

SCHNEIDER, DAVIGNON & LEONE, INC.

PROFESSIONAL CIVIL ENGINEERS & LAND SURVEYORS

N. DOUGLAS SCHNEIDER, P.E., P.L.S.
MATTHEW C. LEONE, P.L.S.



DAVID M. DAVIGNON, P.E.
JAY MCKINNON, E.I.T.

January 13, 2021

Town of Fairhaven
Conservation Commission
40 Center Street
Fairhaven, MA 02719
Attn: Chairman Geoffrey Haworth

Re. DEP File No. SE 23-1297 – Revised Plans

Project Type: Proposed 16-Lot Subdivision
Site Address: Hiller Avenue and Timothy Street
Lots #70 and #71A on Fairhaven Assessors Map #28C
Applicant/Developer: Robert Roderiques
Owners of Record: Jimmy A. Papas & Nickolas L. Papas

Dear Chairman Haworth & Commission Members,

On behalf of the Applicant, Schneider, Davignon & Leone, Inc. herby submits Revised Definitive Subdivision Plans for the above referenced project.

Specifically, the plans have been revised as follows:

- The two proposed Wetland Areas have been added to the plans to match the Conservation Commission Exhibit Plans
- A X- sectional detail has been added to sheet no. 11 of the plan set.

We thank you for your time and consideration in this matter.

Should you have any questions please do not hesitate to call me at (508) 758-7866 Ext. 203.

Sincerely,
Schneider, Davignon & Leone, Inc.

David M. Davignon, P.E.

cc: File 3072
Robert Roderiques
Attorney J.P. Mathieu

*Town of Fairhaven
Board of Public Works*

*5 Arsene Street
Fairhaven, Massachusetts 02719*

*TEL. 508-979-4030
FAX. 508-979-4086
bpw@fairhaven-ma.gov*



To: Paul Foley, Director Planning & Economic Development
From: Vincent D. Furtado, BPW Superintendent
Date: June 14, 2019
Re: Sconticut Neck Woods, Hiller Avenue and Timothy Street – 16 Lot Definitive
Subdivision Plan

The Board of Public Works has the following comment regarding Sconticut Neck Woods, Hiller Avenue and Timothy Street.

- Highway:
1. Are any stop signs required
 2. All drainage located under paved areas are to be RCP or ductile iron (several pages missing type of drainage pipe).
 3. Can the landscaped island on the cul-de-sac be removed and paved instead? Difficult to plow snow.
- Sewer:
1. POTENTIAL FOR VERY EXCESSIVE INFILTRATION AND INFLOW
 2. PROXIMITY TO WASTEWATER TREATMENT PLANT WILL PROVIDE NEGATIVE IMPACT ON NEIGHBORHOOD VIA ODORS AT DIFFERENT TIMES OF THE YEAR DUE TO CONSTRUCTION, SEASONAL FLUCTUATIONS, AND PROXIMITY TO SLUDGE PROCESSING BUILDING AND RECYCLING CENTER WHICH ALSO EMITS NOXIOUS ODORS AT TIMES.
 3. Need a dead-end manhole/cleanout at hammerhead off Timothy Street
 4. How does unit 13 get utilities?
 5. Main line must be 8", services will be 6"
 6. Drainage system for roof leaders and sump pumps should be provided for each lot to prevent inflow issues.

7. Some services appear to be very flat, and at the same elevation as some of the drainage lines which will contribute to blockages, and conflicts between pipelines

- Water:
1. Main Piping all class 52 Ductile Iron.
 2. Loop in hammerhead on Timothy Street to a new main on Hiller Avenue.
 3. Loop Cul-de-sac off Hiller Avenue to dead end on Teal Circle.
 4. Need location of curb stops
 5. Need to check main sizes for tapping sleeve.

A meeting with the sewer, water and highway department heads should be scheduled before plans are amended.



A. Violation Information

Important:
 When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



This Enforcement Order is issued by:

Fairhaven Conservation Commission
 Conservation Commission (Issuing Authority)

5/21/2020
 Date

To:

Richard and Elizabeth Perreira
 Name of Violator
3 Hidden Drive
 Address

1. Location of Violation:

Property Owner (if different)
3 Hidden Drive
 Street Address
Fairhaven
 City/Town
39
 Assessors Map/Plat Number

02719
 Zip Code
27C
 Parcel/Lot Number

2. Extent and Type of Activity (if more space is required, please attach a separate sheet):

On May 11, 2020, three members of the Commission responded to a report of disturbance of bordering vegetated wetlands at 3 Hidden Drive. Upon arrival, they observed an excavator on site and significant clearing of the buffer zone and disturbance to the wetland. A Cease and Desist was issued until such time that the Conservation Commission addressed the violation.

B. Findings

The Issuing Authority has determined that the activity described above is in a resource area and/or buffer zone and is in violation of the Wetlands Protection Act (M.G.L. c. 131, § 40) and its Regulations (310 CMR 10.00), because:

the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone without approval from the issuing authority (i.e., a valid Order of Conditions or Negative Determination).



B. Findings (cont.)

the activity has been/is being conducted in an area subject to protection under c. 131, § 40 or the buffer zone in violation of an issuing authority approval (i.e., valid Order of Conditions or Negative Determination of Applicability) issued to:

_____ Name	_____ Dated
_____ File Number	_____ Condition number(s)

- The Order of Conditions expired on (date): _____
Date
- The activity violates provisions of the Certificate of Compliance.
- The activity is outside the areas subject to protection under MGL c.131 s.40 and the buffer zone, but has altered an area subject to MGL c.131 s.40.
- Other (specify):

The activity has been/is being conducted in an area subject to protection under the Fairhaven Wetlands Bylaw (Code of the Town of Fairhaven, Wetlands, Chapter 192) without approval from the issuing authority (i.e., a valid Order of Conditions or Negative Determination).

C. Order

The issuing authority hereby orders the following (check all that apply):

- The property owner, his agents, permittees, and all others shall immediately cease and desist from any activity affecting the Buffer Zone and/or resource areas.
- Resource area alterations resulting from said activity shall be corrected and the resource areas returned to their original condition.
- A restoration plan shall be filed with the issuing authority on or before 8/19/2020
Date

for the following:

See Attachment A

The restoration shall be completed in accordance with the conditions and timetable established by the issuing authority.



TOWN OF FAIRHAVEN, MASSACHUSETTS

CONSERVATION COMMISSION

Town Hall · 40 Center Street · Fairhaven, MA 02719

Attachment A

DEP File #: None
Fairhaven File #: EO 023-011
Property Owner: Richard and Elizabeth Perreira
Property: 3 Hidden Drive

A restoration plan shall be filed with the issuing authority on or before August 19, 2020 for the following:

1. An assessment of the site and submission of a restoration plan by a qualified, licensed professional by August 19, 2020
2. Delineation of the wetland by a qualified professional
3. A list of the trees, shrubs, and other vegetation that were damaged and/or cut down, including indication of which are native and which are not
4. Restoring and revegetating the disturbed area to the original extent of the resource area by October 15, 2020 as laid out by the Fairhaven Conservation Commission in response to the submitted restoration plan
5. Assessments of vegetation for three growing seasons following the completion of the work shall be submitted to the Commission. If any of the planted vegetation fails to establish, the property owner shall be required to replace those that fail.
6. The Conservation Commission, its employees, and its agents shall have a right of entry to inspect or compliance with the provisions of this Enforcement Order
7. The Commission reserves the right to impose additional conditions on any or all portions of this project that could impact an area of statutory interest under the Act and/or the Fairhaven Wetlands Bylaw.
8. The restoration plan shall be in compliance with the Performance Standards for Bordering Vegetated Wetland (310 CMR 10.55(4)). Specifically, 310 CMR 10.55(4)(b)1, 2, and 6 require the area restored to be equal to that of the area disturbed, the groundwater and surface elevation of the restoration area shall be approximately equal to that of the pre-disturbed Bordering Vegetated Wetland, and at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the restoration area shall be temporarily stabilized to prevent erosion.



C. Order (cont.)

- Complete the attached Notice of Intent (NOI). The NOI shall be filed with the Issuing Authority on or before:

_____ Date

for the following:

No further work shall be performed until a public hearing has been held and an Order of Conditions has been issued to regulate said work.

- The property owner shall take the following action (e.g., erosion/sedimentation controls) to prevent further violations of the Act:

Failure to comply with this Order may constitute grounds for additional legal action. Massachusetts General Laws Chapter 131, Section 40 provides: "Whoever violates any provision of this section (a) shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than two years, or both, such fine and imprisonment; or (b) shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each violation". Each day or portion thereof of continuing violation shall constitute a separate offense.

D. Appeals/Signatures

An Enforcement Order issued by a Conservation Commission cannot be appealed to the Department of Environmental Protection, but may be filed in Superior Court.

Questions regarding this Enforcement Order should be directed to:

Whitney McClees, Agent

_____ Name

508-979-4023, ext. 128

_____ Phone Number

8:30am-4:30pm, Monday-Friday

_____ Hours/Days Available

Issued by:

Fairhaven Conservation Commission

_____ Conservation Commission

Conservation Commission signatures required on following page.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
WPA Form 9 – Enforcement Order
Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:

D. Appeals/Signatures (cont.)

In a situation regarding immediate action, an Enforcement Order may be signed by a single member or agent of the Commission and ratified by majority of the members at the next scheduled meeting of the Commission. In addition, pursuant to DEP’s Guidance to Conservation Commissions for Submissions During MassDEP Office Closure (issued March 28, 2020), this Order will be emailed to the appropriate MassDEP Regional Office using the format indicated in DEP’s guidance document.

Electronic signatures duly authorized by MGL c. 110G and recorded at Bristol County (S.D.) Registry of Deeds in Book 13202 Page 224.

Signatures:

DocuSigned by:
Jay Simmons
5DB0A36B28904EE...
DocuSigned by:
[Signature]
71849D2A5F424EC...
DocuSigned by:
Amy DeSalvatore
36543D91B65F4B1...

DocuSigned by:
Gary Lavolette
640B86EB20F34FD...
DocuSigned by:
Nicholas Carrigg
79F0884A02BF404...

7016 2710 0001 1692 7981

Signature of delivery person or certified mail number

NOTICE OF INTENT

BUZZARDS BAY STORMWATER RETROFITS

Jerusalem Road, Fairhaven, MA

January 2021

Prepared for:

Fairhaven Board of Public Works
5 Arsene Street
Fairhaven, MA 02719

and

Buzzards Bay National Estuary Program
Massachusetts Office of Coastal Zone Management
81-B County Road, Suite E
Mattapoisett, Massachusetts 02739

Prepared by:

Horsley Witten Group, Inc.
90 Route 6A
Sandwich, MA 02563



This product has been funded wholly or in part by the United States Environmental Protection Agency under Assistance Agreement CE00A00623-0 to the Buzzards Bay National Estuary Program, Executive Office of Energy and Environmental Affairs. The contents of this document do not necessarily reflect the views and policies of the U.S. Environmental Agency, nor does the U.S. EPA endorse trade names or recommend the use of any products, services, or enterprises mentioned in this document.



January 4, 2021

Fairhaven Conservation Commission
Town Hall
40 Center Street
Fairhaven, MA 02719

**Re: Notice of Intent Application – Jerusalem Road Stormwater Retrofit Project,
Fairhaven, Massachusetts**

Dear Members of the Conservation Commission:

On behalf of the Applicant, the Town of Fairhaven, the Horsley Witten Group, Inc. (HW) is submitting the enclosed Notice of Intent (NOI) and supporting materials for stormwater retrofits along Jerusalem Road in Fairhaven, Massachusetts, to improve water quality within the Buzzards Bay Watershed. This project is proposed as part of a larger effort to improve water quality within the Watershed, headed up by the Buzzards Bay National Estuary Program. This site is one of three priority sites being permitted under this phase of the program, with additional sites in Acushnet and Wareham, Massachusetts.

Portions of this project will occur within Land Subject to Coastal Storm Flowage (LSCSF) and within the 100-foot buffer zone to Coastal Beach and Coastal Dune as well as within the locally regulated 100-foot buffer to LSCSF. Temporary impacts to Coastal Dune will be restored with native plantings, and the vegetated dune will be expanded. These jurisdictional areas are regulated under the Massachusetts *Wetlands Protection Act* (M.G.L. Ch. 131 § 40) and the Town of Fairhaven Wetlands Bylaw (Chapter 192). The site is located on Town-owned property.

The proposed activities are intended to improve the capture and treatment of stormwater runoff, improve water quality, increase habitat value for fish, shellfish, and wildlife, and improve recreation opportunities. It is anticipated that the entire project will result in an overall improvement to the interests protected by these resource areas and Buzzards Bay. Details of the proposed project are shown on the enclosed site plans, entitled "Buzzards Bay Stormwater Retrofits, Permitting Plans, Fairhaven, Massachusetts," dated January 2021, and described in the attached project narrative.

Enclosed please find two copies of the NOI application, supporting documentation, and site plans. As this is a municipal project, the project is exempt from state and local filing fees. The Applicant has also sent notification of the pending public hearing to abutters in accordance with state and local filing regulations.

Thank you in advance for your review of this NOI application. If you have any questions and/or require additional information pertaining to this submittal, please contact me at (508) 833-6600

Fairhaven Conservation Commission

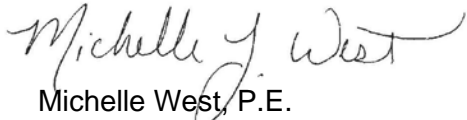
January 4, 2021

Page 2 of 2

or at mwest@horsleywitten.com. We look forward to meeting with you for a public hearing on January 25, 2021.

Sincerely,

Horsley Witten Group, Inc.

A handwritten signature in cursive script that reads "Michelle West".

Michelle West, P.E.
Project Manager

Enclosures

cc: MassDEP, Southeast Regional Office
Vincent Furtado, Fairhaven Public Works Dept.

Buzzards Bay Stormwater Retrofits – Jerusalem Road
Fairhaven, Massachusetts

January 2021

TABLE OF CONTENTS

SUMMARY 1

1.0 BACKGROUND 2

 1.1 Project Prioritization..... 3

 1.2 Project Goals 3

2.0 GENERAL SITE DESCRIPTION 3

 2.1 FEMA Designation..... 4

 2.2 State-listed Rare Species Habitat 4

 2.3 Wetland Resource Areas 4

3.0 PROPOSED PROJECT 9

4.0 PROTECTION OF RESOURCE AREA INTERESTS..... 11

 4.1 Coastal Dune.....11

 4.2 Land Subject to Coastal Storm Flowage14

 4.3 Buffer Zone.....14

 4.4 Stormwater Management.....14

 4.5 Erosion and Sedimentation Control15

5.0 REFERENCES 15

ATTACHMENTS

Attachment A – Locus Maps

Figure 1 – USGS Locus

Figure 2 – Aerial Photo

Figures 3 and 3A – FEMA’s National Flood Hazard Layer and Flood Insurance Rate Maps

Figure 4 – Existing Constraints

Figure 5 – Regulated Areas

Figure 6 – Soils

Attachment B – Project Plans

Attachment C – Stormwater Management Report

Buzzards Bay Stormwater Retrofits – Jerusalem Road

Fairhaven, Massachusetts

January 2021

SUMMARY

The Town of Fairhaven is proposing green stormwater infrastructure (GSI) retrofits along Jerusalem Road in Fairhaven, Massachusetts to reduce pollutant loading from the existing stormwater outfall and improve water quality in Buzzards Bay. Stormwater outfalls throughout the Buzzards Bay Watershed were monitored and assessed by the Buzzards Bay National Estuary Program (BBNEP) in collaboration with the Buzzards Bay Action Committee. The Jerusalem Road site was selected as a high priority site within the Buzzards Bay Watershed and is one of three sites being designed and permitted under this phase of the program, with additional sites in Acushnet and Wareham, Massachusetts.

The project site in Fairhaven consists of GSI features at four main locations along a 1,350-foot stretch of Jerusalem Road extending from the Torrington Road intersection to the west end at New Bedford Harbor. The purpose of the project is to capture and treat stormwater runoff from the surrounding drainage area with hard and soft edge bioretention practices. The project will also include removal of impervious surfaces (pavement), dune and buffer restoration, and repair/retreat of the existing broken outfall pipe that currently extends into the harbor.

The proposed stormwater retrofit project will involve work within coastal resource areas including Land Subject to Coastal Storm Flowage (LSCSF) and Coastal Dune, as well as within the 100-foot buffer zone to Coastal Dune, Bordering Vegetated Wetland, and the locally protected buffer to LSCSF, jurisdiction areas under the Massachusetts Wetlands Protection Act and/or the Fairhaven Wetlands By-law (Ch 192).

The project location and design are intended to accomplish multiple goals related to stormwater management within the Buzzards Bay Watershed, which include removal of pollutants carried in stormwater runoff (to improve water quality), increased infiltration and groundwater recharge, and public outreach and education on GSI benefits and watershed issues. Additional benefits also include potential improvement of shellfish habitat, coastal retreat and resiliency (with removal of pavement at the west end of Jerusalem Road and outfall repair), and creation of natural wind block with native vegetation.

Details of the proposed project are provided in the attached project narrative, project plans, and stormwater management report.

1.0 BACKGROUND

Buzzards Bay is a roughly 250 square mile estuary located between the westernmost part of Cape Cod, Southeastern Massachusetts, and the Elizabeth Islands. The Buzzards Bay Watershed covers 434 square miles of land draining to the Bay and includes parts of 16 municipalities. Historically, industrial and fishing centers around the Bay, particularly in the New Bedford area, had the greatest impact to its water quality. Recently, however, nonpoint source runoff from increased development in the surrounding coastal communities has added to water quality impairments impacting public health, wildlife habitat, and recreational and commercial uses of the Bay.

While many pollutants of concern impact the Bay, bacteria loading is a major focus. In May 2009, EPA approved the Buzzards Bay Watershed Pathogen Total Maximum Daily Load (TMDL) that covers 52 impaired waterbodies in the Buzzards Bay watershed. This TMDL provides a framework for addressing bacteria pollution and prioritizing restoration implementation in 45 estuaries (covering 38.4 square miles) and seven river areas (extending 17.4 river miles).

The Buzzards Bay National Estuary Program (BBNEP) is one of 28 National Estuary Programs established under Section 320 of the Clean Water Act and administered by EPA. The BBNEP is an advisory and planning unit of the Massachusetts Office of Coastal Zone Management, whose mission is “to protect and restore water quality and living resources in Buzzards Bay and its surrounding watershed through the implementation of the Buzzards Bay Comprehensive Conservation and Management Plan.” The BBNEP is working with Buzzards Bay Towns to meet designated TMDLs.

In 2016, the BBNEP collaborated with the non-profit Buzzards Bay Action Committee to form the Buzzards Bay Stormwater Collaborative. The goal of this program was to systematically map underground stormwater networks and monitor stormwater discharges. The initial effort consisted of five participating municipal public works departments (Dartmouth, Acushnet, Fairhaven, Mattapoisett, and Wareham). In 2019, as part of a new partnership with the Massachusetts Maritime Academy, the Stormwater Collaborative expanded to include Westport, Marion, and Bourne. The collaborative has accumulated some site-specific water quality data that the BBNEP used to identify priority sites.

The purpose of the overall Buzzards Bay Stormwater Retrofits project is to help participating Towns reduce bacteria and nitrogen loading into Buzzards Bay and to improve groundwater infiltration where feasible, by implementing the proposed stormwater retrofits at selected high priority sites. The multi-functional GSI retrofit designs were selected and adjusted to maximize pollutant removal and other benefits given the environmental and physical constraints at each site.

This product has been funded wholly or in part by the United States Environmental Protection Agency under Assistance Agreement CE00A00623-0 to the BBNEP, Executive Office of Energy and Environmental Affairs.

1.1 Project Prioritization

Based on a review of the water quality data and site investigations during the past four years, BBNEP identified 15 stormwater outfalls around Buzzards Bay where treating the discharge is a priority because of the potential to reduce stormwater pollutants like bacteria and nitrogen. Sites were selected based on several criteria. Primarily, consideration was given to water quality testing results. Other variables used for site prioritization included potential interest from municipal staff to address those specific locations, the amount of space available at each site for potential treatment options, size of catchment, and expected soils and water table elevation (based on NRCS's Soil Surveys). Based on additional review and design consideration by Horsley Witten Group, with input and recommendations from municipal stakeholders, six of the initial 15 sites with the best potential were advanced to concept designs, and then three were selected for further design and permitting. The Jerusalem Road site in Fairhaven, Massachusetts was selected as one of the three high priority sites, with two additional sites located in Wareham and Acushnet (**Figure 1**).

Overall, the proposed project will result in improvements to local water quality through implementation of GSI retrofits, maintenance/upgrades of existing stormwater infrastructure, and resource area enhancements through native plantings. The project has been designed to conform to the requirements of the Massachusetts Department of Environmental Protection (MassDEP) Massachusetts Stormwater Management Policy under the Wetlands Protection Act (WPA) to the greatest extent practicable, as required for retrofit projects.

1.2 Project Goals

The goal of this project is to improve the water quality within the Buzzards Bay Watershed by reducing pollution from stormwater runoff. Improving water quality will provide a net benefit to the ecosystem and the community. This will also result in improved habitat for fish, shellfish, and wildlife, and restore the areas for human recreation including fishing, swimming and kayaking. The proposed project will achieve these goals through the construction and implementation of GSI practices at Jerusalem Road that will provide water quality improvements to this impaired water body by reducing pollutant loading from stormwater runoff.

2.0 GENERAL SITE DESCRIPTION

Jerusalem Road is located on the northern portion of Scoticut Neck in Fairhaven, Massachusetts, running east to west from Scoticut Neck Road to the beach along New Bedford Harbor. Jerusalem Road is lined with residential parcels to the north and south and generally acts as the southern limit of a residential neighborhood cluster that lies between Scoticut Neck Road and the bay/harbor (east to west) and between Eaton Road and Jerusalem Road (north to south) (**Figures 2 and 3**). The road slopes toward the harbor for the entire extent from Scoticut Neck Road. At the west end of Jerusalem Road, a metal guard rail prevents vehicular access to the beach while maintaining pedestrian access.

At the west end of Jerusalem Road, sand and organic marine debris from the adjacent dune, beach, and ocean is being deposited within the existing footprint of the road from wind and tidal

action. The existing outfall on the west end of Jerusalem Road discharges stormwater directly to the beach and the harbor but is broken and partially disconnected.

Outer New Bedford Harbor is identified as a critical area for shellfishing (Growing Area BB15 as designated by the Massachusetts Division of Marine Fisheries (MA DMF) <http://www.massmarinesfisheries.net/shellfish/dsga/BB15.pdf>). According to the most recent MassDEP 303(d) – Final 2016 Integrated list of Waters, Outer New Bedford Harbor (MA95-63) is impaired for fecal coliform, enterococcus, total nitrogen, other organics, dissolved oxygen, and metals, which has resulted in poor water quality, degraded habitat, and closures of beaches and shellfish areas. As described above, MassDEP developed a Total Maximum Daily Load (TMDL) for Buzzards Bay for total pathogens (March 2009).

2.1 FEMA Designation

According to the FEMA Flood Insurance Rate Map (Community Panel No. 25001C0501F dated July 16, 2014), the site is located in Zone VE, Special Flood Hazard Areas (with velocity) at elevations 18 and 20 feet above sea level (**Figures 4 and 4A**).

2.2 State-listed Rare Species Habitat

According to the most recent version of the *Massachusetts Natural Heritage Atlas* (14th Edition, August 1, 2017), the project site does not fall within areas of *Estimated Habitat of Rare Wildlife and Certified Vernal Pools* and/or *Priority Habitat of Rare Species* as designated by the Massachusetts Natural Heritage and Endangered Species Program (NHESP) (**Figure 5**).

2.3 Wetland Resource Areas

The site supports both coastal and freshwater wetland resource areas, as defined under the Massachusetts *Wetlands Protection Act* (M.G.L. Ch. 131 § 40), its implementing Regulations (310 CMR 10.00), and the Fairhaven Wetlands By-Law (Chapter 192). The extent of MassDEP recognized resource areas per MassGIS are shown on Figure 5. Based on HW's field inspection, the following resource areas occur at or near the project site:

- Land Subject to Coastal Storm Flowage;
- Coastal Beach;
- Coastal Dune;
- Bordering Vegetated Wetland/Freshwater Wetland; and
- Buffer Zone to resource areas.

Land Subject to Coastal Storm Flowage is defined at 310 CMR 10.04 as “*land subject to any inundation caused by coastal storms up to and including that caused by the 100-year storm, surge of record or storm of record, which ever is greater.*”

Portions of the proposed project site closest to the Bay are located within the 1% annual chance flood hazard areas (Zone VE – EL 20 feet & EL 18 feet) (see **Figures 4 and 4A**).

Coastal Beach is defined at 310 CMR 10.27(2) as “*unconsolidated sediment subject to wave, tidal and coastal storm action which forms the gently sloping shore of a body of salt water and*

includes tidal flats. Coastal beaches extend from the mean low water line landward to the dune line, coastal bankline or the seaward edge of existing man-made structures, when these structures replace one of the above lines, whichever is closest to the ocean.”

An area of Coastal Beach is located at this project site on Buzzards Bay, at the west end of Jerusalem Road. This beach is bound by primary frontal dune to the east, which is briefly interrupted by a section of manicured turfgrass and pavement where Jerusalem Road and the adjacent southern parcel (1 Jerusalem Road) abut directly with the beach (**Photo 1**). The substrate of this beach is comprised of unconsolidated sands, with a scattered mix of pebbles, cobbles, and boulders. Wrack lines were observed along the mean high tide line at the time of the site visit. The resource area was delineated along the wrack line, at the base of the vegetated dune with a consecutive series of pink flagging stations labeled B1 through B11.



Photo 1. Looking south along the Coastal Beach at the west end of Jerusalem Road.

Coastal Dune is defined at 310 CMR 10.28(2) as “*any natural hill, mound or ridge of sediment landward of a coastal beach deposited by wind action or storm overwash. Coastal dune also means sediment deposited by artificial means and serving the purpose of storm damage prevention or flood control.*”

An area of primary Coastal Dune is located just landward of the beach at the site. The dune is bound between the beach and eastern adjacent land areas comprised of manicured lawn at the 1 Jerusalem Road parcel, pavement at the western end of Jerusalem Road, and a stone wall along the southern and western sides of the manicured lawn at the 1 Calumet Road property (**Photos 2 and 3**). The dune ranges in height from approximately 2 to 4 feet above the adjacent areas of the beach. The dune is comprised of unconsolidated aeolian (wind-born) sediments and is predominantly vegetated with beachgrass (*Ammophila breviligulata*), although the southern portions of this resource area are dominated by rugosa rose (*Rosa rugosa*). HW

delineated the landward portion of Coastal Dune along the end of Jerusalem Road with a consecutive series of yellow flagging stations labeled Dune 1 through Dune 3.



Photo 2. Looking south along the Coastal Dune south of the Jerusalem Road access to the beach.



Photo 3. Looking northwest at the Coastal Beach and Coastal Dune from the west end of Jerusalem Road. The narrow break in the guardrail allow for pedestrian access to the beach.



Photo 4. Looking south at the Coastal Dune that lies north of the Jerusalem Road access to the beach. The landward edge of this portion of the Coastal Dune is defined by the edge of lawn at 1 Jerusalem Road.

Bordering Vegetated Wetland (BVW) is defined at 310 CMR 10.55(2)(a) as “*freshwater wetlands that border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. Bordering Vegetated Wetlands are areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The boundary of Bordering Vegetated Wetland is defined at 310 CMR 10.55 (2)(c) as the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.*”

An area of BVW was observed south of the parcels at #1 and 5 Jerusalem Road extending in a southeastern direction. The BVW is bounded by the Coastal Dune to the west and manicured lawn and landscaping associated with the private residential properties to the north and east (**Photos 5 and 6**). The BVW in this area is dominated by common reed (*Phragmites australis*) transitioning to a shrub dominated cover type along its eastern extent.

HW observed a couple of couple of areas south of Jerusalem Road (behind private properties) (**Photo 7**) along the extent of the project area where small patches of *Phragmites* potentially indicate that the extent of the BVW is larger than depicted on the current MassDEP wetlands layer in MassGIS (see **Figure 5**). As these areas are located well beyond the project footprint, and south of areas of manicured lawn and located on private properties, HW did not field locate the edge of these BVW areas. Delineation of the extent of BVW as shown on the project plans is based on best professional judgment using aerial imagery in combination with field observations made from a distance while on-site.



Photo 5. Freshwater BVW is present south of the property at #1 Jerusalem Road. Common reed (*Phragmites australis*) is the dominant plant species present within the western extent of the wetland.



Photo 6. Common reed-dominant section of the BVW resource area south of 1 Jerusalem Road lot.



Photo 7. Potential additional BVW area further east on Jerusalem Road, south of 55 Jerusalem Road.

3.0 PROPOSED PROJECT

The proposed project involves construction of stormwater retrofit practices at four sites located along 1,350 linear feet of Jerusalem Road, extending from the intersection with Torrington Road westerly to the intersection to the end of Jerusalem Road, which ends at New Bedford Harbor. The sites are located on Town-owned property. The stormwater retrofits include GSI designs (hard and soft edge bioretention basins) to fit naturally into the site with minimal impact to the surrounding resources while providing the maximum water quality benefits for the pollutants of concern.

The project includes additional measures designed to improve existing conditions, such as impervious surface removal, infrastructure repair, and planting of native vegetation at the western end of Jerusalem Road, which will serve to further protect the resource areas and act as a natural wind block to protect the integrity of the bioretention basin.

Details of the proposed project elements are provided on the site plans entitled “*Buzzards Bay Stormwater Retrofits, Jerusalem Road Permitting Plans, Fairhaven, Massachusetts*,” prepared by Horsley Witten Group (dated January 2021) and within the Stormwater Management Report, prepared by HW and dated January 2021.



Photo 8. View of the end of Jerusalem Road (facing west) where the majority of work within jurisdictional areas will occur. A portion of the pavement will be removed to allow for the construction of a bioretention area, and approximately 2,900 SF of this area will be restored with native plantings.

Project activities will occupy approximately 5,700 SF (0.13 acres) within jurisdictional areas along Jerusalem Road. Portions of the project will occur within Coastal Dune 10, within LSCSF, as well as within the buffer zones to Coastal Beach, Coastal Dune, and Bordering Vegetated Wetlands. A small amount of work will also occur within the locally protected 100-foot buffer zone to LSCSF. Table 1 summarizes the extent of work within jurisdictional areas. A discussion of how the project will protect the interest under the Massachusetts Wetlands Protection Act and the Town of Fairhaven By-Law (Chapter 192) follows.

Table 1. Impacts to Jurisdictional Areas – Jerusalem Road, Fairhaven

RESOURCE AREA	IMPACT*	
	Temporary (SF)	Permanent (SF)
Coastal Dune	570	86
100' Buffer Zone to Coastal Dune/Coastal Beach	2,610	610
100' Buffer Zone to BVW	210	--
Land Subject to Coastal Storm Flowage	219	616
100' Buffer Zone to LSCSF	151	325

*Coastal resource areas at this site are overlapping such that buffer impacts would not be additive.

In addition to the temporary and permanent impacts to jurisdictional areas, approximately 547 SF of Coastal Dune and 2,357 SF of the 100-foot buffer to the coastal resource areas will be restored with native plantings to further protect and enhance the ability of these resource areas to serve the interests under the Massachusetts Wetlands Protection Act and the local bylaw. A discussion of the protection of the resource area interests and how the project meets the performance standards under the WPA regulations follows.

4.0 PROTECTION OF RESOURCE AREA INTERESTS

As noted, the primary objective of the project is to improve water quality in the Buzzards Bay Watershed. In order to achieve the restoration goals of the project, the proposed Buzzards Bay Stormwater Retrofit Project at Jerusalem Road will result in necessary and unavoidable temporary and permanent alterations to resource areas and/or their respective buffer zones. The majority of this project site is already highly developed, occupied by impervious surfaces or maintained turfgrass, diminishing the ability of these resources closest to the Harbor to protect the interests under the Massachusetts Wetlands Protection Act and the local bylaw. All of the proposed efforts will serve to meet the goals of the proposed project, which are to improve overall water quality within the Buzzards Bay Watershed.

4.1 Coastal Dune

A portion of the Coastal Dune will be temporarily impacted to repair and replace the existing outfall located within the dune that currently discharges untreated stormwater to New Bedford Harbor. Permanent impacts to 86 SF of Coastal Dune are necessary to support the outlet control structure (rip rap) and overflow spillways that will prevent further erosion of downgradient resource areas. As noted, approximately 547 SF of the coastal dune will be restored and revegetated with native plantings (see Planting Plan).

This redevelopment project is designed to meet the performance standards at 310 CMR 10.28 for work within Coastal Dune. The performance standards state:

WHEN A COASTAL DUNE IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION, FLOOD CONTROL OR THE PROTECTION OF WILDLIFE HABITAT, 310 10.28(3) THROUGH (6) SHALL APPLY:

(3) Any alteration of, or structure on, a coastal dune or within 100 feet of a coastal dune shall not have an adverse effect on the coastal dune by:

(a) affecting the ability of waves to remove sand from the dune;

The Project will not adversely impact the ability of waves to remove sand from the coastal dune post-construction. Temporary alterations of the coastal dune will be restored in kind, and the area of pavement immediately upgradient of the dune area will be removed and restored with sand and native plantings similar to those found at this site, effectively increasing the extent of coastal dune at this location.

(b) disturbing the vegetative cover so as to destabilize the dune;

The project will not destabilize the dune by removing vegetative cover. Temporary alterations to the dune will be restored in kind and the area of pavement immediately upgradient of the dune area will be removed and restored with sand and native plantings, which would further stabilize this resource area.

(c) causing any modification of the dune form that would increase the potential for storm or flood damage;

Following temporary alterations, the dune form will be restored in kind, and the restoration of the dune and adjacent buffer zone will effectively provide additional dune habitat that will improve the ability of the dune to provide storm and flood damage.

(d) interfering with the landward or lateral movement of the dune;

Under existing conditions, landward movement of this coastal dune is hindered by the presence of Jerusalem Road and adjacent lawn and landscape areas associate with existing residential properties. Following temporary alterations, the dune will be restored in kind, and the restoration of the dune and adjacent buffer zone will not interfere with the landward or lateral movement of the dune. Proposed plantings designed to serve as a windscreen to protect the proposed bioretention area will stabilize this portion of the dune and protect the stormwater practice that is designed to address the water quality objectives of this project.

(e) causing removal of sand from the dune artificially; or

Following temporary alterations, the dune will be restored in kind, and the restoration of the dune and adjacent buffer zone will effectively provide additional dune habitat that will be stabilized with native plantings such as American beachgrass (*Ammophila breviligulata*) to stabilize the dune.

(f) interfering with mapped or otherwise identified bird nesting habitat.

Not applicable. This site has not been identified as bird nesting habitat.



Photo 9. A small portion of the coastal dune will be temporarily impacted to repair the outfall. This resource area will be restored in kind and expanded as a portion of Jerusalem road will be removed and planted with native species.

(4) Notwithstanding the provisions of 310 CMR 10.28(3), when a building already exists upon a coastal dune, a project accessory to the existing building may be permitted, provided that such work, using the best commercially available measures, minimizes the adverse effect on the coastal dune caused by the impacts listed in 310 CMR 10.28(3)(b) through (e). Such an accessory project may include, but is not limited to, a small shed or a small parking area for residences. It shall not include coastal engineering structures.

Not Applicable.

(5): The following projects may be permitted, provided that they adhere to the provisions of 310 CMR 10.28(3):

- (a) pedestrian walkways, designed to minimize the disturbance to the vegetative cover and traditional bird nesting habitat;*
- (b) fencing and other devices designed to increase dune development; and*
- (c) plantings compatible with the natural vegetative cover.*

The proposed project will maintain the existing pedestrian access path to the beach; areas around this access path will be revegetated and/or enhanced with native plantings to further protect the resource area. No fencing designed to increase dune development is proposed at this time.

(6) Notwithstanding the provisions of 310 CMR 10.28(3) through (5), no project may be permitted which will have any adverse effect on specified habitat sites of Rare Species, as identified by procedures established under 310 CMR 10.37.

Not Applicable. This site is not mapped as habitat for rare species (see **Figure 5**).

4.2 Land Subject to Coastal Storm Flowage

While there are currently no performance standards for work within the coastal flood zone, it is generally recognized that this resource area provides for flood protection and storm damage control, and it is protected under the local Bylaw. The proposed stormwater structures will not adversely impact the ability of the V zone to absorb wave energy, nor will it displace or divert floodwaters to other areas, as the project will result in a removal of impervious surface and revegetation of the area with native plant species. Likewise, the proposed stormwater retrofit will not reduce the ability of LSCSF to buffer more inland areas from flooding and wave damage. Instead the proposed retrofit practices will continue to allow this resource area to provide for flood protection and storm damage prevention.

4.3 Buffer Zone

Portions of the work involves disturbance within buffer zone to coastal beach, coastal dune, and BVW as well as the 100-foot buffer to LSCSF. Work will include grading, excavation, placement of fill, installation of stone for stabilization, and installation of structural aspects of the stormwater management practices. In addition, a portion of the existing paved road will be removed, and the area within the buffer zone will be planted with native shrubs and herbaceous plant species designed to blend in with the surrounding coastal resource areas.

All work within the buffer zone is associated with the installation of improved stormwater management features. All disturbed areas within the buffer zone will be stabilized after construction by site condition appropriate and native vegetation. The proposed project will result in a decrease in impervious areas associated with the proposed retrofits and restoration as detailed above and shown on the plans.

4.4 Stormwater Management

The proposed stormwater treatment systems are designed to meet the requirements of the Massachusetts Stormwater Management Standards under the WPA to the greatest extent practicable, as required for retrofit projects. The stormwater runoff at the project site is currently collected by the existing stormwater drainage network and discharged into the resource areas and eventually New Bedford Harbor without any treatment. The proposed retrofits will treat the runoff within the proposed bioretention systems, to further protect the interests under the Massachusetts Wetlands Protection Act and local Bylaw.

Improving the water quality by treating stormwater runoff will improve the resource areas' ability to protect the interests identified in the local Bylaws and Regulations. Additionally, native plantings will be installed within the bioretention basins, which will benefit local wildlife, and restoration of the surrounding area will act as a natural wind block, reducing sand and debris accumulation at the end of Jerusalem Road and within the bioretention area. There will also be a reduction in impervious surface. This reduction in pavement will add coastal resiliency to the impacts of a changing climate and rising sea levels.

Additional details regarding the stormwater design are provided in the attached Stormwater Management Report prepared by HW.

4.5 Erosion and Sedimentation Control

The Town proposes to implement a sedimentation and erosion control barrier consisting of silt socks at the limit of work to further protect the downgradient resource areas during and immediately following construction. The erosion control barrier will be staked in place and be maintained in good condition until all soils are stabilized with vegetation. Areas that are temporarily disturbed during construction will be re-seeded using a compatible native seed mix, which will also improve the ability of the buffer zone to protect the wildlife habitat functions of the wetland area.

5.0 REFERENCES

Massachusetts Year 2016 Integrated List of Waters: Proposed Listing of the Condition of Massachusetts' Waters Pursuant to Sections 305(b), 314 and 303(d) of the Clean Water Act. Massachusetts Department of Environmental Protection.

Buzzards Bay National Estuary Program, Massachusetts Office of Coastal Zone Management. 2020. *Buzzards Bay National Estuary Program*. Accessed 15 December 2020: <<https://buzzardsbay.org/>>



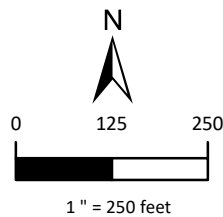
Basemap: Massachusetts 2019 USGS Color Ortho Imagery

Legend

★ Proposed Retrofit Location □ Tax Parcel (MassGIS, 2020)

Existing Infrastructure

- Catchbasins
- ✱ Discharges
- Pipes

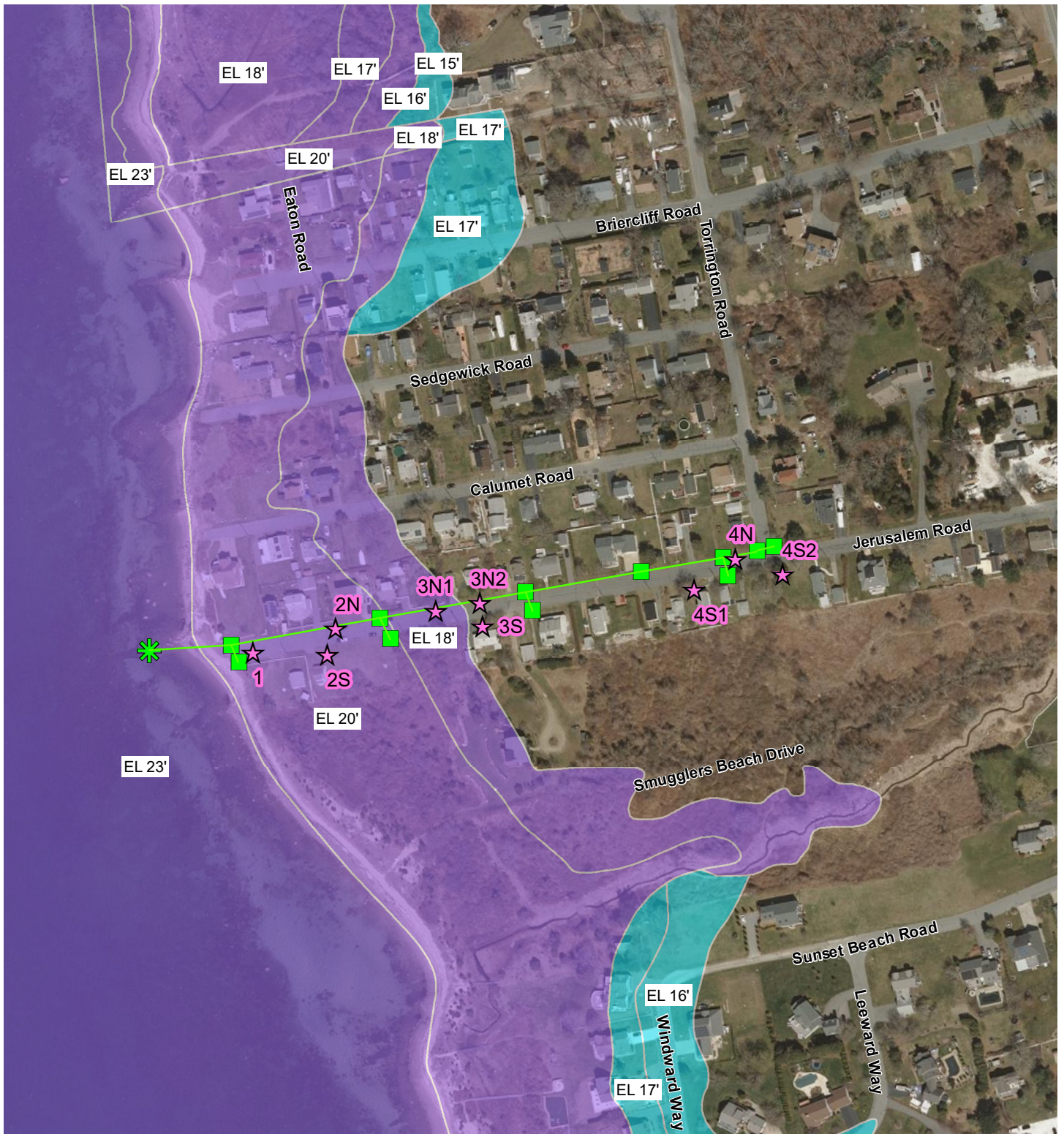


Horsley Witten Group
 Sustainable Environmental Solutions
 90 Route 6A • Unit 1 • Sandwich, MA 02563
 508-833-6600 • horsleywitten.com

Aerial Locus Map
 Buzzards Bay Watershed
 Stormwater Retrofits
 Jerusalem Road, Fairhaven, MA

Date: 12/31/2020

Figure 3



Basemap: Massachusetts 2019 USGS Color Ortho Imagery

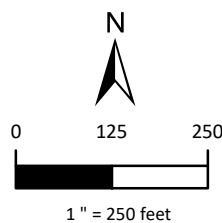
Legend

- ★ Proposed Retrofit Location
- Existing Infrastructure**
- Pipes
- Catchbasins
- ✱ Discharges

FEMA National Flood Hazard Layer

- AE: 1% Annual Chance of Flooding, with BFE
- VE: High Risk Coastal Area

Data Source: MassGIS



Horsley Witten Group
 Sustainable Environmental Solutions
 90 Route 6A • Unit 1 • Sandwich, MA 02563
 508-833-6600 • horsleywitten.com



FEMA Flood Zones
 Buzzards Bay Watershed
 Stormwater Retrofits
 Jerusalem Road, Fairhaven, MA

Date: 12/31/2020

Figure 4

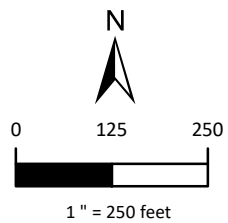


Basemap: Massachusetts 2019 USGS Color Ortho Imagery

Legend

- ★ Proposed Retrofit Location
- Existing Infrastructure
 - Pipes
 - Catchbasins
 - ✱ Discharges
- NHESP Priority Habitats of Rare Species (14th Ed. Atlas)
- NHESP Estimated Habitats of Rare Wildlife (14th Ed. Atlas)
- MassDEP Wetlands (2005)**
 - Hydrologic Connection
 - Wooded Marsh, Marsh/Bog
 - Open Water
 - Beach/Dune

Data Source: MassGIS



Horsley Witten Group
 Sustainable Environmental Solutions
 90 Route 6A • Unit 1 • Sandwich, MA 02563
 508-833-6600 • horsleywitten.com

Environmental Constraints
 Buzzards Bay Watershed
 Stormwater Retrofits
 Jerusalem Road, Fairhaven, MA

Date: 12/31/2020

Figure 5



Whitney McClees <wmcclees@fairhaven-ma.gov>

Fwd: Decker 1 smugglers road

Keith Decker [REDACTED]
To: Whitney McClees <wmcclees@fairhaven-ma.gov>
Cc: Kimberly Decker [REDACTED]

Tue, Jan 19, 2021 at 3:22 PM

Good afternoon, Whitney,

Thank you again for coming by last week to walk the property with me and to go over the scope of the work. To confirm our conversation and my understanding, I have attached a map marking out the scope of work. As we discussed, the area bordering the wetlands is heavily infested with knotweed, bittersweet, rosa multiflora, etc.. The area of the wetlands has been marked off from each surveyed flag and cordoned off to avoid any activity in the wetlands. See photos (I put in just a few but have over 60 pictures of each flag and the tape between). Each native tree will be flagged off and the remainder of the yellow area will have the invasives cut down. In the Spring, the area will be spread with new loam and a seed mixture that was approved by you prior will be put down.

Please let me know if you need anything further or if I have made any errors.

Regards,

Keith

[REDACTED]

[REDACTED]

[REDACTED]

The content of this email is confidential and intended for the recipient specified in message only. It is strictly forbidden to share any part of this message with any third party, without a written consent of the sender. If you received this message by mistake, please reply to this message and follow with its deletion, so that we can ensure such a mistake does not occur in the future.

From: Kimberly Decker [mailto: [REDACTED]]
Sent: Tuesday, January 19, 2021 3:02 PM
To: Keith Decker < [REDACTED] >
Subject: Fwd: Decker 1 smugglers road

[Quoted text hidden]

5 attachments



Wetland 1.jpg
1545K



Wetland 2.jpg
1577K



Wetland 3.jpg
525K



Wetland 4.jpg
1477K

 **Decker plan.pdf**
320K