

Project Narrative

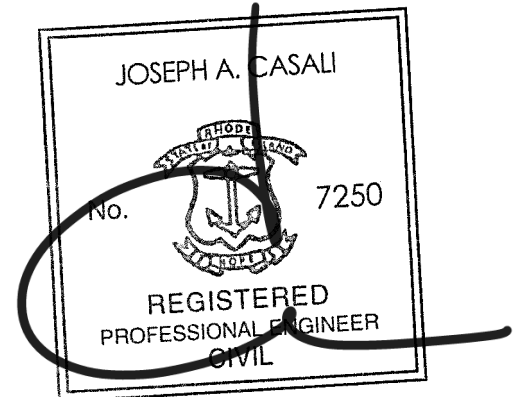
For a Proposed

5-Lot Residential Subdivision

**216 Saugatucket Rd.
South Kingstown, Rhode Island
AP 42, Lot 8**

Prepared for:

Denali Building Co. Inc.
Attn: Mr. Peter Abbenante Jr.
620 Old Baptist Rd.
N. Kingstown, RI 02852



Submission Date:

November 2024

11/14/2024

Submitted by:

JCE

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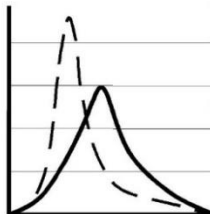


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APPENDICES

- Appendix A: Soil Evaluation Test Hole Logs, prepared by Avizinis Environmental Services, Inc., dated October 2024
- Appendix B: Freshwater Wetland Report of Findings, prepared by Natural Resource Services, Inc., dated December 2023
- Appendix C: RIDEM Edge Verification letter (Application No. 24-0177)

1 INTRODUCTION

On behalf of Denali Building Co., Inc., Joe Casali Engineering, Inc. (JCE) has prepared the following Project Narrative to identify existing and proposed site conditions related to a proposed 5-lot residential subdivision of 216 Saugatucket Road in South Kingstown, Rhode Island. The subject property can also be identified as Tax Assessor's Plat Map (AP) 42, Lot 8. The property lies within the medium density residential (R40) Zoning District. In an effort to blend in with the natural character of the surrounding area, the Applicant is proposing to utilize the flexible frontage provision of the South Kingstown Zoning Ordinance for the subdivision design, providing access to the proposed 5-lots via a shared access driveway.

2 SITE LOCATION AND PHYSICAL DESCRIPTION

2.1 Existing Conditions

According to a Class I Boundary Survey completed by Ocean State Planners, Inc. in August 2024, the subject parcel is approximately 597,477 sq. ft. (13.72 acres) in area. The subject parcel is bound by Saugatucket Rd. to the north, residential properties to the west and east, and a large parcel owned by the Audubon Society of Rhode Island to the south. The parcel is currently occupied by a single-family dwelling with accessory structures and gravel driveway, constructed in 1880. The lot has a history of agricultural activity. A review of historical aerials of the site shows maintenance of an open field from 1939 to 1981 that extended from the home to the stone wall that bisects the property. Since 1981, there has been irregular periods of maintenance and regrowth of the field area towards the center of the parcel.

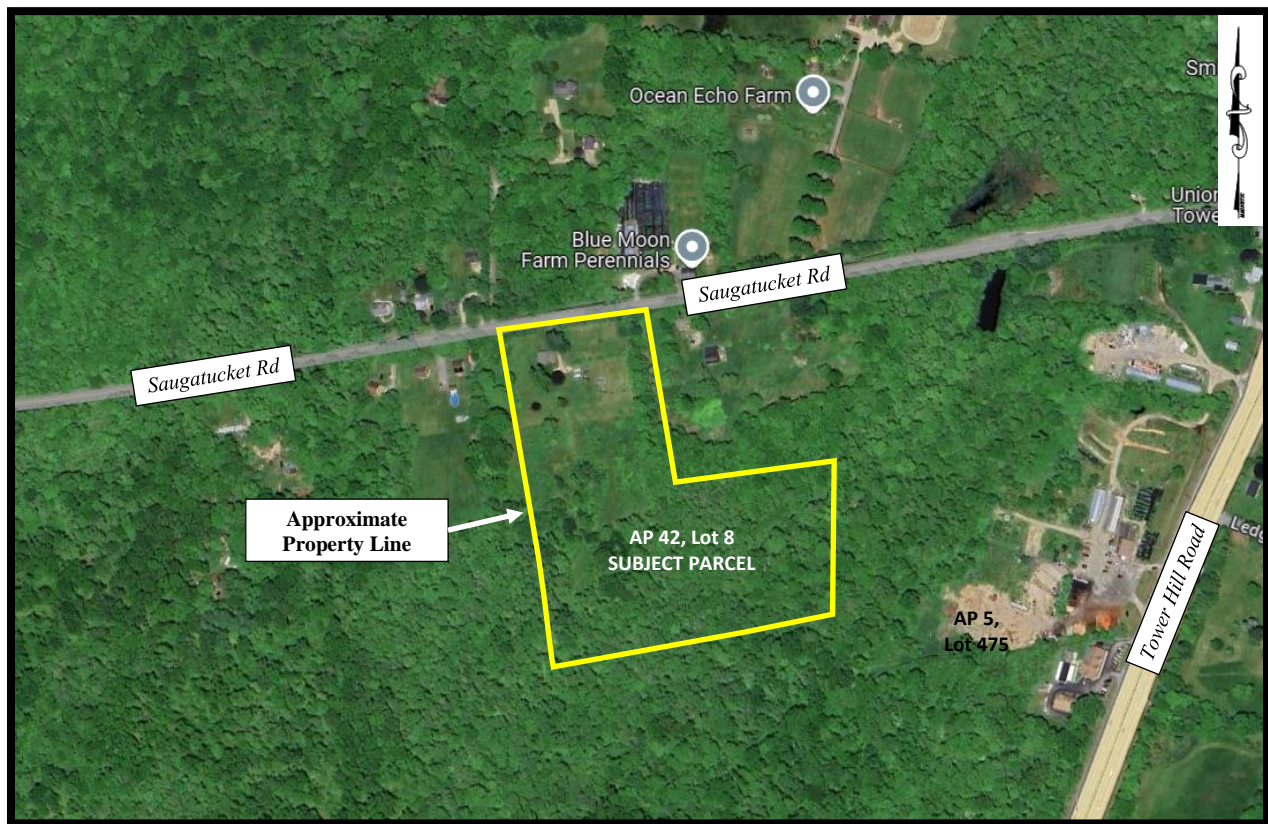


Figure 1 - Locus Map
NOT TO SCALE

2.2 Soil Classification

According to the *Web Soil Survey (WSS)* operated by the US Department of Agriculture Natural Resources Conservation Service (NRCS), produced by the National Cooperative Soil Survey, the soils on site consist primarily of Broadbrook silt loam, 0 to 3 percent slopes (BrA) and Rainbow silt loam, 3 to 8 percent slopes (RaB). BrA soils generally consist of coarse-loamy eolian deposits over coarse-loamy lodgment till derived from granite and gneiss and/or schist and/or shale and siltstone; while RaB soils generally consist of coarse-loamy eolian deposits over coarse-loamy lodgment till derived from granite and gneiss and/or schist. Both BrA and RaB soils generally consist of a depth to the seasonal high groundwater table of 18 to 30-inches below the ground surface, belonging to Hydrologic Soil Group C. Soil evaluations for stormwater management design and on-site wastewater treatment system design (OWTS) were completed in October 2024; logs are included in Appendix A.

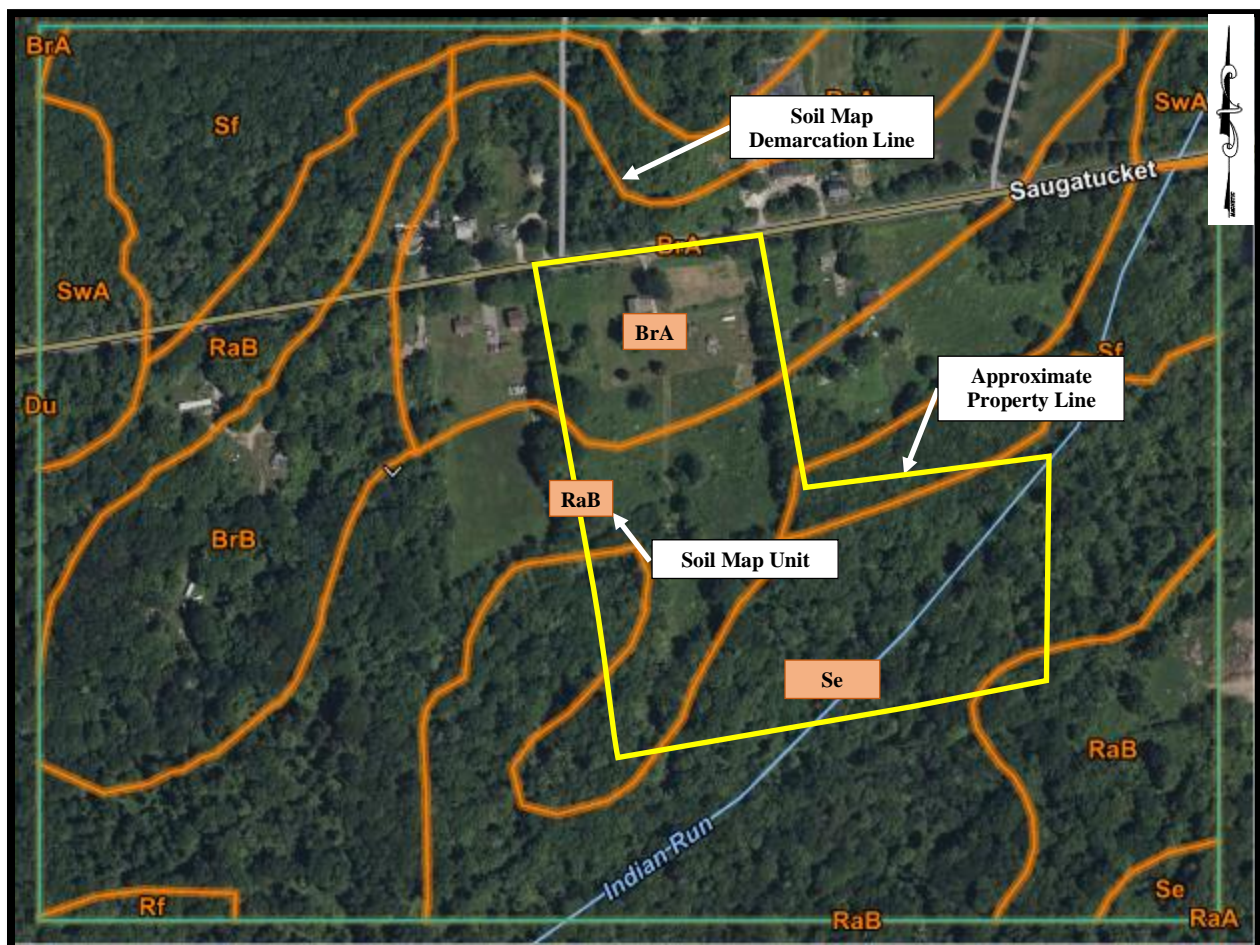


Figure 2 - Soils Map
NOT TO SCALE

2.3 FEMA Flood Hazard

The site is located on the Federal Emergency Management Agency (FEMA), Flood Insurance Rate Map for the Town of South Kingstown, Rhode Island, Map Number 44009C0203K, effective date April 3, 2020. The subject parcel is located entirely within Flood Zone X, which is defined as areas determined to be outside the 0.2% annual chance flood plain.

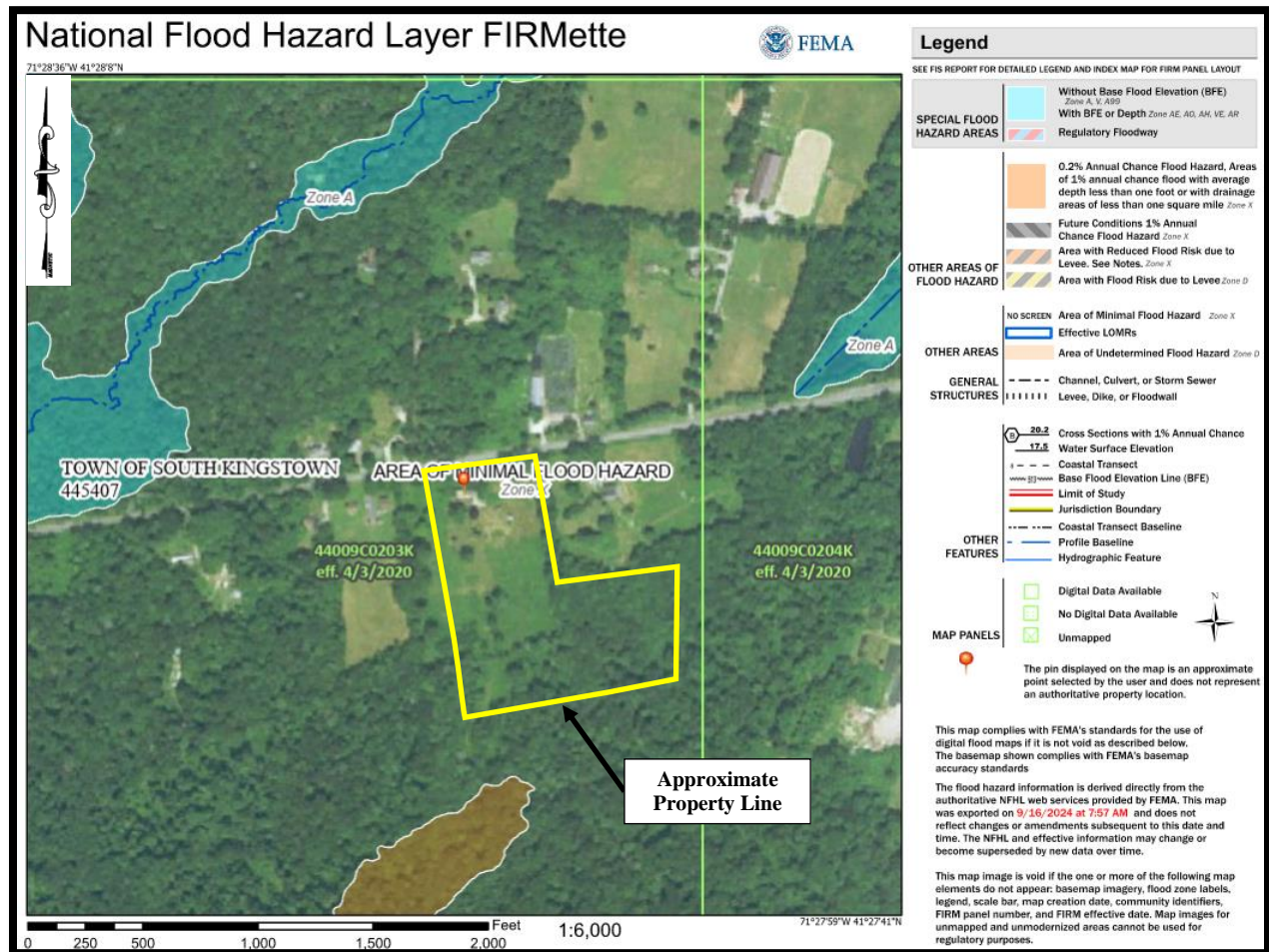


Figure 3 – FEMA Flood Insurance Rate Map (FIRMette)
NOT TO SCALE

2.4 Natural and Recreational Resource Inventory

Based on a Freshwater Wetland Delineation and report prepared by Natural Resource Services, Inc., we understand that a deciduous forested swamp exists within the southern portion of the site, continuing off-site to the south, encompassing greater than 10-acres in area. Swamps of this size are subject to a 75-ft buffer zone. In addition, a blue-lined perennial stream is located within the wetlands on site; the Indian Run Brook. By definition, blue-lined perennial streams are considered a river for state wetland regulatory purposes and therefore the river is subject to a 100-ft buffer zone. In addition to the buffer zone standards above, any primary structure shall require an additional 20-ft setback from the buffer or existing vegetated land within the buffer zone and a 5-

ft setback for any secondary structures proposed. NRS's Freshwater Wetland Delineation report is included in Appendix B.

Wetland edges were field surveyed and a Edge Verification application was submitted to the Rhode Island Department of Environmental Management (RIDEM) in July 2024. The wetland edge, as depicted, was confirmed by RIDEM, as evidenced by the Edge Verification letter (Application No. 24-0177), included in Appendix C.

There are no known existing public, recreational or cultural resources within the subject site. The parcel is not located in any known historic planning district or a land conservation area. Mapping from the Rhode Island Department of Environmental Management (RIDEM) Environmental Resource Mapping (ERM) database indicates that the subject parcel is within a Natural Heritage Area (NHA). Based on data obtained from the RIDEM, we understand that this NHA is associated with American featherfoil (*Hottonia inflata*), a species of state concern. This species was last observed in 1992, approximately 0.15-miles to the east of the subject site. This species generally occurs within wetlands, typically lakes and ponds.

2.5 Watershed

The site is located within the Saugatuckeet River watershed (RIDEM ID# 010900050401); specifically, runoff from the subject site flows towards the south and to the Indian Run Brook (RI0010045R-02). Indian Run Brook flows to the south to a confluence with the Saugatucket River in Peace Dale. Indian Run Brook is identified as impaired based on the RIDEM ERM; impairments include heavy metals (copper, lead and zinc).

2.6 Zoning

According to the Town of South Kingstown Zoning Ordinance and Map, the site is currently within the R40 Medium Density Residential Zoning District. From the Town's Zoning Ordinance: "This district allows a residential density of up to one (1) dwelling per acre. The minimum lot size for single-household detached dwellings is forty thousand (40,000) square feet. Residential compounds will be the preferred type of residential development because they have low visual and environmental impact and fit the rural landscape. This district presently includes large estates, farms and large single-household residential lots, and the character of these lands should be maintained. Any intensive development here is not recommended. However, if major subdivision activity is proposed, cluster zoning techniques should be encouraged. Public water and public sewer service may be available but are not required. In addition, topographic and soil conditions in some portions of this district make large-scale development impractical. These areas may be environmentally sensitive and may contain much of the town's wetlands and prime agricultural areas."

The following are the current dimensional requirements for an R40 Zoning District:

Requirement	R40 Zone
Minimum Lot Area	40,000 SF
Minimum Lot Frontage	150 ft
Min. Front Yard Setback	40 ft
Min. Side Yard Setback	20 ft
Min. Corner Side Yard Setback	30 ft
Min. Rear Yard Setback	40 ft
Max. Building Coverage	20%
Max. Building Height	35 ft
Max. Accessory Bldg. Height	20 ft
Min. Accessory Bldg. Side Yard Setback	15 ft
Min. Accessory Bldg. Rear Yard Setback	10 ft

2.7 Easements

According to the Class I Boundary Survey performed by Ocean State Planners, Inc. in August 2024, there are no known easements within or immediately adjacent to the subject parcel.

2.8 Utilities

Water: A 12-inch water main exists within Saugatucket Road, owned and maintained by Veolia Water Company. It appears that the existing single-family dwelling on the subject property is serviced via the existing 12-inch main; service size is unknown.

Sewer: Public sewer is not available in the project area; the existing single-family dwelling on the subject property is serviced via an on-site wastewater treatment system (OWTS).

Electric/Communications: Electric and communication services are available via overhead lines along the northern side of Saugatucket Road. Electrical poles and associated utilities are owned and maintained by RI Energy. Telecommunications lines are owned and maintained by Verizon and/or Cox Communications.

3 PROPOSED CONDITIONS

3.1 General

The proposed development includes the subdivision of the existing parcel into five (5) new residential lots, with a single-family dwelling proposed on four (4) of the lots and the existing dwelling will be rehabilitated and situated on its own lot. Each new residential lot is proposed to be constructed with associated utilities and driveways. The proposed subdivision has been designed in accordance with the current Town of South Kingstown Zoning Ordinance and the Land Development and Subdivision Regulations. All proposed residential lots have been designed to conform to the dimensional requirements of the R40 Zone.

In an effort to conform to the Town's Zoning Ordinance, specifically "...residential compounds will be the preferred type of residential development because they have low visual and environmental impact and fit the rural landscape...", the Applicant is proposing to proceed with the Flexible Frontage provisions of the Town's Zoning Ordinance (Section 502.2). As per the requirements of Section 502.2, a Yield Plan has been prepared presenting a conventional subdivision with five (5) by-right lots. The development data is broken down as follows:

- Total Lot Area = 597,477 sq. ft. (A)
- Unbuildable Area (wetlands) = 380,753 sq. ft. (B)
- Total Developable Area (A-B) = 216,724 sq. ft. (C)
- Max. Yield (C / 40,000 sq. ft.) = 5.42 lots; say 5 lots

The Applicant is proposing five (5) flexible frontage lots; one of which will have adequate frontage (greater than 150-ft) while the remaining four lots will have reduced frontage. The five (5) lots will be accessed via a shared access driveway with stormwater mitigation area. A hammerhead turnaround area will be located at the end of the access driveway for fire apparatus and other delivery vehicles. With the exception of lot frontage and width, each lot will otherwise conform to the R40 zoning requirements.

3.2 Utilities

Water: A new domestic water service is proposed to be extended to the development from the existing 12-inch main within Saugatucket Road. Each new dwelling will be serviced by a new 1.5-inch diameter domestic water service.

Sewer: Sewer service is not available within the project area; therefore, an individual on-site wastewater treatment system (OWTs) will service each residence. The OWTS design will require review and approval by RIDEM through the Subdivision Suitability application process.

Electric/Telecommunications: Electric and telecommunications services are proposed to be extended to the new dwellings from existing infrastructure along the north side of Saugatucket Road. Services within the proposed development will be subsurface. Review and approval from Rhode Island Energy will be required.

Stormwater: Stormwater mitigation will be achieved via individual Best Management Practices (BMPs) following the State of Rhode Island Stormwater Management Guidance for Individual Single-Family Residential Lot Development. BMP's such as bioretention basins, underground infiltration chamber systems, sediment forebays, stormwater basins and water quality trenches will be located adjacent to proposed dwellings, driveways, and roadways to provide water quality and offset proposed impervious areas.

4 STATE AND LOCAL PERMITTING

4.1 Local Permit Requirements

4.1.1 South Kingstown Planning Board

The project is considered a Minor Subdivision, as the proposal includes five (5) lots. However, the Applicant is proposing to proceed with the Flexible Frontage provision of the Zoning Ordinance, which is considered a variance/waiver, which “upgrades” the project to a Major Subdivision. The Major Subdivision review process consists of abutter notifications, public meetings, and Planning Board approval: Pre-Application, Master Plan, Preliminary Plan and Final Plan.

4.1.2 Union Fire District

The proposed project's layout will require review and approval from the Union Fire District's Fire Marshal.

4.1.3 Veolia Water

Should the project proceed with connection into the existing water main for domestic water service to the development, the design will require review and approval from Veolia Water.

4.2 State Permit Requirements

4.2.1 Rhode Island Department of Environmental Management (RIDEM)

The proposed project will likely require a Freshwater Wetlands Permit from the Rhode Island Department of Environmental Management (RIDEM) Office of Water Resources. In the event that the proposed site improvements can be confined completely outside of the 100-ft wetland jurisdictional zone, a Wetlands Permit may not be required; however, a Rhode Island Pollutant Discharge Elimination System (RIPDES) permit will likely be required, as the area of disturbance will exceed one (1) acre.

Appendix A

Soil Evaluation Test Hole Logs

Prepared by Avizinis Environmental Services, Inc., dated October 2024



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Environmental Management
Office of Water Resources
Onsite Wastewater Treatment Systems Program



Site Evaluation Form
Part A - Soil Profile Description Application Number 2432-1165

Property Owner: Janice Calitri
Property Location: 216 Saugatucket Road (A.P. 42, Lot 8), South Kingstown, Rhode Island
Date of Test Hole: October 18, 2024
Soil Evaluator: Amber K. Hardy, M.S. License Number: D4098
Weather: Sunny, 55° F Shaded: Yes No Time: 9:00 am

Table with 11 columns: TH 1-1 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox (Ab. S. Contr.), Texture, Structure, Consistence, Soil Category. Rows include horizons ^C, Ap, Bw, 2Cd and TH 1-2 horizons Ap, Bw, 2Cd.

TH 1-1 Soil Class G/A Total Depth 96 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 18 (og)

TH 1-2 Soil Class G/A Total Depth 102 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 18 (og)

Comments:

Part B





Site Evaluation – to be completed by Soil Evaluator or Class II or III Designer

Please use the area below to locate:

1. Test holes and bedrock test holes,
2. Approximate direction of due north,
3. Offsets from all test holes to fixed points such as street, utility pole, or other permanent, marked object.*

***OFFSETS MUST BE SHOWN**

Key:

-  Approximate location of test holes
-  Approximate location of bedrock test holes
-  Estimated gradient and direction of slope
-  Approximate direction of due north



Bedrock THs	
TH	Depth

1. Relief and Slope: 3 – 8%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes? If yes, locate on above sketch. NO YES
3. Restrictive Layer or Bedrock within 4' below original ground within 25 feet of test hole? Provide all test hole locations & depths above. NO YES
4. Presence of existing or proposed private drinking water wells within 200 feet of test holes? If yes, locate on above sketch. NO YES
5. Public drinking water wells within 500 feet of test holes? If yes, locate on above sketch. NO YES
6. Is site within the watershed of a public drinking water reservoir or other critical area defined in Rule 6.42? NO YES
7. Has soil been excavated from or fill deposited on site? If yes, locate on above sketch. NO YES
8. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
9. Landscape position: Shoulder
10. Vegetation: Agricultural field, grass, field flowers, landscape trees
11. Indicate approximate location of property lines and roadways.
12. Additional comments, site constraints or additional information regarding site: _____

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by: *Subwarsky* Signature License #D4098 Part B prepared by: *Subwarsky* Signature License # D4098

DO NOT WRITE IN THIS SPACE

Witnessed Soil Evaluation Decision: Concur Inconclusive Disclaim
Unwitnessed Soil Evaluations Decision: Accept Inconclusive Disclaim

Wet Season Determination required Additional Field Review Required

Explanation: _____

Signature Authorized Agent _____ Date _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

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Onsite Wastewater Treatment Systems Program



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Date of Test Hole: October 18, 2024
Soil Evaluator: Amber K. Hardy, M.S. License Number: D4098
Weather: Sunny, 55° F Shaded: Yes No Time: 9:00 am

Table with 11 columns: TH 2-1 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox (Ab. S. Contr.), Texture, Structure, Consistence, Soil Category. Includes data for TH 2-1 and TH 2-2 horizons.

TH 2-1 Soil Class G/A Total Depth 96 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 24 (og)

TH 2-2 Soil Class G/A Total Depth 102 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 24 (og)

Comments:

Part B





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Please use the area below to locate:

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2. Approximate direction of due north,
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Key:

-  Approximate location of test holes
-  Approximate location of bedrock test holes
-  Estimated gradient and direction of slope
-  Approximate direction of due north



Bedrock THs	
TH	Depth

1. Relief and Slope: 3 – 8%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes? If yes, locate on above sketch. NO YES
3. Restrictive Layer or Bedrock within 4' below original ground within 25 feet of test hole? Provide all test hole locations & depths above. NO YES
4. Presence of existing or proposed private drinking water wells within 200 feet of test holes? If yes, locate on above sketch. NO YES
5. Public drinking water wells within 500 feet of test holes? If yes, locate on above sketch. NO YES
6. Is site within the watershed of a public drinking water reservoir or other critical area defined in Rule 6.42? NO YES
7. Has soil been excavated from or fill deposited on site? If yes, locate on above sketch. NO YES
8. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
9. Landscape position: Shoulder
10. Vegetation: Agricultural field, grass, field flowers, landscape trees
11. Indicate approximate location of property lines and roadways.
12. Additional comments, site constraints or additional information regarding site: _____

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Explanation: _____

Signature Authorized Agent _____ Date _____



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Date of Test Hole: October 18, 2024
Soil Evaluator: Amber K. Hardy, M.S. License Number: D4098
Weather: Sunny, 55° F Shaded: Yes No Time: 9:00 am

Table with 11 columns: TH 3-1 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox (Ab. S. Contr.), Texture, Structure, Consistence, Soil Category. Contains data for two soil profiles (TH 3-1 and TH 3-2).

TH 3-1 Soil Class G/A Total Depth 108 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 32 (og)

TH 3-2 Soil Class G/A Total Depth 108 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 32 (og)

Comments:

Part B





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3. Offsets from all test holes to fixed points such as street, utility pole, or other permanent, marked object.*

***OFFSETS MUST BE SHOWN**

Key:

-  Approximate location of test holes
-  Approximate location of bedrock test holes
-  Estimated gradient and direction of slope
-  Approximate direction of due north



Bedrock THs	
TH	Depth

1. Relief and Slope: 3 – 8%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes? If yes, locate on above sketch. NO YES
3. Restrictive Layer or Bedrock within 4' below original ground within 25 feet of test hole? Provide all test hole locations & depths above. NO YES
4. Presence of existing or proposed private drinking water wells within 200 feet of test holes? If yes, locate on above sketch. NO YES
5. Public drinking water wells within 500 feet of test holes? If yes, locate on above sketch. NO YES
6. Is site within the watershed of a public drinking water reservoir or other critical area defined in Rule 6.42? NO YES
7. Has soil been excavated from or fill deposited on site? If yes, locate on above sketch. NO YES
8. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
9. Landscape position: Backslope
10. Vegetation: Agricultural field, grass, field flowers, landscape trees
11. Indicate approximate location of property lines and roadways.
12. Additional comments, site constraints or additional information regarding site: _____

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Unwitnessed Soil Evaluations Decision: Accept Inconclusive Disclaim

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Explanation: _____

Signature Authorized Agent _____ Date _____



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Soil Evaluator: Amber K. Hardy, M.S. License Number: D4098
Weather: Sunny, 55° F Shaded: Yes No Time: 9:00 am

Table with 11 columns: TH 4-1 Horizon, Depth, Horizon Boundaries (Dist, Topo), Soil Colors (Matrix, Re-Dox Features), Re-Dox (Ab. S. Contr.), Texture, Structure, Consistence, Soil Category. Rows include Ap, Bw, 2Cd horizons for TH 4-1 and TH 4-2.

TH 4-1 Soil Class G/A Total Depth 96 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 24 (og)

TH 4-2 Soil Class G/A Total Depth 102 Impervious/Limiting Layer Depth none (og) GW Seepage Depth none SHWT 24 (og)

Comments:

Part B





Site Evaluation – to be completed by Soil Evaluator or Class II or III Designer

Please use the area below to locate:

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3. Offsets from all test holes to fixed points such as street, utility pole, or other permanent, marked object.*

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Key:

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-  Approximate location of bedrock test holes
-  Estimated gradient and direction of slope
-  Approximate direction of due north



Bedrock THs	
TH	Depth

1. Relief and Slope: 3 - 5%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes? If yes, locate on above sketch. NO YES
3. Restrictive Layer or Bedrock within 4' below original ground within 25 feet of test hole? Provide all test hole locations & depths above. NO YES
4. Presence of existing or proposed private drinking water wells within 200 feet of test holes? If yes, locate on above sketch. NO YES
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6. Is site within the watershed of a public drinking water reservoir or other critical area defined in Rule 6.42? NO YES
7. Has soil been excavated from or fill deposited on site? If yes, locate on above sketch. NO YES
8. Site's potential for flooding or ponding: NONE SLIGHT MODERATE SEVERE
9. Landscape position: Shoulder
10. Vegetation: Agricultural field, grass, field flowers, landscape trees
11. Indicate approximate location of property lines and roadways.
12. Additional comments, site constraints or additional information regarding site: _____

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Unwitnessed Soil Evaluations Decision: Accept Inconclusive Disclaim

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Explanation: _____

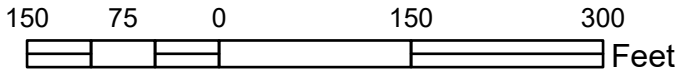
Signature Authorized Agent _____ Date _____




2024 AERIAL MAP
A.P. 42, Lot 8 | 216 Saugatucket Road
South Kingstown, Rhode Island

LEGEND

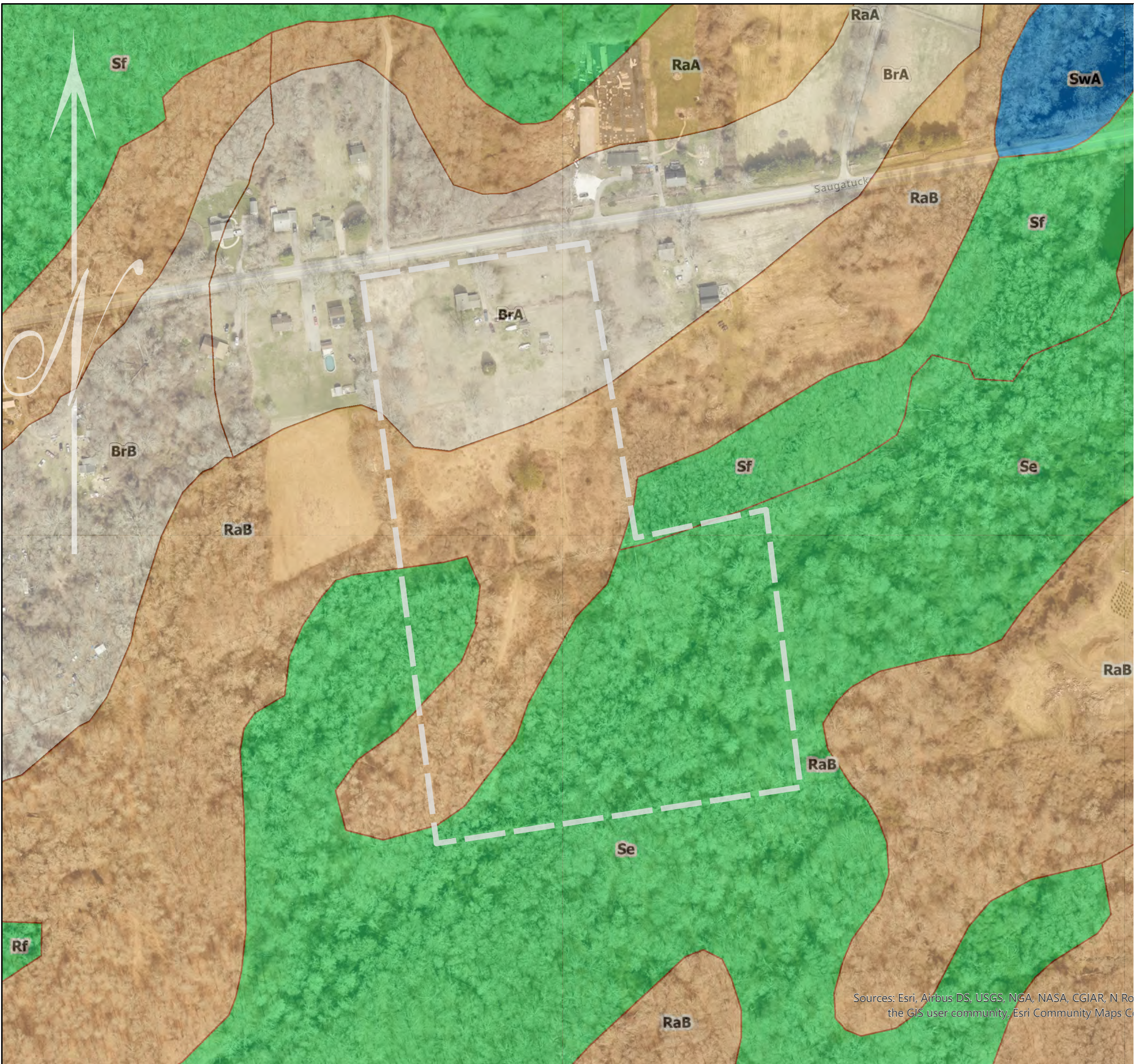
 PROPERTY LINE



- General Notes:
- 1. This map should not be interpreted as a survey quality graphic. It is designed for preliminary planning purposes only. AES recommends consultation with a Professional Land Surveyor for accurate site feature locations.
 - 2. Property lines as depicted on this map have been approximated from plat maps available from the town assessor's online database.
 - 3. Aerial photograph base map and other data layers acquired from the RI DEM and RIGIS database.

Map created by: 
Patrick J. Loveland, GIS Specialist

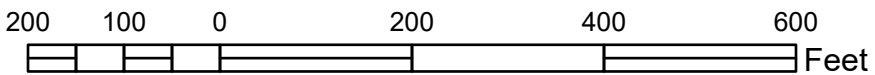
10/18/2024



USDA - NRCS SOIL SURVEY MAP
 A.P. 42, Lot 8 | 216 Saugatucket Road
 South Kingstown, Rhode Island

LEGEND

- BrA - Broadbrook silt loam, 0 to 3 percent slopes
- BrB - Broadbrook silt loam, 3 to 8 percent slopes
- RaA - Rainbow silt loam, 0 to 3 percent slopes
- RaB - Rainbow silt loam, 3 to 8 percent slopes
- Se - Stissing silt loam
- Sf - Stissing very stony silt loam
- SwA - Swansea muck, 0 to 1 percent slopes



- General Notes:
1. This map should not be interpreted as a survey quality graphic. It is designed for preliminary planning purposes only. AES recommends consultation with a Professional Land Surveyor for accurate site feature locations.
 2. Property lines as depicted on this map have been approximated from plat maps available from the town assessor's online database.
 3. Aerial photograph base map and other data layers acquired from the RI DEM and RIGIS database.

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Ro the GIS user community, Esri Community Maps C

Map created by:

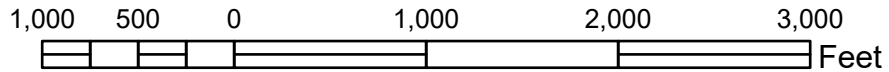
Patrick J. Loveland
 Patrick J. Loveland, GIS Specialist

10/18/2024



USGS TOPOGRAPHIC MAP
 A.P. 42, Lot 8 | 216 Saugatucket Road
 South Kingstown, Rhode Island

LEGEND
 PROPERTY LINE



- General Notes:
1. This map should not be interpreted as a survey quality graphic. It is designed for preliminary planning purposes only. AES recommends consultation with a Professional Land Surveyor for accurate site feature locations.
 2. Property lines as depicted on this map have been approximated from plat maps available from the town assessor's online database.
 3. Aerial photograph base map and other data layers acquired from the RI DEM and RIGIS database.

Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, NRC, the GIS user community, Copyright: © 2013 National Geographic

Map created by: Patrick J. Loveland, GIS Specialist

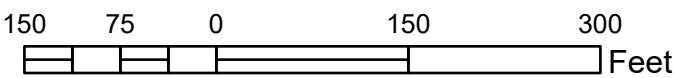
10/18/2024



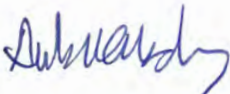
2024 SOIL EVALUATION MAP
 A.P. 42, Lot 8 | 216 Saugatucket Road
 South Kingstown, Rhode Island

LEGEND

-  PROPERTY LINE
-  SOIL EVALUATION



- General Notes:
1. This map should not be interpreted as a survey quality graphic. It is designed for preliminary planning purposes only. AES recommends consultation with a Professional Land Surveyor for an accurate site plan.
 2. Property lines as depicted on this map have been approximated from plat maps available from the town assessor's online database.
 3. Aerial photograph base map and other data layers acquired from the RI DEM and RIGIS database.
 4. Site features located with a Juniper Geode Submetric GNSS receiver with SWmaps data collection software. Non-delineated wetland edges have not been field verified and are depicted for graphic purposes only. The required 20-foot construction setbacks are not shown on this map.

Delineation performed by: 
 Amber K. Hardy, M.S., Soil Evaluator D4098 10/18/2024

Map created by: 
 Patrick J. Loveland, GIS Specialist 11/06/2024

Appendix B

Freshwater Wetland Delineation Report

Prepared by Natural Resource Services, Inc., dated December 14, 2023



Natural Resource Services, Inc.

December 14, 2023

Peter Abbenante Jr.
Denali Corp
620 Old Baptist Road
North Kingstown, RI 02852

RE: Freshwater Wetland Delineation
216 Saugatucket Road; A.P. 42, Lot 8
South Kingstown, Rhode Island

Dear Mr. Abbenante:

Natural Resource Services, Inc. (NRS) has completed the freshwater wetland delineation within the above referenced property. This fieldwork was performed by staff biologist Hannah Chace on December 6, 2023. The wetland delineation was established in accordance with the standards outlined in Section 3.21 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250 RICR 150-15-3). These land-use regulations are administered by the RI Department of Environmental Management (DEM), Office of Water Resources (OWR). It is important to note that in accordance with Section 3.9.3 (D) of these regulations, all delineations performed by wetland consultants are not considered to be accurate for state regulatory purposes until the work is reviewed and verified by the DEM, OWR.

As part of our work, a hand-held GPS unit was used to locate the established wetland flagging. While this location work should not be construed as a professional survey, the data obtained is valuable for preliminary planning purposes. An aerial photograph is attached to this letter. The GPS data has been added as an overlay on the photo to provide a visual representation of the established wetland delineation.

The town tax assessor's database has the subject lot listed as approximately 13.75 acres in size. The property is located along the southern side of Saugatucket Road. The site is developed with a single family home constructed in 1880. The lot has a history of agricultural activity. A review of historic aerials of the site shows maintenance of open field from 1939 to 1981 that extended from the home to the stone wall that bisects the property. Since 1981 there has been irregular periods of maintenance and regrowth in the mid section of the property.

The DEM freshwater wetland regulations establish a 200-foot jurisdictional area (JA) from all rivers and streams, and a 100-foot JA from all vegetated wetlands. The combined river and vegetated wetland JA is depicted as a dashed black line on the attached GIS graphic. Any land disturbing activities proposed within the JA require a permit from the DEM.

The rules regulate wetlands and assign buffer zones based on three (3) factors: 1) the river region in which the property is located; 2) the size of the wetland; and 3) the vegetational composition and classification of the wetland. This property falls in River Region 2.

There is a watercourse located within the wetlands onsite identified as Indian Run Brook. By definition, a blue-lined perennial stream is considered a river for state wetland regulatory purposes. This river should be located by survey to be accurately represented on any site plan to DEM. The river is subject to a 100-foot buffer zone.

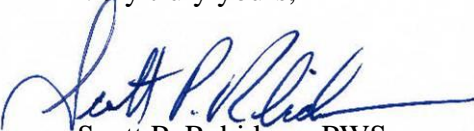
Flagging labeled W1-W48 and B1- B29 depicts a deciduous forested swamp. This swamp continues off-site to the south and appears to be greater than ten (10) acres in size. Swamps of this size are subject to a 75-foot buffer zone. When a wetland subtype, in this case a *Phragmites australis* dominated marsh, falls within 50 feet of the delineated wetland edge, the buffer zone is increased an additional 25 feet. As such flags approximately from B27-B29 would receive a 100-foot buffer zone.

According to Section 3.7.1(D) of the regulations, these buffer zones may be subject to changes upon the Department's review. Due to the presence of a Natural Heritage area within the property, the DEM may consider some of the wetlands as "rare freshwater wetland" that could result in an enhanced buffer zone. The Department will need to be contacted to identify potential rare species to determine if larger buffer zones are required. Although they may be expanded, the buffer zones may not exceed the 100-foot jurisdictional area assigned to vegetated wetlands.

In the case of any new development, the regulations apply construction setback standards in addition to the buffer zone standards outlined above. Any primary structure shall require an additional 20 feet of setback from the buffer, or existing vegetated land within the buffer zone, and 5 feet of setback for any secondary structures proposed.

Please do not hesitate to contact me if you have any questions regarding the information presented in this letter of findings or require more guidance.

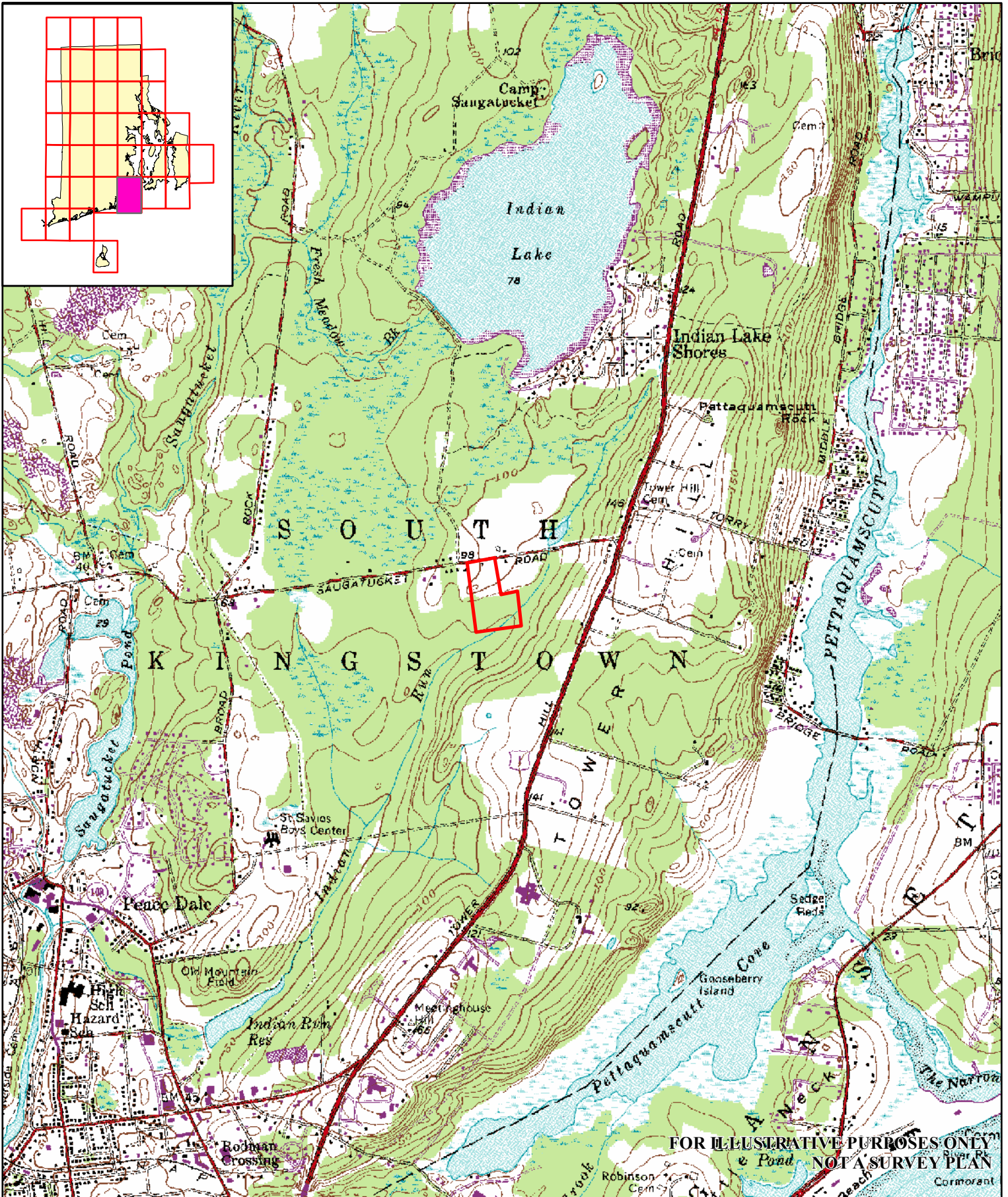
Very truly yours,




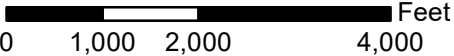
Scott P. Rabideau, PWS
Principal

Enclosures

Cc: Chris Palmer, PLS

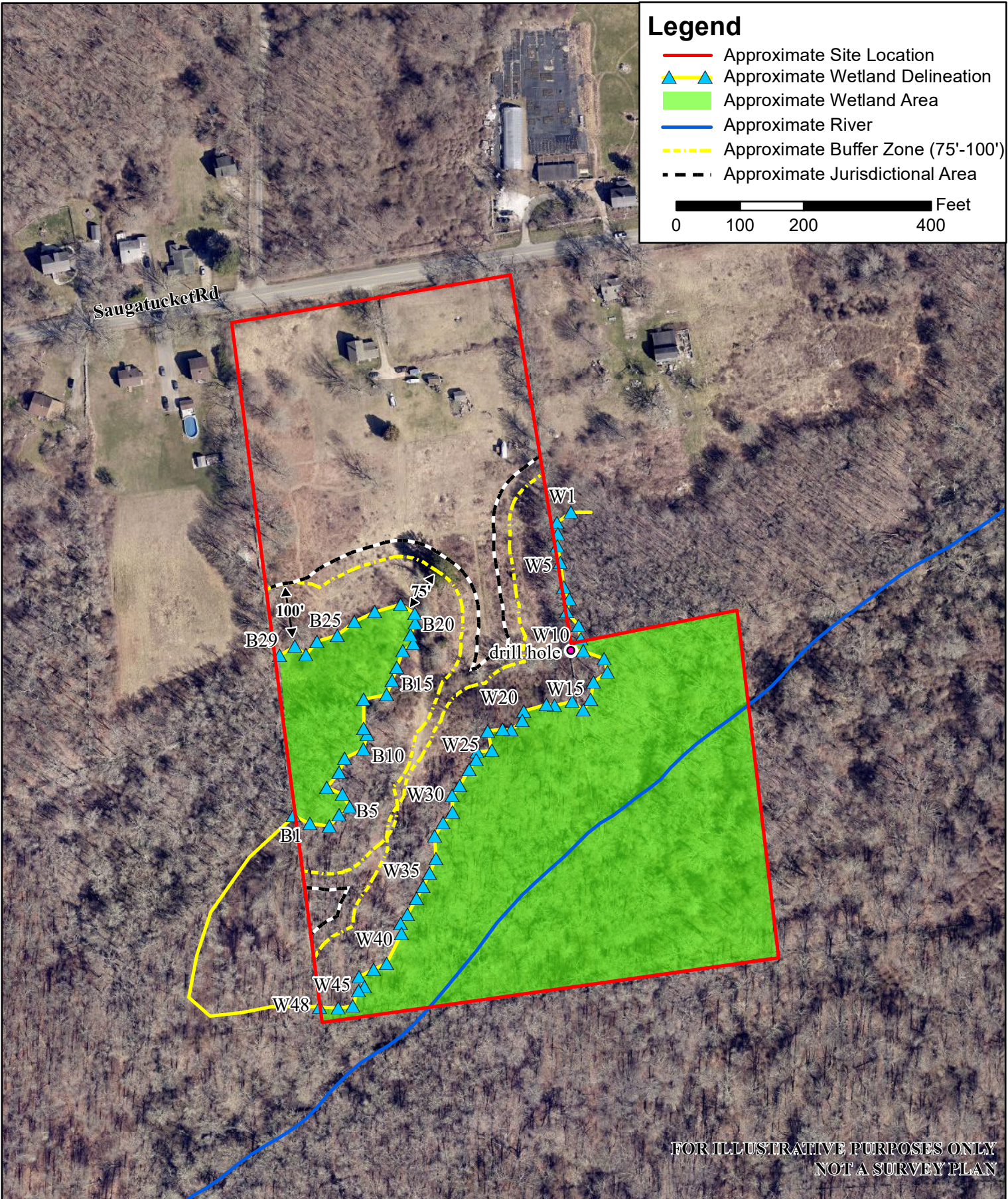


USGS Topographic Map
216 Saugatucket Rd
A.P. 42, Lot 8
 South Kingstown, RI
 Narragansett Pier Quad Map

 **Approximate Site Location**
 USGS Topographic Series
 Contour Interval 10 Feet
 National Geodetic Vertical Datum of 1929
 **Feet**

FOR ILLUSTRATIVE PURPOSES ONLY
NOT A SURVEY PLAN


RIGIS
 Natural Resource Services, Inc.
 PO Box 311
 180 Tinkham Lane
 Harrisville, RI 02830
 p: (401) 568-7390
 (c) RIGIS



**Site Sketch Depicting
Approximate Wetland Delineation
216 Saugatucket Rd
A.P. 42, Lot 8
South Kingstown, RI**

*Performed by:
Staff biologist Hannah Chace - 12/5/2023
Located using a hand-held Trimble GeoXH*

N
W E

RIGIS Spring 2023 aerial
RI DEM Mapping
Natural Resource Services, Inc.

PO Box 311
180 Tinkham Lane
Harrisville, RI 02830

p: (401) 568-7390
(c) RIGIS

Wetland Edge Delineation Data Form (WETLAND)

Applicant: _____
 Project Name: 216 Saugatucket Road
 City/Town: South Kingstown

Wetland No. _____
 Flag No. Sequence: W1-W48
 Delineation Date: 12/5/2023

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

Tree	Indicator Status	Herbs	Indicator Status
Acer rubrum	FAC	Osmundastrum cinnamomea	FACW
Quercus rubra	FACU	Sphagnum sp.	OBL
Quercus bicolor	FACW		

Saplings/Shrubs	Indicator Status	Woody Vines	Indicator Status
Vaccinium corymbosm	FACW	Smilax rotundifolia	FAC

List other vegetative species noted which may have affected determination of the wetland edge: _____

Soil: SCS Soil Survey Mapping Unit: Se
 On Hydric Soils List? YES NO

Soil Profile (Note wetland flag no. nearest soil test pit): W29

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
Ap	0-8"	10YR 2/1		Surface	
Bg	8-17"	5Y 5/2	10YR 4/6		
Stony	17"				

Other indicators exhibiting an absence of wetland hydrology (e.g. water marks, drainage patterns, root rhizospheres, etc.; see § 3.21.1 (D) of the Rules): _____

Landscape position: Toeslope

Altered/atypical situation? (describe): _____

Comments: _____

Wetland Edge Delineation Data Form (UPLAND)

Applicant: _____
 Project Name: 216 Saugatucket Road
 City/Town: South Kingstown

Wetland No. _____
 Flag No. Sequence: W1-W48
 Delineation Date: 12/5/2023

Vegetation: List the three dominant species in each vegetative strata along with their NWI status:

Tree	Indicator Status	Herbs	Indicator Status
		Solidago canadensis	FACU
		Osmundastrum cinnamomea	FACW

Saplings/Shrubs	Indicator Status	Woody Vines	Indicator Status
Ilex opaca	FACU	Smilax rotundifolia	FAC
Vaccinium corymbosm	FACW		
Frangula alnus	FAC		

List other vegetative species noted which may have affected determination of the wetland edge: _____

Soil: SCS Soil Survey Mapping Unit: RaB
 On Hydric Soils List? YES NO
 Soil Profile (Note wetland flag no. nearest soil test pit): W29

Horizon	Depth	Matrix Color	Mottling Description	Depth to Saturation	Depth to Free Water
Ap	0-10"	10YR 2/1			
Bw	10-20"+	2.5Y 4/4	10YR 4/6		

Other indicators exhibiting an absence of wetland hydrology (e.g. absence of water marks, lack of redoximorphic features, lack of oxidized rhizospheres, etc.): _____

Landscape position: Footslope

Altered/atypical situation? (describe): _____

Comments: _____

Appendix C

Edge Verification Letter, Application No. 24-0177

Prepared by RI Department of Environmental Management, dated September 5, 2024



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF WATER RESOURCES

235 Promenade Street
Providence, Rhode Island 02908

September 5, 2024

Janice V. Caltiri
216 Saugatucket Road
Wakefield, RI, 02879

RE: Application No. **24-0177** in reference to the property located:

Approximately 500 feet south of Saugatucket Road, opposite Utility Pole No. 14, and approximately 2,145 feet southwest of its intersection with Tower Hill Road (Route 1), Assessor's Plat 42, Lot 8, South Kingstown, RI.

Dear Ms. Calitri:

Kindly be advised that the Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has completed its review of your Request to verify freshwater wetland edges. This review included an inspection of the above referenced property ("subject property") as described by the site plans submitted with your application and received on July 17, 2024.

Per Rule 250-RICR-150-15-3.23, the **Statewide Buffer Zone Designation**, your property falls within:

- River Protection Region 2

Based upon the Program's observations and review, it is our determination that freshwater wetlands are present on or are in close proximity to the subject property. These freshwater wetlands and other jurisdictional areas are regulated by this Department and include, but are not limited to, at least the following types:

Jurisdictional Areas:

- Freshwater Wetlands (see below)
- Buffer: All areas of undeveloped vegetated land adjacent to a freshwater wetland that is to be retained in its natural undisturbed condition or is to be created to resemble a naturally occurring vegetated area. For the purpose of defining buffer in these Rules, "adjacent to" means land area within the buffer zone.
- Floodplain
- Contiguous areas that extend outward two-hundred (200') feet from the edge of a river or stream
- Contiguous areas that extend one-hundred feet (100') from the edge of all other freshwater wetlands

Freshwater Wetlands and associated Statewide Buffer Zone Designation include at least the following types:

- Swamp greater than 10 acres (B and W flagging) = 75-foot Buffer Zone.
- River (Indian Run Brook) = 100-foot Buffer Zone.

The DEM has completed an inspection and review of the wetland edges delineated by you on-site and are referenced as Flag Nos. W-11 through W-48 and B-1 through B-29. It is our determination that these wetland edges delineated on-site are accurate. These wetland edges have been shown on the site plan submitted with your application.

The depicted Jurisdictional Areas associated with off site wetland flags (W-1 to W-10) appear to be accurately depicted.

Please note that although Phragmites was observed in the vicinity of wetland flags B-27 to B-29 the size of the Phragmites patch was not large enough (less than 0.25 acres) to classify as a subtype. Therefore, a 75-foot Buffer Zone (not a 100-foot Buffer Zone) applies to this portion of wetland.

The Department has verified only those edges delineated and shown by you on-site and on the site plans submitted with your application and as qualified in this letter. Should you wish to verify the edge of additional wetlands, a new application will be required.

This letter does not constitute an approval or permit for any proposed project on the subject property. Pursuant to R.I. Gen. Laws § 2-1-21(a) of the Freshwater Wetlands Act and the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act, 250-RICR150-15-3, a permit is required from this Program prior to the commencement of any activity which impacts or alters freshwater wetlands.

This Program assumes that the edges of freshwater wetlands, as flagged or marked on site, have been accurately surveyed and portrayed on site plans submitted in support of your application. This Program makes no guarantee or representation that such survey is accurate.

In addition, you should note that freshwater wetlands are present on this property which may be regulated under Section 404 of the Clean Water Act (Federal Water Pollution Control Act, as amended 33 U.S.C. 1344). Accordingly, a permit may be required from the U.S. Army Corps of Engineers for alteration of these wetland areas.

In accordance with 250-RICR-150-15-3.9.3(H), this verification of the delineated edge of freshwater wetlands is valid for a limited period of five (5) years from the date of issue.

Please contact Lucianna Faraone Coccia of this Office telephone: (401-537-4225) should you have any questions regarding this letter.

Sincerely,



Andy Charpentier, Environmental Scientist III
Office of Water Resources
Freshwater Wetlands Program
AC/LFC/lfc

cc: Joseph A. Casali, Casali Engineering
Scott P. Rabideau, Natural Resource Services, Inc.