LerchEarlyBrewer 7600 Wisconsin Avenue, Suite 700 • Bethesda, MD 20814 • lerchearly.com

Erin E. Girard
301-657-0736

September 16, 2024

Chairman Harris and
Members of the Montgomery County Planning Board
Maryland-National Capital Park and Planning Commission
2425 Reedie Drive
Wheaton, Maryland 20902

Re: Appeal of Denial of Natural Resources Inventory/ Forest Stand Delineation No. 420240850 for Persimmon Tree Subdivision ("NRI/FSD")

Dear Chair Harris and Members of the Montgomery County Planning Board:

Pursuant to Section 22A-20(c)(1) of the Montgomery County Code (the "Code"), and on behalf of our client, Hamid Shirazi, the owner of the property located at 9810 Newhall Road and an adjacent strip of unaddressed land (collectively, the "Property"), we hereby appeal the August 16, 2024 decision of Planning Director Sartori denying the NRI/FSD for the Property. A copy of the subject denial letter is attached hereto as "Exhibit A". As discussed more fully below, the sole basis of the denial is Staff's insistence on the presence of an intermittent stream on the Property, requiring the establishment of a stream valley buffer. In support of its position regarding the stream classification, Staff has provided little more than conclusory statements and scant evidence, whereas the Maryland Department of the Environment ("MDE") and two independent experts have submitted detailed information contesting Staff's classification. Because the preponderance of the evidence supports the conclusion that the drainage area on the Property is, instead, an ephemeral stream, we request that the Planning Board review the issue *de novo* and ultimately approve the NRI/FSD.

While a more detailed review of the background on this issue is contained in the May 31, 2024 letter we previously submitted to Planning Director Sartori requesting his reconsideration of Staff's interpretation (the "May Letter"), a copy of which is attached hereto as Exhibit "B", some key aspects are worth highlighting again here for context. In the summer of 2022, shortly after his family began occupying the Property, Mr. Shirazi engaged professionals and obtained a permit from the Department of Permitting Services ("DPS") to install an 18-inch drainage pipe within the unaddressed parcel along the western portion of the Property to address drainage from Newhall Road that would run through the Property during rain events. Over a year later, on October 3, 2023, Mr. Shirazi filed Concept Plan No. 520240040, entitled 9312 Persimmon Tree Road, and the related NRI/ FSD in connection with his purchase of an adjacent property and intended resubdivision to create three new buildable lots. During review of the NRI/FSD, a disagreement arose between Staff and Mr. Shirazi's landscape architect regarding whether the channel that was piped by Mr. Shirazi in 2022 constituted an intermittent stream requiring protection, or an ephemeral stream, which does not. In an apparent attempt to resolve this disagreement, on December 18, 2023, the Staff reviewer provided a comment to Mr. Shirazi's consultant to "Please show an intermittent stream and its associated buffer within the study area... Or, please present an official letter from the MDE stating that the stream is not part of the Waters of the U.S." (emphasis added).

After visiting the site twice, MDE issued a letter on January 5, 2024 finding, in relevant part:

> A small amount of flow was present on December 21. A review of precipitation records indicated that there had been rainfall during the days leading up to this visit. A subsequent visit on January 5 confirmed that there was no flow from the drainage pipe, therefore indicating that the flow seen on December 21 was likely due to precipitation rather than groundwater influence. Based on these field conditions, MDE does not consider the drainage pipe a Water of the State. (emphasis added)

Instead of this third-party evaluation resolving the issue, as had been expected, Staff responded to MDE's letter on January 20, 2024, stating, "The provided Letter from the MDE will not be considered for this plan. Therefore, remove the letter from the plan." Thereafter, on February 12, 2024, Staff issued a "Notice of Requirements" declaring the piped drainage area an intermittent stream and calling for restoration of the stream and associated stream valley buffer. To support its position, Staff provided only general conclusory statements regarding how this determination was made without providing any significant supporting documentation.

Given the significant impact of Staff's interpretation on the Property, which would preclude the creation of the three proposed lots due to the impact of the proposed buffer on buildable area, and reintroduce to the Property the very runoff problems that Mr. Shirazi had attempted to solve with the installation of the pipe, Mr. Shirazi decided to engaged two independent experts to evaluate the stream: Michael Klebasko of Wetland Studies and Solutions, Inc. ("WSSI), a well-known and well-respected environmental expert who does a significant amount of work in Montgomery County, and Bob Zarzecki of Soil and Environmental Consultants, Inc. ("S&EC"), a recognized expert in stream classifications who has played a significant role in developing objective standards for such classifications. Copies of their resumes are attached hereto as Exhibit "C". Importantly, prior to their review of the Property and surrounding area, Mr. Shirazi did not share with either consultant the submitted NRI/FSD application or the Staff's review comments so as not to taint their evaluations. Both experts thereafter evaluated the drainage channel in question and reached independent conclusions that the channel was, at best, ephemeral, and not an intermittent stream. A summary of their analysis is contained in our May Letter, and their full reports included as attachments to that letter, all of which are submitted herewith.

In response to the submission of these detailed expert reports, Staff issued a one-page letter on May 1, 2024 summarily rejecting the expert analysis without any supporting rebuttal analysis and reciting the same general conclusion in support of their classification as before. Given the clear preponderance of the evidence in favor of the classification of the stream as ephemeral and not intermittent, and the impact of Staff's proposed classification on the Property as detailed above, our May Letter appealed to Mr. Sartori to take an objective look at the issue and weigh the evidence himself.

Mr. Sartori responded to our request on July 23, 2024, backing his Staff's determination. Notably, his response largely echoes Staff's earlier conclusory findings, and fails to refute much of the independent experts analysis, additional information and supporting documentation disputing Staff's position that was provided in our May Letter. Additionally, in his review of the information and preparation of his decision, no outreach efforts were made to Mr. Shirazi's

experts to discuss the basis for their conclusions and disagreements with Staff's position, nor were there any discussions between these experts and Staff to try to resolve conflicting viewpoints in a more productive matter. Ultimately, Mr. Sartori's position resulted in the issuance of the August 16th denial letter that is the subject of this appeal.

We are confident that in this *de novo* appeal, where you have the opportunity to directly review the evidence and hear from experts, and in which no deference is owed to Staff's position, you will see that the clear preponderance of the evidence supports the position that the stream in question is ephemeral and not intermittent.

Understanding that this discussion is very technical in nature, we intend to have the following witnesses and experts testify at your hearing on this appeal to more clearly explain the basis of our position:

- Hamid Shirazi, the applicant and owner of the Property
- Michael Klebasko of Wetland Studies and Solutions, Inc.
- Bob Zarzecki of Soil and Environmental Consultants, Inc.

Copies of Mr. Klebasko and Mr. Zarzecki's resumes are included in the attachments hereto as Exhibit "C". We also reserve the right to call additional witnesses and present such additional information as may be appropriate.

Finally, we requested that Mr. Zarzecki and Mr. Klebasco review and evaluate Director Sartori's July 23 letter, who concluded that many of the arguments contained in the letter were misleading or insufficiently supported. Exhibit "D" hereto contains pointed responses to the letter that we believe will both give you better context regarding the various arguments and identify many of the flaws in Staff's arguments.

Thank you for your consideration of this information. We look forward to presenting our position to you at the hearing on this matter.

Sincerely,

Erin E. Girard

cc: Hamid Shirazi
Patrick Butler

Montgomery Planning
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

2425 Reedie Drive
Floor 13
Wheaton, MD 20902

MontgomeryPlanning.org

August 16, 2024

Mr. Hamid Shirazi
9810 Newhall Road
Potomac, MD 20854

Erin E. Girard, Esq.
Lerch, Early & Brewer
7600 Wisconsin Avenue, Suite 700
Bethesda, MD 20814

Re: Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) No. 420240850 - Persimmon Tree Subdivision - Denial Decision

Dear Mr. Shirazi and Ms. Girard,

The Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) No. 420240850 - Persimmon Tree Subdivision application for property located at 9810 Newhall Road, Potomac, Maryland (the "Application") ***has been denied***.

As previously detailed in the July 23, 2024 letter from me (Attachment A, which is incorporated herein), Planning Staff has determined that the Application cannot be approved without revisions to the NRI/FSD to show the presence of an intermittent stream and associated buffer on the property. As described in the letter, Planning staff and Department of Permitting Services staff visited the property at different times and witnessed water flow and/or ponding/accumulation in the channel resulting in a determination that there is an intermittent stream on the property. Intermittent streams are defined in the *Environmental Guidelines* (2021) as streams which "typically have baseflow at least once per year" and "usually have baseflow during the winter and spring season." Further, Planning staff identified other features characteristic of intermittent streams including sinuosity, well-defined banks, deposits, sediments, debris, wetland vegetation, and algae cover. Accordingly, without the stream and its associated buffer properly identified, the NRI/FSD is denied.

Section 22A-20(c) of the Montgomery County Code provides that this decision may be appealed to the Planning Board within 30 days. The procedures for such an appeal are attached to this letter as Attachment B.

Please let us know if you have any questions.

Sincerely,

Jason K. Sartori
Planning Director
Montgomery County Planning Department

cc: Robert Tjaden, Tjaden Design Associates, LLC
Patrick Butler, Upcounty Planning Division Chief
Allison Myers, Esq., Office of General Counsel

EXHIBIT
A

ATTACHMENT A

Montgomery Planning
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

2425 Reedie Drive
Floor 14
Wheaton, MD 20902

MontgomeryPlanning.org

July 23, 2024

Hamid Shirazi
9810 Newhall Road
Potomac, MD 20854

Erin E. Girard
7600 Wisconsin Avenue, Suite 700
Bethesda, MD 20814

Re: Response Letter, Natural Resource Inventory/Forest Stand Delineation (NRI/FSD)
#420240850 - Persimmon Tree Subdivision

Dear Ms. Girard and Mr. Shirazi,

I have reviewed your request to reconsider Planning staff's determination regarding the existence of an intermittent stream on Mr. Shirazi's (Applicant) property located at 9810 Newhall Road and an adjacent strip of unaddressed land (the "Property"), as well as the relevant attachments. In preparing a response to your request, I asked Planning staff to provide information on their review of the Property, including all evidence used to support their determination. After reviewing the evidence presented from both the Applicant and Planning staff, I find sufficient evidence to support the intermittent stream delineation on the Property.

At a meeting between Planning staff, the Applicant, and the Applicant's prior legal counsel and plan preparer on February 8, 2024, Planning staff provided a detailed overview of the review of the Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) and the factors supporting the determination of an intermittent stream. Planning staff noted the key physical features to properly identify the intermittent stream, including sinuosity, well-defined banks, deposits, sediments, debris, the presence of wetland vegetation, soil hydric indicators, and algae cover. Planning staff provided a PowerPoint presentation (Attachment), which was subsequently shared with the meeting participants and includes photographs and videos from the Property used to support its determination. The photographs, videos, and staff observations from the property demonstrate that prior to the disturbance (i.e., the installation of two pipes), the stream and its banks were well-developed.

Additionally, Planning staff created a 3D model using LIDAR data and a contour layer to demonstrate the presence of a well-developed channel with clear sinuosity, continuous bed, and bank throughout the natural channel's length, excluding the concrete channel between

9805 Logan Drive and 9901 Logan Drive. The model and the video previously provided by the applicant, clearly show sinuous patterns in the terrain. The video also shows flow during a heavy rain event. During site visits on November 14, 2023 and April 25, 2024, Planning staff found evidence of stream flow. Additionally, the 3D model also depicts evidence that stream banks were up to 2 feet high. Soil and core samples were collected during the site visits for groundwater testing, and observations included decayed leaf matter, sorted sediments, streambed forms, frequent flow marks, algae cover, and wetland vegetation. Evidence of erosion in the form of exposed vegetation roots along the banks, sediment, and debris was observed at 9306 Persimmon Tree Rd and the outfall of the pipes during Planning staff visits. Wetland vegetation such as American Sycamore and algae-covered rocks were identified along the stream channel. Groundwater was also noted during the Department of Permitting Services (DPS) inspection (pictures provided by DPS on December 2, 2023), and various hydrologic conditions, such as the presence of muck and accumulation of organic matter within a few inches of the topsoil on the stream banks were also observed.

The evidence above indicates that the channel was well-developed and exhibited the characteristic sinuosity of intermittent and perennial streams.

The Applicant was given the opportunity to present their perspective during the meeting with Planning staff on February 8, 2024. Additional discussion occurred regarding the existence of previous violations on the Property during the pipe installation project, which involved exceeding disturbance limits set by DPS and clearing a large area of forest without proper permits and approvals from Planning Department Forest Conservation staff.

As defined in the Environmental Guidelines approved by the Montgomery County Planning Board in 2021, intermittent streams "typically have baseflow at least once per year" and "will usually have baseflow during the winter and spring seasons." The Applicant's argument and evidence focus on the second part of the definition, which states that an intermittent stream will usually have baseflow during the winter. However, the first part of the definition is equally important, which states that intermittent streams have baseflow at least once per year. Planning staff has visited the site multiple times, with the most recent visit being on April 25, 2024. During that visit, water flow was observed on the Property, and the National Weather Service records (Table 1) for the area do not show any precipitation in the 72 hours before the environmental staff's visit.

Additionally, pictures from the DPS staff site visit on December 2, 2022, showed water ponding/accumulation in the channel being trenched (Figure 1). The National Weather Service records (Table 2) for the area show zero precipitation in the two days before the DPS site visit (and no more than 0.25 inches of precipitation in the 24 hours starting 4 hours before the site visit). This suggests that the work being executed found seeps, springs, or wetland areas that

were disturbed within the stream bed channel during the construction, causing the water to emerge from the ground. These features are currently observed on the adjacent property at 9306 Persimmon Tree Road. This evidence supports the determination that before the pipes were installed on the Property, there was a stream meeting the definition of "intermittent stream," as provided in the Environmental Guidelines.

Also, I have reviewed the January 5, 2024 letter from the Maryland Department of the Environment (MDE). During plan review, Planning staff requested that Mr. Shirazi's consultants obtain a letter from MDE confirming that the stream is not part of the Waters of the U.S. and assessing whether the stream is an ephemeral stream, for Planning staff's consideration (Figure 2). Planning staff was not in any way deferring a final determination of the stream classification to MDE.

MDE's letter refers to a pipe drainage rather than a stream or natural channel. Moreover, the same letter specifically states that the drainage pipe outfalls only into a stormwater drainage feature, which is non-jurisdictional of MDE. Although Planning staff considered MDE's finding that the drainage pipe as it currently exists is not considered "waters of the state," MDE's letter did not address the nature of the stream as it existed *before* the pipe was installed, which is the primary issue for Planning staff's determination. Therefore, although MDE did provide input on jurisdictional issues relevant to their review, stream delineation for ephemeral and intermittent streams and their associated buffer is solely the responsibility of the Montgomery County Planning Department, using the Environmental Guidelines approved by the Montgomery Planning Board in 2021. Further, the MDE letter mentioned finding water flow on December 21, 2023, but noted that it was deemed likely due to precipitation. The National Weather Service records (Table 3) for the area did not show any precipitation in the 48 hours prior to MDE's visit.

While Planning staff considered MDE's letter in addition to the evidence described above when making the determination of the classification of the stream, the MDE letter only addressed the current environmental features on the Property, most of which were disturbed from their original state. Therefore, I do not find the MDE letter to conflict with the intermittent stream determination made by Planning staff.

Planning staff also considered the report prepared by Soil & Environmental Consultants, Inc. (S&EC), which uses the NC Division of Water Quality 2010 Methodology for Identification of Intermittent and Perennial Streams and their Origins (Version 4.11. North Carolina Department of Environment and Natural Resources, Division of Water Quality, Raleigh, NC). As previously communicated in the response letter provided by Planning staff on May 1, 2024, the stream delineation method used by S&EC differs from that used in Montgomery County, which is outlined in the Environmental Guidelines approved by the Montgomery Planning Board in

2021. Furthermore, Planning staff observed that the findings from S&EC and Wetland Studies and Solutions were inconsistent with the National Resources Inventory (NRI) application submitted by the Applicant in October 2023. The discrepancy arose because the proposed plan showed an intermittent stream and its corresponding buffer extending further into the Property. However, the consultant's report aims to support a different scenario than the one provided by the Applicant. Planning staff has determined that the submitted reports from S&EC and Wetland Studies and Solutions were not persuasive in making a final determination for the status of the stream on the Property, as they both focused on and evaluated the adjoining property, where Planning staff and previous plan preparers had already identified an intermittent stream and associated buffers.

After reviewing the evidence presented, I find that Planning staff provided sufficient evidence to support the existence of an intermittent stream on the Property for the reasons stated above. Therefore, the NRI/FSD application must be revised to include all environmental features such as, but not limited to, showing a stream and its associated buffer, as well as cleared canopy forest within the stream valley buffer area. If you need more information regarding the Natural Resource Inventory/ Forest Stand Delineation (NRI/FSD) process please review the Forest Conservation Law Chapter 22A, 1992 Trees Approved Technical Manual 1992, and the 2021 Environmental Guidelines for Management of Development in Montgomery County. Failure to submit an NRI/FSD application that meets these requirements will result in a denial of the NRI/FSD and subsequent enforcement action.

Finally, to address these environmental concerns, and ensure compliance with the regulations, it is essential that you work closely with our Forest Conservation inspectors and Environmental Planners to resolve the identified issues. This will involve taking the necessary steps to address pending violations by implementing mitigation procedures, such as reforesting the cleared areas and restoring the stream and its buffer as part of your plans, and fulfilling any other conditions specified by the Planning Department and other relevant agencies, such as DPS.

Sincerely,

Jason K. Sartori
Planning Director

cc: Robert Tjaden (Tjaden Design Associates, LLC)

Table 1. Precipitation Data, April 2024

Climatological Data for DALECARLIA RESERVOIR, DC - April 2024

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2024-04-01	66	46	56.0	6.1	9	0	0.09	0.0	0
2024-04-02	66	46	56.0	5.7	9	0	0.36	0.0	0
2024-04-03	52	47	49.5	-1.2	15	0	0.04	0.0	0
2024-04-04	M	M	M	M	M	M	S	M	M
2024-04-05	56	37	46.5	-5.1	18	0	0.05A	0.0	0
2024-04-06	54	40	47.0	-5.0	18	0	0.00	0.0	0
2024-04-07	55	36	45.5	-6.9	19	0	0.00	0.0	0
2024-04-08	M	M	M	M	M	M	S	M	M
2024-04-09	73	38	55.5	2.3	9	0	0.00A	0.0	0
2024-04-10	78	32	55.0	1.4	10	0	0.00	0.0	0
2024-04-11	78	38	58.0	4.0	7	0	0.00	0.0	0
2024-04-12	M	M	M	M	M	M	S	M	M
2024-04-13	71	53	62.0	7.2	3	0	0.03A	0.0	0
2024-04-14	66	43	54.5	-0.7	10	0	0.00	0.0	0
2024-04-15	83	43	63.0	7.4	2	0	0.00	0.0	0
2024-04-16	84	53	68.5	12.5	0	4	0.00	0.0	0
2024-04-17	76	50	63.0	6.6	2	0	0.00	0.0	0
2024-04-18	76	50	63.0	6.3	2	0	0.00	0.0	0
2024-04-19	M	M	M	M	M	M	S	M	M
2024-04-20	M	M	M	M	M	M	M	M	M
2024-04-21	M	M	M	M	M	M	M	M	M
2024-04-22	M	M	M	M	M	M	M	M	M
2024-04-23	63	36	49.5	-9.0	15	0	0.00A	0.0	0
2024-04-24	72	36	54.0	-4.8	11	0	0.00	0.0	0
2024-04-25	73	50	61.5	2.4	3	0	0.00	0.0	0
2024-04-26	73	42	57.5	-1.9	7	0	0.00	0.0	0
2024-04-27	73	42	57.5	-2.2	7	0	0.00	0.0	0
2024-04-28	58	52	55.0	-5.0	10	0	0.00	0.0	0
2024-04-29	75	55	65.0	4.7	0	0	0.00	0.0	0
2024-04-30	90	52	71.0	10.4	0	6	0.00	0.0	0
Sum	1611	1017	-	-	186	10	0.57	0.0	-
Average	70.0	44.2	57.1	1.5	-	-	-	-	0.0
Normal	67.6	43.6	55.6	-	305	23	3.53	0.0	-

Figure 1. DPS Photo During Pipe Installation

Table 2. Precipitation Data, December 2022

Climatological Data for DALECARLIA RESERVOIR, DC - December 2022

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2022-12-01	57	28	42.5	0.7	22	0	0.00	0.0	0
2022-12-02	44	25	34.5	-7.0	30	0	0.00	0.0	0
2022-12-03	51	26	38.5	-2.8	26	0	0.25	0.0	0
2022-12-04	63	35	49.0	8.0	16	0	0.25	0.0	0
2022-12-05	62	25	43.5	2.8	21	0	0.00	0.0	0
2022-12-06	62	25	43.5	3.0	21	0	0.02	0.0	0
2022-12-07	51	39	45.0	4.8	20	0	0.22	0.0	0
2022-12-08	M	M	M	M	M	M	M	0.0	0
2022-12-09	57	36	46.5	6.8	18	0	0.00	0.0	0
2022-12-10	49	28	38.5	-1.0	26	0	0.00	0.0	0
2022-12-11	42	29	35.5	-3.8	29	0	0.00	0.0	0
2022-12-12	46	33	39.5	0.5	25	0	0.05	0.0	0
2022-12-13	42	30	36.0	-2.8	29	0	0.00	0.0	0
2022-12-14	42	23	32.5	-6.1	32	0	0.00	0.0	0
2022-12-15	41	26	33.5	-4.8	31	0	0.60	0.0	0
2022-12-16	43	33	38.0	-0.1	27	0	1.55	0.0	0
2022-12-17	50	30	40.0	2.1	25	0	0.00	0.0	0
2022-12-18	46	34	40.0	2.3	25	0	0.00	0.0	0
2022-12-19	43	27	35.0	-2.5	30	0	0.00	0.0	0
2022-12-20	40	24	32.0	-5.2	33	0	0.00	0.0	0
2022-12-21	40	22	31.0	-6.0	34	0	0.00	0.0	0
2022-12-22	45	22	33.5	-3.3	31	0	0.00	0.0	0
2022-12-23	54	32	43.0	6.4	22	0	1.99	0.0	0
2022-12-24	42	10	26.0	-10.4	39	0	0.00	0.0	0
2022-12-25	41	10	25.5	-10.8	39	0	0.00	0.0	0
2022-12-26	32	15	23.5	-12.6	41	0	0.00	0.0	0
2022-12-27	32	25	28.5	-7.4	36	0	0.00	0.0	0
2022-12-28	40	22	31.0	-4.7	34	0	0.00	0.0	0
2022-12-29	49	26	37.5	1.9	27	0	0.00	0.0	0
2022-12-30	55	28	41.5	6.1	23	0	0.00	0.0	0
2022-12-31	65	29	47.0	11.8	18	0	0.00	0.0	0
Sum	1426	797	-	-	830	0	4.93	0.0	-
Average	47.5	26.6	37.1	-1.2	-	-	-	-	0.0
Normal	46.9	29.6	38.3	-	829	0	3.81	0.8	-

Responded by: Robert Tjaden - 1/9/24 2:30 PM
MDE letter provided with this submission and buffer shown.

Reviewer Response: Ariel Zelaya - 12/18/23 3:03 PM
Please show an intermittent stream and its associated buffer within the study area. All streams/wetlands and associated buffers located on or within 200 feet of the subject property must be shown on the NRI/FSD summary map. Or, please present an official letter from the MDE stating that the stream is not part of the Waters of the U.S. and is an ephemeral stream for consideration.

Responded by: Robert Tjaden - 12/13/23 11:01 AM
Stream added to portion of 9810 Newhall Road. No buffer was added. Please reference M-NCPPC Montgomery County Planning Department Environmental Guidelines - Stream Buffers on page 5. Please note that this property is not in the Ten Mile Creek Watershed. "In most of the County, ephemeral streams do not require a stream buffer, but these streams should be protected as much as possible through plan layout and conditions on a voluntary basis."

Reviewer Response: Ariel Zelaya - 12/6/23 1:17 PM
Other adjoining properties to the south also have the same natural channel running along their boundaries, and the NRI/FSDs have identified it as a stream and stream buffer. Please review the files 42010200E, 42021194E and 42011034E for more information.

Responded by: Robert Tjaden - 11/30/23 12:51 PM
Ephemeral stream head is located on adjacent property 0 Persimmon Tree Road directly south of 9810 Newhall Road property. Storm drain pipes discharges to this stream head through subject property study area shown on plan. Per Montgomery County Environmental Guidelines, no buffer is required for ephemeral streams in this watershed. Previously approved NRI 42021194E shows this stream location as well.

Figure 2. Exchange between Planning Staff and Applicant Consultant

Table 3. Precipitation Data, December 2023

Climatological Data for DALECARLIA RESERVOIR, DC - December 2023

Date	Temperature				HDD	CDD	Precipitation	New Snow	Snow Depth
	Maximum	Minimum	Average	Departure					
2023-12-01	56	29	42.5	0.7	22	0	0.00	0.0	0
2023-12-02	49	36	42.5	1.0	22	0	0.20	0.0	0
2023-12-03	55	45	50.0	8.7	15	0	0.75	0.0	0
2023-12-04	55	40	47.5	6.5	17	0	0.00	0.0	0
2023-12-05	55	32	43.5	2.8	21	0	0.00	0.0	0
2023-12-06	49	34	41.5	1.0	23	0	0.00	0.0	0
2023-12-07	43	28	35.5	-4.7	29	0	0.00	0.0	0
2023-12-08	46	28	37.0	-3.0	28	0	0.00	0.0	0
2023-12-09	57	30	43.5	3.8	21	0	0.00	0.0	0
2023-12-10	57	30	43.5	4.0	21	0	0.00	0.0	0
2023-12-11	60	33	46.5	7.2	18	0	1.55	0.5	1
2023-12-12	46	26	36.0	-3.0	29	0	0.00	0.0	0
2023-12-13	45	25	35.0	-3.8	30	0	0.00	0.0	0
2023-12-14	49	24	36.5	-2.1	28	0	0.00	0.0	0
2023-12-15	47	25	36.0	-2.3	29	0	0.00	0.0	0
2023-12-16	54	25	39.5	1.4	25	0	0.00	0.0	0
2023-12-17	M	M	M	M	M	M	S	M	M
2023-12-18	56	46	51.0	13.3	14	0	2.10A	0.0	0
2023-12-19	56	35	45.5	8.0	19	0	0.00	0.0	0
2023-12-20	57	26	41.5	4.3	23	0	0.00	0.0	0
2023-12-21	56	26	41.0	4.0	24	0	0.00	0.0	0
2023-12-22	56	26	41.0	4.2	24	0	0.00	0.0	0
2023-12-23	48	32	40.0	3.4	25	0	0.00	0.0	0
2023-12-24	46	36	41.0	4.6	24	0	0.05	0.0	0
2023-12-25	50	37	43.5	7.2	21	0	0.00	0.0	0
2023-12-26	M	M	M	M	M	M	S	M	M
2023-12-27	M	M	M	M	M	M	M	M	M
2023-12-28	54	46	50.0	14.3	15	0	0.87A	0.0	0
2023-12-29	57	40	48.5	12.9	16	0	0.00	0.0	0
2023-12-30	58	34	46.0	10.6	19	0	0.05	0.0	0
2023-12-31	49	35	42.0	6.8	23	0	0.00	0.0	0
Sum	1466	909	-	-	625	0	5.57	0.5	-
Average	52.4	32.5	42.4	4.1	-	-	-	-	0.0
Normal	46.9	29.6	38.3	-	829	0	3.81	0.8	-

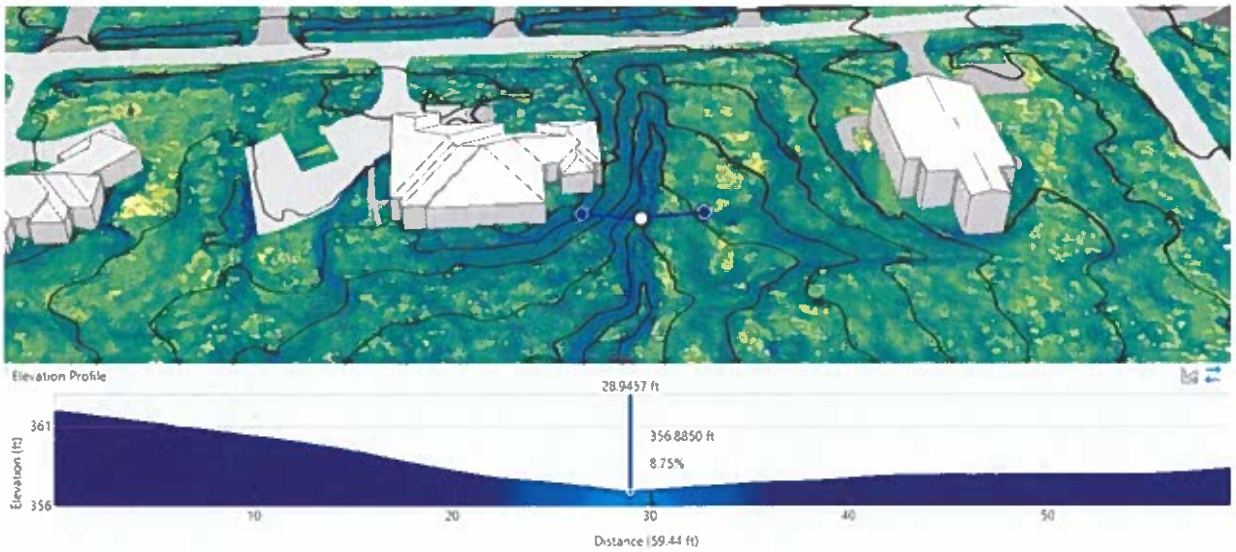


Figure 3. 3D Model: Stream Morphology Analysis, Cross section

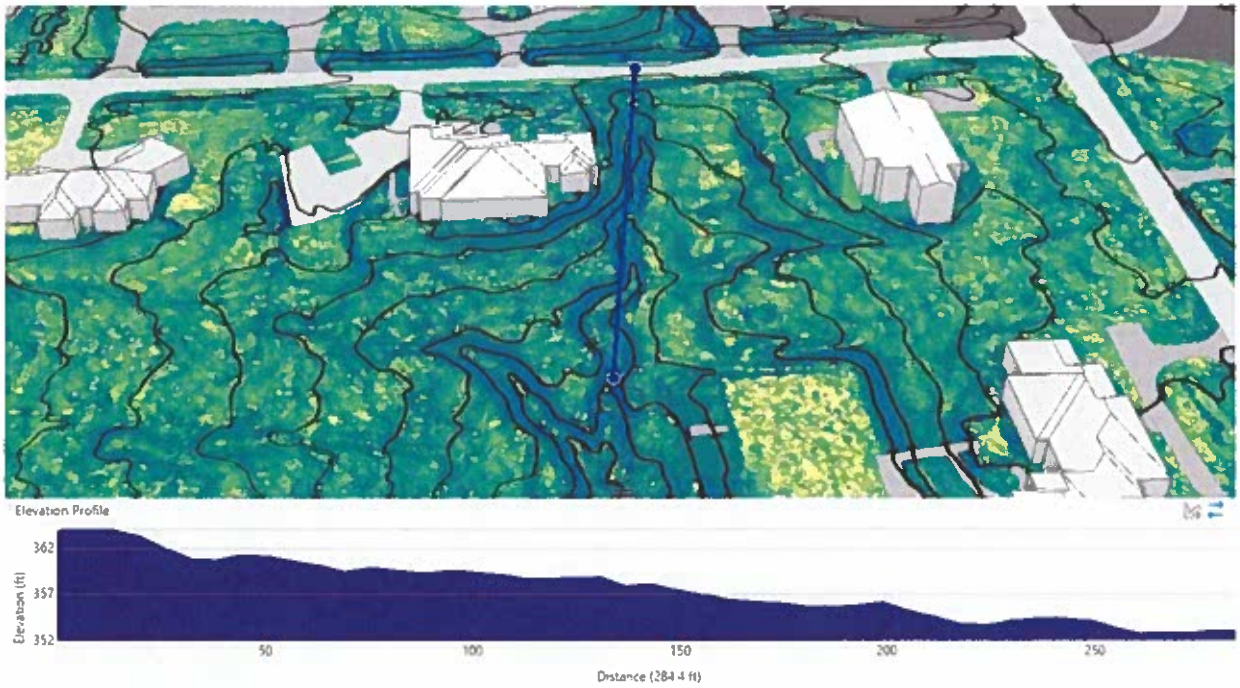
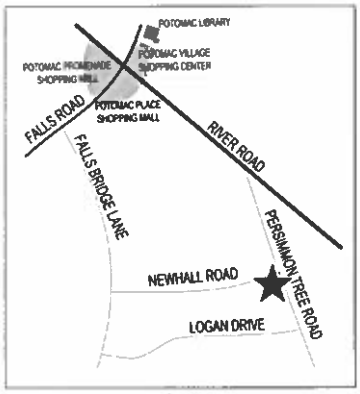


Figure 4. 3D Model: Stream Morphology Analysis, Slope

ATTACHMENT

PowerPoint presentation prepared by Planning staff, February 8, 2024

NRI 420240850 and Concept Plan #520240040, 9312 Persimmon Tree Road



VICINITY MAP
SCALE: 1"=1,000'

Forest and Stream Layer 9810 Newhall Rd Potomac 2023s

2/6/2024, 3:30:40 PM

1:1,128

0 0.0075 0.015 0.03 mi

0 0.015 0.03 0.06 km

Property_poly_with_data
SoftLines
Watersheds
Streams
Water Areas
Forests
Red Band_1
Green Band_2
Blue Band_3

MCG ESRI Pictometry
Source: Esri, HERE, Garmin, iPC, Montgomery County Planning Department, GEBCO, USGS

montgomeryplanning

montgomery Department (ITI) | Jay Mukherjee, ITI | Montgomery County Planning | Montgomery County Planning Department | COM | DHCD MD iMAP | Fairfax County VA, MNCPPC, VITA, Esri, HERE, Garmin, INCREMENT P, USGS, EPA, USDA

Forest Conservation Plan (FCP) exemption; however, the application process was never completed.

Project Name Search Results

Plan Number	Plan Type	Project Name	Submit Date	Area	Pending	Lead Reviewer	Proposed DU	Approved DU	Proposed SQFT	Approved SQFT
42023119E	FCP EXEMPTION	9810 Newhall Road	12-28-2022	3	Withdrawn					

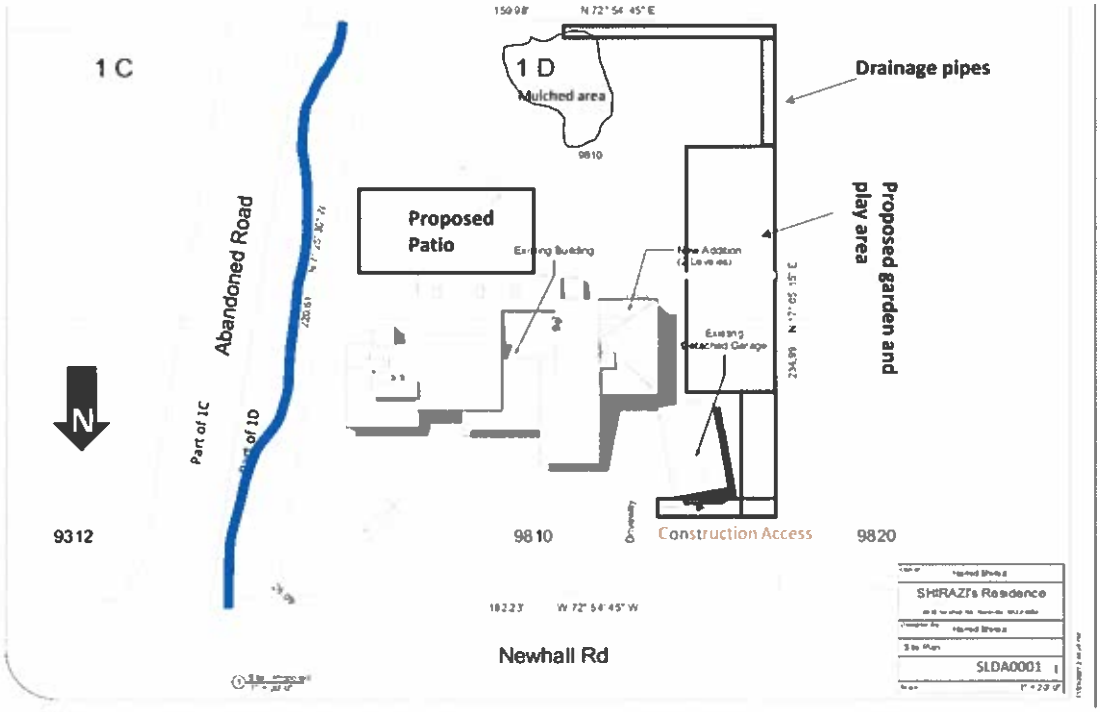
Project Description Narrative:

We are placing drainage pipes along the side of the property as shown in SLDA001 plan. The pipe is 15" in diameter and is intended to collect surface water as well as roof water from gutters. The water is daylighted where it naturally flows currently in the back of the property.

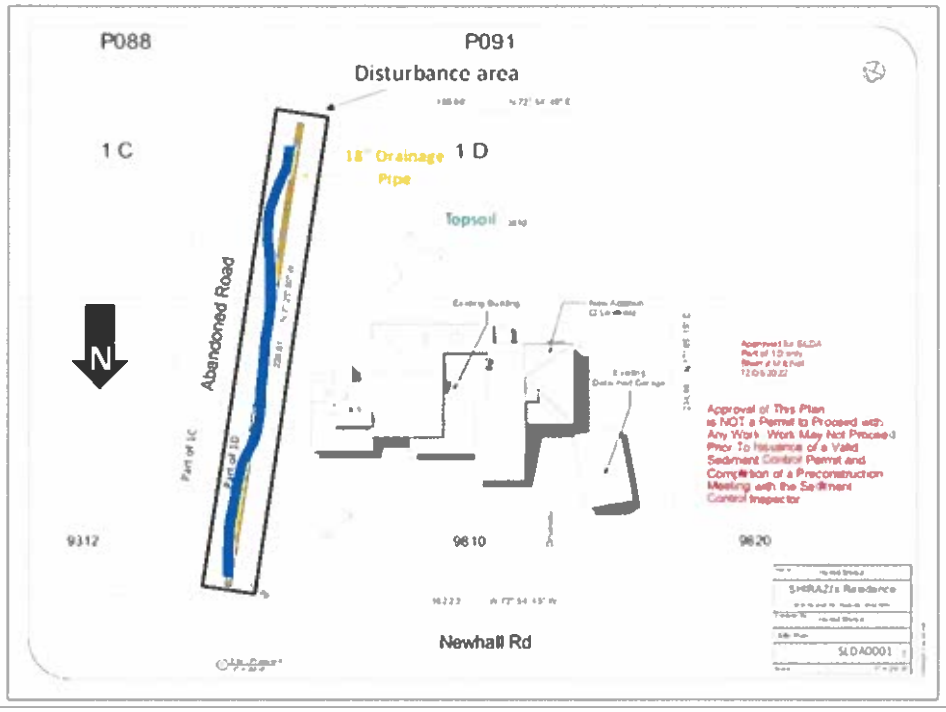
The lot will also be graded to allow for a patio, a garden and a playground in the backyard. Also, a part of the lot, as shown in the plan, is filled with mulch with a 2-3 ft depth. The mulch will be replaced with dirt.

The project does not impact any environmental features or any trees.

FC Exemption Plan (Withdrawn)



*Blue line (Stream), just for reference

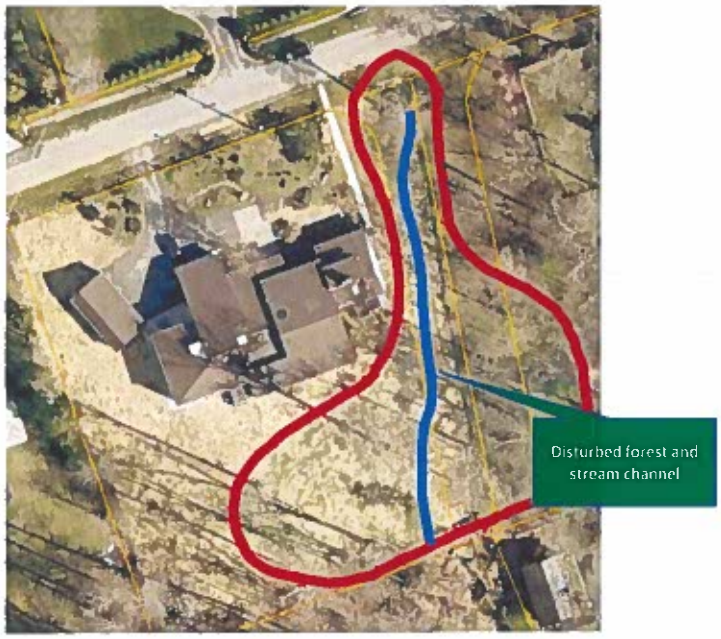


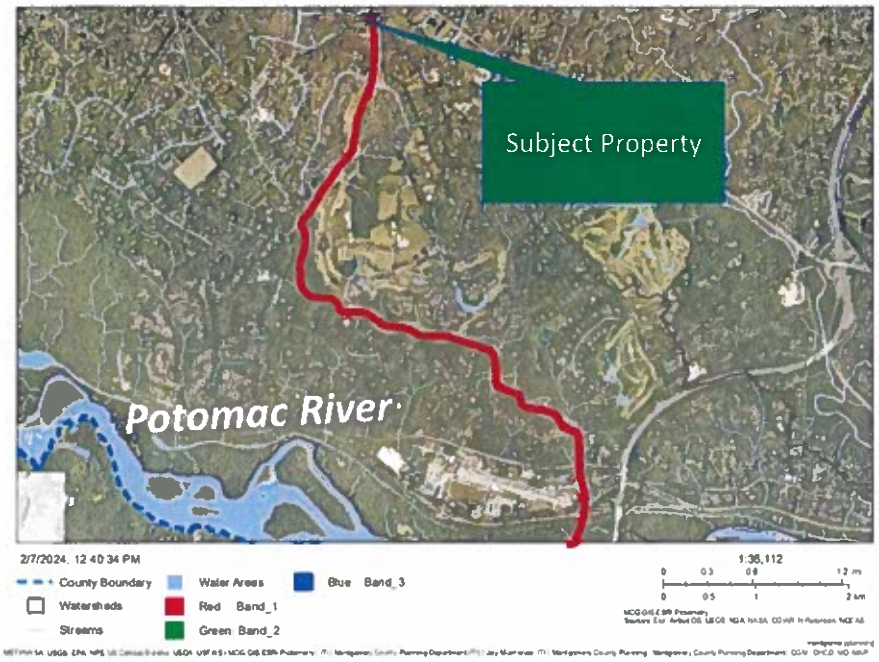
Sediment Control Permit approved by DPS

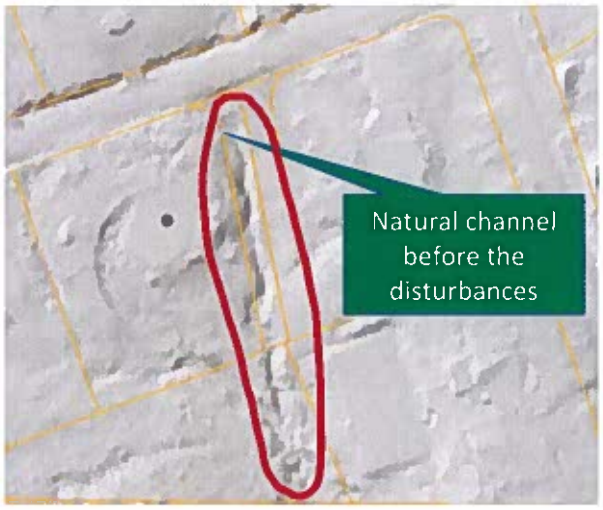
*Blue line (Stream), just for reference

Aerial Photograph 2020

Aerial Photograph 2023







Terrain LIDAR layer 2020

During the installation of the piping, there was some over-disturbance observed, which led to a violation of the Department of Permitting Services (DPS) regulations.

"The soil from the excavation was thrown onto the main property and ***some trees were observed to be removed.*** Work was ***beyond our requirements***, so I issued an NOV and directed to obtain a permit". Inspector III CESSWI (DPS)

"SLDA application (SC 288894) was modified to include only the work on the smaller parcel, and we issued that ***approval without forest conservation***". Manager (DPS)

Potentially, they found water table within 3 ft deep

Aerial Photograph 2023

Synopsis of the activities provided by the owner

There were 2 dead trees in my backyard. I found criteria for removing dead trees on the county website: https://www.montgomerycountymd.gov/green/trees/permits_and_concerns.html. None of the criteria listed were applicable to us. I had a contractor remove both on May 17.

Trees were killed due to their proximity to the piping installation and grading.

Intermittent Streams

Streams that typically have ***baseflow at least once per year***. Typically, in the winter and spring, the groundwater table is elevated, increasing the likelihood that the ***groundwater*** level is higher than the bed of a ***stream channel***. Therefore, an intermittent stream will usually have baseflow during the winter and spring seasons and infrequent baseflow during the rest of the year. Because of discontinuous flow regimes, intermittent streams typically have ***physical, hydrological, and biological characteristics*** that are not as well-developed as perennial streams.

Why streams are important

Benefits:

- Improved flood control: Removing a stream can help mitigate flooding risks in the surrounding area.
- Enhanced water flow: Removing a stream can improve the flow of water in nearby waterways, potentially benefiting aquatic ecosystems.

Impacts:

- Habitat loss: Removing a stream can result in the loss of important habitat for various aquatic species.
- Decreased water quality: Removing a stream can disrupt the natural filtration and purification processes that streams provide, potentially leading to a decline in water quality.
- Altered ecosystems: Removing a stream can disrupt the balance of ecosystems that rely on the stream's presence, potentially affecting biodiversity and ecological dynamics.

Current field conditions (2023)

Video for context (Previous stream conditions)

Field Indicators and Descriptions (Observed in the field)

Geomorphic Indicators

- Continuity of Channel Bed and Bank
- Sinuosity of Channel
- In-channel structure: Riffle-Pool, Step-Pool, Ripple-Pool sequence
- Particle Size of Stream Substrate
- Depositional Bars or Benches (Bankfull elevation)
- Recent Alluvial Deposits

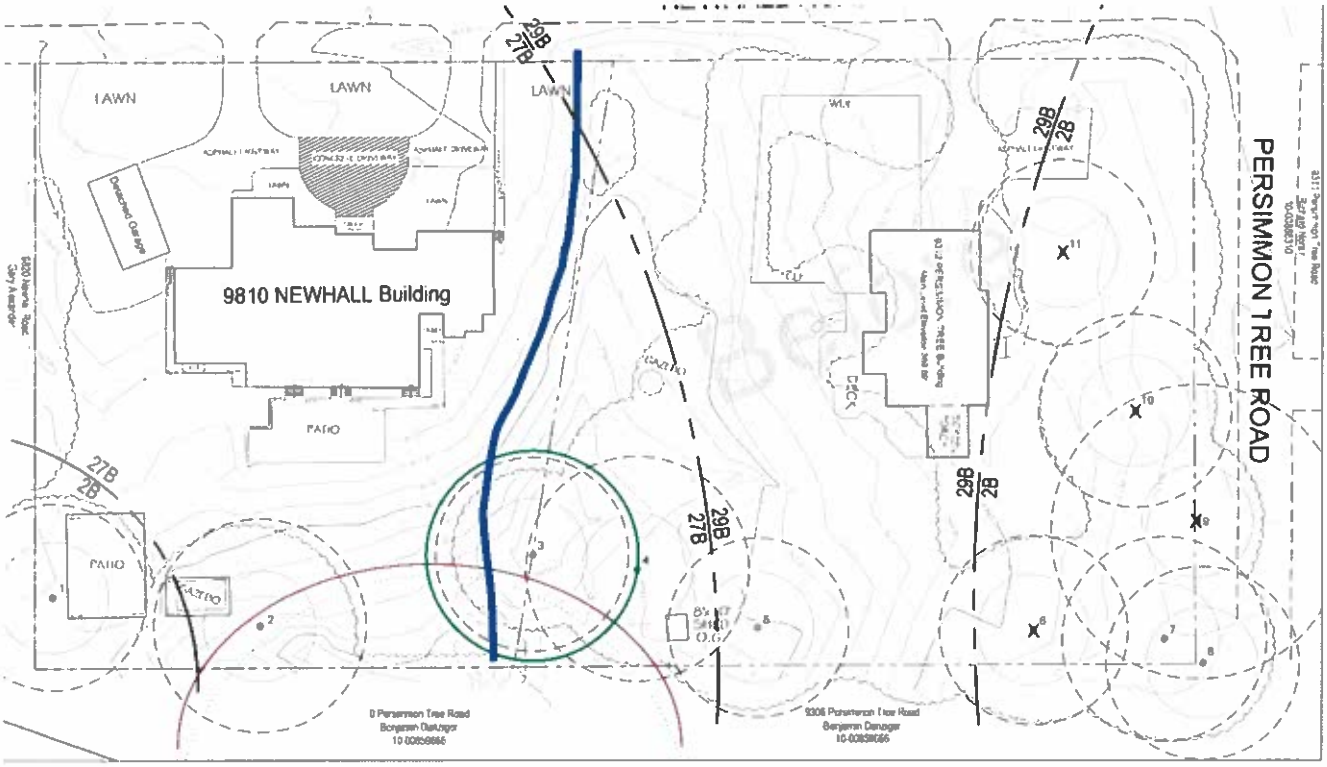
Hydrologic Indicators

- Presence of Baseflow
- Leaf litter
- Sediment on Plants or Debris
- Organic Drift Lines

Biological Indicators

- Wetland Plants in Streambed

NRI 420240850, V1



Red line (Stream buffer), provided by the applicant

*Blue line (Stream), just for reference

NRI 420240850 Review

Ref.# 110	Changemark note #01	AREA ENVIRONMENTAL	Ariel Zelaya	11/20/23 2:49 PM	Cycle 1
Unresolved		01-NRI-420240850-001.pdf			Verify
Markup		All streams/wetlands and associated buffers located on or within 200 feet of the subject property must be shown on the NRI/FSD summary map. Address the hydrologic features in the plan view and universally update all graphics, notes, tables, and figures accordingly.			

Responded by: ***Robert Tjaden*** *- 1/9/24 2:30 PM*
MDE letter provided with this submission and buffer shown.

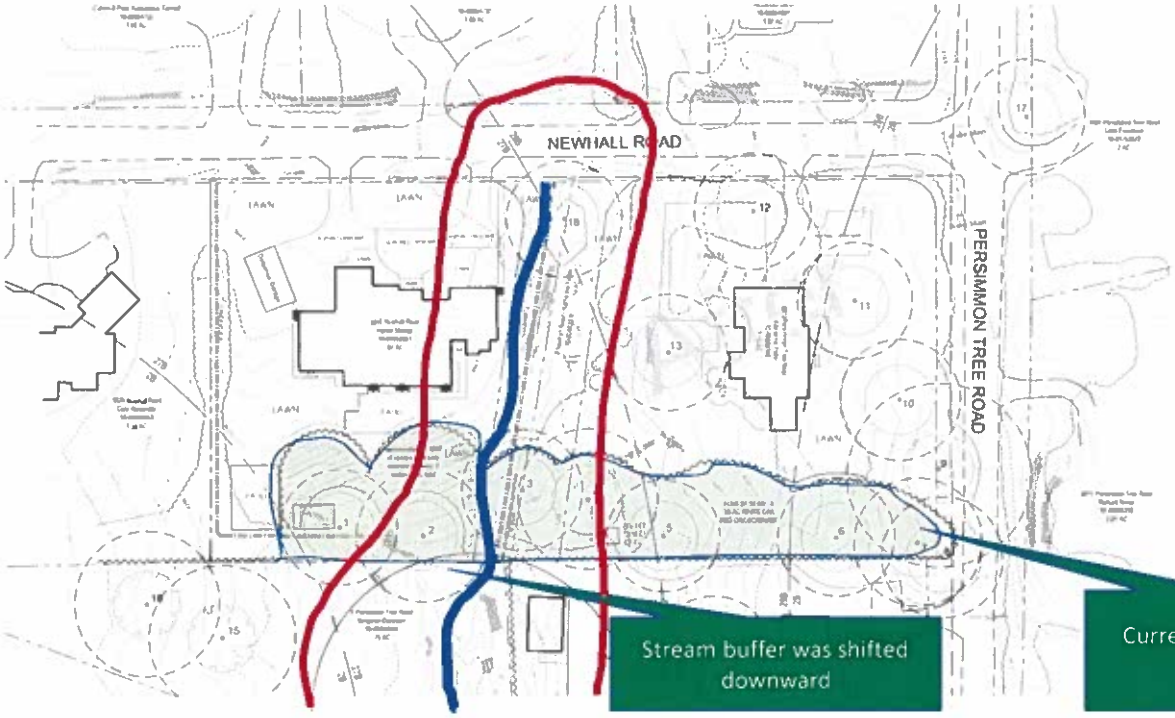
Reviewer Response: ***Ariel Zelaya*** *- 12/18/23 3:03 PM*
Please show an intermittent stream and its associated buffer within the study area. All streams/wetlands and associated buffers located on or within 200 feet of the subject property must be shown on the NRI/FSD summary map. Or, please present an official letter from the MDE stating that the stream is not part of the Waters of the U.S. and is an ephemeral stream for consideration.

Responded by: ***Robert Tjaden*** *- 12/13/23 11:01 AM*
Stream added to portion of 9810 Newhall Road. No buffer was added. Please reference M-NCPPC Montgomery County Planning Department Environmental Guidelines - Stream Buffers on page 5. Please note that this property is not in the Ten Mile Creek Watershed. "In most of the County, ephemeral streams do not require a stream buffer, but these streams should be protected as much as possible through plan layout and conditions on a voluntary basis."

Reviewer Response: ***Ariel Zelaya*** *- 12/6/23 1:17 PM*
Other adjoining properties to the south also have the same natural channel running along their boundaries, and the NRI/FSDs have identified it as a stream and stream buffer. Please review the files 42010200E, 42021194E, and 42011034E for more information.

Responded by: ***Robert Tjaden*** *- 11/30/23 12:51 PM*
Ephemeral stream head is located on adjacent property 0 Persimmon Tree Road directly south of 9810 Newhall Road property. Storm drain pipes discharges to this stream head through subject property study area shown on plan. Per Montgomery County Environmental Guidelines, no buffer is required for ephemeral streams in this watershed. Previously approved NRI 42021194E shows this stream location as well.

NRI 420240850, V4



*Red line (Stream buffer) is currently not being shown by the applicant.

*Blue line (Stream), just for reference) is currently not being shown by the applicant.

Maryland
Department of
the Environment

January 5, 2024

Hamid Shirazi
9810 Newhall Road
Potomac, MD 20854

Project: Pre-application site visit/Proposed subdivision
AI #: 180316
SUBJECT: MDE Waterways Site Visit Comments

Mr. Shirazi:

The Maryland Department of the Environment (MDE) visited the above site on December 21, 2023 and January 5, 2024 to determine whether any state regulated waters are present within the area of proposed subdivision. A culvert which appears to carry only stormwater runs under Newhall Road onto the property. There is a small depression where an additional drainage pipe enters. Flow from the culvert and drainage pipe enter another drainage pipe which runs the remaining length of the property. A small amount of flow was present on December 21. A review of precipitation records indicated that there had been rainfall during the days leading up to this visit. A subsequent visit on January 5 confirmed that there was no flow from the drainage pipe, therefore indicating that the flow seen on December 21 was likely due to precipitation rather than groundwater influence. Based on these observed field conditions, MDE does not consider the drainage pipe a Water of the State. See sketch on Page 2. It was determined that no authorization is required from the Department's Waterway Construction Division for work within the property since no regulated resources are present.

Official letter from the MDE

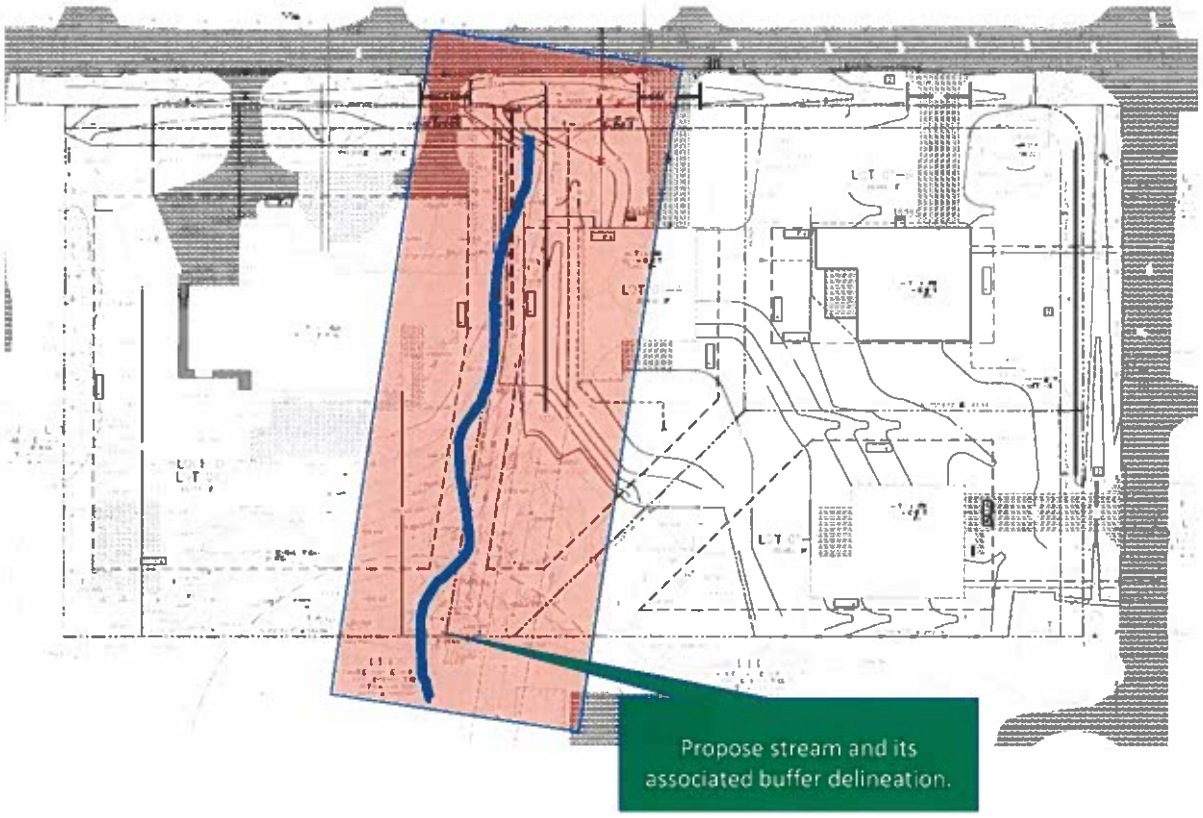
NRI 420240850 Review: This is the last communication with the applicant.

Reviewer Response: ***Ariel Zelaya - 1/20/24 12:08 PM***

Field data, documentation (video and pictures), and Forest Conservation Plan Exemptions have confirmed the presence of previous critical environmental features such as a stream and the associated buffer that were recently disturbed on the subject property. Topographic, hydrologic, and soil maps, Geographic Information Systems (GIS), and fine-resolution Light Detection and Ranging (LIDAR) have also been used to verify the extent of the stream and forest that have been disrupted. The provided Letter from the MDE will not be considered for this plan. Therefore, remove the letter from the plan.

In order to comply with the Forest Conservation Law Chapter 22A. Trees Approved Technical Manual 1992. and the Environmental Guidelines for Management of Development in Montgomery County 2021, the applicant must address the previous comment to fully represent previous and current field conditions (the applicant must show the stream and its associated buffer) and other relevant environmental features for the Natural Resource Inventory/Forest Stand Delineation (NRI/FSD). By failing to address the standard requirement for the Natural Resource Inventory/Forest Stand Delineation (NRI/FSD), the plans cannot be approved.

Concept Plan #520240040



Planning Board Procedures for Appeals under Sec. 22A-20(c)

NRI/FSDs, Exemptions from Article II, and Director-approved FCPs

Filing and Notice

- Petitioner must file any appeal petition within 30 days of receipt of the Director's decision.
    - The Petition must be filed by email to the Planning Board Chair's office at MCP-Chair@mncppc-mc.org.
    - The Petition must be served on Planning Director by email; there are no other parties to the proceeding.
    - The Petition must include the Director's decision, substance of appeal, exhibits, documents, and a list of witnesses/experts, if applicable. New evidence may be included in the Petition.
- The Chair will schedule a Planning Board appeal hearing within 60 days of receipt by Chair's Office, or as soon as practicable;
    - Staff must mail notice to Petitioner of hearing date as soon as scheduled, but no later than 10 days before the hearing date. Staff may also email the Petitioner as a courtesy, but this will not serve as legal notice.
    - The Petitioner is not required to post notice signs.
- Planning Staff may file a response within 30 days of receipt of the Petition.
    - The Staff response must be filed by email to the Planning Board Chair's office.
    - The Staff response must be served on the Petitioner; there are no other parties to the proceeding.
    - The Staff response must include any exhibits, documents, argument, and a list of witnesses/experts, if applicable. New evidence may be included in the Staff response.
- Petitioner may file a reply to Staff's Response (including any additional materials and/or witnesses). The reply must be filed with the Chair's office and served on the Planning Director at least two days before the appeal hearing.
- The Petition and the Staff response, including all exhibits, will be provided to the Planning Board and posted to the Planning Board agenda on its website at least 10 days before the appeal hearing.
- The Petitioner's reply, if any, will be provided to the Planning Board and posted on its website upon receipt.

Hearing Procedures

- The Planning Board will hold a de novo hearing on the appeal.
- Appeal hearing will be scheduled for one hour unless the Petitioner or Staff requests more time. The Chair will rule on such requests, as needed.

Planning Board Procedures for Appeals under Sec. 22A-20(c)

NRI/FSDs, Exemptions from Article II, and Director-approved FCPs

- Appeal hearing will be held as part of an open meeting of the Board; the Chair will preside over the appeal hearing, or another designated Board member in the Chair's absence.
- The appeal hearing is quasi-judicial in nature and based strictly on the record such that the Petitioner and Staff may not communicate with Board members beyond the submission of written materials and testimony at the hearing.
- All submitted materials become part of the record of the proceeding.
- All materials must be submitted as set forth above and in any event, no later than two days before the scheduled appeal hearing.
- The Chair has discretion to admit materials submitted less than two days before the appeal hearing or at the hearing.
- The Petitioner has the burden of proof and will present its argument first, followed by the Planning Department's presentation in response.
- All testimony and materials are presumed to be submitted under oath and represent the whole truth; the Chair or Staff may administer the oath or affirmation of witnesses.
- Parties may request the ability to present rebuttal testimony and cross-examine witnesses. The Chair may set reasonable limits on the scope, duration and form of such cross-examination or rebuttal testimony. In general, cross-examination must be limited to the testimony of the witness being cross examined, be relevant to the issues, and not be argumentative.
- The Board may ask questions of all parties.
- Only testimony from the Petitioner, their witnesses and Staff will be permitted; public testimony will not be accepted.
- The record will be closed at the end of the appeal hearing, at which time the Board will deliberate and vote.

Written Decision

- The Board's decision will be reflected in a Resolution to be adopted at a future public meeting.
- For purposes of judicial review, the decision of the Planning Board is the final agency action.
- The date of final decision is the mailing date of the Planning Board Resolution.
- After receiving the Planning Board's decision, a petitioner may seek judicial review of the decision in the Circuit Court under the applicable Maryland Rules of Procedure governing judicial review of administrative agency decisions.

MILES & STOCKBRIDGE P.C.

Erin E. Girard
301-517-4804
egirard@milesstockbridge.com

May 31, 2024

Jason Sartori, Director
Maryland-National Capital Park and Planning Commission
2425 Reedie Drive
Wheaton, Maryland 20902

Re: Natural Resources Inventory/ Forest Stand Delineation ("NRI/FSD") No. 420240850 for Persimmon Tree Subdivision

Dear Planning Director Sartori:

On behalf of our client, Hamid Shirazi, the owner of the property located at 9810 Newhall Road and an adjacent strip of unaddressed land (collectively, the "Property"), the purpose of this letter is to request reconsideration of Planning Staff's previous determinations regarding the presence of an intermittent stream on the Property and, as necessary, a hearing before the Planning Board on this issue pursuant to Section 22A-20 of the Montgomery County Code. As discussed more fully below, in support of their position, Staff has provided nothing more than conclusory statements, whereas the Maryland Department of the Environment ("MDE") and two independent experts have submitted detailed information contesting the classification of the stream as intermittent. As such, the preponderance of the evidence supports the conclusion that the drainage area on the Property should not be considered an intermittent stream, and we request your verification of the same.

By way of background, shortly after Mr. Shirazi began occupying the Property with his family during the summer of 2022, he began noticing significant stormwater runoff from Newhall Road onto his Property during rain events. To resolve the issue, he contacted the County, and the service request was responded to by both the Department of Permitting Service's Right of Way Division and Department of Transportation inspectors. Both suggested that while they could build a swale to convey the water runoff adjacent to the road, the handling of any water running onto adjacent properties is the responsibility of the adjacent landowners. Mr. Shirazi therefore engaged a professional engineer to design a solution for conveying water through the Property. In December 2022, Mr. Shirazi obtained Sediment Permit No. 288894 from the Montgomery County Department of Permitting Services covering the installation of an 18-inch drainage pipe within the unaddressed parcel along the western portion of the Property, which pipe was installed that same month.

EXHIBIT
B

On October 3, 2023, Mr. Shirazi filed Concept Plan No. 520240040, entitled 9312 Persimmon Tree Road, a copy of which is attached hereto as Exhibit "A" (the "Concept Plan"), and related NRI/ FSD No. 420240850 ("NRI") in connection with his purchase of an adjacent property and intended resubdivision to create three new buildable lots. During review of the NRI, disagreement arose between Staff and Mr. Shirazi's landscape architect regarding whether the channel that was piped by Mr. Shirazi in 2022 constituted an intermittent stream requiring protection. To resolve the situation, Staff requested that Mr. Shirazi's consultants obtain MDE's opinion for a final determination. MDE thereafter visited the site both on December 21, 2023 and January 5, 2024 for a site evaluation. Ultimately, MDE issued a letter on January 5, 2024 finding, in relevant part, "[a] small amount of flow was present on December 21. A review of precipitation records indicated that there had been rainfall during the days leading up to this visit. A subsequent visit on January 5 confirmed that there was no flow from the drainage pipe, therefore indicating that the flow seen on December 21 was likely due to precipitation rather than groundwater influence. Based on these field conditions, MDE does not consider the drainage pipe a Water of the State." The letter marks the outfall of the pipes as "stormwater only drainage feature." A copy of this letter is attached as Exhibit "B".

Despite this determination from an independent agency, as requested by Staff, on February 12, 2024 Staff issued a "Notice of Requirements" declaring the piped drainage area an intermittent stream and calling for restoration of the stream and associated stream valley buffer. To support its position, Staff made general reference to "[f]ield data, documentation (video and pictures), and other Forest Conservation Plan Exemptions nearby" as well as "[t]opographic, hydrologic, and soil maps, Geographic Information Systems (GIS) and fine-resolution Light Detection and Ranging (LIDAR)," without providing any specifics of how such information supported its position. Additionally, and of particular note, the letter explains that "an intermittent stream will usually have baseflow during the winter" without acknowledging MDE's determination that there was no flow observed on January 5, 2024, a winter month.

Given the conflicting information, Mr. Shirazi then engaged two independent experts to evaluate the stream: Michael Klebasko of Wetland Studies and Solutions, Inc., a well-known and well-respected environmental expert who does a significant amount of work in Montgomery County, and Bob Zarzecki of Soil and Environmental Consultants, Inc., a recognized expert in stream classifications who has played a significant role in developing objective standards for such classifications. Both experts evaluated the drainage channel in question and reached independent conclusions that the channel was, at best, ephemeral, and not an intermittent stream.

More specifically, Mr. Klebasko's Report, an updated copy of which is attached as Exhibit "C", states that upon their field visit the "...channel contained no base flow..., generally lacked sinuosity..., contained fibrous roots and upland vegetation in bottom of the channel, and contained non-hydric soils... Furthermore, the channel did not contain blackened or decayed leaf matter, well-sorted sediments, streambed forms, frequent flow marks, algae covered or water-stained rocks, obligate wetland vegetation, natural levees, a defined floodplain, or evidence of stream

biota, all of which are typically absent in ephemeral streams according to the [Montgomery County] Environmental Guidelines. Using the criteria presented in the Environmental Guidelines, it is WSSI professional opinion that the stream channel is unquestionably ephemeral."

Similarly, Mr. Zarzecki's Report, a copy of which is attached as Exhibit "D", concludes "that there are no potential streams on Mr. Shirazi's properties, and that the drainage south of his properties contains an 'ephemeral' stream starting at the outlet end of the recently installed pipes and extending at least 200' to the south. The first 77-80 feet…is clearly 'ephemeral' with no evidence of an 'intermittent' stream….Based on our observations of this drainage to the south (well beyond Mr. Shirazi's properties), it appears to become at least an "intermittent" stream somewhere between Logan Drive and Avenel Farm Drive, which is consistent with how the channel is shown on the 1995 soil survey and MDE use-class tributary mapping."

In response to the submission of these expert reports, Staff issued a one-page supplemental letter on May 1, 2024 summarily rejecting the expert analysis without any supporting rebuttal analysis, and again referencing the same general information quoted above as the basis on which it was making its determination. In this letter Staff again references, without providing specifics, "other environmental applications, such as Tree Save Plans and FC exemptions….[that] have validated the existence and extent of an intermittent stream within [the subject] property and adjacent properties." At the conclusion of this letter, Mr. Shirazi is threatened with initiation of a Notice of Violation or other enforcement action should he not consent to the classification of the stream as intermittent.

In response to Staff's assertion that nearby environmental approvals supported the classification of the stream as intermittent, Mr. Shirazi and his consultants conducted an evaluation of nearby NRI/ FSD approvals and found that the three most proximate to the Property all showed no stream in the immediate area. Two along Logan Drive did show an intermittent stream proximate to those properties, but that conclusion *is fully in accordance with Mr. Zarzecki's findings, quoted above, that an intermittent stream does exist near Logan Drive.* Contrary to Staff's apparent assertions, however, the existence of an intermittent stream near Logan Drive is in no way conclusive of the fact that an intermittent stream exists further north on Mr. Shirazi's Property. A diagram depicting these approvals in relation to Mr. Shirazi's Property is included below for your ease of reference.

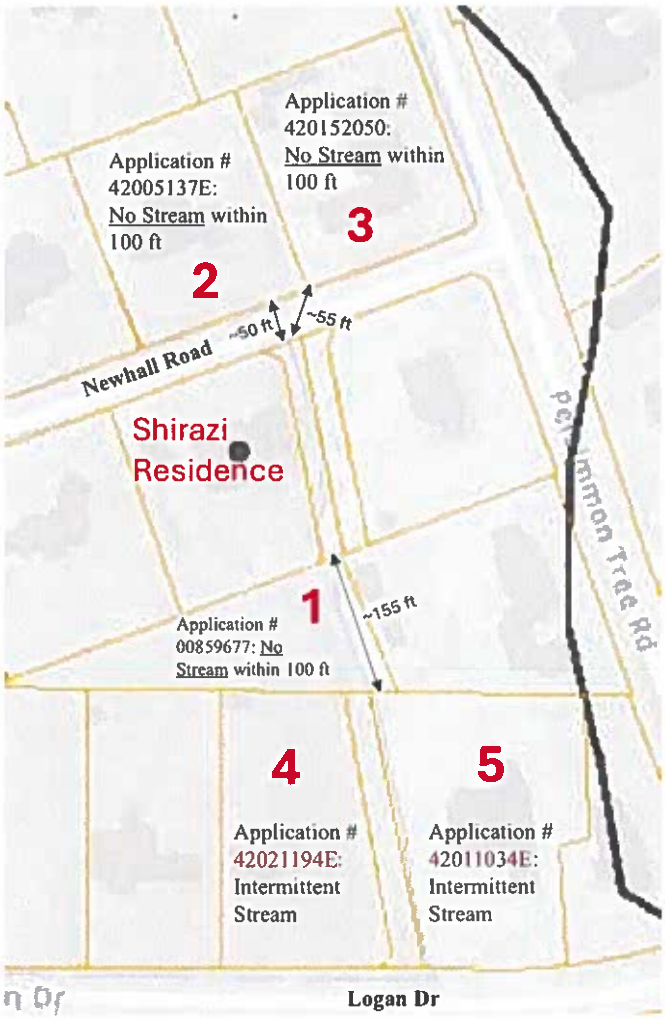


Figure- Approved NRIs Surrounding the Property.

Additionally, in response to Staff's May 1st letter, both Mr. Zarzecki and Mr. Klebasko have provided supplemental information further supporting their conclusions and disputing the validity of Staff's position. Mr. Klebasko added new content to his report further explaining the justification of his assessment of the stream using the County's Environmental Guidelines. Mr. Zarzecki's May 30, 2024 supplemental letter, attached hereto as Exhibit "E", notes the central issue in this dispute is that the County has no standardized "methods and standards" for a detailed stream delineation other than just definitions and characteristics of the stream types noted in Appendix E of the County's "Environmental Guidelines". To highlight this issue and to counter Staff's general reference to topographic, hydrologic, and soil maps, GIS and LIDAR, Mr. Zarzecki's letter identifies four approved NRIs in the vicinity of the Property with mappings

depicting the potential presence of a stream no different than the mapping available for Mr. Shirazi's Property, and yet the stream is not classified as an intermittent stream in those cases. He then concludes Staff's position on the presence of an intermittent stream on the Property, in the absence of a detailed delineation report, is arbitrary.

Based on the above and attached information, and the lack of any detailed information supporting Staff's conclusion, we request your independent review of the evidence on this issue and, if necessary, further consideration by the Planning Board. In accordance with the law, in making your determination you should be guided by the weight of the evidence, which we believe must clearly result in the conclusion that the drainage area on Mr. Shirazi's property is, at best, an ephemeral stream and most certainly not an intermittent stream. As explained more fully above and in the attached materials, this conclusion is supported both by MDE and two reputable independent experts on the subject, whose persuasive analysis has not been refuted by Staff in any substantive way.

Finally, as you can imagine, the engagement of experts to analyze this issue and myself to pursue this appeal has not come without significant expense to Mr. Shirazi. While other property owners may not have the means or incentive to attempt to refute a directive by Staff to reflect a certain stream classification within their property, the impact of Staff's determination in this instance is particularly weighty and impactful. Not only would the classification of the stream as intermittent require the removal of the existing pipe and establishment of a buffer, reintroducing to the Property the very runoff problems that Mr. Shirazi had attempted to solve with the installation of the pipe, but the extent of the buffer would essentially preclude the realization of the single family housing shown in the Concept Plan. The associated stream buffer would reduce the buildable area to the point that it would be impossible to achieve the new lots shown in the Concept Plan.

Thank you for your consideration of this information. We would be happy to set a time to discuss further if that would be helpful to you. We look forward to hearing from you.

Sincerely,

Miles & Stockbridge, P.C.

Erin E. Girard

Erin E. Girard

cc: Hamid Shirazi
Robert Kronenberg
Patrick Butler
Ariel Zelaya

GENERAL SITE NOTES

ZONING DISTRICT: R-200
PARCEL AREA: [illegible] ACRES
WATERSHED: POTOMAC DIRECT
MASTER PLAN REGION: POTOMAC SUBREGION

WATER SEWER CATEGORY: W-1/S-1
WATER UTILITY: WSSC
SEWER UTILITY: WSSC
ELECTRIC UTILITY: PEPCO
NATURAL GAS UTILITY: WASHINGTON GAS

THERE ARE NO WETLANDS ON SITE.
THERE ARE NO 100-YR FLOODPLAINS ON SITE.
THE SITE IS NOT LOCATED IN ANY SPECIAL PLANNING DISTRICT, PLANNING AREAS, SPECIAL PROTECTION AREA, OR ENTERPRISE ZONE.

CONCEPT PLAN
FOR
9810 NEWHALL RD

[illegible]

SITE CIVIL ENGINEERING SHEET INDEX	
SHEET TITLE	SHEET #
COVER AND GENERAL NOTES SHEET	01
EXISTING CONDITIONS	02
CONCEPT PLAN	03
SITE DETAILS	04
UTILITY PLAN	05
STORMWATER MANAGEMENT CONCEPT PLAN	06
STORMWATER MANAGEMENT CALCULATIONS	07
DRAINAGE PLAN	08

VICINITY MAP
SCALE: 1" = 2000'

BLOCK D LOT 01 ZONING REQUIREMENTS R-200		
ZONING STANDARD	REQUIRED	PROPOSED
MINIMUM LOT SIZE	20,000 SF	[illegible] SF
MAXIMUM LOT COVERAGE	[illegible]%	[illegible]%
MAXIMUM BUILDING COVERAGE	25%	[illegible]%
MAXIMUM BUILDING HEIGHT	[illegible] FEET	[illegible]
PRINCIPAL DWELLING		
FRONT	40 FEET	[illegible] FEET
SIDE	40 FEET TO STREET; 12 FEET INTERIOR	[illegible] FEET & [illegible] FEET
SUM OF SIDE SETBACKS	25 FEET	[illegible] FEET
REAR	30 FEET	[illegible] FEET
ACCESSORY STRUCTURES		
FRONT	[illegible] FEET	[illegible] FEET
SIDE	40 FEET TO STREET; 12 FEET INTERIOR	[illegible] FEET & [illegible] FEET
REAR	[illegible] FEET	[illegible] FEET
DENSITY	[illegible]	[illegible]
MINIMUM LOT WIDTH	[illegible] FEET (@ BRL); 25 FEET (@ FRONT LINE)	[illegible] FEET (@ BRL); [illegible] FEET (@ FRONT LINE)

BLOCK C LOT 01-A ZONING REQUIREMENTS R-200		
ZONING STANDARD	REQUIRED	PROPOSED
MINIMUM LOT SIZE	[illegible] SF	[illegible] SF
MAXIMUM LOT COVERAGE	[illegible]%	[illegible]%
MAXIMUM BUILDING COVERAGE	25%	[illegible]%
MAXIMUM BUILDING HEIGHT	[illegible] FEET	[illegible] FEET
SETBACKS FRONT	[illegible] FEET	[illegible] FEET
SIDE	[illegible] FEET TO STREET; 12 FEET INTERIOR	[illegible] FEET & [illegible] FEET
SUM OF SIDE SETBACKS	25 FEET	[illegible] FEET
REAR	30 FEET	[illegible] FEET
DENSITY	[illegible]	[illegible]
MINIMUM LOT WIDTH	[illegible] FEET (@ BRL); 25 FEET (@ FRONT LINE)	[illegible] FEET (@ BRL); [illegible] FEET (@ FRONT LINE)

BLOCK C LOT 01-B ZONING REQUIREMENTS R-200		
ZONING STANDARD	REQUIRED	PROPOSED
MINIMUM LOT SIZE	[illegible] SF	[illegible] SF
MAXIMUM LOT COVERAGE	[illegible]%	[illegible]%
MAXIMUM BUILDING COVERAGE	25%	[illegible]%
MAXIMUM BUILDING HEIGHT	[illegible] FEET	[illegible] FEET
SETBACKS FRONT	[illegible] FEET	[illegible] FEET
SIDE	[illegible] FEET TO STREET; 12 FEET INTERIOR	[illegible] FEET & [illegible] FEET
SUM OF SIDE SETBACKS	25 FEET	[illegible] FEET
REAR	30 FEET	[illegible] FEET
DENSITY	[illegible]	[illegible]
MINIMUM LOT WIDTH	[illegible] FEET (@ BRL); 25 FEET (@ FRONT LINE)	[illegible] FEET (@ BRL); [illegible] FEET (@ FRONT LINE)

BLOCK C LOT 01-C ZONING REQUIREMENTS R-200		
ZONING STANDARD	REQUIRED	PROPOSED
MINIMUM LOT SIZE	[illegible] SF	[illegible] SF
MAXIMUM LOT COVERAGE	[illegible]%	[illegible]%
MAXIMUM BUILDING COVERAGE	[illegible]%	[illegible]%
MAXIMUM BUILDING HEIGHT	[illegible] FEET	[illegible] FEET
SETBACKS FRONT	[illegible] FEET	[illegible] FEET
SIDE	[illegible] FEET TO STREET; 12 FEET INTERIOR	[illegible] FEET & [illegible] FEET
SUM OF SIDE SETBACKS	25 FEET	[illegible] FEET
REAR	30 FEET	[illegible] FEET
DENSITY	[illegible]	[illegible]
MINIMUM LOT WIDTH	[illegible] FEET (@ BRL); 25 FEET (@ FRONT LINE)	[illegible] FEET (@ BRL); [illegible] FEET (@ FRONT LINE)

CONCEPT PLAN

HUSKA CONSULTING, LLC

PROJECT
9810 NEWHALL RD
POTOMAC, MD [illegible]

APPLICANT
[illegible]
9810 NEWHALL RD
POTOMAC, MD [illegible]

CIVIL ENGINEER
PATRICK MORGAN
HUSKA CONSULTING, LLC
WASHINGTON, DC [illegible]

LANDSCAPE ARCHITECT
[illegible]

9810 NEWHALL RD
POTOMAC, MD 20854

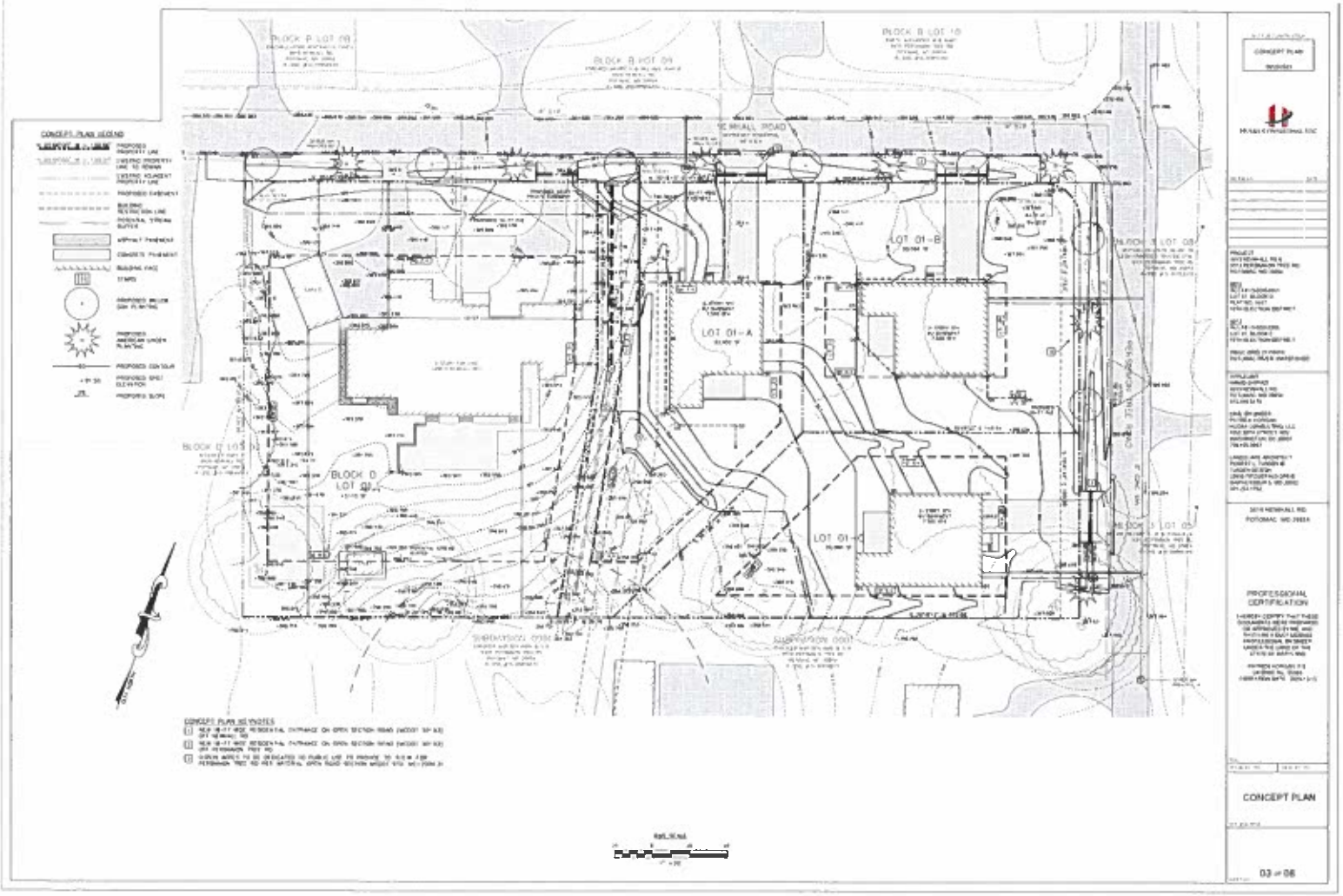
PROFESSIONAL CERTIFICATION

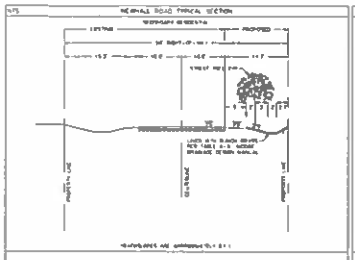
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

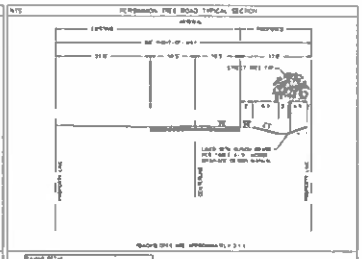
PATRICK MORGAN, P.E.
LICENSE No. [illegible]
EXPIRATION DATE: [illegible]

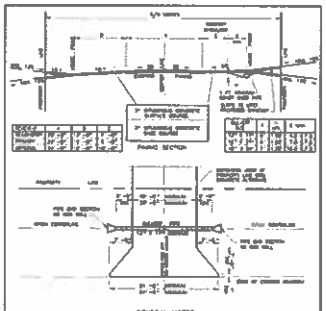
COVER AND GENERAL NOTES SHEET

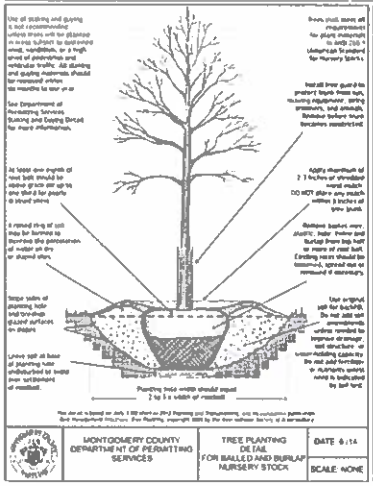
01 of 08

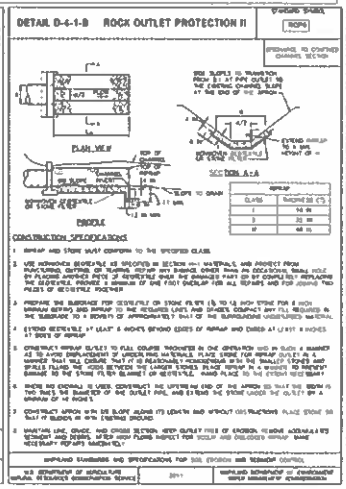

CONCEPT PLAN LEGEND
PROPOSED PROPERTY LINE
EXISTING PROPERTY LINE TO REMAIN
EXISTING ADJACENT PROPERTY LINE
PROPOSED EASEMENT
BUILDING RESTRICTION LINE
PROPOSAL TYPICAL SURFACE
ASPHALT PAVEMENT
CONCRETE PAVEMENT
BUILDING FACE
STAIRS
PROPOSED BOLLOR
PROPOSED AMERICAN UNDER PLANTING
PROPOSED CONTOUR
PROPOSED SPOT ELEVATION
PROPOSED SLOPE
BLOCK B LOT 09
BLOCK B LOT 10
BLOCK B LOT 08
BLOCK D LOT 01
LOT 01-B
LOT 01-A
LOT 01
BLOCK D LOT 03
BLOCK D LOT 05
SUBDIVISION 0091
SUBDIVISION 0091
CONCEPT PLAN KEYNOTES
CONCEPT PLAN
PROFESSIONAL CERTIFICATION
03 of 06

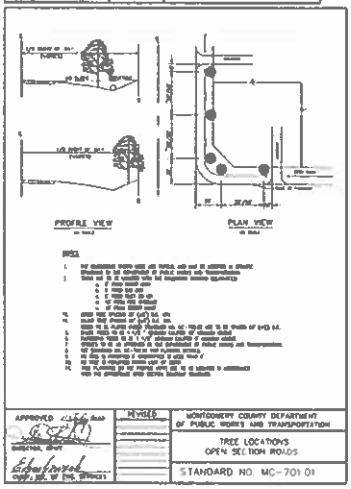












Maryland
Department of
the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

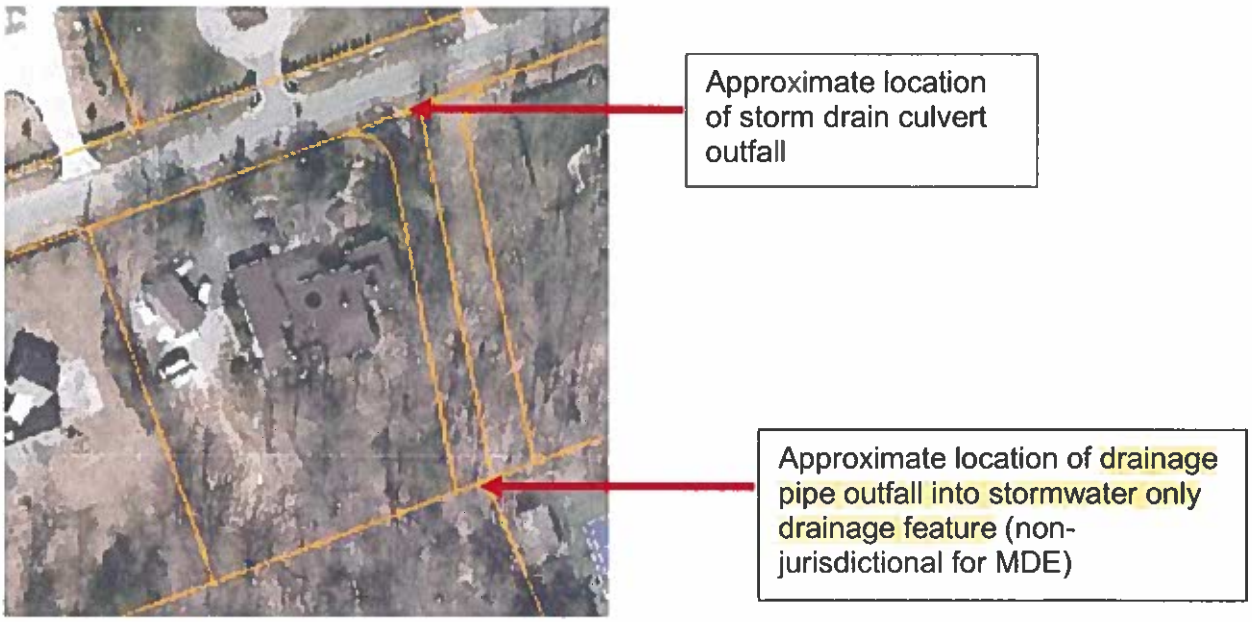
January 5, 2024

Hamid Shirazi
9810 Newhall Road
Potomac, MD 20854

Project: Pre-application site visit/Proposed subdivision
AI #: 180316
SUBJECT: MDE Waterways Site Visit Comments

Mr. Shirazi:

The Maryland Department of the Environment (MDE) visited the above site on December 21, 2023 and January 5, 2024 to determine whether any state regulated waters are present within the area of proposed subdivision. A culvert which appears to carry only stormwater runs under Newhall Road onto the property. There is a small depression where an additional drainage pipe enters. Flow from the culvert and drainage pipe enter another drainage pipe which runs the remaining length of the property. A small amount of flow was present on December 21. A review of precipitation records indicated that there had been rainfall during the days leading up to this visit. A subsequent visit on January 5 confirmed that there was no flow from the drainage pipe, therefore indicating that the flow seen on December 21 was likely due to precipitation rather than groundwater influence. Based on these observed field conditions, MDE does not consider the drainage pipe a Water of the State. See sketch on Page 2. It was determined that no authorization is required from the Department's Waterway Construction Division for work within the property since no regulated resources are present.



Should you have any questions or comments regarding this determination, please feel free to contact me at (410) 218-7451 or via email at melissa.knapp@maryland.gov.

Sincerely,

Melissa Knapp
Regulatory and Compliance Engineer
Waterway Construction Division

Wetland Studies and Solutions, Inc.®
a DAVEY company

LETTER OF FINDINGS

TO: Hamid Shirazi *(Via E-mail: hamidshirazi@gmail.com)*

FROM: Michael J. Klebasko, PWS, Manager – Maryland Environmental Science

RE: 9810 Newhall Road, Potomac, Maryland
Stream Classification Evaluation
WSSI #: P.WS10000770

DATE: March 27, 2024 [Revised May 29, 2024]

Introduction:

On March 20, 2024, Michael J. Klebasko, P.W.S., and Dan Le Kites of Wetland Studies and Solutions, Inc. (WSSI) conducted a site visit to examine the existing drainage channel in the southeastern corner of the property located at 9810 Newhall Road in Potomac, Montgomery County, Maryland (Exhibit 1). Prior to the site visit, WSSI reviewed photos and video of the site as well as publicly available environmental data. The field investigation comprised approximately 80 linear feet of a drainage channel originating at existing twin, plastic flex pipes. The pipes were recently installed along the eastern property boundary to convey water from the drainage ditches along Newhall Road and from overland runoff draining from the adjacent neighbor's property to the east. The purpose of WSSI's site visit was to evaluate the channel's stream classification through visual observation and by using the North Carolina Division of Water Quality's *Methodology for Identification of Intermittent and Perennial Stream and Their Origins, Version 4.11* (2010). With this methodology, several parameters under three major categories (geomorphology, hydrology, and biology) are assessed and rated to determine an overall composite score. Streams with scores less than 19 are considered ephemeral, while streams with scores of 19 or greater and 30 or greater are considered intermittent and perennial, respectively.

Site Investigation Results:

WSSI's investigation initiated along the northern property boundary fronting Newhall Road. At the time of our site visit, the rip-rap lined ditches bordering both sides of Newhall Road were dry and no evidence of standing water or flow was observed (Exhibit 2, Photograph 1). There was no runoff-generating rain event within 48 hours preceding the site visit. A small amount of moisture was observed in a short (5-foot) segment of daylighted drainage ditch that connected the roadside ditches to one of the plastic flex pipes (Exhibit 2, Photograph 2). However, no measurable flow was observed.

WSSI also observed a yard inlet along the eastern property boundary approximately 170 feet south of Newhall Road. (Exhibit 2, Photograph 3). This inlet was installed to collect overland yard runoff from the adjacent property to the east. No water was observed in the neighbor's yard or the inlet at the time of our site visit. The inlet appears to drain via a separate, second plastic flex pipe to the southeastern corner of the property.

Both plastic flex pipes daylight in tandem near the southeastern corner of the property (Exhibit 2, Photograph 4). With the exception of a small pool of water in a scour hole below a minor existing headcut (Exhibit 2, Photograph 5), no surface water was evident in the 80-foot section of channel immediately

below the outfall pipes. One soil boring was taken in the headcut to a depth of 13 inches to determine if hydric soils were present. The boring revealed that approximately 80% of the soil profile is comprised of high chroma colors (10YR 4/6, 10YR 5/4, and 7.5YR 4/6) and would be classified as non-hydric (Exhibit 2, Photograph 6).

According to the Montgomery County's Environmental Guidelines, ephemeral streams are defined as streams that are above the groundwater table and convey flow only during, and for a short duration after (generally less than 48 hours), and in direct response to a precipitation event. Stream characteristics typically present in ephemeral streams include poorly-developed sinuosity, evidence of leaf litter or small debris jams in flow areas, poorly-sorted sediments, poorly-developed removal of vegetation litter, poorly-developed vegetation drift lines, fibrous roots in channel and side slope soils with characteristics of the surrounding landscape. From our investigation, this channel contained no base flow (Exhibit 2, Photographs 4, 5, 7 and 8), generally lacked sinuosity (Exhibit 2, Photographs 7 and 8), contained fibrous roots (Exhibit 2, Photograph 9) and upland vegetation in bottom of the channel, and contained non-hydric soils (Exhibit 2, Photograph 6). Furthermore, the channel did not contain blackened or decayed leaf matter, well-sorted sediments, streambed forms, frequent flow marks, algae covered or water-stained rocks, obligate wetland vegetation, natural levees, a defined floodplain, or evidence of stream biota, all of which are typically absent in ephemeral streams according to the Environmental Guidelines. Using the criteria presented in the Environmental Guidelines, it is WSSI professional opinion that the stream channel is unquestionably ephemeral.

WSSI next used the North Carolina methodology to classify the 80-foot segment of drainage channel starting from where the twin, plastic flex pipes daylight. Our investigation revealed that the channel received a composite score of 13 (Exhibit 3 – Stream Identification Form), which corroborates our initial determination that the channel is ephemeral. Most of the parameters under all three categories received low point totals or no points at all. For example, the ephemeral channel exhibited moderate evidence of fibrous roots in the channel (Exhibit 2, Photograph 9), weak evidence of rooted upland plants in the channel, and no evidence of aquatic organisms or plants, which further strengthens the argument that this channel is ephemeral.

Since this portion of the channel was found to be ephemeral using two evaluation methodologies, it can be assumed that any stream previously upslope of this segment would have also been classified as ephemeral.

Limitations:

This study is based on our observation of the study area at the specified time and under the current environmental conditions. Therefore, our conclusions may vary from future observation by others due to changing conditions. This letter assesses the survey area at the site at the time of our review and does not address conditions at a given time in the future.

Our review and letter of findings has been prepared in accordance with generally accepted guidelines. Conclusions presented herein are based upon our review of available information, the results of our field studies, and/or professional judgement. We make no other warranties, either expressed or implied, and our report is not a recommendation to buy, sell or develop the property.

We offer no opinion and do not purport to opine on the possible application of various building codes, zoning ordinances, other land use or platting regulations, environmental or health laws and other similar

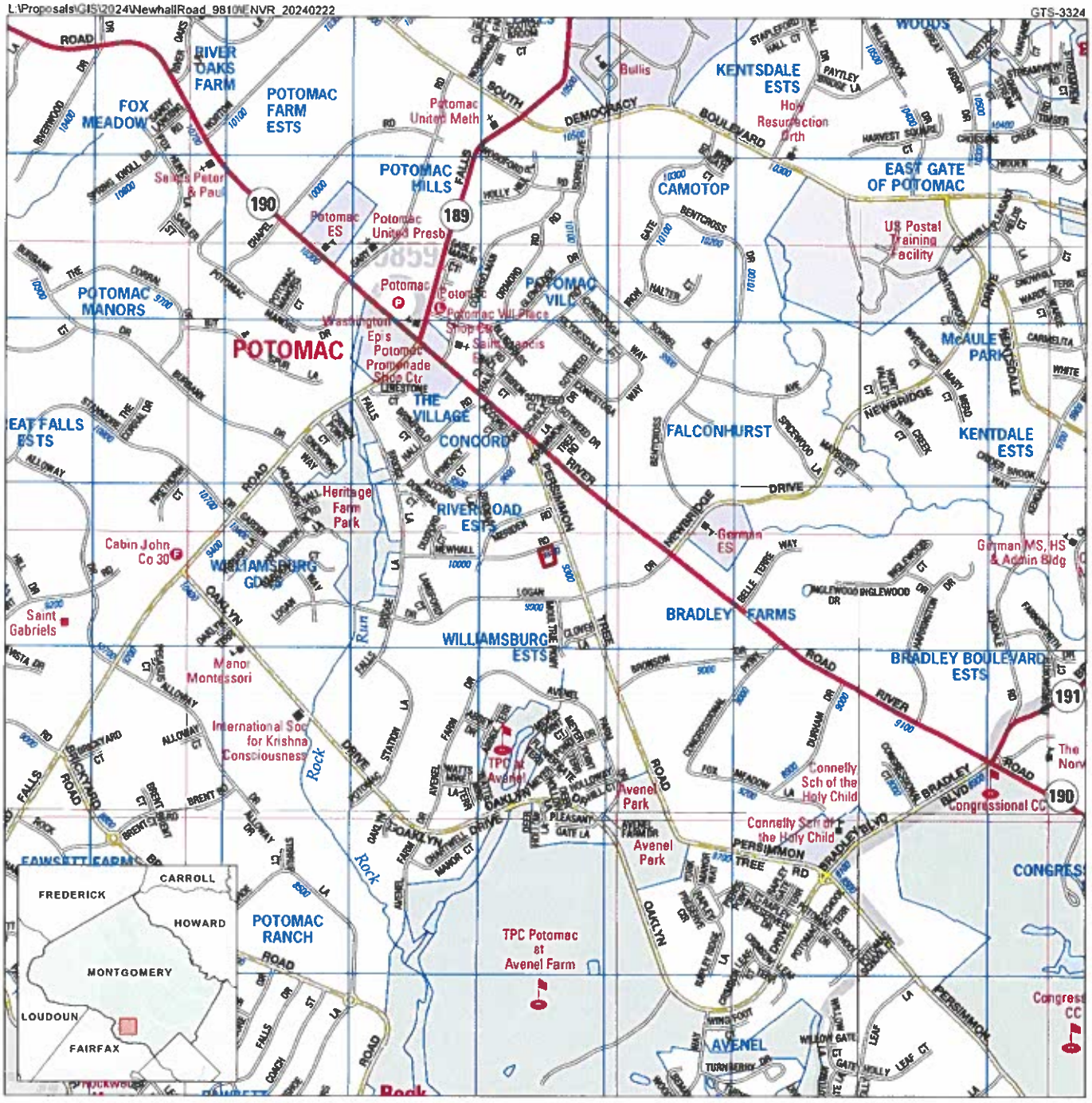
statutes, laws, ordinances, code and regulations affecting the possible use and occupancy of the Property for the purpose for which it is being used, except as specifically provided above.

This report does not constitute a jurisdictional determination of waters of the U.S. since such determinations must be verified by the U.S. Army Corps of Engineers or the Maryland Department of the Environment (as applicable) and are subject to review by the U.S. Environmental Protection Agency.

If you have any questions, please do not hesitate to contact me at (410) 672-5990 or at mklebasko@wetlands.com.

L:\Proposals\GIS\2024\NewhallRoad_9810\ENVR_20240222

GTS-3324



Site ±1.0 acres

Vicinity Map
9810 Newhall Road

NORTH

0 2,000

Feet

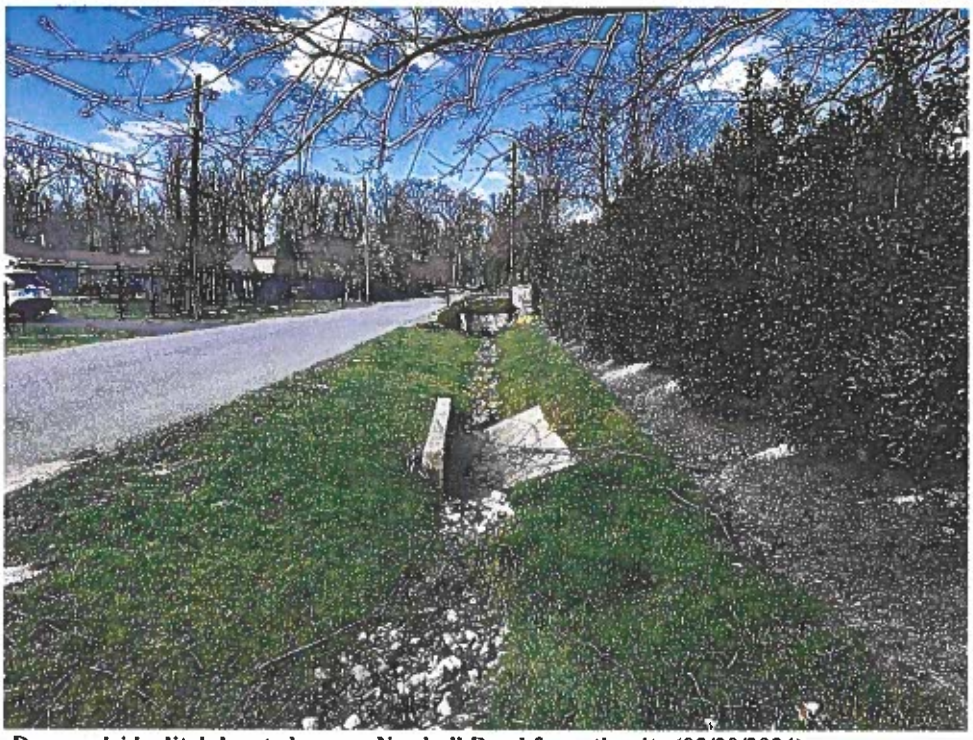
Original Scale:
1 " = 2,000 '

Source: ADC 2008-2012
ADC Map/Column/Row: 5283H9

Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 1

EXHIBIT 2
SITE PHOTOGRAPHS
9810 NEWHALL ROAD
WSSI #P.WS10000770



1. **Dry roadside ditch located across Newhall Road from the site (03/20/2024).**

2. **Daylighted drainage ditch connecting roadside ditches to plastic flex pipe (03/20/2024).**

EXHIBIT 2
SITE PHOTOGRAPHS
9810 NEWHALL ROAD
WSSI #P.WS10000770

3. **View of yard inlet along eastern property boundary (03/20/2024).**

4. **Upslope view of twin outfall pipes in the southeastern corner of the property (03/20/2024).**

EXHIBIT 2
SITE PHOTOGRAPHS
9810 NEWHALL ROAD
WSSI #P.WS10000770

5. **Upslope view of minor headcut in dry ephemeral channel (03/20/2024).**

6. **View of non-hydric soil profile obtained from dry ephemeral channel (03/20/2024).**

EXHIBIT 2
SITE PHOTOGRAPHS
9810 NEWHALL ROAD
WSSI #P.WS10000770

7. **Upper half of dry ephemeral channel looking towards twin outfall pipes (03/20/2024).**

8. **Lower half of dry ephemeral channel looking downslope (Note: channel lacks clear bed and bank, depositional bars/benches, and active/relic floodplain) (03/20/2024).**

EXHIBIT 2
SITE PHOTOGRAPHS
9810 NEWHALL ROAD
WSSI #P.WS10000770

9. **View of fibrous roots in bed of dry ephemeral channel (03/20/2024).**

EXHIBIT 3

NC Division of Water Quality –Methodology for Identification of Intermittent and Perennial Streams and Their Origins v. 4.11

NC DWQ Stream Identification Form Version 4.11

Date: 03/20/24	**Project/Site: 9810 Newhall Road**	**Latitude:**
Evaluator: Michael J. Klebasko, P.W.S.	**County: Montgomery County**	**Longitude:**
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** **13 (Ephemeral)**	**Stream Determination (circle one)** Ephemeral Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 7.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	0	(1)	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	0	(1)	2	3
9. Grade control	0	(0.5)	1	1.5
10. Natural valley	(0)	0.5	1	1.5
11. Second or greater order channel	No = (0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 2.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	(1)	0.5	0
15. Sediment on plants or debris	(0)	0.5	1	1.5
16. Organic debris lines or piles	0	0.5	1	(1.5)
17. Soil-based evidence of high water table?	No = (0)		Yes = 3	

C. Biology (Subtotal = 3)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	(2)	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 Other = (0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

S&EC

Soil & Environmental Consultants, Inc.

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone (919) 846-5900 • Fax (919) 846-9467
sandec.com

April 5, 2024
S&EC Project No.: 16002.W1

To: Hamid Shirazi
9810 Newhall Road
Potomac, Maryland 20854

Re: STREAM IDENTIFICATION REPORT
9810 Newhall Road
Potomac, Maryland 20854

Mr. Shirazi:

On March 19, 2024, S&EC personnel completed an onsite stream determination of the drainage feature along your eastern property boundary and south onto the adjacent property. You will find the attached report, maps and forms detailing our findings.

Please contact S&EC if you have any questions related to wetland and stream regulations or if you need clarification of the attached report.

Sincerely,
SOIL & ENVIRONMENTAL CONSULTANTS, INC

Bob Zarzecki

Digitally signed by Bob Zarzecki
DN: cn=Bob Zarzecki, o=S&EC, ou=Wetlands Department Manager, email=bzarzecki@sandec.com, c=US
Date: 2024.04.05 13:46:33 -04'00'

Bob Zarzecki

Wetlands Department Manager / VP / Principal

Attachments:

1) Stream Identification Report
2) USGS site vicinity map
3) NRCS Soil Survey
4) Sketch Map
5) Site Photographs
6) Stream Forms
7) APT Report
8) SWITC Certificates of Training

S&EC

Soil & Environmental Consultants, Inc.

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone (919) 846-5900 • Fax (919) 846-9467
sandec.com

Stream Identification Report
9810 Newhall Road, Potomac, Maryland

On March 19, 2024, S&EC personnel, Bob Zarzecki and Josh Harvey, completed an onsite determination to identify streams on properties owned by Mr. Hamid Shirazi located at 9810 Newhall Road, Potomac, Montgomery County, Maryland and an adjacent property immediately downstream. The subject properties include Montgomery County tax parcel account numbers 00589861, 00859872 & 00859677 and total approximately 1.86 acres. The attached maps show the location of the properties.

EXECUTIVE SUMMARY

Based on our onsite determination of the stream depicted on the most recent version of the U.S. Geological Survey (USGS) National Map (identified as "A" on the attached maps), S&EC believes that there are no potential streams on Mr. Shirazi's properties and that the stream immediately south of Mr. Shirazi's properties is an "ephemeral stream". There is also no indication based on our onsite determination and additional information provided by Mr. Shirazi that the drainage in which he had recently piped and filled on his properties contained anything more than an "ephemeral stream", if not simply an ephemeral swale or ditch. Please refer to the sketch map and the results and recommendations section below for more detailed information.

STREAM IDENTIFICATION METHODOLOGY

Prior to our onsite determination, S&EC reviewed all available mapping (aerial photography, topography, LiDAR, soils, etc.), online information and documents provided by Mr. Shirazi. We have reviewed the "*Guidelines for Environmental Management of Development in Montgomery County, The Maryland-National Capital Park and Planning Commission, The Montgomery County Planning Department, July 2021.*" (Environmental Guidelines) and associated *Natural Resources Inventory* (NRI) requirements. Our onsite determination focused on stream identification on and within 200 feet of Mr. Shriazi's properties. The Glossary of Terms section of the Environmental Guidelines defines Ephemeral, Intermittent and Perennial Streams as.

- ***Ephemeral Stream*** – *streams that are above the groundwater table and convey flow only during, and for a short duration after (generally less than 48 hours) and in direct response to, a precipitation event. Ephemeral streams do not include roadside ditches.*

- ***Intermittent Stream*** – *streams that typically have baseflow at least once per year. Typically, in the winter and spring, the groundwater table is elevated, increasing the likelihood that the groundwater level is higher than the bed of a stream channel. Therefore, an intermittent stream will usually have baseflow during the winter and spring seasons and infrequent baseflow during the rest of the year. Because of discontinuous*

flow regimes, intermittent streams typically have physical, hydrological, and biological characteristics that are not as well-developed as perennial streams. Depending on the frequency and duration of flows, however, the characteristics of intermittent streams can be similar to those of either perennial or ephemeral streams.

- ***Perennial Stream*** *– streams that typically have continuous baseflow from the groundwater table, which is generally located above the streambed throughout the year.*

Appendix E "Stream Types" of the Environmental Guidelines further provide guidance on the definition and methods to be used to identify and classify streams. While the Environmental Guidelines provide tables with stream characteristics typically present and absent in each stream type, they do not provide a more detailed, quantitative method to differentiate between the stream types. The Environmental Guidelines state: "*Best professional judgment must be applied when classifying a stream.*" And, that the stream classification "*... must be supplemented with data acquired in the field.*"

We understand that the County has accepted the use of the "*NC Division of Water Quality. 2010. Methodology for Identification of Intermittent and Perennial Streams and their Origins, Version 4.11. North Carolina Department of Environment and Natural Resources, Division of Water Quality. Raleigh, NC.*" to assist in the classification of the stream types. S&EC used this methodology to identify the potential streams within 200' of the properties owned by Mr. Shirazi.

QUALIFICATIONS

The qualifications of the S&EC personnel, Bob Zarzecki and Josh Harvey, who completed the onsite stream determination are attached for your review. Both have successfully completed the *Surface Water Identification Training and Certification Program (SWITC)* and their certificates are attached. Bob Zarzecki (resume attached) worked for the N.C. Division of Water Quality (now Water Resources) from November 1999 to January 2005 where he was responsible for the implementation and coordination of the riparian buffer regulations in North Carolina. He was involved in the development and field verification of the *SWITC* methodology, instructed professionals on the use of the methodology, and conducted numerous stream determinations during his time with the Division. He has continued to routinely conduct these stream determinations and obtain verifications of his determinations from the State during his subsequent nineteen years as an environmental consultant. Josh Harvey also routinely conducts stream determinations and obtains State verifications of his findings.

DOCUMENTED DATA REVIEW

The subject drainage is located within the Rock Run creek watershed of the Potomac River. The 12-digit watershed code is 021402020845. The Maryland Department of Environment (MDE) has identified a section of unnamed tributary to Rock Run downstream of Mr. Shiraz's properties. The section of unnamed tributary is shown to begin south of Moultrie Parkway and north of Avenel Farm Drive at approximate coordinates 39.006 / -77202. No section of unnamed tributary is shown above this section or on Mr. Shirazi's properties. The MDE existing use (EU)

class is identified as "not applicable" (meaning an existing use determination has not been conducted). The use class (UC) is identified as "I-P". The specific uses of this classification include "*water contact recreation, protection of aquatic life, and public water supply*". This is the minimum use class assigned for all tributaries of the Potomac River from upstream of Montgomery County to the Washington DC line.

The watershed area to the inlet end of the existing pipes located on the properties owned by Mr. Shiraz is approximately seven (7) acres. The watershed contains large single family residential homes with manicured lawns and gardens all draining to swales and roadside ditches flowing into the inlet end of the culvert pipe under Newhall Road and then into the recently installed pipes located on Mr. Shiraz's properties.

The 1961 soil survey map (attached) shows an intermittent stream starting south of Logan Drive. The more recent 1995 soil survey map (attached) shows an intermittent stream starting south of Moultrie Parkway and north of Avenel Farm Drive (at the same approximate location as identified on the MDE classification map). The current USGS National Map (attached) depicts a "blue line" stream extending up to Newhall Road. However as stated in Appendix E of the Environmental Guidelines, "*such maps are generally not based on detailed data and must be supplemented with data acquired in the field*".

No measurable rainfall had occurred within 48 hours of our onsite determination. We generated a U.S. Army Corps of Engineers (USACE) Antecedent Precipitation vs Normal Range report, also known as the Antecedent Precipitation Tool (APT), (attached) prior to our onsite determination. The result was that "Normal Conditions" existed at the time of our onsite determination. The previous 30 days wetness conditions were identified as "Wet", but the prior 60 days were identified as "Normal".

S&EC has reviewed the information provided by Mr. Shirazi and we understand that there have been NRIs approved for on most of the lots surrounding his properties. The two lots to the north of Newhall Road which drain onto Mr. Shiraz's property do not show stream buffers. The approved applications for 9809 Newhall Road (42005137E) and 9400 Persimmon Tree Road (420152050) state the absence of streams and stream buffers within 100 ft of the properties. The 1995 NRI (#419960020) for the triangle shaped property to the south (account # 00859677) included note 13 which stated, "*There are no streams, non-tidal wetlands or 100-year flood plains on this property.*" The two lots on Logan Drive surrounding the drainage to the south show stream buffers on their NRIs.

S&EC has reviewed the MDE Waterways Site Visit Comments report dated January 5, 2024. MDE determined that no Water of the State or regulated resources are present on Mr. Shirazi's property and as such no authorization is required from the MDE Waterway Construction Division.

ONSITE DETERMINATION 3/19/2024

During the onsite determination conducted by S&EC on March 19, 2024, Bob Zarzecki, Josh Harvey and Mr. Shirazi walked the entire drainage from Newhall Road to Logan Drive (see

attached photos 13-14) and down and along Moultrie Parkway (see attached photos 16-19) . Bob and Josh later also visited the section of the unnamed tributary at the Avenel Farm Drive crossing (see attached photos 20 & 21). S&EC confirmed that the only potential stream within 200' of Mr. Shirazi's properties exists from the outlet end of the recently installed pipes onto the triangle shaped property to the south. This potential stream continues south beyond 200' from Mr. Shirazi's properties where it eventually partially enters and partially flows over clogged/damaged pipes located between 9805 and 9901 Logan Drive downstream.

S&EC identified two distinct sections of this potential stream as indicated on the attached sketch map. We labeled these two sections Reach A and Reach B and completed *NC DWQ Stream Identification Forms Version 4.11* (attached) for each section. The total length of these combined sections is approximately 155 feet.

- Reach A started at the outlet end of the recently installed pipes near Mr. Shirazi's property line and continued to the confluence with another ephemeral drainage (no defined channel present) about 77 – 80 feet south. See attached photos 1-4.

- Reach B started at the end of Reach A and continued another 75 feet or to the south. See photos 5-12.

RESULTS

Reach A = This section of channel scored 12 points and therefore was determined to be an "ephemeral" stream.

- Geomorphology (4.5 points) = This section of channel had no water within it during our evaluation. The channel is poorly defined rating weak for bed and bank. It was straight rating absent for sinuosity. In-channel structure, depositional bars or benches, headcuts, and grade control were all absent. The particle size of stream substrate, active/relict floodplain and recent alluvial deposits were all weak. It's a first order channel with no other streams entering it.

- Hydrology (5.5 points) = There was no water in the stream during our evaluation. Presence of baseflow and iron oxidizing bacteria were both absent. Leaf litter, sediment on plants or debris and organic debris lines all scored moderate. We did find soil-based evidence of high water table, but it was weak. The form however does not differentiate between the strength of the presence of this soil-based evidence, only if it's present or not, which resulted in 3 points. In my professional opinion, I do not believe that any shallow water table results in surface flow within this section of channel.

- Biology (2.0 points) = This section of channel exhibited little to no evidence of stream biology. Fibrous roots and rooted upland plants were both moderate. There was no aquatic organisms (macrobenthos, mollusks, fish, crayfish, amphibians, algae) or wetland plants found within this section of channel.

Reach B = This section of channel scored 18.5 points and therefore was determined to be an "ephemeral" stream.

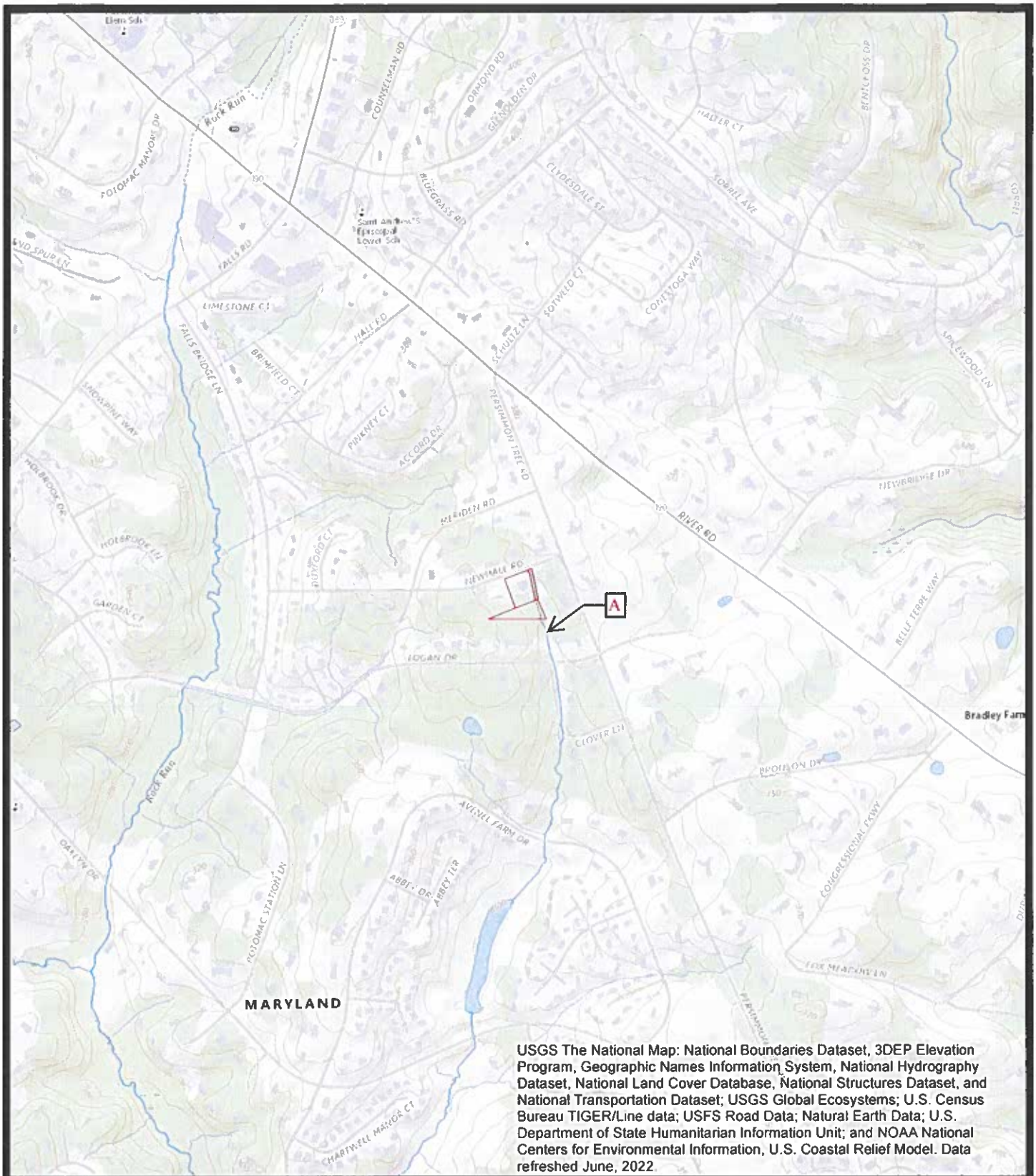
- Geomorphology (8.5 points) = The channel exhibit a well-defined bed and bank resulting in a score of strong. The particle size of the stream substrate was also significantly different than the surrounding riparian areas and scored moderate. The channel contained essentially one long riffle with no well defined in-channel structures, depositional bars or benches, or recent alluvial deposits and as such scored weak on all of these parameters. All other parameters scored absent.

- Hydrology (4 points) = Baseflow while weak was present as well as iron oxidizing bacteria. In my professional opinion, given the recent "wet" conditions over the last 30 days per the APT report and the fact that we evaluated the stream during the first day of spring and end of winter, I would have expected significantly more evidence of baseflow in an "intermittent" stream. Leaf litter was consistent throughout most of the channel and scored moderate even though it's been several months since the last leaf fall. Sediment on plants and debris was weak and organic debris lines was moderate. Notably we did not find any soil-based evidence of high water table within Reach B even though we did up above in Reach A. As such, it's my professional opinion that the weak soil-based evidence of high water table up above in Reach A was a small localized area and not consistent throughout the drainage.

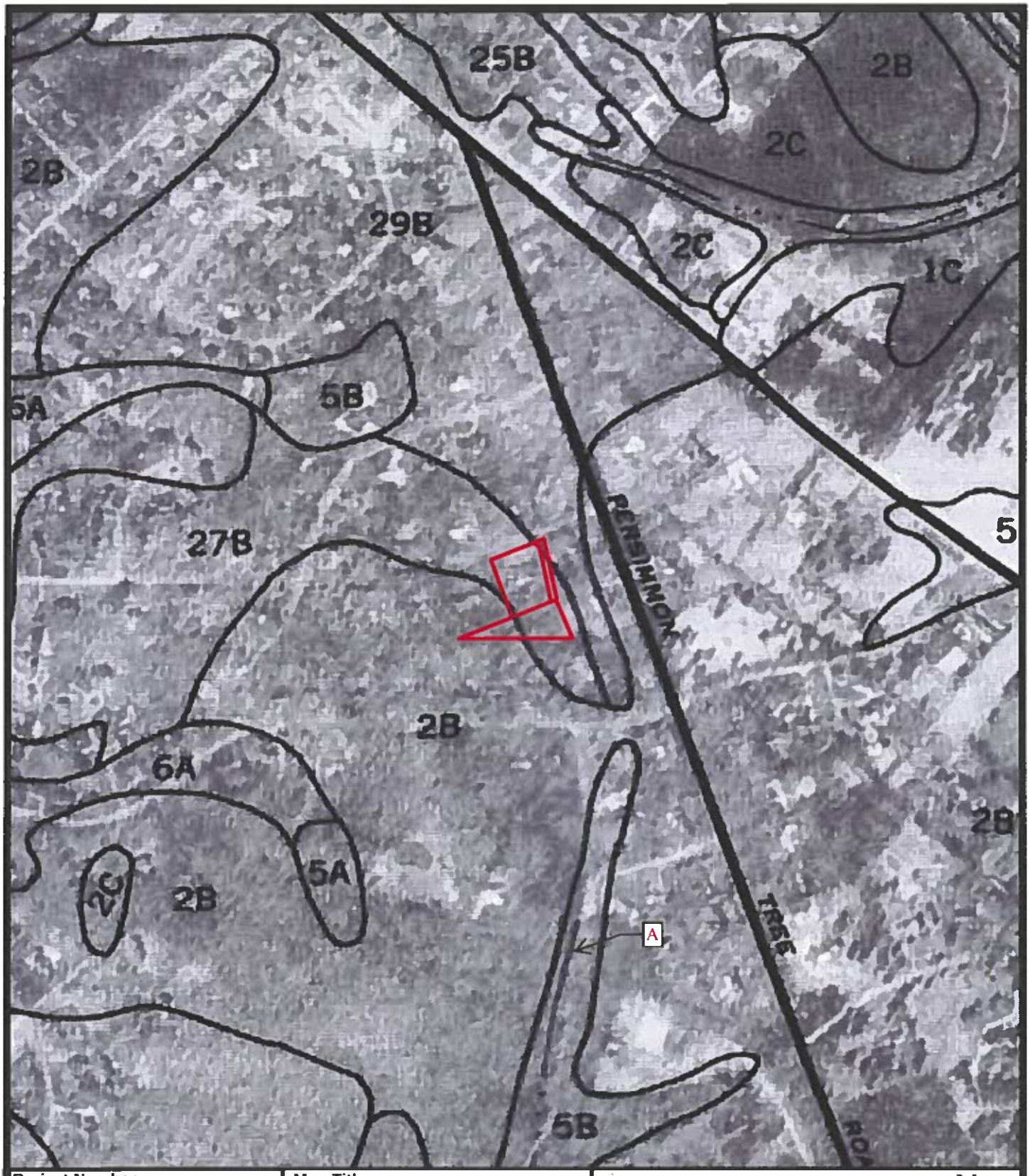
- Biology (6 points) = We found no evidence of fibrous roots or rooted upland plants in this section of channel as such it scored absent for both parameters resulting in the total of the 6 points for biology. We found no evidence of aquatic organisms (macrobenthos, mollusks, fish, crayfish, amphibians, algae) and no wetland plants.

CONCLUSION

S&EC has concluded that there are no potential streams on Mr. Shirazi's properties, and that the drainage south of his properties contains an "ephemeral" stream starting at the outlet end of the recently installed pipes and extending at least 200' to the south. The first 77-80 feet (Reach A) of this "ephemeral" stream is clearly "ephemeral" with no evidence of an "intermittent" stream. It appears to start transitioning to an "intermittent" stream within the next 75 feet (Reach B) but falls just shy of meeting the criteria. Based on our observations of this drainage to the south (well beyond Mr. Shirazi's properties), it appears to become at least an "intermittent" stream somewhere between Logan Drive and Avenel Farm Drive, which is consistent with how the channel is shown on the 1995 soil survey and MDE use-class unnamed tributary mapping.

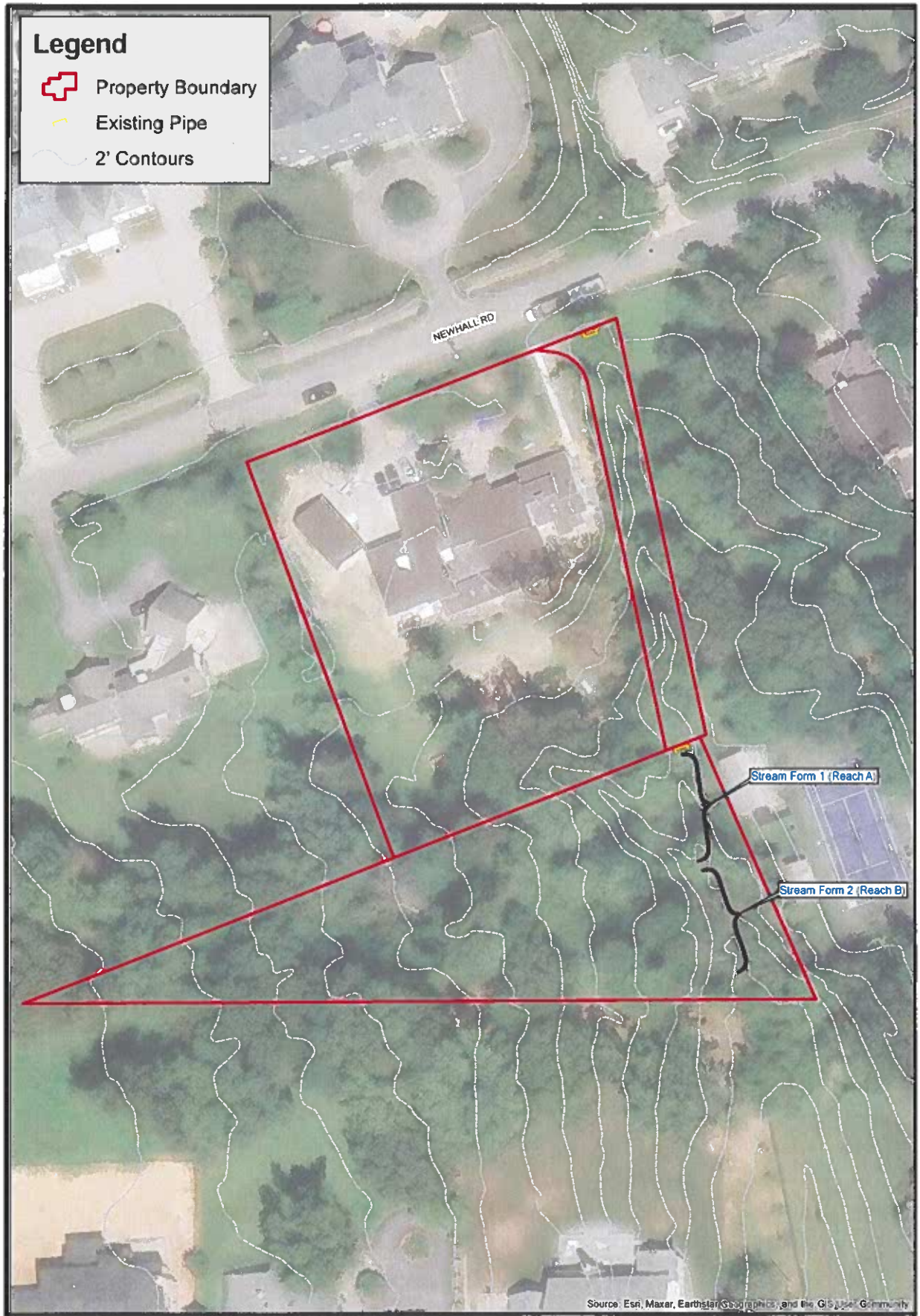


Project Number: 16002.W1	**Map Title:** Figure 1 - USGS National Map 9810 Newhall Road, Potomac, MD	0 1,000 2,000 Feet N
Project Manager: BZ		
Scale: 1" = 1000'		
Date: 03/04/2024	**Source:** ESRI USGS National Map	S&EC Soil & Environmental Consultants, Inc.



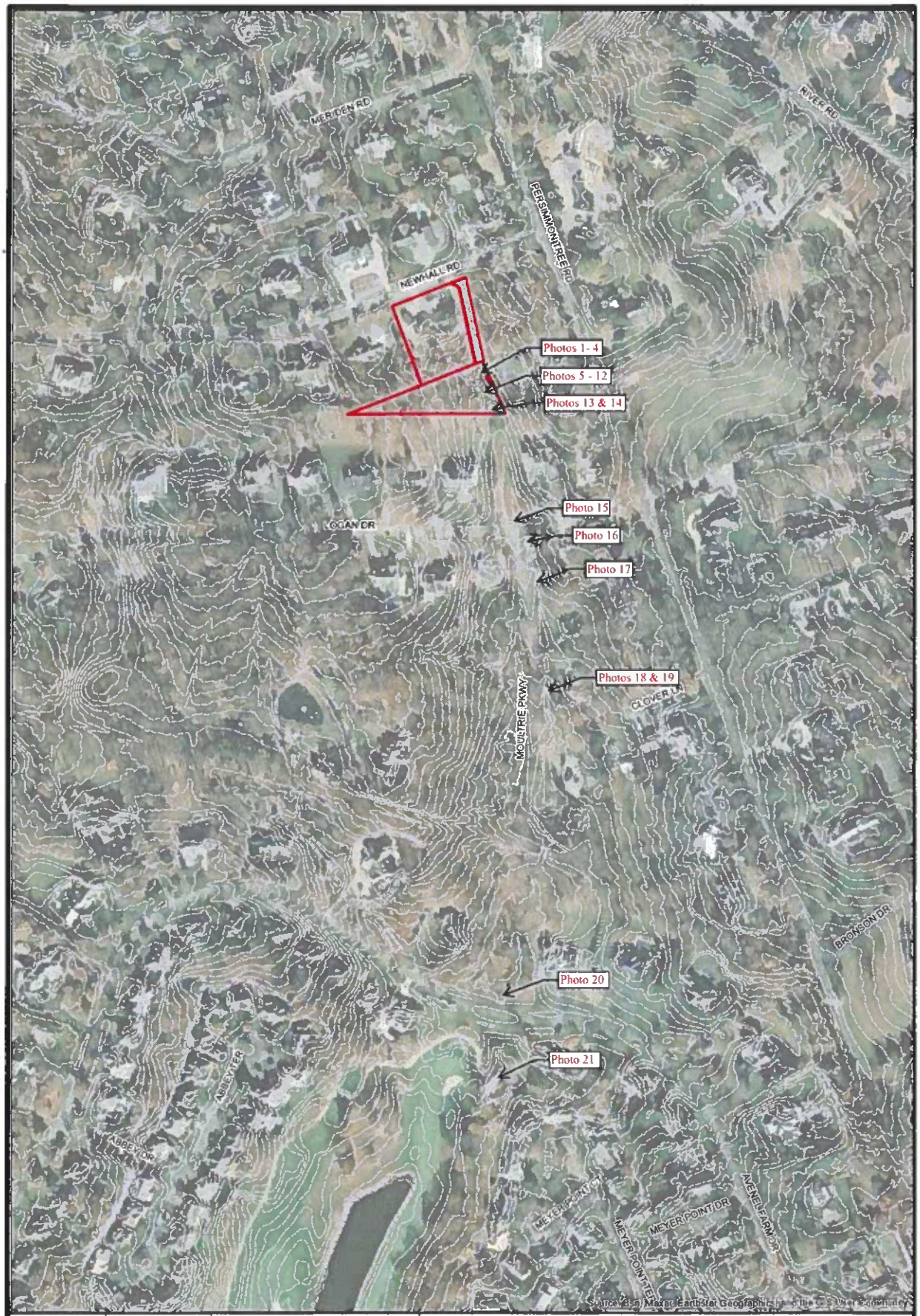
Project Number: 16002.W1	**Map Title:** Figure 2 - Soil Survey 9810 Newhall Road, Potomac, MD	0 500 1,000 Feet N	
Project Manager: BZ			
Scale: 1" = 500'			
Date: 03/04/2024	**Source:** 1995 Mongomery County Soil Survey Sheet 23	S&EC	Soil & Environmental Consultants, Inc.

Project Number: 16002.W1	**Map Title:** Figure 2 - Soil Survey 9810 Newhall Road, Potomac, MD	0 500 1,000 Feet N
Project Manager: BZ		
Scale: 1" = 500'		
Date: 03/04/2024	**Source:** 1961 Mongomery County Soil Survey Sheet 46	S&EC Soil & Environmental Consultants, Inc.



Project No. 16002.W1	Scale: 1" = 50'	**Stream Determination Sketch Map** 9810 Newhall Road Potomac, MD	0 50 100 200 Feet
Project Mgr.: BZ	03/19/2024	Montgomery County GIS	S&EC Soil & Environmental Consultants, Inc.

N



Project No. 16002.W1	Scale: 1" = 250'	**Aerial Photo Map**	0 250 500 1,000 Feet
Project Mgr.: BZ	03/19/2024	9810 Newhall Road, Potomac, MD	N
		Montgomery County GIS	S&EC Soil & Environmental Consultants, Inc.

Job #: 16002.W1
March 19, 2024

Site Photos for the 9810 Newhall Road Property
Montgomery County, MD

Photo 1: Feature A (Reach A) – Facing South

Photo 2: Feature A (Reach A) – Facing North

Photo 3: Feature A (Reach A) – Facing South

Photo 4: Feature A (Reach A) – Facing South

Photo 5: Feature A (Reach B) – Facing North

Photo 6: Feature A (Reach B) – Facing West

Photo 7: Feature A (Reach B) – Facing South

Photo 8: Feature A (Reach B) – Facing North

Photo 9: Reach B soil profile outside of stream (0" - 15")

Photo 10: 2.5Y 4/4

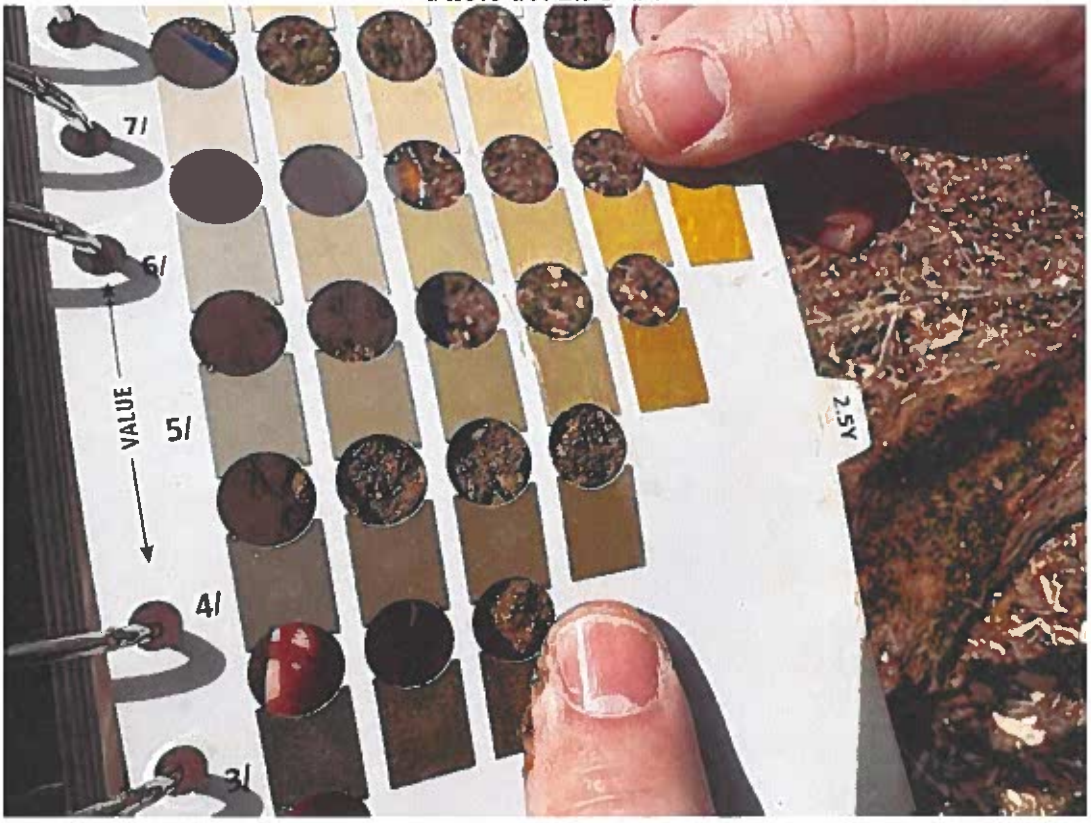


Photo 11: Reach B soil color along thalweg (2.5Y 5/4)

Photo 12: 2.5Y 5.4

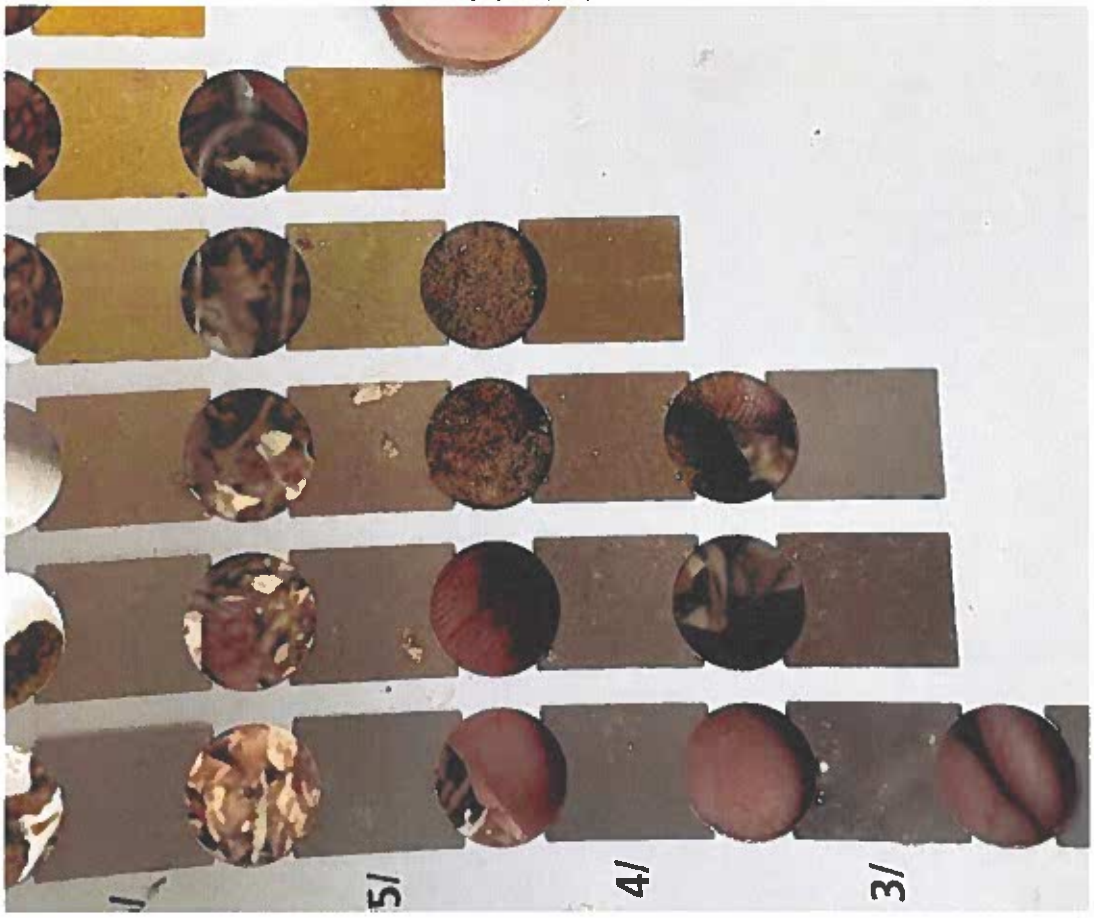


Photo 13: Feature A (along southern boundary) – Facing North

Photo 14: Feature A (along southern boundary) – Facing South

Photo 15: Feature A (Logan Drive) – Facing North

Photo 16: Feature A (Logan Drive) – Facing South | **Potential Intermittent Start Point**

Photo 17: Feature A (along Moultrie Parkway) – Facing South

Photo 18: Feature A (along Moultrie Parkway) – Facing South

Photo 19: Feature A (along Moultrie Parkway) – Facing North

Photo 20: Feature A (Avenel Farm Drive) – Facing North

Photo 21: Feature A (Avenel Farm Drive) – Facing South

Stream Form 1 - Reach A

NC DWQ Stream Identification Form Version 4.11

Date: 03/19/2024	**Project/Site:** 9810 Newhall Road	**Latitude:** 39.009428
Evaluator: S&EC - Bob Zarzecki & Joshua Harvey	**County:** Montgomery, MD	**Longitude:** -77.202387
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 12	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 4.5)	Absent	Weak	Moderate	Strong
1[a] Continuity of channel bed and bank	0	(1)	2	3
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	(0)	1	2	3
4. Particle size of stream substrate	0	(1)	2	3
5. Active/relict floodplain	0	(1)	2	3
6. Depositional bars or benches	(0)	1	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 5.5)				
12. Presence of Baseflow	(0)	1	2	3
13. Iron oxidizing bacteria	(0)	1	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	0.5	(1)	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	No = 0		(Yes = 3)	

C. Biology (Subtotal = 2)				
18. Fibrous roots in streambed	3	2	(1)	0
19. Rooted upland plants in streambed	3	2	(1)	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 (Other = 0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Stream Form 2 - Reach B

NC DWQ Stream Identification Form Version 4.11

Date: 03/19/2024	**Project/Site:** 9810 Newhall Road	**Latitude:** 39.009273
Evaluator: S&EC - Bob Zarzecki & Joshua Harvey	**County:** Montgomery, MD	**Longitude:** -77.202345
Total Points: *Stream is at least intermittent if ≥ 19 or perennial if ≥ 30** 18.5	**Stream Determination (circle one)** (Ephemeral) Intermittent Perennial	**Other** *e.g. Quad Name:*

A. Geomorphology (Subtotal = 8.5)	Absent	Weak	Moderate	Strong
1[a]. Continuity of channel bed and bank	0	1	2	(3)
2. Sinuosity of channel along thalweg	(0)	1	2	3
3. In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	0	(1)	2	3
4. Particle size of stream substrate	0	1	(2)	3
5. Active/relict floodplain	(0)	1	2	3
6. Depositional bars or benches	0	(1)	2	3
7. Recent alluvial deposits	0	(1)	2	3
8. Headcuts	(0)	1	2	3
9. Grade control	(0)	0.5	1	1.5
10. Natural valley	0	(0.5)	1	1.5
11. Second or greater order channel	(No = 0)		Yes = 3	

[a] artificial ditches are not rated; see discussions in manual

B. Hydrology (Subtotal = 4)				
12. Presence of Baseflow	0	(1)	2	3
13. Iron oxidizing bacteria	0	(1)	2	3
14. Leaf litter	1.5	1	(0.5)	0
15. Sediment on plants or debris	0	(0.5)	1	1.5
16. Organic debris lines or piles	0	0.5	(1)	1.5
17. Soil-based evidence of high water table?	(No = 0)		Yes = 3	

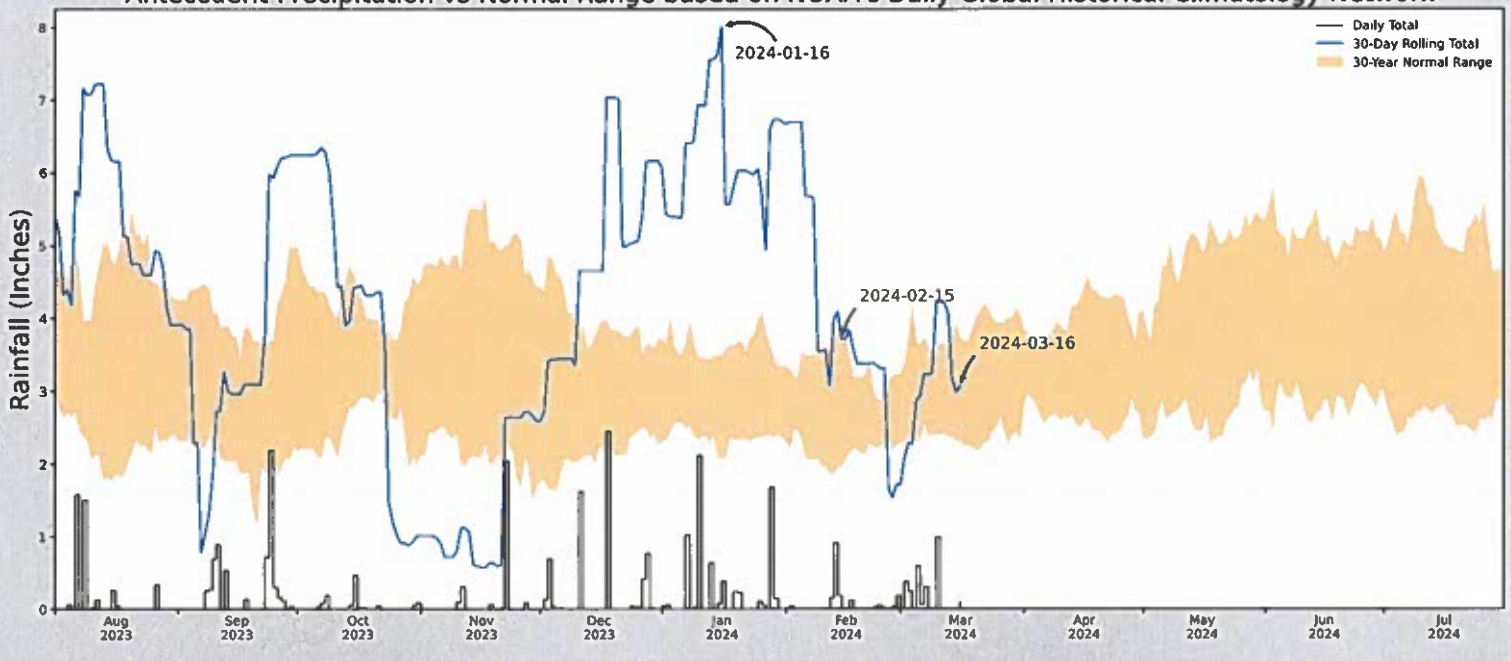
C. Biology (Subtotal = 6)				
18. Fibrous roots in streambed	(3)	2	1	0
19. Rooted upland plants in streambed	(3)	2	1	0
20. Macrobenthos (note diversity and abundance)	(0)	1	2	3
21. Aquatic Mollusks	(0)	1	2	3
22. Fish	(0)	0.5	1	1.5
23. Crayfish	(0)	0.5	1	1.5
24. Amphibians	(0)	0.5	1	1.5
25. Algae	(0)	0.5	1	1.5
26. Wetland plants in streambed	FACW = 0.75; OBL = 1.5 (Other = 0)			

*perennial streams may also be identified using other methods. See p. 35 of manual.

Notes:

Sketch:

Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network



Coordinates	39.009172, -77.202564
Observation Date	2024-03-16
Elevation (ft)	355.68
Drought Index (PDSI)	Mild wetness (2024-02)
WebWIMP H_2O Balance	Wet Season

30 Days Ending	30th %ile (in)	70th %ile (in)	Observed (in)	Wetness Condition	Condition Value	Month Weight	Product
2024-03-16	2.322047	3.718504	3.059055	Normal	2	3	6
2024-02-15	1.963386	3.85748	3.708662	Normal	2	2	4
2024-01-16	2.083465	3.477953	8.007874	Wet	3	1	3
Result							Normal Conditions - 13

US Army Corps of Engineers.

ERDC

Figures and tables made by the Antecedent Precipitation Tool Version 2.0

Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

Weather Station Name	Coordinates	Elevation (ft)	Distance (mi)	Elevation Δ	Weighted Δ	Days Normal	Days Antecedent
VIENNA	38.8919, -77.2892	390.092	9.345	34.412	4.527	11158	89
OAKTON 0.4 E	38.8922, -77.2932	373.032	0.216	17.06	0.101	2	1
VIENNA 1.3 W	38.903, -77.2836	371.063	0.824	19.029	0.386	20	0
FAIRFAX 2.3 W	38.8572, -77.3409	439.961	3.672	49.869	1.836	68	0
VIENNA 3.3 N	38.9475, -77.2637	358.924	4.079	31.168	1.963	2	0
MANTUA 1.4 S	38.8324, -77.2569	430.118	4.463	40.026	2.187	13	0
HERNDON 3.3 S	38.9221, -77.3801	390.092	5.314	0.0	2.391	4	0
POTOMAC FLTR PLT	39.04, -77.2542	270.013	10.404	120.079	5.931	79	0
WFO STERLING	38.9764, -77.4869	288.058	12.124	102.034	6.693	6	0

S&EC

Soil & Environmental Consultants, Inc.

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone (919) 846-5900 • Fax (919) 846-9467
sandec.com

Robert (Bob) Zarzecki
Environmental Specialist

EDUCATION

Bachelor of Science Degree in Fisheries and Wildlife, Minor in Botany
North Carolina State University, 1994

EXPERIENCE

Wetland Department Manager / VP / Principal — **Soil & Environmental Consultants, Inc.**
February 2008-Present — Raleigh, NC

Job Description: Manage the Wetlands Department. Provide technical expertise on U.S. Army Corps of Engineers (USACE), N.C. Division of Water Resources (NCDWR) and local government wetland, stream and riparian buffer regulations, Endangered Species Act (ESA) consultation, SEPA/NEPA, and restoration/mitigation projects.

Raleigh Division Manager / Env. Specialist — **Soil & Environmental Consultants, PA**
February 2005-February 2008 — **Raleigh, NC**

Job Description: Coordinate daily operations within the Raleigh Office. Manage department managers within the Raleigh Office. Provide technical expertise on: U.S. Army Corps of Engineers, N.C. Division of Water Quality and local government wetland & buffer regulations; SEPA/NEPA documents; and stream and wetland restoration projects.

Environmental Specialist III — **NCDENR-Division of Water Quality**
Nov 1999-January 2005 — **Raleigh, NC**

Job Description: Implementation and coordination of Riparian Buffer Regulations and 401 Water Quality Certifications. Signature authority from Director for 401 Certifications & Buffer Authorization Certifications

Biologist — **Soil & Environmental Consultants, Inc.**
Jan 1996-Nov 1999 — **Raleigh, NC**

Job Description: Wetland Delineation & Permitting, Riparian Buffer Evaluation & Permitting, Environmental Assessments (FONSI's) & Endangered Species Evaluations

Field Coordinator **NCSU - Lower Mississippi River Ecological Assessment Study**
Oct 1995-Jan 1996 **Raleigh, NC**

Job Description: the collection of water, soil, fish and biota samples from 26 national wildlife refuges within the lower Mississippi River alluvial plain. Toxic contaminant loading, exposure and associated biological effects on national wildlife refuges and other off-refuge habitat used by fish and wildlife in the lower Mississippi River alluvial plain (states include AR, TN, MS, & LA).

Research Technician **NCSU - Roanoke River Anadromous Fish Migration Study**
Nov 1995-March 1996 **Raleigh, NC**

Job Description: Historical data research concerning anadromous fish in the Roanoke River. This involved many hours searching through library and historical collections across North Carolina and Virginia.

Personnel Coordinator **NCSU - Cedar Island National Wildlife Refuge Monitoring**
January of 1995 - September of 1995 **Raleigh, NC**

Job Description: Biotic and abiotic monitoring of Cedar Island National Wildlife Refuge. Involving water quality analysis, water sampling, macro-invertebrate sampling and identification, avian diurnal and nocturnal point counts, data organization and report writing.

Field Technician **NCSU - Neuse River Ecological Assessment Project**
March of 1994 - October 1995 **Raleigh, NC**

Job Description: Systematic sampling of bivalve species via benthic samplers and water quality analysis from sites encircling the effluent diffuser and 5 miles up and down stream. Determine the effects of tertiary-treated sewage effluent released from Cherry Point Military Base, Havelock, NC to the biotic community of the Neuse River estuary.

Field Technician **NCSU - Neotropical Migratory Bird Nesting Study**
May 1992 - August 1992; March 1994 **Raleigh, NC**

Job Description: Independent ornithological nesting survey of two ~40 hectare sites, study plot construction, vegetative sampling and forest parameter measurements. Study the nesting habitat requirements of neotropical migratory birds in southwestern North Carolina mountains.

REGISTRATIONS, MEMBERSHIPS, AND CERTIFICATIONS

Society of Wetland Scientists (SWS)

N.C. Division of Water Quality Surface Water Identification, Training & Certification (SWITC) Program – Certified June 2003 (Cert. No. 043-0202) & Past Instructor 2003 to 2004, DWQ update completed April 2006 & July 2010; Coastal Plain Refresher 2020;

Aquatic Insect Collection Protocols for Stream Mitigation & Restoration Projects, N.C. DENR – Certified April 2001 and January 2006

Natural Channel Design Workshop for the N.C. Division of Water Quality – completed March 2003

Indirect & Cumulative Impact Assessment – N.C. DOT Training Course, Certified September 2002
NC Wetland Assessment Method (NCWAM), September 2016

NC Stream Assessment Method, (NCSAM), April 2017

Wildland Hydrology, Inc., Research ad Educational Center for River Studies, David L. Rosgen, Ph.D – Applied Fluvial Geomorphology (Level I) Certified September 2000,
River Morphology & Applications (Level II) Certified September 2000,
River Assessment & Monitoring (Level III) Certified September 2000, and
River Restoration & Natural Channel Design (Level IV) Certified August 2006.

PUBLICATIONS AND PRESENTATIONS

Shea D., C.S. Hofeltet, D.R. Luellen, A. Huysman, P.R. Lazaro, R. Zarzecki, and J.R. Kelly. 2001. Chemical contamination at National Wildlife Refuges in the Lower Mississippi River Ecosystem. Report by NC State University to the US Fish and Wildlife Service, Atlanta, GA. 40pp.

Zarzecki, R. M. And J. E . Hightower. 1997 Historical distribution of anadromous fishes within the Roanoke River Basin. NC Cooperative Fish and Wildlife Research Unit. Report to the US Fish and Wildlife Service and Virginia Power.

North Carolina Department of Environment and Natural Resources
Division of Water Quality
Surface Water Identification Training and Certification Program
Pursuant to G.S. 143-214.25
Does Hereby Certify

Bob Zarzecki

Has successfully demonstrated capability and proficiency to determine the presence of surface waters that require the application of rules adopted by the N.C. Environmental Management Commission for the protection of riparian buffers as determined by 15A NCAC 2B .0200. This Certification is valid until revoked by the Division of Water Quality

Alan W. Klimek

Alan W. Klimek, P.E.
Director, Division of Water Quality

6/4/03
Date

DIVISION OF WATER QUALITY
DWQ

Certificate number: 043 - 0202

NCDENR

North Carolina State University is a land-grant university and a constituent institution of the University of North Carolina

Forestry and Environmental Outreach Program

NC STATE UNIVERSITY

DEPARTMENT OF FORESTRY and ENVIRONMENTAL RESOURCES NC STATE UNIVERSITY

Department of Forestry and Environmental Resources
College of Natural Resources
Campus Box 8008
Raleigh, NC 27695-8008

919.515.9563
919.515.6883 (fax)
www.ncsu.edu/feop

September 7, 2010

Bob Zarzecki
Soil & Environmental Consultants PA
11010 Raven Ridge Rd
Raleigh, NC 27614

Dear Bob Zarzecki,

This letter will serve as verification of your completion of the one day (6-hour) refresher course offered on Thursday, July 8, 2010 in Raleigh, NC. I can confirm your presence at the workshop based on a review of the sign-in sheets wherein your signature was listed next to your name.

The training session, "Surface Water Identification and Training Class (SWITC) version 4.0" was a 6-hour program that included classroom instruction and field exercise. It was provided by the North Carolina Division of Water Quality's (NCDWQ).

Please keep a copy of this memo for your records. If you have any questions about the training session content, please contact Amanda Mueller at (919)715-6830, NCDWQ. NC State University's Forestry and Environmental Resources Program (FEOP) retains records on this training program for 6 years.

Regards,

Kelley D. McCarter
Program Coordinator

Bob Zarzecki

From: Scarbraugh, Anthony <anthony.scarbraugh@ncdenr.gov>
Sent: Monday, March 9, 2020 9:33 AM
To: ben.sagara@timmons.com; Bob Zarzecki; Scott Frederick; ted.melchers@terracon.com; Vesely, Will C; morgan.gilbert@timmons.com; Housley, Lauren M; Spears CIV Courtney A; Joey Lawler; Hunter Wines; kate.hefner@timmons.com; sydni.law@timmons.com; Matt Michel; Alex Baldwin; King, Scott; melissa.davis@timmons.com
Cc: Harvey, Bethany; Cliff Tyson; Mowrey, Paul F; Pullinger, Robert C; Maher, Niki
Subject: SWITC Coastal Plain Fresher and Test
Attachments: SWITC Coastal Plain Fresher and Test March 2020.pdf

All,

I want to let everyone know that they have successfully completed the Coastal Plain portion of the field test. Please note, that there is no certification for completion of the Coastal Plain Refresher Course and Field Test. However, I hope that the course has expanded your knowledge base or provided a refresher of existing skills that will assist with performing stream field determination in the Coastal Plain.

I have attached the list of attendees for your convenience.

Regards,
Anthony Scarbraugh

Anthony Scarbraugh
Environmental Specialist II, Water Resources
North Carolina Department of Environmental Quality
252.948.3924 (Office)
Anthony.Scarbraugh@ncdenr.gov

Coastal Plan Refresher and Field Test - March 6, 2020

Name:	Agency	Phone	Email
Benjamin Sagara	Timmons Group	804-200-657	ben.sagara@timmons.com
Bob ZarZecki	S&EC	919-846-5900	bzarzecki@sandec.com
Scott Frederick	Soil, Water & Environment Group, LLC	919-831-1234	sjfrederick@swegrp.com
Ted Melchers	Terracom	843-277-8387	ted.melchers@terracon.com
Will Vesley	Terracom	843-203-7299	Will.Vesely@terracon.com
Morgan Gilbert	Timmons Group	919-866-2351	morgan.gilbert@timmons.com
Lauren Norris-Heflin	Timmons Group		lanorris14@gmail.com
Courtney Spears	USMCB Camp Lejeune	910-451-4542	courtney.spears@usmc.mil
Joey Lawler	S&ME	704-523-4726	JLawler@smeinc.com
Hunter Wines	Timmons Group	757-272-2081	hunter.wines@timmons.com
Kate Hefner	Timmons Group	919-866-4953	kate.hefner@timmons.com
Sydni Law	Timmons Group	919-532-3261	sydni.law@timmons.com
Matthew Michel	Davenport	910-251-8912 ext. 22203	Mmichel@davenportworld.com
Alex Baldwin	Restoration Systems, LLC	919-334-9112	abaldwin@restorationsystems.com
Scott King	Michael Baker International	919-481-5731	scott.king@mbakerintl.com
Chris Pullinger	NC DWR - WaRO	252-948-3918	chris.pullinger@ncdenr.gov
Cliff Tyson	Weyerhaeuser Timberlands	252-229-8328	cliff.tyson@weyerhaeuser.com
Paul Mowrey	NC Forest Service	252-520-2404	Paul.Mowrey@ncagr.com
Anthony Scarbraugh	NC DWR - WaRO	252-948-3924	anthony.scarbraugh@ncdenr.gov
Austin Baggerley	ATLAS Environmental, Inc.	704-512-1206	abaggerley@atlasenvi.com
Melissa Davis	Timmons Group	804-200-6541	melissa.davis@timmons.com
Bethany Harvey	NC DWR - Central	919-827-5439	bethany.harvey@ncdenr.gov

North Carolina

Department of Environmental Quality

Division of Water Resources

Surface Water Identification Training

and Certification Program

Water Resources
ENVIRONMENTAL QUALITY

Division of Water Resources

Certificate of Training

Joshua Harvey

Has successfully demonstrated capability and proficiency to determine the presence of surface waters that require the application of rules adopted by the N.C. Environmental Management Commission for the protection of riparian buffers as determined by 15A NCAC 02B 0200

Linda Culpepper, Director
Division of Water Resources

May 31, 2019
Date

1071T-0519
Certification Number

S&EC

Soil & Environmental Consultants, Inc.

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone (919) 846-5900 • Fax (919) 846-9467
sandec.com

May 30, 2024
S&EC Project No.: 16002.W2

To: Hamid Shirazi
9810 Newhall Road
Potomac, Maryland 20854

Re: Persimmon Tree Subdivision, Newhall Road, Potomac, Maryland 20854
Review of Montgomery Planning May 01, 2024, Response Letter

Mr. Shirazi:

Soil & Environmental Consultants, Inc. (S&EC) has been provided a copy of the *Montgomery Planning, Response Letter, Natural Resource Inventory/Forest Stand Delineation (NRI/FSD) #440440850 – Persimmon Tree Subdivision dated May 01, 2024* (County Letter). We reviewed this letter and the additional information provided by you and provide the following comments.

I. Review of County Letter

The County Letter states: "*... Planning Staff used field inspections, GIS data, topographic, hydrologic, and soils maps, and fine-resolution Light Detection and Ranging (LIDAR) to meticulously delineate the intermittent stream ...*". However, the County provided no detailed report of this stream delineation.

The County has no standardized "*methods and standards*", or at least none that have been presented to me to review, just definitions and characteristics of the stream types provided within "*Appendix E – Stream Types*" within their "*Environmental Guidelines*" (link below).

> *Montgomery County Environmental Guidelines*
> *https://montgomeryplanning.org/planning/environment/environmental-guidelines-reports/environmental-guidelines/*

Therefore, due to the lack of standardized methods and a detailed stream delineation report, the County cannot clearly compare this delineation with other delineations or reference stream types and as such it is arbitrary.

As the County has no standardized method, we utilized the widely accepted North Carolina standardized "*Methodology for Identification of Intermittent and Perennial Streams and Their Origins*" (NC Method) (link below), as provided in our previously provided *Stream Identification Report dated April 5, 2024* (S&EC Report).

> *North Carolina Stream ID Manual Version 4.11*
> *https://edocs.deq.nc.gov/WaterResources/DocView.aspx?dbid=0&id=2488192&cr=1*

Note that this NC Method under the "*Basic rules for making stream determinations:*" section (page 9; excerpt below), like the County's *Environmental Guidelines*, does include the review of available mapping and site information.

> *"Review information on stream to be evaluated - Gather and review available information regarding the area and location of the stream. The use of U.S. Geological Survey (USGS) topographic maps, Natural Resources Conservation Service (NRCS) soil survey maps, geology maps and/or high-resolution topographic data (e.g., LiDAR-based) or aerial photography may help provide information when conducting the field investigation. Other important data may include land use/land cover or current construction activity in the area. To assist in evaluating whether flow in the stream is typical, current streamflow at nearby gauges, recent rainfall compared to normal, and drought status information is useful."*

However, this NC Method goes further and uses a standardized form that quantifies each individual stream characteristic and provides a standardized score which delineates the stream as either ephemeral, intermittent or perennial. This method has been extensively field verified to reference streams and has been utilized on thousands of onsite stream determinations. This standardize method helps to ensure consistent and fair stream determinations.

Utilizing this NC Method, we determined the stream on Mr. Shiraz's properties and the proposed Persimmon Tree Subdivision project area to be ephemeral. We have not seen any evidence provided by the County to cause us to believe otherwise. We are available to review a detailed report from the County if they can provide one.

II. Review of Additional Information Provided by Mr. Shiraz

Similar NRI Projects:

We have reviewed the additional information that you provided, being the four (4) similar NRI projects (listed below) located in the general vicinity of your project.

1. 10200 Falls Road (NRI #420180620)
2. 9300 Belle Terre Way (NRI #420091200)
3. 11620 River Road (NRI #420110510)
4. 7212 Brookstone Court (NRI #420091560)

We understand that the County determined that all of these projects contained ephemeral streams. However, the mapping (USGS, soil survey, topo, aerials, LiDAR, etc.) depicts the potential presence of a stream is greater than or at least certainly no more so than the mapping available for your properties.

Mapped soil types can provide a good indicator of whether potential streams may be either ephemeral, intermittent, or perennial. We've reviewed the information that you provided and the USDA/NRCS Web Soil Survey (link below).

> *USDA/NRCS Web Soil Survey*
> *https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx*

Soil types mapped as poorly drained, frequently flooded or ponded, and with shallow depths to water tables, have a greater potential to contain intermittent or perennial streams.

The soils on your properties and the proposed Persimmon Tree Subdivision project area are mapped as *Neshaminy silt loam* (+/- 50%), *Jackland silt loam* (+/- 34%), and *Glenelg silt loam* (+/- 16%). These soil types are either "well drained" (*Neshaminy & Glenelg*) or "somewhat poorly drained" (*Jackland*). And all three of these soil types are identified as having NO frequent flooding or ponding, and depths to water table of "more than 80 inches".

The other example projects you provided, which the County determined contained ephemeral streams or no streams, have mapped soils which suggest a greater potential for containing intermittent or perennial streams than those mapped on your properties. One such soil that is mapped on the River Road, Belle Terre Way and Falls Road NRI projects is *Baile silt loam* which has properties of "poorly drained", "frequent ponding", and only "0 to 6 inches of depth to water table". Yet, all three of these properties were determined by the County to contain ephemeral streams or no streams.

Based on the review of these other example NRIs, I see no indication that the available mapping would suggest that anything more than an ephemeral stream would exist on your property and the Persimmon Tree Subdivision project area. Again, if the County can provide a detailed report as to why they think otherwise, I'd be happy to review it.

Onsite Video & Photos:

We've also reviewed the video of the drainage on your properties prior to any disturbance. We understand that this video was taken after a rain event as evidence of the flowing water in the drainage. However, the video also clearly shows a lack of intermittent and perennial stream characteristics (alluvial geomorphology, hydrology or biology). It also clearly shows evidence of terrestrial grasses/vegetation and leaves/debris within the drainage not typically seen in intermittent or perennial streams.

We've also reviewed the photos that were taken by the DPS inspector on December 2, 2022 shortly after a channel was excavated within the drainage to prepare it for pipe installation. We understand that it rained within 48 hours prior the inspectors site visit. Standing water is seen in the excavated channel and we understand that the County had found a water table within 3ft. There is however no strong evidence in these photos of stream characteristics typically found in intermittent or perennial streams. The photos and any measured depth to water table should also not be considered in the stream determination as the site was in the process of construction and excavated below the original ground elevation.

Conclusion

In conclusion, we continue to disagree with the County's determination that the site contains or contained an intermittent stream. We stand by our determination, and that of the other consultant and State, that the drainage on Mr. Shirazi's properties and the Persimmon Tree Subdivision project area is ephemeral.

Sincerely,
SOIL & ENVIRONMENTAL CONSULTANTS, INC

Bob Zarzecki Digitally signed by Bob Zarzecki
Date: 2024.05.30 15:44:01 -04'00'

Bob Zarzecki

Wetlands Department Manager / VP / Principal

Wetland Studies and Solutions, Inc.
a DAVEY company

Michael Klebasko, PWS, QFP

Manager - Maryland Environmental Science

Firm Association
Wetland Studies and Solutions, Inc. (WSSI)

Project Assignment
Environmental Science Manager

Years of Experience
With this firm: 13
With other firms: 19

Education
MS - Marine-Estuarine Environmental Science, University of Maryland, College Park

BA - Biology, St. Mary's College of Maryland

Registrations & Certifications
Forest Conservation Act Qualified Professional, Maryland

Professional Wetland Scientist

U.S. Army Corps of Engineers Certified Wetland Delineator

Spotted Lanternfly Permit Training

Mr. Klebasko has over 30 years of extensive experience and expertise in the environmental science field. He has performed both nontidal and tidal wetland delineations on more than 20,000 acres of land in Maryland and the District of Columbia and has worked with the U.S. Army Corps of Engineers (COE) to obtain jurisdictional determinations (JDs) for wetland delineations. Mr. Klebasko also has expertise in performing Forest Stand Delineations (FSDs); Chesapeake Bay Critical Area studies; rare plant surveys; submerged aquatic vegetation surveys, and stream monitoring studies for both public (including counties) and private sector clients. He has designed, overseen the construction of, and prepared post-construction monitoring reports for more than 115 acres of wetland creation/mitigation sites. Finally, Mr. Klebasko has prepared, submitted, and obtained federal and state wetland permits on hundreds of projects including municipal projects, utility lines, and commercial and residential development projects.

Mr. Klebasko's relevant experience includes:

Anne Arundel County Police Training Facility – Anne Arundel County, Maryland
Mr. Klebasko managed both wetland delineation and FSD studies for the +51-acre site located in Davidsonville. He also directed staff in obtaining a JD from the COE. Mr. Klebasko coordinated with the project engineer and assisted with the review and certification of the Forest Conservation Plan.

Eastport Elementary School – Anne Arundel County, Maryland
WSSI staff conducted a critical area study on the 3.37-acre property, located entirely within the Chesapeake Bay Critical Area. The study entailed the identification, sizing, and condition rating of 81 existing trees greater than or equal to four inches in diameter. A wetland delineation was also performed to determine if potentially jurisdictional Waters of the U.S. (including wetlands) existed on the property. As part of the study, coordination occurred with the Maryland Department of Natural Resources (MDNR) – Wildlife and Heritage Service regarding the presence of any known rare, threatened, and/or endangered species within the project vicinity. WSSI staff worked closely with the project engineer during the preparation of the Critical Area Plan, which documented the environmental features on the site. Finally, a critical area report summarizing staff findings and discussing proposed stormwater management techniques and changes to impervious cover was prepared.

Fort Smallwood Park – Anne Arundel County, Maryland
Mr. Klebasko managed both wetland delineation and Chesapeake Bay Critical Area studies for approximately six acres of proposed upgrades at Fort Smallwood Park. He was responsible for coordination with the MDNR and the County regarding protection of an uncommon toad species (eastern spadefoot) on park property. Mr. Klebasko also prepared and submitted a Joint Federal / State Wetland Permit Application (JF/SA) to the COE and the Maryland Department of the Environment (MDE) and oversaw staff's attendance at a MDE visit to confirm the limits of jurisdictional wetlands and streams and to evaluate proposed jurisdictional impacts associated with park improvements. He was responsible for obtaining the necessary state wetland permit. Through close coordination with the project engineer, Mr. Klebasko provided direction on project design to avoid the need for a federal wetland permit.

The Village at Providence Point – City of Annapolis, Maryland
Mr. Klebasko managed both wetland delineation and FSD studies for a National Lutheran Senior Living Community project situated on approximately 29 acres in the City of Annapolis. WSSI prepared and submitted a JF/SA to the COE and the MDE attended a site visit with the MDE to confirm the limits of jurisdictional wetlands and streams, and obtained state and federal wetland permits for proposed jurisdictional impacts associated with the project. WSSI assisted the project engineer with the preparation of a Forest Conservation Plan, attended numerous meetings with City of Annapolis' staff to facilitate the review of the project, and provided expert environmental testimony at several City Council hearings and public informational meetings. At the City's recommendation, WSSI prepared a plan and obtained environmental permits to restore approximately 500 linear feet of highly degraded stream channel in the headwaters of Crab Creek.

Airport Commons – Anne Arundel County, Maryland
Mr. Klebasko served as the environmental scientist responsible for delineating the limits of nontidal wetlands and streams on the 46-acre site. Assisted with completion of a FSD study and coordinated a Forest Interior Dwelling Species (FIDS) Survey on the site. Attended a pre-application meeting with the COE and the MDE for the purpose of obtaining confirmation of the wetland limits. Worked closely with prime consultant to minimize impacts to FIDS Habitat and to completely avoid impacts to state and federally-regulated wetlands and streams.

EXHIBIT
C

S&EC

Soil & Environmental Consultants, Inc.

8412 Falls of Neuse Road, Suite 104, Raleigh, NC 27615 • Phone (919) 846-5900 • Fax (919) 846-9467
sandec.com

Robert (Bob) Zarzecki
Environmental Specialist

EDUCATION

Bachelor of Science Degree in Fisheries and Wildlife, Minor in Botany
North Carolina State University, 1994

EXPERIENCE

Wetland Department Manager / VP / Principal — **Soil & Environmental Consultants, Inc.**
February 2008-Present — Raleigh, NC

Job Description: Manage the Wetlands Department. Provide technical expertise on U.S. Army Corps of Engineers (USACE), N.C. Division of Water Resources (NCDWR) and local government wetland, stream and riparian buffer regulations, Endangered Species Act (ESA) consultation, SEPA/NEPA, and restoration/mitigation projects.

Raleigh Division Manager / Env. Specialist — **Soil & Environmental Consultants, PA**
February 2005-February 2008 — **Raleigh, NC**

Job Description: Coordinate daily operations within the Raleigh Office. Manage department managers within the Raleigh Office. Provide technical expertise on: U.S. Army Corps of Engineers, N.C. Division of Water Quality and local government wetland & buffer regulations; SEPA/NEPA documents; and stream and wetland restoration projects.

Environmental Specialist III — **NCDENR-Division of Water Quality**
Nov 1999-January 2005 — **Raleigh, NC**

Job Description: Implementation and coordination of Riparian Buffer Regulations and 401 Water Quality Certifications. Signature authority from Director for 401 Certifications & Buffer Authorization Certifications

Biologist — **Soil & Environmental Consultants, Inc.**
Jan 1996-Nov 1999 — **Raleigh, NC**

Job Description: Wetland Delineation & Permitting, Riparian Buffer Evaluation & Permitting, Environmental Assessments (FONSI's) & Endangered Species Evaluations

Field Coordinator **NCSU - Lower Mississippi River Ecological Assessment Study**
Oct 1995-Jan 1996 **Raleigh, NC**

Job Description: the collection of water, soil, fish and biota samples from 26 national wildlife refuges within the lower Mississippi River alluvial plain. Toxic contaminant loading, exposure and associated biological effects on national wildlife refuges and other off-refuge habitat used by fish and wildlife in the lower Mississippi River alluvial plain (states include AR, TN, MS, & LA).

Research Technician **NCSU - Roanoke River Anadromous Fish Migration Study**
Nov 1995-March 1996 **Raleigh, NC**

Job Description: Historical data research concerning anadromous fish in the Roanoke River. This involved many hours searching through library and historical collections across North Carolina and Virginia.

Personnel Coordinator **NCSU - Cedar Island National Wildlife Refuge Monitoring**
January of 1995 - September of 1995 **Raleigh, NC**

Job Description: Biotic and abiotic monitoring of Cedar Island National Wildlife Refuge. Involving water quality analysis, water sampling, macro-invertebrate sampling and identification, avian diurnal and nocturnal point counts, data organization and report writing.

Field Technician **NCSU - Neuse River Ecological Assessment Project**
March of 1994 - October 1995 **Raleigh, NC**

Job Description: Systematic sampling of bivalve species via benthic samplers and water quality analysis from sites encircling the effluent diffuser and 5 miles up and down stream. Determine the effects of tertiary-treated sewage effluent released from Cherry Point Military Base, Havelock, NC to the biotic community of the Neuse River estuary.

Field Technician **NCSU - Neotropical Migratory Bird Nesting Study**
May 1992 - August 1992; March 1994 **Raleigh, NC**

Job Description: Independent ornithological nesting survey of two ~40 hectare sites, study plot construction, vegetative sampling and forest parameter measurements. Study the nesting habitat requirements of neotropical migratory birds in southwestern North Carolina mountains.

REGISTRATIONS, MEMBERSHIPS, AND CERTIFICATIONS

Society of Wetland Scientists (SWS)

N.C. Division of Water Quality Surface Water Identification, Training & Certification (SWITC) Program – Certified June 2003 (Cert. No. 043-0202) & Past Instructor 2003 to 2004, DWQ update completed April 2006 & July 2010; Coastal Plain Refresher 2020;

Aquatic Insect Collection Protocols for Stream Mitigation & Restoration Projects, N.C. DENR – Certified April 2001 and January 2006

Natural Channel Design Workshop for the N.C. Division of Water Quality – completed March 2003

Indirect & Cumulative Impact Assessment – N.C. DOT Training Course, Certified September 2002
NC Wetland Assessment Method (NCWAM), September 2016

NC Stream Assessment Method, (NCSAM), April 2017

Wildland Hydrology, Inc., Research ad Educational Center for River Studies, David L. Rosgen, Ph.D – Applied Fluvial Geomorphology (Level I) Certified September 2000,
River Morphology & Applications (Level II) Certified September 2000,
River Assessment & Monitoring (Level III) Certified September 2000, and
River Restoration & Natural Channel Design (Level IV) Certified August 2006.

PUBLICATIONS AND PRESENTATIONS

Shea D., C.S. Hofeltet, D.R. Luellen, A. Huysman, P.R. Lazaro, R. Zarzecki, and J.R. Kelly. 2001. Chemical contamination at National Wildlife Refuges in the Lower Mississippi River Ecosystem. Report by NC State University to the US Fish and Wildlife Service, Atlanta, GA. 40pp.

Zarzecki, R. M. And J. E . Hightower. 1997 Historical distribution of anadromous fishes within the Roanoke River Basin. NC Cooperative Fish and Wildlife Research Unit. Report to the US Fish and Wildlife Service and Virginia Power.

Exhibit "D"

1) **Mr. Sartori's July 23, 2024 letter claims that *"the Applicant was given the opportunity to present their perspective during the meeting with Planning staff on February 8, 2024."***

This statement is misleading. The NRI/ FSD plan preparer, Mr. Tjaden, requested this meeting with the plan reviewer following a series of contradictory comments made on the submitted plans. Mr. Tjaden wrote to the plan reviewer on Jan. 26: *"...our current status leaves us a bit confused on how to proceed from here with the feedback we've been provided from Planning and MDE."*

During the meeting on February 8th, Staff communicated for the first time their position that the intermittent stream and its associated buffer must start from Newhall Road instead of a location south of the Property, and the drainage pipes that were installed pursuant to a DPS Permit must be removed. Mr. Tjaden disagreed with Staff's assessment and subsequently advised Mr. Shirazi to seek the opinion of other stream experts. Mr. Shirazi then hired two consultants, WSSI and S&EC, for independent evaluations. Since receiving their evaluations, Staff never engaged with these consultants for a technical exchange.

2) **The Director's letter indicates that *"Staff observed that the findings from S&EC and Wetland Studies and Solutions were inconsistent with the National Resources Inventory (NRI) application submitted by the Applicant in October 2023. The discrepancy arose because the proposed plan showed an intermittent stream and its corresponding buffer extending further into the Property."***

It is important to note that WSSI, S&EC and Tjaden and Associates evaluated the site and delineated the stream independently. Mr. Shirazi did not share the NRI Plan prepared by Tjaden and Associates with the other consultants in advance of their assessments in order to ensure the integrity of their evaluations. In the end, all three consultants independently concluded that any stream existing on the Property was an ephemeral stream and that no intermittent stream exists within at least 80 feet of the Property. The "inconsistency" noted in the Director's letter simply refers to a minor difference of opinion between the experts regarding how far to the south the ephemeral stream becomes intermittent. In other words, the emphasized discrepancy is, in fact, immaterial to the primary issue in this case: whether or not the stream on the Property is ephemeral or intermittent.

In the end, it was Tjaden and Associates' opinion that an intermittent stream began 80 feet to the south, while WSSI's report noted that *"Using the criteria presented in the Environmental Guidelines, it is WSSI professional opinion that the stream channel [80 ft immediately below pipes outfall] is unquestionably ephemeral."* Furthermore, their report states *"Since this portion of the channel was found to be ephemeral using two evaluation methodologies [MC Environmental Guidelines and NC methodology], it can be assumed that any stream previously*

EXHIBIT
tabbies
D

upslope of this segment would have also been classified as ephemeral." S&EC also concluded that ~77 to 80 feet south of the pipe is an ephemeral stream as detailed in their April report.

3) **The Director's letter indicates that "the stream delineation method used by S&EC differs from that used in Montgomery County, which is outlined in the Environmental Guidelines approved by the Montgomery Planning Board in 2021."**

The County's Environmental Guidelines only include general definitions and characteristics of the stream types provided within "*Appendix E – Stream Types*" and do not contain any "methods and standards" for making a stream delineation. Because of this lack of a standardized method, S&EC and WSSI utilized the widely-accepted North Carolina standardized "*Methodology for Identification of Intermittent and Perennial Streams and Their Origins*" to further assist in their stream delineation. Similar to the County Guidelines, the North Carolina methodology requires the review of available mapping and site information. However, the North Carolina methodology goes further by quantifying each individual stream characteristic and providing a standardized score that delineates a stream as either ephemeral, intermittent or perennial. This methodology has been extensively field verified and utilized on thousands of onsite stream determinations in many jurisdictions and several states. We understand the County has accepted findings from the North Carolina methodology in the past to assist with an appropriate classification under the County's guidelines. It is therefore not fair to characterize the North Carolina methodology as a "different" method of stream classification: It is instead a more refined one that provides objective standards to assist with classification that are missing from County regulations.

To further this point, S&EC compared the stream characteristics noted in the County Guidelines with the North Carolina methodology. As noted in the comparison attached hereto as Attachment "1", in addition to other characteristics, the North Carolina methodology incorporates all of the characteristics that are noted as typically absent or typically present in the Environmental Guidelines except for side slope soil characteristics, decayed leaf litter and natural levees. As shown in the attachment, S&EC has rated these characteristics to be consistent with those of ephemeral streams in Reach A, per the Environmental Guidelines.

4) **The Director's letter states that *"Staff has determined that the submitted reports from S&EC and Wetland Studies and Solutions were not persuasive in making a final determination for the status of the stream on the Property, as they both focused on and evaluated the adjoining property, where Planning staff and previous plan preparers had already identified an intermittent stream and associated buffers."***

This statement is inaccurate. S&EC and WSSI walked and evaluated the entire upstream extent of the drainage feature, the portion on the Property, and the area downstream of the Property. They reviewed the available mapping data, the video shared by the owner, DPS photos and the Staff presentation made on February 8. They could not score the feature on the Property

as it was quickly determined to be artificial and piped. However, they did evaluate an approximately 80-ft section of stream (Reach A) just south of the piped section. With this section clearly being "ephemeral," with no intermittent or perennial streams further north of the Property, it was reasonable for both experts to deduce that the section of artificial drainage that was piped was also ephemeral.

Furthermore, this statement fails to take into account or even attempt to rebut the evidence and exhibit presented in our May Letter showing that the approved NRI/ FSDs for the three properties most proximate to the Property do not show a stream or a stream valley buffer on the Property, and do not actually support Staff's position.

In addition, neither of the two approved applications for properties on Logan Drive that Staff seem to be relying on show the stream extending into the Property or Reach A of the adjoining property. In fact, Benning and Associates who prepared the NRI application for on of the properties on Logan Drive, visited the Property and provided the owner with a proposal for the preparation of an NRI application that clearly stated: *"There is a drainage channel near the site which does not appear to be a stream", and that "our current opinion, based upon a field visit, is that no stream is present near the site." See* Attachment "2".

5) The Director's letter indicates "during site visits on November 14, 2023, and April 25, 2024, Planning staff found evidence of stream flow".

Importantly, while this is made as a statement of fact in the letter, the letter does not specify where the flow was observed, nor does it include any documented evidence of such. Tjaden Design Associates, S&EC and WSSI all visited the site on various occasions between August 2023 and March 2024. They all reported no flow was observed in the vicinity of the existing pipe. An MDE engineer also visited the site and reported no flow was observed on Jan 5, 2024, following an earlier visit on Dec 21 with a small amount of flow observed which was deemed due to precipitation. Per the Guidelines, *"an intermittent stream will usually have baseflow during the winter and spring seasons and infrequent baseflow during the rest of the year."*

Additionally, it should be noted that not all water near the pipes necessarily means a stream exists. In fact, as this disagreement has drawn out, Mr. Shirazi has begun paying closer attention to the drainage patterns and documenting when water is present near the pipe. Mr. Shirazi recorded a video clip on May 2nd at 12:14PM to document that the channel was dry after April 30 precipitation. Later that same evening, at 7:50PM, he noticed flow running through the pipes without any precipitation happening. Upon further inspection, he recorded water being discharged into the pipe from the confronting property at 9400 Persimmon Tree Road. In another instance on July 28 at 7:37PM, the excess irrigation water is recorded again flowing through the pipes from that same property.

The instances of excess irrigation water or irrigation system leakage flowing through the ditch on Newhall is also recorded from the other confronting property at 9819 Newhall Road.

Mr. Shirazi has recorded 2 other instances of water being discharged from that property into the storm pipes on July 28 at 11:35 AM and on August 7 at 10:39 AM. Links to the video clips of these instances are included in the email transmittal of this letter.

6) **The Director's letter references a photo taken by a DPS inspector on Dec 2, 2022, and states *"water ponding/accumulation in the channel being trenched"* suggests that *"the work being executed found seeps, springs, or wetland areas that were disturbed within the stream bed channel during the construction, causing the water to emerge from the ground"* since *"the National Weather Service records for the area show zero precipitation in the two days before the DPS site visit"*. The letter also states that there was *"no more than 0.25 inches of precipitation in the 24 hours starting 4 hours before the site visit"*. A presentation made by the Staff on Feb 8, 2024, had also referenced the picture and commented *"potentially, they found water table within 3 ft deep"*.**

S&EC's May 30th report previously responded to the improper use of this DPS photo as evidence in support of Staff's suggested stream classification. The referenced photo was taken after the channel was excavated below the original ground elevation to prepare for the large pipe installation. Water ponding on excavated ground should not be taken as evidence that seeps or springs existed in its natural condition.

In addition, Mr. Shirazi shared with Staff during the February 8th meeting that it had rained prior to the DPS visit on Dec 2, 2022 and S&EC's supplemental report also stated that "it rained within 48 hours prior the inspector's site visit". Precipitation records from the Potomac weather station, 1.8 miles from the site, indicate not only that it had rained on both days prior to the DPS visit (Dec 1 and Nov 30), but also that it had rained in 2 of the prior 4 days (Nov 26 and 28). In short, it had rained in 4 out of 6 days leading up to the DPS picture, which suggests that the picture is more likely showing rain water ponding than groundwater. *See* Attachment "3". Inexplicably, to justify the statement that there was "no more than 0.25 inches of precipitation in the 24 hours" before the DPS visit, Staff used precipitation data from Dalecarlia Reservoir weather station on the border of Maryland and Washington DC which is about 7 miles from the Property.

Additionally, the Director's letter indicates that seeps, springs or wetlands are currently observed on the adjacent property at 9306 Persimmon Tree Road. The letter does not specify where along that property Staff have observed these features, nor does it provide any evidence to support these statements. As documented by numerous pictures in WSSI and S&EC technical reports during their visits in March 2024, these features were absent within at least the first 80 feet of the pipe's outlet. Also, the approved plans for the above-referenced property, as well as the two properties farther south on Logan Drive, do not indicate any wetlands or wetland buffers. Even if present, however, the existence of such features downstream could not be used to justify the existence of an intermittent stream upstream on the Property.

7) References to Stream Characteristics

Finally, the Director's letter and prior comments and letters issued by the reviewer make frequent references to the sinuosity of the channel, channel's banks and bed, presence of wetland vegetation, mapping data, soil types, sediments and algae covered rocks as characteristics that supported the presence of an intermittent stream on the Property. While the letters make general reference to these characteristics, no evidence is provided for many of the claimed characteristics and a more detailed analysis demonstrates these statements are either misleading or insufficiently supported based on the County Guidelines.

While the characteristics of the stream types are qualitatively described in Appendix E of the County Guidelines, as noted above there are no County-approved methods or standards to qualify many of these characteristics. To benchmark several of the referenced characteristics, we identified a sample of 10 sites with approved NRI/FSDs in proximity to the Property that included ephemeral streams. The comparison of the characteristics of the stream running inside and in proximity to the Property to these approved plans clearly shows that the stream in question has characteristics that are closer to those of ephemeral streams, per the County Guidelines. While we recognize that every site is unique, and site visits and professional judgements are subjective, we believe this comparison is informative.

Table 1 below includes the address and the application number of the referenced Sites. Site 1 is the application that is submitted for the Property, and sites 2 through 11 are the sample comparison sites. Hydrologic characteristics of these sites are depicted in Attachment "4".

Table 1- Mr. Shirazi's Property Application (Site 1) and Other Approved Sites (Sites 2 through 11).

Site	Address	Application #
Site 1	**9810 Newhall Rd**	**420240850**
Site 2	10202 Falls Rd	420180620
Site 3	11610 River Rd	420150200
Site 4	9300 Belle Terre Way	420091200
Site 5	7212 Brookstone ct	420091560
Site 6	8805 Twin Creek	42016047E
Site 7	10828 ALLOWAY DR	42008173E
Site 8	10726 Stanmore Rd	42011062E
Site 9	13505 MAIDSTONE LN	42012048E
Site 10	13109 Brushwood Way	42012151E
Site 11	10821 Adminral's way	42007148E

A. Sinuosity of Channel

The perceived "sinuosity" of the channel is referenced four times in the Director's letter. Per Appendix E of the County Guidelines, besides intermittent and perennial streams, an ephemeral stream may also include sinuosity that is poorly developed. While the Director's letter does not qualify the sinuosity of the channel, it is logically inferred that Staff has assessed the sinuosity to be at least moderately developed. The County Guidelines do not include methods or standards for qualifying what constitutes a well-, moderately- or poorly- developed sinuosity.

The sinuosity of a channel can be quantified by dividing the stream length to its valley length. The sinuosity of the channel starting from Newhall Road to the concrete channel on Logan Drive referenced in the Director's letter is estimated to be 1.02 *See* Attachment "5". When sinuosity is quantified to be less than 1.20, it is assessed as weak under the North Carolina methodology. The sinuosity of the channel is poorly developed and borderline absent. WSSI and S&EC have both assessed the sinuosity of the channel to be weak and absent in Reach A, respectively.

The sinuosity of the channel is also measured for the sample sites. *See* Attachment "5". As summarized in Table 2, the County has previously approved streams with sinuosity of up to 1.12 as ephemeral.

Table 2- Sinuosity of Channels

Site	Sinuosity
Site 1	1.02
Site 2	1.04
Site 3	1.02
Site 4	1.07
Site 5	1.04
Site 6	1.10
Site 7	1.02
Site 8	1.01
Site 9	1.05
Site 10	1.06
Site 11	1.12

B. Well-Defined Channel

The Director's letter repeatedly refers to *"well defined"* banks and a *"well defined"* channel on the Property as further support for its delineation. The letter includes a morphology analysis (cross section and slope) to further prove the presence of a well-defined channel as evidence that the *"banks were up to 2 feet high"*.

Appendix E of the County Guidelines indicates the presence of *"Very well-defined channel banks and bed that include riffles and pools"* as a typical characteristic for intermittent streams. The Director's letter does not make any reference to the presence of rifles and pools. Also, the County Guidelines does not exclude the presence of a well-defined channel from the characteristics of an ephemeral stream.

Although the channel on the Property was defined with banks and bed as illustrated by LiDAR data and the shared video, it did not include riffles and pools. The presence of a well-defined channel does not prove presence of an intermittent stream. As shown in LiDAR and Topographic maps included as Attachment "6", the channels in sample sites are well defined.

WSSI and S&EC have rated the continuity of banks and bed as weak, and the presence of in-channel structure to include riffles and pools as weak and absent in Reach A, respectively. Figure through Figure clearly illustrate the evolution of the stream from Reach A just south of the Property to Avanel Farm Drive that was taken during S&EC's visit on March 20, 2024.

Figure 1- Reach A – No well-defined channel, riffles or pools.

Figure 2- Downstream just north of Logan Drive – Piped; No well-defined channel, riffle or pools.

Figure 3- Downstream along Moultrie Parkway – Well-defined channel, riffles & pools.

Figure 4- Downstream below Avenel Farm Drive – Well-defined channel, riffles & pools, and strong sinuosity.

C. Wetland Vegetation

The Director's letter also references the presence of an American Sycamore as support for Staff's stream classification. American Sycamore, per US Department of Agriculture (USDA), is classified as facultative wetland (FACW) plant. Per USDA, the plant "usually occurs in wetlands but is also occasionally found in non-wetlands".

Per Appendix E of the County Guidelines, "obligate" wetland plants are typically expected to be absent along or in an ephemeral channel. American Sycamore is not an obligate plant. The Guidelines do not exclude the presence of FACW plants, such as American Sycamore, in ephemeral channels.

Furthermore, there are at least two other mature American Sycamore trees inside the Property ~80 ft and ~200 ft away from the stream. *See* Attachment "7".

A review of the sample sites indicates that six sites noted presence of American Sycamore trees with at least 24" diameter at breast height (DBH) in the vicinity of the ephemeral stream, as noted in Table 3. Since trees with at least 24" DBH must be mapped on applications, it is possible that the remaining 4 sites also included American Sycamores that did not meet the criteria. On the Property, only one of the three sycamores met the criteria, and was thus mapped.

Also, one site, with a forest clearing violation, noted the presence of hydrologic and hydrophytic vegetation along the ephemeral channel even though presence of hydrophytic vegetation is a typical characteristic of intermittent streams, per County Guidelines.

Table 3- Presence of American Sycamore on Ephemeral Stream Bank.

Site	American Sycamore on Ephemeral Stream Bank
Site 1	Yes
Site 2	Yes
Site 3	Yes
Site 4	Unknown (Forest removed) + Hydrologic and hydrophytic vegetation exists.
Site 5	Not noted on plans
Site 6	Not noted on plans
Site 7	Yes, several
Site 8	Not noted on plans
Site 9	Yes, several
Site 10	Not noted on plans
Site 11	Yes

D. Soil Maps

The reviewer's letters issued on February 12 and May 1, 2024 indicate Staff used soil maps in combination with other criteria to delineate the stream as intermittent. Per County Guidelines, a typical characteristic of ephemeral streams is the presence of "side slope soils with characteristics typical of the surrounding landscape", and that also "hydric soils in or adjacent to the channel" are typically absent in ephemeral streams.

Per USDA soil maps, the Property include soil types that are either "well drained" or "somewhat poorly drained". The soil types are identified as having NO frequent flooding or ponding. The soil types along the stream have the "characteristics of the surrounding landscape" and are NOT hydric. *See* Attachment "8". S&EC and WSSI also obtained soil samples along the stream and confirmed the lack of hydric soils along the channel, which is consistent with USDA mapping.

A review of other sites identified five that included hydric soils along or in the vicinity of the stream classified as ephemeral, as noted in Table 4 and shown on Attachment "8". In these sites, particularly Sites 4, 7 and 10, the soil type along the stream is clearly mapped differently than the soil types of the surrounding landscape.

Table 4- Soil Types

Site	Soil Types	Hydric Soil Present?	Soil Type Typical of Surrounding Landscape?
Site 1	27B/29B	No	Yes
Site 2	6A/25C	Yes	No

Site	Soil Types	Hydric Soil Present?	Soil Type Typical of Surrounding Landscape?
Site 4	6A/2B	Yes	No
Site 7	6A/1C/2B	Yes	No
Site 8	54A/2B	Yes	No
Site 10	6A/1C	Yes	No

E. Flood Plains

Per County Guidelines, flood plains are often absent in or along ephemeral streams. There are no flood plain mapped in the vicinity of the Property. However, a review of the sample sites identified that four of the streams classified as ephemeral include flood plains in their proximity, as shown in Table 5 and illustrated in Attachment "9".

Table 5- Presence of Flood Plain

Site	Flood Plain on or Near Site
Site 1	No
Site 2	Yes
Site 6	Yes
Site 9	Yes
Site 10	Yes

F. Wetlands

Per County Guidelines, wetlands may be adjacent to an intermittent stream channel. There are no wetlands in proximity to the Property as evident by the prior five NRI approvals for the properties upstream and downstream to the Property. However, a review of the approved plans with ephemeral streams identifies two sites with wetlands in the vicinity of the ephemeral channel as shown in Table 6 and illustrated in Attachment 10".

Table 6- Presence of Wetlands in Stream Vicinity.

Site	Wetlands Presence in proximity to stream?
Site 1	No
Site 2	Yes
Site 9	Yes

G. Sediments

The Director's letter references the "sediments" of the channel multiple times to support Staff's delineation of the stream. The mere presence of sediments is not a characteristic of intermittent streams, rather the level at which sediments are sorted is used to make the distinction

between intermittent and ephemeral streams. Per Appendix E of County Guidelines, ephemeral streams may be characterized by the presence of poorly-sorted sediments. The County Guidelines indicate that well-sorted sediments are typically absent in ephemeral streams. The Guidelines do not offer objective methods to qualify the level at which sediments are sorted.

The Director's letter does not qualify Staff's assessment of the sediments, nor does it present any evidence for the assessment. Since it is impossible to qualify the sediments using the shared video or the DPS pictures, it is inferred that Staff may have assessed sediments along the undisturbed areas on the neighboring property. WSSI and S&EC have both assessed the sediments to be poorly sorted in Reach A. Figure 5- Reach A Streambed – Weak to no sediment sorting; also note amount of leaves.Figures 5 through 7, taken by S&EC during their site visit, differentiates the characteristic of the stream starting from Reach A through Avanel Farm Drive.

Figure 5- Reach A Streambed – Weak to no sediment sorting; also note amount of leaves.

Figure 6- Downstream along Moultrie Parkway – Streambed; strong sediment sorting, riffles & pools, no leaves.

Figure 7- Downstream sound of Avenel Farm Drive – Streambed; very strong sediment sorting, riffles & pools, point-bar formation inside bend.

H. Algae Cover

The Director's letter references "algae cover" multiple times for its delineation justification. The letter, however, does not specify where the algae cover was observed, nor does it provide any evidence of this finding. WSSI and S&EC have both reported the absence of the algae in their site visit.

Attachment 1 - Montgomery County Guidelines Stream Characteristics as Related to NC Methodology

Appendix E of Montgomery County Environmental Guidelines, Ephemeral Streams Characteristics	Closest Related Item in NC Methodology	Related Item in NC Methodology Description	NC Assessment Criteria	Reach A (from pipes to ~80 ft south of pipes)	Reach B (from 80 ft to 155 ft south of pipes)
Typically Present in Ephemeral Streams					
Poorly-developed sinuosity	2	Sinuosity of channel along thalweg	Sinuosity less than 1.2 is weak. Property's sinuosity is measured at 1.02 measuring the entire feature (both Reach A & B) using LiDAR mapping. So not "absent", but "weak" using NC description or "poorly-developed" using the County Guidelines description. Reviewing each Reach individually, S&EC found the sinuousity to be "absent".	Sinuosity is absent	Sinuosity is absent
Evidence of leaf litter or small debris jams in flow areas	14 / 16	Leaf litter / Organic debris lines or piles	**Moderate** – Leaf litter is present throughout most of the stream's reach with some accumulation beginning on the upstream side of obstructions and in pools. Between 25% and 80% of the active channel bottom is covered with leaves and portions of the thalweg is visible.	Leaf Litter = Moderate / Debris Lines = Moderate	Leaf Litter = Moderate / Debris Lines = Moderate
Poorly-sorted sediments	4	Particle size of stream substrate	**Weak** – The channel is poorly developed through the soil profile. Some coarse sediment is present in the streambed but is discontinuous. Particle size differs little between the stream substrate and adjacent land. **Moderate** – There is a well-developed channel but it is not deeply incised through the soil profile. Some coarse sediment is present in the streambed in a continuous layer. Particle size differs somewhat between the stream substrate and adjacent land.	Sediments are sorted weakly	Sediments are moderately sorted
Poorly-developed removal of vegetation litter	14 / 16	Leaf litter / Organic debris lines or piles	**Moderate** – Leaf litter is present throughout most of the stream's reach with some accumulation beginning on the upstream side of obstructions and in pools. Between 25% and 80% of the active channel bottom is covered with leaves and portions of the thalweg is visible.	Leaf Litter = Moderate / Debris Lines = Moderate	Leaf Litter = Moderate / Debris Lines = Moderate
Poorly-developed vegetation drift lines					
Fibrous roots in channel	18	Fibrous roots in streambed	**Moderate** – A discontinuous network of fibrous roots is present in the stream thalweg and surrounding area.	Fibrous roots are moderately present in the channel	Fibrous roots are absent in the channel
Side slope soils with characteristics typical of the surrounding landscape	None	None	--	Side slope soils have characteristics typical of the surrounding landscape	Side slope soils have the characteristics typical of the surrounding landscape

Appendix E of Montgomery County Environmental Guidelines, Ephemeral Streams Characteristics	Closest Related Item in NC Methodology	Related Item in NC Methodology Description	NC Assessment Criteria	Reach A (from pipes to ~80 ft south of pipes)	Reach B (from 80 ft to 155 ft south of pipes)
Typically Absent in Ephemeral Streams					
Moderate to well-developed sinuosity	2	Sinuosity of channel along thalweg	Same as above	Sinuosity is weak and bordenline absent	Sinuosity is weak and bordenline absent
Blackened or decayed leaf litter	None	None	--	Absent	Present
Well-sorted sediments	4	Particle size of stream substrate	Same as above	sediments are weakly sorted	sediments are moderately sorted
Streambed forms (such as riffles/pools, runs, point bars)	3	In-channel structure: ex. riffle-pool, step-pool, ripple-pool sequence	**Weak** – Stream has some structure but dominated by areas of pools or areas of riffles **Absent** – No sequence is observed	Absent	Weak
Frequent-flow marks, algae covered or water-stained or lined rocks	25	Algae	**Absent** – No algae is observed through the reach	Absent	Absent - We did not find algae but did find water-stained rocks and leaves which is not part of the NC method The water-stained leaves & rocks did not however have a "slimy" coating which could be an indicator of algae
Obligate wetland vegetation along or in channel	26	Wetland Plans in the streambed	FACW = 0.75 pts / OBL = 1.5 pts / Other = 0 points	Other = 0	Other = 0
Hydric soils in or adjacent to channel	17	Soil-based evidence of high water table?	**NO** – In the soil of the stream bank or base of a headcut within at least six inches above the average elevation of riffles or other shallow zones in the thalweg is found no indicator a seasonal high water table.	No hydric soil	No hydric soil
Streamflow (except during or briefly (≤ 48 hrs.) after storms	12	Presence of Baseflow	**Absent** – There is little to no visible water in the thalweg region of the channel. There is no evidence of groundwater discharge into the channel and the groundwater table is at or below the deepest parts of the channel. **Weak** – Water is standing in pools and the hyporheic zone is saturated, but there is not visible flow through the riffles or other shallow zones of the thalweg. Evidence of groundwater discharge is present, but requires considerable time to locate. The groundwater table is at or slightly above the level of water in the pools	Absent	Weak
Alluvial deposits	7	Recent alluvial deposits	**Weak** – Small amounts of fresh alluvium present within the channel.	Alluvial deposits are weakly present in channel	Alluvial deposits are weakly present in channel
Natural levees	None	None	--	Absent	Absent

Floodplains	5	Active/relict floodplain	There is no mapped floodplain on the property which we understand is what the County Guidelines uses. NC method for #5 is independent of a mapped floodplain or not	No floodplain is mapped. Per NC methodology this is assessed as Weak.	No floodplain is mapped. Per NC methodology this is assessed as absent.
Evidence of stream biota (e.g., fish, stream salamanders, or aquatic macroinvertebrates)	20 through 24	Macrobenthos (note diversity and abundance). Aquatic Mollusks, Fish, Crayfish, Amphibians	--	Absent	Absent

Benning & Associates, Inc.
Land Planning Consultants
8933 Shady Grove Court
Gaithersburg, MD 20877
(301)948-0240
dmckee@benninglandplan.com

August 9, 2023

Hamid Shirazi
Via email: hamidshirazi@gmail.com

Re: 9312 Persimmon Tree Road

Dear Mr. Shirazi,

As requested, I am contacting you with a proposal for the subject property. The purpose of our work is to establish the current conditions of the property and surrounding area from an environmental protection standpoint. There is a drainage channel near the site which does not appear to be a stream. However, the County planning office (MNCPPC) will be the final decision-maker on this. To confirm there is no stream or related stream buffer for the property, a plan must be submitted to MNCPPC for review and approval.

Given the above discussion, we propose to provide the following services:

1B. NATURAL RESOURCES INVENTORY / FOREST STAND DELINEATION
A Natural Resources Inventory / Forest Stand Delineation Plan (NRI/FSD) is to be prepared to document the presence of any forest, large trees, streams, or other natural features on or near the site. Preparation of this plan includes on-site fieldwork to collect data. If a stream is determined to be on or near the site, the NRI/FSD will show a minimum 100-foot stream buffer from the stream. Our current opinion, based upon a field visit, is that no stream is present near the site. Submission and approval of the NRI/FSD will help to confirm this and other matters prior to any proposal to develop the site. The plan will be submitted to MNCPPC for formal review and approval.

Fee for this task - $[redacted]

1M. MISCELLANEOUS SURVEY WORK
In support of the preparation of the NRI/FSD, some survey work is needed. All trees with a diameter of 24" or larger and other site features must be shown accurately on the plan. These features will be located by survey and added to the plan prior to submission.

Our fee for this item – $[redacted]

Governmental review fees are your responsibility as they become due. The fees for review of the NRI/FSD is as follows:

NRI/FSD - $[redacted]

This proposal also does not include work to obtain any subsequent approvals or permits needed to develop the site. These items can be provided under a separate agreement once the scope of work is known.

For your information, our current normal hourly rates are as follows (subject to adjustment after 12 months):

Principal (Planner / Engineer) -	$[redacted] / Hr.
Associate (Landscape Architect / Arborist) -	$[redacted] / Hr.
Technician -	$[redacted] / Hr.
Administrative / Drafting -	$[redacted] / Hr.
Field Crew -	$[redacted] / Hr.

We appreciate the opportunity to work with you on this project. Please feel free to contact me at any time.

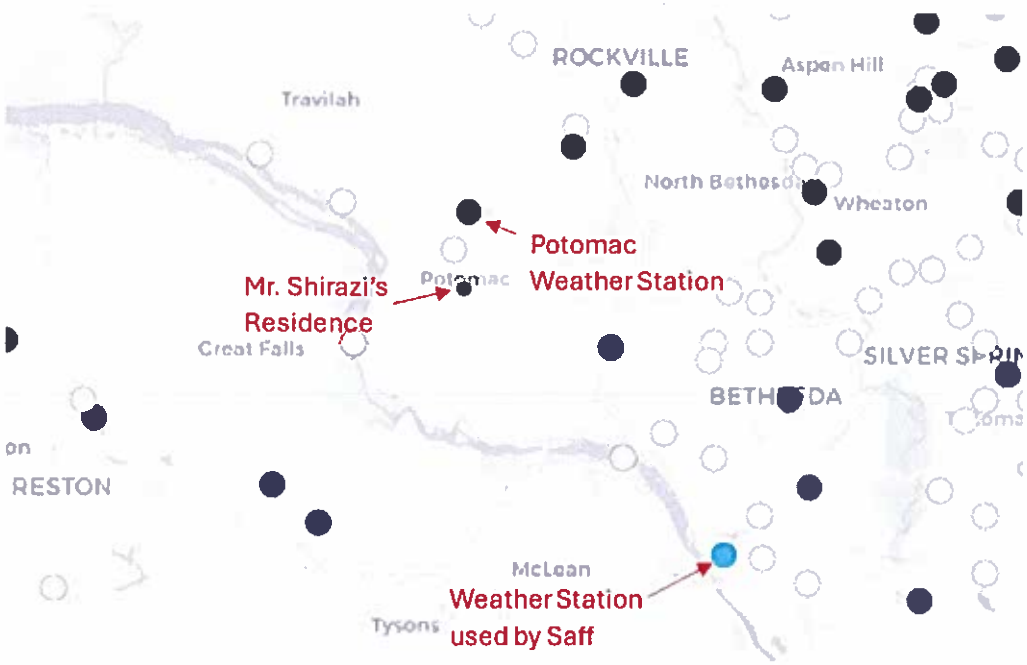
Sincerely yours,

David W. McKee, Principal

Accepted by: Date:

Please provide contact information (mailing address, phone numbers, etc.) below:

Attachment 3: Weather Stations Surrounding the Property & Potomac Weather Station – November & December 2022



U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev 318 ft Lat 39 03'72" N Lon 77 207 5' W
Station: POTOMAC 0.9 NNW, MD US USW1MDMG0003

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations

Generated on 07/27/2024

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

Year	Month	Day	Temperature (F) "24 Hrs. Ending at Observation Time" Max.	Min.	At Obs.	Precipitation 24 Hour Amounts Ending at Observation Time: Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	At Obs. Time: Snow, Ice Pellets, Hail, Ice on Ground (in)	Evaporation: 24 Hour Wind Movement (mi)	Amount of Evap. (in)	"Soil Temperature (F)" 4 in. Depth: Ground Cover (see *)	Max.	Min.	8 in. Depth: Ground Cover (see *)	Max.	Min.
2022	11	01				0.20												
2022	11	02				0.00		0.0										
2022	11	03				0.00		0.0										
2022	11	04				0.00		0.0										
2022	11	05				0.00		0.0										
2022	11	06				0.05												
2022	11	07				0.09												
2022	11	08				0.00		0.0										
2022	11	09				0.00		0.0										
2022	11	10				0.00		0.0										
2022	11	11				0.05												
2022	11	12				1.13												
2022	11	13				0.00		0.0										
2022	11	14				0.00		0.0										
2022	11	15				0.00		0.0										
2022	11	16				1.30												
2022	11	17				0.00		0.0										
2022	11	18				0.00		0.0										
2022	11	19				0.00		0.0										
2022	11	20				0.00		0.0										
2022	11	21				0.00		0.0										
2022	11	22				0.00		0.0										
2022	11	23				0.00		0.0										
2022	11	24																
2022	11	25																
2022	11	26				0.12												
2022	11	27				0.00		0.0										
2022	11	28				0.12												
2022	11	29				0.00		0.0										
2022	11	30				0.17												
		Summary	0	0		3.23												

Empty, or blank, cells indicate that a data observation was not reported
*Ground Cover. 1=Grass, 2=Fallow, 3=Bare Ground, 4=Brome grass, 5=Sod, 6=Straw mulch, 7=Grass muck, 8=Bare muck, 0=Unknown
"s" This data value failed one of NCEI's quality control tests "At Obs." = Temperature at time of observation
"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Current Location: Elev: 318 ft Lat: 39.0372°N Lon: 77.2075° W
Station: POTOMAC 0.9 NNW, MD US USW1MDMG0003

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

Generated on 07/27/2024

National Centers for Environmental Information
151 Patton Avenue
Asheville, North Carolina 28801

Observation Time Temperature: Unknown Observation Time Precipitation: Unknown

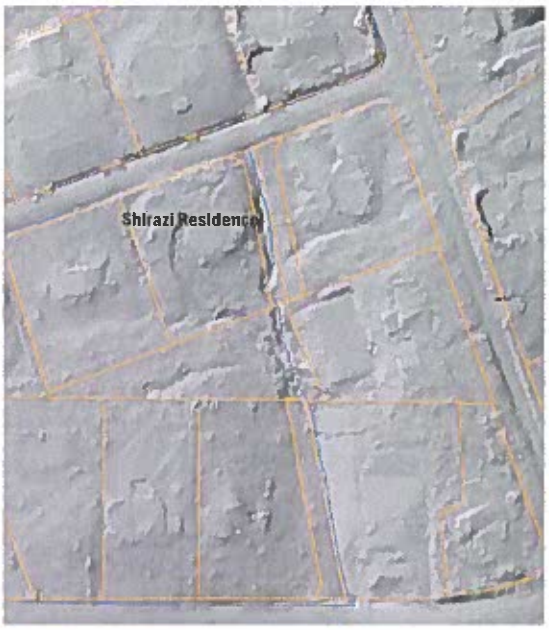
Year	Month	Day	Temperature (F) "24 Hrs. Ending at Observation Time" Max.	Min.	At Obs.	Precipitation 24 Hour Amounts Ending at Observation Time: Rain, Melted Snow, Etc. (in)	Flag	Snow, Ice Pellets, Hail (in)	Flag	At Obs. Time: Snow, Ice Pellets, Hail, Ice on Ground (in)	Evaporation: 24 Hour Wind Movement (mi)	Amount of Evap. (in)	"Soil Temperature (F)" 4 in. Depth: Ground Cover (see *)	Max.	Min.	8 in. Depth: Ground Cover (see *)	Max.	Min.
2022	12	01				0.16												
2022	12	02				0.00		0.0										
2022	12	03				0.22												
2022	12	04				0.23												
2022	12	05				0.00		0.0										
2022	12	06				0.01												
2022	12	07				0.09												
2022	12	08				0.02												
2022	12	09				0.00		0.0										
2022	12	10				0.00		0.0										
2022	12	11				0.00		0.0										
2022	12	12				0.00		0.0										
2022	12	13				0.00		0.0										
2022	12	14				0.00		0.0										
2022	12	15				0.00		0.0										
2022	12	16				1.74												
2022	12	17				0.00		0.0										
2022	12	18				0.00		0.0										
2022	12	19				0.00		0.0										
2022	12	20				0.00		0.0										
2022	12	21				0.00		0.0										
2022	12	22				T												
2022	12	23				1.97												
2022	12	24				0.23		T										
2022	12	25				0.00		0.0										
2022	12	26				0.00		0.0										
2022	12	27				0.00		0.0										
2022	12	28				0.00		0.0										
2022	12	29				0.00		0.0										
2022	12	30				0.00		0.0										
2022	12	31				0.01												
		Summary	0	0		4.62												

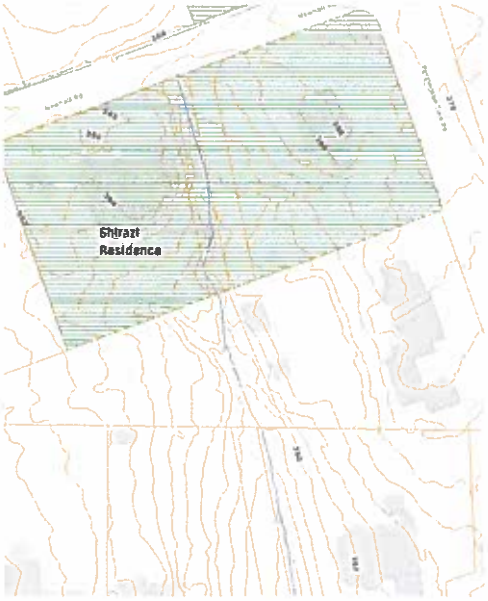
Empty, or blank, cells indicate that a data observation was not reported.
*Ground Cover: 1=Grass, 2=Fallow, 3=Bare Ground, 4=Brome grass, 5=Sod, 6=Straw mulch, 7=Grass mulch, 8=Bare mulch, 0=Unknown
"s" This data value failed one of NCEI's quality control tests "At Obs." = Temperature at time of observation
"T" values in the Precipitation or Snow category above indicate a "trace" value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units

Attachment 4: Hydrologic Characteristics of Shirazi Property and Sample Sites

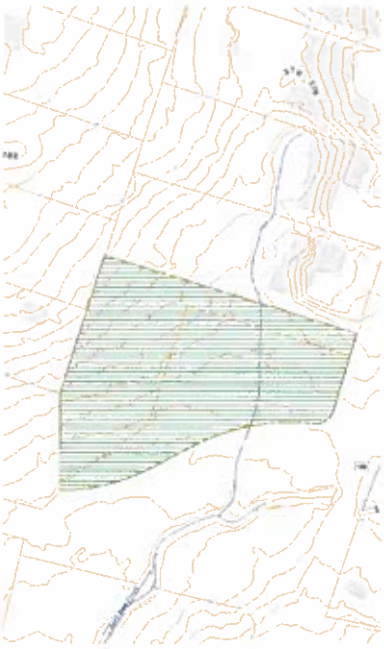
Blue Line, LiDAR Map and Topography

Site 1: 9810 Newhall Road, Shirazi Property

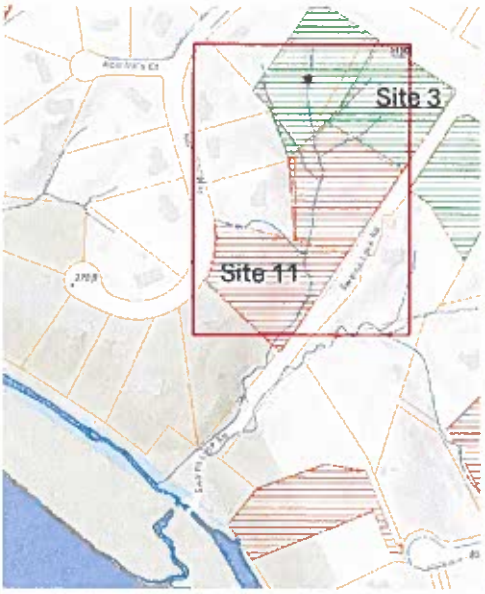


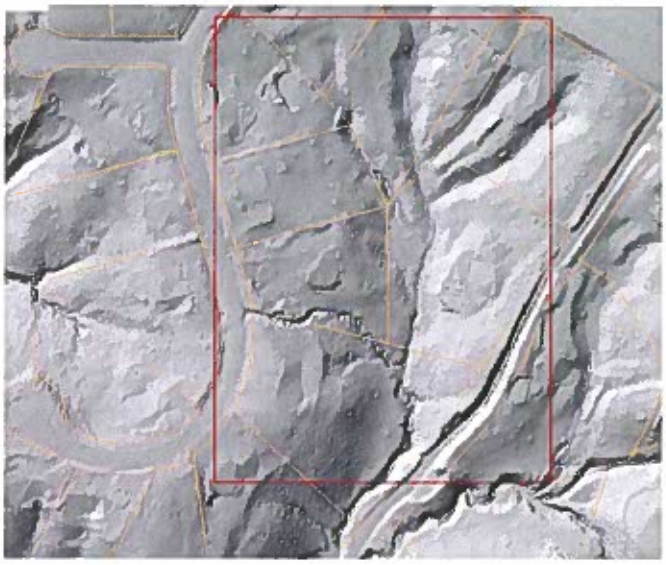


Site 2: 10202 Falls Rd

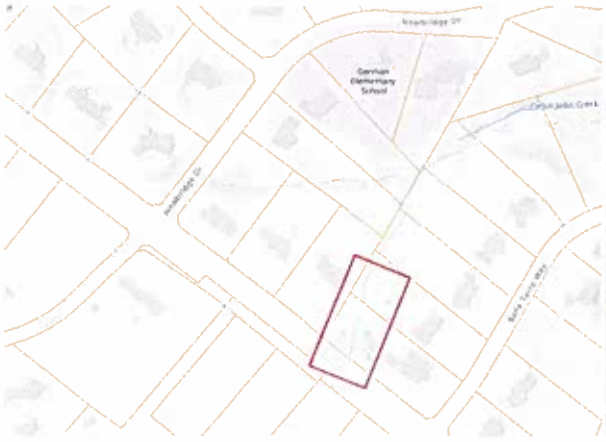


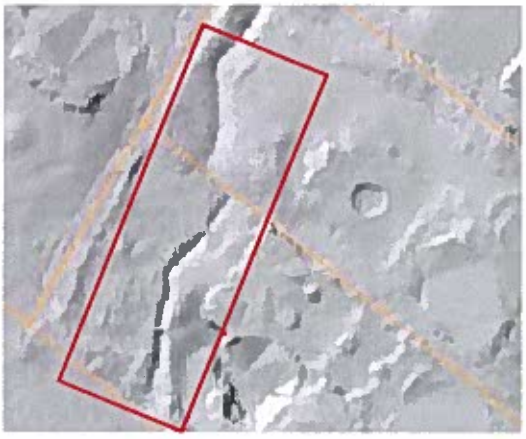
Site 3: 11610 River Rd & Site 11: 10821 Adminral's way

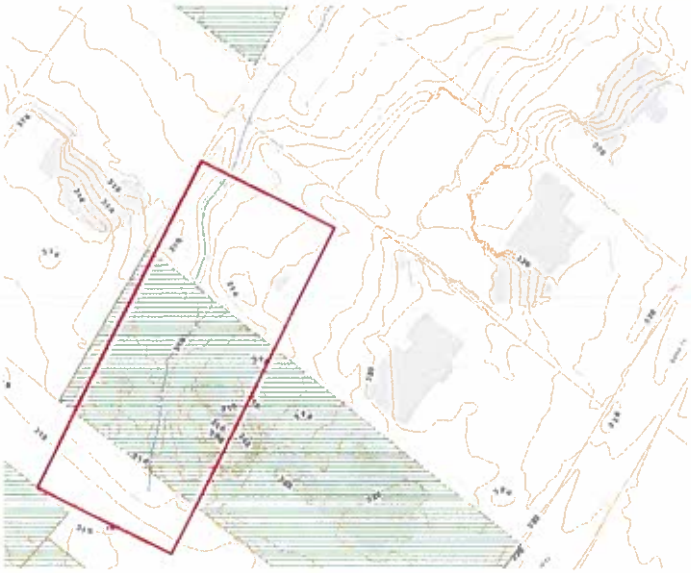




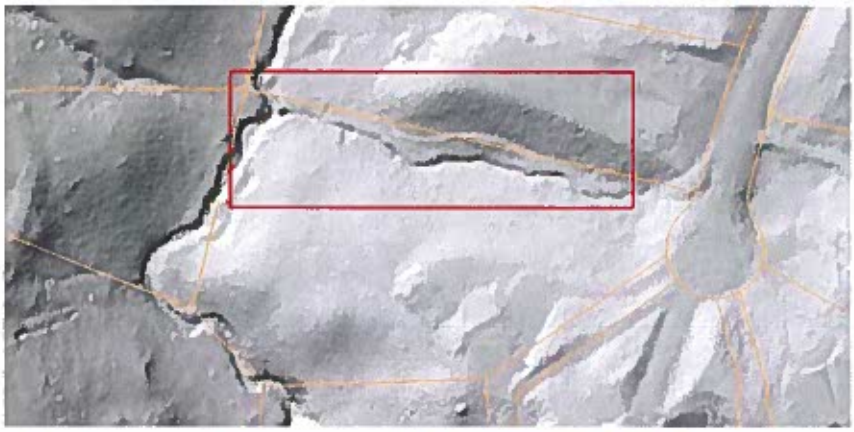
Site 4: 9300 Belle Terre Way

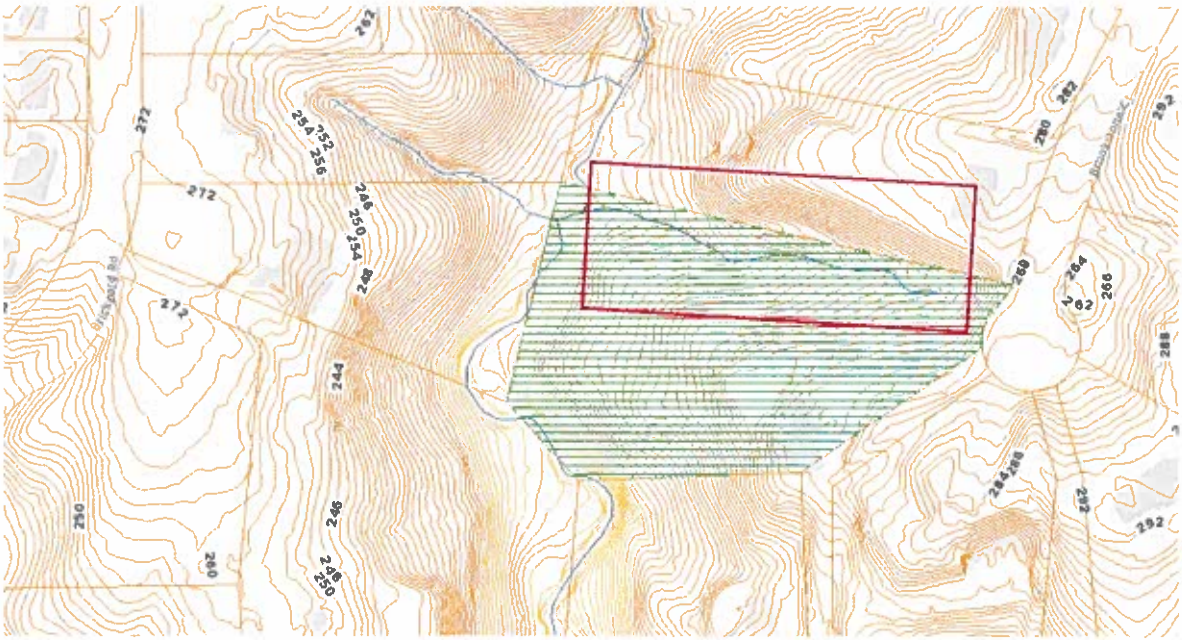




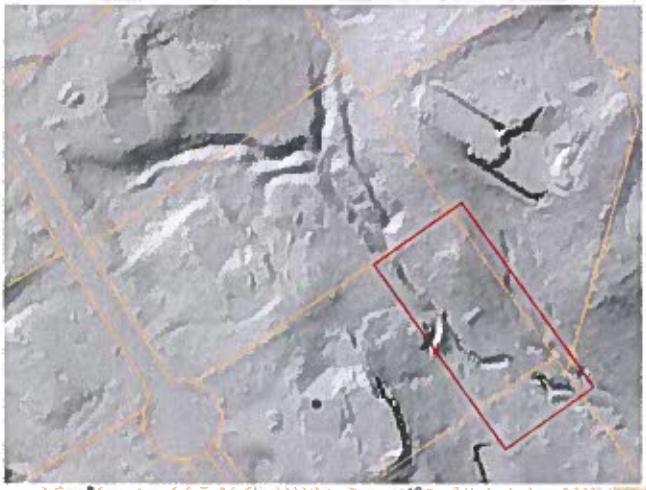


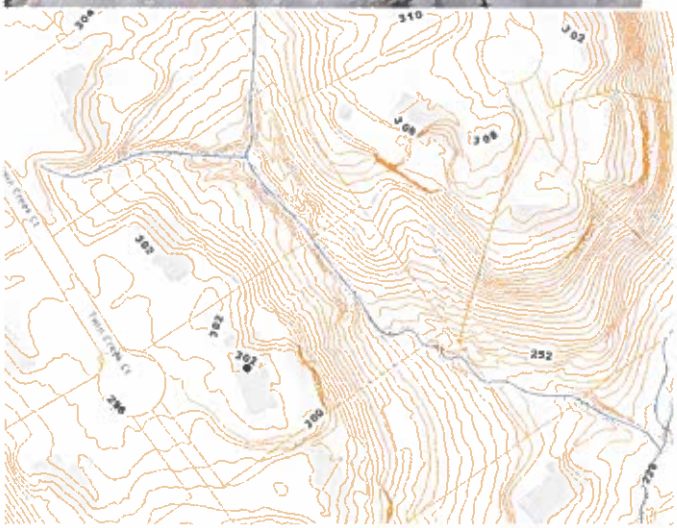
Site 5: 7212 Brookstone ct



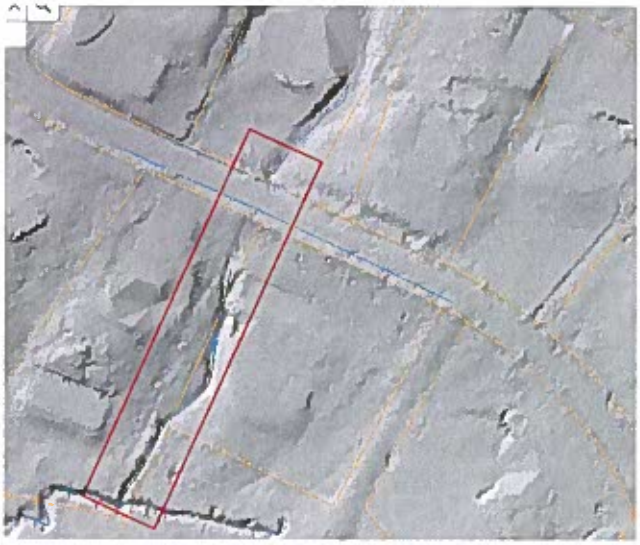


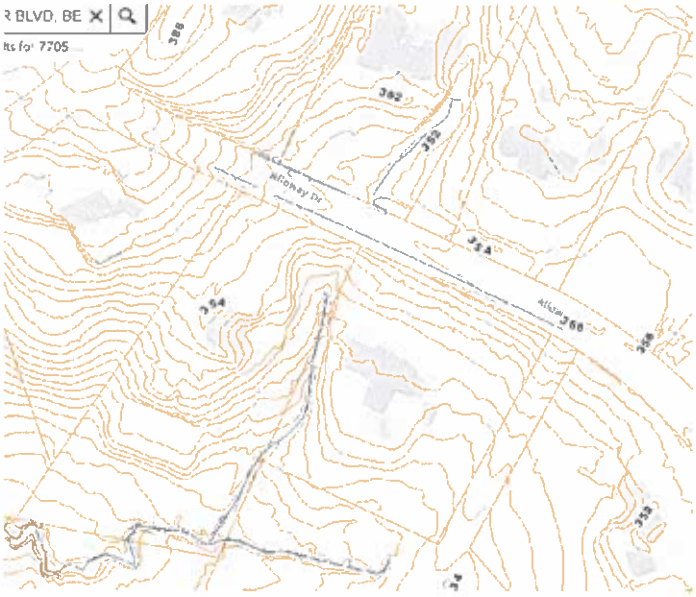
Site 6: 8805 Twin Creek



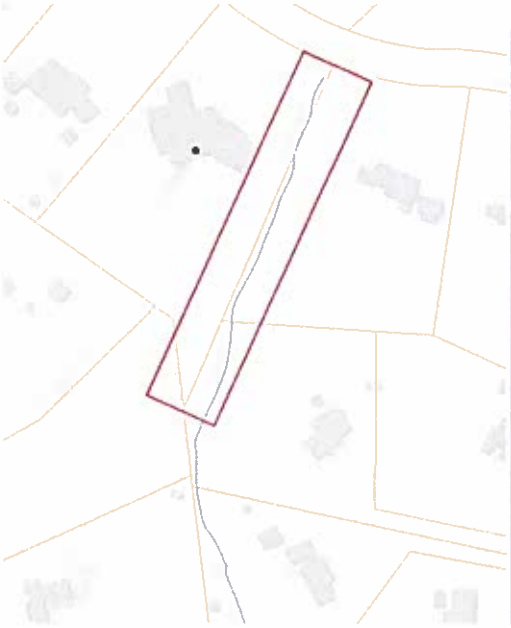


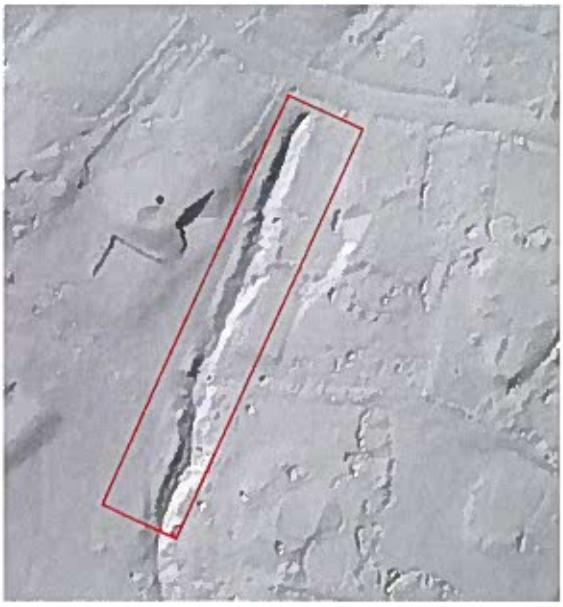
Site 7: 10828 ALLOWAY DR

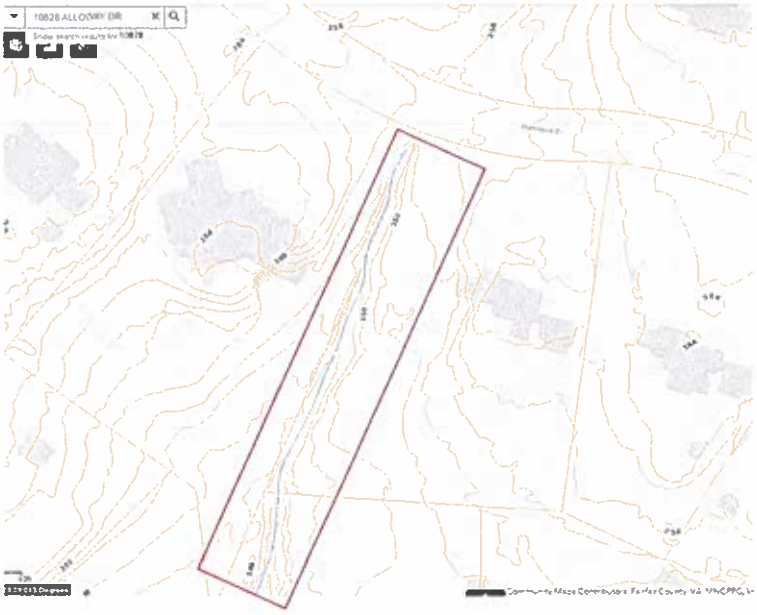




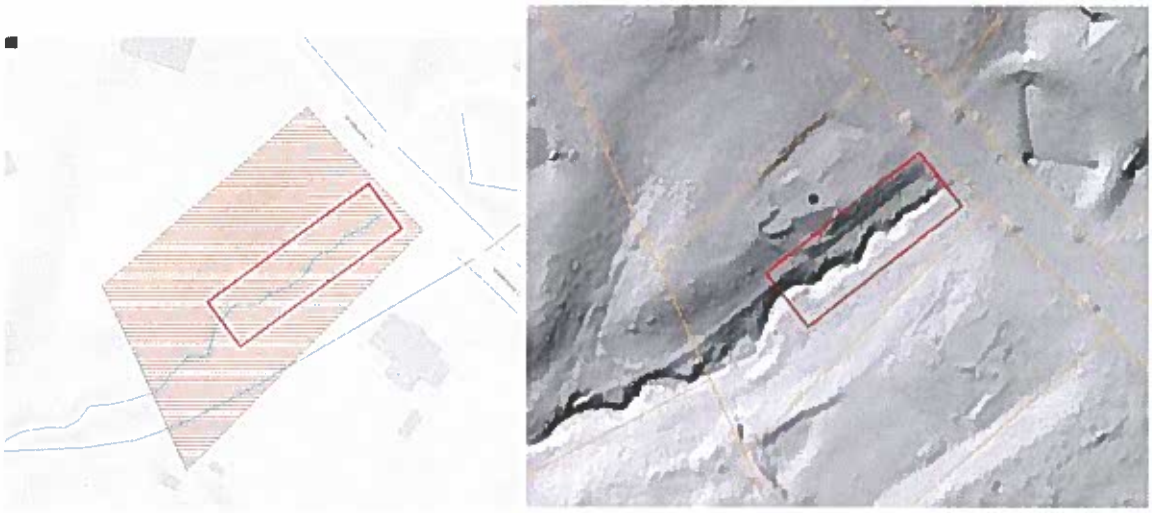
Site 8: 10726 Stanmore Rd

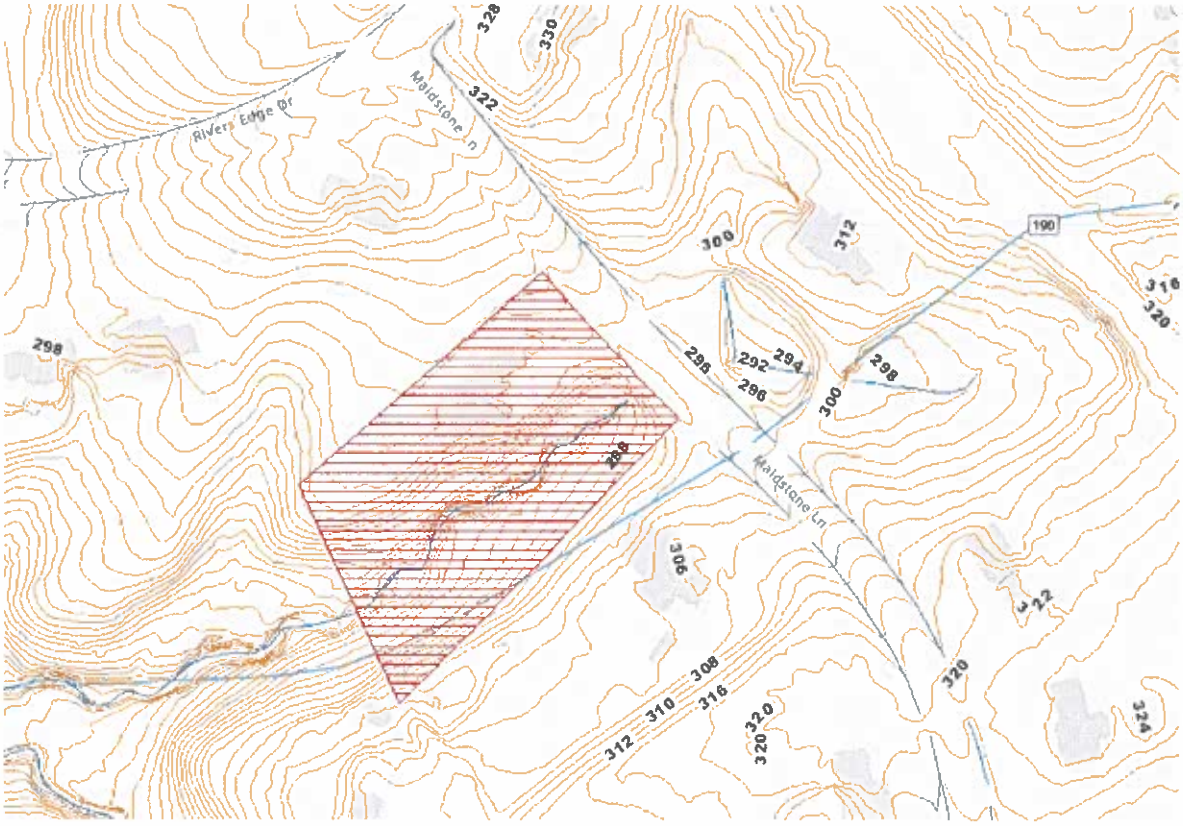




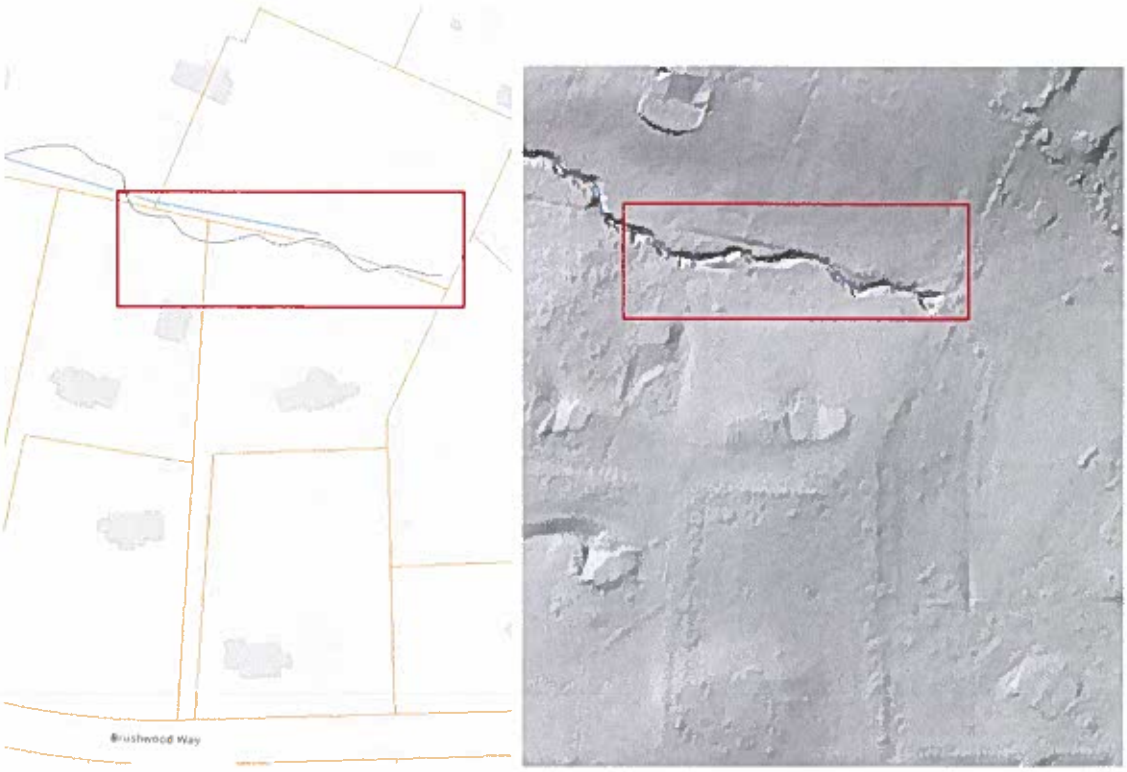


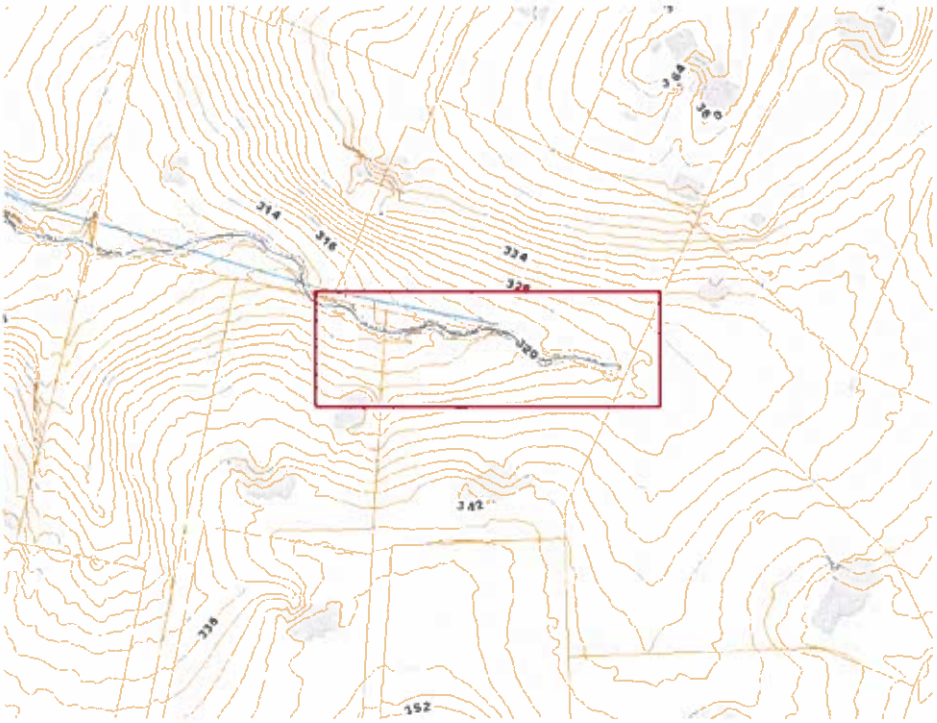
Site 9: 13505 MAIDSTONE LN





Site 10: 13109 Brushwood Way

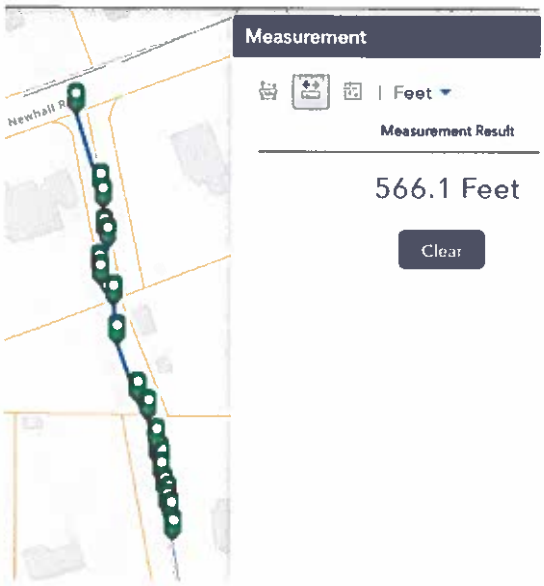




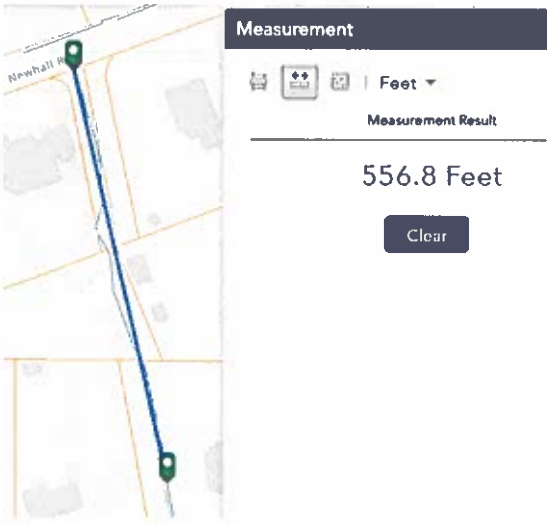
Attachment 4- P10

Attachment 5: Sinuosity

Site 1: 9810 Newhall Road

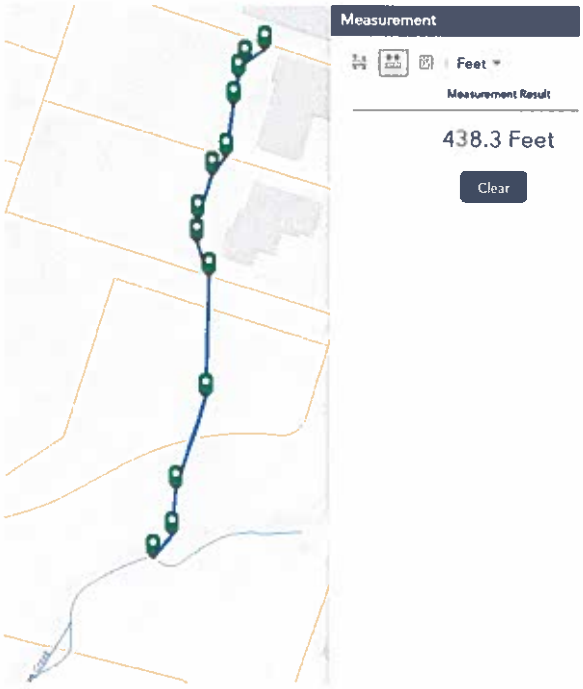


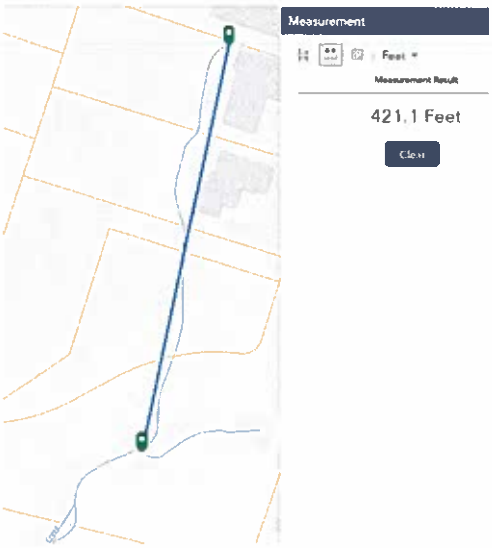
Stream Bed Length Measurement



Stream Valley Length Measurement

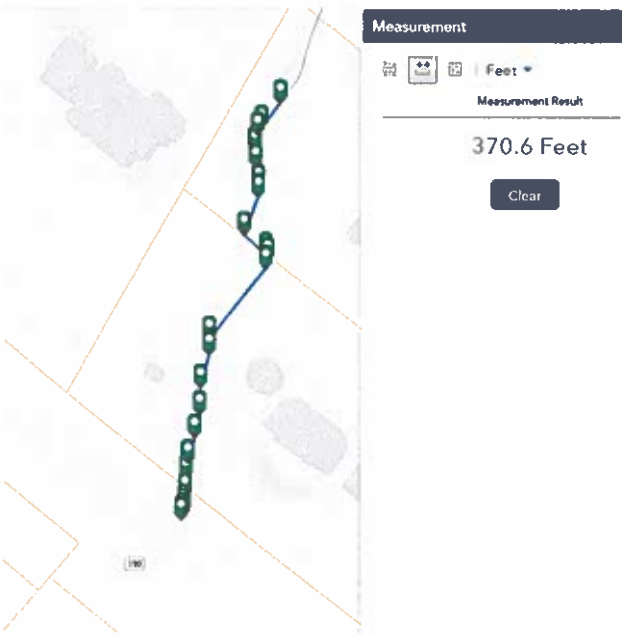
Site 2: 10202 Falls Rd



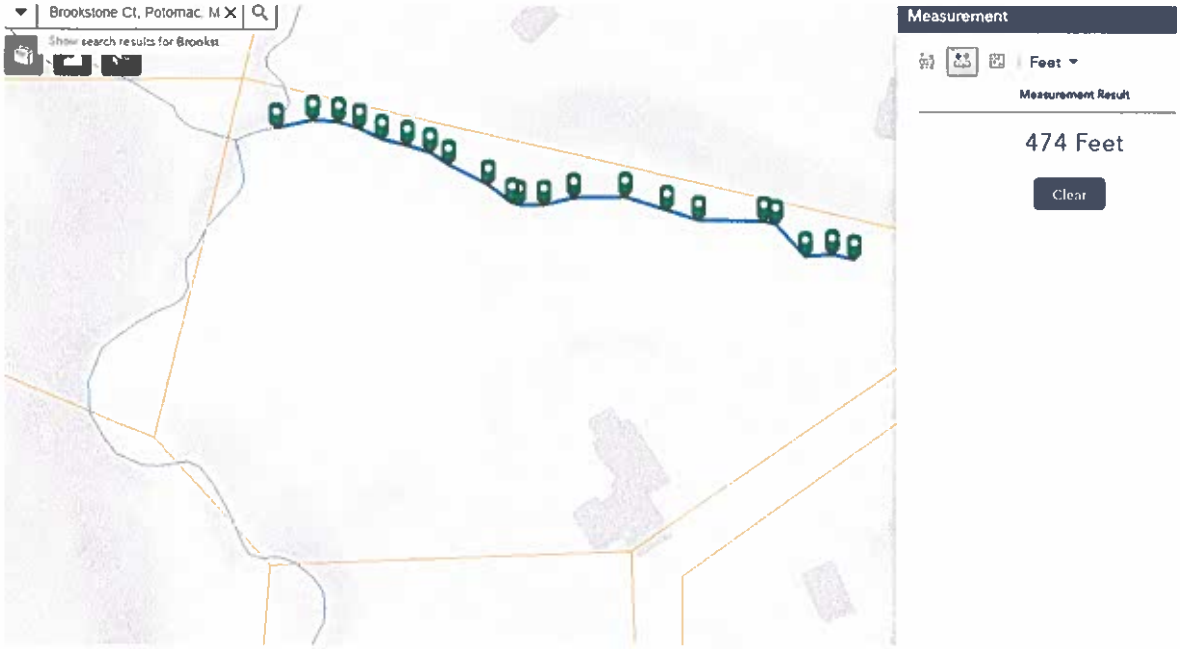


Site 3: 11610 River Rd

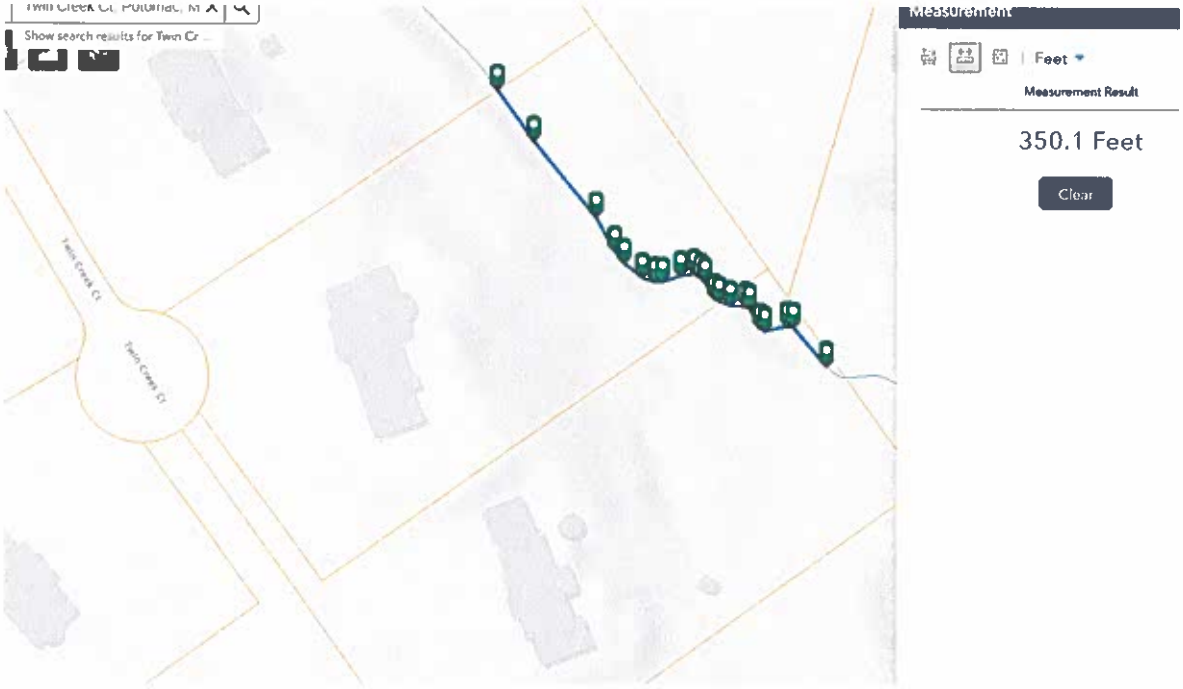
Site 4: 9300 Belle Terre Way



Site 5: 7212 Brookstone ct

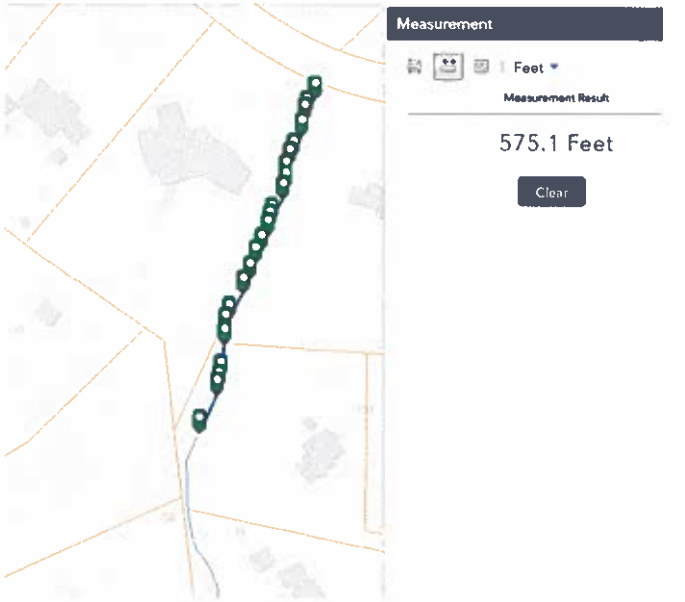


Site 6: 8805 Twin Creek

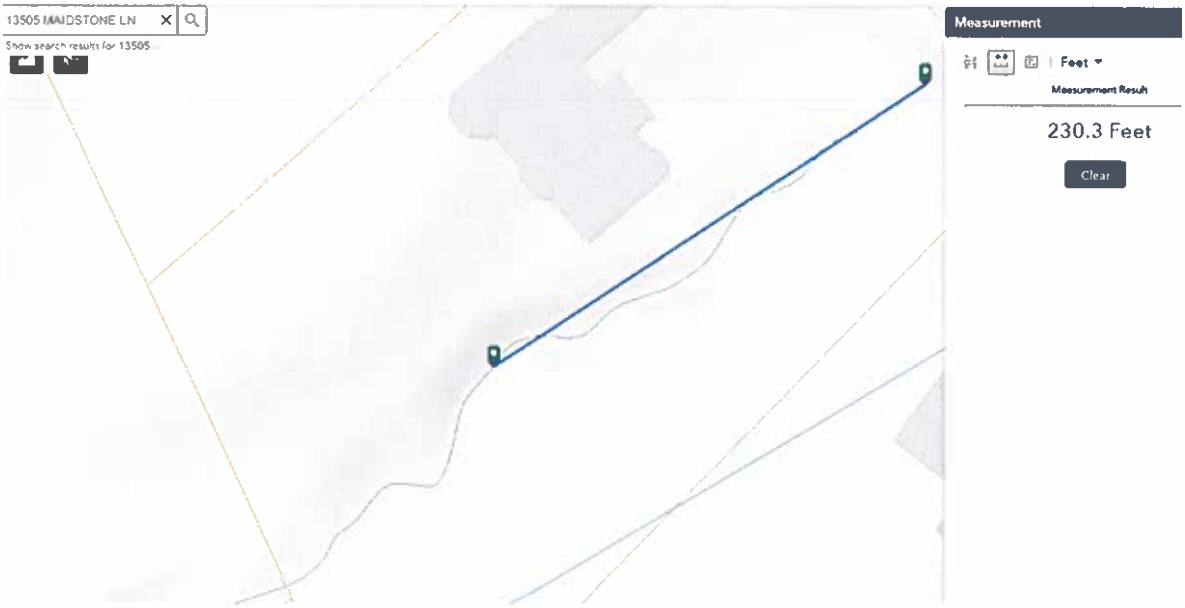


Site 7: 10828 ALLOWAY DR

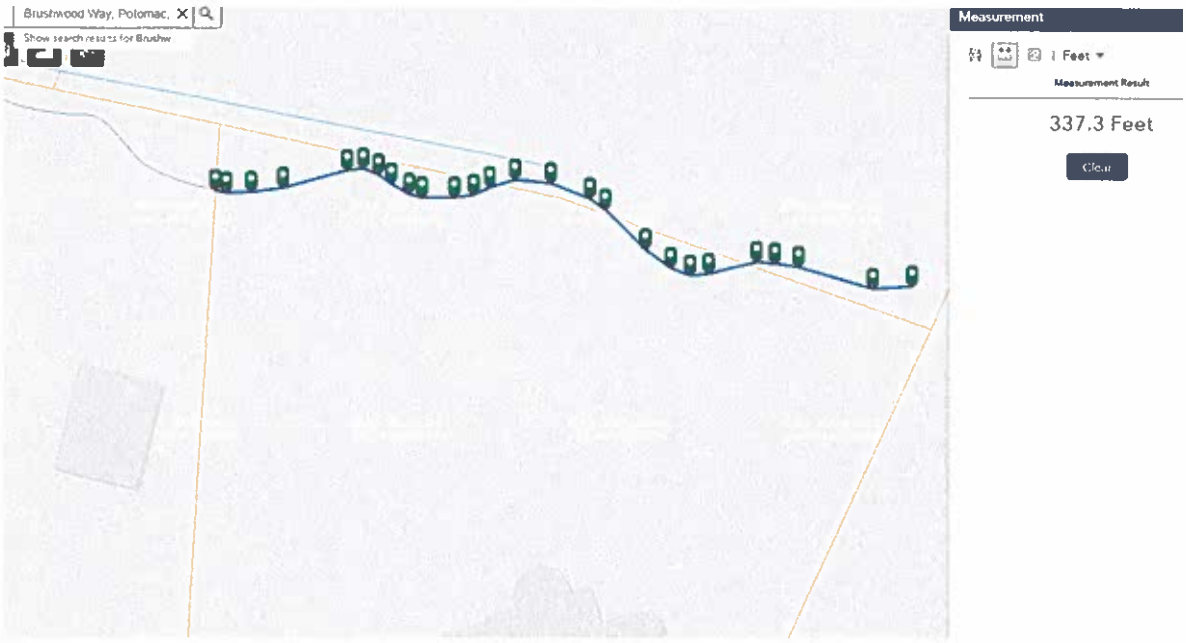
Site 8: 10726 Stanmore Rd

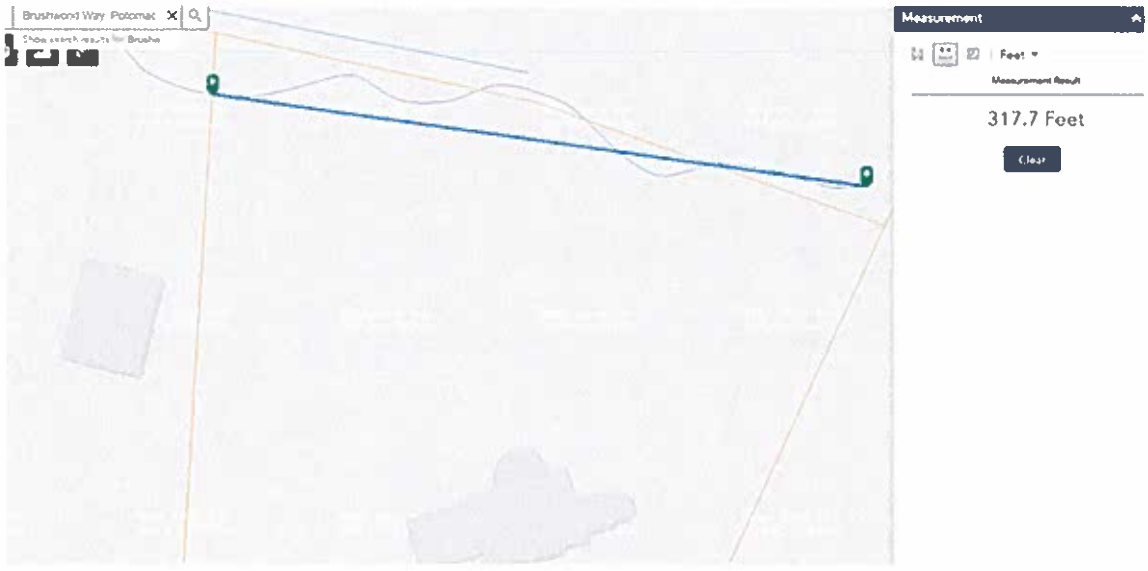


Site 9: 13505 MAIDSTONE LN

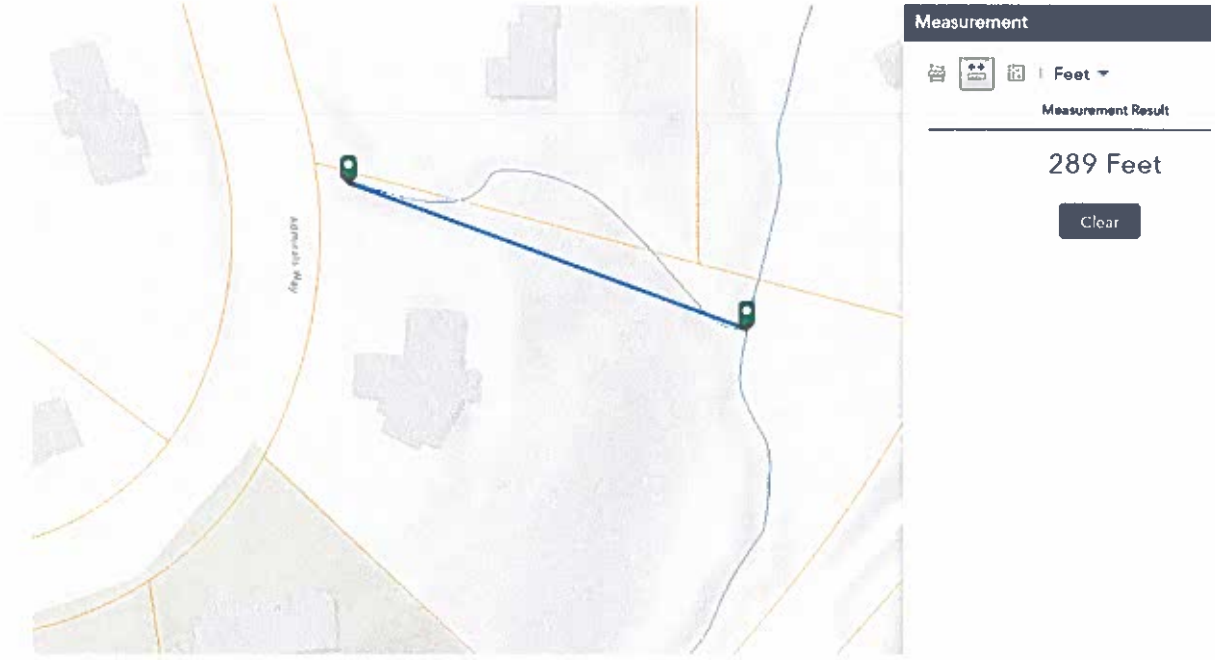


Site 10: 13109 Brushwood Way





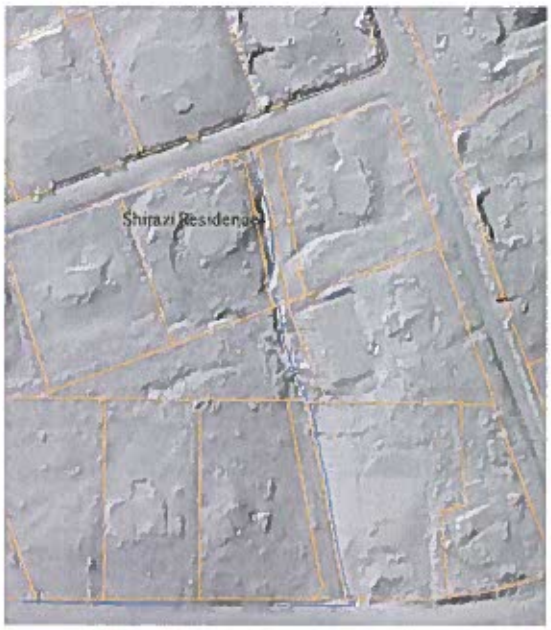
Site 11: 10821 Adminral's way

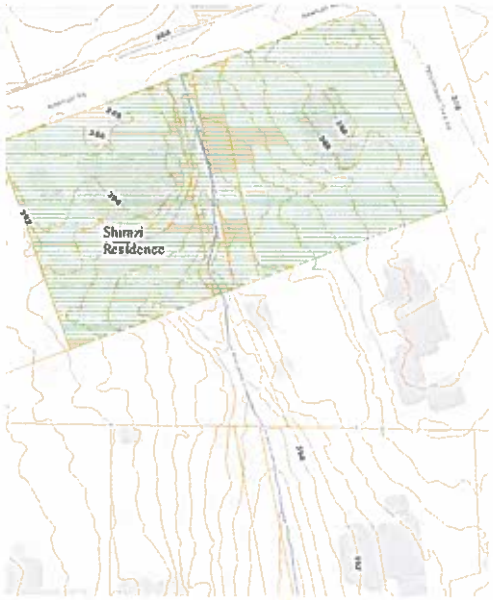


Attachment 6 - Hydrologic Characteristics of Shirazi Property and Sample Sites

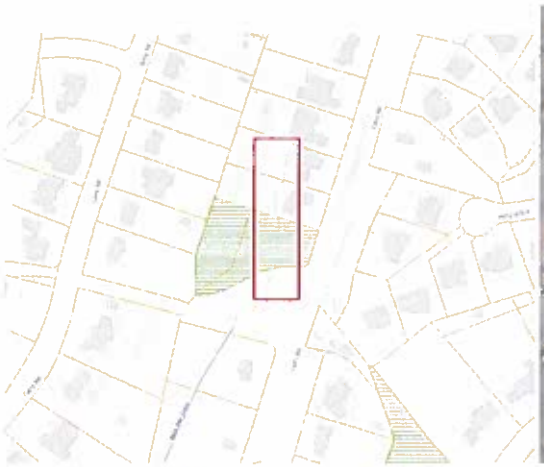
Blue Line, LiDAR Map and Topography

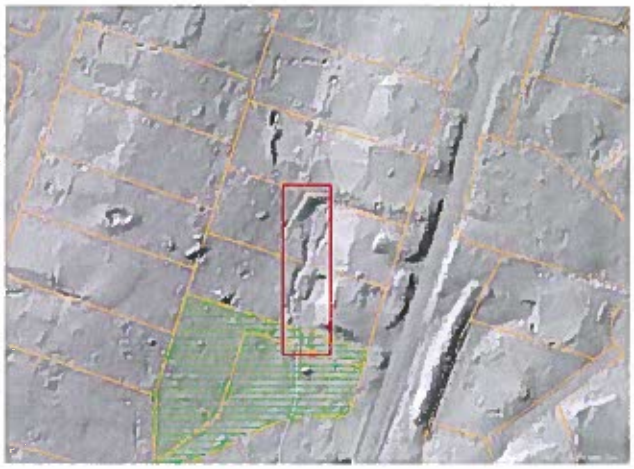
Site 1: 9810 Newhall Road, Shirazi Property

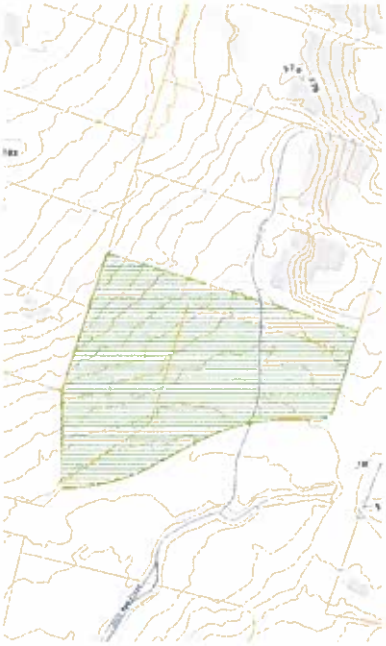




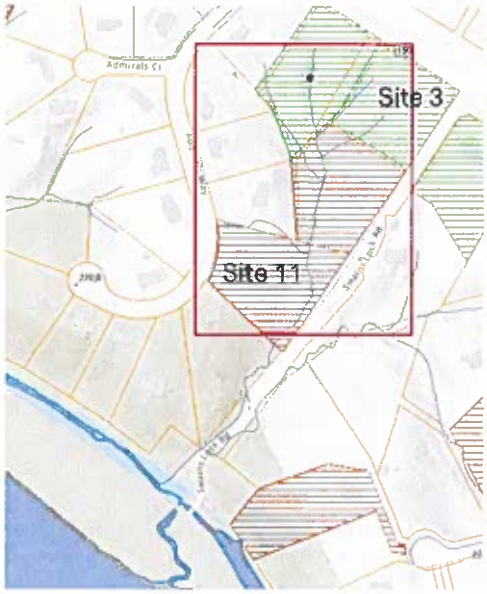
Site 2: 10202 Falls Rd

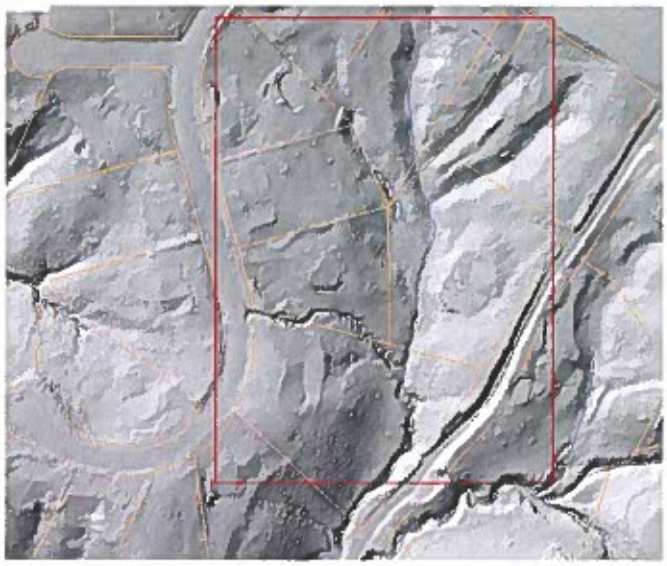




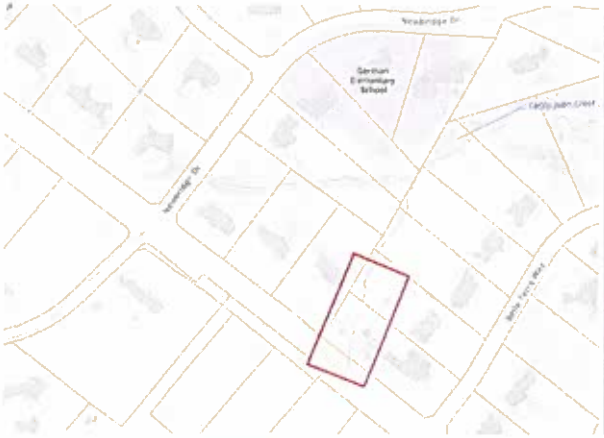


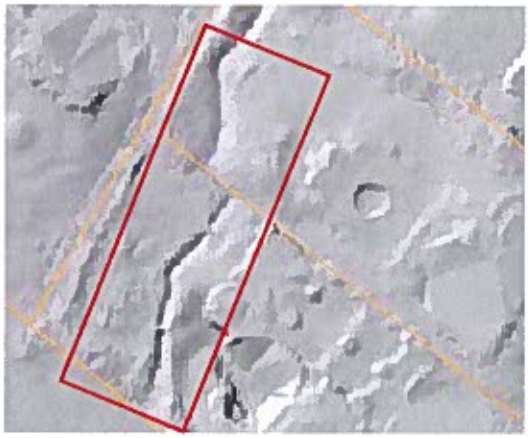
Site 3: 11610 River Rd & Site 11: 10821 Adminral's way

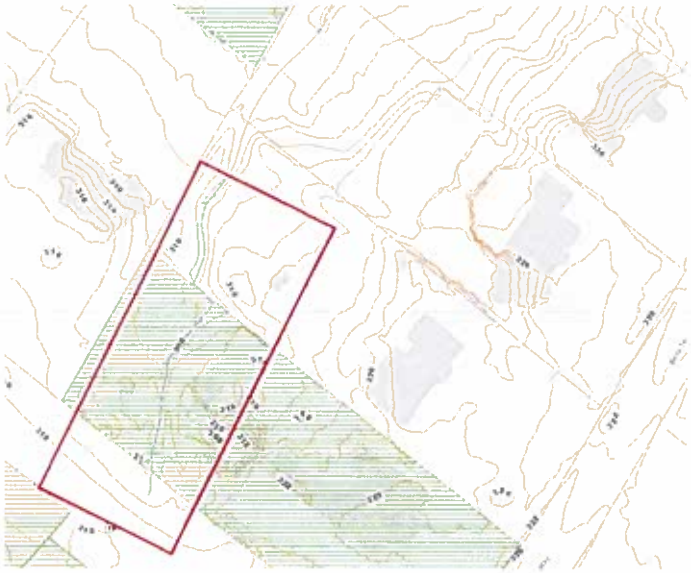




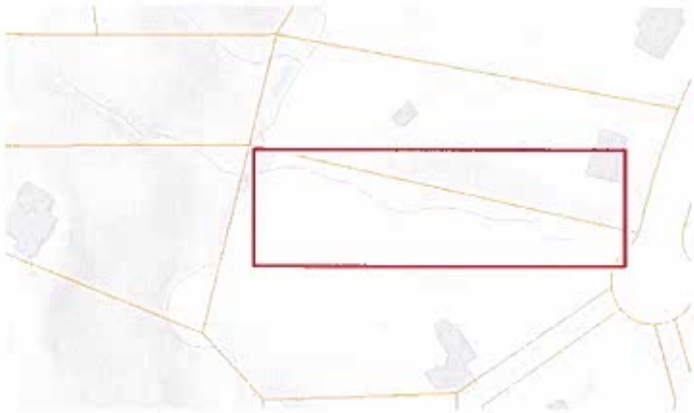
Site 4: 9300 Belle Terre Way

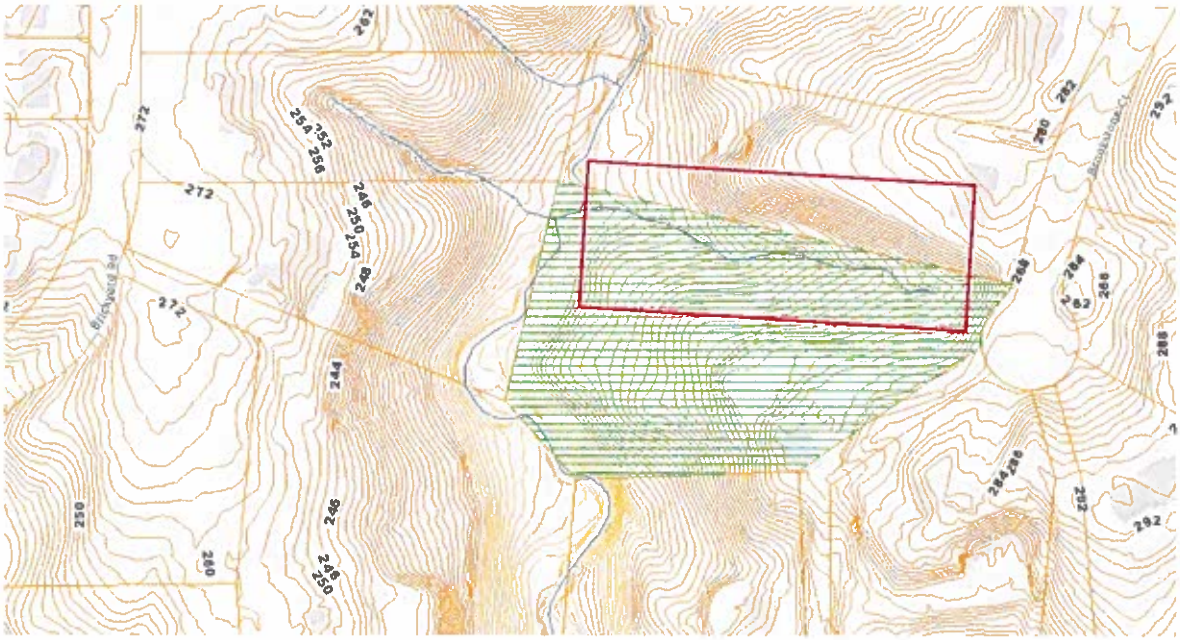




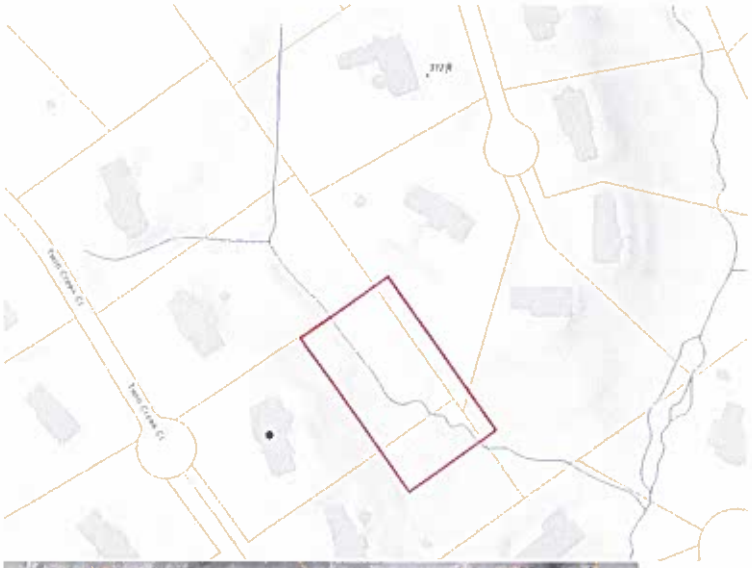


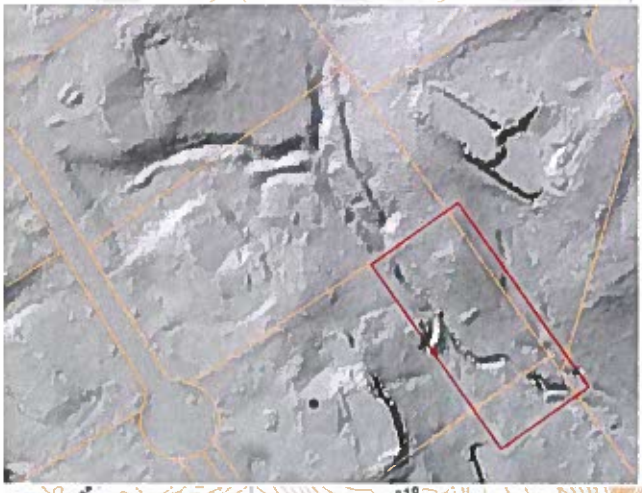
Site 5: 7212 Brookstone ct

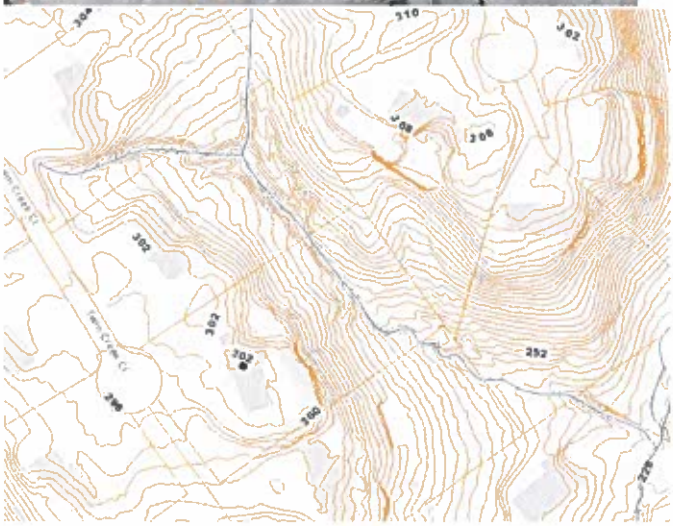




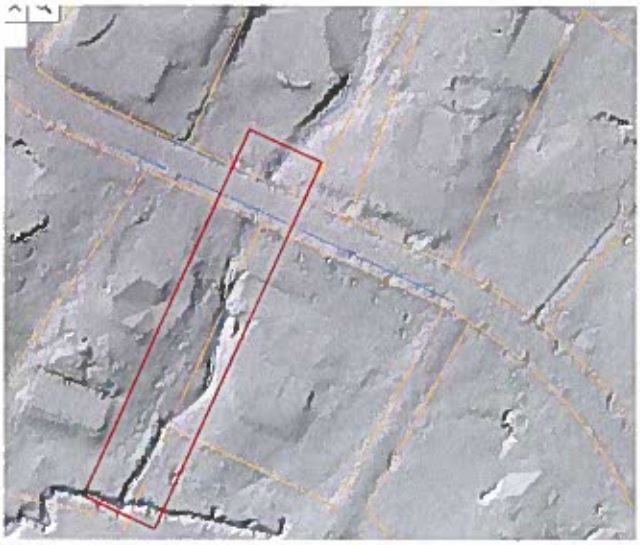
Site 6: 8805 Twin Creek

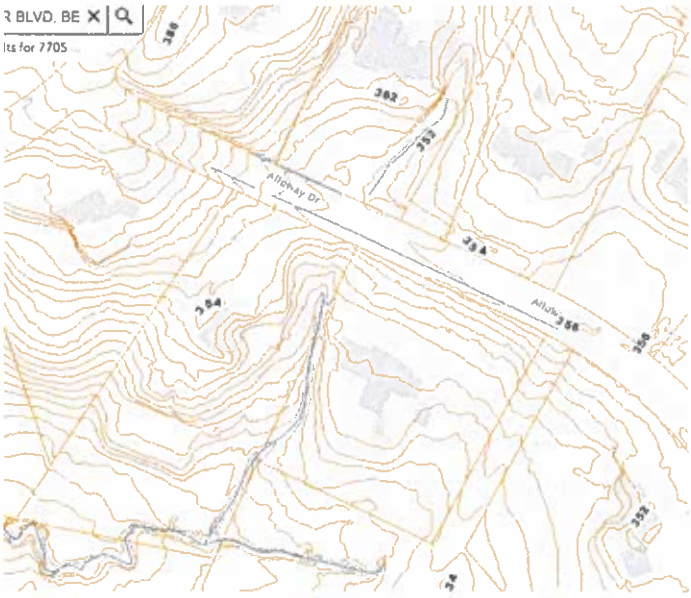




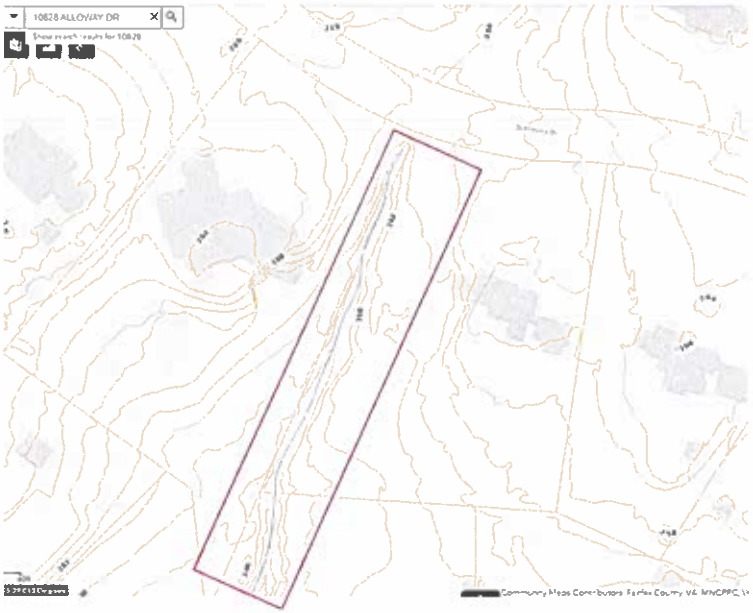


Site 7: 10828 ALLOWAY DR

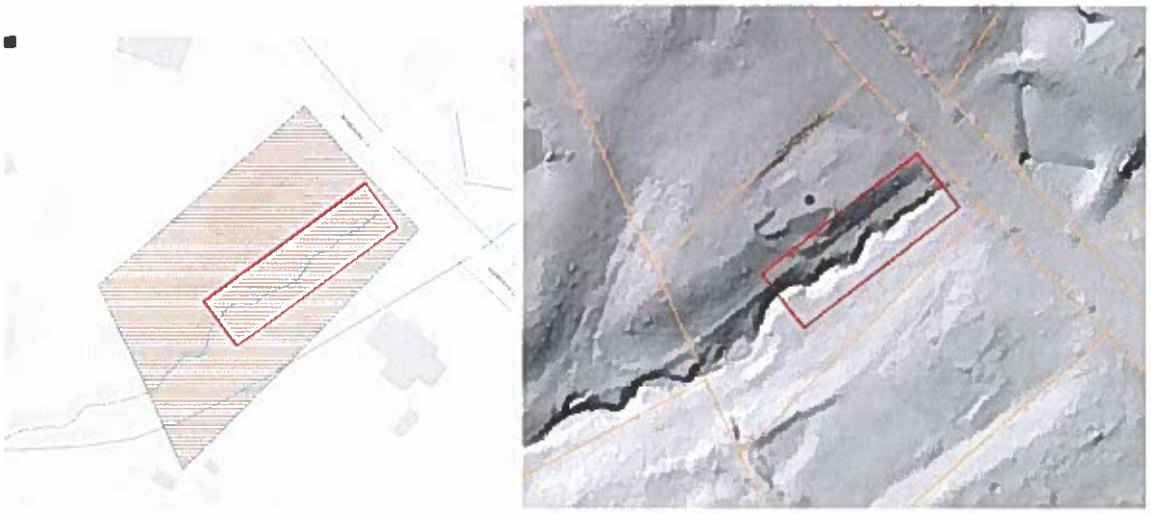


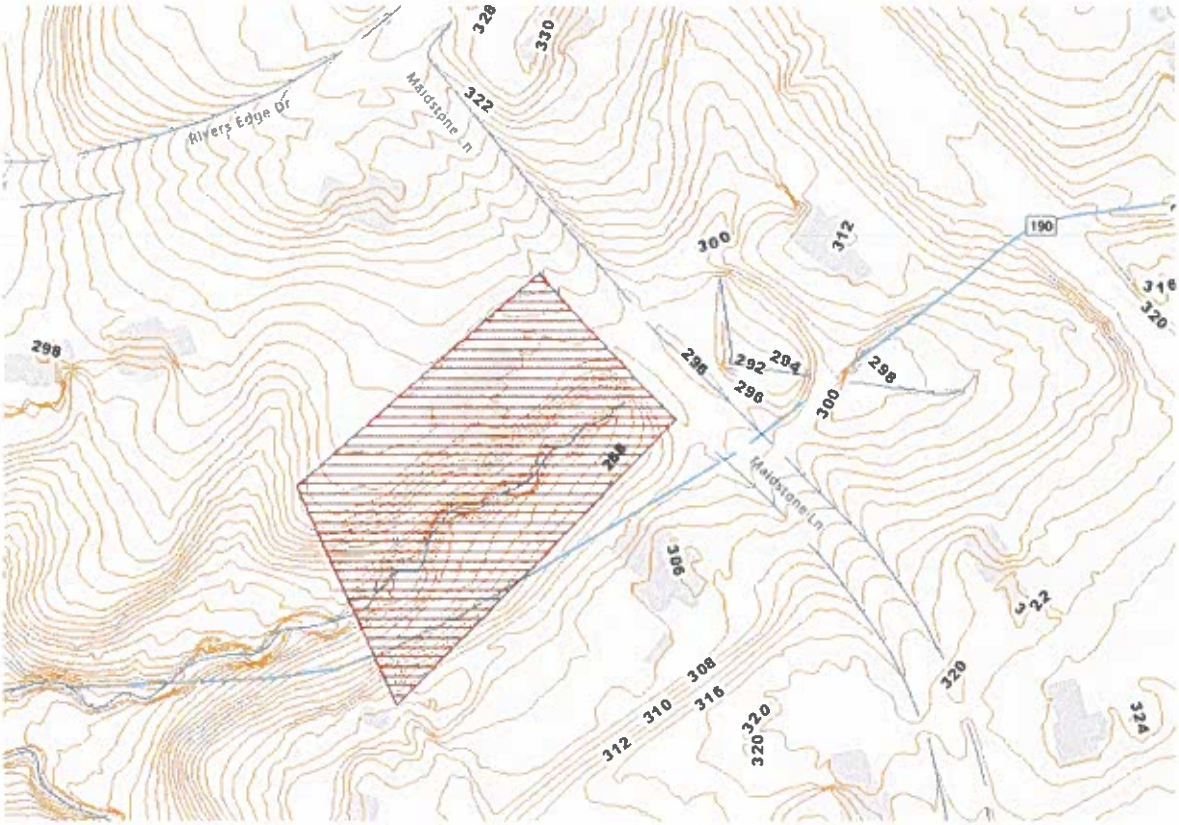


Site 8: 10726 Stanmore Rd

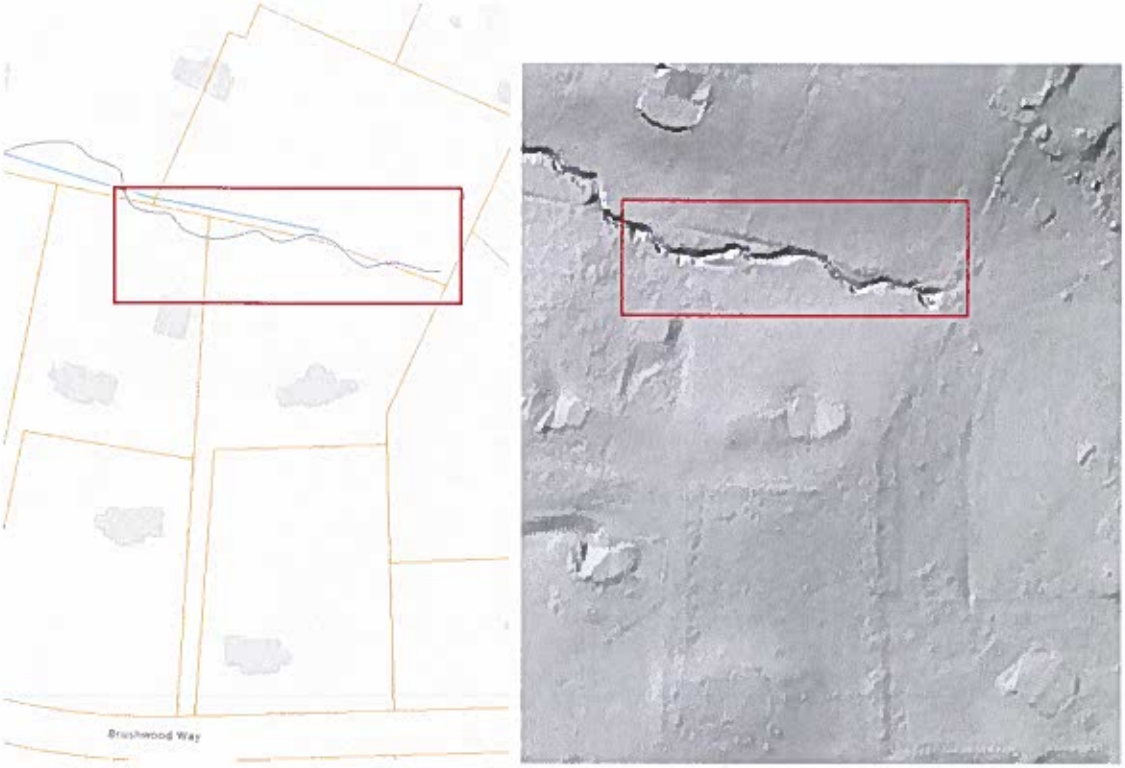


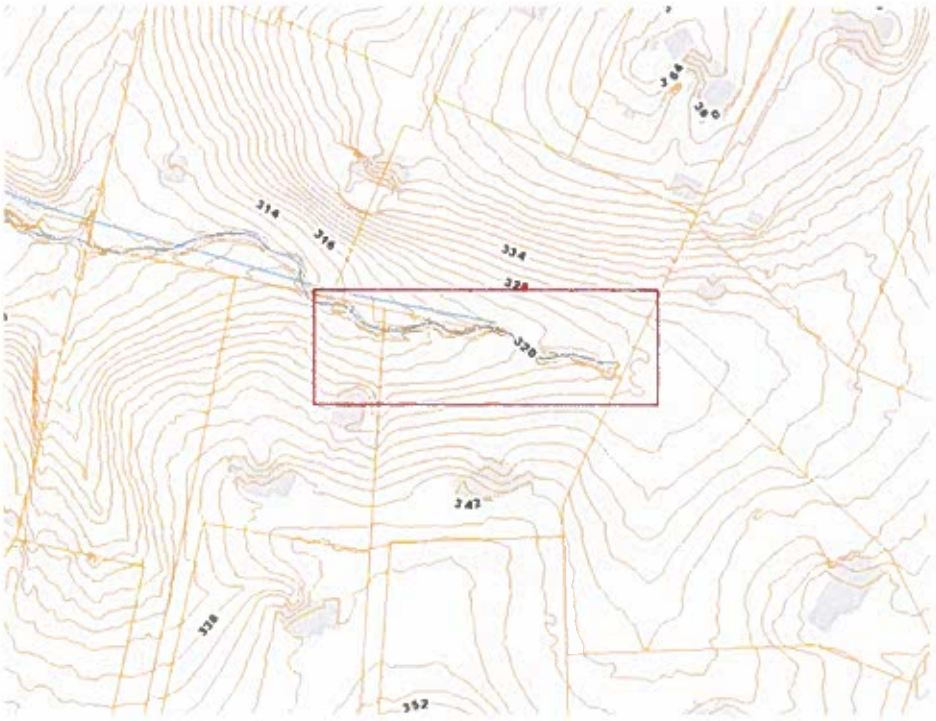
Site 9: 13505 MAIDSTONE LN





Site 10: 13109 Brushwood Way

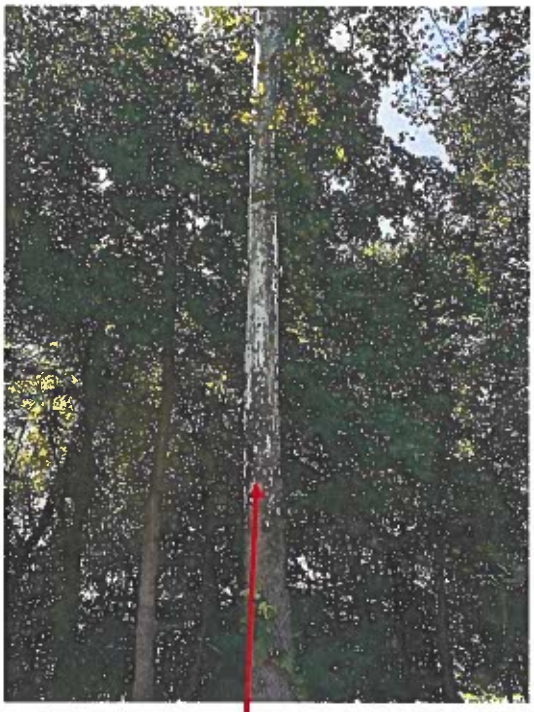


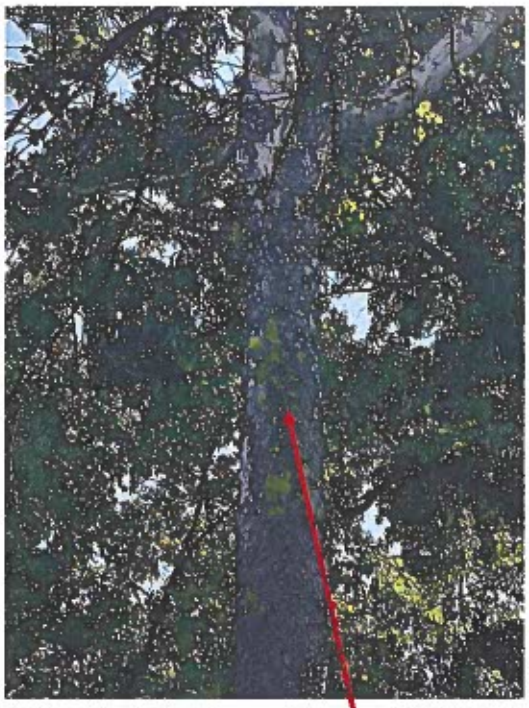


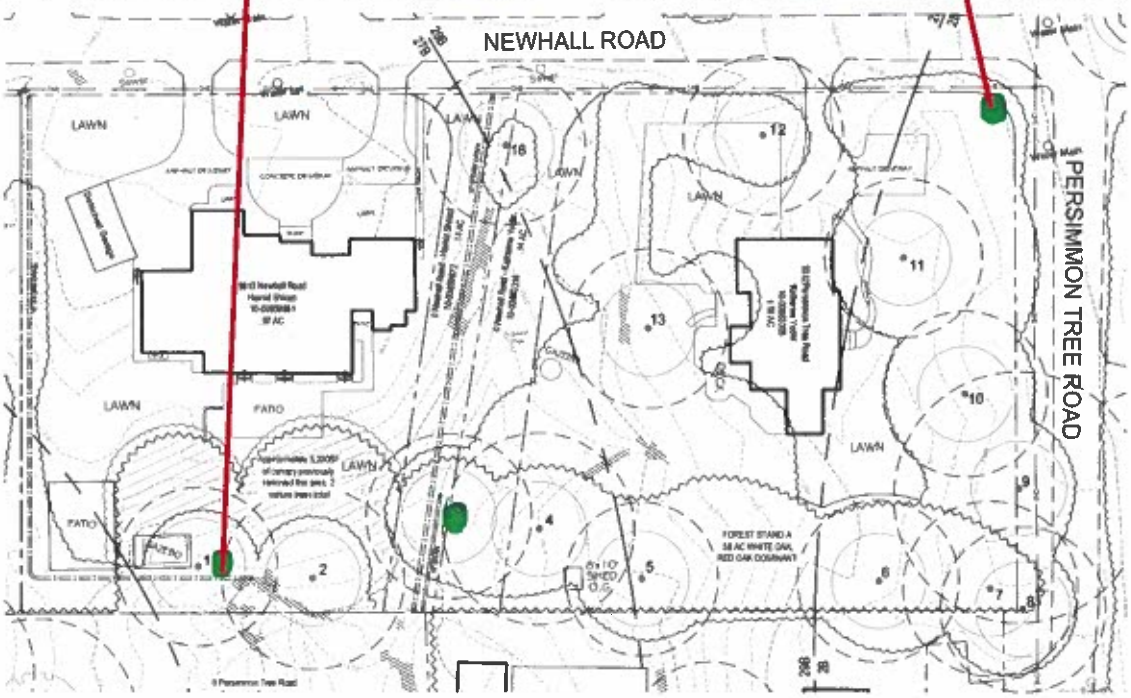
Attachment 6- P10

Attachment 7: American Sycamore

Besides the American Sycamore in proximity to the stream, marked as 3 on the plan, there are two other mature Sycamores inside the project site not located in proximity to the stream.





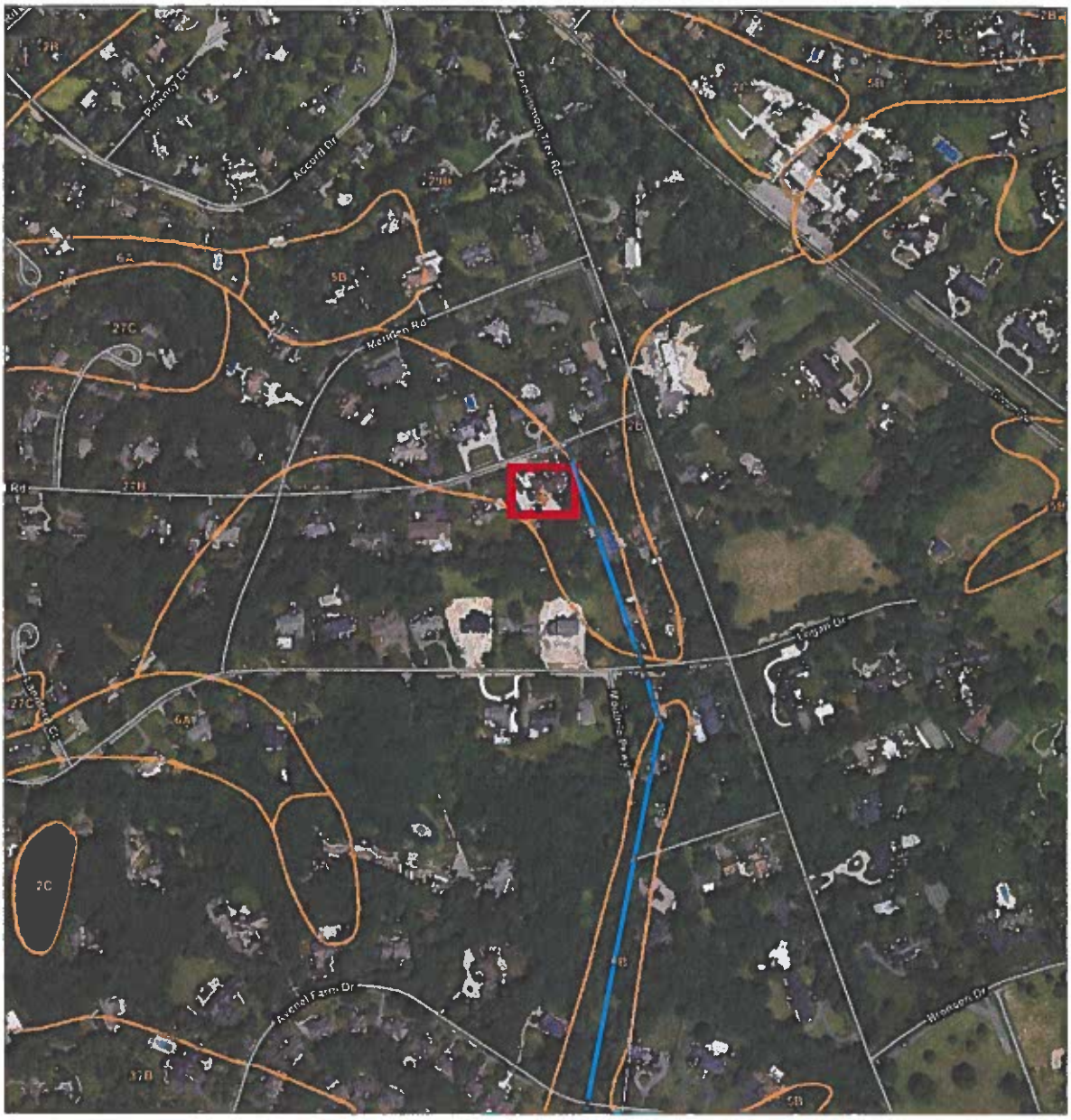


Attachment 7 -P1

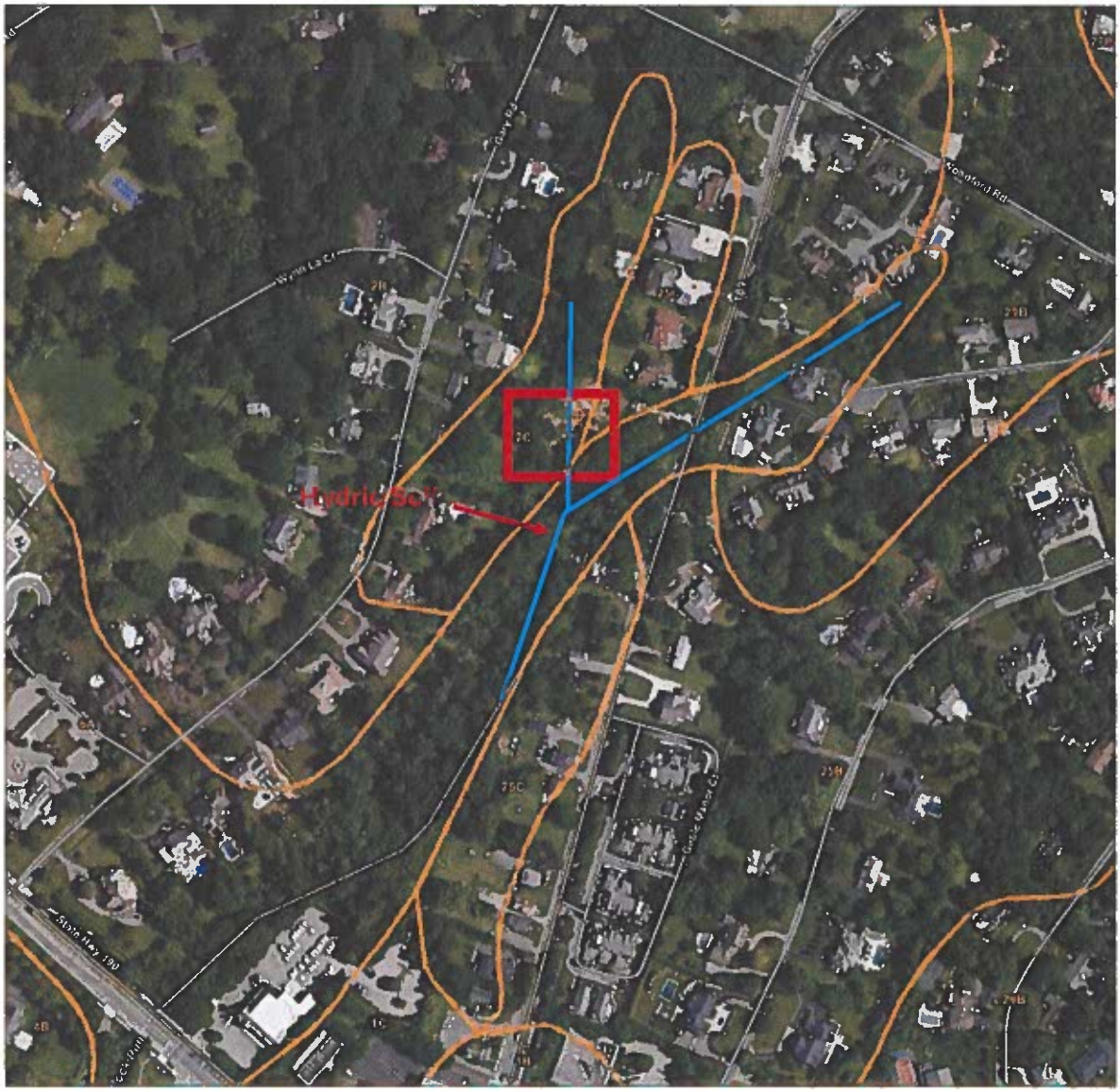
Attachment 8 - Soil Maps: Rex Box represents the property. Blue line represents the stream.

Site 1: 9810 Newhall Road: No hydric soil is mapped on property. Soil type along the stream is typical of surrounding landscape near Property.

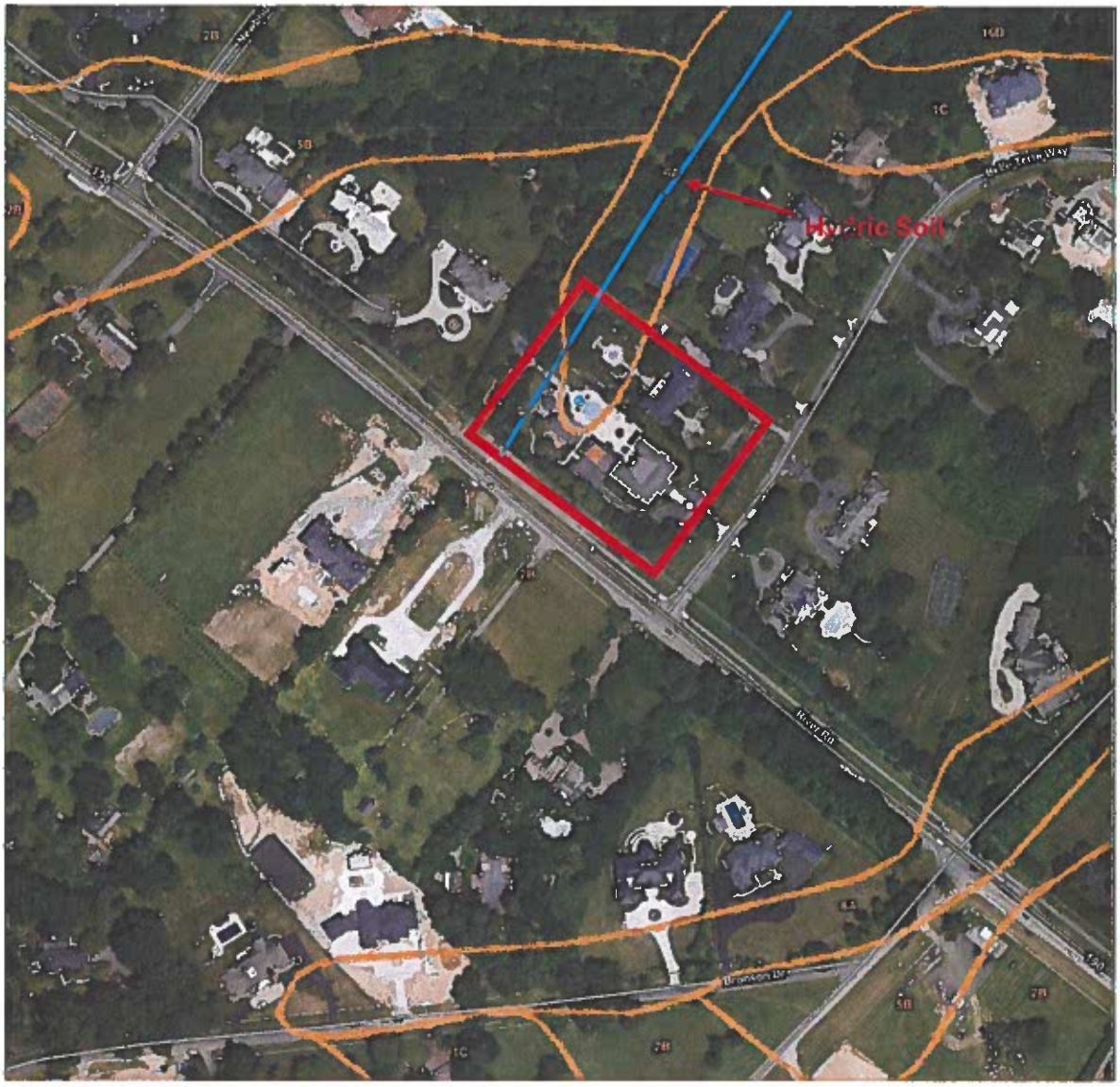
Important to note that soil type along the stream is not typical of surrounding landscape south of Logan Dr. indicating the possibility of an intermittent stream farther south of the Property.



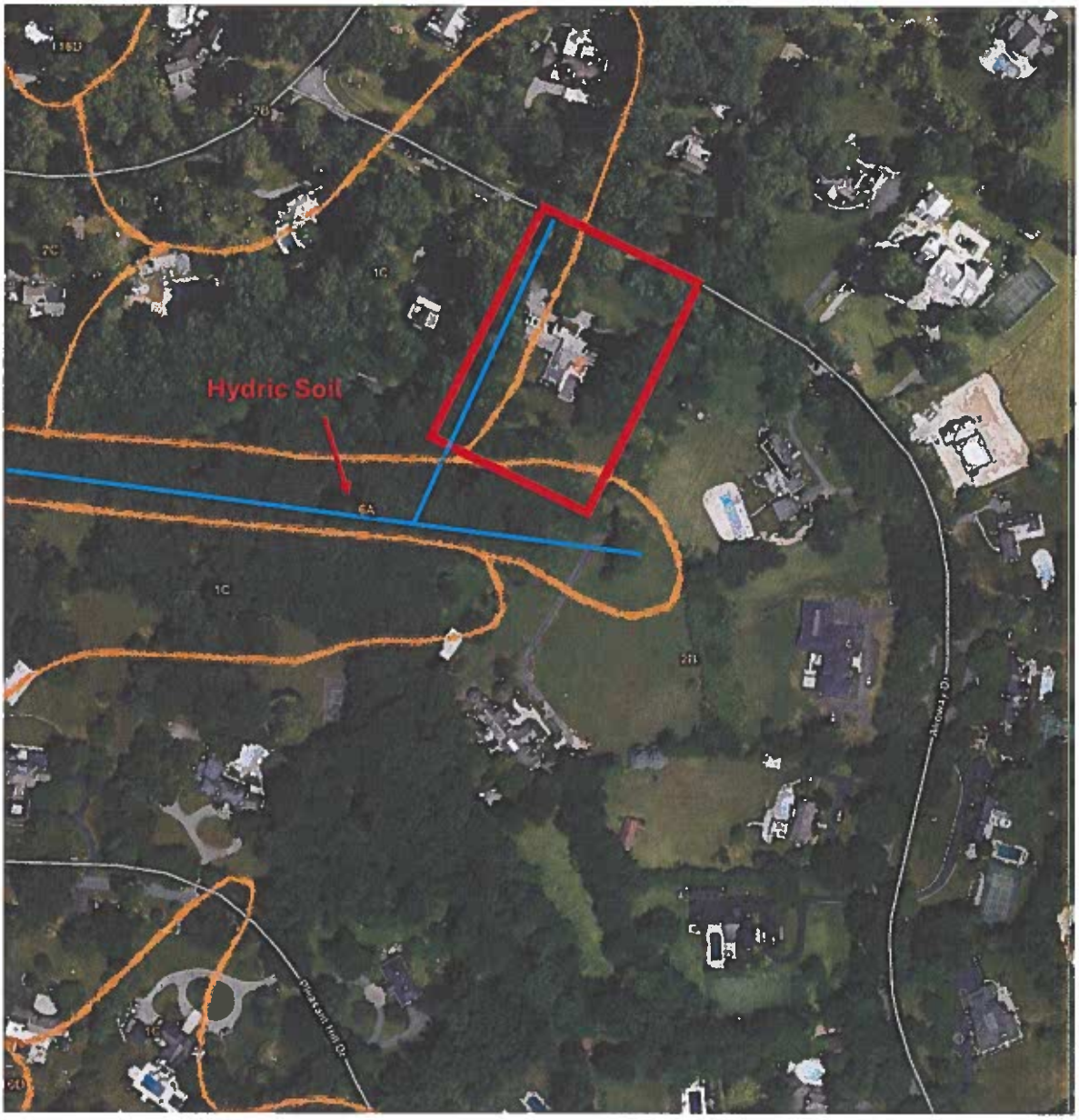
Site 2: 10202 Falls Rd



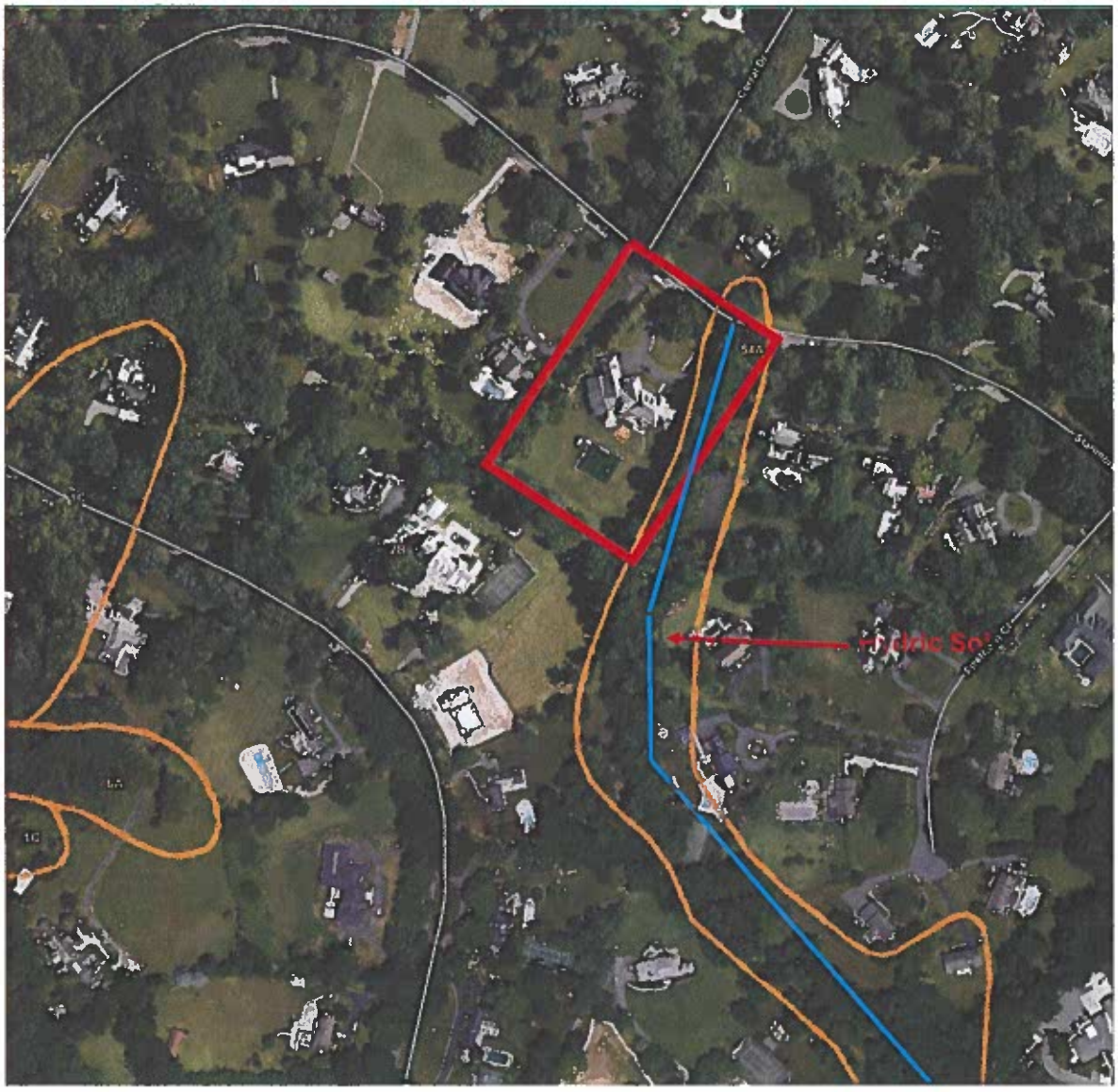
Site 4: 9300 Belle Terre Way



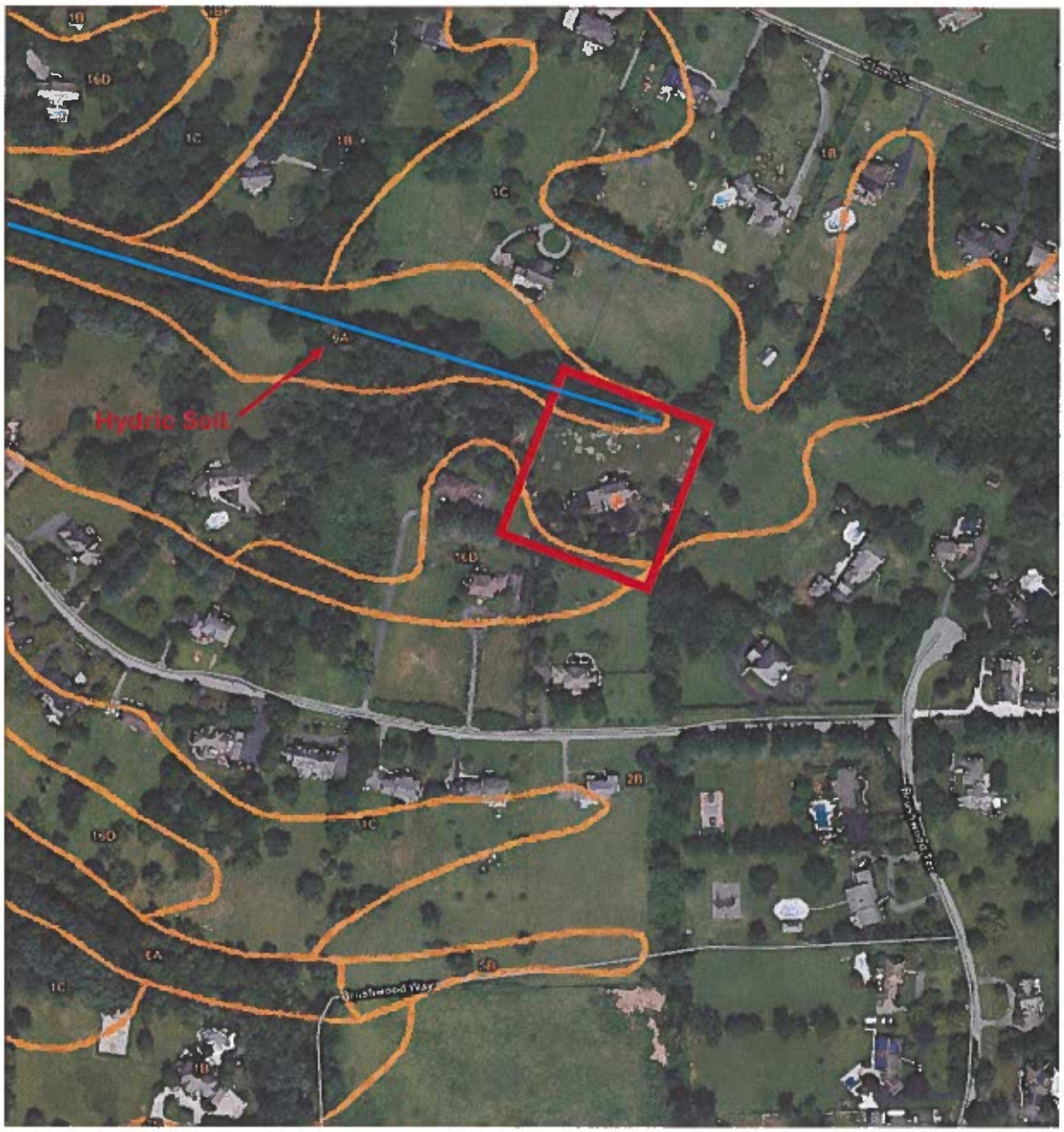
Site 7: 10828 ALLOWAY DR



Site 8: 10726 Stanmore Rd

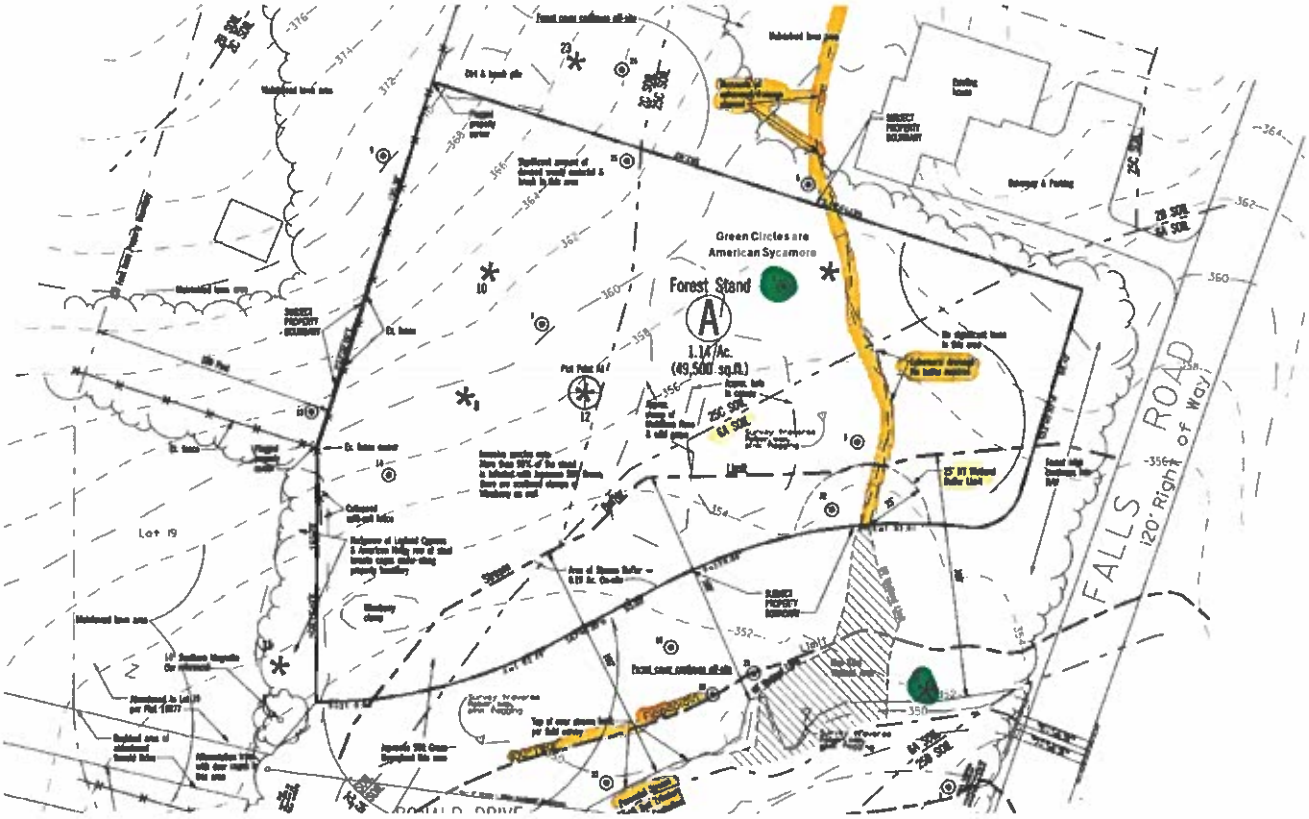


Site 10: 13109 Brushwood Way



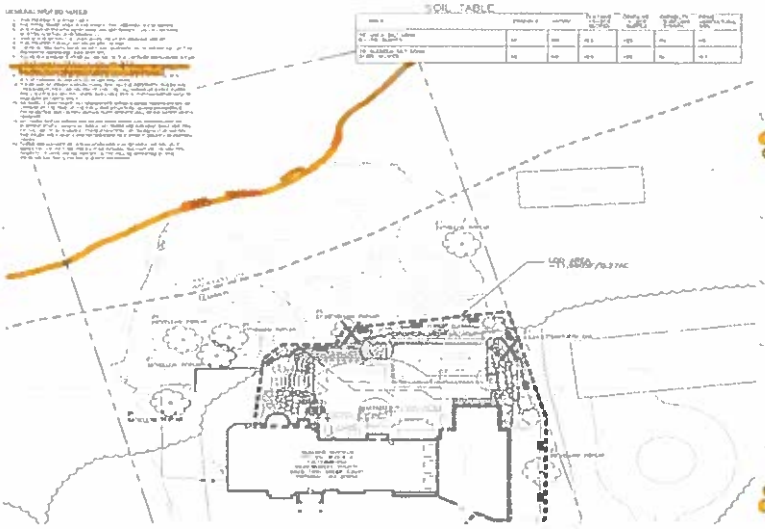
Attachment 9 - Flood Plains

Site 2: 10202 Falls Rd



Attachment 8 - P1

Site 6: 8805 Twin Creek



GENERAL INFORMATION

This is a 2.00-acre site that consists of one lot privately owned. The site currently hosts an existing residence, pool, patio and associated drives. The site is bordered by residential properties to either side. The site has vehicle access from Twin Creek Court. The site lies within the Cabin John Creek Watershed, Use I-P.

ENVIRONMENTAL FEATURES

100 YEAR FLOOD PLAIN

There is a 100-yr floodplain associated with the property according to the FEMA flood map (Community Panel # 24031C0140D).

SOILS

The *Soil Survey of Montgomery County, Maryland* describes the soil types present on the site as follows. The general soil association for this part of the county is Glenelg-Gaila-Occoquan.

Soil type 1C is the Gaila silt loam, 8 to 15 percent slopes, very deep and well drained. The potential productivity for trees on this soil is moderate. The restrictions to lawn and landscaping are moderate when steep slopes are encountered. The limitations for pond reservoir areas is severe due to seepage and when steep slopes are encountered. The potential for Wild herbaceous plants, hardwood trees, and coniferous trees is good. Potential for wetland plants and shallow water areas is very poor. The Gaila soil is not listed on the Hydric soils list of Maryland.

Soil type 2B - Glenelg silt loam, 3 to 8 percent slopes. This soil is very deep and well drained. It is usually found on broad ridgetops in upland areas. The slopes are generally smooth, but some are dissected by drainageways. This soil is well suited for dwellings and urban development. The only limitation is its moderate permeability which can limit the absorption from septic fields.

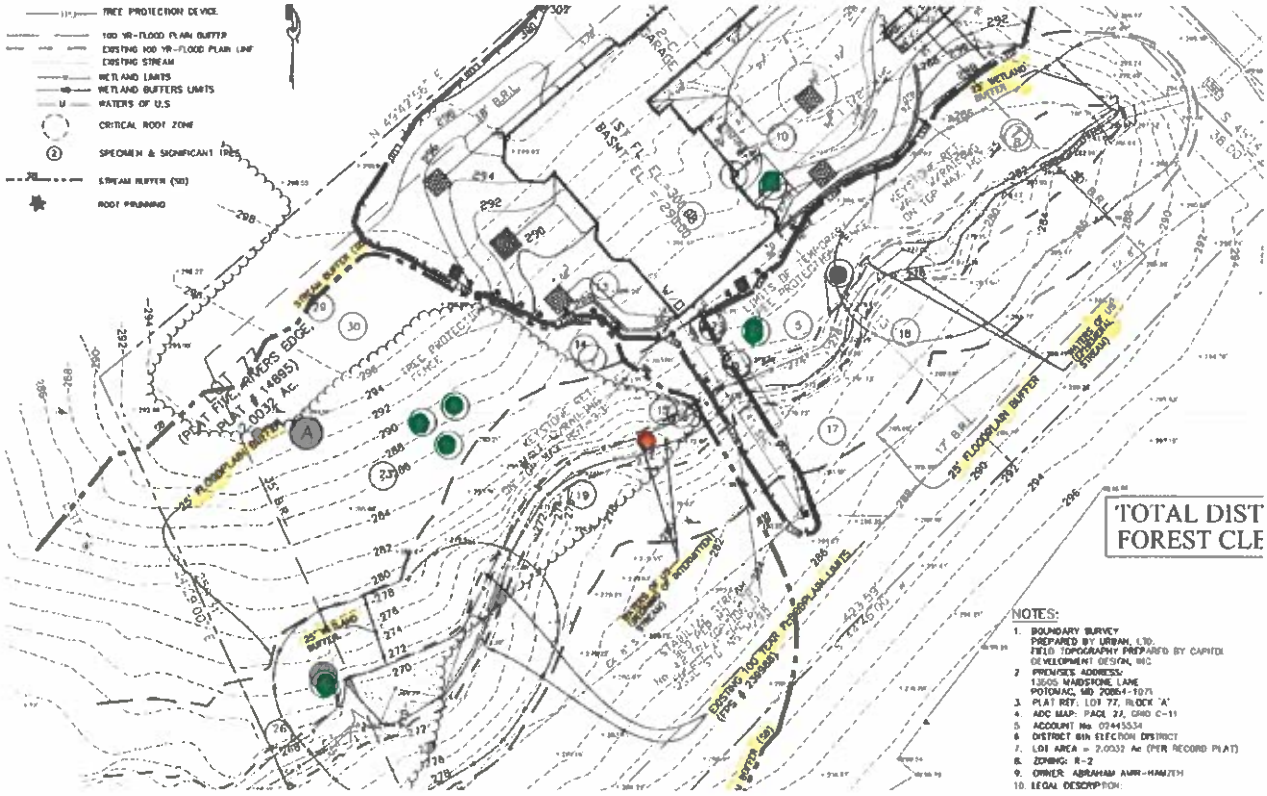
NONTIDAL WETLANDS

There are no wetlands or wetland buffers observed on or within 100' of the study area during the field investigation.

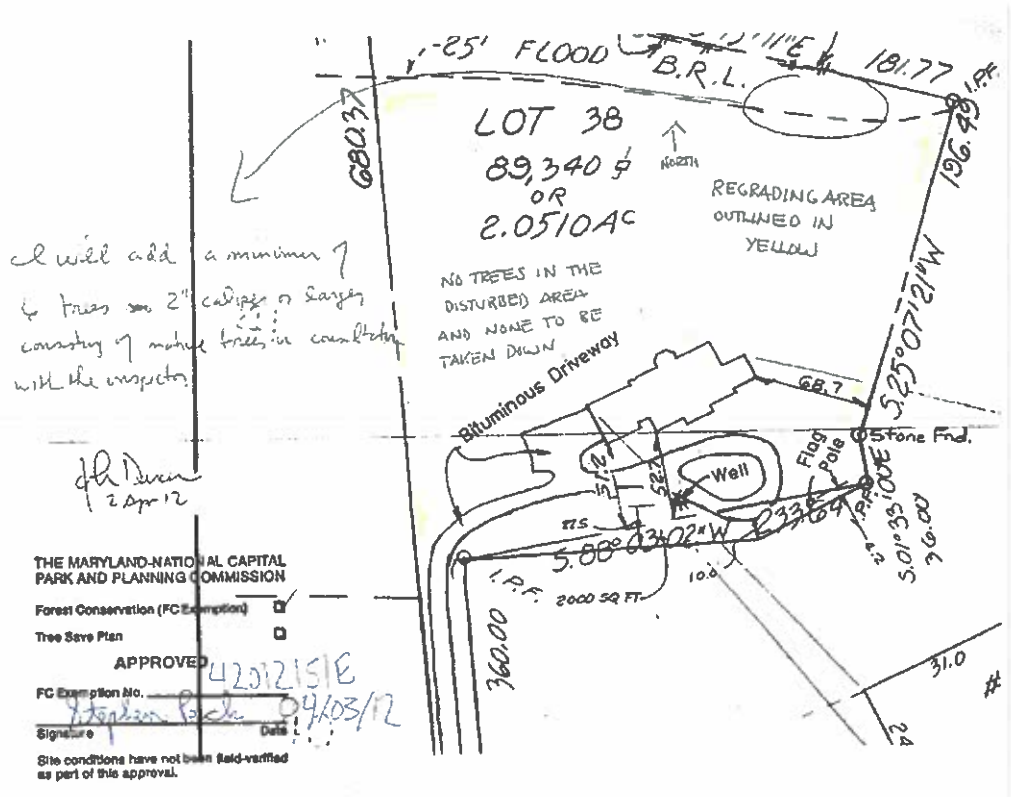
STREAMS AND DRAINAGEWAYS

There is an eroded ephemeral stream within 100' to the rear of the property. There is no stream buffer to encroach on the study area for the implementation of this SWM.

Site 9: 13505 MAIDSTONE LN

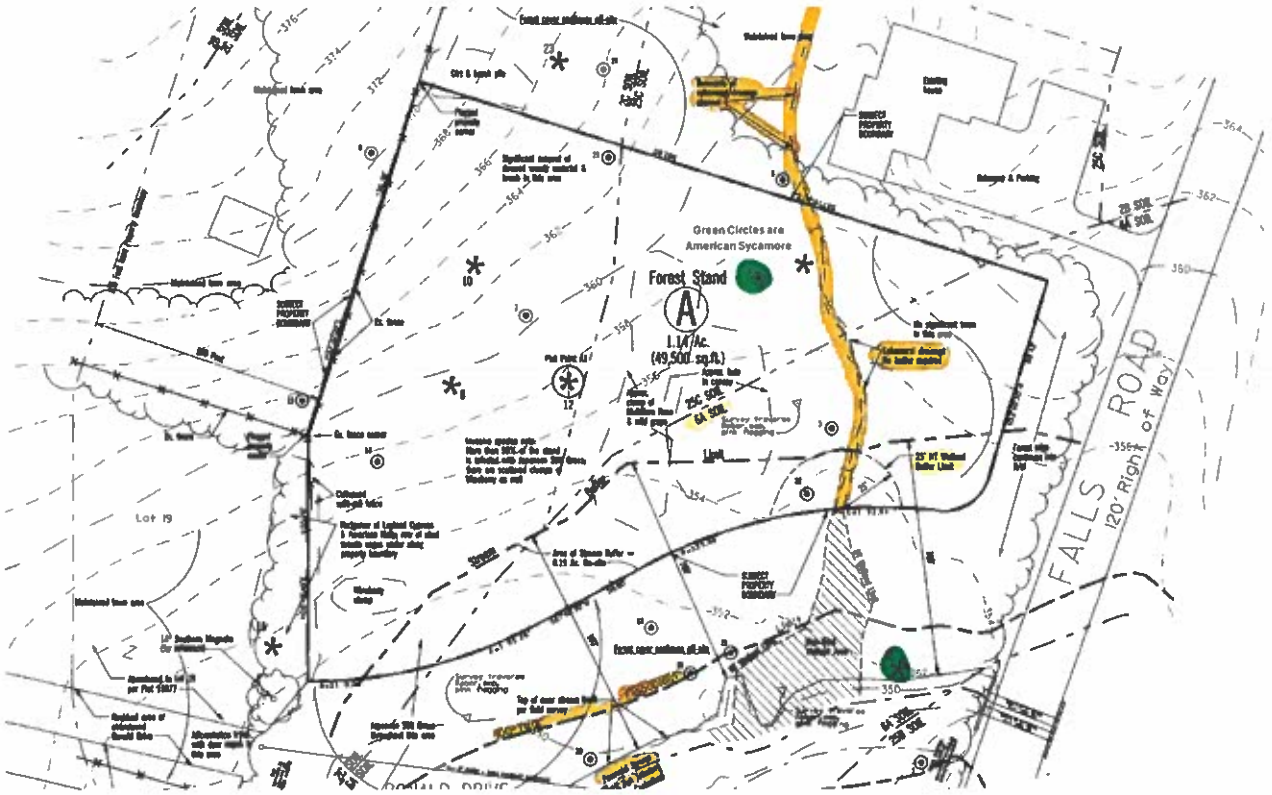


Site 10: 13109 Brushwood Way



Attachment 10: Wetlands in Proximity (Upstream and Downstream) to Ephemeral Streams

Site 2: 10202 Falls Rd



Attachment 10- P1

Site 9: 13505 MAIDSTONE LN