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October 23, 2015

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME	: Woods Hole Ferry Terminal Reconstruction
PROJECT MUNICIPALITY	: Falmouth
PROJECT WATERSHED	: Cape Cod Basin
EEA NUMBER	: 15410
PROJECT PROPONENT	: Woods Hole & Martha's Vineyard Steamship Authority
DATE NOTICED IN MONITOR	: August 26, 2015

Pursuant to the Massachusetts Environmental Policy Act (MEPA, M.G.L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** an Environmental Impact Report (EIR). The project is a water-dependent, public transportation project and permitting agencies have sufficient regulatory authority to address outstanding issues and condition the project to meet permitting standards and requirements for construction.

Project Description

As described in the Environmental Notification Form (ENF) and supplemental information submitted during the extended review period,[1] the project consists of the reconstruction of a new passenger ferry terminal at the terminal site and the construction of a new administrative office building at the Palmer Avenue site, located approximately four miles north of the terminal site in Falmouth.

[1] The supplemental information included responses to comments and additional information dated October 2, 2015. On September 23, 2015 the Proponent requested, and was granted, an extension of the ENF comment period from September 25 to October 13, 2015 to provide additional information and responses to comments until September 25, 2015.

The existing terminal site consists of three ferry slips, a pier at the northwestern side of the site, on which a 20,000-square foot (sf) terminal/administration office building is located. The 5.67 acre Terminal site is almost entirely paved and utilized for vehicular operations.

The project includes the reconfiguration of the three existing ferry slips located in Great Harbor to better accommodate vessel operations. This work will include excavation of a large portion of the existing filled pier. Approximately 24,500 sf of the filled pier will be excavated. Approximately 575 linear feet (lf) of bulkhead will be set 70 feet (ft) seaward of the existing bulkheads to create the new pier configuration and approximately 8,200 sf of fill from the excavation will be placed within the bulkhead seaward of existing slips 1 and 2.

The project also includes the construction of a new two-story 10,000 square foot (sf) terminal building at the terminal site. The proposed terminal building will be located along the waterfront at the Foot of Railroad Avenue in Woods Hole Village of Falmouth. The terminal will house a ticketing area, concessions, lobby restrooms, a break room, a storage room, a utility room and a few offices. The proposed Administration Office Building will be located in a new two-story 27,500 sf administration building on the southeastern portion of the Steamship Authority's Palmer Avenue parking lot in Falmouth, near the intersection of Palmer Avenue and Comanche Drive. This building will contain the offices relocated from the existing Terminal Building. This new building will also contain storage, utility and other ancillary uses.

Project Site

The Woods Hole Ferry Terminal (Terminal Site) is located in the village of Woods Hole within the Town of Falmouth at the southwestern land-end tip of Cape Cod, northeast by sea across the Woods Hole Channel from the Elizabeth Islands and north by sea across Vineyard Sound from Martha's Vineyard. The Terminal Site is a marine transportation facility that provides year-round ferry service for both passengers and vehicles (both cars and trucks) between the Massachusetts mainland and the island of Martha's Vineyard. The Terminal Site is owned and operated by the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA).

The existing Terminal Site consists of three ferry slips, a pier at the northwestern portion of the Terminal Site on which is located a two-story, 20,000 square-foot terminal/administrative office building, an outdoor passenger waiting areas, vehicle staging areas, bus pick-up and drop-off areas, taxi stands, other limited employee and public parking, and several ancillary buildings. The 5.67-acre Terminal Site is almost entirely paved and contains: a metered public parking spaces located on the northeastern portion of the property adjacent to the extension of the Shining Sea Bike Path that currently ends at Railroad Avenue; an employee parking lot located on the southeastern portion of the property; a vehicle staging area located consisting of nine rows approximately 233-feet long surrounded on three sides; and parking for SSA customers.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) dated July 16, 2014, the project site lies within a coastal high hazard. The Terminal Site is subject to the FEMA 1% Annual Chance of Flooding, in Coastal Flood Zone AE13 (Base Flood Elevation, BFE, 13.0) along the landward portion of the site, and the Coastal

Flood Zone VE15 on the seaward portion. The site is within the Woods Hole Historic District (except for the outermost portion of the pier) and is zoned as Commercial, Business 1 (B1), which is found in the older, business districts in Falmouth. There are several businesses in the vicinity of the Terminal Site along Luscombe Avenue and Railroad Avenue These businesses similarly are zoned as Commercial, Business 1 (B1).

According to the Division of Marine Fisheries (DMF), the portion of the project site that lies within Great Harbor is spawning habitat for winter flounder (*Pseudopleuronectes americanus*). The southerly portion of the project site, as described in the ENF, was mapped previously by MassDEP as an eelgrass (*Zostera marina*) meadow.

Environmental Impacts and Mitigation

The potential environmental impacts of the project are associated with temporary impacts to approximately one acre of Land Under Ocean (LUO) and an overall permanent net increase in LUO of 0.37 acres, and temporary impacts to 20,826 sf of Land Subject to Coastal Storm Flowage (LSCSF). However, the supplemental information provided on October 2, 2015 shows that the project design will now avoid impact to eelgrass. Attachment A of the supplemental information depicts the current design. It is substantially the same as the alternative identified in the ENF with the exception of adjustments to the dredging area and the dolphin alignment along Slip 1. The adjustments will avoid direct impacts to the mapped eelgrass area.

The ENF indicates that the project will reduce vehicular traffic at by approximately 200 average daily trips (adt) due to the relocation of the administrative offices. In addition, it will improve traffic circulation at the Terminal Site.

Massachusetts Historical Commission (MHC) will review the project under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). According to MHC, review of the Inventory of Historic and Archaeological Assets of the Commonwealth indicates that portions of the project at the existing Steamship Authority Terminal are within the Woods Hole Historic District (MHC # FAL.AL) listed in the State Register of Historic Places and a local historic district. Structures that will be demolished at the Terminal Site are located within the Woods Hole Historic District; however, they are not included on the Inventory or the State Register. The structure to be demolished at the Palmer Avenue Site is not located within the Falmouth Village Historic District, nor is it listed on the Inventory or in the State Register. The proposed new structure at the Palmer Avenue parking lot is adjacent to the Falmouth Village Historic District (F AL.AG), listed in the State Register of Historic Places and a local historic district. The MHC recommends that project planners consult with the Falmouth Historic Districts Commission regarding the need for a Certificate of Appropriateness for the project.

Measures to avoid, minimize and mitigate impacts will include use of turbidity curtains that will be placed north of the eelgrass beds to minimize sediment and debris movement into this area during construction. The Proponent has also committed in the supplemental information provided to adjust northward the dredge area and dolphin alignment along Slip 1 to avoid any impacts to eelgrass. These adjustments will also reduce the limit of work and avoid any construction in *Estimated* and *Priority Habitat* areas. The project includes additional bicycle

parking spaces and improved bike access to the Shining Sea Bike Path. A small park near Slip 3 will be expanded and the Shining Sea Bike Path will be extended to that location. Additional mitigation measures include: shifting the terminal building farther landward to mitigate impacts to the viewshed of the surrounding neighborhood; improved stormwater management; and removal and disposal of contaminated soil from the Terminal site.

Permitting and Jurisdiction

The project is undergoing MEPA review and requires an ENF pursuant to 301 CMR Sections 11.03(3)(b)(1)(e), 11.03(3)(b)(1)(f), and 11.03(3)(b)(6) because it requires a State Agency Action and will result in new fill or structure or expansion of existing fill or structure in a velocity zone, the alteration of 1/2 or more acres of wetlands, and the reconstruction of an existing solid fill structure and pile-supported structures. The project will require a Chapter 91 (c.91) License and a 401 Water Quality Certificate (WQC) from the Massachusetts Department of Environmental Protection (MassDEP). The project will also require Federal Consistency Review by the Massachusetts Office of Coastal Zone Management (CZM).

It will require an Order of Conditions from the Falmouth Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP).

Because the Proponent is a State Agency, MEPA jurisdiction is broad in scope and extends to all aspects of the project that may cause Damage to the Environment, as defined in the MEPA regulations.

Review of the ENF

The ENF includes a project description, site description including identification of resource areas, plans for both existing and proposed conditions, a discussion and estimates of environmental impacts, and identification of measures to avoid, minimize and mitigate impacts. The ENF also includes an analysis of project alternatives, documentation of c. 91 licensing history, and an eelgrass report.

As stated in the ENF, numerous alternative designs were developed and evaluated during the Feasibility Study for this Project. These alternatives were vetted extensively with the public and were evaluated with respect to practicability, operational efficiency, cost, aesthetics/viewsheds, navigation, safety and environmental impacts.

Four Waterside Alternatives were developed. These schemes were based upon a partial excavation of the existing pier and shifting of the bulkhead westward from Slips 1 and 2. The alternatives discussed include variations on how far to shift the bulkhead westward and ranged from shifting it between from 20 feet to 130 feet westward. The Preferred Alternative would shift the bulkhead 70 feet. Each of these Alternatives would increase Land Under the Ocean (LUO) through excavation of the pier that currently occupies the area proposed for Slips 2 and 3. The Alternatives include:

- *20- Foot Bulkhead Shift Alternative*: Due to the need to relocate the terminal building from the existing pier that will be excavated to another location on-site, this alternative would not allow for adequate landside space for terminal, parking and queuing.

- *100 -Foot Bulkhead Shift Alternative*: This alternative would pose a potential impediment to vessels navigating to/from slips to the north and navigational issues for ferries because of strong currents in the harbor. It would also encroach upon *Estimated/Priority Habitat Area*.

- *130 -Foot Bulkhead Shift Alternative*: This alternative would encroach upon navigation lanes, create a potential impediment to vessels navigating to/from slips to the north, and would create navigational issues for ferries because of strong currents in the harbor. It would provide the most amount of landside space for terminal, parking and queuing, but would encroach upon Estimated/Priority Habitat Area.

- *Preferred Alternative, 70 -Foot Bulkhead Shift Alternative*: This alternative would allow for adequate navigation to/from neighboring slips and provide sufficient landside space for terminal, parking and queuing.

The ENF also presented several alternative design concepts for the reconstruction of the Woods Hole Ferry Terminal for the terminal building. The current building is located well below the flood zone elevation of +13 feet (NAVD88) required for this location. The existing ground floor is located at elevation +6 feet (NAVD88). In addition, keeping the building in its current location on the pier would severely restrict the SSA's ability to improve the condition and configuration of the three ferry slips. Also, because any material repairs or improvements to the building will cost more than 50% of its fair value, such repairs or improvements would require the SSA to bring the entire building into compliance with existing code requirements. To bring the current building into code can be accomplished by demolishing and reconstructing the building. The Alternatives discussed in the ENF include:

- *Concept A Alternative*: Concept A was premised on maintaining all of the terminal's operations on one level with the terminal building located to the north of the site, along Railroad Avenue. As a result, passengers inevitably would be required to cross vehicular traffic to board or disembark from the ferries, and the SSA would have to assign employees to manage the traffic and ensure safety. Concept A would also require vehicles to cut back through the site in order to drop off and pick up passengers, and the floor of the terminal building would have an elevation of 13 feet (NAVD88) (approximately seven feet higher than its current elevation) due to the fact that the property is in a floodplain.

- *Concept B Alternative*: Concept B would take advantage of the site's original topography to create a split level at the elevation where the hill previously had existed half-way back from the water. The terminal building would be located generally at the midway point of the property, and its first floor would have an elevation of 17 feet (NAVD88). Buses and vehicles would drop off and pick up passengers behind the terminal building and would leave by means of Railroad Avenue at a higher location. There would also be elevated

pedestrian walkways from the terminal building to the ferry slips, assuring not only passengers' accessibility but also their safety because they would not have to cross any vehicular traffic. Finally, vehicles waiting to be loaded onto the ferries would have a more direct route to their staging area and would not have to make two 180-degree turns.

- *Concept C Alternative*: Concept C was based upon having a full second level on a deck that would be built beginning about half-way away from the water. The terminal building would be located on top of the deck, again generally at the midway point of the property and, again, there would be elevated pedestrian walkways from the terminal building to the ferry slips. Buses and vehicles would drop off and pick up passengers behind the terminal building; however, because the deck (and the first floor of the terminal building) would be at a higher elevation (25 feet NAVD88), the buses and vehicles would enter the property immediately after going over the Crane Street bridge, and they would exit the terminal by continuing over a ramp to Cowdry Road. As a result, none of that traffic would exit by means of Railroad Avenue. The lower level staging operations would be similar to what takes place today, although automobile staging would be located under the deck. Finally, because the deck would create more space for terminal operations, Concept C also would provide room for metered public parking spaces, more accessible parking spaces, shuttle bus spaces, and a larger buffer area around the bike path.

After the alternative design concepts (Concept A-C) were presented to the public at a community meeting in Woods Hole, the SSA began meeting with a four-member working group representing the Woods Hole Community Association and the Woods Hole Business Association. The community working group asked the SSA to develop several possible variations of two of the three alternative design concepts (Concept A and Concept B), including relocating the terminal building and reducing it to one story instead of two stories in order to open the view as much as possible. The community working group also asked the SSA to develop an additional design concept (Concept D) that would relocate the terminal building to where the SSA's freight shed is currently located.

- *Concept D Alternative*: This alternative reflects the relocation of a two-story terminal building to where the SSA's freight shed is currently located. As a result, all of the shuttle buses are staged at the south side of the property beside the terminal building, requiring all vehicular traffic to leave the property by Railroad Avenue. In addition, trucks and cars taking the ferry would enter the property by means of a ramp off of Cowdry Road, and the trucks would be staged on the north side of the property, which would in turn result in the northernmost slip (Slip 3) being used on a regular basis for the SSA's freight boats (instead of using Slip 1, which is preferred for navigation reasons). After being dropped off from the shuttle buses, passengers would walk up a switchback ramp to the terminal building and then across an elevated pedestrian walkway from the terminal building to the pier between Slips 1 and 2. Finally, vehicles dropping off and picking up passengers would park in a portion of the current employees' parking lot, while some of the employee parking spaces would be relocated behind the vehicle staging area.

In June 2014, the SSA presented *Consensus Solution Alternative*, the Preferred Alternative, to the Woods Hole Community that includes:

1. The terminal building is farther away from intersection of Woods Hole Road, Crane Street and Railroad Avenue, which makes it look smaller from that vantage point and opening up more of the view of the water on both sides of the building.
2. The elevation and general location of the automobile staging area will remain the same as it is today.
3. The elevation of the bus drop-off and pick-up area will be the same or only slightly higher than it is today, instead of being 15 to 16 feet (NAVD88).
4. By having the buses exit the terminal closer to the foot of Railroad Avenue instead of farther up the hill, there is no need to eliminate any of the current parking spaces on Railroad Avenue.
5. By having most of the property remain at its current elevation, the bike path will remain level from underneath the Crane Street bridge to Luscombe Avenue, instead of having to rise from eight feet (NAVD88) to 16 feet and then back to eight feet.

Wetlands and Waterways

The proposed project is subject to the Wetlands Protection Act, its implementing regulations (310 CMR 10.00), and associated performance standards including the Stormwater Management Standards (SMS). The project will be permitted as a redevelopment project and, as such, must meet the Stormwater Standards to the maximum extent practicable.

Comments from MassDEP indicate that the proposed work would be classified as a water-dependent use project pursuant to the Waterways Regulations at 310 CMR 9.12(2). MassDEP also concurs that the work can be categorized as "improvement dredging" as defined in the Waterways Regulations at 9.02. Because the project entails new structures and fill within both flowed and previously filled tidelands, the project requires a c. 91 License. The project also requires a WQC for the proposed improvement dredging and excavation of material from previously filled tidelands. The Proponent may choose to file a combined c. 91/WQC application (BRP WW26) with MassDEP.

The ENF indicates that the Preferred Alternative, which would relocate Slip 3 further to the south, would improve navigation in the immediate vicinity of the terminal. During the review of the c. 91 Application, MassDEP will consult with the Falmouth Harbormaster and adjacent waterfront property owners to determine whether the proposed realignment will significantly interfere with public rights of navigation and individual property owners' right to approach their waterfront pursuant 310 CMR 9.35.

Presently, stormwater is directly discharged into the adjacent waters without treatment. The ENF states that the stormwater system will be designed to allow for isolation of portions of the underground conveyance system so that spills can be captured prior to discharge. This can be accomplished with oil and grease separation devices and manual or automated shut-off valves that will capture the spill for clean-up and disposal in accordance with State and federal regulations.

The proposed stormwater treatment system represents a significant water quality improvement over existing conditions. It should also be designed to ensure that all components of the collection and treatment system can be secured and isolated in the event of a fuel or hazardous materials spill. This can help prevent hazardous material from entering the stormwater system and impacting surrounding waters. The Proponent should also develop an Environmental Management Plan to avoid or minimize environmental impacts resulting from the ferry terminal operations. Due to its location in a mapped FEMA flood zone, particular attention should be given to minimizing storm-related impacts, managing hazardous and other materials that pose a potential water quality impact, and managing vessel fueling operations.

DMF notes that, although the supplemental information plans indicate that the project can avoid direct impacts to mapped eelgrass habitat, indirect impacts could still result if construction occurs near eelgrass. DMF recommends a minimum 75-ft buffer from the top of the slope plus overdredge relative to the nearest edge of any eelgrass identified in the project area to minimize indirect impacts. The Proponent should submit proposed dredging cross-sections during the c.91 process to demonstrate that the proper setbacks can be maintained. DMF has also recommended a time-of-year (TOY) restriction from January 15 to May 31 for all dredging activity to avoid and minimize impacts to winter flounder spawning, demersal egg survival, and juvenile development.

Project plans provided in the ENF indicate that the soils comprising the earthen pier between Slips 1 and 3 contain methylnapthalene and arsenic, which will be remediated during excavation. In addition to the excavation of the pier, the terminal site design plans necessitate improvement dredging that will produce around 5,000 cubic yards of dredged sediment that will be disposed of at a landfill or other upland disposal site. Because of contamination present at the pier, the Proponent should test the dredged sediment and propose disposal options that involve treatment.

The ENF states that all material leaving the site will be subjected to laboratory analysis to determine and evaluate off-site reuse and disposal alternatives. Soils excavated from below the water table and all dredge spoils will be dewatered on-site. Effluent will be treated to remove suspended solids and returned to the area of excavation within the limits of the existing solid fill pier.

Climate Change Adaptation and Resiliency

The project site lies within a Coastal High Hazard A Zone according to the FEMA Flood Insurance Rate Map (FIRM) dated July 16, 2014 for the area. Impacts to coastal development and resources associated with current rates of sea level rise, as well as projections for accelerated trends, will likely increase the height of storm surges and frequency of coastal flooding events.

The current terminal building is at elevation 6. In early 2016, it is anticipated that the Commonwealth of Massachusetts will adopt the 9th Edition of the State Building Code, 780 CMR (the Code). Under the currently proposed revisions to the Code, the minimum building floor levels in Coastal High Hazard A Zones for Class II structures will change to require that the underside of the lowest horizontal structural member be located 2 feet or above the Base Flood

Elevation (BFE). Assuming a one-foot deep structural floor system, the resulting net change due to the proposed revisions to the Code is approximately +3 feet over the current 8th Edition of the Code. For the location of the terminal building, the FEMA mapped BFE for flood Zone AE is elevation 13 (Zone VE is elevation 15).

A principal objective of the project is to provide a convenient and efficient network of accessible paths for the thousands of ferry passengers who pass through the terminal on busy days among all of the ferry slips, passenger boarding platforms, walkways, buildings, parking areas, bus berths and public sidewalks and streets. The terminal is a water-dependent operation and must provide accessible paths of travel between landside areas, the terminal building and vessel boarding doors. The Proponent asserts that this requirement constrains the amount of elevation that can be incorporated into the terminal building. In addition, the terminal would connect to Railroad Avenue which abuts the site at elevation +5.6 ft. An accessible route must be maintained to this public way, which provides both pedestrian and vehicle connections to and from the site.

Based upon the access needs, the Proponent has committed to determine the highest optimal elevation of the new terminal building and to provide protection to BFE+4 (elevation 17) by incorporating dry and/or wet-floodproofing techniques into its design. Dry floodproofing may include the design of removable flood panels to protect openings, flood doors to protect egress stair exits, and flood-resistant exterior wall construction where no openings are present. Alternatively, wet floodproofing techniques would make use of openings or breakaway walls to allow flood waters to pass through the building.

The other areas of the Terminal Site will also address resiliency to sea level rise and accessibility in both the near term and the long term by incorporating:

- Floating Aft Passenger Boarding Platforms: Floating aft platforms with 70-ft long, hinged gangways will be capable of accommodating a sea level rise of over two feet while improving accessibility of the gangways used to board passengers traveling on the larger ferries.

- Fixed Forward Passenger Boarding Platforms: The new forward platforms will be constructed to provide vessel access under current sea level conditions, which would provide appropriate accessibility for passengers traveling on the larger ferries. These platforms will include ramps and/or platforms on the pier deck. This system will be able to add more than adequate elevation to address the projected sea level rise over the next 50 years. The current design would add an additional dead load capacity of 50 pounds per square foot (psf) above what is required to accommodate the initial ramp and platform system.

- Bulkhead/Apron Area: The western/waterside portions of the site will be elevated above the current grades by three to four feet to provide accessible paths of travel to all three slips, as well as provide a maximally elevated platform for the terminal building. The maximum amount of additional elevation would be limited by adjacent street elevations, from which it is required to have accessible paths of travel.

- Vessel access: The new slips will incorporate a flexible design that will support increasing the elevation (and/or length) of transfer bridges and passenger loading platforms without major disruption to operations. This can be accomplished by adding "fill" to the landside and repaving the approach. Site drainage will be designed to support this change and the bulkhead will be designed to support an additional 250 pounds per square foot (psf) of surcharge loading in the area of the new fill.

- Marine Structures: Mooring and berthing dolphins will be designed to accommodate vessel loads at higher elevations. The fender panels will be designed to be capable of being raised on the dolphin faces. Mooring fixtures will be set back slightly to accommodate the higher freeboard elevations of the ferries due to projected sea level changes.

Rare Species

The Massachusetts Natural Heritage and Endangered Species Program (NHESP) has determined that a portion of the proposed project is located within *Priority* and *Estimated Habitat* as indicated in the 13th Edition of the MA Natural Heritage Atlas. Therefore, this project requires review through a direct filing with NHESP for compliance with the Massachusetts Endangered Species Act (MESA 321 CMR 10.00). Based on a preliminary review of the ENF, it is anticipated that the proposed activities within these habitats would not result in a prohibited "take" of state-listed species, in this case Roseate Terns.

Traffic and Parking

According to the ENF, the project will not generate any increased vehicular traffic at either the Terminal Site or the Palmer Avenue Site. As designed, the project will not increase the site's current capacity for the staging, movement, and parking of vehicles. The amount of space dedicated to these functions would not increase, and thus there will not be an increase in operational capacity at the Terminal Site.

The Association to Preserve Cape Cod (APCC) notes that the Steamship Authority may still need additional parking capacity due to the reduction in the number of parking spaces at the Terminal Site and at the Palmer Avenue Site and possible growth in passenger traffic. The APCC asks that the Steamship Authority identify any future demand for parking and, if the Steamship Authority currently does not have sufficient capacity to accommodate that demand, to identify specific locations where the additional parking will be supplied.

The Steamship Authority will be eliminating approximately 50 long-term customer parking spaces at the Terminal Site and approximately 160 customer parking spaces at the Palmer Avenue Site. As noted in the ENF, the Steamship Authority is currently negotiating with the Town of Falmouth, which owns the back Woods Hole parking lot behind the Terminal, to renew its lease for that lot after the current lease expires on December 31, 2015. Because of the proposed elimination of the 20 public metered parking spaces in the front Woods Hole lot, the Steamship Authority has proposed designating some of the parking spaces in the back Woods

Hole lot for use by employees of Woods Hole restaurants and other businesses instead of by the Steamship Authority customers. While this would reduce the capacity of the back Woods Hole parking lot for SSA customers the ENF contends that the SSA should still have sufficient parking capacity for all of its customers except during a few peak summer weekends, assuming that the SSA otherwise renews its lease for the back Woods Hole parking lot.

The Steamship Authority opened a new parking lot on Technology Park Drive (the TBL Lot) in late June 2015. It has 1,922-spaces. It is not longer using the following off-site lots:

- 677 Gifford Street – a total of 385 parking spaces;
- 709 Gifford Street – a total of 575 parking spaces;
- Falmouth High School (874 Gifford Street) (previously leased by the SSA for use on summer weekends) – a total of ~500 parking spaces; and
- 1249-1955 Route 28A, Cataumet (Bourne) (the Cataumet Lot) – (leased by the SSA for use during summer weekends) – a total of ~950 parking spaces.

In the supplemental information provided, the SSA states that it hopes to make more efficient use of its existing parking lots to accommodate any occasional unexpected high level demand. This year the SSA also entered into a lease allowing a car rental agency to rent cars at the SSA's Palmer Avenue Site, and the SSA hopes that the availability of rental cars at that convenient location for island residents will reduce the need for them to park their cars in the SSA's parking lots. But in the event these combined measures are not sufficient on an occasional summer weekend, the SSA can again re-open the existing Cataumet Lot to accommodate the additional demand. The Cataumet Lot is located even farther away from downtown Falmouth and SSA shuttle buses traveling between that lot and the Woods Hole terminal would simply continue to use Route 28 to the Otis Rotary and then Route 28A to the Cataumet Lot. The occasional re-opening of that lot itself will not create any significant traffic congestion.

Cultural Resources

According to the Board of Underwater Archaeological Resources (BUAR), no submerged archaeological resources are known to exist at the project site. BUAR notes that due to the long history of maritime activity in the vicinity of the project site, unknown resources may be encountered during construction. In that event, the Proponent should consult with BUAR regarding any actions that may be necessary.

Construction

I encourage the SSA to set an aggressive target for the recycling of construction and demolition debris. Demolition activities must comply with MassDEP's Solid Waste and Air Pollution Control regulations, including those related to management of demolition procedures and debris, including asbestos-containing materials. All construction activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the SSA to participate in MassDEP's Clean Air Construction Initiative by requiring contractors to retrofit vehicles with emission control equipment. Project contractors are now required to use ultra low sulfur diesel (ULSD) fuel (15 parts per million of sulfur) in off-road engines.

Greenhouse Gas Emissions (GHG)

This project offers many opportunities to minimize GHG emissions and energy use of its landside components, while providing cost savings. The SSA is considering whether to attempt to make the new terminal building a net-zero energy terminal. SSA is proposing to include ground source heat pumps for space conditioning and on-site solar photo-voltaic generated energy on canopies over the main vehicle staging area. I also encourage the SSA to voluntarily undertake additional measures to minimize GHG emissions such as:

- Pursuit of Leadership in Energy and Environmental Design (LEED) and/or Energy Star certifiable project status;
- Availability of potential rebates from energy providers associated with the installation of highly efficient equipment;
- Building orientation to reduce energy usage;
- Energy efficient lighting (both interior and exterior);
- Interior day-lighting of buildings;
- Wall and roof insulation exceeding Building Code requirements;
- Low U-Value windows;
- High-efficiency HVAC systems;
- Low flow plumbing fixtures
- High-albedo roofing materials;
- Incorporation of third-party building commissioning;
- Implementation of lighting motion sensors, climate control and building energy management systems.
- On-site renewable energy sources, particularly photovoltaic (PV) systems;
- Energy performance tracking capabilities; and
- Energy Star-rated appliances.

Conclusion

The ENF has sufficiently defined the nature and general elements of the project for the purposes of MEPA review and identified measures to avoid, minimize and/or mitigate impacts. Based on the information in the ENF, consultation with State Agencies and a review of comment letters, I find that the preparation of an EIR is not warranted. The project may proceed to State permitting.

October 23, 2015
Date

Matthew A. Beaton

Comments received:

09/14/2015 BUAR
09/14/2015 Cape Cod Commission
09/17/2015 Town of Falmouth
09/18/2015 Raymond L. Hayes
09/22/2015 MHC
09/22/2015 NHESP
09/22/2015 APCC
09/23/2015 Jon Goldman
09/23/2015 Nan Logan
09/24/2015 MassDEP – Southeast Regional Office (SERO)
09/24/2015 Martha's Vineyard Commission
09/24/2015 Robin Ackroyd
09/24/2015 Susan Shephard
09/24/2015 Woods Hole Community Association
09/25/2015 Senator Vinny DeMacedo
09/27/2015 Denise Backus
09/28/2015 Joanne Gilbrooke
09/29/2015 Philip Logan
10/13/2015 CZM
10/13/2015 DMF

MAB/ACC/acc

The COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
251 Causeway Street, Suite 800, Boston, MA 02114-2136
Tel. (617) 626-1141 Fax (617) 626-1240 Web Site: www.mass.gov/eea/agencies/czm/buar/

September 14, 2015

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs
Attention: Anne Canaday, MEPA Unit
100 Cambridge St., Suite 900
Boston, MA 02114

RE: Woods Hole Ferry Terminal, Great Harbor, Falmouth (EEA#15410)

Dear Secretary Beaton,

The staff of the Massachusetts Board of Underwater Archaeological Resources has reviewed the above referenced project's ENF (EEA#15410) and supporting materials prepared by GZA Environmental on behalf of Martha's Vineyard and Nantucket Steamship Authority. We offer the following comments.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential submerged cultural resources in the proposed project area. No record of an archaeological site was found within the proposed project boundaries. MHC's MACRIS file FAL. N concentrates on the historical sensitivity of the Juniper Point, principally the area of Little Harbor (old harbor), and not the submerged vicinity of the current ferry landing. Past dredging and other disturbance appears to be fairly extensive in the area of the ferry docks, Parker flats, and elsewhere in Great Harbor along the docks/piers. Further, examination of historic maps strongly suggests extensive modification (filling and dredging) of this area of Great Harbor. Given the extent of past disturbance and harbor modification (dredging, extant piles and dolphins), limited preservation potential in the ferry terminal area coupled the very limited extent of "improvement" dredging, the Board has determined that the planned activity will have no adverse effect on submerged cultural resources.

However, the historical record indicates area is generally archaeologically sensitive. The Board notes its has issued a Reconnaissance Permit (07-001) for the historic anchorage of Great Harbor as part of an ongoing archaeological investigation directed by Dr. Raymond L. Hayes of Woods Hole, Massachusetts. While this permit area is west of the proposed project, it indicates the archaeological potential for the area. The historical record indicates the occurrence of numerous shipwrecks in the Woods Hole/Falmouth vicinity for which locations are vague, so the Board cannot conclude that there are no submerged cultural resources in the proposed project area. Furthermore, the loss of earlier and smaller coastal vessels and the purposeful abandonment of obsolete or damaged vessels are generally not found in the documentary record. The level and diversity of maritime commercial, military, and recreational activities throughout the Cape Cod waterfront may have resulted in the creation of a number of undocumented and anonymous underwater archaeological sites such as small craft, derelict vessels, or

dumpsites. These possible site types represent classes of vessels of which our knowledge is severely limited and, thus, are potentially historically and archaeologically significant. Should heretofore-unknown submerged cultural resources be encountered during the course of the project, the Board expects the project's sponsor will take steps to limit adverse effects and notify the Board, as well as other appropriate agencies, immediately, in accordance with the Board's *Policy Guidance for the Discovery of Unanticipated Archaeological Resources.*

The Board appreciates the opportunity to provide these comments as part of the Corps's project review process. Should you have any question regarding this letter, please do not hesitate to contact the Board at the address above, by telephone at (617) 626-1141 or by email at victor.mastone@state.ma.us.

Sincerely,

Victor T. Mastone
Director

/vtm
Cc: Brona Simon, MHC
Bob Boeri and Steve McKenna, MCZM (via email attachment)
Ramona Peters, MWT (via email attachment)
Bettina Washington, WTGH/A (via email attachment)

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

CAPE COD
COMMISSION

By Electronic Mail

September 14, 2015

Matthew A. Beaton, Secretary
Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Anne Canaday, EEA No. 15410
100 Cambridge Street, Suite 900
Boston MA 02114

Re: Environmental Notification Form - EEA No. 15410
Woods Hole Ferry Terminal Reconstruction - Falmouth, MA

Dear Secretary Beaton:

Thank you for the opportunity to provide comments on the above-referenced Environmental Notification Form (ENF), which follow and are arranged by the applicable issue areas from Barnstable County's Regional Policy Plan (RPP).

Cape Cod Commission staff is available to answer any questions about the comments.

Sincerely,

Patty Daley
Deputy Director

Cc: Project File
Steamship Authority c/o GZA GeoEnvironmental, Inc by Electronic Mail
Brian Currie, Falmouth Town Planner by Electronic Mail
Charles McCaffrey, Falmouth Cape Cod Commission Representative by Electronic Mail

CAPE COD COMMISSION COMMENTS

Natural Resources

The Steamship Authority proposes to dredge 5,000 cy of material from Land Under the Ocean to create a new operational Terminal Slip #3. The dredging is improvement dredging, and includes approximately 2,000 sf of impacts to an established eelgrass bed. The RPP minimum performance standards CR3.7 and 3.10 prohibit improvement dredging and impacts to eelgrass, respectively, except where there is a significant public benefit and no feasible alternative exists. Where impacts to eelgrass are allowed, the RPP requires mitigation. While the proposal indicates that impacts to eelgrass will be minimized during project design, the ENF does not indicate what kind of mitigation is contemplated to compensate for the impacts. According to the survey conducted and included in the ENF, the eelgrass bed to be impacted is dense, and has been well established for some time. Loss of eelgrass within this bed is significant and should be mitigated, if it can't be avoided completely.

Commission staff notes that the Steamship Authority has incorporated consideration for sea level rise into the design of the new terminal building, elevating the structure nearly 7 ft above the current terminal building elevation, as well as raising the height of the bulkheads by 3 ft to improve resiliency of the facility to SLR and storms.

Transportation

The Steamship Authority proposes to relocate administrative offices from the Woods Hole terminal to the Palmer Avenue remote parking lot. The project includes refurbishment of the Woods Hole terminal and many marine-based operational improvements. A major transportation benefit of the project is the reduction of expected traffic to the terminal site. A proposed 10,000 s.f. office building at the more conveniently located Palmer Avenue site should result in an overall reduction in regional vehicle miles traveled.

a. Palmer Avenue Site:
The intensification of use at this site (proposed 10,000 s.f. office building) is expected to generate 228 vehicle trips per day according to the Institute of Transportation Engineers' 9th edition of *Trip Generation*. Some of these trips would be offset by elimination of parking formerly used by the Steamship Authority for remote parking. Commission staff suggests that the Steamship Authority could provide an assessment of the safety and operations at the access of the site driveways onto Palmer Avenue (State Route 28).

b. Woods Hole Terminal Site:
The Steamship Authority parking areas in Woods Hole currently include the alignment of the Shining Sea Bikeway. The bikeway is a convenient and environmentally-friendly option for many Steamship travelers to access the ferry from downtown Falmouth and points north. Unfortunately, the bikeway alignment experiences many conflicts with the parking of vehicles both within the parking areas and the sections of access road between parking areas. The Cape Cod Commission, working with the Falmouth Bikeways Committee, is nearing completion of a Falmouth Bicycle Plan. The Plan includes a recommendation to "improve pavement markings and signs designating bikeway through parking area." The Falmouth Bikeways Committee and Cape Cod Commission staff could offer assistance to the Steamship Authority at the Woods Hole site in meeting this stated goal of the Falmouth Bicycle Plan.

Water Resources

The Woods Hole Ferry Terminal site and the Palmer Avenue site lie outside of wellhead protection areas, freshwater recharge areas, potential water supply areas (as defined in the RPP) and nitrogen-impaired embayment watersheds. Both sites are in watersheds that have not been studied for nitrogen loading by the Massachusetts Estuaries Project. Though the terminal site appears to drain to Great Harbor which has a TMDL for fecal coliform, the fecal coliform TMDL does not impose special wastewater management considerations for this site.

a. Palmer Avenue Site
The proposed relocation of the administration office from the Ferry Terminal to the Palmer Avenue site will transfer those current water use demand and wastewater generation to the Palmer Avenue site. This wastewater load will be directed to a new Title V compliant onsite septic system to accommodate approximately 60 employees.

One water resources goal in the Regional Policy Plan is protecting Cape Cod's sole source aquifer through performance standards that limit nitrogen loading to groundwater. In order to gauge the project's nitrogen contribution to groundwater, the project should calculate its cumulative nitrogen loading impacts (from wastewater, stormwater, and fertilizer); guidance on calculating nitrogen loading from the project can be found in the Cape Cod Commission's Technical Bulletin 91-001. Commission staff suggests that the project be designed towards meeting the Cape Cod Commission's 5ppm nitrogen loading performance standard for general aquifer protection.

Notable stormwater management improvements were completed in 2014 at the Palmer Avenue site. Improvements included LID stormwater infrastructure, vegetated swales, bioretention areas using native non-invasive landscape design, and underground recharge chambers. Though the project does not propose an increase in impervious site area, plans indicate minor modifications will need to be made to the site's stormwater management system to properly accommodate the new building.

Commission staff encourages the use of bioretention in parking islands and permeable paving to ensure all stormwater is managed and infiltrated on site. Staff recommends that these methods be incorporated into the project's stormwater design plans, as feasible. During construction of the new administration building, it is important that erosion and sedimentation control plans are developed and followed so construction site runoff and sediment does not hinder performance of the existing stormwater management systems.

b. Terminal Site
The existing terminal building is currently connected to the town's sanitary sewer and potable water system. During the planned demolition and re-construction of the terminal building, these existing water and sewer lines would be upgraded to serve the project.

Permanent stormwater management at the terminal site would improve dramatically with the project. Currently, the existing stormwater system drains directly to the harbor and incorporates no BMPs. The proposed stormwater management system would provide on-site treatment and infiltration and will be designed in accordance with the Massachusetts Stormwater Standards for redevelopment projects.

Because the current stormwater system drains directly to the harbor, it is imperative that best management practices for erosion and sedimentation control are developed to ensure construction debris and runoff do not contribute to this direct discharge. Because components of the terminal project would be completed in several phases and stormwater flow will change as these phases come to fruition, it is important that the construction stormwater management plans adapt to these changing conditions.

Project plans indicate that the soils comprising the earthen pier between slips 1 and 3 contain 2-methylnapthalene and arsenic, which should be remediated during the planned excavation. In addition to the excavation of the pier, the terminal site design plans require an improvement dredging effort that will produce around 5,000 cubic yards of dredged sediment proposed to be disposed of at a landfill or other upland disposal site. Because of contamination present at the pier, Commission staff recommends testing the proposed dredged sediment and disposal options that involve treatment.

Heritage Preservation/Community Character

The proposed Woods Hole Ferry Terminal Reconstruction will take place within the boundaries of the Woods Hole Local Historic District. While the Woods Hole district is included on the State Register of Historic Places, none of the buildings on the Steamship Authority property are inventoried historic structures, so the project will not directly impact any historic buildings. There are numerous inventoried historic buildings in the project vicinity along Water Street, Woods Hole Road, and Crane Street. None of these properties appear to be impacted by the proposed construction. Efforts to preserve water views within Woods Hole village by locating the proposed building closer to the water, reducing its height and narrowing its profile are most important in designing the project to protect the character of the surrounding historic district. Because of the waterfront location of the project, the applicant should be required to consult with the Mass Historical Commission (MHC) and Mass Bureau of Underwater Archaeological Resources (MBUAR) to insure that any underwater resources are protected.

The Steamship Authority parcel proposed for new offices off Palmer Avenue is partially within the Falmouth Village Local Historic District. Proposed construction on the site is outside the boundaries of the historic district and will not directly impact any historic buildings. The general design of the proposed building appears to be compatible in form and design with the surrounding historic district.

TOWN OF FALMOUTH

Office of the Town Manager & Selectmen

59 Town Hall Square, Falmouth, Massachusetts 02540
Telephone (508) 495-7320
Fax (508) 457-2573

September 17, 2015

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

Subject: Steamship Authority Woods Hole Ferry Terminal Reconstruction
Falmouth, Massachusetts

Dear Secretary Beaton:

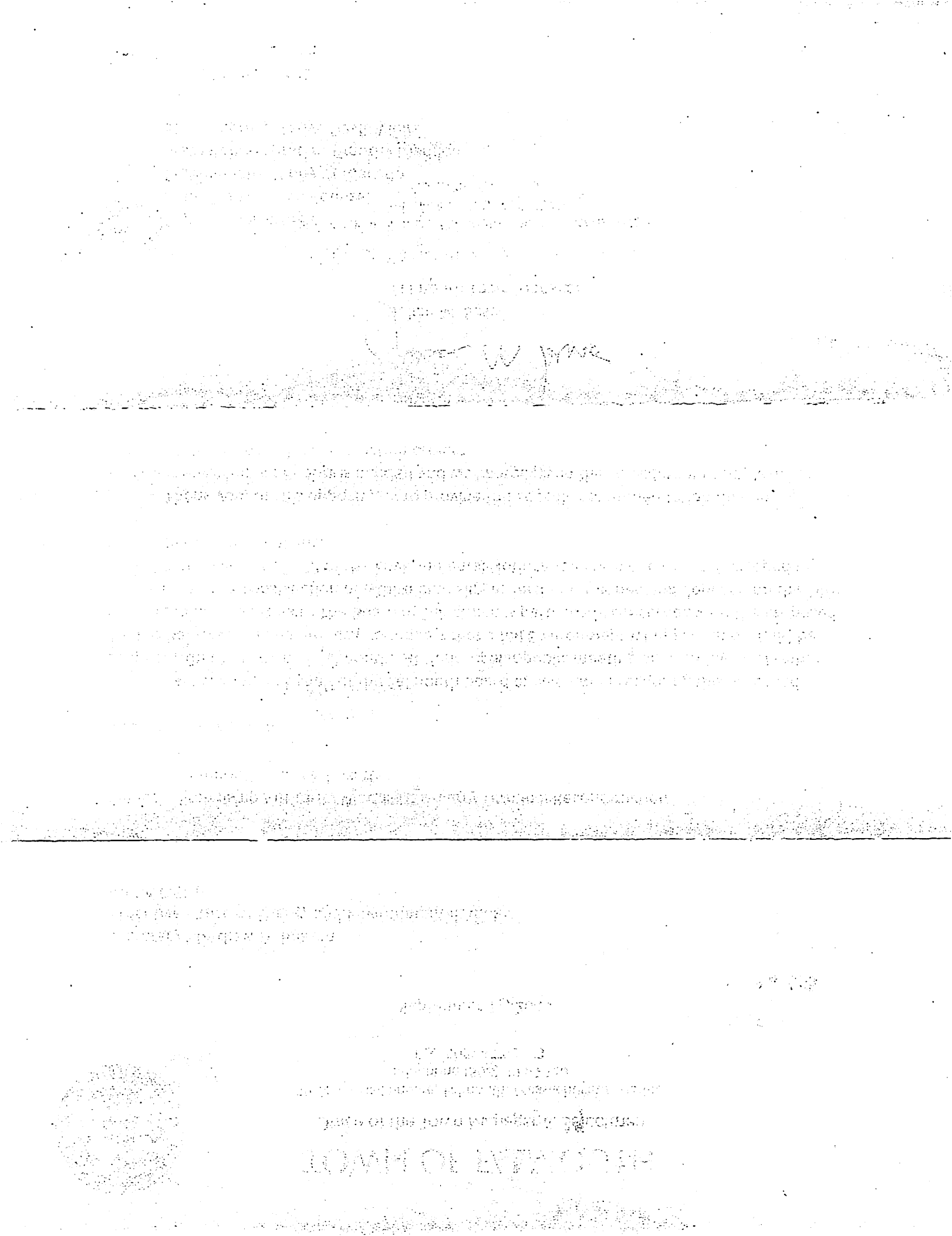
I am writing on behalf of the Falmouth Board of Selectmen regarding this proposed project within the Town of Falmouth. At their regular public meeting on Monday, September 14, the Board voted unanimously to request that a full Environmental Impact Report (EIR) be conducted on this project. The Board of Selectmen is particularly concerned with the proposed construction / re-construction of a third boat slip, as further described and depicted on the Site Layout Plan, page 88 of 172 of the Environmental Notification Form document developed by GZA GeoEnvironmental, Inc.

Thank you for this opportunity to provide this specific recommendation that an Environmental Impact Report is needed and warranted given the considerable complexity and impact of this proposed reconstruction project.

Sincerely,

Julian M. Suso
Falmouth Town Manager

cc: Board of Selectmen
Frank Duffy, Town Counsel
State Senator Vinny DeMacedo
State Representative Timothy Madden
State Representative David Vieira



20 Hyatt Road
Woods Hole, MA 02543
September 18, 2015

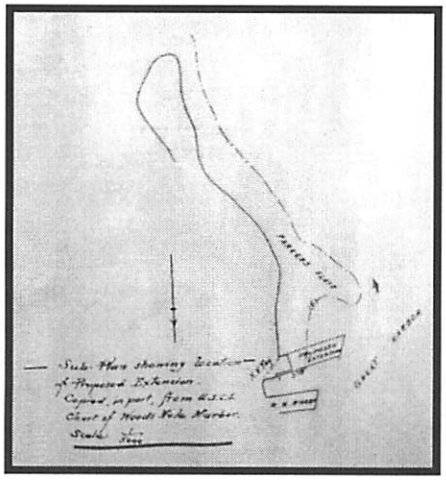
Re: Project Number EEA #15410

Attention: Anne Canaday, MEPA (anne.canaday@state.ma.us)

Dear Ms. Canaday,

This communication is a response to the Environmental Notification Form (ENF) that was prepared by GZA GeoEnvironmental, Inc. on behalf of the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (hereafter referenced as SSA) for the Woods Hole Ferry Terminal Reconstruction Project. As a resident of Woods Hole, a member of the WHCA and a licensee of the MBUAR to conduct underwater archaeology in Great Harbor, Woods Hole, I wish to bring to your attention the significant archaeological potential of Parker Flats, an underwater site proposed for dredging to create a three-slip berthing area for SSA. I recommend that a proper Environmental Impact Assessment (EIA), rather than the ENF, be required prior to initiation of this project. Also, were the SSA project approved, screening of the effluent discharge from the dredging operation should be monitored by a registered maritime or terrestrial archaeologist who is qualified to recognize prehistoric stone and bone artifacts that may appear in the spoil. My suggestions are in accord with those of the WHCA as well as individual citizens of Woods Hole and Falmouth, MA and are consistent with Commonwealth and Federal laws.

According to historic documents, Parker Flats extends along the entire western shoreline of the peninsula known as Juniper Point. This land was originally Native American land. According to historical records, the peninsula, then called Little Neck, was transferred by deed to European settlers by Mr. Job Notantico, a Wampanoag Indian, on December 30, 1679. A sub-plan survey map dated 1902 from the Woods Hole Historical Museum's collection (Fay Family Papers, Box 2) shows the location of Parker Flats to scale in relationship to Juniper Point, the railroad terminal dock and an extension of the ferry dock:



I recently interviewed a local commercial diver, now retired, about Parker Flats. Having dived this area, Mr. Charles K. Fuglister (29 Little Harbor Road, Woods Hole), is quite familiar with the Parker Flats embankment. He described to me the details of a near vertical wall extending from a sandy horizontal platform at 30 feet (10 meters) to another horizontal shelf at 60 feet (20 meters). Of significance, that vertical wall is covered with peat, evidencing an ancient exposed shoreline and a site of grasses, trees and marshland botanical growth. Parker Flats is not an area frequently dived because of very strong currents and the proximity to ferryboat traffic.

The description of Parker Flats given by Mr. Fuglister is confirmed in a USGS report (Sea-Floor Character and Sedimentary Processes in the Vicinity of Woods Hole, Massachusetts. 2008. L.J. Poppe, K.Y. McMullen, D.S. Foster, D.S. Blackwood, S.J. Williams, S.D. Ackerman, S.R. Barnum, and R.T. Brennan, USGS OFR 2008-1004.). In that report, a transect of Parker Flats is presented to show both the bathymetry and the underwater topography of the area. The following image is included in the USGS report, showing the depth and configuration of Parker Flats:

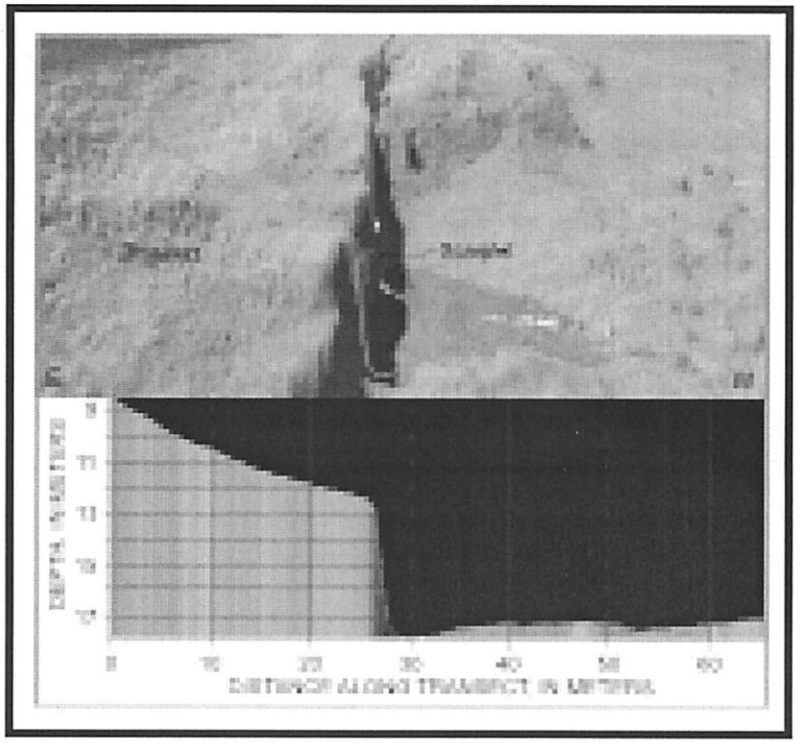


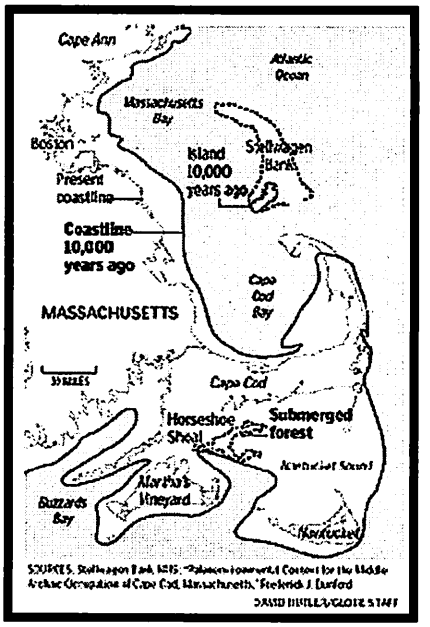
Figure 22. Detailed perspective view of the bathymetry looking south along the scarplet at the edge of Parker Flats from the digital terrain model produced during National Oceanic and Atmospheric Administration survey H11077 of Woods Hole, Massachusetts. Line shows location of transect; cross section shows scaled bathymetry.

The significance of a submerged shoreline of southern Cape Cod was reported in the Boston Globe in

December 2005. A 5-10,000 year old submerged forest was identified on Horseshoe Shoal in Nantucket Sound, within a few miles offshore from Parker Flats and Great Ledge on the eastern boundary of Great Harbor in Woods Hole. In that newspaper article, Dr. Victor Mastone, current Director of the MBUAR, is quoted as saying that "We've been arguing for years whether there are remnant prehistoric landscapes out there and now we know they can exist," Dr. David Robinson of the Public Archaeology Laboratory, who discovered the underwater forest site, adds the following comment: "That's why the Nantucket Sound site is important, It provides evidence to say these land forms can survive."

This characterization of Horseshoe Shoals by these two eminent professional Anthropologists and Underwater Archaeologists applies equally to Parker Flats. That submerged shelf represents an ancient shoreline that has significant archaeological potential. The Boston Globe article is as follows:

Sunken treasure Scientists find evidence of ancient forest buried under the seabed of Nantucket Sound by Beth Daley, Globe Staff | December 4, 2005



Scientists mapping the seabed under a proposed wind farm in Nantucket Sound were stunned by their find: evidence of a submerged forest under 6 feet of mud. It's hardly the lost city of Atlantis, but the piece of birch wood, the yellowish-green grass, soil, and insect parts appear to be part of a forest floor that lined the coastline 5,500 years ago, before being swallowed by the sea that rose after the last ice age. Nearby is evidence of a drowned kettle pond and marsh.

The find has scientists abuzz because if a preserved forest rests below the sea, maybe artifacts from ancient cultures do, too -- items that could help answer some of the most vexing questions about early people in North America. As more energy projects are proposed off New England, archaeologists say, there will be more opportunity for even bigger finds. "We've been arguing for years whether there are remnant prehistoric landscapes out there and now we know they can exist," said Victor Mastone, director and chief archaeologist of the Massachusetts Board of Underwater Archaeological Resources. "This means there is the potential to go after the big theory of how did people get here and how they lived."

Cape Wind Associates, which has proposed the wind farm, redesigned the 130-turbine project this year to

avoid the discovered area. So much of the world's water was locked up in glaciers during the ice age, ocean levels plummeted at least 300 feet. New England's continental shelf was exposed and in some places, the coastline extended more than 75 miles from its current location.

Even at the end of the ice age 10,000 years ago, when melting glaciers were causing sea levels to rapidly rise, New England's coastline -- etched with river valleys, forests, and lakes --stretched miles farther than today. The earliest evidence of Native Americans in New England has come from around this time -- a period when hunters could have walked from Falmouth to Nantucket. Tantalizing clues to these times have been extracted from the sea. New England fishermen have hauled up wooly mammoth and mastodon teeth dozens of miles from shore. A Native American campsite was found on the banks of a submerged riverbed off Maine's Deer Isle. At Odiorne Point State Park in Rye, N.H., visitors at low tide can still find tree stumps and roots dating back almost 4,000 years.

But these finds have little archaeological context. Scientists say the mastodon and mammoth teeth could have been swept out to sea by currents. The Native American campsite was so eroded it was difficult to extract a detailed story of the time period. And if any submerged settlements were at the Rye Beach drowned forest, erosion washed them away. "That's why the Nantucket Sound site is important," said David Robinson, senior underwater archaeologist for The Public Archaeology Laboratory Inc. in Pawtucket, R.I. He discovered the Nantucket Sound site two years ago. "It provides evidence to say these land forms can survive," he said.

Through several sediment samples taken 30 to 50 feet below the water's surface east of Horseshoe Shoal, Robinson pieced together the ancient landscape. The birch wood retrieved from the site is only about 4 inches long and 2 inches in diameter. But the delicate root hairs, leaf pieces and seeds in the samples tell Robinson and other scientists that the area probably was entombed under mud, and thus kept safe from stormy seas and tides.

"We really don't know how big the area is . . . although there is some evidence is it is not tiny," said John King, a professor of oceanography at the University of Rhode Island who has helped Robinson analyze the samples. King said that if Native American cultural sites are to be found, an intact landscape has to be found first. "You need to zero in on these places. Without narrowing down the haystack you are not going to find anything."

The Native American story in New England and North America is incomplete. Archaeologists have long believed the first humans came to this continent about 12,000 years ago via a land bridge from Siberia to Alaska, following mammoths and other big game through the Great Plains, then farther east and south. But some scientists have put forth a different, controversial, theory: People migrated on a coastal route on the edge of the frozen north to get from Russia to the Pacific Coast -- or from Europe to North America.

With the prehistoric shoreline under water, there has been little evidence to support the coastal hypothesis. If scientists find an intact underwater cultural site -- in Nantucket Sound or elsewhere -- it might provide evidence of tools or food gathering that could help settle the debate. Some scientists, however, say it's a fool's errand: Finding submerged settlements is so hard it's not worth the enormous time and expense. "Most of the finds on land are fortuitous," said Robert Oldale, geologist emeritus of the US Geological Survey in Woods Hole, who has spent decades looking at the geology of Cape Cod's continental shelf. "When you go offshore, it's thousands of times tougher." Robinson, who worked on excavating submerged Stone-Age settlements off Denmark this fall, said that once a site is found, it's no more difficult to excavate than a shipwreck. The sea's cold temperatures and lack of oxygen preserve items far better than conditions on land. Denmark's finds have included fabric and food residue in ceramic pots in waters similar in condition to those off New England.

Archaeologists say the increase in projects off New England could help uncover sites of submerged settlements. As with projects on land, federal and state laws require offshore projects to hire archaeological companies to determine whether construction will harm historically significant remains. Cape Wind hired The Public Archaeology Laboratory.
Historically, these underwater searches only meant one thing: shipwrecks. But technology is advancing to

detect solid land below sea mud and sand, as is expertise around the world to excavate these sites. At Robinson's suggestion, officials at Stellwagen Bank National Marine Sanctuary -- which protects a once-exposed plateau 25 miles off Boston -- is considering special protection for paleontological resources in a new management plan it is drafting. Robinson isn't sure when he'll study the Nantucket Sound site further. The area is difficult to dive and there is no money for surveying. But he's finishing his doctorate on these types of sites, and once he gets better data about underwater landscapes, he will start looking for drowned riverbanks because he knows Native American sites on land have been found on riverbanks. He hopes to one day take a magnetic sensor over potential areas, where ancient hearths will give off a telltale ping. If Robinson does find a site, he will use the same archaeological tools used to research underwater shipwrecks to scrape and brush away the seabed. Divers can dig excavation test pits with a water dredge, which gently vacuums sediment from the sea floor in layers to capture artifacts in a mesh bag. "We would go slowly and methodically, just like we would do on land," he said. "Everyone has always said this is impossible. It's not. It just requires a different way of approaching the problem."

Another recent discovery along the Pacific Northwest coast of Seattle, Washington, reinforces the significance of findings from the Atlantic coast in Nantucket Sound. During the Pacific study of Puget Sound, an old shoreline was revealed. This discovery was made during a pre-disturbance EIA. Archaeologists discovered a rich deposit of artifacts lying beneath a peat layer of over one foot in depth. Stone tools and salmon bones were collected to evidence the significance of this site. This confirmed spawning activities of salmon during prehistoric times. This finding is summarized in the following article:

Seattle dig unearths 10,000-year-old stone tools (September 13, 2015 | Associated Press)

SEATTLE – An archaeological survey to clear the way for construction near a mall has unearthed thousands of stone tools crafted at least 10,000 years ago. "We were pretty amazed," archaeologist Robert Kopperl, who led the field investigation, told The Seattle Times. "This is the oldest archaeological site in the Puget Sound lowland with stone tools."

The rare find is shedding light on a time when prehistoric bison and mammoths still roamed what is now western Washington. Only a handful of archaeological sites dating back 10,000 years or more have been discovered in the region. Chemical analysis of one of the tools revealed traces of the food they were eating, including bison, deer, bear, sheep and salmon.

The dig also uncovered a fragment of salmon bone, evidence that the fish made its way up local streams for at least 10,000 years. It also revealed other unusual tools, including the bottoms of two spear points that have concave bases.

The site near Redmond Town Center mall in Redmond, Washington, was initially surveyed in 2009, as the city embarked on a project to restore salmon habitat in Bear Creek, a tributary of the Sammamish River. The creek had been confined to a rock-lined channel decades before. The Washington State Department of Transportation largely paid for the salmon-restoration project as a way to mitigate some of the environmental impacts of building the new Highway 520 floating bridge over Lake Washington and widening the roadway.

The site appears to have been occupied by small groups of people who were making and repairing stone tools, said Kopperl, of SWCA Environmental Consultants. He and his colleagues published their initial analysis earlier this year in the journal PaleoAmerica. "This was a very good place to have a camp," Kopperl said. "They could use it as a centralized location to go out and fish and hunt and gather and make stone tools."

Crews initially found unremarkable artifacts. But when they dug deeper, they found a foot-thick layer of peat — remains of a bog at least 10,000 years old. Below the peat, they later discovered a wealth of tools

and fragments. "We knew right away that it was a pretty significant find," Washington State Historic Preservation Officer Allyson Brooks told The Times. Kopperl said that because of where the artifacts were located below the peat, which had not been disturbed, it's clear they predate the formation of the peat.

Radiocarbon analysis conducted on charcoal fragments found with the tools confirmed the age. "It's hard to find this kind of site west of the Cascades, because it's so heavily vegetated and the Puget Lobe of the big ice sheet really affected the landscape," Kopperl told the newspaper. A handful of sites have been discovered east of the mountains with tools dating back between 12,000 and 14,000 years.

So it's clear that humans have lived in the area since soon after the glaciers retreated, but a lot of mystery still surrounds the region's earliest occupants and their origins, The Times reported. When Kopperl and his team are done analyzing the artifacts, they will hand them over to the Muckleshoot Tribe for curation. There are no immediate plans to display the artifacts publicly.

Based upon the collective data presented above, I request that consideration be given to (1) a full EIA prior to approval of the SSA project and (2) a requirement for on-site archaeological inspection of dredging activity. Specifically, at least a pre-disturbance survey of the area proposed for dredging of Slip #1 should be required. Slip #1 is the southernmost of three slips proposed by the SSA. While Slips #2 and #3 also entail an extension and deepening of the sea floor, these ship berths are in areas of repetitive sea floor disturbance. However, the Slip #1 dredging would disturb a previously undisturbed segment of Parker Flats. Furthermore, services of a professional archaeologist should be available for the project. The proposal calls for the removal of 5,000 cubic yards of spoil within an area of 375 feet by 75 feet in order to generate new slips to a depth of 16-23 feet. It is during the excavation of submerged sediment that prehistoric artifacts are most likely to be released. Their identification requires timely monitoring by trained and experienced personnel.

I thank you for your attention to my request.

Sincerely,

Raymond L. Hayes, Ph.D.
Principal Investigator
MBUAR Permit #07-001 (Great Harbor Historical Anchorage)

20 Hyatt Road (P.O. Box 696)
Woods Hole, MA 02543
(508) 495-2905

cc: Dr. Victor Mastone, Director and Chief Archaeologist, MBUAR

Catherine Bumpus, Co-President
Woods Hole Community Association

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

September 22, 2015

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

RE: Woods Hole Ferry Terminal Reconstruction, Railroad Avenue and Palmer Avenue Parking Lot, Falmouth, MA; MHC# RC.58666, **EEA # 15410**.

Dear Secretary Beaton:

Staff of the Massachusetts Historical Commission (MHC) have reviewed the Environmental Notification Form (ENF), received August 20, 2015, submitted by GZA GeoEnvironmental, Inc., for the project referenced above.

The MHC notes that the project will require review and permitting by the US Army Corps of Engineers. The MHC will review the project under Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800) and looks forward to consultation with the Corps.

Review of the Inventory of Historic and Archaeological Assets of the Commonwealth indicates that portions of the project at the existing Steamship Authority Terminal are within the Woods Hole Historic District (MHC # FAL.AL) listed in the State Register of Historic Places and a local historic district. The proposed new structure at the Palmer Avenue parking lot is adjacent to the Falmouth Village Historic District (FAL.AG), listed in the State Register of Historic Places and a local historic district. The MHC recommends that project planners consult with the Falmouth Historic Districts Commission regarding the need for a Certificate of Appropriateness for the project.

The limited dredging required for the expansion of the existing ferry docks is proposed within portions of Woods Hole harbor that appear to have been subject to previous dredging and disturbance associated with the existing docking infrastructure, including dolphins. In the MHC's staff opinion, no marine archaeological reconnaissance survey is recommended for the project as proposed.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800), Massachusetts General Laws, Chapter 9, Section 26-27C (950 CMR 71) and MEPA (301 CMR 11). If you have any questions or require additional information, please contact Jonathan K. Patton or Elizabeth Sherva at this office.

Sincerely,

Brona Simon

Brona Simon
State Historic Preservation Officer
Executive Director
State Archaeologist
Massachusetts Historical Commission

xc: William J. Cloutier, Steamship Authority
Kevin Kotelly, USACOE-New England District
Kate Atwood, USACOE-New England District
Victor Mastone, MBUAR
DEP-SERO, Waterways
Falmouth Historical Commission
Falmouth Historic District Commission
Stephen Lecco, GZA GeoEnvironmental, Inc.

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www.sec.state.ma.us/mhc

Canaday, Anne (EEA)

From: Hoenig, Amy (FWE)
Sent: Tuesday, September 22, 2015 1:58 PM
To: Canaday, Anne (EEA)
Cc: Glorioso, Lauren (FWE)
Subject: EEA No. 15410, Woods Hole Ferry Terminal Reconstruction, Falmouth

Good afternoon, Anne:

Project Name: *Woods Hole Ferry Terminal Reconstruction*
Proponent: *Steamship Authority*
Location: *Foot of Railroad Ave & Palmer Ave, Falmouth*
Project Description: *Woods Hole Ferry Terminal Reconstruction*
Document Reviewed: *Environmental Notification Form*
EEA File Number: *15410*

The Natural Heritage & Endangered Species Program (NHESP) of the Massachusetts Division of Fisheries & Wildlife (Division) has reviewed the Environmental Notification Form (ENF) for the proposed *Woods Hole Ferry Terminal Reconstruction* project. At this time, the Division would like to offer the following comments regarding state-listed rare species and their habitats.

As noted in the ENF, a portion of the proposed project is located within *Priority* and *Estimated Habitat* as indicated in the 13th Edition of the MA Natural Heritage Atlas. Therefore, this project requires review through a direct filing with NHESP for compliance with the Massachusetts Endangered Species Act (MESA 321 CMR 10.00). Based on a preliminary review of the information provided in the ENF and the information contained in our database, it is anticipated that the proposed activities within these habitats would not result in a prohibited "take" of state-listed species (terns).

We appreciate the opportunity to comment on this project. Please contact Amy Hoenig with any questions about this letter at (508) 389-6364.

Sincerely,

Amy Hoenig
Endangered Species Review Biologist | Natural Heritage & Endangered Species Program | MA Division of Fisheries & Wildlife | 1 Rabbit Hill Road, Westborough, MA 01581 | tel: 508.389.6364 | fax: 508.389.7890 | www.mass.gov/nhesp
NOTE – *I expect to start maternity leave mid-October. Endangered Species Review Assistants, Emily Holt (508-389-6385) or Lauren Glorioso (508-389-6361), are the best NHESP contacts for inquiries at this time.*

September 22, 2015

Matthew Beaton, Secretary
Massachusetts Executive Office of Energy and Environmental Affairs
Attention: MEPA Office
Anne Canaday, EEA # 15410
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Woods Hole Ferry Terminal Reconstruction Project Environmental Notification Form

Dear Secretary Beaton:

The Association to Preserve Cape Cod (APCC) is the Cape's leading nonprofit environmental advocacy and education organization. Founded in 1968 and today representing over 5,000 members across the region, APCC's mission is to preserve, protect and enhance the natural resources of Cape Cod. APCC has reviewed the Woods Hole Ferry Terminal Reconstruction Project Environmental Notification Form (ENF) and offers the following comments.

According to the ENF, the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA) proposes to reconstruct its Woods Hole ferry terminal and to construct a new administration building at the site of its passenger parking facilities at Palmer Ave. in Falmouth. Among other elements, the project includes demolition of the existing terminal/administration building, excavation of a large section of the existing pier, reconstruction and modernization of all three existing ferry slips including vessel sewage pump-out facilities, construction of a new terminal building, a reduction in the number of parking spaces at the terminal site and the Palmer Ave. site, and construction of a new administration building at the Palmer Ave. site.

Potential Impacts from Increased Capacity: As indicated above, the ENF proposes to reconstruct all three ferry slips so that they are each fully operational and capable of performing all ferry service functions, compared to existing conditions where two slips are set up for that purpose and the third is used for ferry berthing and repairs. The ENF emphatically and repeatedly states that there are no plans to increase ferry service or operations at the Woods Hole terminal. The SSA maintains that in proposing this project, it intends to use only two slips for operational purposes at the same time, but updating all three gives the SSA the flexibility to alternate slip use when necessary. The ENF contends that the limited number of parking spaces at the terminal site, coupled with the fact that the two slips currently in active use are already capable of accommodating additional ferry trips, is proof that increasing ferry service is not the intent behind the proposed upgrades.

The ENF states that there should be no increase in Woods Hole traffic, and instead estimates there would be a net reduction in Woods Hole traffic of 200 fewer trips per day, due to the relocation of the administration building to Palmer Ave. However, the ENF also states there could be a need for additional parking capacity due to reduction of parking spaces at the

terminal site and at the Palmer Ave. lot, even with the addition of the new 1,922-space parking lot on Technology Park Drive that opened in June, 2015. The ENF suggests that there is potential for more parking capacity to be added in the future to the Palmer Ave. site or to another unidentified location. APCC recommends that the Environmental Impact Report (EIR) identify the anticipated future demand for parking, show whether the project as proposed will or will not accommodate that anticipated parking demand, and identify specific locations where additional parking will be supplied if a need is determined.

Despite assurances to the contrary by the SSA in the ENF, APCC is aware of concern within the greater community that upgrading the operational function of all three Woods Hole terminal slips will open up the potential for greater intensity of use of the ferry service in the future.

The ENF does acknowledge that the proposed project will theoretically increase the SSA's operating capacity, even though the two operating slips are not currently used to their full capacity. Although the ENF states that current trends do not indicate a substantial increase in demand that would require use of all three slips at the same time, it does state that "if and when" there is an increase in ferry service demand, the SSA "can be expected to respond to that demand by managing, reducing and mitigating" traffic impacts.

In discussing why increases in ferry-related traffic are not anticipated in the near future, the ENF states that the significant percentage of the growth in passenger and vehicle numbers over the years has occurred in the off-season, when overall traffic in the surrounding community is less of an impact. However, the table on page 145 of the ENF shows a month-by-month breakdown of vehicle trips from 1990 to present, which reveals a general upward trend in the number of vehicles using the service in the July and August peak summer months. In July and August of 1990, total vehicle numbers were 45,565 and 50,406, respectively, and in 2014 for July and August, total numbers were 61,113 and 62,457, respectively, with slight up or down fluctuations from year to year. The table on page 135 shows the total number of passengers in 1990 was 272,585 in July and 308,055 in August, and increased in 2014 to 349,545 in July and 377,739 in August. In both cases, the data provided in the ENF show a steady increase in ferry use during the peak summer months.

The proposed expansion of terminal slip operation capabilities in the ENF suggests the need for a comprehensive study of the upper Cape region's (and especially Woods Hole's) existing infrastructure capacity and its ability to sustain a potential future expansion of ferry service. It would also be advantageous for the public to know in greater detail the SSA’s long-range operation and growth plan for ferry service to Martha’s Vineyard from Woods Hole and other potential locations, and how the proposed terminal reconstruction project fits into those plans.

Impacts to Habitat: The ENF states that an area estimated as something less than 2,000 sf of eelgrass beds will be impacted from proposed dredging for the terminal project. Surveys conducted to determine the extent of eelgrass beds in that location documented moderate to heavy population densities of eelgrass. APCC recommends that the EIR provide a detailed study of alternatives that would avoid impacts to the eelgrass. If it is determined that impacts cannot be avoided, the EIR should discuss proposals for minimizing and mitigating impacts to the eelgrass beds.

According to the ENF, dredging and slip reconstruction will take place within area mapped as Estimated and Priority Habitat of state-listed rare species. At the time of the ENF’s publication, the specific rare species mapped for this location were unknown to the SSA. APCC recommends that information about

the mapped species be provided in the EIR, as well as a determination from the Massachusetts Natural Heritage and Endangered Species Program (NHESP) regarding the likelihood that mapped species will be impacted by the project. If a determination is made by NHESP that the project as proposed will result in a species "take," the EIR should include discussion of project modifications to avoid a take. If impacts are unavoidable, the EIR should include a proposed plan to minimize and mitigate project impacts to mapped species.

Portions of the existing Palmer Ave. parking lot are within mapped Priority and Estimated Habitat for rare species, according to map EC-1 in the ENF. The EIR should confirm whether any development activity will occur within the mapped portions of the parking lot.

Wastewater: According to the ENF, the Woods Hole terminal site will be connected to sewer, but a conventional Title 5 septic system is proposed for the new administration building at the Palmer Ave. parking lot site. APCC recommends that the EIR discuss potential wastewater impacts to impaired water resources resulting from this project, especially regarding a determination whether the project meets regionally accepted nitrogen loading standards.

Stormwater: The ENF states that the Woods Hole terminal reconstruction project and the Palmer Ave. administration building development project will both include adequate stormwater management. APCC recommends that the EIR provide more specific details about the project's stormwater management plans. The discussion should include whether Low Impact Development (LID) techniques will be utilized in the stormwater management plan, especially for the Palmer Ave. site where there may be more opportunity for LID to be used.

Hazardous Materials: The ENF states that soil contaminated with 2-metylnapthalene and arsenic at the terminal site will be removed during reconstruction of the pier. APCC recommends that the EIR explain how the contaminated soil will be disposed of, and where it will be disposed.

Climate Change Preparedness: APCC is pleased to see that the ENF describes specific design features in the proposed terminal reconstruction project that are included in order to address sea level rise predictions for the northeast, based on the anticipated 50-year life of the project. Such planning will help ensure that our coastal infrastructure is resilient to changing sea levels and other impacts from climate change.

APCC thanks the Secretary for the opportunity to provide written comments on this development project, which has significant implications for the future of regional transportation on Cape Cod and the Islands. APCC looks forward to reviewing the EIR when it is released.

Sincerely,

Don Keeran
Assistant Director

cc: Cape Cod Commission

Canaday, Anne (EEA)

From: jon goldman [j@goldmanarts.com]
Sent: Wednesday, September 23, 2015 1:45 PM
To: Canaday, Anne (EEA)
Subject: FULL ENVIRONMENTAL IMPACT REPORT for SSA Expansions in Woods Hole

Dear Ms Canaday;

As a year round resident of Woods Hole, I am very interested in the expansion plans by the Steamship Authority at the Woods Hole terminal and as a result of mine and my community's concerns, I feel very strongly that a full Environmental Impact Report is necessary, if not absolutely critical to determine an outcome for this development.

I appreciate the openness that the SSA has expressed in allowing the community's input.

Having said that, it is important to acknowledge the impact of growth on this little village. Volume of traffic and expansion of a variety of parking lots in neighboring Falmouth, have ONLY increased the amount of cars, trucks and other industrial transport through our roads, causing a crippling high volume through our main street, Water Street and this is simply not sustainable.

Of course this doesn't begin to touch on the waterborne impact of a third slip. We, as citizens, are very concerned about the transformation of our village into industrial grade traffic all purportedly as "aids" to Vineyard's "lifeline". That word "lifeline" is an antiquated notion coined for a different time when multiple means of transport to the Vineyard were not available. Today, there are many ways to get to and from the island including multi ferry access, high speed ferries, air transport and others. What has happened to the parcel that is the WH Ferry Terminal and what is proposed is to further enhance and grow this site into an industrial transportation hub absolutely placing greater stress on our infrastructure, our roadways and our peace of mind. The old trope of adding economic growth to the community is a false argument. A few jobs are added with a substantial sacrifice of the character and lifestyle of a small village. Where is the long term sense/rationale for this? It can only be seen as a strategy for developmental growth. Seasonal congestion makes this untenable.

The beholden-to-no-one attitude of the SSA is profit driven, expansion-oriented bull-in-a-china-shop take on community development. It is a bullying position, with little or no oversight to curtail over zealous growth.

As Catherine Bumpus and others have suggested, this proposed project is not consistent with the Town of Falmouth Comprehensive Plan. (see the land section III B 1) comments on the ENF filing.

I, like others, are trying to preserve SOME sense of scale when we call for full Environmental Impact Review, especially since New Bedford, a City that has re-adapted its waterfront as an industrial site, wants the transport and has planned and constructed for such a demand. But alas, it falls on deaf ears claiming costs. I always am always left asking a question that seems to be an unaswerable question: what is the true cost of "progress" if it deteriorates quality of life for some part of the chain?

Thanks for your consideration.

JON GOLDMAN
j@goldmanarts.com
978 505 5796

Canaday, Anne (EEA)

From: loganwoho@comcast.net
Sent: Thursday, September 24, 2015 6:55 AM
To: Canaday, Anne (EEA)
Subject: Woods Hole plans

Dear Ms Canaday

I will be sending you a letter today regarding plans for changes at the Steamship Authority property in Woods Hole but meanwhile hear are my thoughts in e-form!

The essence is: please require a full Environmental Review. The current plans seems to me to have been developed without regard to some potentially sensitive environmental issues. While there might indeed be a need to shore up the two existing fully functional slips I am concerned about the plans for the terminal and especially for the need for a fully functional third slip.

Environmental concerns: what will be removed in the process ? where will it go? How will it get there? What will the implications be for traffic of heavy machinery down Woods Hole Road?

Is the third slip indeed necessary? Might there be other solutions? Perhaps a temporary modification? Perhaps runs from New Bedford when necessary? Since building will be in the winter when schedules for the 'lifeline to the island' is clearly lighter due to the smaller population on the island in winter some creative thinking could save money and simplify other issues.

Please make sure that the most rigorous environmental studies and most creative thinking are done.

Sincerely

Nan Logan
Falmouth, MA

508 457 9665
loganwoho@comcast.net

September 23, 2015
482 Woods Hole Road
Falmouth, MA 02543

Mr. Matthew Beaton,
Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
Anne Canaday,
EEA No. 15410
100 Cambridge Street,
Suite 900Boston MA 02114

Dear Mr Beaton and Ms Canaday

To follow up on today's email I sent you regarding plans for changes at the Steamship Authority property in Woods Hole:

The essence is: please require a full Environmental Review. The current plans seems to me to have been developed without regard to some potentially sensitive environmental issues. While there might indeed be a need to shore up the two existing fully functional slips I am concerned about the plans for the terminal and especially for the need for a fully functional third slip.

Environmental concerns: Do we know what will be removed in the process ? where will it go? How will it get there? What will the implications be for traffic of heavy machinery down Woods Hole Road?

Is the third slip indeed necessary? Might there be other solutions? Perhaps a temporary modification? Perhaps runs from New Bedford when necessary? Since building will be in the winter when schedules for the 'lifeline to the island' is clearly lighter due to the smaller population on the island in winter some creative thinking could save money and simplify other issues.

Please make sure that the most rigorous environmental studies and most creative thinking are done.

Sincerely

Nan Logan

Nan Logan
Falmouth, MA

508 457 9665
loganwoho@comcast.net

Thank you for your
assistance!!!

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

September 24, 2015

Mathew A. Beaton,
Secretary of Environment and Energy
Executive Office of Environmental Affairs
ATTN: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: FALMOUTH – ENF Review
EOEEA # 15410 - Woods Hole Ferry Terminal Reconstruction at Foot of Railroad Avenue

Dear Secretary Beaton,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the ENF for the Proposed Woods Hole Ferry Terminal Reconstruction at Foot of Railroad Avenue, Falmouth, Massachusetts (EOEEA #15410). The project proponent provides the following information for the project:

Describe the existing conditions and land uses on the project site: The Terminal Site is an existing ferry Terminal with three berthing slips, a terminal/office building and ancillary storage and equipment buildings. The remainder of the site consists of parking and vehicle queueing areas for cars and trucks boarding the ferries. The Palmer Avenue Site is a large (18-acre) remote surface parking lot with a restroom building and a storage building.

Describe the proposed project and its programmatic and physical elements: The project involves a phased reconstruction of the existing terminal in order to improve outdated infrastructure and provide a more efficient operation while maintaining the same operations and number of berthing slips. A new bulkhead, piers and a new terminal building will be constructed. The existing administration offices will be relocated to the Palmer Avenue Site. See Appendix 8 for more details.

Wetlands and Waterways Program Comments

The Waterways Program offers the following comments on the ENF submitted by the Woods Hole, Martha's Vineyard & Nantucket Steamship Authority to reconstruct the ferry terminal at Woods Hole and to dredge

The Wetlands and Waterways Program offers the following comments on the ENF submitted by the Woods Hole, Martha's Vineyard & Nantucket Steamship Authority to reconstruct the ferry terminal at Woods Hole and to conduct improvement dredging of approximately 5000 cubic yards of sediment.

- Since the project includes new structures and fill within both flowed and previously filled tidelands, the submittal of a Chapter 91 License application will be required. A Water Quality Certification (WQC) will also be required for the proposed improvement dredging and excavation of material from previously filled tidelands. For this project the Proponent may choose to file a MassDEP BRP WW26 Combined Application for Chapter 91 and WQC. Based on the information contained in the ENF, the Waterways Program has determined that the proposed activities would be classified as a water-dependent use project pursuant to the Waterways Regulations at 310 CMR 9.12.

- The preferred design alternative involves relocating Slip #3 further to the south and the ENF indicates that this change will improve navigation issues in the immediate vicinity of the terminal. During the review of the Chapter 91 Application, the Waterways Program will consult with the Falmouth Harbormaster and adjacent waterfront property owners to determine whether the proposed realignment will significantly interfere with the public rights of navigation and individual property owners' right to approach their waterfront pursuant to the Waterways Regulations at 310 CMR 9.35 & 9.35.

- The ENF indicates that an area of $\leq$2,000 sq. ft. of eelgrass bed will be impacted by the proposed improvement dredging on the southerly side of Slip #1. Pursuant to the Waterways Regulations at 9.40(2)(b), in the review of the Chapter 91 Application the Waterways Program will request that the proponent explore design alternatives to eliminate or minimize the impact to eelgrass. One potential design alternative may include the construction of a subsurface bulkhead to minimize the dredge footprint.

- The proposed project is subject to review under the Wetlands Protection Act. The proponent must file a Notice of Intent and receive an Order of Conditions prior to the commencement of the project.

- The Wetland Regulations for Land Under the Ocean at 310 CMR 10.25 (3) and (6) require that the project minimize adverse effects on marine fisheries habitat. MassDEP recommends that the proponent consider alternatives to the proposed improvement dredging that would avoid and/or minimize impacts to eelgrass.

- The Massachusetts Stormwater Standards have been incorporated into the Wetland Regulations and the proposed project would be considered "redevelopment". As such, the proposed project must meet the Stormwater Standards to the maximum extent practicable.

Air Quality Construction Impacts

Construction and operation activities shall not cause or contribute to a condition of air pollution due to dust, odor or noise. To determine the appropriate requirements please refer to:

- 310 CMR 7.09 Dust, Odor, Construction, and Demolition
- 310 CMR 7.10 Noise

Air Quality

Many industrial, commercial and institutional development activities have facility heating and supplemental or emergency power generation associated with them that require air quality permitting from MassDEP before construction and/or operation.

The determination of when a permit is required is based on the size of the proposed combustion unit. Smaller units and specifically, engines (emergency and non-emergency), combined heat and power (CHP) units and some boilers may not require a specific Plan Approval but are subject to performance standards and certification, the requirements for which are found at 310 CMR 7.26. Specifically:

- 310 CMR 7.26(30) thru (37) – Boilers;
- 310 CMR 7.26(40) thru (44) Engines & Turbines (including 310 CMR 7.26(42) specific to Emergency Engines and Turbines); and
- 310 CMR 7.26(45) Combined Heat and Power

Any unit that exceeds the size limit or does not meet the applicability requirements of the above listed regulations will require a permit under 310 CMR 7.02.

It should be noted that should facilities operate one or more on-site back-up power generators when there is a threat of power loss as an operational practice rather than waiting for an actual power loss, operation of these generators under these conditions may exceed the emergency generator performance standard requirement of 300 hours during a 12 month rolling average. It is the obligation of the facility operator to determine which of the performance standards best fits the planned operational needs and comply with those standards. The Business Compliance Unit of MassDEP's Boston Office is willing to provide assistance regarding the applicability of these generators to the regulations.

Solid Waste Management Program

Building Demolition and Asbestos Containing Waste Material: The proposed project includes the potential demolition of a building at a future phase which may contain asbestos. The project proponent is advised that demolition activity must comply with both Solid Waste and Air Quality Control regulations. Please note that MassDEP promulgated revised Asbestos Regulations (310 CMR 7.15) that became effective on June 20, 2014. The new regulations contain requirements to conduct a pre-demolition/renovation asbestos survey by a licensed asbestos inspector and post abatement visual inspections by a licensed asbestos project monitor. The Massachusetts Department of Labor and Work Force Development, Division of Labor Standards (DLS) is the agency responsible for licensing and regulating all asbestos abatement contractors, designers, project monitors, inspectors and analytical laboratories in the state of Massachusetts.

- In accordance with the Air Quality Regulations at **310 CMR 7.09(2),** the proponent must submit a **BWP AQ 06 Notification Prior to Construction or Demolition** form to MassDEP for all construction or demolition projects. The proponent should propose measures to prevent or alleviate dust, noise, and odor nuisance conditions, which may occur during the demolition.

- In accordance with the revised Asbestos Regulations at **310 CMR 7.15(4),** any owner or operator of a facility or facility component that contains suspect asbestos containing material (ACM) shall, prior to conducting any demolition or renovation, employ a DLS licensed asbestos inspector to thoroughly inspect the facility or facility component, to identify the presence, location and quantity of any ACM or suspect ACM and to prepare a written asbestos survey report. As part of the asbestos survey, samples must be taken

of all suspect asbestos containing building materials and sent to a DLS certified laboratory for analysis, using USEPA approved analytical methods.

- If ACM is identified in the asbestos survey, the proponent must hire a DLS licensed asbestos abatement contractor to remove and dispose of any asbestos containing material(s) from the facility or facility component in accordance with **310 CMR 7.15**, prior to conducting any demolition or renovation activities. The removal and handling of asbestos from the facility or facility components must adhere to the Specific Asbestos Abatement Work Practice Standards required at **310 CMR 7.15(7)**. The proponent and asbestos contractor will be responsible for submitting an **Asbestos Notification Form ANF-001** to MassDEP at least ten (10) working days prior to beginning any removal of the asbestos containing materials as specified at **310 CMR 7.15(6).**

- The proponent shall ensure that all asbestos containing waste material from any asbestos abatement activity is properly stored and disposed of at a landfill approved to accept such material in accordance with **310 CMR 7.15 (17).** The Solid Waste Regulations at **310 CMR 19.061(3)** list the requirements for any solid waste facility handling or disposing of asbestos waste. Pursuant to **310 CMR 19.061(3) (b)1.,** no asbestos containing material; including VAT, asphaltic-asbestos felts or shingles; may be disposed at a solid waste combustion facility.

- Asphalt, brick and concrete (ABC) rubble, such as the rubble generated by the demolition of buildings must be handled in accordance with Massachusetts solid waste regulations. These regulations allow, and MassDEP encourages, the recycling/reuse of ABC rubble. The proponent should refer to MassDEP's Information Sheet, entitled "Guide to Regulations for Using or Processing Asphalt, Brick and Concrete Rubble, revised February 2000", that answers commonly asked questions about ABC rubble and identifies the provisions of the solid waste regulations that pertain to recycling/reusing ABC rubble. This policy can be found on-line at the MassDEP website: www.mass.gov/dep.

If you have any questions regarding the Solid Waste Management Program comments above, please contact Mark Dakers at (508) 946-2847 or Cynthia Baran at (508) 946-2887.

Bureau of Waste Site Cleanup

Based upon the information provided, the Bureau of Waste Site Cleanup (BWSC) searched its databases for disposal sites and release notifications that have occurred at or might impact the proposed project areas. A disposal site is a location where there has been a release to the environment of oil and/or hazardous material that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000].

There are no listed MCP disposal sites located at or in the vicinity of either of the sites that might impact the proposed project areas. The project areas are the ferry slips in Woods Hole, and the proposed administrative buildings to be located at the Palmer Avenue parking area. Interested parties may view a map showing the location of BWSC disposal sites using the MassGIS data viewer (Oliver) at: http://maps.massgis.state.ma.us/map_ol/oliver.php Under "Available Data Layers" select "Regulated Areas", and then "DEP Tier Classified 21E Sites". The compliance

status of specific MCP disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: http://public.dep.state.ma.us/SearchableSites2/Search.aspx

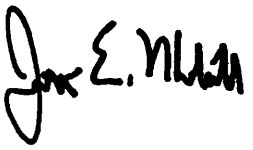
The Project Proponent is advised that if oil and/or hazardous materials are identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) may be necessary. A Licensed Site Professional (LSP) should be retained to determine if notification is required, and render appropriate opinions as necessary. The LSP may evaluate whether risk reduction measures are necessary or prudent if contamination is present. The BWSC may be contacted for guidance if questions arise regarding assessment and cleanup under the MCP.

Proposed s.61 Findings

The "Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form" may indicate that this project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR 11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

The MassDEP Southeast Regional Office appreciates the opportunity to comment on this proposed project. If you have any questions regarding these comments, please contact George Zoto at (508) 946-2820.

Very truly yours,



Jonathan E. Hobill,
Regional Engineer,
Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Deputy Regional Director, Acting Regional Director
David Johnston, Deputy Regional Director, BRP
Maria Pinaud, Deputy Regional Director, BWP
Gerard Martin, Acting Deputy Regional Director, BWSC
Jennifer Viveiros, Deputy Regional Director, ADMIN
Jim Mahala, Acting Chief, Wetlands and Waterways
David Hill, Wetlands Program
Allen Hemberger, Site Management

eCc: Mark Kasprzyk, Falmouth Conservation Commission, 59 Town Hall Square # 1, Falmouth, MA 02540 (concom@falmouthmass.us)

MARTHA'S VINEYARD COMMISSION

Matthew Beaton, Secretary
EOEA, Attn: MEPA Office
Ann Canaday, EOEA No. 15410
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: 15410 Woods Hole Terminal Reconstruction, Town of Falmouth

September 24, 2015

Dear Secretary Beaton,

The Martha's Vineyard Commission is pleased to submit staff comments regarding 15410, Woods Hole Terminal Reconstruction ENF, focusing on the terminal area rather than the Palmer Ave. facilities. The full Martha's Vineyard Commission will NOT review the project for approval. According to Chapter 831 of the Acts of 1977 as amended, the Commission does not have regulatory authority in Falmouth; nor, by separate legislation, over SSA projects. Never the less, the services provided are essential to Martha's Vineyard residents and visitors. Services are also paid for by those same travelers and purchasers of freight goods. Keeping rates down is a concern. In addition, should the SSA run at a deficit, the deficit is made up by the taxpayers of the towns on Martha's Vineyard, the towns of Nantucket, Falmouth, and Barnstable, and the City of New Bedford. It should be noted that almost all of Martha's Vineyard's groceries, fuel and other consumer goods are shipped by truck on the SSA ferries.

Project

The Woods Hole component of the project proposes realignment and reconstruction of the 3 slips and replacement of the terminal building with a new facility to house all but the administrative offices, which are proposed to be relocated to the Palmer Avenue site.

The review of alternatives and project description are adequate.

The slip realignment proposals appear to be sound from both navigational and ADA concerns. Having all the slips ADA-accessible is a vast improvement over the current one. Navigational needs should be much better served by moving the 3rd slip away from the neighbors and making it usable for regular service if needed (while still only using 2 at one time).

Lengthening the transfer bridges from 30' to 50' is a very welcome improvement, and makes perfect sense to be consistent with all the other transfer bridges. The short transfer bridges presently in use make for difficulties loading and unloading at the highest and lowest tides, even for small cars that may bottom out. Trucks need the

greater clearance for height. Tidal range is also increasing along with Sea Level Rise; so this difficulty would only get worse.
With regard to planning for Sea Level Rise, the review of alternatives addressed a number of options for the terminal building. Re-homing the administrative offices to the Palmer Avenue site appears to be a wise choice for reducing the mass of the building as it sits in a highly visible viewshed. It is unfortunate that the elevation of the remainder of the proposed facility could not be raised to provide a bit of freeboard for Sea Level Rise. The present BFE of 13' will be met with the proposal, but that BFE will soon be obsolete. Designing with at least 2 feet of freeboard would prolong the useful life of the building and save the users from the expense of dealing with a flood-vulnerable building in a few decades. Balance must be struck with the building's prominence in its important viewshed, but it would still be prudent to plan for a building that won't be flooded before its' useful life is over. At the very least, the interior of the building could be flood-proofed in its design. Although this wouldn't be required at present BFE of 13', it would still make sense to take such measures as: keeping key utility functions at higher elevations (electric, communications, etc.), consider allowing for floodwaters to pass beneath the building rather than pushing against the walls, etc.

With regard to foot, car and truck traffic, the plan appears to be well thought out. The flow of car and truck traffic appears to be most often separated from foot traffic. The exception is the turning of trucks to load a freight boat in slip one. Passenger numbers are limited for those trips, however, and SSA personnel should be able to manage safely loading both. Pedestrian and vehicular separation for slip 3 is not as clear. Should slip 3 be used for some time, as in the case of heavy damage to another slip, there should be a plan to separate foot traffic from cars and trucks. From the drawings, it looks like all the vehicular traffic for slip 3 passes seaward of the terminal building in a south to north direction, directly crossing the foot and wheelchair traffic between the north pier and the terminal building. Is there a backup plan, such as routing the cars and trucks around the north side of the terminal in a seaward direction, leaving the foot and wheelchair traffic free access between the north pier and the terminal building?

The more significant aspects of the project are similarly well-thought-out. In the review of alternatives, the case is made for selecting the preferred alternative; although better choices were available in terms of adaptation to Sea Level Rise. Achieving balance between prudence regarding Sea Level Rise and protection of treasured viewsheds is not an easy one.

Thank you.

Sincerely,

Jo-Ann Taylor
MEPA Review Coordinator for the Martha's Vineyard Commission

Mr. Matthew Beaton, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn.: MEPA Office
Anne Canaday, EEA No. 15410
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Beaton,

As a long time resident of the Woods Hole community, I am concerned about the Steamship Authority's proposed plan to expand the terminal in Woods Hole. I am concerned about the ever increasing and dangerous traffic that comes through our village each summer. I think that the SSA's proposal for the Woods Hole terminal deserves a complete environmental review.

Thank you for your consideration,

Robin W. Ackroyd

Robin Ackroyd
Woods Hole Community Association

September 24, 2015

Canaday, Anne (EEA)

From: Susan Shephard [susan@whdb.net]
Sent: Thursday, September 24, 2015 5:48 PM
To: Canaday, Anne (EEA); Matthew.Beaton@mahouse.gov
Cc: internet, env (ENV)
Subject: The Steamship Authority, Woods Hole port

Dear Ms. Canaday et al.,

As a resident of Falmouth living just off Woods Hole Road, I believe the size and scope of the Steamship Authority's proposal to add a third slip and build a new terminal in Woods Hole deserves a full environmental impact review. I completely agree with the letter submitted by the Woods Hole Community Association, and won't bore you by repeating those points here. The impact of the SSA on such a small community is something all of us have been grappling with for years, decades actually. Please consider a full review.

Sincerely,

Susan Shephard
35 Cumloden Drive
Falmouth, MA 02540

Woods Hole Community Association
Incorporated in 1919
P.O. Box 327 Woods Hole, Massachusetts 02543

September 21, 2015

Mr. Matthew Beaton, Secretary of Energy and Environmental Affairs
Executive Office of Energy and Environmental Affairs
Attn: MEPA Office
Anne Canaday, EEA No. 15410
100 Cambridge Street, Suite 900
Boston MA 02114

Dear Secretary Beaton,

The Woods Hole Community Association has been following the plans for the expansion of the Martha's Vineyard, Woods Hole and Nantucket Steamship Authority terminal in Woods Hole closely for quite some time.

We appreciate the Steamship Authority's willingness to include the community in the discussions of this project.

The Steamship Authority is expanding their operational capacity with the addition of a third operational slip. The community believes that this is an expansion like the addition of an airport runway and thus deserves the same level of review, and that the Steamship Authority should complete a full Environmental Impact Report.

There are aspects of the Steamship Authority's operation not addressed in the ENF that make the Woods Hole Community Association believe a full EIR is warranted.

The Woods Hole Community Association also has concerns about the incremental expansion of the Steamship Authority over the past few years and the fragmented, rather than holistic, environmental reviews these expansions have received because they were undertaken at various times. In Falmouth these projects include the expansion of the Palmer Avenue parking area and the new parking lot on Thomas B. Landers Road; as well as the currently proposed expansion of the Woods Hole terminal and the not reviewed addition of a new vessel to the Steamship Authority's fleet.

The following are specific comments on the ENF filing:

LAND SECTION:

III. Consistency

B. (Consistency with the Falmouth Comprehensive Plan)

The proposed project is not consistent with the town of Falmouth Comprehensive Plan.

1) Economic Development:
"The road system in Falmouth, particularly around the village center, is extremely congested, especially during peak summer periods. The volume of traffic may potentially negatively impact future growth by causing people to avoid the area. The impassible streets also raise public safety concerns regarding the ability of emergency personnel to respond to calls in a timely fashion. To complicate the problem, Falmouth is inaccessible to the other Cape towns. There are limited routes to Hyannis, Mashpee, Sandwich and Bourne and long traffic backups occur.
The Martha's Vineyard Ferry terminals generate a large amount of traffic through Falmouth, and require extensive parking facilities to accommodate the visitors to the Island. The town should independently evaluate the impact of the ferry on the road system and evaluate it vis-à-vis its economic impact on affected businesses and employment of town residents." (Page 5, Falmouth Local Comprehensive Plan, Economic Development, January 25, 2005)

2) Adequacy of Infrastructure:
"There are frequent parking shortages in the summer months along various coastal areas and in our town and village centers. The Steamship Authority facilities, Woods Hole Village, Falmouth Village, Falmouth Inner Harbor and a range of public beaches and boat ramps all experience parking demands that exceed their capacities. The parking issues in these areas are not easily solvable due to the lack of available land and the high real estate costs. As Martha's Vineyard continues to be further developed, traffic and visitation to the island continue to increase, undoubtedly compounding the parking demand and traffic impacts within Falmouth. The Steamship Authority's current parking facilities have little room for expansion and as demand increases, alternative solutions may need to be considered. These considerations should range from "going up, instead of out" with structured parking at a few of their sites or partnering with the town or other entities to use properties that are underutilized in the summer for additional parking. Woods Hole Village experiences parking shortages and congestion throughout the summer months due to the ferry terminals, the scientific institutions and their summer students, professors and activities, and visitors to the village itself. The scientific institutions currently offer shuttle service from remote parking lots on Oyster Pond Road and the WHOI Campus to lessen the demand in the village." (Page 5, Falmouth Local Comprehensive Plan, Transportation, Element 4.1)

"Intersection Capacity & Congestion Directly linked to the town's road segments that are at or near capacity are our major intersections that are congested and have poor levels of service. The major signalized intersections that are at or near capacity

include: - Route 28 at Jones Road & Ter Heun Drive." (Page 6, Falmouth Local Comprehensive Plan, Transportation, Element 4.1) It should be noted that nearly all traffic headed for the Woods Hole Ferry terminal must pass through this intersection.

3) Open Space Impacts: The terminal expansion does not provide any improvements to open space or public access, but the Woods Hole Community Association is reassured to see the assurance that the project will improve access to the Shining Sea Bikeway. (Element 6, Falmouth Local Comprehensive Plan)

4) Compatibility with Adjacent Land Uses: The terminal site is situated between the historic village center and a residential neighborhood. The reconstruction does nothing to preserve "The historic buildings and landscapes of Falmouth unify and give identity to this 330- year-old coastal New England town. They provide stability in a rapidly changing world, a sense of place for an increasingly mobile population, and a connection to America's heritage for its residents and tourists." (Page 1, Falmouth Local Comprehensive Plan, Historic Preservation, Element 7.0)

C. Consistency with the Cape Cod Commission Regional Policy Plan, 2009

The project is inconsistent with the 2009 CCC RPP.

1) Economic Development: "Development and policy should complement the strengths that make Cape Cod unique and economically viable without taxing the built, human, and natural resources beyond their capacity." (Cape Cod Regional Policy Plan, Page 21) The Steamship Authority's expansion will clearly tax the built and human environment. The plan is silent on the economic development of Martha's Vineyard.

2) Adequacy of Infrastructure: The project will further stress intersections already identified as at or near capacity and does not comply with the stated goal of "To reduce and/or offset the expected increase in motor vehicle trips on public roadways, reduce dependency on automobiles, and reduce air and noise pollution. To promote a balanced and efficient transportation system that includes alternatives to automobile travel." (Page 70, Cape Cod Regional Policy Plan)

3) Open space impacts: The Steamship Authority's expansion will not make any improvements to open space or public access to the water, but we are pleased to read of the assurance that the bike path access will be improved.

WETLANDS, WATERWAYS, AND TIDELANDS SECTION

I. THRESHOLDS/PERMITS

A.&B. While there will be a small increase in area of Land Under the Ocean due to removal of the filled pier, this will be accompanied by filling other areas of Land Under the Ocean and may also have unintended consequences to currently undisturbed land. The re-

created Land Under the Ocean will have very poor habitat value. It will be exposed to almost constant scouring through the action of the vessels maneuvering in the slips and shaded from sunlight. The removal of the filled pier will also likely change the flow of the current in the area exposing the undisturbed eelgrass beds to the south of the slips to increased current and erosion. (See additional comments under HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION.)

It is extremely likely that the fill material removed from the filled pier will be contaminated to some extent. It is clear from those with knowledge of local history that a significant number of creosote pillings are encapsulated in the filled pier. It is also likely that the soil may have been contaminated by the creosote railroad ties and the railroad engines that once used the dock. Steamship Authority has not done significance borings on what the filled material may contain in the dock, but at other locations onsite has discovered arsenic and creosote residues.

The Woods Hole Community Association expects that these issues should be addressed in an EIR and in DEP's 401 Water Quality Certification permitting process.

D. The public is currently prevented from accessing almost all of the jurisdictional tidelands and there will be absolutely no improvement to this access with this new project.

G. The dredging mentioned in Section G seems only to include that within slip one, not the dredging that will have to occur in slips two and three. **This is a significant oversight**, as only a small portion of the dredging associated with the project will occur in slip one.

If the filled pier were maintained and the terminal not expanded with the third operational slip, significantly less dredging would be required with less environmental impact.

No physical or chemical data of the sediment has been included in the analysis of the dredging.

WASTEWATER SECTION

D. The site is currently connected via sewer main to the town of Falmouth's wastewater treatment plant. In addition to the wastewater produced in the buildings, The Steamship Authority pumps vessel wastewater into a holding vault and then into the municipal sewer. The addition of the new vessel will increase the volume of wastewater produced by the vessels that the town of Falmouth will be required to process.

TRANSPORTATION SECTION (TRAFFIC GENERATION)

I. Threshold/Permits

Woods Hole Community Association believes that the addition of a third slip can lead to significant increases in traffic generation and must be evaluated. Given that the Steamship

Authority's stated reason for being is to provide transportation it is by definition a traffic generator. The Steamship Authority has a long history of stating that they do not believe they will there will be growth and that there will be no need for them to provide increased ferry service, but this has always proved false. In 1979 while applying for a permit to add a second slip in Vineyard Haven the Steamship Authority gave this testimony to the Martha's Vineyard Commission:

> The Applicant made a presentation in favor of the development by John J. McCue, its General Manager. Mr. McCue presented a report entitled "Report on the Investigation of the Condition of the Vineyard Haven Steamship Terminal" prepared by George L. Wey, Engineering Consultant, and indicated that the reconstruction of the existing ferry slip would take approximately nine months and that the proposed second slip would be used during the reconstruction of the existing facility. Mr. McCue gave assurances to the Commission that the Applicant had no intention of increasing the level of service for the Island beyond that of the 1978 level, and stated that the Applicant would be pleased to place this condition in writing. George L. Wey, Engineering Consultant for the Applicant, also spoke as to the need for reconstruction, the basic engineering designs and the information set forth in his report.

(Page 6, http://mvcommission.org/sites/default/files/docs/dec_DRI_105___Steamship_Authority.pdf)

Clearly traffic levels have significantly increased since 1979 and the Steamship Authority is reusing its arguments that it must have an additional slip to facilitate reconstruction when in fact it will lead to increased traffic volume. The logical presumption should be for increased growth to match increased capacity.

Woods Hole Community Association believes that due to the local environmental and infrastructure impacts, the Steamship Authority should plan for its future additional growth to take place in a different port, preferably one off Cape and with better infrastructure.

AIR QUALITY SECTION

The potential for increased traffic volume and capacity must be considered as environmental impact to the town of Falmouth as a whole. Last year 514,244 vehicles were transported by the Steamship Authority through the Woods Hole terminal and an unknown number of vehicles came to Falmouth and parked or dropped people off so that their occupants could be transported by the Steamship Authority.

The Steamship Authority's vessels themselves also produce huge daily quantities of exhaust containing visible particulate matter and significant offensive odors.

The overall emissions of the Steamship Authority's operation should be considered.

SOLID AND HAZARDOUS WASTE SECTION

The Steamship Authority does not generate much of its own solid or hazardous waste but transports significant quantities of municipal solid waste and hazardous materials, all of which are transported across the Cape Cod Canal bridges and on roads that are functioning at, above, or near capacity.

The hazardous waste that is likely to be found on site when the expansion takes place must be dealt with carefully so as not to harm the marine environment.

HISTORICAL AND ARCHAEOLOGICAL RESOURCES SECTION

Woods Hole has a long and varied history. This site has been used continuously for several centuries. On the land side there may well be historic artifacts of note. It is likely that the first dredging took place to accommodate the precursors to the Steamship when they moved to this location in the late 1800s. This dredging would have disturbed the area known as "Parker's Flats", a portion of which is still existing to the south of the site. That formation has a peat bank or wall that has been exposed by the current. This indicates that Parker's Flats was at one point above water. That in combination with the fact that evidence of prehistoric activity has been found across Woods Hole lead us to believe that this sensitive area should be protected from dredging, and the changes to the erosional forces of the current due to the removal of the filled pier should be considered.

The barn to be demolished at the Palmer Avenue site is less than 50 feet outside the historic district and clearly visible from the district. The house associated with the barn lay within the historic district and was previously demolished by the Steamship Authority. If the Authority is committed to removing the building they should be encouraged to allow the building to be moved so that another piece of Falmouth history can be preserved.

Comments on the Appendices:

Appendix 8: II.

A. Bullet 5 states that the current "Slip 3 may be used only in case of emergency". So adding a third operational slip is clearly an expansion of capacity.

F. **Alternative Slip Solutions** The environmental impacts of removing the filled pier in terms of changes in current scouring were not considered.

The navigational impacts due to narrowing of the channel are of serious concern. The drawings provided show the vessel MV Island Home berthed in the third slip. This happens so infrequently as not to be remembered by the community. It is much more often the location of the MV Sankaty a vessel 20 feet shorter and 14 feet narrower than the MV Island Home. Or one of the other boats which are 10-25 feet shorter and 12 to 14 feet narrower than the Island Home. This means that the current channel is actually wider than shown. A vessel not listed in the slip solutions is the R/V Marcus Langseth, which is regularly berthed on the WHOI dock in recent years and is wider than the WHOI vessels listed, further constraining the channel.

The regular use of slip three will also lead to the ferry vessels maneuvering significantly closer to the opening of the Eel Pond Channel, an area with intense small boat traffic. Under the current operating conditions, ferries only do this twice a day, very early in the morning and last thing in the evening.

H. Relocating the administrative offices to the Palmer Avenue parking lot will lead to another point of traffic conflict on the already overcapacity Palmer Avenue corridor.

On page 105, the 10th bullet point refers to the improvements to the Shining Sea Bike Path being contingent upon reaching an agreement with the town of Falmouth, where everywhere else in the document improvements to the bike path are stated as a given. Improvements are priority for the community and the town. They should also be a priority for Steamship Authority and not be contingent on anything.

None of the concept plans proposed or considered by the Steamship Authority lead to any environmental improvements, only detriments.

Appendix 9: **Traffic Consistency Statement**

Introduction: The Woods Hole Community Association has serious concerns about the following statement: "And if and when there might be a material increase in traffic demand between Massachusetts mainland and the island of Martha's Vineyard, the SSA can be expected to respond to that demand by managing, reducing and mitigating the impacts of its traffic as it has done over the past decades." (Page 117)

- A material increase is not defined.
- The Steamship Authority's efforts, while appreciated, have not addressed significant concerns of the community over the years.
- The traffic data shown and used does not match with the Cape Cod Commission's data.
- No years and dates are given for the ADT's.
- A variety of different numbers are used for the reduction in parking spaces, sometimes including public spaces and sometimes not, sometimes including reduced employee parking and sometimes not.

The Steamship Authority has also fallen short on its commitments to in the past to committed goals and traffic management.

From the Martha's Vineyard Commission Regional Transportation Plan:

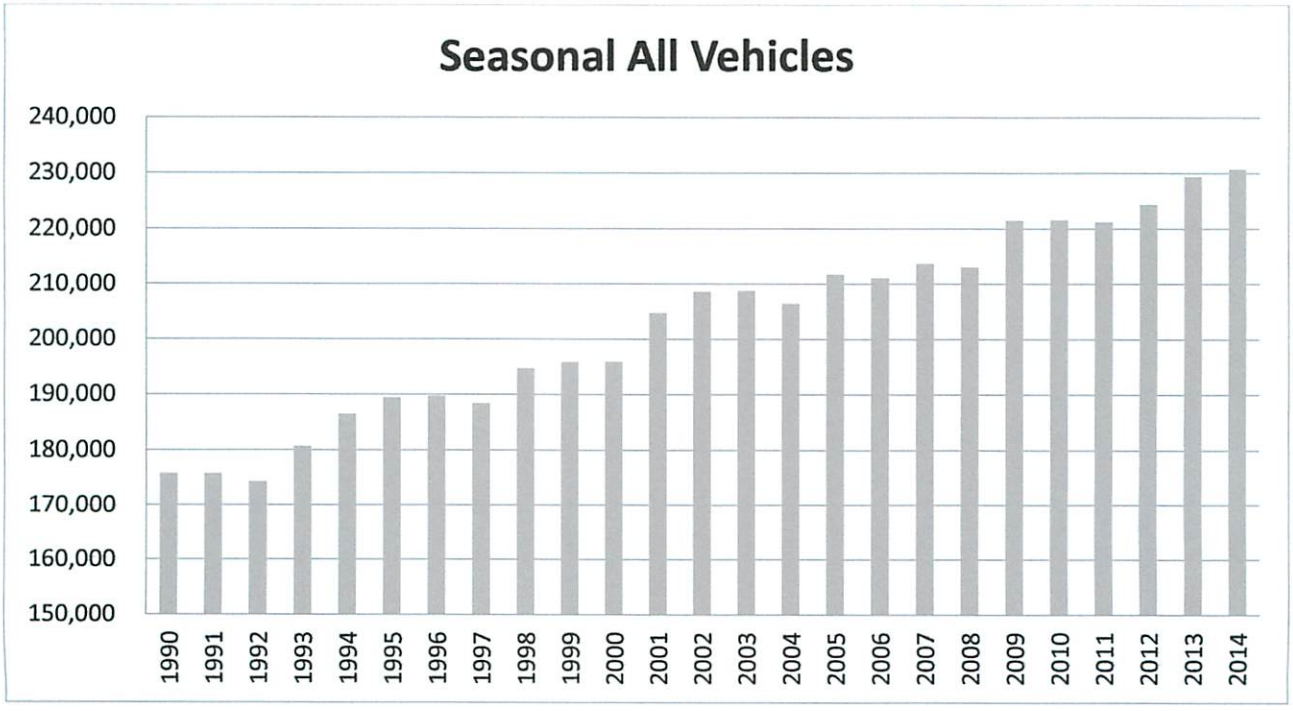
6.3 Objectives

- Maintain the summer capacity of vehicular access to the Island at the 1995 levels, based on the results of the 1997 Island-wide referendum on the subject.

Martha's Vineyard Regional Transportation Plan – 2011 Update 48

Yet 41,250 more vehicles were transported seasonally by SSA in 2014 than in 1995, a 21.77 percent increase.

Seasonal is defined by MVC as June through September inclusive.



Steamship Authority's traffic generation should also be considered in several distinct categories. Employee trips, arrivals including drop offs, and in its pulsed nature when disembarking in Woods Hole. The pulsing causes serious traffic challenges. When 76 CEUs (Car Equivalent Units) unload from the MV Island Home, shuttle buses depart, other public transportation departs, the Jones Rd., Route 28 intersection cannot handle the volume. The backup is often more than 1.5 miles and seriously constrains access to the Falmouth Hospital and route 28 from the South. Another 39 to 54 CEU's from the next vessel then disembark closely behind, with the accompanying busses, and exacerbate the problem.

The SSA's Licensing Passenger Ferry Service from Other Mainland Ports.

Licensing is an important tool that should be considered to mitigate the impacts of the Steamship Authority's proposed expansion Woods Hole. But it should be noted that expansion of licensed capacity leaving from Falmouth may also have serious environmental and traffic impacts.

Off Cape ports that are not constrained by the Cape Cod Canal bridges, small local roads, are serviced by mass transit, or have facilities for passenger and freight transport should be considered.

Barely mentioned, and its impact not considered, in the ENF is the addition of a new ferry, the MV Woods Hole, to the Steamship Authority's fleet. Recently it has become clear that this will be an additional vessel rather than a replacement for an existing vessel.

Woods Hole Community Association believes that due to the local environmental and infrastructure impacts the Steamship Authority's terminal expansion and reconstruction should undergo a full EIR.

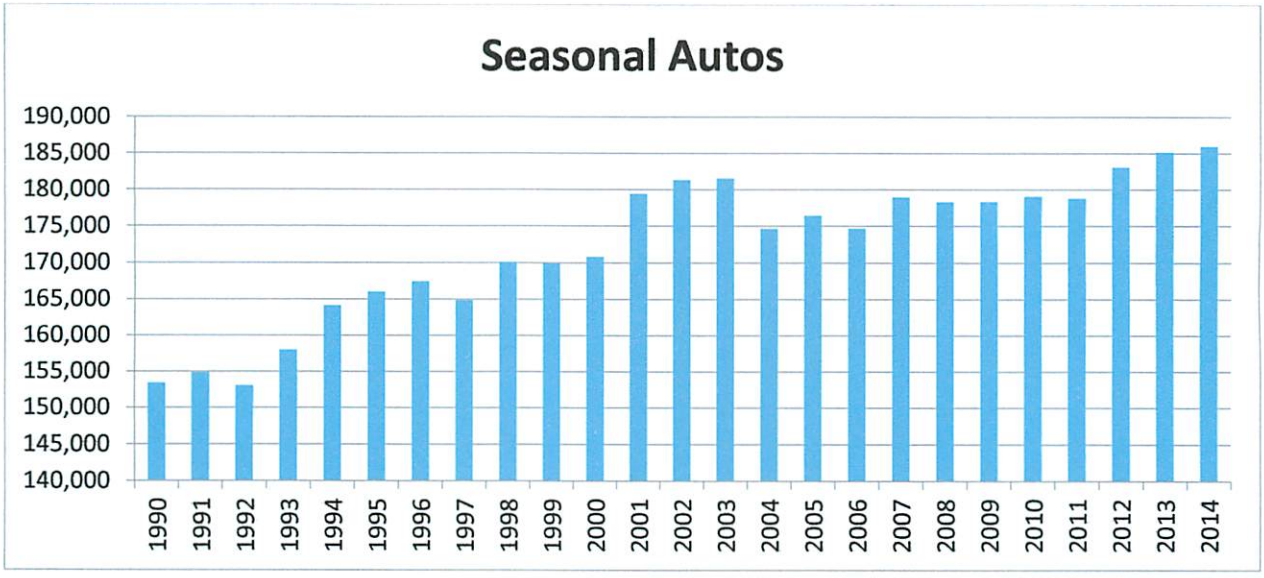
Due to the environmental impacts and limitations of the site, consideration should be given to limiting the Steamship Authority's capacity in Woods Hole at the 2010 number of vessel trips. Growth beyond this level should be accommodated by Steamship using an off Cape port better able to support it.

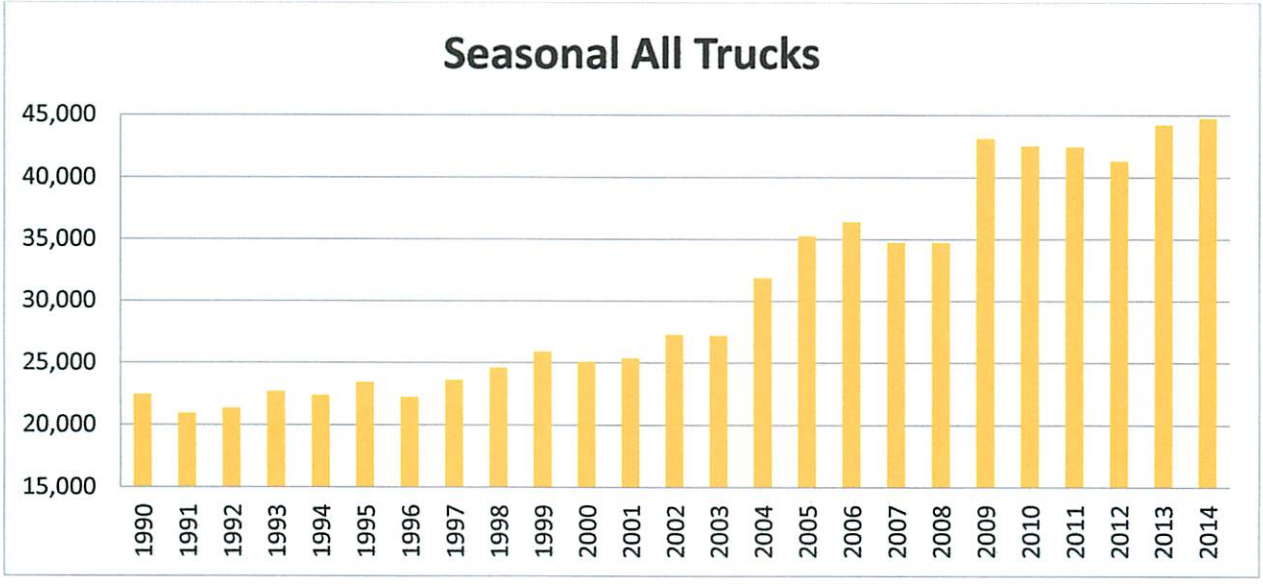
We thank you for your time and thoughtful consideration of this broad range of issues.

Sincerely,

Catherine Bumpus and Stephan Junker
Co-Presidents, Woods Hole Community Association

cc: State Senator Vitiato deMacedo
State Representative Timothy Madden
Falmouth Board of Selectmen c/o Julian Susso, Town Manager
Falmouth Planning Board c/o Brian Curry, Town Planner





The Commonwealth of Massachusetts
MASSACHUSETTS SENATE

SENATOR VINNY DEMACEDO
Plymouth and Barnstable District

STATE HOUSE, ROOM 313A
BOSTON, MA 02133-1053
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Ranking Member
SENATE WAYS AND MEANS

DISTRICT OFFICE
SUITE 229
10 CORDAGE PARK CIRCLE
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TEL. (508) 747-6500

September 25, 2015

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

Dear Secretary Beaton,

I am writing you today in regards to an issue that was recently brought to my attention by the Falmouth Board of Selectmen in regards to the recent unanimous vote by the Board to request a full Environmental Impact report (EIR) to be conducted on the proposed expansion of the Martha's Vineyard, Woods Hole and Nantucket Steamship Authority terminal.

The proposed expansion of the Steamship Authority and particularly the proposed construction/re-construction of a third boat slip in Woods Hole in the town of Falmouth is a complex project that will impact the entire town. Due to the complexity of the proposed reconstruction project, I believe it is imperative every aspect of the project is thoroughly reviewed before moving forward.

Thank you for your consideration of the Falmouth Board of Selectmen's request. If you have any additional questions, please do not hesitate to contact my office.

Sincerely,

Vinny deMacedo
State Senator-Elect
Plymouth Barnstable District

Canaday, Anne (EEA)

From: Denise Backus [denisesheabackus@gmail.com]
Sent: Sunday, September 27, 2015 5:03 PM
To: Canaday, Anne (EEA)
Subject: environmental review for SSA's proposal in Woods Hole

I definitely expect that this proposal deserves an environmental review. Denise Backus

September 28, 2015

Dear Secretary,

I fully support the very careful evaluation of the environmental impact of the project to expand the Steamship Authority terminal in Woods Hole, Massachusetts.

Jane A. Gilbrook
508 548 1169

Secretary Matthew A. Beaton
EOEEA

482 Woods Hole Road
Woods Hole, MA
02543
September 25, 2015

Dear Secretary Beaton,

I strongly support the request of the Woods Hole Community Association for a full review of the comprehensive implications of the expansion of the Steamship Authority's Woods Hole terminal.

Sincerely,

Philip N. Logan Ph.D.
Resource Economist

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENERGY AND ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

MEMORANDUM

TO: Matthew A. Beaton, Secretary, EEA
ATTN: Anne Canaday, MEPA Unit
FROM: Bruce Carlisle, Director, CZM
DATE: October 13, 2015
RE: EEA-15410, Woods Hole Ferry Terminal Reconstruct, Falmouth

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The Massachusetts Office of Coastal Zone Management (CZM) has completed its review of the above-referenced Environmental Notification Form (ENF), noticed in the *Environmental Monitor* dated August 26, 2105 and offers the following comments.

Project Description

The project involves the redevelopment of two Steamship Authority (SSA) properties: the Woods Hole ferry terminal (terminal site) and the Palmer Avenue parking lot (Palmer Avenue site). The existing terminal site consists of three ferry slips, a pier at the northwestern side of the site, on which a 20,000 square foot (sf) terminal/administration office building is located. The 5.67 acre Terminal site is almost entirely paved, and utilized for vehicle operations, including: vehicle staging areas, bus pick-up and drop-off areas, taxi stands, and employee and public parking areas. The Palmer Avenue site is an existing parking facility, operated by the SSA, is located approximately four miles north of the terminal site. It has a total of 1,753 parking spaces. The Palmer Avenue site is proposed as the relocation site for the administrative offices currently located at the Terminal site.

The redevelopment of the terminal site involves the reconfiguration of the 3 existing ferry slips to better accommodate vessel operations and to increase the distance between the adjacent Woods Hole Oceanographic Institute vessel slips and the relocated and reconstructed passenger terminal. This work includes the construction of a new terminal building and excavation a large portion of the existing filled pier. Approximately 24,500 sf of the filled pier will be excavated with approximately 8,200 sf of fill to be placed seaward of the existing slips 1 and 2, and approximately 575 inear feet of bulkhead will be set 70 feet seaward of the existing bulkheads to create the new filled pier configuration.

Project Comments

The SSA Woods Hole ferry terminal is a marine transportation facility supporting vehicle and passenger ferry service to the island of Martha's Vineyard. The facility plays a critical role transporting passengers, vehicles and freight to all communities on Martha's Vineyard. CZM recognizes the need to modernize this facility to better accommodate the increased number of passengers and freight that the SSA has experienced over the past few decades, and which will likely continue to increase in the future. In order to minimize potential impacts from this work, CZM recommends the following:

Certain required activities at this facility, such as fueling and limited maintenance operations, can be a potential source of contamination and could directly or indirectly impact coastal resource areas. CZM recommends that the proponent develop an Environmental Management Plan to reduce environmental impacts associated with ferry terminal operations. An Environmental Management Plan helps identify potential pollution sources associated with the proposed facility and should incorporate Best Management Practices into the design and operation of this facility. Due to the location of this facility within a mapped FEMA flood zone, particular attention should be given to minimizing storm-related impacts, the management of hazardous materials and materials that pose a potential water quality impact, vessel fueling operations and management, and on-site stormwater management. This document should be developed and presented as part of the required local, state and federal permitting process.

CZM recognizes that the proposed stormwater treatment system represents a significant water quality improvement over existing conditions. Presently, stormwater is directly discharged into the adjacent waters and has no treatment. CZM recommends that the stormwater system be designed to insure all components of the collection and treatment system can be secured and isolated in the event of a fuel or hazardous materials spill. This can help prevent hazardous material from entering the stormwater system and impacting surrounding waters.

CZM commends SSA for the innovative climate change considerations that are incorporated into the design of the site and address anticipated sea-level rise for the next 50 year period. CZM staff have been in consultation with SSA representatives to assist the SSA build resiliency into their design plans and will continue to do so.

Federal Consistency

The proposed project may be subject to CZM federal consistency review. For further information on this process, please contact, Robert Boeri, Project Review Coordinator, at 617-626-1050 or visit the CZM web site at www.state.ma.us/czm/fcr.htm.

BKC/sm

cc: Stephen McKenna, CZM Cape & Islands Regional Coordinator
Jim Mahala, MassDEP
Jennifer McKay, Falmouth Conservation Commission
59 Town Hall Square, Falmouth, MA 02540

Commonwealth of Massachusetts

Division of Marine Fisheries

251 Causeway Street, Suite 400
Boston, Massachusetts 02114
(617) 626-1520
fax (617) 626-1509

David E. Pierce
Director

Charles D. Baker
Governor
Karyn E. Polito
Lieutenant Governor
Matthew A. Beaton
Secretary
George N. Peterson, Jr.
Commissioner
Mary-Lee King
Deputy Commissioner

October 13, 2015

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Page Czepiga, EEA No. 15410
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Beaton:

The Division of Marine Fisheries (*MarineFisheries*) has reviewed the Environmental Notification Form as well as the revised plans dated October 2, 2015 for Woods Hole, Martha's Vineyard, and the Nantucket Steamship Authority to carry out the Woods Hole Ferry Terminal Reconstruction Project in Great Harbor in the Town of Falmouth. The "Terminal Site" component of the project includes repairs to existing bulkhead, dolphin, fender, and transfer bridge infrastructure and slip reconfiguration. This latter component would include associated dredging. Existing marine fisheries resources and potential impacts to these resources are outlined below.

The southerly portion of the project site has been mapped previously by the Department of Environmental Protection (DEP) as an eelgrass *(Zostera marina*) meadow (Fig. 1), one of the most productive habitats for numerous marine species [1,2]. A survey performed in July 2015 by GZA GeoEnvironmental, Inc. confirmed the presence of eelgrass in this region. Eelgrass has declined in Massachusetts by approximately 20% in the past decade, an estimated 3 acres of eelgrass lost per year [3]. Every effort should be made to avoid impacts to eelgrass.

Figure 1. DEP mapped eelgrass in the vicinity of the project site.

MarineFisheries has identified Great Harbor as spawning habitat for winter flounder (*Pseudopleuronectes americanus*). Winter flounder enter the area and spawn from January through May, laying clumps of eggs directly on the substrate. These demersal eggs hatch approximately fifteen to twenty days later. The Atlantic States Marine Fisheries Commission has designated winter flounder spawning habitat as "Habitat Areas of Particular Concern" (HAPC). A recent stock assessment has determined that Southern New England/Mid Atlantic winter flounder populations are at only 16% of the recommended recovery level [4]. Because of the winter flounder stock status, every effort should be made to protect winter flounder and their spawning habitat.

MarineFisheries offers the following comments for your consideration:

- The southernmost proposed dredge area in the original ENF bordered a recently delineated eelgrass bed and also directly overlapped the northern section of the bed (ENF Fig. E-1). The revised plans avoid direct impacts by removing the dredging footprint within mapped eelgrass habitat (Attachment A). Indirect impacts could still result under the revised plans if work activity occurs in close proximity to eelgrass. For example, dredging near eelgrass could result in indirect loss through slumping and erosion. Turbidity associated with post-dredge vessel traffic could also result in further indirect impacts to bordering eelgrass in this region. The distance between the northern border of mapped eelgrass and the southern border of the dredge track is not listed in Attachment A. *MarineFisheries* recommends a minimum 75 foot buffer from the top of the slope plus overdredge relative to the nearest edge of any eelgrass identified in the project area to minimize indirect impacts.
- Any dredge activity permitted adjacent to (within 75 feet) of eelgrass should require associated pre- and post-dredge monitoring and mitigation at a 3:1 ratio for any observed eelgrass loss.

- A time of year (TOY) restriction of **January 15 to May 31** is recommended for all dredging activity to minimize impacts to winter flounder spawning, demersal egg survival, and juvenile development [5].

Questions regarding this review may be directed to John Logan in our New Bedford office at (508) 990-2860 ext. 141.

Sincerely,

David E. Pierce
Director

cc: Falmouth Conservation Commission
Stephen Lecco, GZA GeoEnvironmental, Inc.
Chuck Martinsen, Falmouth Shellfish Constable
Christopher Boelke & Alison Verkade, NMFS
Robert Boeri, Steve McKenna, CZM
Ed Reiner, EPA
Ken Chin, DEP
Richard Lehan, DFG
Kathryn Ford, Tom Shields, John Mendes, Christian Petitpas, DMF

References

1. Jackson EL, Rowden AA, Attrill MJ, Bossey SJ, Jones MB (2001) The importance of seagrass beds as a habitat for fishery species. Oceanography and Marine Biology: an Annual Review 39: 269-303.
2. Heck KL, Jr., Carruthers TJB, Duarte CM, Hughes AR, Kendrick G, et al. (2008) Trophic transfers from seagrass meadows subsidize diverse marine and terrestrial consumers. Ecosystems 11: 1198-1210.
3. Costello CT, Kenworthy WJ (2011) Twelve-year mapping and change analysis of eelgrass (*Zostera marina*) areal abundance in Massachusetts (USA) identifies statewide declines. Estuaries and Coasts 34: 232-242.
4. Northeast Fisheries Science Center (2011) 52nd Northeast Regional Stock Assessment Workshop (52nd SAW) Assessment Report. 962 p.
5. Evans NT, Ford KH, Chase BC, Sheppard J (2011) Recommended Time of Year Restrictions (TOYs) for Coastal Alteration Projects to Protect Marine Fisheries Resources in Massachusetts. Massachusetts Division of Marine Fisheries Technical Report, TR-47.

DP/JL/sd

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October 2, 2015

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

RE: Woods Hole Ferry Terminal Reconstruction
Falmouth, MA
EEA #15410

Dear Secretary Beaton:

On behalf of the Woods Hole, Martha's Vineyard and Nantucket Steamship Authority (SSA), GZA GeoEnvironmental, Inc. is pleased to submit this response to the substantive comments and feedback that we have received during the MEPA process. We hope that this letter helps you in preparing the MEPA Certificate.

On September 23, representatives of the Massachusetts Office of Coastal Zone Management (CZM) met with the SSA and its consultants to discuss the ENF. As part of the discussions during the meeting, CZM provided constructive comments and valuable insight regarding the focus of their review of the Project during the MEPA process. This letter responds primarily to the verbal comments provided by CZM as well as additional written comments received from the Association to Preserve Cape Cod, the Cape Cod Commission and others. As you know, on September 23, 2015 we requested, and were granted, an extension of the ENF comment period from September 25 to October 13, 2015 so that we can provide additional information to interested parties for their review, and allow those parties to provide new or additional comments on the ENF based on this supplemental submission.

<u>Eelgrass and Rare Species Habitat Avoidance</u>

As stated in the ENF, design modifications would be evaluated to avoid or minimize impacts to eelgrass beds south of Slip 1. Attachment A depicts the current design, which is substantially the same as the one provided in the original ENF submission except for adjustments to the dredge area and dolphin alignment along Slip 1. As a result of these adjustments, the project will avoid direct impact to the mapped eelgrass area. Furthermore, during construction, turbidity curtains will be placed north of the eelgrass beds to minimize sediment and debris movement into the eelgrass area. These

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adjustments also result in the limit of the proposed work being outside of the Estimated and Priority Habitat areas.

The Intersection of Climate Change and Accessibility

The SSA, as an entity with facilities along the Massachusetts coastline, recognizes the need and importance of anticipating the effects of climate change, specifically with regard to the potential for sea level rise and associated impacts from major storm events. The SSA also needs to provide a convenient, fully accessible environment for its passengers and visitors. Accessibility in this context is as defined by the Americans With Disabilities Act of 1990 and in 521CMR 18: Transportation Terminals.

For this water-dependent, public transportation project, the SSA believes it is important to consider the objectives of resiliency and accessibility together, as an interdependent set of desired outcomes. The project will undertake all reasonable and prudent measures to maximize the terminal's resiliency, while also providing accessibility to its vessels, buildings, and land transportation functions to the fullest extent practicable.

Many different forecasts (models) of sea level rise have been produced by numerous agencies and institutions that encompass a wide range of predictions and scenarios. A recent (January 2015) study was completed by the United States Army Corps of Engineers (USACE) entitled the North Atlantic Coast Comprehensive Survey (NACCS). This report predicts a sea level rise of 2.5 feet by 2068 and 4.9 feet under the USACE's "High" scenario. Other scenarios reported in the study predict a sea level rise in the range between 0.8 feet and 3.7 feet by 2068 for Sandy Hook, New Jersey, which is expected to be similar to that of other coastal areas, including those in Massachusetts. Fifty years is the design service life for this Project, which brings the end of its projected useful life to the year 2072 (completion in 2022 plus 50 years of service).

Most recently, representatives from CZM advised the SSA to consider additional, readily achievable and practical measures to increase the resiliency of the terminal building as the SSA is doing for the new slips (including the transfer bridges and the passenger loading platforms), as presented in the ENF. CZM conveyed that they are currently advising Costal High Hazard A Zone projects to incorporate an additional 2 feet of flood mitigation measures above building code requirements, as practical. Specific measures may include additional raised floor elevations, dry floodproofing and/or wet floodproofing.

In early 2016 it is anticipated that the Commonwealth of Massachusetts will adopt the 9th Edition of the State Building Code, 780 CMR (the Code). Under the currently proposed revisions to the Code, the minimum building floor levels in Coastal High Hazard

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A Zones for Class II structures will change from a requirement to be at or above the Base Flood Elevation (BFE) to at or above BFE+2 feet as measured to the underside of the lowest horizontal structural member. Assuming a one-foot deep structural floor system, the resulting net change due to the proposed revisions to the Code is approximately +3 feet over the current 8th Edition of the Code. For the location of the terminal building, the FEMA mapped BFE for flood Zone AE13 is elevation 13 (note, the FEMA mapped Zone VE15 is elevation 15).

Because the terminal is a water-dependent operation and must provide compliant accessible paths of travel between landside areas, terminal building and vessel boarding doors, there are certain limits to how much additional height can be incorporated into the initial build out. The terminal also connects to Railroad Avenue which abuts the site at elevation +5.6'. An accessible route must be maintained to this public way, which provides both pedestrian and vehicle connections to and from the site. A principal objective of the Project is to provide a convenient and efficient network of accessible paths for the thousands of ferry passengers who pass through the terminal on busy days among all of the ferry slips, passenger boarding platforms, walkways, buildings, parking areas, bus berths and public sidewalks and streets.

Based upon the needs of that network of accessible paths, the SSA will determine the highest optimal elevation of the terminal building and provide protection to BFE+4 (elevation 17) by incorporating the design of dry and/or wet-floodproofing techniques. Dry floodproofing may include the design of removable flood panels to protect openings, flood doors to protect egress stair exits, and flood-resistant exterior wall construction where no openings are present. Alternatively, wet floodproofing techniques would make use of openings or breakaway walls to allow flood waters to pass through the building.

The other areas of the Terminal Site will also address resiliency to sea level rise and accessibility in both the near term and the long term:

- *Floating Aft Passenger Boarding Platforms*: Floating aft platforms with 70' long, hinged gangways will be capable of accommodating sea level rise of over 2 feet while improving accessibility of the gangways used to board passengers traveling on the SSA's larger passenger/vehicle ferries. This is an optimal solution for addressing both sea level rise and accessibility requirements in anticipation of the next 50 years.

- *Fixed Forward Passenger Boarding Platforms*: The new forward platforms will be constructed to provide vessel access under current sea level conditions, which provide appropriate accessibility for passengers traveling on the SSA's larger passenger/vehicle ferries. These platforms will be designed in anticipation of

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"adding height" in the future by installing ramps and/or platforms on the pier deck without the need to add supporting foundational capacity. This system will be able to add more than adequate height to address the projected sea level rise over the next 50 years. The current design is adding an additional dead load capacity of 50 pounds per square foot (psf) above what is required to accommodate the initial ramp and platform system.

- *Approaches*: Elements of the most practical and buildable of these approaches, or a combination of these approaches, will be incorporated in the design to achieve the desired balance of accessibility (particularly during the initial years after completion of the Project) and resiliency (particularly as the Project nears the end of its useful design life).

- *Bulkhead/Apron Area*: The western/waterside portions the site will be elevated above the current grades by 3 to 4 feet to provide accessible paths of travel to all 3 slips, as well as providing a maximally elevated platform for the terminal building. The maximum amount of additional elevation is limited by adjacent street elevations, from which it is required to have accessible paths of travel.

- *Future vessel access*: The new slips will incorporate a flexible design approach that allows for increasing the height (and/or length) of transfer bridges and passenger loading platforms without major disruption to operations. This will be able to be accomplished by adding "fill" to the landside and repaving the approach. The site drainage will be designed for this anticipated future change and the bulkhead will be designed to anticipate an additional 250 psf of surcharge loading (due to future raising of the grades) in the area of the new fill.

- *Marine Structures*: Mooring and berthing dolphins will be designed to be able to take vessel loads at higher elevations. The fender panels will be designed to be able to be moved up (raised) on the dolphin faces. Mooring fixtures will be set back slightly to accommodate higher freeboard elevations of the ferries due to projected sea level changes.

Operationally, the SSA will continue to stop service when weather conditions cause potentially unsafe conditions both at the dock as well as at sea.

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Porous Pavement Considerations

Porous pavement was considered for the parking and vehicle queuing areas at the Terminal Site as a means to help manage stormwater runoff. The SSA has successfully implemented large-scale use of porous pavement at its seasonal Thomas B. Landers Parking Lot (TBL Lot). While the SSA determined that porous pavement would be useful and appropriate for a seasonal remote parking lot, it is not appropriate, nor would it be successful, at the Terminal Site. The Terminal Site requires intense sand/salt application and snow plowing activities during the winter for vehicular, pedestrian and employee safety. The heavy application of sand and salt, will quickly and significantly reduce the porosity of the pavement thereby severely limiting its effectiveness in infiltrating stormwater. Furthermore, the constant snow plowing will likely damage the surface of the porous pavement, leading to constant maintenance and/or full-scale replacement. For these reasons, the use of porous pavement is not practicable at the Terminal Site.

Spill Mitigation

As with any type of fueling operation, there is potential for spills; therefore, planning for such an event is prudent. Given that the Terminal Site is located adjacent to Great Harbor, it is important to have a system in place that will keep potential fuel spills from entering the stormwater system which discharges to the harbor at the bulkhead. The future stormwater system will be designed to allow for isolation of portions of the underground conveyance system so that spills can be captured before discharge to the harbor. This will be done with oil and grease separation devices and manual or automated shut-off valves that will capture the spill for clean-up and disposal in accordance with State and Federal regulations.

Alternative Design Concepts and Their Environmental Impacts

As stated in the ENF, numerous alternative designs were developed and evaluated during the Feasibility Study phase of the Project. These alternatives were vetted extensively with the public and were evaluated with respect to practicability, operational efficiency, cost, aesthetics/viewsheds, navigation safety and environmental impacts. Four general alternative waterside schemes were developed based upon a partial excavation of the existing pier and bulkhead shifts westward from the existing Slips 1 and 2 ranging in length from 20 feet to 130 feet (Attachment B). The preferred alternative has a bulkhead shift of 70 feet.

Each of the four waterside alternatives would result in a positive environmental impact by increasing Land Under the Ocean (LUO) because the pier that currently occupies the area for proposed slips 2 and 3 would be excavated to create LUO under each alternative.

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The approximate increase in LUO associated with each alternative is presented in Table 1. Proximity to mapped eelgrass beds would be similar under each alternative.

Table 1. Impacts of Design Alternatives

Alternative	Land Under Ocean Created (approximate)	Comment
20' Bulkhead Shift	40,000 sf	Due to the need to relocate the terminal building from the existing pier that will be excavated to another location on site, does not allow for adequate landside space for terminal, parking and queuing.
70' Bulkhead Shift	16,000 sf	Preferred alternative. Allows for adequate navigation to/from neighboring slips and provides sufficient landside space for terminal, parking and queuing.
100' Bulkhead Shift	21,000 sf	Very close to navigation lanes. Potential impediment to vessels navigating to/from slips to the north. Increased difficulty in navigating ferries because of strong currents in harbor. Would encroach upon Estimated/Priority Habitat Area.
130' Bulkhead Shift	100 sf	Encroaches upon navigation lanes. Potential impediment to vessels navigating to/from slips to the north. Increased difficulty in navigating ferries because of strong currents further into the harbor. Would provide most amount of landside space for terminal, parking and queuing. Would encroach upon Estimated/Priority Habitat Area.

Traffic and Parking

As noted in the ENF, the Project does not meet or exceed any review thresholds related to traffic generation (see 301 CMR 11.03(6) or roadways or other transportation facilities (see 301 CMR 11.03(6)). Nor does the Project require any state permits related to state-controlled roadways or other transportation facilities. In addition, the Project will not generate any increased vehicular traffic at either the Terminal Site or the Palmer Avenue Site; rather, it will result in a slight decrease in the number of vehicle trips between the Terminal Site and the Palmer Avenue Site of approximately 200 Average Daily Trips (ADT) due to the relocation of its administrative offices from the Terminal Site to the Palmer Avenue Site.

Importantly, the Project will not increase the site's current capacity for the staging, movement, and parking of vehicles. The amount of space dedicated to these functions is not designed to increase and thus there will not be an increase in SSA's operating capacity at the Terminal Site. While in theory the SSA could increase vessel operating

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capacity by utilizing all three ferry slips simultaneously (instead of operating from two slips at a time), the current two slips are in fact not used to their capacity now and are capable of handling additional trips on their own.

However, the Association to Preserve Cape Cod (APCC) notes that the SSA still might need additional parking capacity due to the reduction in the number of parking spaces at the Terminal Site and at the Palmer Avenue Site and possible future traffic growth. The APCC asks that the SSA identify any future demand for parking and, if the SSA currently does not have sufficient capacity to accommodate that demand, to identify specific locations where the additional parking will be supplied. But, as has been the case for the past few years, the SSA expects to continue to have sufficient capacity to park the cars of all of its customers except for a few peak summer weekends, and the project should not materially affect the SSA's ability to park its customers' cars.

Concededly, the SSA will be losing approximately 50 long-term customer parking spaces at the Terminal Site and approximately 160 additional customer parking spaces at the Palmer Avenue Site (although 50 of those spaces still should be able to be used by customers over the weekends when parking demand is greatest). Further, as the SSA also noted in its ENF, the SSA is currently negotiating with the Town of Falmouth, which owns the back Woods Hole parking lot, to renew its lease for that lot after the current lease expires on December 31, 2015. Because of the elimination of the 20 public metered parking spaces in the front Woods Hole lot, the SSA has proposed designating some of the parking spaces in the back Woods Hole lot for use by employees of Woods Hole restaurants and other businesses instead of by SSA customers. This would also reduce the capacity of the back Woods Hole parking lot for SSA customers. But despite the loss of those spaces for customer parking, assuming that the SSA otherwise renews its lease for the back Woods Hole parking lot, the SSA should still have sufficient parking capacity to park the cars of all of its customers except during a few peak summer weekends.

As the APCC noted in its comment letter, the SSA opened its new 1,922-space parking lot on Technology Park Drive (the TBL Lot) in late June 2015. At the same time, it stopped using the following other off-site lots that it had been using on a regular basis during the summer:

- 677 Gifford Street – a total of 385 parking spaces;
- 709 Gifford Street – a total of 575 parking spaces;
- Falmouth High School (874 Gifford Street) (previously leased by the SSA for use on summer weekends) – a total of ~500 parking spaces;
- 1249-1955 Route 28A, Cataumet (Bourne) (the Cataumet Lot) – (leased by the SSA for use during summer weekends) – a total of ~950 parking spaces.

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The only exceptions to the closings of those other off-site lots have been during two weekends during this past summer: the 2015 Independence Day Weekend and the weekend of August 22-23, 2015 when unexpected large numbers of customers arrived who needed to park their cars during those weekends. Although the SSA could have turned away the additional customers whose cars could not be parked in its current parking lots, it felt that such an action would create more traffic problems in Falmouth because those customers would then have no choice but to "troll" the streets trying to find parking spaces at other locations. Therefore, it re-opened the Cataumet Lot on those two occasions to park the cars of those additional customers.

In the future, the SSA hopes to make more efficient use of its existing parking lots (including its lots in Woods Hole, the Palmer Avenue Site, the TBL Lot and the adjacent Falmouth Ice Arena) to accommodate any occasional unexpected high level demand. This year the SSA also entered into a lease allowing a car rental agency to rent cars at the SSA's Palmer Avenue Site, and the SSA hopes that the availability of rental cars at that convenient location for island residents will reduce the need for them to park their cars in the SSA's parking lots. But in the event these combined measures are not sufficient on an occasional summer weekend, the SSA can again re-open the existing Cataumet Lot to accommodate the additional demand. The Cataumet Lot is located even farther away from downtown Falmouth and SSA shuttle buses traveling between that lot and the Woods Hole terminal would simply continue to use Route 28 to the Otis Rotary and then Route 28A to the Cataumet Lot (instead of driving south on Route 28A from the Cataumet Lot), as they have in the past. While re-opening that lot will not prevent traffic congestion caused by private individuals who might offer more attractive parking options for SSA customers in downtown Falmouth or Woods Hole, as they have in the past, the occasional re-opening of that lot itself will not create any significant traffic congestion.

Alternatively, if the Falmouth High School is available during those few peak summer weekends, the SSA could re-open that lot. But that alternative would result in SSA shuttle buses traveling on Gifford Street, which has more traffic congestion than Route 28 (as well as more traffic congestion than Woods Hole Road). For the same reason, assuming that it continues to have all of its current parking lots available, the SSA does not anticipate re-opening either of its two previous Gifford Street parking lots (677 Gifford Street and 709 Gifford Street). Finally, the SSA could create additional parking spaces at the Palmer Avenue Site by digging into the hillside at the northwest corner of the site west of the Shining Sea Bikepath, or it could construct another parking lot on the undeveloped land it owns at the intersection of Thomas B. Landers Road and Research Road (and/or the land it acquired from the Town of Falmouth between Route 28 and Research Road directly to the west of the SSA's property), or it could acquire other

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property for parking (although it has no current plans to do so and has not considered any other potential sites for this purpose).

Wastewater at Palmer Avenue

A new septic system will be installed at the Palmer Avenue site in order to accommodate wastewater flows from the new administration building. The septic system will be designed in accordance with 310 CMR 15 (Massachusetts "Title V" regulations). The old septic system in the vicinity of the abandoned parking lot office.

Stormwater at Palmer Avenue

Concerns have been raised by the APCC regarding the SSA's decision to move its general offices to the Palmer Avenue Site and the effect that the new office building will have on stormwater. In 2013, the SSA completed installation of stormwater management improvements at the Palmer Avenue Site. The design uses Low Impact Development (LID) technologies with bio retention areas and groundwater recharge chambers. The design was sized to handle a 50 year storm that equates to a 6.5" rainfall event. The building will be located in an area of the site lot that does not disturb the underground recharge chambers or the above ground bio retention areas; however, installation of the septic system to service the administration building may require relocation of one of the underground stormwater infiltration galleries. Should relocation of one of the infiltration galleries be necessary, a properly designed and sized replacement infiltration gallery will be installed under the existing parking lot. Since the building will be located on an area of existing pavement, no change is proposed to the amount of impervious area at the site. Similarly, the employee parking area will be simply displacing existing customer parking spaces. In summary, there will be no negative impact to the functionality of the stormwater system because there will be no increase in impervious surfaces and the location of the general offices at the Palmer Avenue Site is not anticipated to increase the amount of stormwater to be managed at the site.

Hazardous Materials Management & Disposal

The Terminal Site is currently listed with Massachusetts Department of Environmental Protection (MassDEP) due to the presence of petroleum hydrocarbons (specifically, 2-methylnaphthalene) in soil and arsenic in groundwater at concentrations above applicable regulatory thresholds as outlined in Massachusetts Contingency Plan (MCP). The release was reported to MassDEP on June 12, 2014 and Release Tracking Number (RTN) 4-25180 was subsequently issued by the Department. Albert J. Ricciardelli is the Licensed Site Professional (LSP No. 4180) for the Project. A Phase I Initial Site Investigation and Tier Classification Submittal was filed on June 15, 2015. The Site's current status under the MCP is Tier II.

To date, the SSA has identified two non-contiguous areas within the existing solid fill pier where soil is impacted with petroleum hydrocarbons at concentrations above regulatory thresholds. Additional sampling and testing within the limits of the proposed excavation have also identified soil that is not impacted (and is therefore suitable for unrestricted off-site reuse). Contaminated soil will be managed under the Massachusetts Contingency Plan (MCP) as well as the Similar Soils Policy (WSC#-13-500). Impacted soils taken off-Site will be transported under Bill of Lading (MassDEP Bureau of Waste Site Cleanup BWSC-112), to qualified/permitted receiving facilities using dump trailers. The soil will be reused to the extent possible at either a "Like Site," as allowed under the MCP, or a permitted receiving facility, such as a municipal solid waste landfill (e.g., use as daily cover/structural fill). Potential receiving facilities have not yet been selected but are expected to be available at the time the soil is removed. Unimpacted soils will be transported under a Material Shipping Record (MSR).

Material leaving the Site will be subjected to laboratory analysis to determine/evaluate off-Site reuse/disposal alternatives.

Soils excavated from below the ground water table and all dredge spoils will be dewatered on-site. Effluent will be treated to remove suspended solids and returned to the area of excavation within the limits of the existing solid fill pier.

All proposed demolition activities associated with the SSA, and all buildings, at both the Terminal and Palmer Avenue Sites will comply with applicable Solid Waste and Air Quality Control Regulations. In accordance with MassDEP Asbestos Regulations (310 CMR 7.15) a pre-demolition survey will be conducted by asbestos inspectors licensed by the Massachusetts Department of Labor and Work Force Development, Division of Labor Standards (DLS). Samples of suspect asbestos containing building material will be collected and sent to a DLS certified laboratory for analytical analysis using USEPA approved methods.

Prior to demolition activities, a BWP AQ 06 Notification form will be submitted to MassDEP proposing measures which will be taken to prevent or alleviate dust, noise, and odor nuisance conditions which may occur during the demolition. Also prior to demolition, a DLS licensed asbestos abatement contractor will be hired to properly remove and dispose of any asbestos containing materials in accordance with 310 CMR 7.15. An Asbestos Notification form (ANF-001) will be submitted to MassDEP at least ten (10) working days prior to the start of asbestos abatement work.

All asbestos containing waste materials will be properly stored and disposed of at a landfill approved to accept such material in accordance with all Massachusetts

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regulations. All asphalt, brick and concrete (ABC) rubble generated will be handled in accordance with Massachusetts solid waste regulations. Upon completion of asbestos abatement activities, a post abatement visual inspection will be conducted by a licensed asbestos project monitor.

If you have any questions, feel free to contact Stephen Lecco at 413-726-2114.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

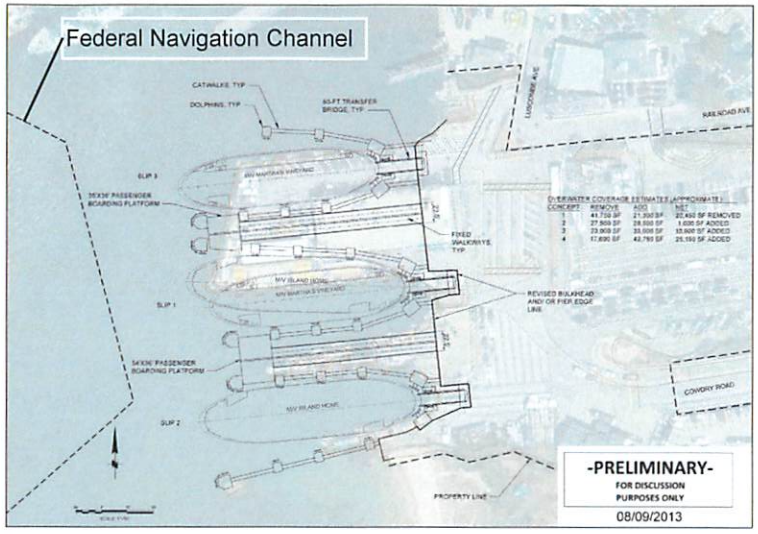
Stephen Lecco, AICP, CEP
Senior Project Manager

Dino Fiscaletti, P.E.
Consultant/Reviewer

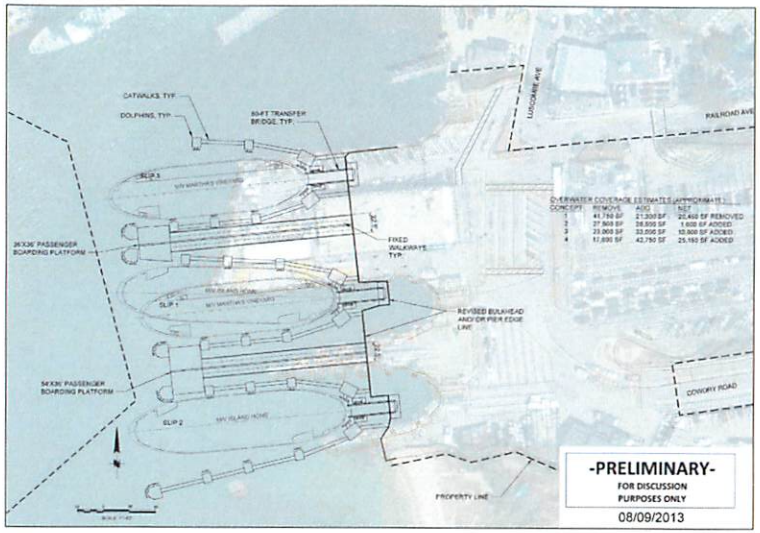
SLL/DF
j:\o gza intercompany projects\03.0033931.05 woods hole ferry\permits\enf\enf certificate & comments\151002 enf response letter final.docx

Attachments: A. Current Design Concept
B. Alternative Design Concepts

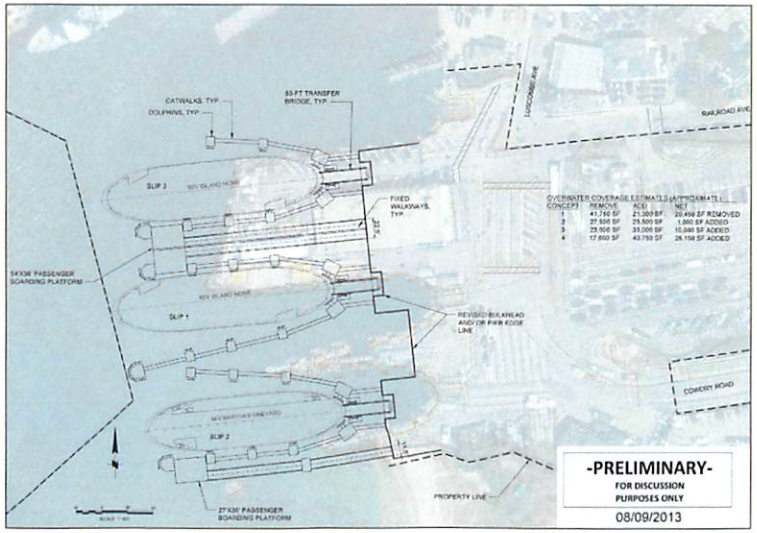
ATTACHMENT B



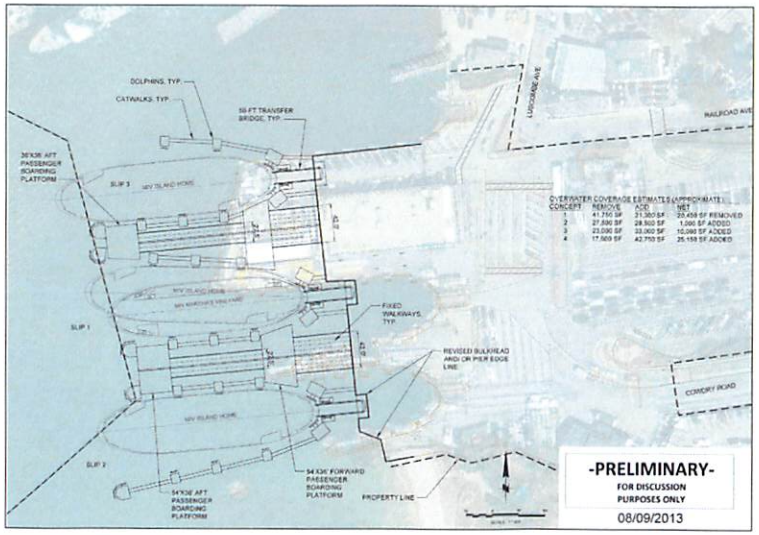
20' Bulkhead Shift



70' Bulkhead Shift

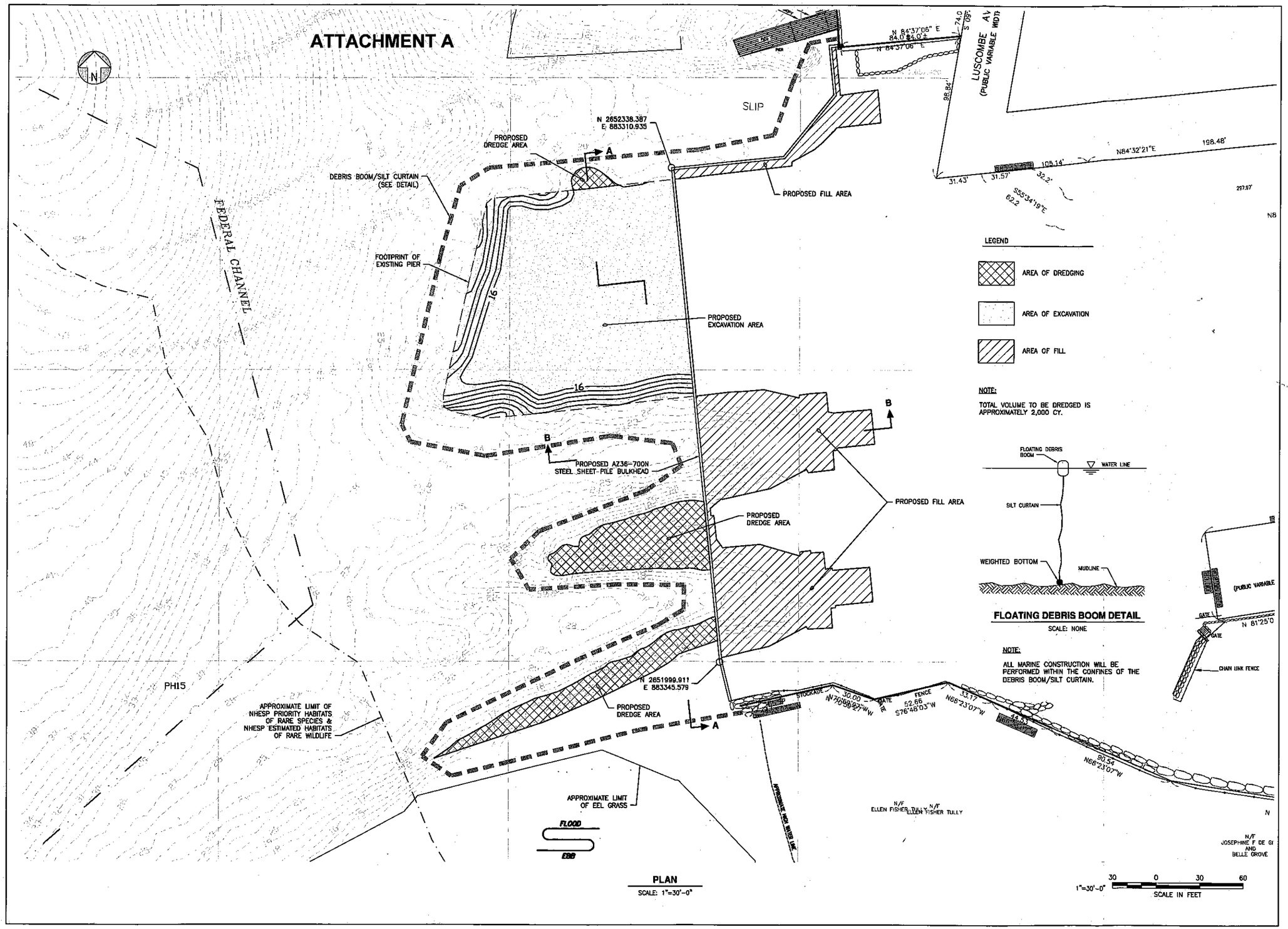


100' Bulkhead Shift



130' Bulkhead Shift

ATTACHMENT A



PLOT DATE: 8/30/2015 12:48 PM
FILE PATH: 160924 2571-15.02 WH 3.8 DREDGE AND FILL PLAN.dwg
REFERENCE FILE PATH:

The Steamship Authority

Woods Hole, Martha's Vineyard & Nantucket Steamship Authority
1 Cowdry Rd, Woods Hole, MA 02543

Woods Hole Ferry Terminal Reconstruction

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Issue / Revision Schedule

No.	Revision	Date

Phase

Drawn By:	TEQ
Checked By:	DLP
Date:	2015/09/30
Scale:	1" = 30'-0"

0 5' 15' 30' 60'

Seal

DREDGE/EXCAVATION AND FILL PLAN

WH 3.8

Canaday, Anne (EEA)

From: Anne Halpin [halpin319@gmail.com]
Sent: Wednesday, September 23, 2015 7:41 PM
To: Canaday, Anne (EEA)
Subject: Re:SSA PROPOSED WOODS HOLE TERMINAL

Dear Ms. Canaday, I'm writing to support the request of the WH Community Association for an environmental impact review. Thank you. Anne Halpin

319 Woods Hole Road
Falmouth, MA 02540