TOWN OF ELIOT, MAINE

PLANNING BOARD AGENDA

TYPE OF MEETING: IN PERSON WITH REMOTE OPTION **DATE: Tuesday, September 20th, 2022**
PLACE: TOWN HALL/ZOOM **TIME: 6:00 P.M.**

PLEASE NOTE: IT IS THE POLICY OF THE PLANNING BOARD THAT THE APPLICANT OR AN AGENT OF THE APPLICANT MUST BE PRESENT IN ORDER FOR REVIEW OF THE APPLICATION TO TAKE PLACE.

All in-person attendees are asked to wear face masks

POSTED 9/13/22
JSB

1) **ROLL CALL**
   a) Quorum, Alternate Members, Conflicts of Interest
2) **PLEDGE OF ALLEGIANCE**
3) **MOMENT OF SILENCE**
4) **10-MINUTE PUBLIC INPUT SESSION**
5) **REVIEW AND APPROVE MINUTES**
   a) July 26th, 2022 ~ September 6th, 2022 – if available
6) **NOTICE OF DECISION**
7) **PUBLIC HEARING**
   a) 147 Beech Road (Map 29/Lot 4) & 0 Harold L. Dow Highway (Map 36/Lot 13), PID # 029-004-000 and 036-013-000, PB22-16: Shoreland Zoning Permit Application – Town of Eliot Route 236 Water-Sewer Project Pump Stations
8) **NEW BUSINESS**
9) **OLD BUSINESS**
   a) 151 Beech Road (Map 29/Lot 7), PID # 029-007-000, PB22-17: Site Plan Review (formerly Home Business) Application – In-home Childcare (Day Nursery)
   b) 771/787 Main Street (Map 6/Lots 43, 44, 154), PID # 006-043-000, 006-044-000, 006-154-000, PB22-09: Clover Farm Subdivision (8 lots) – Preliminary Plan Review
   c) 143 Harold L. Dow Highway (Map 23/Lot 25), PID # 023-025-000, PB22-13: Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary – Sketch Plan Review
10) **OTHER BUSINESS / CORRESPONDENCE**
   a) Updates, if available: Ordinance Subcommittee, Comprehensive Plan, Town Planner
11) **SET AGENDA AND DATE FOR NEXT MEETING**
   a) October 4th, 2022
12) **ADJOURN**

NOTE: All Planning Board Agenda Materials are available on the Planning Board/Planning Department webpages for viewing.

To view a live remote meeting: (Instructions can also be found on the Planning Board webpage)

- ***a) Go to www.eliotme.org***
- ***b) Click on "Meeting Videos" – Located in the second column, on the left-hand side of the screen.***
- ***c) Click on the meeting under "Live Events" – The broadcasting of the meeting will start at 6:00 (Please note: streaming a remote meeting can be delayed up to a minute)***

Instructions to join remote meeting:

a) **To participate please call into meeting 5 minutes in advance of meeting start time. Please note that Zoom does state that for some carriers this can be a toll call. You can verify by contacting your carrier.**
b) **Please call 1-646-558-8656**
   1. **When prompted enter meeting number: 826 2726 2729 #**
   2. **When prompted to enter Attendee ID press #**
   3. **When prompted enter meeting password: 363596 #**
c) **Members of the Public calling in, will be first automatically be placed in a virtual waiting room until admitted by one of the members of the Planning Board. Members of the public will be unmuted one at time to allow for input. Please remember to state your name and address for the record.**
d) **Press *9 to raise your virtual hand to speak**

Carmela Braun

Carmela Braun – Chair

NOTE: All attendees are asked to wear facial protective masks. No more than 50 attendees in the meeting room at any one time. The meeting agenda and information on how to join the remote Zoom meeting will be posted on the web page at eliotmaine.org/planning-board. Town Hall is accessible for persons with disabilities.

ITEM 1 - ROLL CALL

Present: Carmela Braun – Chair, Jeff Leathe – Vice Chair, Christine Bennett – Secretary, Lissa Crichton, and Jim Latter.

Also Present: Jeff Brubaker, Town Planner.

Voting members: Carmela Braun, Jeff Leathe, Christine Bennett, Jim Latter, and Lissa Crichton.

Note: Ms. Braun recused herself from the 768 Main Street Public Hearing.

ITEM 2 – PLEDGE OF ALLEGIANCE

ITEM 3 – MOMENT OF SILENCE

ITEM 4 – RESOLUTION OF APPRECIATION

A. Kearsten Metz, Land Use Administrative Assistant

Ms. Braun said that our Land Use Administrative Assistant, Kearsten Metz, is leaving us. We have a Resolution of Appreciation and I'm going to ask Mr. Brubaker if he would please read it.

Mr. Brubaker read the Resolution:

"RESOLUTION OF APPRECIATION FOR KEARSTEN METZ

Town of Eliot Planning Board

WHEREAS, Kearsten Metz has served for over two years as the Town of Eliot's Land Use Administrative Assistant; and,

WHEREAS, in that capacity, among many other responsibilities, Ms. Metz has helped create Planning Board agendas; assemble Planning Board packets; receive and review applications; answer questions from Planning Board members, applicants, and the public on Planning Board matters; and enable Planning Board meetings to run smoothly with a remote videoconference option; and,

WHEREAS, Ms. Metz has also, in other ways, greatly assisted with the Planning and Code Enforcement function of the Town of Eliot, including receiving building permits; setting up and assisting with inspections; answering questions from contractors and residents; and tracking Planning Board applications; and,

WHEREAS, Ms. Metz has shown responsiveness, tact, courtesy, and diligence in her work with the Town of Eliot; and,

WHEREAS, while Ms. Metz will be leaving the Town of Eliot for a new position with the Town of Kittery, in her two-plus years with the Town of Eliot, she has left a positive legacy for the Town's future;

NOW, THEREFORE, BE IT RESOLVED by the Town of Eliot Planning Board that the Board hereby expresses its heartfelt appreciation for Ms. Metz and the work she has done for the Town. We wish her the best in her new professional chapter.

Made this 26th day of July in the year 2022.

_____

Carmela Braun, Chair"

Ms. Metz said thank you so much. It has been an absolute pleasure to work with you and I appreciate all the knowledge and support and comfort you have brought to my desk and I will severely miss you all very much.

ITEM 5 – 10-MINUTE PUBLIC INPUT SESSION

There was no public input.

ITEM 6 – REVIEW AND APPROVE MINUTES

Mr. Latter moved, second by Mr. Leathe, to approve the minutes of May 3, 2022, as amended.

VOTE
5-0
Motion approved

Mr. Latter moved, second by Ms. Crichton, to approve the minutes of May 17, 2022, as amended.

VOTE
5-0
Motion approved

ITEM 7 – NOTICE OF DECISION

There were no Notices of Decision.

ITEM 8 – PUBLIC HEARING

A. 768 Main Street (Map 6/Lot74), PB22-11: Home Business Application – Professional Office.

Received: May 26, 2022
1st Heard: June 28, 2022 (sketch plan review/completeness)
2nd Heard: July 26, 2022 (continued review/Public Hearing)

Public Hearing: July 26, 2022
Site Walk: N/A
Approval: July 26, 2022

Ms. (Kim) Kelsey was present for this application.

6:16 PM Public Hearing opened.

Ms. Kelsey said that I would like to have a professional office in my home. I am a psychotherapist that would like to be able to see clients in my home two days a week.

Mr. Brubaker said that I have nothing to add. You can see my recommendation in the staff report to approve the application.

There was no public comment.

6:17 PM Public Hearing closed.

Ms. Bennett moved, second by Mr. Latter, that the Planning Board approve PB22-11, with the following conditions of approval:

1. **The property may be developed and used only in accordance with the plans, documents, material submitted, and representations of the applicant made to the Planning Board. All elements and features of the use as presented to the Planning Board are conditions of approval and no changes in any of those elements or features are permitted unless such changes are first submitted to and approved by the Eliot Planning Board. Copies of approved permits from Maine DEP, Army Corps of Engineers, if applicable, and State shall be provided to the CEO before construction on this project may begin.**
2. **The permit is approved on the basis of information provided by the applicant in the record regarding the ownership of the property and boundary location. The applicant has the burden of ensuring that they have the legal right to use the property and that they are measuring required setbacks from the legal boundary lines of the lot. The approval of this permit in no way relieves the applicant of this burden. Nor does this permit approval constitute a resolution in favor of the applicant of any issues regarding the property boundaries, ownership, or similar title issues. The permit holder would be well-advised to resolve any such title problems before expending money in reliance on this permit.**
3. **The applicant authorizes inspection of premises by the Code Enforcement Officer during the term of the permit for the purposes of permit compliance.**

VOTE
4-0
Motion approved

Mr. Leathe said that the application stands approved and there is a 30-day period from which the PB decision can be appealed by an aggrieved person or parties – move forward but move forward cautiously.

Note: At this time, Ms. Braun rejoined the PB as Chair.

B. 244 Pleasant Street Map 3/Lot 41), PB22-12: Shoreland Zoning Permit Application – Permanent Residential Fixed Pier and access stairway, seasonal gangway, and seasonal float.

Received: June 1, 2022
1st Heard: June 28, 2022 (site plan review/completeness)
2nd Heard: July 26, 2022 (continued review)
Public Hearing: July 26, 2022
Site Walk: N/A
Approval: July 26, 2022

Mr. (Steve) Riker, CWS, Ambit Engineering, was present for this application.

6:18 PM Public Hearing opened.

Mr. Riker said that I was here last month with this application to construct a tidal docking structure on the lot. The structure consists of a 4'X12' access stairway, a 6'X80' pier, a 3'X40'gangway, and a 10'X30' float, secured by four 4'X4' concrete block moorings and chains. At the last meeting, there were a couple of things the PB wanted to see. One was a proposed safety gate at the top of the access stairway. We have added that and it is on the revised plan you have now, Sheet C3 dated 7/8/22. The other item was to depict the distance from the riparian lines on each side of the property to the proposed structure. Those have been added to the plan. We have 42' feet on one side and 45' on the other. This application is still under review by the Maine DEP. I believe that is all I have.

There was no public comment.

Mr. Brubaker said that I talked with the Public Works Department. Nothing formal is needed for the opening in the guardrail. I would suggest that you just keep them informed when that will happen and they also wanted to ensure that the standard terminal ends of the guardrail be installed when that opening is created.

Mr. Riker thanked Mr. Brubaker for doing that. I appreciate it. He added that the DEP response comes within the statutory 120 days. I submitted on May 31 and I'm finding that it's 3-4 weeks to just get accepted. That would put us at June 30 and add 120 days from that so it will be a while.

6:20 PM Public Hearing closed

Ms. Bennett moved, second by Mr. Latter, that the Planning Board approve the Shoreland Zoning Permit Application for PB22-12 – 244 Pleasant Street – with the following findings of fact (in addition to other applicable findings of fact to be included in the Notice of Decision):

1. **All applicable sections of the Shoreland Zoning Ordinance (Chapter 44) and Shoreland Zoning Permit Application have or will be met.**
2. **Based on the information presented by the applicant and in accordance with Sec. 44-44, the Planning Board finds that the proposed use:**
   a. **Will maintain safe and healthful conditions;**
   b. **Will not result in water pollution, erosion, or sedimentation to surface waters;**
   c. **Will adequately provide for the disposal of all wastewater;**
   d. **Will not have an adverse impact on spawning grounds, fish, aquatic life, bird, or other wildlife habitat;**
   e. **Will conserve shore cover and visual, as well as actual, points of access to inland and coastal waters;**
   f. **Will protect archaeological and historic resources as designated in the comprehensive plan;**
   g. **Will avoid problems associated with floodplain development and use; and**
   h. **Is in conformance with the provisions of section 44-35, land use standards.**

The approval includes the following:

1. **The property may be developed and used only in accordance with the plans, documents, material submitted, and representations of the applicant made to the Planning Board. All elements and features of the use as presented to the Planning Board are conditions of approval and no changes in any of those elements or features are permitted unless such changes are first submitted to and approved by the Eliot Planning Board. Copies of approved permits from Maine DEP, Army Corps of Engineers, if applicable, and State shall be provided to the CEO before construction on this project may begin.**
2. **The permit is approved on the basis of information provided by the applicant in the record regarding the ownership of the property and boundary location. The applicant has the burden of ensuring that they have the legal right to use the property and that they are measuring required setbacks from the legal boundary lines of the lot. The approval of this permit in no way relieves the applicant of this burden. Nor does this permit approval constitute a resolution in favor of the applicant of any issues regarding the property boundaries, ownership, or similar title issues. The permit holder would be well-advised to resolve any such title problems before expending money in reliance on this permit.**
3. **The applicant authorizes inspection of premises by the Code Enforcement Officer during the term of the permit for the purposes of permit compliance.**
4. **Prior to, or along with, their building permit application:**

a. The applicant shall provide to the Code Enforcement Officer an approved Maine Department of Environmental Protection (DEP) Natural Resources Protection Act (NRPA) permit for the project and documentation of the project's approval by the US Army Corps of Engineers (ACOE).

b. The applicant shall inform the Eliot Public Works Department when it plans to cut the guardrail and shall install standard terminal ends to the guardrails that are cut.

5. No later than 20 days after completion of the development, the applicant shall provide to the Code Enforcement Officer post-construction photographs of the shoreline vegetation and developed site.

VOTE
5-0
Motion approved

Ms. Braun said that the application stands approved and there is a 30-day period from which the PB decision can be appealed by an aggrieved person or parties – move forward but move forward cautiously.

C. 155 Harold L. Dow Highway (Map 29/Lots 24 & 25), PB22-10: Site Plan Review and Change of Use – Marijuana Products Manufacturing Facility – Sketch Plan Review.

Received: May 19, 2022
1st Heard: June 21, 2022 (site plan amendment/sketch plan review/completeness)
2nd Heard: July 26, 2022 (continued review/public hearing)
Public Hearing: July 26, 2022
Site Walk: N/A
Approval: July 26, 2022

Mr. Jeff Cutting (Project Manager), was present for this application.

6:25 PM Public Hearing opened.

Mr. Cutting said that we are looking to build a small manufacturing facility inside an existing vacant rental at 155 Dow Highway. We're not planning to make any changes to the outside of the building at any time. We are also planning to be a very low use, which means we will have 2-3 employees inside the building manufacturing product and then the product will leave in an unmarked van. There will be no real traffic on the site. We corrected the plans as the PB directed at the last meeting. We also worked through a landscape plan for the site that was amenable to us, the landlord of the building, and Mr. Brubaker. We would like to hold off on doing the plantings until springtime because, if we do it in the fall, they are all going to die and we don't want that to happen. The only other input that we had was through the Fire Chief. He asked that a Knox Box be put on the outside of the building and that will be done and put on the plans. We're not going to

have any signage on the road. We only intend to have one small sign in the door just to identify to the people that come to us, the delivery drivers and so forth, and the delivery area is right next to that door. It will be a very low-end use and we are going to build out the space. Right now, it is vacant. It is just inside walls. It has been there for 20 years and they did nothing inside the building. It was put up. They were going to do something with it and then the owner passed away that had had it; that it's just been sitting there for the last 20 years like that.

Ms. (Nancy) Shapleigh said that I own 150 Dow Highway and I am opposed to any variance to allow that use that close to two residences. I believe there may be other residences close, within the 500 feet, that may not be on the tax cards down here but they are there and they have been there a long time. When my daughter was a child, she used to go with the girl that lived in one of them. I think that there are so many places, now, that have been taken over by something to do with pot that, perhaps, they could find something that already exists. I've been a broker in this Town for 47 years and, at many times, people were turned down because we had no sewer, even though we voted for it and a group managed to keep postponing it. Now there's going to be sewer out there and how many people are there that want to come in and put a nice restaurant, or some big building, a nice building, and we're just losing the road to marijuana. I am adamantly opposed to it.

Mr. Cutting clarified that we are not a retail use, we're a wholesale use. There will be no customers coming to that location at all.

6:29 PM Public Hearing closed.

Mr. Brubaker said that you see the updated odor control narrative. I did have a conversation with the Fire Chief that Mr. Cutting referred to with the Knox Box. The other two topics covered were to odor separation to the wall that's shared with the connecting segment to Dunkin' Donuts unit and the other was ADA compliance with a fire alarm system, that for those who are hearing impaired, there will be strobes for when the fire alarms go off.

Mr. (Art) Guadano, AG Architects, said that we provided a plan that will be submitted for a building permit. The plan to include the Knox Boxes, as requested. We did put in a fire alarm control panel with a full ADA fire alarm system with light strobes, as required. The other issue is the 2-hour wall. We had already identified that so the plans will reflect those changes.

Mr. Brubaker said that I do like the vegetated screening that the applicant proposed. You can see there is a condition in the motion template that speaks to that and it also includes in there some flexibility for some of the non-native plants proposed to be swapped out with similar sized native plants. The only other recommended condition in the approval motion template relates to their commercial processing license which Mr. Cutting has kept me up-to-date on. I think it's still in progress and that you're making good progress.

Mr. Cutting said that we got to the point where they actually called us and said that they are ready to inspect us but we said that we're not quite there yet. He said that as soon as we are ready to call them, ~~and~~ they will come down. The application is filed. I have the receipt from them stating that it is on file and they are ready to inspect as soon as we're ready to go.

Ms. Braun said that we just need the license when you get it.

Mr. Brubaker said that I might suggest an amended motion point which would be under #2. It says "prior to building permit application" and I would say "prior to a certificate of occupancy".

Mr. Cutting agreed that that would work.

Mr. Brubaker said that, overall, you can see that my recommendation is approval with conditions. I do believe that the applicant has met all applicable standards, or will, after fulfillment of approval conditions. Ms. Shapleigh makes a good point. The 500-foot rule does apply to any retail or medical retail uses but, in this case, it's just manufacturing.

Ms. Braun asked the PB if there were any more concerns or are we ready to approve.

Mr. Latter said that the vegetative landscape addressed my concern.

Ms. Crichton said to Ms. Shapleigh that this is a manufacturing project. It is not a retail store and what they are doing is included in the plan.
.
Ms. Bennett suggested a brief summary be given of the process.

Mr. Cutting clarified that what we are doing is basically no different than a bakery or a candy store where we manufacture product. We're not selling to the public. There is no retail of any type. No customers will be coming to the location. They will deliver product, we will make the product, then the product will be shipped out to stores throughout the State. It isn't going to be where anybody is coming to that location. In fact, we don't want people at that location. We're going to keep it very low key with only one small sign about a foot and a half on the door and that will be the only sign. We would never sell out of that location.

Ms. Shapleigh said that that's easy to say but that's not how things usually work out and that's my problem. So much of that street has been taken up for the growing and the selling of pot and it's killing other businesses. I think it's time we try to get someone else to develop what's left of Route 236. I'm sorry to be opposed but I am very much opposed.

Mr. Latter said that I appreciate what you've said and you've been on the scene far longer than I have. As I understand it, we don't have the discretion to decide whether we like this business or not. Our job is to see if the application is complete, if they've followed

all the rules, and to approve or deny based on that. I agree with you in some aspects in that I'd like to see other kinds of businesses. Other kinds of businesses aren't purchasing these properties and coming before the PB. I wish there were but, right now, there aren't. The applicant's obligation is to complete the application and follow the rules, as they exist, and our obligation is to decide whether they have done that or not, not whether we like it or not.

Ms. Shapleigh said that I fully understand that but the law, again, is 500 feet within a residence.

It was stated that this is manufacturing and that the applicant can't come back to say they want to sell there.

Ms. Bennett talked about the topic that was raised about the perennial planting and whether there is an opportunity to swap out for some native plants for the non-native plants.

Mr. Cutting said that, yes, we can do that. That would be fine. Whatever we put out there, we want to make sure that it thrives and grows out there. So, if there's something there that's not going to work with that mix, we wouldn't want to put it out there.

Ms. Bennett said that these plants often do thrive and they also do provide a decent amount of habitat where non-native plants would be sterile for pollinators and bees and that sort of thing.

Mr. Latter moved, second by Ms. Bennett, that the Planning Board approve PB22-10 – Site Plan Review and Change of Use for a Marijuana Establishment (Marijuana Products Manufacturing Facility) at 155 Harold L. Dow Highway, with the following conditions of approval:

1. **The property may be developed and used only in accordance with the plans, documents, material submitted, and representations of the applicant made to the Planning Board. All elements and features of the use as presented to the Planning Board are conditions of approval and no changes in any of those elements or features are permitted unless such changes are first submitted to and approved by the Eliot Planning Board. Copies of approved permits from Maine DEP, Army Corps of Engineers, if applicable, and State shall be provided to the CEO before construction on this project may begin.**
2. **The permit is approved on the basis of information provided by the applicant in the record regarding the ownership of the property and boundary location. The applicant has the burden of ensuring that they have the legal right to use the property and that they are measuring required setbacks from the legal boundary lines of the lot. The approval of this permit in no way relieves the applicant of this burden. Nor does this permit approval constitute a resolution in favor of the applicant of any issues regarding the property boundaries, ownership, or similar title issues. The**

permit holder would be well-advised to resolve any such title problems before expending money in reliance on this permit.

3. **The applicant authorizes inspection of premises by the Code Enforcement Officer during the term of the permit for the purposes of permit compliance.**
4. **Prior to, or along with, their Certificate of Occupancy, applicant shall provide their commercial processing license (or similar/other required license, as applicable) from the State of Maine.**
5. **The new plants proposed along Route 236 frontage on Sheet C2.4 shall be planted within one (1) year of site plan approval. With approval from the Code Enforcement Officer, the applicant may use different plants than those shown on Sheet C2.4 as long as they are native species and of roughly the same size as the plants shown. The applicant is encouraged to replace the non-native species listed in Sheet C2.4 plant list with native species.**

VOTE
5-0
Motion approved

Ms. Braun said that the application stands approved and there is a 30-day period from which the PB decision can be appealed by an aggrieved person or parties – move forward but move forward cautiously.

ITEM 9 – NEW BUSINESS

There was no new business.

ITEM 10 – OLD BUSINESS

A. 771/787 Main Street (Map 6/Lots 43, 44, 154), PB22-09: Clover Farm Subdivision (8 lots) – Sketch Plan Review.

Received: April 12, 2022
1st Heard: May 17, 2022 (subdivision site plan review/sketch plan)
2nd Heard: June 21, 2022 (continued sketch plan review)
Public Hearing: ____, 2022
Site Walk: May 31, 2022
Approval: ____, 2022

Mr. (Michael) Sudak, E.I.T. (Attar Engineering, Inc.), was present for this application.

Mr. Sudak said that I have Tom Howarth, Kris Glidden, Diane Morabito (Transportation Engineer, Sewall on Zoom) with me tonight. I would like to have Ms. Morabito speak first. I appreciate that she took time to come. She just came from a meeting and I would like to get her out of here. Since the last time I was before you at the end of June, I, Ms. Morabito, and Mr. Brubaker had some correspondence, included in your packet, about

the three or four things that you had at that meeting – current trip generation rates, if the TIA was effective for the actual travel speeds for the corridors within the study, if there are any new data points that need to be leveraged onto the TIA in the COVID world is what I believe we called it with people working from home or Amazon drivers, and then the last I believe regarded the Dennett Landing development, which might be moot, now, because they rezoned that parcel. The 300-unit development is going forward but the 900-unit development is not. With that, I will bring Ms. Morabito into the conversation.

Ms. Morabito said that the project is expected to generate just six new one-way trips in the AM peak hour and eight in the PM peak hour. This level of traffic typically has no impact off-site. Usually, you have to have at least 25 vehicles in a lane hour and this will have a maximum of 5. We did a safety analysis. We looked at a pretty large area for high crash locations. There are none. Site distances were measured by Attar Engineering and they are more than adequate for the posted speed limit as well as if the speed limit is exceeded by 15 MPH. One of your concerns was separation. In meeting your separation standards, it does require a waiver. I have looked through many DOT standards, highway recommendations, and nothing that I could find were anywhere close to the specific standards you are asking for separation. The separations this project has far exceed what Maine DOT would have on a high volume or arterial highway and the streets in that area are not that.

Ms. Braun said thank you very much. That helps us a great deal. We appreciate your time.

Mr. Sudak said that Item #2 of my cover letter regarded two items changed on the site plan. One is the sidewalk proposed on the south side of the travel way, which has been flipped to the north side. Where it intersects Main Street hasn't been touched at all and the ROW hasn't been touched at all. It was widened to 75' there just to accommodate the slightly off-center travel way and provide the area with vegetative screening of the southern abutting parcels. I believe the sideline between Lots #1 & #2 was adjusted to accommodate a 5'foot easement for a future sidewalk along Main Street. That supports what you are trying to do with the Comprehensive Plan regarding bicycling and walking. Additionally, last week we finished updating the tree line, as well as updating all of the major trees greater than 24" diameter at breast height, and sent a plan to you on Friday. There are quite a few of them. Most of them are on Lots #5 & #6 or within the Limited Residential area but the few that are out in the front lots, we should be able to keep all of them, I think. At least all of the ones we want to keep. There are a couple an arborist might want to take down but we can get into that in the future. I'm confident we'll be able to keep a significant amount of the tree line intact within all those large old-growth trees. The fourth item is regarding the waivers and, if you want me to get into that now I would be happy to.

Ms. Braun suggested we wait on that until we decide on the other two waivers.

Mr. Sudak said that the bulk of the rest of my letter is regarding that reservation of open space waiver request and then my formal response to Ms. Bennett's consideration of an

open space development. As I discussed this a little in June, this isn't in a critical rural overlay so it's at the discretion of the applicant to consider. As Ms. Bennett was nice enough to prepare a whole statement, I felt it appropriate to respond. An open space development, as I refer to it in every other municipality I work in, is a cluster development; so, in lieu of setting aside a large chunk of open space, and I believe it would be 50% for an open space development in Eliot, you would then have to effectively condense the remaining lots in the development up to the maximum number of lots that you would have proposed in a conventional development. The maximum number of lots that we can have in an open space development is equal to what we have proposed and just with the unique situation of Lots #5 & #6, the lots within the Limited Residential area, one of them the foundation is in the ground and, obviously, that one isn't moving and there is the one more north along our riverfront, that one is not moving. So, it's kind of in a unique situation where we're segregating those two lots for the sake of satisfying open space between the other 6 that are then put incredibly farther forward towards the Main Street side of the development. That transparent action that I have shown there would impact three of them. The statement I made with our updated tree line survey that we finished last week, those large trees that I think we could keep in a conventional space where there's a little more room to play with; that when you have an acre you can manipulate the building envelope, manipulate the prospective lawn. With an open space development, even one with the certified _____ utilities so you don't have to worry about a well location or subsurface system, you're going to clear a pretty considerable amount of that dark hatch (referring to site plan) and that was one of the biggest things that was brought up on the site walk to that Lot #7 and #8. You're going to be compromising a crazy portion of that just so you can have a building envelop and some kind of lawn for that Lot #7 and Lot #8. You can still satisfy the vegetative screening but my opinion is that it would be no better for the existing vegetation out there for an open space development. One of the other assertions in the memo is that an open space development would be more in keeping with the surrounding area. So, I did a little bit of research through your Town GIS service. The red on the plan is our proposed project and the heavy blue are five different what I call conventional subdivisions and all of the created roads; that it's basically cookie-cutter versions of what I'm proposing before you. They are all 1-acre lots, all simple travel ways ending in cul-de-sacs. That doesn't mean that the entire Village District is conventional subdivisions but I think that what I'm proposing in a conventional development is just as in keeping in the surrounding area as any open space development would be. I kind of already made the point with my last bullet with the unique geometry of this existing parcel, with a foundation already in the ground and being subject to a building permit and growth permit. Discussing the two clients that were present tonight, he said that Mr. Glidden's parents want to take the prospective lot that's right next to him (Lot #7) and Mr. Howarth's daughter would like to similarly take the one next to him. So, segregating those two parcels would kind of remove that as a possibility and I think my clients are of the opinion that, and mine, having an acre parcel to do with as you like is just as attractive an amenity as a communal open space if my lot were to be shrunk by 20,000 square feet. That's the end of my cover letter. Mr. Brubaker, there were a few other things brought up in your review memo. Most of them are pertaining to the waivers, though, so we can take whatever direction you'd like at this point.

Mr. Brubaker said that I don't have much to add to the discussion of open space development. I'm glad it has been discussed. It has been a good generator for discussion but the applicant is fully entitled to review with a conventional subdivision when not in the critical rural overlay. The sidewalk location has been addressed. Regarding the street separation waiver, my recommendation is approval of the waiver. I do have written signed comments from the Police Chief, Fire Chief, and Public Works Director that I can pull up on the screen if needed. I think it's a good point regarding trip generation that there could be some additional trips these days because of delivery services but I think that Ms. Morabito makes a good point both in her summary and our email discussions. So, my reasons for recommending that waiver is included in the staff report. I would also recommend the approval of the cul-de-sac lot frontage. Really a modification rather than a waiver and motion templates for both of those are included in the packet. I know we'll have more to talk about with the parks and recreation waiver.

Mr. Latter thanked the applicant for exploring the open space development option. You could have said that you weren't interested and I appreciate that you did look through it and you did present something. You presented something practical and explained why what you have brought forward is actually a better idea. Again, this is not a matter of procedure. We do have some discretion, here, so I appreciate everybody's patience as it brought us through several meetings. This is somewhat of a different situation and we're not just trying to cross the 'T's and dot the 'I's and make sure a procedure is being followed. We do have a decision to make and we do have some discretion but I do appreciate everybody's time and effort.

Mr. Brubaker said that I just have two more things to add. I do think that the discussion of trees and buffering is a good element and I think does add to it in addressing that preservation of natural resources section of the subdivision regulations as well as, specifically, the buffering. Also, I did want to call to everyone's attention that we did get an abutter's letter from the Crosiers and should be in your packet. This letter is from John and Deb Crosier on Aqua Avenue, dated July 21, 2022, as follows:

"Town of
Eliot, Maine
Planning
Board

RE: Waiver of the 400-foot ordinance for new road for 771/787 Main St PB 22·09
Map 6/Lots 43,44

Madame Chairperson and Board Members

We are writing to share our perspective on the proposed subdivision project at the above listed address.

As the abutter with the longest common boundary with this project, we feel we will have new homes/ neighbors regardless of the result of your vote. We see a vote in favor of the waiver of the 400-foot rule as the best result for this project.

The new proposed entrance has more advantages and is safer than the existing driveway, which is less than 100 feet from Aqua Ave. A waiver of 50 feet Is not unreasonable. The sightlines are more than adequate in both directions, speed limit is 30 mph in this area so traffic shouldn't be affected. The distance is a comfortable distance from both Aqua Ave and Park St.

With a vote in favor of the waiver, the board would have continued input on the project through the subdivision review process. With a no vote there will be no subdivision review, no control over trees, street size, lighting, hydrants and buffering. With a lot line adjustment and the five-year rule there could be as many as 5 houses built in the near future without subdivision review. The subdivision review process would provide for better planning overall. The review process would also provide an opportunity to develop an agreement about access and maintenance of the family cemetery.

As a former member of the board, I am familiar with the responsibility you bear in these decisions.

Thank you for the opportunity to weigh in on this issue and thank you for your service to the town.
Sincerely,
John and Debra Crosier"

Ms. Braun said that I thought that was a very good letter. It was very helpful.

Ms. Bennett, commenting regarding open space development, said that I appreciate the effort put into the response in demonstrating to us how that would affect your site plan and your detailed response, including looking at the settled pattern in the Village District. I understand that this was something you weren't expecting to do. You were coming for a conventional subdivision and that my memo consideration may have thrown you for a loop. In your cover letter, you had some strong language about my memo and, specifically, you stated that "it is arguably a false assertion" that the settled pattern in the Village has smaller lots. I appreciate the map you made of the Village District. I did not scrutinize it but, when I glanced at it, if you count up all the developed lots in the Village, it's over 50% of them that are much less than an acre. That is what I meant by a settled pattern in the Village District; that historically they have mostly been small lots.

Mr. Leathe said that I have been looking at the steps with stormwater in the subdivision, the stormwater management, and how that might or might not tie in with §37-73 where the PB can require street curbs, gutters, and catchbasins on all streets within growth areas as designated by the comprehensive plan. You guys requested at the May 17th meeting to have street curbs, gutters, and catchbasins not to be manufactured through all the streets

and then you would have roadside swales and asphalt curbs. I'd like a little more definition of what that really means and why you didn't want to go with the recommendation.

Mr. Sudak said that I'll be able to provide a lot more detail, as far as what you see on the plan, regarding stormwater management at preliminary plan. That's just the way the ordinance flows. But I do recall this conversation on May 17th and the way my understanding of the way the section of the ordinance reads is that it's a package deal for growth areas. So, you would be subject to what I'm going to call a flow system for stormwater management. You have catchbasins, culverts. You'd have hard-curb sidewalks and then the road pitches and it's contained within catchbasins and then that goes down by gravity to a stormwater management area further south, further down the grade of the lot. My defense for why the entirety of that isn't necessary, as we've shown on the plan, I'm completely fine with the sidewalk, completely fine with curbing but, really, having the catchbasins and having a more closed system, itself, is something that I just don't think is a necessary expense or a necessary type of element to have added to stormwater management on this site. There are no wetlands. You saw on the site walk that everything pitches away from Main Street down to the river and I really think just crowning the road, having some roadside vegetative swales, then having a single detention pond down likely in the sideline between Lots #6 & #7, just at that low point on the property, is a simple solution that allows stormwater to infiltrate naturally as opposed to kind of cutting to keep everything within the closed system. You would then, not over-encumber, but the responsibility for the entire stormwater management of the site would be that bmp at the end. Whereas, the road to get to it, if you use vegetative swales, allows for some of that water to infiltrate back in and there's really, really good soils out there. It's such a rare thing for me to be actually working with Type A soil. So, it's just something that I don't think is necessary. If we get into discussion at the preliminary stage and is something that we have to move forward with, I'm probably going to have to build up the road a little bit more just to have the amount of relief to get those basins down into the ground with adequate cover to get out to that detention pond. It's not the necessary thing in my opinion as the project engineer.

Mr. Leathe said that so I understand it correctly, you would have a tar berm around a cul-de-sac with driveway cuts. Then just some grass, then no grass, then maybe the sidewalk that's going to go around.

Mr. Sudak said that there is no esplanade proposed right now so, there's just a sidewalk on one side that's an extension of the tar that's raised a little bit because we are proposing curbs there. The outlets would effectively be where the driveway curb cuts are, themselves. You would have driveway culverts that would support that roadside vegetative swale. So, everything really is just a clean pitch so I think there's a natural way there to accomplish the management.

Mr. Leathe said that the cul-de-sac center is not going to get flooded necessarily.

Mr. Sudak said that we are using that area for snow storage right now but there likely would just be, unless I'm super-elevating the cul-de-sac that I'm not proposing at this time, some impervious rock getting down into that area in the middle of the cul-de-sac and there would be an outlet culvert crossing within the road down to the management area that's between the cul-de-sac and the river.

Mr. Leathe said that you're going to cultivate that area so that it doesn't flood, that normally water would be attracted to that will flow towards the river; that it would go onto that area and then down to the culvert and continue on to the pond.

Mr. Sudak said, just as you said, everything is naturally flowing towards the river so we don't want to interrupt that flow. We just want to slightly adjust it to the infrastructure we're proposing.

Ms. Bennett asked if he didn't want to slow it down, interrupt it before it gets to the river.

Mr. Sudak said that this is what the detention pond at the end would be.

Ms. Bennett said what are the other swales going to be doing on the other side of the curve (curb?) on the road.

Mr. Sudak said that, for the sake of argument, we have the north side of our proposed travel way, which is where we're proposing our sidewalk and our curbs. I believe that will be an asphalt curb, as well, that we're proposing right now. You would have an asphalt curb along the entirety of that section of the travel way, with the only breaks in that being where the driveways are going for prospective Lots # 1–4. So, if we have catchbasins, then the catchbasins will contain all that water that comes off the crown of the road and then filters into those, which would make their way down to the detention pond or, if those structures aren't there, then they would effectively run off at the breaks in the driveways. They would be collected in the driveway culverts and the vegetated swale and make their way down there anyway. What that swale would allow the opportunity to do, like I said it's a Type A soil, so you would have a pretty considerable amount of infiltration. So, not all of that water would reach that detention area.

Ms. Bennett said that the sidewalk is going to be on top of the driveway culverts.

Mr. Sudak said no. The driveway culverts will be what allows the continuity of the vegetated swale that exists between the driveways of Lots #1-4. So, the surface runoff that's collected from the property.

Ms. Bennett said that each driveway will have its own little pipe underneath it that will go, the runoff will come out into the vegetated swale and then go through the fixed p___ (1:09) and then it will go _____.

Mr. Sudak said yes.

Ms. Bennett said that, on the south side, there's just going to be a vegetative swale.

Mr. Sudak said that there will be driveway culverts for there, as well, but there won't be an interruption to a curb on that side because there isn't one.

Mr. Leathe said that the curb is going to go on the north side and asked where that ends.

Mr. Sudak said between the edge of the travel way and the sidewalk.

Mr. Leathe said that on the south side it will go on the road and into the swale, with no curb.

Mr. Sudak said yes. No curb would be needed on that side.

Mr. Glidden said that, on the subject of the curbing area, we want to keep that curbing as natural as possible and let the water run the way nature wants it to. Doesn't adding that curbing in there slow that down because it's a raised sidewalk. Wouldn't it be better to have the sidewalk the same height as the road and let the water flow more naturally.

Mr. Sudak said that that would likely create a public safety issue for pedestrians trying to use the sidewalk in inclement weather. You want to keep that area where people are walking free of stormwater runoff, especially moving laterally. The stormwater runoff flows faster over any curbing surfaces. It's not as though I'm proposing 400 feet of curb where something is coming down there and, all of a sudden, there's a break right at the end and Lot #4's front yard is flooded. There's going to be enough interruptions from the driveway curb cuts for Lots #1,2,3,4 that there's not going to be a substantial amount of flow built up from collecting half a roadway all the way down 600 feet.

Mr. Howarth asked if the other developments in Eliot have sidewalks. Do we have to have a sidewalk.

Ms. Braun said that in a subdivision it is required.

Mr. Sudak added in a subdivision in a growth area, I believe, so this is kind of ahead of the curve. Just like the little 5-foot easement that we're trying to provide in the Main Street-side of Lot #1. The Comprehensive Plan of Eliot is trying to have growth areas, from here moving forward, outfitted with the infrastructure for pedestrian ways and bicycling and part of that includes recreational activity of any subdivisions that come off of such roads, like Main Street.

Mr. Howarth said that I might be confused, here. Is this a private road or is this going to be a public road for the Town to take this road over.

Mr. Sudak said that, right now, we're proposing it as a private road.

Mr. Howarth said that I only ask because I've done developments before in South Berwick and they used to have a sidewalk ordinance. They had to do away with it because there wasn't any ordinance. I'm just wondering if it's in the ordinance for a private road.

Mr. Brubaker said that it's in my staff report but the section is 41-221(4), requiring a sidewalk on the subdivision road.

Mr. Howarth said for a private subdivision.

Mr. Brubaker said yes, reading the pertinent language: "Sidewalks shall be installed within all subdivisions located in all growth areas, as indicated in the comprehensive plan, pursuant to the design standards of sections 37-70 and 37-75." 37-70 is I believe the section that simply specifies the minimum 5-foot width of the sidewalks.

Mr. Howarth said that the others around the area that you have that were on the screen earlier, we'd be able to go in there and be able to see the sidewalks in there. I'm just wondering what kind of sidewalk.

Mr. Sudak said that I don't think this section of the ordinance is saying that you are going to be constructing a sidewalk that is then going to be the exclusive right of the Town or bicyclists are going to be coming down the Town-maintained road and then see a sidewalk there and not have the means to go in there. If this is maintained as a private road, it will still be maintained as such, including…

Mr. Howarth said that I'm just thinking about it because of what Mr. Glidden said. I'm thinking about developments that I've done that have no sidewalks and you're talking about natural water disbursement that jets off the front of the road into a grassy swale and the water dissipates through the soil in a culvert at the end of each driveway; that you said that we can't do that because there has to be a sidewalk.

Mr. Sudak said that I think that's part of why growth areas are recommended to have catchbasins and flow systems like Mr. Brubaker recommends, as that would eliminate that. Regarding the other subdivisions that we brought up earlier, I think that would be more of when this subsection of the ordinance was introduced and enforced. So, I can't speak to that side.

Mr. Brubaker said that, with the applicant request, the PB can always entertain a waiver of that requirement, like some of the other requirements. However, in this case, I don't see a compelling reason necessarily. It seems like design ingenuity from Mr. Sudak can accommodate the sidewalk along with appropriate drainage in the drainage plan. Given the benefits of sidewalks for pedestrian safety, the amenity for subdivisions, the pretty standard provisions in subdivision in growth areas, is why I continue to recommend.

Mr. Leathe said, regarding snow removal and snow storage, I'm looking at all the areas on the plan where you have snow storage, which appears to be in the front yards of all of

these homes and across the sidewalk. I was just wondering if that's going to preclude homeowners from building out their front yards. Is it going to be set back some number of feet. Are they going to have snow-plowed piles of all the snow that we're going to get this winter in their front yards.

Mr. Sudak said that the intent of the snow storage locations is to keep them within areas that are incorporated in non-winter months for stormwater management. So, once my proposed grading is built up to the point of showing that roadside swale, the snow storage would be within that roadside swale within the center of the cul-de-sac because there's going to be a bmp that's further down-gravity from that. So, you get whatever kind of surface treatments apply within subdivisions – salt, sand, etc., it would be kept within the infrastructure or the management that goes down to that bmp. Is it going to be in someone's front yard, yes. But it's going to be within someone's front yard within the right-of-way of the travel way. So, they would still be allowed to fully outfit their front yard, at least within their property with landscaping.

Ms. Bennett said to correct me if I'm wrong but you've identified discrete places within that ROW.

Mr. Sudak agreed, saying that I think, to be candid, a couple of those might need to be moved because I believe the last time I added those was when the sidewalk was still on the south side of the road. A couple of those likely need to be adjusted on the preliminary plan.

Ms. Crichton asked if the center of the cul-de-sac a ___ catchbasin, then.

Mr. Sudak said that it will be a catchment area for runoff and then there will be a culverted crossing underneath the travel way that leads to a bmp that's down between Lots #6 and 7.

Mr. Leathe asked where the detention pond is.

Mr. Sudak said that it's a stormwater detention pond and, just to echo Mr. Brubaker's comments from his staff report, I don't want my response that we're getting too ahead of ourselves but I would love to show you at preliminary plan. Pointing to the plan, there's a naturally-occurring vegetative swale, here, that runs along the southern property line so the detention pond is going to likely be somewhere around 'here' and then that pond will daylight down into this swale, which proceeds down to the river. The contours will be very easy for me to generate. I just haven't, yet, because of the stage of the application we are in.

Mr. Leathe said that I was just thinking about the pollution effects on the river. It sounds like you are going to distract, or detract, or move enough of this water through your culvert system and swale system so that salt and oil and whatever else ends up on the roadways is not making its way to the Piscataqua.

Mr. Sudak said that part of what I submit to you at preliminary will be a quality and quantity stormwater analysis for _____ (1:20) so I'll be demonstrating that I'm not increasing the nitrate or phosphate load that's getting out to that analysis point, which would be the river.

Ms. Braun asked for how the PB members felt about the waivers, asking if we are ready to move forward.

Mr. Latter said that I'm ready to make a decision.

Mr. Leathe agreed.

Ms. Bennett said that I'm ready to move forward, adding a point of discussion. Something occurred to me as we were discussing the _____ of this lot and the follow-up to ___ (1:21:23) the TIA; that they fully support the waivers. I'm just thinking forward to next year, when LD2003 comes into effect, that each of these lots could be more than just a single-family home; that it could be a multi-family home or a multi-family with an accessory dwelling unit (ADU) on it. I think, in terms of TIA at this point, we need to be thinking in terms of TIA requirements (1:20) in terms of each, asking Mr. Brubaker if she was off on this.

Mr. Brubaker said that I think that's a very important point for when we address the changes we will need to make based on LD2003, to address TIA requirements. Until that time, we are still operating at pre-LD2003 requirements.

Ms. Bennett agreed, saying that it is more for the higher-level planning for our Town and what it's going to be. This could have the possibility of being times 3.

Mr. Brubaker said that I think that's a really good point. From at least one webinar I've watched, it's something that's on the minds of a lot in the planning community in Maine.

Ms. Braun said that, if everyone is ready, the Chair will accept a motion on the first waiver – street separation.

Mr. Latter moved, second by Ms. Bennett, that the Planning Board approve a waiver of the applicable standard in §37-69(g), as applied to the location of the proposed subdivision street's intersection with Main Street, as shown on the sketch plan dated 6/14/2022. The waiver allows for the following distances (measured from centerline to centerline) from the proposed subdivision street intersection to the adjacent intersections:

- **Aqua Avenue to proposed intersection = 341 feet**
- **Proposed intersection to Park Street = 371 feet**

The Planning Board finds that:

1. **The sketch plan and Traffic Impact Assessment (TIA) from the applicant's consultant (licensed, registered professional engineer Diane W. Morabito, PE, PTOE, of Sewall), dated 4/12/2022, has demonstrated that there is**

adequate sight distance at the proposed intersection, assuming no new obstructions.

2. **The entrance is proposed near the midpoint between Aqua Avenue and Park Street, nearly maximizing the separation to each adjacent street.**
3. **The TIA reports no high-crash locations at/near the proposed entrance and no injury crashes in the vicinity in the last three years.**
4. **The TIA indicates that MaineDOT does not have a spacing standard for a road of this functional classification, and even if Main Street were a higher-level mobility arterial, the spacing would far exceed the standard for those classifications. The TIA also demonstrates spacing in excess of TRB-recommended spacing guidelines.**
5. **The TIA concludes that "the spacing and offset from the adjacent intersection is more than adequate to provide for both safe and convenient site access."**
6. **The Public Works Director, Police Chief, and Fire Chief have reviewed the request and have no objections.**
7. **Per Planning Board and Site Walk input, the applicant has revised the road location, relative to previous submittals, to move it further away from abutting property Map 6, Lot 42, to provide more room for vegetative screening, and to avoid an existing utility pole.**

The following are conditions of approval:

1. **The preliminary and final subdivision plans shall demonstrate the sufficient sight distance (per the stricter of Town and DOT standards) shall be maintained at the intersection. At a minimum, this shall be represented on the plans with sight distance triangles with no obstruction within them.**

VOTE
5-0
Motion approved

The street separation waiver is approved.

Ms. Braun said that the Chair will accept a motion on a waiver for reduced street frontage for the cul-de-sac.

Mr. Leathe moved, second by Mr. Latter, that the Planning Board approve a modification, pursuant to §§41-66 and 41-255(g), to allow a reduced street frontage for proposed Lots 5 and 6 as follows:

- **Lot 5 street frontage: 97 feet (3% reduction)**
- **Lot 6 street frontage: 69 feet (31% reduction)**

The Planning Board finds that:

1. **The modification will not have the effect of nullifying the intent and purpose of the official map, the comprehensive plan, or Chapters 44 and 45.**
2. **The modification will not compromise public health, safety, and welfare.**
3. **The following special circumstances exist relating to Lots 5 and 6: They are located at the end of the cul-de-sac and it is not uncommon for such lots to have lesser frontages relative to lots located along a street segment. Chapter**

41 recognizes this and authorizes the Planning Board to reduce street frontage for cul-de-sac lots by up to 50%.

VOTE
5-0
Motion approved

The reduced street frontage waiver is approved.

Ms. Braun said we should go back to the discussion on preservation of landscape.

Mr. Brubaker said that, since this is the first time the PB has approved a Chapter 37 waiver during my tenure, any person can appeal that decision within 30 days to York Superior Court and the motion must pass with four concurring votes.

Ms. Braun invited Mr. Sudak to speak to this.

Mr. Sudak said that this was discussed a little bit at the June meeting. This for §§41-256(a & b). Both of these are regarding the preservation of open space. I'm going to start with (b), as I understand that they have to be maintained separately So, (b) is the reservation of open space as it particularly relates to parcels that have some type of waterfront, which this development does. My argument in support of the waiver against that standard being upheld is, in such cases, the required minimum width for such a reservation is 200 feet. As you know from the site plan, we have 188 feet of frontage for both Lots 5 and 6. Multiplied by two that's 376 feet. So, subtract 200 from 376 and that leaves 176. Your zoning requirement for lots that have waterfront requires that they have the same amount of water frontage as they do street frontage for the zone, which is 100 feet in the Village. So, 100 times 2, because we're proposing two lots, and we don't have 200 feet there if you're taking 200 out. So, we would have to lose a lot, which considering one of them is already in the ground, I am not in support of. That's my defense of (b). My defense of (a) was best summarized by Mr. Brubaker's memo. Mr. Brubaker, if you want to take the floor, you are welcome to or I would be happy to summarize what you wrote. The reservation of open space under §41-256(a) allows for the PB to consider an applicant to have up to 10%, I believe, of the overall lot area as open space for the development of…

Mr. Brubaker clarified that it is a little confusing. We're talking about whether a subdivision needs to reserve open space, even in a conventional subdivision review. And so, there's one §41-220, which does empower the PB to choose to require, or not, that the subdivision reserve up to 10% of the total land as open space. That would be a little over one acre since the total assemblage is 10.95 acres. That's a PB "may require" provision. So, if a PB doesn't affirmatively require it, it wouldn't need a waiver. You would simply have a by-pass exercising that tool. The question I had to focus more on is: "Should the applicant reserve parks and/or recreation space?", which is something, as Mr. Sudak pointed out, is addressed in §41-256. If they do, then there are standards in paragraph a of that section with regard to the nature of the space: how big it should be, how much frontage it should have, and so forth, access to it. But, in my reading of 41-256, the

question does need to be addressed and there's an almost implicit requirement that they would reserve such land unless the PB waives it. Later on in that section, in paragraph (c), it does empower the PB to waive that provision. In my staff report, on page 9, I talk about what happens if the PB doesn't, or does, grant the waiver. If the PB does grant the waiver, the PB does have the ability to require a cash payment in lieu of land reservation that would be able to contribute to a trust fund that would be used exclusively for the purchase and development of sites for parks, playgrounds, and other recreational purposes and would serve the proposed subdivision. Again, I think the land use regulations, here, are endeavoring to connect improved amenities to the residents who will live in the subdivision. There is also a provision about space for municipal uses. Let's set that one aside, for now. If the PB does not grant the waiver, then the applicant would be required to amend the sketch plan to show where they're reserving land for parks and recreational space. I do have some language in there about pros and cons of a waiver that you can see in the middle of page 5 so I kind of wrestled with it on paper. But I did conclude that I think that it is reasonable to waive this requirement, with the condition that there be a reasonable per-lot payment in lieu be made with the exact amount to be determined as part of preliminary plan review. If the PB goes that direction, you'd essentially render moot the question that I think Mr. Sudak has already adequately addressed – the reservation of waterfront land. I think that becomes moot if you waive the overall reservation of land. That would be my recommendation, waiver with payment in lieu, and I do have a motion template on that one.

Ms. Bennett said that, regarding the reservation of land, I would still like to have a conversation about the three different aspects of this portion of the code – §41-256. Especially as it relates to the river frontage. All the purposes of the stormwater, management of _____ (1:37:00) to keep the pollutants out of the river. I also feel that along the river I think we should consider a reservation of land for the members of the subdivision to be able to get down and have access to the water, to come see the water. I would like to ask Mr. Sudak to go into more about what you said that the linear feet you have on the water must equal the linear feet you have as frontage.

Mr. Sudak asked Mr. Brubaker to pull up the sketch plan. So, the bulk of what you just spoke about is actually also on page 9, Item #2. §41-256(b) states that, for parcels that have waterfront as part of their collective lot area, a reservation of land would have to include access to that waterfront and said access would have to be a minimum of 200 feet in waterfront frontage, effectively; in this case, riverfront frontage. As my site plan shows, because it's a requirement that we dimension that that area shows satisfaction…there's 180 feet of frontage for perspective Lot 6 and perspective Lot 5. He read Note #3 of the General Notes: "Minimum shore frontage is equal to or greater than the minimum required street frontage of the nearest adjacent non-Shoreland District", which would be the Village, which would be 100 feet. So, both of those lots, #5 & #6, need to have 100 feet of frontage along the river. So, you can see why we don't have 400 feet.

Ms. Bennett said that's great. I think I'd like to segue off of that with a general question to the PB and our Planner. We've just waived those frontage amounts. Can we waive the

reservation amounts equal to the frontage amount. If we did, the math absolutely stays right up. So, if you take 376 feet of the total river frontage between those two lots and, then, if you did subtract out 200, it comes to a total of river frontage of 176 feet river frontage. If you look at what we waived, we waived down the total frontage for those two lots to be 176 feet. There seems to be some conformance, there, between the two. Maybe it can _____, (1:47:00) but, personally, I would like to see some reservation of water frontage.

Mr. Sudak said that one of the things that Mr. Brubaker wrote regarding §41-256(a) is kind of what we're getting at, here. What would it be used for and what other amenities are in the area that supports the existing developments and proposed development. I believe, on page 9, he references the Boat Basin, which is about a half hour away. I don't know your Comprehensive Plan but, as I understand, that's the effect radius for what you're looking for when you're considering developments.

Mr. Brubaker said that that's the Comp Plan's sited radius for a playground and then ¼ mile would be for a mini-park.

Mr. Sudak said that, if what the growth area is endeavoring to do is provide an activity, not just for vehicles but for bicycling and pedestrian ways to the surrounding neighborhoods, I think that part of my case is that we're providing all of the infrastructure for this development to access that amenity, which is within the radius that your Comp Plan states. Furthermore, like we brought up when regarding the open space development earlier, the minimum lot size for our conventional plan is an acre and, really, the front six lots (#1-4, 7, 8) are all I believe on the order of right at an acre to 3 acres. So, any reservation of open space would either be tightly taken from those, but still so they can comply, or it would be taken from the two riverfront lots. It's just a matter of, yes, do we physically have the area to comply with this request should it be a request that's made, but what does that look like. Is it going to be some triangle of land that is effectively in the front yard of these two gentlemen, because there's no place else for it to go with the geometry of the site. Just food for thought.

Mr. Leathe said that I may not know enough but when I think about the Remick Cemetery access, I don't know what the width of that is or the length.

Mr. Sudak said that it will be an access easement.

Mr. Leathe said that, in terms of real access – I want to go look at it, walk up the street, ride my bicycle – what do I do. Can I walk down this access or is it going to be trees, etc.

Mr. Sudak said that I believe the way it would be recorded it would be a pass/re-pass easement at the registry. We're not going to be developing a gravel driveway to it but this is going to be maintained as a private road, as currently proposed, and it is 20 feet wide; that 20-foot access that's along the sideline of Lots 4 & 5 right now to the Remick Cemetery would effectively extend our proposed travel way to Main Street. So, you

would have the means to drive down and park on the edge of the cul-de-sac, walk to the Remick Cemetery, bike down there.

Mr. Leathe said it is passable is really my question.

Mr. Sudak said yes.

Mr. Leathe said that I sort of envision that pathway off the south end of the cul-de-sac going to the riverbank, with a couple of picnic tables or something; that it would be a similar access potentially.

Mr. Sudak said that it would be except it would have to be 200 feet wide at the end by your ordinance, by that subsection (b). It could be 20 feet wide up front but it would have to be 200 feet wide at the end. That's your minimum width requirement unless you're proposing to have a 20-foot-wide open space that ends a foot away from the river, which I don't know if that would pass the 'straight face' test.

Mr. Leathe said that it's an unstable riverbank, anyway, and we wouldn't want people falling down.

Mr. Sudak agreed. It is an unstable bluff, as identified by the State.

Mr. Leathe said that it was just a question. It could be as simple as a carriage way that gives some view of the river. It doesn't have to be down to the water but at least somewhere where people from the neighborhood could assemble from time to time.

Mr. Sudak said that, if that is the opinion of the PB, then that is what I'm going to be tasked with figuring out what that looks like. But again, just with the geometry of the site, what that open space is going to be pulling from are those two river front lots. There really isn't anywhere else for it to go.

Mr. Leathe said that the other thing that strikes me about this whole development is that there is a lot of time and effort and money going into making this as nice as you can and it will be a very, very nice area. I want to get back to the cul-de-sac and the stormwater, as well. I think about berms versus stormwater management, and not just the swales but the curbing around it, and so forth. It's just esthetically, we want this to look _____ (1:47:50). If there was a way for not only to think about esthetics but include some ability for these neighbors to have an esthetically-pleasing extra by buying a home, building a home there, I think would be a real plus for this development.

Ms. Braun asked if, by this open space that we're talking about, are we trying to get so that the residents have access to the river.

Mr. Sudak said that that is one of the waivers before you. So, this section is split into (a) and (b). (b) is something specifically that I have to request a waiver for because this development has riverfront.

Mr. Glidden said that I don't like the way that this is going. My reason being is that all the abutters have talked about is my privacy. Now we're inviting more traffic and more people down to the water, which is what we're trying to protect. We talked about the runoff and everything. The other thing is, if people come down there, where are they going to sit on their picnic tables, next to me in my back yard when I'm having my coffee in the morning. If you go down there, I think it's just inviting more traffic. It's taking away my privacy, and to your point of the money that I'm spending on my home, I spent a lot just putting that pier in there and stabilizing the bluff. It's not an inexpensive task that I've taken. One, the privacy, but the other is in having people down there is how are they going to access that and who is going to be liable for that if somebody falls and hurts themselves when they fall on my property. Those are several concerns I have with this. Obviously, with us living there and my parents being right next to me, and potentially Mr. Howarth's, and the others that we're going to sell to the public. Of course, we want it to look as nice as we can. We're going to have it well-landscaped and taken care of. Whether that needs to be written in, that's fine because that's our intention, anyway.

Ms. Bennett said that my understanding that, if land were in reserve, it would be held in common with a homeowner's association (HOA) that would then also be responsible for the maintenance of the road and any stormwater improvements. It would be folded into the HOA and, as far as any liability of anything that happened on reserved open space, it would then be covered under the HOA.

Mr. Glidden said that our intention is not to have a HOA. We're going to have a road usage agreement.

Ms. Bennett asked who would be maintaining the stormwater. Is that going to be part of that agreement.

Mr. Glidden said that it would be part of the road usage agreement.

Ms. Bennett said that there is no HOA associated with this reservation.

Mr. Glidden said no.

Mr. Latter said that to that point, if we don't grant the waiver and we do have to have this reserved open space, then you'd have to have some type of entity that would own the collective space.

Ms. Braun said that I just don't see that it's reasonable to ask them to have a reservation of land under the circumstances because they have _____ (1:51) their privacy, #1, and there's not a HOA. It's not a huge development. It's six homes. And you've got the Boat Basin, as Mr. Brubaker pointed out, that's quite close. I think it's best to have you do a per lot payment in lieu to put it into a trust as opposed to asking you to give up land and your privacy.

Ms. Bennett said that I think you raise some very good points about the feasibility and some issues of privacy. Essentially, there is like half a family subdivision and half _____ (1:52:00) I think a payment in lieu of reservation of open space might be appropriate.

Ms. Braun said that I think that's the best way for them to maintain their privacy and their family compound, as you mentioned, and have a bit of _____, (1:52:00) right. The back half is going to be family but the potential still exists that it also be changed.

Mr. Howarth commented that my parents moved in with me a couple months ago and I like them to have their own place here.

Ms. Braun reiterated that I don't think it's feasible to ask them to give up the land. I really think it's much wiser and in the interest of the Town and the community to have them do a per lot payment into a trust for future recreational purposes within the Town, if you're amenable to that.

Mr. Howarth asked what that would mean. Who would decide what that would be.

Ms. Bennett said that I would think we should look at the code that discusses a one-acre reservation of land and then ask our assessor what the value of one acre is in the Village District.

Mr. Latter said that it would only be one acre with open space for those 8 units. It wouldn't be what an acre would be worth to the public. How would it be quantified. The point is that the open space is only for these 8 lots. You're not setting aside this open space for public use. So, the value of that acre is much higher than ascertained.

Ms. Bennett agreed, but said that the money would be going into a trust that the Town would then use to affect what they aren't doing.

Mr. Latter said right but it's not an acre of open market land where you can say we can call the assessor to ask what an acre of land is worth - $130,000 or $18,000 – whatever the number he gives.

Mr. Sudak apologized for interrupting and asked Mr. Brubaker to correct me if I'm wrong. The Middle of page 9, item g., Mr. Brubaker's memo) I believe the vehicle for determining that movement forward, that value, doesn't have to be part of a waiver decision, yeah or nay tonight. I don't know if this language is specifically there; that I think it's to be determined as part of the preliminary plan review or that's something that you added in. I don't know what that specific subsection (c) says.

Mr. Brubaker read the pertinent language from §41-256:

"(c) If the planning board determines that the reservation of land for parks and/or recreational purposes would be inappropriate, the planning board may waive the

requirement of land reservation. The planning board may require that the subdivider deposit a cash payment in lieu of land reservation with the town clerk. Such payment shall be placed in a trust fund to be used exclusively for the purchase and development of sites for parks, playgrounds, and other recreational purposes and would serve the proposed subdivision. The amount of such payment shall be as determined by the planning board, for each lot approved on the final plan." And then the section goes on to talk about something a little different but I'll stop there my quoting of it. I do want to say that this is kind of like a nascent, basic version of what a lot of communities have, which is a parks and recreation fee. It's just a little more neutral on what the exact amount is. Different communities do it in different ways. But, as blunt as it is, it is still a tool in the toolkit of subdivision review. And so, I think the best way to do this would be for some type of third-party review to be conducted at the preliminary plan stage that can help determine a reasonable payment in lieu so that it's objectively based and fair to both the applicant and the Town.

Ms. Braun said that that sound reasonable to me. Does that sound reasonable to you, Mr. Sudak.

Mr. Sudak said that it does.

Mr. Brubaker said that I do want to emphasize, too, that what this tool does is that it ensures that the payment in lieu be put in a trust that would benefit parks, playgrounds, and other recreational purposes that would serve the proposed subdivision. Again, there would be a kind of return on investment in terms of an amenity because the residents of the subdivision would benefit from those improvements.

Mr. Latter said that you couldn't use those funds to improve a playground four miles away on the other side of Town. It would be for something local that the residents of this subdivision would reasonably have use of.

Mr. Brubaker said yes, that it would arguably have to stay close to the subdivision.

Ms. Braun asked if that makes sense to Mr. Latter.

Mr. Latter said yes. It's just that this is new and hasn't come up in any of the discussions before tonight.

Ms. Crichton asked if that would be private, then.

Mr. Brubaker clarified that the actual beneficiary land of the payment in lieu need not be. I don't think the code specifies that.

Mr. Sudak said, correct me if I'm wrong, but that payment in lieu could also support the maintenance of existing amenities. I remember when we spoke about this at home last week; that it could be an upgrade to the Boat Basin, as an example.

Mr. Brubaker said that my interpretation of the language in my opinion that could serve to upgrade this amenity.

Ms. Braun asked if this makes sense.

Mr. Sudak said that it does.

Ms. Braun asked if it makes sense to the PB members. Are all the PB members satisfied with that proposal.

There was agreement from the PB.

Ms. Braun said that the Chair will accept a motion on the preservation of land.

Mr. Latter moved, second by Ms. Bennett, that the Planning Board approve a waiver, pursuant to §§41-66 and 41-256(c), from the requirement to reserve land for park and/or recreational purposes. The Planning Board finds that:

1. **The modification will not have the effect of nullifying the intent and purpose of the official map, the Comprehensive Plan, or Chapters 44 or 45.**
2. **The modifications will not compromise public, health, safety, and welfare.**
3. **The following special circumstances exist: The Boat Basin is about ½ mile away and has recreational amenities that would be close by. A ½ mile radius is the service area cited in the 2009 Comprehensive Plan (pp. 86-87) for Neighborhood Playgrounds (2-10 acres). This is not a focus area of the 2010 Eliot Open Space Plan. The Comprehensive Plan and Open Space Plan recognize the Village area as a growth area. No documented neighborhood or community consensus has been presented for such a reservation of land, and it is not clear the Town has the fiscal capacity to maintain such land, if it became public.**

The following are conditions of approval:

1. **The applicant shall provide a reasonable per-lot payment-in-lieu of reserving land, to be calculated during Preliminary Plan review.**
2. **The per-lot payment-in -lieu shall be reviewed by an independent third party.**

VOTE
5-0
Motion approved

Ms. Braun said that this waiver is approved. Is there anything we haven't discussed this evening.

Mr. Sudak said that, first of all, I'd like to thank everyone and, now, I'm going to be greedy and ask for the big swing. Regarding the sketch plan, because all these waivers were granted, I have nothing to revise. So, I would like to request sketch plan approval so I can begin preliminary plan application in earnest. There really isn't anything for me to revise unless you have something new for me.

Mr. Brubaker said that after review of the sketch plan application and completion of the preliminary inspection (the site walk the PB did), it talks about (§41-91) contour interval that's been addressed and, of course, what category it is – subdivision or mobile home park – and we know it's a subdivision. The PB "shall also indicate to the applicant whether or not a technical consultant fee will be required upon submission of the preliminary plan, pursuant to §41-142". We've already talked about doing that for the parks impact. Then it skips to preliminary plan for subdivisions and says in §41-141: "Within six months after the planning board approves the sketch plan, the sub-divider shall submit an application for the consideration of a preliminary plan…" So, that's going to be implicit code reference to the need to actually approve the sketch plan, which you don't do for non-subdivision sketch plans. Further down it says: "The preliminary plan shall conform to the layout shown on the sketch plan plus any recommendations made by the planning board." So, the idea here is that we've discussed a lot. We've had three waivers approved. You are now able to, if you would like, to entertain a motion of approval of the sketch plan but you would want to make sure there will be additional recommendations that you'd want to convey to the applicant at this time to make sure they include them in the preliminary plan. The preliminary plan is the big submittal where they fill out a lot of the details, some of which Mr. Sudak alluded to.

Ms. Braun said that the bottom line is that just the sketch plan is approved.

Mr. Sudak agreed.

Mr. Latter said that that starts the 6-month clock for what.

Mr. Brubaker said that once it's approved, and it's on Mr. Sudak, Mr. Glidden, Mr. Howarth and the whole team, to then come back within the 6 months and provide a preliminary plan that conforms with the layout of the approved sketch plan, taking into account any additional recommendations from the PB.

Ms. Braun said that we've already talked about stormwater and you know what you're doing for stormwater.

Mr. Sudak said yes, I do.

Ms. Braun asked if anyone had anymore additions to this sketch plan before we move to approve the sketch plan.

Ms. Bennet said that, it seems for clarification, the sketch plan contains the former access for Lots 5 & 6, I think, on the northern portion of the site. Coming in from Lot 1, going through Lot 2, and then kind of curving to that southern driveway. What is going to become of that. It is currently a deeded access. Is there a deeded ROW right now.

Mr. Sudak said that it is subject to a driveway entrance permit but, now that we have the go-ahead for the proposed travel way, that will be abandoned.

Ms. Bennett said that you mentioned in a portion of today's discussion that there is an easement on Lot 1.

Mr. Sudak said no. Since the last time I was before you in June, I have basically done a 5-foot offset of the Main Street ROW coming into Lot 1 and that is to allow for the future construction of a sidewalk along Main Street.

Ms. Bennett said okay. That's the easement you were referring to. We would like to see that in the preliminary plan.

Mr. Sudak said that it should be there, already.

Mr. Latter said that that's the 'good for everybody' piece.

It was confirmed that it is already on the plan.

Ms. Bennett asked if that could be a note, as well.

Mr. Sudak said that it can be, sure.

Ms. Braun said that I know that we talked about it before but the existing driveway that's close to Aqua Avenue. That will be closed and not utilized.

Mr. Sudak said yes.

Mr. Glidden said that those materials will be re-purposed. That road, when we improve that, we improve that to DOT road specs, the gravel way that's in there now. So, we'll re-purpose a good chunk of that material and then, what's removed from there, we will bring in fresh loam from that large pile that was scraped off then reseeded. It will be brought back to its natural state.

Ms. Braun said that's great. That makes me feel better. Thank you.

Ms. Braun asked if everyone was ready to approve this sketch plan. If so, the Chair would entertain a motion.

Mr. Brubaker asked, regarding the 5-foot easement, is there a reason they didn't extend further across the proposed subdivision.

Ms. Braun said that it can't be on one half. It needs to be on both.

Mr. Sudak said that you are talking about across the southern side of our 75-foot ROW.

Mr. Brubaker said yes.

Mr. Latter said that you're going to abandon that other lot.

Mr. Sudak said yes. I can depict it 'here'. I thought he was talking about the southerly abutting parcel

Mr. Brubaker said to encompass the entire… (could not hear what was said)

Mr. Brubaker said as long as the PB is okay with that. It would be a recommendation conveying that.

Ms. Braun said that, if everyone is ready, the Chair will accept a motion.

Mr. Latter moved, second by Ms. Crichton, that the Planning Board approve the sketch plan for PB22-9, 771 and 787 Main Street.

VOTE
5-0
Motion approved

Ms. Braun said that I want to thank you all for your patience. I know this has been dragging on for a while but we wanted to make sure we were doing the right thing for everyone. You and the residents. I look forward to seeing your plan and, when it's all done, I want a guided tour.

ITEM 11 – OTHER BUSINESS/CORRESPONDENCE

A. Summer Summit Discussions

Ms. Braun asked what everyone who attended the summits think.

Ms. Bennet said that I thought it was great. Ms. Lemire was with me at the first one. There was a presentation from two BOA members, Aging-in-Place, and Wendy Rawski ran the session. Mine was Policies, Ordinances, and Charter. There was a very lively conversation and debate about the merits of things like updating the Charter, instead of being a SB should we be a Town council, how can we improve the Town Meeting process and what needs to be in person. We just had an in-person Town Meeting. Should we stay with a secret ballot. Are there too many questions on the ballot. Is it too long. How do we inform the voters, a significant one. Mr. Hamilton from the BOA offered up his opinion that maybe the Town needs to follow up on a review for getting communication personnel, a person in Town to write press releases or somehow to inform the voters, get more informed voters. One comment was that they would like 400 informed voters rather than 1,000 uninformed voters. One of the things I jumped in without quite thinking ahead of time was that I suggested that maybe there should be an ad hoc ordinance committee that's not just the PB but possibly a BOA member because they see things, parts of our ordinance that need improvement that we may not see. I also brought up the point that, in terms of our government structure, and no one really wanted to go with town council, but why not throw that out there. The town council method of

government is able to act more quickly when it's needed. We have two strikes at the bat when it comes to ordinances. We start in August for the November ballot. I brought up the decision on the Dennett Road proposal by Kittery that looks like they were able to _____. (2:15:00). It was _____ and we do have the Citizen's petition but, from my perspective on the PB, it would be great if we had some quicker tools that could cause some quicker action to pause the game for the community to gather its thoughts, give time for consideration. I know there will be more summits.

Ms. Braun said that I think there will be more in August. I'm just not sure of the dates. I went to the second one, run by Ms. Albert, and it was on Municipal Image – internal and external. We had a SB member there, Mr. Brubaker was there, a Budget Committee member was there, and some people from the public, as I recall. First of all, there was discussion that nobody wants to be known as the 'green mile'. They don't want any more marijuana establishments. So, I think our non-binding question is quite apropos for the moment. They don't want that. Ms. Albert specifically asked me if she felt that the Town of Eliot had dropped the older population and I said that they have. There was a lot of discussion that there is no gathering place for the older population, there's no services for the older population. A community center, or gathering place, was brought up. Any mention of spending money was not taken well by the Budget Committee member that was present. Transportation was a big issue. We do not offer any transportation to services. We have a lot of older adults that have no means of getting to the grocery store, buy their groceries, and I find that appalling that we have no mechanism of community being able to pick them up and take them to market and saying you have two hours to go wherever they want to go there. Also, there was a lot of talk about the biking and walking. We did have a _____ (2:17:40) in place at that meeting. That was a big discussion. Security for the staff – Town Hall staff has not had any training in how to handle if there is an attack in the building. Nobody in the Clerk's Office has an emergency fund. They all should have the emergency fund and they all should have the training. And that was pretty much agreed upon that that should happen. Whether or not it will, I don't know. Everybody in that group seemed to be on the same page. With transportation, we all want a gathering place. We want to grow. We don't want to stay in the past. I also went to Jeff's, which I thought was great. I sat there and listened to what everybody else had to say and it was wonderful. The biggest topic at that point was how do we prevent a development the size of the Dennett Landing. Even though they changed the zoning on that, I think it's something that we just have to think about, whether we write something into our ordinances. And there was a lot of discussion about preserving our natural resources. That was big. How do we do that. We have a lot of natural resources and we don't want to destroy them.

Ms. Lemire added do we have the right tools, which was when we raised the idea of the Great Thicket, Wild & Scenic – those are tools.

Ms. Braun said yes. We don't have the tools. We just don't have the tools. And there was a big discussion on the growth permit. A lot didn't understand how that was determined and Ms. Bishop was there to help us with that. The other thing that Mr. Brubaker

mentioned, and I was a little sad about, was the possibility of the Comprehensive Plan being delayed because of staffing and money.

Mr. Brubaker said that the outlook looks better for us to keep going on that.

Ms. Braun said that the other thing that was discussed was impact fees. I know that York does it but have it based on the number of bedrooms and that might be something that will come down the road. Overall, again everybody was on the same page. They all want to go forward and do what we can to develop the community. We have these younger families coming in and, if we don't give them the services now or think about the services now, when they start asking for them it's going to be a crunch, and they won't be done right. We have to think about what's going to come down the road.

Mr. Leathe attended the Financial Forecast in Summit and thought it was excellent. The Assessor (Mr. Martin) attended, the new Financial Director (Ms. McNulty), SB Chair Mr. Donhauser, an Aging-in-Place member and a Budget Committee member. A couple of insights – the skills, the experience and the focus were great that Mr. martin and Ms. McNulty I thought was exceptional. I think the environment that they work in is not exceptional. Ms. McNulty in particular, with her background and school, is very, very sharp but what she's locked into is really a very difficult situation because of the turn-over in that position, which has been very substantial with things that have not gotten done. She gave us the example of the Town audit that is one year, at least, behind from where it's supposed to be. It's not even completed, yet, and we're already into a new, second fiscal year; that the reason for that is turn-over because there was nobody in that position that knew to work on the audit to get it done. It's not her fault. That's a really, really serious shortcoming. She gave the example that, normally, the annual audit costs $20,000 and this one will likely cost $60,000 because we put it off and it's just dragging on and the fee keeps accruing. There's a very good example of why we should really take better care of our employees, so they stay and we can take advantage of the additional knowledge and actually save money. She definitely needs more assistance and Mr. Donhauser, SB Chair, was there and he was in favor of getting her some temporary help, whatever help she needs, to try to get the payroll, the accounts payable, and also the Town audit back to where it should be. So, he was very supportive of that and I think she really appreciated it. Clearly, the systems for the software and the server and communications and just the backbone of the work space that she's in is not up to code. It's not up to speed. It needs to be reviewed and invested in. Better record retention, better ability to retain and find records. But the thing that came across to me, even though it's a difficult entry point for anyone to come into, she was really focused on understanding and able to elucidate what the issues were and the priority in which she was going to work on what she needed to be successful. I want to give her credit for having a great attitude. Her whole goal is ultimately to enhance the financial reporting so she can get multi reports out to department heads so they will know how they are doing. They have no idea apparently. So, that whole area needs a lot of work. The Assessor, on the other hand, obviously very, very sharp. That's a hugely complex area. I didn't realize it until Mr. Martin went through how it works and how it has worked in the past. I was amazed at what he's done and how he goes about his work. I think he's a great find. He is just at a

different level in his field and he is helping to create a lot of revenue for the Town that has been left on the table for years. So, I was really impressed with both of them. I hadn't met Mr. Donhauser before, either, and I was really impressed how involved he was. He asked good questions and he was very supportive of both of them.

Mr. Latter said that I was at the Housing, Volunteerism and was chaired by Chief Moya. We did have representatives of Aging-in-Place, Selectman Bill Widi, somebody from the Clerk's Office, and we had a couple social services agencies, a local homeless advocacy group, Footprints. We had some really interesting discussions. One of the first things we threw out was "What is Eliot?" It went back and forth, discussing the Comp Plan. Eliot seems to be overshadowed by Dover and Portsmouth and Kittery. A lot of what Eliot is, is defined by what Eliot isn't. It's not Dover or Kittery or Portsmouth. It's very much a community, for the most part, that people live here and work elsewhere. It has a vision of itself as a small, rural town. Whether it is or isn't, that's a different conversation, but the image of itself is as a small, rural town. I was taken aback when I found out the Police Department had seven members. I know it isn't a huge city population but it still has a lot of roads and a lot of obligations. I think the Chief does some great work with what he has. I suggested that both the social service agencies, both from the homeless group and Footprints, should maybe get together with somebody from Town Hall and the Police Chief and some other people and talk about common problems and common solutions, kind of form a resource group because they all have the same customers. We talked about housing costs. There are people in Eliot that are being priced out of Eliot. People in Eliot who have children who have no chance to move in Eliot. And there are people like me that are still working in downtown Boston that have, given the situation over the past two years, and it's not just in Eliot, it's all over with the real estate costs driving up because there's just a different demographic in how people live. People working at the shipyard don't live in Eliot anymore. They live up in Sanford, etc. It's a good thing if you're a property owner cashing out but, if you're just trying to get in here or live here, Eliot does take some of the increase in cost by being relatively close to the downtown Boston area.

Ms. Lemire said that there was a fair amount of talk about workforce housing, too.

Mr. Latter agreed, saying that I always use the term 'workforce housing' as opposed to 'affordable housing' because the people that work in Town Hall are people that…the Police Chief doesn't live in Eliot. Are we going to get into a situation, and it's not just an Eliot issue but a regional issue in a lot of ways, where the people who do the work, support the community, going to be able to live in the community they support. That's a challenge for many communities around.

Ms. Braun said that York has the same problem. People that work there can't afford to live there. That's why they built workforce housing on Route 1.

Ms. Lemire said that it would be really nice to get a tour of that place.

Ms. Braun said that I thought it was good. People from Footprints and Fair Tides brought up good points. We have all these people that don't have housing. It's come to the point,

now, that Footprints is giving out tents to families that don't have any place to live because there's no housing and they have had a 50% increase on their resources.

Ms. Lemire said that the campground is not there anymore (Indian River) that used to be a huge place for the homeless to live.

Ms. Braun said that now they have no place. Of course, they brought up LD2003. We have to consider and decide how we're going to approach that. But again, I thought everyone was pretty much on the same page. We all want to advance the community. So, I thought the summits were pretty good.

Mr. Latter said that I liked the concept. I liked the format. If you're involved on one of the boards in Town, you obviously care about where you live and like being involved. I found it really good to kind of cross-pollinate different groups of people. Many of you have been here a long time but I haven't. So, I really appreciate being pulled in situations where I'm meeting different people with different perspectives in Town, knowing what some of our challenges are. A lot of them are challenges but a lot are what make Eliot a great place to live. I haven't lived here my whole life but I did choose to live here.

Ms. Braun said that I just want to see all the boards work together as one unit with the same common goal, not be going in opposite directions.

Mr. Latter said that many, if not most, of the boards in Town are.

Ms. Braun agreed; that there are only a couple that aren't. I think, overall, we need to be together, otherwise it's not going to be good for Eliot, for the future of Eliot.

Mr. Brubaker said that I think I'm accurately speaking for Mr. Sullivan when I say that he certainly appreciated everybody contributing to those summits. Thank you on behalf of myself and Mr. Sullivan.

B. Town Planner Update (written or verbal), if available.

ITEM 11 – SET AGENDA AND DATE FOR NEXT MEETING

A. August 2, 2022: There ill be one application for this meeting.

B. Special Meeting: August 3, 2022 – 4:00PM to 5:30PM – Community Resilience Partnership Work Session: 6:30PM – Potential Joint Meeting with Conservation Commission.

SMPDC will host the Community Resilience meeting.

The CC meeting will not be possible at this time. Looking to hold a future meeting as scheduling permits.

Mr. Latter asked if there has been any talk about having a joint meeting with the SB.

Ms. Braun said that we keep talking about it but nobody ever says anything. I would love to.

Ms. Bennett suggested that, as Chair of the PB, maybe you could propose it to the Chair of the SB.

Ms. Braun said that I could do that. We are all facing the same issues. We are just facing them from different perspectives.

There will be meetings on August 9th and 16th, as well, due to a heavy agenda and the need to hold a public hearing for proposed ordinance amendments.

Mr. Brubaker said that he would give a presentation to the SB August 11th on the ordinance amendments and the SB would hold a public hearing on them August 25th.

Ms. Bennett discussed some of the work the subcommittee has been doing on definitions, the subdivision ordinance, tweaks for the growth management ordinance. In reflection over the past couple of weeks and having conversations with people, I think we should do more than propose a non-binding question to capping the number of marijuana facilities in our community. I think we should put forward a proposed cap and put it forward to the SB and, if they don't want a discussion then put a non-binding question. So, give them two options on this marijuana thing. I haven't talked to one person who likes where we're going. I think we put it out there and the SB can say they don't like our number and change it, or whatever.

Ms. Braun said that I keep saying we go for a cap. There seems to be strong agreement to cap the number of businesses. Based on what I heard at the summits I went to, that was a big, big discussion. People are tired of all the marijuana stores, being known as the 'green mile'. So, I think the Town would vote for a cap.

Mr. Latter asked if the Town had to grant approval for all marijuana sales.

Ms. Braun said that I think it's just licensing.

Ms. Lemire said that, even with the Mass Gathering Ordinance, all of these ordinances, no matter whether you're PB or BOA or SB, if they meet all the criteria, you can't say no.

Ms. Braun said that that's the problem we are having with the marijuana. We are bound by whatever the ordinance says. They have to either conform or they don't. And if they don't, they need to go back to the drawing board and come back with a new application.

There was a brief discussion of the number of marijuana facilities either operational or approved and coming and the impact on the Town. A chart of the current marijuana establishments will be created.

Ms. Bennett will be attending on Zoom the 9th.

The next regular Planning Board Meeting is scheduled for August 2, 2022 at 7PM.

ITEM 13 – ADJOURN

Mr. Latter moved, second by Ms. Braun, that the Planning Board adjourn.
VOTE
5-0
Motion approved

The meeting adjourned at 8:51 PM.

_____
Christine Bennett, Secretary
Date approved: _____

Respectfully submitted,

Ellen Lemire, Recording Secretary

TOWN OF ELIOT MAINE

PLANNING OFFICE
1333 State Road
Eliot ME, 03903

SITE WALK NOTICE

AUTHORITY:	Eliot, Maine Planning Board
PLACE:	151 Beech Rd.
DATE OF SITE WALK:	September 19th, 2022
TIME:	3:15PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a site walk on Monday, September 19th, 2022 at 3:15 PM for the following application:

- 151 Beech Road (Map 29/Lot 7), PID # 029-007-000, PB22-17: Site Plan Review Application – In-home Childcare (Day Nursery)
    - Applicant: Nichole Garland
    - Property Owner: Nichole and Peter Garland

PUBLIC HEARING NOTICE

AUTHORITY:	Eliot, Maine Planning Board
PLACE:	Town Hall (1333 State Rd.) with Remote Option
DATE OF HEARING:	September 20th, 2022
TIME:	6:00PM

Notice is hereby given that the Planning Board of the Town of Eliot, Maine will hold a public hearing on Tuesday, September 20th, 2022 at 6:00 PM for the following application:

- 147 Beech Road (Map 29/Lot 4) & 0 Harold L. Dow Highway (Map 36/Lot 13), PID # 029-004-000 and 036-013-000, PB22-16: Shoreland Zoning Permit Application – Town of Eliot Route 236 Water-Sewer Project Pump Stations
    - Applicant: Town of Eliot; Underwood Engineers, Inc. (applicant's representative)
    - Property Owner: Town of Eliot

Interested persons may be heard and written communication received regarding the proposed application at this public hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903. The meeting agenda and information on how join the remote Zoom meeting will be posted on the web page at eliotmaine.org/planning-board. Town Hall is accessible for persons with disabilities.

BEDARD, PATRICK S
BEDARD, ABBY COHEN
PO BOX 366
ELIOT, ME 03903

BLAISDELL, KEVIN S
30 BRADSTREET LN
ELIOT, ME 03903

BROWN DOG PROPERTIES MAIN
396 BEECH RD
ELIOT, ME 03903

BURT, WILLIAM A
155 BEECH RD
ELIOT, ME 03903

CAMARDA, STEPHEN J
7 DEBRA LN
KITTERY, ME 03904

CANTRELL, PETER B
CANTRELL, ANNETTE M
11 GALWAY LN
ELIOT, ME 03903

CRESTA, RALPH J
CRESTA, KATHERINE A
295 WEST RD
PORTSMOUTH, NH 03801

DENAULT, ANTHONY C
DENAULT, MICHELLE K
10 GALWAY LN
ELIOT, ME 03903

FINLEY, GARY D
FINLEY, MAUREEN
10 WYMAN AVE
KITTERY, ME 03904

H O BOUCHARD INC
349 COLDBROOK RD
HAMPDEN, ME 04444

HENRIE REALTY TRUST
MARIE & MATTHEW GAGNON TR
PO BOX 431
TOPSFIELD, MA 01983

HERITAGE OPERATING LP
AMERIGAS PROPANE LP
C/O THE ALBANO GROUP
PO BOX 1240
MANCHESTER, NH 03105

HISSONG READY-MIX AGGREGA
48 YORK ST SUITE 2
KENNEBUNK, ME 04043

HUNDLEY, THOMAS R
HUNDLEY, L APRIL
37 BRADSTREET LANE
ELIOT, ME 03903

LAWRENCE, RICHARD
LAWRENCE, CASSANDRA A
23 BRADSTREET LN
ELIOT, ME 03903

LORON LLC
44 RIVERVIEW DR
ELIOT, ME 03903

M & T REALTY LLC
C/O ESTES OIL BURNER SERVICE INC
519 US ROUTE 1
YORK, ME 03909

PERHAM, CALVIN L
145 PINE GROVE AVE
LYNN, MA 01904-2859

POLLARD, JOHN E
ARCHER, CARL ELONARD
PO BOX 61
ELIOT, ME 03903

POTIONS LLC
7 MACLELLAN DR
ELIOT, ME 03903

PUBLIC SERVICE CO OF NH
DBA EVERSOURCE ENERGY
PO BOX 270
HARTFORD, CT 06141-0270

SMALL, CHRISTOPHER M
149 DEPOT RD
ELIOT, ME 03903

SULLIVAN, LULA A
128 BEECH RD
ELIOT, ME 03903

THOMPSON, STEPHEN R
335 HAROLD L DOW HWY
ELIOT, ME 03903-1418

TOWN OF ELIOT
1333 STATE RD
ELIOT, ME 03903

UNITIL
NORTHERN UTILITIES INC
6 LIBERLY LANE WEST
HAMPTON, NH 03842-1720

WEBBER, DONALD JR
163 BEECH RD
ELIOT, ME 03903

WIDI, LOIS A
34 SANDY HILL LN
ELIOT, ME 03903

WILBER, MATTHEW C
173 BEECH RD
ELIOT, ME 03903

YORK/CUMBERLAND MGMT CORP
BARON PLACE
LABRECQUE PROPERTY MANAGEMENT
PO BOX 460
SEBATTUS, ME 04280-0460

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LEGAL NOTICES

Town of Eliot

SITE WALK NOTICE

AUTHORITY:	**Eliot, Maine Planning Board**
PLACE:	**151 Beech Rd.**
DATE OF SITE WALK:	**September 19, 2022**
TIME:	**3:15PM**

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151 Beech Road (Map 29/Lot 7), PID # 029-007-000, PB22-17: Site Plan Review Application – In-home Childcare (Day Nursery). Applicant: Nichole Garland. Property Owner: Nichole and Peter Garland.

PUBLIC HEARING NOTICE

AUTHORITY:	**Eliot, Maine Planning Board**
PLACE:	**Town Hall (1333 State Rd.) with Remote Option**
DATE OF HEARING:	**September 20, 2022**
TIME:	**6:00PM**

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Interested persons may be heard and written communication received regarding the proposed application at this public hearing. The application is on file and available for review in the Planning Office at Eliot Town Hall, 1333 State Road, Eliot, ME 03903. The meeting agenda and information on how join the remote Zoom meeting will be posted on the web page at eliotmaine.org/planning-board. Town Hall is accessible for persons with disabilities.

THE STATE OF NEW HAMPSHIRE
JUDICIAL BRANCH
SUPERIOR COURT

Strafford Superior Court
259 County Farm Road, Suite 301
Dover, NH 03820

Telephone: 1-855-212-1234
TTY/TDD Relay: (800) 735-2964
http://www.courts.state.nh.us

CITATION BY PUBLICATION
Superior Court Rule 4(d)

Case Name: Michele Owens v Ada Tanguay
Case Number: 219-2022-CV-00131

The above entitled action is now pending in this Court. The original pleading is on file and may be examined by interested parties. The Court has issued an Order for Service by Publication on defendant(s) Ada Tanguay.

The Court ORDERS:

Michele Owens shall give notice to Ada Tanguay of this action by publishing a verified copy of this Citation for Publication once a week for three successive weeks in the The Weekly Sentinel, a newspaper of general circulation. The last publication shall be on or before September 23, 2022.

Also, ON OR BEFORE

30 days after the last publication	Ada Tanguay shall electronically file an Appearance and Answer or other responsive pleading with this Court. A copy of the Appearance and Answer or other responsive pleading must be sent electronically to the party/parties listed below.
October 14, 2022	Michele Owens shall electronically file the Return of Publication with this Court. Failure to do so may result in this action being dismissed without further notice.

Notice to Ada Tanguay: If you are working with an attorney, they will guide you on the next steps. If you are going to represent yourself in this action, go to the court's website: www.courts.state.nh.us, select the Electronic Services icon and then select the option for a self-represented party. Complete the registration/log in process then select "I am filing into an existing case". Enter the case number above and click Next. Follow the instructions to complete your filing.

Once you have responded to the Complaint, you can access documents electronically filed through our Case Access Portal by going to https://odypa.nhecourt.us/portal and following the instructions in the User Guide. In that process you will register, validate your email, request access and approval to view your case. After your information is validated by the court, you will be able to view case information and documents filed in your case.

If you do not comply with these requirements, you will be considered in default and the Court may issue orders that affect you without your input.

Send copies to:

Stephen C. Brown. ESQ Brown Law PLLC, 21 S Main St., Rochester, NH 03867

BY ORDER OF THE COURT

August 9, 2022

Kimberly T. Myers
Clerk of Court

ITEMS WANTED

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LEGAL NOTICES

LEGAL NOTICE

PETITION FOR A PARDON
STATE OF MAINE
Augusta, October 20, 2022

Notice is hereby given that a Petition for a Pardon for Jeffrey Rivard (Fournier) who was convicted of the crime(s): Aggravated Criminal Trespass CR03-00250(C); Violating Protection Orders 03694 & 03255; Obstruction Government Administration CR2001-02715; Assault on an Officer(C) JV200000816, is now pending before the Governor and a hearing will be conducted on Thursday, October 20, 2022, at 9:00 o'clock A.M.

Please visit the following link for hearing details: https://www.maine.gov/corrections/adult-community-corrections/pardon-board

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WINTER RENTAL: WELLS BEACH: Fully furnished, 2 BR, 1 BA home available October 15 - April 30, 2023. New kitchen with dishwasher, stainless steel appliances. Quiet street and parking. $2200/month includes ALL utilities. First, last, security due at signing. NO PETS - NO EXCEPTIONS. 207-351-6797

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ANNUAL CHURCH YARD SALE TO BENEFIT
Operations Christmas Child
Saturday, Sept. 10 • 8:30 - 2:00
South Berwick & Wells Christian Church, 612 Emerys Bridge Rd, South Berwick.
Sunny day sale only!
Please, please no early birds.

RINDY HILTON'S WEAVING ESTATE SALE
September 16-17 at the Church of St. Mary the Virgin, 43 Falmouth Road, Falmouth.
Yarns (cottons, tensel, silk, rayon, novelty), dying materials, weaving books, accessories, small looms, notebooks, and Handwoven Magazines!

MULTI-FAMILY YARD SALE
Saturday, Sept. 10 • 9am - 1pm
25 Park Street, Eliot
Furniture, Pottery, Prints!

MULTI-FAMILY ESTATE / GARAGE / YARD SALE
Saturday, Sept. 10 • 9am-2pm
"The Forest" starting on Pointed Fir Blvd, Wells
(across from Dunkin's)
Sporting goods, coins, boating supplies, antiques, collectibles, old & current books (some rare & first editions), old bottles, beanie babies, furniture, fine art, frames, toys, military, jewelry, clothing, fine china, crafts, fire pit, household items, decorations, garden supplies & tools.
If you need it, we probably have it!
(No early birds, please)

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PB22-17: 151 Beech Road (Map 29/Lot 7): Site Plan Review (formerly Home Business) Application – In-home Childcare (Day Nursery)

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

To: Planning Board
From: Jeff Brubaker, AICP, Town Planner
Cc: Nichole Garland, Applicant
Date: September 16, 2022 (report date)
September 20, 2022 (meeting date)
Re: PB22-17: 151 Beech Road (Map 29/Lot 7): Site Plan Review (formerly Home Business) Application – In-home Childcare (Day Nursery)

Application Details/Checklist Documentation	
Address:	151 Beech Rd.
Map/Lot:	29/7
PB Case#:	22-17
Zoning District:	Commercial/Industrial (C/I), Suburban
Shoreland Zoning:	Limited Commercial (near or a small portion just within lot line, but not in business location)
Owner Name:	Nichole & Peter Garland
Applicant Name:	Nichole Garland
Proposed Project:	In-home Childcare (Day Nursery)
✓ Application Received by Staff:	August 15, 2022 (on or about)
✓ Application Fee Paid and Date:	$200 ($25 home business; $175 public hearing); additional $75 to make it a complete Site Plan Review application 8/15/22; 9/12/22 (on or about)
✓ Application Sent to Staff Reviewers:	9/1/22
Application Heard by PB Found Complete by PB	9/6/22; 9/20/22 (scheduled) TBD
Site Walk	9/19/22
Site Walk Publication	9/9/22 (Weekly Sentinel)
Public Hearing	TBD
Public Hearing Publication	TBD
Deliberation	TBD
✓ Reason for PB Review:	Day Nursery – SPR use

Overview: Applicant Nichole Garland is seeking approval of a Site Plan Review (formerly Home Business) Application at 151 Beech Rd. (Map 29, Lot 7) for an in-home family child care center. The

PB22-17: 151 Beech Road (Map 29/Lot 7): Site Plan Review (formerly Home Business) Application – In-home Childcare (Day Nursery)

Site Plan Review application has been submitted as home businesses are prohibited in the C/I district but day nurseries are SPR uses. However, the Home Business Application still has relevant information to the review so its information will continue to be referenced.

The application reports hours of operation of 5:30am to 3:45pm ("Early hours to help support Shipyard families.") Primary access to the parcel is via Ruth Lane from Beech Rd., passing by H.O. Bouchard's truck storage. The application presents two options for the daycare: one involving refitting the upstairs and downstairs of the garage (the previous owner had an approved ADU in the upstairs), and the other involves using the downstairs of the garage plus the front room and kitchen of the house. The maximum number of children served would be twelve (12).

Type of Review Needed: Site Plan Review

Review notes on application and home business performance standards (45-456.1)
***Included here for reference even though it is now a Site Plan Review application*

Standard	**Met?**
Home business owner home occupancy	**Met** – See application questions #1 and #5.
Total home business area (1,500 sf max. allowed)	**Appears to be met** – 1,500 sq. ft. proposed between 2 floor plan scenarios. See application question #2 and sketch plans.
Structure used as part of a home business meeting principal setbacks (30' front and rear, 20' side)	**Appears to be met** for the house and garage per included boundary survey and GIS.
Sales of merchandise or products (up to 4 types of allowed sales)	N/A. No merchandise/product sales proposed.
Parking spaces for non-residents (max. 4)	**Met** – 4 spaces shown next to the garage
Parking spaces within front setback (max. 2)	N/A – no spaces proposed in front setback
Home business sign (max. 1 sign allowed up to 6 sf.)	**Met** – 1 sign of 6 sq. ft. proposed.
External evidence of the home business and business-related vehicles	**Appears to be met** given the context of the site. See also application question #10.
Use and storage of fluids, solids, and gases unique to the business	N/A. None proposed.
Sketch plan	Included with application. I have reviewed and believe it provides sufficient information applicable to the home business for the Board's sketch plan review.

Other notes

- Deed included in the application

Discussion of the split zoning on the property and home business/daycare allowability

See 9/6 staff report.

Review for other applicable non-home-business standards

Section	Standard	Met?
45-406	Traffic	Does not appear to be a significant impact given the maximum number of children and site context.
45-416 / 33-127(16)	Septic system	Discussed at 9/6 meeting. Applicant is having an inspection done of their septic system and expects to tie into the gravity sewer line to be built down Ruth Ln. as part of the Town's Water-Sewer Project.
45-423	Max. fence height 8 ft.	Will need to be met for chain link fence
45-495	Min. 2 parking spaces for each day nursery room plus 1 space for each adult instructor	**Appears to be met.** 4 spaces shown for 2 rooms. Instructor lives at the home; no non-occupant employees proposed.

Site walk

Monday, September 19, 3:15pm – to be summarized at this meeting.

Recommendation: Make motions on the following waivers of 33-127 – site plan application contents – and, having done so, consider a completeness motion and setting of a public hearing.

- 33-127(3) Names and address of all abutters and their present land use
- (4) Perimeter survey
- (6) Contour lines
- (8) Storm drainage
- (9) Bridge/culvert design (not applicable)
- (10) Location of all natural features or site elements to be preserved
- (11) Erosion & sedimentation control plan
- (12) High-intensity soils report
- (13) Location and size of sewers and water mains
- (15) Connection to sewerage system
- (18) Construction drawings (to be provided as needed by CEO during building permit stage)

Water supply information

Applicant to provide water sample to DHHS for state licensing

***

Respectfully submitted,

Jeff Brubaker, AICP
Town Planner

Case No. PB-22-17
Site review? (Yes) No

APPLICATION FOR SITE PLAN REVIEW
TOWN OF ELIOT PLANNING BOARD

☑ **Step 1. (Fill in all blocks below - See the Planning Assistant if you don't understand.)**

Tax Map 29 Lot# 7 Lot Size 1.36ac Zoning District: commercial

Your Name Nichole Garland Your mailing address 151 Beech Rd

City/Town Eliot State: ME Zip: 03903 Telephone: 207-752-4569

Who owns the property now? Nichole + Peter Garland

Address (Location) of the property 151 Beech Rd

Property located in a flood zone? ____Yes ✓ No
(If yes, please complete the attached Flood Hazard Development Application and return it with your completed application)

☑ **Step 2 (establish your legal interest in the property)**

Attach a copy of the Purchase and Sales Agreement, Deed, Tax records, Signed Lease, or other documents to the satisfaction of the Planning Assistant. If you are representing a corporation, provide documentation that you have authority to speak for the corporation.

☑ **Step 3 (Go to the Zoning Ordinance Section 45-290, Table of Land uses)**

What SPECIFIC land use are you applying for? Day Nursery
(You MUST make this selection from Section 45-290 of the Zoning Ordinance)

Having entered the SPECIFIC land use above now provide a more detailed description of what you want to do:

Open an in-home family childcare center to help support the current lack of available childcare in our area. I will have early hours (5:30 am - 3:45 pm) to support Shipyard families. Provide a high quality of care to include a curriculum to help guide my program.

Case No. PB-22-17
Site review? (Yes) No

☐ **Step 4 Attach ten (10) copies of a sketch plan, showing in approximate dimensions the following:**

Submitted Previously

- ☐ All zoning districts
- ☐ The location of all existing and/or proposed buildings
- ☐ The setbacks of all existing and proposed structures or uses.
- ☐ The location of proposed signs, their size, and direction of illumination.
- ☐ The location of all existing and/or proposed entrances and exits.
- ☐ All existing and/or proposed parking areas (parking is permitted in the front, rear and side of the premises, so long as it does not violate setback requirements.)
- ☐ Plans of buildings, sewage disposal facilities, and location of water supply.

☐ **Step 5 Sign the application (both owner and applicant must sign and date the application) and submit fee with preliminary plans ($100 per acre for first 5 acres and $50 per acre after five plus $150 for advertising and public hearing fees)**

Applicant [signature] Date 9/12/22

Property Owner [signature] Date 9/12/22

☐ **Step 6 Application received by Planning Assistant**

Date received by the PA _____ PA initials _____

☐ **Step 7 The Planning Assistant will review the application and if complete, will place your application on a future Planning Board agenda**

☐ **Step 8 The applicant or representative of the applicant must attend the Planning Board meeting**

PART 1 - THE PROCEDURE

Case No. PB-22-17
Site review? (Yes) No

(STEP 1) Meet with the Planning Assistant to assure that Site Review is required. Obtain application forms and assemble data for submission.

(STEP 2) ***Sketch Plan Stage*** Application submission. Include 10 copies of the sketch plan, survey map, location map, and affidavit of ownership or legal interest. (Section 33-63)

(STEP 3) Applicant attends first meeting with Planning Board, describes project, and answers questions *(Board may review checklist for the Site Plan at this time or act on waivers requested for submission of data)*

(STEP 4) Board sets up site visit with applicant (Section 33-64).

(STEP 5) Board visits site with applicant.

(STEP 6) Applicant attends succeeding meetings. Board does preliminary review of the Ordinance requirements for applicability to the Site Plan. Board and notifies applicant of changes required to Sketch Plan after site inspection (Section 33-103).

(STEP 7) Applicant revises the "Sketch Plan" as needed, submits the Site Plan, and pays non-refundable fees prior to the second Planning Board meeting. (Sections 33-126 & 33-128).

(STEP 8) ***Site Plan Stage*** Applicant attends succeeding meetings with Planning Board and discusses Site Plan (Section 33-129) until Board votes to accept the Site Plan (Section 33-126) *Board schedules public hearing for future meeting when all requirements have been or will be met.*

(STEP 9) Board conducts Public Hearing (Section 33-130).

(STEP 10) ***Approval stage*** Board approves / approves with conditions / disapproves applicants application within 30 days of the close of the final Public Hearing or 75 days from date Board accepted completed application and Site Plan (Section 33-131). If more than one public hearing is held, the 30-day period begins after the last public hearing.

(STEP 11) Board issues a Notice of Decision, which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131). The Notice of decision and signing of the final plan is for documentation purposes and does not determine the beginning of the appeal period.

(STEP 12) ***Appeal Period*** A 30-day appeal period begins from the date the Board makes a decision on the application. (Section 45-50) The applicant may begin work on the project during this period, but does so at his or her own risk.

PART 2

Case No. PB-22-17
Site review? (Yes) No

DETAILED ORDINANCE REFERENCES FOR EACH SITE REVIEW EVENT

1. Submit application. (Section 33-63) Include 10 copies of all submissions that show:

☐ Sketch Plan- (See Section 33-105) showing:
- ☑ All zoning districts
- ☑ Existing and proposed structures
- ☑ Existing and proposed parking areas (parking is permitted in the front, rear and side of the premises, so long as it does not violate setback requirements.)
- ☑ Existing and proposed Streets and entrances
- ☑ Existing and proposed setbacks
- ☑ Other site dimensions and area
- ☑ Site and public improvements and facilities
- ☑ Areas of excavation and grading
- ☑ Any other site changes
- ☑ Location Map-This is to be submitted along with or as part of the Sketch Plan (See Section 33-104) and includes:
  - ☑ Scale of 500 ft to the inch
  - ☑ Show all area within 2000 ft of property lines
  - ☑ All surrounding existing streets within 500 ft
  - ☑ Abutters lots and names within 500 ft of property boundary
  - ☑ Zoning districts within 500 ft
  - ☑ Outline of proposed development showing internal streets and entrances

2. Site inspection (Section 33-64) The Board and Applicant conduct site inspection. Applicant shall stake the lot corners, the location of all proposed structures, parking and the centerlines of all proposed streets and entrances in development. Verify that parking meets applicable setbacks

3. Board notifies applicant of changes required to Sketch Plan after site inspection such as contour interval, street classification, etc. (Section 33-103) and determines:

☑ If other Local, State or Federal agencies or officers (Section 33-102) should review Sketch Plan.

☑ If applicable, MaineDOT driveway permit is **required** prior to local approval for anyone installing, physically changing or changing the use of a driveway on state highway.

☑ If review by Eliot Fire Chief ___, Police Chief ___, or Road Commissioner___ is required.

* Fire review happens for licensing

Case No. PB-22-17
Site review? (Yes) No

4. Applicant converts Sketch Plan into a "Site Plan" (Sections 33-126). The following requirements are considered by the Planning Board

Chapter 33 required information

☑ 4.1. Applicant shall provide one original and 10 copies of Site Plan drawn at a scale not smaller than 1-inch equals 20 feet showing the following information:

☑ 4.1.1. Development name, owner, developer, designer name and address and names and addresses of all abutters and abutters land use.
☐ 4.1.2. Certified perimeter survey showing a north arrow, graphic scale, corners of parcel, total acreage, etc. This means a survey of the property using the standards of practice established by the State of Maine Board of Licensure for Professional Land surveyors, MRSA Chapter 121. * Request waiver
☑ 4.1.3. Temporary markers.
☐ 4.1.4. Contour lines at 5-ft intervals or as Board decides.
☑ 4.1.5. A list of the provisions of Chapter 45 (Zoning) which are applicable to this area and identification of any zoning district boundaries affecting the development.
☐ 4.1.6. Storm water Drainage Plan. (50 year storm)
☐ 4.1.7. Required bridges or culverts.
☐ 4.1.8. Location of natural features or site elements to be preserved.
☐ 4.1.9. Soil Erosion and Sediment Control Plan.
☐ 4.1.10. High Intensity Soils Report.
☐ 4.1.11. Locations of sewers, water mains, culverts and drains.
☑ 4.1.12. Water supply information. Will provide water sample for licensing.
☐ 4.1.13. Sewerage System Plan.
☑ 4.1.14. Septic System Survey. To be attached
☑ 4.1.15. Estimated progress schedule. Open by Jan, 2023
☐ 4.1.16. Construction drawings for CEO which show floor areas, ground coverage, location of all structures, setbacks, lighting, signs, incineration devices, noise generating machinery likely to generate appreciable noise beyond the lot lines, waste materials, curbs, sidewalks, driveways, fences, retaining walls, etc. To be provided during building permit stage.
☒ 4.1.17. Telecommunication tower details as required.

☑ 4.2. Additional requirements made by Board (Section 33-126).

Other Chapter 33 Site Review Ordinance Requirements.

☒ 4.4. Traffic data if applicable (Section 33-153)
☒ 4.5. Campground requirements if applicable (33-172)

☒ 4.6. Commercial Industrial requirements if applicable
☒ 4.6.1. Landscaping (Section 33-175)

Case No._____
Site review? Yes No

- [N] 4.6.2. Vibration (33-176)
- [Y] 4.6.3. Site Improvements (33-177) Renovation of garage and playground
- [N] 4.6.4. Electromagnetic Interference (33-178)
- [Y] 4.6.5. Parking and Loading Areas (33-179, 45-487, 45-495)
- [N] 4.6.6. Glare (33-180)

- [N] 4.7. Motel requirements if applicable (Section 33-182)
- [N] 4.8. Multi-family dwelling requirements if applicable (Section 33-183)

Chapter 35 Post-Construction Stormwater Management
Disturbance of more than one acre of land or less than one acre if the development is part of a larger common plan for development must comply with Chapter 35 Post – Construction Stormwater Management.

Chapter 45 Zoning Ordinance Requirements. compliance includes the following Article VIII Performance Standards:

- [N] 4.9. Dimensional Standards (Section 45-405)
- [N] 4.10. Traffic (Section 45-406)
- [N] 4.11. Noise (Section 45-407)
- [N] 4.12. Dust, Fumes, Vapors and Gases (Section 45-408)
- [N] 4.13. Odor (Section 45-409)
- [N] 4.14. Glare (Section 45-410)
- [N] 4.15. Storm-water run-off for a 50 year storm. (Section 45-411)
- [N] 4.16. Erosion Control (Section 45-412)
- [N] 4.18. Preservation of Landscape (Section 45-413)
- [N] 4.19. Relation of Buildings to Environment (Section 45-414)
- [N] 4.20. Soil Suitability for Construction (Section 45-415)
- [Y] 4.21. Sanitary Standards for Sewage (Section 45-416) Septic inspection
- [N] 4.22. Buffers and Screening (Section 45-417)
- [N] 4.23. Explosive Materials (Section 45-418)
- [N] 4.24. Water Quality (Section 45-419)
- [ ] 4.25. Refuse Disposal (Section 45-421)

- [N] 4.26. Specific Activities (Article IX) which include:
  - [N] 4.26.1. Accessory Use or Structure (Section 45-452)
  - [N] 4.26.2. Home Occupation (Section 45-455)
  - [N] 4.26.3. Mobile Homes (Section 45-457)
  - [N] 4.26.4. Off-street Parking and Loading (Article X)
  - [N] 4.26.5. Signs (Article XI)

[ ] 4.27. In addition the Board may make other conditions for approval that will insure such compliance and would mitigate any adverse affects on adjoining or neighboring properties which might otherwise result from any proposed use (Section 33-131).

Case No. PB-22-17
Site review? (Yes) No

5. Board discussion of Site Plan (Section 33-126).
   ☑ 5.1. Board discusses Site Plan with applicant. 9/20/22

6. Public Hearing (Section 33-129 & 130).
   ☐ 6.1. Conducted within 30 days of Boards acceptance of Site Plan.
   ☐ 6.2. Three notices posted 10 days prior to the Public Hearing.
   ☐ 6.3. Notices advertised in two newspapers 10 days prior to Public Hearing.
   ☐ 6.4. Other Towns notified 10 days prior to if within 500 feet of applicant's lot.
   ☐ 6.5. Abutters notified 10 days prior to by certified mail, return receipt requested. $150.00 paid by applicant to cover the cost of advertising and abutter notification (Sec. 1-25)
   ☐ 6.6. Selectmen, CEO, and Board of Appeals shall be notified 10 days prior to the Public Hearing.

7. Board approves / approves with conditions / disapproves applicants Application within 30 days of Public Hearing or 75 days from date Board accepted completed Application and Site Plan (Section 33-131).

Note: Computation of time shall be in accordance with Section 1-2 as follows: "In computing any period of time prescribed or allowed by this Code, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday or legal holiday, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday or legal holiday. When the period of time prescribed or allowed is less than seven days, intermediate Saturdays, Sundays and legal holidays shall be excluded in the computation."

8. Notice of Decision issued which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131).

151 Beech Rd Location Map

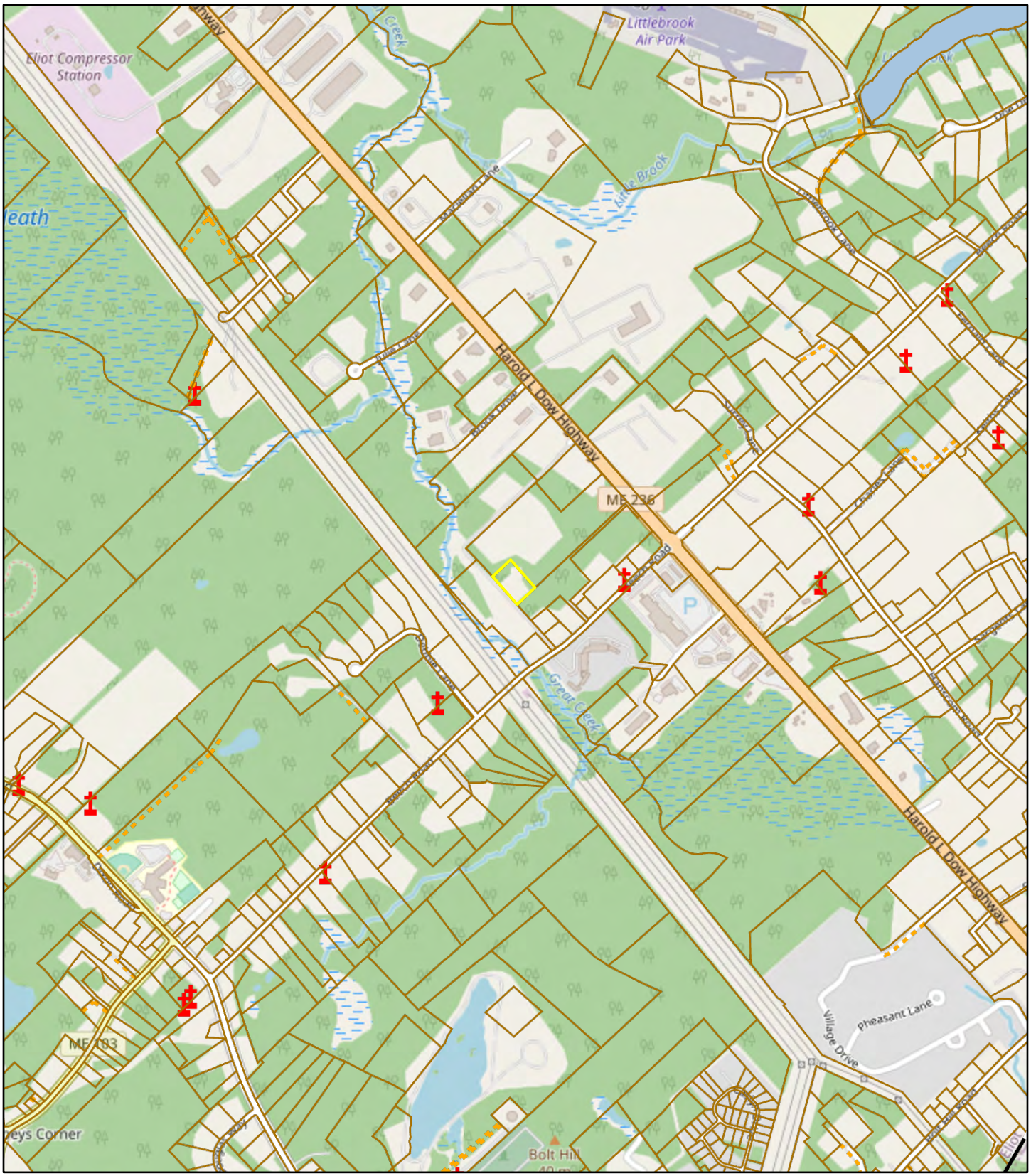
Made by Town staff

1 inch = 500 Feet

0 500 1000 1500

September 16, 2022

CAI Technologies
Precision Mapping. Geospatial Solutions
www.cai-tech.com



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

To: Planning Board
From: Jeff Brubaker, AICP, Town Planner
Cc: Ken Wood, PE, Attar Engineering, Applicant's Representative
Mike Sudak, EI, Attar Engineering, Applicant's Representative
Shelly Bishop, Code Enforcement Officer
Date: September 14, 2022 (report date)
September 20, 2022 (meeting date)
Re: PB22-9: 771 & 787 Main St. (Map 6, Lots 43, 44, & 154) – Clover Farm Subdivision (8 lots) – **Preliminary Plan Review**

Application Details/Checklist Documentation	
Address	771 & 787 Main St.
Map/Lot	6/ 43, 44, & 154
PB Case#	22-9
Zoning District(s)	Village
Shoreland Zoning District(s)	Limited Residential, Resource Protection
Property Owner(s)	Mark McNally, LJE Property Development LLC, Jesse Realty LLC
Applicant Name(s)	Mark McNally Building Maintenance, LLC, LJE Development LLC, Jesse Realty LLC
Proposed Project	8-lot conventional residential subdivision
Sketch Plan	
✓ Application Received by Staff	April 12, 2022
✓ Application Sent to Staff Reviewers	May 10, 2022
✓ Application Reviewed By PB	May 17, 2022; June 21, 2022; July 26, 2022 (scheduled)
✓ Site Walk	May 31, 2022
✓ Site Walk Publication	May 24, 2022 (Portsmouth Herald)
✓ Sketch Plan Approval	July 26, 2022
Preliminary Plan	
✓ Application Received by Staff	August 24, 2022
✓ Fee Paid and Date	$1,775 ($1,600 – subdivision preliminary plan application; $175 – public hearing); August 24, 2022
✓ Application Sent to Staff Reviewers	August 31, 2022
Application Reviewed by PB	September 20, 2022 (scheduled)

Overview

Applicants Mark McNally Building Maintenance, LLC, LJE Development LLC, and Jesse Realty LLC (agent: Attar Engineering; property owners: Mark McNally, LJE Property Development LLC, Jesse Realty LLC) are seeking review of a subdivision application for three existing lots (Map 6, Lots 43, 44, & 154) currently addressed as 771 and 787 Main St. The application proposes a conventional residential subdivision with eight (8) lots. With PB sketch plan approval occurring on July 26, the applicant has submitted their preliminary plan and application package. The assembled parcels comprise 10.95 acres, allowing 9 lots, 1 greater than proposed (Sheet 1, Note 5). Subdivision Lots 5-6 are on the shore of the Piscataqua River. Existing Tax Map 6, Lot 44 – which includes proposed subdivision Lot 6 – already has a growth and building permit associated with it as well as residential pier approval. The site plan notes that the "existing sidelines between [the existing] parcels shall be abandoned", which will make way for the new lot lines.

Application contents

Submitted April 12, 2022

- Cover letter dated 4/12/22
- Subdivision application and checklist
- Agent authorization letters from Jesse Realty, LLC; LJE Property Development, LLC; Mark McNally Building Maintenance, LLC (unsigned)
- Location map (1" = 2,000')
- 100 ft. abutters list
- Easement and land exchange agreement
- Warranty deeds
- FEMA FIRM flood map, dated 6/5/89
- Traffic Impact Assessment from Sewall dated 1/5/22
- Sketch plan dated 4/12/22

Submitted June 1, 2022

- Agent authorization letter from Mark McNally Building Maintenance LLC (signed)

Submitted June 8, 2022

- Progress print sketch plan (superseded by 6/14/22 submittal)
- Plan of Land for Jesse Realty, dated 12/12/18, Sheets D2-D3
- Boundary plan/survey prepared for James D. & Orley Mae White, dated 6/21/05

Submitted June 14, 2022

- Cover letter dated 6/14/22
- Sketch Plan dated 6/14/22

Submitted June 16, 2022

- Sketch Plan dated 6/16/22 (emailed to Planner but after 6/21 packet was sent out)

Submitted July 19, 2022

- Cover letter dated 7/19/22
- Email correspondence between applicant team and Town Planner regarding TIA, 6/23/22 to 7/18/22
- 2009 Comprehensive Plan future land use map excerpt, map showing other subdivisions, and Open Space Development sketch plan, related to Open Space Development discussion
- Sketch plan, 7/19/22 revisions

Submitted August 24, 2022

- Cover letter dated 8/23/22
- Subdivision application signed by Attar Engineering, dated 8/23/22
- Subdivision application checklist
- Agent authorization letters from Mark McNally Building Maintenance, LLC; LJE Property Development, LLC; and Jesse Realty, LLC

- Easement agreement between property owners regarding proposed driveway
- Warranty deeds
- Location map (1" = 2,000')
- 60 ft. abutters list
- FEMA FIRM flood map
- MaineDOT driveway/entrance permit
- Medium-intensity soil survey
- 2005 boundary plan
- Stormwater management plan
- Site plan set
  - Sheet 1: Site plan
  - 2: Existing conditions plan
  - 3: Grading & utilities plan
  - 4: Roadway plan & profile
  - 5-6: Site details
  - 7-8: Stormwater existing/post-construction plans

Affidavit of ownership

Warranty deeds for Jesse Realty, LLC; LJE Property Development, LLC; and Mark McNally

Zoning

Village; Limited Residential and Resource Protection shoreland zoning

Dimensional requirements

Standard	Planner review
Min. lot size: 1 acre [41-255; 41-218(e); 45-405]	**Met.** Lots vary from 1.02 to 1.62 ac. Subdivision to be served by municipal sewer, so 41-218(e) requirement for potential larger lot sizes for septic system lots is N/A.
Min. street frontage: 100 ft.	**Appears to be met** for Lots 1-4 and 7-8. Lots 5-6 have <100 ft. of frontage: modification approved by PB on 7/26/22 [41-255(g) and 41-66].
Setbacks: appropriate for location of subdivision and type of development/use contemplated [41-255]. 45-405 setbacks: 30' front/20' side/30' rear	**Appears to be met.** 30/20/30 setback lines shown on plans (45-405), and no lesser setbacks are proposed.
Min. shore frontage: 100 ft. [44-35(a)(1)]	**Met.** Lots 5-6 each have 188 ft. of frontage.
Structure shoreline setback: 75 ft. from top of unstable coastal bluff [44-35(b)(1)]	**Appears to be met.** Setback line shown on plan with proposed structures behind it.
Max. non-vegetated footprint in shoreland zone: 20%	**Appears to be met.** See Sheet 1, Note 8. Non-vegetated footprint is calculated at 14.6%.

Subdivision road

Per 8/23/22 cover letter: "A ~750 linear foot travelway designed to Minor Road standards is proposed to access all 8 lots, and said travelway includes asphalt curb and an asphalt sidewalk to be incorporated into other pedestrianways in the growth area." 41-221(b)(2) requires that proposed streets meet Ch. 37 standards.

Minor road (<15 lots) street design standards (37-70)	**Planner review**
Min. right-of-way: 40 ft.	**Met.** 50-75 ft. R/W shown on plan. First ~300 lf has been widened to allow for shifting of road to the north to avoid utility pole and bring it further away from, and screen, abutting property (Map 6, Lot 42), plus accommodate a 5 ft. sidewalk.
Min. width of traveled way: 18 ft.	**Appears to be met.** Site plan (Sheet 1) and site detail (Sheet 6) show 18 ft. width.
Min. width of shoulders: 2 ft.	**Met.** Site plan (Sheet 1) and site detail (Sheet 6) show 2 ft. shoulder on side without sidewalk.
Sidewalk width (if used): 5 ft.	**Met**. 5 ft. sidewalk proposed on northwest side of the road and around the cul-de-sac [41-221(a)(4)]. See various plan sheets and the detail on Sheet 6.
Min. grade: 0.5%	**Appears to be met.** Grade is 1.25% to 5% as shown in the roadway profile on Sheet 4.
Max. grade: 8.0%	**Appears to be met.** See above.
Max. grade at intersections: 3%	**Appears to be met.** Grade appears to be ≤1.25% at Main St. intersection.
Min. angle of street intersections: 75 degrees	**Visually appears to be met**
Min. centerline radius of curves: 100 ft.	**Appears to be met.** Road is mostly straight with slight curve of radius >175 ft. as shown on plan.
Min. tangent length b/t reverse curves: 100 ft.	**Visually appears to be met**
Roadway crown: ¼" per ft. of lane width	**Met.** See detail on Sheet 6.
Min. curb radius at 90-degree intersections: 20 ft.	**Need clarification from applicant** for design of curb radius on the sidewalk side as the road meets Main St.
Min. right-of-way radii at intersections: 10 ft.	**Need clarification from applicant** as this may not be met. Property lines appear to have a sharp angled corner at Main St.
Cul-de-sac concentric radii: 30'/40'/65'/70'	**Met.** Radii shown on plan. R/W radius surrounding the cul-de-sac increased to 75 ft. to accommodate the sidewalk.
Cul-de-sac suitable snow storage	**Met.** Snow storage areas shown on site plan within cul-de-sac and other areas along the road.
Min. cul-de-sac pavement width around the center island: 25 ft.	**Met**
Sight distance	**Apparently not met.** Sight distance triangles were a condition of the PB's street separation waiver approval and should be shown as appropriate in the plan set.

Minor road (<15 lots) street construction standards (37-71)	**Planner review**
Aggregate subbase course (max size stone 4"): 15" in depth	**Appears to be met.** See Sheet 6 detail. To my knowledge, MDOT Type D aggregate meets the <4" size standard.
Crushed gravel base course (max size stones 2"): 6" in depth	**Appears to be met.** See Sheet 6 detail. To my knowledge, MDOT Type A aggregate meets the <2" size standard. (Ref. MDOT Standard Specification 703.06)
Hot bituminous pavement	See Sheet 6 detail
Total thickness: 3"	**Met**
Wearing/surface course: 1¼"	**Met**
Base course: 1¾"	**Met**

Subdivision road entrance on Main St.

On July 26, the PB approved a street separation waiver (Section 37-57) allowing <400 ft. distances from adjacent streets. The waiver is conditioned on the aforementioned sight distance triangles being shown on plans.

Stormwater

Subdivisions are required to meet the stormwater requirements in Section 41-213 and 45-411 and enter into post-construction stormwater management agreements per Ch. 35 (applicable to all sites/common plans of development with >1 acre of disturbance). The site is in the MS4 urbanized area. A stormwater management (drainage) plan (SWMP) has been submitted, per 41-150(8). The subdivision is also subject to a Maine DEP stormwater permit-by-rule (PBR). That application was submitted on September 13; a copy is in the packet. The application proposes the following facilities and features for stormwater management:

- A stormwater detention pond located between Lots 6-7 with a stone berm level spreader and emergency spillway. In addition to runoff quantity, the SWMP notes that the detention pond "will provide some treatment of pollutants such as suspended solids and hydrocarbons prior to discharge from the site". The SWMP notes: "Stormwater flow from the detention pond will be routed through a level spreader and undisturbed buffer prior to discharge from the site."
- A vegetated roadside swale along the proposed subdivision road
- Culverted driveway crossings for the swale with inlet/outlet protection and trash screens

Stormwater standards (41-213, 45-411) check	**Planner review**
Runoff minimized and detained on site if possible/practical (design standard is 50-year storm)	SWMP analysis "indicates decreases in peak flow at [the 2 analysis points] in all storm events, resulting in no anticipated adverse effects on abutters or existing downstream systems due to water quantity". For a 50-year storm: • AP1: decrease in peak flow by 4.78 cubic feet per second (cfs) • AP2: decrease in peak flow by 8.44 cfs

Natural state of watercourses, swales, floodways, rights-of-way maintained as nearly as possible	SWMP: "Proposed cuts and fills are moderate, ranging from 0 to 4 feet, with the largest fill being at the down-slope side of the proposed cul-de-sac…Impervious areas are minimized."
Drainage easement	None proposed; PB may require if needed
Soil statement; drainage plan	Included in packet
Storage of materials	No review comments at this time

Recommendation: Seek technical consultant review of SWMP and proposed stormwater features.

Erosion & sedimentation control

Erosion & sedimentation control notes are on Sheet 5, as required by 41-150(10) and 41-214(c).

Erosion control standards (41-214) check	**Planner review**
Stripping of vegetation/regrading/etc. to be minimized as far as practical, minimize erosion	See above regarding moderate grading and minimization of impervious areas
Duration of exposure of disturbed areas kept to a practical minimum	See Sheet 5, E&SC Notes 6 and 9. Generally, stabilization within 7 days, or 48 hours within 75 ft. of a wetland or waterbody.
Temporary vegetation and/or mulching	See Sheet 5, E&SC Notes 2,3,6,7, and Winter Construction Notes
Permanent vegetation, mechanical erosion control measures installed as soon as practical after construction ends.	See Sheet 5, E&SC Note 9, among others
Sediment from disturbed areas trapped by debris basins, sediment basins, silt traps, etc.	See Sheet 5, E&SC Note 20, among others
Top of cut or bottom of fill not <10 ft. to adjoining property, unless otherwise specified by PB	No such grading apparent on plan
Dust control during grading	See Sheet 5, E&SC Note 12
On slopes >25%, no grading/filling within 100 ft. of the normal high water mark except to protect the shorelines and prevent erosion	No such grading apparent on plan
Do not remove topsoil from site, except for surplus for roads, parking areas, building excavations	Unclear if this is included on plan notes

Recommendation: Seek technical consultant review of erosion & sedimentation control elements.

Preservation of natural resources and scenic beauty (41-215)

Per 41-215(a), a landscape plan is incorporated into Sheet 3 – Grading & Utilities Plan. Existing tree lines, proposed clearing limits, and large trees (24+ in. DBH) to be preserved are shown. If the PB deems necessary, you may consider requiring the preservation of lesser diameter trees (down to 10 in.) per 41-215(a). As noted above, grading is moderate (0 to 4 ft.) and primarily associated with the road/cul-de-sac, swales, stormwater detention pond. Per 41-215(b), the proposed arbor vitae buffer along the southeastern edge of the development continues to be depicted and is described in Sheet 1, Note 10. The PB may wish to further comment on the location and type of trees in this buffer.

Preservation of historical and natural features and traditional land use pattern (41-216)

As noted in previous reviews, the site includes the Remick family cemetery and the historic Clover Farm property (771 Main St.). The Code Enforcement Officer has issued the demolition permit for the relocation of the historic barn to Brixham Rd., as previously reviewed by the PB, and it is understood that the dismantling of the barn is underway. Remick Cemetery access, as previously discussed, continues to be provided for on Sheet 1 (between Lots 4-5) and described in Note 13.

Water and sewer service (41-217 and -218)

The subdivision proposes to connect to municipal water and sewer. The 8" water main would be under the northwest half of the road. A fire hydrant is proposed near the Lot 4 driveway, at the base of the cul-de-sac. The 2" sewer force main would be under the middle portion of the road, leading out to the public gravity line on Main St. Water and sewer details are on Sheet 6. A pump station is to be located after input from the Kittery Sewer Dept. Review comments from Kittery Water District, Kittery Sewer Dept., and the Fire Chief are anticipated but have not yet been received at the time of this report. Further review of the sewer main size and sufficiency may be needed per 41-218(a), which requires a min. 8" diameter main.

Community services, utilities, and open space (41-220)

If needed, the PB may make review comments on the potential effects of the subdivision on the community services listed in 41-220(a). My preliminary review:

- Schools, including busing: not expected to be significant given the number of units
- Road maintenance and snow removal: road to be privately-maintained, with private responsibilities for snow removal and snow storage areas shown on plans
- Police and fire protection: plan has been shared with Police and Fire Depts for their review
- Recreation facilities: PB issued waiver from parks/rec land reservation, with condition for payment-in-lieu [41-256(c)]
- Solid waste disposal: no review comments
- Runoff: see above regarding stormwater

The underground utility line is shown under the southeast half of the road. See Sheet 4 and trench/conduit detail on Sheet 6. The PB did not require 10% open space reservation per 41-220(c).

Recommendation: Seek technical consultant review to determine parks/recreation payment-in-lieu amount, per PB waiver.

Traffic and streets (41-221)

This section has been primarily addressed by the traffic impact assessment previously reviewed, the street separation waiver review and approval, the provision of a sidewalk on the subdivision road, and the future sidewalk easement dedication along Main St. The PB may wish to provide further review comments if you deem necessary.

Public health and safety (41-222)

This section includes glare and noise standards. This is expected to be addressed to the extent that

sufficient vegetative buffering is provided for abutting properties.

Reservation of land (41-256)

As noted above, my recommendation is to have technical consultant review of the payment-in-lieu amount, per the condition of the PB's waiver.

Soil suitability/soils report

A soils report is required by 41-150(11). The cover letter notes: "A waiver is being requested for §41-150(11) for a High-Intensity Soil Survey. The Applicants have provided a Medium-Intensity Soil Survey [in packet] and are having test pits dug in the location of all stormwater management BMPs, the combination of which should satisfy any Town requirements for a subdivision being serviced by municipal sewer."

Performance guarantee (41-176; 33-132)

The applicant will need to furnish a performance guarantee statement during preliminary subdivision review. See 33-132(b).

Recommendations/next steps

> ***Recommended motion template:*** Motion to deem the preliminary plan application incomplete, per Section 41-141. Additional items to be provided are noted in the Town Planner's report, the applicant's submittal, and any review comments provided by the Planning Board. The following aspects shall be reviewed by a third-party technical consultant, per Section 41-142:
>
> 1. Proposed stormwater facilities, stormwater management plan, erosion & sedimentation control, and stormwater-related matters
> 2. Determination of a reasonable payment-in-lieu fee for parks/recreation
>
> Review is scheduled to continue on October 18, 2022.

*** * ***

Respectfully submitted,

Jeff Brubaker, AICP
Town Planner

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

To: Ken Wood, PE, Attar Engineering, Applicant's Representative
Mike Sudak, EIT, Attar Engineering, Applicant's Representative
From: Jeff Brubaker, AICP, Town Planner
Cc: Planning Board
Date: August 24, 2022
Re: PB22-9: 771 & 787 Main St. (Map 6, Lots 43, 44, & 154) – Clover Farm Subdivision (8 lots) – **Preliminary Plan Receipt**

This letter verifies that the Town received the Preliminary Plan submittal for the subject application on August 24, 2022.

TOWN OF ELIOT
MAINE

PLANNING OFFICE
1333 State Road
Eliot ME, 03903

NOTICE OF PROPOSED SUBDIVISION

LOCATION: 771 & 787 Main Street
TAX MAP/LOT #s: Map 6, Lots 43, 44, & 154

Per Section 41-141 of the Eliot Town Code, notice is hereby given that the Town has received a preliminary subdivision plan for the Clover Farm Subdivision. This subdivision would be located at 771 & 787 Main St. The proposal is for a conventional subdivision consisting of eight (8) lots, replacing the three (3) lots that are currently at this location, totaling 10.95 acres combined. The subdivision would be served by municipal water service, municipal sewer service, and underground electrical service. It would have a single access onto Main St., a new privately-maintained minor road approximately 750 ft. long.

Applicant: Attar Engineering, Inc. (applicants' representative)
Property Owners: Mark McNally Building Maintenance, LLC, LJE Property Development LLC, Jesse Realty LLC

This subdivision application is also expected to be included on the Planning Board's meeting agenda for review on Tuesday, September 20th, 2022.

Location map of the proposed subdivision (excerpt from the applicant's preliminary plan submittal)

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

LYTLE, NATHANIEL H
722 MAIN ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

VOLTAIRE, JOANNE
12 PATRIOTS LN UNIT 6
ELIOT, ME 03903

OT TOWN OFFICE
33 STATE ROAD
OT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HAMMEKEN, MARQUITA
HAMMEKEN, ELAINA
38 VARNEY LN
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

WINTER, LOUIS G
WINTER, ELIZABETH A
803 MAIN ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

WITTROCK, SUSAN P
WITTROCK, STEVEN P
214 EAST SPRING ST
ALEXANDRIA, VA 22301

1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

BOYD, DUNCAN L
709 MAIN ST
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

BUZZELL, RICHARD L
11 PATRIOTS LN #2
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

CROSBY, ANITA J
12 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HAMBLETT, BARBARA M
HAMBLETT, JOHN C
21 PARK ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

TARR, STEPHANIE J
TARR, JEFFREY T
756 MAIN ST
ELIOT, ME 03903

T TOWN OFFICE
3 STATE ROAD
T, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

TALBOT, JOHN D
19 PARK ST
ELIOT, ME 03903

OT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

STRANGE, MALLORY
11 PATRIOTS LN UNIT 4
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SHEMATEK, ELEANOR M
1200 STEWART ST UNIT 921
BALTIMORE, MD 21230

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

ROBINSON, MARK
ROBINSON, LEIGH B
744 MAIN ST
ELIOT, ME 03903

1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SHEA, LEROY/KAREN REVOCAB
LEROY W/KAREN A SHEA TRUS
24 SHEA DR
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SAURMAN, JANET A
SAURMAN, BRYAN D & MCNEIL
22 PARK ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SIMPSON, ALLAN R
SIMPSON, KATHY L
18 PARK ST
ELIOT, ME 03903

333 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SHEA, LEROY/KAREN REV TRU
LEROY/KAREN SHEA TRUSTEES
24 SHEA DR
ELIOT, ME 03903

OT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

REED, CAITLIN M
REED, MICHAEL R
6 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

RATCLIFF, WARDWELL
767 MAIN ST
ELIOT, ME 03903

1333 STATE ROAD
ELIOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SAKLAD, RICHARD J
1 MARJORIE WAY
ELIOT, ME 03903

T TOWN OFFICE
3 STATE ROAD
T, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

PRATT, CHARLES JR
826 MAIN ST
ELIOT, ME 03903

OT TOWN OFFICE
33 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SHEA, KATY
17 AQUA AVE
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

SAKLAD, CYNTHIA L
1 MARJORIE WAY
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

PATRIOTS LANE MASTERCARD
PATRIOTS
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MCKENNEY, RALPH A
834 MAIN ST
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

POISSON, NICHOLE M
POISSON, FREDERICK L
16 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MORIN, STEPHANIE L
MORIN, DANIEL
11 PATRIOTS LN 3
ELIOT, ME 03903

OT TOWN OFFICE
33 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MARSTON, JOHN E
MARSTON, SIGRED
20 PARK ST
ELIOT, ME 03903

333 STATE ROAD
IOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MCKENNA, ROBERT/DOWNEY, A
ROBERT F MCKENNA/ANNE M D
1 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

POIRIER, CHRISTOPHER ALLA
POIRIER, KELLY ANN
7 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

ORR, SHARON LYNNE
11 PATRIOTS LN UNIT 1
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

NEWLAND, PAMELA M
14 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, STEPHEN M
MANERO, BRITT F
12 ANTHONY'S LANDING
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, STEPHEN M
MANERO, BRITT F
12 ANTHONYS LNDG
ELIOT, ME 03903-1705

333 STATE ROAD
IOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO-EARLEY, MARY ELLEN
18 ANTHONYS LNDG
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, ANTHONY T
MANERO, CANDACE S
31 ANTHONYS LANDING
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

KINNETT, CHARLES P
MCNAMARA, STEPHANIE
793 MAIN ST
ELIOT, ME 03903

IOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, STEPHEN M
12 ANTHONYS LANDING
ELIOT, ME 03903

JOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

LAFORGE, ANDREW P
12 PATRIOTS LN 5
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, ANTHONY K
MANERO, ELIZABETH T
32 ANTHONYS LNDG
ELIOT, ME 03903

333 STATE ROAD
OT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

LEPERE, PAUL R
PO BOX 668
HAMPTON FALLS, NH 03844

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MANERO, ANTHONY T
MANERO, CANDACE S
31 ANTHONYS LNDG
ELIOT, ME 03903

OT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HUTCHINSON FAMILY REVOCAB
FRANKLIN & CAROLYN B HUTC
11 AQUA AVE
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

KELSEY, KIM
768 MAIN ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

KELLY, DONNA L
776 MAIN ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MACDONALD, CHARLES R
MACDONALD, LUCIE F
C/O DEGRAPPO BUILDERS LLC
ELIOT, ME 03903

JOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

JORDAN, HEIDE
15 PARK ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HANNIGAN, ELINOR C
20 AQUA AVE
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

DOHERTY, JAY MICHAEL
816 MAIN ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HURLEY, LUCY A
12 PATRIOTS LN UNIT 7
ELIOT, ME 03903

333 STATE ROAD
OT, MAINE 03903

US POSTAGE $000.57⁰
ZIP 03903
041M11465188

FURBISH, CINDY W
25 PARK ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

HINES, SUSAN N REVOCABLE
SUSAN N HINES TRUSTEE
24 PARK ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

FRISBEE FAMILY REVOCABLE
ROGER A & JEAN D FRISBEE
717 MAIN ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

EMERY, JOYCE
EMERY, CHRISTOPHER
730 MAIN ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

MACDONALD FAMILY REVOCABL
CHARLES R & LUCIE F MACDO
1986 STATE RD
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

DIXON, ROBERT A
DIXON, LINDA E
806 MAIN ST
ELIOT, ME 03903

OT TOWN OFFICE
333 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

FURBISH, JEFFREY H
6 FOURTH AVE
ELIOT, ME 03903

OT TOWN OFFICE
33 STATE ROAD
OT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

GRANT, CRISPIN
751 MAIN ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

DAVIS, RITA REVOCABLE TRU
RITA L DAVIS TRUSTEE
17 ELIZABETH LN
KITTERY POINT, ME 03905

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

FONTAINE, NANCY
FONTAINE, ROBERT J
144 BOLT HILL RD
ELIOT, ME 03903

OT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

BICKFORD, JONATHAN
BICKFORD, THOMAS L
794 MAIN ST
ELIOT, ME 03903

1333 STATE ROAD
ELIOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

CROSIER, DEBRA M & JOHN T
DEBRA M & JOHN T CROSIER
21 AQUA AVE
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

BOCCIA, MICHAEL A & LUONG
MICHAEL A BOCCIA & VALENT
16926 VISTA BRIAR DRIVE
SAN ANTONIO, TX 78247

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

FARNHAM, DEBRA A
FARNHAM, STEVEN R
10 PARK ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

BEAGEN, BRIDGETTE R
790 MAIN ST
ELIOT, ME 03903

LIOT TOWN OFFICE
1333 STATE ROAD
LIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

ADAMS, RALPH
ZIMMERMAN, B DIANE
10 STAPLES ST
ELIOT, ME 03903

IOT TOWN OFFICE
333 STATE ROAD
IOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

ANDERSON, DOUGLAS A REVOC
DOUGLAS A ANDERSON TRUSTE
224 PLEASANT ST
ELIOT, ME 03903

ELIOT TOWN OFFICE
1333 STATE ROAD
ELIOT, MAINE 03903

NEOPOST FIRST-CLASS MAIL
09/06/2022
US POSTAGE $000.57⁰
ZIP 03903
041M11465188

AMSDEN, NATHAN C
AMSDEN, HEIDI P
799 MAIN ST
ELIOT, ME 03903

ATTAR
ENGINEERING, INC
CIVIL STRUCTURAL MARINE

Mr. Jeffery Brubaker, AICP, Town Planner
Town of Eliot, Maine
1333 State Road
Eliot, Maine 03903

August 23rd, 2022
Project No. C174-21

RE: Sketch Subdivision Application
Clover Farm Subdivision (Tax Map 6, Lots 43, 44, & 154)
771 & 787 Main Street, Eliot, Maine

Dear Mr. Brubaker:

On behalf of Mark McNally Building Maintenance, LLC., LJE Development, LLC., and Jesse Realty, LLC., I have enclosed for your review and consideration a Preliminary Application for Major Subdivision and associated documents for the above-referenced project.

The Applicants proposed to develop the collected subject parcels into an 8-lot conventional residential subdivision. The development shall be serviced by municipal water, municipal sewer, and underground electric. A ~750 linear foot travelway designed to Minor Road standards is proposed to access all 8 lots, and said travelway includes asphalt curb and an asphalt sidewalk to be incorporated into other pedestrianways in the growth area.

Lot coverage calculations have been provided to show compliance with the maximum developable percentage within the Limited Residential overlay. All proposed structures are set back appropriately from the 75' setback to the nearby Unstable Coastal Bluff along the riverfront. All waivers granted during the Sketch Plan review have been added to the Plan Set.

This development is subject to an active MDOT Entrance Permit, which the Applicants are working with the State to revise for the recently-granted waiver allowing the proposed entrance location. Additionally, the development is subject to a Stormwater PBR from the MDEP for impervious area created. This permit is ongoing and shall be sent to the Town upon receipt.

A waiver is being requested for §41-150(11) for a High-Intensity Soil Survey. The Applicants have provided a Medium-Intensity Soil Survey and are having test pits dug in the location of all stormwater management BMPs, the combination of which should satisfy any Town requirements for a subdivision being serviced by municipal sewer.

We look forward to discussing the project with the Planning board at their next available meeting. Please contact me for any additional information or clarifications required.

Sincerely;

Michael J. Sudak, E.I.
Staff Engineer

cc: Mark McNally Building Maintenance, LLC., LJE Development, LLC., Jesse Realty, LLC.
C174-21 Cover Prelim SDV 23Aug2022

CASE NO._____

TOWN OF ELIOT
PLANNING BOARD
SUBDIVISION APPLICATION

This application shall conform in all respects to the Land Subdivision Standards of Chapter 41 of the Planning Board of the Town of Eliot code of ordinances. Ten (10) copies of application and sketch plan shall be submitted.

Application for ( ) Sketch plan

(✓) Preliminary plan for major subdivision

( ) Final plan for minor subdivision

1. Proposed name of subdivision Clover Farm Subdivision

2. Location of property 771 & 787 Main Street

3. Tax Map 6 Lot # 43, 44, & 154 Size (acres) 10.95 (combined)

4. Zoning District (circle one) Commercial/Industrial Rural Suburban (Village)

Mark McNally Building Maintenance
Jesse Realty, LLC.

5. Name of record owner LJE Property Development, LLC.

Mailing address 1381 Elwyn Road, Portsmouth NH Phone # 603.498.3837

6. Name of applicant Attar Engineering, Inc.

Mailing address 1284 State Road, Eliot ME Phone # 207.439.6023

If corporation, name of agent Michael J. Sudak, E.I.

7. A complete statement of any easements relating to the property is attached hereto

(if none, so state) Attached as requested

8. Deed or deeds recorded at County Registry of Deeds

Date_____ Book # 18327 Page # 751

Date_____ Book # 17849 Page # 563

Date_____ Book # 18390 Page # 922

CASE NO._____

9. Do the owner and/or applicant have an interest in an abutting property as stated on the attached sheet? No

10. Name, address and license # of Engineer, Land Surveyor, Architect, or Planner
Kenneth A. Wood, P.E. #5992, President of Attar Engineering, Inc.

11. Preliminary plan covers_____

12. If applicable, has the owner and/or applicant been approved for a MaineDOT driveway permit for the installation, physical change or change of use a driveway located on a State highway? Original MDOT Entrance Permit #27599 - 12/19/219

13. Does owner propose to submit Final Subdivision Plan to cover the entire Preliminary Plan, or to file same in sections? Final SDV Plan to cover entire Preliminary Plan
If so, how many?_____

14. Does the preliminary plan cover the entire contiguous holdings of the applicant?
Yes

15. Entrances onto existing or proposed collector streets do not exceed a frequency of one per 400' of street frontage? Yes (No) See Approved Waivers on Site Plan

16. Entrances onto existing or proposed arterial streets do not exceed a frequency of one per 1000' of street frontage? Yes No N/A

17. A distance of at least 200' is maintained between centerlines of offset intersecting streets? (Yes) No

18. Does the applicant propose to dedicate to the public all streets, highways and parks shown on the plan? No

CASE NO._____

19. Give the number of acres which the applicant proposes to dedicate to public to use for park, playground and/or other purposes See Approved Waivers on Site Plan

20. If any waivers of requirements are to be requested, list them on a separate sheet, referencing the Sections in Chapter 41 and give reasons why such requirements should be waived .

21. Is the property located in a flood zone? No

If yes, please complete the attached Flood Hazard Development Application and return it with your application.

Subdivider shall submit fees as specified in Sections 1-25 in the amount of $200/lot prior to the second meeting with the Planning Board. Fees are not refundable.

Applicant signature Michael J. Sudak agent Date 8/23/22

Owner signature Michael J. Sudak agent Date 8/23/22

Planning Assistant_____ Date_____

FEES:

Major subdivision	$200 per lot
Minor subdivision	$200 per lot

CASE NO._____

Town of Eliot Planning Board
CHECKLIST FOR A SUBDIVISION APPLICATION
(All items will be reviewed unless otherwise noted or NA)

☑ The owner of the property is
Mark McNally Building Maintenance, Jesse Realty, LLC., & LJE Property Development, LLC.

☑ The applicant is the Parcel Owners who has demonstrated a legal interest in the property by providing:
their Record Deeds

☑ Agents for the applicant are:
Michael J. Sudak, E.I. & Kenneth A. Wood, P.E. of Attar Engineering, Inc.

☑ The property is located at 771/787 Main Street, in the Village zoning district, identified as Assessor's Map 6, Lot Lots 43, 44, & 154, and containing 10.95 Acres acres

☑ Application is for establishment of (new) (modification to existing) Major/Minor Subdivision.

☐ Existing Subdivision was approved by the Planning Board on N/A.

☑ The name of the proposed subdivision is Clover Farm SDV and it will contain 8 lots which range in size from 1.02 acres to 1.62 acres and are shown on Plan No. 1, dated 08/23/22

☑ Easements and/or Rights of Way affected by or within the proposed subdivision are as follows:

a. 20' access easement for Remick Family Cemetery.
b. 5' easement for future improvements of Main Street Right-of-Way.
c. _____.

☑ Entrances onto existing or proposed collector streets do not exceed a frequency of one per 400' of street frontage? Entrances onto existing or proposed arterial streets do not exceed a frequency of one per 1000' of street frontage? See Approved Waivers on Site Plan

☑ Owner/applicant has been approved for a driveway permit from MaineDOT for the installation, change or change of use on any State highway, if applicable?

☑ Lots within the proposed Subdivision will have (private) (public) water supply and (private) (public) (private central) sewage disposal systems.

☑ Sketch Plan was accepted by the Planning Board on 07/26/2022

☐ Preliminary Plan approved by Planning Board on _____

☑ A Site visit was conducted on 05/31/2022 (Sketch)

☐ A public hearing was held on _____

☑ 05/31/22 abutters spoke or submitted written correspondence at the Public Hearing or submitted written correspondence by mail.

☐_____ members of the public spoke or submitted written correspondence at the Public Hearing or submitted written correspondence by mail.

☑ The application was discussed by the Planning Board on 05/17/22, 06/21/22, 07/26/22,_____,

☑ Plan for minimizing surface water drainage (Section 41-213) submitted: (Yes) (No) (Waiver requested).

☑ Soil Erosion and Sediment Control Plan (Section 41-214) submitted: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Statement or plan showing effect upon air quality (Section 41-212) submitted: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Soils Report and High Intensity Soils Survey [Section 41-150(11)] submitted: (Yes) (No) (Waiver requested)

☑ *(Optional for Minor Subdivision)* Location of all natural features or site elements to be preserved (Section 41-215) identified: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Statement or plan concerning historical sites and land use patterns (Section 41-216) submitted: (Yes) (No) (Waiver requested).

☑ Means of providing water supply to the proposed subdivision (Section 41-217) identified: (Yes) (No) (Waiver requested).

☑ Sanitary sewerage system (Section 41-218) identified: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Community services and impact statement (Section 41-220) submitted: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Traffic congestion and safety plan (Section 41-221) submitted: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Public health and safety statement (Section 41-222) submitted: (Yes) (No) (Waiver requested).

☑ Compliance with Federal, State, and Local land use laws (Section 41-223) demonstrated: (Yes) (No).

☑ *(Optional for Minor Subdivision)* Estimated Progress schedule [Section 41-150(21)] submitted: (Yes) (No) (Waiver requested).

☑ Adequate financing (Section 41-224) demonstrated: (Yes) (No) (Waiver requested).

☑ *(Optional for Minor Subdivision)* Water Department approval provided for public water service [Section 41-174 (1)]

☐ *(Optional for Minor Subdivision)* State of Maine, Department of Human Services approval for central water supply system provided [Section 41-174 (2)]

CASE NO._____

☑ Soil Scientist approval for individual wells provided [Section 41-174 (3)]: (Yes) (No)

☑ Proposed subdivision Plan reviewed by the Department of Environmental Protection: (Yes) (No) (Waiver requested).

☑ Proposed subdivision Plan reviewed by the Department of the Army, Corps of Engineers: (Yes) (No) (Waiver requested).

☑ Proposed subdivision Plan reviewed by the York County Soil and Water Conservation District: (Yes) (No) (Waiver requested)

☐ Other_____

Mark McNally Building Maintenance, LLC
1381 Elwyn Road
Portsmouth, NH 03801
603-275-6369

Jeff Brubaker, AICP
Town Planner
Town of Eliot
1333 State Road
Eliot, ME 03903

April 11th, 2022

Dear Mr. Brubaker,

Please be informed that Kenneth A. Wood, P.E. and Michael J. Sudak, E.I.T. of Attar Engineering, Inc. will be acting as my agent for the applications and permitting of my project on Main Street in Eliot, Maine.

Please contact me if I can provide any additional information.

Sincerely;

Mark McNally
Mark McNally Building Maintenance, LLC.

cc: Kenneth A. Wood, P.E. Attar Engineering, Inc.

LJE Property Development, LLC
2 Punkin Town Road, Suite 340
South Berwick, ME 03908

Jeff Brubaker, AICP
Town Planner
Town of Eliot
1333 State Road
Eliot, ME 03903

April 11th, 2022

Dear Mr. Brubaker,

Please be informed that Kenneth Wood, P.E. and Michael J. Sudak, E.I.T. of Attar Engineering, Inc. will be acting as my agent for the applications and permitting of my project on Main Street in Eliot, Maine.

Please contact me if I can provide any additional information.

Sincerely;

Thomas Howarth
LJE Property Development, LLC

cc: Kenneth Wood, P.E. Attar Engineering, Inc.

Jesse Realty, LLC
2552 Longboat Drive
Naples, FL 34104

Jeff Brubaker, AICP
Town Planner
Town of Eliot
1333 State Road
Eliot, ME 03903

April 11th, 2022

Dear Mr. Brubaker,

Please be informed that Kenneth Wood, P.E. and Michael J. Sudak, E.I.T. of Attar Engineering, Inc. will be acting as my agent for the applications and permitting of my project on Main Street in Eliot, Maine.

Please contact me if I can provide any additional information.

Sincerely;

Kris Glidden
Jesse Realty, LLC

cc: Kenneth Wood, P.E. Attar Engineering, Inc.

AGREEMENT

NOW COME Mark McNally of 1395 Elwyn Road, Portsmouth, New Hampshire 03801 ("McNally"); Tom Howarth, LJE Property Development, LLC ("LJE") of South Berwick, Maine; and Kris Glidden, Jesse Realty, LLC ("Jesse") of Dover, New Hampshire (collectively, the "Parties") this 20th day of August, 2021 ("Effective date) and agree as follows:

RECITALS

WHEREAS, McNally is the owner of certain real property with any improvements thereon located at 771 Main Street, Eliot, Maine, identified as Tax Map 6, Lot 43 on a certain plan entitled Subdivision Plan, Clover Farms, Main Street, Eliot, Maine, for ARCS Property Maintenance, 771 Main St., Eliot, Maine, 03903, dated 6/22/21, by Attar engineering, Inc. (The "Plan");

WHEREAS, LJE is the owner of certain real property with any improvements thereon located at 787 Main Street, Eliot, Maine, identified as Tax Map 6, Lot 154, reconfigured lot 1, LJE Property Development, LLC on the Plan;

WHEREAS, Jesse is the owner of certain real property with any improvements thereon located at 787 Main Street, Eliot, Maine, identified as Tax Map 6, Lot 44 reconfigured lot 2, Jesse Realty, LLC on the Plan[1];

WHEREAS, McNally and LJE/Jesse each intend to develop their respective lot(s);

WHEREAS, the proposed LJE development is located to the South/South-West and adjacent to the planned McNally development;

WHEREAS, the proposed Jesse development is located to the South/South-West and adjacent to the planned McNally development;

WHEREAS, LJE/Jesse desire an easement over the McNally property as depicted on the Plan to access and develop their property directly to the South/South-West and adjacent to McNally respectively.

WHEREAS, McNally desires additional land added to his as depicted on the Plan;

WHEREAS, pursuant to this agreement, the Parties desire to accommodate each other with respect to development of their respective lots;

---

[1] All addresses are subject to change by the Town of Eliot.

CONDITIONS

NOW, THEREFORE, in consideration of the above recitals, and the entire contents of this agreement, which each party hereto agrees and acknowledges constitutes adequate consideration, the parties agree as follows:

1. The Plan, which is to be recorded in the York County Registry of Deeds, is incorporated into this agreement as Exhibit 1.

2. At a closing date to be agreed upon by and between the parties, but no later than September 1st, 2021,McNally shall grant to LJE and Jesse a non-exclusive permanent easement over the entrance, driveway, or roadway or as it may be otherwise termed, running from Route 103 along the boundary of the McNally land as depicted on the Plan, running with the land, for pedestrian and vehicular access, ingress and egress, including, temporarily, construction vehicles to permit development of the LJE and Jesse lots as depicted upon the Plan.

3. The purpose of the easement is to connect the entrance, driveway, or roadway or as it may be otherwise termed, on the McNally parcel to the entrance, driveway, or roadway or as it may be otherwise termed to be built by LJE/Jesse on their respective parcels.

4. The driveway on the McNally parcel shall be constructed at McNally's sole expense. McNally shall also at his expense run utilities to the most southerly end of the entrance, driveway, or roadway or as it may be otherwise termed on his parcel, permitting LJE/Jesse to connect. Furthermore, The road materials existing within the current access drive, roadway to the respective LJE/Jesse parcels shall be moved and reinstalled on the LJE/Jesse parcels to extend the entrance, driveway, or roadway or as it may be otherwise termed.

5. At said closing, LJE/Jesse, shall deed to McNally via deed, the "L" shaped parcel bordering the approximate NW, and S/SW boundaries of the existing McNally parcel, Tax Map 6, Lot 43 as depicted on the Plan. Upon recording of the deed, exclusive use of said parcel shall be reserved to McNally and existing Tax Map 6 Lot 43.

6. In the event that one or more of the proposed developments are not approved, the easement(s) and deed contemplated herein shall survive.

7. This agreement is construed under the laws of the State of Maine. All parties agree to submit to the jurisdiction of Maine courts.

8. This document contains the entire agreement of the parties. Any previous discussions, written or oral or superseded and merged herein. No amendment to this agreement shall be effective unless in writing, executed by all parties hereto.

9. This agreement shall remain in full force and effect and shall survive any decision made, regardless of the outcome of permitting approval or decline by the town of South Berwick.

Witness

By: _____
Mark McNally

STATE OF NEW HAMPSHIRE, COUNTY OF ROCKINGHAM

On this 15 day of August, 2021, personally appeared the above named Mark McNally, known to me and acknowledged the foregoing to be his free act and deed. Before me,

_____
Notary Public/Justice of the Peace
Commission expires: 4/8/2025

Witness

By: _____
Tom Howarth, LJE Properties Development, LLC

STATE OF MAINE, COUNTY OF YORK

On this_____ day of August, 2021, personally appeared the above named Tom Howarth, on behalf of L JE Property Development, LLC, known to me and acknowledged the foregoing to be his free act and deed. Before me,

_____
Notary Public/Justice of the Peace
Commission expires:

SARAH L. DUPLESSIS
NOTARY PUBLIC
State of Maine
My Commission Expires
January 23, 2022

Witness

By: _____
Kris Glidden, Jesse Realty, LLC

STATE OF MAINE, COUNTY OF YORK

On this 14 day of August, 2021, personally appeared the above named Kris Glidden, on behalf of Jesse Realty, LLC, known to me and acknowledged the foregoing to be his free act and deed. Before me,

_____
Notary Public/Justice of the Peace
Commission expires:

SARAH L. DUPLESSIS
NOTARY PUBLIC
State of Maine
My Commission Expires
January 23, 2022

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED **Bk 18327 PG 751**
Instr # 2020035701
08/03/2020 11:55:21 AM
Pages 2 YORK CO

Maine R.E. Transfer Tax Paid

WARRANTY DEED

KNOW ALL PERSONS BY THESE PRESENTS: That I, Valentina Hong Thanh Luong, Trustee of the **Michael Anthony Boccia and Valentina Hong Thanh Luong Trust**, (Loung was incorrectly spelled in prior deed) u/d/t dated February 21, 2013 with a mailing address of 246 Main Street, Eliot, York County ME 03903, for consideration paid grant(s) to **Mark McNally**, Married, of 1381 Elwyn Road, Portsmouth, Rockingham County NH 03801, with WARRANTY COVENANTS:

A certain lot or parcel of land, together with the buildings thereon, situated in the Town of Eliot, County of York and State of Maine, and bounded and described as follows:

COMMENCING at the northerly corner of this parcel at a hub driven into the ground at the southwesterly sideline of Route #103 in said Eliot, which hub lies 75 feet southeasterly of the point of intersection of the fence marking the boundary line of property now or formerly of Hanscom heirs' and the southwesterly sideline of said Route #103; and running thence South 31-1/2° East for 218 feet to a hub driven into the ground at the southwesterly sideline of said Route #103 and at the easterly corner of the premises hereby conveyed; thence turning and running South 63° West for 318 feet to another hub driven into the ground designating the southerly corner of this parcel; thence turning and running North 28° West 258 feet to another hub driven into the ground designating the westerly corner of this parcel; thence turning and running North 70° East 305 feet to the first mentioned hub and place of beginning.

Meaning and intending to describe and convey the same premises conveyed to Michael A. Boccia, Trustee of the Michael Anthony Boccia and Valentina Hong Thanh Luong Trust from Fred F. King Jr Living Trust and the Beverly J. King Living Trust by virtue of a deed dated December 15, 2016 and recorded on December 16, 2015 in the York County Registry of Deeds at Book 17152, Page 537.

The property is not the residence of the grantor or the grantor's spouse and is not subject to homestead rights.

Executed this 3rd day of August, 2020.

Michael Anthony Boccia and Valentina Hong Thanh Luong Trust

Valentina Hong Thanh Luong, Trustee

State of New Hampshire
County of Rockingham

August 3, 2020

Then personally appeared before me on this 3rd day of August, 2020, the said Valentina Hong Thanh Luong, Trustee of the Michael Anthony Boccia and Valentina Hong Thanh Luong Trust and acknowledged the foregoing to be her voluntary act and deed.

ELIZABETH A. MUSSEL
Notary Public-New Hampshire
My Commission Expires
May 01, 2024

Notary Public/Justice of the Peace
Commission expiration: 5/1/2024

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED **Bk 18390 PG 922**
Instr # 2020047792
09/25/2020 04:01:19 PM
Pages 5 YORK CO

Return to:
LJE Property Development, LLC

DLN:1002040112472

WARRANTY DEED

Maine R.E. Transfer Tax Paid

KNOW ALL PERSONS BY THESE PRESENTS: That **CPN Realty, LLC,** a New Hampshire Limited Liability Company, with a mailing address of P.O. Box 657, Eliot, ME 03903, for consideration paid grants to **LJE Property Development, LLC,** a Maine Limited Liability Company, with a mailing address of 2 Punkin Town Road, Suite 340, South Berwick, ME 03908, with WARRANTY COVENANTS:

A certain unimproved parcel of land, situated in the Town of Eliot, County of York, State of Maine, located on the westerly side of Main Street, containing approximately 4.115 acres of upland, more or less, and the associated tidal flats in the Piscataqua River, being a reconfiguration of two lots:

1) A portion of the lands of CPN Realty, LLC described in a deed recorded at the York County Registry of Deeds in Book 17849, Page 559 and shown as LOT 1 on a plan by CIVIL CONSULTANTS, dated November 6, 2018, entitled "PROPOSED DIVISION OF LAND OF HOME FIELD TRUST, ORLEY MAE WHITE, TRUSTEE, 787 MAIN ST., ELIOT, YORK COUNTY, ME" - project 16-166.00 (SHEET D1), and also as shown on a plan by CIVIL CONSULTANTS, dated December 12, 2018, entitled "PLAN OF LAND OF CPN REALTY, LLC â€" 787 MAIN STR., ELIOT, YORK COUNTY, ME" - project 16-166.00 (SHEET D2), recorded at the York County Registry of Deeds in Plan Book 399, Page 10, and

2) A portion of the lands of Jesse Realty, LLC described in a deed recorded at the York County Registry of Deeds in Book 17849, Page 563 and shown as LOT 2 on a plan by CIVIL CONSULTANTS, dated November 6, 2018, entitled "PROPOSED DIVISION OF LAND OF HOME FIELD TRUST, ORLEY MAE WHITE, TRUSTEE, 787 MAIN ST., ELIOT, YORK COUNTY, ME" - project 16-166.00, and also as shown on a plan by CIVIL CONSULTANTS, dated December 12, 2018, entitled "PLAN OF LAND OF JESSE REALTY, LLC - 787 MAIN STR., ELIOT, YORK COUNTY, ME" - project 16-166.00 (SHEET D3), recorded at the York County Registry of Deeds in Plan Book 399, Page 11.

(Reference is also made to a plan by CIVIL CONSULTANTS, entitled "BOUNDARY PLAN PREPARED FOR JAMES D. & ORLEY MAE WHITE, Site Location: 139 Main Street, Eliot, Maine", project number 89-115.01, dated June 21, 2005, recorded at the York County Registry of Deeds in Plan Book 302, Page 6; bearings as shown on the first three referenced plans are based on Grid North, Maine State Plane Coordinate System, West Zone, NAD 83; bearings as shown on the second referenced plan are based on magnetic north; the orientation difference is 14°28'49")

The reconfigured lot of 4.115 acres, more or less, is show as "RECONFIGURED LOT 1" on a plan by CIVIL CONSULTANTS, dated February 5, 2020, entitled "PROPOSED LOT RECONFIGURATION OF LAND OF JESSE REALTY, LLC & CPN REALTY, LLC - 787 MAIN STR., ELIOT, YORK COUNTY, ME", project number 16-166.00 (SHEET D4), and is more particularly described as follows:

UPLAND PARCEL:

BEGINNING at the northeasterly corner of the herein described parcel, a point near the southerly common corner of land now or formerly of Franklin and Carolyn B. Hutchinson described in a deed recorded at the York County Registry of Deeds in Book 1888, Page 554 and land now or formerly of Christopher S. Hayden described in a deed recorded at the York County Registry of Deeds in Book 15753, Page 227, located at a tie course of S 54°21'53" W, 324.47 feet from a flat iron bar in the westerly line of Main Street which marks the southeasterly corner of land now or formerly of the June Remignanti Revocable Trust as described in a deed recorded at the York County Registry of Deeds in Book 15451, Page 115 and the most northeasterly corner of "RECONFIGURED LOT 2" shown on the last referenced plan (SHEET D4);

Thence S 59°55'20" E, along "RECONFIGURED LOT 2", 29.48 feet to a point;

Thence generally southerly, following the arc of a circular curve concave to the east and along "RECONFIGURED LOT 2", an arc length of 44.07 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS", said curve is additionally defined by the following elements: radius=125.00 feet, central angle=20°12'00", chord bearing=S 15°54'14" W, chord length=43.84 feet;

Thence S 05°48'14" W, along "RECONFIGURED LOT 2", 77.39 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS";

Thence S 05°48'14" W, along "RECONFIGURED LOT 2", 36.45 feet to a point;

Thence S 84°11'46" E, along "RECONFIGURED LOT 2", 50.00 feet to a point;

Thence generally southerly, following the arc of a circular curve concave to the east and along "RECONFIGURED LOT 2", an arc length of 25.99 feet to a point, said curve is additionally defined by the following elements: radius=75.00 feet, central angle=19°51'20", chord bearing=S 04°07'26" E, chord length=25.86 feet;

Thence S 14°03'06" E, along "RECONFIGURED LOT 2", 67.96 feet to a point;

Thence S 19°06'22" E, along "RECONFIGURED LOT 2", 73.48 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS";

Thence S 41°35'50" W, along "RECONFIGURED LOT 2", 294.40 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS";

Thence S 44°45'45" W, along "RECONFIGURED LOT 2", 270.00 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS";

Thence S 44°45'45" W, along "RECONFIGURED LOT 2", 29.68 feet to a point marked by a 5/8" diameter rebar with a cap marked "PLS 1302 CIVIL CONSULTS";

Thence S 44°45'45" W, along "RECONFIGURED LOT 2", 5.47 feet to a point at normal high-water line of the Piscataqua River;

Thence northwesterly by the meanders of the normal high-water line of said river, approximately 190 feet to a point at the westerly end of a stone wall, said point being located at a tie course and distance of N 53°21'59" W, 188.06 feet from the last described point;

Thence N 30°44'22" E, along a stone wall and land now or formerly of Debra M. and John T. Croiser, trustees as described in a deed recorded at the York County Registry of Deeds in Book 16975, Page 166, 25.45 feet to the end of said wall;

Thence N 27°15'02" E, by said Crosier land, 44.22 feet to the end of another stone wall;

Thence N 31°53'32" E, along said Crosier land, 197.04 feet to a point in said wall and the northwesterly corner of the Remick Family Burial Ground;

Thence the following three courses and distances around said Burial Ground as defined by granite posts:

S 56°28'01" E, 66.91 feet;
N 32°41'05" E, 68.33 feet;
N 57°48'03" W, 67.82 feet to a point in the last prior-referenced stone wall and said land of Crosier;

Thence N 31°55'36" E, along said wall and land of Crosier, 20.04 feet to a 6" by 6", 4-foot-tall concrete post at the end of said wall;

Thence N 31°53'25" E, by said Crosier land, 180.28 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

Thence N 31°53'25" E, by said Crosier land, 150.00 feet to a 6" by 6", 5-foot tall concrete post;

Thence N 54°21'53" E, by land now or formerly of Christopher S. Hayden as described in a deed recorded at the York County Registry of Deeds in Book 15753, Page 227, 100.00 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

Thence N 54°21'53" E, by said Hayden land, 34.58 feet to the POINT OF BEGINNING;

Together with all of the appurtenant tidal lands in the Piscataqua River, the division line common to "RECONFIGURED LOT 2", across the tidal lands, to extend on a course of S 43°47'23" W from the southwesterly corner of the herein-described upland parcel;

Together with easements of record benefitting the herein-described parcel, but excepting those existing between the parties herein, which are intended to be terminated and replaced by those rights as described herein, and

Subject to easements of record burdening the herein-described parcel, but excepting those existing between the parties herein, which are intended to be terminated and replaced by those rights as described herein;

The subject parcel is conveyed together with an easement to use the "PROPOSED PRIVATE ACCESS WAY" depicted on the last referenced plan (SHEET D4), in common with the owners of "RECONFIGURED LOT 2" as shown on said plan, for a joint driveway, for ingress and egress from and to Main Street, by foot and by vehicle, and for the construction and maintenance of above ground and below ground utilities;

The subject parcel is burdened by an easement to benefit the owners of "RECONFIGURED LOT 2", 10-feet in width, in a mutually convenient location, to allow for a connection to any existing or future waterlines constructed within the 30-foot water line easement described in deed recorded at the York County Registry of Deeds in Book 1985, Page 188;

The subject parcel is subject to and benefitted by mutually beneficial rights to use, for ingress and egress, the existing gravel road which extends southerly into "RECONFIGURED LOT 1" and "RECONFIGURED LOT 2" beyond the southerly limit of the easement area of the "PROPOSED PRIVATE ACCESS WAY" depicted on the last referenced plan (SHEET D4), in common with owners "RECONFIGURED LOT 2".

Meaning and intending to describe and convey the same premises conveyed to CPN Realty, LLC by virtue of a deed from CPN Realty, LLC and Jesse Realty, LLC dated February 24, 2020 and recorded in the York County Registry of Deeds at Book 18181, Page 913.

By executing this Deed, the undersigned further certify that they named in the Operating Agreement and Certificate of Formation as two of the persons authorized to execute, acknowledge, deliver and record any recordable instrument purporting to affect an interest in real property on behalf of the limited liability company and such authority has not been amended, modified or revoked; that the Operating Agreement authorizes them to take all steps necessary to convey the premises or interests described in the above deed on the terms and conditions contained herein; and that no member of the LLC has filed for bankruptcy protection.

Executed this 24 day of September, 2020.

CPN Realty, LLC

By: _____
Laurie A. Chase, Member

By: _____
David L. Chase, Member

State of Maine
County of York

Then personally appeared before me on this 24 day of September, 2020 the said Laurie A. Chase, Member and David L. Chase, Member of CPN Realty, LLC and acknowledged the foregoing to be their voluntary act and deed in their said capacity.

TIMOTHY E CORNWELL
My Commission Expires
08-04-2024
NOTARY PUBLIC

_____
Notary Public
Commission expiration:

Please Return to:
CPN Realty
Po Box 657
Eliot, ME 03903

DEBRA L. ANDERSON, REGISTER OF DEEDS
Bk 17849 PG 563
Instr # 2018049422
11/26/2018 11:15:32 AM
Pages 5 YORK CO

WARRANTY DEED

DLN: 1001840044452

KNOW ALL PERSONS BY THESE PRESENTS that **JESSE REALTY, LLC**, a Florida Limited Liability Company, with an address of 2552 Longboat Drive, Naples, Florida (34104), and **CPN REALTY, LLC**, a New Hampshire limited liability company, with an address of 31 Clark Road, Eliot, Maine (03903), and a mailing address of PO Box 657, Eliot, Maine (03903), for consideration paid, grant to **JESSE REALTY, LLC**, a Florida Limited Liability Company, with an address of 2552 Longboat Drive, Naples, Florida (34104), with Warranty Covenants:

Maine R.E. Transfer Tax Paid

A certain unimproved parcel of land, situated in the Town of Eliot, County of York, State of Maine, located on the westerly side of Main Street, containing approximately 4.455 acres of upland, and the associated tidal flats in the Piscataqua River, being a portion of the land of the grantor described in a deed recorded at the York County Registry of Deeds in Book 17481, Page 446 and shown as **PROPOSED LOT 2** on a plan by CIVIL CONSULTANTS, dated November 6, 2018, entitled "PROPOSED DIVISION OF LAND OF HOME FIELD TRUST, ORLEY MAE WHITE, TRUSTEE, 787 MAIN ST., ELIOT, YORK COUNTY, ME" – project 16-166.00, to be recorded (the "Plan"),

(reference is also made to a plan by CIVIL CONSULTANTS, entitled "BOUNDARY PLAN PREPARED FOR JAMES D. & ORLEY MAE WHITE, Site Location: 139 Main Street, Eliot, Maine", project number 89-115.01, dated June 21, 2005, recorded at the York County Registry of Deeds in Plan Book 302, Page 6; bearings as shown on the first referenced plan are based on Grid North, Maine State Plane Coordinate System, West Zone, NAD 83; bearings as shown on the second referenced plan are based on magnetic north; the orientation difference is 14°28'49")

and being more particularly described as follows:

UPLAND PARCEL

BEGINNING at a 5/8" diameter iron rebar with a cap marked "PLS 1311" in the westerly line of Main Street which marks the northeasterly corner of land now or formerly of the Fred King, Jr. Living Trust and the Beverly J. King Living Trust as described in a deed recorded at the York

5p ↓
Red Door Title, LLC

County Registry of Deeds in Book 8105, Page 151 and the most easterly corner of the herein-described parcel;

thence S 54°21'53" W, along said King land, 305.00 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

thence S 42°17'19" E, along said King land, 258.00 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

thence N 46°46'42" E, along said King land, 18.00 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

thence S 45°22'40" E, along land now or formerly of Jason Scott King as described in a deed recorded at the York County Registry of Deeds in Book 15988, Page 824, 99.07 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311";

thence S 45°22'40" E, along land now or formerly of Kent W. and Deanna L. Davis as described in a deed recorded at the York County Registry of Deeds in Book 16208, Page 514, 99.07 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1311" in a stone wall;

thence S 46°28'30" W, along said stone wall and land now or formerly of Jeanne A. Thorvaldsen and Kenneth Wyman as described in a deed recorded at the York County Registry of Deeds in Book 15863, Page 285, land now or formerly of Debra A. and Steven R. Farnham as described in a deed recorded at the York County Registry of Deeds in Book 9954, Page 245, and land now or formerly of Barbara F. Gauthier as described in a deed recorded at the York County Registry of Deeds in Book 2699, Page 10, 221.19 feet to a point at the end of said wall;

thence S 46°48'03" W, along land now or formerly of Clinton and Pamela M. Newland as described in a deed recorded at the York County Registry of Deeds in Book 2133, Page 887, land now or formerly of Nichole M. and Frederick L. Poisson as described in a deed recorded at the York County Registry of Deeds in Book 11980, Page 184, land now or formerly of Barbara B. Wilson and Katherine H. Morin as described in a deed recorded at the York County Registry of Deeds in Book 14551, Page 713, land now or formerly of John E. and Sigred Marston as described in a deed recorded at the York County Registry of Deeds in Book 1985, Page 249, and land now or formerly of Janet A. and Julia M. Saurman as described in a deed recorded at the York County Registry of Deeds in Book 15517, Page 54, 349.49 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1302";

thence S 46°45'56" W, along land now or formerly of Gregory J. and Andrea M. Power as described in a deed recorded at the York County Registry of Deeds in Book 8136, Page 264, 97.36 feet to a 5/8" diameter iron rebar with a cap marked "PLS 1302";

thence S 46°45'56" W, along said land now or formerly of Gregory J. and Andrea M. Power, 97.36 feet to a 5/8" diameter iron rebar with a cap marked "PLS 2059";

thence S 46°45'56" W, along said land now or formerly of Gregory J. and Andrea M. Power, 52.70 feet to a point at normal high water line of the Piscataqua River;

thence northwesterly by the meanders of the normal high water line of said river, approximately 190 feet to a point at the westerly end of a new division line, said point being located at a tie course and distance of N 39°03'15" W, 188.09 feet from the last described point;

thence N 44°45'45" E, along a new division, 305.15 feet to a point;

thence N 41°35'50" E, along a new division, 294.40 feet to a point in the westerly line of a proposed 50-foot wide access way;

thence N 41°35'50" E, along a new division and the southerly terminus of said access way, 25.09 feet to a point;

thence generally northerly, following the arc of a circular curve concave to the northeast and along the centerline of said access way, an arc length of 207.31 feet to a point, said curve is additionally defined by the following elements: radius=200.00 feet, central angle=59°23'25", chord bearing=N 23°53'29" W, chord length=198.15 feet;

thence N 05°48'14" E, along the centerline of said access way, 77.39 feet to a point;

thence generally northeasterly, following the arc of a circular curve concave to the east and along the centerline of said access way, an arc length of 84.75 feet to a point, said curve is additionally defined by the following elements: radius=100.00 feet, central angle=48°33'40", chord bearing=N 30°05'04" E, chord length=82.24 feet;

thence N 54°21'53" E, along the centerline of said access way, 259.87 feet to a point in the westerly line of Main Street;

thence S 46°14'14" E, along Main Street, 37.50 feet to the POINT OF BEGINNING;

together with all of the appurtenant tidal lands in the Piscataqua River, and

together with easements of record benefitting the herein-described parcel as are identified on the herein-referenced plans, and subject to easements also as identified on said plans;

TOGETHER WITH an easement for the benefit of the owners of PROPOSED LOT 2, in common with the owners of PROPOSED LOT 1 shown on the Plan, and identified on the Plan as "Proposed Private 50' Access Way," to be used as a shared driveway for ingress and egress from and to Main Street, by foot and by vehicle, and for the construction and maintenance of above ground and below ground utilities;

TOGETHER WITH AND SUBJECT TO the obligation of current and future owners of PROPOSED LOT 1 and PROPOSED LOT 2 (the "Lot Owners") to maintain the Proposed Private 50' Access Way in a good and useful condition, under all traffic and weather conditions.

The Lot Owners shall equally share the cost of necessary maintenance and repairs, including but not limited to, snowplowing, snow removal, sanding and ice control, grading, installation and maintenance of ditches and culverts, cutting of brush and paving, all as applicable. This maintenance obligation shall be enforceable by either of the Lot Owners, their heirs, successors and assigns, and shall also be for the benefit of the mortgagees of the Lot Owners, such that any mortgagee of a mortgage of the premises referred to herein shall have the right to enforce this Agreement;

TOGETHER WITH an easement for the benefit of the owners of PROPOSED LOT 2, 10-feet in width, across PROPOSED LOT 1 shown on the Plan, in a mutually convenient location to allow for a connection to any existing or future waterlines constructed within the "30' Water Line Easement" shown on the Plan and described in deed recorded at the York County Registry of Deeds in Book 1985, Page 188;

MEANING AND INTENDING to describe and convey a portion of the premises conveyed by deed of Orley Mae White, Trustee of the Home Field Trust, said deed of near or even date and recorded herewith.

WITNESS my hand and seal on this 21 day of November, 2018.

JESSE REALTY, LLC

By: Kris Glidden, Member

STATE OF New Hampshire
COUNTY OF Rockingham

Before me this 21 day of November, 2018, personally appeared the above-named Kris Glidden in the capacity as Member of Jesse Realty, LLC, and acknowledged the foregoing instrument to be her voluntary act and deed in said capacity.

Notary Public/Attorney at Law
My Comm. Expires: _____

Timothy E Cornwell
New Hampshire
Commissioner of Deeds
My Commission Expires
01/24/2023

WITNESS our hands and seals on this 21 day of November, 2018.

CPN REALTY, LLC

By: David L. Chase, Member

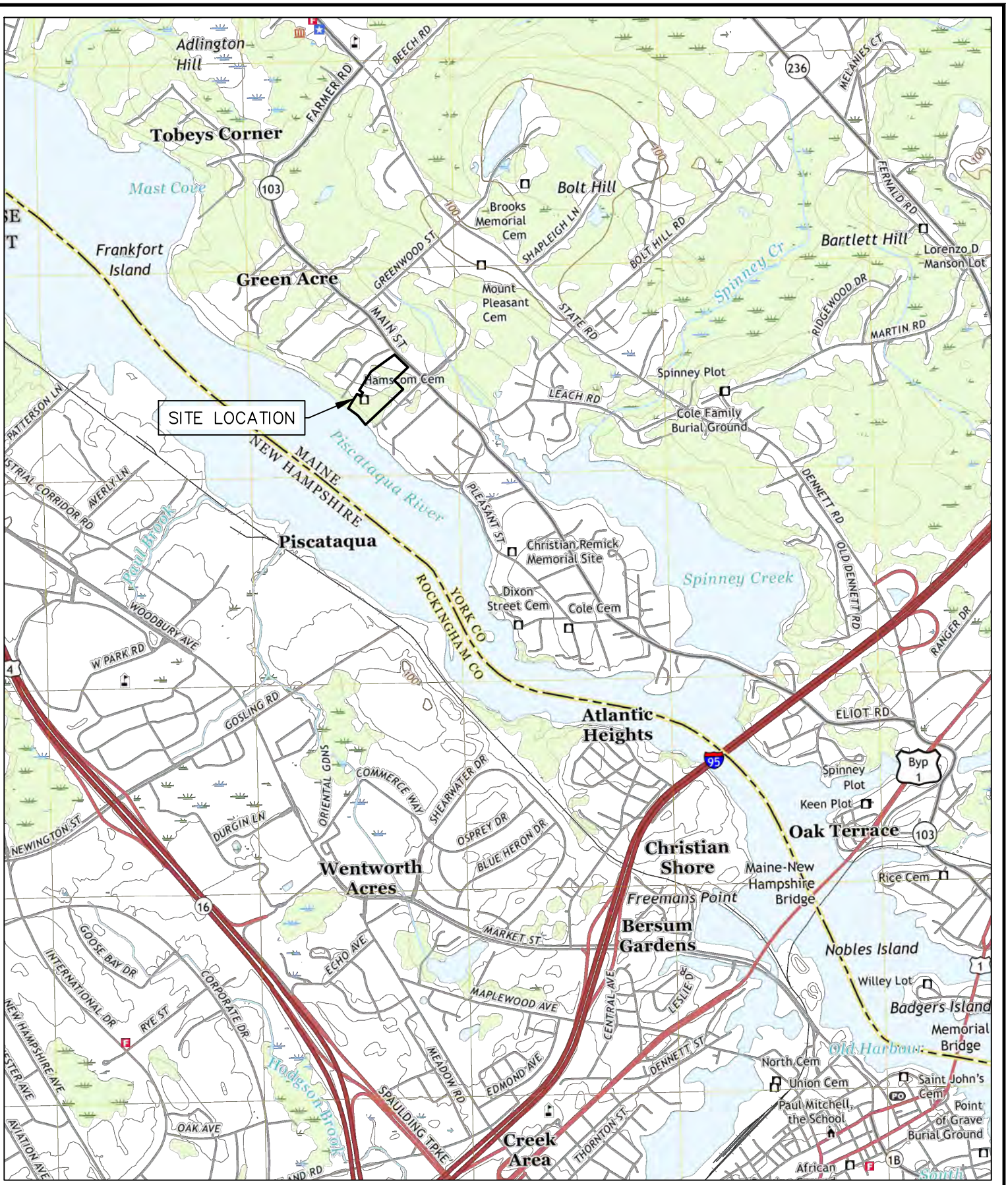
By: Laurie A. Chase, Member

STATE OF NewHampshire
COUNTY OF Rockingham

Before me this 21 day of November, 2018, personally appeared the above-named David L. Chase and Laurie A. Chase in their capacity as Members of CPN Realty, LLC, and acknowledged the foregoing instrument to be their voluntary act and deed in said capacity.

Notary Public/Attorney at Law
My Comm. Expires: _____

Timothy E Cornwell
New Hampshire
Commissioner of Deeds
My Commission Expires
01/24/2023



ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE ◆ SURVEYING
1284 STATE ROAD – ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: 1" = 2,000'	APPROVED BY:	DRAWN BY: MJS
DATE: 08/23/22		REVISION DATE: – : –
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 1

LOCATION:
CLOVER FARM SUBDIVISION
771 & 787 MAIN STREET, ELIOT ME
TAX MAP 6, LOTS 43, 44, 154

INFORMATION:
USGS LOCATION MAP
7.5-MINUTE SERIES
PORTSMOUTH QUADRANGLE

MARK MCNALLY,
BUILDING MAINTENANCE, LLC.
LJE DEVELOPMENT, LLC.
JESSE REALTY, LLC.

60 feet Abutters List Report

Eliot, ME
August 19, 2022

Subject Properties:

Parcel Number:	006-043-000	Mailing Address:	MCNALLY, MARK
CAMA Number:	006-043-000		1381 ELWYN RD
Property Address:	771 MAIN ST		PORTSMOUTH, NH 03801
Parcel Number:	006-044-000	Mailing Address:	JESSE REALTY LLC
CAMA Number:	006-044-000		2552 LONGBOAT DR
Property Address:	787 MAIN ST		NAPLES, FL 34104
Parcel Number:	006-154-000	Mailing Address:	LJE PROPERTY DEVELOPMENT LLC
CAMA Number:	006-154-000		2 PUNKIN TOWN RD STE 340
Property Address:	MAIN ST		SOUTH BERWICK, ME 03908

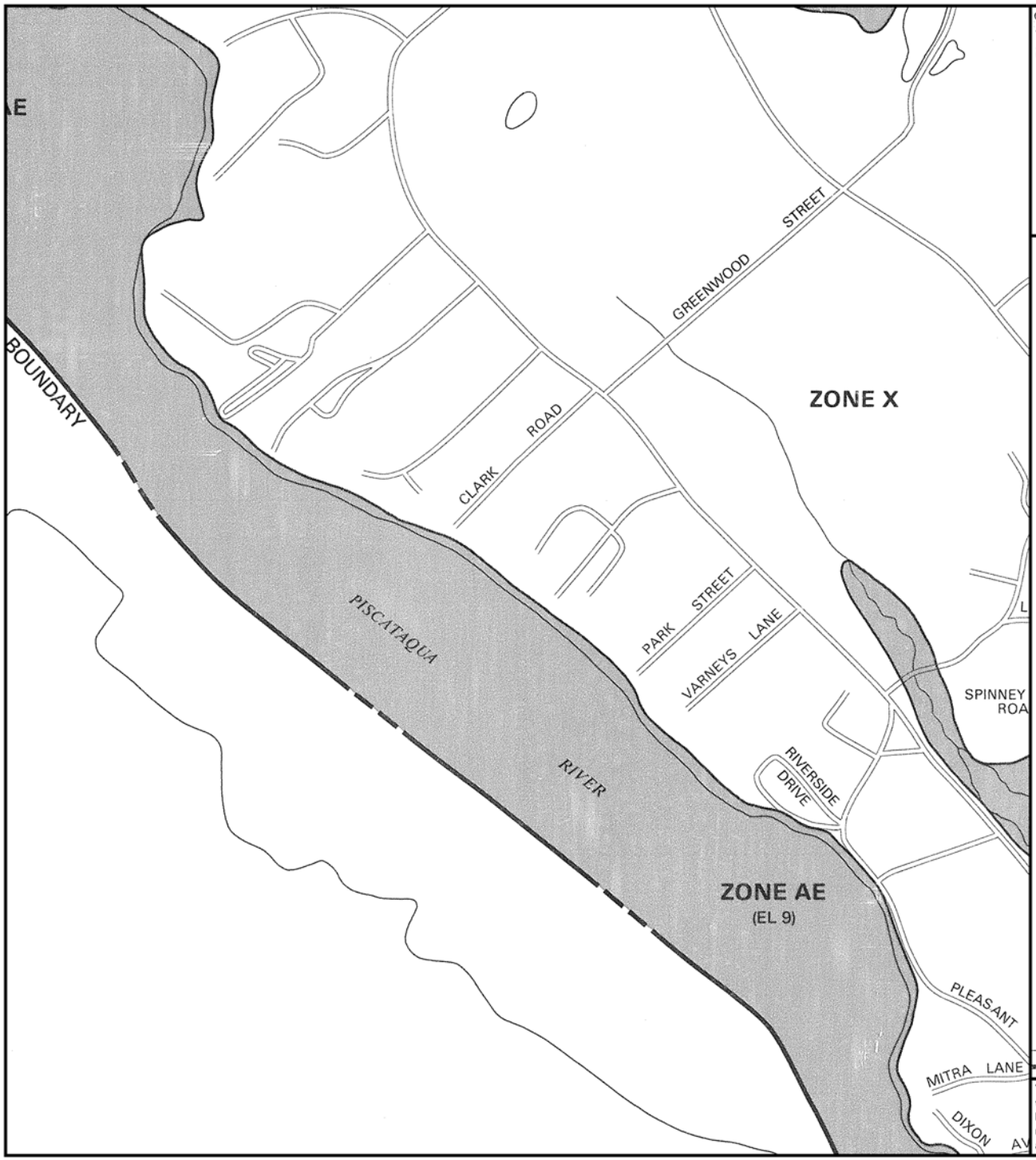
Abutters:

Parcel Number:	006-031-000	Mailing Address:	HINES, SUSAN N REVOCABLE TRUST
CAMA Number:	006-031-000		SUSAN N HINES TRUSTEE
Property Address:	24 PARK ST		24 PARK ST
			ELIOT, ME 03903
Parcel Number:	006-032-000	Mailing Address:	SAURMAN, JANET A SAURMAN, BRYAN
CAMA Number:	006-032-000		D & MCNEIL, EMILY L
Property Address:	22 PARK ST		22 PARK ST
			ELIOT, ME 03903
Parcel Number:	006-033-000	Mailing Address:	MARSTON, JOHN E MARSTON, SIGRED
CAMA Number:	006-033-000		20 PARK ST
Property Address:	20 PARK ST		ELIOT, ME 03903
Parcel Number:	006-034-000	Mailing Address:	SIMPSON, ALLAN R SIMPSON, KATHY L
CAMA Number:	006-034-000		18 PARK ST
Property Address:	18 PARK ST		ELIOT, ME 03903
Parcel Number:	006-035-000	Mailing Address:	POISSON, NICHOLE M POISSON,
CAMA Number:	006-035-000		FREDERICK L
Property Address:	16 PARK ST		16 PARK ST
			ELIOT, ME 03903
Parcel Number:	006-036-000	Mailing Address:	NEWLAND, PAMELA M
CAMA Number:	006-036-000		14 PARK ST
Property Address:	14 PARK ST		ELIOT, ME 03903
Parcel Number:	006-037-000	Mailing Address:	CROSBY, ANITA J
CAMA Number:	006-037-000		12 PARK ST
Property Address:	12 PARK ST		ELIOT, ME 03903

60 feet Abutters List Report

Eliot, ME
August 19, 2022

Parcel Number:	006-038-000	Mailing Address:	FARNHAM, DEBRA A FARNHAM, STEVEN R 10 PARK ST ELIOT, ME 03903
CAMA Number:	006-038-000		
Property Address:	10 PARK ST		
Parcel Number:	006-039-000	Mailing Address:	REED, CAITLIN M REED, MICHAEL R 6 PARK ST ELIOT, ME 03903
CAMA Number:	006-039-000		
Property Address:	6 PARK ST		
Parcel Number:	006-041-000	Mailing Address:	GRANT, CRISPIN 751 MAIN ST ELIOT, ME 03903
CAMA Number:	006-041-000		
Property Address:	751 MAIN ST		
Parcel Number:	006-042-000	Mailing Address:	RATCLIFF, WARDWELL 767 MAIN ST ELIOT, ME 03903
CAMA Number:	006-042-000		
Property Address:	767 MAIN ST		
Parcel Number:	006-045-000	Mailing Address:	KINNETT, CHARLES P MCNAMARA, STEPHANIE 793 MAIN ST ELIOT, ME 03903
CAMA Number:	006-045-000		
Property Address:	793 MAIN ST		
Parcel Number:	006-046-000	Mailing Address:	HUTCHINSON FAMILY REVOCABLE TRUST FRANKLIN & CAROLYN B HUTCHINSON TRUSTEES 11 AQUA AVE ELIOT, ME 03903
CAMA Number:	006-046-000		
Property Address:	11 AQUA AVE		
Parcel Number:	006-047-000	Mailing Address:	SHEA, KATY 17 AQUA AVE ELIOT, ME 03903
CAMA Number:	006-047-000		
Property Address:	17 AQUA AVE		
Parcel Number:	006-048-000	Mailing Address:	CROSIER, DEBRA M & JOHN T REVOCABLE TRUS DEBRA M & JOHN T CROSIER TRUSTEES 21 AQUA AVE ELIOT, ME 03903
CAMA Number:	006-048-000		
Property Address:	21 AQUA AVE		
Parcel Number:	006-072-000	Mailing Address:	BEAGEN, BRIDGETTE R 790 MAIN ST ELIOT, ME 03903
CAMA Number:	006-072-000		
Property Address:	790 MAIN ST		
Parcel Number:	006-073-000	Mailing Address:	KELLY, DONNA L 776 MAIN ST ELIOT, ME 03903
CAMA Number:	006-073-000		
Property Address:	776 MAIN ST		
Parcel Number:	006-074-000	Mailing Address:	KELSEY, KIM 768 MAIN ST ELIOT, ME 03903
CAMA Number:	006-074-000		
Property Address:	768 MAIN ST		



or depths have been established.

To determine if flood insurance is available in this community, contact you insurance agent or call the National Flood Insurance Program at (800) 638-6620

APPROXIMATE SCALE

1000 0 1000 FEET

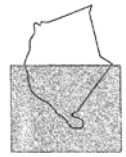
NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TOWN OF
ELIOT,
MAINE
YORK COUNTY

PANEL 10 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER
230149 0010 B

EFFECTIVE DATE:
JUNE 5, 1989

Federal Emergency Management Agency

Maine Department of Transportation

Driveway/Entrance Permit

Janet T. Mills
Governor

Bruce A. Van Note
Commissioner

Permit Number: 27599 - **Entrance ID:** 1

OWNER

Name: **CPN Realty, LLC & Jesse Realty, LLC**
Address: **P.O. Box 657**
Eliot, ME 03903
Telephone: **(603)674-8207**

Date Printed: **December 19, 2019**

LOCATION

Route: **0103X, Main Street**
Municipality: **Eliot**
County: **York**
Tax Map: **6** Lot Number: **44**
Culvert Size: **15 inches**
Culvert Type: **plastic**
Culvert Length: **40 feet**
Date of Permit: **December 19, 2019**
Approved Entrance Width: **22 feet**

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, **an Entrance** to **Subdivision/Development** at a point **581** feet **North** from **Park Street**, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This Permittee acknowledges and agrees to comply with the Standard Conditions and Approval attached hereto and to any Specific Conditions of Approval shown here.

(G = GPS Location; W = Waiver; S = Special Condition)

G - THE ENTRANCE SHALL BE LOCATED AT GPS COORDINATES: 43.110070N, -70.785550W.

S - In the town of Eliot on the southwesterly side of Route 103 / Main Street, the centerline being approximately 581 feet northwesterly of the centerline of Park Street and approximately 35 feet southeasterly of utility pole 66.

Approved by: Anthony Fontaine Date: 12-19-2019

STANDARD CONDITIONS AND APPROVAL

1. Provide, erect and maintain all necessary barricades, lights, warning signs and other devices as directed by MaineDOT to properly safeguard traffic while the construction is in progress.

2. At no time cause the highway to be closed to traffic

3. Where the driveway is located within a curb, curb and gutter, and/or sidewalk section, completely remove the existing curb, curb and gutter, and/or sidewalk as may be required to create the driveway and restore drainage. All driveways abutting sidewalk sections shall meet the requirements set forth in the Americans with Disabilities Act of 1990, 42 U.S.C. Sec. 12131 et seq.

4. Obtain, have delivered to the site, and install any culverts and/or drainage structures which may be necessary for drainage, the size, type and length as called for in the permit pursuant to 23 M.R.S.A. Sec. 705. All culverts and/or drainage structures shall be new.

5. Start construction of the proposed driveway within twenty-four (24) months of the date of permit issuance and substantially complete construction of the proposed driveway within twelve months of commencement of construction.

6. Comply with all applicable federal, state and municipal regulations and ordinances.

7. Do not alter, without the express written consent of the MaineDOT, any culverts or drainage swales within the MaineDOT right of way.

8. File a copy of the approved driveway permit with the affected municipality or LURC, as appropriate within 5 business days of receiving the MaineDOT approval.

9. Construct and maintain the driveway side slopes to be no steeper than the adjacent roadway side slopes, but in no case to be steeper than 3 horizontal to 1 vertical, unless the side slope is behind existing roadway guardrail, in which case it shall be no steeper than 2 horizontal to 1 vertical.

10. Notify the MaineDOT of a proposed change of use served by the driveway when increase in traffic flow is expected to occur. This does not exempt the need for obtaining a Traffic Movement Permit (TMP) if trip generation meets or exceeds 100 passenger car equivalents (PCE) during the peak hour of the day.

11. Construct or implement and maintain erosion and sedimentation measures sufficient to protect MaineDOT facilities.

12. Driveways shall be designed such that all maneuvering and parking of any vehicles will take place outside the highway right-of-way and where vehicles will exit the premises without backing onto the highway traveled way or shoulders. All driveways will have a turnaround area to accomodate vehicles using the premises.

13. Closing any portion of a highway or roadway including lanes, shoulders, sidewalks, bike lanes, or ATV access routes is not permitted without MaineDOT approval.

FURTHER CONDITION OF THE PERMIT

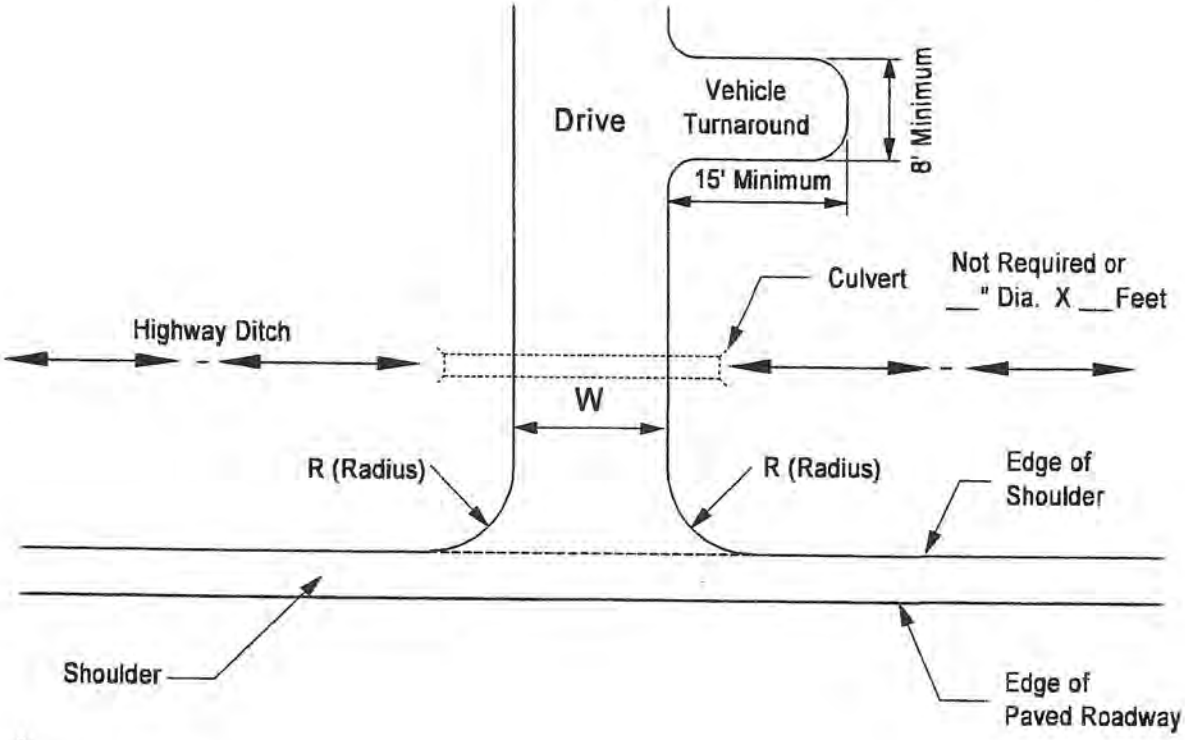
The owner shall assume, the defense of, and pay all damages, fines, and penalties for which he/she shall become liable, and shall indemnify and safe harmless said Department, its representatives, agents and employees from liability, actions against all suits, claims, damages for wrongful death, personal injuries or property damage suffered by any person or association which results from the willful or negligent action or inaction of the owner/applicant (agent) and in proceedings of every kind arising out of the construction and maintenance of said entrance(s), including snow removal.

Nothing herein shall, nor is intended to, waive any defense, immunity or limitation of liability which may be available to the MaineDOT, their officers, agents or employees under the Maine Tort Claims Act or any other privileges and/or immunities provided by law. It is a further condition that the owner will agree to keep the right of way inviolate for public highway purposes and no signs (other than traffic signs and signals), posters, billboards, roadside stands, culvert end walls or private installations shall be permitted within Right of Way limits.

State of Maine
Department of Transportation

Entrance / Driveway Details

PLAN



GENERAL NOTES -

1. ALL RESIDENTAL OR COMMERCIAL DRIVES WITH 10% GRADE OR MORE SLOPING DOWN TOWARDS THE HIGHWAY SHALL BE PAVED TO THE RIGHT OF WAY LINE, AS A MINIMUM, INCUDING SHOULDER, IF GRAVEL AND HAVE DITCHES TO CONTROL RUNOFF.
2. DRIVES SLOPING TO THE HIGHWAY SHALL BE CROWNED (1/2" PER FT. MINIMUM).
3. TO THE MAXIMUM EXTENT PRACTICAL, THE ENTRANCE MUST BE CONSTRUCTED PERPENDICULAR TO THE HIGHWAY AT THE POINT OF ACCESS. EXCEPT WHERE CURBING EXISTS OR IS PROPOSED, THE MINIMUM RADIUS ON THE EDGES OF THE ENTRANCE MUST BE 10 FEET OR AS OTHERWISE REQUIRED AS SHOWN.
4. ENTRANCES/DRIVEWAYS WILL BE BUILT WITH AN ADEQUATE TURN-AROUND AREA ON SITE TO ALLOW ALL VEHICLES TO MANUVER AND PARK WITHOUT BACKING ONTO THE HIGHWAY. THIS TURN-AROUND SHALL BE AT LEAST 8 FEET WIDE BY 15 FEET LONG.
5. ENTRANCES/DRIVEWAYS AND OTHER ASSOCIATED SITE WORK WHICH DIRECTS WATER (RUNOFF) TOWARD THE HIGHWAY MUST BE CONSTRUCTED, CROWNED STABILIZED AND MAINTAINED WITH MATERIALS AND APPROPRIATE TEMPORARY/PERMANENT EROSION CONTROL MATERIALS IN ACCORDANCE WITH MDOT BEST MANAGEMENT PRACTICES.
6. THE PROFILE OF THE ENTRANCES MUST COMPLY WITH THE DETAILS SHOWN ON PAGE 2.

Maine Department of Transportation
Driveway/Entrance Culvert Policy

I. Background:

Title 23§705 MRSA defines culvert responsibility with respect to driveway/entrance culverts. With consideration of this law and the various situations that have occurred around the state, this document has been prepared to more clearly define the specific responsibilities of Maine's taxpayers as a whole (through MaineDOT) and the individual highway abutters.

II. Policy:

A. Activities performed by MaineDOT crews with regard to driveway/entrance culverts located within the right-of-way of state or state-aid highways and outside of the state urban compact areas shall include the following:

1) When MaineDOT undertakes a capital or ditching project that requires the replacement or relocation of driveway/entrance culverts, MaineDOT is responsible for such culvert replacement/relocation and driveway/entrance restoration.

2) When a natural event causes regional flooding and washouts, causing a culvert to fail and/or a driveway/entrance to washout, MaineDOT will reinstall or replace the culvert (at MaineDOT's option) to reestablish access to the abutting property.

3) When MaineDOT determines that a culvert can no longer effectively convey water and the stability of the public highway structure may be at risk, MaineDOT, in its sole discretion, may elect to either clear or replace the culvert as necessary.

In each of the above situations, MaineDOT's role shall be limited to the specific actions described and the abutter shall continue to retain responsibility for ongoing maintenance of the driveway/entrance and culvert.

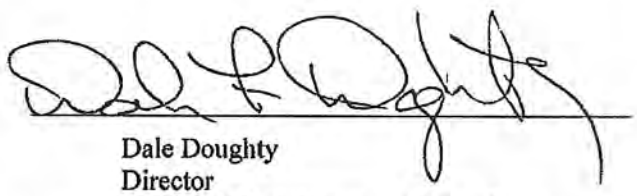
B. Activities that are the responsibility of the owner/abutter, in accordance with Tile 23§705 MRSA, shall include the following:

1) Culvert replacement not covered above.

2) Driveway repairs of any type. This includes such issues as bumps or depressions that may develop over a culvert (a common occurrence in Maine due to seasonal freeze/thaw cycles and the shallow depth of cover over many driveway/entrance culverts), erosion of the driveway/entrance side slopes, or potholes that may develop as the result of a pipe that has started to fail.

3) Restoring flow when the culvert is obstructed, either directly or indirectly, by the actions of the abutter or their agents (e.g. depositing leaves or other debris into a culvert or ditch line).

If an abutter fails to uphold their responsibilities and causes either damage to the highway corridor or preventative actions by MaineDOT or its contractor, MaineDOT may seek appropriate compensation as necessary.



Dale Doughty
Director
Bureau of Maintenance & Operations

8/7/2014
Date

As of the date indicated above, this policy shall supersede any policy or guidance that may have previously existed regarding this particular subject.

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for York County, Maine

August 22, 2022

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

Map Scale: 1:4,660 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

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

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

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

Soil Survey Area: York County, Maine
Survey Area Data: Version 20, Aug 31, 2021

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

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AdB	Adams loamy sand, 0 to 8 percent slopes	5.6	14.9%
AlB	Allagash very fine sandy loam, 3 to 8 percent slopes	13.8	36.8%
MaB	Madawaska fine sandy loam, 0 to 8 percent slopes	8.8	23.4%
MrB	Marlow fine sandy loam, 3 to 8 percent slopes	0.5	1.3%
PeB	Peru fine sandy loam, 3 to 8 percent slopes	2.4	6.3%
Ra	Raynham silt loam	0.9	2.3%
Sc	Scantic silt loam, 0 to 3 percent slopes	1.4	3.8%
SeC	Scio silt loam, 8 to 15 percent slopes	1.7	4.6%
W	Water bodies	2.4	6.4%
Totals for Area of Interest		**37.4**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas

are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

York County, Maine

AdB—Adams loamy sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wqn9
Elevation: 10 to 2,000 feet
Mean annual precipitation: 31 to 95 inches
Mean annual air temperature: 27 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Adams and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Adams

Setting

Landform: Outwash terraces
Landform position (two-dimensional): Summit, backslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciofluvial deposits

Typical profile

Ap - 0 to 7 inches: loamy sand
Bs - 7 to 21 inches: sand
BC - 21 to 27 inches: sand
C - 27 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

AlB—Allagash very fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9k4r
Elevation: 20 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Allagash and similar soils: 88 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Allagash

Setting

Landform: Stream terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy glaciofluvial deposits derived from slate

Typical profile

H1 - 0 to 6 inches: fine sandy loam
H2 - 6 to 23 inches: fine sandy loam
H3 - 23 to 65 inches: gravelly fine sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Hydric soil rating: No

MaB—Madawaska fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 9k60
Elevation: 20 to 2,000 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Madawaska and similar soils: 88 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Madawaska

Setting

Landform: Stream terraces
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-loamy glaciofluvial deposits derived from slate

Typical profile

H1 - 0 to 10 inches: fine sandy loam
H2 - 10 to 23 inches: fine sandy loam
H3 - 23 to 65 inches: fine sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w
Hydrologic Soil Group: B
Hydric soil rating: No

MrB—Marlow fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2ty5d
Elevation: 0 to 690 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Marlow and similar soils: 87 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Marlow

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Mountainbase, interfluve, nose slope, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite

Typical profile

Ap - 0 to 4 inches: fine sandy loam
E - 4 to 6 inches: fine sandy loam
Bs1 - 6 to 10 inches: fine sandy loam
Bs2 - 10 to 15 inches: fine sandy loam
Bs3 - 15 to 20 inches: fine sandy loam
BC - 20 to 24 inches: fine sandy loam
Cd - 24 to 65 inches: fine sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C

Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

PeB—Peru fine sandy loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2ty5x
Elevation: 0 to 720 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Peru and similar soils: 88 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Peru

Setting

Landform: Hills, mountains
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Mountainbase, interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy lodgment till derived from granite and/or loamy lodgment till derived from mica schist and/or loamy lodgment till derived from phyllite

Typical profile

Ap - 0 to 6 inches: fine sandy loam
Bhs - 6 to 8 inches: fine sandy loam
Bs1 - 8 to 12 inches: fine sandy loam
Bs2 - 12 to 18 inches: fine sandy loam
Bs3 - 18 to 21 inches: fine sandy loam
BC - 21 to 24 inches: fine sandy loam
Cd - 24 to 65 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 39 inches to densic material
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 1.42 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C/D
Ecological site: F144BY501ME - Loamy Slope (Northern Hardwoods)
Hydric soil rating: No

Ra—Raynham silt loam

Map Unit Setting

National map unit symbol: 9k6d
Elevation: 10 to 1,750 feet
Mean annual precipitation: 34 to 48 inches
Mean annual air temperature: 37 to 46 degrees F
Frost-free period: 80 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Raynham and similar soils: 92 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Raynham

Setting

Landform: Lakebeds
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Coarse-silty glaciolacustrine deposits derived from sandstone and siltstone

Typical profile

H1 - 0 to 6 inches: silt loam
H2 - 6 to 36 inches: silt loam
H3 - 36 to 65 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 0 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Very high (about 14.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Hydric soil rating: Yes

Sc—Scantic silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2slv3
Elevation: 10 to 900 feet
Mean annual precipitation: 33 to 60 inches
Mean annual air temperature: 39 to 45 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Not prime farmland

Map Unit Composition

Scantic and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scantic

Setting

Landform: Marine terraces, river valleys
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Glaciomarine deposits

Typical profile

Ap - 0 to 9 inches: silt loam
Bg1 - 9 to 16 inches: silty clay loam
Bg2 - 16 to 29 inches: silty clay
Cg - 29 to 65 inches: silty clay

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 6.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: D
Ecological site: F144BY304ME - Wet Clay Flat
Hydric soil rating: Yes

SeC—Scio silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 9k6m
Elevation: 0 to 570 feet
Mean annual precipitation: 48 to 51 inches
Mean annual air temperature: 45 to 46 degrees F
Frost-free period: 145 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Scio and similar soils: 91 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Scio

Setting

Landform: Lakebeds
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Very fine sand glaciolacustrine deposits

Typical profile

H1 - 0 to 7 inches: silt loam
H2 - 7 to 26 inches: silt loam
H3 - 26 to 36 inches: silt loam
H4 - 36 to 65 inches: very fine sandy loam

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 18 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Hydric soil rating: No

W—Water bodies

Map Unit Composition

Water: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Water

Setting

Landform: Hills

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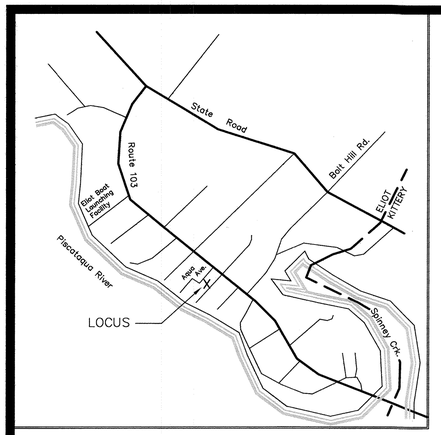

LOCATION PLAN
(nts)

REFERENCE PLANS:

1) "Plan Showing A Portion Of Land Of HANSCOM HEIRS, Prepared For MAJOR L. WHITE, Route 103, Eliot, Maine"
dated: 5/5/1989
by: CIVIL CONSULTANTS
Unrecorded

2) "Property Plan For MAJOR L. WHITE, et al, Eliot, York County, Me."
dated: Sept. 1961
by: C.S. Gerrish
Unrecorded

3) "Plan Of Property Of HARRY WILLIS, Jr., Town Of Eliot, York County, Me."
dated: 11/22/63
by: A.C. Willis
Recorded at Y.C.R.D. in Plan Book 37/32

4) "Plan Of Land For JOE FITZGERALD In Eliot, Me."
dated: July 23, 1986
by: Seacoast Eng. Assoc., Inc.
Recorded at Y.C.R.D. in Plan Book 150/20

5) "Plan Of Lots Of RANSOM M. DERICK, Eliot, Maine"
dated: ???
by: ???
Recorded at Y.C.R.D. in Plan Book 9/69

6) "Sketch Plan For Property At 24 Park Street, Eliot, York County, Maine
Owned By GREGORY J. & ANDRED M. POWER. 24 Park Street,
Eliot, Maine, 03903"
dated: 9/18/01
by: Easterly Surveying, Inc.
Unrecorded

7) "Plan Of Land Lot For HANSCOM HEIRS, In Eliot, York County, Me."
dated: Aug. 1962
by: C.S. Gerrish
Unrecorded

N/F Crosier 5427/201 T.M. 6/48 See R.P. 1,2

N45°13'08"E 25.45'
N41°43'48"E 44.22'
N46°22'29"E 197.04'
N46°22'29"E 20.04'
N46°22'14"E 330.28'
150.00'
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
6" pvc pipe drainage outlet, 1989, missing 2001
N26°56'23"W 149.88'
SEE NOTE #8
Fnd. Conc. Mon. 6"x6" 5' high —painted white—
100.00'
Fnd. Iron Pipe 2" dia. 6" high
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
N68°50'42"E 459.05'
Fnd. Angle Iron 12" high, 1989 missing, 2001
100.00'
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
Fnd. Flat Iron Stake Flush to ground

Remick Family Burial Ground
S41°59'13"E 66.91'
N43°19'15"W 67.82'
N47°09'54"E 68.33'
Fnd. Conc. Mon. 6"x6" 4' high —painted white—
Granite Posts surround the cemetary
SEE NOTES #5 & #6

N/F Hayden 7272/311 T.M. 6/47 See T.M. 1,2,3,7
N/F Hutchinson 1888/554 T.M. 6/46 See R.P. 1,2,3,7
N/F Remignanti 4043/273 T.M. 6/45 See R.P. 1,2,3,7
AQUA AVENUE
Main Street
Culvert
S31°45'25"E 75.00'
SEE NOTE #4
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
S68°50'42"W 305.00'
Barn
* N 4750.0000 E 4750.0000
S27°48'30"E 256.00'
N/F King 1553/469 T.M. 6/43 See R.P. 1,2,7
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
N61°15'30"E 18.00'
S30°53'52"E 99.07'
SEE NOTE #9
N/F King 2473/310 T.M. 6/42 See R.P. 1,2,7
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
S30°53'52"E 99.07'
N/F McKowen 4911/318 T.M. 6/41 See R.P. 1,2,5,7
* N 4500.0000 E 5500.0000
S60°57'16"W 221.19'
SEE NOTE #7
Fnd. 5/8" Iron Rebar w/I.D. Cap #1311
Fnd. Iron Pipe (threaded) 1 1/2" dia 10" high

PISCATAQUA RIVER

TIE—LINE,
NOT A PROPERTY LINE,
USED FOR BOUNDARY
CLOSURE PURPOSES ONLY

Approximate break point of banking
N13°30'42"W 373.54'
* N 4250.0000 E 4250.0000
Approximate toe of banking/high water debris line
Dwelling
OHL
Shed
7.6' to corner board of house
54.17'
Set 5/8" Iron Rebar w/I.D. Cap #2059 6" high
Dwelling
Fnd. Iron Rebar 1/2" dia. 6" high
S61°13'43"W 598.30'
Fencing (typ.)
Fnd. Iron Pipe 1" dia. 11" high
Fnd. Iron Pipe 1 1/4" dia. 11" high —painted red—
Fnd. Conc. Mon. 5"x5" 6" high
Fnd. Gran. Mon. w/drill hole 9"x7" 1' high
Fnd. Conc. Mon. w/drill hole 5"x5" 1' high
Fnd. Conc. Mon. w/drill hole 4"x6" 4" high

N/F Power 8136/264 T.M. 6/31 See R.P. 4,5,6
N/F Saurman 10327/242 T.M. 6/32 See R.P. 5
N/F Marston 1985/249 T.M. 6/33 See r.p. 5
N/F Meikle 5662/167 T.M. 6/34 See R.P. 5
N/F Taylor—Gats 9563/71 T.M. 6/35 See R.P. 5
N/F Newland 2133/887 T.M. 6/36 See R.P. 5
N/F Searles 2699/10 T.M. 6/37 See R.P. 5
N/F Farnham 9954/245 T.M. 6/38 See R.P. 5
N/F Woodlock 5921/57 T.M. 6/39 See R.P. 5

Fnd. Iron Angle Post —post has been disturbed—
Fnd. Iron Pipe 1 1/2" dia. 7" high
Fnd. Iron Pipe 1" dia. —bent easterly—
Fnd. Iron Pipe 1 1/4" dia. 3" below grade
Fnd. Iron Pipe 1" dia. 4" below grade

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

PLAN NOTES:

1) The field survey was performed during April, 1989 &October, 2001.
2) The locus parcel is shown on Eliot Tax Map 6, Lot 44.
3) The parcel area is 9.38 acres, excluding the burial ground.
4) The sideline of Route 103 (Main St.) was determined from the found monumentation.
5) The Remick Family burial ground is excluded out of the locus parcel and it's fee remains with the Remick heirs.
6) An easement by implication for the purposes of burial ground access may exist and be used by the heirs of the burial ground occupants.
7) There exits a five foot water supply easement along the southeasterly boundary line of Lot #41, see Y.C.R.D. Book 1571/442.
8) An easement "to erect and maintain a cold water line running from Aqua Avenue to" the locus parcel exists over the land N/F of Hayden as shown hereon, reference to Y.C.R.D. Book 1985/188. This deed apparently contains a scrivener error in that the location of said easement should read "15 equidistant from the northeasterly sideline of the premises of said David C. Wherren."
9) The northerly and the westerly boundary lines for Lots 41, 42 & 43 were created from the deeds of the original creation, Plan Reference 7 and the found monumentation.
10) Reference is made to a Survey Report prepared by CIVIL CONSULTANTS.
11) Areas of encroaching land use have not been depicted hereon per the request of James D. and Orley Mae White.

000233

STATE OF MAINE
YORK COUNTY ss. REGISTRY OF DEEDS
RECEIVED JUNE 28, 2005
AT 12h 36m, P M, AND RECORDED IN
PLAN BOOK 392, PAGE 6
ATTEST Debra L. Anderson REGISTER

CERTIFICATION:

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WTIH CHAPTER 90, PART 1 AND PART 2 OF THE STATE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

Thomas J McCull

Thomas J. McCullom, P.L.S. #2059
CIVIL CONSULTANTS
South Berwick, Maine

Mailing Address:
HC 65 Box 40
Honesdale, PA 18431

NO.	REVISIONS	INT.	DATE

BOUNDARY PLAN
Prepared For
JAMES D. & ORLEY MAE WHITE
Site Location:
139 Main Street Eliot, Maine

STATE OF MAINE — THOMAS J. McCULLOM No. 2059 — REGISTERED PROFESSIONAL LAND SURVEYOR

CIVIL CONSULTANTS
P.O. BOX 100
293 MAIN STREET
SOUTH BERWICK
MAINE 03908
207-384-2550

DRAWN TJM	SCALE 1" = 50'	DATE 6/21/05
CALC. TJM/RDW	APPROVED	
N.B. # 225/359	SHEET 1 OF 1	#89-115.01

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DC #9115o251

ATTAR
ENGINEERING, INC
CIVIL STRUCTURAL MARINE

STORMWATER MANAGEMENT PLAN
CLOVER FARM SUBDIVISION
771/787 MAIN STREET, ELIOT, MAINE

Project No.: C174-21 August 23rd, 2022

- **Scope**

This stormwater management plan has been prepared for a Major Subdivision development, consisting of eight (8) conventional residential lots. The site in its current state consists of grassed upland, forested upland, an existing structure (Clover Farm Barn) and a building currently being constructed subject to its own Building and Growth Permits.

The project is designed to meet the stormwater management requirements outlined in Section 45-411 (Stormwater Runoff) and Chapter 35 (Post-Construction Stormwater Management) of the Town of Eliot Municipal Code of Ordinances.

This project is subject to the following permits as per the Maine Department of Environmental Protection (MDEP) Chapter 500 – a Stormwater Permit-by-Rule (PBR) for management of stormwater runoff for a development proposing less than one acre of impervious.

- **Site and Watershed Description**

The project site is located in the Village district, with frontage on both Main Street and the Piscataqua River. A 7½-minute series USGS map of the project area is attached. As noted above, the site is largely undeveloped, with no on-site wetlands and an unstable coastal bluff that the development maintains the appropriate 75' setback from.

The site is located in the Piscataqua River watershed (source: EPA National Hydrography Dataset Watershed Report). The site drains in a southwesterly direction towards the riverfront.

The topography of the site is gently-sloped, with the entire collection of parcels draining from east to west/southwest. The grassed upland and forested upland slope with existing grades ranging from 2% to 6%. The riverfront bluff has slopes in the 25-35% range but these slopes are limited to within 30 feet of the river. On-site elevations range from approximately 56' at the northern corner of the property near the Clover Farm Barn to the Piscataqua River, with an interpreted highest annual tide elevation of 8.3'.

There are no areas located within the 100-Year Special Flood Hazard Area as determined by the Federal Emergency Management Agency (FEMA).

Proposed cuts and fills are moderate, ranging from 0 to 4 feet, with the largest fill being at the down-slope side of the proposed cul-de-sac.

- **Soils/Hydrologic Soil Groups**

Soil types and their respective Hydrologic Soil Groups (HSG) were determined by a Medium Intensity Soil Survey. A listing of the soils types can be found on the existing and developed stormwater management plans that accompany this report. Drainage classes range from Somewhat Excessively Drained to Moderately Well Drained.

♦ **Methodology**

The stormwater quantity analysis was conducted using the HydroCAD Stormwater Modeling System by Applied Microcomputer Systems. The analysis was accomplished to determine the "Existing Condition" and "Developed Condition" stormwater flows. Both cases were analyzed for the 2, 10, 25 and 50 year, 24-hour frequency storm events. The Existing Condition analyzes the site as it currently exists and the Developed Condition models the site with the proposed improvements described above.

♦ **Water Quantity Analysis and Results**

Existing Condition

The site will be modelled as undeveloped with two analysis points: AP1 being the roadside drainage that runs from north to south along Main Street, and AP2 being the parcel's frontage along the Piscataqua River.

Developed Condition

The Developed Condition analysis addresses the improvements consisting of the proposed travelway, cul-de-sac, and dwellings and their respective driveways. The same analysis points are used for comparison of peak discharges for all storm events. Vegetated roadside swales along the proposed travelway drain into a single detention pond, which is proposed to be constructed to collect surface runoff from the entire travelway and a majority of the proposed impervious. This detention pond shall daylight to a level spreader to reintroduce sheet flow to the downstream natural swale which is received by the river. All Developed Condition flows are routed to AP1 & AP2 as described above.

Tables showing Existing Condition peak flows, Developed Condition peak flows and the change in peak flow from Existing Condition to Developed Condition are presented on a separate page.

The analysis indicates decreases in peak flow at AP1 & AP2 in all storm events, resulting in no anticipated adverse effects on abutters or existing downstream systems due to water quantity. The level lip spreader discharges the stored stormwater to the on-site existing swale along the southern property line.

♦ **Water Quality**

The project is designed with several Low Impact Development (LID) design practices to minimize adverse effects on water quality. The practices are summarized as follows and are further described in the MDEP publication "Maine Stormwater Best Management Practices Manual – Volume 1, Chapter 3: Low Impact Development".

- Impervious areas are minimized. The proposed travelway and driveways are designed with the minimum amount of impervious area.
- Detention ponds are utilized. Runoff from the proposed development will be collected and retained within the detention basin, which will provide some treatment of pollutants such as suspended solids and hydrocarbons prior to discharge from the site.
- Level Spreaders and Vegetated Swales are utilized. Stormwater flow from the detention pond will be routed through a level spreader and undisturbed buffer prior to discharge from the site.

♦ **Summary**

The use of vegetated swales, level lip spreaders and a detention basin to attenuate peak flows results in no increase in peak runoff quantity from the proposed development. No adverse effects are anticipated on any of the surrounding properties downstream properties or drainage structures for the analyzed storm events. Runoff quality is addressed by the use of several LID design practices, as described above.

Sincerely;

Michael J. Sudak, E.I.
Staff Engineer

C174-21_SW

ATTAR
ENGINEERING, INC
CIVIL • STRUCTURAL • MARINE

OPERATION AND MAINTENANCE PROGRAM
STORMWATER MANAGEMENT BMP's
CLOVER FARM SUBDIVISION
771/787 MAIN STREET, ELIOT, MAINE

Project No.: C174-21 August 23rd, 2022

This project contains specific Best Management Practices (BMP's) for the conveyance, storage, and treatment of stormwater and the prevention of erosion. These BMP's consist of detention ponds and level lip spreaders. All components should be inspected quarterly, and after every significant rain event of 1" in any 24-hour period. Additional inspection intervals are specified for certain BMP's, specifically, underdrained soil filters.

The party responsible for implementing this Operation and Maintenance Program (O & M Program) shall be the property owner.

Stormwater Detention Areas
The Stormwater Detention Areas shall be inspected to ensure that there is no channeling of stormwater and that no debris accumulates within the detention areas. The vegetative cover conditions shall be maintained. The inlets and outlets shall be inspected for erosion and any evidence of debris that could clog the culverts. Emergency spillways and level spreaders shall be inspected for any evidence of rilling and channeling and shall be maintained to promote a level, sheet-flow discharge.

Swales
All swales should be inspected for accumulation of debris, which could adversely affect the function of this BMP. These areas should also be maintained to have gradual slopes, which prevent channeling of stormwater and erosion of the bottom and sides of the swales.

Culverts
Culvert inlets and outlets should be inspected for debris, which could clog the BMP. Additionally, the placement of rip-rap should be inspected to ensure that all areas remain smooth and no areas exhibit erosion in the form of rills or gullies.

Seeding, Fertilizing and Mulching
All exposed soil materials and stockpiles must be either temporarily or permanently seeded, fertilized and mulched in accordance with plan specifications. This is one of the most important features of the Erosion Control Plan, which will provide both temporary and permanent stabilization. Eroded or damaged lawn areas must be repaired until a 75% effective growth of vegetation is established and permanently maintained.

Snow Removal
Snow shall be stockpiled only in approved snow storage areas. Plowing of snow into wetland areas, swales, or level lip spreaders shall be avoided. Additionally, a mostly sand mix (reduced salt) shall be applied during winter months to prevent excessive salt from leaching into wetland areas. Excess sand shall be removed from the storage areas, all gravel surfaces and adjacent areas each spring.

Record Keeping (During Construction)
The construction inspector shall maintain documentation of all inspections as well as maintenance or corrective actions that were taken in response to the inspection. This documentation shall be maintained for at least three years after the site is permanently stabilized. The scope of construction inspections shall include, but not be limited to, the inspection of the sediment and erosion control measures as well as material storage areas and all points at which vehicles access the site.

Record Keeping (Post Construction)
Routine maintenance and inspections will be accomplished by the owner or a third party contracted by the owner. The inspector shall have knowledge of erosion and stormwater control, including the standards and conditions of the permit. All inspections accomplished in accordance with this program shall be documented on the attached Inspection & Maintenance Log. Copies of the Log shall be kept by the property owner or owner's representative, and be made available to the Department (Maine Department of Environmental Protection) or Town of Eliot, upon request.

All post-construction documentation, such as inspection and cleaning logs shall be maintained for at least five years.

Additional responsibilities to include, on or by July 1 of each year, providing a completed and signed certification to the Code Enforcement Officer in a form provided by the Town, if requested, certifying that the person has inspected the stormwater management facilities and that they are adequately maintained and functioning as intended by the stormwater management plan, or that they require maintenance or repair, describing any required maintenance and any deficiencies found during inspection of the stormwater management facilities and, if the stormwater management facilities require maintenance or repair of deficiencies in order to function as intended by the approved stormwater management plan, the person must provide a record of the required maintenance or deficiency and corrective action(s) taken.

Re-certification (as noted in Appendix B. of Chapter 500 Stormwater Management)
Submit a certification of the following to the Department within three months of the expiration of each five-year interval from the date of issuance of the permit noting the following;

(a) **Identification and repair of erosion problems**. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) **Inspection and repair of stormwater control system**. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

(c) **Maintenance**. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the Department, and the maintenance log is being maintained.

Municipalities with separate storm sewer systems regulated under the Maine Pollutant Discharge Elimination System (MPDES) Program may report on all regulated systems under their control as part of their required annual reporting in lieu of separate certification of each system. Municipalities not regulated by the MPDES Program, but that are responsible for maintenance of permitted stormwater systems, may report on multiple stormwater systems in one report.

INSPECTION & MAINTENANCE LOG
CLOVER FARM SUBDIVISION

Date	Purpose[1]	Maintenance Done[2]	By

1. Purpose is the reason for the inspection. For example; “quarterly’ or “after a significant rain event.”
2. Maintenance Done means any maintenance required as a result of the inspection, such as trash removal or re-seeding of areas.

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MAINTENANCE AGREEMENT FOR STORMWATER MANAGEMENT FACILITIES
CLOVER FARM SUBDIVISION
771/787 MAIN STREET, ELIOT, MAINE

Project No.: C174-21

This Maintenance Agreement is made this ___ day of _____ 202__ by and between _____ and the Town of Eliot, Maine.

The project name is Clover Farm Subdivision.

The location is 771 & 787 Main Street, Eliot, Maine.

The project's Tax Map and Lot Numbers are Tax Map 6, Lots 43, 44, & 154.

The project is shown on a plan entitled "_____" dated _____ and most recently revised on _____, approved by the Town of Eliot Planning Board on _____ and recorded in the York County Registry of Deeds in Plan Book _____ Page _____ (the "Project").

WHEREAS, the approval of the Project includes Stormwater Management Facilities which requires periodic maintenance; and

WHEREAS, in consideration of the approval of the Project the Town of Eliot requires that periodic maintenance be performed on the Stormwater Management Facilities;

NOW, THEREFORE, in consideration of the mutual benefits accruing from the approval of the Project by the Town and the agreement of _____ to maintain the Stormwater Management Facilities, the parties hereby agree as follows:

1) _____, for itself, and its successors and assigns, agrees to the following:

a) To use a Qualified Post-Construction Storm Water Inspector to inspect the Stormwater Management Facilities; and to clean, maintain, and repair the Stormwater Management Facilities, which includes, to the extent they exist, parking areas, catch basins, detention basins or ponds, drainage swales, pipes and related structures, at least annually, to prevent the buildup and storage of sediment and debris in the system as described in the Post-Construction Maintenance Plan for the facilities;

b) To provide a certification of inspection to the Town by July 1 each year;

c) To repair any deficiencies in the Stormwater Management Facilities noted during the annual inspection and provide notice to the Town of the repairs within 60 days of identification or within a schedule approved by the Code Enforcement Officer; and

d) For subdivisions, to create a homeowners' association for the purpose of maintaining the Stormwater Management Facilities.

2) For subdivisions, upon creation of the homeowners' association, the homeowners' association shall become responsible for compliance with the terms of this Agreement.

3) This Agreement shall constitute a covenant running with the land, and _____shall reference this Agreement in all deeds to lots and/or units within the Project.

_____ Witness	By: _____ Its:
	TOWN OF ELIOT, MAINE
_____ Witness	By: _____ Its:
STATE OF MAINE _____, ss.	_____, 202___

Personally appeared the above-named _____, the _____ of _____, and acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

	Before me, _____ Notary Public/Attorney at Law
Print Name:	_____
STATE OF MAINE _____, ss.	_____, 202___

Personally appeared the above-named _____, the _____ of the Town of Eliot, and acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

Before me,

_____
Notary Public/Attorney at Law

Print Name: _____

STATE OF MAINE _____, ss. _____, 202___

INSPECTION CERTIFICATION FOR STORMWATER MANAGEMENT FACILITIES

I, _____ (print or type name), certify the following:

1) I am making this Annual Stormwater Management Facilities Certification for the following property: _____ (print or type name of subdivision, condominium, or other development) located at _____ (print or type address), (the "Property");

2) The owner, operator, tenant, lessee or homeowners' association of the Property is: _____ (names of owner, operator, tenant, lessee, homeowners' association or other party having control over the Property);

3) I am (circle one):
   a) A Qualified Post-Construction Stormwater Inspector hired by the person or party specified in #2, and have reviewed the approved Stormwater Management Plan for the facility and have inspected the Stormwater Management Facilities; or
   b) The person (or a duly authorized representative of the party) specified in #2, and I have hired a Qualified Post-Construction Stormwater Inspector and received or reviewed a copy of their inspection report;

4) On _____, 202___, the Stormwater Management Facilities were inspected, including but not limited to parking areas, catch basins, drainage swales, detention basins and ponds, pipes and related structures as required by the approved Stormwater Management Plan for the Property;

5) At the time of the inspection (check one and complete any required information):
   a) ___ The Stormwater Management Facilities were adequately maintained and functioning as intended, or
   b) ___ The Stormwater Management Facilities required maintenance, which was completed within the required 60-day time period, and were functioning as intended after maintenance was completed, or
   c) ___ The Stormwater Management Facilities required maintenance which was not completed within the required 60-day time period. (Attach additional sheets as necessary to describe the maintenance required, proposed schedule for

completion, and an appropriate contact person. The Code Enforcement Officer will contact them to confirm or adjust the schedule to complete the maintenance and any needed further course of action.)

Date: _____, 202___.

By: _____ (Signature)

Print Name: _____

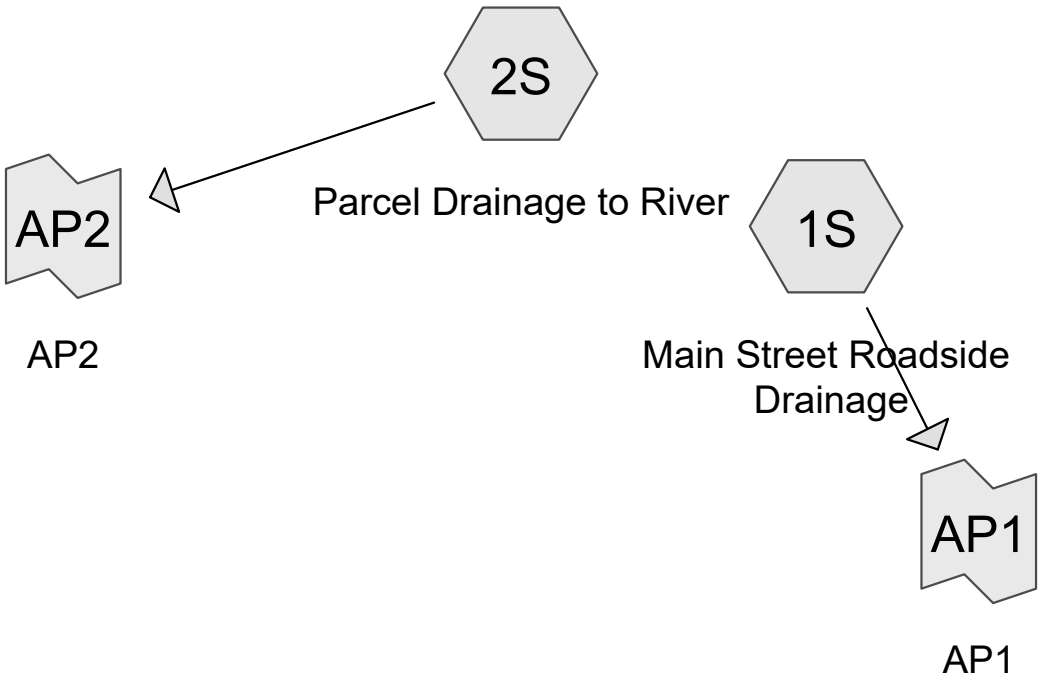
Personally appeared the above-named _____, the _____ of _____, and acknowledged the foregoing Agreement to be said person's free act and deed in said capacity.

Before me,

_____
Notary Public/Attorney at Law

Print Name: _____

STATE OF MAINE _____, ss. _____, 202___



Subcat Reach Pond Link

Routing Diagram for CFS SWA EXT

Prepared by {enter your company name here}, Printed 8/23/2022

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.648	39	>75% Grass cover, Good, HSG A (1S, 2S)
6.304	61	>75% Grass cover, Good, HSG B (1S, 2S)
0.060	74	>75% Grass cover, Good, HSG C (1S, 2S)
0.307	98	Paved parking, HSG A (1S, 2S)
0.311	98	Paved parking, HSG B (1S, 2S)
0.018	98	Paved parking, HSG C (1S)
0.054	98	Unconnected roofs, HSG A (2S)
0.345	98	Unconnected roofs, HSG B (1S, 2S)
0.023	98	Unconnected roofs, HSG C (2S)
0.443	36	Woods, Fair, HSG A (2S)
5.249	60	Woods, Fair, HSG B (2S)
0.122	73	Woods, Fair, HSG C (2S)
14.884	**60**	**TOTAL AREA**

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>0.54"
Flow Length=328' Tc=7.3 min CN=64 Runoff=0.75 cfs 0.066 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>0.35"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=2.76 cfs 0.397 af

Link AP1: AP1 Inflow=0.75 cfs 0.066 af
Primary=0.75 cfs 0.066 af

Link AP2: AP2 Inflow=2.76 cfs 0.397 af
Primary=2.76 cfs 0.397 af

Total Runoff Area = 14.884 ac Runoff Volume = 0.463 af Average Runoff Depth = 0.37"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>1.38"
Flow Length=328' Tc=7.3 min CN=64 Runoff=2.31 cfs 0.169 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>1.05"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=11.35 cfs 1.178 af

Link AP1: AP1 Inflow=2.31 cfs 0.169 af
Primary=2.31 cfs 0.169 af

Link AP2: AP2 Inflow=11.35 cfs 1.178 af
Primary=11.35 cfs 1.178 af

Total Runoff Area = 14.884 ac Runoff Volume = 1.347 af Average Runoff Depth = 1.09"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>2.21"
Flow Length=328' Tc=7.3 min CN=64 Runoff=3.83 cfs 0.271 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>1.78"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=20.61 cfs 1.993 af

Link AP1: AP1 Inflow=3.83 cfs 0.271 af
Primary=3.83 cfs 0.271 af

Link AP2: AP2 Inflow=20.61 cfs 1.993 af
Primary=20.61 cfs 1.993 af

Total Runoff Area = 14.884 ac Runoff Volume = 2.265 af Average Runoff Depth = 1.83"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>2.98"
Flow Length=328' Tc=7.3 min CN=64 Runoff=5.22 cfs 0.366 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>2.48"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=29.31 cfs 2.771 af

Link AP1: AP1 Inflow=5.22 cfs 0.366 af
Primary=5.22 cfs 0.366 af

Link AP2: AP2 Inflow=29.31 cfs 2.771 af
Primary=29.31 cfs 2.771 af

Total Runoff Area = 14.884 ac Runoff Volume = 3.138 af Average Runoff Depth = 2.53"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

Summary for Subcatchment 1S: Main Street Roadside Drainage

Runoff = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af, Depth> 2.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
1,746	98	Paved parking, HSG A
7,453	39	>75% Grass cover, Good, HSG A
790	98	Paved parking, HSG C
1,915	74	>75% Grass cover, Good, HSG C
1,564	98	Unconnected roofs, HSG B
5,713	98	Paved parking, HSG B
45,004	61	>75% Grass cover, Good, HSG B
64,185	64	Weighted Average
54,372		84.71% Pervious Area
9,813		15.29% Impervious Area
1,564		15.94% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.1	20	0.0200	2.87		**Shallow Concentrated Flow, SCF 1** Paved Kv= 20.3 fps
4.0	258	0.0232	1.07		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
7.3	328	Total			

Summary for Subcatchment 2S: Parcel Drainage to River

Runoff = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af, Depth> 2.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
981	98		Unconnected roofs, HSG C
708	74		>75% Grass cover, Good, HSG C
5,295	73		Woods, Fair, HSG C
2,354	98		Unconnected roofs, HSG A
11,607	98		Paved parking, HSG A
64,352	39		>75% Grass cover, Good, HSG A
19,288	36		Woods, Fair, HSG A
13,483	98		Unconnected roofs, HSG B
7,820	98		Paved parking, HSG B
228,644	60		Woods, Fair, HSG B
229,611	61		>75% Grass cover, Good, HSG B
584,143	60	59	Weighted Average, UI Adjusted
547,898			93.80% Pervious Area
36,245			6.20% Impervious Area
16,818			46.40% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0700	0.25		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
13.7	975	0.0287	1.19		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.3	70	0.2850	3.74		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
17.4	1,095	Total			

Summary for Link AP1: AP1

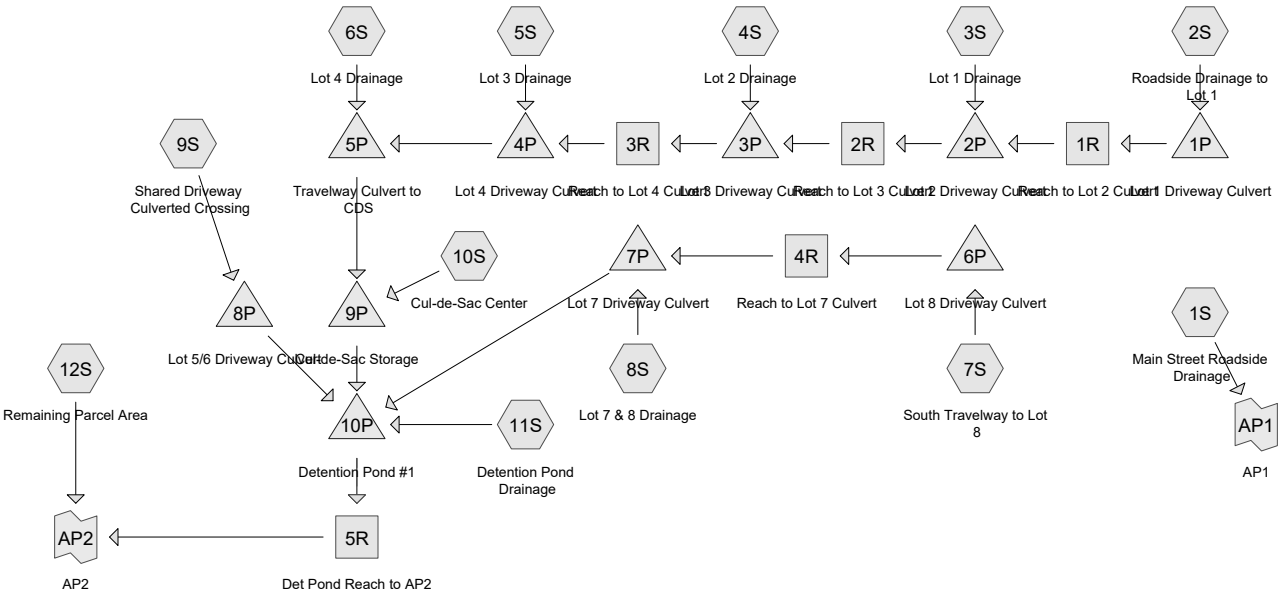
Inflow Area = 1.473 ac, 15.29% Impervious, Inflow Depth > 2.98" for 50 YEAR STORM event
Inflow = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af
Primary = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af, Atten= 0%, Lag= 0.0 min

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

Summary for Link AP2: AP2

Inflow Area = 13.410 ac, 6.20% Impervious, Inflow Depth > 2.48" for 50 YEAR STORM event
Inflow = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af
Primary = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af, Atten= 0%, Lag= 0.0 min

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



Subcat Reach Pond Link

Routing Diagram for CFS SWA DEV

Prepared by {enter your company name here}, Printed 8/23/2022

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.809	39	>75% Grass cover, Good, HSG A (2S, 3S, 5S, 6S, 12S)
5.505	61	>75% Grass cover, Good, HSG B (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S)
0.060	74	>75% Grass cover, Good, HSG C (2S, 5S)
0.141	98	Paved parking, HSG A (5S, 12S)
1.317	98	Paved parking, HSG B (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S)
0.018	98	Paved parking, HSG C (2S)
0.059	98	Unconnected roofs, HSG A (4S, 5S, 12S)
0.747	98	Unconnected roofs, HSG B (2S, 4S, 5S, 6S, 8S, 12S)
0.023	98	Unconnected roofs, HSG C (5S)
0.443	36	Woods, Fair, HSG A (5S, 6S)
4.640	60	Woods, Fair, HSG B (4S, 5S, 6S, 7S, 8S, 11S, 12S)
0.122	73	Woods, Fair, HSG C (12S)
14.884	**63**	**TOTAL AREA**

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>0.54"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.07 cfs 0.005 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>0.50"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=0.32 cfs 0.034 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>0.58"
Flow Length=217' Tc=6.4 min CN=65 Runoff=0.40 cfs 0.032 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>0.75"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=0.55 cfs 0.039 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>0.10"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=0.05 cfs 0.022 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>0.80"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=0.43 cfs 0.041 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>0.80"
Flow Length=282' Tc=7.5 min CN=70 Runoff=0.35 cfs 0.026 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>0.75"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=0.78 cfs 0.062 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>1.24"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.15 cfs 0.010 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>1.80"
Flow Length=54' Tc=0.7 min CN=86 Runoff=0.53 cfs 0.031 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>1.06"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.30 cfs 0.019 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>0.46"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=2.26 cfs 0.288 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.24' Max Vel=0.41 fps Inflow=0.30 cfs 0.033 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=0.28 cfs 0.033 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.25' Max Vel=0.66 fps Inflow=0.46 cfs 0.065 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=0.45 cfs 0.064 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.41' Max Vel=0.48 fps Inflow=0.66 cfs 0.104 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=0.64 cfs 0.103 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.20' Max Vel=0.46 fps Inflow=0.34 cfs 0.026 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=0.24 cfs 0.026 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.21' Max Vel=0.27 fps Inflow=1.42 cfs 0.292 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=1.30 cfs 0.280 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.06' Storage=73 cf Inflow=0.32 cfs 0.034 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.30 cfs 0.033 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=48.64' Storage=56 cf Inflow=0.46 cfs 0.065 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.46 cfs 0.065 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=42.72' Storage=57 cf Inflow=0.66 cfs 0.104 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.66 cfs 0.104 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=40.72' Storage=249 cf Inflow=0.66 cfs 0.124 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.65 cfs 0.123 af

Pond 5P: Travelway Culvert to CDS Peak Elev=39.01' Storage=163 cf Inflow=0.92 cfs 0.164 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=0.91 cfs 0.164 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.33' Storage=31 cf Inflow=0.35 cfs 0.026 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.34 cfs 0.026 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=38.53' Storage=72 cf Inflow=0.80 cfs 0.088 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.79 cfs 0.088 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.18' Storage=79 cf Inflow=0.15 cfs 0.010 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.10 cfs 0.010 af

Pond 9P: Cul-de-Sac Storage Peak Elev=38.03' Storage=557 cf Inflow=1.00 cfs 0.195 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=0.96 cfs 0.192 af

Pond 10P: Detention Pond #1 Peak Elev=36.31' Storage=1,697 cf Inflow=1.68 cfs 0.308 af
Primary=1.42 cfs 0.292 af Secondary=0.00 cfs 0.000 af Outflow=1.42 cfs 0.292 af

Link AP1: AP1 Inflow=0.07 cfs 0.005 af
Primary=0.07 cfs 0.005 af

Link AP2: AP2 Inflow=2.26 cfs 0.567 af
Primary=2.26 cfs 0.567 af

Total Runoff Area = 14.884 ac Runoff Volume = 0.610 af Average Runoff Depth = 0.49"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>1.38"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.20 cfs 0.012 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>1.31"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=1.03 cfs 0.089 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>1.45"
Flow Length=217' Tc=6.4 min CN=65 Runoff=1.14 cfs 0.080 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>1.73"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=1.35 cfs 0.090 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>0.52"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=0.84 cfs 0.112 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>1.80"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=1.05 cfs 0.093 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>1.80"
Flow Length=282' Tc=7.5 min CN=70 Runoff=0.84 cfs 0.060 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>1.73"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=1.95 cfs 0.142 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>2.45"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.30 cfs 0.020 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>3.18"
Flow Length=54' Tc=0.7 min CN=86 Runoff=0.92 cfs 0.055 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>2.20"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.64 cfs 0.040 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>1.24"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=7.56 cfs 0.779 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.46' Max Vel=0.59 fps Inflow=0.96 cfs 0.088 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=0.91 cfs 0.088 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.46' Max Vel=0.93 fps Inflow=1.45 cfs 0.168 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=1.43 cfs 0.167 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.74' Max Vel=0.67 fps Inflow=2.09 cfs 0.257 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=2.06 cfs 0.256 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.34' Max Vel=0.61 fps Inflow=0.81 cfs 0.060 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=0.63 cfs 0.059 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.41' Max Vel=0.40 fps Inflow=4.14 cfs 0.750 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=4.00 cfs 0.731 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.34' Storage=195 cf Inflow=1.03 cfs 0.089 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.96 cfs 0.088 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.01' Storage=144 cf Inflow=1.46 cfs 0.168 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.45 cfs 0.168 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=43.24' Storage=195 cf Inflow=2.11 cfs 0.257 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.09 cfs 0.257 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=41.48' Storage=1,118 cf Inflow=2.89 cfs 0.368 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.54 cfs 0.366 af

Pond 5P: Travelway Culvert to CDS Peak Elev=39.59' Storage=539 cf Inflow=3.20 cfs 0.459 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=3.18 cfs 0.458 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.54' Storage=66 cf Inflow=0.84 cfs 0.060 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.81 cfs 0.060 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=38.97' Storage=202 cf Inflow=2.11 cfs 0.201 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.05 cfs 0.201 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.27' Storage=127 cf Inflow=0.30 cfs 0.020 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.23 cfs 0.020 af

Pond 9P: Cul-de-Sac Storage Peak Elev=38.60' Storage=1,336 cf Inflow=3.35 cfs 0.513 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=3.23 cfs 0.508 af

Pond 10P: Detention Pond #1 Peak Elev=37.50' Storage=4,289 cf Inflow=4.95 cfs 0.768 af
Primary=4.14 cfs 0.750 af Secondary=0.00 cfs 0.000 af Outflow=4.14 cfs 0.750 af

Link AP1: AP1 Inflow=0.20 cfs 0.012 af
Primary=0.20 cfs 0.012 af

Link AP2: AP2 Inflow=8.22 cfs 1.510 af
Primary=8.22 cfs 1.510 af

Total Runoff Area = 14.884 ac Runoff Volume = 1.574 af Average Runoff Depth = 1.27"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>2.21"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.32 cfs 0.020 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>2.12"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=1.75 cfs 0.144 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>2.30"
Flow Length=217' Tc=6.4 min CN=65 Runoff=1.86 cfs 0.128 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>2.66"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=2.09 cfs 0.139 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>1.03"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=2.27 cfs 0.224 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>2.74"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=1.62 cfs 0.142 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>2.75"
Flow Length=282' Tc=7.5 min CN=70 Runoff=1.29 cfs 0.091 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>2.65"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=3.02 cfs 0.218 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>3.52"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.43 cfs 0.029 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>4.35"
Flow Length=54' Tc=0.7 min CN=86 Runoff=1.24 cfs 0.075 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>3.22"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.93 cfs 0.058 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>2.03"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=12.90 cfs 1.276 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.60' Max Vel=0.67 fps Inflow=1.60 cfs 0.143 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=1.54 cfs 0.142 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.59' Max Vel=1.07 fps Inflow=2.38 cfs 0.270 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=2.36 cfs 0.269 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.92' Max Vel=0.75 fps Inflow=3.30 cfs 0.407 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=3.28 cfs 0.405 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.44' Max Vel=0.70 fps Inflow=1.24 cfs 0.091 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=1.00 cfs 0.089 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.55' Max Vel=0.48 fps Inflow=7.34 cfs 1.210 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=6.66 cfs 1.187 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.56' Storage=328 cf Inflow=1.75 cfs 0.144 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.60 cfs 0.143 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.39' Storage=259 cf Inflow=2.42 cfs 0.270 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.38 cfs 0.270 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=43.97' Storage=561 cf Inflow=3.56 cfs 0.407 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.30 cfs 0.407 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=42.49' Storage=3,133 cf Inflow=5.22 cfs 0.629 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.93 cfs 0.627 af

Pond 5P: Travelway Culvert to CDS Peak Elev=40.14' Storage=1,064 cf Inflow=4.82 cfs 0.768 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=4.70 cfs 0.767 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.69' Storage=99 cf Inflow=1.29 cfs 0.091 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.24 cfs 0.091 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=39.48' Storage=474 cf Inflow=3.36 cfs 0.308 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.95 cfs 0.307 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.33' Storage=161 cf Inflow=0.43 cfs 0.029 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.34 cfs 0.029 af

Pond 9P: Cul-de-Sac Storage Peak Elev=39.13' Storage=2,176 cf Inflow=4.88 cfs 0.842 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=4.69 cfs 0.836 af

Pond 10P: Detention Pond #1 Peak Elev=37.66' Storage=4,699 cf Inflow=7.36 cfs 1.230 af
Primary=4.38 cfs 1.076 af Secondary=2.96 cfs 0.134 af Outflow=7.34 cfs 1.210 af

Link AP1: AP1 Inflow=0.32 cfs 0.020 af
Primary=0.32 cfs 0.020 af

Link AP2: AP2 Inflow=14.61 cfs 2.462 af
Primary=14.61 cfs 2.462 af

Total Runoff Area = 14.884 ac Runoff Volume = 2.543 af Average Runoff Depth = 2.05"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>2.99"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.44 cfs 0.027 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>2.88"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=2.41 cfs 0.195 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>3.09"
Flow Length=217' Tc=6.4 min CN=65 Runoff=2.52 cfs 0.172 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>3.50"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=2.75 cfs 0.183 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>1.56"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=3.76 cfs 0.339 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>3.59"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=2.12 cfs 0.186 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>3.60"
Flow Length=282' Tc=7.5 min CN=70 Runoff=1.69 cfs 0.119 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>3.49"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=3.99 cfs 0.287 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>4.46"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.54 cfs 0.037 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>5.35"
Flow Length=54' Tc=0.7 min CN=86 Runoff=1.50 cfs 0.093 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>4.13"
Flow Length=95' Tc=3.9 min CN=75 Runoff=1.19 cfs 0.075 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>2.77"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=17.86 cfs 1.742 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.70' Max Vel=0.73 fps Inflow=2.13 cfs 0.194 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=2.08 cfs 0.193 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.68' Max Vel=1.16 fps Inflow=3.20 cfs 0.364 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=3.19 cfs 0.363 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=1.03' Max Vel=0.80 fps Inflow=4.18 cfs 0.546 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=4.17 cfs 0.543 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.51' Max Vel=0.76 fps Inflow=1.62 cfs 0.119 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=1.34 cfs 0.117 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.64' Max Vel=0.52 fps Inflow=9.05 cfs 1.642 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=8.66 cfs 1.615 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.76' Storage=473 cf Inflow=2.41 cfs 0.195 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.13 cfs 0.194 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.90' Storage=452 cf Inflow=3.39 cfs 0.365 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.20 cfs 0.364 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=44.71' Storage=1,140 cf Inflow=4.86 cfs 0.546 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=4.18 cfs 0.546 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=48.89' Storage=4,545 cf Inflow=7.31 cfs 0.882 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=8.52 cfs 0.879 af

Pond 5P: Travelway Culvert to CDS Peak Elev=41.13' Storage=2,313 cf Inflow=9.77 cfs 1.065 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=6.61 cfs 1.063 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.82' Storage=132 cf Inflow=1.69 cfs 0.119 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.62 cfs 0.119 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=39.97' Storage=905 cf Inflow=4.49 cfs 0.405 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.62 cfs 0.404 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.38' Storage=189 cf Inflow=0.54 cfs 0.037 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.44 cfs 0.036 af

Pond 9P: Cul-de-Sac Storage Peak Elev=39.80' Storage=3,396 cf Inflow=6.77 cfs 1.156 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=6.03 cfs 1.149 af

Pond 10P: Detention Pond #1 Peak Elev=37.71' Storage=4,844 cf Inflow=9.06 cfs 1.664 af
Primary=4.44 cfs 1.321 af Secondary=4.61 cfs 0.321 af Outflow=9.05 cfs 1.642 af

Link AP1: AP1 Inflow=0.44 cfs 0.027 af
Primary=0.44 cfs 0.027 af

Link AP2: AP2 Inflow=20.87 cfs 3.357 af
Primary=20.87 cfs 3.357 af

Total Runoff Area = 14.884 ac Runoff Volume = 3.453 af Average Runoff Depth = 2.78"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

Summary for Subcatchment 1S: Main Street Roadside Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af, Depth> 2.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
425	98	Paved parking, HSG B
4,250	61	>75% Grass cover, Good, HSG B
4,675	64	Weighted Average
4,250		90.91% Pervious Area
425		9.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	36	0.0550	0.21		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 2S: Roadside Drainage to Lot 1

Runoff = 2.41 cfs @ 12.17 hrs, Volume= 0.195 af, Depth> 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
7,332	39		>75% Grass cover, Good, HSG A
1,925	98		Unconnected roofs, HSG B
4,290	98		Paved parking, HSG B
19,128	61		>75% Grass cover, Good, HSG B
790	98		Paved parking, HSG C
1,915	74		>75% Grass cover, Good, HSG C
35,380	64	63	Weighted Average, UI Adjusted
28,375			80.20% Pervious Area
7,005			19.80% Impervious Area
1,925			27.48% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	50	0.0080	0.10		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
3.0	198	0.0252	1.11		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.8	50	0.0200	0.99		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
11.8	298	Total			

Summary for Subcatchment 3S: Lot 1 Drainage

Runoff = 2.52 cfs @ 12.10 hrs, Volume= 0.172 af, Depth> 3.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
3,484	39	>75% Grass cover, Good, HSG A
5,485	98	Paved parking, HSG B
20,097	61	>75% Grass cover, Good, HSG B
29,066	65	Weighted Average
23,581		81.13% Pervious Area
5,485		18.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.0400	0.20		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.9	91	0.0549	1.64		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
1.3	76	0.0197	0.98		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
6.4	217	Total			

Summary for Subcatchment 4S: Lot 2 Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.75 cfs @ 12.08 hrs, Volume= 0.183 af, Depth> 3.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
218	98		Unconnected roofs, HSG A
1,707	98		Unconnected roofs, HSG B
5,491	98		Paved parking, HSG B
7,113	60		Woods, Fair, HSG B
12,774	61		>75% Grass cover, Good, HSG B
27,303	71	69	Weighted Average, UI Adjusted
19,887			72.84% Pervious Area
7,416			27.16% Impervious Area
1,925			25.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	58	0.0618	0.24		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
1.3	116	0.0431	1.45		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
5.3	174	Total			

Summary for Subcatchment 5S: Lot 3 Drainage

Runoff = 3.76 cfs @ 12.19 hrs, Volume= 0.339 af, Depth> 1.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
1,100	98		Unconnected roofs, HSG A
1,300	98		Paved parking, HSG A
19,247	36		Woods, Fair, HSG A
50,591	39		>75% Grass cover, Good, HSG A
981	98		Unconnected roofs, HSG C
708	74		>75% Grass cover, Good, HSG C
1,925	98		Unconnected roofs, HSG B
4,089	98		Paved parking, HSG B
5,225	60		Woods, Fair, HSG B
28,127	61		>75% Grass cover, Good, HSG B
113,293	50	49	Weighted Average, UI Adjusted
103,898			91.71% Pervious Area
9,395			8.29% Impervious Area
4,006			42.64% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	50	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
6.8	507	0.0315	1.24		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
11.5	557	Total			

Summary for Subcatchment 6S: Lot 4 Drainage

Runoff = 2.12 cfs @ 12.21 hrs, Volume= 0.186 af, Depth> 3.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
31	39		>75% Grass cover, Good, HSG A
41	36		Woods, Fair, HSG A
1,925	98		Unconnected roofs, HSG B
6,163	98		Paved parking, HSG B
5,318	60		Woods, Fair, HSG B
13,575	61		>75% Grass cover, Good, HSG B
27,053	72	70	Weighted Average, UI Adjusted
18,965			70.10% Pervious Area
8,088			29.90% Impervious Area
1,925			23.80% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	50	0.0200	0.07		**Sheet Flow, SF 1** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	209	0.0287	1.19		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
15.0	259	Total			

Summary for Subcatchment 7S: South Travelway to Lot 8

Runoff = 1.69 cfs @ 12.11 hrs, Volume= 0.119 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
2,444	60	Woods, Fair, HSG B
4,298	98	Paved parking, HSG B
10,529	61	>75% Grass cover, Good, HSG B
17,271	70	Weighted Average
12,973		75.11% Pervious Area
4,298		24.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	20	0.0150	0.11		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
4.5	262	0.0191	0.97		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
7.5	282	Total			

Summary for Subcatchment 8S: Lot 7 & 8 Drainage

Runoff = 3.99 cfs @ 12.12 hrs, Volume= 0.287 af, Depth> 3.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
3,850	98		Unconnected roofs, HSG B
7,515	98		Paved parking, HSG B
4,097	60		Woods, Fair, HSG B
27,488	61		>75% Grass cover, Good, HSG B
42,950	71	69	Weighted Average, UI Adjusted
31,585			73.54% Pervious Area
11,365			26.46% Impervious Area
3,850			33.88% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.0400	0.20		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
1.7	113	0.0265	1.14		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
2.2	164	0.0304	1.22		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
8.1	327	Total			

Summary for Subcatchment 9S: Shared Driveway Culverted Crossing

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.54 cfs @ 12.08 hrs, Volume= 0.037 af, Depth> 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
2,033	98	Paved parking, HSG B
2,282	61	>75% Grass cover, Good, HSG B
4,315	78	Weighted Average
2,282		52.89% Pervious Area
2,033		47.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	60	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 10S: Cul-de-Sac Center

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.50 cfs @ 12.01 hrs, Volume= 0.093 af, Depth> 5.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
6,248	98	Paved parking, HSG B
2,827	61	>75% Grass cover, Good, HSG B
9,075	86	Weighted Average
2,827		31.15% Pervious Area
6,248		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	40	0.0200	1.16		**Sheet Flow, SF 1** Smooth surfaces n= 0.011 P2= 3.30"
0.1	14	0.2500	3.50		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.7	54	Total			

Summary for Subcatchment 11S: Detention Pond Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.19 cfs @ 12.06 hrs, Volume= 0.075 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
3,513	98	Paved parking, HSG B
95	60	Woods, Fair, HSG B
5,879	61	>75% Grass cover, Good, HSG B
9,487	75	Weighted Average
5,974		62.97% Pervious Area
3,513		37.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	28	0.0300	0.16		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.9	67	0.0298	1.21		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
3.9	95	Total			

Summary for Subcatchment 12S: Remaining Parcel Area

Runoff = 17.86 cfs @ 12.28 hrs, Volume= 1.742 af, Depth> 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
1,253	98		Unconnected roofs, HSG A
4,827	98		Paved parking, HSG A
17,377	39		>75% Grass cover, Good, HSG A
5,295	73		Woods, Fair, HSG C
7,816	98		Paved parking, HSG B
21,219	98		Unconnected roofs, HSG B
177,831	60		Woods, Fair, HSG B
92,842	61		>75% Grass cover, Good, HSG B
328,460	63	62	Weighted Average, UI Adjusted
293,345			89.31% Pervious Area
35,115			10.69% Impervious Area
22,472			64.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	50	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
14.3	838	0.0381	0.98		**Shallow Concentrated Flow, SCF 1** Woodland Kv= 5.0 fps
0.2	30	0.2670	2.58		**Shallow Concentrated Flow, SCF 2** Woodland Kv= 5.0 fps
19.2	918	Total			

Summary for Reach 1R: Reach to Lot 2 Culvert

[79] Warning: Submerged Pond 1P Primary device # 1 INLET by 0.45'

Inflow Area = 0.812 ac, 19.80% Impervious, Inflow Depth > 2.87" for 50 YEAR STORM event
Inflow = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af
Outflow = 2.08 cfs @ 12.34 hrs, Volume= 0.193 af, Atten= 2%, Lag= 5.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.73 fps, Min. Travel Time= 3.2 min
Avg. Velocity = 0.33 fps, Avg. Travel Time= 7.1 min

Peak Storage= 399 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.70'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 21.31 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 140.0' Slope= 0.0161 '/'
Inlet Invert= 50.50', Outlet Invert= 48.25'

Summary for Reach 2R: Reach to Lot 3 Culvert

[79] Warning: Submerged Pond 2P Primary device # 1 INLET by 0.43'

Inflow Area = 1.479 ac, 19.38% Impervious, Inflow Depth > 2.96" for 50 YEAR STORM event
Inflow = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af
Outflow = 3.19 cfs @ 12.38 hrs, Volume= 0.363 af, Atten= 0%, Lag= 3.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.16 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 0.54 fps, Avg. Travel Time= 4.3 min

Peak Storage= 387 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.68'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 34.07 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 140.0' Slope= 0.0411 '/'
Inlet Invert= 48.00', Outlet Invert= 42.25'

Summary for Reach 3R: Reach to Lot 4 Culvert

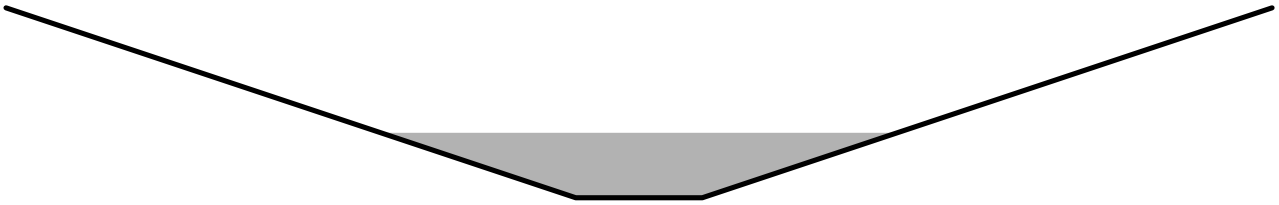
[79] Warning: Submerged Pond 3P Primary device # 1 INLET by 0.78'

Inflow Area = 2.106 ac, 21.70% Impervious, Inflow Depth > 3.11" for 50 YEAR STORM event
Inflow = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af
Outflow = 4.17 cfs @ 12.46 hrs, Volume= 0.543 af, Atten= 0%, Lag= 5.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.80 fps, Min. Travel Time= 2.9 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 6.0 min

Peak Storage= 729 cf @ 12.41 hrs
Average Depth at Peak Storage= 1.03'
Bank-Full Depth= 3.00' Flow Area= 33.0 sf, Capacity= 49.45 cfs

2.00' x 3.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 20.00'
Length= 140.0' Slope= 0.0125 '/'
Inlet Invert= 42.00', Outlet Invert= 40.25'



Summary for Reach 4R: Reach to Lot 7 Culvert

[79] Warning: Submerged Pond 6P Primary device # 1 INLET by 0.26'

Inflow Area = 0.396 ac, 24.89% Impervious, Inflow Depth > 3.60" for 50 YEAR STORM event
Inflow = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af
Outflow = 1.34 cfs @ 12.32 hrs, Volume= 0.117 af, Atten= 17%, Lag= 11.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.76 fps, Min. Travel Time= 6.9 min
Avg. Velocity = 0.31 fps, Avg. Travel Time= 17.2 min

Peak Storage= 561 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.51'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 26.37 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 315.0' Slope= 0.0246 '/'
Inlet Invert= 45.75', Outlet Invert= 38.00'

Summary for Reach 5R: Det Pond Reach to AP2

[79] Warning: Submerged Pond 10P Primary device # 1 INLET by 0.39'

Inflow Area = 7.236 ac, 20.57% Impervious, Inflow Depth > 2.72" for 50 YEAR STORM event
Inflow = 9.05 cfs @ 12.40 hrs, Volume= 1.642 af
Outflow = 8.66 cfs @ 12.72 hrs, Volume= 1.615 af, Atten= 4%, Lag= 19.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.52 fps, Min. Travel Time= 10.0 min
Avg. Velocity = 0.28 fps, Avg. Travel Time= 18.8 min

Peak Storage= 5,189 cf @ 12.55 hrs
Average Depth at Peak Storage= 0.64'
Bank-Full Depth= 4.00' Flow Area= 240.0 sf, Capacity= 347.70 cfs

20.00' x 4.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 100.00'
Length= 310.0' Slope= 0.0476 '/'
Inlet Invert= 34.75', Outlet Invert= 20.00'

‡

Summary for Pond 1P: Lot 1 Driveway Culvert

Inflow Area = 0.812 ac, 19.80% Impervious, Inflow Depth > 2.88" for 50 YEAR STORM event
Inflow = 2.41 cfs @ 12.17 hrs, Volume= 0.195 af
Outflow = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af, Atten= 12%, Lag= 4.2 min
Primary = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 51.76' @ 12.24 hrs Surf.Area= 813 sf Storage= 473 cf

Plug-Flow detention time= 4.3 min calculated for 0.194 af (100% of inflow)
Center-of-Mass det. time= 3.1 min (812.5 - 809.4)

Volume	Invert	Avail.Storage	Storage Description
#1	50.75'	1,900 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
50.75	150	0	0
51.00	290	55	55
52.00	980	635	690
53.00	1,440	1,210	1,900

Device	Routing	Invert	Outlet Devices
#1	Primary	50.75'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.75' / 50.50' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.12 cfs @ 12.24 hrs HW=51.75' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 2.12 cfs @ 2.70 fps)

Summary for Pond 2P: Lot 2 Driveway Culvert

[62] Hint: Exceeded Reach 1R OUTLET depth by 0.97' @ 12.35 hrs

Inflow Area = 1.479 ac, 19.38% Impervious, Inflow Depth > 2.96" for 50 YEAR STORM event
Inflow = 3.39 cfs @ 12.12 hrs, Volume= 0.365 af
Outflow = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af, Atten= 6%, Lag= 12.6 min
Primary = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 49.90' @ 12.33 hrs Surf.Area= 415 sf Storage= 452 cf

Plug-Flow detention time= 2.2 min calculated for 0.363 af (100% of inflow)
Center-of-Mass det. time= 1.7 min (812.5 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	48.25'	3,198 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
48.25	100	0	0
49.00	275	141	141
50.00	430	353	493
51.00	1,440	935	1,428
52.00	2,100	1,770	3,198

Device	Routing	Invert	Outlet Devices
#1	Primary	48.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.25' / 48.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.19 cfs @ 12.33 hrs HW=49.89' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 3.19 cfs @ 4.07 fps)

Summary for Pond 3P: Lot 3 Driveway Culvert

[62] Hint: Exceeded Reach 2R OUTLET depth by 1.77' @ 12.40 hrs

Inflow Area = 2.106 ac, 21.70% Impervious, Inflow Depth > 3.11" for 50 YEAR STORM event
Inflow = 4.86 cfs @ 12.12 hrs, Volume= 0.546 af
Outflow = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af, Atten= 14%, Lag= 15.3 min
Primary = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 44.71' @ 12.37 hrs Surf.Area= 933 sf Storage= 1,140 cf

Plug-Flow detention time= 2.5 min calculated for 0.546 af (100% of inflow)
Center-of-Mass det. time= 2.2 min (811.1 - 808.9)

Volume	Invert	Avail.Storage	Storage Description
#1	42.25'	2,795 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.25	50	0	0
43.00	270	120	120
44.00	652	461	581
45.00	1,050	851	1,432
46.00	1,675	1,363	2,795

Device	Routing	Invert	Outlet Devices
#1	Primary	42.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 42.25' / 42.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.17 cfs @ 12.37 hrs HW=44.70' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 4.17 cfs @ 5.31 fps)

Summary for Pond 4P: Lot 4 Driveway Culvert

[93] Warning: Storage range exceeded by 5.89'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[63] Warning: Exceeded Reach 3R INLET depth by 5.86' @ 12.45 hrs

Inflow Area = 4.707 ac, 14.29% Impervious, Inflow Depth > 2.25" for 50 YEAR STORM event
Inflow = 7.31 cfs @ 12.22 hrs, Volume= 0.882 af
Outflow = 8.52 cfs @ 12.45 hrs, Volume= 0.879 af, Atten= 0%, Lag= 13.6 min
Primary = 8.52 cfs @ 12.45 hrs, Volume= 0.879 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 48.89' @ 12.45 hrs Surf.Area= 3,000 sf Storage= 4,545 cf

Plug-Flow detention time= 9.9 min calculated for 0.879 af (100% of inflow)
Center-of-Mass det. time= 8.6 min (832.8 - 824.1)

Volume	Invert	Avail.Storage	Storage Description
#1	40.25'	4,545 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.25	280	0	0
41.00	1,063	504	504
42.00	2,010	1,537	2,040
43.00	3,000	2,505	4,545

Device	Routing	Invert	Outlet Devices
#1	Primary	40.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 40.25' / 40.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=8.50 cfs @ 12.45 hrs HW=48.86' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 8.50 cfs @ 10.82 fps)

Summary for Pond 5P: Travelway Culvert to CDS

[93] Warning: Storage range exceeded by 0.13'
[79] Warning: Submerged Pond 4P Primary device # 1 INLET by 0.88'

Inflow Area = 5.328 ac, 16.11% Impervious, Inflow Depth > 2.40" for 50 YEAR STORM event
Inflow = 9.77 cfs @ 12.45 hrs, Volume= 1.065 af
Outflow = 6.61 cfs @ 12.60 hrs, Volume= 1.063 af, Atten= 32%, Lag= 8.9 min
Primary = 6.61 cfs @ 12.60 hrs, Volume= 1.063 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 41.13' @ 12.60 hrs Surf.Area= 1,790 sf Storage= 2,313 cf

Plug-Flow detention time= 3.8 min calculated for 1.059 af (100% of inflow)
Center-of-Mass det. time= 3.2 min (830.2 - 827.0)

Volume	Invert	Avail.Storage	Storage Description
#1	38.50'	2,313 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.50	130	0	0
39.00	500	158	158
40.00	1,010	755	913
41.00	1,790	1,400	2,313

Device	Routing	Invert	Outlet Devices
#1	Primary	38.50'	**15.0" Round CMP_Round 15"** L= 70.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.50' / 38.00' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.59 cfs @ 12.60 hrs HW=41.12' (Free Discharge)
↑**1=CMP_Round 15"** (Inlet Controls 6.59 cfs @ 5.37 fps)

Summary for Pond 6P: Lot 8 Driveway Culvert

Inflow Area = 0.396 ac, 24.89% Impervious, Inflow Depth > 3.60" for 50 YEAR STORM event
Inflow = 1.69 cfs @ 12.11 hrs, Volume= 0.119 af
Outflow = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af, Atten= 4%, Lag= 1.7 min
Primary = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 46.82' @ 12.14 hrs Surf.Area= 271 sf Storage= 132 cf

Plug-Flow detention time= 1.8 min calculated for 0.118 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (795.3 - 794.0)

Volume	Invert	Avail.Storage	Storage Description
#1	46.00'	1,905 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	50	0	0
47.00	320	185	185
48.00	800	560	745
49.00	1,520	1,160	1,905

Device	Routing	Invert	Outlet Devices
#1	Primary	46.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.00' / 45.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.59 cfs @ 12.14 hrs HW=46.81' (Free Discharge)
↑—**1=CMP_Round 12"** (Barrel Controls 1.59 cfs @ 3.18 fps)

Summary for Pond 7P: Lot 7 Driveway Culvert

[62] Hint: Exceeded Reach 4R OUTLET depth by 1.49' @ 12.30 hrs

Inflow Area = 1.382 ac, 26.01% Impervious, Inflow Depth > 3.51" for 50 YEAR STORM event
Inflow = 4.49 cfs @ 12.13 hrs, Volume= 0.405 af
Outflow = 3.62 cfs @ 12.27 hrs, Volume= 0.404 af, Atten= 19%, Lag= 8.3 min
Primary = 3.62 cfs @ 12.27 hrs, Volume= 0.404 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 39.97' @ 12.27 hrs Surf.Area= 1,048 sf Storage= 905 cf

Plug-Flow detention time= 2.3 min calculated for 0.404 af (100% of inflow)
Center-of-Mass det. time= 2.0 min (802.2 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	2,350 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.00	50	0	0
39.00	380	215	215
40.00	1,071	726	941
41.00	1,747	1,409	2,350

Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.00' / 37.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.61 cfs @ 12.27 hrs HW=39.96' (Free Discharge)
1=CMP_Round 12" (Inlet Controls 3.61 cfs @ 4.60 fps)

Summary for Pond 8P: Lot 5/6 Driveway Culvert

Inflow Area = 0.099 ac, 47.11% Impervious, Inflow Depth > 4.46" for 50 YEAR STORM event
Inflow = 0.54 cfs @ 12.08 hrs, Volume= 0.037 af
Outflow = 0.44 cfs @ 12.15 hrs, Volume= 0.036 af, Atten= 19%, Lag= 3.8 min
Primary = 0.44 cfs @ 12.15 hrs, Volume= 0.036 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 38.38' @ 12.15 hrs Surf.Area= 597 sf Storage= 189 cf

Plug-Flow detention time= 17.2 min calculated for 0.036 af (98% of inflow)
Center-of-Mass det. time= 11.7 min (789.4 - 777.7)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	1,870 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.00	400	0	0
39.00	920	660	660
40.00	1,500	1,210	1,870

Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.00' / 37.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.15 hrs HW=38.38' (Free Discharge)
1=CMP_Round 12" (Barrel Controls 0.44 cfs @ 2.39 fps)

Summary for Pond 9P: Cul-de-Sac Storage

[79] Warning: Submerged Pond 5P Primary device # 1 INLET by 1.29'

Inflow Area = 5.537 ac, 18.09% Impervious, Inflow Depth > 2.51" for 50 YEAR STORM event
Inflow = 6.77 cfs @ 12.60 hrs, Volume= 1.156 af
Outflow = 6.03 cfs @ 12.77 hrs, Volume= 1.149 af, Atten= 11%, Lag= 10.6 min
Primary = 6.03 cfs @ 12.77 hrs, Volume= 1.149 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 39.80' @ 12.77 hrs Surf.Area= 1,996 sf Storage= 3,396 cf

Plug-Flow detention time= 9.3 min calculated for 1.145 af (99% of inflow)
Center-of-Mass det. time= 7.1 min (831.4 - 824.3)

Volume	Invert	Avail.Storage	Storage Description
#1	37.50'	6,163 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.50	875	0	0
38.00	1,225	525	525
39.00	1,630	1,428	1,953
40.00	2,090	1,860	3,813
41.00	2,610	2,350	6,163

Device	Routing	Invert	Outlet Devices
#1	Primary	37.50'	**15.0" Round CMP_Round 15"** L= 65.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 37.50' / 37.00' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.03 cfs @ 12.77 hrs HW=39.79' (Free Discharge)
1=CMP_Round 15" (Inlet Controls 6.03 cfs @ 4.91 fps)

Summary for Pond 10P: Detention Pond #1

[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.21'

Inflow Area = 7.236 ac, 20.57% Impervious, Inflow Depth > 2.76" for 50 YEAR STORM event
Inflow = 9.06 cfs @ 12.37 hrs, Volume= 1.664 af
Outflow = 9.05 cfs @ 12.40 hrs, Volume= 1.642 af, Atten= 0%, Lag= 1.5 min
Primary = 4.44 cfs @ 12.40 hrs, Volume= 1.321 af
Secondary = 4.61 cfs @ 12.40 hrs, Volume= 0.321 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 37.71' @ 12.40 hrs Surf.Area= 2,710 sf Storage= 4,844 cf

Plug-Flow detention time= 16.6 min calculated for 1.642 af (99% of inflow)
Center-of-Mass det. time= 11.5 min (832.7 - 821.2)

Volume	Invert	Avail.Storage	Storage Description
#1	35.00'	5,655 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
35.00	920	0	0
36.00	1,480	1,200	1,200
37.00	2,270	1,875	3,075
38.00	2,890	2,580	5,655

Device	Routing	Invert	Outlet Devices
#1	Primary	35.00'	**12.0" Round CMP_Round 12"** L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 35.00' / 34.75' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

#2	Device 1	35.50'	**6.0" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	36.50'	**6.0" Vert. Orifice/Grate X 2.00** C= 0.600
#4	Secondary	37.50'	**20.0' long x 4.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50
Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=4.44 cfs @ 12.40 hrs HW=37.71' (Free Discharge)
└─**1=CMP_Round 12"** (Inlet Controls 4.44 cfs @ 5.65 fps)
  ├─**2=Orifice/Grate** (Passes < 2.65 cfs potential flow)
  └─**3=Orifice/Grate** (Passes < 1.85 cfs potential flow)

Secondary OutFlow Max=4.60 cfs @ 12.40 hrs HW=37.71' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Weir Controls 4.60 cfs @ 1.09 fps)

Summary for Link AP1: AP1

Inflow Area = 0.107 ac, 9.09% Impervious, Inflow Depth > 2.99" for 50 YEAR STORM event
Inflow = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af
Primary = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

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

Summary for Link AP2: AP2

Inflow Area = 14.776 ac, 15.53% Impervious, Inflow Depth > 2.73" for 50 YEAR STORM event
Inflow = 20.87 cfs @ 12.35 hrs, Volume= 3.357 af
Primary = 20.87 cfs @ 12.35 hrs, Volume= 3.357 af, Atten= 0%, Lag= 0.0 min

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

Clover Farm Subdivision - Existing Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.75	2.31	3.83	5.22
AP2	2.76	11.35	20.61	29.31

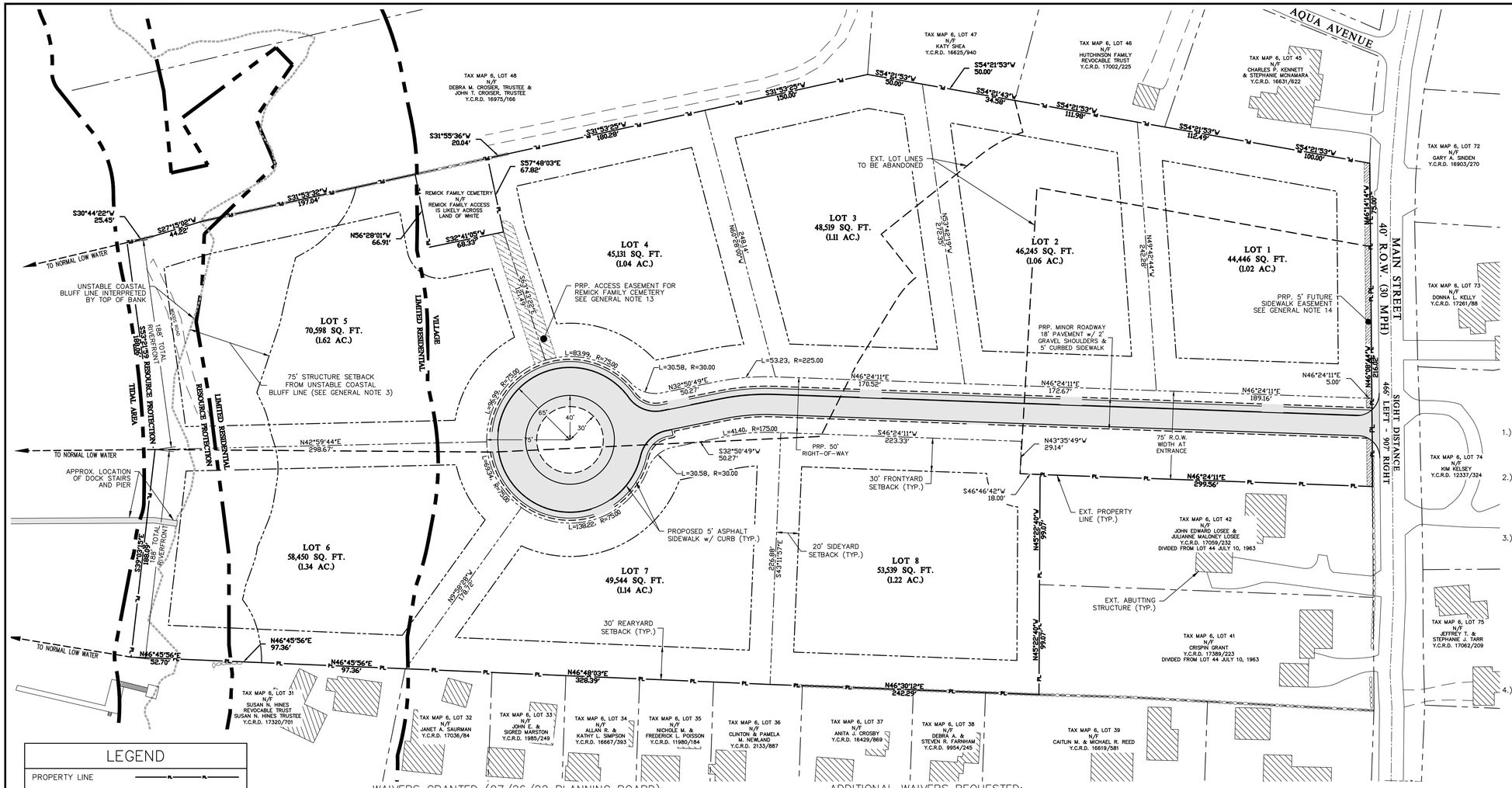
Rainfall Event Totals (in.)	
2-Year	3.30
10-Year	4.90
25-Year	6.20
50-Year	7.30

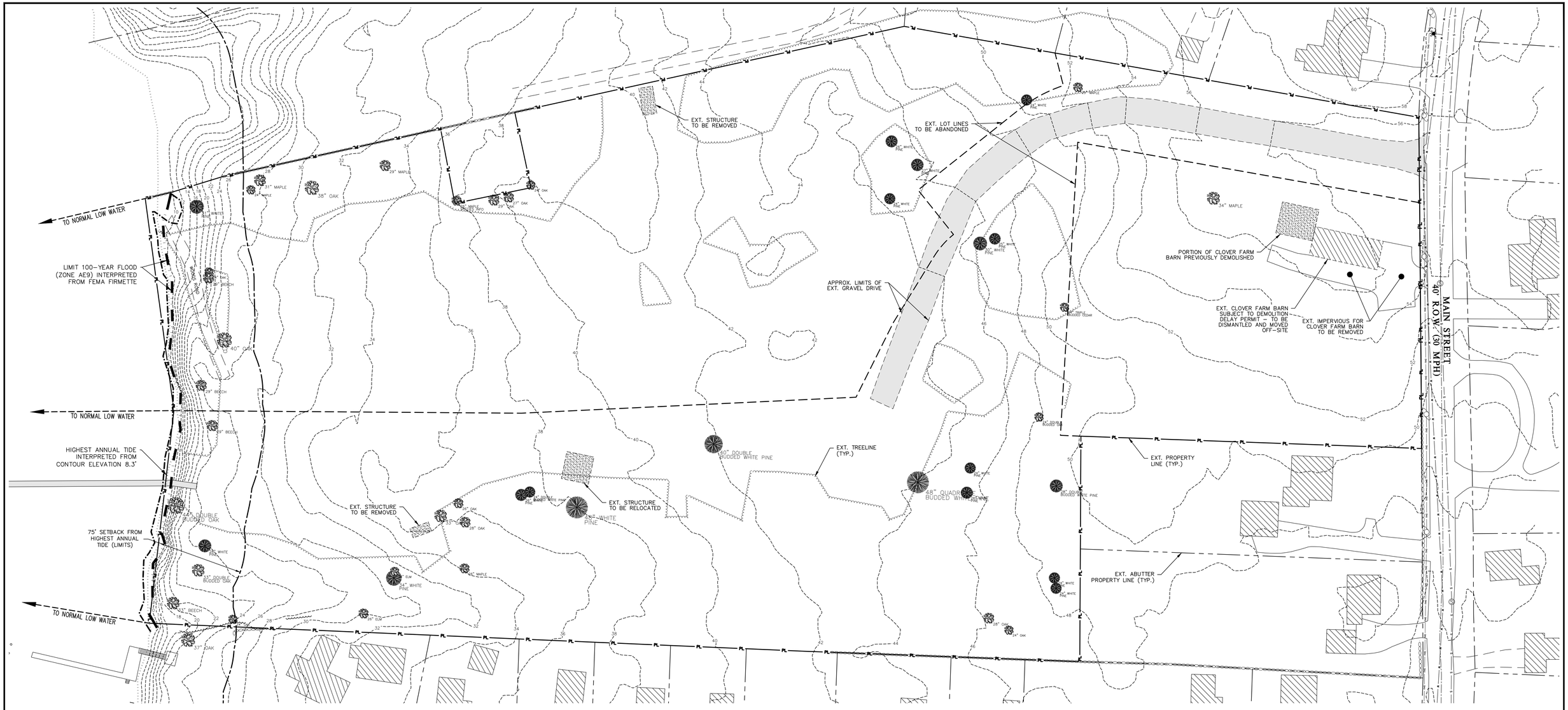
Clover Farm Subdivision - Developed Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.07	0.20	0.32	0.44
AP2	2.26	8.22	14.61	20.87

Clover Farm Subdivision - Change in Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	-0.68	-2.11	-3.51	-4.78
AP2	-0.50	-3.13	-6.00	-8.44


AQUA AVENUE
MAIN STREET
40' R.O.W. (30 MPH)
466' SIGHT DISTANCE LEFT - 90° RIGHT
TAX MAP 6, LOT 48 N/F DEBRA M. CROSIER, TRUSTEE & JOHN T. CROSIER, TRUSTEE Y.C.R.D. 16975/166
TAX MAP 6, LOT 47 N/F KATY SHEA Y.C.R.D. 16625/940
TAX MAP 6, LOT 46 N/F HUTCHINSON FAMILY REVOCABLE TRUST Y.C.R.D. 17002/225
TAX MAP 6, LOT 45 N/F CHARLES P. KENNETT & STEPHANIE MCNAMARA Y.C.R.D. 16631/822
TAX MAP 6, LOT 72 N/F GARY A. SINDEN Y.C.R.D. 16903/270
TAX MAP 6, LOT 73 N/F DONNA L. KELLY Y.C.R.D. 17261/88
TAX MAP 6, LOT 74 N/F KIM KELSEY Y.C.R.D. 12337/324
TAX MAP 6, LOT 75 N/F JEFFREY T. & STEPHANIE J. TARR Y.C.R.D. 17062/209
TAX MAP 6, LOT 42 N/F JOHN EDWARD LOSEE & JULIANNE MALONEY LOSEE Y.C.R.D. 17059/232 DIVIDED FROM LOT 44 JULY 10, 1963
TAX MAP 6, LOT 41 N/F CRISPIN GRANT Y.C.R.D. 17389/223 DIVIDED FROM LOT 44 JULY 10, 1963
TAX MAP 6, LOT 31 N/F SUSAN N. HINES REVOCABLE TRUST SUSAN N. HINES TRUSTEE Y.C.R.D. 17320/701
TAX MAP 6, LOT 32 N/F JANET A. SAURMAN Y.C.R.D. 17036/84
TAX MAP 6, LOT 33 N/F JOHN E. & SIGRED MARSTON Y.C.R.D. 1985/249
TAX MAP 6, LOT 34 N/F ALLAN R. & KATHY L. SIMPSON Y.C.R.D. 16667/393
TAX MAP 6, LOT 35 N/F NICHOLE M. & FREDERICK L. POISSON Y.C.R.D. 11980/184
TAX MAP 6, LOT 36 N/F CLINTON & PAMELA M. NEWLAND Y.C.R.D. 2133/887
TAX MAP 6, LOT 37 N/F ANITA J. CROSBY Y.C.R.D. 16429/869
TAX MAP 6, LOT 38 N/F DEBRA A. & STEVEN R. FARNHAM Y.C.R.D. 9954/245
TAX MAP 6, LOT 39 N/F CAITLIN M. & MICHAEL R. REED Y.C.R.D. 16619/581
REMICK FAMILY CEMETERY N/F REMICK FAMILY ACCESS IS LIKELY ACROSS LAND OF WHITE
EXT. LOT LINES TO BE ABANDONED
LOT 1 44,446 SQ. FT. (1.02 AC.)
LOT 2 46,245 SQ. FT. (1.06 AC.)
LOT 3 48,519 SQ. FT. (1.11 AC.)
LOT 4 45,131 SQ. FT. (1.04 AC.)
LOT 5 70,598 SQ. FT. (1.62 AC.)
LOT 6 58,450 SQ. FT. (1.34 AC.)
LOT 7 49,544 SQ. FT. (1.14 AC.)
LOT 8 53,539 SQ. FT. (1.22 AC.)
PRP. ACCESS EASEMENT FOR REMICK FAMILY CEMETERY SEE GENERAL NOTE 13
PRP. 5' FUTURE SIDEWALK EASEMENT SEE GENERAL NOTE 14
PRP. MINOR ROADWAY 18' PAVEMENT w/ 2' GRAVEL SHOULDERS & 5' CURBED SIDEWALK
PRP. 50' RIGHT-OF-WAY
75' R.O.W. WIDTH AT ENTRANCE
75' STRUCTURE SETBACK FROM UNSTABLE COASTAL BLUFF LINE (SEE GENERAL NOTE 3)
UNSTABLE COASTAL BLUFF LINE INTERPRETED BY TOP OF BANK
APPROX. LOCATION OF DOCK STAIRS AND PIER
TO NORMAL LOW WATER
VILLAGE LIMITED RESIDENTIAL
LIMITED RESIDENTIAL RESOURCE PROTECTION
TIDAL AREA
188' TOTAL WATERFRONT
PROPOSED 5' ASPHALT SIDEWALK w/ CURB (TYP.)
20' SIDEYARD SETBACK (TYP.)
30' FRONTYARD SETBACK (TYP.)
30' REARYARD SETBACK (TYP.)
EXT. PROPERTY LINE (TYP.)
EXT. ABUTTING STRUCTURE (TYP.)
L=83.99, R=75.00
L=30.58, R=30.00
L=53.23, R=225.00
L=41.40, R=175.00
L=138.22, R=75.00
N46°24'11"E 170.52'
N46°24'11"E 172.67'
N46°24'11"E 189.16'
N46°24'11"E 5.00'
S46°24'11"W 223.33'
N43°35'49"W 29.14'
N46°24'11"E 299.56'
S46°46'42"W 18.00'
N42°59'44"E 298.67'
N46°45'56"E 97.36'
N46°45'56"E 52.70'
N46°48'03"E 328.39'
N46°30'18"E 242.25'
S54°21'53"W 30.00'
S54°21'43"W 34.58'
S54°21'53"W 111.96'
S54°21'53"W 112.43'
S54°21'53"W 100.00'
S31°55'36"W 20.04'
S31°33'25"W 150.00'
S31°33'25"W 180.28'
S31°33'32"W 197.04'
S57°48'03"E 67.82'
S35°41'05"W 68.33'
S27°15'08"W 44.82'
S30°44'22"W 25.45'
N56°28'01"W 66.91'
S32°50'49"W 50.27'
N32°50'49"E 50.27'
S32°50'49"W 50.27'
N39°38'39"W 176.12'
S45°22'40"W 95.07'
S45°22'40"W 236.99'
N45°22'40"E 95.07'
N45°22'40"E 236.99'
N52°42'35"W 219.47'
S52°42'35"E 219.47'
S52°42'35"E 219.47'
N52°42'35"W 219.47'
S52°42'35"E 219.47'
N52°42'35"W 219.47'
S52°42'35"E 219.47'
N52°42'35"W



LEGEND

- PROPERTY LINE
- EXT. ABUTTER LINE
- CENTERLINE OF ROAD
- EXT. GRAVEL
- EXT. PAVEMENT
- EXT. BUILDING
- EXT. BLDG. TO BE DEMO'D
- EXT. WATER LINE — W —
- EXT. WATER HYDRANT
- EXT. SEWER LINE — S —
- EXT. SEWER MANHOLE
- EXT. OVERHEAD ELEC — OHU —
- EXT. POWER POLE
- EXT. STONEWALL
- EXT. MAJOR CONTOUR --- XXX ---
- EXT. MINOR CONTOUR --- XXX ---
- EXT. TREELINE
- EXT. TREE >24" DBH (DECIDUOUS / CONIFEROUS)
- COASTAL BLUFF BANK
- EXT. HIGH TIDE OFFSET

GRAPHIC SCALE
0 40 80 120 160 (FEET)

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

STATE OF MAINE — KENNETH A WOOD No. 5992 — LICENSED PROFESSIONAL ENGINEER

EXISTING CONDITIONS PLAN
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE:	APPROVED BY:	DRAWN BY:
1" = 40'		MJS
DATE:		REVISION DATE:
08/23/22		- : -
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 2

TAX MAP 6, LOT 43, 44, & 154

LEGEND

PROPERTY LINE	— PL —	EXT. SEWER MANHOLE	Ⓢ
SETBACK		PRP. FORCE MAIN	— FM —
EXT. ABUTTER LINE		PRP. SEWER MANHOLE	Ⓢ
PRP. LOT LINE		EXT. OVERHEAD ELEC	— OHU —
CENTERLINE OF ROAD		EXT. POWER POLE	
EXT. GRAVEL		PRP. U.G. ELECTRIC	— UGU —
EXT. PAVEMENT		EXT. STONEWALL	
PRP. GRAVEL		EXT. MAJOR CONTOUR	— XXX —
PRP. PAVEMENT		EXT. MINOR CONTOUR	— XXX —
EXT. BUILDING		PRP. MAJOR CONTOUR	XXX
PRP. BUILDING		PRP. MINOR CONTOUR	XXX
EXT. WATER LINE	— W —	PRP. SPOT GRADE	102.0' x
EXT. WATER HYDRANT		EXT. TREELINE	
PRP. WATER LINE	— W —	PRP. CLEARING LIMITS	
PRP. WATER HYDRANT		EXT. TREE >24" DBH	DECIDUOUS CONIFEROUS
PRP. STORM LINE	— D —	PRP. VEG. SCREENING	ARBORVITAE
PRP. RIP RAP			
EXT. SEWER LINE	— S —		

GRADING & UTILITY NOTES

1.) SEWER FORCE MAINS SHALL BE SDR 35 PVC. ALL OTHER APPURTENANCES SHALL MEET KITTERY SEWER DISTRICT STANDARDS. SEE DETAIL FOR TYPICAL INDIVIDUAL SERVICE SIZES.

2.) ALL PIPES, VALVES, FITTINGS, AND CONNECTIONS SHALL MEET CURRENT KITTERY WATER DISTRICT STANDARDS.

3.) ALL WATER SERVICES TO BE EQUIPPED WITH CURB STOPS.

4.) ALL STORM DRAINS SHALL BE ADS N-12 (HDPE) OR APPROVED EQUAL (UNLESS NOTED OTHERWISE). PROPER TRENCHING AND BACKFILLING ARE VITAL TO THE LONG TERM PERFORMANCE AND DURABILITY OF HDPE CULVERT INSTALLATIONS. SEE HDPE CULVERT TRENCH DETAIL.

5.) A MINIMUM OF 5.0' OF COVER SHALL BE MAINTAINED OVER ALL WATER LINES.

6.) CENTRAL MAINE POWER COMPANY WILL PREPARE THE ELECTRICAL PLAN FOR CONSTRUCTION. ALL ELECTRICAL, TELEPHONE, AND CABLE SERVICES WILL BE UNDERGROUND.

7.) NEW WATER AND SEWER LINES SHALL BE TESTED IN ACCORDANCE WITH RESPECTIVE DISTRICT REQUIREMENTS.

8.) SNOW STORAGE LOCATIONS ARE DEPICTED ON THE PLANS. ROADSIDE SNOW STORAGE IS LOCATED IN THE SOUTHERLY VEGETATED SWALE, AS WELL AS IN THE DETENTION AREA IN THE CENTER OF THE CUL-DE-SAC. IN AN INSTANCE WHERE THE DEVELOPED LOT REACHES ITS CAPACITY FOR SNOW STORAGE, ALL EXCESS SNOW SHALL BE CARRIED OFF-SITE.

9.) ALL PROPOSED LOTS SHALL BE SERVICED BY A LOW-PRESSURE GRINDER SEWAGE PUMP UNIT (E-ONE, BARNES ECO-TRAN, OR APPROVED EQUAL).

GRID

GRAPHIC SCALE

0 30 60 90 120 (FEET)

NO.	DESCRIPTION	DATE
	REVISIONS	

STATE OF MAINE
KENNETH A. WOOD
No. 5992
LICENSED PROFESSIONAL ENGINEER

GRADING & UTILITIES PLAN
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
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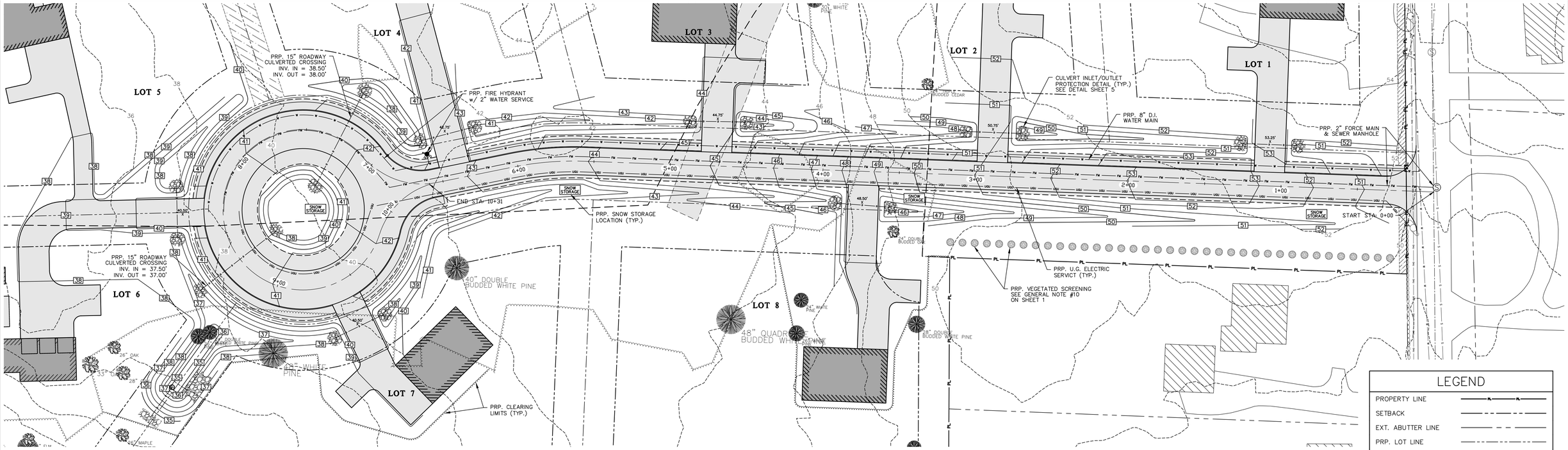

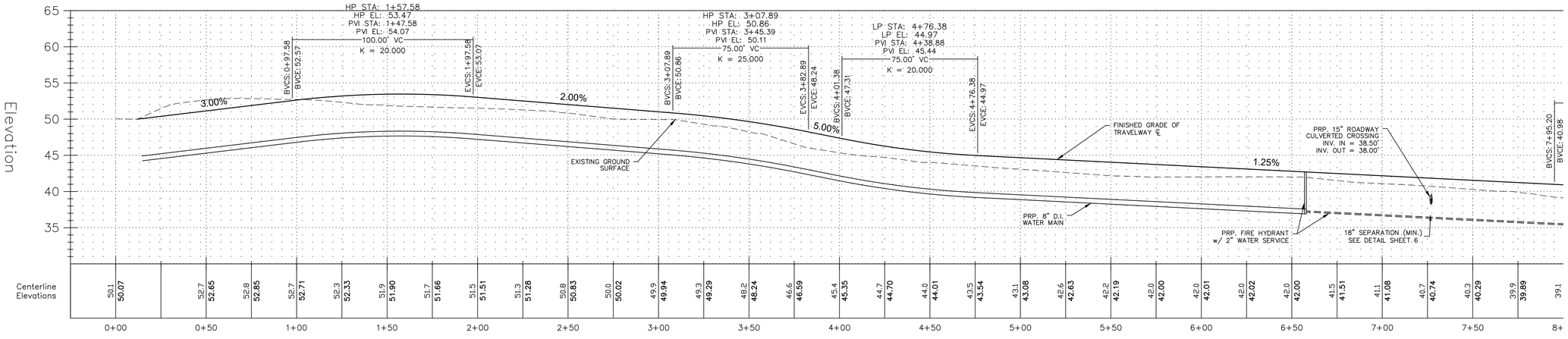

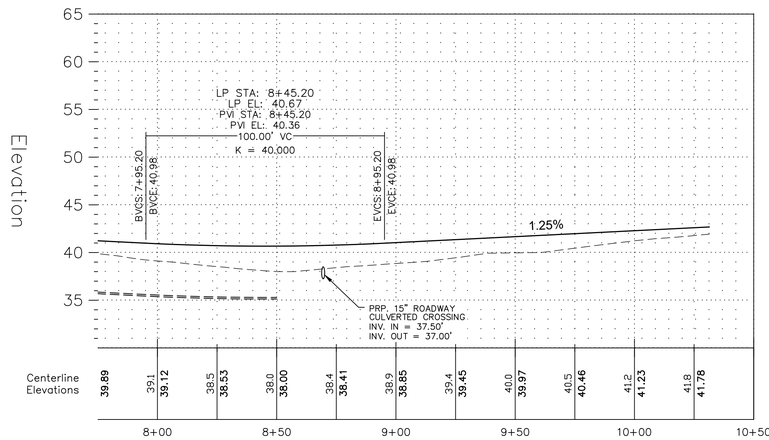

LEGEND

- PROPERTY LINE
- SETBACK
- EXT. ABUTTER LINE
- PRP. LOT LINE
- CENTERLINE OF ROAD
- EXT. GRAVEL
- EXT. PAVEMENT
- PRP. GRAVEL
- PRP. PAVEMENT
- EXT. BUILDING
- PRP. BUILDING
- EXT. WATER LINE — W —
- EXT. WATER HYDRANT
- PRP. WATER LINE — W —
- PRP. WATER HYDRANT
- PRP. STORM LINE — D —
- PRP. RIP RAP
- EXT. SEWER LINE — S —
- EXT. SEWER MANHOLE
- PRP. FORCE MAIN — FM —
- PRP. SEWER MANHOLE
- EXT. OVERHEAD ELEC — OHU —
- EXT. POWER POLE
- PRP. U.G. ELECTRIC — UGU —
- EXT. STONEWALL
- EXT. MAJOR CONTOUR — XXX —
- EXT. MINOR CONTOUR — XXX —
- PRP. MAJOR CONTOUR — XXX —
- PRP. MINOR CONTOUR — XXX —
- PRP. SPOT GRADE 102.0' x
- EXT. TREELINE
- PRP. CLEARING LIMITS
- EXT. TREE >24" DBH (DECIDUOUS / CONIFEROUS)
- PRP. VEG. SCREENING (ARBORVITAE)

GRAPHIC SCALE
0 40 80 120 160 (FEET)

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

STATE OF MAINE — KENNETH A WOOD No. 5992 — LICENSED PROFESSIONAL ENGINEER

ROADWAY PLAN & PROFILE
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
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SCALE:	APPROVED BY:	DRAWN BY:
1" = 40'		MJS
DATE:		REVISION DATE:
08/23/22		– : –
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 4

EROSION & SEDIMENTATION CONTROL NOTES

1. PRIOR TO ANY SNOW EVENT, SILTATION FENCE OR HAY BALE BARRIERS WILL BE INSTALLED DOWNSLOPE OF ALL STRIPPING OR CONSTRUCTION OPERATIONS. A DOUBLE SILT FENCE BARRIER SHALL BE INSTALLED DOWNSLOPE OF ANY SOIL MATERIAL STOCKPILES. SILT FENCES SHALL BE INSPECTED AFTER EACH RAIN EVENT AND DAILY DURING PROLONGED RAIN. SILT AND SOIL PARTICLES ACCUMULATING BEHIND THE FENCE SHALL BE REMOVED AFTER EACH SIGNIFICANT RAIN EVENT AND IN NO INSTANCE SHOULD ACCUMULATION EXCEED 1/2 THE HEIGHT OF THE FENCE. TORN OR DAMAGED AREAS SHALL BE REPAIRED.

2. TEMPORARY AND PERMANENT VEGETATION AND MULCHING IS AN INTEGRAL COMPONENT OF THE EROSION AND SEDIMENTATION CONTROL PLAN. ALL AREAS SHALL BE INSPECTED AND MAINTAINED UNTIL THE DESIRED VEGETATIVE COVER IS ESTABLISHED. THESE CONTROL MEASURES ARE ESSENTIAL TO EROSION PREVENTION AND ALSO REDUCE COSTLY REWORK OF GRADED AND SHAPED AREAS.

3. SEEDING, FERTILIZER AND LIME RATES AND TIME OF APPLICATION WILL BE DEPENDENT ON SOIL REQUIREMENTS. TEMPORARY VEGETATION SHALL BE MAINTAINED IN THESE AREAS UNTIL PERMANENT SEEDING IS APPLIED. ADDITIONALLY, EROSION AND SEDIMENTATION MEASURES SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED.

4. ALL LAWN AREA, OUTER POND SIDE SLOPES AND SWALES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 2 LB/ACRE REDTOP AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 42 LB/ACRE. FERTILIZER AND LIME RATES SHALL BE DEPENDENT ON SOIL TESTING. IN THE ABSENCE OF SOIL TESTS, FERTILIZE WITH 10-20-20 (N-P205-K201) AT 800 LB/ACRE AND LIME AT 3 TONS/ACRE. MULCH WITH HAY AT 70-90 LB/1000 S.F. 4" OF LOAM SHALL BE APPLIED PRIOR TO SEEDING.

5. POND BOTTOMS AND INNER POND SIDESLOPES SHALL BE PERMANENTLY SEEDED WITH THE FOLLOWING MIXTURE: 20 LB/ACRE CREEPING RED FESCUE, 8 LB/ACRE BIRDSFOOT TREFOIL AND 20 LB/ACRE TALL FESCUE FOR A TOTAL OF 48 LB/ACRE. SEE THE ABOVE NOTE FOR FERTILIZER, LIME AND MULCHING RATES.

6. TEMPORARY VEGETATION OF ALL DISTURBED AREAS, MATERIAL STOCKPILES AND OTHER SUCH AREAS SHALL BE ESTABLISHED BY SEEDING WITH EITHER WINTER RYE AT A RATE OF 112 LB/ACRE OR ANNUAL RYEGRASS AT A RATE OF 40 LB/ACRE. WINTER RYE SHALL BE USED FOR FALL SEEDING AND ANNUAL RYEGRASS FOR SHORT DURATION SEEDING. SEEDING SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. TEMPORARY STABILIZATION WITH MULCH OF DISTURBED AREAS SHALL TAKE PLACE WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS. AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY SHALL BE TEMPORARILY STABILIZED WITH MULCH WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

7. TEMPORARY SEEDING OF DISTURBED AREAS SHALL BE ACCOMPLISHED BEFORE OCTOBER 1. PERMANENT SEEDING SHALL BE ACCOMPLISHED BEFORE SEPTEMBER 15.

8. ALL SEEDED AREAS SHALL BE MULCHED WITH HAY AT A RATE OF 2 BALES (70-90 LB) PER 1000 S.F. OF SEEDED AREA.

9. ALL DISTURBED AREAS ON THE SITE SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR TEMPORARILY STABILIZED PER E&S NOTE 6. PERMANENT STABILIZATION MEANS 90% COVER WITH MATURE, HEALTHY PLANTS FOR PLANTED AREAS AND FOR SODDED AREAS, COMPLETE BINDING OF SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

10. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL ACCESSES TO PUBLIC ROADS (SEE PLAN). TEMPORARY CULVERTS SHALL BE PROVIDED AS REQUIRED.

11. SLOPES BETWEEN 2:1 AND 3:1 (INCLUDING 3:1) SHALL BE TREATED WITH POLYJUTE OPEN WEAVE GEOTEXTILE (OR EQUIVALENT) AFTER SEEDING. JUTE MATS SHALL BE ANCHORED PER MANUFACTURER'S SPECIFICATIONS. SLOPES BETWEEN 2:1 AND 1.5:1 (INCLUDING 2:1) SHALL BE ANCHORED WITH RIPRAP. SLOPES ARE PROHIBITED FROM BEING STEEPER THAN 1.5:1.

12. EXCESSIVE DUST CAUSED BY CONSTRUCTION OPERATIONS SHALL BE CONTROLLED BY APPLICATION OF WATER OR CALCIUM CHLORIDE.

13. THE CONTRACTOR MAY OPT TO USE EROSION CONTROL MIX BERM AS A SEDIMENT BARRIER IN LIEU OF SILTATION FENCE OR HAY BALE BARRIERS WITH APPROVAL FROM THE INSPECTING ENGINEER.

14. SEDIMENT BARRIERS SHALL BE DOUBLED WITH 75' OF WETLANDS OR OTHER PROTECTED NATURAL RESOURCES.

15. TEMPORARY E&S CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS OF PERMANENT STABILIZATION. ACCUMULATED SEDIMENTS SHALL BE REMOVED AND THE AREA STABILIZED.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT. THESE STANDARDS CAN BE FOUND IN THE FOLLOWING DOCUMENT: MDEP CHAPTER 500 (STORMWATER MANAGEMENT), APPENDIX C. HOUSEKEEPING. HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, SPILL PREVENTION, GROUNDWATER PROTECTION, FUGITIVE SEDIMENT AND DUST, DEBRIS AND OTHER MATERIALS, EXCAVATION DEWATERING, AUTHORIZED NON-STORMWATER DISCHARGES AND UNAUTHORIZED NON-STORMWATER DISCHARGES. ANY SPILL OR RELEASE OF HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE MDEP; FOR OIL SPILLS, CALL 1-800-482-0777; FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664.

17. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

18. ALL SEDIMENT BARRIERS AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION.

19. SEDIMENT BARRIERS SHALL BE INSTALLED DOWN-GRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO STOCKPILES.

20. THE PROPOSED STORMWATER MANAGEMENT AREAS INTENDED FOR USE AS PERMANENT, POST-CONSTRUCTION BMP'S SHALL BE USED TO TEMPORARILY MANAGE FLOWS DURING CONSTRUCTION. THESE BMP'S SHALL BE MAINTAINED DURING THEIR TEMPORARY USE BY INSTALLING THE APPROPRIATE MEASURES DURING CONSTRUCTION, INCLUDING UNDERDRAINS, SOIL FILTER MEDIA, ETC. SEDIMENT REMOVAL AND SLOPE STABILIZATION SHALL TAKE PLACE AS NECESSARY FOR TEMPORARY CONSTRUCTION MANAGEMENT.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE HOUSEKEEPING PRACTICES DURING THE CONSTRUCTION OF THE PROJECT. THESE STANDARDS CAN BE FOUND IN THE FOLLOWING DOCUMENT: MDEP CHAPTER 500 (STORMWATER MANAGEMENT), APPENDIX C. HOUSEKEEPING. HOUSEKEEPING PRACTICES INCLUDE, BUT ARE NOT LIMITED TO, SPILL PREVENTION, GROUNDWATER PROTECTION, FUGITIVE SEDIMENT AND DUST, DEBRIS AND OTHER MATERIALS, EXCAVATION DEWATERING, AUTHORIZED NON-STORMWATER DISCHARGES AND UNAUTHORIZED NON-STORMWATER DISCHARGES(DETAILED BELOW).

ROAD & DRIVEWAY CONSTRUCTION NOTES

1. ROADS & DRIVEWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH THE APPROPRIATE CROSS SECTION DETAIL. GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR IN ACCORDANCE WITH ASTM D 1557. LIFT THICKNESSES TO BE A MAXIMUM OF 6".

2. ALL STUMPS, ORGANIC MATERIAL, ROCKS AND BOULDERS TO BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBBASE.

3. ALL STUMPS, LEDGE AND LARGE BOULDERS TO BE REMOVED FROM THE CONSTRUCTION AREA. THE CONSTRUCTION AREA SHALL BE CLEARED AND ROUGH GRADED.

4. ALL CULVERTS TO BE ADS N-12 (HDPE) OR APPROVED EQUAL. CULVERT INLETS AND OUTLETS TO BE PROTECTED IN ACCORDANCE WITH THE CULVERT INLET/OUTLET PROTECTION DETAIL.

5. THE CONTRACTOR MUST CONTACT DIG SAFE AND ALL LOCAL UTILITIES PRIOR TO THE START OF CONSTRUCTION TO VERIFY THE LOCATION OF EXISTING SUBSURFACE UTILITIES AND CONDITIONS. LOCATING AND PROTECTING ANY UNDERGROUND OR ABOVE GROUND UTILITY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

E&S INSPECTION/MAINTENANCE DURING CONSTRUCTION

A. INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK, PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES, AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT WHICH PRODUCES 0.5 INCHES OR MORE WITHIN SAID 24 HOUR PERIOD. A TOWN-APPOINTED ENGINEER WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS AND SHALL ALSO ENSURE THAT THE RECOMMENDED MAINTENANCE IS PERFORMED.

B. MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPS) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPS OR SIGNIFICANT REPAIR OF BMPS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT WHICH PRODUCES 0.5 INCHES OR MORE WITHIN A 24 HOUR PERIOD. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

C. DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPS THAT NEED MAINTENANCE, BMPS THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPS ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP NEEDING REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPS, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

WINTER CONSTRUCTION NOTES

(01 NOVEMBER THRU 15 APRIL)

1. EXPOSED AREAS SHOULD BE LIMITED TO AN AREA THAT CAN BE MULCHED IN ONE DAY.

2. AN AREA SHALL BE CONSIDERED STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH HAY AT A RATE OF 140-180 LB/1000 S.F. (DOUBLE THE NORMAL RATE) OR DORMANT SEEDED, MULCHED AND ADEQUATELY ANCHORED BY AN APPROVED ANCHORING TECHNIQUE. IN ALL CASES, MULCH SHALL BE APPLIED SO THAT THE SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH.

3. FROM OCTOBER 15 TO APRIL 1, LOAM AND SEED WILL NOT BE REQUIRED. DURING PERIODS OF TEMPERATURES ABOVE FREEZING, DISTURBED AREAS SHALL BE FINE GRADED AND PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL PERMANENT SEEDING CAN BE APPLIED. AFTER NOVEMBER 1, DISTURBED AREAS MAY BE LOAMED, FINE GRADED AND DORMANT SEEDED AT A RATE 200-300% HIGHER THAN THE SPECIFIED PERMANENT SEEDING RATE. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, DISTURBED AREAS SHALL BE GRADED BEFORE FREEZING AND TEMPORARILY STABILIZED WITH MULCH. DISTURBED AREAS SHALL NOT BE LEFT OVER THE WINTER OR FOR ANY OTHER EXTENDED PERIOD OF TIME UNLESS STABILIZED WITH MULCH.

4. FROM NOVEMBER 1 TO APRIL 15 ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, TRACK OR WOOD CELLULOSE FIBER. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH SLOPES GREATER THAN 3%, SLOPES EXPOSED TO DIRECT WINDS AND FOR SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL AREAS WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1, THE SAME APPLIES TO ALL SLOPES GREATER THAN 8%.

5. DURING WINTER CONSTRUCTION, DORMANT SEEDING OR MULCH AND ANCHORING SHALL BE APPLIED TO ALL DISTURBED AREAS AT THE END OF EACH WORKING DAY.

6. SNOW SHALL BE REMOVED FROM AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

7. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MEST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE MDEP.

CONSTRUCTION HOUSEKEEPING PUNCHLIST

1. ALL DISTRUBED AREAS SHALL BE PERMANENTLY STABILIZED, AND PLANTINGS SHALL BE ESTABLISHED (GRASS SEEDS HAVE GERMINATED WITHIN 90% VEGETATIVE COVER).

2. ALL TRASH, SEDIMENTS, DEBRIS, OR ANY SOLID WASTE SHALL BE REMOVED FROM STORMWATER CHANNELS, CATCH BASINS, DETENTION STRUCTURES, DISCHARGE POINTS, AND LEVEL SPREADERS.

3. ALL EROSION AND SEDIMENTATION DEVICES SHALL BE REMOVED (SILTATION FENCES AND POSTS, DIVERSIONS AND SEDIMENT STRUCTURES, ETC.)

4. ALL DELIVERABLES (CERTIFICATIONS, SURVEY INFORMATION, AS-BUILT PLANS, REPORTS, NOTICES OF TERMINATION, ETC.) IN ACCORDANCE WITH ALL PERMIT REQUIREMENTS SHALL BE SUBMITTED TO THE TOWN, THE MAINE DEP, HOMEOWNER'S ASSOCIATION, OWNER, AND/OR ALL APPROPRIATE ENTITIES.

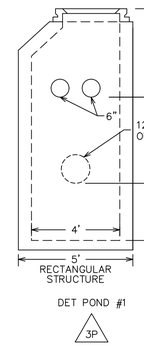
STORMWATER DISCHARGE REQUIREMENTS

AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

(A) DISCHARGES FROM FIREFIGHTING ACTIVITY;
(B) FIRE HYDRANT FLUSHINGS;
(C) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
(D) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
(E) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
(F) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
(G) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
(H) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
(I) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
(J) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5))
(K) PORTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS
(L) LANDSCAPE IRRIGATION

UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

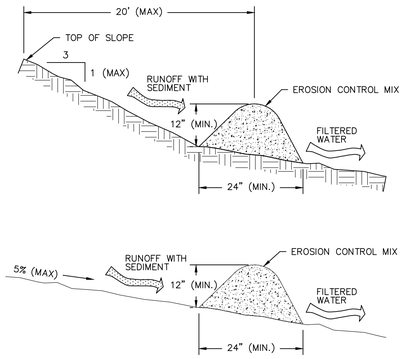
(A) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
(B) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
(C) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
(D) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE



DETENTION POND #1 OUTLET STRUCTURE

(NTS)

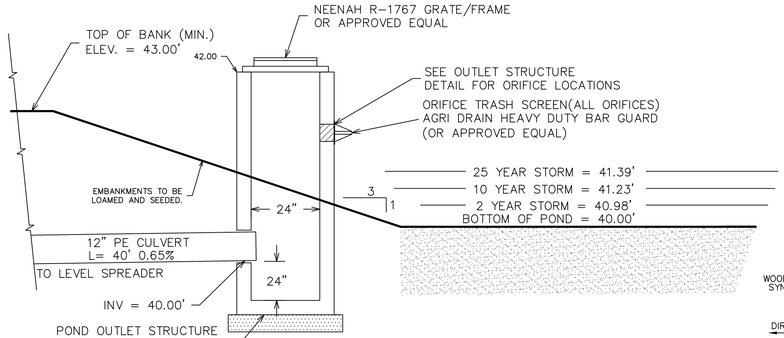
ORIFICES TO BE PROTECTED WITH TRASH SCREENS (2" MAX. OPENINGS) FASTENED TO OUTLET STRUCTURES WITH SS PARTS.



EROSION CONTROL MIX COMPOSITION STANDARDS:

- THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% MAXIMUM OF 85% PASSING A 0.75" SCREEN.
- THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
- LARGE PORTIONS OF SILTS, CLAYS, OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
- SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm
- THE pH SHOULD FALL BETWEEN 5.0 AND 8.0.

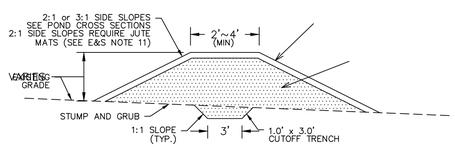
EROSION CONTROL MIX BERM - NTS



DETENTION POND #1

(NTS)

NOTES: PIPE JOINTS TO BE WATER TIGHT



FILTER POND EMBANKMENT AND BERM DETAIL

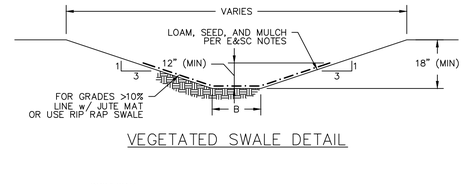
SCALE: 1" = 5'

EMBANKMENT CONSTRUCTION NOTES

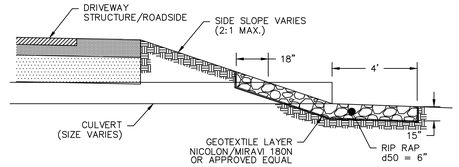
1. ALL ORGANIC MATERIAL, STUMPS, ROCKS AND BOULDERS SHALL BE REMOVED TO A MINIMUM DEPTH OF 24" BELOW SUBGRADE OF THE BASIN EMBANKMENT. ALL EXCAVATIONS BELOW THE BASIN EMBANKMENT SHALL HAVE A MINIMUM SLOPE OF 1H : 1V.

2. ALL BASIN EMBANKMENT FILL MATERIAL SHALL BE WELL GRADED BORROW WITH A MINIMUM OF 20% FINES CONTENT. EMBANKMENT FILL SHALL BE PLACED IN 12" (MAX.) LIFTS AND BE COMPACTED TO 95% MODIFIED PROCTOR. A CUTOFF TRENCH SHALL BE EXCAVATED AS SHOWN PRIOR TO CONSTRUCTION OF EMBANKMENT.

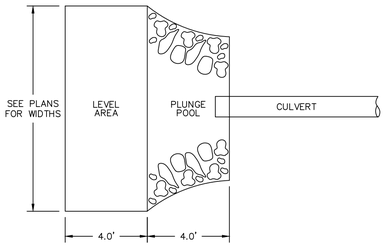
3. DETENTION BASIN AND ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER DURING CONSTRUCTION.

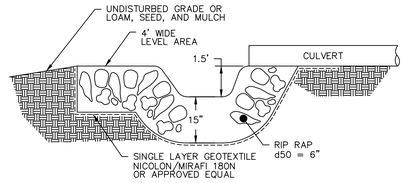


VEGETATED SWALE DETAIL

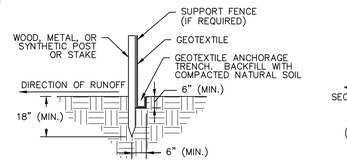


CULVERT INLET/OUTLET PROTECTION DETAIL



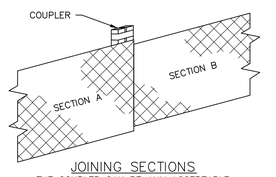


LEVEL SPREADER DETAIL



TOP VIEW
(CONNECTION)

TOE-IN METHOD



NOTES:
1. DEPENDING UPON THE CONFIGURATION, ATTACH GEOTEXTILE TO WIRE MESH WITH HOG RINGS, TO STEEL POSTS WITH TIE WIRES, AND TO WOOD POSTS WITH STAPLES.
2. POSTS MAY BE WIRED TOGETHER WHEN JOINING SECTIONS.

JOINING SECTIONS
THE COUPLER CAN BE ANY ACCEPTABLE DEVICE USED TO TIE THE POLES TOGETHER

TEMPORARY SILT FENCE - NTS

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

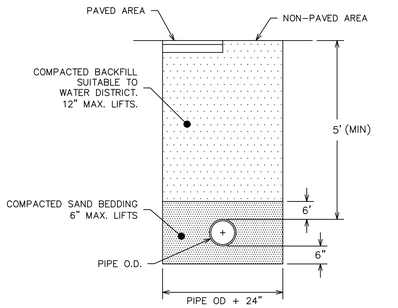
STATE OF MAINE
KENNETH A. WOOD
No. 5992
LICENSED PROFESSIONAL ENGINEER

SITE DETAILS
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

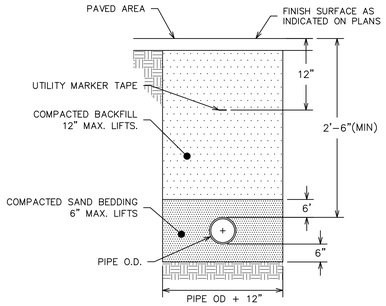
FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

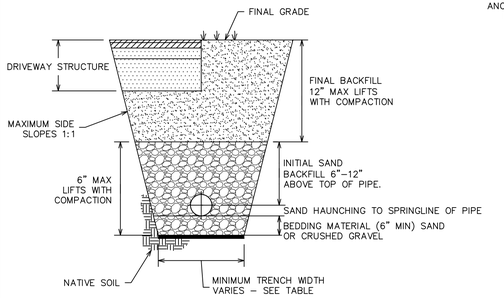
SCALE: 1" = 40'	APPROVED BY:	DRAWN BY: MJS
DATE: 08/23/22		REVISION DATE: - : -
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 5



WATER LINE TRENCH DETAIL
(NTS)



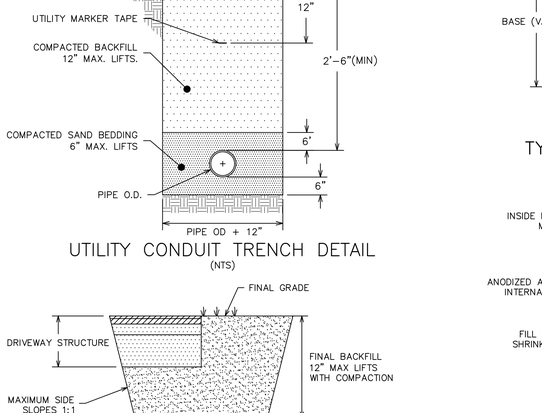
UTILITY CONDUIT TRENCH DETAIL
(NTS)



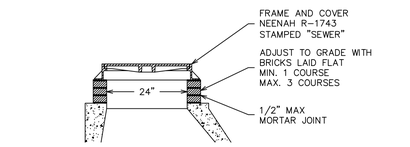
HDPE CULVERT TRENCH DETAIL
(NTS)

TRENCH TO BE SUPPORTED BY SLOPING BACK AT 2:1 OR OTHER ACCEPTABLE METHOD.

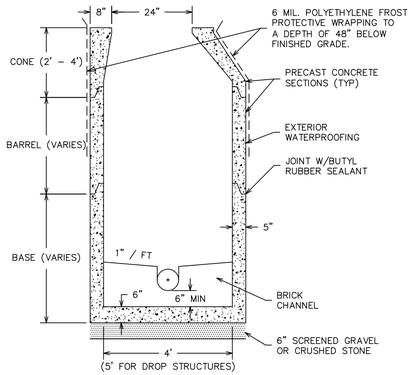
NOMINAL DIAMETER (IN)	MIN. TRENCH WIDTH (IN)
4	21
6	23
8	25
10	28
12	31
15	34
18	39
24	48
30	66
36	78
42	83
48	89
60	102



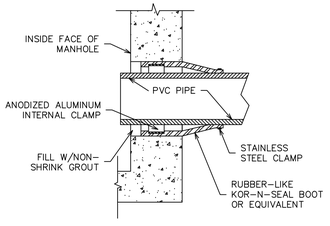
FIRE HYDRANT ASSEMBLY DETAIL
NTS



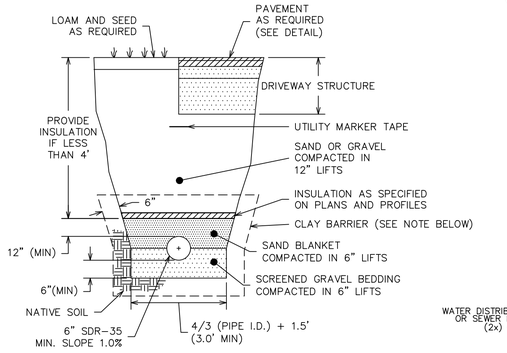
STANDARD COVER AND FRAME
SCALE: NTS



TYPICAL SANITARY MANHOLE
SCALE: NTS



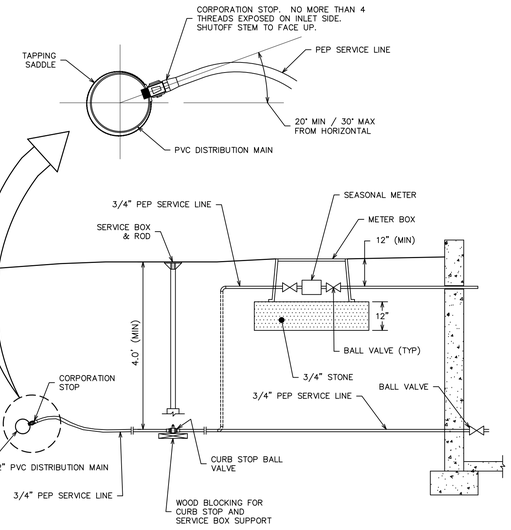
TYPICAL BOOT GASKET
SCALE: NTS



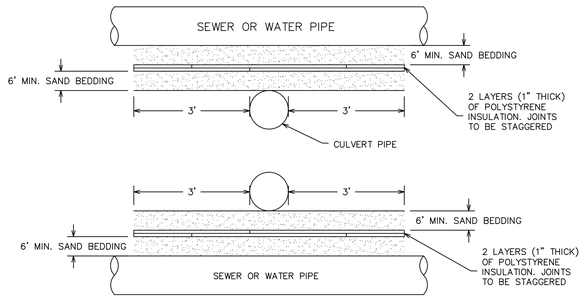
SEWER PIPE TRENCH DETAIL
FORCE MAIN TRENCH DETAIL
SCALE: NTS

TRENCH TO BE SUPPORTED BY SLOPING BACK AT 2:1 OR OTHER ACCEPTABLE METHOD.

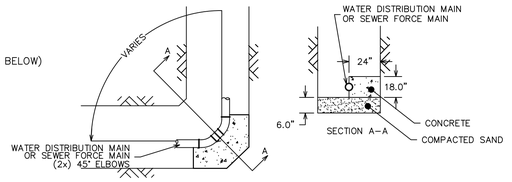
CLAY BARRIERS (12" THICK, APPROX. 100' INTERVALS) ALONG THE PIPE BEDDING SHALL BE INSTALLED IN AREAS OF HIGH GROUNDWATER OR AS DIRECTED BY THE INSPECTING ENGINEER.



WATER SERVICE DETAIL
(NTS)



CULVERT CROSSING
(NTS)



THRUST BLOCK DETAIL
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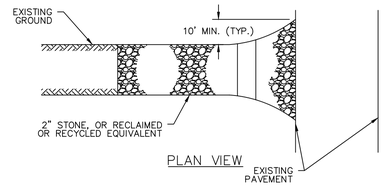
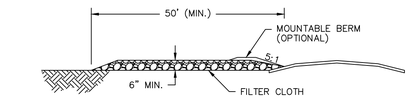


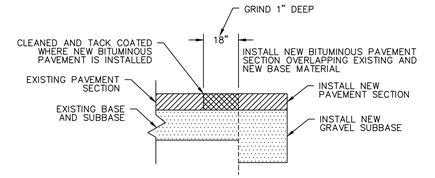
PLAN VIEW



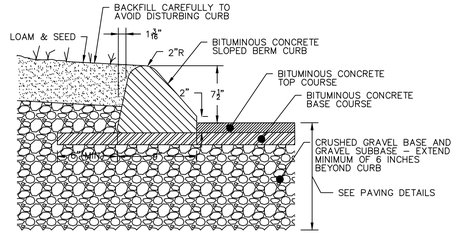
PROFILE

NOTES:
1. GEOTEXTILE: PLACE FILTER CLOTH OVER ENTIRE AREA TO BE COVERED WITH AGGREGATE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENTIAL LOT.
2. PIPING OF SURFACE WATER UNDER ENTRANCE SHALL BE PROVIDED AS REQUIRED. IF PIPING IS IMOSSIBLE, A MOUNTABLE BERM WITH A 5:1 SLOPE WILL BE PERMITTED.

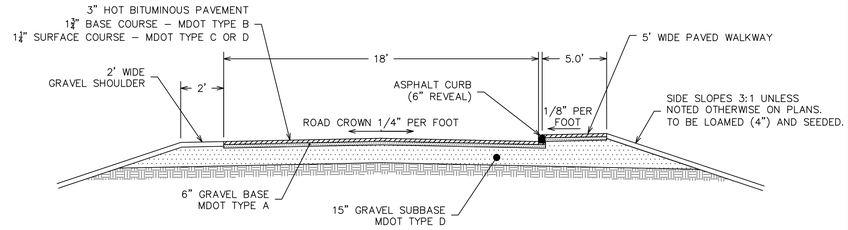
STABILIZED CONSTRUCTION ENTRANCE



PAVEMENT JOINT CROSS SECTION
NEW PAVEMENT ABUTTING EXISTING PAVEMENT

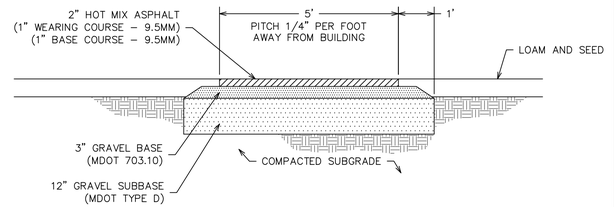


BITUMINOUS CONCRETE CURB



ROAD CROSS SECTION
(SIDEWALK ONE SIDE - ADJACENT TO ROAD)
SCALE: (NTS)

GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR



ASPHALT SIDEWALK DETAIL
(NTS)

GRAVEL FILL TO BE COMPACTED TO 95% MODIFIED PROCTOR

GRAPHIC SCALE
0 30 60 90 120 (FEET)

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

KENNETH A. WOOD No. 5992 — STATE OF MAINE — LICENSED PROFESSIONAL ENGINEER

SITE DETAILS
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD - ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: AS NOTED	APPROVED BY:	DRAWN BY: MJS
DATE: 08/23/22		REVISION DATE: - : -
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 6

SOILS LEGEND

SYMBOL	SOIL SERIES NAME	HSG	SLOPES
AdB	ADAMS LOAMY SAND	A	0–8%
AlB	ALLAGASH VERY FINE SANDY LOAM	B	3–8%
MaB	MADAWASKA FINE SANDY LOAM	B	0–8%
PeB	PERU FINE SANDY LOAM	C	3–8%
SeC	SCIO SILT LOAM	C	8–15%
W	WATER BODIES	N/A	N/A

FLOW TYPES

SF SHEET FLOW
SCF SHALLOW CONCENTRATED FLOW
CF CHANNEL FLOW

NOTE: SOILS INFORMATION IS TAKEN FROM CUSTOM SOIL RESOURCE REPORT FOR YORK COUNTY, MAINE, MEDIUM INTENSITY, INFORMATION GATHERED FROM THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS). SURVEY AREA DATA IS VERSION 20, DATED 08/31/2021.

1S SUBCATCHMENT
1R REACH
1P POND (LEVEL SPREADER)
AP1 ANALYSIS POINT

LEGEND

PROPERTY LINE
EXT. ABUTTER LINE
EXT. GRAVEL
EXT. PAVEMENT
EXT. BUILDING
EXT. BLDG. TO BE DEMO'D
EXT. MAJOR CONTOUR XXX
EXT. MINOR CONTOUR XXX
EXT. TREELINE
EXT. TREE >24" DBH DECIDUOUS CONIFEROUS
EXT. SUBCATCHMENT
EXT. Tc FLOW LINE
EXT. Tc GRADE CALC SF=XXX' X.XX%
SOIL TYPE BOUNDARY

GRID

GRAPHIC SCALE
0 50 100 150 200 (FEET)

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

KENNETH A WOOD No. 5992 STATE OF MAINE LICENSED PROFESSIONAL ENGINEER

STORMWATER: EXISTING CONDITIONS
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD – ELIOT, MAINE 03903
PHONE: (207)439–6023 FAX: (207)439–2128

SCALE: 1" = 50'	APPROVED BY:	DRAWN BY: MJS
DATE: 08/23/22		REVISION DATE: – : –
JOB NO: C174–21	FILE: MAIN ST REV BASE.DWG	SHEET: 7

Clover Farm Subdivision - Existing Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.75	2.31	3.83	5.22
AP2	2.76	11.35	20.61	29.31

Clover Farm Subdivision - Developed Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.07	0.20	0.32	0.44
AP2	2.26	8.22	14.61	20.87

Clover Farm Subdivision - Change in Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	-0.68	-2.11	-3.51	-4.78
AP2	-0.50	-3.13	-6.00	-8.44

Rainfall Event Totals (in.)	
2-Year	3.30
10-Year	4.90
25-Year	6.20
50-Year	7.30

SOILS LEGEND

SYMBOL	SOIL SERIES NAME	HSG	SLOPES
AdB	ADAMS LOAMY SAND	A	0–8%
AlB	ALLAGASH VERY FINE SANDY LOAM	B	3–8%
MaB	MADAWASKA FINE SANDY LOAM	B	0–8%
PeB	PERU FINE SANDY LOAM	B	3–8%
SeC	SCIO SILT LOAM	C	8–15%
W	WATER BODIES	N/A	N/A

FLOW TYPES

SF SHEET FLOW
SCF SHALLOW CONCENTRATED FLOW
CF CHANNEL FLOW

NOTE: SOILS INFORMATION IS TAKEN FROM CUSTOM SOIL RESOURCE REPORT FOR YORK COUNTY, MAINE, MEDIUM INTENSITY, INFORMATION GATHERED FROM THE NATIONAL RESOURCES CONSERVATION SERVICE (NRCS). SURVEY AREA DATA IS VERSION 20, DATED 08/31/2021.

1S SUBCATCHMENT
1R REACH
1P POND (LEVEL SPREADER)
AP1 ANALYSIS POINT

LEGEND

PROPERTY LINE
EXT. ABUTTER LINE
EXT. GRAVEL
EXT. PAVEMENT
EXT. PAVEMENT
PRP. GRAVEL
EXT. BUILDING
PRP. BUILDING
PRP. STORM LINE
PRP. RIP RAP
EXT. MAJOR CONTOUR
EXT. MINOR CONTOUR
PRP. MAJOR CONTOUR
PRP. MINOR CONTOUR
PRP. SPOT GRADE
EXT. TREELINE
EXT. TREE >24" DBH
PRP. VEG. SCREENING
PRP. SUBCATCHMENT
PRP. Tc FLOW LINE
PRP. Tc GRADE CALC
SOIL TYPE BOUNDARY
PRP. SILTATION FENCE

GRAPHIC SCALE
0 50 100 150 200 (FEET)

TAX MAP 6, LOT 43, 44, & 154

NO.	DESCRIPTION	DATE
	REVISIONS	

STATE OF MAINE
KENNETH A WOOD
No. 5992
LICENSED PROFESSIONAL ENGINEER

STORMWATER: DEVELOPED CONDITIONS
CLOVER FARM SUBDIVISION
MAIN STREET, ELIOT, MAINE

FOR: MARK MCNALLY BUILDING MAINTENANCE, LLC.
1381 ELWYN ROAD
PORTSMOUTH, NH 03801

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD – ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE:	APPROVED BY:	DRAWN BY:
1" = 50'		MJS
DATE:		REVISION DATE:
08/23/22		– : –
JOB NO: C174-21	FILE: MAIN ST REV BASE.DWG	SHEET: 8

ATTAR
ENGINEERING, INC
CIVIL STRUCTURAL MARINE

Ms. Alison Sirois, Regional Manager, Southern Maine
Bureau of Land Resources
Maine Department of Environmental Protection, Portland Office

September 13th, 2022
Project No. C174-21

RE: Stormwater PBR Application
Clover Farm Subdivision (Tax Map 6, Lots 43, 44, & 154)
771 & 787 Main Street, Eliot, Maine

Dear Ms. Sirois:

On behalf of Mark McNally Building Maintenance, LLC., LJE Development, LLC., and Jesse Realty, LLC., I have enclosed for your review and consideration a Stormwater Permit-by-Rule (PBR) Application and associated documents for the above-referenced project.

The Applicants proposed to develop the collected subject parcels into an 8-lot conventional residential subdivision. The development shall be serviced by municipal water, municipal sewer, and underground electric. A ~750 linear foot travelway designed to Minor Road standards is proposed to access all 8 lots, and said travelway includes asphalt curb and an asphalt sidewalk. Stormwater shall be managed by a series of roadside vegetated swales, driveway culverted crossings, and a single detention pond that daylights to a level spreader before flowing into an existing natural swale on the southern edge of the property that feeds into the Piscataqua River.

Thank you for your time and consideration, please contact me for any additional information or clarifications required.

Sincerely;

Michael J. Sudak, E.I.
Staff Engineer

cc: Mark McNally Building Maintenance, LLC., LJE Development, LLC., Jesse Realty, LLC.
C174-21 Cover MDEP 13Sep2022

STORMWATER PBR APPLICATION FORM

[1] **Name of Applicant:** Mark McNally Building Maintenance, LLC.	[5] **Name of Agent:** Attar Engineering, Inc.
[2] **Applicant's Mailing Address:** 1381 Elwyn Road, Portsmouth NH 03801	[6] **Agent's Mailing Address:** 1284 State Road, Eliot ME 03903
[3] **Applicant's Daytime Phone:** 603.498.3837	[7] **Agent's Daytime Phone:** 027.439.6023
[4] **Applicant's Email Address:** markmcnally36@gmail.com	[8] **Agent's Email Address:** mike@attarengineering.com

[9] **Location of Project: (Road, Street, Rt.)**	[10] **Location Town:**	[11] **Location County:**
771/787 Main Street	Eliot	York

[12] **Is this PBR for renewal of an individual Stormwater permit or Stormwater Permit-by-Rule?** ☐ Yes ☑ No

Is this PBR for transfer of a Stormwater Permit-by-Rule? ☐ Yes ☑ No

If Yes, DEP Permit Number: _____ **Prior Project Manager (if known):** _____

NOTE: If either box is checked Yes, skip to Box 30B below.

[13] **Type of Direct Watershed: (Check all that apply.)**	[14] **Amount of Developed Area:**
☐ Lake not most at risk ☐ Lake most at risk ☐ Lake most at risk, severely blooming ☑ River, stream or brook ☐ Urban impaired stream ☐ Freshwater wetland ☐ Coastal wetland ☐ Wellhead of public water supply	Total 3.32 acres **OR** Total 144,550 SF [15] **Amount of Impervious Area:** Total 0.76 acres **OR** Total 33,192 SF [16] **Amount of Occupied Area:** Total N/A acres

[17] **Part of a Subdivision?** ☑ Yes ☐ No	[18] **Is this Activity Part of a Larger Project?** ☐ Yes ☑ No
[19] **Name of Waterbody(ies) Drained to:** Piscataqua River	[20] **Name of Impaired Waterbody (if applicable)**

[21] **Brief Project Description:**
Development of subject parcels into 8-lot conventional residential subdivision

[22] **Size of Lot or Parcel:**	**UTM Northing, if known:**	**UTM Easting, if known:**
Total 10.95 acres **OR** Total _____ SF	101306.7948'	2787608.6906'

[23] **Deed Reference Numbers:** Book: 18327 Page: 751	[24] **Map and Lot Numbers:** Map: 6	Lot: 43, 44, & 154
[25] **DEP Staff Previously Contacted:**	[26] **Project started prior to Application?** ☐ Yes ☑ No	**If yes, Completed?** ☐ Yes ☐ No

[27] **Resubmission of PBR Application?** ☑ No ☐ Yes→	**If Yes, Prior Application Number:**	**Prior Project Manager:**
[28] **Written Notice of Violation?** ☑ No ☐ Yes→	**If Yes, Name of DEP Enforcement Staff Involved:**	

[29] **Detailed Directions to the Project Site:**
Exit 2 off I-95, turn onto ME-236N, 1.3mi turn left onto Bolt Hill Road, 1.5mi turn right onto Main Street, site is 0.3mi on left

SUBMISSIONS

[30A] **For a new Stormwater PBR:**		[30B] **For renewal of an individual Stormwater permit or Stormwater PBR and/or transfer of a Stormwater PBR:**
☑ This Form (signed and dated)	☑ Photos of Area	☐ This Form (signed and dated)
☑ Fee	☑ ESC Plan	☐ Copy of original Stormwater permit or PBR
☐ Dept. of Inland Fisheries & Wildlife Approval (if in Essential Habitat)	☑ Location Map ☑ Site Plan	☐ Fee ☐ For a transfer: A copy of the deed, lease, purchase option or other evidence of applicant's title, right or interest in project site, and proof of legal name if the applicant is a corporation or other legal entity.

FEE: Pay by credit card at the Payment Portal. The SW Permit-by-Rule fee may be found here: https://www.maine.gov/dep/feeschedule.pdf.

☑ **Attach payment confirmation from the Payment Portal when filing this notification form.**

STORMWATER PBR APPLICATION FORM

CERTIFICATION / SIGNATURE for NEW STORMWATER PBR or RENEWAL

Applicant Statement:

I am applying for a Stormwater PBR or permit renewal and have attached the required submissions. I have read the requirements and I affirm that my project satisfies the applicable stormwater management standards. I authorize staff of State and Federal agencies having jurisdiction over this activity to access the project site for the purpose of determining compliance with the rules.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature (may be typed): Michael J. Sudak Title: Applicant's Engineer Date: 9/13/22

Print or Type Name: Michael J. Sudak, E.I., Attar Engineering, Inc.

CERTIFICATION / SIGNATURES for TRANSFER of a STORMWATER PBR

Current Permittee Statement: By signing below, the current permittee certifies that they agree to the transfer of the Stormwater PBR identified on this application form to the applicant named on this form.

Signature (may be typed): _____ Title: _____ Date: _____

Print or Type Name: _____

Applicant Statement: By signing below the applicant certifies that they have received, read, and understand and will comply with the Stormwater PBR being transferred.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Signature (may be typed): _____ Title: _____ Date: _____

Print or Type Name: _____

NOTICE OF INTENT TO COMPLY with the MAINE CONSTRUCTION GENERAL PERMIT
(Must be Completed by All Applicants)

Applicant Statement: With this Stormwater PBR form and my signature below, I am filing notice of my intent to carry out work that meets the requirements of the Maine Construction General Permit (MCGP). I have read and will comply with all of the MCGP standards. In addition, I will file a Notice of Termination (NOT) within 20 days of project completion.

If this form is not being signed by the landowner or lessee of the property, attach documentation showing authorization to sign. *If typing your signature below, you are agreeing to and acknowledging the above information is true.*

Signature (may be typed): Michael J. Sudak Title: Applicant's Engineer Date: 9/13/22

Print or Type Name: Michael J. Sudak, E.I., Attar Engineering, Inc.

Sta: 0+50 looking east towards Main Street

Sta: 2+00 looking west towards treeline

Sta: 0+50 looking west into development

Sta: 5+00 looking west towards river

Sta: 5+00 looking east towards entrance

Proposed Stormwater Detention area

TP #MC1 & cul-de-sac radius point

End of Impervious looking west towards river

ATTAR
ENGINEERING, INC
CIVIL STRUCTURAL MARINE

STORMWATER MANAGEMENT PLAN
CLOVER FARM SUBDIVISION
771/787 MAIN STREET, ELIOT, MAINE

Project No.: C174-21 August 23rd, 2022

- **Scope**

This stormwater management plan has been prepared for a Major Subdivision development, consisting of eight (8) conventional residential lots. The site in its current state consists of grassed upland, forested upland, an existing structure (Clover Farm Barn) and a building currently being constructed subject to its own Building and Growth Permits.

The project is designed to meet the stormwater management requirements outlined in Section 45-411 (Stormwater Runoff) and Chapter 35 (Post-Construction Stormwater Management) of the Town of Eliot Municipal Code of Ordinances.

This project is subject to the following permits as per the Maine Department of Environmental Protection (MDEP) Chapter 500 – a Stormwater Permit-by-Rule (PBR) for management of stormwater runoff for a development proposing less than one acre of impervious.

- **Site and Watershed Description**

The project site is located in the Village district, with frontage on both Main Street and the Piscataqua River. A 7½-minute series USGS map of the project area is attached. As noted above, the site is largely undeveloped, with no on-site wetlands and an unstable coastal bluff that the development maintains the appropriate 75' setback from.

The site is located in the Piscataqua River watershed (source: EPA National Hydrography Dataset Watershed Report). The site drains in a southwesterly direction towards the riverfront.

The topography of the site is gently-sloped, with the entire collection of parcels draining from east to west/southwest. The grassed upland and forested upland slope with existing grades ranging from 2% to 6%. The riverfront bluff has slopes in the 25-35% range but these slopes are limited to within 30 feet of the river. On-site elevations range from approximately 56' at the northern corner of the property near the Clover Farm Barn to the Piscataqua River, with an interpreted highest annual tide elevation of 8.3'.

There are no areas located within the 100-Year Special Flood Hazard Area as determined by the Federal Emergency Management Agency (FEMA).

Proposed cuts and fills are moderate, ranging from 0 to 4 feet, with the largest fill being at the down-slope side of the proposed cul-de-sac.

- **Soils/Hydrologic Soil Groups**

Soil types and their respective Hydrologic Soil Groups (HSG) were determined by a Medium Intensity Soil Survey. A listing of the soils types can be found on the existing and developed stormwater management plans that accompany this report. Drainage classes range from Somewhat Excessively Drained to Moderately Well Drained.

♦ **Methodology**

The stormwater quantity analysis was conducted using the HydroCAD Stormwater Modeling System by Applied Microcomputer Systems. The analysis was accomplished to determine the "Existing Condition" and "Developed Condition" stormwater flows. Both cases were analyzed for the 2, 10, 25 and 50 year, 24-hour frequency storm events. The Existing Condition analyzes the site as it currently exists and the Developed Condition models the site with the proposed improvements described above.

♦ **Water Quantity Analysis and Results**

Existing Condition

The site will be modelled as undeveloped with two analysis points: AP1 being the roadside drainage that runs from north to south along Main Street, and AP2 being the parcel's frontage along the Piscataqua River.

Developed Condition

The Developed Condition analysis addresses the improvements consisting of the proposed travelway, cul-de-sac, and dwellings and their respective driveways. The same analysis points are used for comparison of peak discharges for all storm events. Vegetated roadside swales along the proposed travelway drain into a single detention pond, which is proposed to be constructed to collect surface runoff from the entire travelway and a majority of the proposed impervious. This detention pond shall daylight to a level spreader to reintroduce sheet flow to the downstream natural swale which is received by the river. All Developed Condition flows are routed to AP1 & AP2 as described above.

Tables showing Existing Condition peak flows, Developed Condition peak flows and the change in peak flow from Existing Condition to Developed Condition are presented on a separate page.

The analysis indicates decreases in peak flow at AP1 & AP2 in all storm events, resulting in no anticipated adverse effects on abutters or existing downstream systems due to water quantity. The level lip spreader discharges the stored stormwater to the on-site existing swale along the southern property line.

♦ **Water Quality**

The project is designed with several Low Impact Development (LID) design practices to minimize adverse effects on water quality. The practices are summarized as follows and are further described in the MDEP publication "Maine Stormwater Best Management Practices Manual – Volume 1, Chapter 3: Low Impact Development".

- Impervious areas are minimized. The proposed travelway and driveways are designed with the minimum amount of impervious area.
- Detention ponds are utilized. Runoff from the proposed development will be collected and retained within the detention basin, which will provide some treatment of pollutants such as suspended solids and hydrocarbons prior to discharge from the site.
- Level Spreaders and Vegetated Swales are utilized. Stormwater flow from the detention pond will be routed through a level spreader and undisturbed buffer prior to discharge from the site.

♦ **Summary**

The use of vegetated swales, level lip spreaders and a detention basin to attenuate peak flows results in no increase in peak runoff quantity from the proposed development. No adverse effects are anticipated on any of the surrounding properties downstream properties or drainage structures for the analyzed storm events. Runoff quality is addressed by the use of several LID design practices, as described above.

Sincerely;

Michael J. Sudak, E.I.
Staff Engineer

C174-21_SW

ATTAR
ENGINEERING, INC
CIVIL • STRUCTURAL • MARINE

OPERATION AND MAINTENANCE PROGRAM
STORMWATER MANAGEMENT BMP's
CLOVER FARM SUBDIVISION
771/787 MAIN STREET, ELIOT, MAINE

Project No.: C174-21 August 23rd, 2022

This project contains specific Best Management Practices (BMP's) for the conveyance, storage, and treatment of stormwater and the prevention of erosion. These BMP's consist of detention ponds and level lip spreaders. All components should be inspected quarterly, and after every significant rain event of 1" in any 24-hour period. Additional inspection intervals are specified for certain BMP's, specifically, underdrained soil filters.

The party responsible for implementing this Operation and Maintenance Program (O & M Program) shall be the property owner.

Stormwater Detention Areas
The Stormwater Detention Areas shall be inspected to ensure that there is no channeling of stormwater and that no debris accumulates within the detention areas. The vegetative cover conditions shall be maintained. The inlets and outlets shall be inspected for erosion and any evidence of debris that could clog the culverts. Emergency spillways and level spreaders shall be inspected for any evidence of rilling and channeling and shall be maintained to promote a level, sheet-flow discharge.

Swales
All swales should be inspected for accumulation of debris, which could adversely affect the function of this BMP. These areas should also be maintained to have gradual slopes, which prevent channeling of stormwater and erosion of the bottom and sides of the swales.

Culverts
Culvert inlets and outlets should be inspected for debris, which could clog the BMP. Additionally, the placement of rip-rap should be inspected to ensure that all areas remain smooth and no areas exhibit erosion in the form of rills or gullies.

Seeding, Fertilizing and Mulching
All exposed soil materials and stockpiles must be either temporarily or permanently seeded, fertilized and mulched in accordance with plan specifications. This is one of the most important features of the Erosion Control Plan, which will provide both temporary and permanent stabilization. Eroded or damaged lawn areas must be repaired until a 75% effective growth of vegetation is established and permanently maintained.

Snow Removal
Snow shall be stockpiled only in approved snow storage areas. Plowing of snow into wetland areas, swales, or level lip spreaders shall be avoided. Additionally, a mostly sand mix (reduced salt) shall be applied during winter months to prevent excessive salt from leaching into wetland areas. Excess sand shall be removed from the storage areas, all gravel surfaces and adjacent areas each spring.

Record Keeping (During Construction)
The construction inspector shall maintain documentation of all inspections as well as maintenance or corrective actions that were taken in response to the inspection. This documentation shall be maintained for at least three years after the site is permanently stabilized. The scope of construction inspections shall include, but not be limited to, the inspection of the sediment and erosion control measures as well as material storage areas and all points at which vehicles access the site.

Record Keeping (Post Construction)
Routine maintenance and inspections will be accomplished by the owner or a third party contracted by the owner. The inspector shall have knowledge of erosion and stormwater control, including the standards and conditions of the permit. All inspections accomplished in accordance with this program shall be documented on the attached Inspection & Maintenance Log. Copies of the Log shall be kept by the property owner or owner's representative, and be made available to the Department (Maine Department of Environmental Protection) or Town of Eliot, upon request.

All post-construction documentation, such as inspection and cleaning logs shall be maintained for at least five years.

Additional responsibilities to include, on or by July 1 of each year, providing a completed and signed certification to the Code Enforcement Officer in a form provided by the Town, if requested, certifying that the person has inspected the stormwater management facilities and that they are adequately maintained and functioning as intended by the stormwater management plan, or that they require maintenance or repair, describing any required maintenance and any deficiencies found during inspection of the stormwater management facilities and, if the stormwater management facilities require maintenance or repair of deficiencies in order to function as intended by the approved stormwater management plan, the person must provide a record of the required maintenance or deficiency and corrective action(s) taken.

Re-certification (as noted in Appendix B. of Chapter 500 Stormwater Management)
Submit a certification of the following to the Department within three months of the expiration of each five-year interval from the date of issuance of the permit noting the following;

(a) **Identification and repair of erosion problems**. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.

(b) **Inspection and repair of stormwater control system**. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

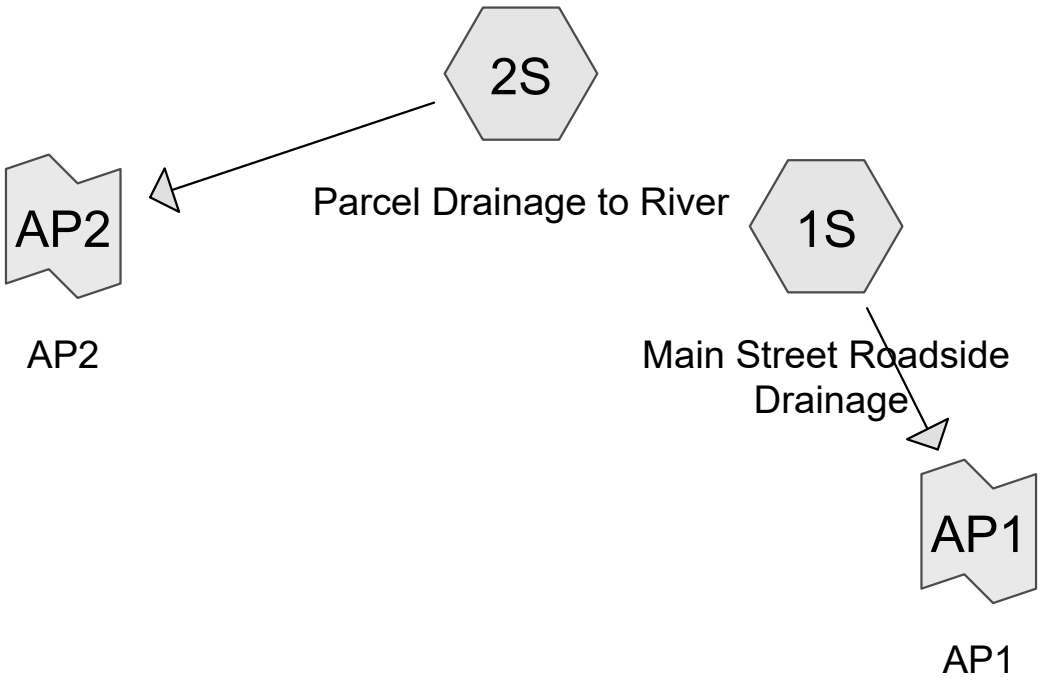
(c) **Maintenance**. The erosion and stormwater maintenance plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the Department, and the maintenance log is being maintained.

Municipalities with separate storm sewer systems regulated under the Maine Pollutant Discharge Elimination System (MPDES) Program may report on all regulated systems under their control as part of their required annual reporting in lieu of separate certification of each system. Municipalities not regulated by the MPDES Program, but that are responsible for maintenance of permitted stormwater systems, may report on multiple stormwater systems in one report.

INSPECTION & MAINTENANCE LOG
CLOVER FARM SUBDIVISION

Date	Purpose[1]	Maintenance Done[2]	By

1. Purpose is the reason for the inspection. For example; “quarterly’ or “after a significant rain event.”
2. Maintenance Done means any maintenance required as a result of the inspection, such as trash removal or re-seeding of areas.



Subcat Reach Pond Link

Routing Diagram for CFS SWA EXT

Prepared by {enter your company name here}, Printed 8/23/2022

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.648	39	>75% Grass cover, Good, HSG A (1S, 2S)
6.304	61	>75% Grass cover, Good, HSG B (1S, 2S)
0.060	74	>75% Grass cover, Good, HSG C (1S, 2S)
0.307	98	Paved parking, HSG A (1S, 2S)
0.311	98	Paved parking, HSG B (1S, 2S)
0.018	98	Paved parking, HSG C (1S)
0.054	98	Unconnected roofs, HSG A (2S)
0.345	98	Unconnected roofs, HSG B (1S, 2S)
0.023	98	Unconnected roofs, HSG C (2S)
0.443	36	Woods, Fair, HSG A (2S)
5.249	60	Woods, Fair, HSG B (2S)
0.122	73	Woods, Fair, HSG C (2S)
14.884	**60**	**TOTAL AREA**

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>0.54"
Flow Length=328' Tc=7.3 min CN=64 Runoff=0.75 cfs 0.066 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>0.35"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=2.76 cfs 0.397 af

Link AP1: AP1 Inflow=0.75 cfs 0.066 af
Primary=0.75 cfs 0.066 af

Link AP2: AP2 Inflow=2.76 cfs 0.397 af
Primary=2.76 cfs 0.397 af

Total Runoff Area = 14.884 ac Runoff Volume = 0.463 af Average Runoff Depth = 0.37"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>1.38"
Flow Length=328' Tc=7.3 min CN=64 Runoff=2.31 cfs 0.169 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>1.05"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=11.35 cfs 1.178 af

Link AP1: AP1 Inflow=2.31 cfs 0.169 af
Primary=2.31 cfs 0.169 af

Link AP2: AP2 Inflow=11.35 cfs 1.178 af
Primary=11.35 cfs 1.178 af

Total Runoff Area = 14.884 ac Runoff Volume = 1.347 af Average Runoff Depth = 1.09"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>2.21"
Flow Length=328' Tc=7.3 min CN=64 Runoff=3.83 cfs 0.271 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>1.78"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=20.61 cfs 1.993 af

Link AP1: AP1 Inflow=3.83 cfs 0.271 af
Primary=3.83 cfs 0.271 af

Link AP2: AP2 Inflow=20.61 cfs 1.993 af
Primary=20.61 cfs 1.993 af

Total Runoff Area = 14.884 ac Runoff Volume = 2.265 af Average Runoff Depth = 1.83"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=64,185 sf 15.29% Impervious Runoff Depth>2.98"
Flow Length=328' Tc=7.3 min CN=64 Runoff=5.22 cfs 0.366 af

Subcatchment 2S: Parcel Drainage to River Runoff Area=584,143 sf 6.20% Impervious Runoff Depth>2.48"
Flow Length=1,095' Tc=17.4 min UI Adjusted CN=59 Runoff=29.31 cfs 2.771 af

Link AP1: AP1 Inflow=5.22 cfs 0.366 af
Primary=5.22 cfs 0.366 af

Link AP2: AP2 Inflow=29.31 cfs 2.771 af
Primary=29.31 cfs 2.771 af

Total Runoff Area = 14.884 ac Runoff Volume = 3.138 af Average Runoff Depth = 2.53"
92.90% Pervious = 13.826 ac 7.10% Impervious = 1.057 ac

Summary for Subcatchment 1S: Main Street Roadside Drainage

Runoff = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af, Depth> 2.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
1,746	98	Paved parking, HSG A
7,453	39	>75% Grass cover, Good, HSG A
790	98	Paved parking, HSG C
1,915	74	>75% Grass cover, Good, HSG C
1,564	98	Unconnected roofs, HSG B
5,713	98	Paved parking, HSG B
45,004	61	>75% Grass cover, Good, HSG B
64,185	64	Weighted Average
54,372		84.71% Pervious Area
9,813		15.29% Impervious Area
1,564		15.94% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.2	50	0.0800	0.26		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.1	20	0.0200	2.87		**Shallow Concentrated Flow, SCF 1** Paved Kv= 20.3 fps
4.0	258	0.0232	1.07		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
7.3	328	Total			

Summary for Subcatchment 2S: Parcel Drainage to River

Runoff = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af, Depth> 2.48"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
981	98		Unconnected roofs, HSG C
708	74		>75% Grass cover, Good, HSG C
5,295	73		Woods, Fair, HSG C
2,354	98		Unconnected roofs, HSG A
11,607	98		Paved parking, HSG A
64,352	39		>75% Grass cover, Good, HSG A
19,288	36		Woods, Fair, HSG A
13,483	98		Unconnected roofs, HSG B
7,820	98		Paved parking, HSG B
228,644	60		Woods, Fair, HSG B
229,611	61		>75% Grass cover, Good, HSG B
584,143	60	59	Weighted Average, UI Adjusted
547,898			93.80% Pervious Area
36,245			6.20% Impervious Area
16,818			46.40% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.4	50	0.0700	0.25		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
13.7	975	0.0287	1.19		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.3	70	0.2850	3.74		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
17.4	1,095	Total			

Summary for Link AP1: AP1

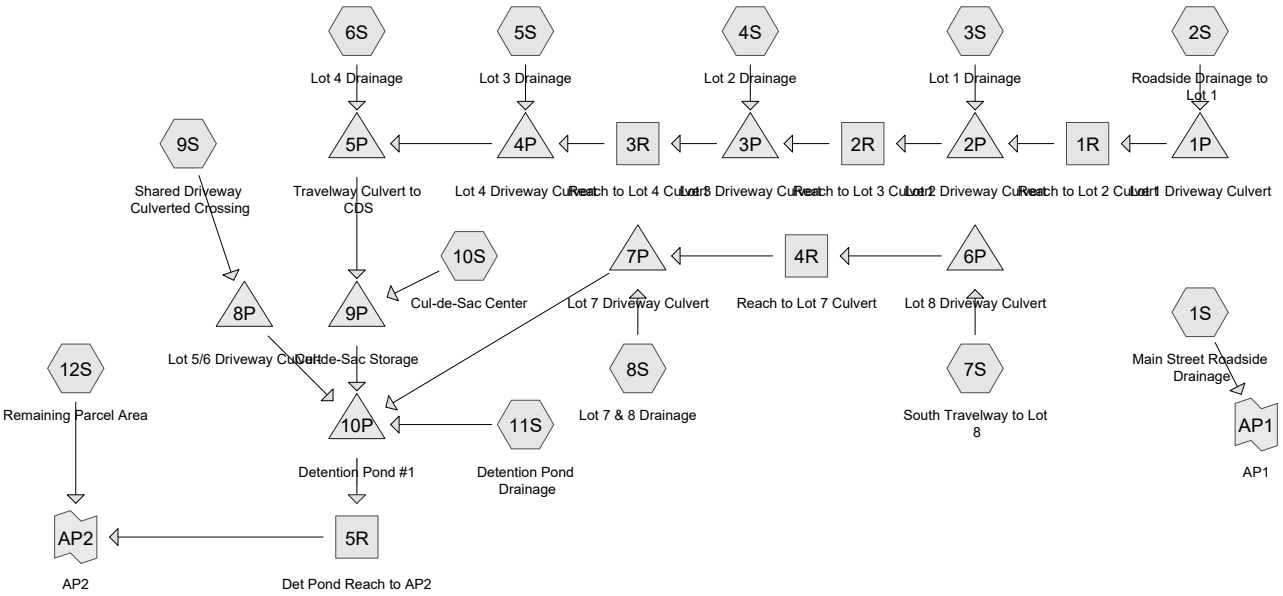
Inflow Area = 1.473 ac, 15.29% Impervious, Inflow Depth > 2.98" for 50 YEAR STORM event
Inflow = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af
Primary = 5.22 cfs @ 12.11 hrs, Volume= 0.366 af, Atten= 0%, Lag= 0.0 min

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

Summary for Link AP2: AP2

Inflow Area = 13.410 ac, 6.20% Impervious, Inflow Depth > 2.48" for 50 YEAR STORM event
Inflow = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af
Primary = 29.31 cfs @ 12.26 hrs, Volume= 2.771 af, Atten= 0%, Lag= 0.0 min

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



Subcat Reach Pond Link

Routing Diagram for CFS SWA DEV

Prepared by {enter your company name here}, Printed 8/23/2022

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.809	39	>75% Grass cover, Good, HSG A (2S, 3S, 5S, 6S, 12S)
5.505	61	>75% Grass cover, Good, HSG B (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S)
0.060	74	>75% Grass cover, Good, HSG C (2S, 5S)
0.141	98	Paved parking, HSG A (5S, 12S)
1.317	98	Paved parking, HSG B (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S)
0.018	98	Paved parking, HSG C (2S)
0.059	98	Unconnected roofs, HSG A (4S, 5S, 12S)
0.747	98	Unconnected roofs, HSG B (2S, 4S, 5S, 6S, 8S, 12S)
0.023	98	Unconnected roofs, HSG C (5S)
0.443	36	Woods, Fair, HSG A (5S, 6S)
4.640	60	Woods, Fair, HSG B (4S, 5S, 6S, 7S, 8S, 11S, 12S)
0.122	73	Woods, Fair, HSG C (12S)
14.884	**63**	**TOTAL AREA**

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>0.54"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.07 cfs 0.005 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>0.50"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=0.32 cfs 0.034 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>0.58"
Flow Length=217' Tc=6.4 min CN=65 Runoff=0.40 cfs 0.032 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>0.75"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=0.55 cfs 0.039 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>0.10"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=0.05 cfs 0.022 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>0.80"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=0.43 cfs 0.041 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>0.80"
Flow Length=282' Tc=7.5 min CN=70 Runoff=0.35 cfs 0.026 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>0.75"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=0.78 cfs 0.062 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>1.24"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.15 cfs 0.010 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>1.80"
Flow Length=54' Tc=0.7 min CN=86 Runoff=0.53 cfs 0.031 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>1.06"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.30 cfs 0.019 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>0.46"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=2.26 cfs 0.288 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.24' Max Vel=0.41 fps Inflow=0.30 cfs 0.033 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=0.28 cfs 0.033 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.25' Max Vel=0.66 fps Inflow=0.46 cfs 0.065 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=0.45 cfs 0.064 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.41' Max Vel=0.48 fps Inflow=0.66 cfs 0.104 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=0.64 cfs 0.103 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.20' Max Vel=0.46 fps Inflow=0.34 cfs 0.026 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=0.24 cfs 0.026 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.21' Max Vel=0.27 fps Inflow=1.42 cfs 0.292 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=1.30 cfs 0.280 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.06' Storage=73 cf Inflow=0.32 cfs 0.034 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.30 cfs 0.033 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=48.64' Storage=56 cf Inflow=0.46 cfs 0.065 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.46 cfs 0.065 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=42.72' Storage=57 cf Inflow=0.66 cfs 0.104 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.66 cfs 0.104 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=40.72' Storage=249 cf Inflow=0.66 cfs 0.124 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.65 cfs 0.123 af

Pond 5P: Travelway Culvert to CDS Peak Elev=39.01' Storage=163 cf Inflow=0.92 cfs 0.164 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=0.91 cfs 0.164 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.33' Storage=31 cf Inflow=0.35 cfs 0.026 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.34 cfs 0.026 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=38.53' Storage=72 cf Inflow=0.80 cfs 0.088 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.79 cfs 0.088 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.18' Storage=79 cf Inflow=0.15 cfs 0.010 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.10 cfs 0.010 af

Pond 9P: Cul-de-Sac Storage Peak Elev=38.03' Storage=557 cf Inflow=1.00 cfs 0.195 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=0.96 cfs 0.192 af

Pond 10P: Detention Pond #1 Peak Elev=36.31' Storage=1,697 cf Inflow=1.68 cfs 0.308 af
Primary=1.42 cfs 0.292 af Secondary=0.00 cfs 0.000 af Outflow=1.42 cfs 0.292 af

Link AP1: AP1 Inflow=0.07 cfs 0.005 af
Primary=0.07 cfs 0.005 af

Link AP2: AP2 Inflow=2.26 cfs 0.567 af
Primary=2.26 cfs 0.567 af

Total Runoff Area = 14.884 ac Runoff Volume = 0.610 af Average Runoff Depth = 0.49"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>1.38"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.20 cfs 0.012 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>1.31"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=1.03 cfs 0.089 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>1.45"
Flow Length=217' Tc=6.4 min CN=65 Runoff=1.14 cfs 0.080 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>1.73"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=1.35 cfs 0.090 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>0.52"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=0.84 cfs 0.112 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>1.80"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=1.05 cfs 0.093 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>1.80"
Flow Length=282' Tc=7.5 min CN=70 Runoff=0.84 cfs 0.060 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>1.73"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=1.95 cfs 0.142 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>2.45"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.30 cfs 0.020 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>3.18"
Flow Length=54' Tc=0.7 min CN=86 Runoff=0.92 cfs 0.055 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>2.20"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.64 cfs 0.040 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>1.24"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=7.56 cfs 0.779 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.46' Max Vel=0.59 fps Inflow=0.96 cfs 0.088 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=0.91 cfs 0.088 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.46' Max Vel=0.93 fps Inflow=1.45 cfs 0.168 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=1.43 cfs 0.167 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.74' Max Vel=0.67 fps Inflow=2.09 cfs 0.257 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=2.06 cfs 0.256 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.34' Max Vel=0.61 fps Inflow=0.81 cfs 0.060 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=0.63 cfs 0.059 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.41' Max Vel=0.40 fps Inflow=4.14 cfs 0.750 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=4.00 cfs 0.731 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.34' Storage=195 cf Inflow=1.03 cfs 0.089 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.96 cfs 0.088 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.01' Storage=144 cf Inflow=1.46 cfs 0.168 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.45 cfs 0.168 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=43.24' Storage=195 cf Inflow=2.11 cfs 0.257 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.09 cfs 0.257 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=41.48' Storage=1,118 cf Inflow=2.89 cfs 0.368 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.54 cfs 0.366 af

Pond 5P: Travelway Culvert to CDS Peak Elev=39.59' Storage=539 cf Inflow=3.20 cfs 0.459 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=3.18 cfs 0.458 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.54' Storage=66 cf Inflow=0.84 cfs 0.060 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.81 cfs 0.060 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=38.97' Storage=202 cf Inflow=2.11 cfs 0.201 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.05 cfs 0.201 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.27' Storage=127 cf Inflow=0.30 cfs 0.020 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.23 cfs 0.020 af

Pond 9P: Cul-de-Sac Storage Peak Elev=38.60' Storage=1,336 cf Inflow=3.35 cfs 0.513 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=3.23 cfs 0.508 af

Pond 10P: Detention Pond #1 Peak Elev=37.50' Storage=4,289 cf Inflow=4.95 cfs 0.768 af
Primary=4.14 cfs 0.750 af Secondary=0.00 cfs 0.000 af Outflow=4.14 cfs 0.750 af

Link AP1: AP1 Inflow=0.20 cfs 0.012 af
Primary=0.20 cfs 0.012 af

Link AP2: AP2 Inflow=8.22 cfs 1.510 af
Primary=8.22 cfs 1.510 af

Total Runoff Area = 14.884 ac Runoff Volume = 1.574 af Average Runoff Depth = 1.27"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>2.21"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.32 cfs 0.020 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>2.12"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=1.75 cfs 0.144 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>2.30"
Flow Length=217' Tc=6.4 min CN=65 Runoff=1.86 cfs 0.128 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>2.66"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=2.09 cfs 0.139 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>1.03"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=2.27 cfs 0.224 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>2.74"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=1.62 cfs 0.142 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>2.75"
Flow Length=282' Tc=7.5 min CN=70 Runoff=1.29 cfs 0.091 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>2.65"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=3.02 cfs 0.218 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>3.52"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.43 cfs 0.029 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>4.35"
Flow Length=54' Tc=0.7 min CN=86 Runoff=1.24 cfs 0.075 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>3.22"
Flow Length=95' Tc=3.9 min CN=75 Runoff=0.93 cfs 0.058 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>2.03"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=12.90 cfs 1.276 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.60' Max Vel=0.67 fps Inflow=1.60 cfs 0.143 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=1.54 cfs 0.142 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.59' Max Vel=1.07 fps Inflow=2.38 cfs 0.270 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=2.36 cfs 0.269 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=0.92' Max Vel=0.75 fps Inflow=3.30 cfs 0.407 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=3.28 cfs 0.405 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.44' Max Vel=0.70 fps Inflow=1.24 cfs 0.091 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=1.00 cfs 0.089 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.55' Max Vel=0.48 fps Inflow=7.34 cfs 1.210 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=6.66 cfs 1.187 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.56' Storage=328 cf Inflow=1.75 cfs 0.144 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.60 cfs 0.143 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.39' Storage=259 cf Inflow=2.42 cfs 0.270 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.38 cfs 0.270 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=43.97' Storage=561 cf Inflow=3.56 cfs 0.407 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.30 cfs 0.407 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=42.49' Storage=3,133 cf Inflow=5.22 cfs 0.629 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.93 cfs 0.627 af

Pond 5P: Travelway Culvert to CDS Peak Elev=40.14' Storage=1,064 cf Inflow=4.82 cfs 0.768 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=4.70 cfs 0.767 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.69' Storage=99 cf Inflow=1.29 cfs 0.091 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.24 cfs 0.091 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=39.48' Storage=474 cf Inflow=3.36 cfs 0.308 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.95 cfs 0.307 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.33' Storage=161 cf Inflow=0.43 cfs 0.029 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.34 cfs 0.029 af

Pond 9P: Cul-de-Sac Storage Peak Elev=39.13' Storage=2,176 cf Inflow=4.88 cfs 0.842 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=4.69 cfs 0.836 af

Pond 10P: Detention Pond #1 Peak Elev=37.66' Storage=4,699 cf Inflow=7.36 cfs 1.230 af
Primary=4.38 cfs 1.076 af Secondary=2.96 cfs 0.134 af Outflow=7.34 cfs 1.210 af

Link AP1: AP1 Inflow=0.32 cfs 0.020 af
Primary=0.32 cfs 0.020 af

Link AP2: AP2 Inflow=14.61 cfs 2.462 af
Primary=14.61 cfs 2.462 af

Total Runoff Area = 14.884 ac Runoff Volume = 2.543 af Average Runoff Depth = 2.05"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

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

Subcatchment 1S: Main Street Roadside Runoff Area=4,675 sf 9.09% Impervious Runoff Depth>2.99"
Flow Length=36' Slope=0.0550 '/' Tc=2.8 min CN=64 Runoff=0.44 cfs 0.027 af

Subcatchment 2S: Roadside Drainage to Runoff Area=35,380 sf 19.80% Impervious Runoff Depth>2.88"
Flow Length=298' Tc=11.8 min UI Adjusted CN=63 Runoff=2.41 cfs 0.195 af

Subcatchment 3S: Lot 1 Drainage Runoff Area=29,066 sf 18.87% Impervious Runoff Depth>3.09"
Flow Length=217' Tc=6.4 min CN=65 Runoff=2.52 cfs 0.172 af

Subcatchment 4S: Lot 2 Drainage Runoff Area=27,303 sf 27.16% Impervious Runoff Depth>3.50"
Flow Length=174' Tc=5.3 min UI Adjusted CN=69 Runoff=2.75 cfs 0.183 af

Subcatchment 5S: Lot 3 Drainage Runoff Area=113,293 sf 8.29% Impervious Runoff Depth>1.56"
Flow Length=557' Tc=11.5 min UI Adjusted CN=49 Runoff=3.76 cfs 0.339 af

Subcatchment 6S: Lot 4 Drainage Runoff Area=27,053 sf 29.90% Impervious Runoff Depth>3.59"
Flow Length=259' Tc=15.0 min UI Adjusted CN=70 Runoff=2.12 cfs 0.186 af

Subcatchment 7S: South Travelway to Lot Runoff Area=17,271 sf 24.89% Impervious Runoff Depth>3.60"
Flow Length=282' Tc=7.5 min CN=70 Runoff=1.69 cfs 0.119 af

Subcatchment 8S: Lot 7 & 8 Drainage Runoff Area=42,950 sf 26.46% Impervious Runoff Depth>3.49"
Flow Length=327' Tc=8.1 min UI Adjusted CN=69 Runoff=3.99 cfs 0.287 af

Subcatchment 9S: Shared Driveway Runoff Area=4,315 sf 47.11% Impervious Runoff Depth>4.46"
Flow Length=60' Slope=0.0300 '/' Tc=5.5 min CN=78 Runoff=0.54 cfs 0.037 af

Subcatchment 10S: Cul-de-Sac Center Runoff Area=9,075 sf 68.85% Impervious Runoff Depth>5.35"
Flow Length=54' Tc=0.7 min CN=86 Runoff=1.50 cfs 0.093 af

Subcatchment 11S: Detention Pond Runoff Area=9,487 sf 37.03% Impervious Runoff Depth>4.13"
Flow Length=95' Tc=3.9 min CN=75 Runoff=1.19 cfs 0.075 af

Subcatchment 12S: Remaining Parcel Runoff Area=328,460 sf 10.69% Impervious Runoff Depth>2.77"
Flow Length=918' Tc=19.2 min UI Adjusted CN=62 Runoff=17.86 cfs 1.742 af

Reach 1R: Reach to Lot 2 Culvert Avg. Flow Depth=0.70' Max Vel=0.73 fps Inflow=2.13 cfs 0.194 af
n=0.150 L=140.0' S=0.0161 '/' Capacity=21.31 cfs Outflow=2.08 cfs 0.193 af

Reach 2R: Reach to Lot 3 Culvert Avg. Flow Depth=0.68' Max Vel=1.16 fps Inflow=3.20 cfs 0.364 af
n=0.150 L=140.0' S=0.0411 '/' Capacity=34.07 cfs Outflow=3.19 cfs 0.363 af

Reach 3R: Reach to Lot 4 Culvert Avg. Flow Depth=1.03' Max Vel=0.80 fps Inflow=4.18 cfs 0.546 af
n=0.150 L=140.0' S=0.0125 '/' Capacity=49.45 cfs Outflow=4.17 cfs 0.543 af

Reach 4R: Reach to Lot 7 Culvert Avg. Flow Depth=0.51' Max Vel=0.76 fps Inflow=1.62 cfs 0.119 af
n=0.150 L=315.0' S=0.0246 '/' Capacity=26.37 cfs Outflow=1.34 cfs 0.117 af

Reach 5R: Det Pond Reach to AP2 Avg. Flow Depth=0.64' Max Vel=0.52 fps Inflow=9.05 cfs 1.642 af
n=0.400 L=310.0' S=0.0476 '/' Capacity=347.70 cfs Outflow=8.66 cfs 1.615 af

Pond 1P: Lot 1 Driveway Culvert Peak Elev=51.76' Storage=473 cf Inflow=2.41 cfs 0.195 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=2.13 cfs 0.194 af

Pond 2P: Lot 2 Driveway Culvert Peak Elev=49.90' Storage=452 cf Inflow=3.39 cfs 0.365 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.20 cfs 0.364 af

Pond 3P: Lot 3 Driveway Culvert Peak Elev=44.71' Storage=1,140 cf Inflow=4.86 cfs 0.546 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=4.18 cfs 0.546 af

Pond 4P: Lot 4 Driveway Culvert Peak Elev=48.89' Storage=4,545 cf Inflow=7.31 cfs 0.882 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=8.52 cfs 0.879 af

Pond 5P: Travelway Culvert to CDS Peak Elev=41.13' Storage=2,313 cf Inflow=9.77 cfs 1.065 af
15.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=6.61 cfs 1.063 af

Pond 6P: Lot 8 Driveway Culvert Peak Elev=46.82' Storage=132 cf Inflow=1.69 cfs 0.119 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=1.62 cfs 0.119 af

Pond 7P: Lot 7 Driveway Culvert Peak Elev=39.97' Storage=905 cf Inflow=4.49 cfs 0.405 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=3.62 cfs 0.404 af

Pond 8P: Lot 5/6 Driveway Culvert Peak Elev=38.38' Storage=189 cf Inflow=0.54 cfs 0.037 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0069 '/' Outflow=0.44 cfs 0.036 af

Pond 9P: Cul-de-Sac Storage Peak Elev=39.80' Storage=3,396 cf Inflow=6.77 cfs 1.156 af
15.0" Round Culvert n=0.013 L=65.0' S=0.0077 '/' Outflow=6.03 cfs 1.149 af

Pond 10P: Detention Pond #1 Peak Elev=37.71' Storage=4,844 cf Inflow=9.06 cfs 1.664 af
Primary=4.44 cfs 1.321 af Secondary=4.61 cfs 0.321 af Outflow=9.05 cfs 1.642 af

Link AP1: AP1 Inflow=0.44 cfs 0.027 af
Primary=0.44 cfs 0.027 af

Link AP2: AP2 Inflow=20.87 cfs 3.357 af
Primary=20.87 cfs 3.357 af

Total Runoff Area = 14.884 ac Runoff Volume = 3.453 af Average Runoff Depth = 2.78"
84.52% Pervious = 12.579 ac 15.48% Impervious = 2.305 ac

Summary for Subcatchment 1S: Main Street Roadside Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af, Depth> 2.99"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
425	98	Paved parking, HSG B
4,250	61	>75% Grass cover, Good, HSG B
4,675	64	Weighted Average
4,250		90.91% Pervious Area
425		9.09% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.8	36	0.0550	0.21		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 2S: Roadside Drainage to Lot 1

Runoff = 2.41 cfs @ 12.17 hrs, Volume= 0.195 af, Depth> 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
7,332	39		>75% Grass cover, Good, HSG A
1,925	98		Unconnected roofs, HSG B
4,290	98		Paved parking, HSG B
19,128	61		>75% Grass cover, Good, HSG B
790	98		Paved parking, HSG C
1,915	74		>75% Grass cover, Good, HSG C
35,380	64	63	Weighted Average, UI Adjusted
28,375			80.20% Pervious Area
7,005			19.80% Impervious Area
1,925			27.48% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.0	50	0.0080	0.10		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
3.0	198	0.0252	1.11		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.8	50	0.0200	0.99		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
11.8	298	Total			

Summary for Subcatchment 3S: Lot 1 Drainage

Runoff = 2.52 cfs @ 12.10 hrs, Volume= 0.172 af, Depth> 3.09"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
3,484	39	>75% Grass cover, Good, HSG A
5,485	98	Paved parking, HSG B
20,097	61	>75% Grass cover, Good, HSG B
29,066	65	Weighted Average
23,581		81.13% Pervious Area
5,485		18.87% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.0400	0.20		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.9	91	0.0549	1.64		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
1.3	76	0.0197	0.98		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
6.4	217	Total			

Summary for Subcatchment 4S: Lot 2 Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.75 cfs @ 12.08 hrs, Volume= 0.183 af, Depth> 3.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
218	98		Unconnected roofs, HSG A
1,707	98		Unconnected roofs, HSG B
5,491	98		Paved parking, HSG B
7,113	60		Woods, Fair, HSG B
12,774	61		>75% Grass cover, Good, HSG B
27,303	71	69	Weighted Average, UI Adjusted
19,887			72.84% Pervious Area
7,416			27.16% Impervious Area
1,925			25.96% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.0	58	0.0618	0.24		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
1.3	116	0.0431	1.45		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
5.3	174	Total			

Summary for Subcatchment 5S: Lot 3 Drainage

Runoff = 3.76 cfs @ 12.19 hrs, Volume= 0.339 af, Depth> 1.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
1,100	98		Unconnected roofs, HSG A
1,300	98		Paved parking, HSG A
19,247	36		Woods, Fair, HSG A
50,591	39		>75% Grass cover, Good, HSG A
981	98		Unconnected roofs, HSG C
708	74		>75% Grass cover, Good, HSG C
1,925	98		Unconnected roofs, HSG B
4,089	98		Paved parking, HSG B
5,225	60		Woods, Fair, HSG B
28,127	61		>75% Grass cover, Good, HSG B
113,293	50	49	Weighted Average, UI Adjusted
103,898			91.71% Pervious Area
9,395			8.29% Impervious Area
4,006			42.64% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	50	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
6.8	507	0.0315	1.24		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
11.5	557	Total			

Summary for Subcatchment 6S: Lot 4 Drainage

Runoff = 2.12 cfs @ 12.21 hrs, Volume= 0.186 af, Depth> 3.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
31	39		>75% Grass cover, Good, HSG A
41	36		Woods, Fair, HSG A
1,925	98		Unconnected roofs, HSG B
6,163	98		Paved parking, HSG B
5,318	60		Woods, Fair, HSG B
13,575	61		>75% Grass cover, Good, HSG B
27,053	72	70	Weighted Average, UI Adjusted
18,965			70.10% Pervious Area
8,088			29.90% Impervious Area
1,925			23.80% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.1	50	0.0200	0.07		**Sheet Flow, SF 1** Woods: Light underbrush n= 0.400 P2= 3.30"
2.9	209	0.0287	1.19		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
15.0	259	Total			

Summary for Subcatchment 7S: South Travelway to Lot 8

Runoff = 1.69 cfs @ 12.11 hrs, Volume= 0.119 af, Depth> 3.60"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
2,444	60	Woods, Fair, HSG B
4,298	98	Paved parking, HSG B
10,529	61	>75% Grass cover, Good, HSG B
17,271	70	Weighted Average
12,973		75.11% Pervious Area
4,298		24.89% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	20	0.0150	0.11		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
4.5	262	0.0191	0.97		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
7.5	282	Total			

Summary for Subcatchment 8S: Lot 7 & 8 Drainage

Runoff = 3.99 cfs @ 12.12 hrs, Volume= 0.287 af, Depth> 3.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
3,850	98		Unconnected roofs, HSG B
7,515	98		Paved parking, HSG B
4,097	60		Woods, Fair, HSG B
27,488	61		>75% Grass cover, Good, HSG B
42,950	71	69	Weighted Average, UI Adjusted
31,585			73.54% Pervious Area
11,365			26.46% Impervious Area
3,850			33.88% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.2	50	0.0400	0.20		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
1.7	113	0.0265	1.14		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
2.2	164	0.0304	1.22		**Shallow Concentrated Flow, SCF 2** Short Grass Pasture Kv= 7.0 fps
8.1	327	Total			

Summary for Subcatchment 9S: Shared Driveway Culverted Crossing

[49] Hint: Tc<2dt may require smaller dt

Runoff = 0.54 cfs @ 12.08 hrs, Volume= 0.037 af, Depth> 4.46"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
2,033	98	Paved parking, HSG B
2,282	61	>75% Grass cover, Good, HSG B
4,315	78	Weighted Average
2,282		52.89% Pervious Area
2,033		47.11% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	60	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"

Summary for Subcatchment 10S: Cul-de-Sac Center

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.50 cfs @ 12.01 hrs, Volume= 0.093 af, Depth> 5.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
6,248	98	Paved parking, HSG B
2,827	61	>75% Grass cover, Good, HSG B
9,075	86	Weighted Average
2,827		31.15% Pervious Area
6,248		68.85% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	40	0.0200	1.16		**Sheet Flow, SF 1** Smooth surfaces n= 0.011 P2= 3.30"
0.1	14	0.2500	3.50		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
0.7	54	Total			

Summary for Subcatchment 11S: Detention Pond Drainage

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.19 cfs @ 12.06 hrs, Volume= 0.075 af, Depth> 4.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Description
3,513	98	Paved parking, HSG B
95	60	Woods, Fair, HSG B
5,879	61	>75% Grass cover, Good, HSG B
9,487	75	Weighted Average
5,974		62.97% Pervious Area
3,513		37.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	28	0.0300	0.16		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
0.9	67	0.0298	1.21		**Shallow Concentrated Flow, SCF 1** Short Grass Pasture Kv= 7.0 fps
3.9	95	Total			

Summary for Subcatchment 12S: Remaining Parcel Area

Runoff = 17.86 cfs @ 12.28 hrs, Volume= 1.742 af, Depth> 2.77"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 50 YEAR STORM Rainfall=7.30"

Area (sf)	CN	Adj	Description
1,253	98		Unconnected roofs, HSG A
4,827	98		Paved parking, HSG A
17,377	39		>75% Grass cover, Good, HSG A
5,295	73		Woods, Fair, HSG C
7,816	98		Paved parking, HSG B
21,219	98		Unconnected roofs, HSG B
177,831	60		Woods, Fair, HSG B
92,842	61		>75% Grass cover, Good, HSG B
328,460	63	62	Weighted Average, UI Adjusted
293,345			89.31% Pervious Area
35,115			10.69% Impervious Area
22,472			64.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.7	50	0.0300	0.18		**Sheet Flow, SF 1** Grass: Short n= 0.150 P2= 3.30"
14.3	838	0.0381	0.98		**Shallow Concentrated Flow, SCF 1** Woodland Kv= 5.0 fps
0.2	30	0.2670	2.58		**Shallow Concentrated Flow, SCF 2** Woodland Kv= 5.0 fps
19.2	918	Total			

Summary for Reach 1R: Reach to Lot 2 Culvert

[79] Warning: Submerged Pond 1P Primary device # 1 INLET by 0.45'

Inflow Area = 0.812 ac, 19.80% Impervious, Inflow Depth > 2.87" for 50 YEAR STORM event
Inflow = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af
Outflow = 2.08 cfs @ 12.34 hrs, Volume= 0.193 af, Atten= 2%, Lag= 5.9 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.73 fps, Min. Travel Time= 3.2 min
Avg. Velocity = 0.33 fps, Avg. Travel Time= 7.1 min

Peak Storage= 399 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.70'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 21.31 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 140.0' Slope= 0.0161 '/'
Inlet Invert= 50.50', Outlet Invert= 48.25'

Summary for Reach 2R: Reach to Lot 3 Culvert

[79] Warning: Submerged Pond 2P Primary device # 1 INLET by 0.43'

Inflow Area = 1.479 ac, 19.38% Impervious, Inflow Depth > 2.96" for 50 YEAR STORM event
Inflow = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af
Outflow = 3.19 cfs @ 12.38 hrs, Volume= 0.363 af, Atten= 0%, Lag= 3.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 1.16 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 0.54 fps, Avg. Travel Time= 4.3 min

Peak Storage= 387 cf @ 12.34 hrs
Average Depth at Peak Storage= 0.68'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 34.07 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 140.0' Slope= 0.0411 '/'
Inlet Invert= 48.00', Outlet Invert= 42.25'

Summary for Reach 3R: Reach to Lot 4 Culvert

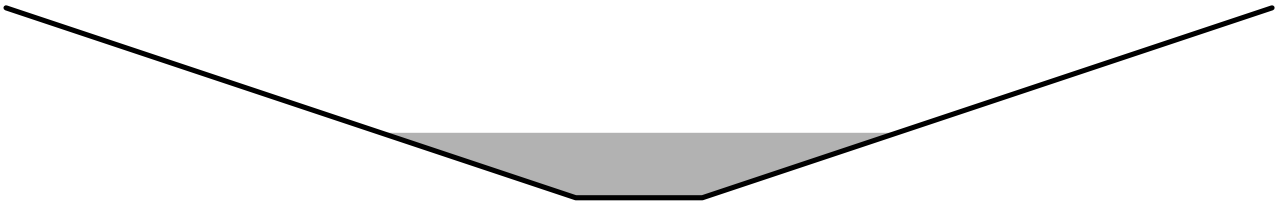
[79] Warning: Submerged Pond 3P Primary device # 1 INLET by 0.78'

Inflow Area = 2.106 ac, 21.70% Impervious, Inflow Depth > 3.11" for 50 YEAR STORM event
Inflow = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af
Outflow = 4.17 cfs @ 12.46 hrs, Volume= 0.543 af, Atten= 0%, Lag= 5.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.80 fps, Min. Travel Time= 2.9 min
Avg. Velocity = 0.39 fps, Avg. Travel Time= 6.0 min

Peak Storage= 729 cf @ 12.41 hrs
Average Depth at Peak Storage= 1.03'
Bank-Full Depth= 3.00' Flow Area= 33.0 sf, Capacity= 49.45 cfs

2.00' x 3.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 20.00'
Length= 140.0' Slope= 0.0125 '/'
Inlet Invert= 42.00', Outlet Invert= 40.25'



Summary for Reach 4R: Reach to Lot 7 Culvert

[79] Warning: Submerged Pond 6P Primary device # 1 INLET by 0.26'

Inflow Area = 0.396 ac, 24.89% Impervious, Inflow Depth > 3.60" for 50 YEAR STORM event
Inflow = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af
Outflow = 1.34 cfs @ 12.32 hrs, Volume= 0.117 af, Atten= 17%, Lag= 11.2 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.76 fps, Min. Travel Time= 6.9 min
Avg. Velocity = 0.31 fps, Avg. Travel Time= 17.2 min

Peak Storage= 561 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.51'
Bank-Full Depth= 2.00' Flow Area= 16.0 sf, Capacity= 26.37 cfs

2.00' x 2.00' deep channel, n= 0.150 Sheet flow over Short Grass
Side Slope Z-value= 3.0 '/' Top Width= 14.00'
Length= 315.0' Slope= 0.0246 '/'
Inlet Invert= 45.75', Outlet Invert= 38.00'

Summary for Reach 5R: Det Pond Reach to AP2

[79] Warning: Submerged Pond 10P Primary device # 1 INLET by 0.39'

Inflow Area = 7.236 ac, 20.57% Impervious, Inflow Depth > 2.72" for 50 YEAR STORM event
Inflow = 9.05 cfs @ 12.40 hrs, Volume= 1.642 af
Outflow = 8.66 cfs @ 12.72 hrs, Volume= 1.615 af, Atten= 4%, Lag= 19.4 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.52 fps, Min. Travel Time= 10.0 min
Avg. Velocity = 0.28 fps, Avg. Travel Time= 18.8 min

Peak Storage= 5,189 cf @ 12.55 hrs
Average Depth at Peak Storage= 0.64'
Bank-Full Depth= 4.00' Flow Area= 240.0 sf, Capacity= 347.70 cfs

20.00' x 4.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 100.00'
Length= 310.0' Slope= 0.0476 '/'
Inlet Invert= 34.75', Outlet Invert= 20.00'

‡

Summary for Pond 1P: Lot 1 Driveway Culvert

Inflow Area = 0.812 ac, 19.80% Impervious, Inflow Depth > 2.88" for 50 YEAR STORM event
Inflow = 2.41 cfs @ 12.17 hrs, Volume= 0.195 af
Outflow = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af, Atten= 12%, Lag= 4.2 min
Primary = 2.13 cfs @ 12.24 hrs, Volume= 0.194 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 51.76' @ 12.24 hrs Surf.Area= 813 sf Storage= 473 cf

Plug-Flow detention time= 4.3 min calculated for 0.194 af (100% of inflow)
Center-of-Mass det. time= 3.1 min (812.5 - 809.4)

Volume	Invert	Avail.Storage	Storage Description
#1	50.75'	1,900 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
50.75	150	0	0
51.00	290	55	55
52.00	980	635	690
53.00	1,440	1,210	1,900

Device	Routing	Invert	Outlet Devices
#1	Primary	50.75'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.75' / 50.50' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.12 cfs @ 12.24 hrs HW=51.75' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 2.12 cfs @ 2.70 fps)

Summary for Pond 2P: Lot 2 Driveway Culvert

[62] Hint: Exceeded Reach 1R OUTLET depth by 0.97' @ 12.35 hrs

Inflow Area = 1.479 ac, 19.38% Impervious, Inflow Depth > 2.96" for 50 YEAR STORM event
Inflow = 3.39 cfs @ 12.12 hrs, Volume= 0.365 af
Outflow = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af, Atten= 6%, Lag= 12.6 min
Primary = 3.20 cfs @ 12.33 hrs, Volume= 0.364 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 49.90' @ 12.33 hrs Surf.Area= 415 sf Storage= 452 cf

Plug-Flow detention time= 2.2 min calculated for 0.363 af (100% of inflow)
Center-of-Mass det. time= 1.7 min (812.5 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	48.25'	3,198 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
48.25	100	0	0
49.00	275	141	141
50.00	430	353	493
51.00	1,440	935	1,428
52.00	2,100	1,770	3,198

Device	Routing	Invert	Outlet Devices
#1	Primary	48.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.25' / 48.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.19 cfs @ 12.33 hrs HW=49.89' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 3.19 cfs @ 4.07 fps)

Summary for Pond 3P: Lot 3 Driveway Culvert

[62] Hint: Exceeded Reach 2R OUTLET depth by 1.77' @ 12.40 hrs

Inflow Area = 2.106 ac, 21.70% Impervious, Inflow Depth > 3.11" for 50 YEAR STORM event
Inflow = 4.86 cfs @ 12.12 hrs, Volume= 0.546 af
Outflow = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af, Atten= 14%, Lag= 15.3 min
Primary = 4.18 cfs @ 12.37 hrs, Volume= 0.546 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 44.71' @ 12.37 hrs Surf.Area= 933 sf Storage= 1,140 cf

Plug-Flow detention time= 2.5 min calculated for 0.546 af (100% of inflow)
Center-of-Mass det. time= 2.2 min (811.1 - 808.9)

Volume	Invert	Avail.Storage	Storage Description
#1	42.25'	2,795 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
42.25	50	0	0
43.00	270	120	120
44.00	652	461	581
45.00	1,050	851	1,432
46.00	1,675	1,363	2,795

Device	Routing	Invert	Outlet Devices
#1	Primary	42.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 42.25' / 42.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.17 cfs @ 12.37 hrs HW=44.70' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 4.17 cfs @ 5.31 fps)

Summary for Pond 4P: Lot 4 Driveway Culvert

[93] Warning: Storage range exceeded by 5.89'
[88] Warning: Qout>Qin may require smaller dt or Finer Routing
[63] Warning: Exceeded Reach 3R INLET depth by 5.86' @ 12.45 hrs

Inflow Area = 4.707 ac, 14.29% Impervious, Inflow Depth > 2.25" for 50 YEAR STORM event
Inflow = 7.31 cfs @ 12.22 hrs, Volume= 0.882 af
Outflow = 8.52 cfs @ 12.45 hrs, Volume= 0.879 af, Atten= 0%, Lag= 13.6 min
Primary = 8.52 cfs @ 12.45 hrs, Volume= 0.879 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 48.89' @ 12.45 hrs Surf.Area= 3,000 sf Storage= 4,545 cf

Plug-Flow detention time= 9.9 min calculated for 0.879 af (100% of inflow)
Center-of-Mass det. time= 8.6 min (832.8 - 824.1)

Volume	Invert	Avail.Storage	Storage Description
#1	40.25'	4,545 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.25	280	0	0
41.00	1,063	504	504
42.00	2,010	1,537	2,040
43.00	3,000	2,505	4,545

Device	Routing	Invert	Outlet Devices
#1	Primary	40.25'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 40.25' / 40.00' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=8.50 cfs @ 12.45 hrs HW=48.86' (Free Discharge)
↑—**1=CMP_Round 12"** (Inlet Controls 8.50 cfs @ 10.82 fps)

Summary for Pond 5P: Travelway Culvert to CDS

[93] Warning: Storage range exceeded by 0.13'
[79] Warning: Submerged Pond 4P Primary device # 1 INLET by 0.88'

Inflow Area = 5.328 ac, 16.11% Impervious, Inflow Depth > 2.40" for 50 YEAR STORM event
Inflow = 9.77 cfs @ 12.45 hrs, Volume= 1.065 af
Outflow = 6.61 cfs @ 12.60 hrs, Volume= 1.063 af, Atten= 32%, Lag= 8.9 min
Primary = 6.61 cfs @ 12.60 hrs, Volume= 1.063 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 41.13' @ 12.60 hrs Surf.Area= 1,790 sf Storage= 2,313 cf

Plug-Flow detention time= 3.8 min calculated for 1.059 af (100% of inflow)
Center-of-Mass det. time= 3.2 min (830.2 - 827.0)

Volume	Invert	Avail.Storage	Storage Description
#1	38.50'	2,313 cf	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.50	130	0	0
39.00	500	158	158
40.00	1,010	755	913
41.00	1,790	1,400	2,313

Device	Routing	Invert	Outlet Devices
#1	Primary	38.50'	**15.0" Round CMP_Round 15"** L= 70.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.50' / 38.00' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.59 cfs @ 12.60 hrs HW=41.12' (Free Discharge)
↑**1=CMP_Round 15"** (Inlet Controls 6.59 cfs @ 5.37 fps)

Summary for Pond 6P: Lot 8 Driveway Culvert

Inflow Area = 0.396 ac, 24.89% Impervious, Inflow Depth > 3.60" for 50 YEAR STORM event
Inflow = 1.69 cfs @ 12.11 hrs, Volume= 0.119 af
Outflow = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af, Atten= 4%, Lag= 1.7 min
Primary = 1.62 cfs @ 12.14 hrs, Volume= 0.119 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 46.82' @ 12.14 hrs Surf.Area= 271 sf Storage= 132 cf

Plug-Flow detention time= 1.8 min calculated for 0.118 af (100% of inflow)
Center-of-Mass det. time= 1.4 min (795.3 - 794.0)

Volume	Invert	Avail.Storage	Storage Description
#1	46.00'	1,905 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	50	0	0
47.00	320	185	185
48.00	800	560	745
49.00	1,520	1,160	1,905

Device	Routing	Invert	Outlet Devices
#1	Primary	46.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.00' / 45.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.59 cfs @ 12.14 hrs HW=46.81' (Free Discharge)
↑—**1=CMP_Round 12"** (Barrel Controls 1.59 cfs @ 3.18 fps)

Summary for Pond 7P: Lot 7 Driveway Culvert

[62] Hint: Exceeded Reach 4R OUTLET depth by 1.49' @ 12.30 hrs

Inflow Area = 1.382 ac, 26.01% Impervious, Inflow Depth > 3.51" for 50 YEAR STORM event
Inflow = 4.49 cfs @ 12.13 hrs, Volume= 0.405 af
Outflow = 3.62 cfs @ 12.27 hrs, Volume= 0.404 af, Atten= 19%, Lag= 8.3 min
Primary = 3.62 cfs @ 12.27 hrs, Volume= 0.404 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 39.97' @ 12.27 hrs Surf.Area= 1,048 sf Storage= 905 cf

Plug-Flow detention time= 2.3 min calculated for 0.404 af (100% of inflow)
Center-of-Mass det. time= 2.0 min (802.2 - 800.1)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	2,350 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.00	50	0	0
39.00	380	215	215
40.00	1,071	726	941
41.00	1,747	1,409	2,350

Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.00' / 37.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.61 cfs @ 12.27 hrs HW=39.96' (Free Discharge)
1=CMP_Round 12" (Inlet Controls 3.61 cfs @ 4.60 fps)

Summary for Pond 8P: Lot 5/6 Driveway Culvert

Inflow Area = 0.099 ac, 47.11% Impervious, Inflow Depth > 4.46" for 50 YEAR STORM event
Inflow = 0.54 cfs @ 12.08 hrs, Volume= 0.037 af
Outflow = 0.44 cfs @ 12.15 hrs, Volume= 0.036 af, Atten= 19%, Lag= 3.8 min
Primary = 0.44 cfs @ 12.15 hrs, Volume= 0.036 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 38.38' @ 12.15 hrs Surf.Area= 597 sf Storage= 189 cf

Plug-Flow detention time= 17.2 min calculated for 0.036 af (98% of inflow)
Center-of-Mass det. time= 11.7 min (789.4 - 777.7)

Volume	Invert	Avail.Storage	Storage Description
#1	38.00'	1,870 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
38.00	400	0	0
39.00	920	660	660
40.00	1,500	1,210	1,870

Device	Routing	Invert	Outlet Devices
#1	Primary	38.00'	**12.0" Round CMP_Round 12"** L= 36.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 38.00' / 37.75' S= 0.0069 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.15 hrs HW=38.38' (Free Discharge)
1=CMP_Round 12" (Barrel Controls 0.44 cfs @ 2.39 fps)

Summary for Pond 9P: Cul-de-Sac Storage

[79] Warning: Submerged Pond 5P Primary device # 1 INLET by 1.29'

Inflow Area = 5.537 ac, 18.09% Impervious, Inflow Depth > 2.51" for 50 YEAR STORM event
Inflow = 6.77 cfs @ 12.60 hrs, Volume= 1.156 af
Outflow = 6.03 cfs @ 12.77 hrs, Volume= 1.149 af, Atten= 11%, Lag= 10.6 min
Primary = 6.03 cfs @ 12.77 hrs, Volume= 1.149 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 39.80' @ 12.77 hrs Surf.Area= 1,996 sf Storage= 3,396 cf

Plug-Flow detention time= 9.3 min calculated for 1.145 af (99% of inflow)
Center-of-Mass det. time= 7.1 min (831.4 - 824.3)

Volume	Invert	Avail.Storage	Storage Description
#1	37.50'	6,163 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
37.50	875	0	0
38.00	1,225	525	525
39.00	1,630	1,428	1,953
40.00	2,090	1,860	3,813
41.00	2,610	2,350	6,163

Device	Routing	Invert	Outlet Devices
#1	Primary	37.50'	**15.0" Round CMP_Round 15"** L= 65.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 37.50' / 37.00' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

Primary OutFlow Max=6.03 cfs @ 12.77 hrs HW=39.79' (Free Discharge)
1=CMP_Round 15" (Inlet Controls 6.03 cfs @ 4.91 fps)

Summary for Pond 10P: Detention Pond #1

[79] Warning: Submerged Pond 9P Primary device # 1 INLET by 0.21'

Inflow Area = 7.236 ac, 20.57% Impervious, Inflow Depth > 2.76" for 50 YEAR STORM event
Inflow = 9.06 cfs @ 12.37 hrs, Volume= 1.664 af
Outflow = 9.05 cfs @ 12.40 hrs, Volume= 1.642 af, Atten= 0%, Lag= 1.5 min
Primary = 4.44 cfs @ 12.40 hrs, Volume= 1.321 af
Secondary = 4.61 cfs @ 12.40 hrs, Volume= 0.321 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 37.71' @ 12.40 hrs Surf.Area= 2,710 sf Storage= 4,844 cf

Plug-Flow detention time= 16.6 min calculated for 1.642 af (99% of inflow)
Center-of-Mass det. time= 11.5 min (832.7 - 821.2)

Volume	Invert	Avail.Storage	Storage Description
#1	35.00'	5,655 cf	**Custom Stage Data (Prismatic)**Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
35.00	920	0	0
36.00	1,480	1,200	1,200
37.00	2,270	1,875	3,075
38.00	2,890	2,580	5,655

Device	Routing	Invert	Outlet Devices
#1	Primary	35.00'	**12.0" Round CMP_Round 12"** L= 35.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 35.00' / 34.75' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

#2	Device 1	35.50'	**6.0" Vert. Orifice/Grate X 2.00** C= 0.600
#3	Device 1	36.50'	**6.0" Vert. Orifice/Grate X 2.00** C= 0.600
#4	Secondary	37.50'	**20.0' long x 4.0' breadth Broad-Crested Rectangular Weir**

Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50
Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=4.44 cfs @ 12.40 hrs HW=37.71' (Free Discharge)
└─**1=CMP_Round 12"** (Inlet Controls 4.44 cfs @ 5.65 fps)
  ├─**2=Orifice/Grate** (Passes < 2.65 cfs potential flow)
  └─**3=Orifice/Grate** (Passes < 1.85 cfs potential flow)

Secondary OutFlow Max=4.60 cfs @ 12.40 hrs HW=37.71' (Free Discharge)
└─**4=Broad-Crested Rectangular Weir** (Weir Controls 4.60 cfs @ 1.09 fps)

Summary for Link AP1: AP1

Inflow Area = 0.107 ac, 9.09% Impervious, Inflow Depth > 2.99" for 50 YEAR STORM event
Inflow = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af
Primary = 0.44 cfs @ 12.05 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min

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

Summary for Link AP2: AP2

Inflow Area = 14.776 ac, 15.53% Impervious, Inflow Depth > 2.73" for 50 YEAR STORM event
Inflow = 20.87 cfs @ 12.35 hrs, Volume= 3.357 af
Primary = 20.87 cfs @ 12.35 hrs, Volume= 3.357 af, Atten= 0%, Lag= 0.0 min

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

Clover Farm Subdivision - Existing Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.75	2.31	3.83	5.22
AP2	2.76	11.35	20.61	29.31

Rainfall Event Totals (in.)	
2-Year	3.30
10-Year	4.90
25-Year	6.20
50-Year	7.30

Clover Farm Subdivision - Developed Condition Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	0.07	0.20	0.32	0.44
AP2	2.26	8.22	14.61	20.87

Clover Farm Subdivision - Change in Peak Flows

Analysis Point	2 Year Storm (cfs)	10 Year Storm (cfs)	25 Year Storm (cfs)	50 Year Storm (cfs)
AP1	-0.68	-2.11	-3.51	-4.78
AP2	-0.50	-3.13	-6.00	-8.44

From:	Maine Dept. of Environmental Protection
To:	Mike Sudak
Subject:	Dept. of Environmental Protection Payment Portal
Date:	Tuesday, September 13, 2022 2:47:48 PM

Thank you for submitting this payment to the Dept. of Environmental Protection. Below is a copy of the information and payment the agency will receive.

- Applicant Name: **Mark McNally Building Maintenance, LLC.**
- Activity Location: **771 & 787 Main Street, Eliot ME 03903**
- First Name: **Kenneth**
- Last Name: **Wood**
- Company Name: **Attar Engineering, Inc.**
- Street Address: **1284 State Road**
- Town/City: **Eliot**
- State or Province: **Maine**
- Country: **United States**
- Zip Code: **03903**
- Phone Number: **2074396023**
- Email Address: **mike@attarengineering.com**
- Fee Type: **Stormwater Management Law (Permit-by-Rule)**
- Customer Number:
- Invoice Number:
- Spill Number:
- Payment Amount: **73.00**
- Additional Comments:

Your information will be reviewed and you may be contacted if more information is needed or if there are additional questions.

OFFICE OF

KITTERY WATER DISTRICT

17 State Road
Kittery, ME 03904-1565
TEL: 207-439-1128
FAX: 207-439-8549
E-Mail: kitterywater@comcast.net

Eliot Planning Board
1333 State Road
Eliot, ME 03903

September 15, 2022

RE: Proposed Clover Farm Subdivision off Main Street - Eliot

Dear Planning Board Members,

I have reviewed the proposed Clover Farm Subdivision plans and deemed that the Kittery Water District does not currently have the adequate infrastructure in place to support the fire protection needs for this project. The existing 6-Inch cast iron 1930's vintage water main already has diminished flow rates due to the age, size, and condition of the pipe. The District does have a portion of main street scheduled to be upgraded with a 12-Inch pipe slated for 2037 in our master plan.

In 2010 the district installed a 12-Inch water main from Park Street to the Great Cove Boat Marina, replacing the undersize 6-Inch cast iron pipe.

In closing, to provide adequate fire protection to the proposed Clover Farm Subdivision, the district will need to install approximately 200 feet of 12-Inch water main on Main Street to intersect with the entrance road of the subdivision. This work will be scheduled during the 2023 construction season and the cost borne by the District.

Sincerely,

Michael S. Rogers
Superintendent

Cc: Ken Woods, P.E. – Attar Engineering, Inc.

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

To: Planning Board
From: Jeff Brubaker, AICP, Town Planner
Cc: John Chagnon, PE, LLS, Ambit Engineering, Applicant's Representative
Josh Seymour, Applicant
Date: September 16, 2022 (report date)
September 20, 2022 (meeting date)
Re: PB22-13: 143 Harold L. Dow Hwy.: Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary – Sketch Plan Review – **Sketch Plan Review**

Application Details/Checklist Documentation	
✓ Address:	143 Harold L. Dow Hwy.
✓ Map/Lot:	23/25
✓ PB Case#:	22-13
✓ Zoning:	Commercial/Industrial (C/I) District
✓ Shoreland Zoning:	None
✓ Owner Name:	Tim Pickett
✓ Applicant Name:	Green Truck Farms 7, LLC
✓ Proposed Project:	Marijuana Store and Medical Marijuana Dispensary
Application Received by Staff:	June 3, 2022
✓ Application Fee Paid and Date:	$300 (SP Amend.: $100; Chg. of Use: $25; PH: $175) June 8, 2022
✓ Application Sent to Staff Reviewers:	June 30, 2022
✓ Application Heard by PB Found Complete by PB	August 2, 2022; September 20 (scheduled) TBD
Site Walk	TBD
Site Walk Publication	TBD
Public Hearing	TBD
Public Hearing Publication	TBD
Deliberation	TBD
✓ Reason for PB Review:	Site Plan Amendment, Change of Use, Marijuana Establishment, Medical Marijuana Establishment

9/20/22 update: *The primary focus of this continued sketch plan review is the status of residential use at 150 HL Dow Hwy. and its relation to the "500 foot rule" in 33-190(5)b. No new site plan material has been submitted by the applicant. Attached is an August 8, 2022, Memorandum from the applicant's attorneys and my response.*

PB22-13: 143 Harold L. Dow Hwy.: Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary – **Sketch Plan Review**

Overview

Applicant Green Truck Farms 7, LLC (property owner: Tim Pickett; agent: Ambit Engineering) seeks Site Plan Amendment/Review and a Change of Use approval for a marijuana establishment (marijuana store) and medical marijuana establishment (medical marijuana dispensary) at 143 Harold L. Dow Hwy. (Map 23, Lot 25), a 5-acre lot. The proposed building would be a one-story, 6,000-sf building that would co-locate the adult use marijuana store with the medical marijuana dispensary. There would be one driveway accessing Route 236 with foundation plantings, walkways, and a parking area surrounding the building.

The lot is currently used as a wood-carving workshop with a presumptively legally nonconforming accessory residential use. The lot is characterized by wetlands surrounding the existing land uses.

Application contents

Submitted June 3, 2022

- Cover letter/transmittal
- Site Plan Review application
- Sketch plan

Submitted on or about June 14, 2022

- Confidential information on medical marijuana caregiver (omitted from packet)
- Letter regarding OCP Conditional License from Attorney Michelle DelMar
- OCP Conditional License

Submitted July 2022

- Various correspondence from Attorney Michelle DelMar and Town Planner review letter/response

Submitted August 8, 2022

- Memo from Attorney Philip M. Giordano

Type of review needed

Sketch plan review – ask questions of the applicant, seek more information as needed, provide input as needed on ordinance compliance. Some information may be provided with full SPR application.

Zoning

Commercial-Industrial (C/I); no shoreland zoning

Use

Marijuana establishments and medical marijuana dispensaries are SPR uses in the C/I district. The PB may want to clarify whether the applicant wants to provide a medical marijuana dispensary, as included on their application, or medical marijuana caregiver retail store.

Affidavit of ownership (33-106)

Purchase and sales agreement and warranty deed provided by applicant. Note, one page has been redacted from PDF packet – relates to proposed medical marijuana caregiver.

OMP Conditional License

See packet – AMS1272 – Adult Use Cannabis Store

Dimensional requirements (45-405)

Dimension	Standard	Met?
Min lot size, lot line setbacks, max building height, max lot coverage		Appears to be met; however, lot line setbacks should be shown on the plan
Min street frontage (ft)	300	Appears to be met
Max sign area (sf)	Max. 50 sf for wall-mounted, 100 sf for common freestanding	To be addressed in future submittals

Site walk (33-64)

Recommended

Marijuana performance standards (33-190)

Paragraph	Standard summary	Met?
(1)	Screening per 33-175	TBD
(2)	Comply with applicable parking requirements (45-495)	**Appears to be met.** See Note 11, using the new standard of 1 space per 100 sf for marijuana retail stores
(3)	Signage and advertising	32 sf sign shown in sketch plan. Further review will be conducted with full SPR submittal
(4a)	Activities conducted indoors, no outdoor sales	No outdoor sales suggested by the site plan, but to be confirmed during full SPR submittal
(4b)	Odor management	See Odor Remediation Plan narrative from applicant
(4c)	Noxious gases and fumes	TBD
(4d)	Smoke, dust, debris, fluids, substances	TBD
(4e)	Waste disposal plan	See Waste Disposal Plan narrative from applicant
(4f)	Security measures	See Security Plan narrative from applicant
(5)	"500 foot rule" separation/buffering	**Appears to be not met.** Proposed marijuana store is less than 500 ft. from 150 HL Dow, which evidence suggests is a residential property with longstanding apartment use that may have predated applicable zoning. ***9/20 update:*** See applicant's attorneys' memo and my response.
(6)	Hours of operation	Appears to be met. See Note 13.
(7)	Cultivation area limitation	N/A
(8)	Sale of edible products	TBD, applicant will need to provide update on commercial food licensing if edibles are to be sold
(9)	Drive-through and home delivery prohibition	**Appears to be met** as no drive-through is apparent.
(10)	Traffic impact assessment	**Will need to be provided with full SPR submittal.**
(11)	Pesticides, packaging, and labeling	Defer packaging and labeling requirements to State OCP review.
(12)	Inspections	Relates to building permit/Fire Chief review
(13)	Change/addition of use	**Met** – current proposal under review by PB.

(14)	Other laws remain applicable	Defer to State OCP review

Traffic (45-406)

See above. Traffic Impact Assessment will need to be provided.

Odor (45-409)

See Odor Control Plan narrative from applicant.

Stormwater runoff (45-411)

Proposed stormwater treatment area shown on sketch plan. More information on stormwater will be needed for full SPR submittal.

Erosion control (45-412)

TBD

Preservation of landscape (45-413)

The lot is mostly covered with wetlands. Given the proposed footprint of the building and surrounding impervious area, it is recommended the PB clarify with the applicant more information about current extent of delineated wetlands, estimated wetland impacts, and status of DEP review.

9/20 update: Applicant spoke to avoiding wetland alteration at 8/2 sketch plan review.

Water and sewer (45-416)

Route 236 in this area has water service and a private sewer line. More info TBD in future submittals.

Buffers and screening (45-417, 33-175, 33-190)

Frontage area shown appears to be suitable to provide/maintain buffer. Currently the frontage includes wetland vegetation.

Parking and loading

See Note 11 – 60 spaces required and 61 provided, including 2 marked ADA spaces and a loading bay.

* * *

Respectfully submitted,

Jeff Brubaker, AICP
Town Planner

MEMORANDUM

ATTORNEY-CLIENT COMMUNICATION

To: Michelle DelMar, Esq.

From: REED & GIORDANO, P.A.
Philip M. Giordano, Esq.

Dated: August 8, 2022

RE: Applicant's Response to Various Issues Raised at Town of Eliot Planning Board Meeting, August 2, 2022, Regarding PB22-13: 143 Harold L. Dow Hwy. (the "Marijuana Retail Store Property")[1]: Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary

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INTRODUCTION

This Memorandum is prepared as preliminary response by the Applicant with respect to the issues raised by the Town Planner and others at the Town of Eliot Planning Board meeting, held on August 2, 2022, and regarding the property located on 150 Harold L. Dow Hwy, Eliot, Maine (hereinafter the "Property") and its nonconforming use for residential purposes. As detailed previously, from all available evidence, documents and information, the Property, built in or about 1970, exists within the Commercial-Industrial (CI) zone as designated by the Town of Eliot (hereinafter the "Town") in Maine, and which prohibits any residential property to be built within its limits. The August 2nd submissions of the Applicant and the legal argument presented by Applicant's counsel, Michelle DelMar, Esq., reinforced the undisputed conclusion regarding the Property and nonconforming use for residential purposes.

FACTS AND BACKGROUND

On August 2, 2022, the Town of Eliot Planning Board convened a meeting to discuss the Marijuana Retail Store Application and considered an alleged "500 ft rule," which would purportedly bar the anticipated construction. A video of the entire meeting can be found online through townhallstreams.com, hereinafter referred to as the "Meeting Video."[2]

[1] With a limited time frame for review, this Firm has only had an opportunity to conduct a preliminary inquiry into the facts and legal issues presented, and subject to the information and documents provided. Other documents and/or information may lead to a differing conclusion or differing analysis of the legal issues presented.
[2] https://townhallstreams.com/stream.php?location_id=36&id=46843

At the meeting, Mr. Joshua Seymour, principal of the Applicant, presented the Board with his arguments against the Town's contention that the Property located on 150 Harold L. Dow Hwy is used for residential purposes. Specifically, Mr. Seymour argued that 1) per Sec. 45-193(a) of the Eliot Code of Ordinances, the Property's nonconforming use has been discontinued for more than one year due to an absence of evidence that anyone has lived at the Property since the 1980s; and 2) per Sec. 45-193(b), the Property's nonconforming residential use, if not discontinued, was still superseded by a conforming use starting in 2002 and therefore cannot be resumed. The Applicant and his counsel presented the Board with a Memorandum, with Exhibits, detailing the available evidence and the legal requirements, which require the Board's consideration and approval of the Application. *See* Memorandum, dated August 2, 2022, as submitted at the Planning Board meeting, and as attached hereto as **Exhibit A**.

In response, the Town and its Planner have contended, without probative evidence and primarily relying upon rumor and "family memories," that Nancy Shapleigh, the current owner of the Property, maintains a lawful nonconforming residential use of the Property in conjunction with its commercial use. Unfortunately, a review of the hearing and the arguments presented demonstrates that there is an absence of evidence supporting such conclusion and, as a result, the Planning Board must not deny the Application on the grounds that it does not meet the 500' set back requirement for sensitive uses.

Initially, the Planner relied upon the Town's Correspondence to Michelle DelMar, Esq., dated August 1, 2022 (the "August 1st Letter"), which is attached hereto as **Exhibit B**. By its August 1st Letter, the Planner has reiterated the Town's prior argument, without evidence, and contends that while apartments and other residential areas are prohibited in the CI zone, the Property's residential use pre-dates the earliest ordinance expressly dictating so. *See id.* The Town further references Sec. 45-192 of the Eliot Code of Ordinances which allows The Code Enforcement Officer (CEO) to "permit accessory uses and structures for existing residential use in the commercial/industrial district" to support its claim. Given the alleged residential use of the Property, the Town contends that the proposed plans for the Adult Use Marijuana Retail Store and Medical Marijuana Dispensary set to be built on 143 Harold L. Dow Hwy cannot move forward in the application process or be approved as the ordinances prohibit construction within 500 feet of a residential property. *See* **Exhibit B**.

Additionally, the Town relied upon two Eliot community members to rebut these claims: Mr. Jeff Brubaker, the Town Planner, and Mr. William Widi, the grandson of the owner of the Property. Mr. Brubaker repeated his August 1st Letter to the Board, and maintained that the residential use of the Property is a "legally nonconforming use which has not been discontinued." *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:53:06. Mr. Brubaker further stated that the Change of Use applications filed in 2002, 2003, and 2008 for the property were "immaterial" to the question at hand, and that the "preponderance of evidence presented" suggested that the residential use had not been discontinued by the owner. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:52:50. Mr. Brubaker argued that the Change of Use applications for the Property needed to explicitly state that the owner intended to change the

residential use of the Property for it to be superseded within the meaning of Sec. 45-193(b). *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:55:55.

For his argument, Mr. Widi provided purported "evidence" that the Property has been used for residential purposes since the 1970s. Mr. Widi provided to the Board photographs and other miscellaneous documents,[3] apparently from the 1970's to 1989, of himself and his family members.[4] From the Meeting Video, the photographs apparently showed certain individuals at the Property during various functions, including birthdays and graduation parties, but failed to establish that anyone actually resided at the Property. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:47:30. Mr. Widi also explained that his brother was arrested for growing marijuana at the Property in 2008. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:48:20. Lastly, Mr. Widi also inaccurately contended that the Change of Use applications for the Property were filed solely for the downstairs units which have been used for commercial purposes, and were not filed to change the residential use of the upstairs units. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:46:20. The evidence is contrary to the representations of Mr. Widi and the Town of Eliot Planning Board may not properly rely upon such unsworn statements or unreliable, unauthenticated documents.

ARGUMENT

1. The Town Has Not Provided Any Probative Evidence That the Property Has Been Continuously Used for Residential Purposes Since 1970.

First, the evidence provided by the Town at the meeting is insufficient to prove that the Property has been continuously used for residential purposes since the 1970s. To restate, Sec. 45-193(a) of the Eliot Code of Ordinances provides, in pertinent part: "A nonconforming use which is discontinued for a period of one year may not be resumed. The uses of the land, building or structure shall thereafter conform to the provisions of this chapter." Eliot Code-Ordinances, § 45-193(a). Maine courts have long held that "[n]onconforming uses are a thorn in the side of proper zoning and should not be perpetuated any longer than necessary… The policy of zoning is to abolish nonconforming uses as swiftly as justice will permit." *Farley v. Town of Lyman*, 557 A.2d 197, 201 (Me.1989) (quoting *Town of Windham v. Sprague*, 219 A.2d 548, 552–53 (Me.1966)). As such, "provisions of a zoning regulation for the continuation of [nonconforming] uses should be strictly construed, and provisions limiting nonconforming uses should be liberally construed." *Town of Windham v. Sprague*, 219 A.2d at 552. What constitutes as a discontinuance, therefore, has been liberally construed so as to properly limit the bounds of nonconforming uses. *See Lown v. Town of Kennebunkport*, No. AP-07-007, 2007 WL 4352179 (Me. Super. 2007).

[3] The Applicant has not been granted an opportunity to test the authenticity of such photographs or other miscellaneous documents, limiting the ability of the Applicant to properly respond to, or to test, such "evidence."

[4] The Town has not provided copies of such photographs and related documents to the Applicant or his counsel, thereby limiting the ability of the Applicant to properly respond to, or to test, such "evidence."

In his arguments, Mr. Brubaker repeatedly alluded to the fact that the Property was granted a building permit in 1977 for residential use, and that because of this it is a legally nonconforming use and prevents the proposed Marijuana Retail Store from being built. *See* **Exhibit B**; Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:53. It is undisputed that the Property was, at one point, used for residential purposes starting in the 1970s. However, due to the general disfavoring of nonconformance, this use must be continuous to present day in order to be preserved. *See Town of Windham*, 219 A.2d at 553. In other words, if it is shown that the Property, at any point between now and present day, had not been used for a period of twelve months, the nonconforming residential use of the property cannot be resumed.

The sum total of supporting evidence of continuous use at the August 2nd Meeting is as follows:

a) Mr. Widi provided unauthenticated documentation and photographs purportedly demonstrating that he and/or his family members at the Property, at unknown times between 1970 and 1989. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:47:30.
b) Mr. Widi also explained how his brother was arrested for growing marijuana at the Property in November of 2008. *See* Eliot Planning Board Meeting Video, dated Aug. 2, 2022, timestamp 1:48:20.

That's it. Mr. Widi's strongest piece of evidence, his birth certificate which listed the Property as the place of birth, is dated in 1988, nearly thirty four (34) years ago.[5] Nothing provided by Mr. Widi demonstrates: 1) continuous use from the 1970's to the present; 2) the discrete points in time of "family events," do not demonstrate residence or continuous use, and are no more probative or persuasive than analogous photographs of typical family functions at a restaurant. 3) The evidence of Mr. Widi's brother being arrested in 2008 at the Property actually supports the absence of any residential use, in that it shows that the upstairs unit was being used for an illegal commercial purpose to grow and sell marijuana in or about 2008. 4) No evidence was offered for any time period after 2008.

More concrete evidence, however, is available to support the contention that the Property was not used for residential purposes. In 1985, a man named David K. Fulton applied for a permit to display a sign at the Property. David K. Fulton's permit application is attached herein as **Exhibit C**. Next to "Existing use of property," Fulton listed "real estate offices" as the sole use. *See* **Exhibit C**. Later, on May 22, 2002, Nancy Shapleigh and Lois Widi applied for a building permit for an addition to the Property. Shapleigh's May 22, 2002 building permit application is attached herein as **Exhibit D**. Similar to Fulton's application, next to "Existing uses and structures on property," Shapleigh only wrote "Office building + Shed." *See* **Exhibit D**. No mention of any residential use

[5] While Mr. Widi claims that the birth certificate lists the Property as his place of birth, the Applicant and his counsel were not provided authenticated copies of such birth certificate, thereby precluding the ability of the Applicant to properly respond to, or to test, such evidence. Moreover, the birth certificate apparently was not certified, and therefore is inadmissible as evidence.

was listed in these applications. Lastly, according to the Town's own publicly available database of records online, the Property's use is listed as "Office Building."[6]

With the Town's latest evidence of residential use flimsily dating back to 1988, and with contrary evidence indicating that the Property was designated as solely for commercial use on building permits in 1985 and 2002, it seems evident that the residential nonconforming use has been discontinued at the Property.

2. The Change of Use Applications in 2002, 2003, and 2008 Demonstrate That the Nonconforming Residential Use at the Property Has Clearly Been Superseded by a Lawful Conforming Commercial Use

Second, even if the residential use has not been discontinued, the Town's arguments that the Change of Use applications filed for the Property in 2002, 2003, and 2008 fail to demonstrate that the nonconforming residential use has not been superseded by a conforming commercial use. In at least three instances in the past twenty (20) years, the Property has undergone changes to its use. The Change of Use applications are attached herein as **Exhibits E-G**. In 2002, a conditional use application was filed to convert the Property into a retail flower shop. *See* **Exhibit E**. In 2003, another conditional use application was filed to convert the Property into a driving school which could hold up to twenty-eight students. *See* **Exhibit F**. Lastly, in 2008, a conditional use application was filed to change the Property into a daycare for children. *See* **Exhibit G**.

Sec. 45-193(b) of the Eliot Code of Ordinances states: "Whenever a nonconforming use is superseded by a permitted use of a structure, or structure and land in combination, such structure or combination of land and structure shall thereafter conform to the provisions of this chapter and the nonconforming characteristic or use may not thereafter be resumed." Eliot Code-Ordinances, § 45-193(b). At the heart of the argument that the nonconforming residential use was not superseded by the Change of Use applications is the fact that the Property is allegedly divided by the "downstairs" commercial use and the "upstairs" residential use. Both Mr. Brubaker and Mr. Widi contend that the Change of Use applications were filed solely to change the downstairs portion of the Property, and that no mention of changing the upstairs residential use had been made. *See* Meeting Video timestamp 1:46:20. Thus, they claim, the residential use has never been superseded. Mr. Brubaker further argues that Change of Use applications need to explicitly state the owner's intent to change the nonconforming use. *See* Meeting Video timestamp 1:55:55.

Mr. Widi and Mr. Brubaker's arguments are wishful thinking. First, Mr. Brubaker's argument that Change of Use applications need to explicitly state the intent to change a nonconforming use runs contrary to the attitude towards nonconforming uses in general. "Provisions of a zoning regulation for the continuation of [nonconforming] uses should be strictly construed, and provisions limiting nonconforming uses should be liberally construed." *Town of Windham*, 219 A.2d at 553. Nowhere in Sec. 45-193(b) of the Eliot Code of Ordinances does it

[6] https://gis.vgsi.com/eliotme/Parcel.aspx?Pid=1227

require an intent to alter the nonconforming use to be shown for the nonconforming use to be superseded. To read this requirement into the section would be to go against the spirit of nonconforming uses as laid out by Maine courts. Requiring an intent for a conforming use to supersede a nonconforming use would mean that the Town would be strictly construing a provision limiting nonconformance.

Second, the Change of Use applications filed in 2002, 2003, and 2008 speak to the entire Property, and not just the downstairs portion. The division of the Property laid out by both Mr. Brubaker and Mr. Widi is not identified in any of the Change of Use applications. Instead, each Change of Use application identifies the Property's address, 150 Dow Highway (Formerly 38 Dow Highway), as well as the full lot size, which is roughly 2.5 acres. *See* **Exhibits E-G**. The applications do not specify any division of units at the Property. In fact, the Change of Use applications seemingly apply to the entire land which the Property is based on, not just the building, due to the inclusion of the acreage. For Mr. Brubaker and Mr. Widi's argument to be true, the Change of Use application should have specifically identified the units that were sought to be changed. Allowing anything less than that would only serve to frustrate the goals of the Town's zoning ordinances. Because of this, the Change of Use applications demonstrate that the nonconforming residential use that once existed at the Property has been superseded by lawful conforming commercial uses.

CONCLUSION

From the video, information and documents reviewed by this Firm, there is no persuasive or probative evidence submitted by the Planner or others justifying a rejection of the Application based upon the alleged nonconforming residential use of the Property, and thereby supporting the timely and prompt consideration of the Application through the approval process by the Town of Eliot Planning Board.

Exhibit “A”

MEMORANDUM

ATTORNEY-CLIENT COMMUNICATION

To: Michelle DelMar, Esq.

From: REED & GIORDANO, P.A.
Philip M. Giordano, Esq.

Dated: August 2, 2022

RE: Application for Dispensary Located at 150 Harold L. Dow Highway (the "Property") And Alleged Nonconforming Residential Use of Property[1]

INTRODUCTION

This Memorandum is in regards to the property located on 150 Harold L. Dow Hwy, Eliot, Maine (hereinafter the "Property") and its nonconforming use for residential purposes. From all available information, the Property, built in 1970, exists within the Commercial-Industrial (CI) zone as designated by the Town of Eliot (hereinafter the "Town") in Maine, which prohibits any residential property to be built within its limits.

The Town has contended, however, that Nancy Shapleigh, the current owner of the Property, maintains a lawful nonconforming residential use of the Property in conjunction with its commercial use. The Town's Letter to Michelle DelMar, Esq., dated August 1, 2022 (the "August 1st Letter") is attached hereto as **Exhibit A**. By its August 1st Letter, the Town contends that while apartments and other residential areas are prohibited in the CI zone, the Property's residential use pre-dates the earliest ordinance expressly dictating so. *See id.* The Town further references Sec. 45-192 of the Eliot Code of Ordinances which allows The Code Enforcement Officer (CEO) to "permit accessory uses and structures for existing residential use in the commercial/industrial district" to support its claim. Given the alleged residential use of the Property, the Town contends that the proposed plans for the Adult Use Marijuana Retail Store and Medical Marijuana Dispensary set to be built on 143 Harold L. Dow Hwy cannot be approved as the ordinances prohibit construction within 500 feet of a residential property. *See* **Exhibit A**.

FACTS AND BACKGROUND

A. The Nonconforming Residential Use of the Property Has Been Discontinued

[1] With a limited time frame for review, this Firm has only had an opportunity to conduct a preliminary inquiry into the facts and legal issues presented, and subject to the information and documents provided. Other documents and/or information may lead to a differing conclusion or differing analysis of the legal issues presented.

First, the Property's once-lawful nonconforming use has been discontinued and thus the Property is not residential. Sec. 45-193(a) of the Eliot Code of Ordinances provides, in pertinent part: "A nonconforming use which is discontinued for a period of one year may not be resumed. The uses of the land, building or structure shall thereafter conform to the provisions of this chapter." Eliot Code-Ordinances, § 45-193(a). Maine courts have long held that "[n]onconforming uses are a thorn in the side of proper zoning and should not be perpetuated any longer than necessary… The policy of zoning is to abolish nonconforming uses as swiftly as justice will permit." *Farley v. Town of Lyman*, 557 A.2d 197, 201 (Me.1989) (quoting *Town of Windham v. Sprague*, 219 A.2d 548, 552–53 (Me.1966)). As such, "provisions of a zoning regulation for the continuation of [nonconforming] uses should be strictly construed, and provisions limiting nonconforming uses should be liberally construed." *Town of Windham v. Sprague*, 219 A.2d at 552. What constitutes as a discontinuance, therefore, has been liberally construed so as to properly limit the bounds of nonconforming uses. *See Lown v. Town of Kennebunkport*, No. AP-07-007, 2007 WL 4352179 (Me. Super. 2007).

In *Lown v. Town of Kennebunkport*, the Maine Superior Court held that a non-conforming use of a pier had been discontinued even when still used to moor boats. No. AP-07-007, 2007 WL 4352179 (Me. Super. 2007). The nonconforming pier was missing a platform due to years of normal wear-and-tear but still essentially served the same myriad of uses as a normal pier. Liberally applying the word "discontinued," the Superior Court disagreed with the owner's contention, however, and found that the lack of platform constituted a use that was both different in character and degree from the use of the pilings alone and thus was discontinued.

Lown decision demonstrates the Maine courts' reluctance to uphold non-conforming uses. *See id.* Here, the Property's non-conforming residential use has been discontinued for decades, and certainly well over a year. There has been nothing in the public record or otherwise, as reviewed by this Firm, to suggest that the Property has been used for residential purposes. In fact, the only evidence the Town brings forth that someone did actually live at the Property for a time is the vague recollection of the Shapleigh family that they lived there in the 1970s, more than fifty (50) years ago. *See* **Exhibit A**. Even if the CEO did permit this accessory use back then (which is still uncertain), the liberal construction implemented by Maine courts when limiting nonconforming uses would find that the Property had discontinued its residential use long ago. Because of this, the Property is no longer deemed a residential property under the Town of Eliot Ordinances.

B. The Property's Change of Use Applications Supersedes Its Nonconforming Residential Use

Further, the Property's various Changes of Use Applications, as filed in 2002, 2003, and 2008, indicate that the residential use of the Property has been superseded. The Change of Use Applications are attached hereto as **Exhibit B**. In at least three instances in the past twenty (20) years, the Property has undergone changes to its use. *See* **Exhibit B**. In 2002, a conditional use application was filed to convert the Property into a retail flower shop. *See id.* In 2003, another

conditional use application was filed to convert the Property into a driving school which could hold up to twenty-eight students. *See id.* Lastly, in 2008, a conditional use application was filed to change the Property into a daycare for children. *See id.* In all of these applications, no mention of the residential use of the Property was made. *See id.*

Sec. 45-193(b) of the Eliot Code of Ordinances states: "Whenever a nonconforming use is superseded by a permitted use of a structure, or structure and land in combination, such structure or combination of land and structure shall thereafter conform to the provisions of this chapter and the nonconforming characteristic or use may not thereafter be resumed." With all available evidence, it is undisputed that the Property at a certain point in the 1970s had a lawful nonconforming residential use in a designated commercial district. However, due to the change of use applications, this residential use has been superseded at least three times by conforming uses for retail, education, and childcare. *See* **Exhibit B**. The Change of Use applications make no mention of any sort of residential aspect to the property, let alone any attempt to maintain the residential use. *See id.* Indeed, it would make little sense for a town to approve a Change of Use application if it did not disclose all aspects of the Property. Inclusion of all uses is essential to a Planning Board's ability to make an informed decision on Change of Use applications. Maine courts have disfavored allowing nonconforming uses of a property when doing so would frustrate the objectives of a town's ordinances. *See Farley v. Town of Lyman*, 557 A.2d 197, 201 (Me. 1989). By allowing applicants to leave off a nonconforming use on its Change of Use application to a property, the Planning Board would be frustrating the objectives of its own ordinances. Because of this, the Property no longer has a nonconforming residential use because it has been superseded with conforming commercial uses.

PRELIMINARY CONCLUSION

From the information and documents reviewed by this Firm, it appears that the client's Application should not be rejected based upon the alleged nonconforming residential use of the Property.

Exhibit “B”

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

August 1, 2022

Michelle L. DelMar, Esq.
DelMar Law Offices
ContactMyLawyer.com

10 Post Office Square
Suite 800-S
Boston, MA 02109 USA

John Chagnon, PE, LLS
200 Griffin Road, Unit 3
Portsmouth, NH 03801

Mr. Josh Seymour
Green Truck Farms 7, LLC
19 Buffum Rd., Unit 6
North Berwick, ME 03906

Subject: PB22-13: 143 Harold L. Dow Hwy.: Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary – Review Letter 2

Dear Ms. DelMar, Mr. Chagnon, and Mr. Seymour:

This letter responds to various correspondence your team submitted regarding the subject application and its relation to 150 Harold L. Dow Hwy. (Map 30, Lot 3) with respect to the residential use in the building on the property (hereinafter referred to as the "150 HL Dow Building" or "…Property") and Section 33-190(5)b of the Town Code.

Ms. DelMar's letter of July 20, 2022, stated that:

> it appears there is an error on the Town Property Card for that property. Specifically, there is no current applicable apartment use allowed on the property and such has not been included in any of the multiple applications for that property going back to 1985. The Property Card further indicates code 3400, Office Building 100%.

Ms. DelMar's email of July 30, 2022, stated: "Please let me know who has authorization to correct the error on the Property Card." The Town Assessor generally maintains property records. However, I disagree with your assumption that the Property Card in question is necessarily in error.

The Property Card (publicly available via www.axisgis.com/eliotme and included in the August 2, 2022, Planning Board packet) indicates that the building has an apartment use, as "APTS 2 UNITS" is listed for the finished upper story (FUS) in the "Notes" section. Furthermore, five bedrooms are indicated in the "Construction Detail" section.

The Town records include Building Permit No. 862 (see attached), issued by the Town Building Inspector on May 24, 1977, to the current owner (Nancy Shapleigh, then Nancy Boyce), for "Fencing, door, + window alteration/repair of office/home property". The permit explicitly mentions an "office/home" mixed use. The Property Card indicates that the building was built in 1970. From a review of Town property tax records, it is likely that the building was built, if not in 1970 exactly, then sometime in the early 1970s. As I have stated before, I have heard recollection from the Shapleigh/Widi family of having lived in the building in the 1970s.

The Town's first zoning ordinance was adopted at a Special Town Meeting on February 8, 1971. This zoning ordinance included provisions allowing for legally nonconforming uses to continue and for variances to be issued via Board of Appeals (BOA) review. It separated the Town into two districts, the General Residence (GR) zone and the Commercial-Industrial (CI) zone, the latter being defined as "extend[ing] parallel to and 1500 feet back from the center line of Route 236…". The 1982 zoning ordinance is the earliest ordinance I can find to explicitly prohibit apartments in the C/I district, which is clear in Section 207 – Table of Land Uses. However, this ordinance also included Section 402.2, which stated: "The CEO [Code Enforcement Officer] may permit accessory uses and structures for existing residential use in the Commercial/Industrial District. Dimensional Standards shall be the same as those for the Suburban District (Section 305)." (See attached.) A nearly verbatim provision still exists in the Town Code today, in Section 45-192(b).

In summary, the 150 HL Dow Property had a permit granted by the Town Building Inspector in 1977 referencing residential use. Shapleigh/Widi family members have conveyed to me memories of living there in the 1970s. And the Town's zoning ordinance, by 1982 if not earlier, allowed the CEO to permit "existing residential use" in the C/I District. Based on the preponderance of evidence available to me, it cannot be concluded that the 150 HL Dow Property's residential use is invalid or illegal, as you imply. In fact, the evidence points to the residential use being specifically permitted and legal. Apartment residences deserve the same protection under the 33-190(5)b rule as other types of residences. Therefore, Comment #3 of my Review Letter 1 continues to apply to your team's application.

Sincerely,

Jeff Brubaker, AICP, Town Planner

Cc: Planning Board
Philip Saucier, Esq., Bernstein Shur (Town Attorney)
Michael Sullivan, Town Manager
Shelly Bishop, Code Enforcement Officer
Brent Martin, CMA-4, Town Assessor

(attachments)

BUILDING PERMIT NO. 862 ELIOT, MAINE

Owner's Name NANCY BOYCE

Owner's Address SITE 236

Map No. U-21 Lot No. 8B

Location of Property SAME

Date of Permit 24 MAY 77 Estimated Cost

DESCRIPTION

FENCING, DOOR, & WINDOW ALTERATION/REPAIR OF OFFICE/HOME PROPERTY

Action by:

Planning Board (if required)

Board of Appeals (if required)

Bldg. Insp.

TOWN OF ELIOT

ZONING ORDINANCE

$ 2.00

EFFECTIVE: 11/2/82

205.5 Commercial and Industrial District-

To provide for the public health and safety, environmental quality, and economic well-being of the community;
To encourage the location of commercial and industrial uses on those lands withim the community where such uses are suitable and desirable;
To provide effective controls on those uses which, by virtue of their size or external effects (waste discharge, noise, glare, fumes, smoke, dust, odors, or auto, truck or rail traffic) could otherwise create nuisances or unsafe conditions; and
To avoid the blight, congestion,and inconvenience caused by inappropriate and poorly-located development of commercial and industrial facilities.

206 Permitted/Prohibited Uses

The following Section 207 is a Table of Land Uses showing permitted (yes) and prohibited uses (no). Any use not listed is a prohibited use. The letters CEO, PB, and SR are explained in Section 302.

207 Table of Land Uses

Land Uses (abbreviations listed Section 201):	RP	LR	R	S	V	C/I
Agriculture, except animal breeding and care	PB	CEO	yes	yes	yes	no
Animal breeding and care	PB[1]	CEO	yes[1]	PB[1]	PB[1]	no
Apartments	no	PB	no	PB	PB	no
*Aquaculture	PB	PB	yes	yes	yes	no
*Assembly Places	no	no	no	SR	SR	SR
*Auto graveyards	no	no	SR	no	no	no
*Auto repair garages	no	no	no	SR	SR	SR
*Auto service stations	no	no	no	SR	SR	SR
Banks	no	no	no	no	SR	SR
Bath house	no	CEO	CEO	CEO	CEO	no
Bathing beach	PB	CEO	yes	yes	yes	no
* Boarding homes	no	no	no	PB	PB	no
*Boarding kennel	no	no	no	no	no	SR
Boat house	CEO	CEO	CEO	CEO	CEO	no
Bulk oil fuel tanks	no	no	no	no	no	SR[2]
Business office	no	no	no	PB[3]	PB[3]	SR
*Campgrounds	no	no	SR	no	no	no
Cemeteries	no	no	PB	PB	PB	no
Churches	no	no	PB	PB	PB	SR
Clearing	CEO	yes	yes	yes	yes	yes
Clinics	no	no	no	no	no	SR
Clustered housing	no	no	SR	no	no	no
* Commercial establishment (2 or more where allowed)	-	-	-	SR	SR	SR

*(Terms defined in Section 602, Definitions)

ARTICLE 4 NON-CONFORMANCE

401 General Rule

The use of land, building, or structure, lawful at the time of adoption or subsequent amendment of this Ordinance, may continue although such use does not conform to the provisions of this Ordinance.

402 Non-Conforming Use

402.1 Application for extension or expansion of area or function shall be filed with the Board in the same manner as for a Conditional Use Permit. A non-conforming use may be expanded in area or function by building horizontally or vertically, adding to the volume of business, or increasing the range of goods or services by not more than 25 percent over any 10 year period. The Board shall grant or deny such application for extension or expansion of a non-conforming use, with or without conditions, only after holding a public hearing on the matter. Such application, hearing, and conditions shall be as set forth in Section 508.

402.2 The CEO may permit accessory uses and structures for existing residential use in the Commercial/Industrial District. Dimensional Standards shall be the same as those for the Suburban District (Section 305).

403 Discontinuance of Non-Conforming Use

403.1 A non-conforming use which is discontinued for a period of one (1) year may not be resumed. The uses of the land, building, or structure shall thereafter conform to the provisions of this Ordinance.

403.2 Rule of Precedence - Whenever a non-conforming use is superseded by a permitted use of a structure, or structure and land in combination, such structure or combination of land and structure shall thereafter conform to the provisions of this Ordinance and the non-conforming characteristic or use may not thereafter be resumed.

403.3 Transfer of Ownership - Ownership of land and structures which remain lawful but become non-conforming by the adoption or amendment of this Ordinance may be transferred, and the new owner may continue the non-conforming characteristics or uses subject to the provisions of this Ordinance.

404 Non-Conforming Lots of Record

404.1 A single lot of record which, at the effective date of adoption or amendment of this Ordinance, does not meet the area, road frontage, or setback requirements of the District in which it is located, may be built upon provided that such lot shall be in separate ownership and not contiguous with any other lot in the same ownership, that all other provisions of this Ordinance, shall be met and shall conform with all State laws and regulations.

Exhibit “C”

TOWN OF ELIOT, MAINE MAP No. 42/ LOT 8C

30-3

APPLICATION FOR A PERMIT TO DISPLAY SIGN

1. Applicant David K. Fulton
   Address 38 Rolling Wood
   Eliot Maine
   Telephone 439-4803

2. Owner Nancy Shapleigh
   Address River Rd
   Eliot
   Telephone 439 4709

3. Location of Property Route 236
4. Property is zoned as Com/Ind
5. If a recorded subdivision: Name NA Lot No.
6. Existing use of property (including structures thereon) Real Estate Offices
7. Proposed changes or additions of property:
   a. Residence
   b. Accessory bldg.
   c. Pier or dock
   d. Clearing
   e. Interior Plmbg.
   f. Earth moving activity
      Less than 10 Cu. yds.
      More than 10 Cu. yds.
   g. Other Add a 3'8" X 3' sign, to hang below existing Realtors sign.
8. Lot Dimensions: Front NA Depth NA Area NA
9. Description of Proposed structure (s):
   a. Type of construction Wood
   b. Size and Height 3'8" wide x 3' high
   c. No. of bedrooms
   d. No. of bathrooms
   e. Garage:
      Attached
      Under
      Separate
   f. Other
10. Setbacks: Front NA Side (L) NA Side (R) NA Rear NA
11. Existing Utilities or disposal system: NA
    a. Electric
    b. Town Water
    c. Town Sewer
    d. Well
    e. Private Sewage Disp. Sys.
    f. Other
12. Request for application for electric service. NA Yes No
13. Attachments (when applicable) NA
    a. Record of ownership
    b. Site evaluation Request Waiver of Site Review
    c. Site location permit, waivers, etc.
    d. Plot Plan
    e. Building Plan
    f. Additional information See attached Sketch (the top and bottom may switch places as the order has not been set)
14. ~~Setbacks: Front Side (L) Side (R) Rear~~
15. Estimated Cost $150.00

To the best of my knowledge and belief, all information submitted as part of this application is true and correct. I understand that additional information may be requested in accordance with the Eliot Zoning Ordinance.

1/14/85
Date

David K. Fulton
Applicant Signature

FOR OFFICE USE ONLY

Date received Building Permit NO.
Approved Denied Planning Board approval required
Reasons, Conditions

Exhibit “D”

Permit number 02-69

Town of Eliot
Building permit application

Tax map 30
Lot 3

Date: 22MAY02

Property address: 38 H.L DOW HWY
Owner's name: NANCY SHARLAND / LOIS WIDI
Address: 76 River Rd, ELIOT
Telephone number: 207-439-3106
Property zone: ☐ Village ☐ Suburban ☐ Rural ☑ Commercial/Industrial
Existing uses and structures on property: OFFICE BUILDING + SHED

Land data:
Lot dimensions: frontage 350'
Lot size (in sq.ft. or acres) 3+-A

Building setbacks from property lines:
Front: 37' Rear: 250'
Left side: 50' Right side: 230'

Estimated cost: (This is the market value including labor & materials regardless of who does the work.)$ 7,500
Permit fee $ 15.00 (this fee is due and payable prior to issuance of the permit. **Permit fees are $2.00 per $1,000 of value or any part thereof.**)

Height of building	Number of bathrooms	Number of bedrooms	Septic system is approved for:
Present 30'+-ft	Present N/A	Present N/A	_____ Bedrooms
Proposed SAME ft	Proposed N/A	Proposed N/A	

Description of all proposed construction, dimensions and proposed use.
10'x10' ADDITION OUT BACK OF RIGHT SIDE & 10X20' ADDITION OFF RIGHT SIDE OF BUILDING FACING PARKING LOT.

Contractor information (enter applicable information)
Building contractor: SELF Telephone: _____
Address: _____
Plumbing contractor: _____ Telephone: _____
Address: _____
Electrical contractor: _____ Telephone: _____
Address: _____
Masonry contractor: _____ Telephone: _____
Address: _____
Septic installer: _____ Telephone: _____
Address: _____

Exhibit “E”

PB Serial No. PB02-05
(Filled out by Planning Board)

RECEIVED
APR 19 2002

APPLICATION FOR CONDITIONAL USE PERMIT
TOWN OF ELIOT PLANNING BOARD

☐ **Step 1. (Fill in all blocks below - See the Code Enforcement Officer (CEO) if you don't understand)**

Tax Map 30 Lot # 3 Lot Size 2½A Zoning District: COMMERCIAL

Applicant LOIS WIDI Applicant's mailing address 78 RIVER RD

City/Town ELIOT State: ME Zip: 03903 Telephone: 439-0412

Who owns the property now? NANCY Shapleigh

Address (Location) of the property 38 DOW Hwy, ELIOT

☐ **Step 2 (establish your legal interest in the property)**

Attach a copy of the Purchase and Sales Agreement, Deed, Tax records, Signed Lease, or other documents to the satisfaction of the CEO. If you are representing a corporation, provide documentation that you have authority to speak for the corporation. I WILL BE SIGNING LEASE UPON TOWN APPROVAL. THE PROPERTY IS OWNED BY MY MOTHER.

☐ **Step 3 (Go to Attachment 1 of this form which is a copy of the Zoning Ordinance Section 45-290; Table of Land Uses. Identify the specific use you are applying for)**

What SPECIFIC conditional use are you applying for? Retail Flower Shop
(You MUST make this selection from Section 45-290 of the Zoning Ordinance, for example, industrial establishment, restaurant, school, professional office, etc.)

Having entered the SPECIFIC conditional use above now provide a more detailed description of what you want to do: I want to sell FLOWERS & gifts

5/21
6/4

RECEIVED
APR 19 2002

PB Serial No. _____
(Filled out by Planning Board)

☐ **Step 4 Attach a sketch or plot plan showing the following:** (See Attachment 2)

- ☐ A title block showing Date ___ Scale ___ Arrow pointing North ___.
- ☐ The Zoning District in which the conditional use is planned.
- ☐ The setbacks of all existing and proposed structures or uses.
- ☐ The location of proposed signs, their size, and direction of illumination.
- ☐ The location of all existing and/or proposed buildings, with dimensions.
- ☐ The location of all existing and/or proposed entrances and exits.
- ☐ All existing and/or proposed parking areas
- ☐ Plans of buildings, sewage disposal facilities, and location of water supply.

(see attachment #2 which is an example of a sketch plan showing all of the items above)

☐ **Step 5 Sign the application. (Both owner and applicant must sign and date the application otherwise you will not be put on Planning Board Agenda))**

Applicant _____ Date 18 April 02

Property Owner Nancy Shapiro Date 18 April 02

☐ **Step 6 Give this application to the CEO and have him sign, date and initial it**

Received _____ This is a Non-Conforming ☐ Lot ☐ Use ☐ Structure

Planner CEO Initials _____

☐ **Step 7 The CEO will now put this application on the Planning Board Agenda for the second Tuesday of the month.**

(you are now done with the application)

☐ **Step 8 Attend the Planning Board meetings. You will be sent a copy of the time of the meeting you or your representative must attend. If you or your representative can't attend the meeting please notify the CEO and you will be rescheduled.**

Case PB-02-05

TOWN OF ELIOT
PLANNING BOARD NOTICE OF DECISION

DATE: May 29, 2002

Ms. Lois Widi
78 River Road
Eliot, Maine
03903

Dear Ms. Widi,

This is to inform you that the Planning Board has acted on your application for a Conditional Use as follows:

Findings of Fact:

1. The owner of the property is Nancy Shapleigh.

2. The property address is 38 Dow Highway, Eliot

3. Assessor's Map # 30 , Lot # 3 , Size (acres): 2.5 , Zoning District: Commercial/Industrial

4. The applicant is Lois Widi who has demonstrated a legal interest in the property by providing a statement that a lease will be signed as soon as she obtains approval by the Planning Board.

5. The application was accepted by the CEO on April 18, 2002

6. The application was first discussed by the Planning Board on May 7, 2002

7. A Site Inspection was waived due to Planning Boards knowledge of property.

8. A Public Hearing was advertised in the Portsmouth Herald and Foster's Daily Democrat on May 11, 2002 and held on May 21, 2002.

9. The applicant proposes to establish a retail flower shop on the subject property.

10. One abutter or member of the public spoke at the Public Hearing.

11. The major concern identified during the public hearing was future expansion plans.

Conclusions:

1. A retail flower shop is a permitted use with Planning Board approval under the Town of Eliot Zoning ordinances and will not significantly change the character of the neighborhood.

2. All concerns raised during the public hearing were addressed by the applicant.

3. The standards of Section 45-290 and 45-404 of the Zoning Ordinance (Chapter 45) have or will be met.

4. All applicable sections of the Site Review Ordinance (Chapter 33, Article III) have been or will be met.

5. The following Performance Criteria and/or Ordinance Requirements have been addressed by the Planning Board in accordance with Section 33-127 during review of this application as follows:

(1) Development name or title -*Provided on plan*
(2) Owner, developer, designer name and address -*Provided on plan*
(3) Names and addresses of all abutters and abutters land use *Provided*
(4) Certified perimeter survey showing true north, graphic scale, corners of parcel, total acreage, etc..*Not required by the Board*
(5) Temporary markers. - *Waived by the Planning Board (Not needed)*
(6) Contour lines at 5 ft intervals or as Board decides. - *Waived by the Planning Board (Not needed)*
(7) Provisions of Chapter 45 of the Zoning Ordinance applicable to the area to be developed and any zoining district boundaries affecting the development. *Provided*
(8) Storm water Drainage Plan. - *Waived by the Planning Board (Not needed; no grading)*
(9) Required bridges or culverts. *Not Applicable*
(10) Location of natural features or site elements to be preserved. (*Not Applicable; no grading)*
(11) Soil Erosion and Sediment Control Plan. - *(Waived by the Planning Board; no grading)*
(12) High Intensity Soils Report. - *Waived by the Planning Board (Applicable to subdivisions)*
(13) Locations of sewers, water mains, culverts and drains. - *Waived by the Planning Board (Not needed)*
(14) Water supply information. -*Provided on plan*
(15) Sewerage System Plan. -*Provided on plan*
(16) Septic System Survey. *Not applicable, no change in use*
(17) Progress schedule. - *Waived by the Planning Board (Not needed)*
(18) Construction drawings for CEO which show areas, ground coverage, location of all structures, setbacks, lighting, signs, incineration devices, noise generating machinery likely to generate appreciable noise beyond the lot lines, waste materials, curbs, sidewalks, driveways, fences, retaining walls, etc.. - *Will be provided to the CEO when needed.*

Decision:
Based on the above facts and conclusions, on May 21, 2002, the Planning Board voted to approve your application for a Conditional Use Permit to establish a retail flower shop.

Conditions of Approval:
In order to further promote the purposes of the Eliot Zoning Ordinance, the Planning Board has voted to impose the following conditions on the approval of this application:

1. The property may be developed and used only in accordance with the plans, documents and materials submitted and representations of the applicant made to the Planning Board. All elements and features of the use as presented to the Planning Board are conditions of

approval and no changes in any of those elements or features are permitted unless such changes are first submitted to and approved by the Eliot Planning Board.

2. Public Hearing fees must be paid for notification of property owners and newspaper advertisements.

3. Application fees of $ 300 per IAW section 33-128 at $100/acre must be paid by the applicant . In addition, advertising fees for a Public Hearing and Abutter notification fees must be paid.

4. This permit is approved on the basis of information provided by the applicant in the record regarding his ownership of the property and boundary location. The applicant has the burden of ensuring that he has a legal right to use the property and that he is measuring required setbacks from the legal boundary lines of the lot. The approval of this permit in no way relieves the applicant of this burden. Nor does this permit approval constitute a resolution in favor of the applicant of any issues regarding the property boundaries, ownership, or similar title issues. The permit holder would be well-advised to resolve any such title problems before expending money in reliance on this permit.

Permits

The Planning Board has approved your application and the Code Enforcement Officer is authorized to grant you the necessary Permits or Certificates of Occupancy, as appropriate. It is your responsibility to apply for these permits. In exercising this approval you must remain in compliance with all the conditions of approval set forth by the Planning Board, as well as all other Eliot, State, and Federal regulations and laws. Be aware, however, that Conditional Use approvals that are granted by the Eliot Planning Board have expiration provisions specified in Sections 33-59, 45-126, and 44-45 of the Zoning Ordinances. The holder of an approved application would be well advised to review these sections of the ordinances to ensure that the approval granted on May 21, 2002 does not expire prior to commencement of work.

Appeals

This decision can be appealed to the Board of Appeals within 30 days after May 21,2002 by an aggrieved person or party as defined in section 45-50(b) of the Eliot Zoning Ordinance. Computation of time shall be in accordance with Section 1-2 of the Eliot Zoning Ordinances.

Sincerely,

_____

Tony Manero
Chairman, Eliot Planning Board

CC: Code Enforcement Officer
Municipal Officers

Exhibit “F”

Case No. PB03-36
Site review? (Yes) No

APPLICATION FOR CONDITIONAL USE PERMIT
(Includes Home Occupation)
TOWN OF ELIOT PLANNING BOARD

☐ **Step 1. (Fill in all blocks below - See the Planning Assistant if you don't understand.)**

Tax Map 30 Lot# 3 Lot Size 2.5 ac. Zoning District: C/I

Your Name Vanessa J. Moulton dba Eliot Dr. School Inc Your mailing address 38HL Dow Hwy

City/Town Eliot State: Maine Zip: 03903 Telephone: 207.439.4669

Who owns the property now? Nancy Shapleigh

Address (Location) of the property 38HL Dow Hwy Eliot, Me 03903

☑ **Step 2 (establish your legal interest in the property)**

Attach a copy of the Purchase and Sales Agreement, Deed, Tax records, Signed Lease, or other documents to the satisfaction of the Planning Assistant. If you are representing a corporation, provide documentation that you have authority to speak for the corporation.

☑ **Step 3 (Go to the Zoning Ordinance Section 45-290, Table of Land uses)**

What SPECIFIC conditional use are you applying for? ~~Driving~~ School
(You MUST make this selection from Section 45-290 of the Zoning Ordinance)

Having entered the SPECIFIC conditional use above now provide a more detailed description of what you want to do:
to provide in-classroom and on-road instructions to conduct the Eliot Driving School business.

Case No. PB03-36
Site review? Yes No

☐ **Step 4 Attach ten (10) copies of a sketch or plot plan showing the following:**

- ☑ A title block showing Date ___, Scale ___, Arrow pointing North ___.
- ☑ The Zoning District in which the conditional use is planned.
- ☑ The setbacks of all existing and proposed structures or uses.
- ☑ The location of proposed signs, their size, and direction of illumination.
- ☑ The location of all existing and/or proposed buildings, with dimensions.
- ☑ The location of all existing and/or proposed entrances and exits.
- ☑ All existing and/or proposed parking areas
- ☐ Plans of buildings, sewage disposal facilities, and location of water supply.

☐ **Step 5 Sign the application (both owner and applicant must sign and date the application)**

Applicant Vanessa G. Moulton Date 12.2.03

Property Owner Nancy Shapleigh Date 12/3/03

☑ **Step 6 Application received by Planning Assistant**

Date received by the PA 12/3/03 PA initials

☐ **Step 7 The Planning Assistant will review the application and if complete, will place your application on a future Planning Board agenda**

☐ **Step 8 The applicant or representative of the applicant must attend the Planning Board meeting**

CASE NO. 03-36____

ELIOT PLANNING BOARD
NOTICE OF DECISION

DATE: March 2nd, 2004

Vanessa J. Moulton d/b/a Eliot Driving School
38 Dow Highway
Eliot, ME 03903

Dear Ms. Moulton,

This is to inform you that the Planning Board has acted on your application for a Conditional Use as follows:

Findings of fact:

1. The owner of the property is Nancy Shapleigh.

2. The property is located on Route 236, in the commercial/industrial zoning district, identified as Assessor's Map 30, Lot 3, and containing 2.5 acres.

3. The applicant is Vanessa J. Moulton who demonstrated a legal interest in the property by providing a copy of a commercial lease October 1st, 2003.

4. The application was accepted by the Planning Assistant on December 3rd, 2003

5. The application was first discussed by the Planning Board on January 20th, 2004.

6. A site visit was waived due to the Planning Board's knowledge of the property.

7. A Public Hearing was advertised in the Portsmouth Herald and held on February 17th, 2004.

8. The applicant proposes to establish a driving school for up to 28 students at the subject property.

9. The proposed use is listed in the Table of Land Uses Section 45-290 as a school.

10. One abutter or member of the public spoke or submitted written correspondence at the Public Hearing or submitted written correspondence by mail in favor of the proposal.

11. The Police and Fire Chiefs both reviewed this application and did not express any concerns with the proposal.

Conclusions:

1. The Planning Board voted to review this application under PB and not SR in accordance with Section 45-402(c).

2. Establishment of a school is a permitted use with Planning Board approval under the Town of Eliot Zoning ordinances and will not significantly change the character of the neighborhood.

3. The standards of Section 45-290 and 45-404 of the Zoning Ordinance (Chapter 45) have or will be met.

Decision:
Based on the above facts and conclusions, on February 17th, 2004, the Planning Board has voted to approve your application for a Conditional Use to establish a driving school for up to 28 students.

Conditions of Approval:
The applicant must comply with all of the requirements of the Town of Eliot Land Use Ordinances. In addition, in order to further promote the purposes of the Eliot Zoning Ordinance, the Planning Board has voted to impose the following conditions on the approval of this application:

1. The property may be developed and used only in accordance with the plans, documents, materials submitted, and representations of the applicant made to the Planning Board. All elements and features of the use as presented to the Planning Board are conditions of approval and no changes in any of those elements or features are permitted unless such changes are first submitted to and approved by the Eliot Planning Board.

2. Public Hearing fees must be paid for notification of property owners and newspaper advertisements.

Permits
The Planning Board has approved your application and the Code Enforcement Officer is authorized to grant you the necessary Permits or Certificates of Occupancy, as appropriate. It is your responsibility to apply for these permits. In exercising this approval, you must remain in compliance with all the conditions of approval set forth by the Planning Board, as well as all other Eliot, State, and Federal regulations and laws. Be aware, however, that Conditional Use approvals that are granted by the Eliot Planning Board have expiration provisions specified in Sections 33-59, 45-126, and 44-45 of the Zoning Ordinances. The holder of an approved application would be well advised to review these sections of the ordinances to ensure that the approval granted on February 17th, 2004 does not expire prior to commencement of work.

Appeals
This decision can be appealed to the Board of Appeals within 30 days after February 17th, 2004 by an aggrieved person or party as defined in section 45-50(b) of the Eliot Zoning Ordinance. Computation of time shall be in accordance with general provisions of the Town of Eliot Municipal Code of Ordinances, section 1-2.

Exhibit “G”

Case No. _____
Site review? Yes No

RECEIVED
AUG 07 2008
By: Lee Tollefson

APPLICATION FOR CONDITIONAL USE PERMIT
(Includes Home Occupation)
TOWN OF ELIOT PLANNING BOARD

☐ **Step 1. (Fill in all blocks below - See the Planning Assistant if you don't understand.)**

Tax Map 30 Lot# 3 Lot Size 2.87± Zoning District: COMM/INDUSTRIAL

Your Name Kimberly Shunk Your mailing address 60 Picott Rd

City/Town Kittery State: ME Zip: 03904 Telephone: 603-834-2419

Who owns the property now? NANCY SHAPLEIGH

Address (Location) of the property 150 DOW HIGHWAY, ELIOT, ME

☐ **Step 2 (establish your legal interest in the property)**

Attach a copy of the Purchase and Sales Agreement, Deed, Tax records, Signed Lease, or other documents to the satisfaction of the Planning Assistant. If you are representing a corporation, provide documentation that you have authority to speak for the corporation.

☐ **Step 3 (Go to the Zoning Ordinance Section 45-290, Table of Land uses)**

What SPECIFIC conditional use are you applying for? DAY NURSERY
(You MUST make this selection from Section 45-290 of the Zoning Ordinance)

Having entered the SPECIFIC conditional use above now provide a more detailed description of what you want to do:
CHILD CARE FACILITY STARTING WITH 10 CHILDREN BUT NOT TO EXCEED 16 INCLUDING 2 OF MY OWN CHILDREN.

Case No._____
Site review? Yes No

☐ **Step 4 Attach ten (10) copies of a sketch or plot plan showing the following:**

- ☐ A title block showing Date ___, Scale ___, Arrow pointing North ___.
- ☐ The Zoning District in which the conditional use is planned.
- ☐ The setbacks of all existing and proposed structures or uses.
- ☐ The location of proposed signs, their size, and direction of illumination.
- ☐ The location of all existing and/or proposed buildings, with dimensions.
- ☐ The location of all existing and/or proposed entrances and exits.
- ☐ All existing and/or proposed parking areas
- ☐ Plans of buildings, sewage disposal facilities, and location of water supply.

☐ **Step 5 Sign the application (both owner and applicant must sign and date the application) and submit fee ($100 per acre for first 5 acres and $50 per acre after five)**

Applicant _____ Date _____

Property Owner _____ Date _____

☐ **Step 6 Application received by Planning Assistant**

Date received by the PA _____ PA initials _____

☐ **Step 7 The Planning Assistant will review the application and if complete, will place your application on a future Planning Board agenda**

☐ **Step 8 The applicant or representative of the applicant must attend the Planning Board meeting**

Case No._____
Site review? Yes No

PART 1 - THE PROCEDURE

(STEP 1) Meet with the Planning Assistant to assure that Site Review is required. Obtain application forms and assemble data for submission.

(STEP 2) ***Sketch Plan Stage*** Application submission. Include 10 copies of the sketch plan, survey map, location map, and affidavit of ownership or legal interest. (Section 33-63)

(STEP 3) Application fees paid at time of application submission. Fees shall be $100 per acre for first 5 acres and $50 per acre after five (Section 1-25).

(STEP 4) Applicant attends first meeting with Planning Board, describes project, and answers questions *(Board may review checklist for the Site Plan at this time or act on waivers requested for submission of data)*

(STEP 5) Board sets up site visit with applicant (Section 33-64).

(STEP 6) Board visits site with applicant.

(STEP 7) Applicant attends succeeding meetings. Board does preliminary review of the Ordinance requirements for applicability to the Site Plan. Board and notifies applicant of changes required to Sketch Plan after site inspection (Section 33-103).

(STEP 8) Applicant revises the "Sketch Plan" as needed, submits the Site Plan, and pays non-refundable fees. (Sections 33-126 & 33-128).

(STEP 9) ***Site Plan Stage*** Applicant attends succeeding meetings with Planning Board and discusses Site Plan (Section 33-129) until Board votes to accept the Site Plan (Section 33-126) *Board schedules public hearing for future meeting when all requirements have been or will be met.*

(STEP 10) Board conducts Public Hearing (Section 33-130).

(STEP 11) ***Approval stage*** Board approves / approves with conditions / disapproves applicants application within 30 days of the close of the final Public Hearing or 75 days from date Board accepted completed application and Site Plan (Section 33-131). If more than one public hearing is held, the 30-day period begins after the last public hearing.

(STEP 12) Board issues a Notice of Decision, which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131). The Notice of decision and signing of the final plan is for documentation purposes and does not determine the beginning of the appeal period.

Case No._____
Site review? Yes No

(STEP 13) ***Appeal Period*** A 30-day appeal period begins from the date the Board makes a decision on the application. (Section 45-50) The applicant may begin work on the project during this period, but does so at his or her own risk.

PART 2
DETAILED ORDINANCE REFERENCES FOR EACH SITE REVIEW EVENT

1. Submit application. (Section 33-63) Include 10 copies of all submissions that show:

☐ Sketch Plan- (See Section 33-105) showing:
- ☐ All zoning districts
- ☐ Existing and proposed structures
- ☐ Existing and proposed parking areas (Parking must meet setbacks)
- ☐ Existing and proposed Streets and entrances
- ☐ Existing and proposed setbacks
- ☐ Other site dimensions and area
- ☐ Site and public improvements and facilities
- ☐ Areas of excavation and grading
- ☐ Any other site changes
- ☐ Location Map-This is to be submitted along with or as part of the Sketch Plan (See Section 33-104) and includes:
  - ☐ Scale of 500 ft to the inch
  - ☐ Show all area within 2000 ft of property lines
  - ☐ All surrounding existing streets within 500 ft
  - ☐ Abutters lots and names within 500 ft of property boundary
  - ☐ Zoning districts within 500 ft
  - ☐ Outline of proposed development showing internal streets and entrances

2. Site inspection (Section 33-64) The Board and Applicant conduct site inspection. Applicant shall stake the lot corners, the location of all proposed structures, parking and the centerlines of all proposed streets and entrances in development. Verify that parking meets applicable setbacks

3. Board notifies applicant of changes required to Sketch Plan after site inspection such as contour interval, street classification, etc. (Section 33-103) and determines:

☐ If other Local, State or Federal agencies or officers (Section 33-102) should review Sketch Plan.

☐ If review by Eliot Fire Chief ___, Police Chief ___, or Road Commissioner___ is required.

Case No._____
Site review? Yes No

4. Applicant converts Sketch Plan into a "Site Plan" (Sections 33-126). The following requirements are considered by the Planning Board

Chapter 33 required information

☐4.1. Applicant shall provide one original and 10 copies of Site Plan drawn at a scale not smaller than 1-inch equals 20 feet showing the following information:

☐4.1.1. Development name, owner, developer, designer name and address and names and addresses of all abutters and abutters land use.
☐4.1.2. Certified perimeter survey showing a north arrow, graphic scale, corners of parcel, total acreage, etc. This means a survey of the property using the standards of practice established by the State of Maine Board of Licensure for Professional Land surveyors, MRSA Chapter 121.
☐4.1.3. Temporary markers.
☐4.1.4. Contour lines at 5-ft intervals or as Board decides.
☐4.1.5. A list of the provisions of Chapter 45 (Zoning) which are applicable to this area and identification of any zoning district boundaries affecting the development.
☐4.1.6. Storm water Drainage Plan. (50 year storm)
☐4.1.7. Required bridges or culverts.
☐4.1.8. Location of natural features or site elements to be preserved.
☐4.1.9. Soil Erosion and Sediment Control Plan.
☐4.1.10. High Intensity Soils Report.
☐4.1.11. Locations of sewers, water mains, culverts and drains.
☐4.1.12. Water supply information.
☐4.1.13. Sewerage System Plan.
☐4.1.14. Septic System Survey.
☐4.1.15. Estimated progress schedule.
☐4.1.16. Construction drawings for CEO which show floor areas, ground coverage, location of all structures, setbacks, lighting, signs, incineration devices, noise generating machinery likely to generate appreciable noise beyond the lot lines, waste materials, curbs, sidewalks, driveways, fences, retaining walls, etc.
☐4.1.17. Telecommunication tower details as required.

☐4.2. Additional requirements made by Board (Section 33-126).

Other Chapter 33 Site Review Ordinance Requirements.

☐4.4. Traffic data if applicable (Section 33-153)
☐4.5. Campground requirements if applicable (33-172)

☐4.6. Commercial Industrial requirements if applicable
☐4.6.1. Landscaping (Section 33-175)

Case No._____
Site review? Yes No

☐4.6.2. Vibration (33-176)
☐4.6.3. Site Improvements (33-177)
☐4.6.4. Electromagnetic Interference (33-178)
☐4.6.5. Parking and Loading Areas (33-179, 45-487, 45-495)
☐4.6.6. Glare (33-180)

☐4.7. Motel requirements if applicable (Section 33-182)
☐4.8. Multi-family dwelling requirements if applicable (Section 33-183)

Chapter 45 Zoning Ordinance Requirements. compliance includes the following Article VIII Performance Standards:

☐4.9. Dimensional Standards (Section 45-405)
☐4.10. Traffic (Section 45-406)
☐4.11. Noise (Section 45-407)
☐4.12. Dust, Fumes, Vapors and Gases (Section 45-408)
☐4.13. Odor (Section 45-409)
☐4.14. Glare (Section 45-410)
☐4.15. Storm-water run-off for a 50 year storm. (Section 45-411)
☐4.16. Erosion Control (Section 45-412)
☐4.18. Preservation of Landscape (Section 45-413)
☐4.19. Relation of Buildings to Environment (Section 45-414)
☐4.20. Soil Suitability for Construction (Section 45-415)
☐4.21. Sanitary Standards for Sewage (Section 45-416)
☐4.22. Buffers and Screening (Section 45-417)
☐4.23. Explosive Materials (Section 45-418)
☐4.24. Water Quality (Section 45-419)
☐4.25. Refuse Disposal (Section 45-421)

☐4.26. Specific Activities (Article IX) which include:
- ☐4.26.1. Accessory Use or Structure (Section 45-452)
- ☐4.26.2. Home Occupation (Section 45-455)
- ☐4.26.3. Mobile Homes (Section 45-457)
- ☐4.26.4. Off-street Parking and Loading (Article X)
- ☐4.26.5. Signs (Article XI)

☐4.27. In addition the Board may make other conditions for approval that will insure such compliance and would mitigate any adverse affects on adjoining or neighboring properties which might otherwise result from any proposed use (Section 33-131).

5. Board discussion of Site Plan (Section 33-129).
   ☐5.1. Board discusses Site Plan with applicant.

6. Public Hearing (Section 33-130).
   ☐6.1. Conducted within 30 days of Boards acceptance of Site Plan.
   ☐6.2. Three notices posted 10 days prior to the Public Hearing.

Case No._____
Site review? Yes No

☐6.3. Notices advertised in two newspapers 10 days prior to Public Hearing.
☐6.4. Other Towns notified 10 days prior to if within 500 feet of applicant's lot.
☐6.5. Abutters notified 10 days prior to by certified mail, return receipt requested. $150.00 paid by applicant to cover the cost of advertising and abutter notification (Sec. 1-25)
☐6.6. Selectmen, CEO, and Board of Appeals shall be notified 10 days prior to the Public Hearing.

7. Board approves / approves with conditions / disapproves applicants Application within 30 days of Public Hearing or 75 days from date Board accepted completed Application and Site Plan (Section 33-131).

Note: Computation of time shall be in accordance with Section 1-2 as follows: "In computing any period of time prescribed or allowed by this Code, the day of the act, event or default from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included unless it is a Saturday, Sunday or legal holiday, in which event the period shall run until the end of the next day which is neither a Saturday, Sunday or legal holiday. When the period of time prescribed or allowed is less than seven days, intermediate Saturdays, Sundays and legal holidays shall be excluded in the computation."

8. Notice of Decision issued which contains findings certifying compliance with ordinance, reasons for conditional approval or reasons for disapproval (Section 33-131).

TOWN OF ELIOT MAINE
PLANNING OFFICE
1333 State Road
Eliot ME, 03903

September 15, 2022

Mr. Philip M. Giordano, Esq.
Giordano & Company, P.C.
REED & GIORDANO, P.A.
47 Winter Street, Suite 800
Boston, Massachusetts 02108-4774

Re: PB22-13: 143 Harold L. Dow Hwy. – Site Plan Review and Change of Use – Marijuana Store and Medical Marijuana Dispensary – Response to August 8, 2022, Memorandum from Applicant's Attorney(s)

Dear Mr. Giordano:

This letter responds to your memorandum to Attorney Michelle DelMar, Esq., representing the subject applicant (hereinafter the "Applicant"), dated August 8, 2022, entitled, "RE: Applicant's Response to Various Issues Raised at Town of Eliot Planning Board Meeting, August 2, 2022, Regarding PB22-13: 143 Harold L. Dow Hwy. (the "Marijuana Retail Store Property"): Site Plan Review and Change of Use – Adult Use Marijuana Retail Store and Medical Marijuana Dispensary" (hereinafter the "Memo"). This letter will be shared with the Planning Board (hereinafter the "Board") to ensure that Board members and the public have accurate information. Sentences in quotation marks and italics are direct quotes from your letter. Numerical citations are from the Eliot Town Code, unless otherwise specified.

"…the Town and its Planner have contended, without probative evidence and primarily relying upon rumor and "family memories," that Nancy Shapleigh, the current owner of the Property, maintains a lawful nonconforming residential use of the Property in conjunction with its commercial use."

This is incorrect. My August 1 letter, which your memo attaches as "Exhibit 'B'" (hereinafter the "August 1 Letter") relies on evidence in the record, including the 1977 building permit referencing residential use, the history of the Town's land use regulations, and the Vision property card publicly available via www.axisgis.com/eliotme and included in the August 2, 2022, Planning Board packet. Such evidence is merely supplemented with recollections from the Shapleigh/Widi family, which the Memo seems to trivialize. On the contrary, those family memories do matter.

"The Town Has Not Provided Any Probative Evidence That the Property Has Been Continuously Used for Residential Purposes Since 1970"

The burden of proof is on the Applicant to demonstrate how they are meeting all applicable land use regulations, including 33-190(5)b. In this case, the Board has the discretion to make a reasonable finding of fact on the residential status of 150 Harold L. Dow Hwy (hereinafter "150 HL Dow") weighing the available evidence and input they have received.

"Maine courts have long held that "[n]onconforming uses are a thorn in the side of proper zoning and should not be perpetuated any longer than necessary… The policy of zoning is to abolish nonconforming uses as swiftly as justice will permit." Farley v. Town of Lyman, 557 A.2d 197, 201 (Me.1989) (quoting Town of Windham v. Sprague, 219 A.2d 548, 552–53 (Me.1966)). As such, "provisions of a zoning regulation for the continuation of [nonconforming] uses should be strictly construed, and provisions limiting nonconforming uses should be liberally construed." Town of Windham v. Sprague, 219 A.2d at 552. What constitutes as a discontinuance, therefore, has been liberally construed so as to properly limit the bounds of nonconforming uses. See Lown v. Town of Kennebunkport, No. AP-07-007, 2007 WL 4352179 (Me. Super. 2007)."

This court precedent is acknowledged. However, the cited court decisions have a categorically different context than PB22-13. Therefore, I do not believe they can be primarily relied upon to make conclusions about the residential use at 150 HL Dow.

In the *Town of Windham v. Sprague* (1966), at issue was whether the owner of a property (not within a trailer park) could replace an old house trailer with a new house trailer when the old house trailer was made nonconforming by the passage of an ordinance restricting house trailers to approved trailer parks. The court found that the ordinance was a "reasonable exercise of the police power". However, the court acknowledged that the property owner "under the ordinance had a right to maintain [the old trailer] as a nonconforming use". The building at 150 HL Dow is the same building that was built in the 1970s and permitted for residential use in 1977. The Board is not reviewing a proposal to create a new apartment or new residential building on 150 HL Dow.

In *Farley v. Town of Lyman* (1989), at issue was whether the plaintiff could build a new house on a vacant 3.7-acre nonconforming lot of record (cited in the decision as "Lot 12"), after the minimum lot size in the zoning district was increased to 5 acres. A complicating factor was that the plaintiff had sold the lot to her sister, who owned an adjoining parcel ("Lot 11"), but then bought it back. The Town's building inspector and code enforcement officer "denied plaintiff's application on the ground that the undersized Lots 11 and 12 had merged" when her sister owned both, relying on an ordinance provision deeming contiguous nonconforming lots under common ownership a single parcel for the purpose of land use review. The Board of Appeals upheld the denials, concluding that Lot 12 "lost its grandfathered status as a separate parcel" as a result of the merger. Both the Superior Court and Law Court affirmed. However, the Law Court made clear that, had Lot 12 not been merged, it would have been "grandfathered and would have been exempt from the new dimensional requirement had plaintiff applied for her permit at that time." This confirms the legal basis for allowing grandfathered uses to continue as is in the event of the adoption of more restrictive dimensional or other regulatory requirements. The question about 150 HL Dow's residential use has nothing to do with a merger of a vacant nonconforming lot with another lot. It has to do with an apartment that was built in the 1970s and remains today.

In *Lown v. Town of Kennebunkport* (2007), the facts of the case are quite different than what we are debating in PB22-13 with 150 HL Dow. The pier platform "had decayed sometime during the 1980's" and was rebuilt in 2006. The court held that the "extent of repair…is subject to reasonable dispute", concluding that the rebuilding of the platform and replacement of the pilings "indicate a substantial rebuild occurred" – a strike against the argument that the continued use of the (substantially rebuilt) pier still had grandfathered status. With 150 HL Dow, no evidence has been presented that the apartment floor of the building sat deteriorating for decades and then was substantially rebuilt. Normal upkeep and maintenance work is to be expected for structures built in the 1970s to allow the grandfathered use to continue in a safe and healthy manner.

The task before the Board is to review your client's application to determine if it meets applicable land use regulations, not to review a permit application relating to the rebuilding or alteration of the residential portion of the 150 HL Dow building. The court precedent of strictly construing ordinance provisions allowing continuation of nonconforming uses, and liberally construing ordinance provisions limiting the same, applies to "one seeking nonconforming use status", as the court states in *Lown*. 150 HL Dow is not the locus parcel. Therefore, the Board in PB22-13 is not bound to a particular interpretation approach in determining if 150 HL Dow is a residential property for the sake of 33-190(5)b. It needs to make that determination objectively, without a predisposition to disfavor the apartment use.

"In other words, if it is shown that the Property, at any point between now and present day, had not been used for a period of twelve months, the nonconforming residential use of the property cannot be resumed."

This statement is confusing when considering what follows. You suggest here that the burden of proof is on those arguing in favor if discontinuance – namely, you on behalf of the Applicant. But in the paragraph that follows, you reverse yourself and seek to unload the burden onto Mr. Widi to provide "supporting evidence of continuous use", then you trivialize the evidence he provided. As I stated above, the burden of proof is on the applicant to demonstrate that they are meeting all applicable land use regulations, including 33-190(5)b.

"More concrete evidence, however, is available to support the contention that the Property was not used for residential purposes. In 1985, a man named David K. Fulton applied for a permit to display a sign at the Property. David K. Fulton's permit application is attached herein as ***Exhibit C****. Next to "Existing use of property," Fulton listed "real estate offices" as the sole use. See* ***Exhibit C****. Later, on May 22, 2002, Nancy Shapleigh and Lois Widi applied for a building permit for an addition to the Property. Shapleigh's May 22, 2002 building permit application is attached herein as* ***Exhibit D****. Similar to Fulton's application, next to "Existing uses and structures on property," Shapleigh only wrote "Office building + Shed." See* ***Exhibit D****. No mention of any residential use was listed in these applications."*

In Exhibit C, Mr. Fulton is not the property owner, who is clearly listed as Nancy Shapleigh. The mere writing of an existing use on a sign permit application (Line 6) by an applicant, not the property owner, does not magically invalidate any other existing use on the property not enumerated. You give a single fill-in-the-blank on a form too much gravity. As the February 19, 1985, Planning Board minutes (attached) show, there was no mention of an intent to discontinue the residential use as part of this sign permit review. In fact, the minutes suggest that Mr. Fulton had already opened his new law office in the building – he wanted his sign under Ms. Shapleigh's realtor sign – so his application even omits his own law office use from Line 6, suggesting that Line 6 was more informational than substantial.

In summary, there is thin gruel in Exhibit C for arguing that this sign permit application in any way discontinued the residential use.

In Exhibit D, the listing of an "office building" as an existing use/structure does not preclude residential use. It is common for an office building to have a mixed-use component including both offices and other uses, such as residential. This is reflected in the 1977 building permit. Also, the floor plan on file attached to the conditional use permit application for the flower shop (PB02-05) only covers the first floor of the building. I can see no explicit proposed change to the second floor in the file.

"Lastly, according to the Town's own publicly available database of records online, the Property's use is listed as "Office Building.""

This is correct but is lacking additional context. As mentioned previously, an apartment use is reflected on the current Vision property card. Also, on the separate Vision property record (attached), also publicly available at the aforementioned link, the style of the building is listed as "Comm/Apartment" and the number of bedrooms is shown as five (5).

"The Change of Use Applications in 2002, 2003, and 2008 Demonstrate That the Nonconforming Residential Use at the Property Has Clearly Been Superseded by a Lawful Conforming Commercial Use"

I can find nothing in these applications (not technically "change of use applications", but rather "conditional use permit applications"), or in associated Board review minutes, where a request was made to give up the legally nonconforming residential use. Again, in my opinion, the burden of proof is on the Applicant to demonstrate that the 150 HL Dow residential use was discontinued because they need to show how they are meeting all applicable land use regulations for their application, including 33-190(5)b.

"Mr. Widi and Mr. Brubaker's arguments are wishful thinking. First, Mr. Brubaker's argument that Change of Use applications need to explicitly state the intent to change a nonconforming use runs contrary to the attitude towards nonconforming uses in general. "Provisions of a zoning regulation for the continuation of [nonconforming] uses should be strictly construed, and provisions limiting nonconforming uses should be liberally construed." Town of Windham, 219 A.2d at 553."

I discuss above (related to *Lown*) why this "attitude" is incongruent with the Board's consideration of the residential use at 150 HL Dow.

"Nowhere in Sec. 45-193(b) of the Eliot Code of Ordinances does it require an intent to alter the nonconforming use to be shown for the nonconforming use to be superseded."

Nor does 45-193(b) assume a nonconforming use is automatically superseded by the permitting of a conforming use adjacent to it, or within the same building, or on the same property. It begins, "Whenever a nonconforming use is superseded by a permitted use of a structure…" This is an "if" conditional clause; a superseding actually needs to occur for the "conforming characteristic or use" to be required to cease. In fact, read together with 45-192(b), a mixed-use property in the C/I district could have different commercial uses approved and permitted over time, but if it also had a

nonconforming residential use, the Code Enforcement Officer could continue to "permit accessory uses and structures" for that residential use, provided they met the cited dimensional standards.

"Requiring an intent for a conforming use to supersede a nonconforming use would mean that the Town would be strictly construing a provision limiting nonconformance."

On the contrary, preventing a mixed-use property owner from applying for a new conforming use while retaining, on a different part of the property, their legally nonconforming use as is (under the logic that the new conforming use would automatically supersede the nonconforming use) would go against the grandfathering logic of allowing legally nonconforming uses to continue, and would frustrate the purpose of 45-192(b).

"Second, the Change of Use applications filed in 2002, 2003, and 2008 speak to the entire Property, and not just the downstairs portion. The division of the Property laid out by both Mr. Brubaker and Mr. Widi is not identified in any of the Change of Use applications… The applications do not specify any division of units at the Property."

That is incorrect. The PB02-05 flower shop floor plan (first floor) was mentioned earlier and is attached. The PB03-36 driving school application included a lease (first page attached) showing that the driving school would only be renting "Office Unit B". The PB08-13 day care application includes a letter from Ms. Shapleigh indicating that only "Suites A & B" would be rented.

Thank you for your consideration of these clarifications and corrections. I look forward to discussing this further at the upcoming Board meeting.

Sincerely,

Jeff Brubaker, AICP
Town Planner

Cc: Philip Saucier, Esq., Bernstein Shur (Town Legal Counsel)
Michelle DelMar, Esq., DelMar Law Offices
Planning Board
William Widi

150 HAROLD L DOW HWY

Location	150 HAROLD L DOW HWY	**Mblu**	30/ 3/ / /
Acct#		**Owner**	SHAPLEIGH, NANCY E
Assessment	$354,500	**Appraisal**	$354,500
PID	1227	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2021	$135,500	$219,000	$354,500
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2021	$135,500	$219,000	$354,500

Owner of Record

Owner	SHAPLEIGH, NANCY E	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	28 SANDY HILL LN ELIOT, ME 03903	**Book & Page**	2136/0489
		Sale Date	07/01/1976

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
SHAPLEIGH, NANCY E	$0		2136/0489	07/01/1976

Building Information

Building 1 : Section 1

Year Built:	1970
Living Area:	3,332
Replacement Cost:	$274,026
Building Percent Good:	48
Replacement Cost Less Depreciation:	$131,500

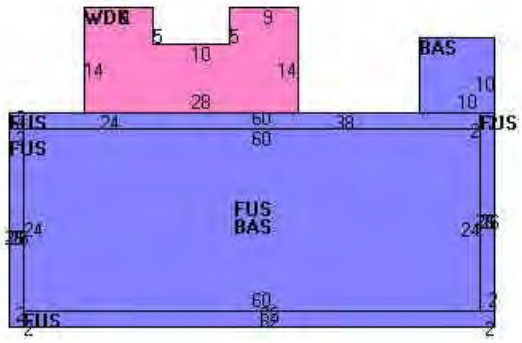
Building Attributes

Building Photo


Building Photo
(https://images.vgsi.com/photos/EliotMEPhotos//\0006\P1040838_6464.JP

Field	Description
Style:	Comm/Apartment
Model	Commercial
Grade	Average
Stories:	2
Occupancy	4.00
Exterior Wall 1	Vinyl Siding
Exterior Wall 2	
Roof Structure	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Drywall/Sheet
Interior Wall 2	Plywood Panel
Interior Floor 1	Carpet
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Electr Basebrd
AC Type	None
Struct Class	
Bldg Use	OFFICE BLD
Total Rooms	
Total Bedrms	05
Total Baths	3
1st Floor Use:	3400
Heat/AC	NONE
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	AVERAGE
Wall Height	8.00
% Comn Wall	0.00

Building Layout



(https://images.vgsi.com/photos/EliotMEPhotos//Sketches/1227_2684.jpg)

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
FUS	Upper Story, Finished	1,792	1,792
BAS	First Floor	1,540	1,540
WDK	Deck, Wood	342	0
		3,674	3,332

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 3400

Land Line Valuation

Size (Sqr Feet) 125017

Description	OFFICE BLD	**Frontage**	0
Zone	C/I	**Depth**	0
Neighborhood		**Assessed Value**	$219,000
Alt Land Appr	No	**Appraised Value**	$219,000
Category			

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
PAV1	PAVING-ASPHALT			2000.00 S.F.	$4,000	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$173,700	$164,400	$338,100
2019	$173,700	$164,400	$338,100
2018	$173,700	$164,400	$338,100

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$173,700	$164,400	$338,100
2019	$173,700	$164,400	$338,100
2018	$173,700	$164,400	$338,100

Minutes of Meeting

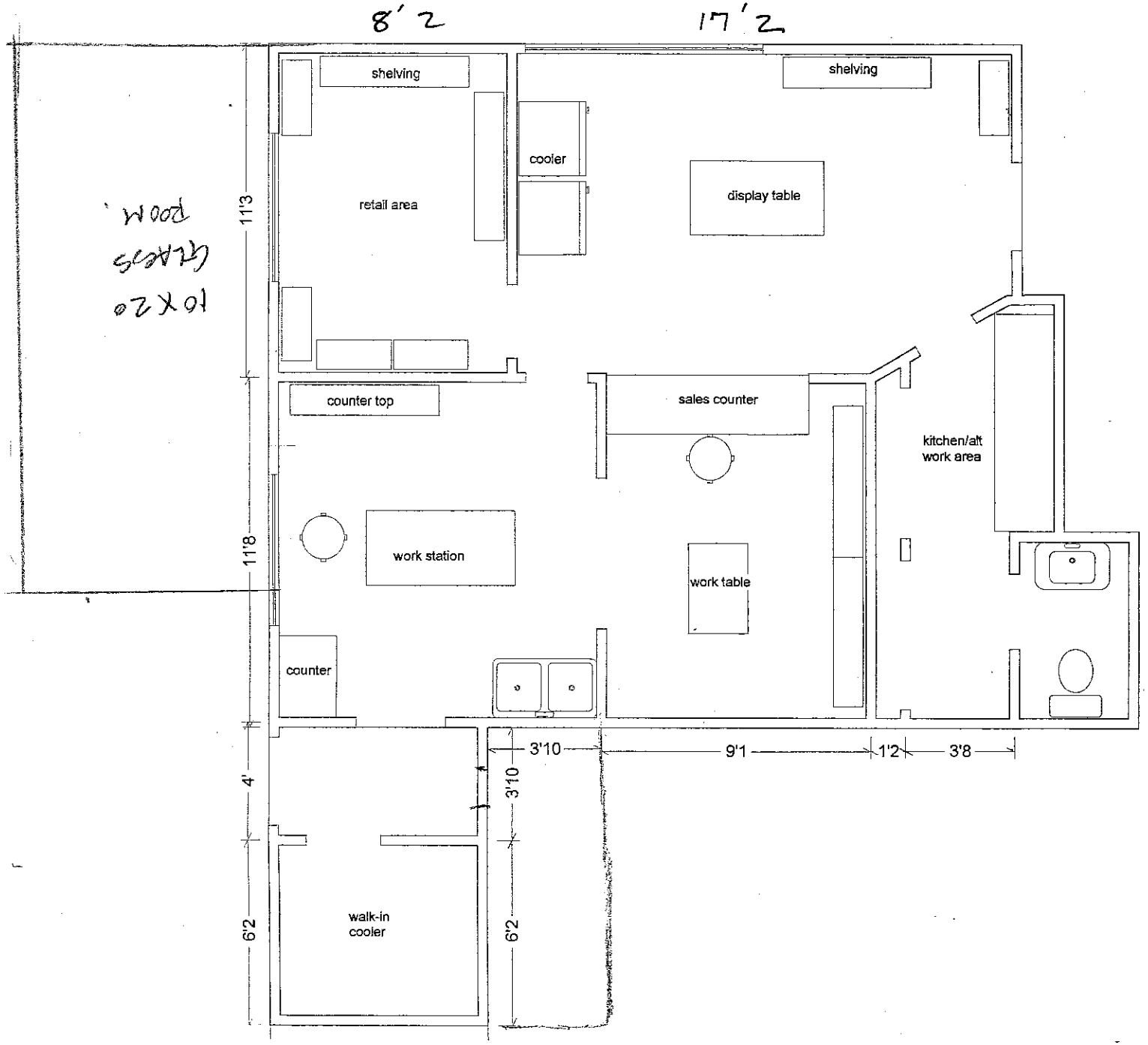
Planning Board Meeting February 19 1985

7:00 P.M.
Members present Chairman John McManus,Vice Chairman Warren Allen,Jean Languell Hardy, Alternate David LeMay,and Alternate Janis Sullivan
Chairman McManus appointed David LeMay a voting member for this meeting
Absent Clifford Coppen
7.02 P.M.
Chairman McManus,Anyone care to make a motion to approve the December 18 1985 minutes? It was noted that the following corrections be made,page two"Clifford Coppen,third line" and "lease takes effect".
Warren allen moves to accept minutes of the meeting as ammended.
Seconded by John Murphy
Vote 4-0

Anyone care to make a motion to approve the January 15 1985 minutes?
Warren Allen moves to accept minutes as presented.
Seconded by John Murphy
Vote 4-0

7:10 P.M.
David Fulton Sign Permit,Route #236
David Fulton presented his sign to the Board members for their consideration to allow a sign at his new office,which is located in Nancy Boyce Realtor building,Route #236.
Chairman McManus to C.E.O. sign meets the requirements
Walter Gipe Yes.
David Fulton The Purposed sign will be erected under Nancy Boyce Realtor sign.
Robeft Fisher A office building with fifteen offices could have fifteen signs?
Chairman McManus This Board to approve this sign only for a Attorney Office.
Warren Allen We are hearing this because the sign ordinance requires Planning Board to have site review.Also refers to section 335.3.
Chairman McManus Any more questions? NONE
Hearing Closed
Motion by John Murphy to approve application for a permit to erect a professional display sign.
Seconded by David LeMay
Vote 4-0

7:15 P.M.
Russell McMullen Retail Sales Route #236
Russell McMullen Explained to the Board that the original plan was for a Real Estate Office.We are requesting permission to have buisness offices and retail sales in the basement.There will be two seperate entrances.The basement will be used for furniture sales.My Real Estate Office will be on the first floor and plan to rent the second floor for buisness offices.
Chairman McManus How many offices will there be on the second floor?
Russell McManus Two offices on the second floor and two offices on the first floor, plus my own real estate office.
At this time I need to know what type of buisness I may rent to.Also what is the difference between a buisness office and a professional office.
Walter Gipe A professional use would be by a person or persons that requires a license and formal training.A buisness office could be a type of buisness that do not require any formal training or testing to secure a license.
Janis Sullivan A buisness would be some one selling something,retail sales would be a buisness and not a professional use.
Warren Allen The table of land use requires site review for both types.
Robert Fisher Are you trying to decide between a buisness office and a professional office?
Chairman McManus YES



Approx. 670 ft
Parking - 5 spaces

RENTAL AGREEMENT

This indenture, made this 1ST day of OCTOBER, 2003, between NANCY SHAPLEIGH of 76 RIVER ROAD, ELIOT MAINE 03903 hereinafter referred to as OWNER, and STAN + VANESSA MOULTON ELIOT DRIVING SCHOOL hereinafter referred to as TENANT, Witnesseth.

1. TERM AND RENT. In consideration of the covenants and rents contained herein to be observed and performed by the TENANT, the OWNER does hereby rent to the TENANT certain premises known as OFFICE UNIT B 38 H L DOW HIGHWAY, ELIOT, ME 03903 and consisting of OFFICE SPACE on a month-to-month basis beginning on the 1ST day of OCTOBER, 2003, at the rent of $700.00 per month, payable in advance on the 1ST day of each and every month. This agreement may continue on a month-to-month basis until either party gives the other 30 days written notice of intent to vacate the premises. Possession shall be given on 10/1/03.

2. TENANT'S COVENANTS. TENANT does hereby covenant with OWNER:

A. TO PAY RENT. That TENANT will pay rent in the amount specified above and at the time specified above except only in the event of fire or some other unavoidable casualty as hereinafter provided. Rent shall be made payable to NANCY SHAPLEIGH and sent to 76 RIVER ROAD, ELIOT, ME 03903.

B. UTILITIES AND FIXTURES. TENANT may use the existing mini refrigerator.

Nancy Boyce Realtors
28 Sandy Hill Lane
Eliot, Maine 03903
August 6, 2008

Town of Eliot
1333 State Road
Eliot, Maine 03903

To Whom It May Concern,

Please be informed that I have accepted a lease agreement with Kimberly Shunk of 60 Picott Road, Kittery, Maine 03904 for the rental of Suites A & B of my building located at 150 Harold L. Dow Highway, Eliot, Maine 03903. Kimberly is planning to operate a day nursery providing childcare for infants, toddlers and preschool children.

Nancy Shapleigh