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August 9, 2021

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

PROJECT NAME : Rock Harbor Commercial Wharf Improvement Project
PROJECT MUNICIPALITY : Orleans
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 16403
PROJECT PROPONENT : Town of Orleans
DATE NOTICED IN MONITOR : July 9, 2021

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).

Project Description

As described in the Environmental Notification Form (ENF), the Town of Orleans (Town) is proposing reconstruction and improvements to an existing, water-dependent commercial wharf located within Rock Harbor in Orleans to address aging infrastructure as well as improve safety and modernize commercial operations. Proposed improvements include installation of a new steel bulkhead, a pile-supported commercial off-loading deck (including a high capacity, 1-ton hoist system), two timber piers and commercial floating dock systems with gangway access, a public landing and viewing area and extended pedestrian walkway.

Existing steel and timber bulkheads will be replaced with a steel bulkhead. The north-south face of the replacement bulkhead that is directly adjacent to the navigable waterways of Rock Harbor will be installed 20 feet landward of the existing structure. The existing timber bulkhead that runs east-west along the backside of the pile-supported timber off-loading pier will remain in place and will be over-sheeted with new steel sheeting. From the eastern-most corner of the over-sheet, a new bulkhead will be installed which will continue south along Rock Harbor Road and then turn west along Bay View Drive

to replace the existing graveled stone revetment that currently stabilizes these two roadways. Two gangways will provide access to a new commercial offloading dock and deck. The commercial offloading dock will be installed seasonally to avoid ice damage. The offloading pier is proposed to be replaced with a pile-supported concrete pier. On the southern end of the offloading pier, a new public landing and viewing area and sidewalk extension will be constructed that will tie into the existing pedestrian walkway currently providing access along the Rock Harbor waterfront to allow visitors to view the commercial boat operations. This connectivity will establish a total of ± 820 linear feet (lf) of public access along the entire western side of the project site. The viewing platform and sidewalk will be separated from the commercial operations to improve pedestrian safety. Improvements are proposed to provide a net benefit to coastal resource areas and return previously filled tidelands to the Commonwealth. The project may be phased based on availability of funding.

Project Site

The 5.62-acre project site is comprised of two Town-owned parcels located at 113 Rock Harbor Road within Rock Harbor in Orleans. The harbor area consists of a fairly narrow waterway with an established 3-foot deep navigation channel which supports existing public water-dependent uses on both the Orleans and Eastham sides of the harbor. Rock Harbor serves as an essential economic hub that supports commercial fishing, shellfishing and charters within Cape Cod Bay. The harbor houses a winter fleet of quahog boats and hosts the largest charter boat fishing fleet on Cape Cod in the summer months. The project site and the surrounding/adjacent areas of the harbor currently provide seasonal dockage for approximately 120 vessels from April through December. Vessels are comprised of approximately 21 sportfishing charter boats, 24 commercial fishing vessels, a Harbormaster search/rescue vessel, and the remainder consists of recreational boaters. Generally, a half dozen or so commercial fishing vessels will dock at the Commercial Wharf Facility during the off-season. The commercial fishing fleet bring in a wide variety of seafood from striped bass, bluefish, bluefin tuna, surf clams, quahogs, softshell clams, bay scallops, blue mussels, razor clams, and lobsters.

The existing commercial wharf facility was originally constructed in the late 1950s/early 1960s and includes a 16-foot wide by 85-foot long pile-supported timber off-loading pier and a solid-fill parking lot and work area that is retained by ± 310 linear feet (LF) of a combination steel and timber bulkhead system. Vehicular access is provided from the solid-fill area and Rock Harbor Road. The shoreline area that is adjacent to the roadway is currently stabilized by an existing stone revetment that extends to provide protection along Bay View Drive which is the intersecting roadway to Rock Harbor Road. A 2018 inspection of the facility determined that the existing timber bulkhead structure that supports the adjacent shoreline/backland area immediately adjacent to the commercial wharf off-loading pier was at the end of its design life and in need of replacement. To address safety concerns, load restrictions were placed on the pier. Trucks are no longer able to access the pier, and this has impacted commercial operations.

Coastal wetland resource areas include Land Under Ocean (LUO), Salt Marsh, Coastal Beach, Intertidal Zone, Land Containing Shellfish (LCS), and Land Subject to Coastal Storm Flowage (LSCSF). The Inner Cape Cod Bay/Cape Cod Basin is a designated Outstanding Resource Water (ORW). The project site within Rock Harbor contains mapped habitat for a variety of shellfish species including soft shell clam, quahog and American oyster habitat. Rock Harbor also provides habitat for a variety of finfish species including white perch, alewives, and winter flounder. While a portion of Rock

Harbor is located within the Inner Cape Cod Bay Area of Critical Environmental Concern (ACEC), the project site is not.

Environmental Impacts and Mitigation

Potential environmental impacts of the project are described in Table 7 below. Measures to avoid, minimize, and mitigate environmental impacts include adherence to time of year (TOY) restrictions, construction of stormwater improvements and implementation of construction period best management practices (BMPs).

TABLE 7 - SUMMARY OF RESULTING IMPACTS/RESTORATIVE BENEFITS ALTERNATIVE 6 ("PREFERRED ALTERNATIVE")	Land Under Ocean (SF)	Saltmarsh (SF)	Coastal Beach (SF)	Intertidal Zone (SF)	Mapped Land Cont. Shellfish (SF)	Notes/Comments
TOTAL IMPACTS PROPOSED	82.4	3.1	289.8	287.6	352.8	135 SF shading impacts to saltmarsh
LESS TOTAL REMOVED/RESTORED	-3,412.4	-6.3	-781.8	-781.8	-69.2	-184 SF shading impacts to saltmarsh removed
NET RESULTING IMPACTS <i>(Note: Negative sign indicates Net Benefit/Gain)</i>	-3,330.0	-3.2	-492.0	-494.2	283.6	-49 SF shading impacts to saltmarsh

Jurisdiction and Permitting

This project is undergoing MEPA review and requires an ENF pursuant to 301 CMR 11.03 (3)(b)(6) because it requires an Agency Action and Construction, reconstruction or expansion of a pile-supported structure of 2,000 or more sf base area, provided the structure occupies flowed tidelands or other waterways. The project requires a Section 401 Water Quality Certification (WQC) and a Chapter 91 License (c. 91) from the Massachusetts Department of Environmental Protection (MassDEP). The project is subject to federal consistency review by the Massachusetts Office of Coastal Zone Management (CZM). The Massachusetts Seaport Economic Council is providing financial assistance for the project (\$147,200.00).

The project requires an Order of Conditions from the Orleans Conservation Commission (or in the case of an appeal, a Superseding Order of Conditions from MassDEP).

Because the project is receiving Financial Assistance from the Commonwealth, 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 provides a description of existing and proposed conditions, preliminary project plans, and an analysis of alternatives. It identifies measures to avoid, minimize and mitigate project impacts. The Town participated in a pre-filing meeting with several State Agencies on February 12, 2021 to discuss project alternatives. Comments from CZM and the Massachusetts Division of Marine Fisheries (DMF) identify support for project elements which will reduce existing impacts to coastal and marine resources including removal of existing dock systems located over Salt Marsh and removal of fill behind the existing north-south bulkhead to increase LUO habitat.

Alternatives Analysis

The ENF includes an extensive analysis of the following six alternatives: No Build; In-Kind Replacement (Alternative 2); New Solid-filled Commercial Wharf and Bulkhead Oversheet (Alternative 3); New Reduced Size Solid-filled Commercial Wharf with Landward Retreat of Existing Bulkhead (Alternative 4); Pile-supported Commercial Pier and Landward Retreat of Existing Bulkhead (Alternative 5); and Extended Pile-Supported Commercial Pier and Landward Retreat of Existing Bulkhead (the Preferred Alternative, as described herein). The ENF includes a tabular comparison of impacts to coastal wetland resource areas, total footprint area, total number of pilings total piling area and costs associated with each alternative and provides a conceptual plan for build alternatives. The analysis calculates the net impacts and net restorative benefits for each criterion. The ENF describes the poor structural condition of the existing facility, how this negatively impacts current commercial operations, and the need for reconstruction based upon safety and operational reasons. Therefore, the No Build is not viable.

Alternative 2 (\$2.1 million) would over-sheet existing steel and compromised timber bulkheads that currently retain the solid fill parking lot and work area with a new steel bulkhead. While this alternative would limit impacts to coastal resource and habitat areas and would include the lowest costs, it is not considered viable because it would not meet the following project goals: improving user safety and site access; minimizing user conflicts within the harbor; addressing shoreline stability of existing roadways.

Alternative 3 (\$2.2 million) would replace the existing timber off-loading pier with a new solid-filled structure consisting of a steel sheeting exterior that would tie into the existing bulkhead along Bay View Drive and then extend north across the harbor where it would transition into an over-sheet to the existing steel bulkhead. The new-solid fill pier structure would safely serve the needs of the commercial fleet without having to replace the existing failing timber bulkhead and stone revetment that currently provides shoreline protection against the undermining of Rock Harbor Road and Bay View Drive. A pile-supported concrete deck would be constructed along the face of the new solid-fill structure for vessel tie-up and off-loading using a new high-capacity hoist. The off-loading deck extension would accommodate a gangway to provide access to a new floating dock system that would support the commercial fleet and increase tie-up space beyond the current bulkhead. A second point of gangway access would be provided at the northern limit of the dock through the reconstruction of the existing Town Pier. While this alternative would provide operational improvements, it was not considered permissible because it would result in significant impacts to coastal resource and mapped habitat areas; in addition, it would not minimize user conflicts within the harbor.

Alternative 4 (\$3.1 million) would construct a new replacement bulkhead 20 feet landward of the existing north-south steel sheeting line. This landward retreat would open up watersheet area through removal of the steel bulkhead and excavation of $\pm 3,000$ cubic yards (cy) of backfill material to the authorized channel depth of -3.0 feet. This additional watersheet area would support two seasonal dock systems for commercial vessels to berth stern end instead of the current side-to practice minimizing encroachment into the navigable waterway. This alternative would allow for a reduction in the footprint of the new solid-fill wharf structure considered in Alternative 3 with similar benefits. A pile-supported concrete deck would be constructed for vessel tie-up and off-loading using a new high-capacity hoist.

This deck extension would accommodate a gangway to provide access to a floating dock system. A second point of gangway access would be provided via an intermediate pile-supported landing at the north end of the replacement bulkhead. The gangway would provide access to a second seasonal commercial dock system that would extend north to the existing Town Pier, which would be available for additional temporary side-to-berthing of vessels for off-loading. While this alternative would provide operational improvements, restore coastal resource areas and return tidelands to the Commonwealth, it was not considered permissible because it would result in significant impacts to coastal resource and mapped habitat areas; in addition, it would not minimize user conflicts within the harbor.

Alternative 5 (\$4.7 million) would incorporate all of the benefits gained under Alternative 4, however, it would minimize intertidal impacts associated with construction of a solid-fill wharf structure and dredging to support vessel access and instead, construct a $\pm 5,660$ sf pile-supported concrete deck (divided into a $\pm 3,930$ sf off-loading area to serve the commercial fleet and $\pm 1,730$ sf for a public access landing and viewing area on the south side of the new structure). This layout would direct all vehicle and pedestrian flow away from commercial operations and working areas of the harbor to separate visitors and tourists from commercial activities. The section of the proposed new bulkhead that would stabilize Rock Harbor Road and Bay View Drive would be installed within existing footprint of the stone revetment that currently stabilizes this area. Approximately ± 720 sf of intertidal area would be restored by removal of the existing stone up to the face of the bulkhead line. Alternative 5 achieves all of the commercial operational, and safety goals for the project, however, it would require dredging of an estimated $\pm 5,778$ sf since the existing 3-foot-deep navigation channel limits would still not support vessel access to the pile-supported commercial off-loading deck and the northernmost seasonal floating dock system. Based on State and federal agency input at the February 2021 pre-filing meeting, it was suggested that further consideration be given to developing another alternative that would focus on minimizing/avoiding dredging and reducing the size of the proposed public landing and viewing area.

Accordingly, the Preferred Alternative was developed with the following modifications to Alternative 5: increase in the size of the commercial portion of the deck from $\pm 3,930$ sf to $\pm 5,420$ sf, which will extend ± 30 feet seaward to eliminate the need for dredging to support vessel berthing at this location; reduction in the size of the proposed public landing and viewing area by 250 sf from $\pm 1,730$ sf to $\pm 1,480$ sf; and shifting of the northernmost commercial floating dock system ± 5 feet further seaward so that the structure is fully located within the authorized limits of the existing 3-foot deep navigational channel. Accordingly, future maintenance dredging (proposed in 2023-2024) will be able to adequately support vessel access/use.

Although the Preferred Alternative (\$4.9 million) results in a larger overall footprint for the project compared to other alternatives, CZM comments note that the removal of existing infrastructure will result in significant environmental benefits including a reduction in the number of pilings from 162 to 84 and net restoration of $\pm 3,330$ sf of LUO, ± 492 sf of Coastal Beach, ± 494 sf of intertidal and ± 3.2 sf of Salt Marsh areas. The removal of existing structures above Salt Marsh will result in a reduction in total shading impacts by ± 49 sf. In addition to net environmental benefits, the project results in 3,330 sf of new harbor area that can be used by commercial fishing vessels to improve berthing and loading/offloading operations, improves public safety on and around the pier, and improves the operational efficiency of this commercial, water dependent facility. CZM comments concur that the comprehensive alternatives analysis demonstrates that environmental impacts were minimized to the maximum feasible extent while still achieving the project goals.

Wetlands, Waterways and Stormwater

The project will impact LUO, Coastal Beach (including intertidal areas), Salt Marsh, LCS, and LSCSF. The Orleans Conservation Commission will review the project for its consistency with the Wetlands Protection Act (WPA), Wetlands Regulations (310 CMR 10.00) and associated performance standards including stormwater management standards (SMS). MassDEP will review the project to determine its consistency with the 401 WQC regulations (314 CMR 9.00) and c. 91 Waterways Regulations (310 CMR 9.00). The project will require submission of a c. 91 License Application and a 401 Water Quality Certification (WQC). The Proponent may choose to file a MassDEP BRP WW26 Combined Application for c. 91 and WQC. MassDEP has determined that the project would be classified as a water-dependent use project pursuant to 310 CMR 9.12.

The proposed pile-supported deck will overlie existing intertidal shellfish habitat with piles causing direct impacts; the decking will cause indirect impacts through shading. DMF comments indicate that direct impacts may require mitigation at the state or federal level during the permitting process. The elevated structure should allow as much light as possible to avoid shading impacts to underlying Salt Marsh pursuant to 310 CMR 10.32(4). Designs that reduce indirect shading impacts should be explored in the permitting process. While decking options for the commercial section of the structure may be limited due to structural requirements, the public viewing section may accommodate use of decking that allows greater light penetration to underlying intertidal habitat. DMF comments recommend avoidance of in-water, silt-producing activities from February 1 to June 30 to minimize impacts to winter flounder; however, work may be possible within this TOY restriction period if adequate containment structures are installed outside of the TOY period.

The project is subject to the SMS to the maximum extent practicable as a redevelopment project. The proposed over-sheeting of the existing failing timber bulkhead and construction of the new sidewalk behind the replacement bulkhead along Bay View Drive will result in $\pm 1,027$ sf of new impervious area within LSCSF. The project will remove $\pm 3,400$ sf of paved parking lot through the proposed 20-foot retreat of the existing north-south bulkhead section which will restore this area to open water. Stormwater improvements will be designed and implemented to direct run-off from newly created impervious areas and grading changes resulting from the installation of proposed infrastructure towards municipal catch basins. The Town drainage system will be analyzed to ensure there is sufficient capacity to handle changes in run-off volumes/patterns associated with the project. I refer the Town to MassDEP comments regarding the potential need for NPDES industrial stormwater permitting.

Climate Change and Resiliency

The ENF includes a discussion of the project in the context of climate change adaptation and resiliency. New infrastructure proposed to be constructed at the water-dependent facility is anticipated to have a 50-year design life. The replacement bulkhead will provide protection of landward components associated with the new facility against flooding and storm damage while continuing to support existing solid-fill area to allow for vehicular access to the new commercial off-loading deck and parking for the commercial fleet. The replacement bulkhead will be extended to include shoreline protection along Rock Harbor Road and Bay View Drive to protect these roadways. Existing topography at the facility and along the adjacent public roadways is at elevation (EL.) ± 15 feet above mean low water (MLW) on average. The existing grade decreases to EL. ± 13 feet above MLW on average immediately north of the

existing bulkhead and where the vehicular access transitions from a paved to an unpaved roadway surface. Because all new infrastructure must be constructed to support both the waterside berthing of vessels and land-side vehicular access, elevations to which new infrastructure can be constructed are constrained by existing grades set by Rock Harbor Road and Bay View Drive, and unpaved roadway access to the north.

According to the Massachusetts Climate Change Projections published by the Northeast Climate Science Center at the University of Massachusetts at Amherst in March of 2018, the Sea Level Rise (SLR) projections for the Intermediate-High (IH) scenario for the next 50 years within Rock Harbor (~2070) is estimated at ± 2.9 feet. The ENF maintains that site conditions do not support new infrastructure that is designed to initially accommodate ± 2.9 feet in SRL; however, structures will be designed to be retrofitted and elevated at some point in the future and new infrastructure will potentially accommodate a future ± 2.9 -foot increase in structure height and withstand the 100-year storm event. Through an adaptive management approach, the ability to accommodate SLR will be built into the design of the new infrastructure, to allow for water-dependent uses to remain operational over the 50-year design life. The project will also include the following climate adaptation and resiliency measures:

- Approximately $\pm 3,400$ sf of compensatory flood storage will be gained through the 20-foot retreat of the north-south section of the existing bulkhead landward
- The concrete cap that will be installed along the north-south section of the replacement bulkhead will have a top elevation of EL. ± 17.5 feet above MLW which will provide an additional ± 2.5 feet of elevation above the existing commercial parking and work areas to help mitigate against storm damage and overwash impacts
- The new pile-supported concrete off-loading and public landing and viewing decks will have a top elevation of EL. ± 15.0 feet and EL. ± 15.5 feet above MLW, respectively, as required to tie into existing roadway grades. A 12-inch concrete curb will be installed along the seaward edge of the new deck which that will provide an additional 6 to 12-inches in elevation to help mitigate against storm damage and overwash impacts.

Construction Period

All construction and demolition (C&D) activities should be managed in accordance with applicable MassDEP's regulations regarding Air Pollution Control (310 CMR 7.01, 7.09-7.10), and Solid Waste Facilities (310 CMR 16.00 and 310 CMR 19.00, including the waste ban provision at 310 CMR 19.017). I refer the Town to comments from MassDEP regarding construction-period measures. The Town will install BMPs on the project site to control erosion and sedimentation during the construction period. The project will require the preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the NPDES CGP. The project should include measures to reduce construction period impacts (e.g., noise, dust, odor, solid waste management) and emissions of air pollutants from equipment, including anti-idling measures in accordance with the Air Quality regulations (310 CMR 7.11).

I encourage the Town to require contractors to use construction equipment with engines manufactured to Tier 4 federal emission standards, or select project contractors that have installed retrofit emissions control devices or vehicles that use alternative fuels to reduce emissions of volatile organic compounds (VOCs), carbon monoxide (CO) and particulate matter (PM) from diesel-powered

equipment. Off-road vehicles are required to use ultra-low sulfur diesel fuel (ULSD). If oil and/or hazardous materials are found during construction, the Town should notify MassDEP in accordance with the Massachusetts Contingency Plan (310 CMR 40.0000). The Town should develop a spills contingency plan. All C&D activities should be undertaken in compliance with the conditions of all State and local permits. I encourage the Town to reuse/recycle C&D debris to the maximum extent.

Conclusion

The ENF has adequately described and analyzed the project and its alternatives, and assessed its potential environmental impacts and mitigation measures. Based on review of the ENF and comments received on it, and in consultation with State Agencies, I have determined that an EIR is not required.

August 9, 2021
Date

K. Theoharides

Kathleen A. Theoharides

Comments received:

- 07/29/2021 Massachusetts Office of Coastal Zone Management (CZM)
- 07/29/2021 Massachusetts Division of Marine Fisheries (DMF)
- 07/29/2021 Massachusetts Department of Environmental Protection (MassDEP) – Southeast Regional Office (SERO)
- 07/30/2021 Massachusetts Board of Underwater Archaeological Resources (BUAR)

KAT/PPP/ppp



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July 27, 2021

Secretary Kathleen Theoharides
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Purvi Patel, EEA No. 16403
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Theoharides:

The Division of Marine Fisheries (MA DMF) has reviewed the Environmental Notification Form (ENF) by the Town of Orleans for the Rock Harbor Commercial Wharf Improvement Project on Rock Harbor in the Town of Orleans. MA DMF also participated in a pre-application meeting for this project on February 12, 2021. The proposed project consists of the construction of a new facility for commercial operations. The facility would include a new steel bulkhead, a pile-supported commercial offloading deck, two timber piers and commercial floating dock systems with gangway access, and a public landing and viewing area. The north-south face of the new bulkhead is proposed to be set twenty feet landward of the existing structure while the seaward fill material would be removed to achieve a depth of -3.0 feet MLW with a one foot overdredge to -4.0 feet MLW. This proposed landward retreat would create approximately 3,400 square feet of new land under ocean. The proposed new pile-supported concrete deck would be 6,900 square feet in total area with 5,420 square feet designated as an offloading area for the commercial fleet and the remaining 1,480 square feet would be used as a public landing and viewing area. The existing east-west facing bulkhead would be oversheeted with new steel sheeting while a new bulkhead would be installed to replace existing stone revetment along Rock Harbor Road and Bay View Drive. The project also includes the reconstruction of an existing timber pier as well as the removal of two existing floating dock and landing dock structures. Existing marine fisheries resources and habitat and potential project impacts are described below.

The project site contains mapped habitat for a variety of shellfish species. Specifically, this region of Rock Harbor contains soft shell clam (*Mya arenaria*), quahog (*Mercenaria mercenaria*) and American oyster (*Crassostrea virginica*) habitat. Land containing shellfish is deemed significant to the interest of the Wetlands Protection Act (310 CMR 10.34) and the protection of marine fisheries.

Rock Harbor also provides habitat for a variety of finfish species. White perch (*Morone americana*) and alewives (*Alosa pseudoharengus*) use Rock Harbor as passage and foraging habitat. Winter flounder (*Pseudopleuronectes americanus*) use Rock Harbor as spawning and

nursery habitat. Winter flounder enter the area and spawn from February 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).

MA DMF offers the following comments for your consideration:

- MA DMF is supportive of the proposed project elements that will reduce existing impacts to marine resources. Specifically, the project proposes the removal of existing dock systems located over salt marsh and removal of fill behind the existing north-south bulkhead to increase land under ocean habitat.
- The proposed pile-supported deck will overlies existing intertidal shellfish habitat with piles causing direct impacts and decking causing indirect impacts through shading. Direct impacts may require mitigation at the state or federal levels of the permitting process. Designs that reduce indirect shading impacts should be explored in the permitting process. While decking options for the commercial section of the structure may be limited due to structural requirements, the public viewing section might be able to include decking that allows greater light penetration to underlying intertidal habitat.
- Impacts to winter flounder spawning, demersal eggs, larval settlement and juvenile development can best be minimized through avoidance of in-water, silt-producing activities from **February 1 to June 30** (Evans *et al.*, 2011). Work may be possible within this time of year (TOY) restriction period if adequate containment structures are installed outside of the TOY period.

Questions regarding this review may be directed to John Logan in our New Bedford office at john.logan@mass.gov.

Sincerely,



Daniel J. McKiernan

Director

cc: Orleans Conservation Commission
Christine Player, Foth
Nate Sears, Town of Orleans Natural Resources Manager
Kaitlyn Shaw, NMFS
Rebecca Haney, CZM
David Wong, DEP
Tori LaBate, DFG
Terry O’Neil, Tom Shields, Ryan Nuttall, DMF

References

Evans, N. T., Ford, K. H., Chase, B. C., & 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.

DM/JL/sd



THE COMMONWEALTH OF MASSACHUSETTS
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MEMORANDUM

TO: Kathleen A. Theoharides, Secretary, EEA
ATTN: Purvi Patel, MEPA Office
FROM: Lisa Berry Engler, Director, CZM
DATE: July 29, 2021
RE: EEA-16403, Rock Harbor Commercial Wharf Improvements, Orleans

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 July 9, 2021, and offers the following comments.

Project Description

The proposed project involves the reconstruction and improvements to an existing, water-dependent commercial wharf, located in Rock Harbor, Orleans. Proposed improvements include the installation of a new steel bulkhead, pile-supported commercial off-loading deck (including a high capacity, 1-ton hoist system), two timber piers and commercial floating dock systems with gangway access, a public landing and viewing area and extended pedestrian walkway. The existing facility was originally constructed in the late 1950s/early 1960s and includes a 16-foot-wide x 85-foot-long pile-supported timber off-loading pier and a solid-fill parking lot and work area that is retained by ± 310 linear feet (LF) of a combination steel and timber bulkhead system.

The existing steel and timber bulkheads will be replaced with a steel bulkhead. The north-south face of the replacement bulkhead that is directly adjacent to the navigable waterways of Rock Harbor will be installed 20 feet landward of the existing structure. The existing timber bulkhead that runs east-west along the backside of the pile-supported timber off-loading pier will remain in place and be over-sheeted with new steel sheeting. From the eastern-most corner of the over-sheet, a new bulkhead will be installed which will continue south along Rock Harbor Road and then turn west along Bay View Drive to replace the existing graveled stone revetment that presently stabilizes these two roadways. Two gangways will provide access to a new commercial offloading dock and deck. The commercial offloading dock will be installed seasonally to avoid ice damage. The offloading pier is proposed to be replaced with a pile-supported concrete pier. On the southern end of the offloading pier, a public viewing area is proposed to allow visitors to view the commercial boat operations, but also to separate commercial operations from pedestrians.

The existing commercial pier and associated infrastructure facility were constructed in the late 1950s/early 1960s. A 2018 inspection of the Commercial Wharf Facility determined that the existing timber bulkhead structure that supports the adjacent shoreline/backland area immediately adjacent to the Commercial Wharf off-loading pier was at the end of its design life and in need of replacement. To address safety concerns, load restrictions were placed on the pier. Trucks are no longer able to access the pier, and this has impacted commercial operations.



Project Comments

The alternatives analysis provided in the ENF is extensive, and evaluates six different alternatives, ranging from a no-build alternative (Alternative 1) to the preferred alternative (Alternative 6): Extended Pile-Supported Commercial Pier & Landward Retreat of Existing Bulkhead. For each alternative, impacts were calculated for five coastal resource areas, including Land Under Ocean; Saltmarsh; Coastal Beach; Intertidal and Land Containing Shellfish. It also evaluated the total footprint area, total number of pilings and total piling area. These different criteria were then compared to those of the existing facility, and the net impacts and net restorative benefits were calculated for each criterion.

Although the preferred alternative results in a larger overall footprint for the proposed project, the removal of existing infrastructure will result in significant environmental benefits. These include a reduction in the number of pilings from 162 (existing) to 84; net restoration of $\pm 3,330$ square feet (SF) of Land Under Ocean, ± 492 SF of Coastal Beach, ± 494 SF of intertidal and ± 3.2 SF of saltmarsh areas. The removal of existing structures above saltmarsh will result in a reduction in total shading impacts by approximately ± 49 SF. In addition to net environmental benefits, the project results in 3,330 SF of new harbor area that can be utilized by commercial fishing vessels to improve berthing and loading/offloading operations. A new public landing and viewing area and sidewalk extension will be constructed that will tie into the existing pedestrian walkway currently providing access along the Rock Harbor waterfront. This connectivity will establish a total of ± 820 LF of public access along the entire western side of the project site. The viewing platform and sidewalk will be separated from the commercial operations to improve pedestrian safety.

Information in the ENF describes the poor structural condition of the existing facility, how this is negatively impacting current commercial operations, and the need for reconstruction based upon safety and operational reasons. The comprehensive alternatives analysis in the ENF demonstrates that environmental impacts were minimized to the maximum feasible extent while still achieving the project goals. Overall, the proposed project results in significant net benefit to numerous coastal resource areas, improves public safety on and around the pier, and improves the operational efficiency of this commercial, water dependent facility.

Federal Consistency Review

The proposed project may be subject to CZM federal consistency review and if so must be found to be consistent with CZM's enforceable program policies. For further information on this process, please contact Robert Boeri, Project Review Coordinator, at robert.boeri@mass.gov, or visit the CZM web site at <https://www.mass.gov/federal-consistency-review-program>.

LE/sm/rh

cc: Christine Player, Foth Infrastructure & Environment
Tom Daley, Orleans DPW
Dan Gilmore, DEP, Southeast Regional Office
Stephen McKenna, CZM



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Commissioner

July 29, 2021

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

RE: ENF Review. EOEEA 16403.
ORLEANS. Rock Harbor Commercial
Wharf Improvements at 113 Rock Harbor
Road

Dear Secretary Theoharides,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Environmental Notification Form (EENF) for the Rock Harbor Commercial Wharf Improvements at 113 Rock Harbor Road, Orleans, Massachusetts (EOEEA #16403). The Project Proponent provides the following information for the Project:

The proposed Commercial Wharf Improvement Project will consist of the construction of a new facility that addresses current aging infrastructure limitations/concerns as well as improves safety and modernizes commercial operations within Rock Harbor. Proposed improvements will include the installation of a new steel bulkhead, pile-supported commercial off-loading deck (including a high capacity, 1-ton hoist system), two timber piers and commercial floating dock systems with gangway access, a public landing and viewing area and extended pedestrian walkway. The proposed improvements will result in significant net restorative benefits to coastal resource areas and return previously filled tidelands to the Commonwealth.

Bureau of Water Resources Comments

Wetlands. The Proponent will need to submit a Notice of Intent (NOI) to DEP and the Orleans Conservation Commission for the project. DEP notes that if the minimum submittal requirements have been met a File Number will be issued. It is anticipated that the Orleans Conservation Commission will conduct a Public Hearing and issue an Order of Conditions. A final Order of Conditions must be obtained before any work within Areas Subject to Jurisdiction commences.

The proposed Project has an elevated structure that impacts salt marsh. As per 310 CMR 10.32(4) the elevated structure should let in as much light as possible so as to not disturb the underlying salt marsh.

This information is available in alternate format. Contact Michelle Waters-Ekanem, Director of Diversity/Civil Rights at 617-292-5751.

TTY# MassRelay Service 1-800-439-2370

MassDEP Website: www.mass.gov/dep

Printed on Recycled Paper

Work should be performed in accordance with any Time of Year Restrictions as determined by the MA Division of Marine Fisheries, to avoid impacts to marine fisheries resources.

Waterways. This Project will require the submittal of a Chapter 91 License Application and a 401 Water Quality Certification (WQC). 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.

Stormwater Management/National Pollutants Discharge Elimination System (NPDES) Permit. The Project's construction activities may disturb more than an acre of land and therefore may require a NPDES Stormwater Permit for Construction Activities. The Proponent can access information regarding the NPDES Stormwater requirements and an application for the Construction General Permit by completing and submitting a Notice of Intent (NOI) to EPA via the <https://www.epa.gov/npdes/stormwater-discharges-construction-activities>.

The Proponent is advised to consult with David Gray at gray.david@epa.gov, 617-918-1577 for any of its questions regarding EPA's NPDES stormwater permitting requirements.

Industrial Stormwater. The Proponent appears to be operating as water transportation facility (Standard Industrial Classification (SIC) Major Group 44) and may require a Sector Q Industrial Stormwater General NPDES Permit from the U.S. EPA. More information may be found at: https://www.epa.gov/sites/default/files/2015-10/documents/sector_q_watertransportation.pdf

Bureau of Waste Site Cleanup Comments

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 area. 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 the site that would appear to impact the proposed Project 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”. MCP reports and the compliance status of specific disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: <https://eeaonline.eea.state.ma.us/portal#!/search/wastesite>

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

Bureau of Air and Waste (BAW) Comments

Air Quality. 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

The ENF reports “all equipment used by the Contractor will be operated/maintained in accordance with all applicable local, State and Federal emission regulations; equipment will not be idled without an operator in the cab. “

Construction-Related Measures

MassDEP requests that all non-road diesel equipment rated 50 horsepower or greater meet EPA’s Tier 4 emission limits, which are the most stringent emission standards currently available for off-road engines. If a piece of equipment is not available in the Tier 4 configuration, then the Proponent should use construction equipment that has been retrofitted with appropriate emissions reduction equipment. Emission reduction equipment includes EPA-verified, CARB-verified, or MassDEP-approved diesel oxidation catalysts (DOCs) or Diesel Particulate Filters (DPFs). The Proponent should maintain a list of the engines, their emission tiers, and, if applicable, the best available control technology installed on each piece of equipment on file for Departmental review.

Massachusetts Idling Regulation

MassDEP reminds the Proponent that unnecessary idling (*i.e.*, in excess of five minutes), with limited exception, is not permitted during the construction and operations phase of the Project (Section 7.11 of 310 CMR 7.00). With regard to construction period activity, typical methods of reducing idling include driver training, periodic inspections by site supervisors, and posting signage. In addition, to ensure compliance with this regulation once the Project is occupied, MassDEP requests that the Proponent install permanent signs limiting idling to five minutes or less on-site.

Spills Prevention. A spills contingency plan addressing prevention and management of potential releases of oil and/or hazardous materials from pre- and post-construction activities should be presented to workers at the site and enforced. The plan should include but not be limited to, refueling of machinery, storage of fuels, and potential on-site activity releases.

Solid Waste Management.

The Proponent reports that “the Contractor will be responsible for proper disposal of all materials being removed from the Project site at a facility that is licensed to accept such materials. Recycling may be performed by the off-site disposal facility.

Solid Waste Comments:

1. *Waste Ban Regulations:* MassDEP enforces solid waste regulations that restrict certain recyclable materials from disposal. Known as “waste bans”, these regulations (310 CMR 19.017) prohibit the disposal of recyclable materials as solid waste. Waste materials that are determined to be solid waste (e.g., construction and demolition waste) and/or recyclable material (e.g., metal, asphalt, brick, and concrete) shall be disposed, recycled, and/or otherwise handled in accordance with the Solid Waste Regulations including 310 CMR 19.017: Waste Bans.

Asphalt, brick, and concrete (ABC) rubble, such as the rubble generated by the demolition of buildings or other structures must be handled in accordance with the 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 "*Using or Processing Asphalt Pavement, Brick and Concrete Rubble, Updated February 27, 2017*", 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: <https://www.mass.gov/files/documents/2018/03/19/abc-rubble.pdf>

For more information on how to prevent banned materials from entering the waste stream the Proponent should contact the RecyclingWorks in Massachusetts program at (888) 254-5525 or via email at info@recyclingworksma.com. RecyclingWorks in Massachusetts also provides a website that includes a searchable database of recycling service providers, available at <https://recyclingworksma.com/>.

2. *Demolition and Asbestos Containing Waste Material*: The proposed Project includes the demolition of structures 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 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) lists 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.

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 any

construction or demolition of an industrial, commercial, or institutional building or residential building with 20 or more dwelling units at least ten (10) working days prior to initiation of said construction or demolition Project. The Proponent should propose measures to prevent or alleviate dust, noise, and odor nuisance conditions, which may occur during the demolition.

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.

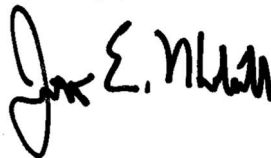
Proposed s.61 Findings

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.

Other Comments/Guidance

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

Very truly yours,

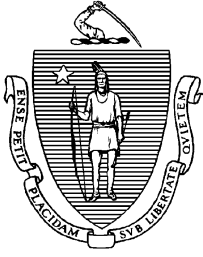


Jonathan E. Hobill,
Regional Engineer,
Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
Gerard Martin, Acting Deputy Regional Director, BWR
John Handrahan, Acting Deputy Regional Director, BWSC
Seth Pickering, Deputy Regional Director, BAW
Jennifer Viveiros, Deputy Regional Director, ADMIN
Daniel Gilmore, Chief, Wetlands and Waterways, BWR
Nate Corcoran, Wetlands and Waterways, BWR
Brendan Mullaney, Wetlands and Waterways, BWR
Mark Dakers, Solid Waste, BAW
Elza Bystom, Solid Waste, BAW
Allen Hemberger, Site Management, BWSC



The COMMONWEALTH OF MASSACHUSETTS
BOARD OF UNDERWATER ARCHAEOLOGICAL RESOURCES
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www.mass.gov/orgs/board-of-underwater-archaeological-resources

July 28, 2021

Kathleen A. Theoharides, Secretary
Executive Office of Energy and Environmental Affairs
Attention: Purvi Patel, MEPA Unit (via email attachment)
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: Town of Orleans: Rock Harbor Commercial Wharf Improvement Project (EEA# 16403), Orleans, MA

Dear Secretary Theoharides,

The staff of the Massachusetts Board of Underwater Archaeological Resources has reviewed the above-referenced proposed project as detailed in the *Environmental Monitor* of July 9, 2021 and offers the following comments.

The Board has conducted a preliminary review of its files and secondary literature sources to identify known and potential underwater archaeological resources within the proposed project area. No record of any underwater archaeological resources was found. Based on the results of this review, the Board considers this project unlikely to adversely impact submerged cultural resources.

However, the Board notes the area may be generally archaeologically sensitive. Should heretofore-unknown underwater archaeological resources be encountered during the course of the project, the Board expects that the project's sponsor will take steps to limit adverse effects and notify the Board and the Massachusetts Historical Commission, 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 MEPA review process. Should you have any questions regarding this letter, please do not hesitate to contact me at the address above or by email at david.s.robinson@mass.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read "David S. Robinson".

David S. Robinson
Director

/dsr

Cc: Brona Simon, MHC
Robert Boeri and Stephen McKenna, MCZM (via email attachment)
Bettina Washington, WTGH/A (via email attachment)
David Weeden, MWT (via email attachment)