



February 26, 2014

Kevin Kotelly, P.E.
US Army Corps of Engineers,
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Concord, MA 01742

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**Subject: Emergency Geotube Installation below 87-105 Baxter Road
'Sconset, Nantucket, MA. File Number: NAE-2005-350**

Dear Mr. Kotelly:

The purpose of this letter is to confirm in writing our understanding of the status of Corps review of the above-referenced project, following our conversation on February 21, 2014 in regards to your letter dated February 4, 2014 and follow-up email correspondence from Epsilon on February 6 and February 7, 2014. This letter also provides to you the information you requested about ongoing maintenance of the project.

As we discussed, the project was permitted under an emergency certification and construction occurred from mid-December through the end of January. The as-built plan for the project (dated January 30, 2014) and submitted to the Corps via email on February 7, 2014, shows that the project components are above the high tide line (HTL) elevation of 5.11 feet Mean Low Water (MLW). The HTL elevation was established by averaging each month's highest high tide level recorded from the NOAA Nantucket Station (ID 8449130) over a one year period. I understand that the Corps concurs with the determination that the constructed project is above the high tide line and is therefore outside of your jurisdiction.

As we discussed, the design plans for the project (submitted to the Corps via email on December 27, 2013) indicate that the high tide line elevation is approximately 45- feet or more seaward of the anchor tube (the most seaward component of the project), which led to our determination that construction of the project would not require a Corps permit. Due to the timing of permitting, with the project receiving approval in mid-December, construction had to occur during the winter storm season, when the beach may have temporarily narrowed. Stakes at elevation 5.4 feet MLW (i.e., somewhat higher than the high tide line elevation of 5.11 feet) were placed on the beach at the end of December. Photographs of the staked elevation

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and work on the beach were provided to the Corps via email on December 30, 2014. The construction crew was aware of the HTL location on the beach and made every effort to stay landward of that line; however, it was sometimes hard to determine the exact location of the HTL on the beach due to storm conditions and associated wave runup. We note that the Army Corps definition of high tide line excludes storm surges:

*"The term 'high tide line' means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the fore shore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency *but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm*" [emphasis added].*

Overall, there were no permanent impacts below the HTL and any temporary impacts that may have occurred below the HTL elevation have been restored to pre-existing conditions through natural wind and wave action.

Based on our conversation, I understand that the Corps is taking no further action on the work completed to date. Specifically, the Corps is not requesting additional information, not issuing an enforcement order, and not requiring or seeking an after-the-fact permit. I also understand that the Corps is requesting (1) that we provide information on maintenance of this project to the Corps and obtain a permit if required, and (2) that we contact the Corps if any expansion of the project is proposed and obtain a permit if required. The attachment to this letter provides the requested information on maintenance. Additionally, a Notice of Intent for the project is under review that contemplates expansion of the geotube approximately 400 feet southward to the southern border of 85 Baxter Road. We will provide information to you on the construction of the proposed expansion in a subsequent submittal to assist your determination of whether a Corps permit is required for this work.

Mr. Kevin Kotelly
US Army Corps of Engineers
February 26, 2014

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Please contact me at (703) 489-8945 or mhartnett@epsilonassociates.com, or Les Smith at (978) 461-6212 or lsmith@epsilonassociates.com, for any questions regarding this submission.

Sincerely,

EPSILON ASSOCIATES. INC.



Maria B. Hartnett
Senior Consultant

Enclosure

Copy Furnished (via email):

Jeff Carlson, Natural Resources Coordinator, 2 Bathing Beach Road, Nantucket, MA 02554, jcarlson@nantucket-ma.gov

Ms. Elizabeth F. Kouloheras, DEP Southeast Regional Office, Wetlands and Waterways, 20 Riverside Drive, Lakeville, MA 02347, elizabeth.kouloheras@state.ma.us

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MAINTENANCE PROTOCOLS FOR THE GEOTUBE SYSTEM AT
87-105 BAXTER ROAD, NANTUCKET, MA
FEBRUARY 26, 2014

Maintenance of the above-referenced project is primarily anticipated to include replacing the sand cover. It is anticipated that sand will be added over the geotubes two times each year (spring and fall), with possible additional deliveries during the winter if required by severe storms. As during the initial installation, sand will be delivered at the top of the bluff to a conveyor belt that will dump it over the edge. (Once the coastal bank is vegetated, ADS pipes will be placed on the bank face to convey the sand while protecting the vegetation.) An excavator and a bulldozer will be positioned on the template above the third geotube; the excavator will pull sand from the pile and make it available to the dozer, which will spread the sand over the length of the geotubes and up and down the face of the geotube as necessary. During a small maintenance event, a skid steer or loader could be used in place of the excavator and bulldozer; these would work in approximately the same locations as the excavator or bulldozer. Overall, the sand maintenance activity will occur either on top of the geotubes and/or at the back of the beach (within approximately 15 feet of the seaward edge of the lowest geotube). The equipment will access the beach via the Hoick's Hollow accessway to the north of the project location. Therefore, the sand maintenance would not appear to be within Army Corps jurisdiction.

The only other maintenance activity that may be required is repair of the geotubes from any storm damage. This activity would involve a skid steer or an excavator depending on the scale and location of the damage and required patch. This would not involve slurry pumping, only infilling and patching. As with the sand maintenance activity, this work would occur at the back of the beach, above the high tide line, and equipment access would be via Hoick's Hollow. Therefore, any geotube repair activities would not appear to be within Army Corps jurisdiction.