

December 2, 2020 C19318.00

Harwich Waterways Committee c/o John Rendon, Harbormaster 715 Main Street Harwich, MA By Hand Delivery

Re: <u>Notice of Intent: Request for Waterways Comments</u>

Proposed Pier, Ramp & Float Oliver Cox 7 Skecheconet Way W. Harwich, MA Map 4 Parcel C1-4

On behalf of our client, Oliver Cox, we are submitting 6 copies of a request for comments for a Notice of Intent application for the above referenced project. The following items are enclosed:

- Request for Waterways Comments Letter
- Project Description
- AECOM, Shellfish Assessment, dated 11/6/19
- Locus Man
- Coastal Engineering Co., Inc., Plan Showing Proposed Pier Platforms, Ramps & Floats, dated 11/30/20

Please schedule this for your December 16, 2020 meeting. If you have any questions or require additional information, please give our office a call. Thank you.

Sincerely,

COASTAL ENGINEERING CO., INC.

sain Cole

Sarah Cole

Enclosures: as stated

cc: Harwich Conservation Commission by email

Oliver Cox

Roger P. Michniewicz, Coastal Engineering Co., Inc.



December 2, 2020 C19318.00

Harwich Waterways Committee c/o John Rendon, Harbormaster 715 Main Street Harwich, MA

Re: <u>Notice of Intent: Request for Waterways Comments</u>

Proposed Pier, Ramp & Float Oliver Cox 7 Skecheconet Way W. Harwich, MA Map 4 Parcel C1-4

Dear Committee Members:

On behalf of our client, Oliver Cox, we are requesting a review and endorsement of the above referenced project. Please forward comments to Amy Usowski, Harwich Conservation Agent, to be included with our Harwich Conservation Commission Notice of Intent application for the project.

A representative from our office will be at the September 18, 2019 Waterways Committee meeting to discuss the project.

Sincerely,

COASTAL ENGINEERING CO., INC.

Roger P. Michniewicz

RPM/sgc

cc: Harwich Conservation Commission by email

Oliver Cox

#### **Project Narrative**

This project includes the construction of a proposed pier, ramp, and float in the Herring River. Both a hydrographic survey and shellfish survey were performed at the site to assess existing site and shellfish habitat and population characteristics along the property shorefront for analysis of possibly siting of a pier facility in compliance with the Town of Harwich Conservation Commission Wetland Protection Regulations. A Shellfish Survey and Sediment Survey were performed at the site by Pamrla Neubert Ph.D., Senior Marine Biologist with AECOM after which she prepared the attached Shellfish Habitat Summary Report dated November 9, 2019. The report concludes that the proposed project will not have a significant, adverse impact to shellfish or shellfish habitat. The survey at the site indicated that sufficient depth of water below Mean Low Water (MLW) can be easily attained within the required overall length of the pier, ramp, and float between the location of Mean High Water (MHW) at the site and the end of the float. The length of the proposed pier facility will extend into Herring River about 36 feet from Mean High Water. Based upon our recent field survey, the proposed pier facility will be able to extend into Herring River from the coastal bank without needing to cross any salt marsh. The deep water width of Herring River is about 145' in the vicinity of the proposed pier. The proposed pier project was approved by the Waterways Committee in April, 2020 and a filing with the Harwich conservation Commission was made in May, 2020.

That original filing included a fixed pier that was designed to be supported by two pile bents spaced about 14' on center and with the pile bents being supported by two 8" diameter greenheart timber piles. The pier was designed with an overall deck width of 4 feet utilizing 2x6 decking planks spaced at least ½" apart. The underside of the pier deck stringers was designed to be located a minimum of 5 feet above MHW at the site to comply with DEP Chapter 91 regulations regarding public passage along the shoreline. The proposed pier facility was designed to include a 3' wide X 20' long ramp, and an 8' x 20' float (160 sq. ft.) held in place by two- 12" diameter greenheart timber piles as shown on the plan. The larger piles securing the float were proposed to be well-embedded because the river current is quite rapid at the location of the proposed pier as is evidenced by the very deep river bed (EL. -14) located adjacent to the proposed pier.

During the hearing, the Conservation Commission expressed concern regarding the ongoing erosion of the river bank at the location of the proposed pier and stated that they felt that the proposed pier piles located directly adjacent to the base of the river bank would greatly accelerate erosion of the bank. The bank in this area is located on the outside edge of an oxbow in the river where the river flow velocity is the greatest. In response to those concerns of the Commission at the hearing, the Notice of Intent filing was withdrawn. Consequently, the attached revised pier design plan has been prepared that addresses the concerns of the Commission. The plan indicates a proposed pier with one end founded on piles located 10 feet back from the top of the river bank and the other end founded on piles located in the river at least 10 feet away from the toe of the river bank. The entire pier facility is proposed to be prefabricated of marine grade aluminum. There is no salt marsh at the location of the proposed pier, and the river bottom depths at the location of the pier facility are such that no dredging is required to maintain the minimum required water depth under the float. The proposed float is the same size as previously proposed and extends the same distance into the river as previously approved by the Waterways Committee.

All components of the proposed pier facility are designed to be located at least 25' from the adjacent property lines as required by the Army Corps of Engineers, and at least 65' from all components of the adjacent pier facility located northeast of the site. The Herring River has a deep water channel (EL -5.1 NAVD88) adjacent to the proposed pier facility that is about 90' wide as shown on the site plan. The site plan indicates the location of three existing moorings located in the river in the general vicinity of the proposed pier facility.

Based upon the Shellfish Habitat Assessment at the site prepared by Pamrla Neubert of AECOM on November 6, 2019, there appears to be no shellfish at the location of the proposed pier. This appears to be due to the depth of the river bottom at this location and the high velocity of the river flow at the location of the proposed pier.



## Shellfish Habitat Assessment 7 Skecheconet Way, Harwich, MA

To: Town of Harwich Conservation From: Pamela Neubert, AECOM

Commissioners

Conservation Commission 9 Jonathan Bourne Drive Pocasset,

Administrator MA 02559, USA

File: Oliver H Cox Date: November 6, 2019

1311 10th Street N W Washington, DC 20001

On November 6, 2019 AECOM completed a shellfish habitat assessment at a proposed pier location adjacent to 7 Skecheconet Way, Harwich, MA. The proposed project is within the tidal waters of the Herring River (**Figure 1**) and is surrounded by year-round and seasonal residential development.

The results of this shellfish survey are being submitted as part of the applicant's Notice of Intent (NOI) package to meet performance standards and recommendations for both the Commonwealth of Massachusetts (MA) and the Town of Harwich for construction of a new water dependent structure and provides a complete and accurate description of the shellfish resources at the proposed project location. The resource areas within 100 feet of the project site include: land under the ocean, land containing shellfish, salt marsh, coastal bank, and land subject to coastal storm flowage.

# **Survey Methodology**

AECOM's survey methodology followed those approved and utilized for shellfish studies throughout the Cape Cod including the Town of Harwich (Harwich) as well as other southeastern Massachusetts municipalities including Nantucket and Martha's Vineyard. Shellfish stations at the proposed project site were arranged in a grid pattern. The investigation included surveying the area along transects perpendicular and parallel to the proposed pier, and float. A centerline was established running along the center of the proposed pier, and float location. Additional transects were established at 10-ft. intervals on either side of the proposed pier centerline out to 50-ft. running parallel to the centerline. Transects were established Parallel to shore and set every 10-ft. Samples were collected at the grid nodes. Samples were approximately 1-cubic foot of substrate and processed through a 0.25-inch mesh basket at each of the station locations. General sediment texture and other fauna observed were recorded and are presented on Figure 2 and Figure 3.

Figure 1. Proposed Project 7 Skecheconet Way, Harwich, MA. Green line depicts proposed project location.





Figure 2. Shellfish Habitat Substrate Survey.





Figure 3. Shellfish Survey Results. Species Collected.



#### **Survey Results**

AECOM's survey found no eelgrass present within the project area, which was consistent with MADEP figures provided within the MassGIS OLIVER website. The inshore area consisted of a steep sandy area that transitioned to sand and gravel at mean low water. The inshore surveyed footprint was observed to have saltmarsh, peat mixed with a sandy sediment type. Water depth beyond the AECOM 50 foot surveyed transect was greater than 13 feet and, therefore samples were not obtained due to the water depth (**Figure 2**). Two (2) American oysters were collected from two (2) of the eighty-three (83) sample stations (**Figure 3**). No other shellfish were obtained.

The proposed structure is mapped by Massachusetts Division of Marine Fisheries (MADMF) to be suitable (Figure 4, shellfish suitability) habitat for quahogs (*Mercenaria mercenaria*) and bay scallops (*Argopecten irradians*), however, no quahogs or bay scallops were observed. The area is not mapped for eelgrass (*Zostera marina*) by Massachusetts Department of Environmental Protection (MADEP). The proposed project is located in an area The Town of Harwich was classified as suitable for oysters (*Crassostrea virginica*) (Figure 5).

#### **Conclusions**

The shellfish survey was performed using a methodology that accurately maps shellfish abundance in the area of the proposed project. Based on observations made during the shellfish survey, the intertidal zone is suitable shellfish habitat for both oysters and quahogs. No eel grass was present in the project location.

Pertinent Resource Areas as defined by Commonwealth of Massachusetts 310 CMR, and Town of Harwich General Bylaws include:

- Land Under the Ocean Massachusetts 310 CMR 10.25
- Land Containing Shellfish 310CMR 10.34
- There are no coastal dunes, mud flats, and/or rocky intertidal natural resources associated with the proposed project
- Town of Harwich Chapter 304 8H Conducting a shellfish survey

## Massachusetts 310CMR 10.25 Land Under the Ocean Performance Standards

Massachusetts 310CMR 10.25 states: "When land under the ocean or nearshore areas of land under the ocean are found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention or flood control, 310CMR 10.25(3) through (7) shall apply". These include as summarized below:

- (5) Project not included in 310CMR 10.25(3) or (4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage, erosion, coastal banks, dunes or salt marshes.
- (6) Projects not included in 310 CMR 10.25(3) which affect land under the ocean shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries habitat or wildlife habitat caused by:
- (a) alterations in water circulation:
- (b) destruction of eelgrass (Zostera marina) or widgeon grass (Ruppia maritima) beds;
- (c) alterations in the distribution of sediment grain size;
- (d) changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or (e) alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae.
- (7) Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.



### Pertaining to Massachusetts 310CMR 10.25 Land Under the Ocean:

The proposed Project will not adversely affect sediment transport, destroy or pollute fisheries and shellfish habitat or add nutrients to the Herring River. There is no eelgrass or widgeon grass in the Project area, there are no rare vertebrates or invertebrate species identified that would be affected by this project.

# Massachusetts 310CMR 10.34 Land Containing Shellfish Performance Standards

Massachusetts 310CMR 10.34 defines land containing shellfish as follows:

"Land Containing Shellfish means land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish. Significance. Land containing shellfish shall be found significant to the protection of land containing shellfish and to the protection of marine fisheries when it has been identified and mapped as follows:

(a) by the conservation commission or the Department in consultation with the Division of Marine Fisheries and based upon maps and designations of the Division of Marine Fisheries;

or

(b) by the conservation commission or the Department, based upon maps and written documentation of the shellfish constable or the Department. In making such identification and maps the following factors shall be taken into account and documented: the density of shellfish, the size of the area and the historical and current importance of the area to recreational or commercial shellfishing.

Except as provided in 310 CMR 10.34(5), any project on land containing shellfish shall not adversely affect such land or marine fisheries by a change in the productivity of such land caused by:

- (a) alterations of water circulation;
- (b) alterations in relief elevation;
- (c) the compacting of sediment by vehicular traffic;
- (d) alterations in the distribution of sediment grain size;
- (e) alterations in natural drainage from adjacent land; or
- (f) changes in water quality, including, but not limited to, other than natural fluctuations in the levels of salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.
- (6) In the case of land containing shellfish defined as significant in 310 CMR 10.34(3)(b) (i.e., those areas identified on the basis of maps and designations of the Shellfish Constable), except in Areas of Critical Environmental Concern, the issuing authority may, after consultation with the Shellfish Constable, permit the shellfish to be moved from such area under the guidelines of, and to a suitable location approved by, the Division of Marine Fisheries, in order to permit a proposed project on such land. Any such project shall not be commenced until after the moving and replanting of the shellfish have been commenced.
- (7) Notwithstanding 310 CMR 10.34(4) through (6), projects approved by the Division of Marine Fisheries = that are specifically intended to increase the productivity of land containing shellfish may be permitted. Aquaculture projects approved by the appropriate local and state authority may also be permitted.
- (8) Notwithstanding the provisions of 310 CMR 10.34(4) through (7), no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37".

### Pertaining to Massachusetts 310CMR 10.34 Land Containing Shellfish:

According to 310 CMR 10.34(5) Notwithstanding the provisions of 310 CMR 10.34(4), "projects which temporarily have an adverse effect on shellfish productivity but which do not permanently destroy the habitat maybe permitted if the land containing shellfish can and will be returned substantially to its former productivity in less than one year from the commencement of work, unless an extension of the Order of Conditions is granted, in which case such restoration shall be completed within one year of such extension".

 Water circulation would not be adversely changed. Tidal currents in the area are small and would not be altered by the placement of the proposed pylons.



- There will not be an increase in compacting of sediment by vehicular traffic.
- The project will not alter the distribution of sediment grain size.
- The project will not adversely alter the natural drainage from adjacent land.
- The project will not change the water quality, including, salinity, dissolved oxygen, nutrients, temperature or turbidity, or the addition of pollutants.
- This project will have no adverse effect on rare vertebrate or invertebrate species as the proposed Project is not within an area considered as habitat for rare wildlife for coastal wetlands.

### Town of Harwich General Bylaws Chapter 304 -8H Water Dependent structures

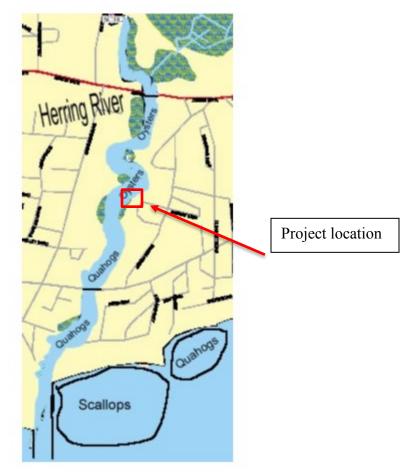
"No structure shall be located within 50 feet of an existing eelgrass bed or within a shellfish area defined by the Town bylaws or Town Shellfish Warden. The presence or absence of shellfish at a proposed site must be determined by a shellfish survey submitted by the applicant. The survey shall include existing populations of all sizes of commercially important species of shellfish (clams, quahogs, scallops, and mussels) and shall also include other species of mollusks which may indicate the capacity of the area to support commercially important species. The survey shall also include a description of shell fragments, if feasible, and references, if available, to historical information regarding the presence or absence of shellfish species."

# Pertaining to Town of Harwich General Bylaws Chapter 304 -8H Water Dependent structures

The area is not mapped for eelgrass (*Zostera marina*) by (MADEP) and no eelgrass was observed during the survey. MADEP has deemed the area suitable habitat for softshell clams, and quahogs. The Town of Harwich has designated the Project area as having oysters (**Figure 4**). The shellfish survey conducted by AECOM on November 6<sup>th</sup> found two (2) American oysters from two (2) of the eighty-three (83) sampled stations (**Figure 3**). These were the only shellfish sampled throughout the project location. Therefore, this project will not adversely impact shellfish habitat or shellfish resources as proposed.



Figure 4. Town of Harwich Shellfish Habitat Map



Please do not hesitate to contact me if you have any questions. Sincerely yours,

Pamela Neubert, Ph.D. Senior Marine Biologist

Pamela I. Neubst

