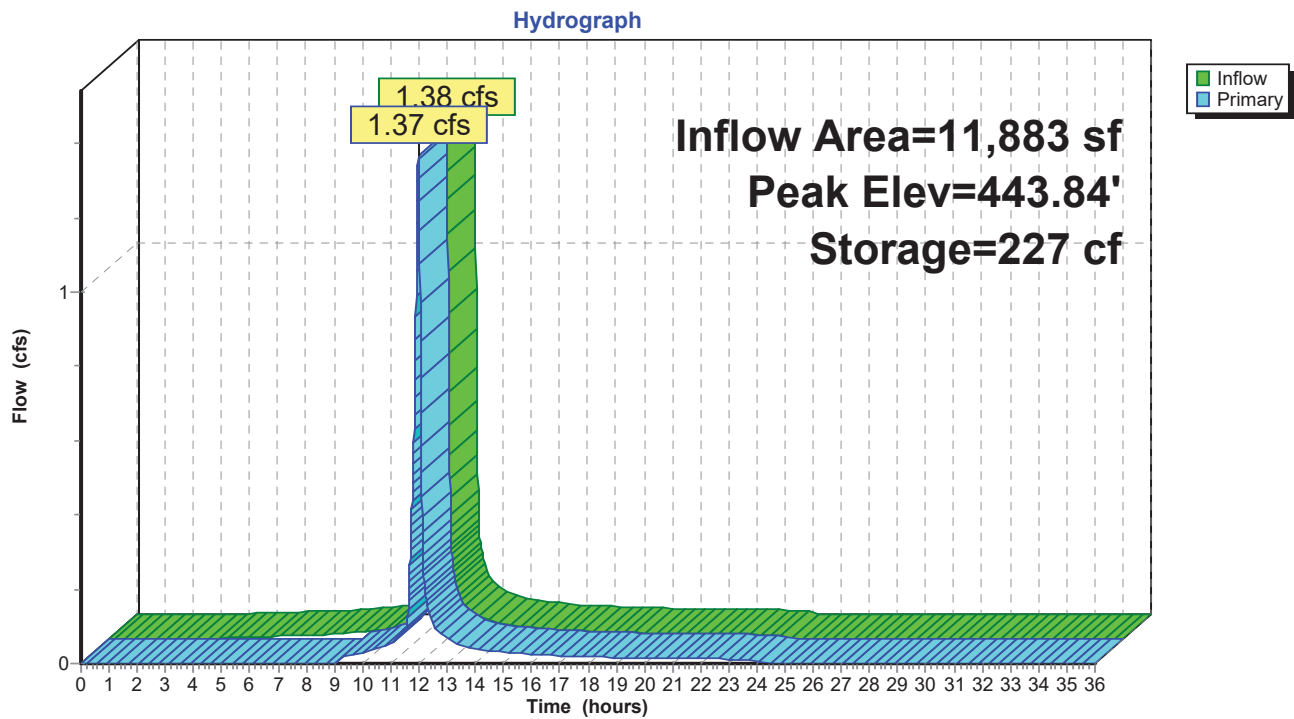
Routing by Dyn-Stor-Ind method, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
 Peak Elev= 443.84' @ 11.98 hrs Surf.Area= 731 sf Storage= 227 cf

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

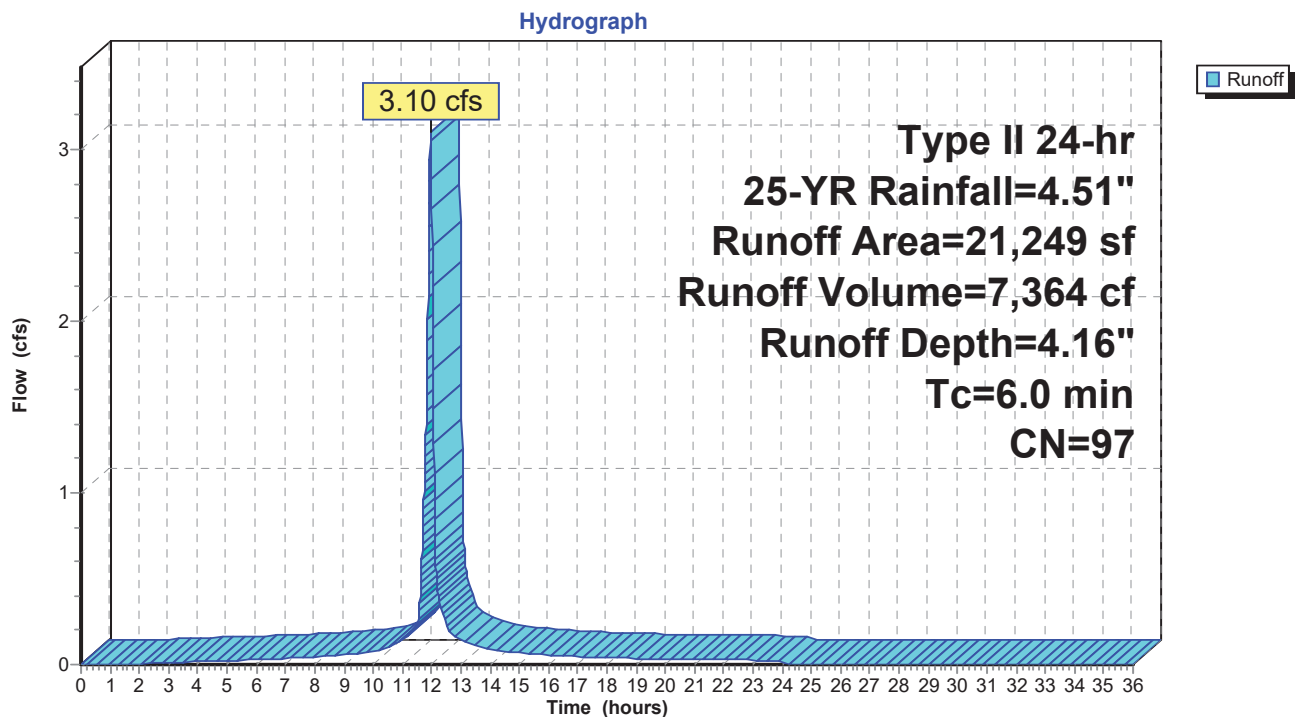
Summary for Subcatchment 3S: POST 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 41

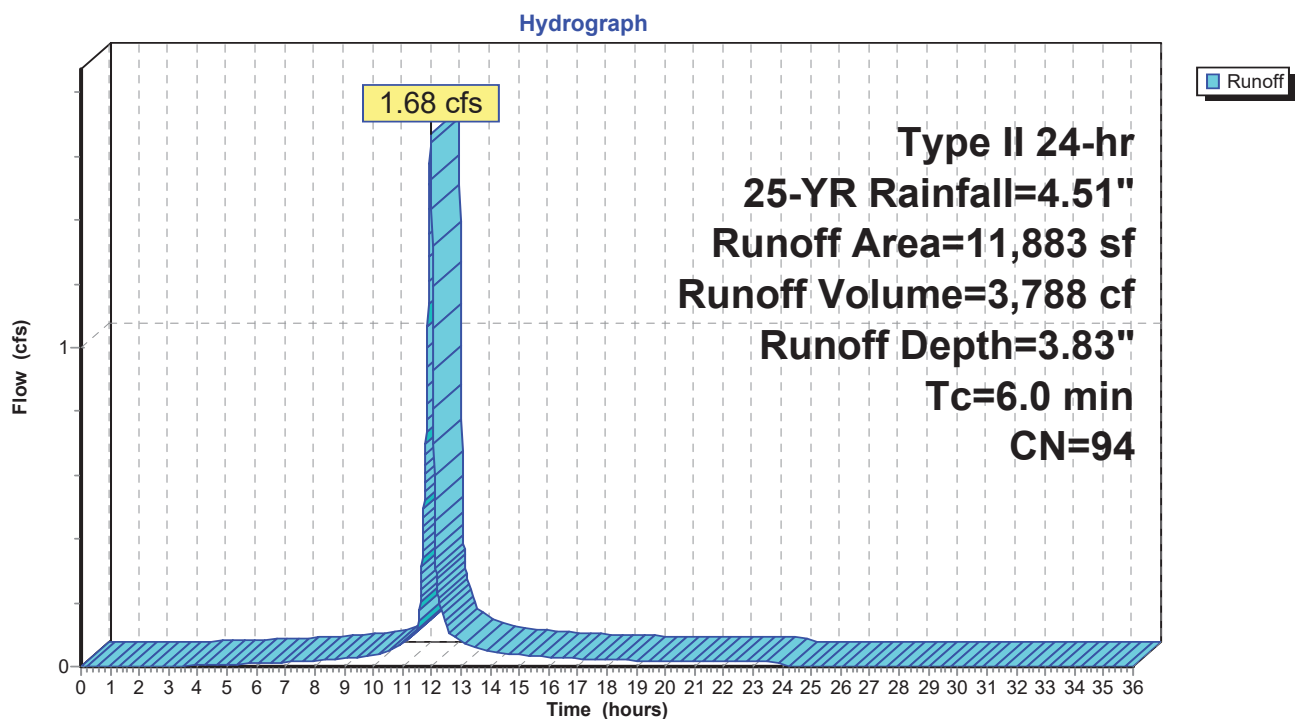
Summary for Subcatchment 4S: PRE 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 42

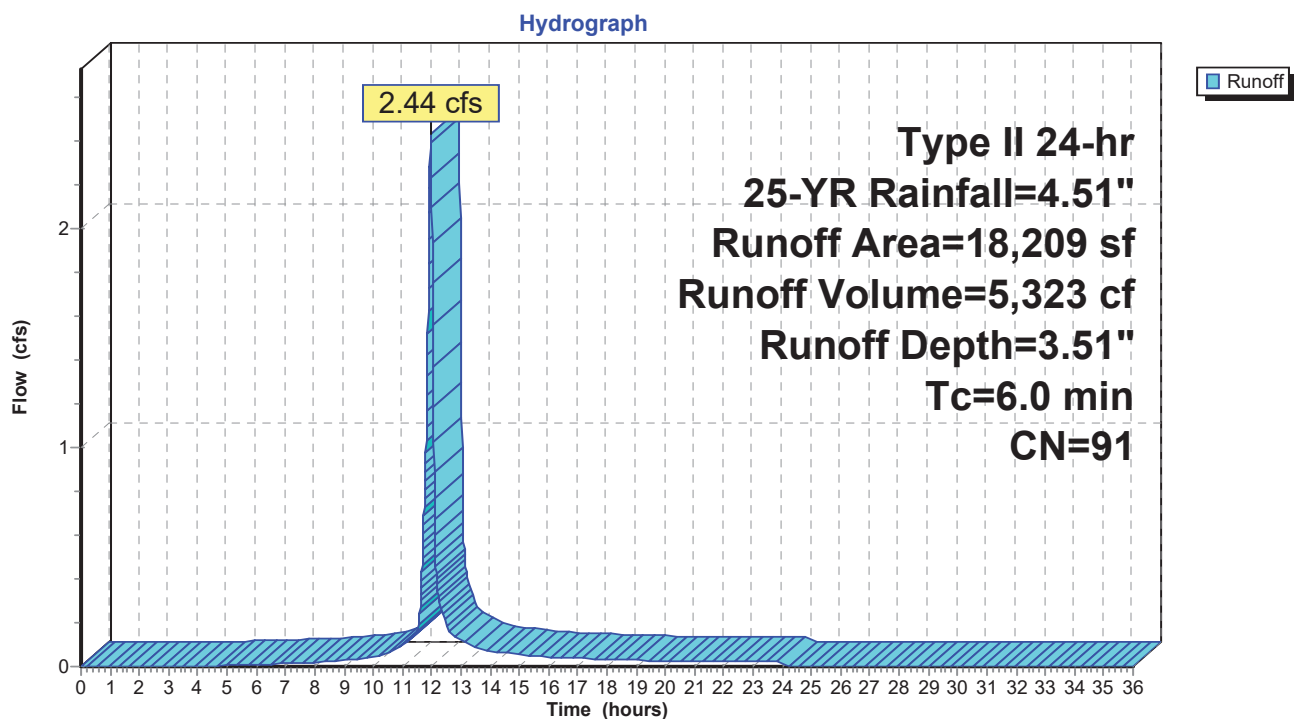
Summary for Subcatchment 5S: PRE 2B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 43

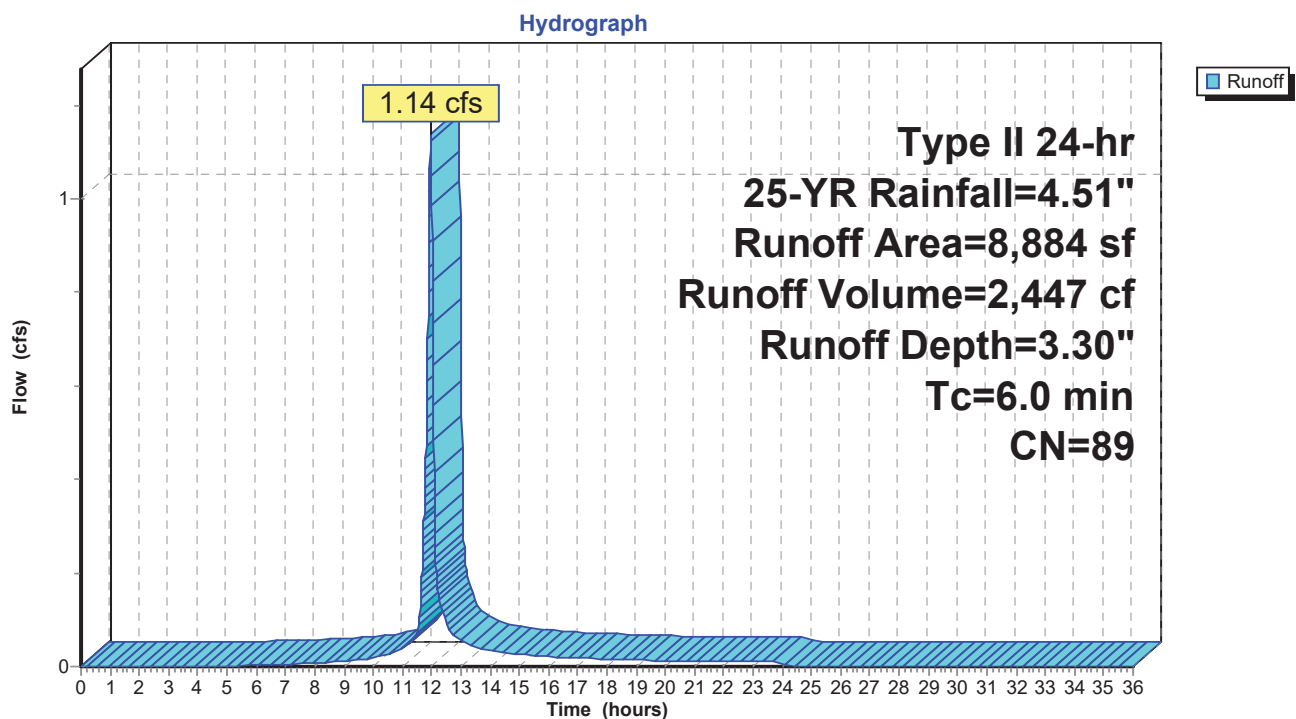
Summary for Subcatchment 6S: POST 1A-2

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 44

Summary for Subcatchment 7S: PRE 1A

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

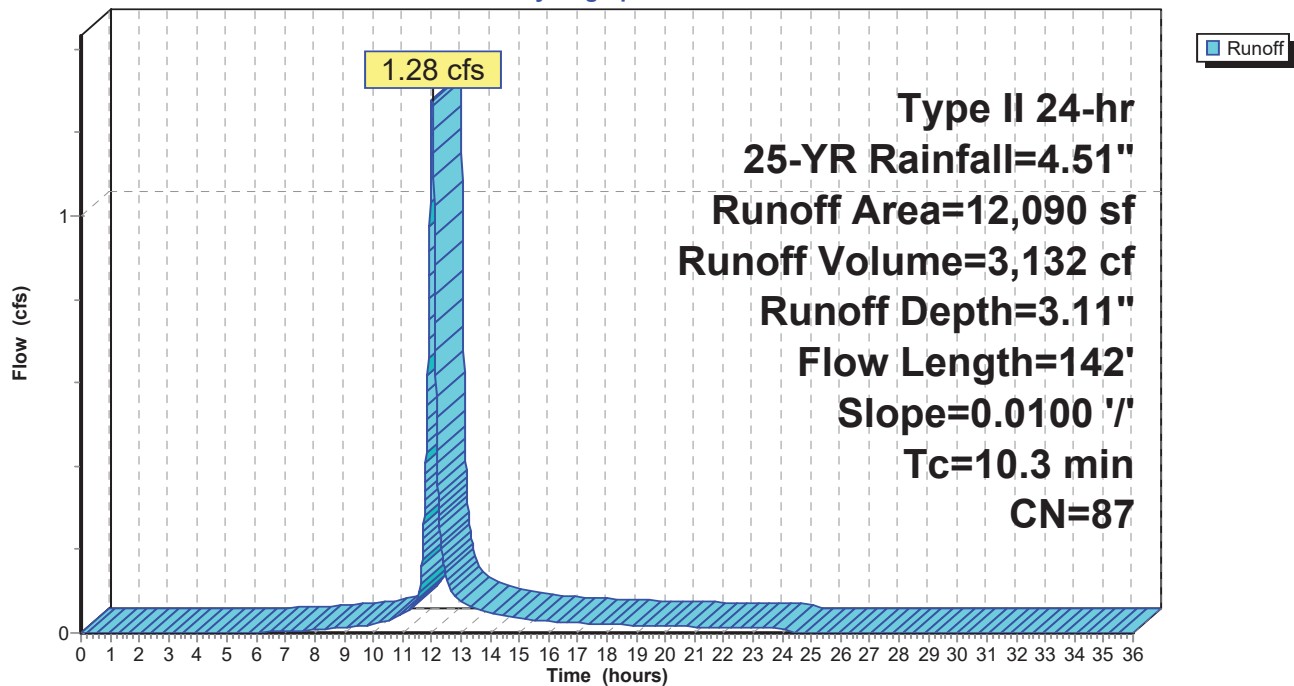
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 45

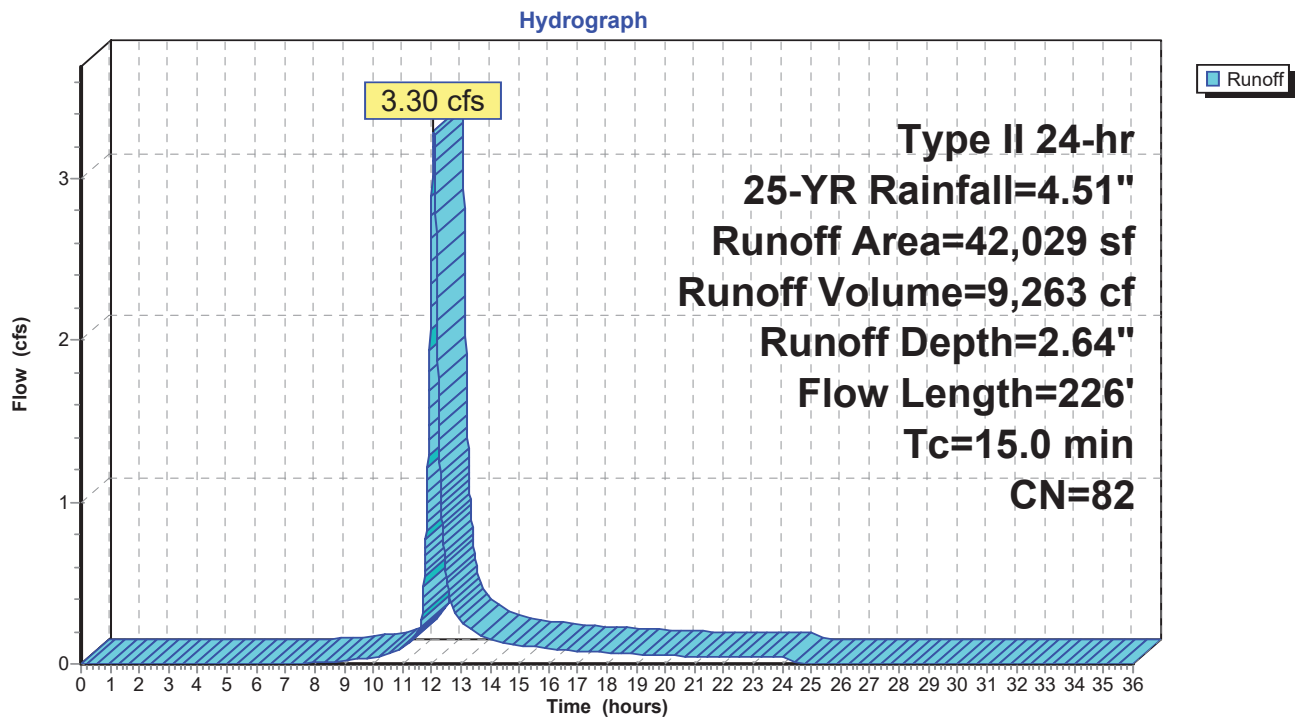
Summary for Subcatchment 8S: PRE 1B

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

Summary for Subcatchment 9S: PRE 3

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

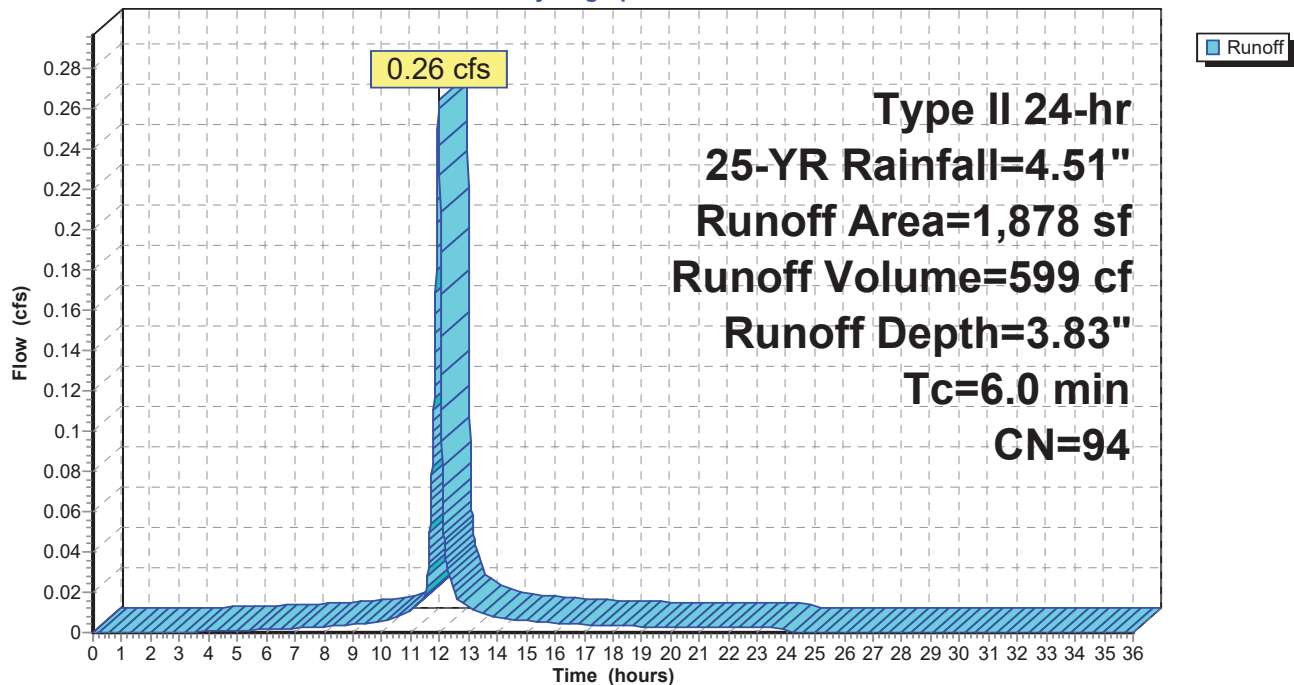
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 47

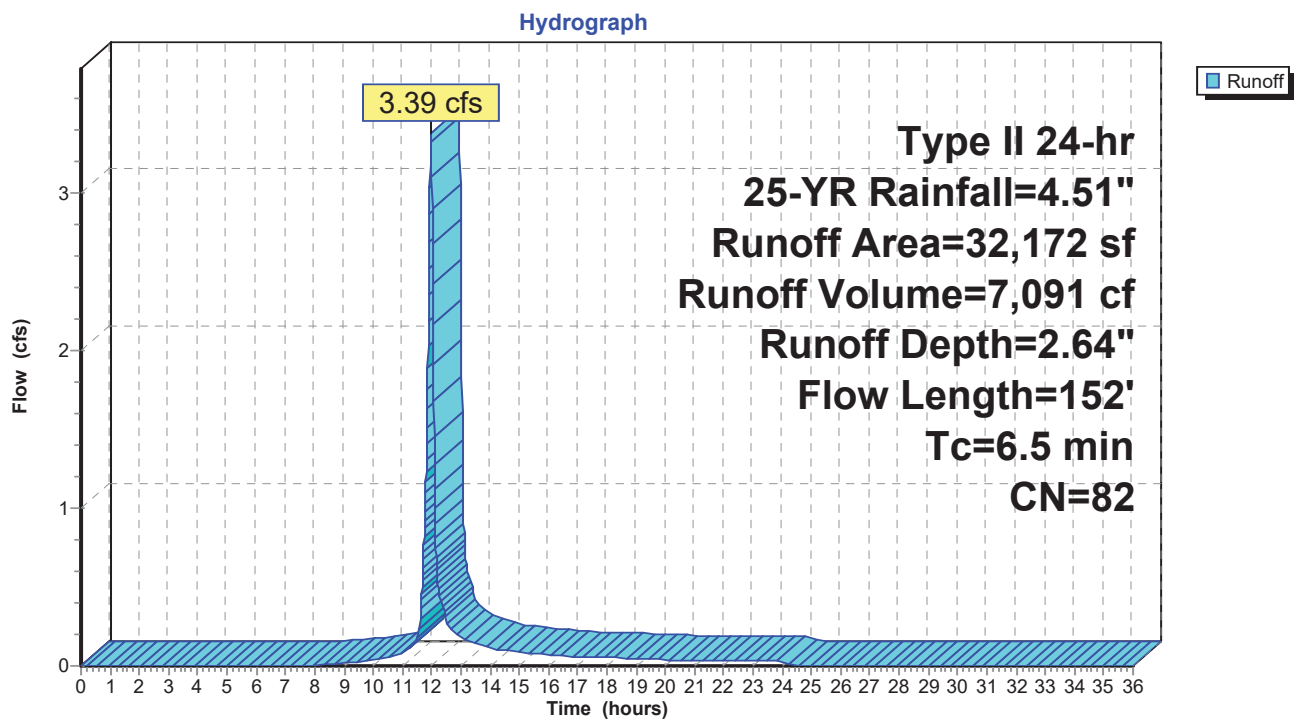
Summary for Subcatchment 10S: POST 1B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 48

Summary for Subcatchment 11S: POST 1A-3

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

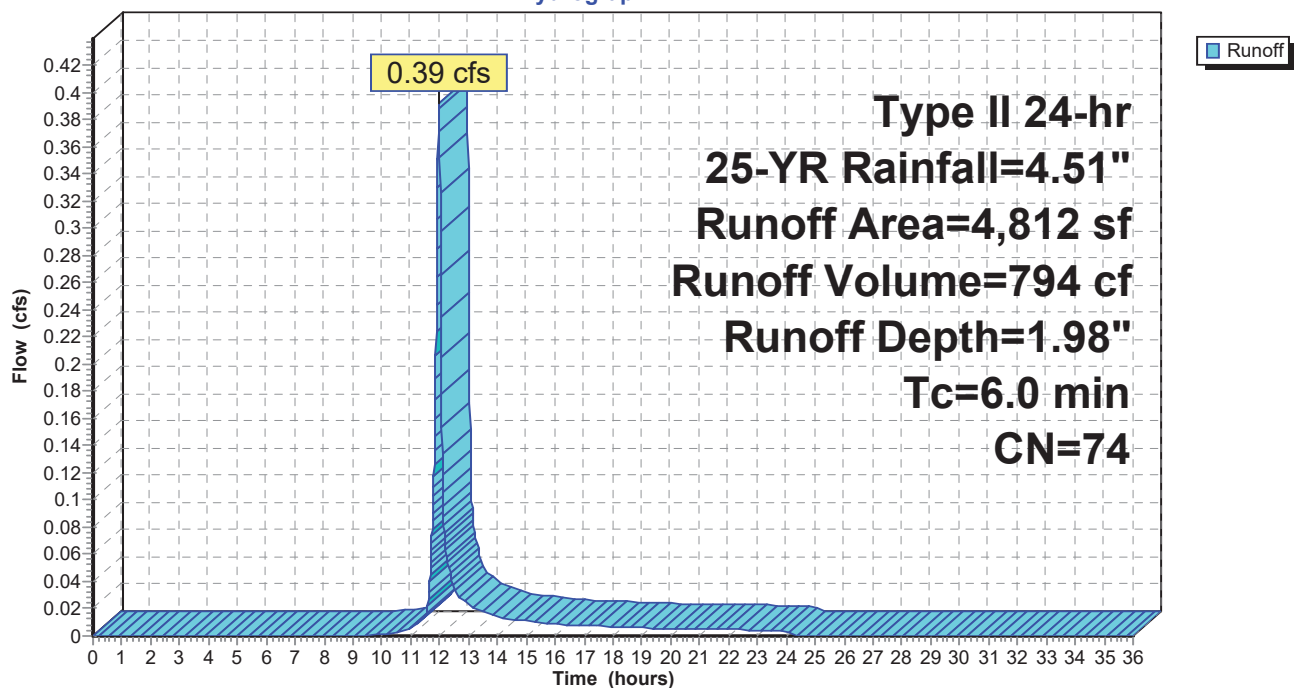
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

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"

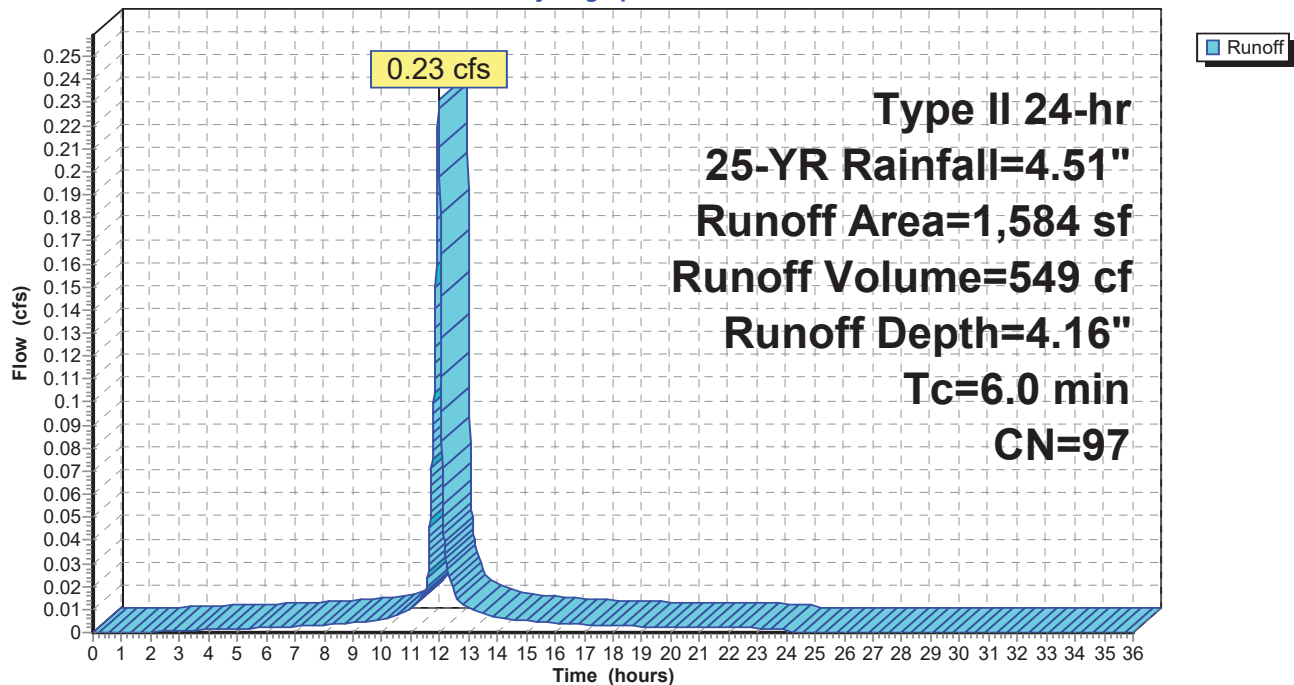
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 25-YR Rainfall=4.51"

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



Summary for Subcatchment 16S: POST 2B

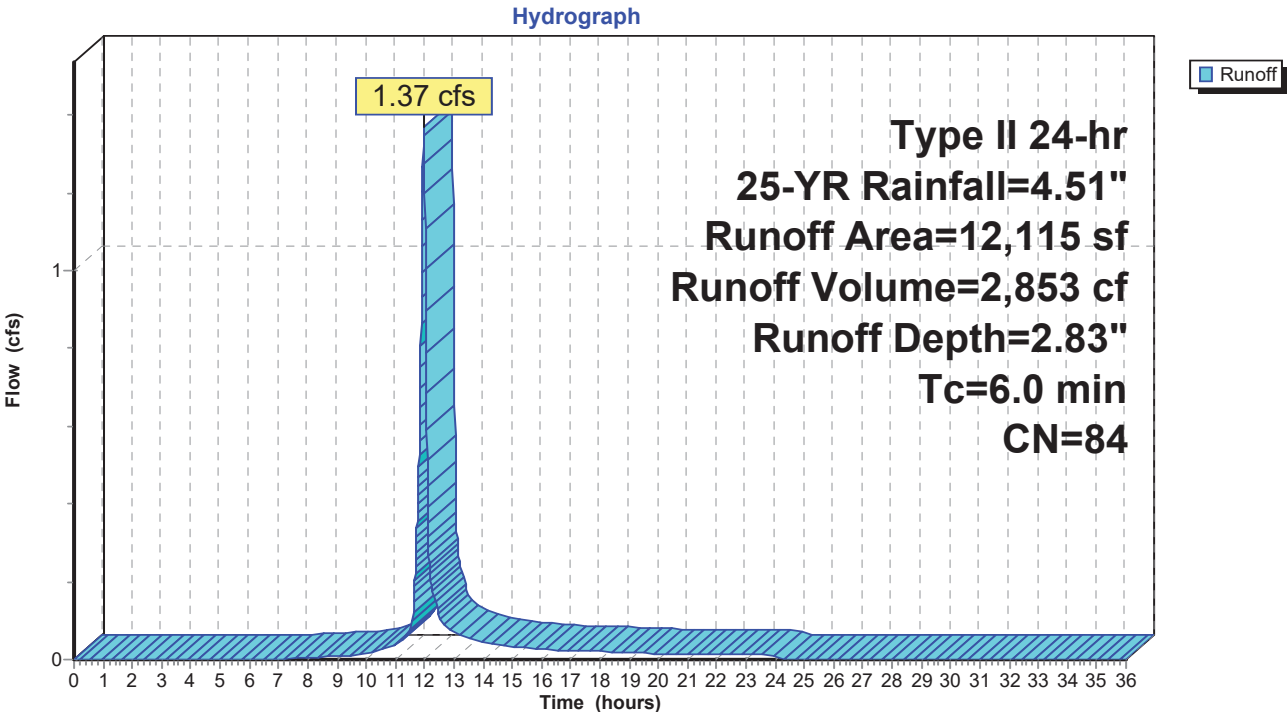
Runoff = 1.37 cfs @ 11.97 hrs, Volume= 2,853 cf, Depth= 2.83"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 51

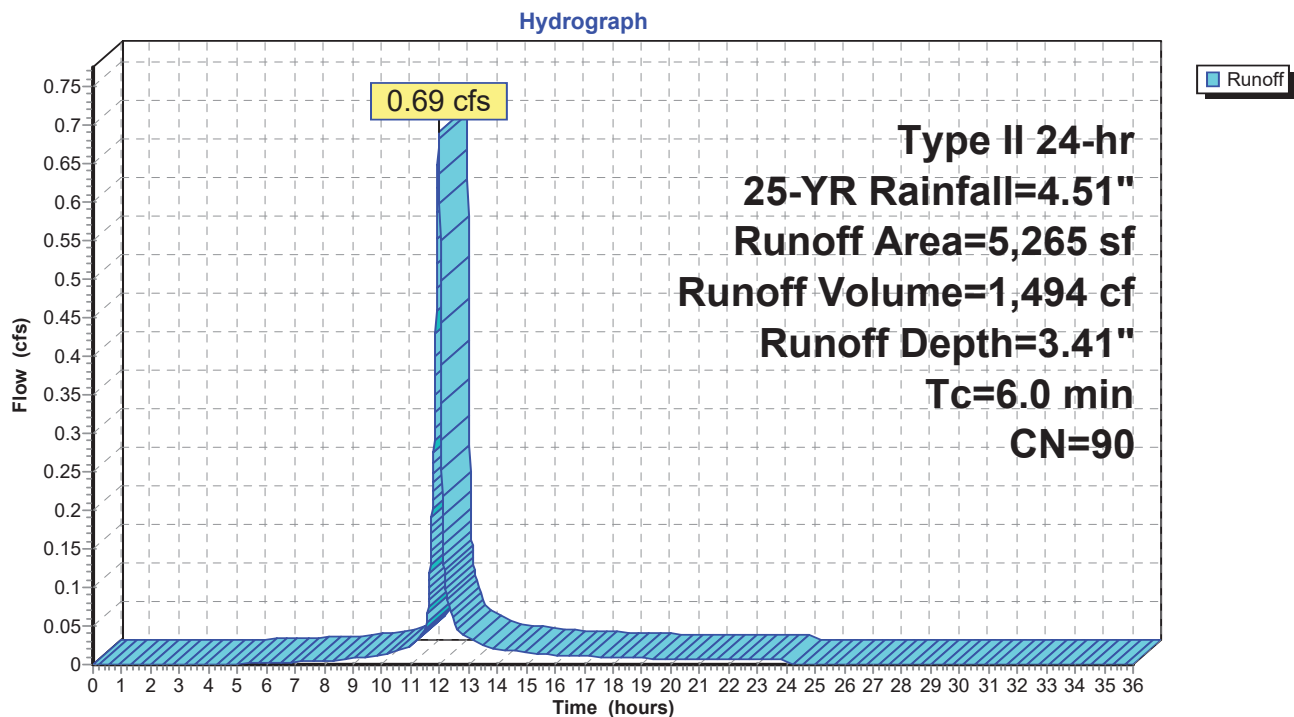
Summary for Subcatchment 19S: POST 1A-1

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

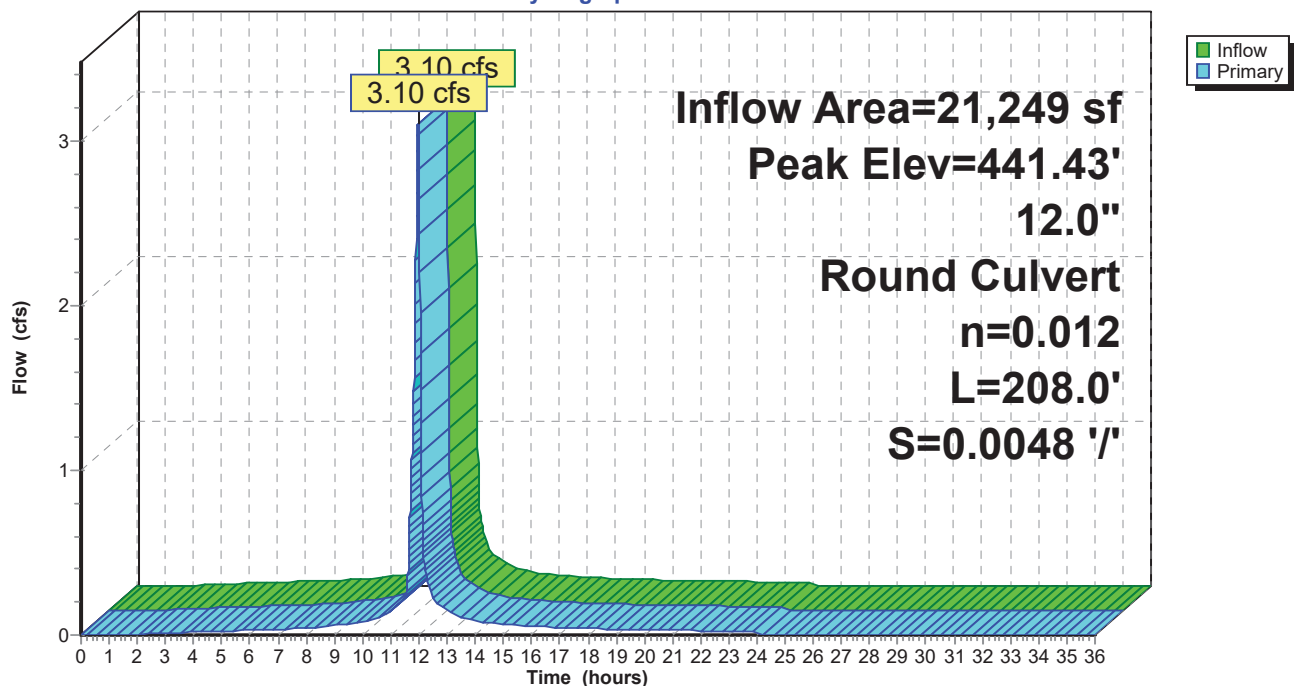
Flood Elev= 442.20'

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

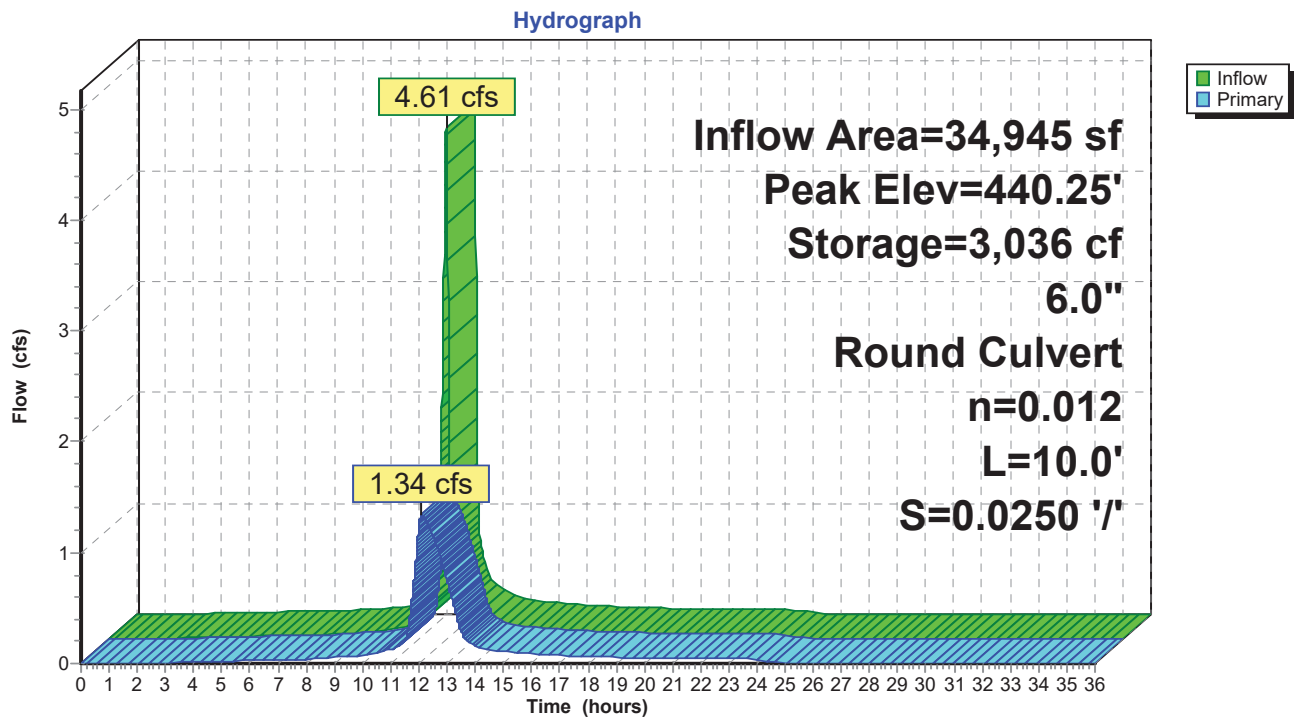
Plug-Flow detention time= 29.1 min calculated for 10,292 cf (100% of inflow)
 Center-of-Mass det. time= 28.8 min (804.4 - 775.6)

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)

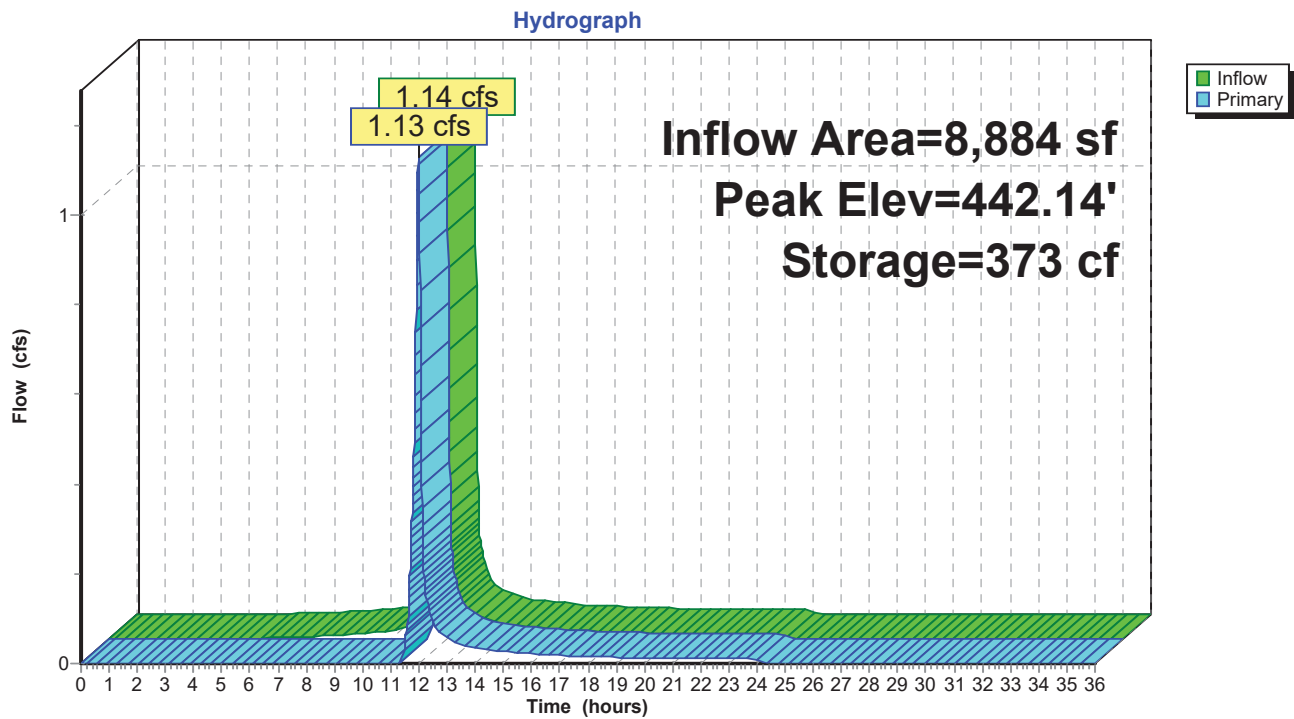
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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 ' /' 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

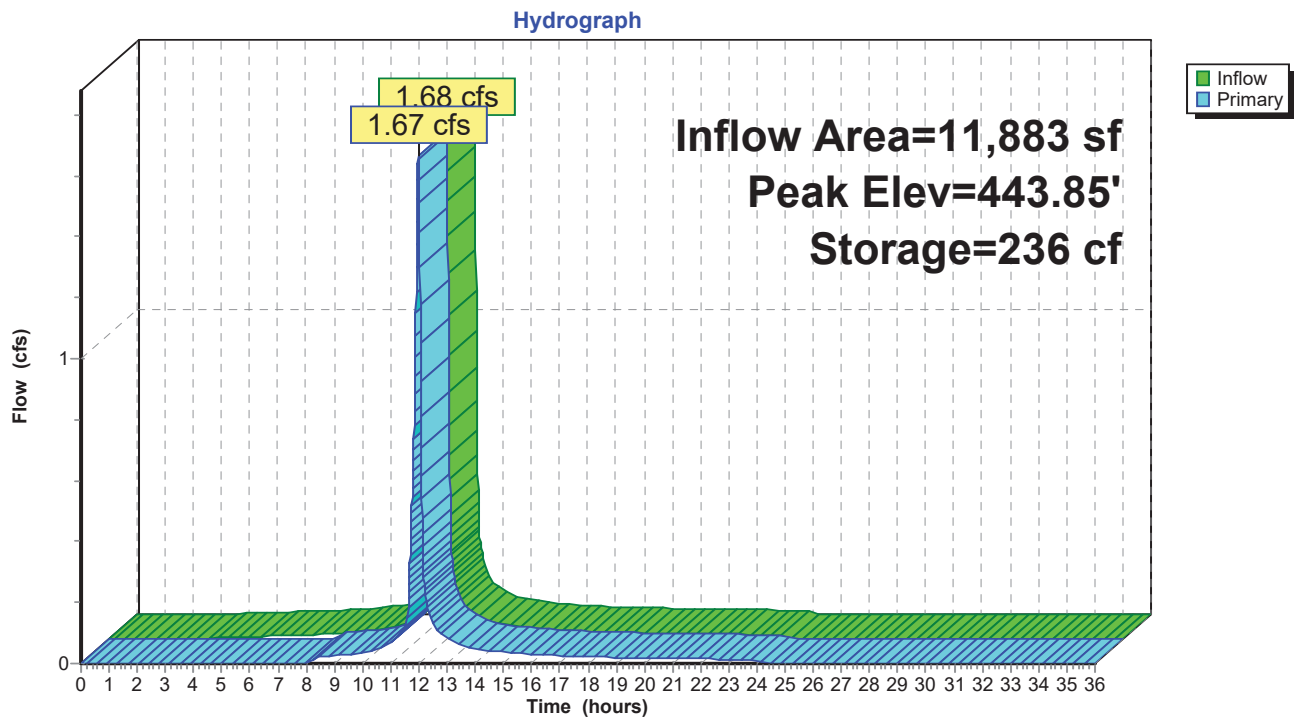
Plug-Flow detention time= 45.5 min calculated for 3,622 cf (96% of inflow)
 Center-of-Mass det. time= 19.5 min (792.5 - 773.0)

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 59

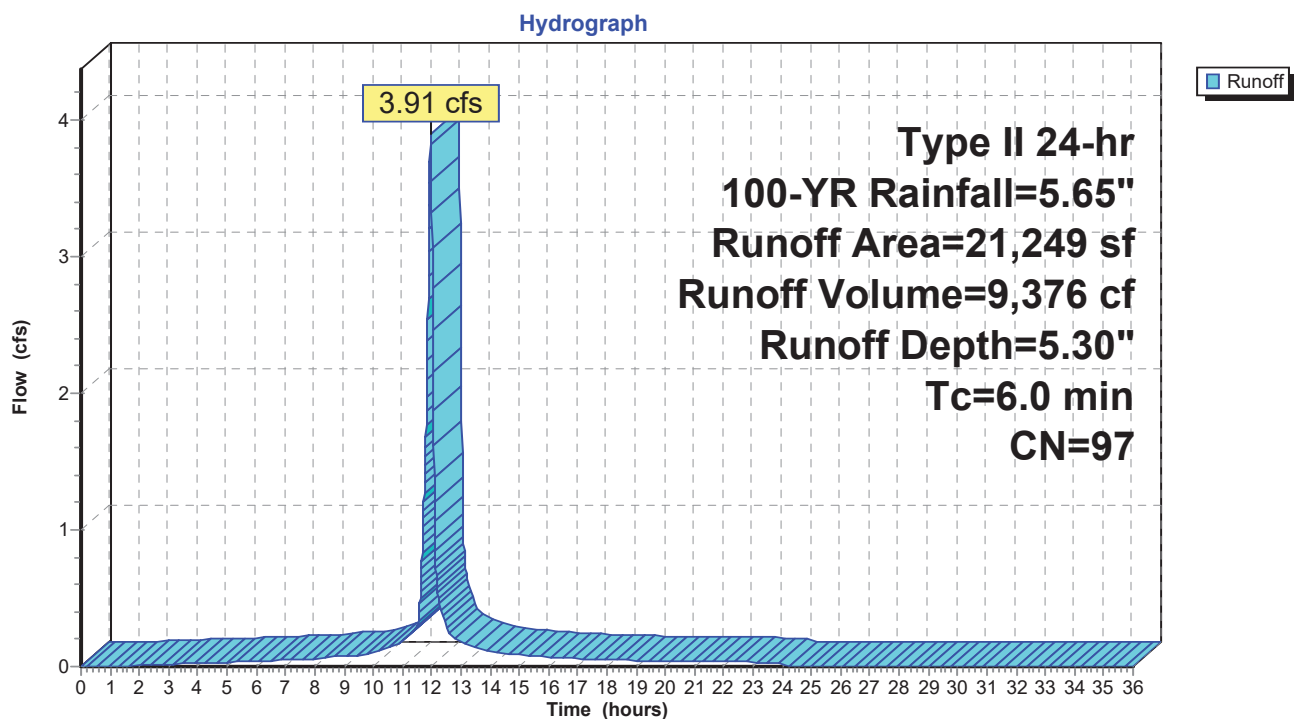
Summary for Subcatchment 3S: POST 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 60

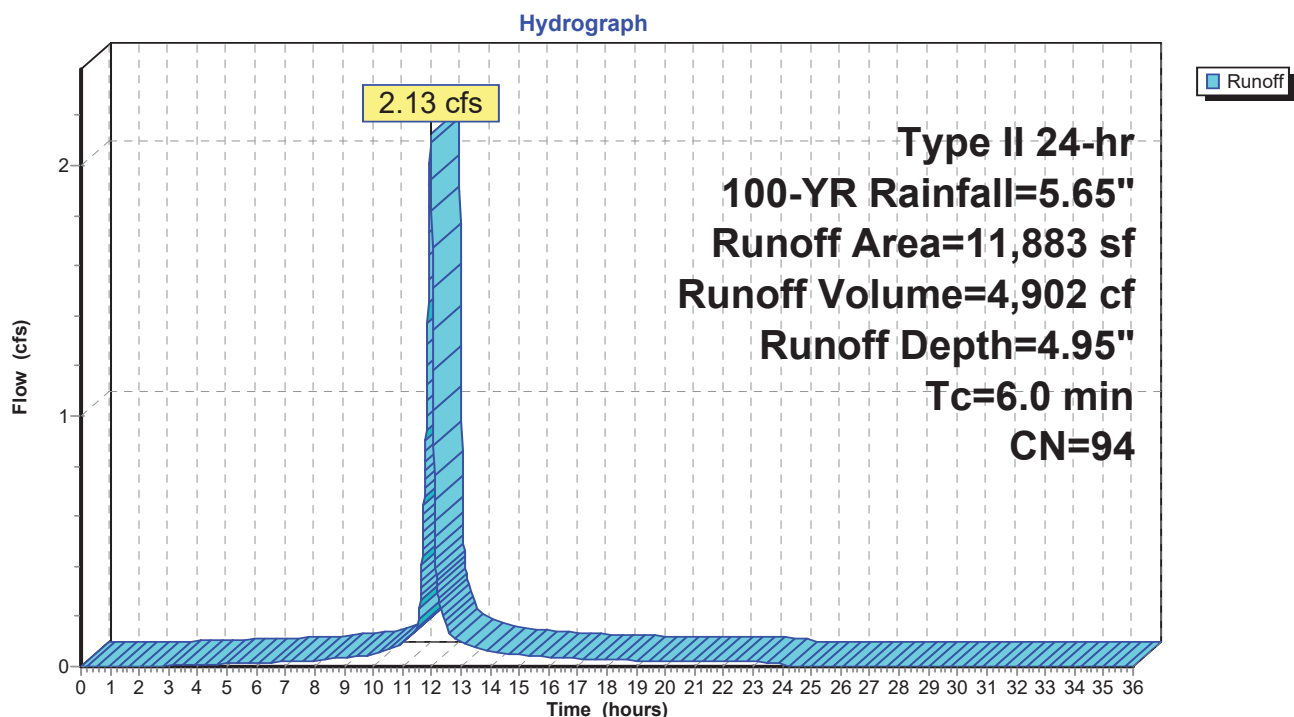
Summary for Subcatchment 4S: PRE 2A

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 61

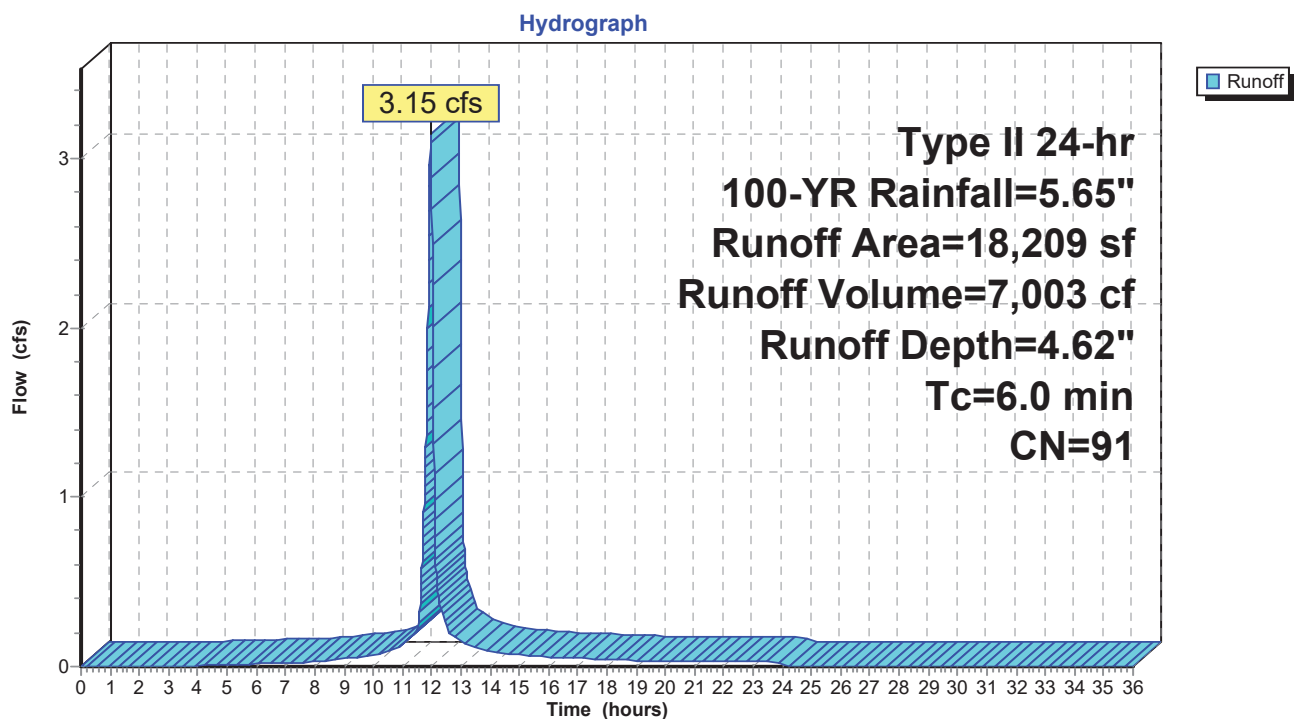
Summary for Subcatchment 5S: PRE 2B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 62

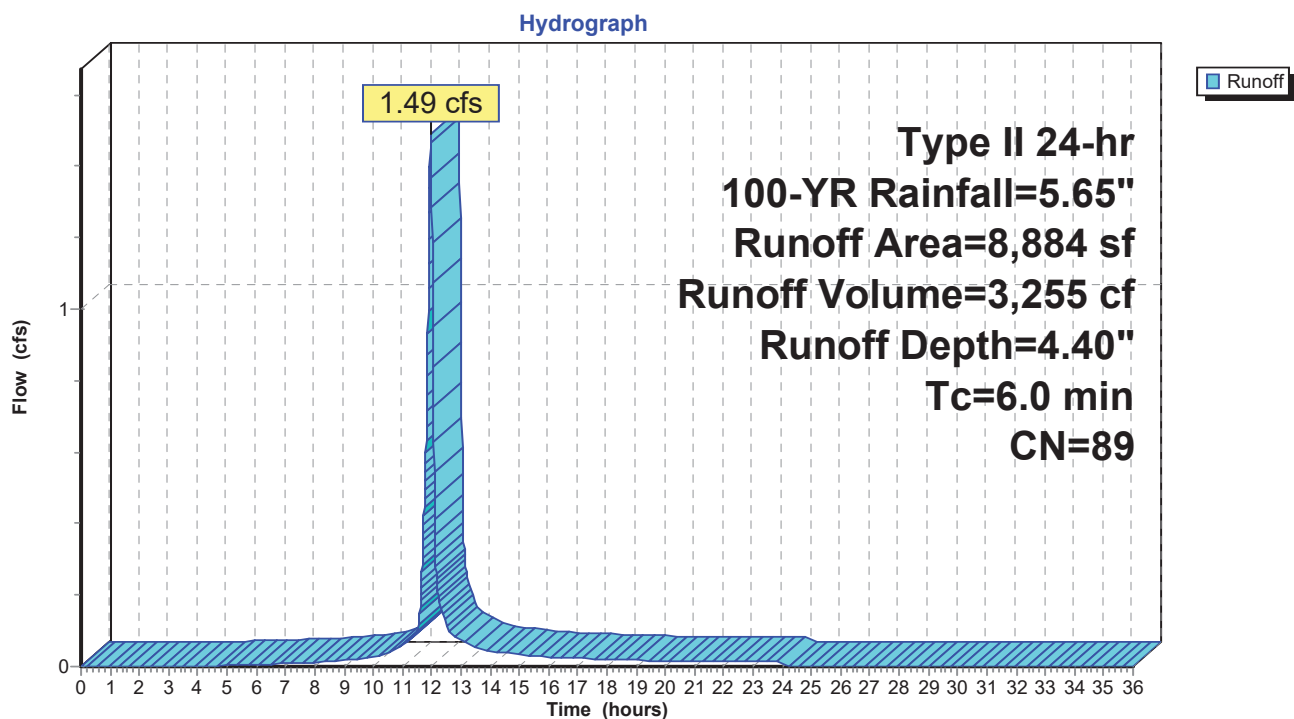
Summary for Subcatchment 6S: POST 1A-2

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 63

Summary for Subcatchment 7S: PRE 1A

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

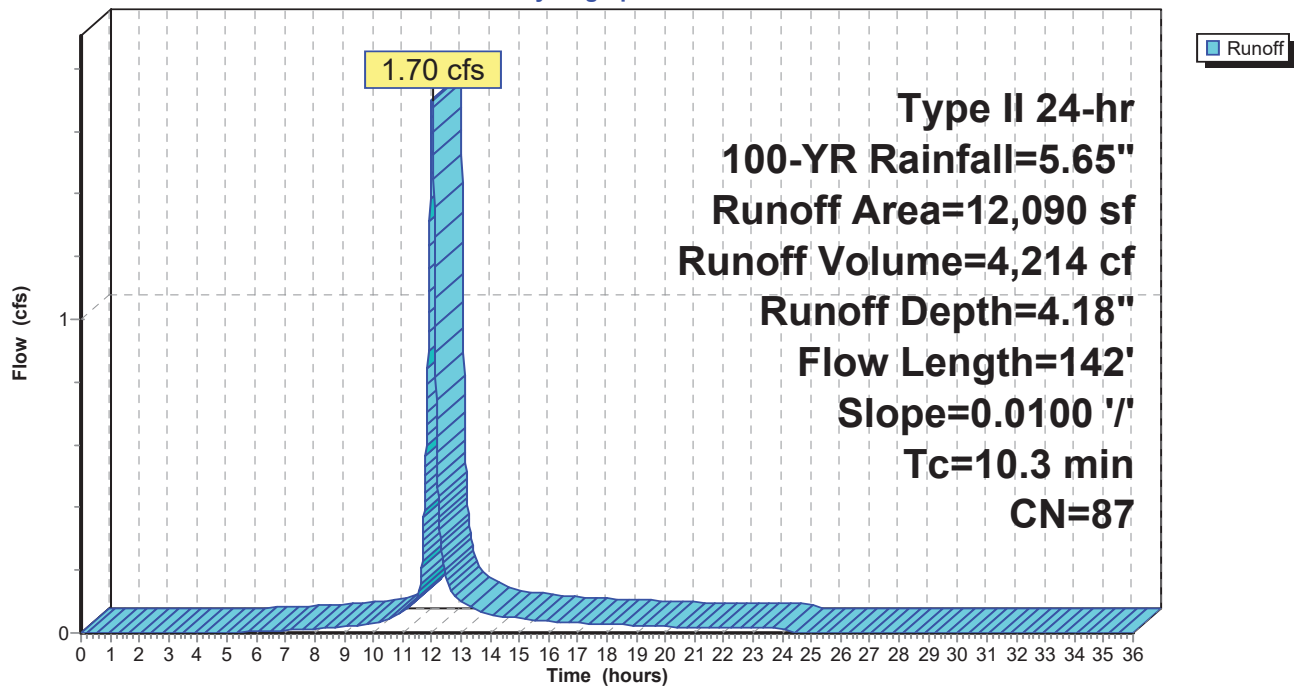
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 64

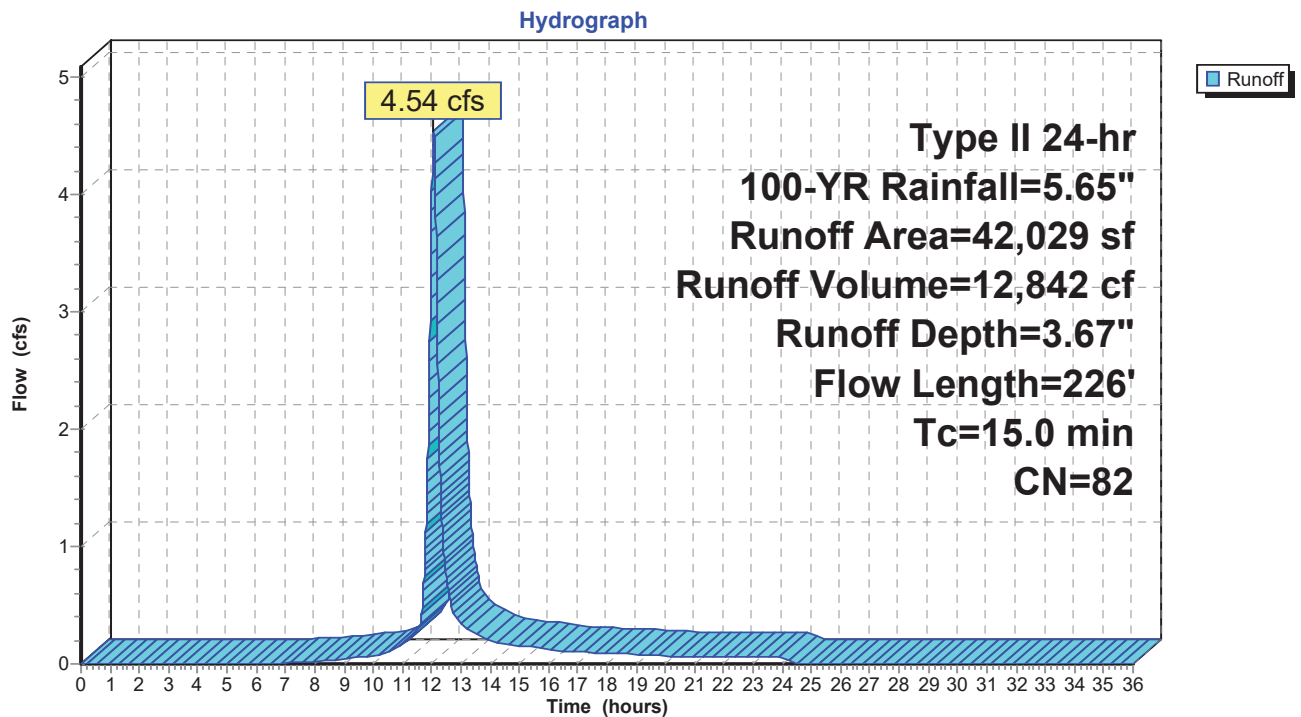
Summary for Subcatchment 8S: PRE 1B

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

Summary for Subcatchment 9S: PRE 3

Runoff = 0.34 cfs @ 11.97 hrs, Volume= 775 cf, Depth= 4.95"

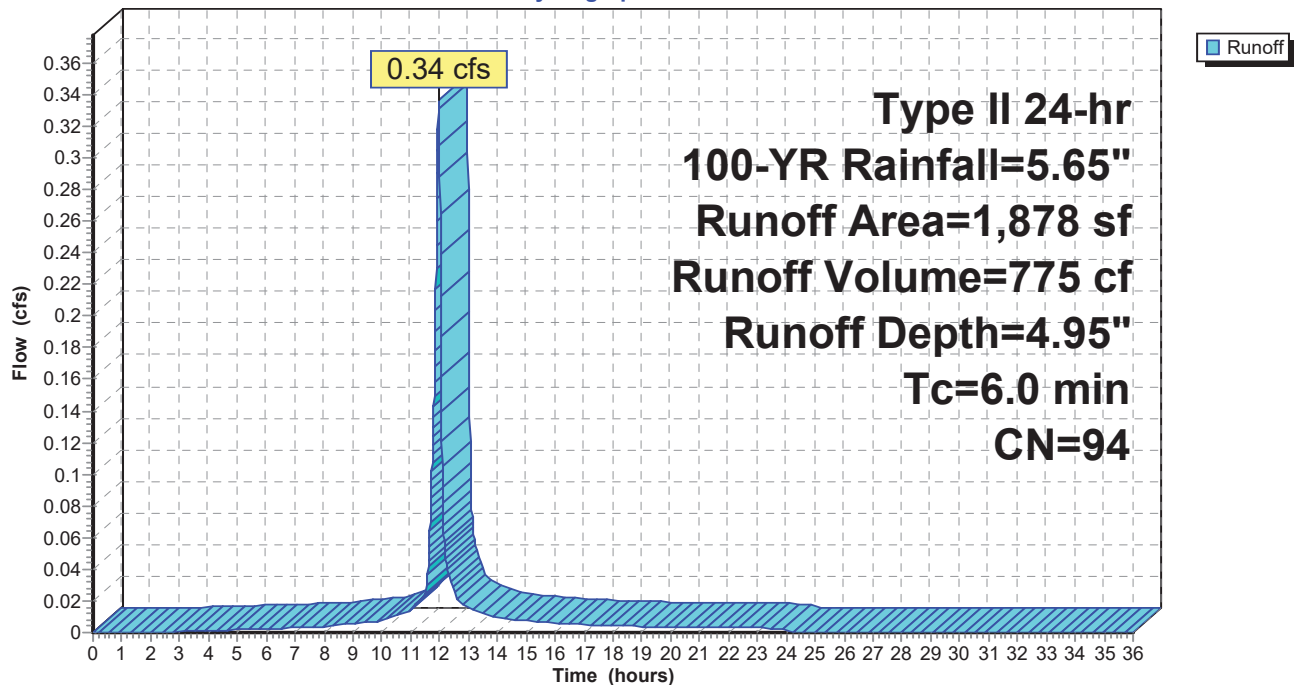
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 66

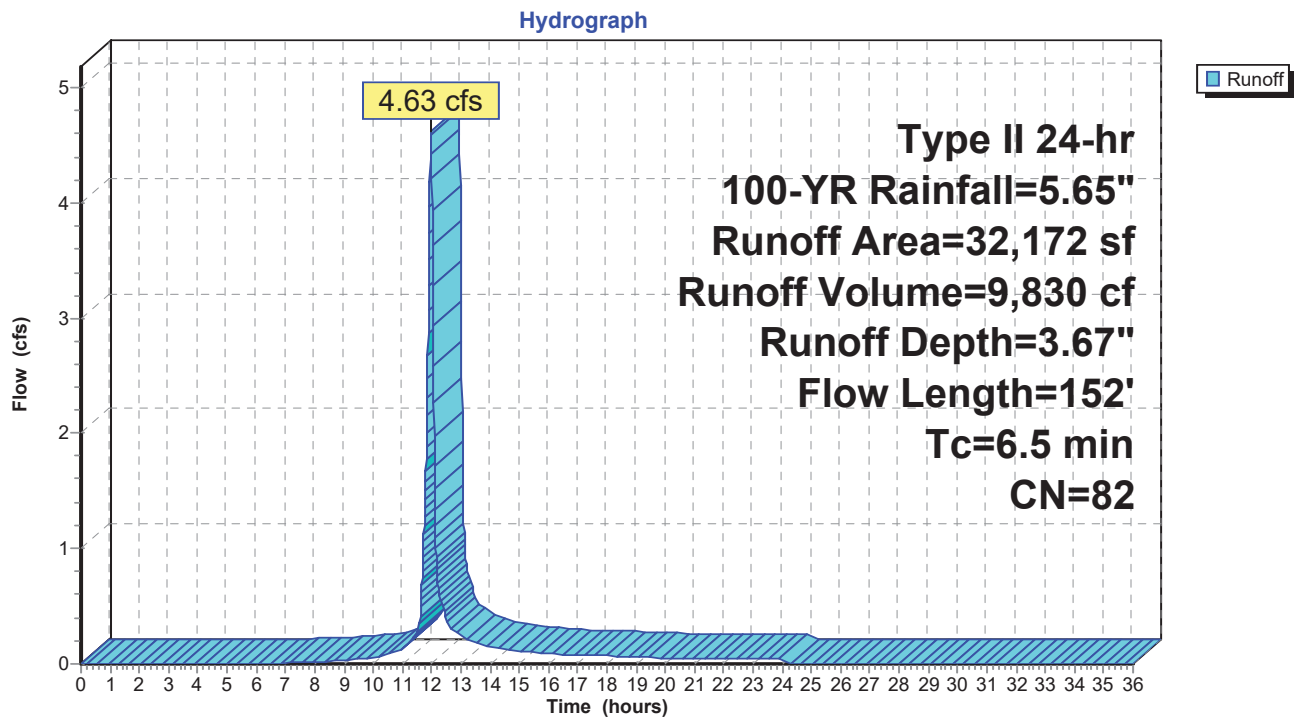
Summary for Subcatchment 10S: POST 1B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 67

Summary for Subcatchment 11S: POST 1A-3

Runoff = 0.57 cfs @ 11.97 hrs, Volume= 1,160 cf, Depth= 2.89"

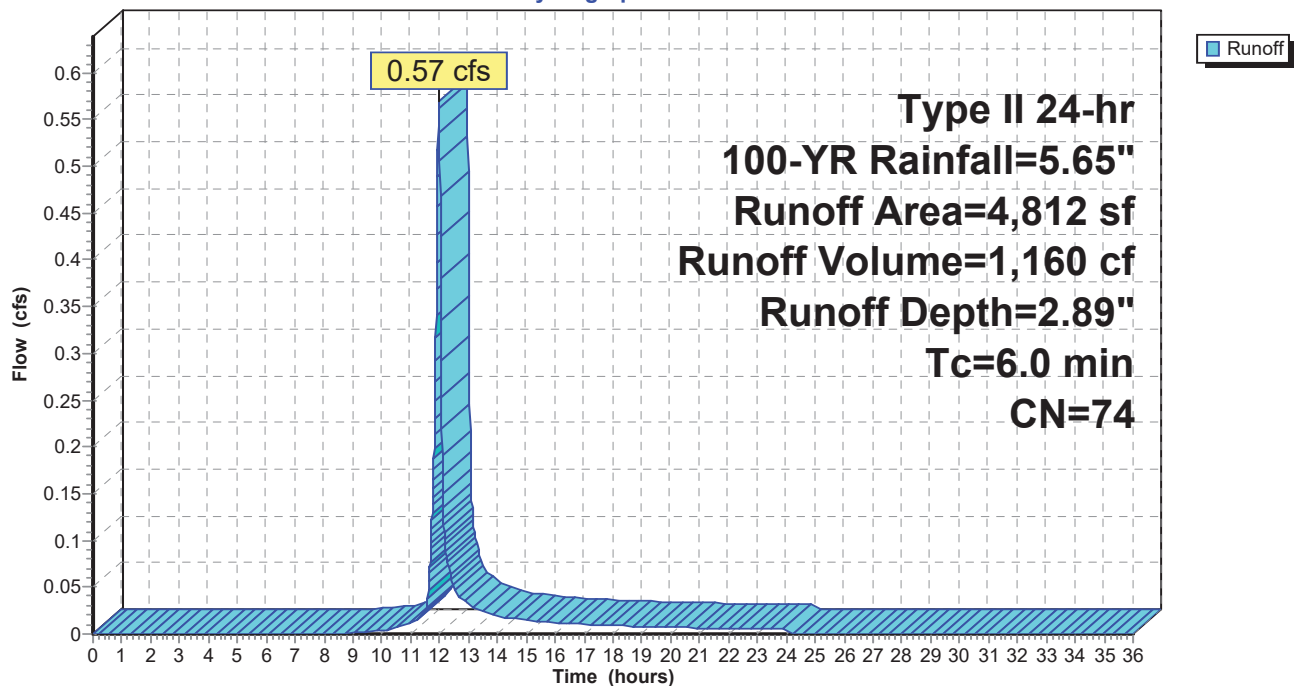
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 68

Summary for Subcatchment 15S: POST 3

Runoff = 0.29 cfs @ 11.97 hrs, Volume= 699 cf, Depth= 5.30"

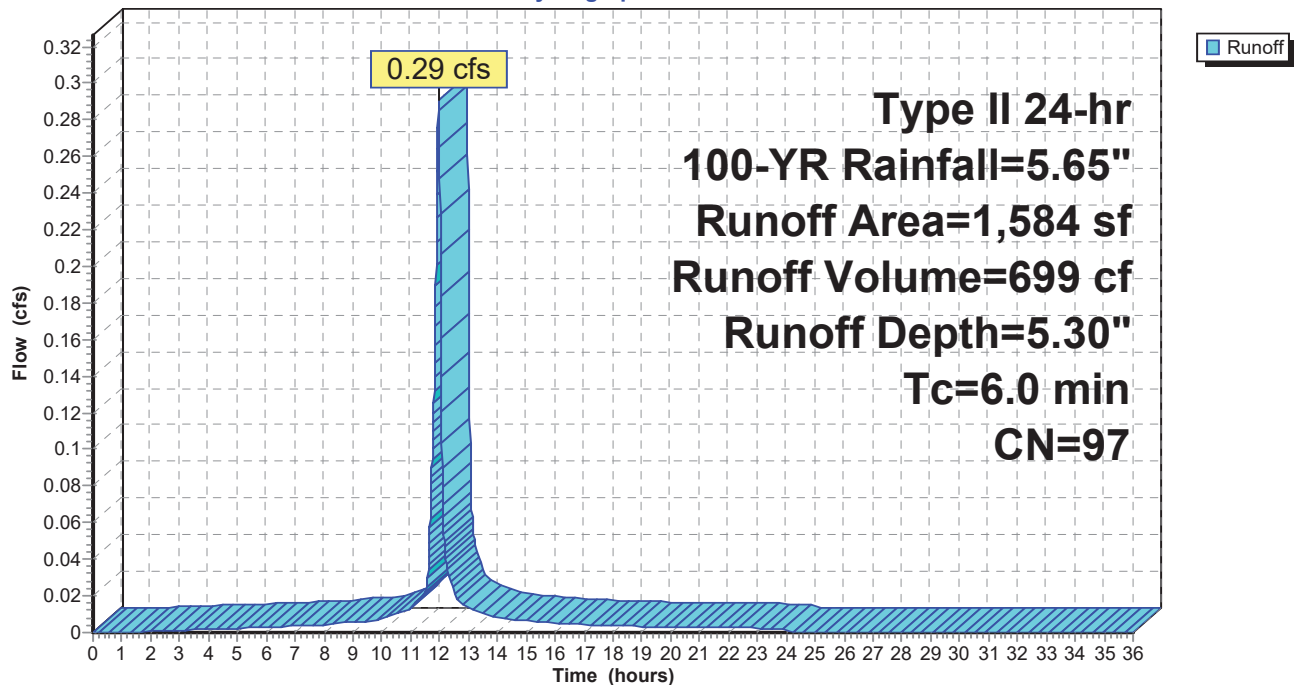
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-36.00 hrs, dt= 0.01 hrs
Type II 24-hr 100-YR Rainfall=5.65"

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



5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 69

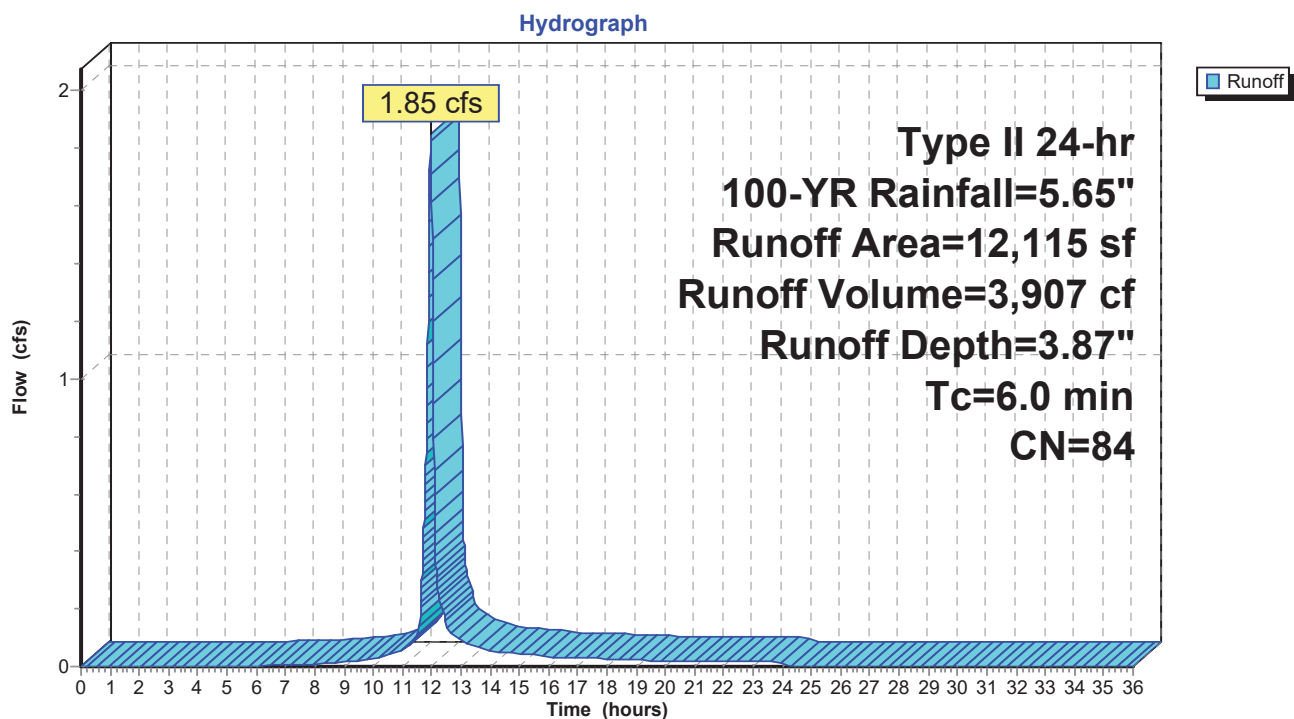
Summary for Subcatchment 16S: POST 2B

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

5618A-S4-HydroCAD

Prepared by ABD Engineers, LLP

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

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

Printed 1/8/2024

Page 70

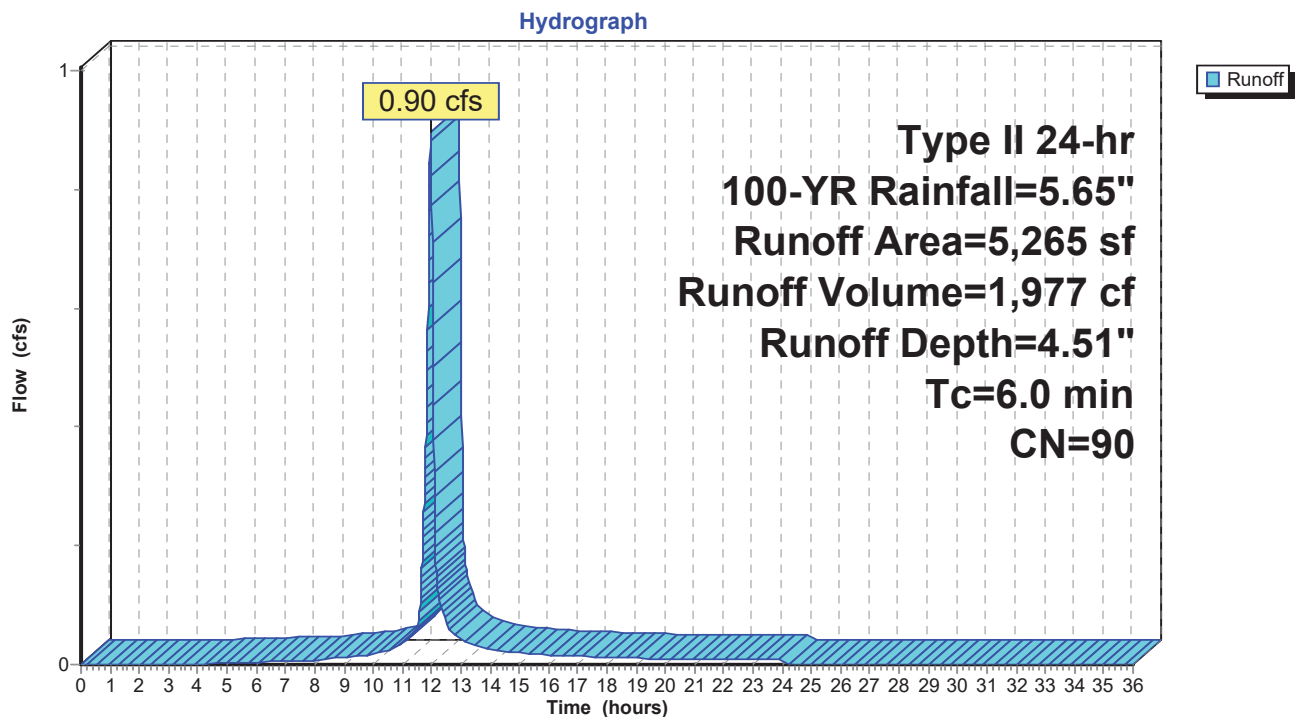
Summary for Subcatchment 19S: POST 1A-1

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'

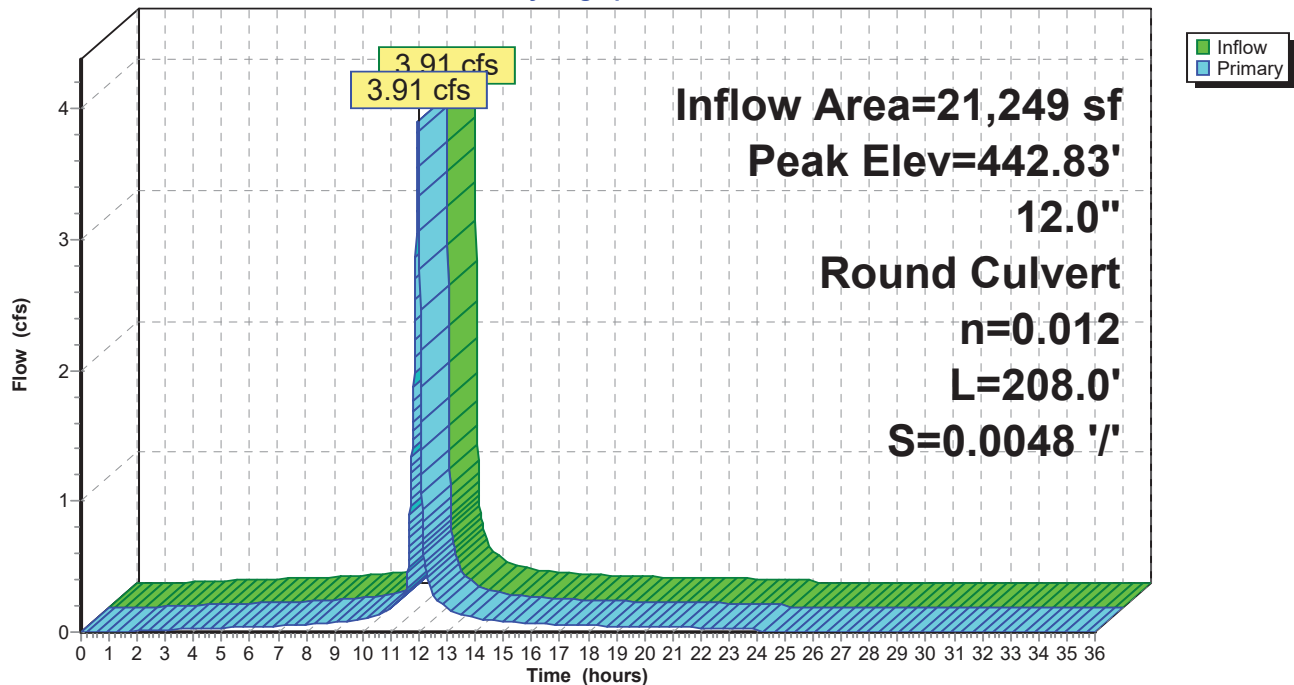
Device	Routing	Invert	Outlet Devices
#1	Primary	439.00'	12.0" Round Culvert L= 208.0' CPP, end-section conforming to fill, Ke= 0.500 Inlet / Outlet Invert= 439.00' / 438.00' S= 0.0048 '/ Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf

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

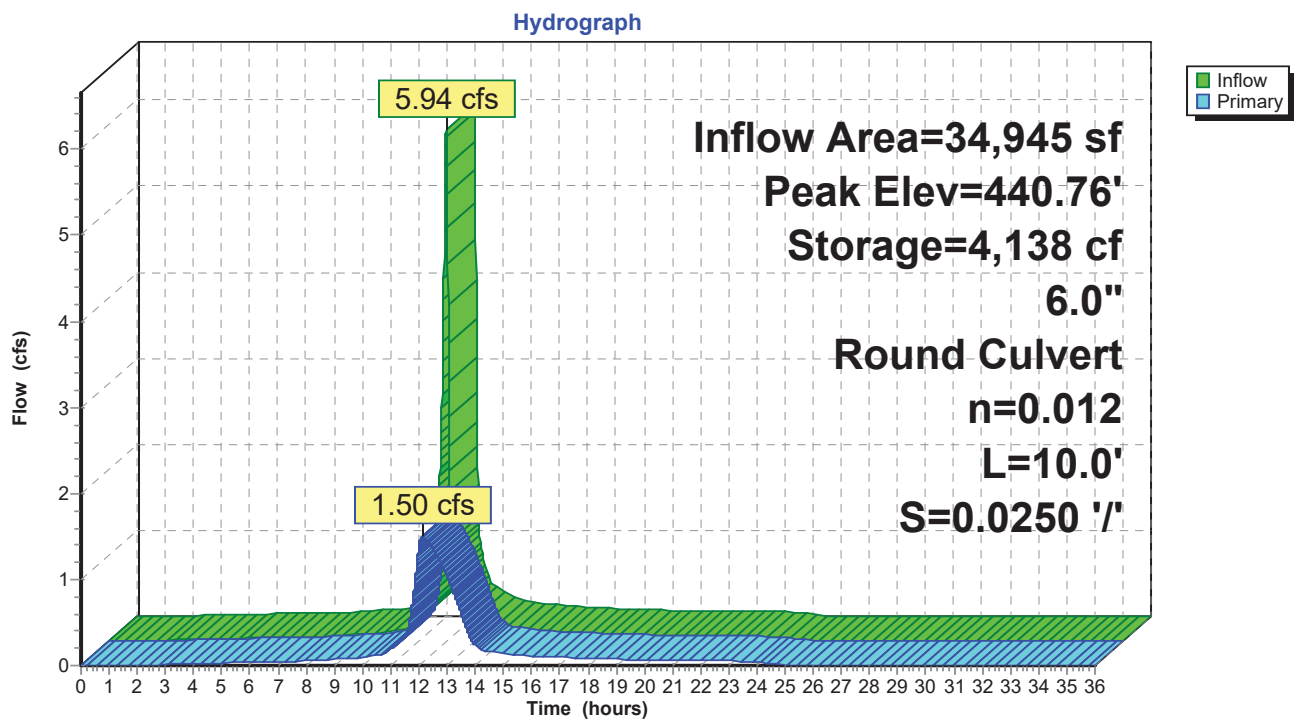
Plug-Flow detention time= 30.5 min calculated for 13,478 cf (100% of inflow)
 Center-of-Mass det. time= 30.3 min (800.9 - 770.6)

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)

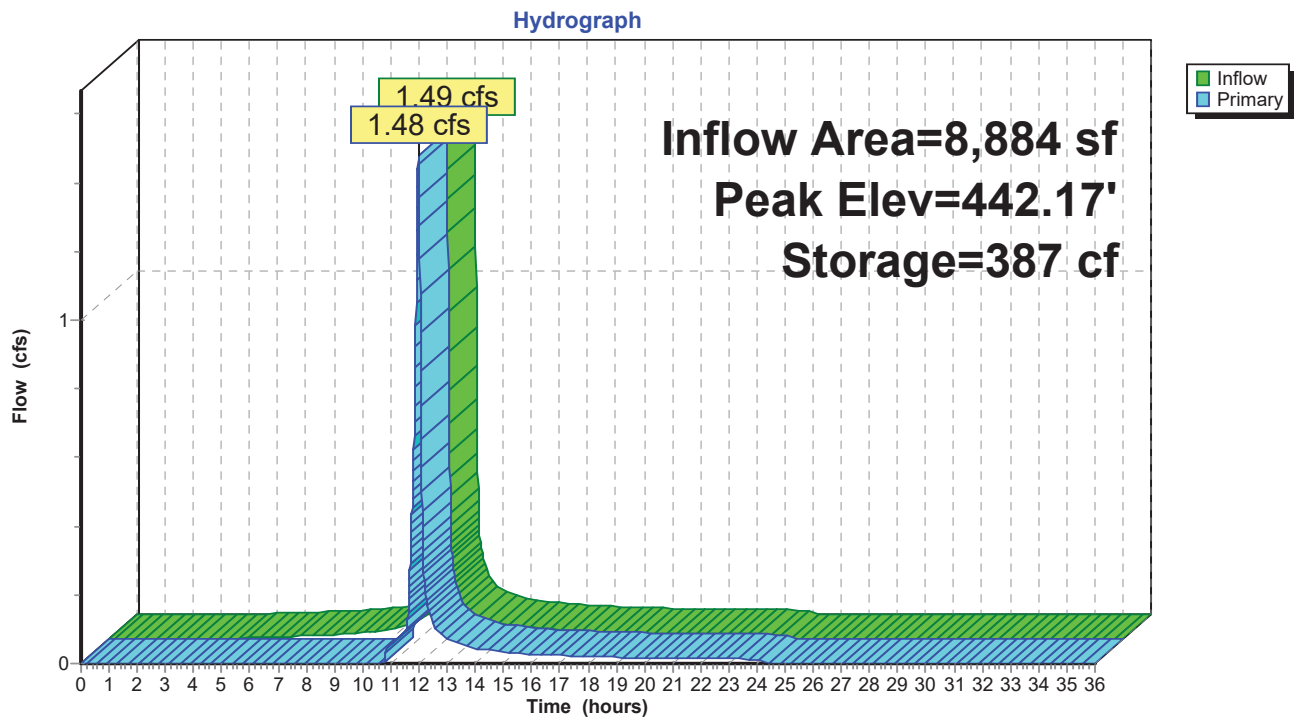
Volume	Invert	Avail.Storage	Storage Description
#1	441.00'	556 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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 ' / ' 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

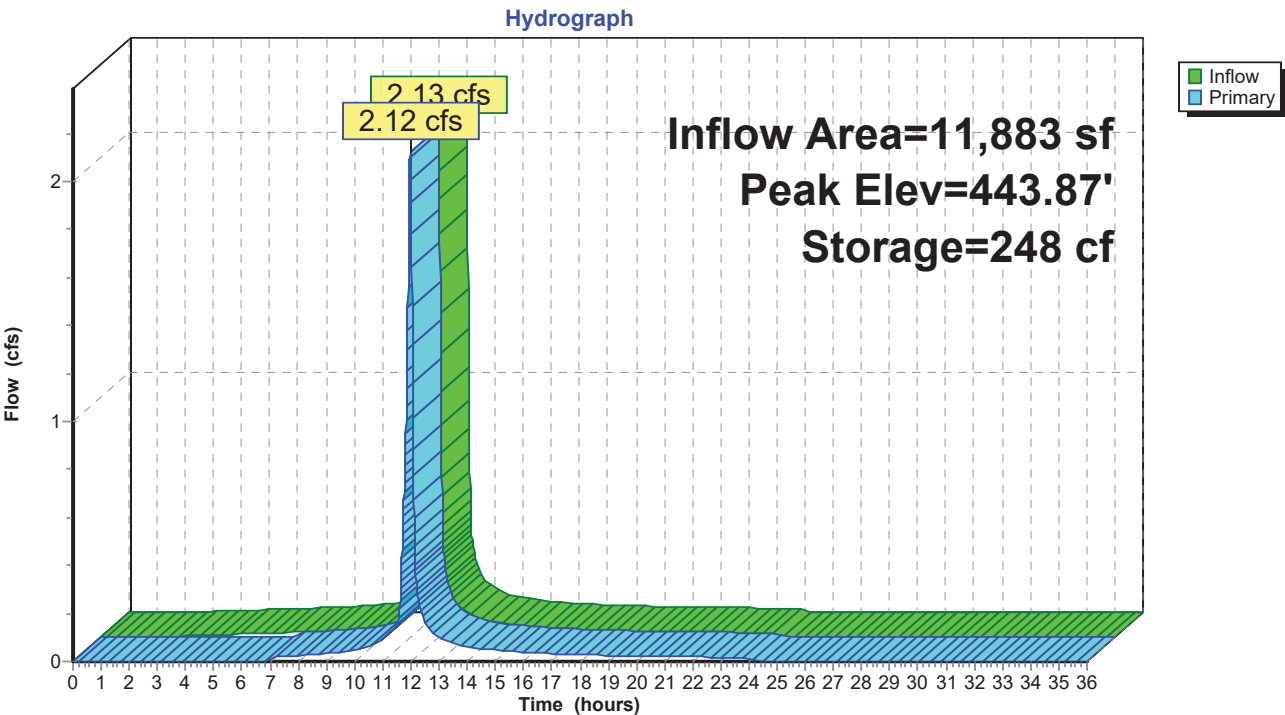
Plug-Flow detention time= 37.9 min calculated for 4,737 cf (97% of inflow)
 Center-of-Mass det. time= 17.0 min (783.5 - 766.5)

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





TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VII. 2

MEETING DATE: 1/22/2024

ITEM TITLE: RESOLUTION: 2024-04: A Resolution for site plan approval for a tenant change to a Market 32 grocery store at 2333 Nott St. E.

PROJECT LEAD: Leslie Gold

APPLICANT: Kelly O'Neill, agent for the owner

SUBMITTED BY: Kelly O'Neill, 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 O'Neill 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.

The PB reviewed the plans to reconfigure the building as a Market 32 store. It was agreed that in conforming with past practice, the tenant change can move forward and the signage will be addressed at a later date. At the 1/8/24 PB meeting the Board noted the visibility of the rear yard and rear façade of the site from the Niskayuna High School property. The Board asked the applicant to include aesthetic improvements to the rear of the property as part of this project. A tentative resolution for site plan approval (not including signage) is included in the meeting packet.

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

12/11/23 Planning Board (PB) meeting – Ms. O'Neill attended the PB meeting and explained the project to the Board. She provided a top-level overview of the proposed Market 32 store. She noted that the company would like to open the store as quickly as possible and they do not plan to make any significant changes to the current layout. She explained that one of the appeals to the Golub Corporation about this site is the fact that it could be converted so quickly with minimal investment. A general discussion ensued regarding lighting, shopping cart storage locations, grocery pickup parking areas and landscaping. Chairman Walsh asked Ms. O'Neill to work with the Planning Office and the Project Lead, Ms. Gold, to address the typical site plan topics listed above.

12/12/23 – Ms. Robertson emailed Ms. O'Neill a list and map of things the Complete Streets and Tree Council identified for the formerly ShopRite Plaza that she mentioned during the 12/11/23 PB meeting. The list includes the following.

- Crosswalks painted at the plaza entrances where the multi-use path crosses parallel to Nott St and where the sidewalk crosses parallel to Balltown Road
- Install missing section of sidewalk/stairs between parking lot and Nott St and add corresponding crosswalks across parking lot and across Nott St (this was in original plaza designs)
- Refresh landscaping islands surrounding parking lot – especially where there are dead or mostly dead trees.

12/20/23 – The following updated design documents were provided to the Planning Office.

- A 1-page building (façade) signage drawing entitled “Market 32, Niskayuna, NY Exterior Signs 3-1” by Saxton Sign Co. dated 12/23/19
- A 1-page pylon signage drawing entitled “Market 32, Niskayuna, NY Exterior Signs 3-2” by Saxton Signs dated 12/23/19
- A 1-page drawing entitled “#229 Niskayuna Developer Pylon” by Watt Retail Integrated dated 12/7/23.
- A 4-page Power Point presentation with the file name “Niskayuna Site Signs and Cart Corral Location Plan 12.20.23” including two sheets of proposed directional signs.
- A 1-page drawing entitled “Exterior Building Elevations Painting and Signage Scope of Work 2333 Nott Street East, Niskayuna, NY” by Golub Corporation dated 12/14/23 with no subsequent revisions.

SUMMARY OF PROPOSED FACADE WAIVERS FOR MARKET 32

No.	Description	Code Allows	Proposed (sq. ft.)	Prior Waiver (sq. ft.)	New Waiver (sq. ft.)
1	Number of façade signs	1 per façade	15	6	8
2	Size of a façade sign	50 sq. ft. max.			
	1		110.04	32.4	27.64
	1		110.04	0	60.04
	1		125	0	75
3	Height of 1 directional sign	4' high	6' high	0	2'

BACKGROUND

Shop Rite Signage – Approved 7/26/11

- Approximate building frontage = 281'
- Approximate square footage of façade signage / linear ft. of building frontage = 0.54

	Sign Name	Size (sq. ft.)	Waiver (sq. ft.)
1	Bottle Return	11.25	
2	Circle logo	15.9	
3	Entrance	7.5	
4	Shop Rite script (reduced from 140.1 sq. ft.)	82.4	$82.4 - 50 = 32.4$
5	Circle logo	15.9	
6	Pharmacy department within	12.5	
7	Entrance	7.5	
Total		152.95	$152.95 - 50 = 102.95$

7/26/11

- Waiver granted allowing 152.95 sq. ft. of total façade signage (waiver of 102.95 sq. ft.)
- Waiver granted allowing 7 façade signs (waiver of 6 façade signs)
- Waiver granted allowing 82.4 sq. ft. of Shop Rite Script façade sign (waiver of 32.4 sq. ft.)

Proposed Market 32 Signage

- Approximate building frontage = 281'
- Approximate square footage of façade signage / linear ft. of building frontage = 1.14

	Sign Name	Size (sq. ft.)	Waiver (sq. ft.)
1a	Market 32 Place	110.04	$110.04 - 50 = 60.04$
1b	Market 32 Place	110.04	$110.04 - 50 = 60.04$
2	Market 32	125	$125 - 50 = 75$
3	Grocery Pickup	9.58	
4	Dairy	3.5	
5	Recycling Center	11.18	
6	Bakery	4.5	
7	Deli & Cheese	7.5	
8	Butcher	4.8	
9	Seafood	4.8	
10	Foodfare	5.3	
11	Florist	4.4	
12	Welcome	22.5	
13	Produce	5.4	
14	Café	2.0	

Total		321.0	
	Shop Rite approved signage	152.95	102.95 waiver
	Market 32 signage increase from prior	168.05	$102.95 + 168.05 = 271$
Qty 6	Directional signs	6' high	2' (6' – 4')

1/8/24

- Shop Rite (previous tenant) obtained the following waivers
 - A waiver allowing 7 façade signs on the front façade (waiver of 6 façade signs)
 - A waiver allowing an 82.4 sq. ft. façade sign (waiver of $82.4 - 50 = 32.4$)
 - A waiver allowing 152.95 total sq. ft. of façade signage ($152.95 - 50 = 102.95$)
- **Market 32 is proposing the following waivers**
 - ***A waiver allowing a total of 15 façade signs***
 - ***Additional waiver of $14 - 6 = 8$ signs***
 - ***A waiver allowing 2 façade signs each measuring a total of 110.04 sq. ft.***
 - ***1 additional waiver of 27.64 sq. ft. ($60.04 - 32.4 = 27.64$)***
 - ***1 new waiver of 60.04 sq. ft. ($110.04 - 50 = 60.04$)***
 - ***A waiver allowing 1 new façade sign measuring a total of 125 sq. ft.***
 - ***A new waiver of 75 sq. ft. ($125 - 50 = 75$)***
 - ***A waiver allowing 6 directional signs measuring 6 ft. above grade***
 - ***A new waiver of 2 ft. of directional sign height ($6 - 4 = 2$)***

REFERENCE

Market 32 Signage – Mohawk Commons Store

- Approximate building frontage = 343'
- Approximate square footage of façade signage / linear ft. of building frontage = 0.75

	Sign Name	Size (sq. ft.)	Waiver (sq. ft.)
1	Market	175.6	125.6 ($175.6 - 50$)
2	Welcome	22.45	
3	Florist	4.4	
4	Butcher	4.8	
5	Dairy	3.5	
6	Seafood	4.8	
7	Produce	5.4	
8	Bakery	4.5	
9	Deli & Cheese	7.5	
10	Food Fare	5.3	
11	Pharmacy +	19.57	

Total		257.82	
12	Market (West)	118.125	
Total		118.125	

Reference

- The Market 32 at Mohawk Commons is in the C-S Shopping Center Commercial district
- The Market 32 store at Mohawk Commons was granted the following waivers
 - A waiver allowing 11 façade signs on the front façade (waiver of 10 façade signs)
 - A waiver allowing a 175.6 sq. ft. façade sign (waiver of $82.4 - 50 = 32.4$)
 - A waiver allowing 152.95 total sq. ft. of façade signage ($152.95 - 50 = 102.95$)

1/8/24 Planning Board (PB) meeting – Tom Lee attended the meeting representing the Golub Corporation. Ms. Robertson displayed the Power Point presentation Mr. Lee had provided and he described each slide to the Board and highlighted the following.

- The site lighting will not change
- They are in discussions with the landlord to paint the crosswalks, add the missing section of sidewalk, and address the landscaping. He felt this can be accomplished for tenant change.
- He noted that they will be making a main entrance right in the front center of the façade

The Board inquired if they are considering any changes to the painting scheme or overall appearance. Mr. Lee noted that the roof will remain the same and they have provided images of any proposed façade color changes.

The Board noted that the rear façade of the building is very visible from many vantage points of Niskayuna High School. They asked the applicant to improve the appearance of the building and grounds when viewed from the school property. It was suggested that the façade be painted an earth tone color to blend in with the surroundings or vegetative screening be added.

The Board noted that the proposed signage is quite detailed and recommended that to expedite approval of the reconfiguration of the overall site, the signage could be approved at a later date.

On 1/9/24 the Planning Office emailed Mr. Lee the following top level signage comparison for future use. The summary compares the proposed signage for the new Market 32 store, signage that existed at the site when it was a Shop Rite grocery store and signage for the Market 32 store in Mohawk Commons.

Name	Address	Frontage	# of façade signs	Total sign area
Market 32	2333 Nott St E	281'	15	321 sq. ft.
Shop Rite	2333 Nott St. E	281'	7	153 sq. ft.
Market 32	Balltown Rd. (Mohawk Commons)	343'	11	258 sq. ft.

A tentative resolution for site plan approval, with conditions, is included in the meeting packet.

RESOLUTION NO. 2024-04

AT A REGULAR MEETING OF THE PLANNING BOARD AND ZONING COMMISSION OF THE TOWN OF NISKAYUNA DULY CALLED AND HELD ON THE 22ND DAY OF JANUARY 2024 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
CHRIS LAFLAMME
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
SARAH BILOFSKY
EHASUYI GOMES

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, Kelly O'Neill has made an application to the Planning Board and Zoning Commission for site plan approval for tenant change at 2333 Nott St. E. to a Market 32 grocery store as described in the Application for Site Plan Review form and accompanying documentation package listed below, and

WHEREAS, the property is located in a Planned Development District (PDD) within the C-N Neighborhood Commercial zoning district and the Town Center Overlay District (TCOD). Grocery stores are permitted principal uses in the PDD, and

WHEREAS, the proposed tenant change complies with the Economic Development section of the 2013 Niskayuna Comprehensive Plan, and

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

1. An 11-page slide set of marked up colored renderings of the site with notes addressing the following topics:
 - a. Page 1 – parking lot - sidewalks, crosswalks and landscaping
 - b. Page 2 – parking lot - grocery pickup and way finding signage

- c. Page 3 – parking lot – parking spaces, grocery pickup parking spaces, shopping cart corral locations and parking lot lighting
 - d. Page 4 – parking lot – new main entrance, cross walk striping and stop sign
 - e. Page 5 – parking lot – new main entrance, cross walk striping and stop sign
 - f. Page 6 – dimensioned grocery pickup parking stall signs
 - g. Page 7 – picture of a typical pickup parking stall sign, pole and base
 - h. Page 8 – drawing of a typical grocery pickup parking stall sign (w/dimensions)
 - i. Page 9 – drawing of a typical grocery pickup parking stall sign “2”
 - j. Page 10 – drawing of a typical grocery pickup parking stall sign “3”
 - k. Page 11 – drawing of a typical grocery pickup parking stall sign “4”
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.

WHEREAS, the Planning Board referred this application to the Town’s Superintendent of Water, Sewer and Engineering, the Fire District Chief and the Chief of Police and there were no objections to the proposal, and

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

NOW, THEREFORE, be it hereby

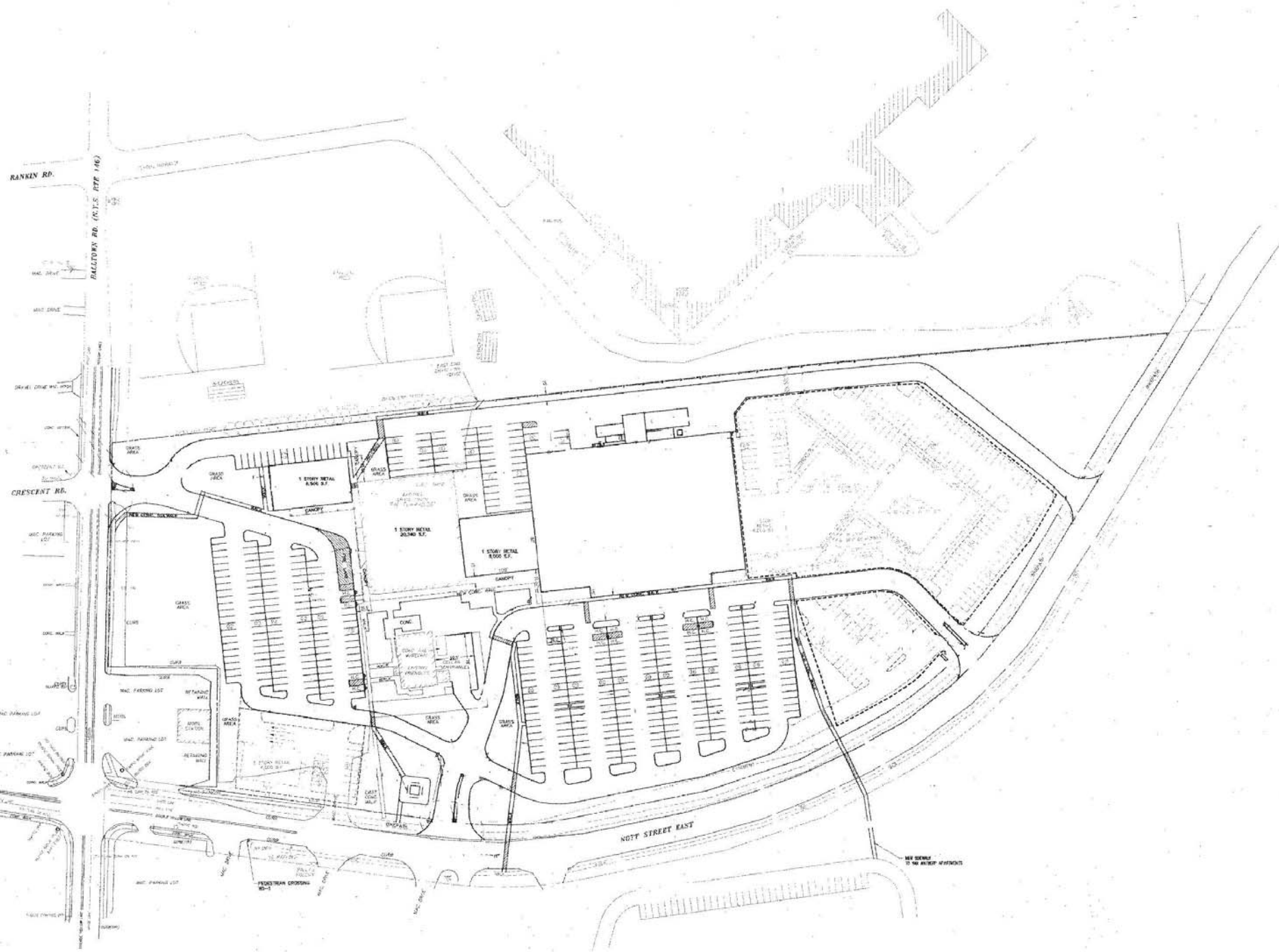
RESOLVED, that the Planning Board and Zoning Commission finds the above referenced site plan meets the requirements of the Zoning Code and previous site plan approvals, and therefore, hereby approves the site plan with the following conditions:

1. Outdoor storage: No outdoor storage or obstructions shall be allowed on the sidewalk between the main grocery store entrance and the secondary grocery store entrance to protect pedestrian passageway through the plaza.
2. Crosswalks: Prior to completion of the building permit, crosswalks shall be striped in the 6 locations identified by the Planning Office in the aerial map provided to the applicant labeled Nott Street Site Plan.
3. Sidewalks: Prior to completion of the building permit, the missing section of sidewalk between the parking lot and Nott Street East, identified by the Planning Office in the aerial map provided to the applicant labeled Nott Street Site Plan, shall be installed to the satisfaction of the Planning Office.
4. Landscaping: Prior to issuance of a building permit – the applicant shall supply a landscaping plan for review and approval by the Tree Council. The landscaping beds in front of the proposed Market 32 should be refreshed; dead or severely distressed trees within the property should be removed, and any removed trees should be replanted.
5. Signage: This resolution is for tenant change only. The Planning Board shall review and approve any proposed signage and façade color changes at a later date.

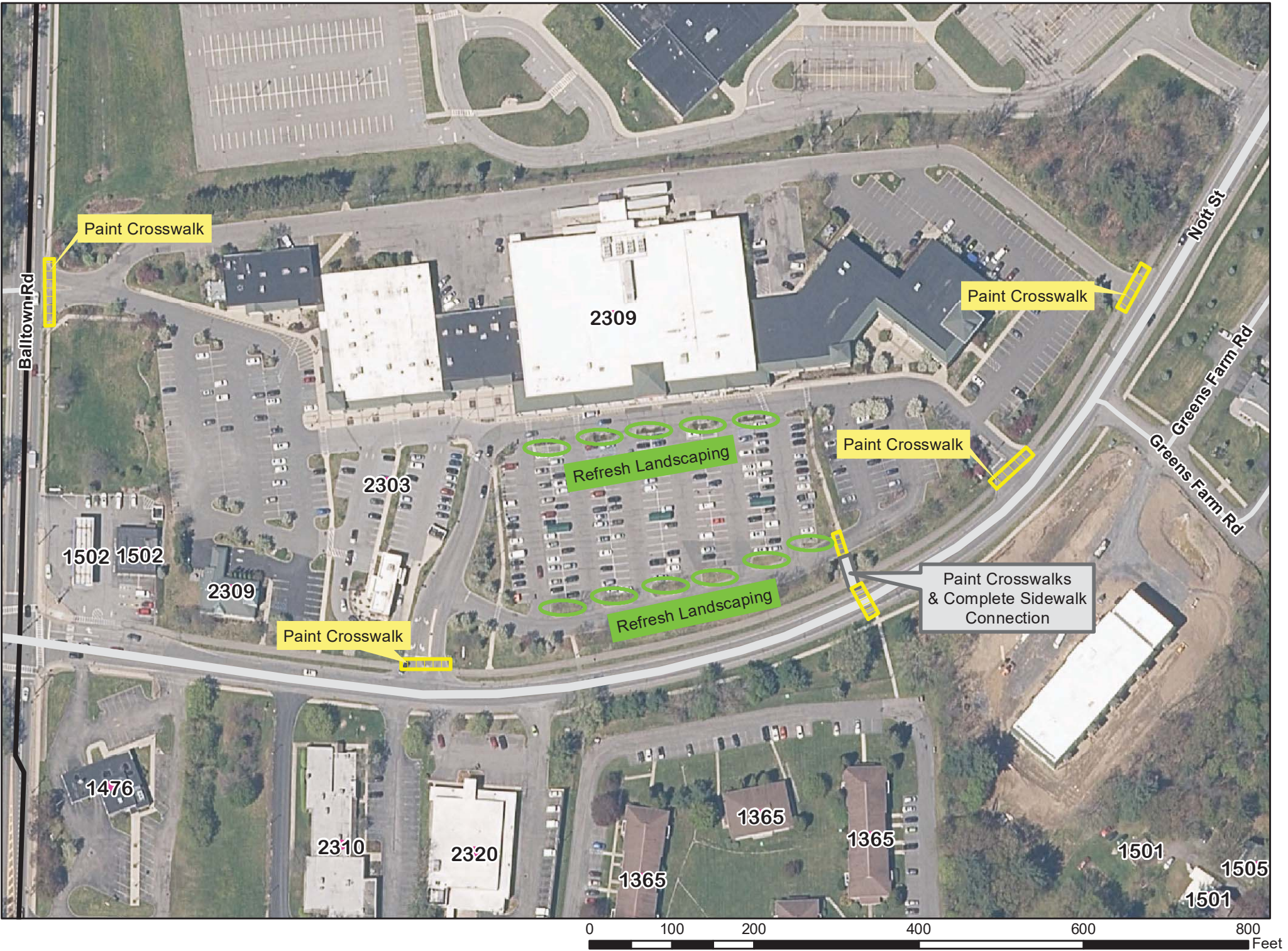
Upon roll call the foregoing resolution was adopted by the following vote:

KEVIN A. WALSH, CHAIRMAN
GENGHIS KHAN
CHRIS LAFLAMME
DAVID D'ARPINO
LESLIE GOLD
NANCY STRANG
SARAH BILOFSKY
EHASUYI GOMES

The Chairman declared the same _____.



NOTT STREET SITE PLAN



NOTT STREET SITE PLAN - ENLARGED SITE PLAN



NOTT STREET SITE PLAN - NEW MAIN ENTRANCE - PHOTO A

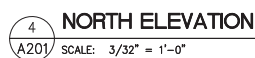
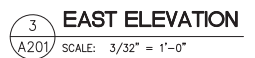
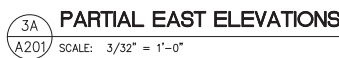
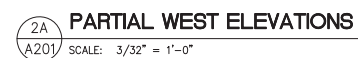
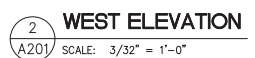
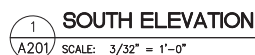
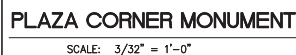


NOTT STREET SITE PLAN - NEW MAIN ENTRANCE - PHOTO B





EXTERIOR INSULATION FINISH SYSTEM COLORS		
KEY		COLOR
A	DRYWIT SYSTEMS - E.I.F.S.	PMS 725
B	DRYWIT SYSTEMS - E.I.F.S.	SW693 275-06 RUSTIC RED
C	DRYWIT SYSTEMS - E.I.F.S.	SW6055 FIERY BROWN
D	DRYWIT SYSTEMS - E.I.F.S.	SW2735 252-C1 ROCKNEED
E	3M WINDOW FILM	BLACKOUT





TOWN OF NISKAYUNA

PLANNING BOARD AND ZONING COMMISSION

AGENDA STATEMENT

AGENDA ITEM NO. VIII. 1

MEETING DATE: 1/22/2024

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

PROJECT LEAD: 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.

At the 1/8/24 PB meeting the Planning Board approved a resolution making a Negative SEQR declaration via. a vote of 7-0 and called for a public hearing on the proposed subdivision to be held at the 1/22/24 PB meeting. The project was also discussed during the Discussion Items portion of the 1/8/24 meeting and several open design details were closed. A meeting between Mr. Lucey and the Town was held on 1/18/24 regarding ownership of the path to River Road Park near the end of Seneca Rd. and the parties are near an agreement.

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.

12/8/2023 Complete Streets Committee Meeting - The Complete Streets Committee reviewed the most recent revision to the subdivision drawings and expressed their support and recommendation to the Planning Board for a public access easement between Seneca Road and River Road Park along the existing trail connection and a public access easement along River Road for a potential future multi-use path.

12/11/23 Planning Board (PB) meeting – Mr. Ryan and his design team were present at the meeting. They described the revised plans and documents that were emailed to the Planning Office on Friday afternoon 12/8/23 (the plans were received too late to be included in the

documentation packet for the 12/11/23 PB meeting so they were emailed separately to the PB members). Chairman Walsh noted the documents will be included in the meeting packet for the 1/8/24 PB meeting. It was noted that the CAC did not make a SEQR recommendation at their 12/6/23 meeting. LR explained that the applicant described design revisions that were underway on 12/6/23 but no documentation of the revised design was provided to the CAC at the meeting. Therefore, the CAC decided to table making a SEQR recommendation until they received and reviewed the revised documents. After a general discussion the PB called for a tentative resolution for the 1/8/24 PB meeting to make a SEQR determination based upon proposed CAC action on January 3rd and call for a public hearing for the 1/22/24 meeting.

12/28/23 – 2nd TDE comment letter -- The TDE provided a 5-page comment letter regarding the following documents.

- The applicant's response letter dated 12/6/23
- Revised site plans dated 12/6/23
- Updated SWPPP dated 12/6/23
- Subdivision application dated 12/4/23
- Revised Short Form EAF dated 6/22/23

Noteworthy comments in the 2nd TDE comment letter include but are not limited to the following.

- Site Plan
 - 2. Some of the large paved driveway/parking area on Lot 3 appears to shed water to the West, however, this new impervious area should be directed to the proposed bioretention area.
 - 7. We ask that the driveway culverts for all 3 lots be sized to convey the 100-year 24-hour storm event and include velocity dissipation features at the outlets.
 - 8. The [lot 2] basement floor elevation is stated to be approximately 291.40, which is essentially at proposed grade at the rear of the home and would still be about 12" above the anticipated water level in the wetland during the 100-year storm event. The analysis was performed under the conservative assumption that the culvert crossing at Seneca Road and the wetlands adequately convey flows to the inlet of the River Road culvert (control point). The Applicant also states that the new homes will be constructed with waterproofing techniques and sump pump back up. We find this to be acceptable and it can be confirmed through Town building permit inspection during construction.
 - 12. The Town multi-use path easement needs to be shown on lot 3. The Town will also require the applicant to prepare and show on the plan a utility easement between the Seneca Road right-of-way and the Town Park property for potential future utility installation.
 - 13. The Town would like to see a Street Planting Plan as part of the next drawing set revisions. The code states that the trees shall have a minimum of 2.5" caliper at 5 feet above grade and be planted parallel to the street with a minimum of 2 trees per lot or one tree every 60 feet of road frontage.
- SWPPP
 - 10. In Section IX.C. Maintenance, Inspections and Record Keeping, Permanent E&SC Practices and Post Construction Features, "Infiltration Basins" is mentioned, however, no infiltration basins are proposed. The applicant should remove and replace with a section describing "Bioretention" practice requirements, as well as add a section for "Vegetated Swale" for the frontage area along Lot 3.

1/3/24 Conservation Advisory Council (CAC) meeting – Michael Roman and Michael Dussault attended the meeting on behalf of the applicant, Ryan Lucey. Chairman Strayer provided a short update on the project and Mr. Roman provided additional detail on a number of topics including the following.

- The number of proposed lots have been lowered from 4 to 3
- The Army Corps of Engineers permit regarding wetland disturbance is pending and they expect to receive approval very soon.
- Mr. Lucey agreed to provide the Town with a drainage easement allowing them to access a large portion of the southeastern portion of the property extending all the way to Seneca Road.
- Mr. Lucey is not in favor of granting an easement to the Town for a multi-use path from Seneca Road to River Road Park. He noted that he is in favor of keeping the existing footpath on Mr. Lucey's property.
 - Chairman Strayer noted that increasing pedestrian and multi-use path connectivity throughout Town is an initiative of the Comprehensive Plan and several councils and committees such as the Complete Streets Committee. He noted that easements for multi-use paths are regularly required for subdivisions. The multi-use path in the Kelts Farm subdivision and easements in recent subdivisions on Van Antwerp Road and Empire Drive were noted as examples. He stated keeping the walking connection private would cause problems in the future as any new homeowner could close it down at any time and limit its use to only certain people. The benefit needed to be public and, for equity, needed to be available to everyone.

The Council asked if Mr. Lucey would agree to a legal agreement that precluded future development of the land in the southeastern corner of the property (along Seneca Rd.). A conservation easement was mentioned. Mr. Roman stated that he would need to speak with Mr. Lucey's attorney before he could comment further. Several Council members explained the Town's commitment and their commitment to preserving open space. Ms. Robertson noted that several Department Heads within the Town have reviewed this and have commented that having the Town own the land, rather than simply have an easement, is preferable. She noted that if this path were to be pursued the land would actually need to be delineated as a 4th lot within the subdivision that would be deeded over to the Town. Mr. Roman agreed to schedule a meeting during the week of 1/8/24 so that the involved parties could discuss this in more legal detail.

The CAC then proceeded to review and complete the EAF form and make a conditional SEQR recommendation to the lead agency (Planning Board).

The CAC findings are attached. They found significant negative effects to the environment, including inconsistency with the 2013 Comprehensive Plan and lack of connectivity to parks and neighborhoods in the subdivision, could be mitigated by adding a public access easement over the existing trail from the end of the Seneca Road cul-de-sac to the River Road Park. Because no further studies are needed and the impacted can be mitigated with a public access easement, they made this into a conditional negative SEQR recommendation. They also found conservation of the undisturbed lands to be significantly important, as the drainage and wetlands in this area make this parcel extremely sensitive to development.

The Planning Board is lead agency. From the DEC's website, "A conditioned negative declaration (CND) is a form of negative declaration which may be used for Unlisted actions only, and only in

limited circumstances. Use of a CND can be appropriate when a lead agency concludes that a proposed action may have a potentially significant adverse impact on the environment, but the impact can be eliminated or adequately mitigated by conditions imposed by the lead agency, without the need for additional environmental studies. Use of the CND acknowledges that without imposition of conditions by the lead agency, the action may have potentially significant impacts.” Typical conditions imposed under a Conditional SEQR determination as illustrated on the DEC website include:

- “Requiring addition of a turning lane and new traffic signal to mitigate traffic impacts
- Addition of a permanent vegetated buffer area along the stream bank to protect the riparian corridor along the waterway
- Requiring that all stone walls located along public roads shall be maintained
- Requiring that a landscape berm shall be built between the public road and the parking lot to screen and buffer a new shopping plaza; and
- Requiring that the siting of the proposed parking lot shall be moved to from the eastern side to the western side of a proposed structure to avoid impacts to a wetland.”

The Planning Department finds that requiring a public easement to make a critical connection between an isolated cul-de-sac and the adjacent parklands and neighborhoods falls within the types of examples provided by the DEC and recommends the Planning Board adopt a conditional SEQR determination to avoid negative impacts to existing land use plans and an existing walkway.

1/8/24 Planning Board (PB) meeting – Ryan Lucey, Michael Roman and Mike Dussault attended the meeting. The Board discussed Resolution 2024-01 for SEQR determination and call for a public hearing. After a detailed discussion with input from the Town Attorney and Town Planner, the Board determined it was more procedurally accurate to replace the conditioned negative SEQR declaration as proposed by the CAC with a negative SEQR declaration with the following four comments from the CAC findings. The resolution was amended and then passed by unanimous 7-0 votes.

1. The Developer shall explore solar and EV ready options for the new homes as well as explore pesticide free options for lawn maintenance as the properties are directly adjacent to wetlands.
2. The Developer shall use native species wherever possible in their plantings plans.
3. Drainage is critical to the review of this subdivision, and the developer shall provide for ways to maintain the privately owned stormwater management practices in perpetuity.
4. The applicant shall provide a public access easement from the Seneca Road cul-de-sac to the River Road Park and conserve the remaining undisturbed lands of the subdivision through a conservation easement or deed to the Town of Niskayuna.

The Board also discussed the project, including the topics listed below, during the Discussion Items portion of the meeting.

- Mr. Dussault confirmed the discharge locations of the bio-retention ponds.
 - Lot 1 – discharges to the gulley along River Rd.
 - Lot 2 – discharges to the wetland area
 - Lot 3 – discharges to the wetland area
- The attendees discussed options for Town ownership & maintenance of the path near the end of Cul-de-sac
 - Mr. Lucey agreed to schedule a meeting with the Town Attorney and other Town representatives to discuss an easement or deed restriction, etc.
 - Ms. Robertson also stated that the Superintendent of Water, Sewer and Engineering has also requested a utility easement in this area so that the current water line at the end of

the Cul-de-sac may be extended into River Road Park. This eliminates the existing “deadheaded” line and will create a loop which is the preferred layout.

- Mr. Lucey agreed to design the driveway culverts to the 100 storm rainfall amounts – he estimated that at most this would require the culverts to be increased one pipe diameter size.
- Mr. Lucey confirmed that the roof drains of the new homes will be piped to the bio-retention areas
- Mr. Lucey and the Board agreed to adjust the eastern boundary of Lot 2 so that it abutted the western edge of the proposed easement for the large wetland area near Seneca Rd.
- Ms. Robertson stated that a maintenance agreement for the stormwater bioretention ponds is required. She noted that a similar agreement was included in the recent 2-Lot subdivision along Polsinelli Dr.
- Ms. Robertson stated a street tree planting plan was still required and the limits of clearing would need to be flagged for the Tree Council.

The Board and Ms. Robertson concluded the discussion by affirming that a public hearing will be held at the 1/22/24 PB meeting.



SCALE: 1"=200'



SCALE: 1"=40'



SCALE: 1"=1500'

1. EXACT OBJECT LOCATIONS MAY DIFFER FROM THAT AS SHOWN, AND ADDITIONAL SUB-SURFACE AND SURFACE UTILITIES AND STRUCTURES MAY EXIST. THE CONTRACTOR IS TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK.
2. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITIES LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS. ANY DISCREPANCIES SHALL BE REPORTED TO THE OWNER AND ENGINEER. THE CONTRACTOR SHALL NOTIFY CITY UTILITY LABOR SERVICE AND THE UTILITY OWNERS 72 HOURS, EXCLUSIVE OF WEEKENDS AND HOLIDAYS, PRIOR TO ANY DIGGING, DRILLING, OR BLASTING:
 - a. DIS SAFE (TEL #811)
 - b. NON DIS SAFE MEMBER CITY UTILITIES/ENGINEER IF KNOWN (A LIST OF DIS SAFE MEMBERS BY STATE CAN BE FOUND ON THE DIS SAFE WEB SITE WWW.DISSAFE.COM)
 - c. TOWN OF NISKAYUNA WATER AND SEWER DEPARTMENT (510-386-4620)
3. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL FROM THE ENGINEER.
4. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
5. THE CONTRACTOR SHALL RESTORE LANDS, DRAINWAYS, CULVERTS, SLOPES, AND OTHER PUBLIC OR PRIVATE PROPERTY DAMAGED OR HARMED BY EXISTING CONDITIONS OR HETTER AS DETERMINED BY THE ENGINEER. ANY DAMAGED TREES, SHRUBS AND/OR HEDGES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE, UNLESS NOTED OTHERWISE.
6. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
7. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL BUILDING PERMITS. THE CONTRACTORS SHALL BE RESPONSIBLE FOR ALL PERMITS, REPLECTIONS, AND CERTIFICATES.
8. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DESTROYED OR DISAPPEARED, AS DETERMINED BY THE ENGINEER OR OWNER SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A NEW YORK STATE LICENSED LAND SURVEYOR.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS, AND COORDINATE WORK WITH ALL CONTRACTS FOR THE SITE.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT EXPLORATORY TEST PITS AS MAY BE REQUIRED TO DETERMINE UNDERGROUND CONDITIONS.
11. ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE WITH THE LATEST CITY REGULATIONS FOR CONSTRUCTION.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK. DRAINAGING METHOD MUST BE APPROVED BY THE OWNER AND COORDINATED WITH THE CITY OF GLENS FALLS DEPARTMENT OF PUBLIC WORKS.
13. MAINTAIN FLOW TO ALL EXISTING UTILITIES, UNLESS NOTED OTHERWISE.
14. CONTRACTOR TO GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS AND IMPERVIOUS SURFACES.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL FIELD LAYOUT. THE CONTRACTOR SHALL PROVIDE UNLESS OTHERWISE PLANS FOR ALL UTILITIES SHOWING CONDUITS, BENDS, VICES, LENGTH OF LINES AND INVERTS. AS-BUILT PLANS SHALL BE REVIEWED BY THE OWNER AND HIS REPRESENTATIVES BEFORE PLANS WILL BE ACCEPTED.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER INSTALLATION, MONITORING, MAINTENANCE AND REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURES AND TAKING PRECAUTIONARY STEPS TO AVOID ANY SEDIMENT TRANSPORT TO NEIGHBORING STORM OR WATERS OF THE STATE.
17. BY ISSUANCE OF A BUILDING PERMIT, THE TOWN OF NISKAYUNA DOES NOT ASSUME ANY LIABILITY FOR STORM WATER DAMAGE TO BUILDINGS OR OTHER PROPERTY. THE OWNER MUST ASSUME ANY AND ALL LIABILITIES FOR DAMAGE CLAIMED ARISING OUT OF INCREASED STORM WATER FLOW.
18. ALL ON-SITE SANITATION AND WATER SUPPLY FACILITIES SHALL BE DESIGNED TO MEET THE MINIMUM SPECIFICATIONS OF THE STATE DEPARTMENT OF HEALTH.

- | SHEET | SHEET TITLE |
|-------|---|
| C001 | SITE LEGEND AND NOTES |
| C101 | EXISTING CONDITIONS AND DEMOLITION PLAN |
| C102 | OVERALL SUBDIVISION PLAN |
| C103 | SUBDIVISION PLAN - PROPOSED 3-LOT |
| C104 | EROSION AND SEDIMENT CONTROL PLAN |
| C501 | SITE DETAILS |
| C501 | STORM DETAILS |
| C502 | EROSION AND SEDIMENT CONTROL DETAILS (1 of 2) |
| C503 | EROSION AND SEDIMENT CONTROL DETAILS (2 of 2) |

TAX MAP PARCELS 51.-1-7.1 AND 51.9-2-1.1
2890 RIVER RD
TOWN OF NISKAYUNA, SCHENECTADY COUNTY, NEW YORK

RPL FAMILY TRUST
2505 WHAMER LANE
NISKAYUNA, NY 12309

1. EXISTING PHYSICAL SURVEYS, BOUNDARIES, AND TOPOGRAPHY SHOWN HEREIN ARE BASED OFF A PLAN ENTITLED "SURVEY LINES OF RPL FAMILY TRUST #2890 RIVER ROAD", PREPARED BY OLBERT WAGLANDER LAND SURVEYOR, PLLC AND DATED DECEMBER 01, 2022.
2. ENGINEERING VENTURES HAS NOT PERFORMED ANY BOUNDARY OR TOPOGRAPHIC SURVEYS. THE PROPERTY LINES, EASEMENTS, AND OTHER REAL PROPERTY DESCRIPTIONS PROVIDED ON THESE PLANS DO NOT DEFINE LEGAL RIGHTS OR MEET LEGAL REQUIREMENTS FOR A LAND SURVEY AS REQUIRED BY ANY STATUTE. THESE PLANS SHOULD BE USED AS THE BASIS OF ANY LAND TRANSFER OR ESTABLISHMENT OF ANY PROPERTY RIGHT.
3. CONTOUR INTERVAL DEPICTED HEREIN IS TWO (2) FOOT.
4. UTILITIES SHOWN DO NOT PURPORT TO CONSTITUTE OR REPRESENT ALL UTILITIES LOCATED UPON OR ADJACENT TO THE SURVEYED PREMISES. EXISTING UTILITIES SHOWN ON THE PLANS ARE BASED ON FIELD SURVEY DATA AND RECORDS AND PREVIOUS WAYS AND RECORDS AND RECORD UTILITY DRAWINGS AND NOT GUARANTEED TO BE ACCURATE OR COMPLETE.



- | IMPOSED FEATURES | EXISTING FEATURES |
|--|--|
|  ROUND |  ROUND |
|  BENCHMARK |  BENCHMARK |
|  DRILL HOLE |  DRILL HOLE |
|  SURVEY POINT |  SURVEY POINT |
|  IRON PIN |  IRON PIN |
|  TEST PIT |  TEST PIT |
|  BORING |  BORING |
|  PERC TEST |  PERC TEST |
|  CATCH BASIN (SQUARE) |  CATCH BASIN (SQUARE) |
|  CATCH BASIN (ROUND) |  CATCH BASIN (ROUND) |
|  HEADWALL |  HEADWALL |
|  FLARED END SECTION |  FLARED END SECTION |
|  STONE APRON |  STONE APRON |
|  DRAIN MANHOLE (DMM) |  DRAIN MANHOLE (DMM) |
|  DRAINAGE CLEAN OUT |  DRAINAGE CLEAN OUT |
|  SANITARY SEWER MANHOLE (SSM) |  SANITARY SEWER MANHOLE (SSM) |
|  SANITARY CLEAN OUT |  SANITARY CLEAN OUT |
|  HYDRANT |  HYDRANT |
|  WATER SHUTOFF |  WATER SHUTOFF |
|  TAPPING SLEEVE & VALVE |  TAPPING SLEEVE & VALVE |
|  GATE VALVE |  GATE VALVE |
|  WELL |  WELL |
|  UTILITY POLE |  UTILITY POLE |
|  GUY POLE |  GUY POLE |
|  ELECTRICAL MANHOLE |  ELECTRICAL MANHOLE |
|  FLOOD LIGHT |  FLOOD LIGHT |
|  LIGHT POST |  LIGHT POST |
|  TELEPHONE MANHOLE |  TELEPHONE MANHOLE |
|  NATURAL GAS MANHOLE |  NATURAL GAS MANHOLE |
|  COMMUNICATION MANHOLE |  COMMUNICATION MANHOLE |
|  BOLLARD |  BOLLARD |
|  SINGLE POLE SIGN |  SINGLE POLE SIGN |
|  DOUBLE POLE SIGN |  DOUBLE POLE SIGN |
|  SPOT ELEVATION |  SPOT ELEVATION |
|  ACCESSIBLE PARKING STALL |  ACCESSIBLE PARKING STALL |
|  DRAINAGE FLOW |  DRAINAGE FLOW |
|  DECIDUOUS TREE |  DECIDUOUS TREE |
|  CONIFEROUS TREE |  CONIFEROUS TREE |
|  WETLAND SETBACK |  WETLAND |

- | | |
|-----------------------|-----------------------|
| PROPOSED FEATURES | EXISTING FEATURES |
| 100 MAJOR CONTOUR | 100 MAJOR CONTOUR |
| 98 MINOR CONTOUR | 98 MINOR CONTOUR |
| PROPERTY LINE | PROPERTY LINE |
| SETBACK | SETBACK |
| EASEMENT | EASEMENT |
| CENTERLINE | CENTERLINE |
| EDGE OF PAVEMENT | EDGE OF PAVEMENT |
| EDGE OF GRAVEL | EDGE OF GRAVEL |
| EDGE OF CONCRETE | EDGE OF CONCRETE |
| CURB | CURB |
| X FENCE (BARBED WIRE) | X FENCE (BARBED WIRE) |
| O FENCE (CHAIN LINK) | O FENCE (CHAIN LINK) |
| □ FENCE (WOODEN) | □ FENCE (WOODEN) |
| GUARD RAIL | GUARD RAIL |
| TREE LINE | TREE LINE |
| STONE WALL | STONE WALL |
| SANITARY SEWER | SANITARY SEWER |
| SEWER FORCEMAIN | SEWER FORCEMAIN |
| STORM LINE | STORM LINE |
| UNDER DRAIN | UNDER DRAIN |
| FOUNDATION DRAIN | FOUNDATION DRAIN |
| ROOF DRAIN | ROOF DRAIN |
| DITCH/SWALE | DITCH/SWALE |
| UNDERGROUND TELECOM | UNDERGROUND TELECOM |
| OVERHEAD TELECOM | OVERHEAD TELECOM |
| UNDERGROUND ELECTRIC | UNDERGROUND ELECTRIC |
| OVERHEAD ELECTRIC | OVERHEAD ELECTRIC |
| 4" W WATER LINE | WATER LINE |
| 8" W WATER LINE | WATER APPROX. |
| | ARCS SOIL BOUNDARY |

Date _____

Date _____

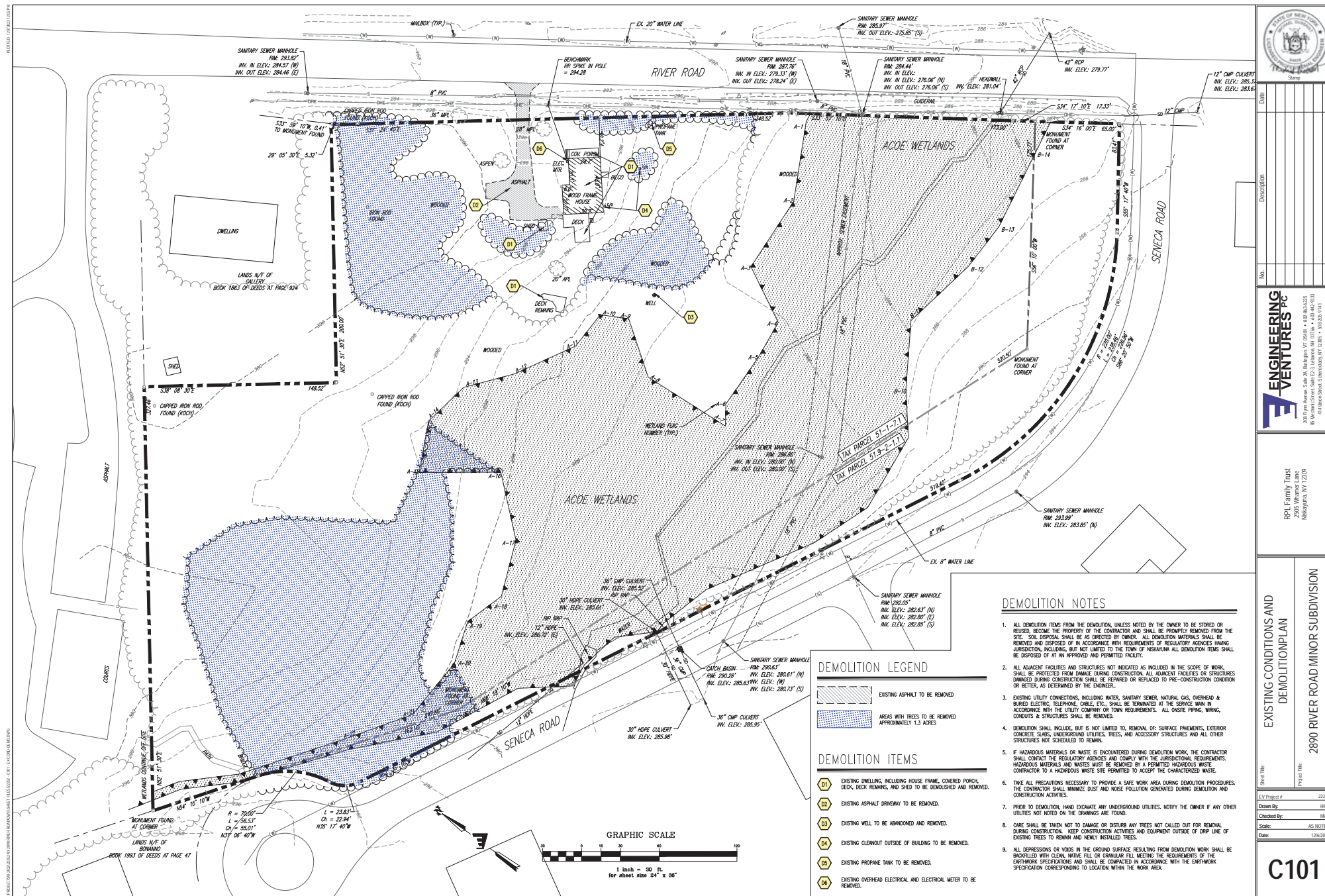
[illegible]

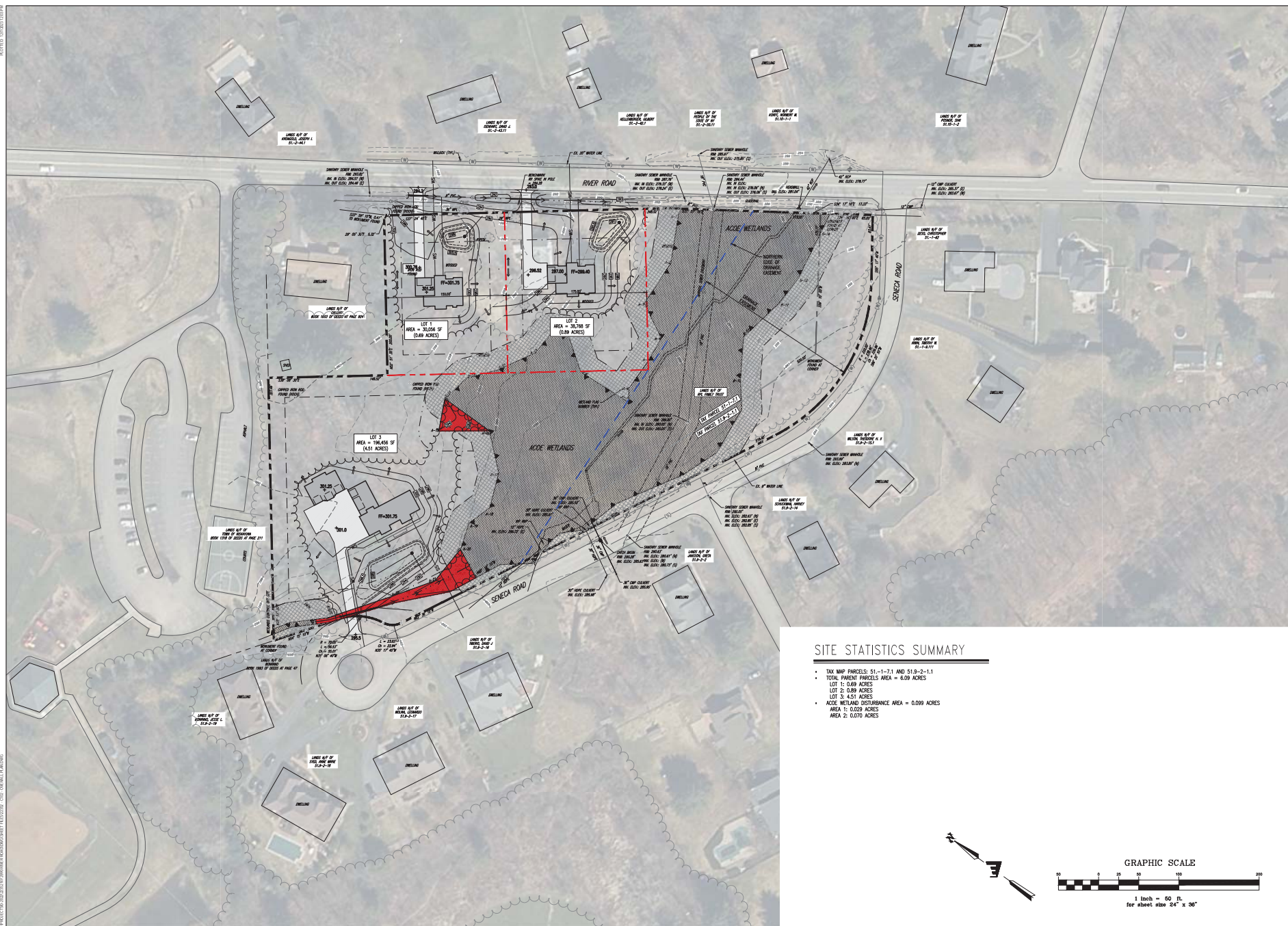
RPL Family Trust
2505 Whamler Lane
Niskayuna, NY 12309


SITE LEGEND AND NOTES

Project #	22352
Drawn By:	HMB
Checked By:	MHD
Date:	AS NOTED
File:	12/6/2023

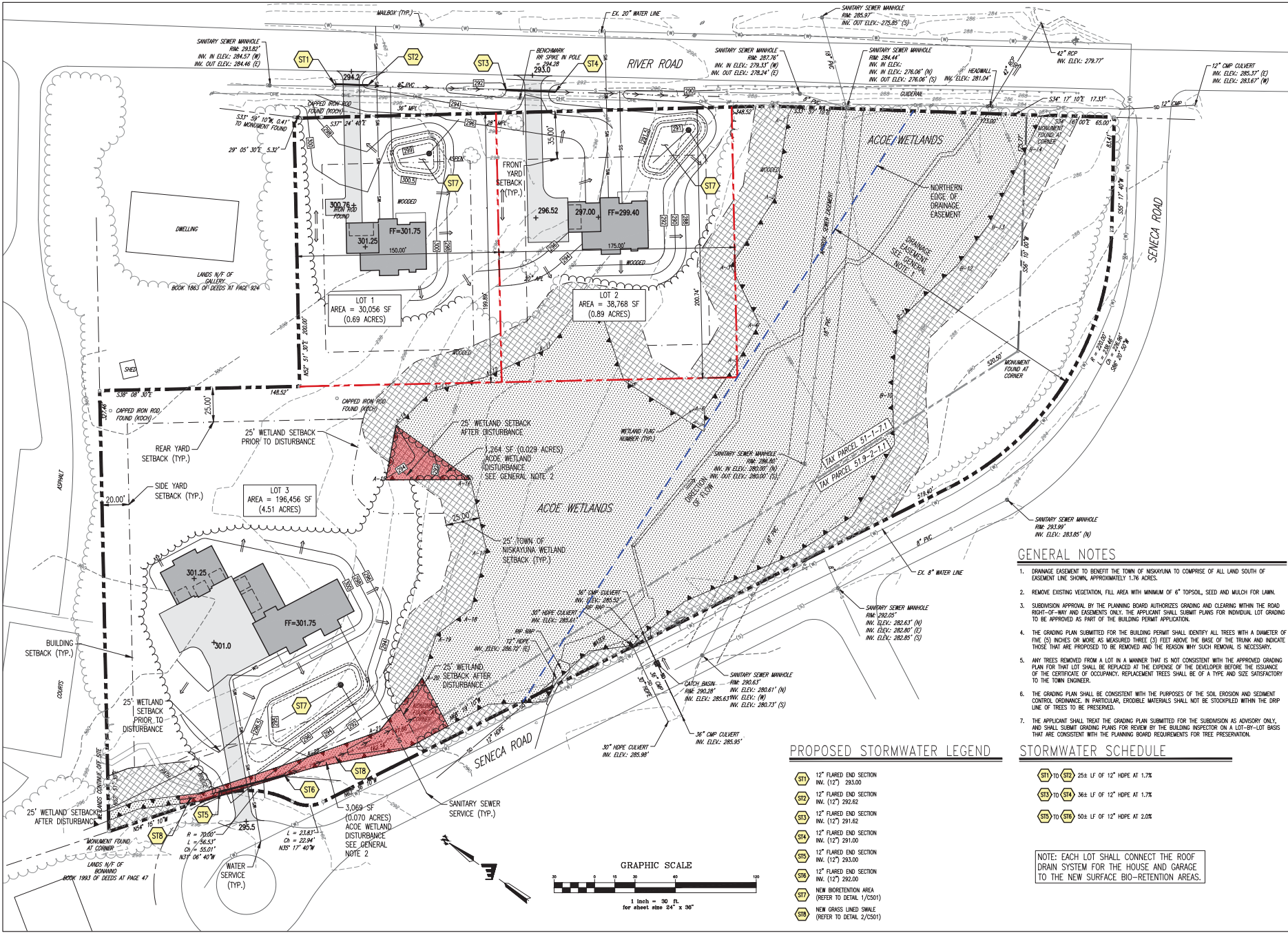
C001

[illegible]



<div style="display: flex; justify-content: space-between;"> <div> <p>OVERALL SUBDIVISION PLAN</p> <p>PROPOSED 3-LOT</p> </div> <div> <p>2990 RIVER ROAD MINOR SUBDIVISION</p> <p>TOWN OF INDIANAPOLIS, SHELBY COUNTY, IN</p> </div> </div>		
<div> <p>Stamp</p> <p>Date</p> <p>Description</p> <p>No.</p> </div>	<div> <p>ENGINEERING VENTURES PC</p> <p>2001 York Avenue, Suite 205, Burlington, NY 10601 • 40.6043225 40 Hudson Street, Suite 200, New York, NY 10013 414 Union Street, Schenectady, NY 12305 • 43.93265441</p> <p>www.engravingventures.com</p> </div>	
<div> <p>EV Project # 22352</p> <p>Drawn By: 1488</p> <p>Checked By: 1840</p> <p>Scale: AS NOTED</p> <p>Date: 12/06/2023</p> </div>		
<div style="text-align: center;"> <p>C102</p> </div>		

NOTED INFORMATION



GENERAL NOTES

1. DRAINAGE EASEMENT TO BENEFIT THE TOWN OF NISKAYUNA TO COMPRISE OF ALL LAND SOUTH OF EASEMENT LINE SHOWN, APPROXIMATELY 1.76 ACRES.
2. REMOVE EXISTING VEGETATION, FILL AREA WITH MINIMUM OF 6" TOPSOIL, SEED AND MULCH FOR LAWN.
3. SUBDIVISION APPROVAL BY THE PLANNING BOARD AUTHORIZES GRADING AND CLEARING WITHIN THE ROAD RIGHT-OF-WAY AND EASEMENTS ONLY. THE APPLICANT SHALL SUBMIT PLANS FOR INDIVIDUAL LOT GRADING TO BE APPROVED AS PART OF THE BUILDING PERMIT APPLICATION.
4. THE GRADING PLAN SUBMITTED FOR THE BUILDING PERMIT SHALL IDENTIFY ALL TREES WITH A DIAMETER OF FIVE (5) INCHES OR MORE AS MEASURED THREE (3) FEET ABOVE THE BASE OF THE TRUNK AND INDICATE THOSE THAT ARE PROPOSED TO BE REMOVED AND THE REASON WHY SUCH REMOVAL IS NECESSARY.
5. ANY TREES REMOVED FROM A LOT IN A MANNER THAT IS NOT CONSISTENT WITH THE APPROVED GRADING PLAN FOR THAT LOT SHALL BE REPLACED AT THE EXPENSE OF THE DEVELOPER BEFORE THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY. REPLACEMENT TREES SHALL BE OF A TYPE AND SIZE SATISFACTORY TO THE TOWN ENGINEER.
6. THE GRADING PLAN SHALL BE CONSISTENT WITH THE PURPOSES OF THE SOIL EROSION AND SEDIMENT CONTROL ORDINANCE. IN PARTICULAR, ERODIBLE MATERIALS SHALL NOT BE STOCKPILED WITHIN THE DROP LINE OF TREES TO BE PRESERVED.
7. THE APPLICANT SHALL TEND THE GRADING PLAN SUBMITTED FOR THE SUBDIVISION AS ADVISORY ONLY, AND SHALL SUBMIT GRADING PLANS FOR REVIEW BY THE BUILDING INSPECTOR ON A LOT-BY-LOT BASIS THAT ARE CONSISTENT WITH THE PLANNING BOARD REQUIREMENTS FOR TREE PRESERVATION.

PROPOSED STORMWATER LEGEND

- ST1 12" FLARED END SECTION (12') 293.00
- ST2 12" FLARED END SECTION (12') 292.62
- ST3 12" FLARED END SECTION (12') 291.62
- ST4 12" FLARED END SECTION (12') 291.00
- ST5 12" FLARED END SECTION (12') 293.00
- ST6 12" FLARED END SECTION (12') 292.00
- ST7 NEW BIORETENTION AREA (REFER TO DETAIL 1/C501)
- ST8 NEW GRASS LINED SWALE (REFER TO DETAIL 2/C501)

STORMWATER SCHEDULE

- ST1 TO ST2 25± LF OF 12" HOPE AT 1.7%
- ST3 TO ST4 36± LF OF 12" HOPE AT 1.7%
- ST5 TO ST6 50± LF OF 12" HOPE AT 2.0%

NOTE: EACH LOT SHALL CONNECT THE ROOF DRAIN SYSTEM FOR THE HOUSE AND GARAGE TO THE NEW SURFACE BIO-RETENTION AREAS.

DATE: _____
DESCRIPTION: _____
NO: _____

ENGINEERING VENTURES PC
2807 Park Avenue, Suite 2A, Nanuet, NY 10954 • (845) 894-1325
440 Hudson Street, 3rd Floor, New York, NY 10014 • (212) 444-4333
www.engrventures.com

RPL Family Trust
2505 Whitford Lane
Nanuet, NY 12909

**SUBDIVISION PLAN
PROPOSED 3-LOT**

2890 RIVER ROAD MINOR SUBDIVISION
TOWN OF NISKAYUNA, SCHENECTADY COUNTY, NY

Sheet No: 22163
E.V. Project #: 16468
Drawn By: MKH
Checked By: MKH
Scale: AS NOTED
Date: 12/06/2023

C103

1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES. INsofar AS PRACTICABLE, EXISTING VEGETATION SHALL BE PRESERVED.
2. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE AREA AND DURATION OF SOIL EXPOSURE.
3. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED.
4. CONSTRUCTION TRAFFIC SHALL NOT CROSS STROADS OR DITCHES EXCEPT AT SUITABLE CROSSING FACILITIES, AND SHALL NOT OPERATE UNNECESSARILY WITHIN WATERWAYS OR DRAINAGE DITCHES.
5. THE DEVELOPER/CONTRACTOR OR HIS BUILDER SHALL INSPECT AND MAINTAIN THE INTEGRITY AND FUNCTION OF ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT THE DURATION OF THE CONSTRUCTION PROCESS. EROSION CONTROL MEASURES SHALL BE MAINTAINED IN GOOD CONDITION AND REINFORCED, EXTENDED, REPAIRED, RE-SEEDED AND PROTECTED FROM FURTHER EROSION. ALL ACCUMULATED SEDIMENT SHALL BE REMOVED AND CONTAINED IN APPROPRIATE SPILL AREAS. WATER SHALL BE APPLIED TO NEWLY SEEDED AREAS AS NEEDED UNTIL GRASS COVER IS WELL ESTABLISHED.

DUST CONTROL
DUST SHALL BE CONTROLLED THROUGH APPLICATION OF WATER, AS REQUIRED TO PREVENT MIGRATION BEYOND THE PROJECT LIMITS. CONTROL OF DUST REMAINS AN ONGOING RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED.

INSPECTION REQUIREMENTS
THE SITE WORK CONTRACTOR IS RESPONSIBLE FOR INSPECTION OF ALL EROSION AND SEDIMENT CONTROL MEASURES EVERY 7 DAYS AND AS SOON AS REASONABLY POSSIBLE DURING OR AFTER RUNOFF EVENTS RESULTING IN RUNOFF FROM THE SITE.

FULL COMPLIANCE WITH THE REQUIREMENTS OF NEW YORK STATE EROSION AND SEDIMENT CONTROL MANUAL (2016) AND THE NYSDEC SPECIES GENERAL PERMIT FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES (GP-0-20-001) IS THE RESPONSIBILITY OF THE SITE CONTRACTOR.

IT IS THE RESPONSIBILITY OF THE SITE CONTRACTOR TO PROVIDE AND COMPENSATE A "QUALIFIED INSPECTOR", AS DEFINED IN THE NYSDEC GENERAL PERMIT GP-0-20-001. (SEE WRITTEN SPECIFICATIONS AND THE STORMWATER POLLUTION PREVENTION PLAN REPORT FOR ADDITIONAL INFORMATION). A THIRD-PARTY "QUALIFIED INSPECTOR" MAY BE HIRED AND COMPENSATED BY THE SITE CONTRACTOR.

INSPECTION FREQUENCY MAY BE REDUCED TO MONTHLY IF ALL DISTURBED AREAS HAVE BEEN STABILIZED.
INSPECTION AND REPORTING REQUIREMENTS DO NOT CEASE UNTIL THE SITE IS PERMANENTLY STABILIZED.

VEGETATIVE STABILIZATION
ALL SEEDING FOR VEGETATIVE STABILIZATION IS TO TAKE PLACE BETWEEN APRIL 15TH AND SEPTEMBER 15TH UNLESS OTHERWISE APPROVED.

STABILIZATION REQUIREMENTS
TO BE CONSIDERED PERMANENTLY STABILIZED, ALL DISTURBED AREAS MUST BE PROTECTED BY ONE OF THE FOLLOWING: PAVEMENT, GRAVEL, MULCH BEDS, OR VEGETATION (70% MINIMUM COVERAGE). THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL SEDIMENT CONTROL MEASURES (SILT FENCE, DISTURBANCE LIMIT MARKERS, INLET PROTECTION, ETC.) AND FOR RESTORATION OF ALL STAGING AND SOIL STOCKPILE AREAS BEFORE FILING NOTICE OF TERMINATION.

SOLID WASTE DISPOSAL
SOLID WASTES SHALL BE COLLECTED ON SITE AND REMOVED TO AN APPROVED OFF-SITE FACILITY.

3.05, 80, 85.5

3270 CHIPPED MOUNT ROAD
FOUND (KOCH)

|||

SOIL STOPS

NUCLEUS
CYTOSOL
MITOCHONDRIA
GOLGI APPARATUS
LYSOSOMES
VACUOLAR

Geological Map of the Coastal Area

Legend:

- Hatched: Gravel and sand
- Stippled: Clay and silt
- Solid black: Shale

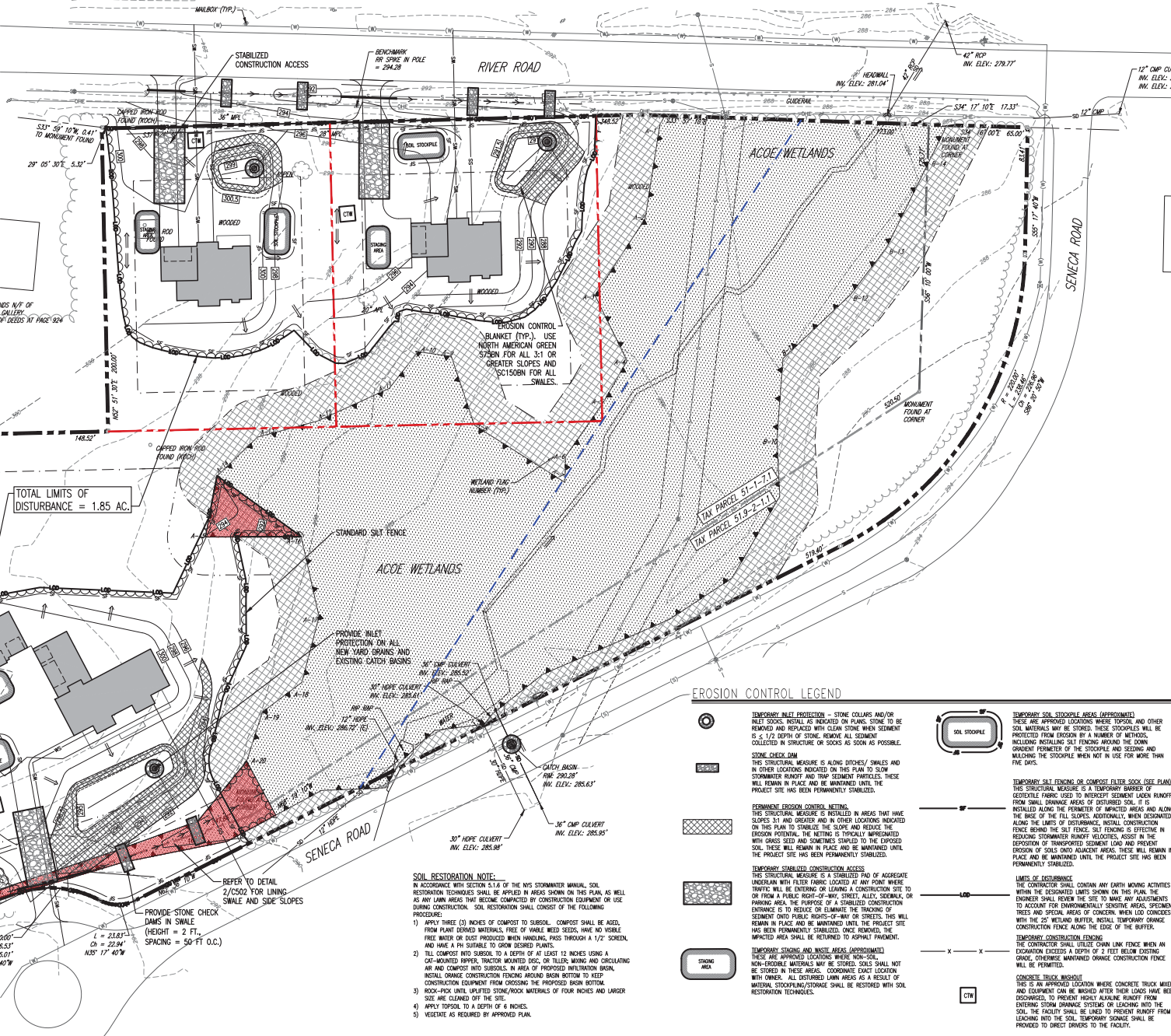
Scale: 0, 100, 200 feet

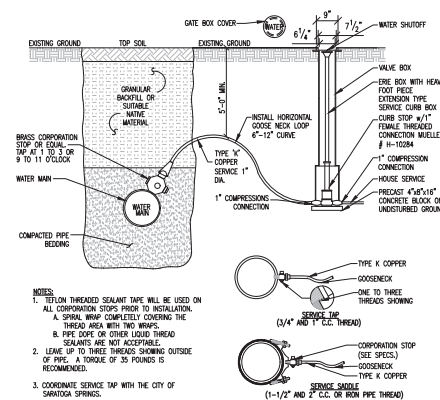
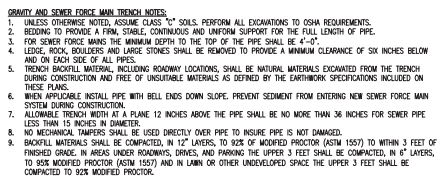
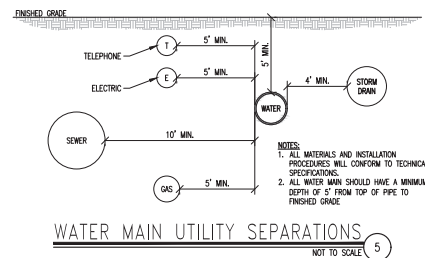
North Arrow

N54° 15' 10"W

MONUMENT FOUND
AT CORNER

LANDS N/F OF
BOINANO
BOOK 1983 OF DEEDS AT PAGE 47





C501

1. UPGRADE AREAS DRAINING TO BIO-RETENTION AREA SHALL BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF INTO THE PROPOSED BIO-RETENTION AREA.

SEE LANDSCAPING ON THIS SHEET. LANDSCAPING SHALL PROVIDE A DIVERSE, DENSE PLANT COVER TO TREAT STORMWATER RUNOFF AND WITHSTAND PERIODIC INUNDATION, URBAN STRESSES FROM INSECT AND DISEASE INFESTATIONS, DROUGHT, TEMPERATURE AND WIND.

6" PVC CLEANOUT WITH THREADED CAP TO BE USED AS OBSERVATION WELL

3" MULCH OR 2" RIVERSTONE

EXISTING GRADE

OVERFLOW (ELEV. 1')

INLET (ELEV. 1')

BIO-RETENTION SURFACE (ELEV. 1')

TOP OF BERM (ELEV. 1')

3" MULCH

• BIO-RETENTION AREA LOT 1 AND LOT 2

3" ORIFICE

• BIO-RETENTION AREA LOT 3: 2" ORIFICE

6" YARD DRAIN (NYLOPLAST OR APPROVED EQUIVALENT)

COMPACTED SUBGRADE FOR BERM

6" HDPE

6" PERFORATED PVC AT 0.00%

SEE DETAILED PLAIN VIEW FOR BIO-RETENTION AREAS (THIS SHEET)

UNDISTURBED/UNCOMPACTED

MR41 160N

#2 STONE

BOTTOM OF UNDERGRAIN GRAVEL (ELEV. 1')

BOTTOM OF FILTER MEDIA (ELEV. 1')

FILTER MEDIA

FILTER MEDIA:

THE SOIL SHOULD BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN 1/2" INCH. NO OTHER MATERIALS OR SUBSTANCES SHOULD BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE FILTER MEDIA SHOULD BE FREE OF NOXIOUS WEEDS. THE FILTER MEDIA SHOULD BE TESTED AND SHOULD MEET THE FOLLOWING CRITERIA:

- PH RANGE 5.2 - 7.0
- ORGANIC MATTER 1.5 - 4%
- MAGNESIUM 35 LB./AC
- PHOSPHORUS P205 75 LB./AC
- POTASSIUM K2O 85 LB./AC
- SOLUBLE SALTS NOT TO EXCEED 500 PPM

NOT TO SCALE



NOT TO SCALE 2

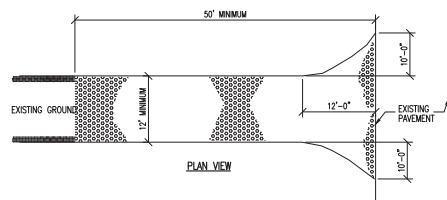


1. MULCH: 1/4" OF STRAW MAY BE UTILIZED AND SHALL BE APPLIED AT A RATE OF 2 TONS PER ACRE.
2. SEED: SHALL BE OF THE FOLLOWING MIXTURE

KENTUCKY BLUE GRASS -----	20 POUNDS / ACRE
CREeping RED FESCUE -----	20 POUNDS / ACRE
RYE GRASS -----	5 POUNDS / ACRE
3. COVER SEED WITH 1/4" INCH SOIL UNLESS A HYDROSEEDER IS USED.
4. MULCH ANCHORING: SHALL BE ACCOMPLISHED BY DEGRADABLE MULCH NETTING. USE WHEN SLOPES ARE GREATER THAN 10%.
5. TOPSOIL AND MULCHING NOT TO BE APPLIED IN AREAS OF TRAVEL WAYS.
6. SEEDING AND MULCHING OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 48 HOURS OF FINAL GRADING.

STRAW MULCH- 2 BALES PER 1000S.F.
APPLY BINDER OR NETTING AS NEEDED.

NOT TO SCALE



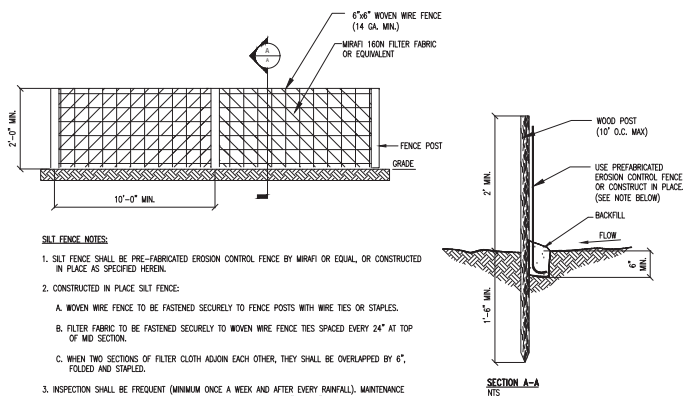
STABILIZED CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE: USE 1-1/2" CRUSHED STONE.
2. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCE SHALL BE PIPED ACROSS THE ENTRANCE.
3. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. REPAIR AND/OR CLEANOUT ANY MEASURES USED TO TREAD SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.
4. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.
5. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROPRIATE SEDIMENT TRAPPING DEVICE.



1. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/ BLANKETS SHALL HAVE GOOD SOIL CONTACT.
2. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
3. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

NOT TO SCALE (3)

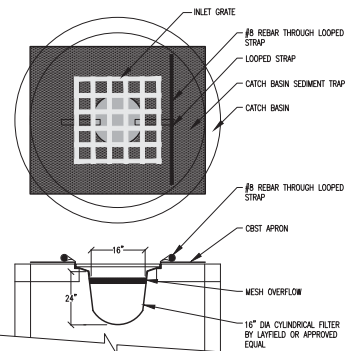


NOT TO SCALE (4

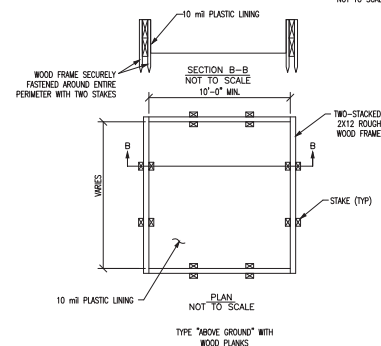


- CONSTRUCTION SPECIFICATIONS**
1. CLEAR THE AREA OF ALL DEBRIS THAT WILL HINDER EXCAVATION.
 2. GRADE APPROACH TO THE INLET UNIFORMLY AROUND THE BASIN.
 3. WEEP HOLES SHALL BE PROTECTED BY GRAVEL.
 4. UPON STABILIZATION OF CONTRIBUTING DRAINAGE AREA, SEAL WEEP HOLES, FILL BASIN WITH STABLE SOIL, TO FINAL GRADE, COMPACT IT PROPERLY AND STABILIZE WITH PERMANENT SEEDING.
 5. GRAVEL, GRADE GUARDS, FILTERED OR SCDURATED INLET PROTECTIONS MAY BE USED. SUBMIT PROOF OF INFORMATION TO ENGINEER FOR REVIEW PRIOR TO USE. INSTALL PRODUCTS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND THE LATEST EDITION OF THE NY EPSC STANDARDS AND SPECIFICATIONS.

NOT TO SCALE 5



NOT TO SCALE 6



NOT TO SCALE



1. DETERMINE THE CRITICAL ROOT RADII, ESTIMATE THE TREE'S HEIGHT AND MULTIPLY BY 40 PERCENT (0.40). THE RESULT IS THE APPROXIMATE DISTANCE FROM THE TREE TRUNK TO THE EDGE OF THE CONSTRUCTION FENCING.
2. FENCE SPECIMEN TREES AND GROUPS OF TREES, WHERE ROOT LOSS WILL OCCUR, ROOT PRUNE ONE FOOT BEYOND THE CONSTRUCTION FENCING USING A VIBRATING CIRCULAR OR NARROW TRENCHER - ALWAYS WITH SHARP BLADES TO MAKE CLEAN CUTS. BACKFILL IMMEDIATELY AND COVER WITH 3 INCHES OF MULCH.
3. INSTALL SILT FENCE ON THE INTERIOR OF THE CONSTRUCTION FENCING TO KEEP SOIL FROM DISTURBED AREAS OUT OF THE ROOT ZONES OF TREES TO BE SAVED.
4. FERTILIZE, WATER, AERATE AND OTHERWISE MAINTAIN TREE HEALTH.
5. COORDINATE THE FINAL LOCATION OF THE CONSTRUCTION FENCING AND ROOT PRUNING WITH THE OWNER.

NOT TO SCALE 1



1. STOCKPILES TO HAVE MAXIMUM 2:1 SIDE SLOPES.
2. SILT FENCE SHALL BE PLACED AROUND THE PERIMETER OF STOCKPILE AREA.
3. STOCKPILE AREA TO BE STABILIZED WITH VEGETATION, GEOTEXTILE, OR COVER. IF COVER TO BE USED, COVER SHALL BE SECURED WITH USE OF SAND BAGS OR OTHER MEASURES TO PREVENT COVER FROM BLOWING OFF STOCKPILE.
4. STOCKPILES SHALL BE PLACED ON DRY AND STABLE AREAS.

NOT TO SCALE (2)



1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN PLANS.
2. LAYING OF CHECK DAMS TO ASSURE THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE CHANNEL APERTURES, SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMS OR BLOCKAGE FROM DISPLACED STONES.
6. REMOVE ACCUMULATED SEDIMENT BEHIND CHECK DAM WHEN 1/2 THE HEIGHT OF THE DAM. REPLACE STONES AS NECESSARY.

NOT TO SCALE 6



1. THE "ON-SITE EROSION CONTROL PLAN COORDINATOR" SHALL BE PRESENT ON-SITE FROM DAY-TO-DAY, AND SHALL BE RESPONSIBLE FOR ENSURING THAT THE EROSION CONTROL MEASURES REQUIRED BY THE EROSION CONTROL PLAN, DETAILS AND NOTES, ARE PROPERLY INSTALLED AND MAINTAINED. THE ONSITE EROSION CONTROL PLAN COORDINATOR SHALL KEEP A WRITTEN RECORD OF INSPECTIONS AND MAINTENANCE OF EROSION CONTROL FEATURES. A COPY OF THESE PLANS AND INSPECTION/MAINTENANCE RECORDS SHALL BE KEPT ONSITE AT ALL TIMES.

2. EROSION CONTROL MEASURES SHALL BE CONDUCTED IN ACCORDANCE WITH THE "NEW YORK STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", LATEST EDITION, NOVEMBER 2004, OR LATEST EDITION.
3. DISTURBANCE LIMITS ARE TO BE MARKED, AND THE FOLLOWING MANAGEMENT PRACTICES INSTALLED, PRIOR TO BEGINNING EARTH WORK IN ANY GIVEN AREA, SOIL ERECTION, CONSTRUCTION DRAINAGE, PILE PROTECTION, AND TREE PROTECTION FENCING.
4. THE PERIOD BETWEEN OCTOBER 15TH AND APRIL 15TH IS CONSIDERED THE "WINTER CONSTRUCTION PERIOD". A PLAN FOR WINTER CONSTRUCTION MUST BE DEVELOPED BY THE CONTRACTOR, AND SUBMITTED TO THE ENGINEER AT LEAST 30 DAYS IN ADVANCE OF PROPOSED EARTH MOVEMENT DURING THIS PERIOD.
5. ALL DISTURBED AREAS ARE TO BE STABILIZED (TEMPORARILY OR PERMANENTLY) WITHIN 7 DAYS OF INITIAL DISTURBANCE. AFTER THIS PERIOD, THE CONTRACTOR SHALL MAINTAIN THE STABILIZED AREAS WITHIN THE FOLLOWING CONDITIONS:
- a. NO EROSION SHALL BE REQUIRED IF THERE IS TO CONTINUE IN THE AREA WITHIN 24 HOURS AND NO PRECIPITATION IS FORECAST DURING THAT PERIOD.
- b. WORK IS OCCURRING WITH A SELF-CORRECTING EROSION, 2 FEET OR MORE IN DEPTH.
- c. NO EROSION SHALL SOIL BE REQUIRED FOR MORE THAN 14 DAYS WITHOUT BEING STABILIZED.
6. THE CONTRACTOR IS RESPONSIBLE FOR DAILY INSPECTION OF THE ADJACENT ROWS FOR OFF-SITE DAMAGE TO SOIL, MATERIALS, SOIL, STONE, AND DEBRIS FLOW LEAVING THE SITE OR TO BE REMOVED (IMPACTS) BY SWEeping AT THE END OF EACH CONSTRUCTION DAY, OR WORK FREQUENTLY WHEN NEEDED TO PREVENT PHENOMENA TO ADJACENT ROWS AND SIDEWALKS.
7. IF SWEEEPING IS REQUIRED FOR PROTECTION, THE CONTRACTOR MUST UTILIZE SEEDING PAPER BAGS (OR ALTERNATE) APPROVED BY THE ENGINEER TO PREVENT DISCHARGE OF SEDIMENT-LADEN WATER OFF-SITE.

TEMPORARY/CONSTRUCTION EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE DISTURBED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS DISTURBED, IT SHALL BE PROTECTED BY EROSION CONTROL MEASURES AS APPROVED BY THE LOCAL AGENCY.
2. DUST SHALL BE CONTROLLED WITH WINDMIST DISTRIBUTED BY A TRUCK-MOUNTED SPRAY BAR. CALCIUM CHLORIDE (ASHGRT M 144) OR SODIUM CHLORIDE (ASHGRT M 143) SHALL BE USED AS DIRECTED BY THE ENGINEER.
3. SET FINISHES SHALL BE INSTALLED GENERALLY 10 FEET FROM THE BASE OF THE FILL SLOPES, OR AS SHOWN ON THE PROJECT SHEETS. THESE FINISHES SHALL BE INSTALLED AS SOON AS POSSIBLE TO PREVENT SOIL EROSION AND STABILIZATION OF THE SLOPE. STOCKPILING ON THE UPRAMP SIDE OF DISTURBED AREAS, IF POSSIBLE, DURING WINDY WEATHER SHALL BE PROHIBITED.
4. SLOPES GREATER THAN 3:1 SHALL HAVE EROSION CONTROL NETTING INSTALLED TO STABILIZE THE SOILS AND REDUCE THE EROSION POTENTIAL. NETTING SHALL BE BODECROQUETTE WITH A 12 MONTH VIGNETTE, 2100MM AS MANUFACTURED OR APPROVED EQUIVALENT. NETTING OTHER THAN WALLED SLOPES SHALL BE CONTACT WITH THE SOIL AND SHALL BE INSTALLED WITH NETTING WITH AN OPEN AREA OF 10% TO ALLOW PLANT GROWTH. PLANTING SHALL BE INSTALLED IMMEDIATELY AND SHALL BE LEFT SUFFICIENTLY ROUGHENED AND NOT SMOOTH. IF LARGE AMOUNTS OF OFFSITE WATER WILL DRAIN OVER THESE SLOPES, TEMPORARY DRAINAGE CHANNELS SHALL BE INSTALLED UP SLOPE UNTIL THE SOIL VEGETATION STABILIZES.

PERMANENT EROSION CONTROL MEASURES

3. AFTER THE AREA IS STABILIZED, REMOVE ALL TEMPORARY MEASURES AND INSTALL PERMANENT VEGETATION ON THE DISTURBED AREAS.
4. RE-SEEDING SHALL BE DONE UNTIL ALL AREAS ARE COMPLETELY COVERED WITH A MATURE STAND OF GRASS. AN AREA SHALL BE CONSIDERED COVERED WHEN THE ENTIRE SURFACE SHOWS A VIGOROUS STAND OF GRASS. AREAS THAT, IN THE JUDGMENT OF THE ENGINEER, ARE PREVIOUSLY WEEDS SHALL BE PLOWED UP AND RESEEDING SHALL BE DONE. AREAS THAT WERE PREVIOUSLY FERTILIZED AND RE-SEEDING IN THE MANNER SPECIFIED PREVIOUSLY, EXERCISING CAUTION NOT TO CAUSE DAMAGE TO NEW OR EXISTING PLANT MATERIAL.
5. ALL STABILIZATION INVOLVING SEEDING IS TO BE COMPLETED BY SEPTEMBER 15TH.



1. ALL PROJECT DECONTAMINATES PUMPS SHALL DISCHARGE INTO A PUMPED SETTIMENT CONTROL DEVICE.
2. ALL PUMPABLE MATERIALS ARE TO BE PUMPED INTO A PUMPED WATER, I.E., FOR COARSE PARTICLES A WOVEN MATERIAL, FOR SILTS/CLAYS A NON-WOVEN MATERIAL.
3. LIFTING STRIPS SHALL BE INCLUDED WITH THE PUMPED SETTIMENT CONTROL DEVICE FOR REMOVAL WHEN FULL.
4. DO NOT OVER PRESSURIZED BAG OR USE BEYOND CAPACITY.
5. DISCHARGE SITE ON LEVEL UPLAND TO BE AS FAR AWAY AS POSSIBLE FROM STREAMS, WETLANDS, OTHER RESOURCES AND POINTS OF CONCENTRATED FLOW.
6. DOWNDRAINAGE FROM RECEIVING AREA MUST BE WELL VEGATED OR OTHERWISE STABLE FROM EROSION, E.G., FOREST FLOOR, GRASS LAWN OR COARSE GRAVEL/STONE.
7. DISCHARGE LOCATIONS SHALL MEET ALL REGULATORY SETBACKS FROM WETLANDS AND OTHER WATER COURSES.
8. HEAVY EQUIPMENT SHALL NOT BE ON THE PUMPED SETTIMENT CONTROL DEVICE SITE SHALL BE MAINTAINED FOR REPLACEMENT AND DISPOSAL.
9. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION, CLEANING AND REMOVAL.

NOT TO SCALE 5

WINTER CONSTRUCTION STANDARDS AND EROSION AND SEDIMENT CONTROL MEASURES APPLY TO ALL CONSTRUCTION ACTIVITIES INVOLVED WITH ONGOING LAND DISTURBANCE AND EXPOSURE BETWEEN OCTOBER 15TH TO THE FOLLOWING APRIL 1ST.

WINTER CONSTRUCTION PROCEDURES

- 1. DURING WINTER CONSTRUCTION, OPERATIONS BY THE ON-SITE PLANT COORDINATOR SHALL OCCUR DAILY WHEN TEMPERATURES ARE 32°F OR LOWER, AND MOSTLY PRIOR TO ANY FORECASTED RAIN, SO THAT SPRING MELT WHEN TEMPERATURES BEGIN TO RISE IS IN PLACE.
- 2. IF THE SITE WILL NOT HAVE EARTH DISTURBANCES ONGOING DURING THE WINTER CONSTRUCTION PERIOD, ALL BARE EXPOSED SOIL MUST BE STABILIZED BY ESTABLISHING VEGETATION, STRAW OR OTHER ACCEPTABLE COVER. IF THE SITE WILL HAVE EARTH DISTURBANCES, STRAW OR POLLED DISTURBED MATERIALS, SEEDING OF AREAS WITH MULCH COVER IS PREFERRED BUT SEEDING ALONE IS NOT ACCEPTABLE FOR PROPER STABILIZATION.
- 3. PREPARE A SNOW MANAGEMENT PLAN WITH ADEQUATE STRAWING FOR SNOW AND COVER, OF MELT WATER, REQUIRING CLEARLED SNOW TO BE STORED IN A MANNER NOT AFFECTING ONGOING CONSTRUCTION ACTIVITIES.
- 4. DRAINAGE AND STABLED ACCESS POINTS TO PROVIDE FOR SNOW MANAGEMENT AND STORING. SNOW MANAGEMENT ACTIVITIES MUST NOT DESTROY OR DEGRADE INSTALLED EROSION AND SEDIMENT CONTROL PRACTICES.
- 5. LIMITS OF DISTURBANCE SHALL BE DEMONSTRATED OR RELATED TO REFLECT BOUNDARY OF WINTER WORK.
- 6. A MINIMUM 25'-FT BUFFER SHALL BE MAINTAINED FROM ALL PERMETER CONTROLS (SUCH AS SLT FENCES) TO ALLOW FOR CLEARING AND WATERSHED. MARK SLT FENCE WITH SLT TALKES THAT ARE VISIBLE ABOVE THE SNOW PILE.
- 7. SNOW TO BE REMOVED FROM ALL STRUCTURAL EROSION AND SEDIMENT CONTROL MEASURES FOLLOWING EACH SIGNIFICANT SNOWFALL. NO SNOW STORAGE OR GRABENT OF SNOWFALL. NO SNOW STORAGE IN SEDIMENT PONDINGS/BASINS. IF NECESSARY, SNOW MUST BE REMOVED PRIOR TO STABILIZATION OF DISTURBED AREAS.
- 8. EDGES OF DISTURBED AREAS THAT OADN TO A WATERBODY WITHIN 100 FT SHALL HAVE 2 ROWS OF SLT FENCE, 5 FEET EACH, INSTALLED ON EACH SIDE OF THE DISTURBED AREA.
- 9. DRAINAGE STRUCTURES SHALL KEEP OPEN AND FREE OF SNOW AND ICE. ALL DEBRIS, ICE, DIRT, OR DEBRIS FROM PLOWING OPERATIONS, THAT RESTRICT THE FLOW OF RUNOFF AND MELTWATER, SHALL BE REMOVED.
- 10. SEDIMENT BARRIERS MUST BE INSTALLED AT ALL APPROPRIATE PERIMETER AND SENSITIVE LOCATIONS. SLT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED BEFORE THE GROUND FREEZES.
- 11. SOIL STROPLES MUST BE PROVIDED BY THE USE OF ESTABLISHED VEGETATION, ANCHORED STRAW MULCH, STABILIZATION MATTING, OR OTHER COVERING. COVERS, A BARRIER MUST BE INSTALLED AT LEAST 15 FEET FROM THE EDGE OF THE DISTURBED SOIL.
- 12. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF STRAW MULCH STABILIZATION MEASURES SHOULD BE INITIATED BY THE END OF EACH BUSINESS DAY AND COMPLETED WITHIN THREE (3) DAYS. LOGGED EROSION CONTROL BARRIERS MUST BE USED ON ALL SLOPES 1:3 OR STEEPER.
- 13. IF STRAW MULCH IS USED FOR TEMPORARY STABILIZATION, IT SHALL BE APPLIED AT DOUBLE THE STANDARD RATE OF 2.0 TONS PER ACRE. A JOSE AND COVER OF 2.0 TONS PER ACRE FOR TEMPORARY STABILIZATION SHALL BE APPLIED AT DOUBLE THE MANUFACTURER'S RECOMMENDED RATE.
- 14. TO DESIRE ADJUSTABLE STABILIZATION AND COVER OF DISTURBED SOIL IN AVOIDANCE OF A MELT EVENT, AREAS OF DISTURBED SOIL SHOULD BE STABILIZED AT THE END OF EACH WORK DAY WITH THE FOLLOWING EXCLUSIONS:
 - a. SNOW SHALL BE REMOVED FROM ALL STABILIZED AREAS AND NOT REAPPLIED OR RECOVERED.
 - b. THE WORK IS IN DISTURBED AREAS THAT COLLECT AND RAIN RUNOFF, SUCH AS OPEN UTILITY TRENCHES, FLOODING EXCAVATIONS, OR WATER MANAGEMENT AREAS.
- 15. USE STONE PILES TO STABILIZE ACCESS PERIMETERS OF BALDINGS UNDER CONSTRUCTION AND AREAS WHERE CONSTRUCTION VEHICLES TRAVEL AT ANCHORED. STONE PILES SHOULD BE A MINIMUM 18" IN WIDTH BUT NOT LESS THAN 12" IN HEIGHT.
- 16. ALL EROSION PREVENTION AND STABILIZATION MEASURES MUST BE IN PLACE BY OCTOBER 15, OR IF NOT POSSIBLE, THEN PRIOR TO GROUND FREEZE.
- 17. SNOW AND ICE SHALL BE REMOVED TO LEAST 1" THICKNESS PRIOR TO STABILIZATION.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE A DETAILED CONSTRUCTION SEQUENCE DETAILING THE SPECIFIC WORK THAT WILL BE PERFORMED. THE SEQUENCE PROVIDED IS FOR GENERAL WORK ITEMS TO ENSURE THAT SEDIMENT LADEN RUNOFF IS NOT DISCHARGED FROM SITE. CONTRACTOR TO ENSURE THAT NO MORE THAN 5 ACRES IS DISTURBED AT ANY ONE TIME WITHOUT AREAS BEING FULLY STABILIZED.

6. OBTAIN ALL NECESSARY APPROVALS AND PERMITS FROM THE APPROPRIATE AGENCIES INCLUDING THE MISSOURI, ARKANSAS, AND THE TOWN OF INDIANAPOLIS.
7. HOLD PRE-CONSTRUCTION MEETING WITH ALL NECESSARY PARTICIPANTS AT LEAST ONE WEEK PRIOR TO STARTING CONSTRUCTION.
8. INSTALL STABILIZED CONSTRUCTION ENTRANCE, MARK LIMITS OF DISTURBANCE WITH FLAGGING/TAPING OR APPROPRIATE MEASURES, INSTALL SLOPE PROTECTION DOWNHILL OF WORK AREAS AS SHOWN ON PLAN, INSTALL BATTLE PROTECTION ON EXISTING CATCH BASIN IN SENeca ROAD.
9. CLEAR AND GRUBB EXISTING VEGETATION TO THE LIMITS SHOWN ON PLAN.
10. BEGIN DEMOLITION OF EXISTING STRUCTURES AND UTILITIES AS SHOWN ON THE DEMOLITION PLAN. CONTRACTOR TO STORE EXCAVATED EXISTING MATERIALS FOR RE-USE ON SITE IN DESIGNATED STAGING AREA, IF DEEMED SUITABLE BY ENGINEER.
11. STRIP TOPSOIL FROM AND BEGIN FOUNDATION EXCAVATION AND ROUGH GRADING. FUTURE BIO-RETENTION BASINS ARE NOT TO BE EXCAVATED AT THIS TIME TO PREVENT SEDIMENT RUNOFF FROM ENTERING THE BASIN.
12. BEGIN CONSTRUCTION OF BUILDING FOUNDATIONS. CONCRETE WASHOUT AREA TO BE INSTALLED AND FUNCTIONING PRIOR TO ANY CONCRETE BEING POURED FOR THE BUILDING FOUNDATION. BUILDING WORK MAY CONTINUE THROUGH REMAINING DURATION OF PROJECT.
13. INSTALL PROPOSED WATERLINE AND SANITARY SEWER LINE.
14. INSTALL ALL REMAINING UNDERUTILITIES, INCLUDING STORM CONVEYANCE SYSTEMS.
15. FINAL GRADE PREPARATION AREAS AND INSTALL PAVEMENT BASE COURSES.
16. ONCE ALL UPOPLATE TRIBUTARY AREAS HAVE BEEN STABILIZED, THE BIO-RETENTION BASINS MAY BE INSTALLED. SPECIAL CARE TO BE TAKEN TO NOT COMPACT THE NATIVE SOILS AT THE BOTTOM OF THE BIO-RETENTION BASINS.
17. INSTALL LANDSCAPING AND IMMEDIATELY STABILIZE ALL 3:1 SLOPES WITH EROSION CONTROL BLANKET.
18. INSTALL ANY REMAINING HARDSCAPE.
19. ONCE ALL DISTURBED AREAS HAVE ACHIEVED FINAL STABILIZATION, THE REMAINING DRAINAGE CONTROL FEATURES SHALL BE DEMOLISHED. STABILIZE ANY AREAS DISTURBED DURING THE REMOVAL OF TEMPORARY EASE MEASURES. INSTALL PERMANENT SEDS AND MULCH ON ANY AREAS NOT ALREADY STABILIZED.
20. INSTALL BINDER AND WEARING COURSES FOR ALL PAVEMENT AREAS.



GE RELC - DAC BUILDING 2690 BALLTOWN ROAD

2690 BALLTOWN ROAD
PRELIMINARY - DEC. 20, 2023



DRAWING LIST

SHEET NUMBER	SHEET TITLE	SHEET DESCRIPTION
01	COVER SHEET	G-001
02	EXISTING CONDITIONS PLAN	C-101A
03	SITE LAYOUT PLAN	C-101
04	SITE GRADING & SOIL EROSION & SEDIMENT CONTROL PLAN	C-102
05	SITE UTILITY PLAN	C-103
06	SITE LANDSCAPING PLAN	C-104
07	SITE DETAILS	C-501
08	SITE DETAILS	C-502
09	WATER DETAILS	C-503
10	SANITARY SEWER DETAILS	C-504
11	STORM SEWER DETAILS	C-505
12	EROSION & SEDIMENT CONTROL DETAILS	C-506

PRELIMINARY

© 2023

C.T. MALE ASSOCIATES
WARNING: IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ARCHITECT IS ALTERED, THE ALTERING ARCHITECT SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION ARCHITECTURE.
- CONSEQUENCES VIOLATING PART 40.0.

WARNING: IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE SEAL OF AN ENGINEER OR LAND SURVEYOR IS ALTERED, THE ALTERING ENGINEER OR LAND SURVEYOR SHALL AFFIX TO HIS ITEM THE SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION PROFESSIONAL ENGINEERING AND LAND SURVEYING - ART. 140, SECTION 7209.

C.T. MALE ASSOCIATES
Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 CENTURY HILL DRIVE, LATHAM, NY 12110 PH: 518.786.7400
GLENS FALLS, NY • JOHNSTOWN, NY • POUGHKEEPSIE, NY • SYRACUSE, NY



www.ctmale.com

PROJECT NO. 23.3617
DRAWING NO. 23-0700

G-001
SHEET 01 OF 13

