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707 Sable Oaks Drive
Suite 150
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T: 207.879.9190
F: 207.536.1173
www.gza.com



VIA EMAIL

May 11, 2023
File No. 03.0035109.00

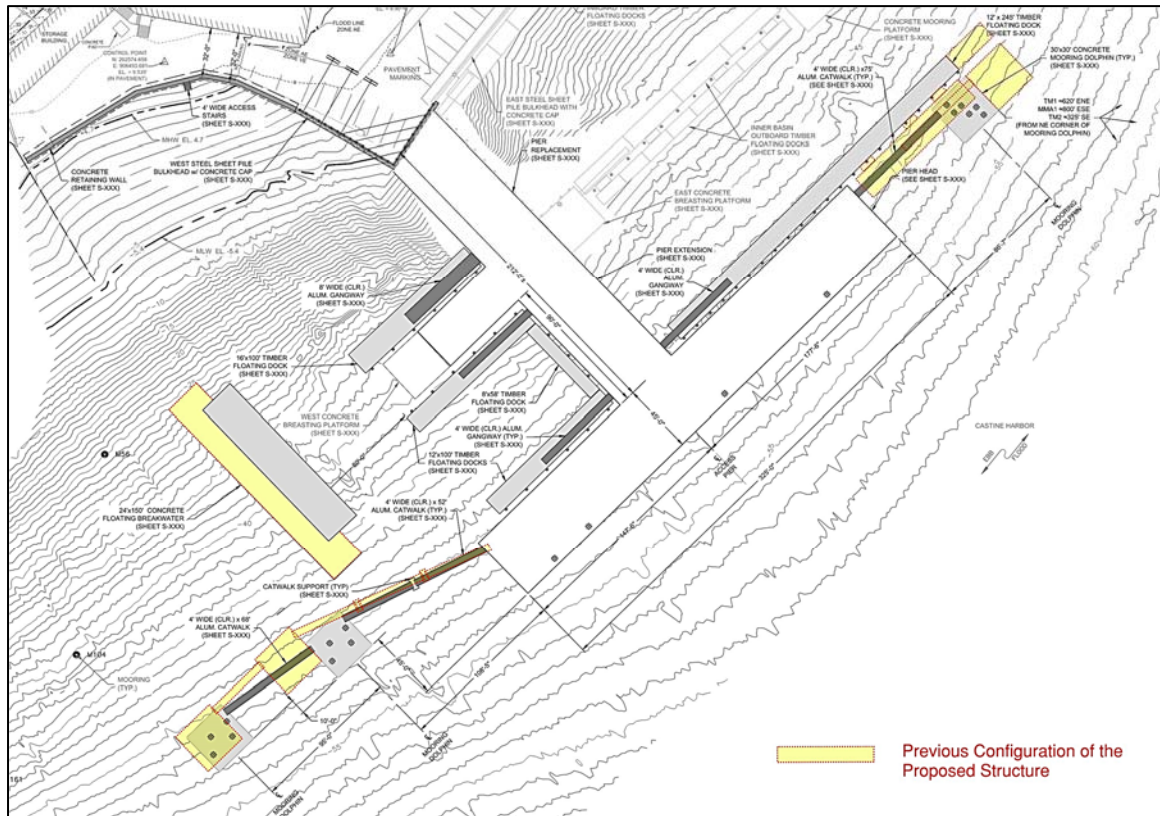
Shannon Smith, Project Manager (Shannon.D.Smith@maine.gov)
Maine Department of Environmental Protection
Bureau of Land Resources
Eastern Maine Regional Office
106 Hogan Rd
Bangor, ME 04401

Re: Natural Resource Protection Act Permit Application Update (L-15887)
Maine Maritime Academy Waterfront Campus Improvements
1 Pleasant Street
Castine, Maine

Dear Shannon Smith:

On February 24, 2023, a Natural Resources Protection Act (NRPA) application was submitted on behalf of Maine Maritime Academy (MMA) for proposed waterfront campus improvements at MMA located in Castine, Maine. After submission of MMA's NRPA permit application, discussions between MMA, the adjacent landowner, and the Town of Castine led to modifications to the size and siting of the proposed floating breakwater (FBW) as well as modifications to the layout of the proposed dolphins and adjustment of floating docks and access to the proposed dolphins. These modifications are reflected in the attached plan, **Figure 6 Rev 1**. The modifications include the following and are highlighted in **Graphic 1**:

- Reducing the FBW length to 115 feet. This represents a 23% reduction in the FBW length.
- Siting the FBW 14 feet closer to the proposed west floating docks.
- Relocating the two west proposed mooring dolphins toward the east as much as permissible while providing a heavy weather mooring arrangement for the National Security Multi-Mission Vessel (NSMV).
- Relocating the east mooring dolphin toward the west as much as permissible while providing a heavy weather mooring arrangement for the NSMV.
- Replacing the floating dock and gangways between the east end of the proposed pier T-head and the east proposed mooring dolphin with an elevated catwalk.
- Reducing the length of the east proposed floating dock.



Graphic 1: Modifications of Proposed Structures (Yellow-highlighted with red outline represents the previous layout as shown in the NRPA Application)

Additionally, the NRPA application relied on preliminary design information to estimate the amount of wetland impact. As the design has progressed, more accurate information has become available and wetland impacts have been reduced.

Updates to the permit application are as follows:

ACTIVITY DESCRIPTION - UPDATES

1. Replace Existing Retaining Wall and Bulkhead, West

No Update

- ## 2. Reinforce Existing Steel Sheet Pile Bulkhead, East

No Update

- ### 3. Repair Existing Travel Lift Pier

No Update

- #### 4. Repair Existing Floating Docks and Guide Piles

No Update



5. Maintenance Dredge of Inner Boat Basin

At this time MMA would like to withdraw the dredging permit application until pre-dredge samples can be collected and analyzed. Once the analytical results are available, MMA will re-apply for the dredge permit.

6. Remove and Replace Existing Timber Pier

The proposed pier reconstruction will have the same L-shape configuration and footprint. However, by using concrete framing and 24-inch diameter steel pipe piles, the proposed pier will have approximately 60 piles. The proposed pier reconstruction is within the same footprint as the existing pier, but, will have approximately 175 fewer piles than the existing pier. Although the pier has fewer piles than the existing pier, the proposed piles are of a larger diameter. The net result is a reduction from 80 SF of direct impacts (as presented in our original application) to no increase in direct impacts at the mudline.

7. Modify Existing Mooring and Breasting Platforms

No Update

8. Proposed Pier Extension

The proposed pier extension has an approximate 18,700 square foot footprint with approximately 190 support piles (approx. 600 SF of direct impacts at the mudline) and approximately 15 piles to support pier fendering (approx. 50 SF of direct impacts at the mudline). This reduces our estimate from 960 SF of direct impacts (as presented in our original application) to 650 SF of direct impacts.

9. Proposed Mooring Dolphins

The proposed mooring dolphins have a combined 2,700 square foot footprint with 42 support piles (approx. 135 square feet of direct impacts at the mudline). The proposed elevated access walkway has an approximate 450 square foot footprint with two support piles (approx. 10 square feet of direct impacts at the mudline). This reduces our estimate from 3,300 SF of shading footprint (as presented in our original application) to 3,150 SF of shading footprint.

10. Proposed Floating Docks

The proposed floating docks have a combined 7,500 square foot footprint with 43 guide piles (approx. 135 square feet of direct impacts at the mudline). Because the guide piles will be located along the floats and not within the floating dock footprint, the overall impact is 7,635 square feet. This reduces our estimate from 9,340 SF of shading footprint and 160 SF of direct impacts (as presented in our original application) to 7,500 SF of shading footprint and 135 SF of direct impacts.

11. Proposed Floating Breakwater

The floating breakwater consists of a 24-foot wide by 115-foot long concrete float with guide piles for anchorage. Fifteen, 30-inch diameter pipe piles are programmed for the floating breakwater, resulting in approximately 75 square feet of direct impacts to the mudline.

The proposed floating breakwater has a 2,760 square foot footprint and an estimated 75 square feet of direct impacts at the mudline. It is anticipated that the anchorage will be both inside and outside of the floating



breakwater footprint. This reduces our estimate from 3,675 SF of shading footprint (as presented in our original application) to 2,760 SF of shading footprint.

12. Proposed Utilities Reconfiguration

No Update

Revised Table 1 provides a summary of the impacts to the wetland resource for the proposed work, as described above.

REVISED TABLE 1: WETLAND RESOURCE IMPACTS FOR THE PROPOSED ACTIVITIES

Proposed Activity	Shading Footprint* (Square Feet)	Direct Impacts† (Square Feet)	Indirect Impacts‡ (Square Feet)
1. Replace Existing Retaining Wall and Bulkhead, West	-	1,200	1,800
2. Reinforce Existing Steel Sheet Pile Bulkhead, East	-	-	-
3. Repair Existing Travel Lift Pier	-	6	-
4. Repair Existing Floating Docks and Guide Piles	-	-	-
5. Maintenance Dredge of Inner Boat Basin	-	-	-
6. Remove and Replace Existing Timber Pier	-	-	-
7. Modify Existing Mooring and Breasting Platforms	-	-	-
8. Proposed Pier Extension	18,700	650	-
9. Proposed Mooring Dolphins (including elevated access walkway)	3,150	145	-
10. Proposed Floating Docks	7,500	135	-
11. Proposed Floating Breakwater	2,760	75	-
12. Proposed Utilities Reconfiguration	-	-	-
Total	32,110	2,211	1,800

* Shading footprint is the square footage of new structure above the water or floating on the water.

† Direct impacts reflect the square footage of new wetland fill (direct contact with the wetland resource).

‡ Indirect impacts reflect temporary impacts to the wetland resource during construction.

COMPENSATORY MITIGATION

Based on the updates listed above, the estimated in-lieu fee payment to fill 2,211 square feet of wetlands is \$10,878.12.

FEDERAL REGULATORY REQUIREMENTS

MMA's PCN application was submitted to Shawn Mahaney on April 13, 2023.



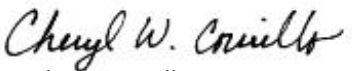
LOCAL REGULATORY REQUIREMENTS

MMA's Site Plan Review application was submitted on March 27, 2023 and presented to the Town of Castine Planning Board on April 13, 2023. The approval is pending closing of the 30-day appeal period. Coordination with the Town of Castine, beyond local regulatory requirements, is ongoing.

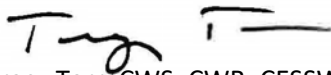
If you have any questions regarding GZA's response or require additional information, please feel free to contact Aimee Mountain at 207-344-9704 or aimee.mountain@gza.com.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.


Cheryl W. Coviello, P.E.^{NH}, D. PE
Associate Principal


Aimee Mountain, GISP, CPMSM
Senior Project Manager, Permitting


Tracy Tarr, CWS, CWB, CESSWI
Consultant/Reviewer

ADM/TLT/CWC

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Attachments: Figure 6 Rev 1, Overall Work Plan with Erosion Controls, dated 8 May 2023.

