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# Maine Maritime Academy Waterfront Campus Improvements Project Water Street Castine, Maine

Maine Department of Environmental Protection  
Natural Resource Protection Act Individual Permit Application



## PREPARED BY:

**GZA GeoEnvironmental, Inc.**

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February 24, 2023  
File No. 03.0035109.00

MEDEP File: \_\_\_\_\_

Department of Environmental Protection  
Bureau of Land & Water Quality  
17 State House Station  
Augusta, Maine 04333  
Telephone: 207-287-7688

FOR DEP USE  
ATS # \_\_\_\_\_  
L- \_\_\_\_\_  
Total Fees: \_\_\_\_\_  
Date: Received \_\_\_\_\_

## APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT PERMIT

→ PLEASE TYPE OR PRINT IN **BLACK INK ONLY**

<b>1. Name of Applicant:</b>		<b>5. Name of Agent:</b>	
<b>2. Applicant's Mailing Address:</b>		<b>6. Agent's Mailing Address:</b>	
<b>3. Applicant's Daytime Phone #:</b>		<b>7. Agent's Daytime Phone #:</b>	
<b>4. Applicant's Email Address (Required from either applicant or agent):</b>		<b>8. Agent's Email Address:</b>	
<b>9. Location of Activity: (Nearest Road, Street, Rt.#)</b>		<b>10. Town:</b>	<b>11. County:</b>
<b>12. Type of Resource: (Check all that apply)</b>	<input type="checkbox"/> River, stream or brook <input type="checkbox"/> Great Pond <input type="checkbox"/> Coastal Wetland <input type="checkbox"/> Freshwater Wetland <input type="checkbox"/> Wetland Special Significance <input type="checkbox"/> Significant Wildlife Habitat <input type="checkbox"/> Fragile Mountain		<b>13. Name of Resource:</b>
	<input type="checkbox"/> Forested <input type="checkbox"/> Scrub Shrub <input type="checkbox"/> Emergent <input type="checkbox"/> Wet Meadow <input type="checkbox"/> Peatland <input type="checkbox"/> Open Water <input type="checkbox"/> Other _____		<b>14. Amount of Impact: (Sq.Ft.)</b> Fill: 2,626 square feet Dredging/Veg Removal/Other:
<b>15. Type of Wetland: (Check all that apply)</b>		<b>FOR FRESHWATER WETLANDS</b>	
		<i>Tier 1</i>	<i>Tier 2</i>
		<i>Tier 3</i>	
		<input type="checkbox"/> 0 - 4,999 sq ft. <input type="checkbox"/> 5,000-9,999 sq ft <input type="checkbox"/> 10,000-14,999 sq ft	<input type="checkbox"/> 15,000 – 43,560 sq. ft. <input type="checkbox"/> > 43,560 sq. ft. or smaller than 43,560 sq. ft., not eligible for Tier 1
<b>16. Brief Activity Description:</b>			
<b>17. Size of Lot or Parcel &amp; UTM Locations:</b>		<input type="checkbox"/> _____ square feet, or <input type="checkbox"/> _____ acres UTM Northing: _____ UTM Easting: _____	
<b>18. Title, Right or Interest:</b>		<input type="checkbox"/> own <input type="checkbox"/> lease <input type="checkbox"/> purchase option <input type="checkbox"/> written agreement	
<b>19. Deed Reference Numbers:</b>		Book#: 692 Page: 340	<b>20. Map and Lot Numbers:</b> Map #: Lot #:
<b>21. DEP Staff Previously Contacted:</b>		<b>22. Part of a larger project:</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No <b>After-the-Fact:</b> <input type="checkbox"/> Yes <input type="checkbox"/> No
<b>23. Resubmission of Application?:</b>		<b>Previous project manager:</b>	
<input type="checkbox"/> Yes → <input type="checkbox"/> No If yes, previous application #			
<b>24. Written Notice of Violation?:</b>		<b>25. Previous Wetland Alteration:</b>	
<input type="checkbox"/> Yes → <input type="checkbox"/> No If yes, name of DEP enforcement staff involved:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
<b>26. Detailed Directions to the Project Site:</b>			
<b>27. TIER 1</b>		<b>TIER 2/3 AND INDIVIDUAL PERMITS</b>	
<input type="checkbox"/> Title, right or interest documentation <input type="checkbox"/> Topographic Map <input type="checkbox"/> Narrative Project Description <input type="checkbox"/> Plan or Drawing (8 1/2" x 11") <input type="checkbox"/> Photos of Area <input type="checkbox"/> Statement of Avoidance & Minimization <input type="checkbox"/> Statement/Copy of cover letter to MHPC		<input type="checkbox"/> Title, right or interest documentation <input type="checkbox"/> Topographic Map <input type="checkbox"/> Copy of Public Notice/Public Information Meeting Documentation <input type="checkbox"/> Wetlands Delineation Report (Attachment 1) that contains the information listed under Site Conditions <input type="checkbox"/> Alternatives Analysis (Attachment 2) including description of how wetland impacts were Avoided/Minimized <input type="checkbox"/> Erosion Control/Construction Plan <input type="checkbox"/> Functional Assessment (Attachment 3), if required <input type="checkbox"/> Compensation Plan (Attachment 4), if required <input type="checkbox"/> Appendix A and others, if required <input type="checkbox"/> Statement/Copy of cover letter to MHPC <input type="checkbox"/> Description of Previously Mined Peatland, if required	
<b>28. FEES Amount Enclosed:</b>			
<b>CERTIFICATIONS AND SIGNATURES LOCATED ON PAGE 2</b>			

**IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.**

By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following :

**DEP SIGNATORY REQUIREMENT**

**PRIVACY ACT STATEMENT**

Authority: 33 USC 401, Section 10; 1413, Section 404. Principal Purpose: These laws require permits authorizing activities in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor a permit be issued.

**CORPS SIGNATORY REQUIREMENT**

USC Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry shall be fined not more than \$10,000 or imprisoned not more than five years or both. I authorize the Corps to enter the property that is subject to this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

**DEP SIGNATORY REQUIREMENT**

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by emailing the decision to the address located on the front page of this application (see #4 for the applicant and #8 for the agent)."

*Richard W. Rosen*

SIGNATURE OF AGENT/APPLICANT

Date: \_\_\_\_\_

**NOTE:** Any changes in activity plans must be submitted to the DEP and the Corps in writing and must be approved by both agencies prior to implementation. Failure to do so may result in enforcement action and/or the removal of the unapproved changes to the activity.

#L- \_\_\_\_\_  
ATS # \_\_\_\_\_  
Fees Paid \_\_\_\_\_  
Date Received \_\_\_\_\_

### MINOR REVISION APPLICATION

For Site Location, Natural Resources Protection Act & Stormwater Projects

This form shall be used for minor revisions to a project that has received previous Site Law, NRPA or Stormwater Law approval from the Department, where the revision(s) significantly decreases or eliminates an environmental impact, does not significantly expand the project, does not change the nature of the project or does not modify any Department findings with respect to any licensing criteria. If significant project changes are proposed, then an amendment application will be required by the Department.

Please contact the DEP for current fee schedule information. The fee schedule is updated every November 1. The fee is payable to "Treasurer, State of Maine", and **MUST** accompany the application.

**Please type or print in black ink only**

<b>1. Name of Applicant:</b>		<b>5. Name of Agent:</b>	
<b>2. Applicant's Mailing Address:</b>		<b>6. Agent's Mailing Address:</b>	
<b>3. Applicant's Daytime Phone #:</b>		<b>7. Agent's Daytime Phone #:</b>	
<b>4. Applicant e-mail address (REQUIRED):</b>		<b>8. Agent e-mail address (REQUIRED):</b>	
<b>LOCATION OF ACTIVITY</b>			
<b>9. Name of Project:</b>			
<b>10. Name of Town where project is located:</b>		<b>11. County:</b>	
<b>REQUIRED INFORMATION:</b>			
<b>12. Existing DEP permit number:</b>		<b>13. DEP Project Manager for previous application (if known):</b>	
<b>14. Description of Proposed Change: (Use additional sheet, if necessary)</b>			

Provide all documentation necessary to support the proposed change. This documentation should include, as appropriate, revised site plans, construction drawings, and technical data such as HHE-200 forms. (If you are unsure of what information to include, please contact the original DEP project manager, or the Division of Land Resource Regulation in the appropriate regional office for assistance.)

This completed application form, fee and all supporting documents summarized above shall be sent to the appropriate DEP Office in Augusta, Portland or Bangor.

Bureau of Land and Water Quality 17 State House Station Augusta, ME 04333 Tel: (207) 287-3901	Bureau of Land and Water Quality 312 Canco Road Portland, ME 04103 Tel: (207) 822-6300	Bureau of Land and Water Quality 106 Hogan Road Bangor, ME 04401 (207) 941-4570
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**CERTIFICATIONS / SIGNATURES on PAGE 2**



**IMPORTANT: IF THE SIGNATURE BELOW IS NOT THE APPLICANT'S SIGNATURE, ATTACH LETTER OF AGENT AUTHORIZATION SIGNED BY THE APPLICANT.**

**By signing below the applicant (or authorized agent), certifies that he or she has read and understood the following :**

**CERTIFICATIONS / SIGNATURES**

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein.

Further, I hereby authorize the DEP to send me an electronically signed decision on the license I am applying for with this application by e-mailing the decision to the electronic address located on the front page of this application (see #4 and #8)"

Signed: Richard W. Rosen Title \_\_\_\_\_ Date: \_\_\_\_\_

**Notice of Intent to Comply  
with Maine Construction  
General Permit**

If over one acre of new disturbance will result as part of the proposed minor revision, please sign here acknowledging that with this minor revision form and signature below, I am filing notice of my intent to carry out work which meets the requirements of the Maine Construction General Permit. I have read and will comply with all of the MCGP standards.

Signed Richard W. Rosen Date: \_\_\_\_\_

**NOTE:** If a Notice of Intent is required, you must file a Notice of Termination (NOT form available from the Department) within 20 days of completing permanent stabilization of the project site.



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## 1.0 APPLICANT AND OWNER INFORMATION

### 1.1 APPLICANT INFORMATION

#### Applicant Name

Maine Maritime Academy (MMA)

#### Applicant Contact Information

Richard Rosen  
Vice President of Financial & Institutional Services  
207-326-2241  
richard.rosen@mma.edu

### 1.2 OWNER INFORMATION

#### Owner Name

Maine Maritime Academy (MMA)

Deed Reference: Book #692 Page #340, provided as **Appendix A**.

## 2.0 SITE LOCATION AND DESCRIPTION

The MMA Waterfront Campus is located in Castine, Maine, on the western shore of Castine Harbor, which lies at the entrance to the Bagaduce River in the northeast portion of Penobscot Bay. The Site of the proposed project is bordered to the west by residential properties, to the north by commercial properties, to the east by the Town of Castine Dock, and to the south by the Atlantic Ocean and Bagaduce River. This report is subject to **Appendix B** – Limitations.

The project area is located on a lot identified on the Town of Castine Tax Maps as Map 21, Lot 110, and is centered at the approximate coordinates of 44° 23'11.33" N, 68° 47'48.32" W, as shown in **Figure 1**. A photograph log of pertinent Site features is provided as **Appendix C**.

MMA's Waterfront Campus includes the following: approximately 410 feet of steel sheet pile bulkhead, approximately 150 feet of timber and composite lagging wall, a timber access pier, two concrete breasting platforms, one mooring platform, an inboard and outboard section of timber floating docks, and two timber travel lift runway piers (see **Figures 2-5**). These waterfront structures provide direct access to Castine Harbor, Penobscot Bay, and the Atlantic Ocean for a range of vessels, from MMA's small vessel fleet to U.S. Maritime Administration (MARAD)-supplied training vessels used by MMA.

The U.S. MARAD provides ships from the National Defense Reserve fleet to serve as training vessels at the six state maritime academies. MARAD is in the process of replacing the existing training vessels with new National Security Multi-Mission Vessels (NSMV). The NSMVs are state-of-the-art training platforms, as well as, national assets that will be deployed to support federal responses to natural disasters and humanitarian needs. MMA is scheduled to receive the NSMV in the fall of 2024, and the current pier will not support the new vessel. The new vessel is larger with more modern services and different system requirements than the current training vessel utilized by MMA. To be ready to receive the NSMV, MMA's Waterfront Campus requires modification of its current waterfront infrastructure and systems and



additional water-dependent structures for the safe mooring and berthing of the NSMV. In addition to the proposed work for the NSMV, MMA proposes to complete routine maintenance of their other waterfront structures.

In October 2022, GZA completed a *Maine Maritime Academy Waterfront Structures Conditions Assessment*, which documented findings related to the above and below-water assessment of the current waterfront structures at the MMA Waterfront Campus. The assessment documented the observed August 2022 conditions of the existing pier, platforms, floating docks, walls, and bulkheads supporting the waterfront facility in order to aid the development of waterfront facility improvements.

### 3.0 ACTIVITY DESCRIPTION

To prepare for the NSMV and its more modern services and systems, modifications to the MMA Waterfront Campus are necessary. MMA's proposed project includes rehabilitation, upgrades and expansion of the existing pier structure including new infrastructure for mooring and berthing the NSMV; new floating docks to support reorganization of MMA's programs and training; repair of the existing floating docks; repair/replacement of portions of the bulkhead along the shoreline; maintenance dredging within the existing boat basin; and repair/modification of existing utilities and new utilities to support the NSMV's systems and waterfront activities (see **Figures 6-15**). The proposed project allows MMA to integrate the NSMV vessel into their academic programs and improve energy efficiency, reduce emissions (compared to the current training vessel) and coastal resiliency.

For MMA to be ready to receive the NSMV from MARAD in the fall of 2024, construction of the waterfront improvements is intended to commence in the summer of 2023, in accordance with best management practices outlined in the Department of the Army General Permit for the State of Maine General Condition 25. The initial construction work will focus on the elements necessary to berth the NSMV. It is anticipated that construction related activities for the remaining proposed work will continue to the fall of 2025. MMA intends to maintain waterfront operations as much as feasible throughout construction.

The following provides a description of each component of the proposed project. Avoidance and mitigation are covered in **Section 3.2** and erosion controls are discussed in **Section 3.3**.

#### 1. Replace Existing Retaining Wall and Bulkhead, West

Construct a new sheet pile bulkhead wall 4 to 7 feet in front of the existing bulkhead and extending approximately 115 linear feet from the east side of the existing pier to the western shoreline. The proposed offset from the existing bulkhead is necessary to properly locate the proposed bulkhead's anchorage system (tie rods and deadman) in the backland while avoiding the building foundation for Payson Hall (which was constructed after the existing bulkhead and deadman) and underground utilities corridor.

Construct a new concrete retaining wall 1 to 7 feet in front of the existing composite timber retaining wall and existing steel sheet pile bulkhead, respectively, and extending approximately 187 linear feet from the terminus of the proposed sheet pile bulkhead toward the western property boundary.

The retaining wall construction will require either temporary shoring in front of the wall or temporary removal of the beach sand to provide an excavation slope meeting OSHA requirements. For purposes of this permit application, it is assumed that the contractor will use slope excavation, which represents the approach with greater temporary impacts to the resource. Actual execution of the work may result in less temporary impact. The contractor will be required to stockpile the excavated material outside of the tidal area, utilize erosion control best management practices, and replace/stabilize excavated material upon completion of the retaining wall.



Proposed direct impacts include approximate 1,200 square feet of wetland fill between the existing bulkhead and retaining wall and the proposed bulkhead and retaining wall.

Indirect (temporary) impacts for construction of the retaining wall is estimated as 1,800 square feet.

2. Repair Existing Steel Sheet Pile Bulkhead, East

Complete routine maintenance of the existing steel sheet pile bulkhead from the east side of the existing pier to the eastern property boundary. The proposed work includes protective coating repair consisting of cleaning and recoating the exposed face of the sheet piling with a protective coating system. Materials will be managed in accordance with requirements outlined in the Maine Construction General Permit.

The proposed work does not alter the footprint of the bulkhead, and therefore, does not pose impacts to the resource.

3. Repair Existing Travel Lift Pier

Install high density polyethylene (HDPE) pile wrap to the timber piles of the travel lift piers. The HDPE wraps are needed to arrest decay and deterioration and extend the service life of the piles. The proposed wraps will extend from the top of the pile to the mudline and increases the overall diameter of the pile by approximately one inch. It is anticipated that the contractor will stage this work from a support vessel.

The proposed work does not alter the overall footprint of the travel lift piers. However, the pile wraps are estimated to result in an additional 0.14-square foot footprint at each pile for a combined total of approximately 6 square feet of direct impacts to the wetland resource.

4. Repair Existing Floating Docks and Guide Piles

Complete routine maintenance of the existing floating docks and associated guide piles. The proposed floating dock work includes repair of discrete timber elements, floatation units, and connection hardware. The proposed guide pile work includes protective coating repair consisting of cleaning and recoating the steel piles with a protective coating system and replacement of galvanic anodes, working from the surface of the dock.

The proposed work does not alter the footprint of the floating docks or guide piles, and therefore, does not include proposed impacts to the resource.

5. Maintenance Dredge of Inner Boat Basin

Perform maintenance dredging to re-establish the water depth at the inner floating dock located along the bulkhead on the east side of the existing pier.

Mechanical dredge operations are anticipated with upland disposal at property owned by MMA. The property is located approximately 3.5 miles from the project site and was previously permitted to accept dredge material from the same area as the proposed dredge.

The proposed dredge covers approximately 4,900 square feet to a depth of approximately -16.4' NAVD88 with a 1-foot over dredge for a total estimated volume of 470 CY. The extent and depth of the proposed dredge are within the limits of previously approved dredging at the site.



#### 6. Reconstruct Existing Pier

Remove the existing timber pier and replace it with a new pier consisting of steel pipe piles supporting precast concrete framing elements and precast concrete deck panels with a cast-in-place wearing surface.

The existing timber pier is L-shaped with an approximate 45-foot wide by 97-foot long approach to a 30-foot wide by 105-foot long pierhead for a total pier footprint of approximately 7,500 square feet. The pier has approximately 235 12-inch diameter timber support and fender piles. The piles will be extracted, or if unable to extract, will be cut at the mudline.

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 85 piles.

The proposed pier will include mitigation for overtopping and inundation from current day storm surge conditions and for consideration of sea level rise projections. However, due to backland site constraints, the deck elevation is limited to an approximate 6-inch raise at the bulkhead. In order to realize as much resiliency as practical, the pier deck will slope up at 3% to the pierhead. This will provide additional height at the end of the reconstructed pier and for continuation of the 3% grade along the proposed pier extension such that the pierhead of the proposed pier extension can be set at a more desirable elevation for the projected sea level rise and operational considerations.

The piles for the proposed pier reconstruction will be installed using both vibratory and impact hammer driving equipment. Depending on the subsurface conditions encountered, the piles may be end bearing, rock socketed into bedrock or have an internal rock anchor in the underlying bedrock.

The proposed pier reconstruction is within the same footprint as the existing pier, but, will have approximately 150 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 an increase of approximately 80 square feet of direct impacts at the mudline, which are required for appropriate support for the reconstructed pier.

#### 7. Modify Existing Mooring and Breasting Platforms

The proposed work at the three existing pile-supported platforms (one mooring platform and two breasting platforms) includes routine maintenance of the piles and modification of the concrete cap to raise the elevation to match the deck elevation raise of the proposed pier reconstruction.

The proposed work does not alter the footprint of the mooring and breasting platforms or their associated piles, and therefore, does not pose impacts to the resource.

#### 8. Proposed Pier Extension

Construct a proposed pile-supported pier extension for the mooring and berthing of the NSMV. The proposed pier extension has a T-head configuration comprised of a 45-foot wide by 90-foot long approach from the end of the proposed pier reconstruction to a 45-foot wide by 325-foot long pierhead. The proposed pier approach and pierhead consist of steel pipe piles supporting precast concrete framing elements and precast concrete deck panels with a cast-in-place concrete wearing surface.

The proposed piles are 24-inch diameter steel pipe piles that will be installed using both vibratory and impact hammer driving equipment. Depending on the subsurface conditions encountered, the piles may be end-bearing, rock socketed into bedrock or have an internal rock anchor into the underlying bedrock.



The proposed pier extension has an approximate 18,700 square foot footprint with approximately 290 support piles (approx. 910 SF of direct impacts at the mudline) and approximately 15 piles to support pier fendering (approx. 50 SF of direct impacts at the mudline).

#### 9. Proposed Mooring Dolphins

Construct three proposed mooring dolphins for mooring of the NSMV. The proposed mooring dolphins are each 30 feet wide by 30 feet long. They consist of steel pipe piles supporting a concrete cap. The two western mooring dolphins consist of 13 piles and the east dolphin consists of 14 piles.

Access from the proposed pier extension to the western dolphin will be provided via a 4-foot clear width elevated walkway consisting of three segments of prefabricated aluminum walkways with two intermediate supports. Each support is anticipated to consist of two steel pipe piles with a concrete cap.

The proposed piles are 24-inch diameter steel pipe piles that will be installed using both vibratory and impact hammer driving equipment. Depending on the subsurface conditions encountered, the piles may be end-bearing or have an internal rock anchor into the underlying bedrock.

The proposed mooring dolphins have a combined 2,700 square foot footprint with 40 support piles (approx. 130 square feet of direct impacts at the mudline).

The proposed elevated access walkway has an approximate 600 square foot footprint with four support piles (approx. 15 square feet of direct impacts at the mudline).

#### 10. Proposed Floating Docks

Install six floating docks of varying size along the proposed pier extension and the proposed pier reconstruction. Timber floating docks with steel pipe guide piles are proposed for accommodating reorganization of MMA's waterfront operations and academic programs. The proposed floats along the proposed pier extension will also provide berthing of the small vessel fleet when they must be relocated for the proposed work at the existing pier and floats is advanced.

The proposed guide piles are 24-inch diameter steel pipe piles that will be installed using both vibratory and impact hammer driving equipment. Depending on the subsurface conditions encountered, the piles may attain adequate embedment before encountering bedrock. If adequate embedment is not attained the piles will be rock socketed into the bedrock.

The proposed floating docks have a combined 9,340 square foot footprint with 51 guide piles (approx. 160 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 9,500 square feet.

#### 11. Proposed Floating Breakwater

Install a floating breakwater to provide wave attenuation for the proposed floating docks on the west side of the pier. The floating breakwater consists of a 24-foot wide by 150-foot long concrete float. Anchorage of the floating breakwater will have direct impacts to the mudline. 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 3,600 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. For purposes of this application, the overall impact is estimated as 3,675 square feet.

## 12. Proposed Utilities Reconfiguration

Proposed utility reconfiguration includes electrical, communications, steam, water, and sewer upgrades for connection with the NSMV's systems and for lighting, power and boat pump out services along the pier and floating docks. The utilities will be within underground trenches from the upland service points to the bulkhead and continue within enclosed trenches integral with the underside of the pier deck to the topside connection at the NSMV or to utility trays on the underside of the gangways to the floating docks.

The proposed utility work also includes relocation of MMA's current seawater intake for the laboratory classrooms within Andrews Hall.

The proposed utility work does not pose impacts to the resource. A description of the work is provided as part of the complete project proposed.

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

**TABLE 1: WETLAND RESOURCE IMPACTS FOR THE PROPOSED ACTIVITIES**

<b>Proposed Activity</b>	<b>Shading Footprint* (Square Feet)</b>	<b>Direct Impacts† (Square Feet)</b>	<b>Indirect Impacts‡ (Square Feet)</b>
1. Replace Existing Retaining Wall and Bulkhead, West	-	1,200	1,800
2. Repair 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	-	4,900	-
6. Reconstruct Existing Pier	-	80	-
7. Modify Existing Mooring and Breasting Platforms	-	-	-
8. Proposed Pier Extension	18,700	960	-
9. Proposed Mooring Dolphins (including elevated access walkway)	3,300	145	-
10. Proposed Floating Docks	9,340	160	-
11. Proposed Floating Breakwater	3,675	75	-
12. Proposed Utilities Reconfiguration	-	-	-
<b>Total, excluding Dredge</b>	<b>35,015</b>	<b>2,626</b>	<b>1,800</b>
<b>Total, including Dredge</b>	<b>35,015</b>	<b>7,526</b>	<b>1,800</b>

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

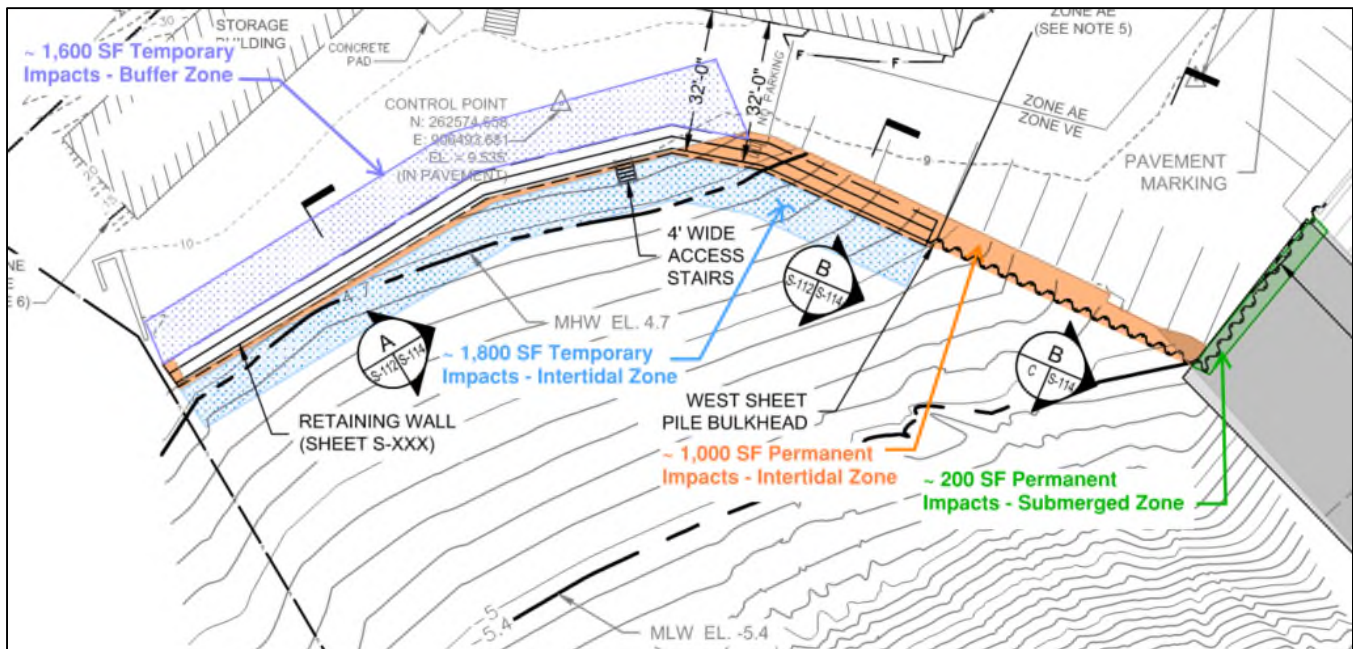
† Direct impacts reflect the square footage of new wetland fill (direct contact with the resource).

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



### 3.1 PROJECT CLASSIFICATION AND IMPACTS

MMA requests an Individual Natural Resources Protection Act (NRPA) Permit from the Maine Department of Environmental Protection (MEDEP) Land Resources Bureau for a proposed activity that will occur in protected natural resources, including coastal and emergent wetlands.



There are no proposed impacts within 250 feet of a lake, pond, or vernal pool classified as a GPA under 38 M.R.S. §465-A. However, since the proposed project will occur within and adjacent to land classified as coastal wetlands, this project is not eligible for a Tier 1, Tier 2, or Tier 3 review, and is therefore subject to an Individual Natural Resource Protection Act Permit.

### 3.2 AVOIDANCE AND MINIMIZATION OF IMPACTS

The proposed project avoids and minimizes impacts to natural resources, to the extent practicable, by modifying existing structures and working with the existing configuration of MMA's waterfront. The following provides additional details for both avoidance and minimization of impacts.

#### 3.2.1 Avoidance of Impacts

Complete avoidance of impacts to the coastal wetland is not practical because of the nature of water-dependent uses associated with MMA's academic programming and vessels. However, impacts were avoided by a careful design of the project and limiting the proposed new structures to those necessary for the waterfront operations, academic programming and the safe mooring and berthing of the NSMV and small vessel fleet.

#### 3.2.2 Minimization of Impacts

Minimization of impacts was achieved by using stronger capacity materials than timber for new and replacement structures; working with the existing configuration of the waterfront structures; and limiting new structures to those for required operations.



- a. **Stronger Capacity Materials:** The proposed pier reconstruction replaces the existing timber pier with a steel pile-supported concrete pier. This results in a pier with not only a greater structural capacity but also greater pile spacing and fewer piles than if the pier were reconstructed in-kind with timber. If the existing pier were rehabilitated with timber to increase its structural capacity, it would require adding 225 timber piles for a total of 460 timber piles at an approximate 6-foot spacing. By using concrete framing and 24-inch diameter steel pipe piles, the proposed pier reconstruction requires only approximately 85 piles. Thus, increasing the pile spacing and reducing the quantity of piles.
- b. **Working with Existing Waterfront Configuration:** Replacement of the steel sheet pile bulkhead and composite timber retaining wall is required due to deterioration and failure of the systems. Due to the water depth at the southern portion of the bulkhead (at the pier) and consideration of future loading scenarios for bulkhead alterations as sea level rise is realized, a steel sheet pile bulkhead with a tie rod and deadman anchorage system is necessary. However, the deadman location is restricted by the necessary underground utility trench to the pier and the foundation for Payson Hall. In order to set the deadman at an effective distance behind the bulkhead for the design loads and avoid conflict with the utility trench and building foundation, the bulkhead needs to be placed 4 to 7 feet in front of the existing bulkhead. This represents the minimum offset for the geo-structural performance of the new bulkhead and, therefore, is the minimum impact necessary to the coastal wetland resource.
- c. **Structures Limited to Those Required for Operations:** The proposed new structures represent the minimum structures necessary for the safe mooring and berthing of the NSMV; the operations associated with the academic programming; and the continuation of MMA's waterfront operations, as much as feasible, during construction. The size of the proposed pierhead and the size and location of the proposed dolphins are the minimum necessary to meet MARAD's mooring and berthing requirements for the NSMV. The width of the proposed pier approach maintains the existing pier width and is the minimum width for accommodating on-pier enclosures for safety equipment and watchtower, maneuvering of equipment and passage of personnel/student. A wider pier was considered to allow for trucks and trailers to turn around on the pier. However, the additional width and corresponding impacts were deemed too great and the MMA operations team agreed that vehicle operators would back-up off the pier rather than turn around. Finally, the proposed floating docks allow for MMA to continue to operate (at a reduced capacity) when construction is underway at the existing structures. The floating docks also provide additional berths for the vessel fleet which will afford MMA more flexibility with vessel locations and with what type of vessel to acquire for vessel replacements or augmentation of the fleet. Therefore, the proposed structures are the minimum required with the minimum impact necessary to the coastal wetland resource.

### 3.3 EROSION CONTROL AND CONSTRUCTION PLAN

Prior to the landside construction activities, the Contractor will be required to submit for review to the design engineer a sediment and erosion controls plan which will supplement details provided below. The Contractor will be required to follow the Maine Erosion and Sediment Control Best Management Practices and Army Corps Maine General Permit requirements. Relevant landside BMPs, such as perimeter controls, will include those for excavation for installation of the underground utility trench, temporary excavation for the concrete retaining wall construction, and grading and paving of the disturbed backland areas.

For the in-water work, a turbidity curtain and debris boom will be required during turbidity generating activities for the duration of in-water work. Activities requiring the turbidity curtain and debris boom include, but are not limited to, removal of the existing timber pier, dredging and dewatering of dredge material.



Construction means and methods will be proposed by the Contractor. It is anticipated that other than the replacement bulkhead and retaining wall, the proposed work will be conducted from barges. Pile driving will be conducted using both vibratory and impact hammer driving equipment. A soft-start pile-driving procedure will be used at the beginning of each pile-driving session and when hammering ceases for more than 30 minutes. It is not anticipated that cofferdams will be used for any of the water-based activities.

Sediment and erosion controls are included on the overall work plan provided as **Figure 6**.

### 3.4 ALTERNATIVES ANALYSIS

As presented in **Section 2**, the primary need for this project is to prepare the existing waterfront for the incoming NSMV in the fall of 2024 and to complete routine maintenance of the existing water-dependent structures. The proposed project was developed through evaluation of alternatives to identify the most economical, practical, and adaptable structures to safely moor and berth the NSMV; to integrate the NSMV into MMA's academic programming and operations; to mitigate current-day storm surge inundations and to incorporate some level of coastal resiliency for sea level rise projections.

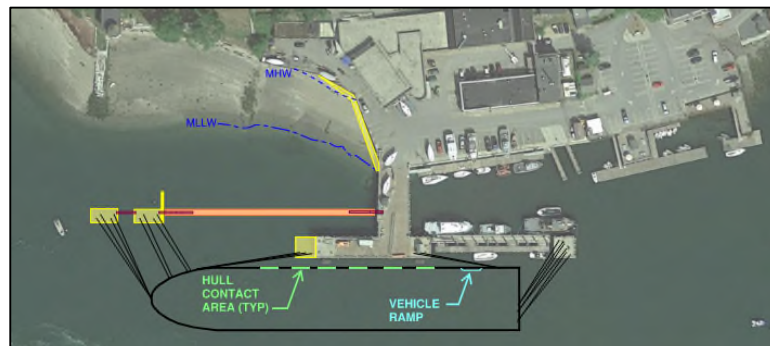
This section describes the reasonable alternatives considered for the project. This includes the No Action Alternative and the Action Alternative.

#### 3.4.1 No Action Alternative

Under the No Action Alternative, MMA would not construct the proposed structures. As such, the project purpose and need would not be met. The MMA waterfront, as currently configured, does not meet criteria established by MARAD and is unable to support the NSMV. Therefore, MMA and the State of Maine would be denied the benefits of this valuable academic and national security resource as well as the positive environmental impact of replacing the current training vessel with the modern, energy efficient NSMV.

#### 3.4.2 Action 1

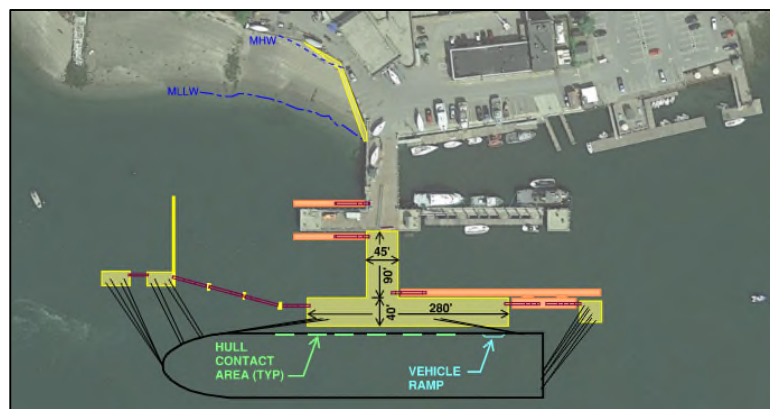
Action 1 represented the least amount of new build-out to accommodate the NSMV. The configuration replaced the sheet pile bulkhead and composite timber retaining wall along the northwest portion of the shore, rehabilitated the existing pier and northeast mooring platform, added a new dolphin abutting the existing west berthing platform, and added two new dolphins to the west with a new floating dock off the pier for access to them. This alternative restricted MMA's use of the outermost floating dock and impacted MMA's operations. It also limited the opportunities for training of the NSMV's capabilities and systems because the berth face was too short and did not allow full operational use of the on-board cranes (provisions stores crane and cargo crane) and provided limited landing point for access from the pier to the vessel's quarter deck entrance.





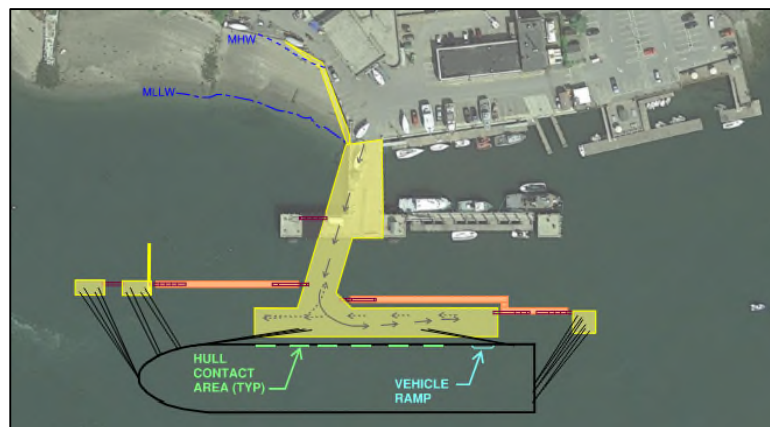
### 3.4.3 Action 2

Action 2 maintained the existing waterfront structures and incorporated a pier extension to create a berth for the NSMV. The configuration replaced the sheet pile bulkhead and composite timber retaining wall along the northwest portion of the shore, rehabilitated the existing pier and platforms, added a pier extension with a 280-ft berth face for the NSMV, added three new dolphins for mooring lines from the NSMV, and added four new floating docks. This configuration maintained MMA's operations on the existing structures and allowed for some reorganization of the academic programs. While the length of the NSMV berth provided use of the on-board cranes (provisions stores crane and cargo crane), it provided limited landing point for access from the pier to the vessel's quarter deck entrance.



### 3.4.4 Action 3

Action 3 incorporated a reconfiguration of the existing pier and extended the pier waterward for a new berth to accommodate the NSMV. The configuration replaced the existing pier superstructure; repaired and supplemented the existing pier substructure (piles); added a pier extension with an approach alignment that allowed for a two-axle, single unit, general hauling truck to turnaround on the pier; provided a 325-foot berth face for the NSMV; added three new dolphins for the NSMV mooring lines; and added floating docks for access to the new mooring dolphins. This configuration maintained MMA's operations on the existing structures and allowed for more reorganization of the academic programs. It also provided a berth length that allowed use of the on-board cranes (provisions stores crane and cargo crane) and landing point for access from the pier to the vessel's quarter deck entrance. However, this option was the most costly and required a greater footprint for the proposed pier.





#### 3.4.5 Action 4

Action 4 maintained the existing pier and added a pier extension with an east-west berth configuration for the NSMV. However, this configuration was not considered viable or practical because it had the most waterward reach, placed the stern dolphin approximately aligned with the Red Nun buoy to the northeast, and oriented the NSMV such that it was not in alignment with the tidal current direction or the prevailing wind direction. As such, the berth orientation subjected the NSMV to the greatest environmental loading (wind, current and wave), posed additional risks for the mooring and berthing of the NSMV and was not consistent with standard practices for siting a berth.

#### 3.4.6 Proposed Action

The Proposed Action consists of a modified version of Action 2 that incorporates the NSMV berth length of Action 3. The Proposed Action is discussed in **Section 3.0**.

### 3.5 COMPENSATORY MITIGATION

Per NRPA Chapter 310, Section 5(c), compensation is required when the MEDEP determines that a wetland alteration will cause a wetland function or functions to be lost or degraded as identified by a functional assessment or the department's evaluation of the project. During a January 18, 2023 pre-application meeting with Shannon Smith from MEDEP, it was determined that an in-lieu fee payment would be accepted as compensatory mitigation for the proposed impacts to the wetland habitat present in the project area. The natural resource enhancement and restoration cost in Hancock County is \$4.69 per square foot and the average assessed land value in Hancock County is \$0.23 per square foot, so the estimated in-lieu fee payment to fill 2,626 square feet of wetlands is \$12,919.92. Refer to **Table 1** for a breakdown of wetland impacts by activity type.

## 4.0 IDENTIFICATION OF NATURAL AND CULTURAL RESOURCES

### 4.1 FLOODPLAINS AND WETLANDS

The National Flood Insurance Program (NFIP) defines regulations for construction-related activities within floodplains designated by the Federal Emergency Management Agency (FEMA) and as defined by a Flood Insurance Rate Map (FIRM). Section 60.3 (d)(3) of the NFIP regulations states that a community is to "Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base (100-year) flood discharge". Executive Order (EO) 11988 – Floodplain Management directs each federal agency to take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. Compliance with EO 11988 is required for construction and improvement projects that are federally undertaken, financed, or assisted and that involve a floodplain encroachment, which is an action within the limits of the base (100-year) floodplain.

The Proposed Action is located within portions of zones AE (100-year floodplain, base elevation 10 feet) and VE (100-year floodplain, base elevation 13 feet), as identified on FIRM panel 23009C0893D, effective July 20, 2016. A floodplain map is provided as **Figure 16**. As one of the objectives of the Proposed Action is to rehabilitate the pier and existing bulkhead, there is no practicable alternative to the proposed construction activities outside the floodplain that would still meet the purpose and need of the project. Impacts of the Proposed Action on the hydrology, drainage, and flooding conditions of the waterway are expected to be minimal and therefore do not require mitigation.



Executive Order 11990, Protection of Wetlands, directs federal agencies to take actions to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands on federal property. In addition, DOT Order 5660.1A, Preservation of the Nation’s Wetlands, governs MARAD’s actions to assure the protection, preservation, and enhancement of the nation’s wetlands to the fullest extent practicable.

As shown in **Figure 17**, based on review of National Wetland Inventory (NWI) data, in addition to field observations completed by GZA, the shoreline located in the Proposed Action area is considered estuarine and marine wetlands. The Proposed Action includes the repair/replacement of portions of the bulkhead along the shoreline, which is adjacent to identified wetlands.

GZA delineated and classified wetlands and photographed natural resources on January 25, 2023. The wetland delineation was conducted in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual*<sup>1</sup>, using the *Routine Determination Method*; in conjunction with the *Regional Supplement*<sup>2</sup> to the *Corps of Engineers Wetland Delineation Manual*, the *National Wetland Plant List*<sup>3</sup>, *Field Indicators of Hydric Soils in the United States Version 8.2*,<sup>4</sup> and *Field Indicators for Identifying Hydric Soils in New England*.<sup>5</sup> Observed wetlands were classified in accordance with the *Classification of Wetlands and Deepwater Habitats of the United States*.<sup>6</sup> The High Tide Line (HTL) was evaluated in accordance with the Army Corps of Engineers “waters of the U.S.” under the *Clean Water Act* (33 CFR 328) and “navigable waters of the U.S.” under Section 10 of the *Rivers and Harbors Act of 1899* (33 CFR 329).<sup>7</sup> The wetland delineation field work was performed by Mr. Peter Petkauskos (State of New Hampshire Certified Wetland Scientist #319) on January 25, 2023 (see **Appendix D**). A photo log is included as an appendix in the wetland delineation report.

The Site contains one estuarine wetland system (i.e., Wetlands 1 **Table 2**). Wetland 1 is located in the southwestern portion of the Site. The wetland contains the Bagaduce River and drains in a southerly direction into the Atlantic Ocean.

**TABLE 2. SUMMARY OF WETLAND DELINEATION**

Wetland Identification	Wetland Classification	Notes
Wetland 1	M2US2N	Located in the southwestern portions of the Site and contains the Bagaduce River draining southerly into the Atlantic Ocean.

The wetlands on Site are classified as marine intertidal wetland system with unconsolidated shore that is regularly flooded with a sand bottom (M2US2N). The intertidal deep-water habitat adjacent to the intertidal wetland is classified as a

<sup>1</sup> U.S. Army Corps of Engineers, Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

<sup>2</sup> U.S. Army Corps of Engineers, 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, C.V. Noble and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, Mississippi; U.S. Army Engineer Research and Development Center.

<sup>3</sup> U.S. Army Corps of Engineers, Engineer Research and Development Center. 2020. *National Wetland Plant List, Version 3.4*. Cold Regions Research and Engineering Laboratory, Hanover, NH

<sup>4</sup> United States Department of Agriculture, Natural Resource Conservation Service, 2018. *Field Indicators of Hydric Soils in the United States*, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

<sup>5</sup> New England Hydric Soils Technical Committee. 2020 Version 4. *Field Indicators for Identifying Hydric Soils in New England*, New England Interstate Water Pollution Control Commission, Lowell, Massachusetts.

<sup>6</sup> Federal Geographic Data Committee. 2013. *Classification of Wetlands and Deepwater Habitats of the United States*. FGDC-STD-004-2013. Federal Geographic Data Committee and U.S. Fish and Wildlife Service.

<sup>7</sup> U.S. Army Corps of Engineers New England District, Department of the Army General Permits of the State of Maine. 2020. “Waters of the U.S.” under the Clean Water Act (33 CFR 328) and “navigable waters of the U.S.” under Section 10 of the Rivers and Harbors Act of 1899 (33 CFR 329).



subtidal deep-water habitat with unconsolidated bottom (M1UBL). Wetland 1 is dominated by a tidal sand beach with a low energy high tide and composed of fine to medium sand with no vegetation.

As required by MEDEP, a coastal wetland characterization checklist of intertidal and subtidal wetlands is included in **Appendix D**. Wetland 1 contains an intertidal wetland on the southwest portion of the Site. GZA completed one coastal characterization checklist for Wetland 1. The data sheet was completed during low tide. Mussels were observed along the sand beach which has a low energy high tide and is composed of fine to medium sand with no vegetation.

Per MEDEP Chapter 310 (5)(C), a wetland function-value assessment is required for a NRPA Individual Permit Application. A wetland function and value assessment was completed by GZA on January 25, 2023 (see **Appendix D**) in accordance with the U.S. Army Corps of Engineers Highway Methodology Workbook Supplement: Wetlands Functions and Values<sup>8</sup>.

#### 4.2 VEGETATION AND SIGNIFICANT WILDLIFE HABITAT

According to the Maine Department of Inland Fisheries and Wildlife (MDIFW) The Proposed Action is located in the Downeast Coast of the Acadian Plains and Hills Ecoregion. This Ecoregion is characterized by forests containing a large percentage of spruce and fir. Boreal features include rocky woodlands of patchy black spruce and heaths, as well as boreal plant species such as black crowberry, baked appleberry, and roseroot. Coastal raised peat bogs occur. The region includes an island-bay coastal type east of Penobscot Bay and a mostly cliffed coastal margin east of Machias Bay. Rocky headlands and islands are abundant with few isolated pocket beaches. Some gravel beaches and coarse-grained tidal flats occur.

The Proposed Action is comprised primarily of waterfront features that were developed prior to 1956, and do not support significant vegetation communities. The project area consists of the existing MMA docking facility and associated boating routes.

Existing characteristics of the Proposed Action area include asphalt-paved surfaces on land, and waterfront structures including approximately 410 feet of steel sheet pile bulkhead, approximately 150 feet of timber and composite lagging wall, a timber access pier, two concrete breasting platforms, one mooring platform, an inboard and outboard section of timber floating docks, and two timber travel lift runway piers. The existing structures currently offer limited suitability for wildlife use. Impacts resulting from the repair and modification of the structures would likely result in minor changes to the suitability of the environment for wildlife use, due to the limited availability of habitat and the overall low quality of the habitat that currently exists.

Review of the Maine Inland Fisheries and Wildlife habitat data indicates that the wetland adjacent to the western bulkhead is considered a moderate Tidal Wading Bird and Waterfowl Habitat (TWWH). The proposed project includes a new sheet pile bulkhead wall 4 to 7 feet in front of the existing bulkhead and extending approximately 115 linear feet from the east side of the existing pier to the western shoreline. The proposed project will result in a decrease of available TWWH in the area of the western bulkhead; however, its proximity to built structures suggests that this is not a high quality TWWH.

During a pre-application meeting conducted on January 18, 2023, Denis-Marc Nault of the Maine Department of Marine Resources (DMR) indicated that Bagaduce River is an active alewife run; however, the fish tend to run more to the south and not at the side of the channel where the existing MMA pier is located. As part of the meeting, DMR indicated they

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<sup>8</sup> USACE. 1999. The Highway Methodology Workbook Supplement. Wetland Functions and Values: A Descriptive Approach. U.S. Army Corps of Engineers, New England Division. NAEPP-360-1-30a. 32 pp





may request a time of year restriction for dredging and we understand that DMR will review this application after receipt from MEDEP

Federally listed species and their habitats are protected under the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531-1544, 87 Stat. 844), as amended. To evaluate the Proposed Action area for the potential to contain threatened or endangered species, lists of threatened and endangered species for the Proposed Action area were obtained and reviewed from the United States Fish and Wildlife Service (USFWS). Species that the USFWS determined may be affected by the Proposed Action include the Northern Long-eared Bat (*Myotis septentrionalis*), Roseate Tern (*Sterna dougallii*), Atlantic Salmon (*Salmo salar*), and the Monarch Butterfly (*Danaus plexippus*). According to the USFWS, no critical habitats are located within the Proposed Action area. The species list provided by USFWS is provided in **Appendix E**.

Habitat in the Proposed Action area provides minimal beneficial use to terrestrial animals, as land waterfront features primarily consist of asphalt-paved surfaces. The shoreline and Castine Harbor provide habitat to avian and aquatic species. Accordingly, under the Maine Natural Resources Protection Act, a portion of the Proposed Action area is considered Tidal Waterfowl and Wading Bird Habitat. However, since the Proposed Action includes modifications and repairs to already existing structures, minimal impacts to the shoreline habitats are anticipated, other than those disturbances that will occur during the construction phase.

The Migratory Bird Treaty Act (MBTA) of 1918 protects migratory and resident bird species by prohibiting taking, attempting to take, capturing, killing, selling/purchasing, possessing, transporting, and importing of migratory birds (including ground-nesting species), their eggs, parts, and nests. The Bald and Golden Eagle Protection Act (BGEPA) of 1940 prohibits the taking, including parts, nests, or eggs, of eagles and protects their continued survival in the United States. No trees or vegetation suited to serve as habitat for protected eagles would be impacted by the Proposed Action.

The Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), as amended, directs that all agencies utilizing federal dollars for projects, where actions could impact essential fish habitat or marine threatened and endangered species, to consult with the National Marine Fisheries Service (NMFS) regarding potential adverse effects. Objectives of the MSFCMA include preventing overfishing, rebuilding overfished stocks, increasing long-term economic and social benefits, ensuring a safe and sustainable supply of seafood, and protecting fish habitats that need fish to spawn, breed, feed, and grow to maturity.

A Section 7 consultation with both the United States Fish and Wildlife Service (USFWS) and NMFS is being conducted to determine whether the identified species will be adversely impacted. The USFWS consultation letter was sent on January 19, 2023, and follow-up communication took place on January 23, 2023 (see **Appendix E**). A Biological Assessment (BA) is currently being drafted for submission to NMFS and will be submitted as soon as it is completed.

#### 4.3 FARMLAND SOILS

The U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) administers the Farmland Protection Policy Act (FPPA 1981) to ensure that federal programs minimize unnecessary and irreversible conversion of farmland soils to non-agricultural uses. Observations made during the Site reconnaissance on August 23 and 24, 2022, revealed that there are no active agricultural lands within or adjacent to the Proposed Action. For the purpose of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.

The two soil types within the Proposed Action area, as mapped by the USDA NRCS, include Udorthents-Urban land complex (Ud) on land, and 'Water Bodies' (W) within Castine Harbor. These soil types are not classified as prime farmland soils,



nor are they associated with land of statewide or local importance. The Proposed Action area occurs on a site developed for commercial purposes; therefore, no adverse impacts to any prime farmlands are anticipated as a result of the Proposed Action.

#### 4.4 CULTURAL AND HISTORICAL RESOURCES AND HISTORIC PRESERVATION

Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, protects those properties that are listed or eligible for listing in the National Register of Historic Places (NRHP). Approval of the Proposed Action requires compliance with Section 106 of the NHPA and its implementing regulations in 36 Code of Federal Regulations (CFR) Part 800 (Protection of Historic Properties). Pursuant to the CFR, the process involves identification of proper consulting parties, which includes the Maine Historic Preservation Commission (MHPC). A request for project review was sent to the MHPC on January 4, 2023. MHPC responded to the project review on January 11, 2023, and concluded that the proposed project would have no adverse effect upon historic properties (architectural or archaeological) as defined by Section 106. A copy of the letter and subsequent response received from MHPC is provided in **Appendix F**.

As per 36 CFR §800.2(c)(2)(i)(B), consultation with the Tribal Historic Preservation Office (THPO) was conducted by sending letters to the Tribal Historic Preservation Officer & Environmental Planners of the five federally recognized tribes in Maine on January 4, 2023. The Passamaquoddy Tribe responded on January 12, 2023, and indicated that the project would not have any impact on cultural and historic concerns of their tribe. The Mi'kmaq Nation (formerly Aroostook Band of Micmac) responded on January 18, 2023, and indicated that the tribe did not have knowledge of any specific sites or cultural features that exist at the proposed location; however, they requested that if wetlands are disturbed and require mitigation, the black ash tree (*Fraginus nigra*) be utilized as the principal wetland species for wetland restoration. Both tribes requested that should human remains, artifacts, or other evidence of Native American presence be discovered, construction should cease and the tribes should be notified. Copies of the letters and subsequent responses received from the five federally recognized tribes are provided in **Appendix G**.

In the event archeological deposits, including any Native American pottery, stone tools, bones, or human remains are uncovered, the project shall be halted and the applicant shall stop work immediately in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. All archeological findings will be secured by the applicant, and access to the sensitive area will be restricted. The applicant will inform MARAD immediately, and MARAD will consult with the MHPC and THPO. Work in sensitive areas shall not resume until consultation is completed and until MARAD determines that the appropriate measures have been taken to ensure complete project compliance with NHPA and its regulations.

#### **5.0 FEDERAL REGULATORY REQUIREMENTS**

The U.S. Army Corps of Engineers (USACE) issued a General Permit (GP) that allows MEDEP to review wetland permit applications and grant wetland impact permits under the Clean Water Act. However, the USACE maintains a supervisory role over State wetland permits. In the case of an Individual Permit project where primary and secondary impacts exceed one acre, the USACE requires a Pre-Construction Notification (PCN) and written approval from the USACE prior to commencing work. The applicant may receive a request from the USACE for additional information, modifications to the project as proposed, compensatory mitigation, or an Individual Permit for the project during the course of their review. If an Individual Permit is requested, the USACE has declared that the project is ineligible for a permit under the SPGP.

During a pre-application meeting conducted on January 18, 2023, Shawn Mahaney of the USACE indicated that the USACE will accept the state application with the PCN under the General Permit.



## 6.0 STATE REGULATORY REQUIREMENTS

During the pre-application meeting held on January 18, 2023, Shannon Smith of the MEDEP indicated that the full NRPA Individual Permit was required for the project. A public informational meeting was held at Emerson Hall (Castine Town Hall) on the evening of February 6, 2023. Please refer to **Appendix K** for public notice filing and certification.

## 7.0 LOCAL REGULATORY REQUIREMENTS

Based on review and coordination with the Town of Castine, initially on October 7, 2022 and again on December 15, 2022, the two local permits required for the project include the site plan approval permit and the building construction permit. Coordination with the Town of Castine is ongoing.

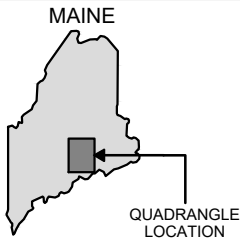
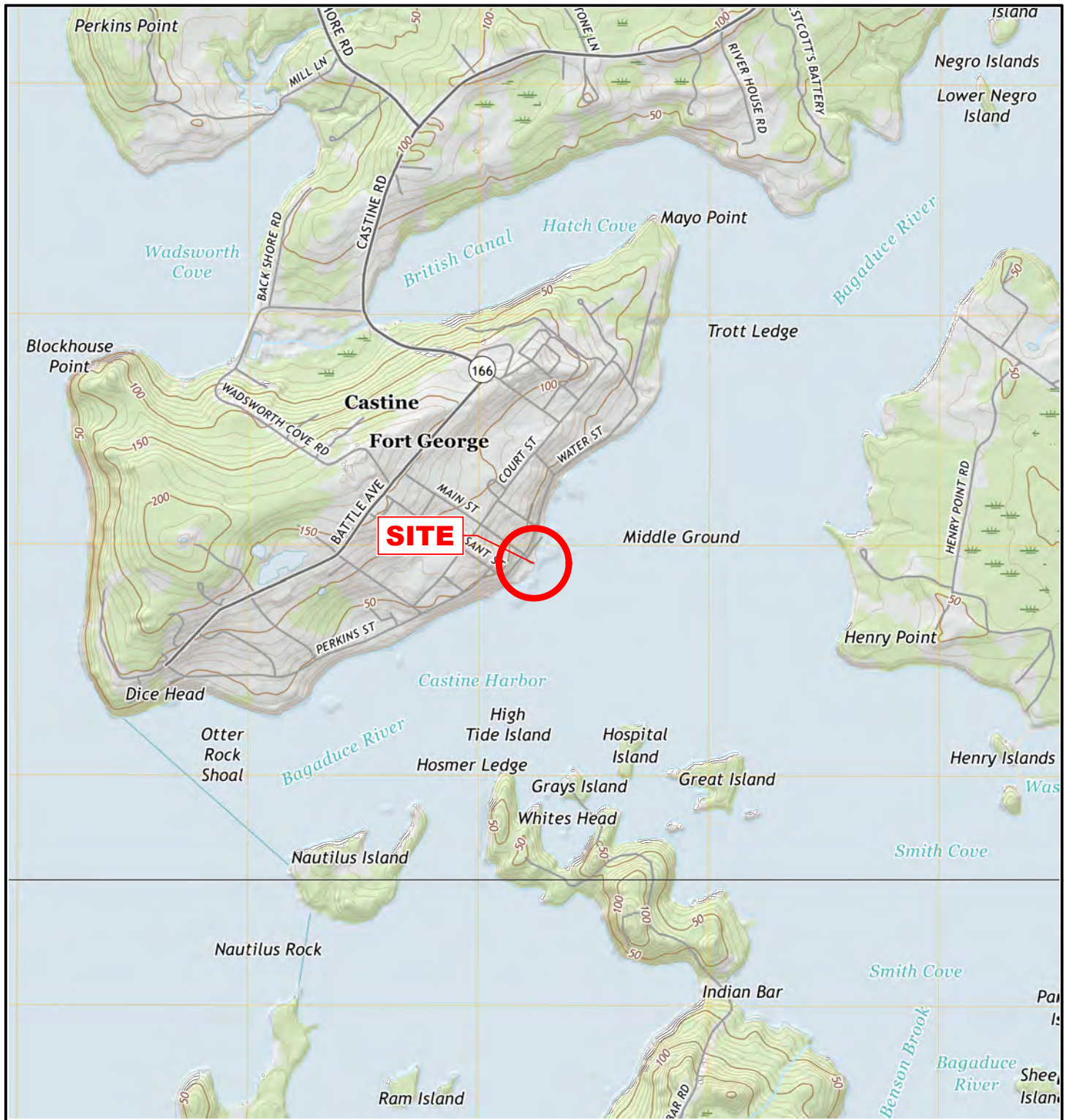


## Figures

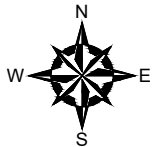


**Figure 1 – Vicinity and Topographic Map**






SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



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PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME
PROJ MGR:	RKC
DESIGNED BY:	RKC
REVIEWED BY:	DDF
DRAWN BY:	MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
WATER STREET, CASTINE, MAINE

VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

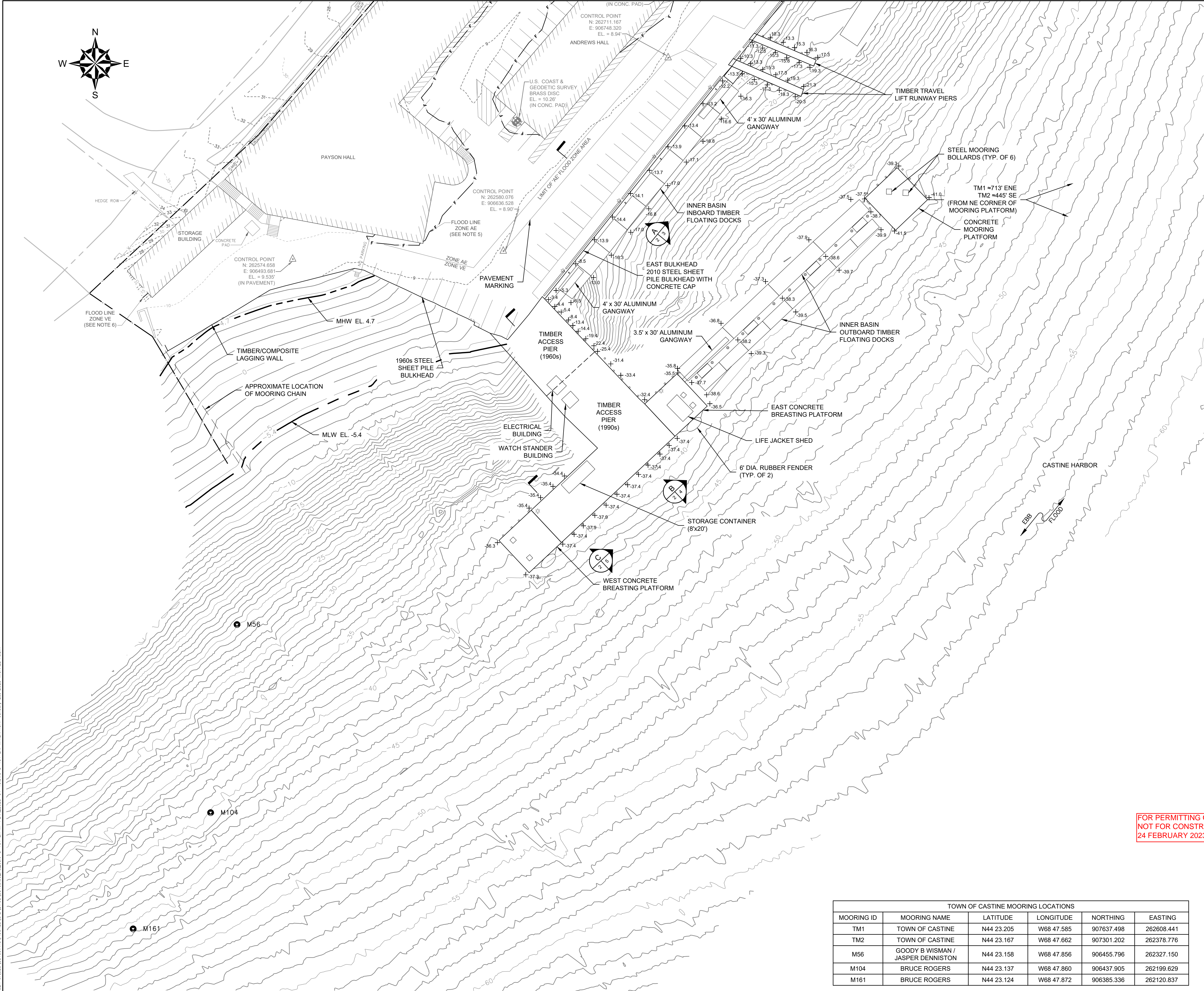
DATE:	FEBRUARY 2023
PROJECT NO.	03.0035109.00
FIGURE	1



**Figure 2 – Existing Waterfront Structures Plan**



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- NOTES:
- THIS PLAN DEPICTS EXISTING TOPOGRAPHIC CONDITIONS AS FOUND AND SURVEYED BY HALEY WARD, INC. ON SEPTEMBER 1, 2022, SUPPLEMENTED BY LIMITED TOPOGRAPHIC CONDITIONS SURVEYED BY GZA GEOENVIRONMENTAL, INC. ON AUGUST 30 AND 31, 2022.
  - HYDROGRAPHIC SURVEY PERFORMED BY GZA GEOENVIRONMENTAL, INC. ON AUGUST 30 AND 31, 2022, AND REPRESENTS THE CONDITIONS AT THE TIME OF THE SURVEYS. HYDROGRAPHIC SURVEY WAS PERFORMED FROM A GZA SURVEY VESSEL UTILIZING AN ODOM HYDOTRAC SINGLE-FREQUENCY ECHO SOUNDER, 200 KHZ TRANSDUCER WITH AN 8-DEGREE BEAM, ODOM DIGIBAR VELOCITY PROBE, LEICA VIVA SMARTWORX REAL-TIME KINEMATIC (RTK) DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS) UNIT FOR HORIZONTAL POSITIONING AND HYPACK ACQUISITION AND PROCESSING SOFTWARE.
  - HORIZONTAL DATUM: MAINE STATE PLANE, EAST ZONE, NAD83, US FEET
  - VERTICAL DATUM: ELEVATIONS ARE IN FEET AND REFERENCE THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
  - A PORTION OF THE SUBJECT PROPERTY HEREON IS SITUATED IN FEMA FLOOD ZONE AE, AS SHOWN ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NUMBER Z3009C0893D, EFFECTIVE JULY 20, 2016, AND AS DEPICTED ON THIS PLAN. FEMA ZONE AE CONTAINS A 100-YEAR BASE FLOOD ELEVATION (BFE) OF 10 FEET NAVD88. A PORTION OF THE SUBJECT PROPERTY HEREON IS ALSO SITUATED IN FEMA FLOOD ZONE VE, AS SHOWN ON SAID FLOOD INSURANCE RATE MAP AND DEPICTED ON THIS PLAN. FEMA ZONE VE CONTAINS A 100-YEAR BFE OF 13 FEET NAVD88.
  - SITE BENCHMARKS CONSIST OF MAG NAILS SET IN THE PAVEMENT. BENCHMARKS WERE LOCATED USING A LEICA VIVA SMARTWORX REAL-TIME KINEMATIC (RTK) DIFFERENTIAL GLOBAL POSITIONING SYSTEM (DGPS) UNIT.
  - THIS IS NOT A STANDARD BOUNDARY SURVEY. PROPERTY LINES SHOWN HEREON ARE CONSIDERED APPROXIMATE.
  - EXISTING UTILITIES ARE NOT SHOWN ON THIS PLAN FOR CLARITY. REFER TO THE EXISTING UTILITIES PLAN.
  - MOORING POINT LOCATIONS ARE APPROXIMATE, AS PROVIDED BY THE TOWN OF CASTINE.
  - LEADLINE SOUNDINGS WERE PERFORMED BY GZA GEOENVIRONMENTAL, INC. ON AUGUST 24, 30, AND 31, 2022. SOUNDINGS WERE NOT PERFORMED ON THE SOUTHEAST EDGE OF THE ACCESS PIER, DUE TO OBSTRUCTIONS FROM UTILITY LINES

PLAN REFERENCES:

- "BOUNDARY SURVEY OF THE MAINE MARITIME ACADEMY PROPERTY, WATER, MAIN & SEA STREETS, CASTINE, HANCOCK COUNTY, MAINE", PREPARED BY SAGE COLLINS SURVEYING, INC. AND DATED OCTOBER 25, 2018.
- "EXISTING WATER STREET (WEST & EAST) INFRASTRUCTURE PLAN & PROFILE", PREPARED BY OLIVER ASSOCIATES, INC., MANDY HOLWAY OLVER, PE #5765, AND DATED DECEMBER 2016.




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TOWN OF CASTINE MOORING LOCATIONS					
MOORING ID	MOORING NAME	LATITUDE	LONGITUDE	NORTHING	EASTING
TM1	TOWN OF CASTINE	N44 23.205	W68 47.585	907637.498	262608.441
TM2	TOWN OF CASTINE	N44 23.167	W68 47.662	907301.202	262378.776
M56	GOODY B WISMAN / JASPER DENNISTON	N44 23.158	W68 47.856	908455.796	262327.150
M104	BRUCE ROGERS	N44 23.137	W68 47.860	906437.905	262199.629
M161	BRUCE ROGERS	N44 23.124	W68 47.872	906385.336	262120.837

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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

EXISTING WATERFRONT STRUCTURES PLAN

PREPARED BY: <div></div> <div>GZA GeoEnvironmental, Inc. Engineers and Scientists <a href="http://www.gza.com">www.gza.com</a></div>		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC DESIGNED BY: CWC DATE: JANUARY 2023		REVIEWED BY: DRAWN BY: MEA PROJECT NO. 35109.00	
		CHECKED BY: SCALE: AS NOTED REVISION NO.	FIGURE <b>2</b>





**Figure 3 – Existing Bulkhead Section**



1. DETAILS ON THIS SHEET ARE A COMPILATION OF AVAILABLE ARCHIVE INFORMATION. ACTUAL CONDITIONS MAY VARY.



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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

EXISTING BULKHEAD SECTION

PREPARED BY:

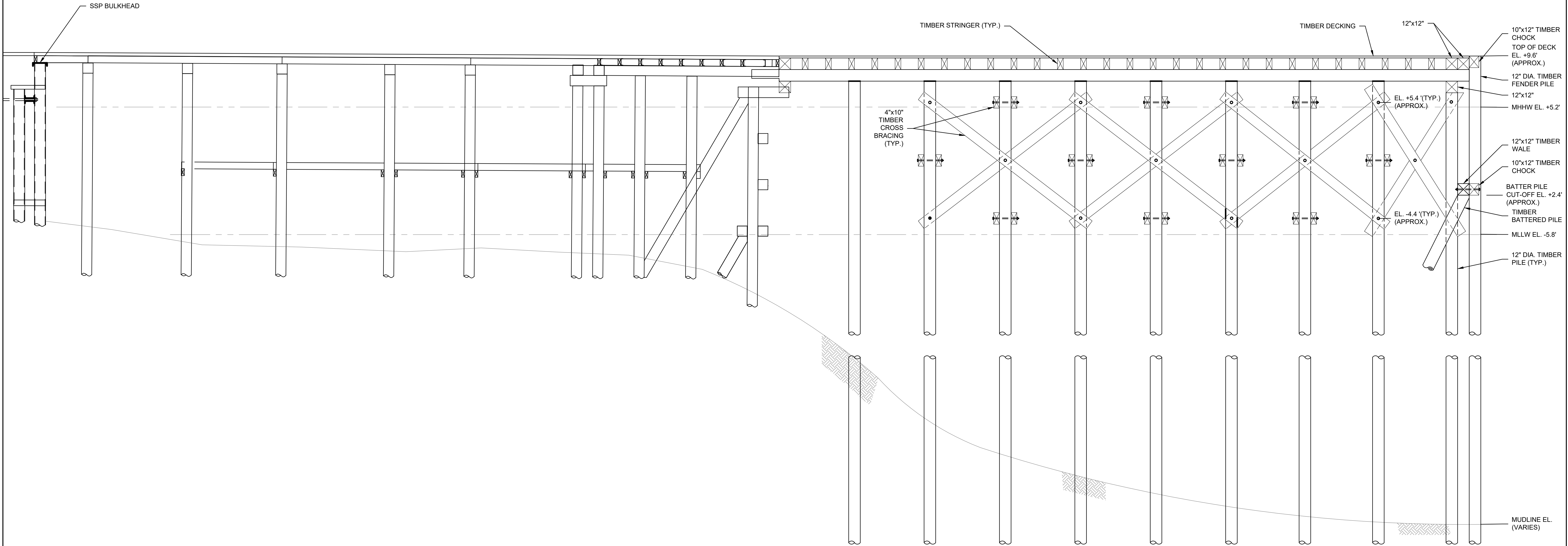
 **GZA** GeoEnvironmental, Inc.  
www.gza.com

PROJ MGR: RKC	REVIEWED BY:	CHECKED BY:	FIGURE <b>3</b>
DESIGNED BY: CWC	DRAWN BY: MEA	SCALE: AS NOTED	
DATE: JANUARY 2023	PROJECT NO. 35109.00	REVISION NO.	



**Figure 4 – Existing Pier Section (1 of 2)**

© 2023 GZA GeoEnvironmental, Inc. GZA is a U.S. GEOLOGICAL SURVEY (USGS) VENDOR. WATER PIER SECTIONS.DWG 5-103 EX. PIER SECT (1) JANUARY 30, 2023 REBECCA CHERRY



**B** SECTION - EXISTING PIER  
2 4 SCALE: 1" = 4'

**NOTES:**

1. DETAILS ON THIS SHEET ARE A COMPILATION OF AVAILABLE ARCHIVE INFORMATION. ACTUAL CONDITIONS MAY VARY.



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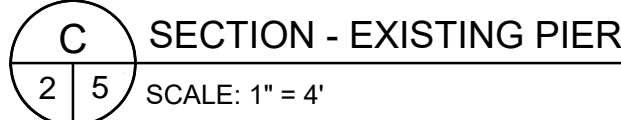
MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

EXISTING PIER SECTION (1 OF 2)

PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	REVIEWED BY:	CHECKED BY:	FIGURE
DESIGNED BY: CWC	DRAWN BY: MEA	SCALE: AS NOTED	<b>4</b>
DATE: JANUARY 2023	PROJECT NO. 35109.00	REVISION NO.	



**Figure 5 – Existing Pier Section (2 of 2)**



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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

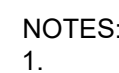
PREPARED FOR:  
MAINE MARITIME ACADEMY  
CASTINE, ME

PROJ MGR: RKC	REVIEWED BY:	CHECKED BY:	<b>FIGURE</b>  <b>5</b>
DESIGNED BY: CWC	DRAWN BY: MEA	SCALE: AS NOTED	
DATE: JANUARY 2023	PROJECT NO. 35109.00	REVISION NO.	



**Figure 6 – Overall Work Plan with Erosion Control**






1. "BOUNDARY SURVEY OF THE MAINE MARITIME ACADEMY PROPERTY, WATER, MAIN & SEA STREETS, CASTINE, HANCOCK COUNTY, MAINE", PREPARED BY SAGE COLLINS SURVEYING, INC. AND DATED OCTOBER 25, 2018.
2. "EXITING WATER STREET (WEST & EAST) INFRASTRUCTURE PLAN & PROFILE", PREPARED BY OLVER ASSOCIATES, INC., MANDY HOLWAY OLVER, PE #5765, AND DATED DECEMBER 2016.



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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

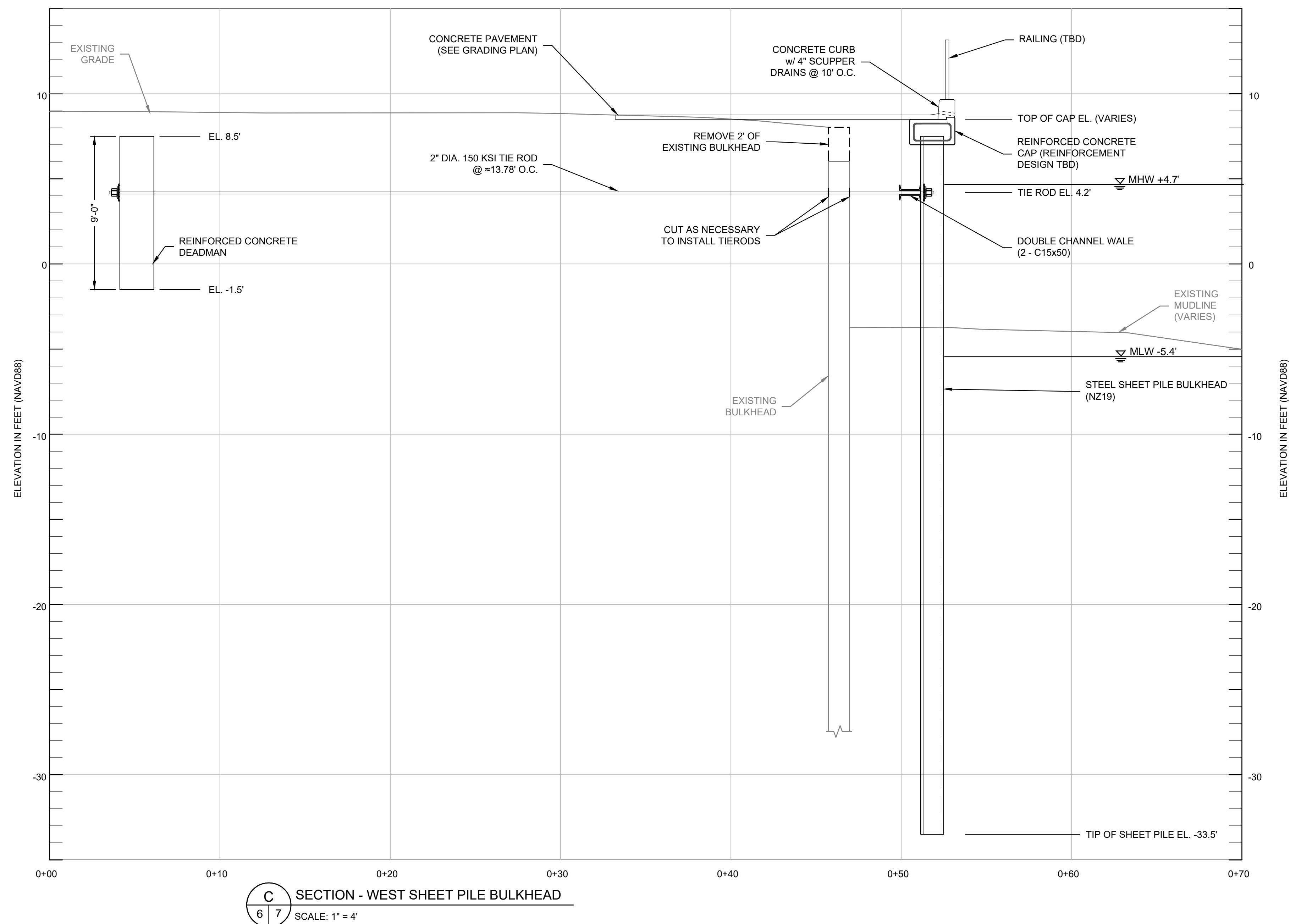
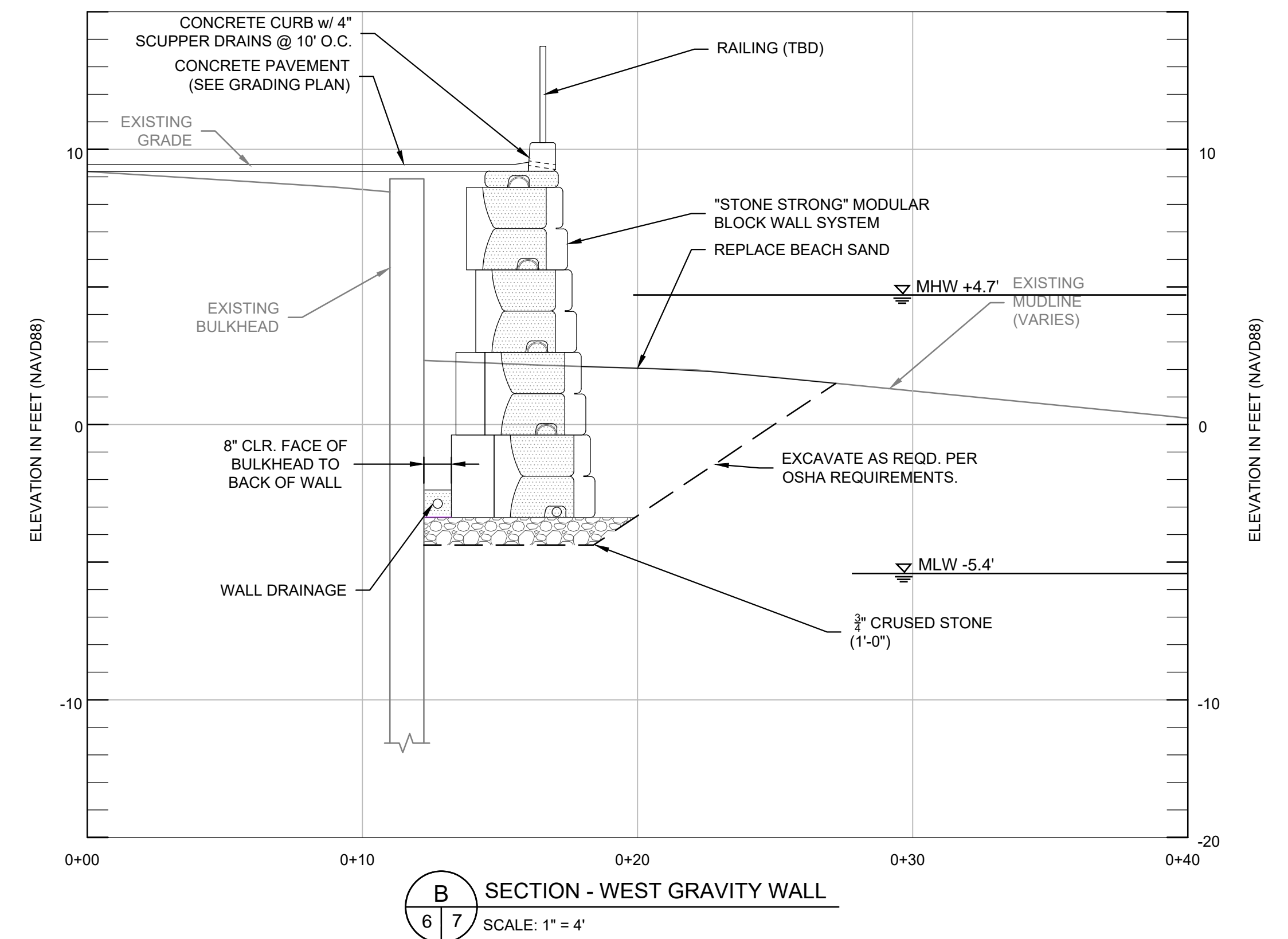
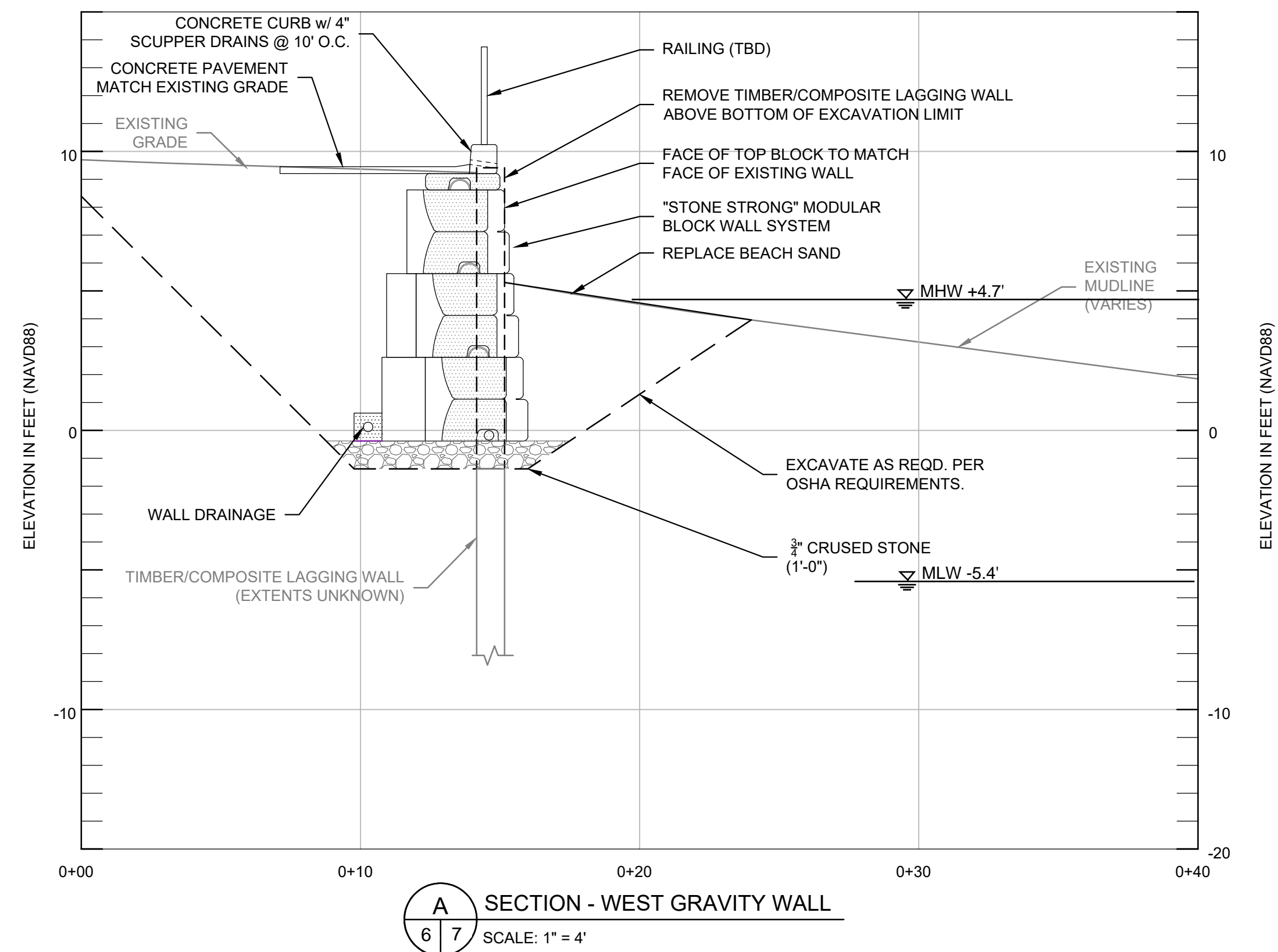
## OVERALL WORK PLAN WITH EROSION CONTROL

PREPARED BY:  <b>GZA</b> GeoEnvironmental, Inc. Engineers and Scientists <a href="http://www.gza.com">www.gza.com</a>		PREPARED FOR: <b>MAINE MARITIME ACADEMY</b> <b>CASTINE, ME</b>	
PROJ MGR:	RKC	REVIEWED BY:	FIGURE <div style="font-size: 2em; font-weight: bold; text-align: center;">6</div>
DESIGNED BY:	CWC	DRAWN BY: MEA	
DATE:	JANUARY 2023	PROJECT NO. 35109.00	
		CHECKED BY:	REVISION NO.





**Figure 7 – Bulkhead and Retaining Wall Sections**



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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

WEST BULKHEAD TYPICAL SECTIONS

PREPARED BY:

 **GZA** GeoEnvironmental, Inc.  
www.gza.com

PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME
---------------	---------------------------------------

PROJ MGR:	RKC
DESIGNED BY:	AFS
DATE:	JANUARY 2023

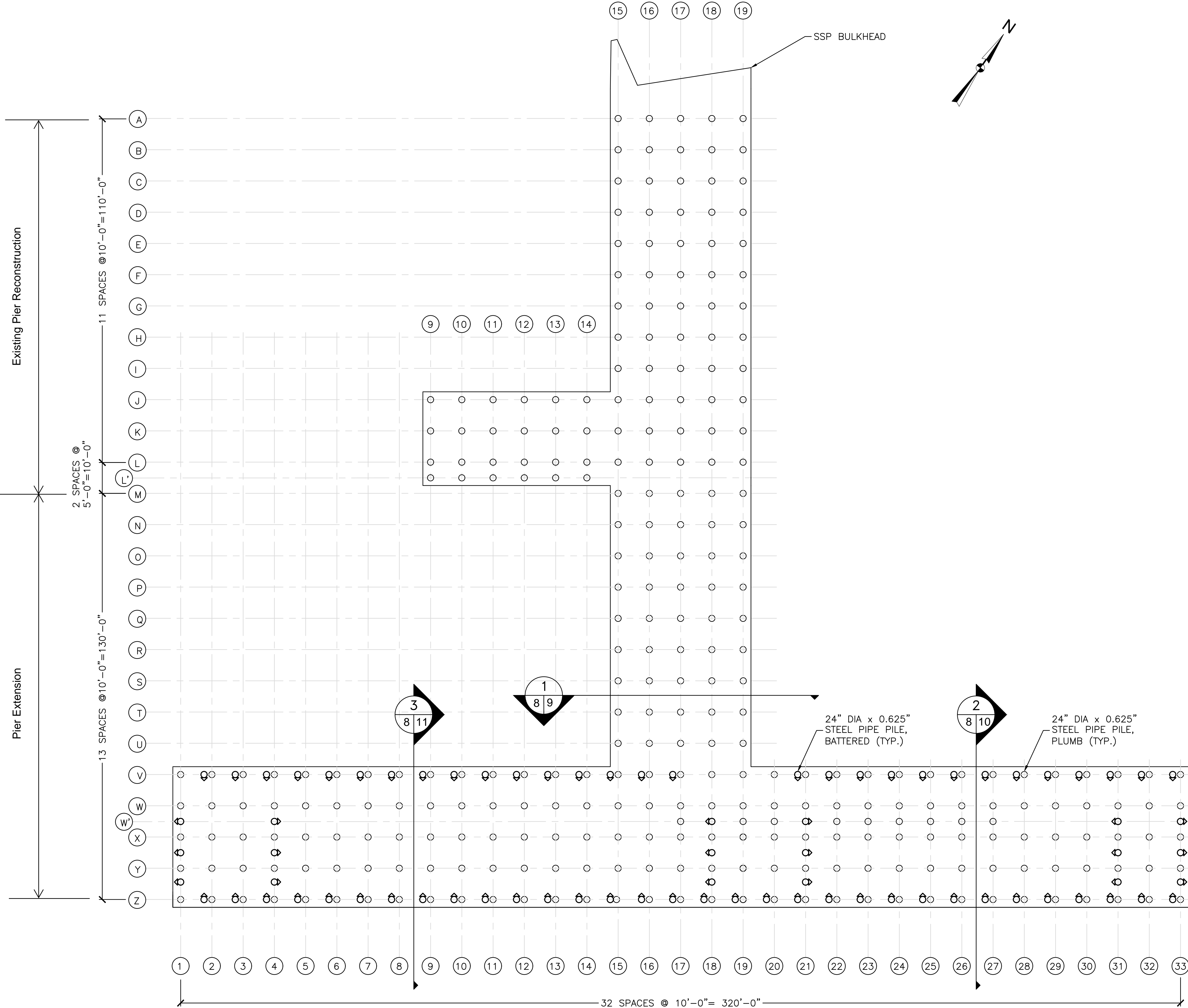
RKC	REVIEWED BY: DDF
AFS	DRAWN BY: MEA
2023	PROJECT NO. 35109.00

CHECKED BY: TWS	<b>FIGURE</b>  <b>7</b>
SCALE: AS NOTED	
REVISION NO.	

7



**Figure 8 – Pile Plan**




PIER PILE PLAN  
1/16" = 1'-0"

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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

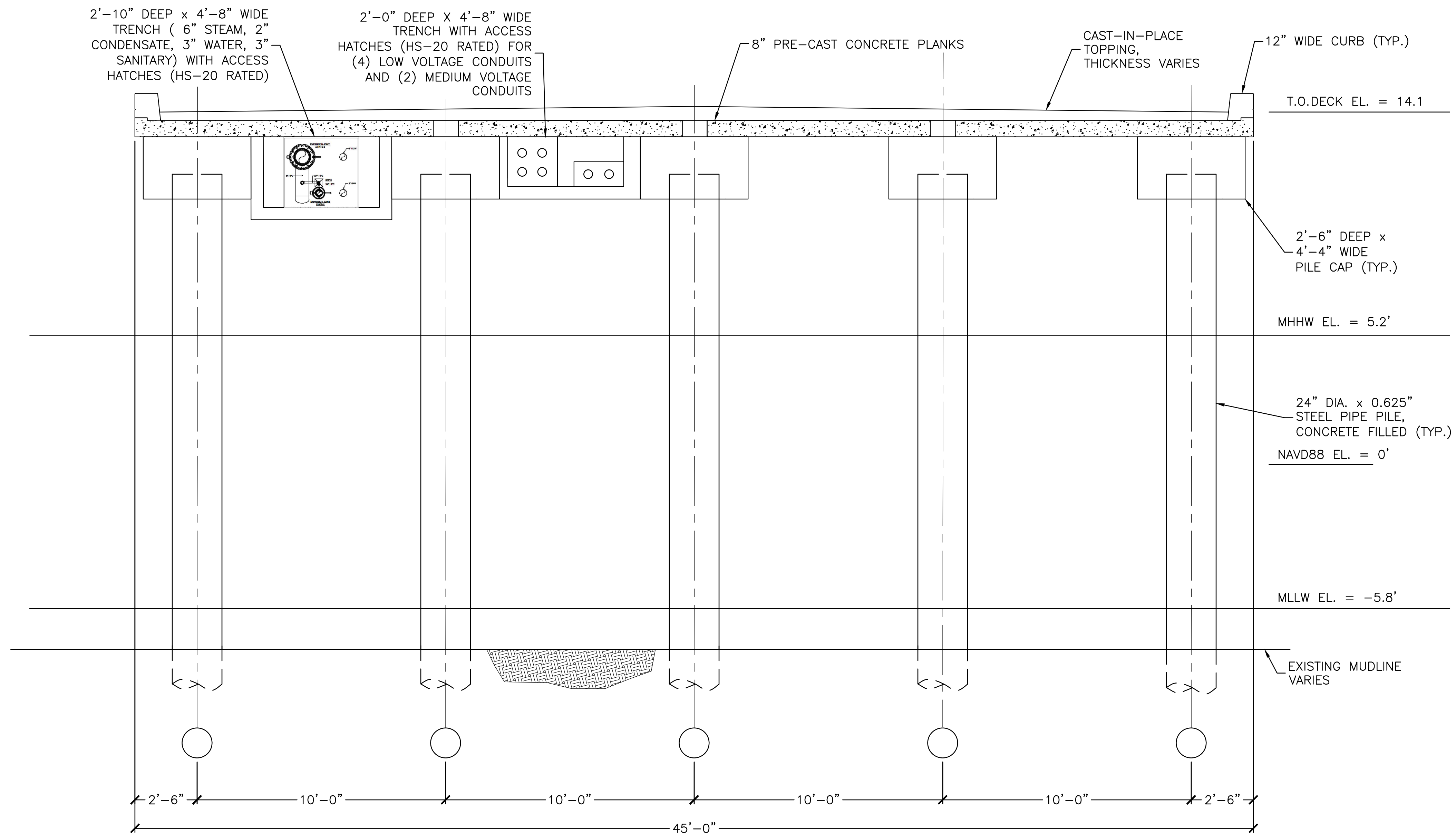
PILE PLAN

PREPARED BY:  GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	DESIGNED BY: MAR	REVIEWED BY: BDW	CHECKED BY:
DATE: JANUARY 2023	PROJECT NO. 03.0035109.00	SCALE:	REVISION NO.
			FIGURE 8



**Figure 9 – Pier Sections – 1**

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1 PIER STEM SECTION  
8 9 1/2" = 1'-0"

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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

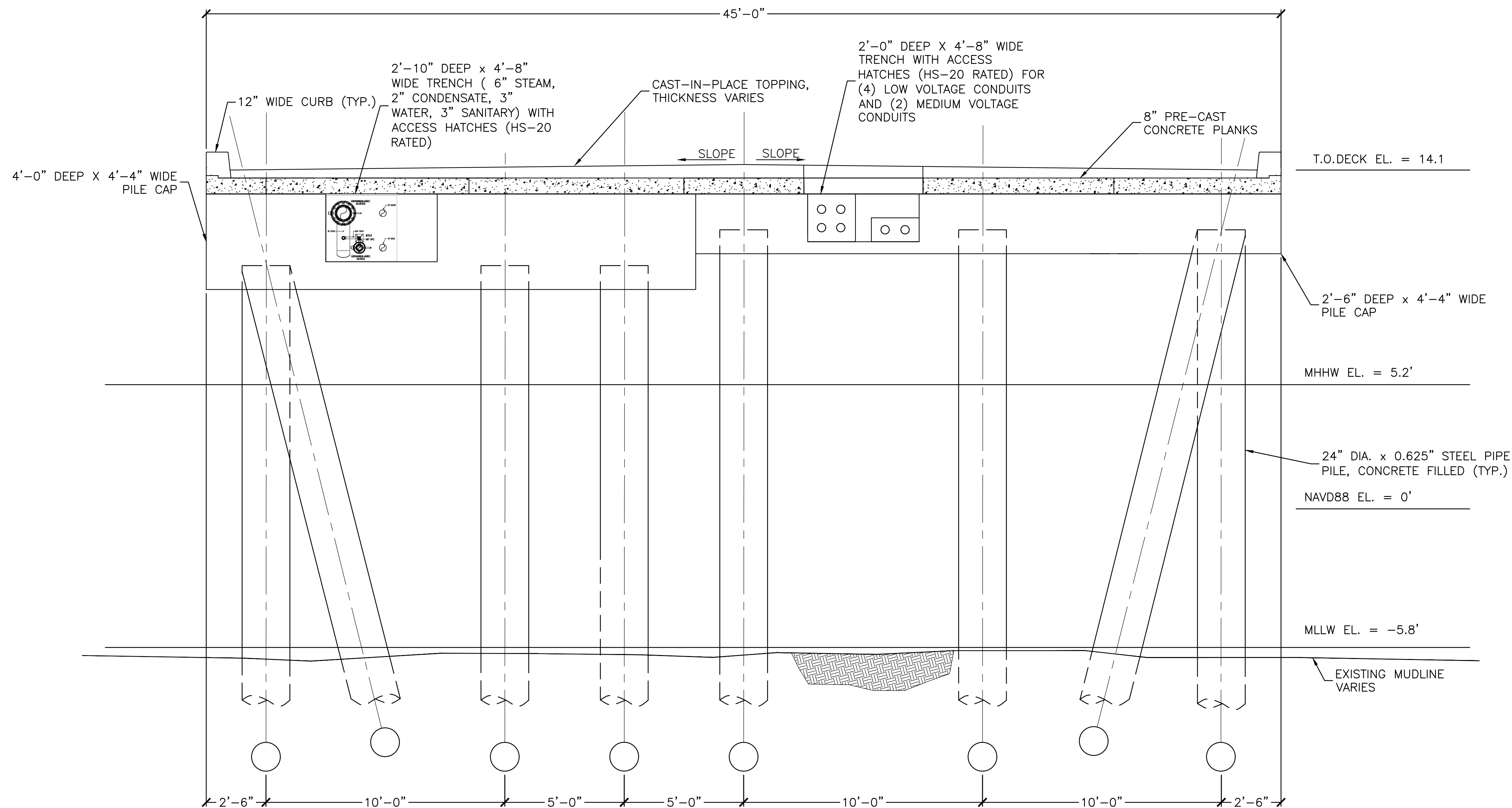
PIER SECTIONS - 1

PREPARED BY:  GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	DESIGNED BY: MAR	REVIEWED BY: BDW	CHECKED BY:
DATE: JANUARY 2023	PROJECT NO. 03.0035109.00	SCALE: REVISION NO.	FIGURE 9



**Figure 10 – Pier Sections – 2**





2 PIER T-HEAD - EAST SECTION  
8 10 1/2" = 1'-0"

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MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

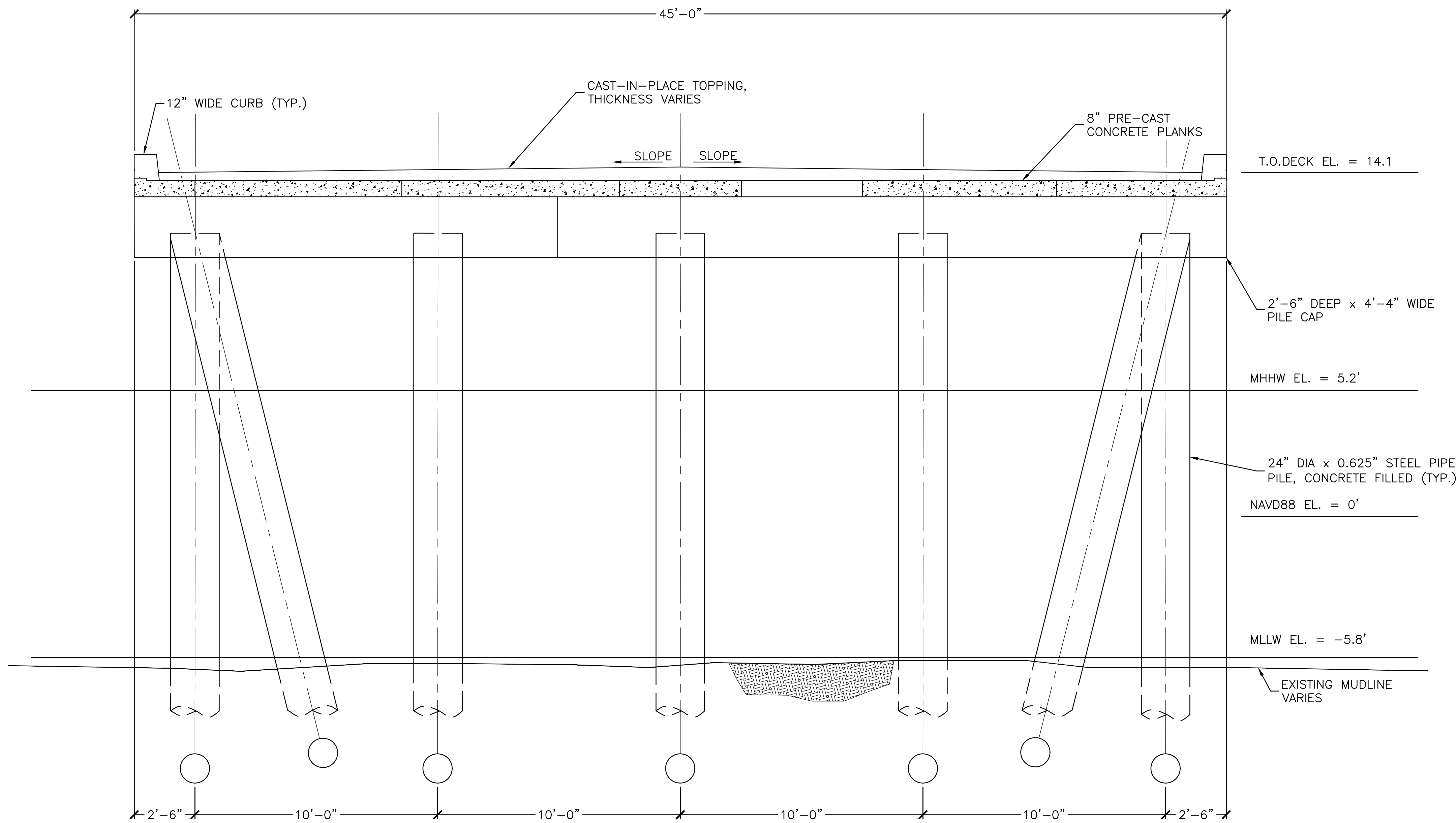
PIER SECTIONS - 2

PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	DESIGNED BY: MAR	REVIEWED BY: BDW	CHECKED BY:
DATE: JANUARY 2023	PROJECT NO. 03.0035109.00	SCALE:	REVISION NO.
			<b>10</b>





**Figure 11 – Pier Sections – 3**



3 PIER T-HEAD - WEST SECTION  
8 11 1/2" = 1'-0"

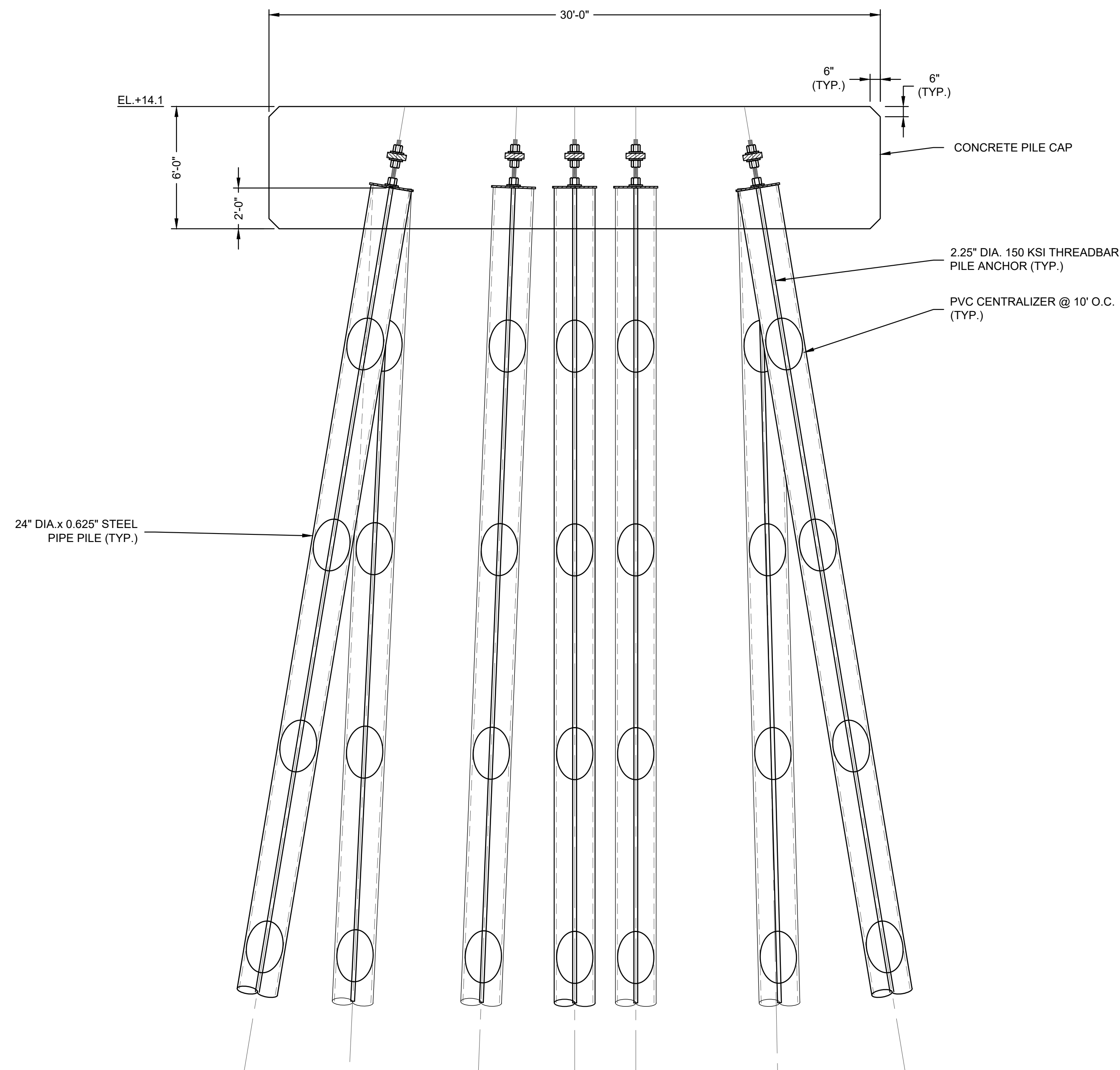
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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT MAINE MARITIME ACADEMY WATERFRONT CAMPUS CASTINE, MAINE			
PIER SECTIONS - 3			
PREPARED BY: GZA GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	REVIEWED BY:	CHECKED BY:	FIGURE 11
DESIGNED BY: MAR	DRAWN BY: BDW	SCALE:	
DATE: JANUARY 2023	PROJECT NO. 03.0035109.00	REVISION NO.	

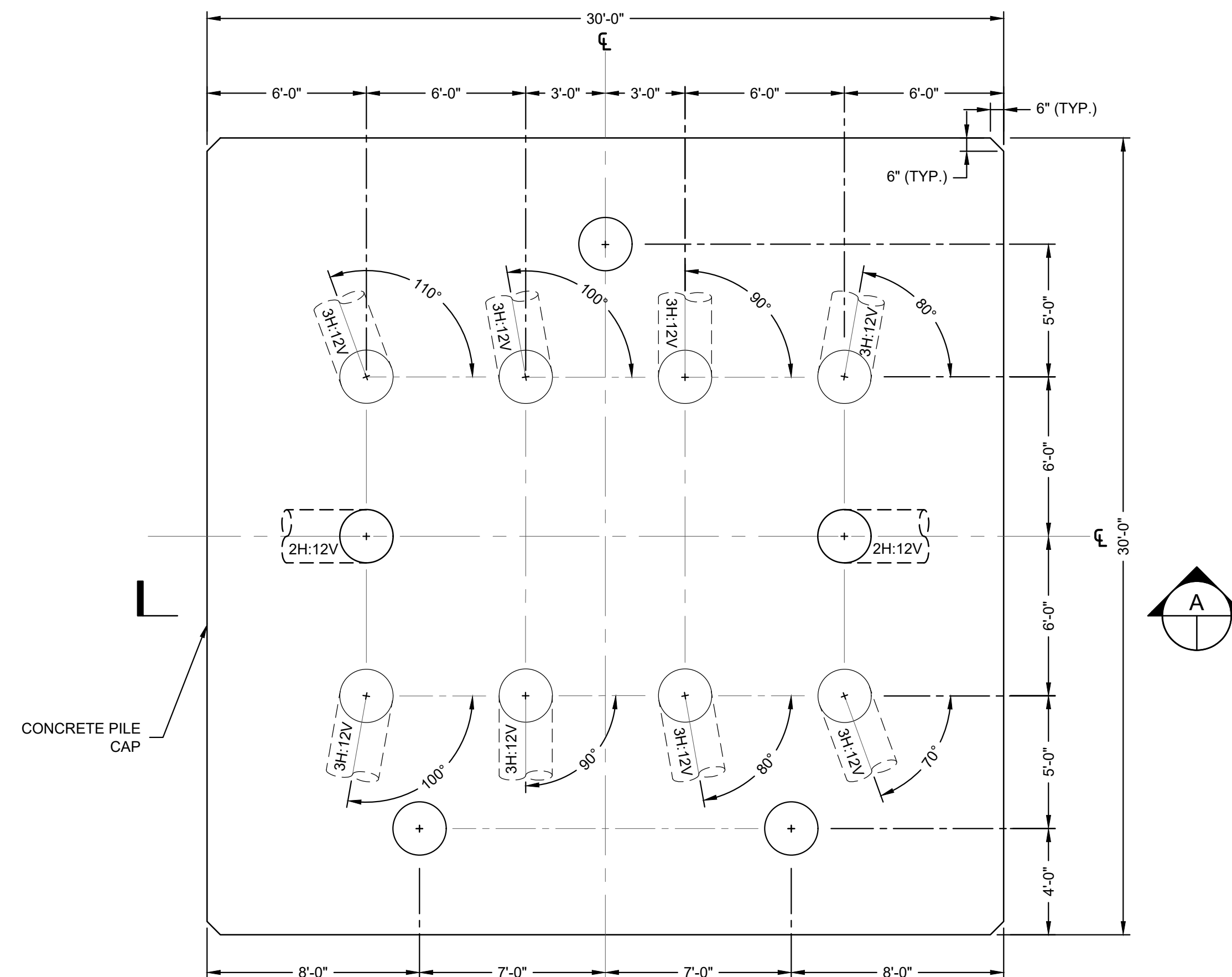


**Figure 12 – West Mooring Dolphin Plan and Section**

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**A** DETAIL - WEST MOORING DOLPHIN #1 & #2 BOLLARD LAYOUT PLAN  
SCALE: 1" = 4'



**1** DETAIL - WEST MOORING DOLPHIN #1 & #2 PILE LAYOUT PLAN  
SCALE: 1" = 4'

0 2' 4' 8' 12'  
SCALE IN FEET 1" = 4'

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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

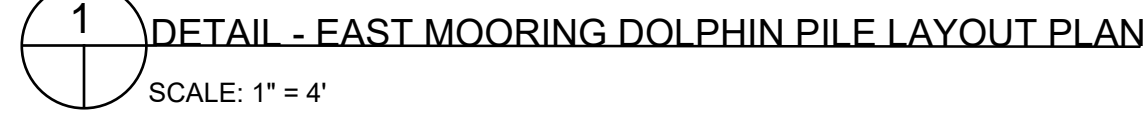
WEST MOORING DOLPHIN PLAN AND SECTION

PREPARED BY: <b>GZA</b> GeoEnvironmental, Inc. www.gza.com		PREPARED FOR: MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR: RKC	DESIGNED BY: AFS	REVIEWED BY: DDF	CHECKED BY: TWS
DATE: JANUARY 2023	DRAWN BY: MEA	PROJECT NO. 35109.00	SCALE: AS NOTED
			REVISION NO.

**FIGURE**  
**12**




**Figure 13 – East Mooring Dolphin Plan and Section**



MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

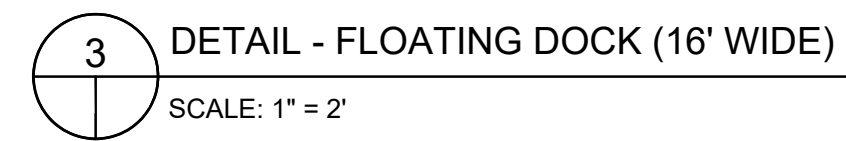
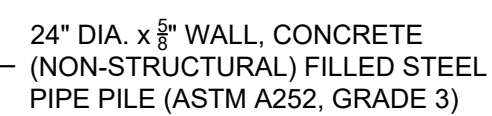
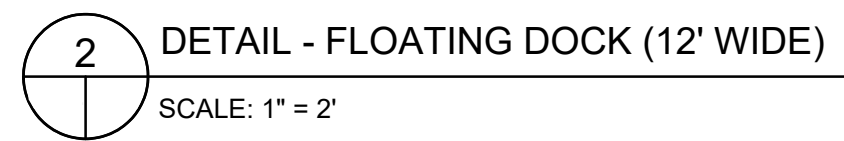
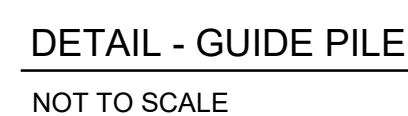
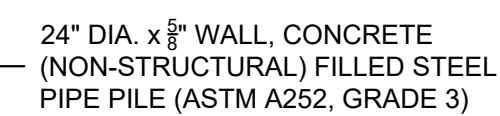
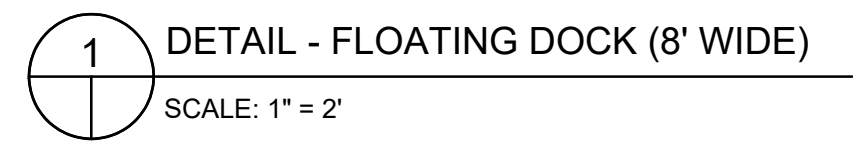
## EAST MOORING DOLPHIN PLAN AND SECTION

PREPARED BY:  <b>GZA</b> GeoEnvironmental, Inc. <a href="http://www.gza.com">www.gza.com</a>		PREPARED FOR: <b>MAINE MARITIME ACADEMY          CASTINE, ME</b>	
PROJ MGR: RKC DESIGNED BY: AFS DATE: JANUARY 2023	REVIEWED BY: DDF DRAWN BY: MEA PROJECT NO. 35109.00	CHECKED BY: TWS SCALE: AS NOTED REVISION NO.	FIGURE <div style="font-size: 2em; font-weight: bold; text-align: center;">13</div>





**Figure 14 – Floating Docks Sections and Details**



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24 FEBRUARY 2023

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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

## FLOATING DOCKS SECTIONS AND DETAILS

PREPARED BY:

 **GZA** GeoEnvironmental, Inc.  
www.gza.com

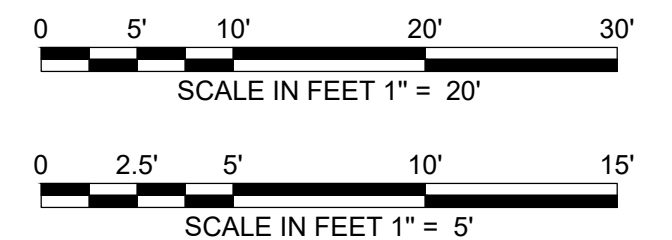
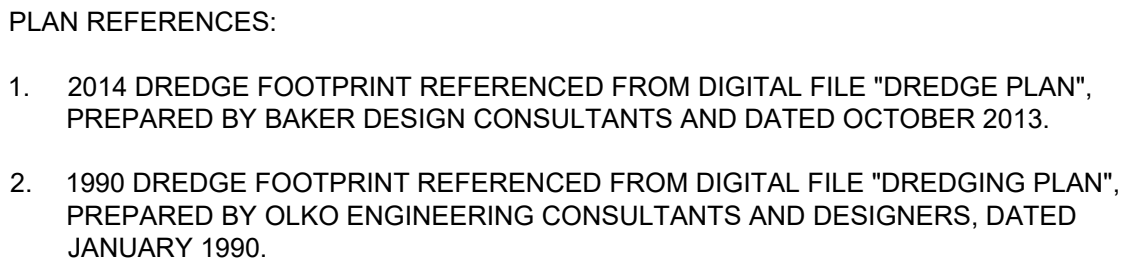
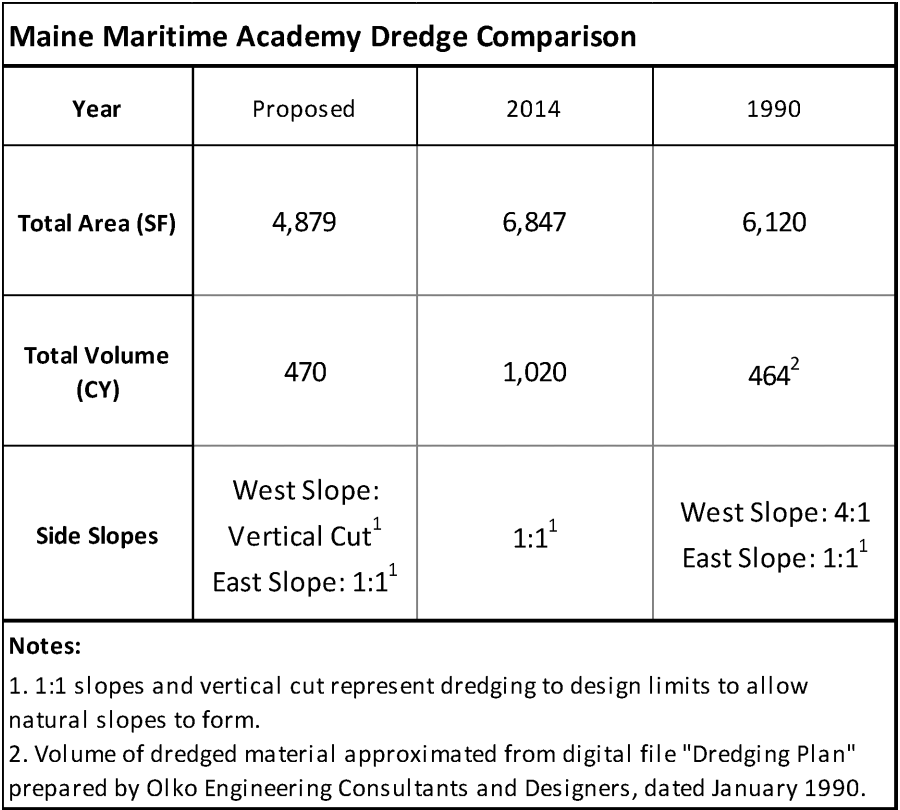
PREPARED FOR:  
MAINE MARITIME ACADEMY  
CASTINE, ME

PROJ MGR: RKC	REVIEWED BY: CWC	CHECKED BY: TWS	<b>FIGURE</b>  <b>14</b>
DESIGNED BY: AFS	DRAWN BY: MEA	SCALE: AS NOTED	
DATE: JANUARY 2023	PROJECT NO. 35109.00	REVISION NO.	

4



**Figure 15 – Dredge Plan and Section**



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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

## DREDGE PLAN AND SECTION

PREPARED BY:



**GZA** GeoEnvironmental, Inc.  
Engineers and Scientists  
[www.gza.com](http://www.gza.com)

PREPARED FOR:

MAINE MARITIME ACADEMY  
CASTINE, ME

PROJ MGR:	RKC
-----------	-----

KC	REV
----	-----

REVIEWED BY:
--------------

DESIGNED BY: EJW  
DATE:

JW	DRA
	PR

DRAWN BY:	
PROJECT NO.	

CHECKED BY: \_\_\_\_\_

SALE: AS SHOWN

REVISION NO.

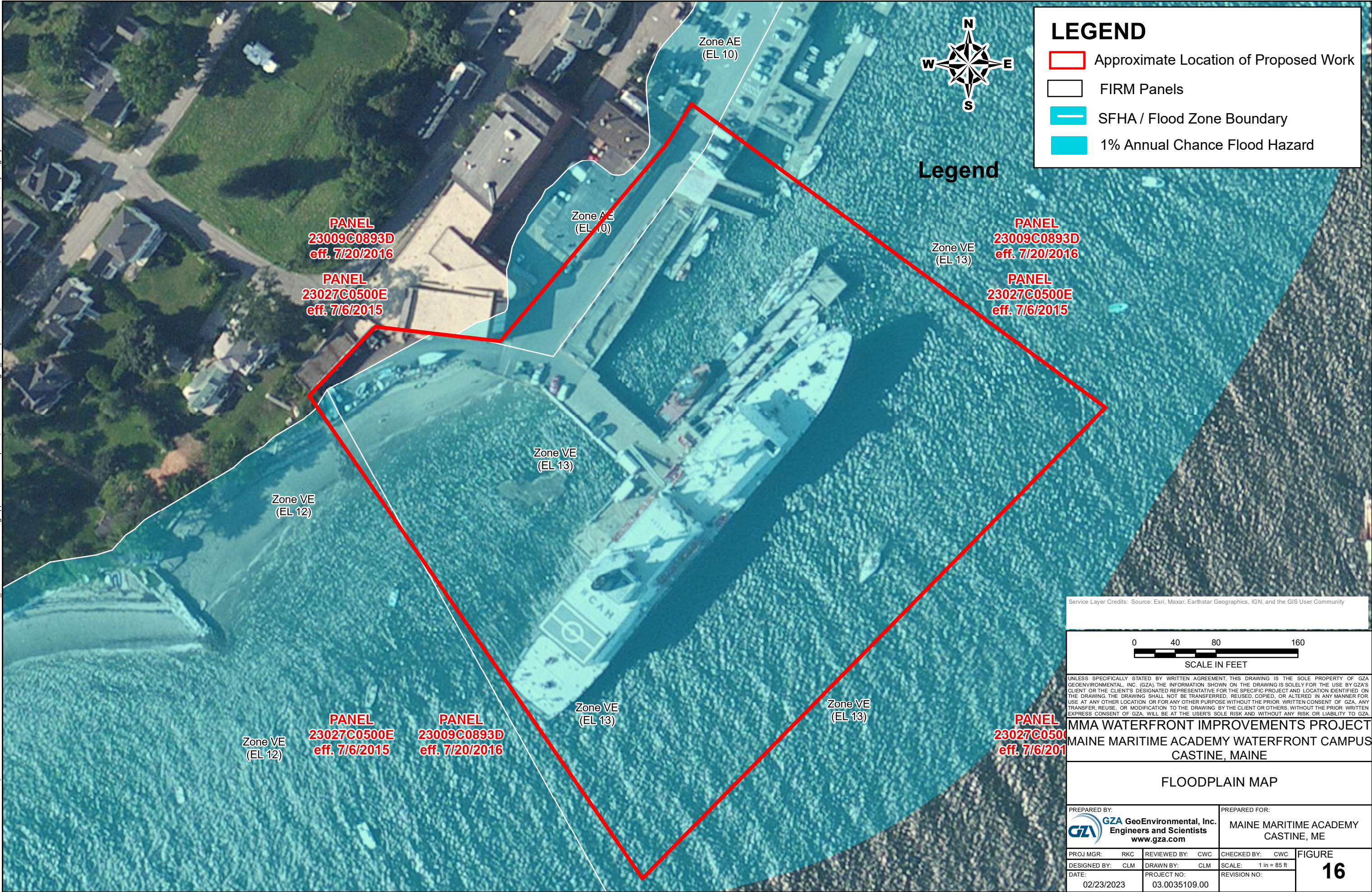
15



**Figure 16 – Floodplain Map**



© 2022 - GZA GeoEnvironmental, Inc. \\GZAPROVIDENCE\Jobs\Geo\35109\_rtc\Work\09\_Permits\NEPA\Working\Appendix D - Floodplains, Wetlands\GIS\Fig-X\_Floodplains.mxd, December 20, 2022 - 1:20:54 PM, casey.moguff



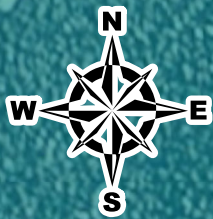
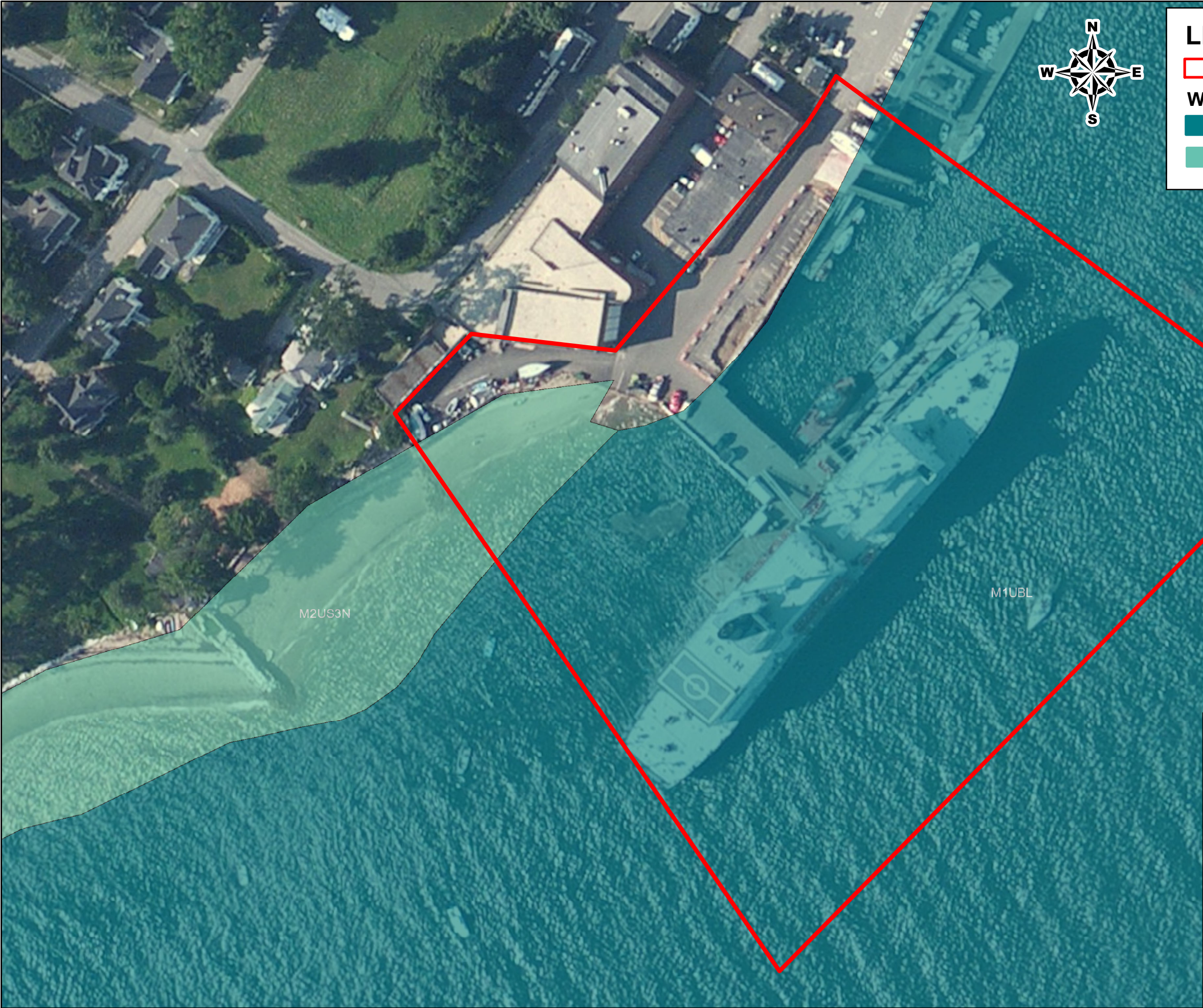




**Figure 17 – National Wetland Inventory Map**



© 2022 - GZA GeoEnvironmental, Inc. \\GZAPROVIDENCE\Jobs\Geo\35109\_rkc\Work\09\_Permits\NEPA\Working\Appendix D - Floodplains, Wetlands\GIS\Fig-X\_Wetlands.mxd, December 20, 2022 - 1:47:36 PM, casey.mcguiffy



**LEGEND**

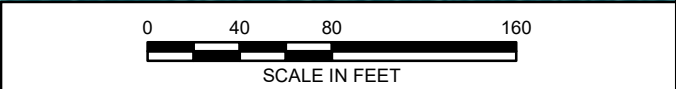
Approximate Location of Proposed Work

**WETLANDS**

Estuarine and Marine Deepwater

Estuarine and Marine Wetland


Service Layer Credits: U.S. Fish and Wildlife Service, National Standards and Support Team, wetlands\_team@fws.gov  
Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community



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**MMA WATERFRONT IMPROVEMENTS PROJECT**  
**MAINE MARITIME ACADEMY WATERFRONT CAMPUS**  
**CASTINE, MAINE**

**NATIONAL WETLAND INVENTORY MAP**

PREPARED BY:  <b>GZA GeoEnvironmental, Inc.</b> Engineers and Scientists <a href="http://www.gza.com">www.gza.com</a>		PREPARED FOR:  <b>MAINE MARITIME ACADEMY</b> <b>CASTINE, ME</b>	
PROJ MGR: RKC	REVIEWED BY: CWC	CHECKED BY: CWC	<b>FIGURE</b>  <b>17</b>
DESIGNED BY: CLM	DRAWN BY: CLM	SCALE: 1 in = 83 ft	
DATE: 02/23/2023	PROJECT NO: 03.0035109.00	REVISION NO:	





## **Appendices**



## **Appendix A – Property Deed**



## STATE OF MAINE

I, Harry C. Page, Collector of Taxes of the Town of Bucksport, in the county of Hancock, said taxes having been duly and legally committed to me for collection on the 28th day of June, 1942, hereby certify that a tax of Ninety five dollars and Twenty cents, duly and legally assessed to real estate in said Town of Bucksport, and assessed against Lester & Helen Sutherland of Bucksport, an owner-occupant\*thereof, said real estate being bounded and described as follows:

North Grange Property  
East Range Line  
South C. E. Rogers  
West Shore Road

together with interest of Five dollars and Seventy One cents, which has been added to and become a part of said tax, a total of One Hundred dollars and Ninety One cents, remains unpaid; that a lien is claimed on said real estate, above described, to secure the payment of the said tax; that a demand for payment of said tax has been made of the said Lester & Helen Sutherland to executor-administrator-heir-heiress of the said Lester & Helen Sutherland, by me by my giving to him in hand, by my leaving at his last and usual place of abode at Bucksport, by my sending by registered mail to his last known place of abode at on the 12th day of June 1942, a notice in writing signed by me stating the amount of said tax, describing the real estate on which said tax is assessed, alleging that a lien is claimed on said real estate to secure the payment of said tax and demanding payment of said tax within 10 days after ~~the~~ service-mailing of said notice, in accordance with the provisions of Chapter 244 of the Public Laws of Maine for 1933, as amended.

Fees:  
Notice and Filing, \$1.00  
Registry of Deeds, \$ .50

H. C. Page Collector of Taxes  
Town of Bucksport

## STATE OF MAINE

Hancock, ss.

June 24, 1943

Then personally appeared the above subscribed H. C. Page, Collector, and acknowledged the foregoing instrument to be his free act and deed in his said capacity.

Notarial  
Seal

Before me, Annie S. Clay  
Notary Public

MY COMMISSION EXPIRES APRIL 6, 1945

Rec'd June 26, 1943 at 2h. 05m. P.M., and entered by,  
George R. Hadlock, Reg'r.

## KNOW ALL MEN BY THESE PRESENTS, THAT

Eastern Trust and Banking Company, a corporation organized and existing under the laws of the State of Maine and having its principal office and place of business at Bangor, in the County of Penobscot and State of Maine, in consideration of one dollar and other valuable considerations paid by Maine Maritime Academy, a corporation organized and existing under the laws of the State of Maine, and located at Castine, in the County of Hancock and State of Maine, the receipt whereof is hereby acknowledged, does hereby remise, release, sell and forever quit-claim unto the said Maine Maritime Academy, its successors and assigns forever, a certain lot or parcel of land, with the buildings thereon, situate in said Castine, and bounded and described as follows: Beginning on the southeasterly side of Water Street, at the southwesterly line of land formerly of Mrs. A. Chamberlain, and now or formerly of Grace D. Noyes and Ethel S. Noyes; thence southwesterly by said Water Street to land formerly belonging to Dr. J. W. Grindle, and now or formerly of Bertram J. Clergue; thence southeasterly by line of said Clergue's land to low water mark of the Bagaduce River; thence by said low water mark of Bagaduce River, being the low water mark of Castine Harbor, northeasterly three hundred twenty-five (325) feet, more or less, to the southwest line of land now or formerly owned by W. H. Hooper; thence northwesterly on said Hooper's line to the place of beginning; EXCEPTING the wharf and portion of said property sold March 31, 1919, to the Castine Bay Company, which portion is bounded as follows: Beginning at a point in the bulkhead marked by a bolt, seventeen feet four inches (17'4") from the stable of William H. Hooper, and eighty-five (85) feet, more or less, southeast from the so-called studio building now or formerly occupied by E. J. Seybt; thence southwest ninety-five (95) feet, more or less, along property now or formerly of Ralph S. Wardwell, said line being fifteen feet from the building known as Wardwell's Garage, to a bolt in the bulkhead; thence southeasterly to low water mark of Castine Harbor; thence by said low water mark northeasterly to property described above; thence northwesterly on the line of said Ralph S. Wardwell to the place of beginning.

U.S.I.R.  
Stamps  
SERIES  
1942  
\$1.65  
EASTERN  
TRUST  
&  
BANKING  
CO.  
JUN 14  
1943



## **Appendix B – Natural Resource Limitations**



## **USE OF REPORT**

1. GZA GeoEnvironmental, Inc. (GZA) has prepared this report on behalf of, and for the exclusive use of Maine Maritime Academy (MMA) ("Client") for the stated purpose(s) and location(s) identified in the report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's risk, and without any liability to GZA.

## **STANDARD OF CARE**

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the data gathered and observations made during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

## **LIMITS TO OBSERVATIONS**

4. Natural resource characteristics are inherently variable. Biological community composition and diversity can be affected by seasonal, annual or anthropogenic influences. In addition, soil conditions are reflective of subsurface geologic materials, the composition and distribution of which vary spatially.
5. The observations described in this report were made on the dates referenced and under the conditions stated therein. Conditions observed and reported by GZA reflect the conditions that could be reasonably observed based upon the visual observations of surface conditions and/or a limited observation of subsurface conditions at the specific time of observation. Such conditions are subject to environmental and circumstantial alteration and may not reflect conditions observable at another time.
6. The conclusions and recommendations contained in this report are based upon the data obtained from a limited number of surveys performed during the course of our work on the site, as described in the Report. There may be variations between these surveys and other past or future surveys due to inherent environmental and circumstantial variability.

## **RELIANCE ON INFORMATION FROM OTHERS**

7. Preparation of this Report may have relied upon information made available by Federal, state and local authorities; and/or work products prepared by other professionals as specified in the report. Unless specifically stated, GZA did not attempt to independently verify the accuracy or completeness of that information.

## **COMPLIANCE WITH REGULATIONS AND CODES**

8. GZA's services were performed to render an opinion on the presence and/or condition of natural resources as described in the Report. Standards used to identify or assess these resources as well as regulatory jurisdiction, if any, are stated in the Report. Standards for identification of jurisdictional resources and regulatory control over them may vary between governmental agencies at Federal, state and local levels and are subject to change over time which may affect the conclusions and findings of this report.



#### **NEW INFORMATION**

9. In the event that the Client or others authorized to use this report obtain information on environmental regulatory compliance issues at the site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this work, may modify the conclusions stated in this report.

#### **ADDITIONAL SERVICES**

10. GZA recommends that we be retained to provide further investigation, if necessary, which would allow GZA to (1) observe compliance with the concepts and recommendations contained herein; (2) evaluate whether the manner of implementation creates a potential new finding; and (3) evaluate whether the manner of implementation affects or changes the conditions on which our opinions were made.



## **Appendix C – Photograph Log**






## NRPA PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> Water Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
---	---	--------------------------------------

<b>Photo No.:</b> <b>1</b>	<b>Date:</b> 8/30/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the shoreline adjacent to the pier.  Photograph direction: North	

A photograph showing a coastal scene. In the foreground, there's a rocky shore with a large, dark, twisted log or piece of driftwood lying across it. To the right, a gravel beach meets the water's edge. In the background, a wooden pier or walkway runs along the shore. Behind the pier, there's a blue building with yellow letters 'M M' on its side. Further back, a larger brick building with several windows is visible. The sky is clear and blue, and some houses are visible on a hill in the distance.

<b>Photo No.:</b> <b>2</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the shoreline and west bulkhead adjacent to the pier.  Photograph direction: West	

A photograph of a shoreline and west bulkhead adjacent to a pier. The foreground shows a sandy beach with a wooden bulkhead on the right. In the background, there are buildings, including a blue one with 'MMA' on it, and a large brick building with a green roof. The sky is blue with some clouds.







## NRPA PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> Water Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
---	---	--------------------------------------

<b>Photo No.:</b> <b>3</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier.  Photograph direction: Southeast	


---

<b>Photo No.:</b> <b>4</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier and western bulkhead.  Photograph direction: North	

A photograph showing a view of a pier and western bulkhead. In the foreground, a concrete bulkhead with yellow lichen is visible on the right, next to a white electrical box. The water is a greenish-blue color. In the background, there is a wooden pier structure with several buildings, including a large brick building with a green roof and a white building. A tall mast or antenna is visible in the distance under a blue sky with some clouds.






## NRPA PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> Water Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
---	---	--------------------------------------

<b>Photo No.:</b> <b>5</b>	<b>Date:</b> 10/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of Payson Hall.  Photograph direction: Northwest	


---

<b>Photo No.:</b> <b>6</b>	<b>Date:</b> 10/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the asphalt surfaces and Andrews Hall, adjacent to the waterfront features.  Photograph direction: Northeast	

A photograph taken from an elevated position looking northeast towards a waterfront. In the immediate foreground on the left is a curved brick wall and a small brick building with a white door and window. To the right of the building is a paved asphalt area with yellow parking lines. Several boats are docked along the waterfront, including a large white sailboat with multiple masts and a smaller yellow and black boat. The water extends to the horizon under a cloudy sky.





## NRPA PHOTOGRAPHIC LOG

**Project:**

Maine Maritime Academy  
Waterfront Campus Improvements

**Site Location:**

Water Street, Castine, Maine

**Project No.:**

03.0035109.00

**Photo No.:**

**7**

**Date:**

8/31/2022

**Photo Credit:**

GZA GeoEnvironmental,  
Inc.

**Description:**

View of marine travel lift  
pier.

Photograph direction:  
West

**Photo No.:**

**8**

**Date:**

8/29/2022

**Photo Credit:**

GZA GeoEnvironmental,  
Inc.

**Description:**

View of the north side of the  
marine travel lift pier.

Photograph direction:  
Northeast





## NRPA PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> Water Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
---	---	--------------------------------------

<b>Photo No.:</b> <b>9</b>	<b>Date:</b> 8/30/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier decking.  Photograph direction: Northeast	

A wide-angle photograph taken from a wooden pier deck, looking out over a body of water towards a distant shoreline. The pier deck is made of weathered wooden planks and runs diagonally from the bottom left towards the center right. On the left side of the pier, there is a large, light-colored metal container with some red markings. Next to it are some green pipes and orange hoses. In the background, there are several small white buildings and a larger dark building. A tall crane or derrick is visible behind the buildings. The water is a deep blue, and the sky is a clear, bright blue. The overall scene is a typical waterfront industrial or marina setting.

<b>Photo No.:</b> <b>10</b>	<b>Date:</b> 8/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the floating dock along the southeast bulkhead.  Photograph direction: Southwest	







## **Appendix D – Wetland Delineation Report**



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WATER  
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MANAGEMENT

707 Sable Oaks Drive  
Suite 150  
South Portland, ME 04106  
T: 207.879.9190  
F: 207.536.1173  
www.gza.com



## VIA EMAIL

February 22, 2023  
File No. 03.0035109.00

Peter Stewart  
Director of Facilities & Campus Safety  
Maine Maritime Academy Waterfront  
Castine, Maine

Re: Wetland Delineation Report  
Maine Maritime Academy's Waterfront Campus  
Castine, Maine

Dear Mr. Stewart:

GZA GeoEnvironmental, Inc. (GZA) is pleased to provide this letter report to Maine Maritime Academy (MMA) summarizing the wetland delineation in the vicinity of MMA's Waterfront Campus, located off Water Street and Main Street in Castine, Maine (Site, see **Figure 1 – Locus Plan**). Wetland delineation was completed on approximately 0.5 acres in the southwestern portion of the Site on the parcel identified as Tax Map-Lot 21-110 ("Site," see **Figure 2 – Wetland Delineation Plan**). The Site is developed and contains academic and operations buildings, asphalt pavement, bulkheads and retaining walls along the shore, and a timber access pier with associated timber floating docks. The property is bordered to the west by residential properties, to the north by commercial properties, to the east by the Town Dock, and to the south by the Atlantic Ocean and Bagaduce River. This wetland delineation was completed to support evaluations for MMA's Waterfront Improvements Project which includes repair, modification and replacement of existing waterfront structures and construction of new waterfront structures.

The wetland delineation field work was performed by Mr. Peter Petkauskos (State of New Hampshire Certified Wetland Scientist #319) on January 25, 2023. The purpose of the work was to evaluate and locate the boundaries of wetlands on the Site. GZA will incorporate the data from the wetland delineation into permit applications for the proposed waterfront improvements at the Site. This report is subject to **Appendix A – Limitations**.

The wetland delineation was conducted in accordance with the 1987 *Corps of Engineers Wetlands Delineation Manual*<sup>1</sup>, using the *Routine Determination Method*; in conjunction with the *Regional Supplement<sup>2</sup> to the Corps of Engineers Wetland Delineation Manual*, the *National Wetland Plant List*<sup>3</sup>, *Field Indicators of Hydric Soils in the United States Version*

<sup>1</sup> U.S. Army Corps of Engineers, Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experiment Station, Vicksburg, Mississippi.

<sup>2</sup> U.S. Army Corps of Engineers, 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (Version 2.0), ed. J.S. Wakeley, R.W. Lichvar, C.V. Noble and J.F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, Mississippi; U.S. Army Engineer Research and Development Center.

<sup>3</sup> U.S. Army Corps of Engineers, Engineer Research and Development Center. 2020. *National Wetland Plant List, Version 3.4*. Cold Regions Research and Engineering Laboratory, Hanover, NH



8.2,<sup>4</sup> and Field Indicators for Identifying Hydric Soils in New England.<sup>5</sup> Observed wetlands were classified in accordance with the *Classification of Wetlands and Deepwater Habitats of the United States*.<sup>6</sup> The High Tide Line (HTL) was evaluated in accordance with the Army Corps of Engineers “waters of the U.S.” under the *Clean Water Act* (33 CFR 328) and “navigable waters of the U.S.” under Section 10 of the *Rivers and Harbors Act of 1899* (33 CFR 329).<sup>7</sup>

The presence of potential vernal pools was evaluated in accordance with *Maine Citizen’s Guide to Locating and Documenting Vernal Pools*, 2003, Maine Audubon Society. Significant vernal pool criteria are outlined in the Maine Department of Environmental Protection, Maine Land Rules, Chapter 335 Significant Wildlife Habitat. Assessment of significant vernal pool criteria requires egg mass searches during the spring. No potential vernal pools were identified on the Site (see **Figure 2 – Wetland Delineation Plan**).

The High Tide Line (HTL) was witnessed with pink and black flagging on the existing timber retaining wall at approximate 50-foot intervals on January 25, 2023. GZA delineated the wetland systems using the following flag series and noted wetland classification descriptions (see Table 1):

- Wetland 1 – Flag Series
  - A1-A5 (open)

The Site contains one estuarine wetland system (i.e., Wetlands 1 **Table 1**). Wetland 1 is located in the southwestern portion of the Site. The wetland contains the Bagaduce River and drains in a southerly direction into the Atlantic Ocean.

Table 1. Summary of wetland delineation

Wetland Identification	Wetland Classification	Notes
Wetland 1	M2US2N	Located in the southwestern portions of the Site and contains the Bagaduce River draining southerly into the Atlantic Ocean.

### **Wetland 1**

Wetland 1 is located in the southwestern portion of the Site and is demarcated by the A-line wetland flag series (see **Figure 2 – Wetland Delineation Plan**). Wetland 1 is classified as a marine intertidal wetland system with unconsolidated shore that is regularly flooded with a sand bottom (M2US2N). The intertidal deep-water habitat adjacent to the intertidal wetland is classified as a subtidal deep-water habitat with unconsolidated bottom (M1UBL). Wetland 1 is dominated by a tidal sand beach with a low energy high tide and composed of fine to medium sand with no vegetation.

### **MDEP Coastal Wetland Characterization Checklist**

MDEP requires coastal wetland characterization checklists of intertidal and subtidal wetlands. Wetland 1 contains an intertidal wetland on the southwest portion of the Site. GZA completed one coastal characterization checklist for Wetland 1 (see **Appendix B – MDEP Coastal Wetland Characterization Checklist** and **Figure 2 – Wetland Delineation**

<sup>4</sup> United States Department of Agriculture, Natural Resource Conservation Service, 2018. *Field Indicators of Hydric Soils in the United States*, Version 8.2. L.M. Vasilas, G.W. Hurt, and J.F. Berkowitz (eds.). USDA, NRCS, in cooperation with the National Technical Committee for Hydric Soils.

<sup>5</sup> New England Hydric Soils Technical Committee. 2020 Version 4. *Field Indicators for Identifying Hydric Soils in New England*, New England Interstate Water Pollution Control Commission, Lowell, Massachusetts.

<sup>6</sup> Federal Geographic Data Committee. 2013. *Classification of Wetlands and Deepwater Habitats of the United States*. FGDC-STD-004-2013. Federal Geographic Data Committee and U.S. Fish and Wildlife Service.

<sup>7</sup> U.S. Army Corps of Engineers New England District, Department of the Army General Permits of the State of Maine. 2020. “Waters of the U.S.” under the Clean Water Act (33 CFR 328) and “navigable waters of the U.S.” under Section 10 of the Rivers and Harbors Act of 1899 (33 CFR 329).



**Plan).** The data sheet was completed during low tide. Mussels were observed along the sand beach which has a low energy high tide and is composed of fine to medium sand with no vegetation.

Please feel free to contact Ms. Aimee Mountain at 207-344-9704 or [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com) if you have any questions regarding this Wetland Delineation Report.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

A handwritten signature in blue ink that reads 'Aimee Mountain'.

Aimee D. Mountain, GISP, CPMSM  
Senior Project Manager

A handwritten signature in black ink that reads 'Cheryl W. Coviello'.

Cheryl W. Coviello, P.E. (NH)  
Principal-in-Charge

A handwritten signature in black ink that reads 'Tracy Tarr'.

Tracy Tarr, CWS, CWB, CESSWI  
Consultant Reviewer

ADM/TLT/CWC

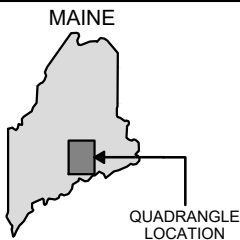
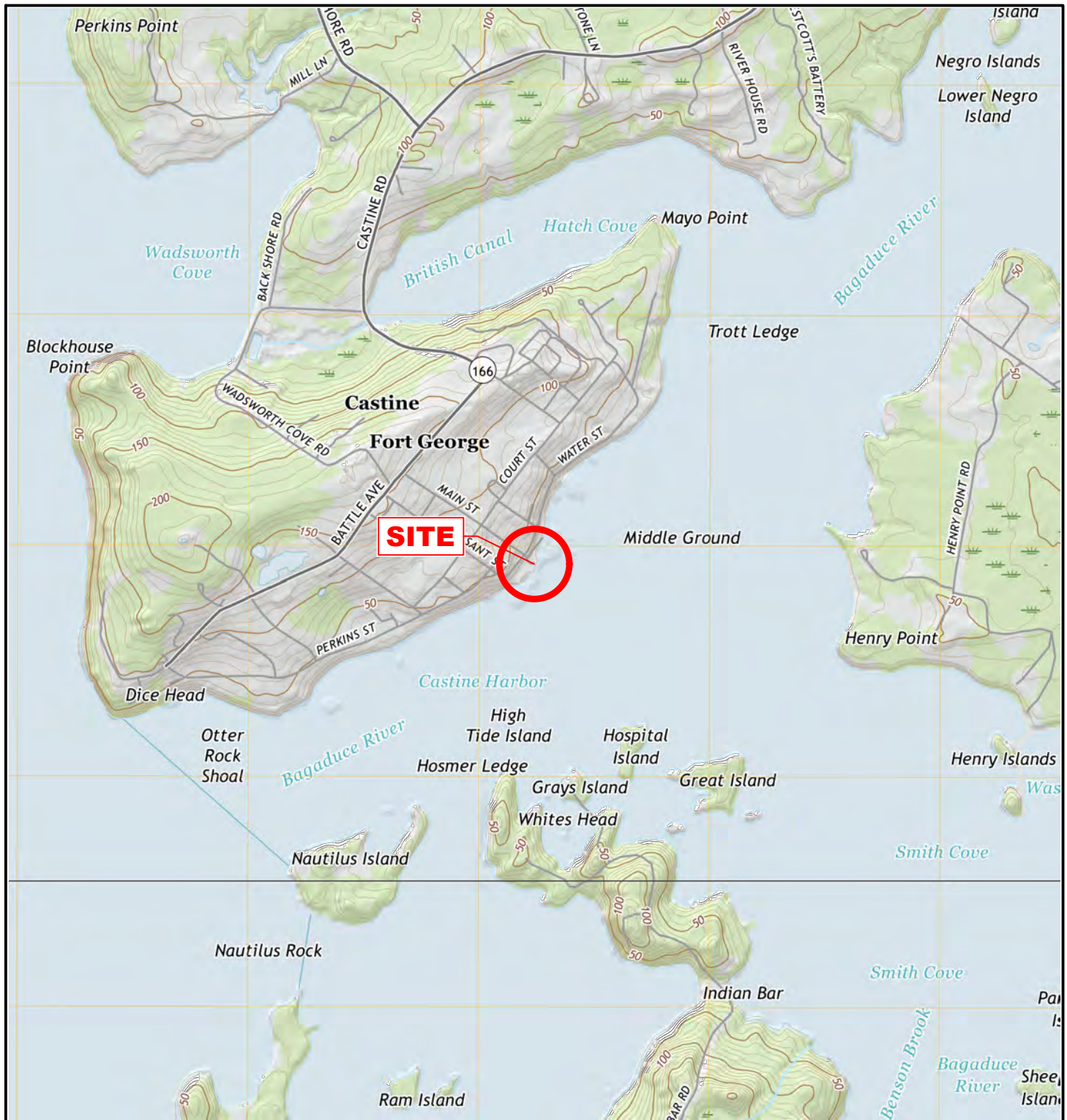
\\GZAPROVIDENCE\Jobs\Geo\35109.rkc\Work\09\_Permits\NRPA\Wetland Delineation\Report\FINAL 03.0035109.00 MMA Wetlands Delineation Report 02.22.2023.docx

Attachments: Figure 1 – Locus Plan  
Figure 2 – Wetland Delineation Plan  
Appendix A – Limitations  
Appendix B – MDEP Coastal Wetland Characterization Checklist  
Appendix C – Wetland Function Value Assessment Form  
Appendix D – Photo Log

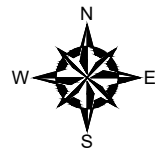


**Figure 1 – Locus Plan**






SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



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PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME
PROJ MGR:	RKC
DESIGNED BY:	RKC
REVIEWED BY:	DDF
DRAWN BY:	MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
WATER STREET, CASTINE, MAINE

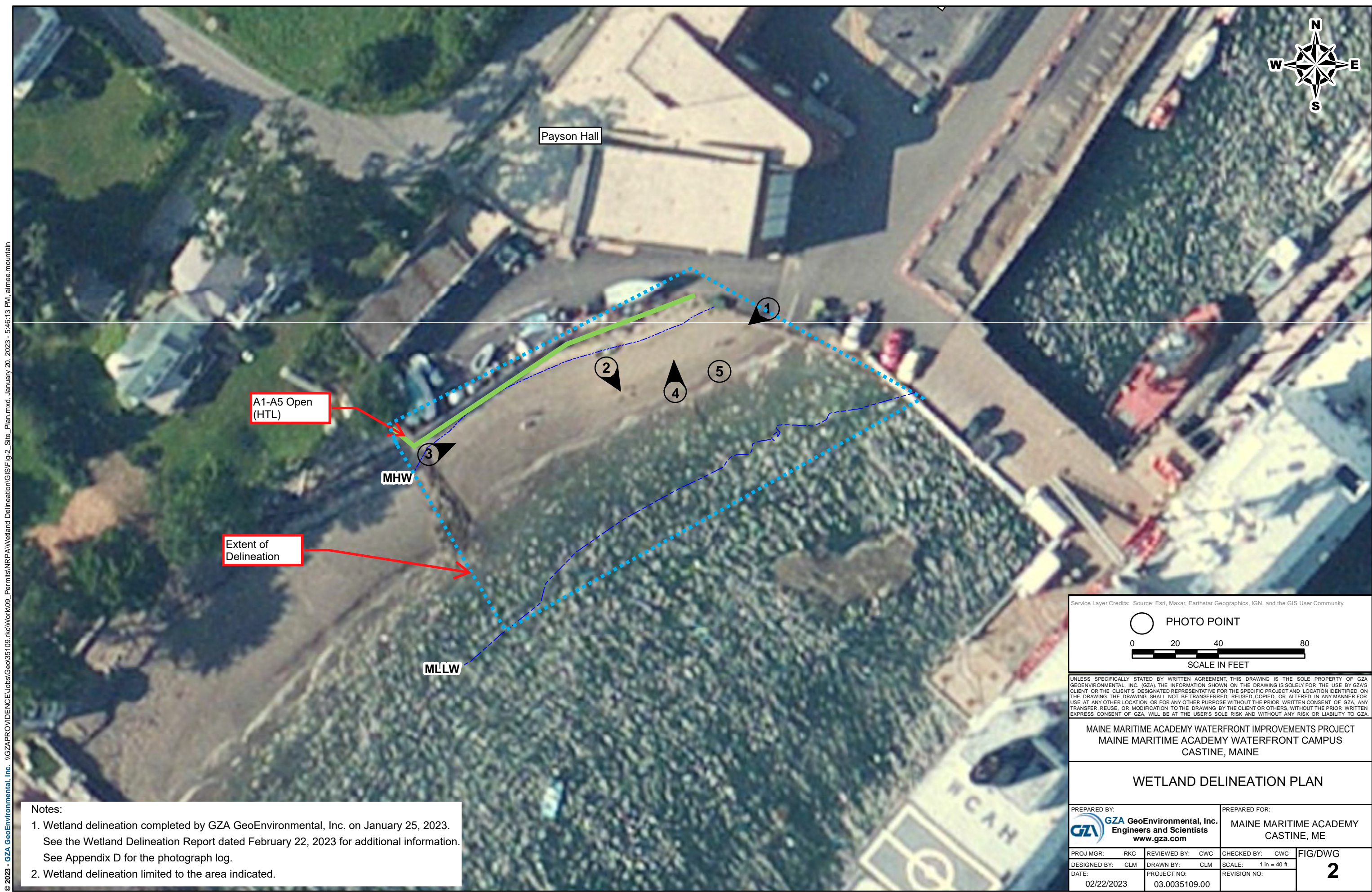
VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

DATE:	FEBRUARY 2023
PROJECT NO.	03.0035109.00
FIGURE	1



**Figure 2 – Wetland Delineation Plan**





© 2023 - GZA GeoEnvironmental, Inc. \\GZA\PROVIDENCE\Jobs\Geo\35109\_rke\Work\09\_Permits\NRP\Wetland Delineation\GIS\Fig-2\_Site\_Plan.mxd, January 20, 2023 - 5:46:13 PM, almee.mountain

- Notes:
- Wetland delineation completed by GZA GeoEnvironmental, Inc. on January 25, 2023.  
See the Wetland Delineation Report dated February 22, 2023 for additional information.  
See Appendix D for the photograph log.
  - Wetland delineation limited to the area indicated.

Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, IGN, and the GIS User Community

PHOTO POINT

0204080

SCALE IN FEET

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MAINE MARITIME ACADEMY WATERFRONT IMPROVEMENTS PROJECT  
MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
CASTINE, MAINE

WETLAND DELINEATION PLAN

PREPARED BY: <b>GZA GeoEnvironmental, Inc.</b> Engineers and Scientists <a href="http://www.gza.com">www.gza.com</a>		PREPARED FOR: <b>MAINE MARITIME ACADEMY</b> CASTINE, ME	
PROJ MGR: RKC	REVIEWED BY: CWC	CHECKED BY: CWC	FIG/DWG <b>2</b>
DESIGNED BY: CLM	DRAWN BY: CLM	SCALE: 1 in = 40 ft	
DATE: 02/22/2023	PROJECT NO: 03.0035109.00	REVISION NO:	





## **Appendix A – Limitations**



## **USE OF REPORT**

1. GZA GeoEnvironmental, Inc. (GZA) has prepared this report on behalf of, and for the exclusive use of Maine Maritime Academy (MMA) ("Client") for the stated purpose(s) and location(s) identified in the report. Use of this report, in whole or in part, at other locations, or for other purposes, may lead to inappropriate conclusions; and we do not accept any responsibility for the consequences of such use(s). Further, reliance by any party not identified in the agreement, for any use, without our prior written permission, shall be at that party's risk, and without any liability to GZA.

## **STANDARD OF CARE**

2. GZA's findings and conclusions are based on the work conducted as part of the Scope of Services set forth in the Report and/or proposal, and reflect our professional judgment. These findings and conclusions must be considered not as scientific or engineering certainties, but rather as our professional opinions concerning the data gathered and observations made during the course of our work. Conditions other than described in this report may be found at the subject location(s).
3. GZA's services were performed using the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services, at the same time, under similar conditions, at the same or a similar property. No warranty, expressed or implied, is made.

## **LIMITS TO OBSERVATIONS**

4. Natural resource characteristics are inherently variable. Biological community composition and diversity can be affected by seasonal, annual or anthropogenic influences. In addition, soil conditions are reflective of subsurface geologic materials, the composition and distribution of which vary spatially.
5. The observations described in this report were made on the dates referenced and under the conditions stated therein. Conditions observed and reported by GZA reflect the conditions that could be reasonably observed based upon the visual observations of surface conditions and/or a limited observation of subsurface conditions at the specific time of observation. Such conditions are subject to environmental and circumstantial alteration and may not reflect conditions observable at another time.
6. The conclusions and recommendations contained in this report are based upon the data obtained from a limited number of surveys performed during the course of our work on the site, as described in the Report. There may be variations between these surveys and other past or future surveys due to inherent environmental and circumstantial variability.

## **RELIANCE ON INFORMATION FROM OTHERS**

7. Preparation of this Report may have relied upon information made available by Federal, state and local authorities; and/or work products prepared by other professionals as specified in the report. Unless specifically stated, GZA did not attempt to independently verify the accuracy or completeness of that information.

## **COMPLIANCE WITH REGULATIONS AND CODES**

8. GZA's services were performed to render an opinion on the presence and/or condition of natural resources as described in the Report. Standards used to identify or assess these resources as well as regulatory jurisdiction, if any, are stated in the Report. Standards for identification of jurisdictional resources and regulatory control over them may vary between governmental agencies at Federal, state and local levels and are subject to change over time which may affect the conclusions and findings of this report.



#### **NEW INFORMATION**

9. In the event that the Client or others authorized to use this report obtain information on environmental regulatory compliance issues at the site not contained in this report, such information shall be brought to GZA's attention forthwith. GZA will evaluate such information and, on the basis of this work, may modify the conclusions stated in this report.

#### **ADDITIONAL SERVICES**

10. GZA recommends that we be retained to provide further investigation, if necessary, which would allow GZA to (1) observe compliance with the concepts and recommendations contained herein; (2) evaluate whether the manner of implementation creates a potential new finding; and (3) evaluate whether the manner of implementation affects or changes the conditions on which our opinions were made.





## **Appendix B – MDEP Coastal Wetland Characterization Checklist**

## APPENDIX B: MDEP COASTAL WETLAND CHARACTERIZATION: INTERTIDAL & SHALLOW SUBTIDAL FIELD SURVEY CHECKLIST

NAME OF APPLICANT: Maine Maritime Academy PHONE: \_\_\_\_\_

APPLICATION TYPE: NRPA Individual Permit

ACTIVITY LOCATION: TOWN: Castine COUNTY: Hancock

ACTIVITY DESCRIPTION: ☒ fill ☒ pier ☐ lobster pound ☐ shoreline stabilization  
☐ dredge ☐ other: \_\_\_\_\_

DATE OF SURVEY: 1-25-2023 OBSERVER: Peter Petkauskos

TIME OF SURVEY: 7:15 AM TIDE AT SURVEY: Low

SIZE OF DIRECT IMPACT OR FOOTPRINT (square feet):  
Intertidal area: 1,000 Subtidal area: 200

SIZE OF INDIRECT IMPACT, if known (square feet): \_\_\_\_\_  
Intertidal area: 1,800 Subtidal area: 1,600

HABITAT TYPES PRESENT (check all that apply):  
☒ sand beach ☐ boulder/cobble beach ☐ sand flat ☐ mixed coarse & fines ☐ salt marsh  
☐ ledge ☐ rocky shore ☐ mudflat (sediment depth, if known: \_\_\_\_\_)

ENERGY: ☐ protected ☒ semi-protected ☐ partially exposed ☐ exposed

DRAINAGE: ☒ drains completely ☐ standing water ☐ pools ☐ stream or channel

SLOPE: ☐ >20% ☐ 10-20% ☒ 5-10% ☐ 0-5% ☐ variable

SHORELINE CHARACTER:  
☐ bluff/bank (height from spring high tide: \_\_\_\_\_) ☒ beach ☐ rocky ☐ vegetated

FRESHWATER SOURCES: ☐ stream ☐ river ☐ wetland ☐ stormwater

MARINE ORGANISMS PRESENT:

	absent	occasional	common	abundant
mussels	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
clams	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
marine worms	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
rockweed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
eelgrass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
lobsters	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SIGNS OF SHORELINE OR INTERTIDAL EROSION? ☐ yes ☒ no

PREVIOUS ALTERATIONS? ☒ yes ☐ no

CURRENT USE OF SITE AND ADJACENT UPLAND:  
☐ undeveloped ☐ residential ☒ commercial ☐ degraded ☐ recreational

**PLEASE SUBMIT THE FOLLOWING:**













☒ Photographs ☒ Overhead drawing (pink)



## **Appendix C – Wetland Function Value Assessment Form**



**Maine Maritime Academy  
Castine, Maine**

File No: 03.0035109.00				WETLAND FUNCTION – VALUE EVALUATION FORM	Date: 1/25/2023		
Wetland ID: Wetland 1 (M2US2N)					GZA Personnel: Peter Petkauskos		
Function/Value		Capability Y      N		Criteria	Summary		Principal Yes/No
	Groundwater Recharge/Discharge	Y		4, 7	The wetland contains sandy soils and tidal waters.		N
	Floodflow Alteration	Y		1, 3, 6, 8, 9, 10, 11, 13	The wetland receives overland sheet flow from surrounding uplands and Maine Maritime Academy.		Y
	Fish and Shellfish Habitat	Y		2, 4, 5	The marine habitat present is associated with the Bagaduce River and Atlantic Ocean.		Y
	Sediment/Toxicant Retention	Y		1, 2, 3, 4, 5, 8, 9,	The wetland receives stormwater from surrounding uplands and existing parking lots.		Y
	Nutrient Removal	Y		1, 2, 3, 4, 7, 14	Deep open water habitat is present.		Y
	Production Export	Y		4, 5, 6, 11	Export is occurring through wildlife use and mussels were observed during the assessment.		Y
	Sediment/Shoreline Stabilization	Y		1, 2, 3, 6, 10, 11	A bulkhead is present that is able to withstand large storm events and a rocky shoreline is present outside the work area in the larger riverine system.		Y
	Wildlife Habitat	Y		6, 8, 12, 17, 21	Marine habitat is present in the assessment area. The area is mapped by the State of Maine as a moderate Tidal Wading Bird and Waterfowl Habitat (TWWH).		Y
	Recreation	Y		2, 4, 5, 7, 8, 9, 12	Recreational and commercial boating activity is present.		Y
	Educational/Scientific Value	Y		5, 8, 14, 16	The wetland is located adjacent to the Maine Maritime Academy and parking suitable for school buses is present.		Y
	Uniqueness/Heritage	Y		3, 8, 9, 17, 19	The wetland contains tidal and deep open water habitat.		Y
	Visual Quality/Aesthetics	Y		8, 12	The wetland contains open water views of the Bagaduce River and the Atlantic Ocean.		Y
ES	Endangered Species Habitat	Y		1	The vicinity is mapped as potential habitat for Atlantic Salmon, Atlantic Sturgeon, Green Turtle, Kemp’s Ridley Turtle, Leatherback Turtle, Loggerhead Turtle, and Shortnose Sturgeon.		Y


Notes:




## **Appendix D – Photo Log**



## Photographic Log


<b>Client Name:</b> Maine Maritime Academy Waterfront Improvements Project Wetland Delineation		<b>Site Location:</b> MMA Waterfront Campus Castine, ME	<b>Project No.</b> 03.0035109.00
<b>Photo No.</b> 1	<b>Date:</b> 1/25/2023		
<b>Direction Photo Taken:</b> Southwest			
<b>Description:</b> View of Wetland 1 at 7:20 am during low tide.			

<b>Photo No.</b> 2	<b>Date:</b> 1/25/2023	
<b>Direction Photo Taken:</b> Southeast		
<b>Description:</b> View of Wetland 1 at 7:20 am during low tide.		





## Photographic Log


<b>Client Name:</b> Maine Maritime Academy Waterfront Improvements Project Wetland Delineation		<b>Site Location:</b> MMA Waterfront Campus Castine, ME	<b>Project No.</b> 03.0035109.00
<b>Photo No.</b> 3	<b>Date:</b> 1/25/2023		
<b>Direction Photo Taken:</b> Northeast			
<b>Description:</b> View of Wetland 1 near flag A2 at 7:20 am during low tide.			

<b>Photo No.</b> 4	<b>Date:</b> 1/25/2023
<b>Direction Photo Taken:</b> North	
<b>Description:</b> View of Wetland 1 at 7:20 am during low tide.	

A photograph of a wetland area at low tide. The foreground is a dark, gravelly beach with some small pools of water. In the middle ground, there is a wooden fence and a large, multi-story building with a brick upper section and large glass windows. The sky is clear and blue.



## Photographic Log

<b>Client Name:</b> Maine Maritime Academy Waterfront Improvements Project Wetland Delineation		<b>Site Location:</b> MMA Waterfront Campus Castine, ME	<b>Project No.</b> 03.0035109.00
<b>Photo No.</b> 5	<b>Date:</b> 1/25/2023	 A close-up photograph of a mussel shell resting on a dark, wet rock. The mussel is dark brown with a lighter, silvery-grey interior. The surrounding area is a rocky shore covered in small, dark pebbles and larger, smooth stones of various colors (grey, black, brown, and some with reddish-orange hues). The water is not visible, suggesting a low tide.	
<b>Direction Photo Taken:</b> N/A			
<b>Description:</b> View of a mussel observed in Wetland 1 at 7:20 am during low tide.			



## **Appendix E – United States Fish and Wildlife Service Coordination**

## Aimee Mountain

---

**From:** Aimee Mountain  
**Sent:** Monday, January 23, 2023 2:34 PM  
**To:** Maine Field Office, FW5  
**Cc:** kelly.oreilly@dot.gov; Peter Stewart; John Cashman; Richard Rosen; Eric Mora; Cheryl Coviello; Rebecca Cherry; Casey McGuffy; mael\_glon@fws.gov  
**Subject:** RE: Section 7 Review Request - MMA waterfront campus improvements  
**Attachments:** NE Consistency Letter\_ Northeast Endangered Species Determination Key 2023-01-23.pdf

Hi Mael,

Thank you for your email. Attached is the consistency letter for the Northeast Determination Key. No tree clearing is proposed as part of this project so the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency is not applicable. We are currently working on a biological assessment that we will share with the National Marine Fisheries Service to move that consultation forward.

Please let me know if you need anything further to review this project. Thanks!

**Aimee Dubois Mountain, GISP, CPMSM**  
**Senior Project Manager**

GZA | 707 Sable Oaks Drive, Suite 150 | South Portland, ME 04106  
o: 207-358-5116 | c: 207-344-9704 | [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com) | [www.gza.com](http://www.gza.com)

---

**From:** Glon, Mael G <mael\_glon@fws.gov> **On Behalf Of** Maine Field Office, FW5  
**Sent:** Monday, January 23, 2023 11:35 AM  
**To:** Aimee Mountain <Aimee.Mountain@gza.com>  
**Cc:** kelly.oreilly@dot.gov; Peter Stewart <peter.stewart@mma.edu>; John Cashman <john.cashman@mma.edu>; Richard Rosen <richard.rosen@mma.edu>; Eric Mora <eric.mora@collierseng.com>; Cheryl Coviello <cheryl.coviello@gza.com>; Rebecca Cherry <Rebecca.Cherry@gza.com>; Casey McGuffy <Casey.McGuffy@gza.com>  
**Subject:** Re: [EXTERNAL] Section 7 Review Request - MMA waterfront campus improvements

Hi Aimee,

Thank you for sharing your species list with us. When you entered the project into IPaC, were you given the option to complete any determination keys? Typically, a project like this will have the option to complete the Northeast Determination Key and possibly the northern long-eared bat 4(d) rule key. I'd recommend that you check whether you can complete those as a next step, and then please share the results with us.

One other note, because your project is in tidally influenced water, the Atlantic salmon consultation will need to go through the National Marine Fisheries Service.

Thank you and please don't hesitate to reach out if you have any questions.  
Best,



Mael

---

**From:** Aimee Mountain <[Aimee.Mountain@gza.com](mailto:Aimee.Mountain@gza.com)>

**Sent:** Thursday, January 19, 2023 10:51 AM

**To:** Maine Field Office, FW5 <[mainefieldoffice@fws.gov](mailto:mainefieldoffice@fws.gov)>

**Cc:** [kelly.oreilly@dot.gov](mailto:kelly.oreilly@dot.gov) <[kelly.oreilly@dot.gov](mailto:kelly.oreilly@dot.gov)>; Peter Stewart <[peter.stewart@mma.edu](mailto:peter.stewart@mma.edu)>; John Cashman <[john.cashman@mma.edu](mailto:john.cashman@mma.edu)>; Richard Rosen <[richard.rosen@mma.edu](mailto:richard.rosen@mma.edu)>; Eric Mora <[eric.mora@collierseng.com](mailto:eric.mora@collierseng.com)>; Cheryl Coviello <[cheryl.coviello@gza.com](mailto:cheryl.coviello@gza.com)>; Rebecca Cherry <[Rebecca.Cherry@gza.com](mailto:Rebecca.Cherry@gza.com)>; Casey McGuffy <[Casey.McGuffy@gza.com](mailto:Casey.McGuffy@gza.com)>

**Subject:** [EXTERNAL] Section 7 Review Request - MMA waterfront campus improvements

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hello,

I'm writing to request a project review by the US Fish and Wildlife Service (USFWS) for proposed waterfront campus improvements at Maine Maritime Academy (MMA) in Castine, Maine (see attached). Please let me know if you have any questions or need anything further to complete a section 7 review. Thanks!

Aimee Dubois Mountain, GISP, CPMSM

Senior Project Manager

GZA | 707 Sable Oaks Drive, Suite 150 | South Portland, ME 04106

o: 207-358-5116 | c: 207-344-9704 | [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com) | [www.gza.com](http://www.gza.com)

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U.S. Department  
of Transportation

**Maritime  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

January 19, 2023

**VIA ELECTRONIC MAIL**

U.S. Fish and Wildlife Service USFWS MEFO  
Maine Ecological Services Field Office ([mainefieldoffice@fws.gov](mailto:mainefieldoffice@fws.gov))  
306 Hatchery Road  
East Orland, ME 04431

**RE: U.S. Department of Transportation Maritime Administration  
Section 7 initiation  
Maine Maritime Academy Waterfront Campus Improvements  
1 Pleasant Street, Castine, Maine**

To Whom it May Concern:

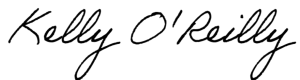
The U.S. Department of Transportation (DOT) Maritime Administration (MARAD) awarded funds to the Maine Maritime Academy (MMA) under the MMA Pier Upgrade Project for improvements to the MMA Waterfront Campus. The project is located in Hancock County, Castine, Maine. This letter notifies you that for the purposes of this project, MARAD has authorized GZA GeoEnvironmental, Inc. (GZA) to consult with your agency on our behalf.

Maine Maritime Academy is third in line of the six state maritime academies to receive a new National Security Multi-Mission Vessel (NSMV) from the U.S. Maritime Administration's National Defense Reserve fleet to serve as a training vessel. To prepare for the vessel and its more modern services and systems, modifications of the MMA Waterfront Campus are necessary. MMA's proposed project includes rehabilitation, upgrades and expansion of the existing pier structure including new mooring dolphins for mooring and berthing the NSMV; new floating docks to reorganize the Academy's programs and training; repair of the existing floating docks; repair/replacement of portions of the bulkhead along the shoreline; maintenance dredging within the existing boat basin; and repair/modification of existing utilities and new utilities to support the NSMV's systems and waterfront activities. The proposed project allows MMA to integrate the NSMV vessel into their academic programs and improve energy efficiency and coastal resiliency. Figure 1 – Locus Map identifies the approximate location of the property on an excerpt of the relevant U.S. Geologic Survey topographic map. Figure 2 – Waterfront Campus Improvements Schematic Layout provides a general overview of the proposed project elements.

Federally listed species and their habitats are protected under the Endangered Species Act (ESA) of 1973 (16 U.S.C. § 1531-1544, 87 Stat. 884), as amended (Department of the Interior, 1973). The attached USFWS letter states there is one threatened species, the northern long-eared bat; two endangered species, the roseate tern and Atlantic salmon; and one candidate species, the monarch butterfly that may occur at the project site. The letter also states there are no critical habitats within the area.

We value your assistance and look forward to consulting further if there are federally listed species and designated critical habitat that may be affected by this project. To meet project timeframes, MARAD respectfully requests that you notify us within 30 days. If you have additional questions or comments, please contact me and/or the consultant for the action proponent, Aimee Mountain (207-344-9704, [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com)).

Sincerely,

A handwritten signature in cursive script that reads "Kelly O'Reilly".

Kelly O'Reilly  
Environmental Protection Specialist  
[kelly.oreilly@dot.gov](mailto:kelly.oreilly@dot.gov)

Attachments: USFWS IPaC Official Species List  
Figure 1 – Vicinity and Topographic Map  
Figure 2 – Waterfront Campus Improvements Schematic Layout

Cc: Kelly O'Reilly, U.S. Maritime Administration  
Peter Stewart, Maine Maritime Academy  
John Cashman, Maine Maritime Academy  
Richard Rosen, Maine Maritime Academy  
Eric Mora, Colliers Project Leaders  
Aimee Mountain, GZA  
Cheryl Coviello, GZA  
Rebecca Cherry, GZA



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:

October 28, 2022

Project Code: 2023-0010016

Project Name: Maine Maritime Academy (MMA)

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/birds/policies-and-regulations.php>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

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Attachment(s):

- Official Species List

## Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Maine Ecological Services Field Office**

P. O. Box A

East Orland, ME 04431

(207) 469-7300

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## Project Summary

Project Code: 2023-0010016

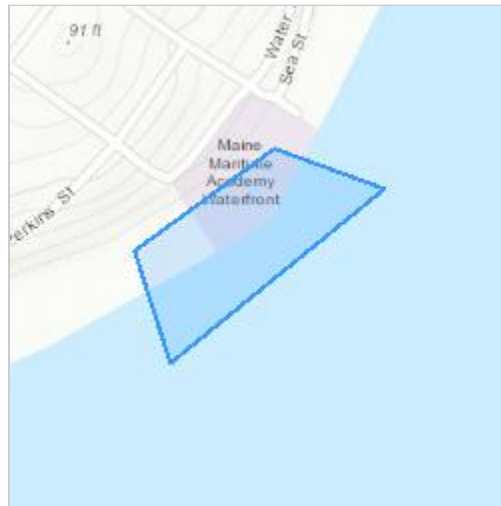
Project Name: Maine Maritime Academy (MMA)

Project Type: Boatlift/Boathouse/Dock/Pier/Piles - Maintenance/Modification

Project Description: MMA Waterfront Campus Improvements

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.38604745,-68.79704984912735,14z>



Counties: Hancock County, Maine

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## Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

### Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

### Birds

NAME	STATUS
Roseate Tern <i>Sterna dougallii dougallii</i> Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/2083">https://ecos.fws.gov/ecp/species/2083</a>	Endangered

### Fishes

NAME	STATUS
Atlantic Salmon <i>Salmo salar</i> Population: Gulf of Maine DPS There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/2097">https://ecos.fws.gov/ecp/species/2097</a>	Endangered



## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

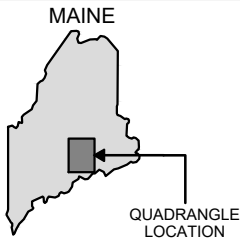
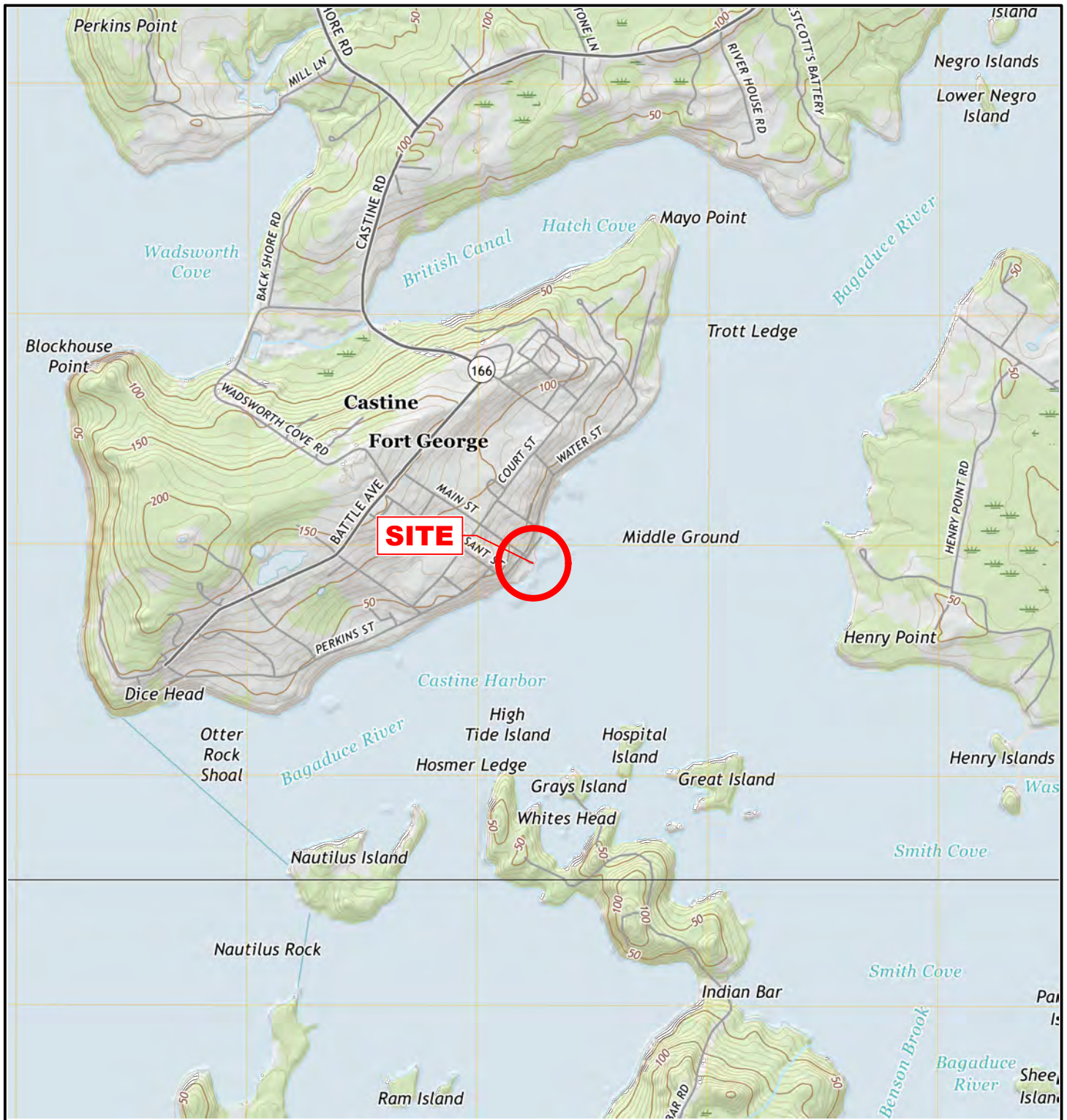
## Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

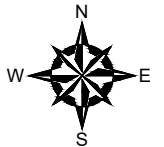
**IPaC User Contact Information**

Agency: GZA GeoEnvironmental, Inc.  
Name: Aimee Mountain  
Address: 707 Sable Oaks Drive  
Address Line 2: Suite 150  
City: South Portland  
State: ME  
Zip: 04106  
Email: aimee.mountain@gza.com  
Phone: 2073449704


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SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



UNLESS SPECIFICALLY STATED BY WRITTEN AGREEMENT, THIS DRAWING IS THE SOLE PROPERTY OF GZA GEOENVIRONMENTAL, INC. (GZA). THE INFORMATION SHOWN ON THE DRAWING IS SOLELY FOR USE BY GZA'S CLIENT OR THE CLIENT'S DESIGNATED REPRESENTATIVE FOR THE SPECIFIC PROJECT AND LOCATION IDENTIFIED ON THE DRAWING. THE DRAWING SHALL NOT BE TRANSFERRED, REUSED, COPIED, OR ALTERED IN ANY MANNER FOR USE AT ANY OTHER LOCATION OR FOR ANY OTHER PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF GZA. ANY TRANSFER, REUSE, OR MODIFICATION TO THE DRAWING BY THE CLIENT OR OTHERS, WITHOUT THE PRIOR WRITTEN EXPRESS CONSENT OF GZA, WILL BE AT THE USER'S SOLE RISK AND WITHOUT ANY RISK OR LIABILITY TO GZA.

PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com	
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR:	CWC	REVIEWED BY: DDF
DESIGNED BY:	RKC	DRAWN BY: MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
1 PLEASANT STREET, CASTINE, MAINE

VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

DATE:	OCTOBER 2022
PROJECT NO.	03.0035109.00
FIGURE	1
SHEET NO.	1 OF 1









## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Maine Ecological Services Field Office

P. O. Box A

East Orland, ME 04431

Phone: (207) 469-7300 Fax: (207) 902-1588



In Reply Refer To:

January 23, 2023

Project code: 2023-0010016

Project Name: Maine Maritime Academy (MMA)

IPaC Record Locator: 120-121447176

Federal Nexus: yes

Federal Action Agency (if applicable): United States Maritime Administration

Subject: Federal agency coordination under the Endangered Species Act, Section 7 for 'Maine Maritime Academy (MMA)'

Dear Aimee Mountain:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on January 23, 2023, for "Maine Maritime Academy (MMA)" (here forward, Project). This project has been assigned Project Code 2023-0010016 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (DKey), invalidates this letter. To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat.

Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a proposed action "is

not likely to adversely affect" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Roseate Tern ( <i>Sterna dougallii dougallii</i> )	Endangered	No effect

**Conclusion** If there are no updates on listed species, no further consultation/coordination for this project is required for the species identified above. However, the Service recommends that project proponents re-evaluate the Project in IPaC if: 1) the scope, timing, duration, or location of the Project changes (includes any project changes or amendments); 2) new information reveals the Project may impact (positively or negatively) federally listed species or designated critical habitat; or 3) a new species is listed, or critical habitat designated. If any of the above conditions occurs, additional consultation with the Service should take place before project implements any changes which are final or commits additional resources.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Atlantic Salmon *Salmo salar* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate
- Northern Long-eared Bat *Myotis septentrionalis* Endangered

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or [PermitsR5MB@fws.gov](mailto:PermitsR5MB@fws.gov), with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the Maine Ecological Services Field Office and reference the Project Code associated with this Project.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

Maine Maritime Academy (MMA)

**2. Description**

The following description was provided for the project 'Maine Maritime Academy (MMA)':

MMA Waterfront Campus Improvements

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@44.38604745,-68.79704984912735,14z>



## Qualification Interview

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

*Yes*

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

**Note:** This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

*No*

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

*Yes*

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

*No*

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

**Note:** If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

*Yes*

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

*Yes*

7. Will the proposed project involve the use of herbicide?

*No*

8. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

*No*

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9. Does any component of the project associated with this action include structures that may pose a collision risk to birds or bats (e.g., wind turbines, communication towers, transmission lines, any type of towers with or without guy wires)?

**Note** For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

10. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

No

11. Will the proposed project affect wetlands?

This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

Yes

12. Will the proposed project activities (including upland project activities) occur within 0.5 miles of the water's edge of a stream or tributary of a stream?

Yes

13. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary?

Yes

14. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream?

No

15. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds)?

No

16. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining?

Yes

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17. Will the proposed project involve the creation of a new water-borne contaminant source (e.g., leachate pond, pits containing chemicals that are not NSF/ANSI 60 compliant)?

**Note** that sedimentation will be addressed in a separate question.

*No*

18. Will the proposed project involve perennial stream loss that would require an individual permit under 404 of the Clean Water Act?

*No*

19. Will the proposed project involve blasting?

*No*

20. Will the proposed project include activities that could result in an increase to recreational fishing or potentially affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage)?

*No*

21. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream?

*No*

22. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank?

*No*

23. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, or the equivalent to these BMPs, be applied to the project?

*Yes*

24. Will the proposed project result in changes to beach dynamics that may modify formation of habitat over time?

**Note:** Examples of projects that result in changes to beach dynamics include 1) construction of offshore breakwaters and groins; 2) mining of sand from an updrift ebb tidal delta; 3) removing or adding beach sands; and 4) projects that stabilize dunes (including placement of sand fences or planting vegetation).

*No*

25. [Hidden Semantic] Is the project area located within the roseate tern AOI?

**Automatically answered**

*Yes*

---

26. If you have determined that the roseate tern is unlikely to occur within your project's action area or that your project is unlikely to have any potential effects on the roseate tern, you may wish to make a "no effect" determination for the roseate tern. Additional guidance on how to make this decision can be found in the project review section of your local Ecological Services Field Office's website. CBFO: <https://www.fws.gov/office/chesapeake-bay-ecological-services/project-review> ; MEFO: <https://www.fws.gov/office/maine-ecological-services> ; NJFO: <https://www.fws.gov/office/new-jersey-ecological-services/new-jersey-field-office-project-review-guide> ; NEFO: <https://www.fws.gov/office/new-england-ecological-services/endangered-species-project-review#Step5> ; WVFO: <https://www.fws.gov/office/west-virginia-ecological-services/project-planning>. If you are unsure, answer "No" and continue through the key.

Would you like to make a no effect determination for the roseate tern?

Yes

27. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

**Automatically answered**

No

28. [Semantic] Does the project intersect the Indiana bat critical habitat?

**Automatically answered**

No

29. [Semantic] Does the project intersect the candy darter critical habitat?

**Automatically answered**

No

30. [Semantic] Does the project intersect the diamond darter critical habitat?

**Automatically answered**

No

31. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

**Automatically answered**

No

32. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

**Automatically answered**

No

33. Do you have any other documents that you want to include with this submission?

No

---

## Project Questionnaire

1. Approximately how many acres of trees would the proposed project remove?

0

2. Approximately how many total acres of disturbance are within the disturbance/  
construction limits of the proposed project?

0.5

3. Briefly describe the habitat within the construction/disturbance limits of the project site.

*Estuarine and Marine Wetland habitat (M2US3N) and Estuarine and Marine Deepwater habitat (M1UBL).*

---



## **IPaC User Contact Information**

Agency: GZA GeoEnvironmental, Inc.  
Name: Aimee Mountain  
Address: 707 Sable Oaks Drive  
Address Line 2: Suite 150  
City: South Portland  
State: ME  
Zip: 04106  
Email: aimee.mountain@gza.com  
Phone: 2073449704

## **Lead Agency Contact Information**

Lead Agency: United States Maritime Administration  
Name: Kelly O'Reilly  
Email: kelly.oreilly@dot.gov  
Phone: 2025796756

---



## **Appendix F – Maine Historic Preservation Commission Coordination**



MAINE HISTORIC PRESERVATION COMMISSION  
55 CAPITOL STREET  
65 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333

JANET T. MILLS  
GOVERNOR

KIRK F. MOHNEY  
DIRECTOR

January 11, 2023

Ms. Aimee Mountain  
GZA  
7070 Sable Oaks Drive  
Suite 150  
South Portland, ME 04106

Project: MHPC #0004-23      Maine Maritime Academy; 1 Pleasant Street  
Waterfront Campus Improvements  
Town: Castine, ME

Dear Ms. Mountain:

In response to your recent request, I have reviewed the information received January 4, 2023 to initiate consultation on the above referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA).

Based on the information submitted, I have concluded that the proposed undertaking will have **no adverse effect** upon historic properties (architectural or archaeological), as defined by Section 106.

Please contact Megan Rideout at (207) 287-2992 or [megan.m.rideout@maine.gov](mailto:megan.m.rideout@maine.gov) if we can be of further assistance in this matter.

Sincerely,

Kirk F. Mohney  
State Historic Preservation Officer



U.S. Department  
Of Transportation  
**Maritime  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

January 4, 2023

**VIA ELECTRONIC MAIL** [[MHPCprojectreview@maine.gov](mailto:MHPCprojectreview@maine.gov)]

Kirk F. Mahoney  
Maine Historic Preservation Commission  
65 State House Station  
Augusta, Maine 04333-0065

Subject: U.S. Department of Transportation Maritime Administration  
Section 106 initiation  
Maine Maritime Academy Waterfront Campus Improvements  
1 Pleasant Street, Castine, Maine

Dear Director Mahoney:

The U.S. Department of Transportation (DOT) Maritime Administration (MARAD), awarded funds to the Maine Maritime Academy (MMA) under the MMA Pier Upgrade Project for improvements to the MMA Waterfront Campus. The project is located in Hancock County, Castine, Maine. The project location is entirely rural and contains existing residential, commercial, municipal, recreational, and academic development.

This action constitutes an undertaking under Section 106 of the National Historic Preservation Act 1966, as amended (54 U.S.C. § 300101 et seq.). Pursuant to Section 106 and its implementing regulations, 36 CFR § 800, MARAD is initiating consultation with your office regarding this project.

#### Project Description

Maine Maritime Academy is third in line of the six state maritime academies to receive a new National Security Multi-Mission Vessel (NSMV) from MARAD's National Defense Reserve fleet to serve as a training vessel. To prepare for the vessel and its more modern services and systems, modifications of the MMA Waterfront Campus are necessary. MMA's proposed project includes rehabilitation, upgrades and expansion of the existing pier structure including new mooring dolphins for mooring and berthing the NSMV; new floating docks to reorganize the Academy's programs and training; repair of the existing floating docks; repair/replacement of portions of the bulkhead along the shoreline; maintenance dredging within the existing boat basin; and repair/modification of existing utilities and new utilities to support the NSMV's systems and waterfront activities. The proposed project allows MMA to integrate the NSMV vessel into their academic programs and improve energy efficiency and coastal resiliency. Figure 1 – Locus Map identifies the approximate location of the property on an excerpt of the relevant U.S. Geologic Survey topographic map. Figure 2 – Waterfront Campus Improvements Schematic Layout provides a general overview of the proposed project elements.

#### Area of Potential Effects

Based on our research of the property, including the National Register of Historic Places and the Maine DOT Public Map Viewer, performed by GZA GeoEnvironmental, Inc., we have defined the Area of Potential Effect (APE) as the boundary as shown in the attached Figure 2.



### Identification of Historic Properties

The project site is located adjacent to the Castine Historic District. Based on our research of the property, including the National Register of Historic Places and the Maine DOT Public Map Viewer, no historic properties are located within the proposed project area. According to the MMA Campus & Facilities Inventory, updated in 2019, one building located near the project site is over fifty years of age. Andrews Hall, which borders the project area to the north and west, was constructed in approximately 1960. Adjacent to Rodgers Hall there is a building at 14 Water Street that may be over fifty years of age. No other buildings that may be over fifty years of age have been identified on, adjacent to, or across the street from the project site.

The National Register of Historic Places categorizes the Bowdoin Schooner, which docks at the MMA waterfront, as a historic structure. It is part of MMA's vessel fleet and can be relocated during the construction phase of the project.

On January 4, 2023, the following Indian tribes were notified about the MMA Waterfront Campus Improvements Project: Houlton Band of Maliseet Indians, Passamaquoddy Tribe of Indians (Pleasant Point Reservation and Indian Township Reservation), Aroostook Band of Micmacs, and the Penobscot Nation.

### Assessment of Effects

Buildings and project area features are shown on the 2022 Site Plan, attached. The project work is intended to take place on the Pier, within the Harbor, and along the shoreline south/southwest of Payson Hall. Shoreline work (bulkhead) adjacent to Andrews Hall is not anticipated. However, a utility trench from Andrews Hall to the pier is proposed. Photos of adjacent buildings, including Andrews Hall, 14 Water Street, and access roads are shown in the attached Photographic Log.

The Bowdoin Schooner, categorized as a historic structure, is a mobile structure that can be relocated during the construction phase of the project.

Therefore, as currently designed, the Project would have **No Effect** on historic properties according to 36 CFR 800.4(d)(1).

Pursuant to 36 CFR 800.4(c)(1) MARAD seeks concurrence by your office with this finding.

In addition, the National Park Service (NPS) website was used to review information pertaining to wild and scenic rivers within or near the proposed project area. No waterways classified as wild and scenic pursuant to the Federal Wild and Scenic Rivers Act, Public Law 90-542, are located within the Proposed Action area.

Please note that for the purposes of this project, MARAD has authorized GZA GeoEnvironmental, Inc. (GZA) to consult with your Agency on behalf of MARAD. We therefore request that you provide a copy of your response to them.

If you have additional questions or comments, please contact me and/or the consultant for the action proponent, Aimee Mountain (207-344-9704, [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com)). Please mail correspondence to GZA's South Portland office located at 707 Sable Oaks Drive, Suite 150, South Portland, Maine 04106.

Sincerely,

*Barbara Voulgaris*

Barbara Voulgaris  
Federal Preservation Officer  
[Barbara.Voulgaris@dot.gov](mailto:Barbara.Voulgaris@dot.gov)  
202.366.0866

Attachments: Photographic Log  
Figure 1 – Vicinity and Topographic Map  
Figure 2 – Waterfront Campus Improvements Schematic Layout

Cc: Kelly O'Reilly, Maritime Administration  
Peter Stewart, Maine Maritime Academy  
John Cashman, Maine Maritime Academy  
Richard Rosen, Maine Maritime Academy  
Eric Mora, Colliers Project Leaders  
Aimee Mountain, GZA  
Cheryl Coviello, GZA  
Rebecca Cherry, GZA




<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>1</b>	<b>Date:</b> 8/30/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the shoreline adjacent to the pier.  Photograph direction: North	



<b>Photo No.:</b> <b>2</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the shoreline and west bulkhead adjacent to the pier.  Photograph direction: West	

A photograph showing a coastal scene. In the foreground, a wooden bulkhead runs along the right side of a sandy beach. The beach is wet, reflecting the sunlight. To the left, the ocean waves are breaking onto the shore. In the background, there are several houses on a hill, a large tree, and a blue building with yellow letters 'MMA' on its side. A brick building is visible on the right side of the image. The sky is blue with some clouds.






U.S. Department of Transportation  
Maritime Administration


MHPC PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>3</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier.  Photograph direction: Southeast	

A photograph showing a wooden pier structure extending from a shoreline into a body of water. In the foreground, a large, weathered wooden beam lies on the ground. To the left, a yellow and red cylindrical object, possibly a buoy or a large pipe, is visible. The pier itself is constructed of wooden pilings and has several small white buildings or sheds on it. The water is calm with some ripples, and the sky is blue with light clouds. In the background, there are some distant structures and hills.

<b>Photo No.:</b> <b>4</b>	<b>Date:</b> 8/29/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier and western bulkhead.  Photograph direction: North	

A photograph of a waterfront scene. In the foreground, a concrete bulkhead with yellow lichen is visible on the right. A large, weathered wooden post stands in the water. The water is greenish-blue. In the background, a wooden pier extends into the water, supported by many wooden pilings. Behind the pier is a large brick building with several windows and a white door. To the right of the brick building are several white wooden buildings. A tall, thin structure, possibly a lighthouse or tower, is visible in the distance. The sky is blue with some clouds.





<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>5</b>	<b>Date:</b> 10/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of Andrews Hall.  Photograph direction: Northeast	



<b>Photo No.:</b> <b>6</b>	<b>Date:</b> 10/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of Payson Hall.  Photograph direction: Northwest	









U.S. Department of Transportation  
Maritime Administration

MHPC PHOTOGRAPHIC LOG

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>7</b>	<b>Date:</b> 8/31/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of marine travel lift pier.  Photograph direction: West	

A photograph showing a wooden pier extending into a body of water. The pier has metal railings and two blue cranes mounted on it. In the background, there is a blue building and a brick building. The water is dark and calm. The sky is overcast.

<b>Photo No.:</b> <b>8</b>	<b>Date:</b> 8/29/2022	
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.		
<b>Description:</b>  View of the north side of the marine travel lift pier.  Photograph direction: Northeast		






**U.S. Department of Transportation  
Maritime Administration**

**MHPC PHOTOGRAPHIC LOG**

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>9</b>	<b>Date:</b> 8/30/2022
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.	
<b>Description:</b>  View of the pier decking.  Photograph direction: Northeast	

A photograph showing a wooden pier deck extending from the foreground into the distance. On the left side of the pier, there is a large, light-colored metal container with the number '28 268' visible on its side. Several red hoses are coiled on the deck near the container. In the background, there are some buildings and a crane. The pier is bordered by a wooden railing on the right side, and the water is visible beyond the railing. The sky is clear and blue.

<b>Photo No.:</b> <b>10</b>	<b>Date:</b> 8/31/2022	
<b>Photo Credit:</b>  GZA GeoEnvironmental, Inc.		
<b>Description:</b>  View of the floating dock along the southeast bulkhead.  Photograph direction: Southwest		



**U.S. Department of Transportation  
Maritime Administration**

**MHPC PHOTOGRAPHIC LOG**

<b>Project:</b> Maine Maritime Academy Waterfront Campus Improvements	<b>Site Location:</b> 1 Pleasant Street, Castine, Maine	<b>Project No.:</b> 03.0035109.00
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<b>Photo No.:</b> <b>11</b>	<b>Date:</b> 10/31/2022
--------------------------------	----------------------------

**Photo Credit:**

GZA GeoEnvironmental,  
Inc.

**Description:**

View of the asphalt surfaces and Andrews Hall, adjacent to the waterfront features.

Photograph direction:  
Northeast



<b>Photo No.:</b> <b>12</b>	<b>Date:</b> May 2019
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**Photo Credit:**

Google Street View

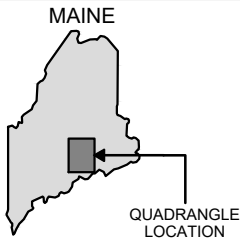
**Description:**

View of 14 Water Street

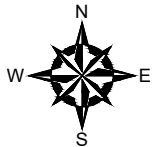
Photograph direction:  
Southeast








SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



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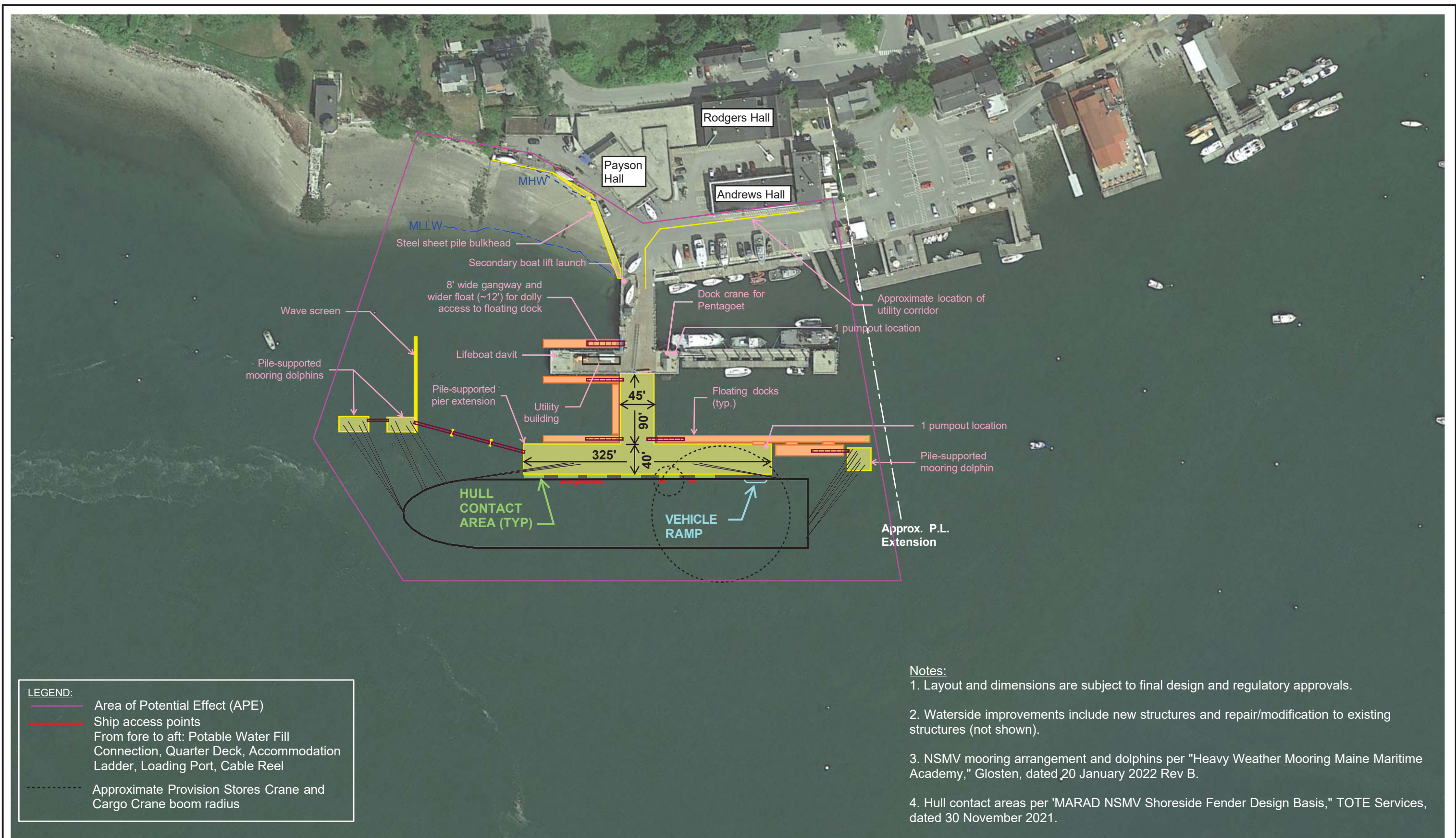
PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com	
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR:	CWC	REVIEWED BY: DDF
DESIGNED BY:	RKC	DRAWN BY: MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
1 PLEASANT STREET, CASTINE, MAINE

VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

DATE:	OCTOBER 2022
PROJECT NO.	03.0035109.00
FIGURE	1
SHEET NO.	1 OF 1







## **Appendix G – Tribal Historic Preservation Officer Coordination**



**Tribal Historic Preservation Office**  
**Mi'kmaq Nation** (Formerly known as the Aroostook Band of Micmac)  
Kendyl Reis  
Tribal Historic Preservation Officer  
7 Northern Road  
Presque Isle, ME 04769  
Phone: (207)764-1972 ext. 161  
[kreis@micmac-nsn.gov](mailto:kreis@micmac-nsn.gov)

Maine Maritime Academy Waterfront Campus Improvements Project  
1 Pleasant Street  
Castine, Maine  
January 18th, 2023

Based on the project description, we do not have knowledge of any specific sites or cultural features that exist at the proposed project location(s).

However, this geographic area does constitute traditional areas that were historically utilized by members of the Mi'kmaq Nation and the other Wabanaki Tribes. Therefore, we respectfully request that if during the course of excavation/construction activities, human remains, artifacts, or any other evidence of Native American presence is discovered, that site activities in the vicinity of the discovery immediately cease, pending notification to us.

In addition, if this project results in wetland disturbances requiring mitigation, we are requesting that you utilize the black ash (*Fraginus nigra*) as the principal wetland species for wetland restoration activities. The black ash tree has special significance in the culture of the northeastern Tribes and is used extensively for weaving baskets and other Native American crafts. The black ash tree also provides valuable food and habitat for migratory waterfowl and other wildlife. Unfortunately, however, this species has been selected against by foresters and landowners who favor other tree species. As a result of this, and other environmental factors, the black ash tree is in serious decline in Maine. The Mi'kmaq Nation has completed several black ash wetland restoration projects and have a dependable source for highly-quality seedlings, and the experience and expertise to assist you with black ash wetland restoration projects.

On the subject of human remains, artifacts, or any other evidence of Native American presence is discovered. The human remains will be reburied with the appropriate respect for the remains that is required at a distinctive and respectable site. The artifacts and other evidence of Native American discovery will be documented with appropriate detail. The items will be analyzed for the precise period of the items' distinctive period and will be documented by the Tribal Historic Preservation Officer for the Mi'kmaq Nation.

If you have any questions or comments, please feel free to contact me.

Sincerely,

Kendyl Reis  
Tribal Historic Preservation Officer

**Tribal Historic Preservation Office**  
**Passamaquoddy Tribe**  
PO Box 159 Princeton, Me. 04668  
207-214-4051

January 12, 2023

Aimee Dubois Mountain, GISP, CPMSM  
Senior Project Manager

Re: **Castine – Maine Maritime AC**

Dear Aimee;

The Passamaquoddy THPO has reviewed the following applications regarding the historic properties and significant religious and cultural properties in accordance with NHPA, NEPA, AIRFA, NAGPRA, ARPA, Executive Order 13007 Indian Sacred Sites, Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, and Executive Order 12898 Environmental Justice.

The Projects listed above will not have any impact on cultural and historical concerns of the Passamaquoddy Tribe. Should buried artifacts, human remains, cultural sites or ground features be unexpectedly unearthed during ground disturbing activities, all construction should immediately cease and the resources be examined by a professional archaeologist. Additionally, all appropriate authorities-including all pertinent tribal entities should be notified.

Sincerely;

Donald Soctomah  
Soctomah@gmail.com  
THPO  
Passamaquoddy Tribe





U.S. Department  
Of Transportation  
**Maritime  
Administration**

1200 New Jersey Avenue, SE  
Washington, DC 20590

January 4, 2023

**VIA ELECTRONIC MAIL** [[kreis@micmac-nsn.gov](mailto:kreis@micmac-nsn.gov)]

Tribal Historic Preservation Officer  
Aroostook Band of Micmacs  
7 Northern Road  
Presque Isle, Maine 04769

Subject: Maine Maritime Academy Waterfront Campus Improvements Project  
1 Pleasant Street  
Castine, Maine

Dear Historic Preservation Officer:

The U.S. Department of Transportation (DOT) Maritime Administration (MARAD), awarded funds to the Maine Maritime Academy (MMA) under the MMA Pier Upgrade Project for improvements to the MMA Waterfront Campus. The project is located in Hancock County, Castine, Maine. The project location is entirely rural and contains existing residential, commercial, municipal recreational and academic development.

In keeping with a government-to-government relationship, and in compliance with the National Historic Preservation Act of 1966, as amended (54 U.S.C. § 300101 et seq.), and its implementing regulations, 36 CFR § 800, we invite you to participate in the Section 106 process as a consulting party. As part of the review process, we request information that identifies any resources that may hold traditional religious or cultural significance to the Houlton Band of Maliseet Indians that could be affected by the proposed work, and, if applicable, assist in developing alternatives that would avoid, minimize, or mitigate any adverse effects.

#### Project Description

Maine Maritime Academy is third in line of the six state maritime academies to receive a new National Security Multi-Mission Vessel (NSMV) from MARAD's National Defense Reserve fleet to serve as a training vessel. To prepare for the vessel and its more modern services and systems, modifications of the MMA Waterfront Campus are necessary. MMA's proposed project includes rehabilitation, upgrades and expansion of the existing pier structure including new mooring dolphins for mooring and berthing the NSMV; new floating docks to reorganize the Academy's programs and training; repair of the existing floating docks; repair/replacement of portions of the bulkhead along the shoreline; maintenance dredging within the existing boat basin; and repair/modification of existing utilities and new utilities to support the NSMV's systems and waterfront activities. The proposed project allows MMA to integrate the NSMV vessel into their academic programs and improve energy efficiency and coastal resiliency. Figure 1 – Vicinity and Topographic Map identifies the approximate location of the property on an excerpt of the relevant U.S. Geologic Survey topographic map Figure 2 – Waterfront Campus Improvements Schematic Layout provides a general overview of the proposed project elements.

#### Previous Surveys

Based on our research of the property, including the National Register of Historic Places and the Maine DOT Public Map Viewer, no historic buildings are located within the proposed project area. The project area is located adjacent to the Castine Historic District. The Bowdoin Schooner, which docks at the MMA waterfront, is categorized as a historic structure. It is part of MMA's vessel fleet and can be relocated during the construction phase of the project.

The National Park Service (NPS) website was used to review information pertaining to wild and scenic rivers within or near the proposed project area. No waterways classified as wild and scenic pursuant to the Federal Wild and Scenic Rivers Act, Public Law 90-542, are located within the Proposed Action area.

Please note that for the purposes of this project, MARAD has authorized GZA GeoEnvironmental, Inc. (GZA) to consult with your Tribe on behalf of MARAD. We therefore request that you provide a copy of your response to them.

We value your assistance and look forward to consulting further if there are historic properties of religious and/or cultural significance to your Tribe that may be affected by this project. To meet project timeframes, if you would like to participate or provide information regarding this project, MARAD respectfully requests that you notify us within 30 days.

If you have additional questions or comments, please contact me and/or the consultant for the action proponent, Aimee Mountain (207-344-9704, [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com)).

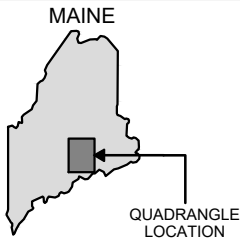
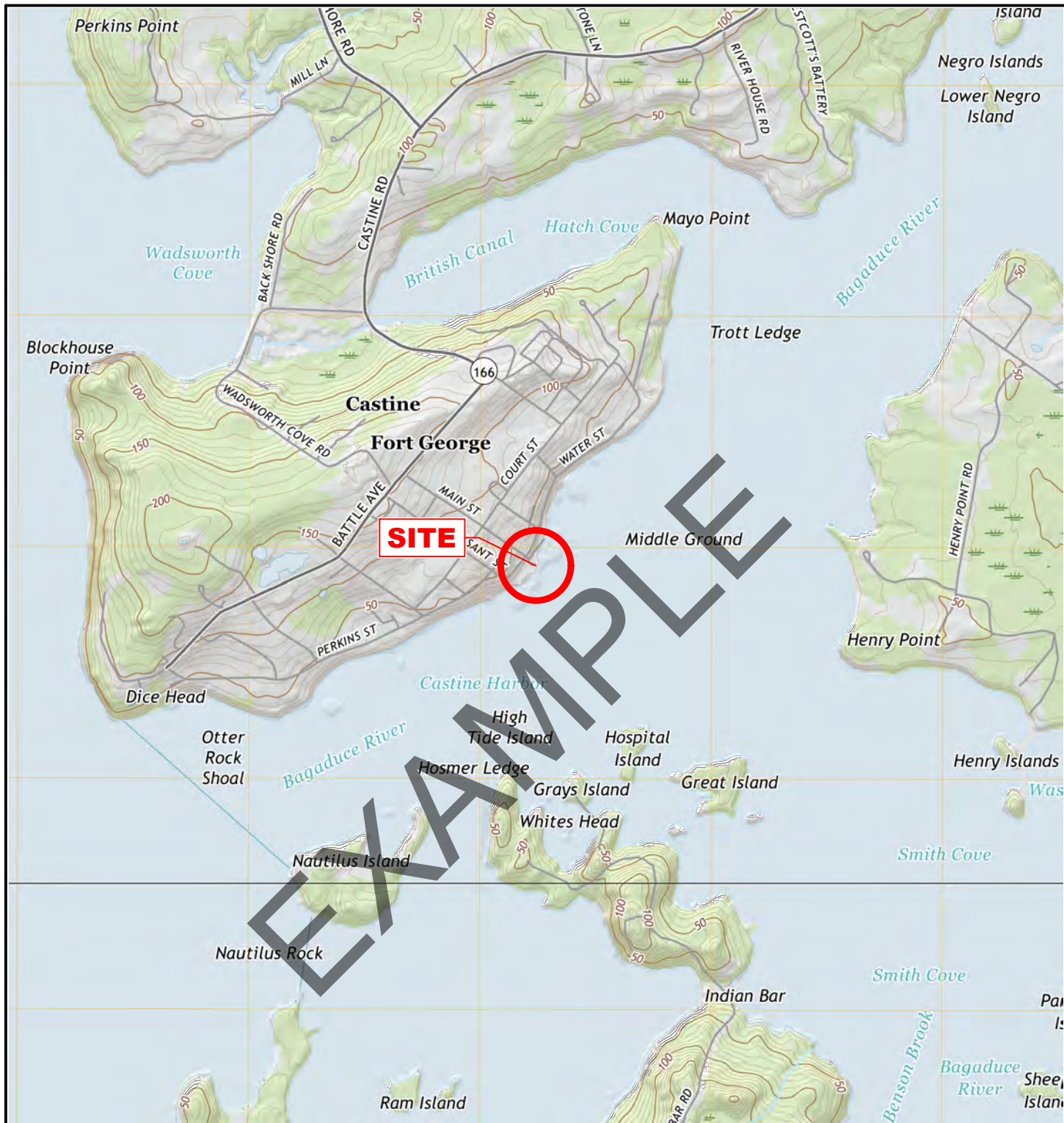
Sincerely,

*Barbara Voulgaris*

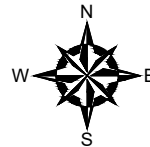
Barbara Voulgaris  
Federal Preservation Officer  
[Barbara.Voulgaris@dot.gov](mailto:Barbara.Voulgaris@dot.gov)  
202.366.0866

Attachments: Figure 1 – Vicinity and Topographic Map  
Figure 2 – Waterfront Campus Improvements Schematic Layout


Cc: Kelly O'Reilly, Maritime Administration  
Peter Stewart, Maine Maritime Academy  
John Cashman, Maine Maritime Academy  
Richard Rosen, Maine Maritime Academy  
Eric Mora, Colliers Project Leaders  
Aimee Mountain, GZA  
Cheryl Coviello, GZA  
Rebecca Cherry, GZA



SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



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PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com	
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR:	CWC	REVIEWED BY: DDF
DESIGNED BY:	RKC	DRAWN BY: MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
1 PLEASANT STREET, CASTINE, MAINE

VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

DATE:	OCTOBER 2022
PROJECT NO.	03.0035109.00
FIGURE	1
SHEET NO.	1 OF 1









## **Appendix H – MDEP Visual Evaluation**

# **APPENDIX A: MDEP VISUAL EVALUATION FIELD SURVEY CHECKLIST**

(Natural Resources Protection Act, 38 M.R.S. §§ 480 A - Z)

Name of applicant: Maine Maritime Academy Phone: Richard Rosen 207-326-2241

Application Type: Individual Natural Resource Protection Act Permit

Activity Type: (brief activity description) Waterfront Improvements (rehabilitation/upgrade/expansion of pier, repair of floating docks, new floating docks, repair of bulkhead, modification of utilities, and new utilities).

Activity Location: Town: Castine County: Hancock County

GIS Coordinates, if known: 44° 23'11.33" N, 68° 47'48.32" W

Date of Survey: January 26, 2023 Observer: Casey McGuffy Phone: 862-246-0480

	<b>Distance Between the Proposed Visibility Activity and Resource (in Miles)</b>		
	0-1/4	1/4-1	1+
1. Would the activity be visible from:			
A. A National Natural Landmark or other outstanding natural feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B. A State or National Wildlife Refuge, Sanctuary, or Preserve or a State Game Refuge?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
C. A state or federal trail?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D. A public site or structure listed on the National Register of Historic Places?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. A National or State Park?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
F. 1) A municipal park or public open space?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2) A publicly owned land visited, in part, for the use, observation, enjoyment and appreciation of natural or man-made visual qualities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3) A public resource, such as the Atlantic Ocean, a great pond or a navigable river?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. What is the closest estimated distance to a similar activity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. What is the closest distance to a public facility intended for a similar use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the visibility of the activity seasonal? (i.e., screened by summer foliage, but visible during other seasons)		<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5. Are any of the resources checked in question 1 used by the public during the time of year during which the activity will be visible?		<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

A listing of National Natural Landmarks and other outstanding natural features in the State of Maine can be found at: [www.nature.nps.gov/nnl/Registry/USA\\_map/states/Maine/maine.htm](http://www.nature.nps.gov/nnl/Registry/USA_map/states/Maine/maine.htm) . In addition, unique natural areas are listed in the Maine Atlas and Gazetteer published by DeLorme.

(pink)

Most Maine State and National Wildlife Refuges, Sanctuaries, and Preserves and State Game Refuges are listed in the Maine Atlas and Gazetteer published by DeLorme.

Most State and federal trails are listed in the Maine Atlas and Gazetteer published by DeLorme. In addition, the Maine Department of Conservation maintains a list of state parks with trails that can be searched by county at: [www.state.me.us/doc/parks/programs/db\\_search/index.html](http://www.state.me.us/doc/parks/programs/db_search/index.html)

Maine sites and structures listed on the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended, can be searched by town at: [www.cr.nps.gov/nr/research/nris.htm](http://www.cr.nps.gov/nr/research/nris.htm)

In addition, State historic sites can be found at: [www.state.me.us/doc/parks/programs/db\\_search/index.html](http://www.state.me.us/doc/parks/programs/db_search/index.html) A partial listing of historic sites in Maine can be found in the Maine Atlas and Gazetteer published by DeLorme.

A listing of Maine State Parks can be found at: [www.state.me.us/doc/parks/programs/db\\_search/index.html](http://www.state.me.us/doc/parks/programs/db_search/index.html) or in the Maine Atlas and Gazetteer published by DeLorme. Acadia National Park on Mount Desert Island is Maine's only National Park.

For guidance on completing this field survey checklist, please contact Licensing staff in the Division of Land Resource Regulation at the following offices:

(Headquarters)  
Central Maine Regional Office  
17 State House Station  
Ray Building, Hospital Street  
Augusta, Maine 04333  
**(207) 287-7688** or  
toll free at **1-800-452-1942**

Northern Maine Regional Office  
1235 Central Drive  
Presque Isle, Maine 04769  
**(207) 764-0477** or  
toll free at **1-888-769-1053**

Eastern Maine Regional Office  
106 Hogan Road  
Bangor, Maine 04401  
**(207) 941-4570** or  
toll free at **1-888-769-1137**

Southern Maine Regional Office  
312 Canco Road  
Portland, Maine 04103  
**(207) 822-6300** or  
toll free at **1-888-769-1036**

(pink)



## **Appendix I – Supplemental Information for Dredging Activities**



**APPENDIX C: APPLICATION FOR A NATURAL RESOURCES PROTECTION ACT  
PERMIT  
SUPPLEMENTAL INFORMATION FOR DREDGING ACTIVITIES IN A COASTAL WETLAND, GREAT POND,  
RIVER, STREAM OR BROOK**

(Discard this part if dredging is not proposed as part of your activity.)

**The DEP and the Corps strongly recommend that applicants schedule a pre-application meeting prior to submitting an application for dredging.**

<b>Volume to be dredged:</b>	470 cu. yds.		
<b>Sq. ft. to be dredged:</b>	4,900 sq. ft.		
<b>Max. depth of dredging below existing grade:</b>	Max depth of approximately -16.4' NAVD88 with a 1-foot over dredge. The extent and depth of the proposed dredge are within the limits of previously approved dredging under Army Corp Permit No. NAE-2002-2598-M1 (issued 2/25/2014).		
<b>Type of material (example: sand, silt, clay, gravel. etc.) to be Dredged:</b>	Fine grain materials will be removed.		
<b>Describe what erosion and sediment control measures will be used during the dredging operation. (attach separate sheet if necessary):</b>	During turbidity generating dredge operations, the marine contractor will be required to deploy and maintain a turbidity curtain and debris boom. It is anticipated that a time of year restriction similar to that in the previous authorization, will be required and that dredging will be limited to periods between November 8 to April 9 to avoid impacts to fisheries and water quality. It is anticipated that the proposed maintenance dredge may be completed in up to a one-month timeframe.		
<b>Describe how and where the dredge spoils will be dewatered (attach separate sheet if necessary):</b>  <b>Show dewatering location and erosion control measures on activity drawings.</b>	Dredge material will be dewatered on a barge or in a designated upland location and proper controls will be maintained by the marine contractor selected to perform this work.		
<b>What equipment will be used for the dredge?</b>	Mechanical dredging is proposed. The exact method of dredging will be determined by the marine contractor selected to perform this work.		
<b>Disposal Location: (Check one)</b>	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <b>Upland disposal:</b>  <input type="checkbox"/> On site  <input type="checkbox"/> Landfill  <input checked="" type="checkbox"/> Other <u>Upland disposal property owned by the applicant</u> </div> <div style="width: 45%;"> <b>Ocean disposal:</b>  Federal Disposal Site  <input type="checkbox"/> Arundel  <input type="checkbox"/> Portland  <input type="checkbox"/> Rockland  <input type="checkbox"/> Other _____ </div> </div>		

(pink)

**FOR UPLAND DISPOSAL:**

Contact the Division of Solid Waste Management at (207) 822-6300:

Contacted:     ☐ Yes ☒ No   If yes, attach a copy of any correspondence.  
Permitted:     ☐ Yes ☒ No   If yes, provide the permit number\_\_\_\_\_.

**FOR OCEAN DISPOSAL:**

- ☐ Submit as **Attachment 15**, a copy of the test results performed in accordance with the U.S. Environmental Protection Agency and the Army Corps of Engineers' document entitled "Regional Implementation Manual for the Evaluation of Dredged Material Proposed for Disposal in New England Waters" (May 2002). This is available from the Army Corps of Engineers. (207) 623-8367

**NOTE:** Applicants are **STRONGLY** recommended to contact the DEP prior to performing any sediment sampling. Improperly sampled or analyzed sediments may have to be retested.

- ☐ Submit as **Attachment 16**, a copy of a map showing the proposed transportation route to the disposal site.

List all municipalities adjacent to the proposed transportation site:

---

---

---

A copy of the application must be submitted to all municipalities adjacent to the proposed transportation site.

- ☐ Submit as **Attachment 17**, a copy of the notice of the proposed transportation route. A copy of the proposed transportation route must be published in a newspaper of general circulation in the area of the proposed route. (The notice of the proposed route must include compass bearings or Loran coordinates). The notice must be published under the heading "NOTICE TO FISHERMEN".

(pink)

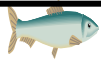


## **Appendix J – Project Description Worksheet for a Dock, Pier or Wharf Application**

**Natural Resource Protection Act Application**  
**APPENDIX D: Project Description Worksheet for a Dock, Pier or Wharf Application.**



Help us process your application more efficiently by completing this worksheet, which is supplemental to a NRPA application for a dock, pier or wharf. A completed Appendix D may be substituted for Block 14 of the application page.



**THIS IS AN APPLICATION FOR A....**

- ☐ Commercial wharf  
If yes, indicate type of commercial activity: \_\_\_\_\_  
License number: \_\_\_\_\_  
Number of fishermen using this wharf: \_\_\_\_\_
- ☐ Public pier, dock or wharf
- ☐ Common or shared recreational pier, dock or wharf
- ☐ Private recreational pier, dock or wharf
- ☐ Expansion or modification of an existing structure
- ☒ Other, please indicate: Maine Maritime Academy Waterfront Campus



**TELL US ABOUT YOUR BOAT....**

My boat(s) requires a draft of 21.3 feet.  
My boat(s) is 525 feet long.



**TELL US ABOUT YOUR PROJECT SITE....** For coastal piers and wharves, please complete Appendix B of the NRPA application. For freshwater docks, please describe the substrate and any vegetation: \_\_\_\_\_



**SCENIC CONSIDERATIONS...** Please complete Appendix A of the NRPA application.



**WHAT FACILITIES ARE NEARBY?**

The nearest public boat launch is located in Castine approximately 120 feet ~~miles~~ from the project location.  
(town) (distance)

The nearest public, commercial, or private marina is located in Castine approximately 120 feet ~~miles~~ from the project location.  
(distance) (town)

- ☐ I have inquired about slip or mooring availability at the nearest marina or public facility.
- ☐ Yes, a slip or mooring is available. ☐ No, a slip or mooring is not available.  
Approximate expected time on waiting list: \_\_\_\_\_
- ☒ I have contacted the local Harbor Master.







## **Appendix K – Public Notice Filing and Certification**

## PUBLIC NOTICE FILING AND CERTIFICATION

Department Rules, Chapter 2, require an applicant to provide public notice for all Tier 2, Tier 3 and individual Natural Resources Protect Act projects. In the notice, the applicant must describe the proposed activity and where it is located. **“Abutter”** for the purposes of the notice provision means any person who owns property that is BOTH (1) adjoining and (2) within one mile of the delineated project boundary, including owners of property directly across a public or private right of way.

1. **Newspaper:** You must publish the Notice of Intent to File in a newspaper circulated in the area where the activity is located. The notice must appear in the newspaper within 30 days prior to the filing of the application with the Department. You may use the attached Notice of Intent to File form, or one containing identical information, for newspaper publication and certified mailing.
2. **Abutting Property Owners:** You must send a copy of the Notice of Intent to File by certified mail to the owners of the property abutting the activity. Their names and addresses can be obtained from the town tax maps or local officials. They must receive notice within 30 days prior to the filing of the application with the Department.
3. **Municipal Office:** You must send a copy of the Notice of Intent to File and a **duplicate of the entire application** to the Municipal Office.

**ATTACH a list of the names and addresses of the owners of abutting property.**


### CERTIFICATION

By signing below, the applicant or authorized agent certifies that:

1. A Notice of Intent to File was published in a newspaper circulated in the area where the project site is located within 30 days prior to filing the application;
2. A certified mailing of the Notice of Intent to File was sent to all abutters within 30 days of the filing of the application;
3. A certified mailing of the Notice of Intent to File, and a duplicate copy of the application was sent to the town office of the municipality in which the project is located; and
4. Provided notice of and held a public informational meeting, if required, in accordance with Chapter 2, Rules Concerning the Processing of Applications, Section 13, prior to filing the application. Notice of the meeting was sent by certified mail to abutters and to the town office of the municipality in which the project is located at least ten days prior to the meeting. Notice of the meeting was also published once in a newspaper circulated in the area where the project site is located at least seven days prior to the meeting.

The Public Informational Meeting was held on February 6, 2023.  
Date

Approximately 35 members of the public attended the Public Informational Meeting.

  
Signature of Applicant or authorized agent

2/7/2023  
Date

(blue)

DEARIE, DIREXA D  
17 EAST 89TH STREET  
NEW YORK NY 10028

HALL, MARSHALL K  
HALL, LOUISE C AND HALL,  
MARGARET J  
PO BOX 512  
WAYNESVILLE NC 28786

BAG END LLC  
283 WARDWELL POINT RD  
PENOBSCOT ME 04476

YENOOM LLC  
PO BOX 822  
CASTINE ME 04421

CASTINE, TOWN OF  
PO BOX 204  
CASTINE ME 04421

MAINE MARITIME ACADEMY  
P.O. BOX C-3  
CASTINE ME 04421

CASTEEN, JOHN T III -TRUSTEE  
1/2 INT  
CASTEEN, ELIZABETH FOOTE -  
TRUSTEE 1/2 INT  
766 CLUB DRIVE  
KESWICK VA 22947

ODEGAARD, J EDWARD  
ODEGAARD, DEBORAH RYAN  
1030 3RD AVENUE SOUTH, UNIT  
407  
NAPLES FL 34102

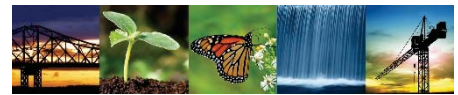




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Suite 150  
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T: 207.879.9190  
F: 207.536.1173  
www.gza.com



January 26, 2023  
File No. 03.0035109.00

MAINE MARITIME ACADEMY  
P.O. BOX C-3  
CASTINE, ME 04421

Re: Maine Maritime Academy Waterfront Campus Improvements  
1 Pleasant Street  
Castine, Maine

Dear Sir or Madam:

On behalf of Maine Maritime Academy (MMA), GZA GeoEnvironmental, Inc (GZA) is providing this notice of intent to file a Natural Resources Protection Act (NRPA) permit application with the Maine Department of Environmental Protection (Maine DEP) within approximately 20 days of the date of this notice.

The project is proposed on a lot owned by MMA located on Water Street in Castine, Maine (Tax Map 21, Lot 110, the Site). MMA is third in line of the six state maritime academies to receive a new National Security Multi-Mission Vessel (NSMV) designed by the U.S. Government and owned by the U.S. Maritime Administration's National Defense Reserve fleet to serve as a vessel for training future mariners and for deployment to serve humanitarian relief as needed. To prepare for the vessel and its more modern services and systems, modifications of the MMA waterfront pier facilities are necessary. MMA's proposed project includes rehabilitation, upgrades and expansion of the existing pier structure including new infrastructure for mooring and berthing the NSMV; new floating docks to support MMA's programs and training; repair of the existing floating docks; repair/replacement of portions of the bulkhead along the shoreline; maintenance dredging if necessary within the existing boat basin; and repair/modification of existing utilities and new utilities to support the NSMV's systems and waterfront activities. The proposed project allows MMA to integrate the NSMV vessel into their academic programs and improve energy efficiency and coastal resiliency. Attached Figure 1 – Vicinity and Topographic Map identifies the approximate location of the property on an excerpt of the relevant U.S. Geologic Survey topographic map.

A public informational meeting will be held on Monday, February 6, 2023 at 6:00 pm at Emerson Hall (Castine Town Hall). For further information, contact MMA's agent, Aimee Mountain, at 207-358-5116 or [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com).

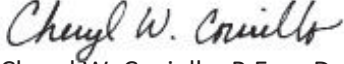


MMA anticipates undertaking the project following the Maine DEP's approval of the NRPA Permit application. Prior to approval, this permit application will be available at the Maine DEP office in Bangor as well as at the Castine municipal office. Written public comments may be sent to the Maine DEP Eastern Maine Regional Office, 106 Hogan Road, Bangor, Maine 04401.

Very truly yours,

GZA GEOENVIRONMENTAL, INC.

  
Aimee Mountain, GISP, CPMSM  
Senior Project Manager, Permitting

  
Cheryl W. Coviello, P.E., D. PE  
Associate Principal

ADM/CWC/JP

\\gzaprovidence\jobs\geo\35109.rkc\work\09\_permits\nrpa\public notice\final mma abutter letter\_01262023.docx

Attachments: Notice of Intent to File  
Figure 1 – Vicinity and Topographic Map

EXAMPLE

**PUBLIC NOTICE:  
NOTICE OF INTENT TO FILE**

Please take notice that

Maine Maritime Academy, 1 Pleasant Street, Castine, Maine

Agent phone 207-358-5116

*(Name, Address and Phone # of Applicant)*

is intending to file a Natural Resources Protection Act permit application with the Maine Department of Environmental Protection pursuant to the provisions of 38 M.R.S. §§ 480-A thru 480-BB on or about

February 10, 2023

*(anticipated filing date)*

The application is for

Modifications of the Maine Maritime Academy (MMA) Waterfront Campus, which includes  
*(description of the project)*

rehabilitation, upgrades and expansion of the existing pier structure including new mooring dolphins  
for mooring and berthing of a new National Security Multi-Mission Vessel.  
at the following location:

Maine Maritime Academy Waterfront Campus, Water Street, Castine, Maine

*(project location)*

A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the Department in writing, no later than 20 days after the application is found by the Department to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application.

For Federally licensed, permitted, or funded activities in the Coastal Zone, review of this application shall also constitute the State's consistency review in accordance with the Maine Coastal Program pursuant to Section 307 of the federal Coastal Zone Management Act, 16 U.S.C. § 1456. (Delete if not applicable.)

The application will be filed for public inspection at the Department of Environmental Protection's office in (Portland, Augusta or Bangor) (circle one) during normal working hours. A copy of the application may also be seen at the municipal offices in Castine, Maine.  
*(town)*

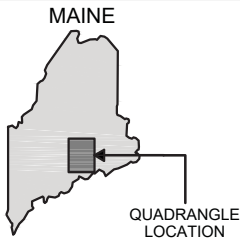
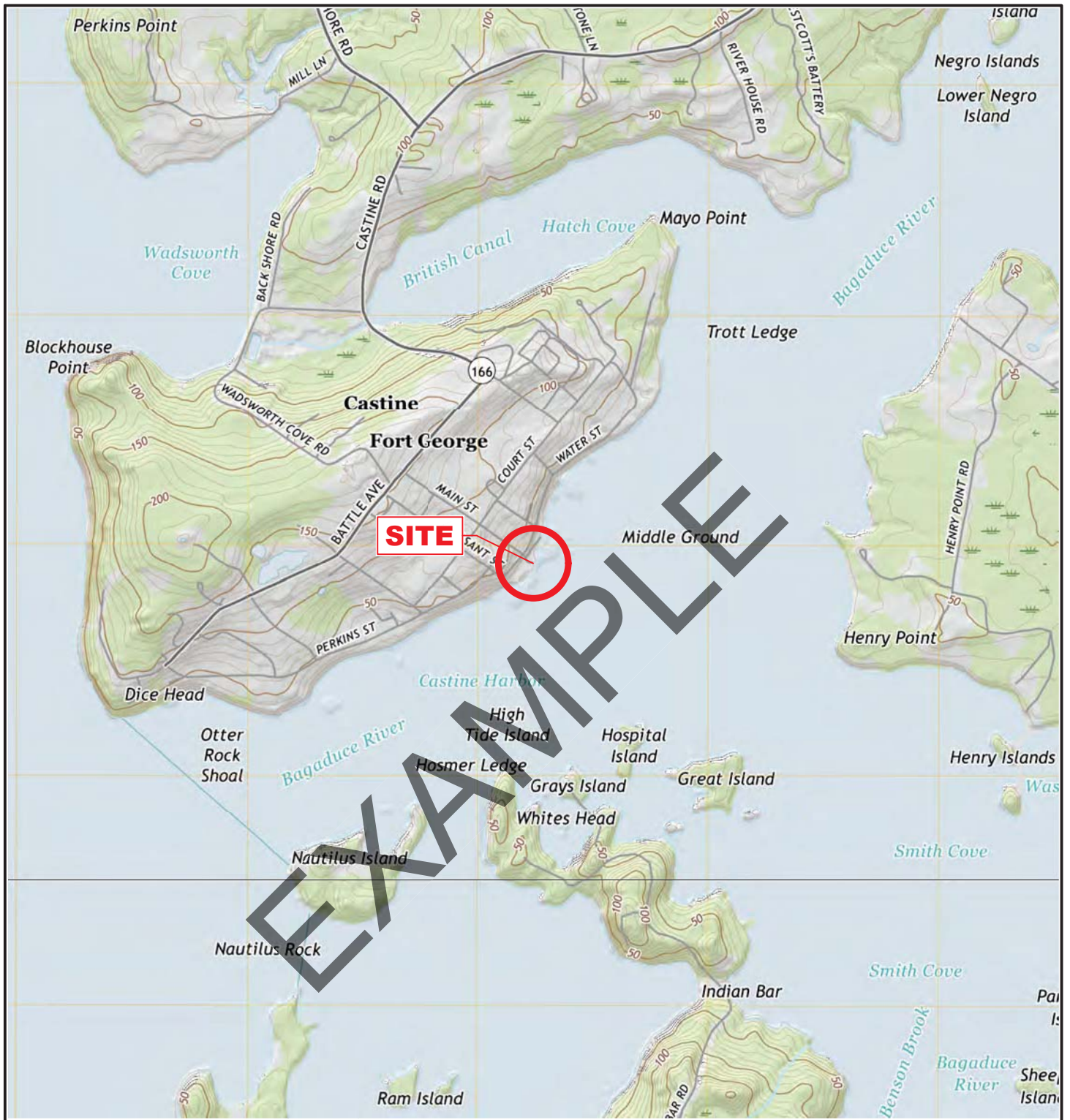
Written public comments may be sent to the regional office in Portland, Augusta, or Bangor where the application is filed for public inspection:

MDEP, Central Maine Regional Office, 17 State House Station, Augusta, Maine 04333

MDEP, Southern Maine Regional Office, 312 Canco Road, Portland, Maine 04103

MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor, Maine 04401


(pink)



SOURCE: DIGITAL TOPOGRAPHIC MAPS PROVIDED BY UGSSSTORE.GOV.  
CONTOUR ELEVATIONS REFERENCE NAVD88, CONTOURS ARE SHOWN IN FEET AT 10' INTERVALS  
USGS QUADRANGLE MAP: CASTINE, CAPE ROSIER (2021)



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PREPARED BY:	 GZA GeoEnvironmental, Inc. www.gza.com	
PREPARED FOR:	MAINE MARITIME ACADEMY CASTINE, ME	
PROJ MGR:	CWC	REVIEWED BY: DDF
DESIGNED BY:	RKC	DRAWN BY: MEA

MAINE MARITIME ACADEMY WATERFRONT CAMPUS  
1 PLEASANT STREET, CASTINE, MAINE

VICINITY AND TOPOGRAPHIC MAP  
MMA WATERFRONT IMPROVEMENTS PROJECT

DATE:	OCTOBER 2022
PROJECT NO.	03.0035109.00
FIGURE	1
SHEET NO.	1 OF 1



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 CASTINE ME 04421

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 701J 1J50 0000 0392 226J

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 D. Is delivery address different from item 1? Yes No

3. Service Type  
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☐ Adult Signature Restricted Delivery  
☐ Certified Mail®  
☐ Certified Mail Restricted Delivery  
☐ Collect on Delivery  
☐ Collect on Delivery Restricted Delivery  
☐ Priority Mail Express®  
☐ Registered Mail™  
☐ Registered Mail Restricted Delivery  
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☐ Signature Confirmation Restricted Delivery

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☐ Certified Mail Restricted Delivery  
☐ Collect on Delivery  
☐ Collect on Delivery Restricted Delivery  
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☐ Registered Mail™  
☐ Registered Mail Restricted Delivery  
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Total Postage & Fees	\$8.13		

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1/2 INT  
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Total Postage & Fees	\$4.15	
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04421



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## Bid Notices and Requests for Services



Published in Bangor Daily News on January 30, 2023

### Location

Penobscot County, Maine

### Notice Text

NOTICE OF INTENT TO FILE PUBLIC NOTICE: NOTICE OF INTENT TO FILE AND NOTICE OF PUBLIC INFORMATIONAL MEETING Please take notice that Maine Maritime Academy (MMA), 1 Pleasant Street, Castine, ME 04421, agent phone number 207-358-5116, is intending to file a Natural Resources Protection Act permit application with the Maine Department of Environmental Protection (MDEP), pursuant to the provisions of 38 M.R.S.A. 480-A thru 480-BB on or about February 10, 2023. The application is for modifications of the MMA waterfront pier infrastructure facilities including rehabilitation, upgrades and expansion of the existing pier structure including new mooring dolphins for mooring and berthing of a new National Security Multi-Mission Vessel at MMA's waterfront campus located on Water Street in Castine, Maine (Tax Map 21, Lot 110). There will be a public informational meeting held on Monday, February 6, 2023 at 6 PM at Emerson Hall (Castine Town Hall). The purpose of this meeting is for the applicant to inform the public of the project and its anticipated environmental impacts and the opportunities for public comment. Members of the public are invited to attend. For further information, contact MMA's agent, Aimee Mountain, at 207-358-5116 or [aimee.mountain@gza.com](mailto:aimee.mountain@gza.com). A request for a public hearing or a request that the Board of Environmental Protection assume jurisdiction over this application must be received by the MDEP in writing, no later than 20 days after the application is found by the MDEP to be complete and is accepted for processing. A public hearing may or may not be held at the discretion of the MDEP Commissioner or Board of Environmental Protection. Public comment on the application will be accepted throughout the processing of the application. The application will be filed for public inspection at the MDEP's office in Bangor, during normal working hours. A copy of the application may also be seen at the municipal office in Castine, Maine. Written public comments may be sent to the MDEP regional office in Bangor where the application is filed for public inspection: MDEP, Eastern Maine Regional Office, 106 Hogan Road, Bangor, Maine 04401.





GZA GeoEnvironmental, Inc.