Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator

MassDOT
Massachusetts Department of Transportation
Highway Division

Date: April 12, 2018

RE: Bicycle and Pedestrian Improvements along Beach Road, Tisbury MA

To Whom It May Concern:

I have enclosed for your review, as required by the Massachusetts Environmental Policy Act Regulations, a copy of the Environmental Notification Form (ENF) for the above-mentioned project. This was filed with the Executive Office of Energy and Environmental Affairs on or before April 17, 2018. Comments on this project are due by May 15, 2018.

Notice of the ENF can be viewed on the MEPA website in the April 25, 2018 MEPA Environmental Monitor.

All comments should be sent to:

Secretary Matthew A. Beaton
Executive Office of Energy & Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

Please send a copy of your comments to:

MassDOT Highway Division
Environmental Services Section
Attn: Hung Pham
10 Park Plaza, Room 4260
Boston, MA 02116
Hung.Pham@dot.state.ma.us

If you have any questions concerning the enclosed information, please feel free to contact Hung Pham at (857)368-8831 or at Hung.Pham@dot.state.ma.us.

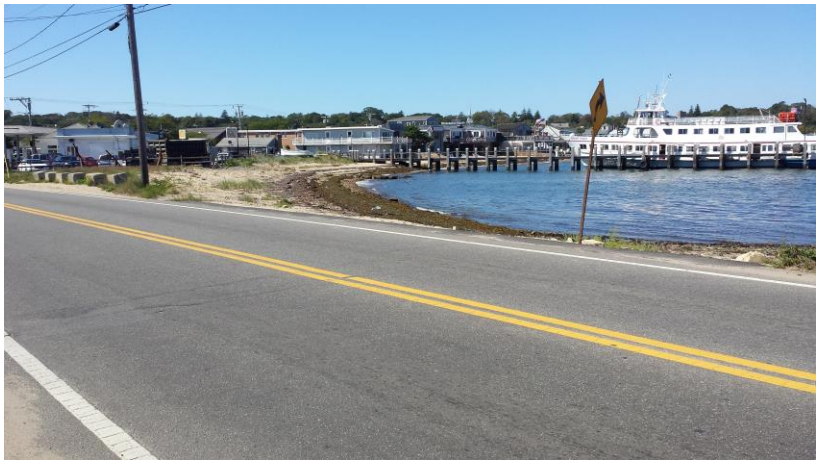
Sincerely,

David White
Acting Director
MassDOT Environmental Services Division

ENVIRONMENTAL NOTIFICATION FORM

Bicycle and Pedestrian Improvements along Beach Road
Tisbury, Massachusetts
MassDOT Project #607411

April 12, 2018



SUBMITTED TO:

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

PREPARED FOR:

Massachusetts Department of Transportation
Ten Park Plaza
Boston, Massachusetts 02116

PREPARED BY:

181 Ballardvale Street, Suite 202
Wilmington, Massachusetts 01887

Nover-Armstrong Associates, Inc.
124 Main Street, Unit 2GG
Carver, Massachusetts 02333

TABLE OF CONTENTS

MEPA Environmental Notification Form
Bicycle and Pedestrian Improvements along Beach Road
Tisbury, MA

Commonwealth of Massachusetts

Executive Office of Energy and Environmental Affairs
Massachusetts Environmental Policy Act (MEPA) Office

Environmental Notification Form

For Office Use Only

EEA#: _____

MEPA Analyst: _____

The information requested on this form must be completed in order to submit a document electronically for review under the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Bicycle and Pedestrian Improvement Project along Beach Road**		
Street Address: **Beach Rd. in Vineyard Haven from Water St./Beach St./Lagoon Pond Rd. (Five Corners) running 2632 ft. easterly to the start of the existing shared use path.**		
Municipality: **Tisbury**	Watershed: **Atlantic Ocean**	
Universal Transverse Mercator Coordinates: **N: 165401.2775 E: 1612692.2385**	Latitude: **Northing: 40^{O} 27' 13.90"** Longitude: **Easting: 70^{O} 36' 3.84"**	
Estimated commencement date: **October 2019**	Estimated completion date: **December 2022**	
Project Type: **Roadway Reconstruction**	Status of project design**: 75** **%complete**	
Proponent: **MassDOT Highway Division and Town of Tisbury**		
Street Address: **10 Park Plaza, Room 4260**		
Municipality: **Boston**	State: **MA**	Zip Code: **02116**
Name of Contact Person: **Hung Pham**		
Firm/Agency: **MassDOT Highway Division Environmental Services**	Street Address: **10 Park Plaza, Room 4260**	
Municipality: **Boston**	State: **MA**	Zip Code: **02116**
Phone: **(857) 368-8831**	Fax: **857-368-0609**	E-mail: **Hung.Pham@dot.state.ma.us**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

If this is an Expanded Environmental Notification Form (ENF) (see 301 CMR 11.05(7)) or a Notice of Project Change (NPC), are you requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes ☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes ☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes ☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes ☒No

Which MEPA review threshold(s) does the project meet or exceed (see 301 CMR 11.03)?

301 CMR 11.03(3)(b)(1)(a)

Which State Agency Permits will the project require?

A Chapter 91 Permit is needed for beach nourishment below the Mean High Water line and CZM is providing federal consistency review.

Identify any financial assistance or land transfer from an Agency of the Commonwealth, including the Agency name and the amount of funding or land area in acres:

No land transfer from an Agency of the Commonwealth will be required for the project. The project's construction costs will be funded by MassDOT Highway Division (20%) and the Federal Highway Administration (80%).

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	3.49 acres		
New acres of land altered		0.00 acres	
Acres of impervious area	2.61 acres	+0.03 acres	2.64 acres
Square feet of new bordering vegetated wetlands alteration		0.0 s.f.	
Square feet of new other wetland alteration		0.08 acres (Dune and Beach)	
Acres of new non-water dependent use of tidelands or waterways		0.0 acres	
STRUCTURES			
Gross square footage	N/A	N/A	N/A
Number of housing units	N/A	N/A	N/A
Maximum height (feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WASTEWATER			
Water Use (Gallons per day)	N/A	N/A	N/A
Water withdrawal (GPD)	N/A	N/A	N/A
Wastewater generation/treatment (GPD)	N/A	N/A	N/A
Length of water mains (miles)	N/A	N/A	N/A
Length of sewer mains (miles)	N/A	N/A	N/A

Has this project been filed with MEPA before?
☒ Yes (EEA # 15722) ☐ No

Has any project on this site been filed with MEPA before?
☒ Yes (EEA # 15722) ☐ No

GENERAL PROJECT INFORMATION

PROJECT DESCRIPTION:

The proposed project features the reconstruction of approximately 2,600 feet of Beach Road in Tisbury, Massachusetts (herein referred to as "the Project" – See Attachment B, Figure 1). The improvements are intended to enhance safety conditions, extend existing bicycle and pedestrian facilities, and meet current ADA standards throughout the project. Specifically, the project entails adding sidewalks and/or bicycle accommodations, as well as, shoulders to both sides of the majority of the roadway in order to extend the multiuse path from the Beach Road Causeway to the Five Corners intersection (the intersection of Beach Road, Lagoon Pond Road/Water Street, and Beach Street extension). No work is proposed within the Five Corners intersection.

The roadway reconstruction project includes minor roadway widening and geometric improvements, along with associated roadway work, installation of new granite curbing, rehabilitation of and improvements to existing drainage systems, construction of ADA compliant wheelchair ramps, and the addition of shoulders and sidewalks along both sides of the majority of the roadway. The addition of sidewalks and shoulders will enable current bicycle and pedestrian traffic on the multiuse path to connect safely with the existing pedestrian facilities at the Five Corners intersection. Coastal resiliency elements, consisting of flood controls, restoration efforts, and beach nourishment, have been incorporated into the proposed project design.

Describe the existing conditions and land uses on the project site:

The section of Beach Road within the project limits contains a varied mix of retail, commercial and industrial uses. There are active boat yards, piers, motels, a gas station, restaurants, fuel storage tanks, pharmacies, and hardware stores located adjacent to the Right-of-Way (ROW). The current roadway has 12-foot travel lanes in each direction with 3-foot shoulders. The edge of pavement is generally defined by vertical granite/concrete curbing with a bituminous sidewalk of varying width extending from the Five Corners to just past the Shell Gas Station (Station 21+00) on the north and to the project limits near the Causeway on the south. It should be noted that generally Beach Road's ROW lies at the back of the existing sidewalks. The Beach Road corridor, within the project limits, sees heavy vehicle, bicycle, and pedestrian traffic during the summer months.

Along the roadway, the adjacent land use consists primarily of bituminous or gravel lots with a very limited amount of existing vegetation. There is an existing drainage system installed along Beach Road within the project limits. Based upon field inspection, the system does not appear to be functioning as intended. The limited amount of existing catch basins, shallow and even negative pipe slopes, and outfall invert elevations cause the catch basins to back-up and "surcharge". This condition has resulted in stormwater ponding on the roadway. The lack of deep sumps in the catch basins contributes to sedimentation in the drainage trunk line and at discharge points. There are four stormwater discharge points for the project. Three of the drainage outfalls from the project limits discharge to Vineyard Haven Harbor (Atlantic Ocean) to the north and one outfall discharges to Lagoon Pond to the south. There are no stormwater BMPs currently in place to reduce sedimentation or provide any form of peak flow mitigation or treatment of the stormwater prior to discharging into the harbor or Lagoon Pond.

The existing Coastal Beach and Coastal Dune located north of Station (Sta.) 23+00 is currently showing signs of impacts from storm damage, as erosion from the area is significant and undermining the roadway.

Describe the proposed project and its programmatic and physical elements:

The proposed improvements involve full depth reconstruction of Beach Road, including resetting existing and adding new granite curbing (Project Plans – Attachment E). The roadway configuration will consist of 10.5-foot travel lanes in each direction with 4.5-foot shoulders from the Five Corners to approximately Sta. 21+00, east of the horizontal curve in Beach Road, where the shoulders are reduced to 2 feet wide. Sidewalks, 6.5 feet wide, will be constructed on each side of the road from the Five Corners intersection to Sta. 18+30, where the northerly sidewalk will end. The southerly sidewalk (6.5 feet wide) transitions into a new 8 to 10-foot wide Shared Use Path for pedestrians and bicycles, connecting with the existing Shared Use Path at the northeast project limits (Sta. 36+64).

The reconstruction of sidewalks and shoulders will enable the current bicycle and pedestrian traffic on the Shared Use Path to connect safely with existing pedestrian facilities at the Five Corners intersection. No work is anticipated at the intersection itself. The project also includes minor roadway widening and geometric improvements, along with associated pavement rehabilitation treatments including both overlay and full depth construction and installation of ADA compliant wheelchair ramps.

The Project has been designed to comply with DEP's Stormwater Management Standards for a redevelopment project. The existing drainage system will be reconstructed as part of this redevelopment project. Approximately twenty-nine (29) new deep sump catch basins and eighteen (18) new drain manholes will be installed, with new piping, within the project limits. The majority of the existing structures will be removed or abandoned. The new drainage system will tie into four (4) existing drainage outfalls, three that discharge to Vineyard Haven Harbor to the north and one to Lagoon Pond to the south. The existing outfalls, at Stations 21+49 LT, 30+82 RT, and 35+56 LT, will be upgraded with the installation of check valves in accessible manhole structures to help control hydraulic surge of the system. The project proposes a 3'- 4' vegetated (grass) swale to run adjacent to the shared-use-path and is designed to capture stormwater flow from the path. The proposed swale runs from Sta. 18+19 to 36+64 RT, for a distance of 1,845 feet, but is broken up by intermittent driveways.

There are currently no BMPs associated with the existing drainage system to provide stormwater treatment prior to discharging into the ocean. Limited ROW and high groundwater elevations hinder the ability to provide substantial stormwater treatment BMP's. Measures are proposed however, as a best fit scenario given the site constraints, to meet the Stormwater Standards to the maximum extent practicable. These include: all new deep sump catch basins to provide stormwater pre-treatment; cleaning of existing pipes and structures to remove sediment build-up; creation of a drainage easement for the outfall at Sta. 30+83 RT to allow for future maintenance access; construction of a vegetated swale within the 3'-4' buffer area between the shared use path and the road; and, trees and plantings to be provided throughout the project limits as shown in the Landscape Plans.

Portions of the Project are located within Areas Subject to Protection and/or Jurisdiction under the Massachusetts Wetlands Protection Act, including Barrier Beach, Coastal Dune, Coastal Beach, Land Subject to Coastal Storm Flowage, Land Subject to Tidal Action, and the 100-foot buffer zone to Coastal Dune, Coastal Beach, and Salt Marsh (Attachment B, Figure 2). Temporary and permanent impacts related to drainage and roadway improvements will occur within Barrier Beach, Coastal Dune, Coastal Beach, Land Subject to Tidal Action, and Land Subject to Coastal Storm Flowage.

Describe the on-site project alternatives (and alternative off-site locations, if applicable), considered by the proponent, including at least one feasible alternative that is allowed under current zoning, and the reasons(s) that they were not selected as the preferred alternative:

Overall, the Beach Road Project length is approximately 2,600 feet (0.49 mi). The proposed design was required to include: full-depth construction; the installation of bike lanes and a shared use path; the rehabilitation of existing drainage facilities; the installation of new sidewalks and shoulders along both

sides of Beach Road; construction of a raised boardwalk over a Coastal Dune, the installation or new or resetting of granite curbing; the installation of ADA compliant wheelchair ramps; and the installation of new signing and pavement markings.

GPI prepared a Pre-Feasibility Study that analyzed a number of project alternatives that were presented to the Town and key stakeholders at various times. The following three alternatives were analyzed for this project:

1. Standard Roadway Construction - 43-foot wide Right of Way, with 5-foot Shoulders and 5.5-foot sidewalk along the entire roadway.
2. Constructing a Shared Used Path from Five Corners intersection connecting to the existing Shared Use Path
3. A Hybrid 43–foot version with sidewalks to the bend in Beach Road and the Shared Use Path extending from the bend to eastern project limit (current design)

The Hybrid 43-foot alternative with the shared use path extending to the bend in the road was preferred over the standard 43 foot version with 5 foot shoulders and 5.5 foot sidewalks throughout. Efforts were also, made to improve the existing roadway geometry, however due to the existing right-of-way limitations, design exceptions are still required.

The original Beach Road cross section was proposed to consist of one 10.5-foot wide travel lane with 4.5-foot wide shoulders in each direction. In addition, six-foot sidewalks were proposed along the majority of the corridor. This cross section was mutually agreed upon between MassDOT and the Town at a meeting on December 3rd, 2014. The Beach Road cross section was later revised at the request of the Town of Tisbury. The proposed project included two typical cross sections. The first cross section consisted of 10.5-foot travel lanes, 4.5-foot shoulders, and a 5.5-foot sidewalk. The second cross section consisted of 10.5-foot lanes, 2-foot shoulders, a variable width grass strip and a 9 to 10-foot shared use path. This hybrid cross section was mutually agreed upon between MassDOT and the Town in September of 2015.

The MVC submitted comments on the project in a letter dated 3/17/2015. The roadway improvements design was revised to include work recommended by the MVC, where feasible. The Project has now been designed to fit within the constraints of the ROW and to include the required roadway improvements. The drainage design is controlled by the outlet elevation which does not allow for oversizing of structures as was suggested by the MVC. The design does involve replacing most of the piping, manholes, and all of the catch basins with deep sump basins, however. Raising the level of Beach Road was discussed, however, this was determined to not be feasible.

As stated earlier, this project was previously subject to MEPA review under EEA# 15722. Since the original filing in June 2017, the design has been further revised to remove the proposed pedestrian infrastructure on the north side of Beach Road between Sta. 18+30 and 23+00, in order to meet the Performance Standards under 310 CMR 10.00, with respect to Coastal Dune. Specifically, in response to comments from CZM, the sidewalk proposed within Coastal Dune in this area has been removed from the plan. Only temporary impacts to Dune are proposed resulting from removal of existing utility poles and concrete blocks, in the area of the originally proposed sidewalk. The design now terminates the sidewalk on the north side of Beach Road at approximately Sta. 18+30, and the area located in front of the gas station will be landscaped.

Summarize the mitigation measures proposed to offset the impacts of the preferred alternative:

The project is developed to avoid, minimize, and mitigate impacts to coastal resource areas, wildlife habitats, and other environmentally sensitive areas (Attachment B, Figure 3). Mitigation measures provided for unavoidable impacts allow the project to be conditioned to comply with the General Performance Standards in the Wetland Regulations and to contribute to the interests found in the

Massachusetts Wetland Protection Act (WPA). Impacts to resource areas Subject to Protection under the WPA have been mitigated to the maximum extent practicable. Permanent alteration of Coastal Dune and Coastal Beach will be mitigated through the nourishment of existing beach, removal of impervious surfaces by decreasing the travel lane width from 12 feet to 10.5 feet, and planting of native species along the Beach Road Corridor.

Beach nourishment, consisting of supplementing the Beach with compatible sediment, planting vegetation, and installing coir envelopes, is proposed at approximately Sta 22+00. The landward portion of the beach nourishment area will be planted with American beachgrass (Ammophilia brevigulata) culms. The Beach nourishment area is proposed to be 12,102 square feet in area, as shown on the landscaping plans. Dune restoration is also proposed from Sta. 22+00 to 23+00, consisting of the removal of existing utility poles and concrete blocks, and planting both American beachgrass (*Ammophilia brevigulata*) and northern bayberry (*Myrica pensylvanica*). This proposed dune restoration area is approximately 1,727 s.f. The Landscaping Plans also depict planting of native species appropriate for the ecological conditions, along the Beach Road corridor. These plantings will enhance the areas wildlife habitat value within the Barrier Beach.

There are currently no BMPs associated with the existing drainage system to provide stormwater treatment prior to discharging into the ocean. Limited ROW and high groundwater elevations hinder the ability to provide substantial stormwater treatment BMP's. Measures are proposed however, as a best fit scenario given the site constraints, to meet the Stormwater Standards to the maximum extent practicable. These include: all new deep sump catch basins to provide stormwater pre-treatment; cleaning of existing pipes and structures to remove sediment build-up; maintenance of the existing outfalls and installation of check valves in accessible manhole structures at Sta. 21+69 LT (behind the gas station), at Sta. 30+83 RT, and at Sta. 35+56 LT, to help control hydraulic surge of the drainage system; creation of a drainage easement for the outfall at Sta. 30+83 RT for future maintenance access; construction of a vegetated swale within the 3'-4' buffer area between the shared use path and the road to collect sheet flow from the path, providing opportunity for infiltration and peak flow attenuation; and, trees and plantings to be provided throughout the project limits as shown in the Landscape Plans. The project results in the conversion of 6,171 square feet of existing impervious surface to vegetated areas.

The entire work area in proximity to wetland resources will be protected by erosion controls. A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan has been provided as part of the stormwater report. Erosion and sedimentation controls will be installed and maintained where activities are proposed adjacent to Coastal Beach or Coastal Dune. They will provide a limit of work barrier while preventing silt and sediments from migrating into or towards the coastal resource areas. These measures include compost filter tubes and silt sacks (catch basin inserts).

If the project is proposed to be constructed in phases, please describe each phase:

The Project will not be constructed in Phases.

AREAS OF CRITICAL ENVIRONMENTAL CONCERN:

Is the project within or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____)

☒No

RARE SPECIES:

Does the project site include Estimated and/or Priority Habitat of State-Listed Rare Species?
(see http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/priority_habitat/priority_habitat_home.htm)

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES:
Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?
☐Yes (Specify_____) ☒No

Although the project site does not include any structure, site or district listed in the State Register of Historic Places or the inventory of Historic and Archeological Assets of the Commonwealth, the Massachusetts Cultural Resource Information System (MACRIS) lists one property located along the project site as an inventoried property (Beach Road – TIS.116). The property is inventoried as the former location of the Martha's Vineyard Co-Op Grocery Store. This project proposes no changes to this structure.

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes (Specify_____) ☒No

WATER RESOURCES:
Is there an Outstanding Resource Water (ORW) on or within a half-mile radius of the project site?
___Yes **_X_**No;
if yes, identify the ORW and its location. _____

Are there any impaired water bodies on or within a half-mile radius of the project site? **_X_**Yes ___No;
if yes, identify the water body and pollutant(s) causing the impairment:

The Environmental Protection Agency (EPA) in cooperation with MassDEP has developed a Draft TMDL (Total Maximum Daily Load) for Nitrogen within Lagoon Pond. As such, Tisbury is responsible for eliminating nitrogen sources. Sources of nitrogen in Lagoon Pond were found to be many and varied. Sources of nitrogen include septic systems, natural background, runoff, fertilizers, wastewater treatment facilities, landfills, and agricultural activities. In addition Vineyard Haven Harbor is impaired for Bacteria/Pathogens, there is currently no TMDL for the waterbody.

Is the project within a medium or high stress basin, as established by the Massachusetts Water Resources Commission? ___Yes **_X_**No

STORMWATER MANAGEMENT:

Generally describe the project's stormwater impacts and measures that the project will take to comply with the standards found in MassDEP's Stormwater Management Regulations:

The Beach Road Bicycle and Pedestrian Improvement Project is considered a redevelopment project under the Massachusetts Stormwater Management Policy. As such, the project will be designed to comply with the Stormwater Management Standards to the maximum extent practicable, while improving upon existing conditions. The existing drainage system will be reconstructed; the majority of the existing structures will be removed or abandoned. The Stormwater Policy also states that "Stormwater Management Standards shall apply to the maximum extent practicable to the following: (6) Footpaths, bike paths and other paths for pedestrian and/or non-motorized vehicle access."

There are no untreated discharges being proposed as part of this project. Approximately twenty-nine (29) new deep sump catch basins providing pre-treatment will be installed with new piping within the project limits. These deep sump catch basins will provide pre-treatment for the four discharge outfall pipes for the project; three of the outfalls discharge to Vineyard Haven Harbor (Atlantic Ocean) to the north and one outfall discharges to Lagoon Pond to the south. This new system will maintain the existing drainage patterns and outfalls.

There are currently no BMPs associated with the existing drainage system to provide stormwater treatment prior to discharging into the ocean. Limited ROW and high groundwater elevations hinder the ability to provide substantial stormwater treatment BMP's. Measures are proposed however, as a best fit scenario given the site constraints, to meet the Stormwater Standards to the maximum extent practicable. These measures, which will be an improvement over the existing conditions, include:

- **Installation of catch basins with 4 foot deep sumps spaced appropriately based on the profile and super-elevation of the road.**
- **Cleaning of existing pipes and structures to remove sediment build up.**
- **Maintenance of the existing outfall behind the gas station at Sta. 21+49 LT and installation of check valve in DMH #214, outside of the extreme high tide line, to control hydraulic surge of the system.**
- **Maintenance of the existing outfall at Sta. 30+82 RT and installation of a check valve at the last manhole structure. A drainage easement is proposed for this outfall to allow for future maintenance access.**
- **Maintenance of the existing outfall at Sta. 35+36 LT and installation of a check valve.**
- **Construction of a vegetated swale within the 3'-4' buffer area between the Shared Use Path and the road to collect sheet flow from the path. The buffer area will collect sheet flow from the path, providing an opportunity for infiltration and peak flow attenuation.**
- **Provision of trees and plantings throughout the project limits as shown in the Landscape Plans.**

The total project area is 151,830 square feet and the net increase to impervious area is approximately 1,227 square feet after conversion of 6,171 square feet of impervious surface within the Barrier Beach to vegetated areas. The resulting flow rate increase is negligible given the overall project area and its impact on the receiving ocean waters. Additionally, this area is in a Land Subject to Coastal Storm Flowage (LSCSF), for which the peak rate requirement may be waived per the Stormwater Standards.

Infiltration BMP options for groundwater recharge are limited due to ROW constraints and the presence of significant jurisdictional resource areas adjacent to the roadway including barrier beach and coastal dune. In addition, the groundwater is anticipated to be located at a depth of 1 to 4 feet below surface grade. Infiltration could not be designed to meet the 2-foot separation requirement and inflow piping to any proposed infiltration BMP would be within groundwater. The Required Recharge Volume (Rv) is minimal and was calculated using only "new" impervious areas due to the project's classification as a Redevelopment project. Rv was calculated to be 91 c.f. The project proposes to include a 3'- 4' vegetated (grass strip) swale to run adjacent to the shared-use-path.

To improve the TSS removal capacity of the existing condition, deep sump catch basins are proposed throughout the project to allow solids to settle prior to discharge. As a basis for the calculations for this redevelopment project, the applicant has considered only areas of new impervious surfaces to be treated in accordance with the standards. The deep sump catch basins and street sweeping will be part of the plans to remove total suspended solids and will be an improvement over the existing conditions.

The project includes reconstruction of roadways and sidewalks, which are not considered land uses with higher pollutant loads. The LUHPPL standard is not applicable to the work proposed within the project limits. The Shell Gas Station however, located at 86 Beach Road, has an unpermitted connection to the State drainage system. As part of this project, the proposal is to remove the drainage connection which will eliminate the potential for pollutants from a LUHPPL, therefore improving the runoff quality. No other LUHPPL adjacent to the project limits are known to exist.

The project will primarily consist of full depth reconstruction of the roadway. The entire work area in proximity to wetland resources will be protected by erosion controls. A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan has been provided as part of the stormwater report. Erosion and sedimentation controls will be installed and maintained where activities are proposed adjacent to Beach or Dune. They will provide a limit of work barrier while preventing silt and sediments from migrating into or towards the coastal resource areas. These measures include compost filter tubes and silt sacks (catch basin inserts). No hay bales shall be used at any time on this project. The erosion and sedimentation control measures will be constructed in accordance with the Massachusetts Erosion and Sediment Control Guidelines for Urban and Suburban Areas, March 1997 and the U.S.D.A. SCS's Erosion and Sediment control in the Site Development, Massachusetts Conservation Guide, September - 1983. The areas will be seeded with a seed mix that provides wildlife habitat as designed by NHESP and MassDOT. Best management practices for erosion and sedimentation control will be adhered to for all phases of construction to minimize potential impacts to wetland resource areas and wildlife habitat. Since the project will disturb more than one acre of land, a Notice of Intent will be submitted to the EPA for coverage under the National Pollution Discharge Elimination System (NPDES) Construction General Permit. As part of the application, the Applicant is required to prepare a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will be prepared by the Contractor and will

include erosion and sediment controls, temporary stormwater management measures, Contractor inspection schedules, materials management, waste disposal, spill prevention and response, sanitation, and non-stormwater discharges. A MassDOT BMP Operation and Maintenance Plan has been prepared.

The project limits were reviewed to identify any illicit discharges to the stormwater management system. MassDOT has determined that runoff from the Tisbury Shell gas station currently discharges to the existing State-owned drainage system without applicable permits. As part of this project, the connection from the Shell Station to the drainage system within the Beach Road ROW will be removed and the property owner will be responsible for permitting and/or handling the stormwater discharges from the privately owned site. No other illicit discharges are known to exist within the project limits.

MASSACHUSETTS CONTINGENCY PLAN:

Has the project site been, or is it currently being, regulated under M.G.L.c.21E or the Massachusetts Contingency Plan? Yes _**X**__ No ___; if yes, please describe the current status of the site (including Release Tracking Number (RTN), cleanup phase, and Response Action Outcome classification):

There are 28 sites along the project Site corridor that have been, or are currently being, regulated under the Massachusetts Contingency Plan (MCP). These sites have been reviewed and it has been determined that of the 28 sites, the following sites could potentially impact the project:

Tisbury Wharf Company – 185 Beach Road – RTN 4-1136, STATUS: RAO A2
RM Packer Oil Co – Off Beach Road – RTN 4-11082, STATUS: RAO A3
Harness Shop Square – 23 Beach Street Ext – RTN 4-12524, STATUS: PSNC
Vineyard Haven Xtra Mart – 19 Beach Road – RTN 4-13294, STATUS: RAO A2
Tisbury Texaco – 84 Beach Road – RTN 4-14290, STATUS: RAO C2
Vapor Recovery Unit – Beach Road – RTN 4-17249, STATUS: TIER 2/Phase V
Beach Road Ext – Beach Road – RTN 4-17583, STATUS: URAM

Is there an Activity and Use Limitation (AUL) on any portion of the project site? Yes ___ No _**X**__**;** if yes, describe which portion of the site and how the project will be consistent with the AUL: _____

There are no AUL Restrictions within the project site. There are, however, two AUL Deed Restrictions on properties located along the project corridor. These AULs are associated with the following sites:

Vineyard Haven Xtra Mart – 19 Beach Road – RTN 4-19998, STATUS: RAO A2
RM Packer Oil Co – Off Beach Road – RTN 4-11082, STATUS: RAO A3

The existing AULs on properties located along the project corridor are not located on the project Site. If contaminated materials are encountered during construction, these materials will be handled in accordance with applicable state and federal regulations, as described in the Contractor Specifications (ITEMs 180, 181, 183, and 184).

Are you aware of any Reportable Conditions at the property that have not yet been assigned an RTN? Yes ___ No _X__ ;

According to MassDEP, the following are closed sites that are in close proximity to the project area:

Tisbury Harbor @ Shipyard Fueling Dock – Beach Road
RM Packer Company – 199 Beach Road
Tisbury Wharf Company – 153 Beach Road
RM Packer Company – 84 Beach Road
Tisbury Texaco – 84 Beach Road
Tisbury Shell Station – 86 Beach Road
Machine & Marine – Beach Road
Vineyard Haven Xtra Mart – 19 Beach Road

SOLID AND HAZARDOUS WASTE:

If the project will generate solid waste during demolition or construction, describe alternatives considered for re-

use, recycling, and disposal of, e.g., asphalt, brick, concrete, gypsum, metal, wood:

MassDOT adopted its GreenDOT Policy Directive on June 2, 2010, with the primary goal to reduce greenhouse gas emissions; promote the healthy transportation options of walking, bicycling, and public transit; and to support smart growth development. As part of that policy, Sustainable Design and Construction Best Practices, MassDOT currently uses a range of recycled materials in pavement, including recycled asphalt pavement, recycled tires, and shingles, as well as warm mix asphalt. MassDOT is working to increase the use of environmentally-friendly technologies, and continues to conduct research so that it can maximize use of recycled materials in warm-mix asphalt paving.

Will your project disturb asbestos containing materials? Yes ___ No X___ ;
if yes, please consult state asbestos requirements at http://mass.gov/MassDEP/air/asbhom01.htm

MassDOT Highway Division's Hazardous Materials Unit reviews all projects to determine if they will encounter and/or generate waste containing asbestos. If asbestos containing materials are encountered, appropriate special conditions are provided in the project's contract, such that contractors handle and dispose of those materials appropriately and in accordance with all applicable local, state, and federal regulations.

Describe anti-idling and other measures to limit emissions from construction equipment**:**

As stated in MassDOT's GreenDot Policy Directive, MassDOT requires that contractors install emission control devices in all off-road vehicles. MassDOT's Revised Diesel Retrofit Specification states emissions control standards must be met or technology must be used for non-road, diesel powered construction equipment in excess of 50 horsepower on MassDOT job sites.

DESIGNATED WILD AND SCENIC RIVER:

Is this project site located wholly or partially within a defined river corridor of a federally designated Wild and Scenic River or a state designated Scenic River? Yes ___ No **X**__

LAND SECTION – all proponents must fill out this section

I. Thresholds / Permits

A. Does the project meet or exceed any review thresholds related to **land** (see 301 CMR 11.03(1)
___ Yes **X** __ No; if yes, specify each threshold:

II. Impacts and Permits

A. Describe, in acres, the current and proposed character of the project site, as follows:

	Existing	Change	Total
Footprint of buildings	N/A	N/A	N/A
Internal roadways	1.89 ac.	-0.24 ac.	1.65 ac.
Parking and other paved areas	0.75 ac.	0.27 ac.	1.02 ac.
Other altered areas	0.25 ac.	-0.13 ac.	0.12 ac.
Undeveloped areas	0.60 ac.	0.10 ac.	0.69 ac
Total: Project Site Acreage	3.49 ac.	0.00 ac.	3.49 ac.

B. Has any part of the project site been in active agricultural use in the last five years?
___ Yes _**X**__ No; if yes, how many acres of land in agricultural use (with prime state or locally important agricultural soils) will be converted to nonagricultural use?

C. Is any part of the project site currently or proposed to be in active forestry use?
___ Yes _**X**__ No; if yes, please describe current and proposed forestry activities and indicate whether any part of the site is the subject of a forest management plan approved by the Department of Conservation and Recreation:

D. Does any part of the project involve conversion of land held for natural resources purposes in accordance with Article 97 of the Amendments to the Constitution of the Commonwealth to any purpose not in accordance with Article 97? ___ Yes _**X**__ No;

E. Is any part of the project site currently subject to a conservation restriction, preservation restriction, agricultural preservation restriction or watershed preservation restriction?
___ Yes _**X**__ No;

F. Does the project require approval of a new urban redevelopment project or a fundamental change in an existing urban redevelopment project under M.G.L.c.121A? ___ Yes _X__ No;

G. Does the project require approval of a new urban renewal plan or a major modification of an existing urban renewal plan under M.G.L.c.121B? Yes ___ No _**X**__;:

III. Consistency

A. Identify the current municipal comprehensive land use plan
Title: **Master Plan Principals & Objectives (Draft)** Date**: Aug. 19, 2005**

This project is consistent with the Town of Tisbury 2005 Master Plan Principals & Objectives (Draft). The Principles and Objectives include promoting the connectivity of streets, making access to and use of the waterfront an important part of the overall circulation system, promoting alternate means of transportation - pedestrian and bike with a special emphasis on pedestrian movements, avoidance of street widening, tree planting and landscape preservation and as much as possible use existing utilities and infrastructure.

B. Describe the project's consistency with that plan with regard to:

1) economic development

The Town of Tisbury and the Island of Martha's Vineyard are dependent on a seasonal visitor-based economy. The project will help the Town reach its economic development goals through improving the existing roadway and infrastructure conditions and connectivity. It will provide enhanced pedestrian, bicycle and disabled access through the reconstruction of sidewalks, ADA compliant ramps and extension of the shared use path from the Five Corners intersection of Vineyard Haven to commercial properties along Beach Road, the Causeway, Vineyard Haven Harbor and to Oak Bluffs beyond to the east.

2) adequacy of infrastructure

The project includes minor roadway widening and geometric improvements, along with various pavement rehabilitation treatments, installation of new granite curbing, and rehabilitation of the existing drainage systems to prevent ponding on the roadway. The addition of ADA compliant wheelchair ramps and the addition of shoulders and sidewalks along both sides of the roadway will enable the current bicycle and pedestrian traffic on the multiuse path located on the causeway east of the project to connect safely with existing pedestrian facilities at the Five Corners intersection.

3) open space impacts

One of the Master Plan goals is to make protection and restoration of the natural environment the Town's number one priority. In general, the project will result in reduced traffic congestion and improved air quality, improved pedestrian and bicycle safety and an enhanced stormwater management system. The plan prioritizes the avoidance of sprawl and destruction of open spaces and promotes restoration of access to the town's harbor. The project involves the reconstruction of Beach Road including bicycle and pedestrian improvements; re-establishing a connection from the Vineyard Haven Town Center to the Harbor and Oak Bluffs beyond. The plans call for preservation and protection of existing street trees within the limit of work, as well as tree plantings and beach nourishment, in compliance with the Plans goals of tree planting and landscape preservation.

4) compatibility with adjacent land uses

The Tisbury Master Plan prioritizes maintaining Tisbury's New England town character by preserving and encouraging its small scale, tree-lined streets, historic structures and neighborhoods. Beach Road runs from the Five Corners Intersection in the historic commercial core of Vineyard Haven easterly to the Causeway continuing the commercial neighborhood and to the town center of Oak Bluffs beyond. The proposed project, maintains and enhances the pedestrian and bicycle infrastructure and reconstructs part of a main thoroughfare between Vineyard Haven and Oak Bluffs.

C. Identify the current Regional Policy Plan of the applicable Regional Planning Agency (RPA)

RPA: **The Martha's Vineyard Commission**

Title: **The Island Plan, Charting the Future of the Vineyard** Date: **December 10, 2009**

The Island Plan identifies that until the 1970s, the Island's settlement pattern was structured around three main town centers, Edgartown, Oak Bluffs, and Vineyard Haven, surrounded by dense, traditional neighborhoods. The plan recommends keeping retail activities and visitor services concentrated in walkable town centers. This directs new developments to them to limit sprawl and prevent building in environmentally sensitive areas. The Island Plan recommends making the best use of existing infrastructure such as roads, sewer, and town water. It encourages reducing dependence on private automobiles and promotes bus, bicycle, and walking for both residents and visitors to alleviate traffic congestion. Town centers see heavy pedestrian activity, especially in summer and the dense, historic layouts make it difficult to accommodate large volumes of pedestrians, bicyclists, and motor vehicles. Many sidewalks are narrow, obstructed with utility poles and signs or have uneven surfaces. The absence of an adequate network of continuous pedestrian pathways presents a safety concern by forcing pedestrians to walk in the roadway, which causes automobile delays. The Island has a 37-mile network of off-road bike paths and filling the gaps in it would connect the highest density commercial and population centers with each other, especially connecting the main population centers – central Edgartown, Oak Bluffs, and Vineyard Haven. The Island Plan also proposes to eliminate or reduce direct discharge of stormwater runoff into sensitive water resources and recommends that drainage system design and maintenance programs be put in place to limit stormwater problems.

D. Describe the project's consistency with that plan with regard to:

1) economic development:

The project enhances economic development through improving the existing roadway and infrastructure conditions and connectivity within one of the islands historic town centers, Vineyard Haven. It will provide enhanced and expanded pedestrian, bicycle and disabled access through the widening and reconstruction of sidewalks and installation of ADA compliant ramps to create alternate transportation modes, alleviating traffic congestion and safety hazards. The extension of the Shared Use Path from the Five Corners intersection of Vineyard Haven to commercial properties along Beach Road, the Causeway, Vineyard Haven Harbor and to Oak Bluffs beyond; it begins to fill in one of the gaps in the network of off-road bicycle paths critical to connecting two high density population and commercial town centers.

2) adequacy of infrastructure

The project is being classified as a redevelopment project as no significant increase in impervious area is being proposed. The existing drainage system will be reconstructed and improved as part of this redevelopment project. Approximately twenty-nine (29) new deep sump catch basins and eighteen (18) new drain manholes will be installed with new piping within the project limits. The majority of the existing structures will be removed or abandoned. The new drainage system will tie into four (4) existing drainage outfalls, three (3) that discharge to Vineyard Haven Harbor to the north and

one (1) to Lagoon Pond to the south. There are currently no BMPs associated with the existing drainage system to provide stormwater treatment prior to discharging into the ocean. Limited ROW and high groundwater elevations hinder the ability to provide substantial stormwater treatment BMP's. Measures are proposed however, as a best fit scenario given the site constraints, to meet the Stormwater Standards to the maximum extent practicable. These include: all new deep sump catch basins to provide stormwater pre-treatment prior to outfall; cleaning of existing pipes and structures to remove sediment build-up; maintenance of the existing outfalls at Sta. 21+49 LT (behind the gas station), at Sta. 30+82 RT, and at Sta. 35+56 LT, and installation of check valves in accessible manhole structures to help control hydraulic surge of the system; creation of a drainage easement for the outfall at Sta. 30+82 RT to allow for future maintenance access; and, canopy and shrub plantings to be provide throughout the project limits as shown in the Landscape Plans.

3) open space impacts

The Island Plan identifies that it is a priority to preserve and reinforce the traditional settlement pattern of the Island with three main town centers and avoid creating new areas of commercial development and new town centers in environmentally sensitive locations. This would provide a better balance between allowing a reasonable amount of growth and the desire to protect the qualities of Martha's Vineyard as well as accelerating the rate of open space protection. The plan prioritizes the avoidance of sprawl and destruction of open spaces and promotes restoration of access to the town's harbor. The project involves the reconstruction of Beach Road including bicycle and pedestrian improvements; re-establishing a connection from the Vineyard Haven Town Center to the Harbor.

RARE SPECIES SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **rare species or habitat** (see 301 CMR 11.03(2))? ___ Yes _**X**__ No;

B. Does the project require any state permits related to **rare species or habitat**? ___ Yes _**X**_ No

C. Does the project site fall within mapped rare species habitat (Priority or Estimated Habitat?) in the current Massachusetts Natural Heritage Atlas (attach relevant page)? ___ Yes _**X**__ No.

D. If you answered "No" to all questions A, B and C, proceed to the **Wetlands, Waterways, and Tidelands Section**.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wetlands, waterways, and tidelands** (see 301 CMR 11.03(3))? _X_ Yes ___ No; if yes, specify, in quantitative terms:

Yes. The Project requires a Chapter 91 Permit, as beach nourishment (a water-dependent use) is proposed below the Mean High Water (MHW) line. Because the review thresholds for Wetlands, Waterways, and Tidelands outlined in 301 CRM 11.03 are contingent upon a Project requiring a State Permit, and the Project requires a Chapter 91 Permit, the review thresholds for alteration of Coastal Dune and Barrier Beach are exceeded (301 CMR 11.03(3)(b)1.a.).

According to the Office of Coastal Zone Management, approximately 1,600 linear feet of Beach Road is located on a Barrier Beach. Within the project limits, the majority of the Barrier Beach is developed; however, portions of the limit-of-work within the Barrier Beach consist of functioning Coastal Beach and/or Coastal Dune, which are both areas Subject to Protection under the Wetlands Protection Act. The project proposes to alter a total of 104,473 sf of Barrier Beach, including both temporary and permanent alterations to developed and undeveloped areas.

The project, as proposed, results in 3,431 square feet (sf) of permanent alteration to Coastal Dune within Barrier Beach. The project also results in 9,591 sf of temporary alteration to Coastal Dune within Barrier Beach and 12,102 sf of temporary alteration to Coastal Beach within Barrier Beach (resulting from beach nourishment).

The entire project is located within a velocity zone, so additional fill within the velocity zone is unavoidable. The project proposed approximately 3,431 sf of permanent alteration to Land Subject to Coastal Storm Flowage (the velocity zone) and 151,830 sf of temporary alteration to Land Subject to Coastal Storm Flowage (the velocity zone).

B. Does the project require any state permits (or a local Order of Conditions) related to **wetlands, waterways, or tidelands**? __**X**__ Yes ___ No; if yes, specify which permit:

A Notice of Intent (NOI) was filed with the Tisbury Conservation Commission for work within resource areas and their buffer zones. Because the proposed impacts to Areas Subject to Jurisdiction under the federal Clean Water Act (33 U.S.C. §1251 *et seq.*) consist beach nourishment; the Order of Conditions will serve as the Section 401 of the Clean Water Act Water Quality Certification (WQC) for the project (314 CMR 9.03(2)). Additionally, the Massachusetts Programmatic Agreement for Section 404 of the Clean Water Act Programmatic General Permit (PGP) will be filed. A Federal Consistency Review by CZM and Chapter 91 Permit for beach nourishment are required.

C. If you answered "No" to both questions A and B, proceed to the **Water Supply Section**. If you answered "Yes" to either question A or question B, fill out the remainder of the Wetlands, Waterways, and Tidelands Section below.

II. Wetlands Impacts and Permits

A. Does the project require a new or amended Order of Conditions under the Wetlands Protection Act (M.G.L. c.131A)? __**X**__ Yes ___ No; if yes, has a Notice of Intent been filed? __**X**__ Yes ___ No; if yes, list the date and MassDEP file number: __**074-0817**___; if yes, has a local Order of Conditions been issued? ___ Yes __**X**__ No; Was the Order of Conditions appealed? ___ Yes __**X**__ No. Will the project require a Variance from the Wetlands regulations? ___ Yes __**X**__ No.

B. Describe any proposed permanent or temporary impacts to wetland resource areas located on the project site:

Coastal Dune – Barrier Beach

The proposed work impacting Coastal Dune includes replacing drainage infrastructure, construction of a shared use bike path, Dune restoration, and roadway re-alignment. Because the project is located within a Barrier Beach, impacts to vegetated areas within the Barrier Beach are considered impacts to Dune. Specifically, the proposed work impacting Coastal Dune includes the following project elements:

1. **Replacement of 71 feet of the existing 12" reinforced concrete pipe at approximately Station (Sta) 21+50, with a 12" ductile iron pipe, and the removal of existing adjacent utility poles and concrete blocks, resulting in 1,727.04 square feet of temporary Coastal Dune alteration. American beachgrass (*Ammophilia brevigulata*) and northern bayberry (*Myrica pensylvanica*) plantings are proposed along this area to restore the dune after**

construction completion.

2. **Construction of a ± 10-foot-wide asphalt shared use pathway on the south side of the road from Sta 18+19 to Sta 36+50. This portion of the project requires conversion of existing vegetated areas within a Barrier Beach to asphalt and existing asphalt to vegetated areas. Construction of the path will result in 2,600 square feet of permanent alteration and 3,806 square feet of temporary alteration of Coastal Dune. This portion of the project also results in the conversion of 4,287 square feet of existing impervious surface to vegetated areas (Coastal Dune restoration);**
3. **Due to the Site constraints, in order to accommodate construction of the shared use pathway, the roadway will be shifted to the north from Sta 25+80 to Sta 32+00. This requires conversion of existing vegetated area within Barrier Beach to asphalt, which results in 808 square feet of permanent Coastal Dune alteration;**
4. **Installation of a wheelchair ramp, located near Sta 35+10, resulting in 23 square feet of permanent Coastal Dune alteration;**
5. **Planting and construction staging along the north side of the roadway, resulting in alteration of vegetated areas within a Barrier Beach. This portion of the project results in 4,062 square feet of temporary Dune alteration and conversion of 593 square feet of existing impervious area to vegetated area (Coastal Dune restoration); and,**
6. **Installation of coir envelopes on the north side of the road from Sta 22+95 to Sta 23+73 to protect the eroding roadway and installation of American beachgrass plantings, resulting in 263 square feet of Coastal Dune restoration.**
7. **Conversion of the existing sidewalk located north of the roadway, from Sta. 20+00 to 21+50, to vegetated area will result in 1,028 square feet of Dune restoration.**

The Coastal Dune areas north of Sta 22+00 and Sta 36+00 are determined to be significant to storm damage prevention, flood control, and for wildlife habitat. The remaining vegetated areas along the Barrier Beach are significant to storm damage prevention and flood control, so the Performance Standards at 310 CMR 10.28 (3 through 6) apply.

The project no longer proposes permanent Coastal Dune impacts between Sta 21+50 to Sta 24+00, resulting from construction of the sidewalk. Now, the only permanent impacts to Coastal Dune result from converting vegetated lawn area (within Barrier Beach) to impervious surfaces, with the exception of the wheelchair ramp located at Sta. 35+10. The increase in impervious surfaces within Coastal Dune are mitigated through conversion of existing impervious surfaces to vegetated areas.

Cumulatively, the project results in 3,431 square feet of permanent Coastal Dune alteration, 9,591 square feet of temporary Coastal Dune alteration, and conversion of 6,171 square feet of impervious surface within Barrier Beach to vegetated areas.

<u>Coastal Beach – Barrier Beach</u>

Proposed work impacting Coastal Beach includes proposed beach nourishment downgradient of Beach Road to protect the roadway and installation of Coir Envelopes from Sta 22+95 to Sta 23+73. American beachgrass (*Ammophilia brevigulata*) culm plantings are proposed on the landward portion of the beach nourishment area. This work will result in 12,102 square feet of temporary Coastal Beach alteration.

The Beach in this area is significant to storm damage prevention, flood control, and wildlife habitat so the performance standards at 310 CMR 10.27 (3 through 5, and 7) apply. In accordance with 310 CMR 10.27(5), and notwithstanding 310 CMR 10.27(3), beach nourishment using clean sediment of compatible grain size may be permitted. As such, all Coastal Beach performance standards will be met because no solid fill structure is proposed within the Coastal Beach and there is no mapped rare species habitat within the Project limits.

Land Subject to Coastal Storm Flowage

Proposed work includes temporary and permanent alterations to Land Subject to Coastal Storm Flowage (LSCSF). The entire roadway is located under the Velocity Elevation, so impacts to the floodplain are unavoidable.

The proposed work will not change the existing flow-pattern of floodwaters. The project also includes the installation of check valves on the outfall at Sta. 30+82 RT at the last manhole, within drainage manhole #214 at Sta. 21+49 LT, and within drainage manhole #401 at Sta. 35+56, to aid in directing stormwater. The provisions of 310 CMR 10.00 do not specify any performance standards for LSCSF.

Land Subject to Tidal Action

Proposed work within Land Subject to Tidal Action includes beach nourishment and installation of coir envelopes. The proposed work below the extreme high tide elevation will not impact tidal action.

C. Estimate the extent and type of impact that the project will have on wetland resources, and indicate whether the impacts are temporary or permanent:

Coastal Wetlands	Area (square feet) or Length (linear feet)	Temporary or Permanent Impact?
Land Under the Ocean		
Designated Port Areas		
Coastal Beaches	**12,102 s.f.**	**Temporary (w/in BB) - Beach Nourishment**
Coastal Dunes	**3,431 s.f.**	**Permanent (w/in BB)**
	9,591 s.f.	**Temporary**
	6,171 s.f.	**Permanent Restoration**
Barrier Beaches	**84,381 s.f.**	**Temporary (to previously developed BB)**
	3,431 s.f.	**Permanent (Dune)**
Coastal Banks		
Rocky Intertidal Shores		
Salt Marshes		
Land Under Salt Ponds		
Land Containing Shellfish		
Fish Runs		
Land Subject to Coastal Storm Flowage	**151,830 s.f.**	**Temporary**
	3,431 s.f.	**Permanent**

Inland Wetlands		
Bank (lf)	**N/A**	
Bordering Vegetated Wetlands	**N/A**	
Isolated Vegetated Wetlands	**N/A**	
Land under Water	**N/A**	
Isolated Land Subject to Flooding	**N/A**	
Bordering Land Subject to Flooding	**N/A**	
Riverfront Area	**N/A**	

D. Is any part of the project:

1. proposed as a **limited project**? _**X**__ Yes ___ No;
   if yes, what is the area (in sf)?__**71,946.49 square feet**_

   Maintenance and improvement of existing public roadways, but limited to widening less than a single lane, adding shoulders, correcting substandard intersections, and improving inadequate drainage systems.

2. the construction or alteration of a **dam**? ___ Yes _**X**__ No;
3. fill or structure in a **velocity zone** or **regulatory floodway**? _**X**__ Yes ___ No
4. dredging or disposal of dredged material? ___ Yes _**X**__ No;
5. a discharge to an **Outstanding Resource Water (ORW)** or an **Area of Critical Environmental Concern (ACEC)**? ___ Yes _**X**__ No
6. subject to a wetlands restriction order? ___ Yes _**X**__ No; if yes, identify the area (in sf):
7. located in buffer zones? _**X**__Yes ___No; if yes, how much (in sf) __**84,381 s.f**.____

   Although portions of the project are within the buffer zones to coastal dune, coastal beach, and salt marsh, the entire project is located within a resource area (Land Subject to Coastal Storm Flowage).

E. Will the project:

1. be subject to a local wetlands ordinance or bylaw? ___ Yes _**X**__ No

   MassDOT projects are not subject to local bylaws.

2. alter any federally-protected wetlands not regulated under state law? ___ Yes _**X**__ No;

III. Waterways and Tidelands Impacts and Permits

A. Does the project site contain waterways or tidelands (including filled former tidelands) that are subject to the Waterways Act, M.G.L.c.91? _**X**__ Yes ___ No; if yes, is there a current Chapter 91 License or Permit affecting the project site? ___ Yes _**X**__ No; if yes, list the date and license or permit number and provide a copy of the historic map used to determine extent of filled tidelands:

Because Beach Road's construction was conducted prior to 1984, the roadway public service project is, in all probability, exempt from Chapter 91. A Minor Modification letter for the roadway work was submitted to DEP for review on April 5, 2017 to determine if the project requires a new License or Permit. The letter requested the Department approve the proposed improvements. Because no response has been received and it has been over 30 days, we are assuming concurrence by the Department for the roadway portion of the Project.

Because the Project proposes beach nourishment below the Mean High Water (MHW) line, a Chapter 91 permit is required, however, the nourishment is considered a water-dependent use.

B. Does the project require a new or modified license or permit under M.G.L.c.91? _**X**__ Yes ___ No; if yes, how many acres of the project site subject to M.G.L.c.91 will be for non-water-dependent use? Current __**1.74 acres**_ Change __**0 acres**_ Total _**1.74 acres**_

No additional solid fill will be placed within tidelands.

C. For non-water-dependent use projects, indicate the following:

Area of filled tidelands on the site:_____**0.13 acres**_____
Area of filled tidelands covered by buildings:___**N/A**_____
For portions of site on filled tidelands, list ground floor uses and area of each use:
_____**N/A**_____
Does the project include new non-water-dependent uses located over flowed tidelands?
Yes ____ No _**X**__
Height of building on filled tidelands____**N/A**_____

Also show the following on a site plan: Mean High Water, Mean Low Water, Water-dependent Use Zone, location of uses within buildings on tidelands, and interior and exterior areas and facilities dedicated for public use, and historic high and historic low water marks.

D. Is the project located on landlocked tidelands? ___ Yes _**X**__ No;

E. Is the project located in an area where low groundwater levels have been identified by a municipality or by a state or federal agency as a threat to building foundations?
___Yes _**X**__ No;

F. Is the project non-water-dependent **and** located on landlocked tidelands **or** waterways or tidelands subject to the Waterways Act **and** subject to a mandatory EIR?
___ Yes _**X**__ No;

G. Does the project include dredging? ___ Yes _**X**__ No;

IV. Consistency:

A. Does the project have effects on the coastal resources or uses, and/or is the project located within the Coastal Zone? _**X**__ Yes ___ No; if yes, describe these effects and the projects consistency with the policies of the Office of Coastal Zone Management:

A letter describing the project's consistency with the policies of the Office of Coastal Zone Management will be submitted as required for Federal Consistency Review.

B. Is the project located within an area subject to a Municipal Harbor Plan? ___ Yes _**X**__ No; if yes, identify the Municipal Harbor Plan and describe the project's consistency with that plan:

WATER SUPPLY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **water supply** (see 301 CMR 11.03(4))? ___ Yes __**X**__ No;

B. Does the project require any state permits related to **water supply**? ___ Yes _**X**___ No;

C. If you answered "No" to <u>both</u> questions A and B, proceed to the **Wastewater Section**.

WASTEWATER SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **wastewater** (see 301 CMR 11.03(5))? ___ Yes _**X**___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **wastewater**? ___ Yes _**X**___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Transportation -- Traffic Generation Section**

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Thresholds / Permit

A. Will the project meet or exceed any review thresholds related to **traffic generation** (see 301 CMR 11.03(6))? ___ Yes _**X**___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **state-controlled roadways**? ___ Yes _**X**__ No; if yes, specify

C. If you answered "No" to both questions A and B, proceed to the **Roadways and Other Transportation Facilities Section**.

TRANSPORTATION SECTION (ROADWAYS AND OTHER TRANSPORTATION FACILITIES)

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **roadways or other transportation facilities** (see 301 CMR 11.03(6))? ___ Yes _**X**___ No; if yes, specify, in quantitative terms:

B. Does the project require any state permits related to **roadways or other transportation facilities**? ___ Yes _**X**___ No; if yes, specify which permit:

C. If you answered "No" to both questions A and B, proceed to the **Energy Section**.

ENERGY SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **energy** (see 301 CMR 11.03(7))? ___ Yes _**X**___ No;

B. Does the project require any state permits related to **energy**? ___ Yes _**X**___ No;

C. If you answered "No" to both questions A and B, proceed to the **Air Quality Section**.

AIR QUALITY SECTION

I. Thresholds

A. Will the project meet or exceed any review thresholds related to **air quality** (see 301 CMR 11.03(8))? ___ Yes __**X**__ No;

B. Does the project require any state permits related to **air quality**? ___ Yes _**X**___ No;

C. If you answered "No" to both questions A and B, proceed to the **Solid and Hazardous Waste Section**.

SOLID AND HAZARDOUS WASTE SECTION

I. Thresholds / Permits

A. Will the project meet or exceed any review thresholds related to **solid or hazardous waste** (see 301 CMR 11.03(9))? ___ Yes _**X**___ No;

B. Does the project require any state permits related to **solid and hazardous waste**? ___ Yes **X**____ No;

C. If you answered "No" to both questions A and B, proceed to the **Historical and Archaeological Resources Section**.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

I. Thresholds / Impacts

A. Have you consulted with the Massachusetts Historical Commission? _____ Yes _**X**__ No; if yes, attach correspondence. For project sites involving lands under water, have you consulted with the Massachusetts Board of Underwater Archaeological Resources? ____Yes ____ No; if yes, attach correspondence

An early environmental coordination letter, sent by the Town's design consultant to the Tisbury Historical Commission on January 13, 2015; similar letters were sent to the Mashpee Wampanoag Tribe and the Wampanoag Tribe of Gay Head-Aquinnah Tribal Historic Preservation Officers on April 1, 2015. No response was received from any of these parties, to date.

B. Is any part of the project site a historic structure, or a structure within a historic district, in either case listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes __**X**__ No; if yes, does the project involve the demolition of all or any exterior part of such historic structure? ___ Yes ___ No; if yes, please describe:

C. Is any part of the project site an archaeological site listed in the State Register of Historic Places or the Inventory of Historic and Archaeological Assets of the Commonwealth? ___ Yes _**X**___ No;

D. If you answered "No" to all parts of both questions A, B and C, proceed to the **Attachments and Certifications** Sections. If you answered "Yes" to any part of either question A or question B, fill out the remainder of the Historical and Archaeological Resources Section below.

CERTIFICATIONS:

1. The Public Notice of Environmental Review has been/will be published in the following newspapers in accordance with 301 CMR 11.15(1):

   (Name) Vineyard Gazette (Date) 4/13/2018

2. This form has been circulated to Agencies and Persons in accordance with 301 CMR 11.16(2).

Signatures:

4/12/2018	4/12/2018
Date Signature of Responsible Officer or Proponent	Date Signature of person preparing ENF (if different from above)
David White	Ruth McCawley Geoffroy, AICP
Name (print or type)	Name (print or type)
MassDOT Env. Services Division	Nover-Armstrong Associates, Inc.
Firm/Agency	Firm/Agency
10 Park Plaza, Room 4260	124 Main Street, Unit 2GG
Street	Street
Boston, MA 02116	Carver, MA 02330
Municipality/State/Zip	Municipality/State/Zip
(857) 368-4636	(508) 866-8383, ext. 207
Phone	Phone

List of Attachments

Attachment A:	ENF Distribution List
Attachment B:	Figures *1. USGS Topographic Site Locus Map* *2. Environmental Resource Areas* *3. NHESP and Wildlife Habitat Map*
Attachment C:	List of Municipal and Federal Permits and Reviews Required
Attachment D:	Resource Impact Tables
Attachment E:	Massachusetts Department of Transportation Highway Division, Plan and Profile of Beach Road, in the Town of Tisbury, Dukes County - *Bound Separately*

ATTACHMENT A
ENF Distribution List

NOVER-ARMSTRONG ASSOCIATES, INC.

124 Main Street, Unit 2GG
Carver, Massachusetts 02330
Telephone 508.866.8383
Facsimile 508.866.9898

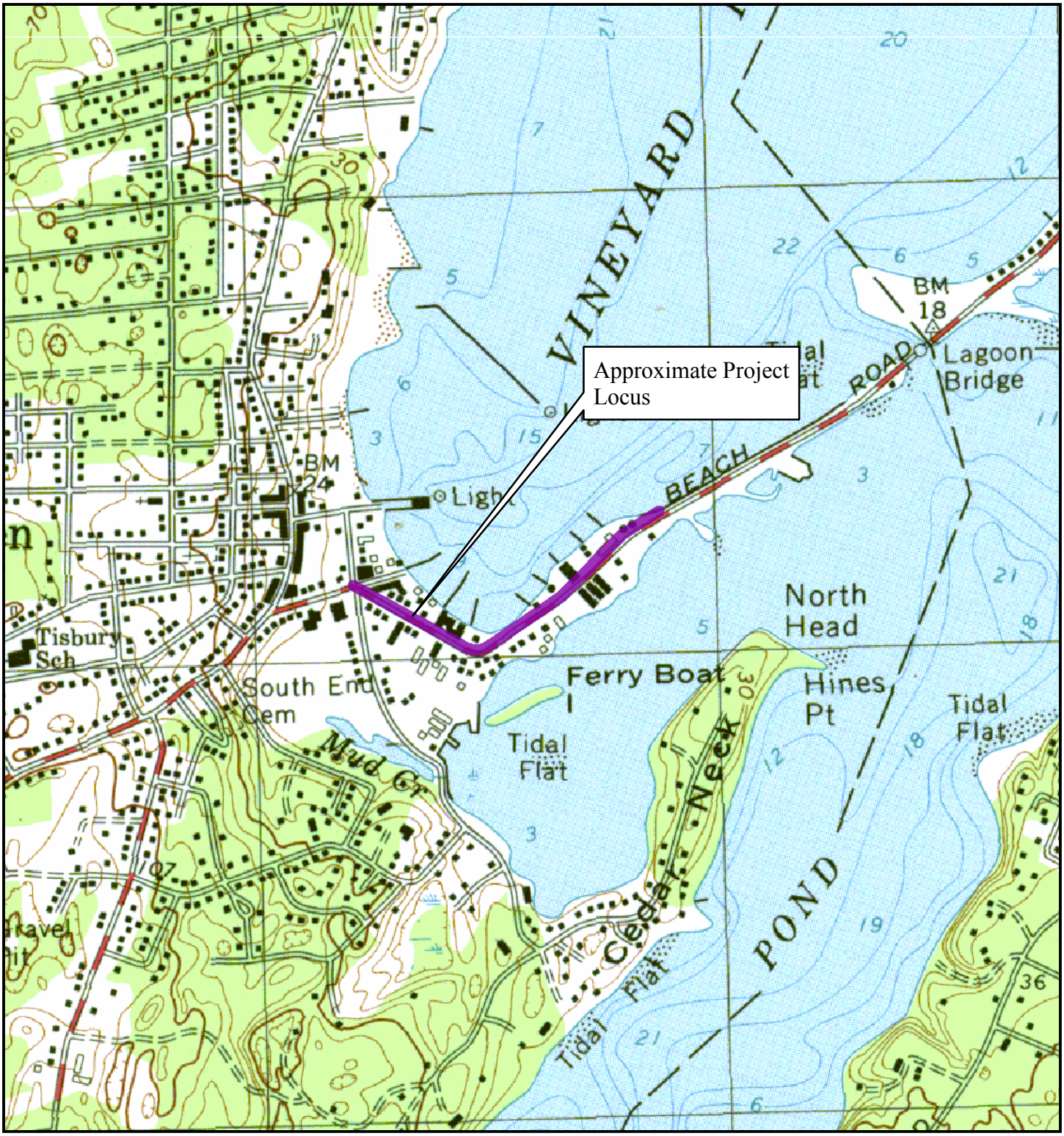
89 Shrewsbury, Suite 300
Worcester, MA 01604
Telephone 508.756.1600

Bicycle and Pedestrian Improvements along Beach Road
Tisbury, MA
ENF Distribution List

Secretary Matthew A. Beaton Executive Office of Energy and Environmental Affairs Attention: MEPA Office 100 Cambridge Street, Suite 900 Boston, MA 02114	Tisbury Conservation Commission 66 Highpoint Lane Right Trailer Vineyard Haven, MA 02568
Department of Environmental Protection Commissioner's Office One Winter Street Boston, MA 02108	Board of Health 66 Highpoint Lane Left Trailer, PO Box 666 Vineyard Haven, MA 02568
Department of Environmental Protection Southeastern Regional Office Attn: MEPA Coordinator 20 Riverside Drive Lakeville, MA 02347	Tisbury Planning Board 66 Highpoint Lane Left Trailer Vineyard Haven, MA 02568
Massachusetts Highway Department Public/Private Development Unit 10 Park Plaza Boston, MA 02116	Board of Selectman PO Box 1239 51 Spring Street Vineyard Haven, MA 02568
Massachusetts Highway Department– District 5 Attn: MEPA Coordinator Box 111, 1000 County Street Taunton, MA 02780	Coastal Zone Management Attn: Project Review Coordinator 251 Causeway Street, Suite 800 Boston, MA 02114
Massachusetts Historical Commission The Massachusetts Archives Building 220 Morrissey Boulevard Boston, MA 02125	Natural Heritage & Endangered Species Program MA Division of Fisheries & Wildlife 1 Rabbit Hill Road Westborough, MA 01581
Martha's Vineyard Commission Attn: Jo-Ann Taylor P.O. Box 1447 Oak Bluffs, MA 02125	Division of Marine Fisheries (South Shore) Attn: Environmental Reviewer 1213 Purchase Street – 3rd Floor New Bedford, MA 02740-6694

ATTACHMENT B
Figures

1. *USGS Topographic Site Locus Map*
2. *Environmental Resource Areas*
3. *NHESP and Wildlife Habitat Map*



NOVER-ARMSTRONG ASSOCIATES, INC.

Figure 1
Site Locus Map
Beach Road
Tisbury, Ma

Legend

Approximate Project Locus

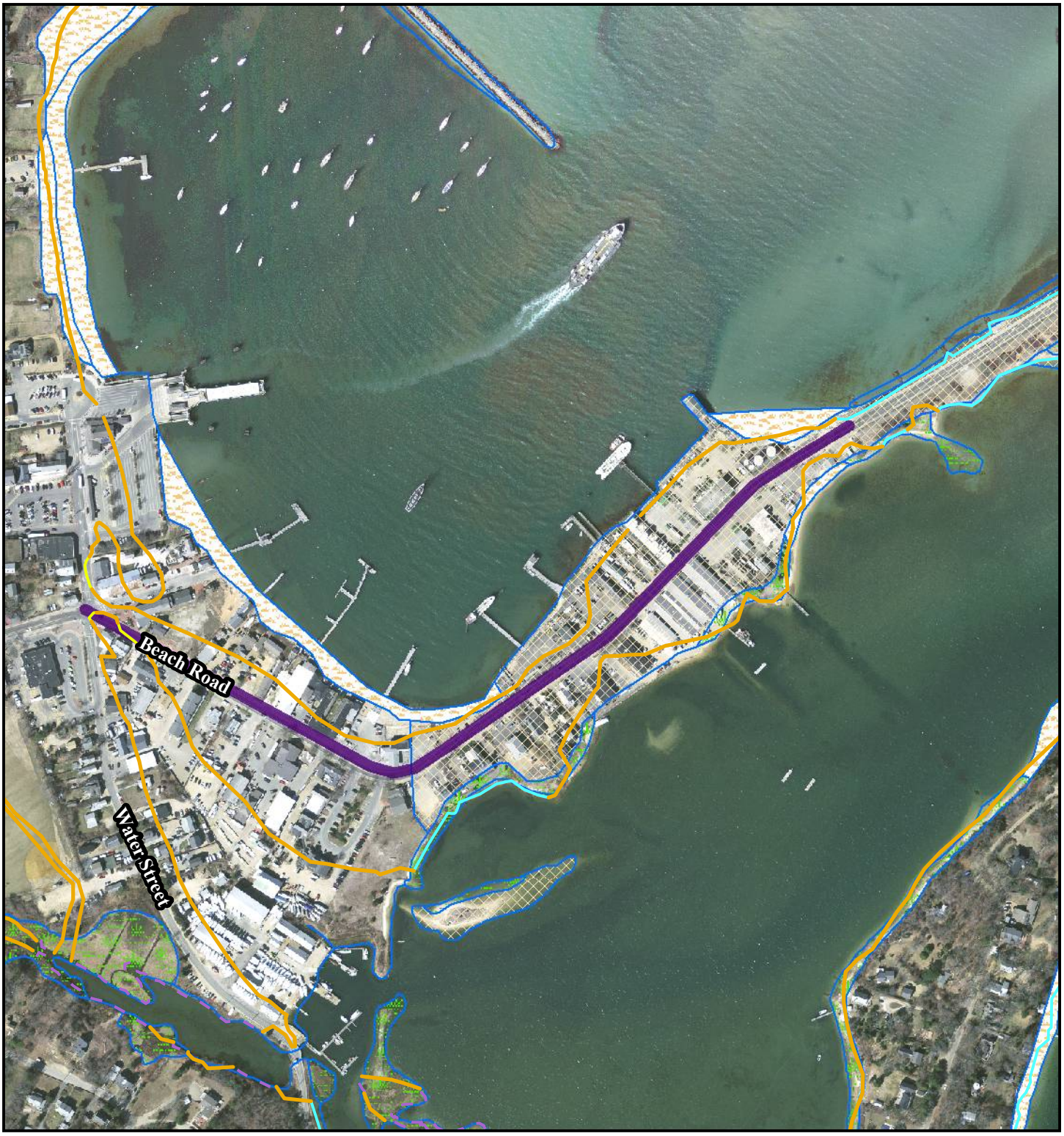
N
W E
S

0 1,000 2,000 Feet

1 inch = 1,000 feet

Date: 2.8.2017
Prepared by: LK

Data Source: MassGIS USGS Topographic Quadrangle Images (2001)



NOVER-ARMSTRONG ASSOCIATES, INC.

Figure 2
Jurisdictional Areas
Beach Road
Tisbury, Ma

Legend

- Approximate Project Locus

Coastal Resource Type

- Barrier Beach
- Coastal Beach/Coastal Dune
- Deep Marsh
- Salt Marsh
- MassDEP Hydrologic Feature

Chapter 91 Jurisdiction

- Contemporary High Water
- Marsh Boundary - seaward
- Historic High Water
- Jurisdiction

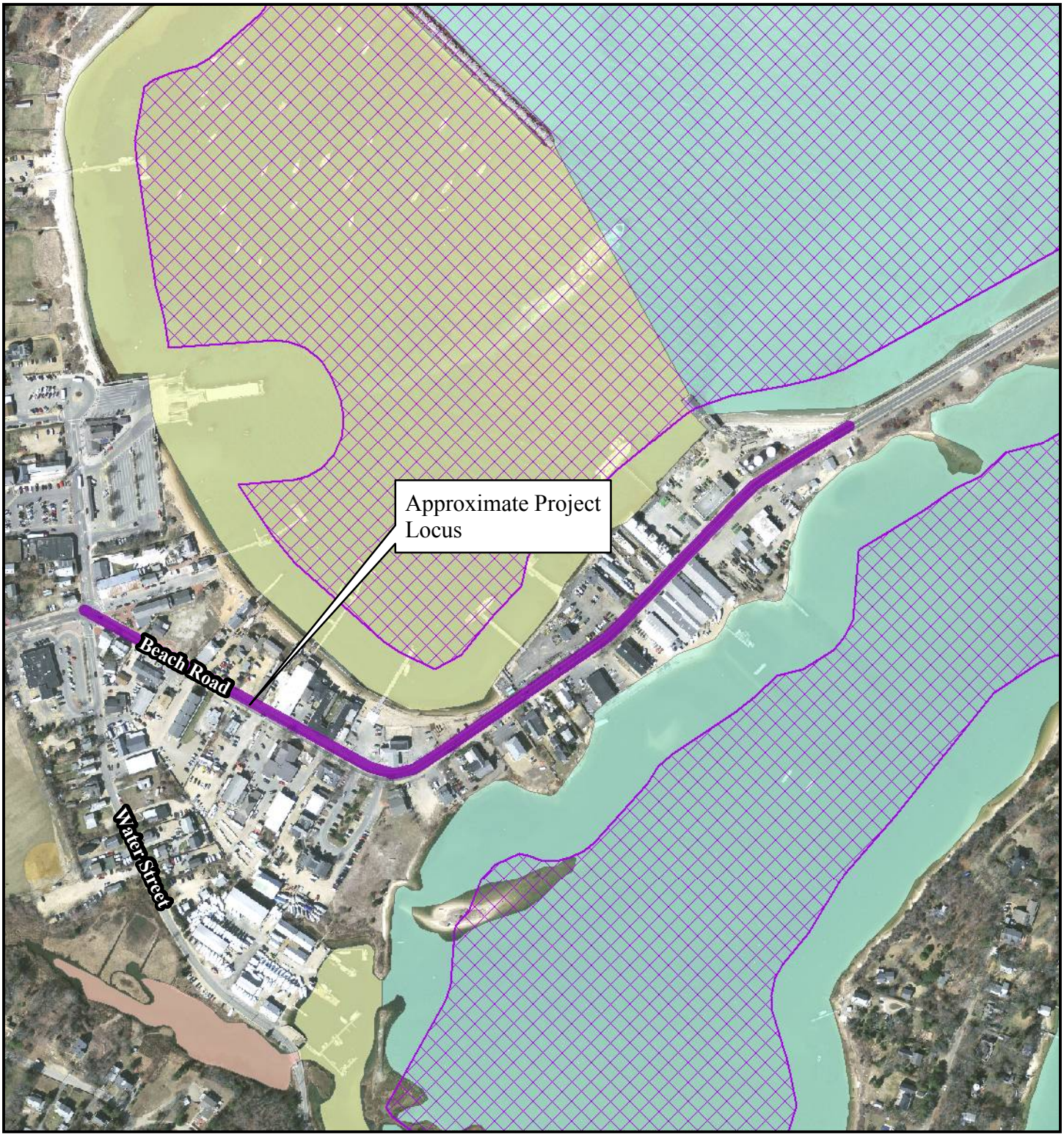
N
W E
S

0 200 400 Feet

1 inch = 400 feet

Date: 2.9.2017
Prepared by: LK

Data Source: MassGIS USGS Color Ortho Imagery (2014), MassDEP Wetlands (1:12000) (2009), Tidelands Jurisdiction Data (2011)



NOVER-ARMSTRONG ASSOCIATES, INC.

Figure 3
NHESP and Wildlife Habitat Map
Beach Road
Tisbury, Ma

Legend

- NHESP Potential Vernal Pool
- NHESP Certified Vernal Pool
- NHESP Priority Habitat of Rare Species
- NHESP Estimated Habitats of Rare Wildlife
- Area of Critical Environmental Concern (ACEC)
- Approximate Project Locus

Designated Shelfish Growing Area

CLASS

- Approved
- Conditionally Approved
- Conditionally Restricted
- Prohibited
- Restricted

N
W E
S

0 200 400 Feet

1 inch = 400 feet

Data Source: MassGIS USGS Color Ortho Imagery (2014), NHESP Potential Vernal Pools (2000), NHESP Certified Vernal Pools, NHESP Priority Habitats of Rare Species (2008), NHESP Estimated Habitats of Rare Species (2008), Areas of Critical Environmental Concern (2009), Designated Shellfish Growing Areas (2015)

Date: 2.8.2017
Prepared by: LK

ATTACHMENT C

List of Municipal and Federal Permits/Reviews Required

NOVER-ARMSTRONG ASSOCIATES, INC.

124 Main Street, Unit 2GG
Carver, Massachusetts 02330
Telephone 508.866.8383
Facsimile 508.866.9898

89 Shrewsbury, Suite 300
Worcester, MA 01604
Telephone 508.756.1600

List of Municipal and Federal Permits and Reviews Required for the Project

Municipal Permits – Town of Tisbury

1. Conservation Commission – Order of Conditions
2. DPW – Road Cut Permit
3. DPW – Trench Permit

Federal Permits

1. National Pollutant Discharge Elimination System (NPDES) Permits
   – Stormwater Construction General Permit – Construction Related Activities
2. US Army Corp of Engineers – Sections 10 & 404
   – Pre-Construction Notification for coverage under the General Permit

ATTACHMENT D
Resource Impact Tables

Table 1: Coastal Resource Area Impacts – Bicycle and Pedestrian Improvements, Tisbury, Massachusetts

Jurisdictional Areas	Calculated Impacts		Comments
	Permanent Impacts	Temporary Impacts	
Barrier Beach	3,431 s.f.	84,381 s.f. of impacts to previously developed Barrier Beach	From approximately Sta 20+00 to the eastern limit of work, the proposed project is located within state-designated Barrier Beach. Impacts vegetated areas within a Barrier Beach are also impacts dune or beach.
Coastal Beach (within Barrier Beach)	0 s.f.	12,102 s.f.	Beach nourishment using compatible sediments
Coastal Dune (within Barrier Beach)	3,431 s.f.	9,591 s.f.	The proposed work impacting coastal dune includes the construction of a sidewalk, replacing drainage infrastructure, construction of a shared use bike path, and dune restoration. Because the project is located within Barrier Beach, impacts to vegetated areas within the Barrier Beach are considered impacts to dune.
Land Subject to Coastal Storm Flowage (LSCSF)	Approx. 3,431 s.f	Approx. 151,830 s.f.	The entire project is located below the velocity zone elevation determined by FEMA, so all proposed work will result in LSCSF alteration. The project proposes no change in the flow-pattern of floodwaters. The alteration area consists primarily of existing impervious area, however, impacts to existing vegetated areas below the velocity elevation are permanent impacts to LSCSF.

ATTACHMENT E

Massachusetts Department of Transportation Highway Division,
Plan and Profile of Beach Road, in the Town of Tisbury, Dukes County –
Bound Separately