



August 27, 2020

Department of Environmental Management
Permit Application Center
235 Promenade Street, Room 260
Providence, RI 02908

Re: Proposed 11-Unit Residential Development (Tower Hill Landings Annex)
Plat 32-4, Lot 32
2095 Kingstown Road (Route 108)
South Kingstown, RI 02879

To whom this may concern,

On behalf of the applicant, the Tower Hill Landings, LLC, we are submitting the following documents for the Freshwater Wetlands Preliminary Determination, RIPDES Application for Stormwater Construction Permit, Water Quality Certification and Underground Injection Control for the above referenced project:

- Site Plan Set (3)
- Drainage Narrative and Assessment (3)
- Soil Erosion and Sediment Control Plan (3)
- Long Term Operations and Maintenance Plan (3)
- Project Narrative: Impact and Avoidance (3)
- RIDEM Wetlands and Stormwater Applications (1)
- Site Work Affidavit (1)
- Wetland Edge Delineation Forms (included in Drainage Narrative and Assessment)
- Filing Fee: \$900

If there are any comments or any additional information needed, please contact me (chris.cabral@crossmaneng.com) or Steven Cabral (steven.cabral@crossmaneng.com) at 508-695-1700.

Thank you for your consideration.

Sincerely,
CROSSMAN ENGINEERING

Chris Cabral, PE



Application for Stormwater Construction Permit and Water Quality Certification

Use this form to request a Stormwater Construction Permit or Water Quality Certification (WQC). [This form replaces the formerly used WQC Program Application; Applications for a Stormwater Discharge System Registration and to Modify a Groundwater or Stormwater Discharge System (GWD/UIC Program); and the RIPDES Notice of Intent (NOI) Stormwater General Permit for Construction Activity (CGP).] **If a Freshwater Wetlands (FWW) Application is required, this form must be submitted in addition to the [FWW Application form](#).**

Please complete this form online before printing. Submit the completed form with all required documentation and fee to: **Permit Application Center (PAC)**
RIDEM
235 Promenade Street, Room 260
Providence, RI 02908-5767

(Check or money order must be made payable to the Rhode Island General Treasurer.)
 Stormwater Construction Permit Fee will be waived for applications submitted concurrently with a Freshwater Wetlands Application.

Provide all applicable information by completing the **shaded** areas.

Double-click to select:		<input checked="" type="checkbox"/> New Permit Fee = \$400.	<input type="checkbox"/> Permit Modification			
Site & Project	City/Town: South Kingstown	Street Address: 2095 Kingstown Road		<u>Water Body Class:</u> B		
	Plat(s): 32-4	Lot(s): 32	Project Name: Tower Hill Landings Annex			
	Location: Kingstown Road intersects Westwind Road opposite the site. Site is on east side of Kingstown Road.		Water Body Name(s): Unnamed tributary to Saugatucket River			
	<u>Latitude:</u> 41.470890	<u>Longitude:</u> -71.514100	Utility Pole #: 132-2	Total Site Area: 1.22 acres	Site Area to be Disturbed: 1.2 acres	
	RI Federal Aid Project #:	RI Contract #:	Was there a Pre-Application Meeting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
	Organization/Company Name: Tower Hill Landings Annex, LLC			Contact Name of Owner's Representative for Questions: Chris Bicho		
Owner / Applicant		First Name: Chris	Last Name: Bicho	Email: cbicho@landingsgroup.com	Phone: 401-845-2200	
		Address: 543 Thames Street		City/Town: Newport	State: RI	Zip: 02840
I certify under penalty of law that I've requested and authorized the investigation, compilation, and submission of all the information, in whatever form, contained in this Application; I have personally examined and am familiar with the information submitted herein; and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate and complete. I'm aware that it's the owner's responsibility to implement or hire a qualified contractor responsible to implement any required Soil Erosion and Sediment Control Plan, so as to effectively control stormwater discharges leaving the site during the construction period. I authorize RIDEM personnel access to the property for purposes of observing conditions pertinent to this application and assessing compliance with any permit or determination resulting from this application.						
		Applicant's Signature: 		Title: President	Date: 07/17/20	
Professional	Organization/Company Name: Crossman Engineering		Professional's License Type(s) and Number(s): PE No. 4847			
	Professional's Name: Steven Cabral		Email: steven.cabral@crossmaneng.com	Phone: 401-738-5660		
	I certify under penalty of law that the project described in this application and associated materials is in compliance with the RI Stormwater Design and Installation Standards Manual (as amended) and the Rhode Island Soil Erosion and Sediment Control Handbook (as amended) [if required] and I believe all information presented in this application and the accompanying materials are true, accurate and complete. All engineering designs, plans and specifications [if required] included in this application were done by me or by someone working directly for me. The Natural Heritage Area Information [if required] and the site specific Soil Erosion and Sediment Control Plan [if required] were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering or developing the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete at the time this application is made. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.					
			Professional's Signature: 		Title: PE	Date: 07/17/20

PERMIT HISTORY AND APPLICABILITY - **Double-click** to check all boxes that apply to the proposed project.

Permit History	Provide all other application or file numbers associated with this site.		RIDEM USE ONLY
	RI CRMC Assent:	US Army Corps of Engineers:	RIDEM Program Name & File Number: RIDEM Wetlands 16-0120
Stormwater Construction Activity	<p>Select all that apply. [Stormwater submissions must comply with all requirements of the Stormwater Management, Design and Installation Rules.] Click links below to refer to other applicable Rules.]</p> <p>There are Freshwater Wetlands on the subject or adjacent property, AND the project proposes:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> New or increased impervious cover for property other than a single family home; or <input checked="" type="checkbox"/> Disturbance of more than 10,000 sq. ft. of existing impervious cover; or <input type="checkbox"/> To fill in any amount of floodplain or alter storm flowage to a river, stream or wetland on any lot. <p style="text-align: center;"><i>Refer to Freshwater Wetland: Rules</i></p>		FWW Application # Required:
	<p>The project requires an application to RI CRMC, AND proposes:</p> <ul style="list-style-type: none"> <input type="checkbox"/> A residential development of 6 units or more; or <input type="checkbox"/> A project that results in the creation of 10,000 sq. ft. or more of impervious area. <p style="text-align: center;"><i>Refer to Water Quality: Rules</i></p>		STW/WQC Application # Required:
	<p>The project proposes an infiltration system listed in 8.21 of the Stormwater Rules (i.e. infiltration trench, infiltration basin, UIC chamber or drywell) that receives stormwater from:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> A residential impervious area that is more than 10,000 sq. ft.; or <input type="checkbox"/> A non-residential roof area greater than 10,000 sq. ft.; or <input type="checkbox"/> A non-residential (commercial, industrial, institutional...) road or parking area of any size. <p>Indicate if the treatment system discharges:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Below the ground (UIC); or <input checked="" type="checkbox"/> Above the ground and infiltrates (not UIC), but must be reviewed for compliance with the RISDISM to be protective of groundwater. <p style="text-align: center;"><i>Refer to Groundwater Discharge: Rules</i></p>		
	<p>The project proposes discharge of stormwater to waters of the State [including a Separate Storm Sewer System (MS4)], AND :</p> <ul style="list-style-type: none"> <input type="checkbox"/> Disturbs less than 1 acre, but the activity is part of a larger common plan resulting in more than 1 acre of disturbance. <input checked="" type="checkbox"/> Disturbs more than 1 acre of property. <p>Site is within or directly discharges to a Natural Heritage Area? Click to Select</p> <p style="text-align: center;"><i>Refer to RI Pollutant Discharge Elimination System: General Permit</i></p>		RIPDES Application # Required:
Water Quality Certification (WQC)	<p>Select all project type(s):</p> <ul style="list-style-type: none"> <input type="checkbox"/> Discharge that requires a Federal Permit <ul style="list-style-type: none"> <input type="checkbox"/> Federal Energy Regulatory Commission (FERC) <input type="checkbox"/> Marinas - New Construction or Expansion <input type="checkbox"/> Individual Permit <input type="checkbox"/> Fill Waters of the State <input type="checkbox"/> Harbor Management Plan <input type="checkbox"/> Flow Alteration <input type="checkbox"/> Stormwater Master Plan <p style="text-align: center;"><i>Refer to Water Quality: Rules Guidance</i></p>		
Submission Requirements	<p>Please submit separately bound documents, as required. Additional copies are required when submitting concurrently with a Freshwater Wetlands Application.</p> <p style="margin-left: 40px;">Site Plan(s) Appendix A Checklist and LID Planning Assessment Stormwater Analysis and Drainage Report Soil Erosion and Sediment Control (SESC) Plan Post-Construction Operation and Maintenance (O&M) Plan Stormwater Construction Permit Fee Waived when submitting concurrently with a Freshwater Wetland Application Completed Freshwater Wetland Application Form</p>		<p>Amt Paid:</p> <p>Check No:</p> <p>Date Received:</p>

RIDEM USE ONLY:

Wetlands Application Number _____



RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Water Resources / Freshwater Wetlands Program
235 Promenade Street, Providence, RI 02908-5767

SITE WORK AFFIDAVIT

This affidavit is to be used by Freshwater Wetland Professionals to attest to the completion and certification of all Site Work **at the time an application is submitted** to the RIDEM Freshwater Wetlands Program. Affidavits must be accompanied by a complete Freshwater Wetlands permit application submittal.

In accordance with the *Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act*, 250-RICR-150-15-1, specifically, [250-RICR-150-15-1.7\(A\)\(5\)](#), an applicant must perform site work to clearly identify and label site activities and features. Incomplete site work results in the issuance of deficiency letters and the need for multiple RIDEM inspections, causing unnecessary permitting delays. Applicants are encouraged to read [Avoid these Common Preventable Site Work Delays!](#) to learn more about facilitating quicker permit reviews.

Applicant Name: Tower Hill Landings Annex, LLC

Note: Applicant must be the owner of property or easement or a government agency or entity with power of condemnation over such property or easement that is the subject of this application.

Please initial that all applicable site work listed below have been performed and certified at the time of application submission and sign the certification statement.

- Wetland Flags are present on site and are correctly and legibly labeled; ✓
- Wetland Flag numbers on site correspond to those depicted on the plans; ✓
- Wetland Flags have been accurately surveyed and depicted on the plans; and ✓
- The proposed Limit of Disturbance (LOD) and other applicable proposed activities and features (See [250-RICR-150-15-1.7\(A\)\(5\)](#)) have been staked and labeled on site. *- Currently paved/developed parcel -*

CERTIFICATION OF PROFESSIONAL(S)

I certify that I have inspected the subject property and its surroundings and do hereby attest that to the best of my knowledge, all site work specified above has been accurately completed and certified at the time of application submission and prior to RIDEM inspection, in accordance with the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act, [250-RICR-150-15-1](#).

Professional's Name: Steven Cabral, PE

Note: The professional (e.g. engineer, biologist, landscape architect, surveyor, etc.) responsible for the submission and/or preparation of this Application, on behalf of the Applicant, must sign below.

Signature: *Steven Cabral* **Date:** *8-20-20*

RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF WATER RESOURCES \ FRESHWATER WETLANDS PROGRAM

235 Promenade Street, Providence, RI 02908
Telephone: 401-222-6820, Rhode Island Relay 711

AGENCY USE ONLY

Application No:

Application Received:

GENERAL APPLICATION FORM

Please type or print

PART A Purpose of Application (see [250-RICR-150-15-1](#))

- Request to Determine Presence of Wetlands only (250-RICR-150-15-1.8(B))
- Request to Verify Delineated Edge of Wetlands (250-RICR-150-15-1.8(C))
- Request for Preliminary Determination (250-RICR-150-15-1.9)
- Application to Alter a Freshwater Wetland (250-RICR-150-15-1.10)
- Application for Permit Renewal (250-RICR-150-15-1.11(B)) **Complete Only Parts B, D & H**
- Application for Permit Modification (250-RICR-150-15-1.11(C))
- Application for Permit Transfer (250-RICR-150-15-1.11(D)) **Complete Only Parts B, E & H**
- Change in Owner during review (250-RICR-150-15-1.7(A)(2)(e)) **Complete Only Parts B, F & H**

PART B Applicant Information:

Applicant's Name (see [250-RICR-150-15-1.7\(A\)\(2\)](#)): Tower Hill Landings Annex, LLC

Note: The applicant must be the owner of the property or easement which is the subject of this application or must be the government agency or entity with power of condemnation over such property or easement.

Applicant's Mailing Address: 543 Thames Street

	Street/Road		P.O. Box
<u>Newport</u>	<u>RI</u>	<u>02840</u>	<u>401-845-2200</u>
City/Town	State	Zip Code	Telephone No.

Applicant's Email Address: (print legibly): cbicho@landingsgroup.com

Property Location subject to this Application:

<u>South Kingstown</u>	<u>Kingstown Road (Route 108)</u>	<u>2095</u>
City/Town	Street Abutting Site	Street address number (if applicable)

Nearest street intersection and its distance and direction from site Kingstown Rd. intersects Westwind Rd opposite site

Nearest utility pole number(s): 132-2 Direction to site from abutting street: N S E W

Tax Assessor's Plat(s) and Lot No(s): Plat Map 32-4, Lot 32

Recorded Plat(s) and Lot No(s) (if Assessor's are not available): _____

PART C General Information:

Any previous application for this site? Yes No Provide Application No(s) 16-0120

Any previous enforcement action for this site? Yes No Provide File No(s) _____

Amount of wetland area to be altered, if any:

Palustrine wetland: 0 square feet

Riverbank or perimeter wetland: 11,600 square feet

Watercourse: _____ linear feet

Check here if any floodplain alteration is proposed.

1.7(A)11(d)4(b)

• Fee category per [250-RICR-150-15-1.7\(A\)\(11\)](#) (ex. 1.7(A)(11)(d)(6) 2-lots sub. Pre-Det. \$900) Prel. Det. \$900.00 Check No. 56208

Check here if the project has a Certificate of Critical Economic Concern (CEC) and attach copy of certification.

PART D For Application for Permit Renewal (if applicable):

Name of Original or Subsequent Permittee: _____

Application/Permit No. _____ Permit Expiration Date: _____

Number of previous renewals issued (if applicable): _____

Applicant's Statement: I hereby state that I am requesting renewal of the original or subsequently modified permitted project under Application/Permit No. _____. I fully understand the permit limitations and will comply with any and all conditions of the permit.

Applicant's name: (print) _____ (signature) _____

Check here if actual site work has commenced on the project for which renewal is requested.

PART E For Application for Permit Transfer (if applicable):

Original Permittee's Name: _____

Application/Permit No.: _____ Permit Expiration Date: _____

Note: A certified copy of the deed of transfer must be enclosed with application.

Applicant's Statement: I hereby certify that I have reviewed the permit letter issued under Application/Permit No. _____ and hereby agree to comply with all conditions of the permit, including any time limitations imposed.

Applicant's Name (print): _____ (signature): _____ Date: _____

PART F For Change in Owner During Application Processing (if applicable):

Original Applicant's Name: _____ Application No. _____

Note: A certified copy of the deed of transfer must be enclosed for Applications to Alter only.

PART G Certification of Professional(s) (if applicable):

Note: Any professional (e.g. engineer, biologist, landscape architect, etc.) who participated in the submission and/or preparation of this Application and supporting documentation must sign below.

I hereby certify that I have been authorized by the applicant to prepare documentation to be submitted in support of this Application; that such documentation is in accordance with the [Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act \(250-RICR-150-15-1\)](#); and that such documentation is true, accurate and complete to the best of my knowledge.

Professional's Name (print): Steven M. Cabral Title: PE

Email (print legibly): steven.cabral@crossmaneng.com d/b/a: Crossman Engineering

Address: 151 Centerville Road, Warwick, RI 02886

Professional's Signature:  Date: 8-4-20

Check this box if the above named is the project manager or project lead for the applicant.

I've completed and attached the [Site Work Affidavit](#).

If more than one professional:

Professional's Name (print): _____ Title: _____

Email (print legibly): _____ d/b/a: _____

Address: _____

Professional's Signature: _____ Date: _____

I've completed and attached the [Site Work Affidavit](#).

Professional's Name (print): _____ Title: _____

Email (print legibly): _____ d/b/a: _____

Address: _____

Professional's Signature: _____ Date: _____

I've completed and attached the [Site Work Affidavit](#).

PART H Certification/Authorization of Applicant:

I hereby certify that I have requested and authorized the investigation, compilation, and submission of all the information, in whatever form, contained in this Application; that I have personally examined and am familiar with the information submitted herein; and that such information is true, accurate and complete to the best of my knowledge. I hereby authorize RIDEM personnel access to the property for purposes of observing conditions pertinent to this application and assessing compliance with any permit or determination resulting from this application, including any sampling, monitoring or surveying that may be deemed appropriate, consistent with the RIDEM Administrative Inspection Guidelines. (See DEM website - Office of Compliance and Inspection for copy).

Note any special concerns for access here:

Applicant's Signature:  Title (if applicable): President

See [250-RICR-150-15-1.7\(A\)\(2\)](#) regarding Signatures

Print Name Signed Above: Chris Bicho, Tower Hill Landings Annex, LLC Date: 7/17/2020

**PROJECT NARRATIVE
FOR
TOWER HILL LANDINGS ANNEX
2095 KINGSTOWN ROAD (ROUTE 108)
PLAT 32-4, LOT 32
SOUTH KINGSTOWN, RHODE ISLAND**

AUGUST 2020

Prepared by: Crossman Engineering
Engineers & Surveyors
151 Centerville Road
Warwick, RI 02886

&

103 Commonwealth Ave
North Attleboro, MA 02763

Table of Contents

<u>RIDEM</u>		<u>Page</u>
<u>Rules</u>		
<u>Section</u>		
9.00	Request for Preliminary Determination	1
9.02	Application Requirements	1
9.02 A	Project Scope.....	1
9.02 B	General Requirements	2
9.02 C	Project Description	2
9.02 D	Avoidance and Minimization Requirements	3
9.02 E	Engineering Requirements	7
9.02 F	Compliance with Water Quality Regulations	7
Appendix	8
	a. RIDEM Environmental Resource Map	
	b. FEMA Flood Maps	
	c. Soil Survey Map	
	d. Wetland Biologist Letter	
	e. Site Photographs	

Rule 9.00 – Request for Preliminary Determination

Overview

The purpose of the project is to construct 2 new apartment buildings for the creation of 11 new residential units. In addition to the new building, the project scope includes a new parking area, closed drainage system, underground utilities, and landscaping. The proposed site work will require approximately 1.46 acres of land disturbance. The project is considered a redevelopment, and the proposed drainage systems have been designed to meet all requirements applicable for a redevelopment project.

The site is currently developed and the former site of the Cucina Twist Restaurant with three building structures and a large pavement area. The former restaurant building and other structures have recently been demolished with the intention to redevelop the lot pending State and local permitting. In 2015-2016 property was previously redesigned and permitted for a new restaurant, Dan's Place, but the former owner decided not to proceed with the development and sold the land to the abutting Tower Hill Landings apartment complex. The previously permitted design of the site (File #16-0120) included a sand filter in the northeast corner of the site to meet the recharge and water quality requirements for the increased impervious area on site. The grading and drainage design for the current application proposes a very similar sand filter design in addition to permeable pavement for additional groundwater recharge and an underground detention system for additional peak flow attenuation.

The majority of the site drains in an easterly direction, away from Kingstown Road, towards an existing A.S.S.F. and wetland area in the rear of the property. The forested wetland is awarded a 50-foot regulatory buffer zone, and it contributes to an offsite intermittent stream which has a 100-foot riverbank wetland that extends on site. The wetlands were delineated by Natural Resource Services, Inc. in March 2020, and their letter is included in the Appendix. The overall site layout and design have been prepared to minimize the impacts to the wetland areas to the maximum extent practicable while still achieving the project goals.

9.02 Application Requirements

9.02 A. Project Scope

The project scope includes the construction of 2 new apartment buildings in an effort to meet the applicant's needs while demonstrating compliance with all applicable environmental regulations. The proposed land disturbance and impervious areas of the development have been minimized to the greatest extent practicable to create a level building area and gently sloped perimeter parking. The proposed stormwater management system has been designed to comply with all RISDISM Minimum Standards and guidelines. Soil erosion and sediment control measures will be incorporated during construction and all disturbed areas will be stabilized after construction.

9.02 B. General Requirements

In compliance with Rule 9.02 B, enclosed with this application package are, including but not limited to; Site Plans, Project Narrative, Drainage Narrative & Assessment, Application Form, Fee, Long Term O&M Plan and Soil Erosion and Sediment Control Plan.

9.02 C. Project Description

Area Description

The site is located at 2095 Kingstown Road (Route 108) in South Kingstown, Rhode Island. The site is bounded by Kingstown Road to the west, wood/wetlands and residential properties to the north, and the existing Tower Hill Landings complex to the east and the south. The site is currently developed, with the majority of the topography draining in an easterly direction towards the rear ASSF and wetland areas. Due to the close proximity of the wetland area, a portion of the site work is required to encroach into the existing 50 ft perimeter wetland and 100 ft riverbank buffer zone.

The Soil Survey of Rhode Island by NCRS (Natural Resources Conservation Service) identifies the underlying soils within the project as Udorthents-Urban Land Complex (UD), and Narragansett Silt Loam, 3-8% slopes (NaB). There is no Hydrologic soil series associated with UD, but NaB is categorized as HSG-B, therefore, the hydrologic design for the site assumes project wide the existing and proposed surface conditions are HSG-B.

Alternatives to the Proposed Project

Alternatives to the proposed project included a typical impervious asphalt parking area, but the Town Planning Board indicated they would prefer a porous or permeable asphalt parking area to provide additional groundwater recharge benefits.

Land Use and Zoning

The site falls within the Town's Commercial Neighborhood (Zone CN) and Medium High-Density Residential District (Zone R-10). The property is also within the Kingstown Road Special Management District local overlay zone.

Solid Waste Management

All construction waste and recyclables will be properly stored in enclosures and will not be exposed to the environment. All waste generated during construction will be removed off site in accordance with local, state and federal laws.

Hazardous or Toxic Substances

There are no known hazardous waste areas on site and the proposed land use will not generate hazardous or toxic substances.

Water Resources

The site is not within a wellhead protection area as referenced in the Rhode Island Department of Environmental Management “Groundwater Classification, Wellhead Protection Areas and Drinking Water Reservoir Watersheds for Rhode Island” Map. The underlying groundwater is classified as GA.

Construction

A Soil Erosion and Sediment Control Plan has been developed to provide protection of the areas outside the project limits. Construction equipment and activities will be limited to within the designated limit of disturbance shown on the plans.

9.02 D Avoidance and Minimization Requirements:

1. Avoidance

- a.) *Is the primary proposed activity water dependent or require access to freshwater wetlands?*

Response: No. The activity is not water dependent and does not require access to wetlands.

- b.) *Are there other areas on the Owner’s property or other properties owned or controlled by the applicant, which could be used to achieve the project purpose without altering the natural character of the freshwater wetlands?*

Response: No. The project, as currently designed, does not propose a negative impact to any freshwater wetlands. The proposed construction activity within the wetland buffer zones are limited to previously disturbed areas.

- c.) *Are there other properties that are not currently owned or controlled by the Applicant, which are reasonably available to achieve the same purpose?*

Response: No. The project, as currently designed, does not propose a negative impact to any freshwater wetlands. The proposed construction activity within the wetland buffer zones are limited to previously disturbed areas.

- d.) *Are alternative designs, layouts or technologies available to avoid freshwater wetlands or impacts on wetland functions and values on the same property or other property?*

Response: No. The extent of improvements represents the minimum necessary to satisfy the project's needs.

- e.) *Description of attempts to overcome or remove site constraints.*

Response: Site constraints included shallow groundwater table and proximity to wetland areas in the rear. The parking areas have been located as far away from the wetland area and buffer zones to the greatest extent practicable. The parking area shall be raised several feet above existing grade to provide adequate separation from the bottom of the porous pavement to the seasonal high ground water table.

- f.) *Impact of feasible alternatives, which would not alter the natural character of the wetland?*

Response: The project will not alter the natural character of the wetland since peak discharges leaving the site shall be less than existing conditions. The project, as currently designed, does not propose negative impacts to any freshwater wetlands.

2. Minimization

- a.) *Can the project's scale be reduced or the scale of wetlands impacts be reduced?*

Response: No. The project scale cannot be further reduced and still achieve the same primary purpose. The proposed parking area has been reduced to the minimum size allowable to meet parking space requirements with the local zoning ordinance and located as far away from the wetlands as possible.

- b.) *Is the project's location necessary or are other locations available that would result in less impacts?*

Response: There are no other locations available which could satisfy the project's goals. There is no opportunity to move or relocate the project to other locations within the site which could achieve the project purpose. The project, as currently designed, does not propose to impact any freshwater wetlands.

- c.) *Are there feasible alternative designs, layouts, densities, or technologies that are feasible which would result in less impacts?*

Response: No. The proposed construction activity within the wetland buffer zones are limited to previously disturbed areas. Peak flow rates leaving the proposed drainage system shall be less than that expected under existing conditions. The proposed parking layout is located as far away from the wetland to the greatest extent practicable. The porous pavement structure of the new parking area should help further reduce impacts and help improve groundwater recharge conditions when compared to existing conditions.

- d.) *Will reduction in the project's scale or relocation of the project to minimize impacts result in significant consequences?*

Response: The project cannot be reduced in scale or relocated. Any further reduction will eliminate the project's viability. The project, as currently designed, does not propose negative impacts to the freshwater wetlands.

3. Mitigation Measures

a.) *Preserving natural areas in and around wetlands:*

Response: The proposed improvements will minimize disturbance to natural vegetation to the greatest extent possible. The project, as currently designed, does not propose a negative impact to any freshwater wetlands.

b.) *Minimizing the extent of disturbed areas and encouraging the preservation of land in its natural state:*

Response: The scale of the project has been kept to the minimum necessary for project feasibility. The project, as currently designed, does not propose negative impacts to any freshwater wetlands.

c.) *Designing dense plantings of shrubs and trees between the developed areas and the remaining natural areas (i) to “buffer” impacts from loss of wildlife habitat and loss of natural areas and (ii) to reduce the impacts of noise, lighting and other disturbances upon wildlife and the remaining natural areas:*

Response: The proposed land cover and preservation of existing undisturbed areas on the property represents the minimum design possible.

d.) *Maintaining unrestricted fish and wildlife passage:*

Response: Not applicable.

e.) *Designing structures and alterations so that they are located outside of flood plain, floodway, areas subject to flooding, flowing bodies of water or other freshwater wetlands:*

Response: The site improvements are outside of any flood plain, and construction activity within the jurisdictional wetland buffer zones are limited to the greatest extent practicable.

f.) *Using best management practices for the stabilization of disturbed areas and the selection, use, and maintenance of temporary soil erosion and sediment controls in accordance with or equivalent to the latest version of the Rhode Island Soil Erosion and Sediment Control Handbook and the Rhode Island Stormwater Design and Installation Standards Manual:*

Response: Erosion and sedimentation control measures are proposed as part of the project. Once established, such measures would remain in place until all

construction activity has ceased and the site has stabilized. Strict utilization of such measures will ensure that neither erosion nor sedimentation adversely impacts the overall water quality of freshwater wetlands.

- g.) *Using best management practice selection and design criteria in accordance with or equivalent to the Rhode Island Stormwater Design and Installation Standards Manual to maximize the control, treatment and maintenance of stormwater flows:*

Response: The proposed design conforms to all applicable RISDISM Minimum Standards and requirements.

- h.) *Minimizing impervious surface areas such as roads, parking, paving or other surfaces:*

Response: The impervious surface areas proposed are the minimum areas required to meet the project needs. The majority of the new parking area is proposed to be porous asphalt to minimize the actual total impervious area on site.

- i.) *Incorporating compensatory flood storage area(s) where necessary and in compliance with these Rules:*

Response: There are no impacts to the 100-year flood zones therefore compensatory storage is not required.

- j.) *Encouraging infiltration of non-contaminated run-off into uncontaminated soils:*

Response: A sand filter system is proposed onsite to satisfy the groundwater recharge requirements for the proposed increase in impervious area on site. Refer to the Civil Site Plan Set for location and details.

- k.) *Preventing channelization or piping run-off and encouraging sheet flow:*

Response: Runoff for the proposed improvement areas will discharge from the proposed stormwater management system in a non-erosive manner.

- l.) *Landscaping with gradual slopes to maximize sheet flow and infiltration while minimizing channelization:*

Response: The proposed slopes on site have been minimized where feasible to accomplish the project goals and maximize infiltration.

- m.) *Minimizing or eliminating the use or increase of any pollutants, fertilizers, pesticides, herbicides, or any other chemical or organic application which increase pollutant and nutrient loadings:*

Response: The use of fertilizers will be limited to the minimum required to maintain the proposed grassed areas.

- n.) *Maximizing setbacks of septic systems and other land disturbances from wetlands:*

Response: There is no on-site wastewater treatment system existing or proposed.

- o.) *Minimizing the withdrawal of surface water or groundwater from wetlands or uplands adjacent to wetlands, especially dry periods, and minimizing any reduction in river or stream flow:*

Response: Runoff flow directions during pre-development conditions are maintained in post-development conditions. No surface water or groundwater is proposed to be diverted away from the wetland systems.

9.02 E. Engineering Requirements

The supporting calculations and documents demonstrating the project meets the criteria in Rule 9.03 and 10.05 are provided in the two (2) attached reports entitled, “Drainage Narrative and Assessment for Tower Hill Landings Annex” and “Soil Erosion and Sediment Control Plan for Tower Hill Landings Annex.”

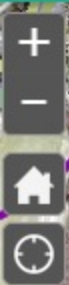
In general, the proposed project was developed to conform to the intent of the Rules and Regulations Governing the Enforcement of the Freshwater Wetlands Act, the State of RI Stormwater Design and Installation Standards Manual and the Rhode Island Soil Erosion and Sediment Control Handbook.

9.02 F. Compliance with Water Quality Regulations

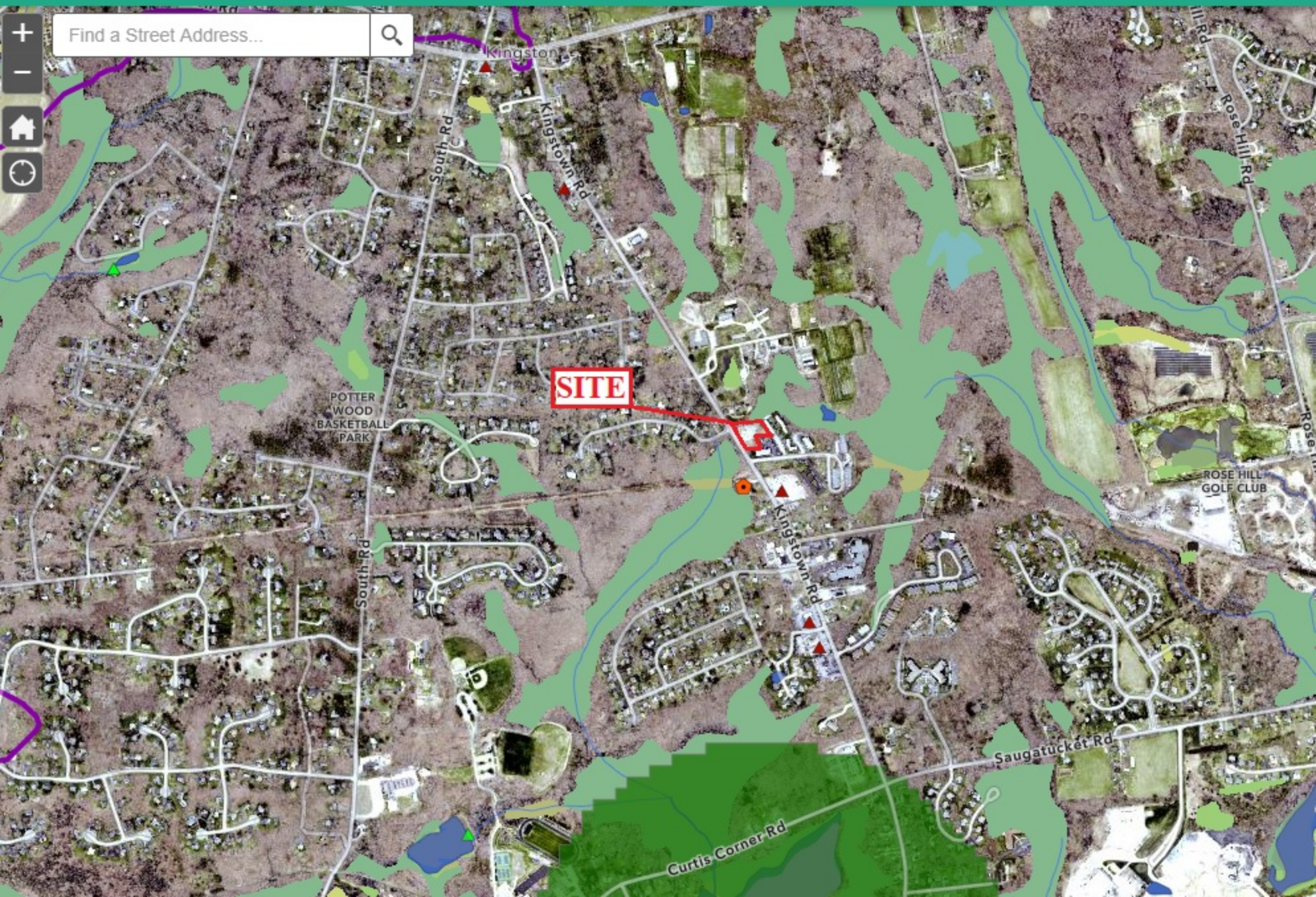
This application has been prepared to comply with the State of RI Stormwater Design and Installation Standards Manual and RIDEM Water Quality Regulations and Standards.

APPENDIX

**a. RIDEM Environmental
Resource Maps**



Find a Street Address...



SITE

POTTER WOOD BASKETBALL PARK

ROSE HILL GOLF CLUB

Kingston

South Rd

Kingstown Rd

Rose Hill Rd

South Rd

Kingstown Rd

Saugatucket Rd

Curtis Corner Rd

b. FEMA Flood Map

National Flood Hazard Layer FIRMette



41°28'28.86"N



41°28'1.89"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

- | | | |
|------------------------------------|--|--|
| SPECIAL FLOOD HAZARD AREAS | | Without Base Flood Elevation (BFE)
<i>Zone A, V, A99</i> |
| | | With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i> |
| | | Regulatory Floodway |
| OTHER AREAS OF FLOOD HAZARD | | 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i> |
| | | Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i> |
| | | Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i> |
| | | Area with Flood Risk due to Levee <i>Zone D</i> |
| OTHER AREAS | | NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i> |
| | | Effective LOMRs |
| GENERAL STRUCTURES | | Area of Undetermined Flood Hazard <i>Zone D</i> |
| | | Channel, Culvert, or Storm Sewer |
| | | Levee, Dike, or Floodwall |
| OTHER FEATURES | | 20.2 Cross Sections with 1% Annual Chance Water Surface Elevation |
| | | 17.5 Coastal Transect |
| | | Base Flood Elevation Line (BFE) |
| | | Limit of Study |
| | | Jurisdiction Boundary |
| MAP PANELS | | Coastal Transect Baseline |
| | | Profile Baseline |
| | | Hydrographic Feature |
| | | Digital Data Available |
| | | No Digital Data Available |
| | | Unmapped |
| | | The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location. |



This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/9/2020 at 4:54:47 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

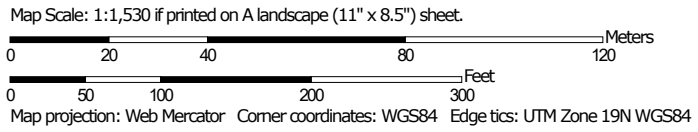
71°30'33.38"W

c. Soil Survey Map

Soil Map—State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties




Soil Map may not be valid at this scale.





MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Rhode Island: Bristol, Kent, Newport, Providence, and Washington Counties

Survey Area Data: Version 19, Sep 12, 2019

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Apr 1, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BmB	Bridgehampton silt loam, till substratum, 3 to 8 percent slopes	0.5	4.2%
CB	Canton-Urban land complex	0.2	2.2%
NaB	Narragansett silt loam, 3 to 8 percent slopes	1.2	11.3%
NbB	Narragansett very stony silt loam, 0 to 8 percent slopes	1.1	10.2%
Rf	Ridgebury, Leicester, and Whitman soils, 0 to 8 percent slopes, extremely stony	2.3	21.0%
SwA	Swansea muck, 0 to 1 percent slopes	0.2	1.6%
UD	Udorthents-Urban land complex	5.4	49.0%
WcB	Wapping very stony silt loam, 0 to 8 percent slopes	0.1	0.6%
Totals for Area of Interest		11.0	100.0%

d. Wetland Biologist Letter



Natural Resource Services, Inc.

March 2, 2020

Steven Cabral, PE
Crossman Engineering
151 Centerville Road
Warwick, RI 02886

RE: Freshwater Wetland Delineation
2095 Kingstown Road; A.P. 32-4, Lot 32
South Kingstown, Rhode Island

Dear Mr. Cabral:

Natural Resource Services, Inc. (NRS) has completed the freshwater wetland delineation within and immediately adjacent to the above referenced property. This field work was performed by Edward J. Avizinis, PWS, CPSS on February 28, 2020. The wetland delineation was established in accordance with the standards outlined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (250 RICR 150-15-1). 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 1.8 (C)(4) 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 approved 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 property is listed in the South Kingstown tax assessor's database as a 1.23 acre parcel. The property is a vacant parcel with frontage on Kingstown Road.

Flag series A1-A5 depicts the limit of a swamp. The freshwater wetland regulations define a swamp as a wetland which is dominated with woody vegetation, primarily trees, and is greater than three (3) acres in overall size. This wetland extends off property to the north and therefore does appear to meet this three acre threshold. The regulations require the addition of a 50 foot perimeter wetland to the delineated edge of any swamp.

The 50 foot perimeter wetland is considered an extension of the swamp under the freshwater wetland regulations. Any and all proposed land disturbing activities within either the swamp or 50 foot perimeter wetland requires a permit from the DEM, OWR.

In addition, there is a stream present within the swamp. The freshwater wetland regulations require the application of a 100 foot riverbank wetland to each side of this stream. As with the 50 foot perimeter wetland, any proposed construction within the 100 foot riverbank wetland requires a permit from the DEM. There is also an Area Subject to Storm Flowage (ASSF) located along the eastern property boundary, any proposed construction within the ASSF requires a permit from the DEM.

It is important to note that a new state freshwater wetlands law was enacted in July of 2015. This law made changes to the jurisdictional limits currently utilized in the regulations. The Department of Environmental Management (DEM) is writing new regulations which will require buffer zones for all freshwater wetlands. While a comprehensive timeline has not been established for the enactment of these rules, it is anticipated that they will be in effect at some point in 2020. If you submit an application prior to the promulgation of these rules, your project would then be grandfathered under the current setback standards.

Please do not hesitate to contact me if you have questions regarding the field work performed or any of the information presented in this letter of findings.

Very truly yours,

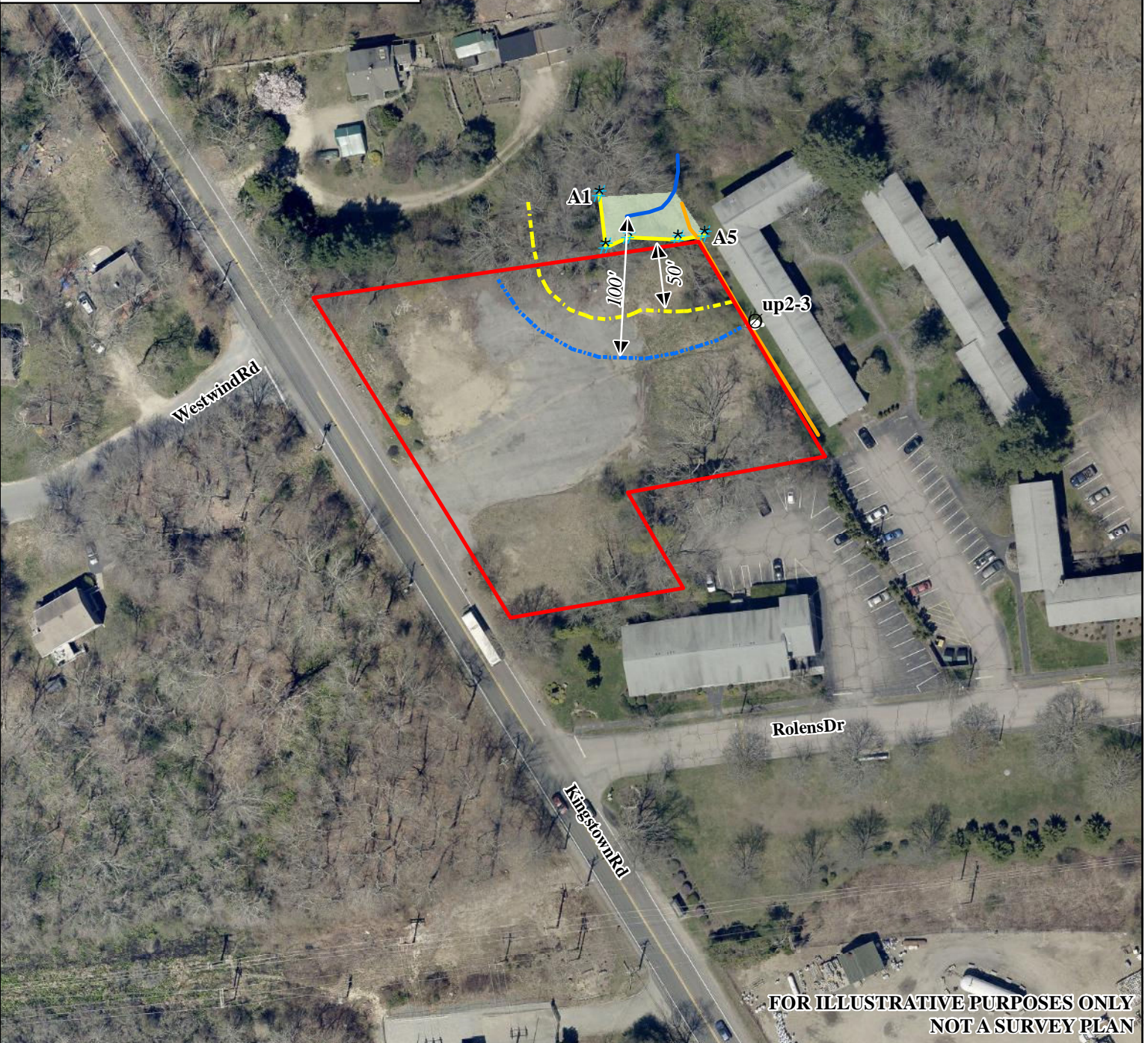
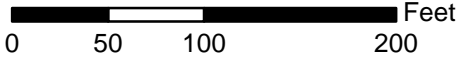
A handwritten signature in blue ink, appearing to read "Scott P. Rabideau", with a long horizontal flourish extending to the right.

Scott P. Rabideau, PWS
Principal

Enclosures

Legend

- Approximate Site Location (GIS)
- *—* Approximate Wetland Delineation
- Approximate Wetland Area
- - - 50' Perimeter Wetland
- Approximate Intermittent Stream
- ⋯ 100' Riverbank Wetland
- Approximate ASSF



FOR ILLUSTRATIVE PURPOSES ONLY
NOT A SURVEY PLAN

**Site Sketch Depicting Approximate
Wetland Delineation
2095 Kingstown Rd
A.P. 32-4, Lot 32
South Kingstown, RI**

*Performed by
Edward J. Avizinis, PWS, CPSS - 2/28/2020
Located using hand-held Trimble GeoXH*

April 2019 aerial
RI DEM Mapping
Natural Resource Services, Inc.
PO Box 311
180 Tinkham Lane
Harrisville, RI 02830
p: (401) 568-7390
f: (401) 568-7490

e. Site Photographs



Site frontage facing East towards existing
Tower Hill Landings Apartment Building (2016)



Site frontage facing Northeast to existing paved parking areas (2016)



Site frontage facing North towards former restaurant building, now demolished (2016)



Driveway connection off Kingstown Road (Route 108) facing Northwest



Center of Site facing east towards rear of site (2016)



Rear property line of site facing North along ASSF (2016)



Rear of site facing East towards Kingstown Road and now demolished restaurant building (2016)



Center of site facing South towards existing Tower Hill Landings apartment building (2016)