Natural Resource Services, Inc.

Written Narrative in Support of an
Application to Alter a Freshwater Wetland
for a
Hotel Development
A.P. 111, Lot 1; Gooding Avenue
Bristol, Rhode Island

Prepared for:
D&M Boca Development
92 Faunce Corner Road
North Dartmouth, MA 02747

Prepared by:

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Introduction

Natural Resource Services, Inc. (NRS) has been retained by Dennis DeGrazia of D&M Boca Development to assist with the preparation and submission of an Application to Alter a Freshwater Wetland (AAFW) to the RI Department of Environmental Management (DEM), Office of Water Resources (OWR). It should be noted that D&M Boca Development has a purchase and sale agreement with the current property owner, KenDan, LLC. As such, KenDan, LLC has signed the application form and is considered the applicant when referenced throughout this report.

The wetlands on the property were field delineated and verified by the DEM, OWR (DEM Application No. 13-0098). All of the wetland edge changes outlined in the Department's verification letter dated June 12, 2014 have been made and are reflected on the development plans submitted with this application. A previous application to construct an almost identical building and parking lot was approved under application 15-0033 but the proposed structure was never built.

This written narrative has been prepared to fulfill the requirements outlined in Section 1.10 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act (the regulations). NRS has performed the required habitat assessments and is responsible for the preparation of this narrative. The applicant has engaged DiPrete Engineering as the engineering consultant. DiPrete is responsible for the development plan, drainage design and all assessments the regulations require to be performed by a RI licensed professional engineer (PE).

Response to Section 1.10

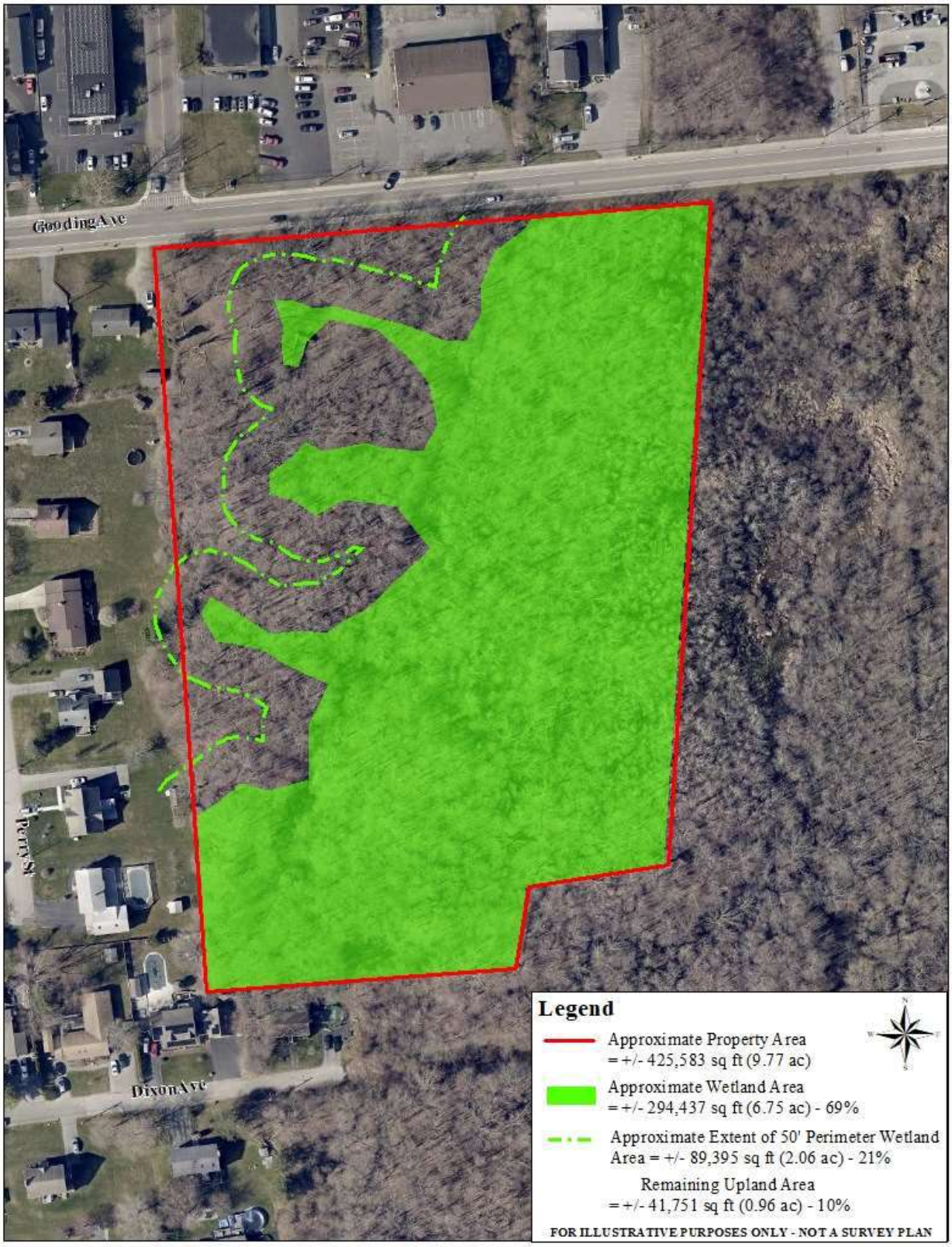
This Section concerns the filing of an Application to Alter a Freshwater Wetland with DEM, OWR. The following responses address each of the pertinent sections of this Rule.

Section 1.10(B)(1): Project Scope

The purpose of this project is to develop an 80 room hotel on A.P. 111, Lot 1, a 9.77 acre parcel situated on the southerly side of Gooding Avenue in the Town of Bristol. It is the applicant's position that the 80 room facility is the minimum size necessary to make the project economically feasible in this location.

The lot is undeveloped and entirely forested. A municipal sewer easement bisects the parcel in its entirety. Figure 1 is a GIS graphic which depicts the verified edge of the freshwater wetland within the boundaries of the property. It has been determined that 69 percent of the lot is swamp (294,437 square feet) and 21 percent of the lot is 50 foot perimeter wetland (89,395 square feet).

Figure 1: Regulated Freshwater Wetlands Present on A.P. 111, Lot 1



The current proposal mirrors the previously permitted development to build a hotel along with associated parking area and stormwater management structures. This facility will be serviced with town water and sewer. The hotel and associated structures will be situated on the northwest most corner of the lot and has been designed to maximize the use of non-jurisdictional upland in their entirety. This design has also made every attempt to avoid, minimize, and mitigate all potential wetland impacts as much as is practicable, including the incorporation of recommendations made by Ronald Gagnon, PE, Chief of the Office of Technical and Customer Assistance as outlined in a letter (September 10, 2014) to Scott Rabideau, PWS as a follow up to a pre-application meeting held on September 3, 2014. Later portions of this report explain these efforts in detail.

In order to achieve the project purpose, it is necessary to alter both swamp and perimeter wetland. The total alterations proposed to each of these regulated wetlands are found in Table 1. Although the development proposed is quite similar to that which was approved in 2015, the proposed alterations reflect a slightly reduced project limit of disturbance (LOD) as reflected in the table below.

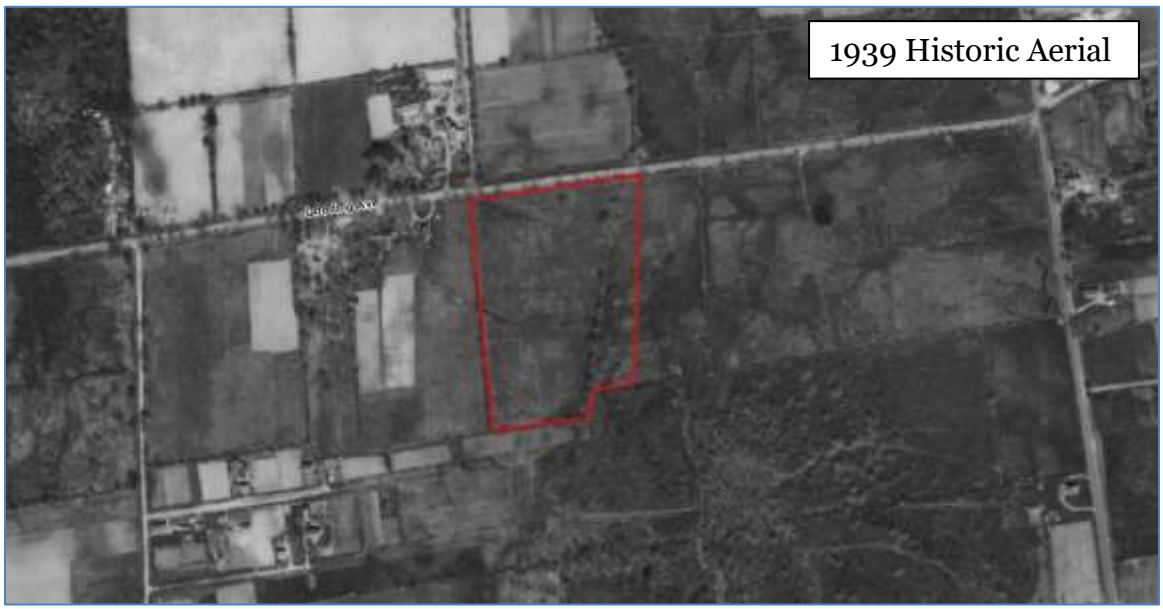
Table 1: Proposed Alterations

Wetland Feature	*Total Proposed Alterations (sq. ft.)*
Swamp	**4,717**
50 foot perimeter wetland	**45,200**

The Rhode Island Soil Survey has the majority of the site mapped as the Stissing soil series. This is a silt loam fine textured soil that is characterized by a high seasonally high water table and is generally indicative of wetlands. NRS field investigations were consistent with the findings of the soil survey, however, areas of soil on the northwest most corner of the lot that are indicative of uplands would be more accurately mapped as a Pittstown soil series.

Land use, as depicted on the map which can be found in Appendix A, derived from the Rhode Island Geographic Information System (RIGIS) Data Distribution System (2020), shows the entirety of the lot mapped as the Deciduous Forest (>80% hardwood). The surrounding area within 150 feet of the property is mapped as Commercial, Medium High Density Residential, Industrial, and Vacant Land to the north and west. The remainder of the surrounding area is mapped as Deciduous Forest (>80 hardwood) to the south and east. The land use map provides justification for the siting of a commercial development along the Gooding Avenue road frontage. The development is consistent with the Town of Bristol's intended use of the property.

A review of historic aerial photographs of the area shows that the entire lot was cleared and used for agricultural purposes in 1939. It appears that the area was left fallow and unaltered after that time. The surrounding area has become more developed over the years including a residential development created in the late 1970s to 1980s. The commercial and industrial uses have also established since the 1980's.



The applicant and D&M Boca will develop the hotel only in the northwest corner of the parcel. A permanent limit of disturbance, once established through DEM permitting, shall be the only active use of the property. A permanent buffer marker shall be placed along the limit of disturbance to demarcate this edge for current and future property owners. The applicant will agree to encumber the remaining land area with a conservation easement to ensure the protection of the swamp and perimeter wetland into the future.

Section 1.10(B)(2): General Provisions

In compliance with Section 1.10(B)(2), all necessary material has been prepared and submitted as part of this application.

The applicant has received a verification of the wetland delineation from the DEM, OWR and is proposing the alteration of 4,717 square feet of federally regulated freshwater wetland. The application qualifies for a self-verification review under the agreement between the DEM and the U.S. Army Corps of Engineers (ACOE).

Section 1.10(B)(4): Avoidance and Minimization Requirements

In accordance with Section 1.10(B)(3) of the Regulations, all AAFW must demonstrate in the form of a written narrative that all probable impacts to freshwater wetlands functions and values have been avoided to the maximum extent possible. The following review criteria have been considered in the applicant's assessment of impact avoidance.

1.10(B)(4)(a) Impact Avoidance:

As currently proposed, this project has achieved a sufficient level of impact avoidance given the existing wetland feature constraints. Due to the configuration of the wetland on the lot, a portion of the work will occur within the swamp and the perimeter wetland. This project has been designed to avoid potential impacts as much as possible. It is the applicant's contention that the current project design clearly illustrates a successful effort to avoid impacts to jurisdictional wetlands, and more importantly wetland functions and values, to the greatest degree practicable and still achieve the project purpose.

a) Whether the primary proposed activity is water-dependent, or whether it requires access to freshwater wetlands as a central element of its primary purpose (e.g., a pier);

This project is neither water-dependent, nor does it require access to freshwater wetlands as a central element of its primary purpose. However, the location and orientation of the onsite wetland resource inhibits the ability to propose this project completely outside of the wetland. In particular, there are multiple fingers of wetland that extend westward upslope. Specifically, the northernmost finger fragments an otherwise large piece of upland. This portion of wetland will have to be filled as a result of this project to create one contiguous piece of upland large enough to support the hotel and parking area.

b) Whether any areas within the same property or other properties owned or controlled by the applicant could be used to achieve the project purpose without altering the natural character of any freshwater wetlands;

There are no alternate areas within the same property that can be used to achieve the project purpose without requiring a greater level of alteration to the freshwater wetlands that occupy this property. The project is proposed to utilize the available upland

that exists in the northwest portion of the lot. There is no other location on this pre-existing lot that would support this project.

c) Whether any other properties reasonably available to, but not currently owned or controlled by, the applicant could be used to achieve the project purpose while avoiding wetland alterations. A property is reasonably available if, in whole or in part, it can be acquired without excessive cost, taking individual circumstances into account, or, in the case of property owned or controlled by the same family, entity, group of affiliated entities, or local, state or federal government, may be obtained without excessive hardship;

No alternate off-site property can be used to accomplish the project goals, and provide a complete or greater level of impact avoidance. The surrounding properties are currently developed with other commercial facilities or residential neighborhoods.

d) Whether alternative designs, layouts or technologies could be used to avoid freshwater wetlands or impacts on functions and values on the subject property or whether the project purpose could be achieved on other property that is reasonably available and would avoid wetlands;

The current project layout was designed to avoid freshwater wetlands as much as possible. No other layouts or technologies could be used that would achieve higher levels of impact avoidance. Although the complete avoidance of wetland impacts cannot be accomplished, the applicant has made every attempt to avoid impacts as much as possible while still achieving the project goals.

e) Whether the applicant has made any attempts (and if so what they were) to avoid alterations to freshwater wetlands by overcoming or removing constraints imposed by zoning, infrastructure, parcel size or the like; and

The alterations to jurisdictional wetlands that are currently proposed are not in part due to zoning constraints. The structures proposed are consistent with land use for this portion of the lot and surrounding area as it is zoned as commercial.

f) Whether feasible alternatives that would not alter the natural character of any freshwater wetlands on the subject property or on property that is reasonably available, if incorporated into the proposed project, would adversely affect public health, safety or the environment.

Not applicable, as no feasible alternatives are available that would achieve the project goals without creating a greater impact to the wetland. Furthermore, the project as currently designed does not pose a significant adverse effect on public health, safety, or the environment.

Section 1.10(B)(4)(b): Impact Minimization

As a complete level of impact avoidance cannot be attained and still achieve the proposed project goals, the applicant has attempted to minimize resulting wetland impacts to the greatest extent practicable. Specifically, the applicant has maximized use of the available upland portions of the lot. In addition, stormwater mitigation systems will be implemented to promote treatment of runoff and groundwater recharge and erosion controls will be implemented to protect areas outside the limit of disturbance.

a) Whether the proposed project is necessary at the proposed scale or whether the scale of the wetland alteration could be reduced and still achieve the project purpose;

The project as currently proposed is the result of multiple designs and reconfigurations to minimize impacts. Any further minimization to the project scale will compromise the project goals and make the project unviable economically. It has been determined that an 80 room hotel is the smallest number of rooms that could be created to maintain an economic benefit to the owner and the Town of Bristol.

b) Whether the proposed project is necessary at the proposed location or whether another location within the site could achieve the project purpose while resulting in less impact to the wetland;

There are no alternate locations available that would allow for a greater level of impact minimization. The majority of the lot is comprised of swamp. The location of the proposed project is situated in the area of the lot with the most available upland. This upland is fragmented by fingers of wetland extending into the upland from the main portion of the wetland situated on the lower remaining portion of the lot. Any other alternative would require a greater level of wetland impact.

c) Whether there are feasible alternative designs, layouts, densities or technologies, that would result in less impact to the wetland while still achieving the project purpose; and

The current project designs, layouts, and technologies that are now proposed will all provide the greatest level of impact minimization possible, while still achieving the intended project goals.

d) Whether reduction in the scale or relocation of the proposed project to minimize impact to the wetland would result in adverse consequences to public health, safety or the environment.

This project will not result in an adverse impact to public health, safety, or the environment. A reduction in the scale or relocation of this project would create an economically unviable project which would result in a termination of the project as a whole. This would also nullify the economic benefits provided to the town by this project.

Section 1.10(B)(4)(c): Mitigating Measures

As part of the overall project design, mitigation measures will be incorporated into this development plan. Such measures will include the installation of proper erosion and sedimentation control measures that will be established along the limits of disturbance associated with this project, as depicted by the accompanying site plan. Once established such measures will remain in place and be monitored on a regular basis until all construction activity has ceased and the surrounding grade has stabilized. Strict utilization of this measure should ensure that neither erosion nor sedimentation potentially occurring during the initial construction process adversely or significantly impacts the overall water quality of the surrounding freshwater wetlands. During construction soil erosion and sedimentation controls will be implemented along all limits of work (Barrett et al. 1995; Knowen 1990).

Additionally, in compliance with the *Rhode Island Stormwater Design and Installation Standards Manual* (RI Department of Environmental Management 2010), multiple best management practices have been proposed to mitigate any impacts that could result from the introduction of new impervious surfaces to this site. This will include the implementation of a stormwater management treatment system designed by DiPrete Engineering. These controls will collect and provide treatment for overland flow from the impervious parking area and roof top and will also promote infiltration of the water.

Furthermore, screening vegetation will be planted along portions of the limit of disturbance as indicated on the plan. This will provide a buffer from noise and aesthetic disturbance to the wetland and wildlife that use the wetland and were designed in accordance with the Wetland BMP Manual (April, 2010).

Section 1.10(B)(5) - Evaluation of Wetland Functions, Values and Impacts

Evaluation Methodology:

Natural Resource Services, Inc. (NRS) performed several inspections and assessments of this property. The initial site visit was conducted on April 17, 2014 for the purpose of delineating the on-site freshwater wetland and documenting site conditions. Follow-up inspections were conducted on December 22nd (8am – 11am) and December 30, 2014 (1pm – 3:30pm) in order to gather additional site data. An additional site visit was done on December 15th 2022 to discern if the current site conditions match those which were previously documented on site.

Habitat assessments are conducted to evaluate the wildlife habitat potential offered by the subject site, and to assist in the preparation and submission of the application package. During its habitat assessment, Natural Resource Services, Inc. (NRS) utilizes direct site inspections, existing data review, and conducts a detailed assessment of existing and potential wildlife usage. This inspection details those species directly observed or indicated through physical evidence (tracks, scat, etc.), or identified by unique signature

traits (call). In addition, those species which could and could not utilize the site, dependent upon features present within the property, are identified.

NRS field delineations consist of the identification and classification of both soil and vegetation. The soils are examined for the presence of hydric condition indicators. The facultative status of vegetation present is determined to further deduce the position of any wetland edge.

USGS Topographic maps are examined for the depiction of blue-lined streams, waterbodies or depressed areas. The Rhode Island Soil Survey is examined for the presence of hydric soils, any perennial waterways, as well as any hydrologic connection to known public water supplies.

Where applicable, FEMA floodplain insurance maps are consulted to determine if the subject property would be affected by any existing 100-year floodplain. Additionally, the DEM Division of Water Resources Water Quality Standards Map is utilized to determine the existing quality of fresh and/or salt waters within the project area. As applicable, the latest State's List of Impaired Waters is consulted. NRS also examines available RIGIS data layers concerning rare species, historic districts, historic aerial photographs, and other pertinent information.

Qualifications:

Natural Resource Services, Inc. personnel involved in the evaluation of the subject property and preparation of this application include:

- Scott P. Rabideau, *PWS/Principal*
- Hannah Chace, *Staff Biologist*

Detailed statements of qualification are included in Appendix C of this narrative, which present all relevant experience.

Freshwater Wetland Characteristics:

This delineation was based on the predominance of hydrophytic vegetation (OBL, FACW, FAC, and FACU) as defined in Appendix 2 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act in combination with observed surface hydrology indicators as well as hydric soil indicators as defined in the Field Indicators for Identifying Hydric Soils in New England, Version 3 (2004). The primary indicators observed on the site include *mucky mineral horizon, depleted matrix below a dark surface horizon,* and *redox within a dark surface horizon*. Vegetation within the wetland on site was dominated by a mix of Red Maple, Black Tupelo, Highbush Blueberry and Morrows Honeysuckle. However, the wetland continues eastward and is dominated by a different mix of vegetation with a more flooded hydrologic regime. Vegetation dominating those areas north of the site includes species of willow and thick patches of common reed and other marshy vegetation.

Table 2: Vegetation observed in abundance throughout this wetland:

Common Name	*Scientific Name*	*Vegetative Layer*
Red Maple	*Acer rubrum*	Overstory
Black Tupelo	*Nyssa sylvatica*	Overstory
White Oak	*Quercus alba*	Overstory
Green Ash	*Fraxinus pennsylvanica*	Overstory
Highbush Blueberry	*Vaccinium corymbosum*	Understory
*Morrow's Honeysuckle	*Lonicera morrowii*	Understory
Sweet Pepperbush	*Clethra alnifolia*	Understory
Southern Arrowwood	*Viburnum dentatum*	Understory
Spicebush	*Lindera benzoin*	Understory
*Japanese Honeysuckle	*Lonicera japonica*	Vine
Poison Ivy	*Toxicodendron radicans*	Vine
Sensitive Fern	*Onoclea sensibilis*	Herbaceous
Skunk Cabbage	*Symplocarpus foetidus*	Herbaceous
Royal Fern	*Osmunda regalis*	Herbaceous
Sphagnum Moss	*Sphagnum*	Herbaceous

*Indicates an invasive species

The upland on the site is situated on the northwest corner of the lot and is bordered by residential development and Gooding Avenue. This area contains a significant amount of invasive species that were found throughout the area. This area is a mixed hardwood forest with specimens of varying age including few old growth trees. The area has been exposed to nearby development of surrounding roads, commercial, and residential use. During the most recent site visit, portions within the previously approved LOD had been cleared. Portions of the understory within the approved LOD were less vegetated than those upland and wetland areas outside the LOD. However the clearing did not appear to be recent, and occurred as a result of the previous permitting history.

Table 3: Vegetation observed in abundance throughout the upland:

Common Name	*Scientific Name*	*Vegetative Layer*
Black Cherry	*Prunus serotina*	Overstory
American Beech	*Fagus grandifolia*	Overstory
Red Maple	*Acer rubrum*	Overstory
Black Birch	*Betula lenta*	Overstory
White Oak	*Quercus alba*	Overstory
*Morrow's Honeysuckle	*Lonicera morrowii*	Understory
*Multifloral Rose	*Rosa multiflora*	Understory
Blackberry	*Rubus L.*	Understory
Sweet Pepperbush	*Clethra alnifolia*	Understory
Southern Arrowwood	*Viburnum dentatum*	Understory
*Oriental Bittersweet	*Celastrus orbiculatus*	Vine
Dewberry	*Rubus flagellaris*	Vine
*Japanese Honeysuckle	*Lonicera japonica*	Vine
Poison Ivy	*Toxicodendron radicans*	Vine
Roundleaf Greenbrier	*Smilax rotundifolia*	Vine
Princess Pine	*Lycopodium obscurum*	Vine

Cinnamon Fern	*Osmundastrum cinnamomeum*	Herbaceous

*Indicates an invasive species

During the latest site visit staff biologist Hannah Chace located four points utilizing a handheld GPS which were obtained to document surrounding conditions during the habitat assessment. Worksheets detailing conditions observed are located in Appendix B.

Wildlife & Wildlife Habitat:

NRS performed three (3) site visits in which a detailed assessment of the property was conducted. The purpose of these assessments was to determine which, if any, wildlife species currently use the available habitat for feeding, breeding, or other related activities. This study details both those wildlife species directly observed, as well as any identified by unique signature traits (signs/ vocalizations). Further evidence of wildlife inhabitation or utilization of the area (tracks, scat, burrows, tree cavities, trails, nests) has also been identified. The direct visual observations of wildlife were limited due to the winter season dates for the field work.

Table 4: Wildlife Indicators: Those species that were directly observed or signs of inhabitance were directly observed during either of the NRS site visits.

Common Name	*Scientific Name*
Blue Jay	*Cyanocitta cristata*
Carolina Wren	*Thryothorus ludovicianus*
Chickadee, Black-capped	*Poecila atricapilla*
Whitetail Deer	*Odocoileus virginianus*
Eastern Gray Squirrel	*Sciurus carolinensis*

The following table (Table 5) is a summary of species that likely use this habitat. This list was developed based on site characteristics, vegetative communities, and observed habitat indicators.

Table 5: Anticipated Wildlife Utilization of Subject Wetland:

Common Name	*Scientific Name*
Common Yellowthroat	*Geothlypis trichas*
Cooper's Hawk	*Accipiter cooperii*
Downy Woodpecker	*Picoides pubescens*
Eastern American Toad	*Bufo americanus americanus*
Eastern Box Turtle	*Terrapene carolina carolina*
Eastern Garter Snake	*Thamnophis sirtalis sirtalis*
Eastern Gray Squirrel	*Sciurus carolinensis*
Eastern Pheobe	*Sayornis phoebe*
Eastern Screech Owl	*Otus asio*
Eastern Wood Peewee	*Contopus virens*
European Starling	*Sturnus vulgaris*
Gray Fox	*Urocyon cinereoargenteus*

Hairy Woodpecker	*Picoides villosus*
Hermit Thrush	*Catharus guttatus*
House Finch	*Carpodacus mexicanus*
House Sparrow	*Passer domesticus*
Mourning Dove	*Zenaida macroura*
Northern Black Racer	*Coluber constrictor constrictor*
Northern Cardinal	*Cardinalis cardinalis*
Northern Flicker	*Colaptes auratus*
Northern Red-backed Salamander	*Plethodon cinereus*
Northern Ringneck Snake	*Diadophis punctatus edwardsii*
Northern Saw-Whet Owl	*Aegolius acadicus*
Ovenbird	*Seiurus aurocapillus*
Purple Finch	*Carpodacus purpureus*
Raccoon	*Procyon lotor*
Redeyed Vireo	*Vireo olivaceus*
Scarlet Tanager	*Piranga olivacea*
Skunk, Striped	*Mephitis mephitis*
Song Sparrow	*Melospiza melodia*
Veery	*Catharus fuscescens*
Virginia Opossum	*Didelphis virginiana*
Warbling Vireo	*Vireo gilvus*
White-breasted Nuthatch	*Sitta carolinensis*
White-footed Mouse	*Peromyscus leucopus*
Yellow Throated Warbler	*Thryothorus ludovicianus*
Yellow Warbler	*Dendroica petechia*

Wetland Values:

The habitat value of this site for most wildlife species is limited by the proximity of adjacent roadways and residential and commercial development. Additionally, the sewer easement has created an edge through the center of this lot, bisecting the lot into an east and west side. The RIGIS data layer does designate this site as potential habitat for rare species. A recent inquiry to DEM revealed the presence of the Northern Leopard Frog, a species of state concern, last identified in 1985. This species was identified near Leila Jean Drive, well off-site to the south of the project location. The wetland area proposed for alteration is not a valuable habitat for this species of concern, nor was this species identified during the assessment site visits.

Photo 1: Depicting cleared sewer easement - 12/15/2022

The west side of the lot, where the project is proposed, is comprised of ruderal forest with an invasive species dominated understory. The west side is also bordered by residential and commercial development and does not contain many high value habitat features. This would preclude use of this site by those species that are sensitive to human inhabitation and related disturbances. There are no stone walls, flowing or standing waterbodies, and woody debris and density of vegetation is limited on this side of the site. The wetland on the western portion of the lot consists of narrow fingers extending into the upland. The hydrology in these wetlands is seasonally saturated and the presence of the wetland is indiscernible to the untrained eye.

The portion of the property to the east of the sewer easement represents the portion of the lot with the highest value. The land slopes down to the east to a large contiguous wetland that ranges from saturated to seasonally flooded with more of an apparent wetland signature. The area is dominated by Red Maple and Black Tupelo and contains a denser understory which provides nesting opportunity and protection for birds. The eastern portion of the lot is contiguous with a large tract of habitat protected by the Town of Bristol which contains swamp/marsh wetland and an intermittent stream (Silver Creek) that is hydrologically connected with Bristol Cove. This area will remain protected through a proposed conservation easement as a result of this project.

Table 6: Differentiation of Habitat Values

West Side of Sewer Easement (proposed to be developed)	East Side of Sewer Easement (to remain unaltered)
Ruderal forest (few mature specimens)	Red Maple/Tupelo dominated swamp

Invasive species dominate understory	Less invasive species, dominated by Arrowwood, High Bush Blueberry, Spicebush, etc.
Surrounded by edges created by sewer easement, residential and commercial development, and Gooding Avenue	Contiguous with larger tract of land preserved by Town of Bristol
Limited habitat features, i.e. no stone walls, no rivers, no open water, no dense understory, no emergent wetland	Greater habitat value including snags, dense understory, riverine habitat, emergent wetland plants, pockets of standing water (includes off-site contiguous land)

Proposed Impacts:

The commercial development of this site will not significantly impact the functions and values of the wetland complex even though the proposed design will require filling a portion of the swamp and alterations to the perimeter wetland. As previously stated, the habitat value of the western section of the swamp is lower than the portion to the east of the sewer easement. The value of the western portion is low due to the anthropogenic disturbances that have historically occurred in and around this area. East of the sewer easement is a larger area of swamp with higher habitat value that extends off-site and is contiguous with conservation land. This area has a higher overall value and will not be altered.

Erosion and sedimentation controls will be implemented throughout all phases of construction to ensure protection of the off-site wetland and perimeter wetland. Additionally, screening vegetation will be planted along a portion of the limit of disturbance as indicated on the accompanying plan consisting of native Northern White Cedar to further protect the swamp and its functions and values.

Recreation and Aesthetics:

The habitat assessment performed by NRS also attempted to identify the existing aesthetic or open space value provided by this site.

Currently, public access to this site is restricted due to the private nature of the property. The mucky nature of soil and dense vegetation within the interior of the wetland further limits access to the wetland for passive recreational pursuits. The greatest value of the wetland from an aesthetic point of view is from casual observance while utilizing nearby areas. This value will not be altered as there will be no significant impact to the biological wetland.

The identified wetland features represent the potential for photography, bird watching, nature study, and limited trapping for the current owner only. This property is not open to the public. The potential for hunting is restricted again by the private nature of the property and by the proximity to residential/commercial properties. Additionally,

the lack of flowing or open waterbodies within the wetland would further restrict its use for fishing, swimming, or canoeing.

No geological or archaeological sites were directly observed or identified within the subject property during the initial inspection. In addition, the RIGIS data layers concerning historic features and conservation areas do not depict any such features as being present or affected by this project.

The commercial development of this site should not result in a reduction of the currently available recreational or aesthetic values.

Flood Protection:

This proposal will not significantly impact the flood protection value of the wetland. The construction of the stormwater management systems will provide treatment, storage and infiltration of stormwater and will be designed in accordance with the RI DEM Rhode Island Design and Installation Standards Manual (December 2010). Furthermore the wetland proposed to be altered resides on a hillslope and therefore does not provide significant flood storage volume but rather channels flow westward toward the lower gradient wetland that does provide flood storage.

Groundwater and Surface Water Supplies:

Protection of groundwater and surface water supplies will be ensured through proper implementation of stormwater management controls. Currently, within the vicinity of the proposed project area, water during rain events either infiltrates or runs off via the finger-like drainage way wetlands down to the larger lower gradient wetland to the east of the sewer easement. This proposal calls for the installation of a stormwater management system designed by DiPrete to promote treatment and infiltration of run-off and will be intended to mitigate the effect of the proposed impervious surface. Furthermore, the development will be serviced with a municipal water supply and therefore a significant impact to the local watershed is not expected.

Water Quality:

There are no open or flowing bodies of water on the site. The nearest waterbody is Silver Creek which is depicted as an intermittent stream on the USGS topographic map. This feature is approximately 500 feet east at its closest point to the limit of disturbance and flows south where it eventually drains into Bristol Harbor. To ensure protection of water quality within the vicinity of the project area stormwater management systems and erosion controls will be implemented in conjunction with this project. In addition the hotel will be serviced with municipal water and sewer lines which reduces the potential for this project to have an adverse effect on surrounding water quality.

Soil Erosion and Sediment Control:

DiPrete has prepared a Soil Erosion and Sedimentation Control Plan in accordance with the RI Pollution Discharge Elimination Systems (RIPDES) standards. This plan details all measures to be implemented during construction. Part of the plan requires soil erosion and sedimentation controls which will be implemented along all limits of work. These will consist of hay bales with silt fence as detailed on the accompanying plan set. Once established, such measures would remain in place and be monitored on a regular basis until all construction activity has ceased and the surrounding grade has stabilized. Strict application of this measure will ensure that neither erosion nor sedimentation potentially occurring during the construction process adversely or significantly impacts the overall water quality of nearby freshwater wetlands (Barrett et al. 1995; Knowen 1990).

Section 1.10(E) – Review Criteria

a) Significant reduction in the overall wildlife production or diversity of a wetland;

As proposed, this project will not pose a significant reduction on the overall wildlife production or diversity of this wetland. The area of perimeter wetland and minimal areas of swamp proposed to be altered do not represent a significantly valuable habitat. The lower gradient portion of the wetland to the east of the sewer easement is of higher value and will remain intact along with its functions and values. Furthermore, the upland perimeter wetland area proposed to be altered is comprised of numerous invasive plant species and is within close proximity to residential, commercial, and industrial development.

b) Significant reduction in the ability of a wetland to satisfy the needs of a particular wildlife species;

This project will also not result in a significant reduction of the wetlands ability to satisfy the needs of a particular wildlife species. The majority of the work, besides the indicated wetland alteration, will occur outside of the biological wetland. Although a greater portion of the perimeter wetland will be altered, there are no species that specifically utilize this area and no other areas of the wetland and perimeter wetland that are proposed to remain unaltered. Furthermore, the area proposed to be altered is comprised of a greater density of invasive species than the area proposed to remain intact. Studies have shown that invasive species can provide a lower food source value than native counterparts (Smith et al., 2007).

c) Significant displacement or extirpation of any wildlife species from a wetland or surrounding areas due to the alteration of the wetland;

This project will also not cause a significant displacement or extirpation of any wildlife species from this wetland. As previously stated this is a substantially large wetland system contiguous with conservation land and extends off-site to the east and south.

The proposed alteration will not significantly reduce the range of any potential species utilizing this area to a degree that would result in the extirpation of any such species. There will be ample habitat space available within the wetland and perimeter wetland after these plans have come to fruition.

d) Any reduction in the ability of the wetland to ensure the long-term viability of any rare animal or rare plant species;

This project will also not reduce the ability of the wetland to ensure long-term viability of any rare animal or plant species. No rare animal or plant species was observed on-site either within the wetland or perimeter wetland. The potential does exist for the occurrence of rare or endangered species within interior portions of the wetland as does with all large swamp wetlands. However, the overall nature of the wetland will not be impacted by this project as proposed. Proper stormwater mitigation systems will be implemented to mitigate potential impacts from the impervious pavement and erosion controls will be implemented to protect the wetland resource. The hotel will be serviced with municipal water and sewer. These will all contribute to the protection of this large wetland system.

e) Any degradation in the natural characteristic(s) of any rare wetland type;

This project will not degrade the natural characteristic of any rare wetland type. The wetland proposed to be altered is a slope seep wetland situated in a drainage way. The wetland associated with this project meets the regulatory definition of a swamp which is not considered a rare wetland type. Furthermore, for the portion of wetland within the lot limits, no observation of any rare species was observed that would give this swamp special consideration.

f) Significant reduction in the suitability of any wetland for use by any resident, migratory, seasonal, transient, facultative, or obligate wildlife species, in either the short- or long-term as a travel corridor; feeding site; resting site; nesting site; escape cover; seasonal breeding or spawning area;

This project as proposed will not result in a significant reduction in the suitability of any wetland for use by any resident, migratory, seasonal, transient, facultative, or obligate wildlife species, in either the short- or long-term as a travel corridor; feeding site; resting site; nesting site; escape cover; seasonal breeding or spawning area. There are large portions of the wetland that will remain unaltered that will still provide habitat that extend off-site to the east and south, portions of which are mapped as conservation land. Screening vegetation will also be planted along the limit of disturbance near the wetland to provide some degree of buffer from noise and light. Once this project plan has been implemented the wetland system will still provide significant value to wildlife species.

g) Any more than a minimal intrusion of, or increase in, less valuable, invasive or exotic plant or animal species in a wetland;

This project will not result in any more than a minimal intrusion of, or increase in, less valuable, invasive or exotic plant or animal species in this wetland. The area of perimeter wetland that will be impacted is already comprised of invasive species. The alteration proposed in this area will result in the removal of these invasive species. The wetland to the east of the sewer easement is dominated by native species, however some invasive species already exist there, likely from original disturbance from the creation of the sewer line and from historic farming practices. The screening vegetation will consist of native species and provide a vegetative border to the limit of disturbance.

h) Significant reduction in the wildlife habitat functions and values of any wetland which could disrupt the management program for any game or non-game wildlife species carried out by state or federal fish, game, or wildlife agencies;

This project will not significantly reduce the wildlife habitat functions and values of this wetland to a degree that would disrupt any management program for any game or non-game wildlife species carried out by state or federal fish, game, or wildlife agencies. There is significant wildlife value for the portion of wetland to the east that is contiguous to the larger wetland that exists off-site. This portion of the wetland will not be altered, only the portions in the northwest corner of the lot with lower value. In addition, the habitat value specific to the area being altered is lower than other portions of the wetland due to the historically disturbed nature of the land, predominance of invasive species, and proximity to anthropogenic disturbances (*e.g.* other commercial/residential buildings and heavily travelled roadways).

i) Significant reduction in overall current or potential ability of a wetland to provide active or passive recreational activities to the public;

This proposal will not result in the significant reduction in overall current or potential ability of a wetland to provide active or passive recreational activities to the public since these potential abilities are already limited in value.

j) Significant disruption of any on-going scientific studies or observations;

This project will not pose a significant disruption of any on-going scientific studies or observations. This project is located on private property for which no permission has been given to conduct scientific research.

k) Elimination of, or severe limitation to traditional human access to, along the bank of, up or down, or through any rivers, streams, ponds, or other freshwater wetlands;

This proposal will not cause the elimination of, or severe limitation to traditional human access to, along the bank of, up or down, or through any rivers, streams, ponds, or

other freshwater wetlands. No such accesses currently exist on this private parcel besides the cleared sewer line easement which will not be altered.

l) Any reduction in water quality functions and values or negative impacts to natural water quality characteristics, either in the short- or long-term, by modifying or changing: water elevations, temperature regimes, volumes, velocity of flow regimes of water; increasing turbidity; decreasing oxygen; causing any form of pollution; or modifying the amount of flow of nutrients so as to negatively impact wetland functions and values;

This project will not result in any reduction in water quality functions and values or negative impacts to natural water quality characteristics, either in the short- or long-term, by modifying or changing: water elevations, temperature regimes, volumes, velocity of flow regimes of water; increasing turbidity; decreasing oxygen; causing any form of pollution; or modifying the amount of flow of nutrients so as to negatively impact wetland functions and values. Proper erosion controls, stormwater mitigation systems, and the use of municipal water and sewer are being proposed in conjunction with this project to ensure the protection of water quality.

m) Any placement of any matter or material beneath surface water elevations or erection of any barriers within any ponds or flowing bodies of water which could cause any hazards to safety;

The project does not propose any placement of any matter or material beneath surface water elevations or erection of any barriers within any ponds or flowing bodies of water.

n) Significant loss of important open space or significant modification of any uncommon geologic or archaeological features;

This project will not cause the significant loss of important open space or significant modification of any uncommon geologic or archaeological features. A review of historic aerial photographs (RIGIS) shows that this area was disturbed for agricultural purposes in 1939 and left fallow after this time. This early successional forest is of the most common forest type in Rhode Island.

o) Significant modification to the natural characteristics of any wetland area of unusually high visual quality;

This project will not result in the significant modification to the natural characteristics of any wetland area of unusually high visual quality. The visual aesthetics of the wetland are not unusually high. The gradient from wetland to upland in the area proposed to be altered would likely be overlooked by an untrained observer.

p) Any decrease in the flood storage capacity of any freshwater wetland which could impair the wetland's ability to protect life or property from flooding or flood flows;

This project will not pose a decrease in the flood storage capacity of this freshwater wetland which could impair the wetland's ability to protect life or property from flooding or flood flows. There will be an increase in the impervious surface on the subject parcel, however the creation of stormwater mitigation systems will mitigate this impact. Furthermore the entire project is outside of the 100 year flood zone as based on FEMA FIRM maps. The wetland proposed to be altered is on a hill slope and therefore directs flow downslope. For this reason the wetland has little to no flood storage capacity. The lower gradient portion of the wetland on the east side of the sewer line does provide substantial storage and will not be altered.

q) Significant reduction of the rate at which flood water is stored by any freshwater wetland during any flood event;

This project will also not result in the significant reduction of the rate at which flood water is stored by this freshwater wetland during any flood event. Currently, within the vicinity of the project area, stormwater either infiltrates or flows downslope to the lower gradient wetland. The wetland proposed to be altered has little to no flood storage capacity.

r) Restriction or significant modification of the path or velocities of flood flows for the 1-year, 10-year, or 100-year frequency, 24-hour, Type III storm events so as to cause harm to life, property, or other functions and values provided by freshwater wetlands;

This project will not cause any restrictions or significant modifications of the path or velocities of flood flows for the 2-year, 10-year, 25-year, or 100-year frequency, 24-hour, Type III storm events so as to cause harm to life, property, or other functions and values provided by this freshwater wetland. The wetland proposed to be altered has little to no flood storage capacity. Runoff emanating from new impervious surface proposed for this project will be directed to a treatment system designed in accordance with the RI Stormwater Design & Implementation Standards Manual. This will protect the water quality of the wetland and promote infiltration of the runoff into the groundwater.

s) Placement of any structure or obstruction within a floodway so as to cause harm to life, property, or other functions and values provided by freshwater wetlands;

The project will not place any structure or obstruction within a floodway so as to cause harm to life, property, or other functions and values provided by the freshwater wetland. There are no streams, rivers, or other floodway channels within the vicinity of the proposed work. Additionally, the entire project area is outside of the 100 year flood zone.

t) Any increase in run-off rates over pre-project levels or any increase in receiving water/wetlands peak flood elevations for the 1-year, 10-year, or 100-year frequency, 24-hour, Type III storm events which could impair the wetland's ability to protect life or property from flooding or flood flows;

This project will not create an increase in run-off rates over pre-project levels or any increase in receiving water/wetlands peak flood elevations for the 2-year, 10-year, 25-year, or 100-year frequency, 24-hour, Type III storm events which could impair the wetland's ability to protect life or property from flooding or flood flows. As stated previously, the wetland proposed to be altered has little to no flood storage capacity due to its situation upon a backslope of a drumlin. Additionally, this proposal calls for the creation of a stormwater treatment system that will be designed to promote treatment and infiltration of run-off and will be intended to mitigate the effect of the proposed impervious surface. Please see the accompanying plan for stormwater mitigation details.

u) Any increase in run-off volumes and discharge rates which could, in any way, exacerbate flooding conditions in flood-prone areas;

This project will not pose an increase in run-off volumes and discharge rates which could, in any way, exacerbate flooding conditions in flood-prone areas for the reasons outlined in sections 16 – 20 of this portion of the report.

v) Significant changes in the quantities and flow rates of surface or groundwater to or from isolated wetlands (e.g., those wetlands without inflow or outflow channels);

This project will not pose significant changes in the quantities and flow rates of surface or groundwater to or from isolated wetlands. The proposed stormwater management plan will promote infiltration into groundwater to maintain a pre-project hydrology. Furthermore, the development will be serviced with municipal water and not create new draw on the local aquifer.

w) Placement of any structural best management practices within wetlands, or proposal to utilize wetlands as a detention or retention facility;

This project will not require the placement of any structural best management practices within wetlands, or proposal to utilize wetlands as a detention or retention facility. The proposed infiltration basin will be constructed within upland.

x) Any more than a short-term decrease in surface water or groundwater elevations within any wetland;

It is not anticipated that this project will result in any more than a short-term decrease in surface water or groundwater elevations within this wetland. The stormwater management plan will promote infiltration of overland flow during rain events and the hotel will be serviced with municipal water so the local aquifer will not be impacted.

y) Non-compliance with the Rhode Island Department of Environmental Management Water Quality Regulations; or

This proposed project will comply with the Rhode Island Department of Environmental Management Water Quality Regulations. The proposed project will not contradict

the standards set forth in these regulations. Stormwater mitigation systems and erosion control measures will be implemented to achieve this goal.

z) Any detrimental modification of the wetland's ability to retain or remove nutrients or act as natural pollution filter.

This project will not pose any detrimental modification of the wetland's ability to retain or remove nutrients or act as natural pollution filter. The majority of the work will occur outside of the wetland. The portion of wetland proposed to be altered is situated in a drainageway which directs flow to the lower gradient portion of the wetland where most of the treatment will occur. This portion of the wetland will not be altered. This project does not represent a significant alteration to the wetland or its ability to retain or remove nutrients or act as a natural pollution filter.

Conclusion

The applicant has proposed the construction of an 80 room hotel along the Gooding Avenue frontage of A.P. 111, Lot 1. The applicant, KenDan, LLC, has had all freshwater wetlands on the 9.77 acre parcel delineated and verified by the DEM, OWR. The lot is bisected with a 12 inch municipal sewerline.

This utility easement segments the wetland into two distinct habitat types. The swamp west of the easement is ruderal forest with an understory dominated by state listed invasive species. The swamp east of the easement has a well-developed Red maple/Tupelo canopy with a native species understory. All wetland impacts are proposed on the west side of the utility easement, minimizing the effect on freshwater wetland functions and values.

The project has been designed by DiPrete Engineering to comply with the RI Stormwater Design and Installation Standards Manual. A Soil Erosion and Sedimentation Control Plan has also been developed by DiPrete in conformance with the revised Soil and Sedimentation Control Handbook. NRS has performed the requisite habitat assessments and prepared the written narrative required by the freshwater wetland regulations for any AAFW.

The project is consistent with local zoning and is supported by the Town of Bristol. It will add to the commercial tax base and still preserve, through a conservation restriction, a significant area of natural habitat. Impacts to freshwater wetland functions and values have been avoided to the maximum extent possible while still achieving the project purpose. Impacts considered unavoidable have been minimized and a series of mitigation measures developed to offset short and long-term effects from the hotel.

The application as presented documents that the development plan does not represent a random, unnecessary or undesirable alteration to freshwater wetlands. The DEM, OWR is in a position to evaluate the application and, after the required public notice, issue a Permit to Alter Freshwater Wetlands.

Literary References

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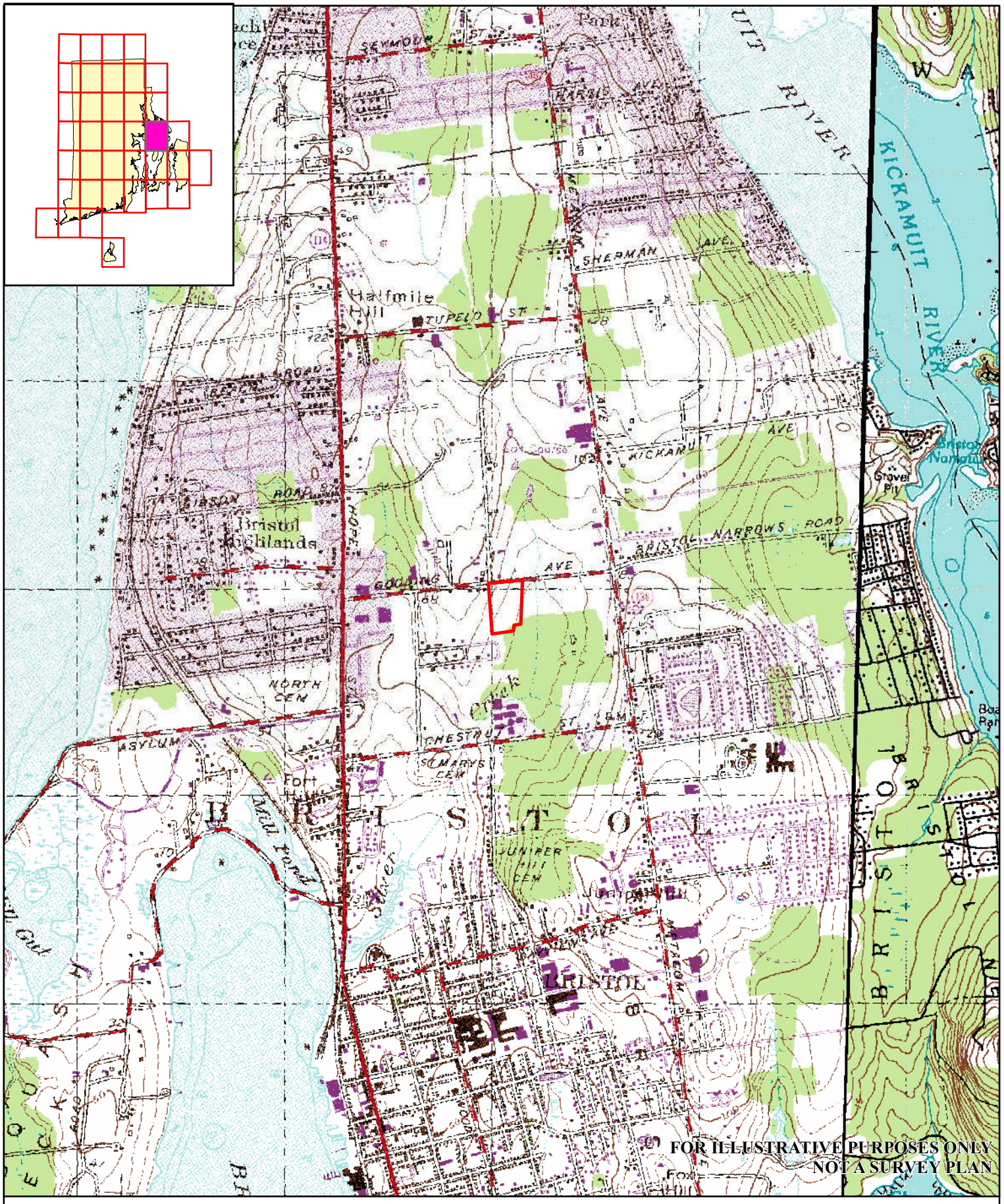
Appendix A

USGS Topographic Map
USDA Soil Survey Map
Landuse Map



USGS Topographic Map
Gooding Ave
A.P. 111 Lot 1

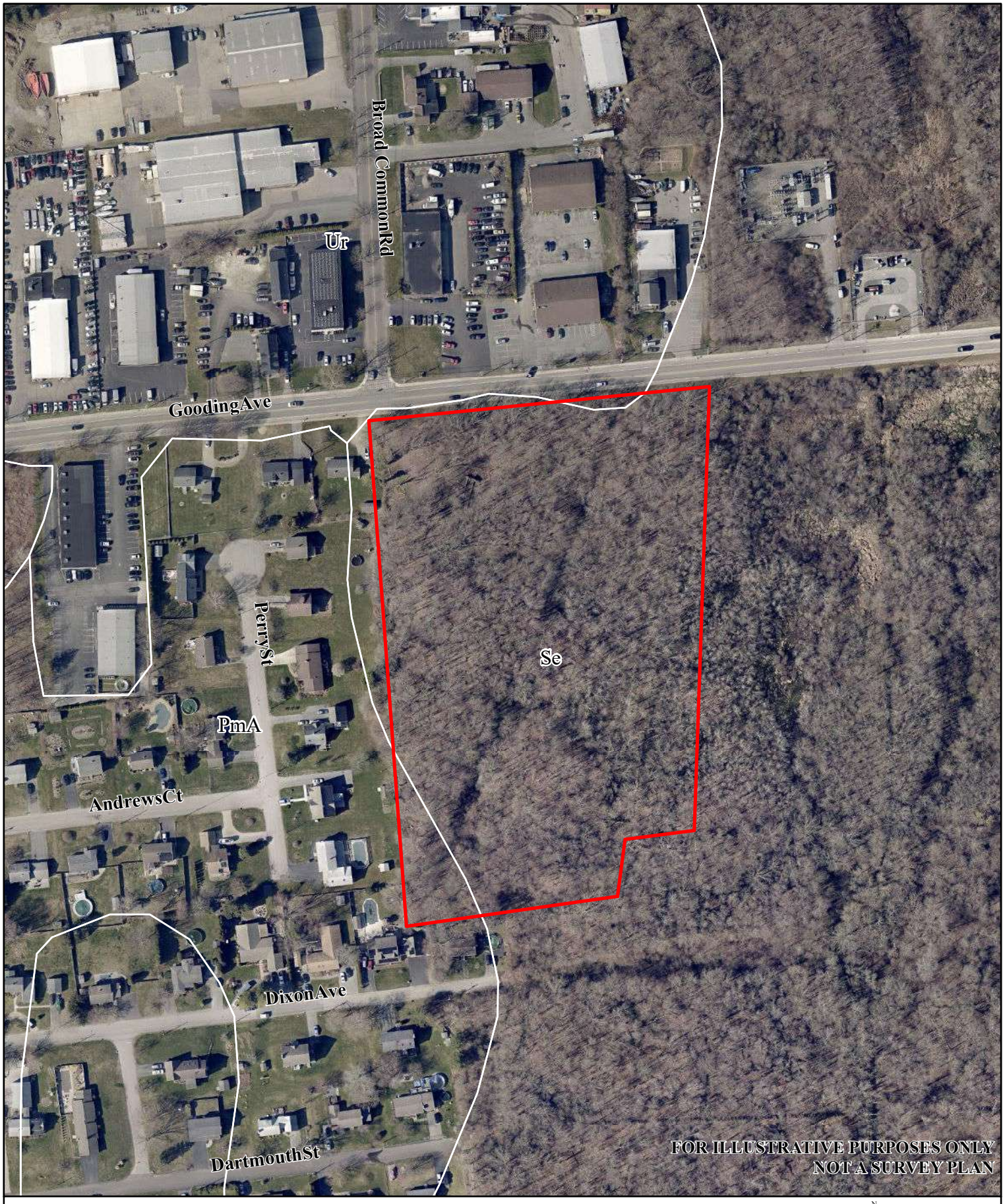
Bristol, RI
Bristol Quad Map

Approximate Site Location

USGS Topographic Series
Contour Interval 10 Feet
National Geodetic Vertical Datum of 1929

0 1,000 2,000 4,000 Feet

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



USDA Soil Survey Map
Gooding Ave
A.P. 111 Lot 1

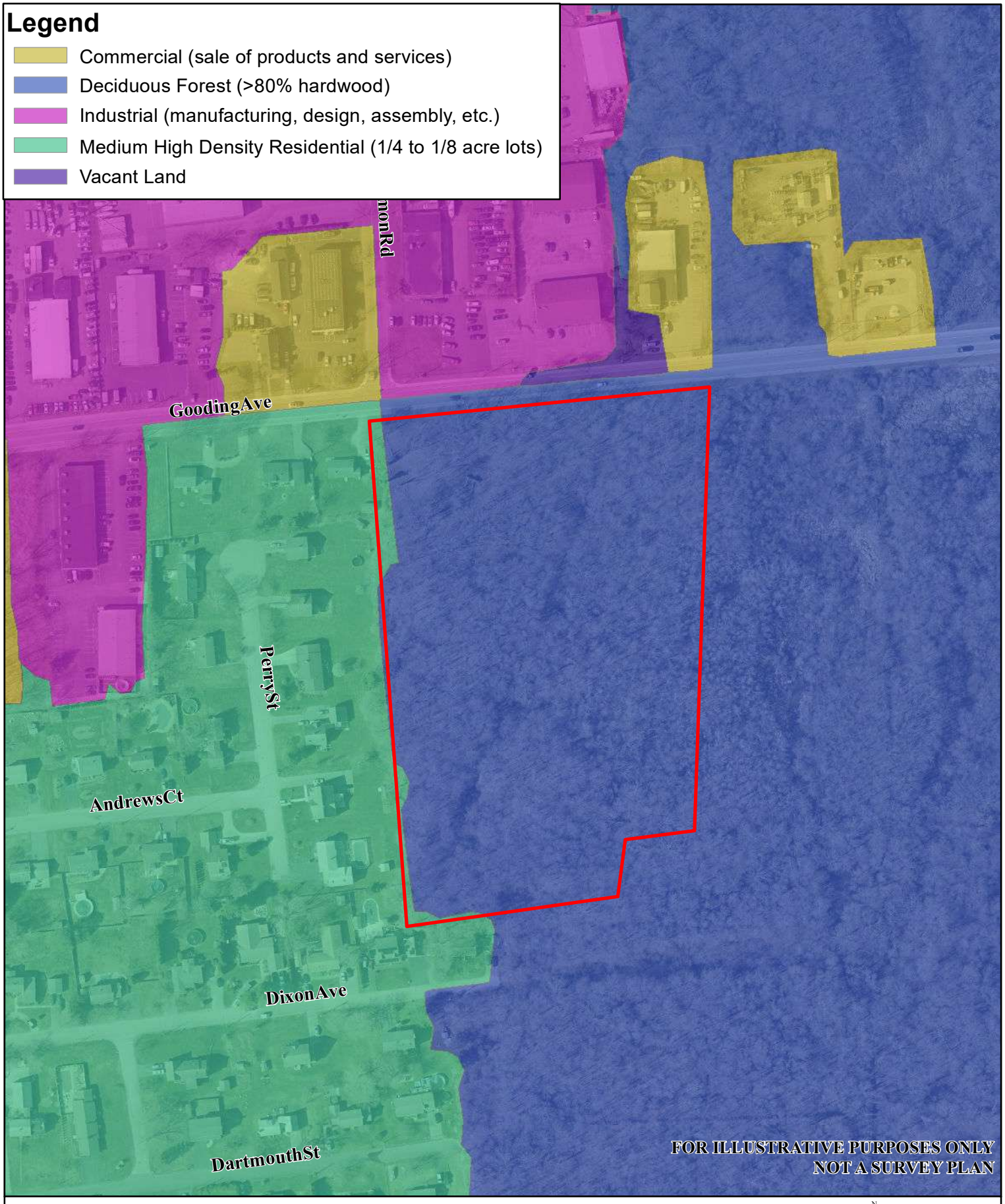
Bristol, RI

Approximate Site Location

0 100 200 400 Feet

Spring 2022 aerial
RI DEM Mapping

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



Land Use Map
Gooding Ave
A.P. 111 Lot 1

Bristol, RI

Approximate Site Location

0 100 200 400 Feet

N W E S

Spring 2022 aerial
RI DEM Mapping

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

Appendix B

DEM Permit, Application No. 15-0033
Habitat Assessment Graphic
Habitat Assessment Worksheet

RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
235 Promenade Street, Providence, RI 02908-5767 TDD 401-222-4462

August 22, 2018

CERTIFIED MAIL

Kendan, LLC
c/o Donovan and Sons, Inc.
613 Aquidneck Avenue
Middletown, RI 02842

Re: Wetland Application No. 15-0033; RIPDES File No. RIR101247; and UIC No. 001650 in reference to the location below:

approximately 220 feet south of Gooding Avenue, approximately 200 feet southeast of the intersection of Gooding Avenue and Broadcommon Road, Assessors Plat 111, Lot 1, in the Town of Bristol, Rhode Island.

"Appendix A"

PERMIT TO ALTER FRESHWATER WETLANDS

Dear Mr. Donovan:

The Department of Environmental Management's ("DEM") Freshwater Wetlands Program ("Program") has reevaluated your Application to Alter a Freshwater Wetland regarding the project proposed at the above referenced property ("subject property"/"site"). This reevaluation is in response to settlement negotiations involving the original decision issued by this Office on March 30, 2016 for Application No. 15-0033 and has been accomplished in accordance with Rule 10.10 of the Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act ("Rules"). That decision was contested by you in your appeal to the DEM Administrative Adjudication Division for Environmental Matters (AAD). As a result of your appeal, settlement negotiations were entered to seek resolution of the contested issues and a Consent Agreement has been entered between you and the DEM. This consent agreement was executed by you on August 9, 2018, and by the DEM on August 22, 2018, and is enclosed herein as a matter of record.

As a result of settlement negotiations, the Program has reviewed and evaluated a revised project proposed by you and as described by revised site plans received by the Program on May 14, 2018. The revised site plan is noted as Appendix B in the above-mentioned consent agreement. The Program has determined that the revised project does not represent a random, unnecessary, or undesirable alteration of freshwater wetlands. Therefore, the Program, in response to our evaluation and the fully executed consent agreement, hereby issues this permit to alter freshwater wetlands, subject to all controlling Rules and the Terms and Conditions set forth herein.

Permit Terms and Conditions for Wetland Application No. 15-0033:

1. This letter is the DEM's permit for this project under the R.I. Fresh Water Wetlands Act, Rhode Island General Laws (RIGL) Section 2-1-18 et seq.

2. This permit is specifically limited to the project, site alterations and limits of disturbance as detailed on the site plan submitted with your application and received by the DEM on May 14, 2018. A copy of the site plan stamped approved by the DEM is enclosed. Changes or revisions to the project which would alter freshwater wetlands are not authorized without a permit from the DEM.

3. Where the terms and conditions of the permit conflict with the approved site plan, these terms and conditions shall be deemed to supersede the site plan.

4. You must notify this Program in writing immediately prior to the commencement of site alterations and upon completion of the project.

5. A copy of the stamped approved site plans and a copy of this permit must be kept at the site at all times during site preparation, construction, and final stabilization. Copies of this permit and the stamped approved plans must be made available for review by any DEM representative upon request.

6. Within ten (10) days of the receipt of this permit, you must record this permit in the land evidence records of the Town of Bristol and supply this Program with written documentation obtained from the Town showing this permit was recorded.

7. The effective date of this permit is the date this letter was issued. This permit expires on August 22, 2019 and may be renewed after this date pursuant to Rules 10.07F and 11.02.

8. Any material utilized in this project must be clean and free of matter which could pollute any freshwater wetland.

9. Prior to commencement of site alterations, you shall erect or post a sign resistant to the weather and at least twelve (12) inches wide and eighteen (18) inches long, which boldly Identifies the initials "DEM" and the application number of this permit. This sign must be maintained at the site in a conspicuous location until such time that the project is complete or the DEM issues a Notice of Completion of Work for the project.

10. Temporary erosion and sediment controls detailed or described on the approved site plans shall be properly installed at the site prior to or commensurate with site alterations. Such controls shall be properly maintained, replaced, supplemented, or modified as necessary throughout the life of this project to minimize soil erosion and to prevent sediment from being deposited in any wetlands not subject to disturbance under this permit.

11. Upon permanent stabilization of all disturbed soils, temporary erosion and/or sediment controls consisting of staked hay bales, straw wattles or silt fence must be removed.

12. All plantings of shrubs, trees or other forms of vegetation as shown or detailed on the approved plans, or detailed in this permit, must be installed as soon as possible after completion of final grading; weather and season permitting. You must notify this Program in writing upon completion of the required plantings for a compliance inspection by a Program representative.

13. The planting of trees and/or shrubs proposed between the project and any adjacent freshwater wetland areas, except for necessary replacement, must be allowed to develop naturally without being subjected to mowing or manicuring.

14. Any plantings which fail to survive one full growing season shall be replaced in-kind. Replacement plantings shall be similarly guaranteed for one full growing season.

15. You are obligated to install, utilize and follow all best management practices detailed or described on the approved site plans in the construction of the project to minimize or prevent adverse impacts to any adjacent freshwater wetlands and the functions and values provided by such wetlands.

16. You must provide written certification from a registered land surveyor or registered professional engineer that the stormwater drainage system including any and all basins, piping systems, catch basins, culverts, swales and any other stormwater management control features have been constructed/installed in accordance with the site plans approved by this permit. This written certification must be submitted to this Program within twenty (20) days of its request or upon completion of the project.

17. Artificial lighting authorized by this permit must be directed away from all vegetated wetland areas. Where this is not possible, the use of deflectors to concentrate lighting away from vegetated wetlands must be employed.

18. An environmental consultant, experienced in site assessments and measures necessary to protect sensitive aquatic environments or sensitive ecosystems, must be employed prior to the commencement of site alterations to monitor this project and to ensure compliance with the terms and conditions of this permit. This Program must be notified in writing of the consultant chosen to comply with this condition and must receive monthly written progress reports from the consultant regarding compliance with this permit until such time that the project is complete, or this Program issues a Notice of Completion of Work.

19. Also prior to commencement of any site alterations, permanent buffer zone markers must be installed along the limit of disturbance at the locations indicated in red ink on the approved site plans (sheet 7 of 10) in order to provide permanent reference points on site that are clear to present and future property owners. Acceptable permanent type markers include 4" x 4" pressure treated timber posts, galvanized fence posts with cap, or granite or concrete bounds. Markers must extend a minimum 24" above grade. A permanent-type tag or sign labeled "RIDEM Buffer Zone" must be placed on each marker. A permanent-type fence at least 24" tall placed along the limits of disturbance may be substituted where desired. No alterations of any kind are permitted beyond these markers without first obtaining the necessary permit from this Program.

20. Immediately upon installation of the buffer zone markers, this Program must be contacted to arrange an on-site inspection. Once proper installation has been confirmed by this Program, work may be initiated on the project as herein approved.

21. This Program has made a specific revision to the approved site plans. This revision is clearly marked in red on the approved plans. This project must take place in compliance with this revision. Specifically, nine (9) additional Northern White Cedar trees measuring five feet tall must be installed along the Limit of Disturbance immediately west of wetland flag A21 continuing in a westerly direction eight feet on center to the edge of the Perimeter Wetland. Also, the swamp on the subject property has been appropriately labeled.

Pursuant to the provisions of Rules 7.09 and 11.04, as applicable, any properly recorded and valid permit is automatically transferred to the new owner upon sale of the property.

Additionally, the Program has reviewed this project in accordance with the standards of the RIPDES General Permit for Storm Water Discharge Associated with Construction Activity ("CGP"). Construction Activities which disturb one (1) or more acres of land and where storm water runoff is directed, via a point source, into a separate storm sewer system or into the waters of the State, are required to seek coverage under the Rhode Island Pollutant Discharge Elimination System (RIPDES) storm water permit. Our review has determined that the project has been designed to meet the requirements of the 2013 GP. This determination therefore includes your final authorization to discharge storm water associated with construction activity under the CGP.

For future references and inquiry, your permit authorization number is RIPDES No. **RIR101247**. Both the owner and the contractor retained to undertake the construction activity are required to comply with all terms and conditions of the CGP. This includes maintaining the Soil Erosion and Sediment Control (SESC) Plan, performing the required inspections and maintenance of the selected Best Management Practices (BMPs), and retaining inspection records. Further information on the requirements of the CGP is available at:
http://www.dem.ri.gov/pubs/regs/regs/water/ripdesca.pdf .

Please be aware that the RIDEM's Rules and Regulations Governing the Establishment of Various Fees require that RIPDES CGP permit holders to pay an Annual Fee of $100.00. An invoice will be sent to the owner on record in May/June of each year if the construction was still active as of December 31st of the previous year. The owner will be responsible for the Annual Fee until the construction activity has been completed, the site has been properly stabilized, and a completed Notice of Termination (NOT) has been received by the RIPDES Program. A copy of the NOT can be found attached to the CGP on the web page referenced above.

This application review has also included review of any subsurface disposal of stormwater subject to the RI DEM Underground Injection Control (UIC) Program. This Freshwater Wetlands Permit will also serve as the UIC Program permit for this project, which has been assigned the **UIC file number 001650** for any subsurface disposal of stormwater on the site. The following conditions are specific to this UIC Program Permit:

1) Any alterations or modifications to the disposal system from that approved herein, including permanent closure, must be reviewed and approved by the UIC Program prior to being affected.

2) Any inadvertent or deliberate discharge of waste oil or any other pollutant to the subsurface disposal system requires the immediate notification of the UIC Program.

3) The UIC Program must be provided the name and address of any new property owner in writing within thirty (30) days upon any future transfer of the property.

This Permit also constitutes your authorization from the U.S. Army Corps of Engineers ("Corps") under Section 404 of the Clean Water Act for the work proposed. Your project qualifies as a Pre-Construction Notification ("PCN") activity under the Rhode Island General Permit (General Permit No. NAE-2016-2264), (RI GP). You can view this permit at: "http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/RI/Rhode_Island_General_Permits_2017.pdf. **You are, therefore, not required to file a separate application with the Corps.**

Please note that the General Conditions within the RI GP apply to all activities authorized under the RI GP. Please review them carefully to thoroughly familiarize yourself with their contents. You may wish to discuss all permit conditions with your contractor to ensure that the work can be accomplished in a manner which conforms to all requirements.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Rules at all times. Failure to do so may result in an enforcement action by this Department and/or subject you to the enforcement provisions of the Corps' regulations.

In permitting the proposed alterations, the DEM assumes no responsibility for damages resulting from faulty design or construction. This permit does not remove your obligation to obtain any local, state, or federal approvals or permits required by ordinance or law and does not relieve you from any duties owed to adjacent landowners with specific reference to any changes in drainage.

If you have any questions regarding this matter, you may contact me or Jane Kelly of my staff at this Office (telephone: 401-222-6820).

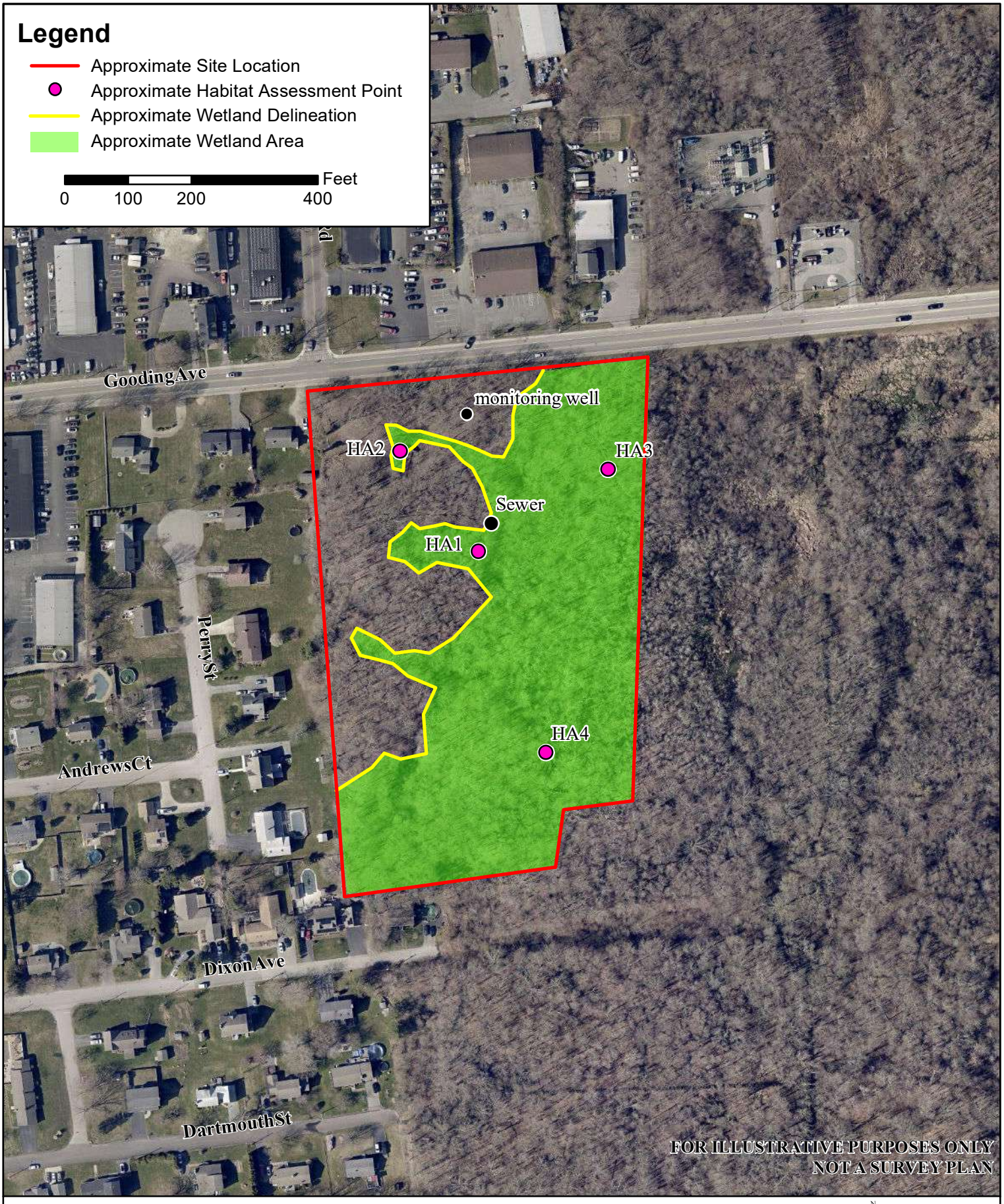
Sincerely,

Martin D. Wencek

Martin D. Wencek, Permitting Supervisor
Office of Water Resources/Permitting Section
Freshwater Wetlands Program
MDW/mdw

Enclosure: Approved Site Plans (Appendix B)
Consent Agreement

xc: David Kerins, Administrative Adjudication Division
Mary Dalton, Clerk, Administrative Adjudication Division
Tricia Quest, Esq., DEM Office of Legal Services
Eric Beck, Chief, DEM Office of Water Resources
Dianne M. Williamson, Community Development Director, Town of Bristol
Richard J. Pimenta, Building Official, Town of Bristol
Taylor Bell, U.S. Army Corps. Of Engineers
Mary Shekarchi, Esq.
Mollie Titus, DiPrete Engineering, Inc.
Scott Rabideau, Natural Resource Services, Inc.



Habitat Assessment
Gooding Ave
A.P. 111 Lot 1

Bristol, RI

Performed by:
Staff biologist Hannah Chace - 12/15/2022
Located using a hand-held Trimble GeoXH

Spring 2022 aerial
RI DEM Mapping

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

HABITAT ASSESSMENT WORKSHEET

NRS Project #:___22-263_____
Date: 12/15/2022 Time:_12:00 -2:00 pm Weather: 30°F___Cloud Cover: overcast
Observer:____HC_____

Wetland (HA1 outside impact area)

- At least seven (7) vegetative species listed.
  - Morrows Honeysuckle, Poison Ivy, Black tupelo, Red maple, Multiflora rose, Cinnamon fern, Spicebush
- Evidence of flooding?
  - No evidence of flooding this was along the sloped edge, appears to be seasonally saturated
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Yes, there is a sewer easement which cuts this section of swamp from other portions of the swamp. Also somewhat near the roadway and residential areas to the north and east.
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - The wetland does extend off site to the south and east.
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Wetland (HA2 – Disturbed wetland- B series)

- At least seven (7) vegetative species listed.
  - Sensitive fern, Common reed, Red maple, Poison ivy, Goldenrod, Japanese honeysuckle, tall grass species.
- Evidence of flooding?
  - No, this is also along the sloped edge, difficult to distinguish as wetland, no flooding
- In watershed of public drinking water supply?
  - No
- Any evidence of human disturbance present?
  - Yes, some cutting within the understory appears to have taken place, most likely because of the previous permit as there were also a few erosion controls along the edge of the old limit of disturbance still present.
- Does the wetland extend off-site/ is it connected to a larger wetland system?
  - This portion of wetland labeled the B series connects to the rest of the wetland complex to the south
- Flowing waterbodies?
  - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Old erosion controls

Windthrown tree within B series

Wetland (HA3 – interior wetland, near roadway)

- At least seven (7) vegetative species listed.
    - Highbush blueberry, Poison ivy, white oak, multiflora rose, red maple, dewberry, Cinnamon fern
- Evidence of flooding?
    - No, appears more likely to have some surface water present but primarily saturated, more wetland microtopography here than to the west
- In watershed of public drinking water supply?
    - No
- Any evidence of human disturbance present?
    - Can still hear and see the roadway
- Does the wetland extend off-site/ is it connected to a larger wetland system?
    - The wetland does extend off site to the south and east.
- Flowing waterbodies?
    - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.

Rock wall adjacent to HA4

Wetland (HA4 – interior wetland, further from roadway)

- At least seven (7) vegetative species listed.
    - Highbush blueberry, winterberry, red maple, swamp white oak, dewberry, Cinnamon fern, sensitive fern, sphagnum
- Evidence of flooding?
    - No, appears more likely to have some surface water present but primarily saturated, more wetland microtopography here than to the west
- In watershed of public drinking water supply?
    - No
- Any evidence of human disturbance present?
    - Some residential homes nearby but less disturbances and quieter than the rest of the site
- Does the wetland extend off-site/ is it connected to a larger wetland system?
    - The wetland does extend off site to the south and east.
- Flowing waterbodies?
    - None within the project site but Silver Creek, a river, is located directly east of the site within the same wetland complex as those on site.
    -

Some flooding adjacent to HA4

Rule 10.02E.4.a – Wildlife and Wildlife Habitat

- A listing of observed and potential wildlife species; see attached
    - Observed
        - Black capped chickadee (Call)
        - Blue Jay (Call)
        - White tailed deer (Scat throughout site)
        - Paper wasp (visible nest)

- What type of wildlife species benefit most in this wetland? What features are available to support this determination? Place corresponding number next to feature:

1.) Birds; 2.) Small mammals; 3.) Large mammals; 4.) Reptiles 5.) Amphibians; 6.) Odonata 7.) Fish

Feature:
Tree cavities/nest holes: 1,2
dead snags: 1,2
rock crevices:
flat rocks:
Beaver lodges/dams:
stone walls: 2,4,5
organic debris/leaf litter:
Water soaked/rotten logs:
overhanging branches:
steep, dirt banks with nest holes (swallow nests)
sphagnum carpet:
emergent vegetation (odonates):
Nests observed:
Extreme dense vegetation:

- Are there travel corridors within the wetland or property? List exact location:
    - Yes, there do appear to be some deer trails throughout the property an cross through the stone wall along the eastern side of the property in some locations. Additionally, the sewer line may also be utilized by large mammals such as deer as there was significant deer scat along the cleared sewer easement line.

Rule 10.02E.4.b – Recreation and Aesthetics

- Overall aesthetic value of wetland?
    - Moderate. The portion of wetland to the north of the sewer line has minimal aesthetic value as it is separated from the larger system, much more exposed to the roadway and surrounding residential areas and is generally more disturbed and colonized by non-native species such as Morrow's honeysuckle. The value increases further interior but does not provide more than moderate aesthetic value related to view or wildlife.

- Potential onsite for:

Hunting		No
Trapping		No
Wildlife observation	Yes	
Photography	Yes	
Bird watching	Yes	
Swimming		No
Canoeing		No
Fishing		No

Hiking	Yes

- Public access to wetland?
    - No public access as the property is private

Rule 10.02E.4.c – Flood Protection

- Can the wetland temporarily store flood waters?
    - Yes some areas, along the eastern edge however the majority of wetlands on site are seasonally saturated, including those within the proposed limit of disturbance.

- Will the inflow of flood waters endanger surrounding upland development?
    - No

- Does the wetland currently receive waters from existing adjacent stormwater facilities?
    - None observed

- What is the hydrology of the wetland?
    - Seasonally saturated primarily on site, flooded to the east

- Will an influx of flood waters (as a result of the filling of a portion of the wetland) result in an increase potential for flood events in areas surrounding the wetland/ downstream?
    - No, very little filling is required within the wetland, and only within seasonally saturated areas. Additionally, the wetland system itself is large has the capacity to adjust to any small influx.

Rule 10.02E.4.d – Groundwater and Surface Water Supplies

- Is the wetland groundwater fed?
    - Yes

- Does the wetland receive surface waters from surrounding uplands or via a culvert?
    - Both

- Does water flow out of the wetland or is it retained?
    - Flows out

Rule 10.0E.4.e – Water Quality

- Evidence of human disturbances that negatively impacted water quality?
    - There is some trash within the wetland along the edge of the roadway

- Inflow of waters from culverts, stormwater runoff, etc. that may negatively affect water quality?

- Stormwater runoff from the road likely contributes to negative water quality on the flooded areas to the east of the property

Orange coloration within standing water adjacent to roadway

- Evidence of eutrophication?
  - Some evidence within adjacent property to the south

Appendix C

Statements of Qualification

SCOTT P. RABIDEAU

1001 Hill Road, Pascoag, RI · (401) 556-6095 · nrsscott@gmail.com

PROFESSIONAL EXPERIENCE

PRESIDENT/PRINCIPAL BIOLOGIST — 1987–PRESENT

NATURAL RESOURCE SERVICES, INC, HARRISVILLE, RI

Natural Resource Services, which was founded by Scott Rabideau in 1987, is a private environmental consulting firm specializing in freshwater and coastal wetland studies in Rhode Island and Massachusetts. Experience within the company includes:

- Conducting wetland delineations
- Designing replacement wetlands
- Restoring wetlands
- Conducting wildlife habitat evaluations
- Permitting alterations through state and federal agencies
- Providing representation at public hearings
- Providing expert testimony
- Hiring, training, and managing a staff of up to 12

ADMINISTRATOR — 1987–1988

NORTHBRIDGE NURSING HOME, NORTHBRIDGE, MA

Oversaw operations and management of a 100-bed non-union skilled nursing facility.

PERSONNEL DIRECTOR — 1985–1987

HOPKINS HEALTH CENTER, NORTH PROVIDENCE, RI

Responsible for hiring, managing, and scheduling all professional and non-professional nursing staff in a 200-bed unionized skilled nursing facility.

MANAGER, FAXON FARM — 1982–1985

LINCOLN SCHOOL, PROVIDENCE, RI

Managed a 32-acre environmental education center and athletic facility, developed nature programs, and managed wetland and upland habitat at a private K–12 school.

EDUCATION

MASTER OF SCIENCE, APPLIED MANAGEMENT — 1986

LESLEY COLLEGE, CAMBRIDGE, MA

BACHELOR OF SCIENCE, NATURAL RESOURCES — 1982

UNIVERSITY OF RHODE ISLAND, KINGSTON, RI

PROFESSIONAL LICENSES & CERTIFICATIONS

SENIOR PROFESSIONAL WETLAND SCIENTIST #1410
SOCIETY OF WETLAND SCIENTISTS

OWTS INSTALLER #L1379
RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

ELECTED POSITIONS

STATE REPRESENTATIVE, DISTRICT 60 1995–2002
RI GENERAL ASSEMBLY, BURRILLVILLE, RI

- Ranking minority member, Committee on Judiciary
- Ranking minority member, House Committee on Environmental Accountability
- Ranking minority member, Joint Committee on Energy and the Environment
- Ranking minority member, Committee for Redistricting

PUBLIC APPOINTMENTS

SPECIAL MASTER, SUPERIOR COURT 2009–PRESENT
TILLINGHAST VS. RI DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

- Acting on behalf of the Superior Court to seek resolution in dispute between the defendant and plaintiff regarding freshwater wetland alterations.

JUDICIAL NOMINATING COMMISSION 2014-2020
STATE OF RHODE ISLAND

- Appointed by Governor Lincoln Chafee.
- Responsible for vetting candidates seeking appointments to all state courts, including Supreme, Superior, District, Family, Works Compensation, and Traffic.
- Meeting quarterly or as required to fulfill the statutory mandate for providing the governor with qualified candidates for judicial vacancies.

LEGISLATIVE COMMISSION 2013-2015
FRESHWATER WETLANDS ACT REVIEW

- Acted as a small business representative on the commission.
- Held hearings and heard testimony on changes to the RI Freshwater Wetlands Act.
- Drafted a bill to replace the previous statute—the act was passed by the General Assembly and signed into law by Governor Raimondo in July 2015.

PUBLIC APPOINTMENTS, CONT.

BOARD OF SEWER COMMISSIONERS, CHAIRMAN 2006–2007
TOWN OF BURRILLVILLE, RI

BOARD OF SEWER COMMISSIONERS 2004–2008
TOWN OF BURRILLVILLE, RI

VICE CHAIRMAN, CONSERVATION COMMISSION 1983–1985
TOWN OF REHOBOTH, MA

PROFESSIONAL ORGANIZATIONS

THE WILDLIFE SOCIETY 1985–PRESENT

INVESTMENT REVIEW COMMITTEE MEMBER 2013–2017

- Met on a quarterly basis to review TWS Endowment Accounts.
- Responsible for adjusting account allocations in conformation with TWS Executive Committee's guidelines.

SOCIETY OF WETLAND SCIENTISTS 1995–PRESENT

RI ASSOCIATION OF WETLAND SCIENTISTS

CHARTER MEMBER 1992–1998

PRESIDENT/MEMBER OF BOARD OF DIRECTORS 1993–1994

TREASURER/MEMBER OF BOARD OF DIRECTORS 1992–1993

US DEPARTMENT OF AGRICULTURE, NATURAL RESOURCE CONSERVATION SERVICE 1989–1990

PROJECT EARTH TEAM

PHILANTHROPIC ORGANIZATIONS

TRUSTEE, JUNE ROCKWELL LEVY FOUNDATION 2018–PRESENT

- One of 10 trustees responsible for administering a $30 million charitable trust.
- Responsible for reviewing and distributing grants to qualified non-profits in Providence County.

RI FOREST CONSERVATORS ORGANIZATION 2001–PRESENT

PHILANTHROPIC ORGANIZATIONS, CONT.

OCEAN STATE POWER SCHOLARSHIP FOUNDATION 1995–2002
BOARD OF DIRECTORS

OCEAN STATE POWER COMMUNITY GRANT FOUNDATION 1995–2002
BOARD OF DIRECTORS

VOLUNTEER WORK

BURRILLVILLE LITTLE LEAGUE 2009–PRESENT

- Volunteer umpire for youth baseball

EXPERT QUALIFICATIONS

WETLAND DELINEATIONS, HABITAT EVALUATIONS, & WETLAND PERMITTING

- RI Department of Environmental Management
- Administration Adjudication Division

WETLAND DELINEATIONS, HABITAT EVALUATIONS, SOIL SCIENCE & COASTAL PERMITTING

- RI Coastal Resources Management Council

WETLAND DELINEATIONS, HABITAT EVALUATIONS, & SOIL SCIENCE

- Superior Court, Worcester County, MA
- Superior Court, Bristol County, MA
- Superior Court, Fall River, MA

WETLAND DELINEATIONS, HABITAT EVALUATIONS, SOIL SCIENCE & WETLAND PERMITTING

- Superior Court, Providence County, RI
- Superior Court, Kent County, RI
- Superior Court, Newport County, RI

Natural Resource Services, Inc.

HANNAH CHACE
Wetland Biologist

EXPERIENCE

Wetland Biologist 6/2020 – Present

Natural Resource Services, Inc. Harrisville, RI

- **Field Work Experience:** Conducted field work including wetland delineations, habitat assessments, wetland restorations, buffer zone management projects and submerged aquatic vegetation surveys throughout Rhode Island, Massachusetts, and Connecticut;
- **Technical Writer:** Interpret plan sets and provide technical written documentation of impact avoidance and minimization techniques for written narratives submitted for permitting to DEM and CRMC.

EDUCATION

Bachelor of Science Degree, Environmental Science and Management May 2020

Soil Science Minor

University of Rhode Island Kingston, RI

RELATED SKILLS

Wetland delineation; vegetation identification; avian, herp and mammal identification; aerial photograph interpretation; working knowledge of GPS; utilization of the ESRI ArcGIS software and manipulation of RIGIS and MassGIS data; inventorying of wildlife and vegetation.

P.O. Box 311 Harrisville, RI 02830 401-568-7390