INSTRUCTIONS FOR COMPLETING APPLICATION
NOTICE OF INTENT – BOSTON NOI FORM

The Boston Notice of Intent Form is intended to be a supplement to the WPA Form 3 detailing impacts to locally designated wetland resource areas and buffer zones. Please read these instructions for assistance in completing the Notice of Intent application form. These instructions cover certain items on the Notice of Intent form that are not self-explanatory.

INSTRUCTIONS TO SECTION B: BUFFER ZONE AND RESOURCE AREA IMPACTS

Item 1. Buffer Zone Only. If you check the Buffer Zone Only box in this section you are indicating that the project is entirely in the Buffer Zone to a resource area ***under both*** the Wetlands Protection Act and Boston Wetlands Ordinance. If so, skip the remainder of Section B and go directly to Section C. Do not check this box if the project is within the Waterfront Area.

Item 2. The ***boundaries of coastal resource areas*** specific to the Ordinance can be found in Section II of the Boston Wetlands Regulations. You must also include the size of the proposed alterations (and proposed replacement areas) in each resource area.

Item 3. The ***boundaries of inland resource areas*** specific to the Ordinance can be found in Section II of the Boston Wetlands Regulations. You must also include the size of the proposed alterations (and proposed replacement areas) in each resource area.

INSTRUCTIONS TO SECTION C: OTHER APPLICABLE STANDARDS AND REQUIREMENTS

Item 1. Rare Wetland Wildlife Habitat. Except for Designated Port Areas, no work (including work in the Buffer Zone) may be permitted in any resource area that would have adverse effects on the habitat of rare, "state-listed" vertebrate or invertebrate animal species.

The most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife is published by the Natural Heritage and Endangered Species Program (NHESP). See: http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm or the *Massachusetts Natural Heritage Atlas*.

If any portion of the proposed project is located within Estimated Habitat, the applicant must send the Natural Heritage Program, at the following address, a copy of the Notice of Intent by certified mail or priority mail (or otherwise sent in a manner that guarantees delivery within two days), no later than the date of the filing of the Notice of Intent with the Conservation Commission.

Evidence of mailing to the Natural Heritage Program (such as Certified Mail Receipt or Certificate of Mailing for Priority Mail) must be submitted to the Conservation Commission along with the Notice of Intent.

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581-3336
508.792.7270

City of Boston Environment

NOTICE OF INTENT APPLICATION FORM
Boston Wetlands Ordinance
City of Boston Code, Ordinances, Chapter 7-1.4

Boston File Number

MassDEP File Number

A. GENERAL INFORMATION

1. Project Location

N/A - (42° 20’ 0.162” N, 71° 0’ 3.732” W)	Boston	N/A
a. Street Address	b. City/Town	c. Zip Code
N/A	N/A	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant

Michael	Carosotto	United States Coast Guard
a. First Name	b. Last Name	c. Company

475 Kilvert Street Suite 100
d. Mailing Address

Warwick	RI	02866
e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email address

3. Property Owner

a. First Name	b. Last Name	c. Company

d. Mailing Address

e. City/Town	f. State	g. Zip Code

h. Phone Number	i. Fax Number	j. Email address

❑ Check if more than one owner

(If there is more than one property owner, please attach a list of these property owners to this form.)

4. Representative (if any)

Christine	Perron	McFarland-Johnson, Inc.
a. First Name	b. Last Name	c. Company

53 Regional Drive
d. Mailing Address

Concord	NH	03301
e. City/Town	f. State	g. Zip Code

603-225-2978		cperron@mjinc.com
h. Phone Number	i. Fax Number	j. Email address

5. Is any portion of the proposed project jurisdictional under the Massachusetts Wetlands Protection Act M.G.L. c. 131 §40?

☑ Yes ☐ No

If yes, please file the WPA Form 3 - Notice of Intent with this form

6. General Information

The proposed project involves the replacement of an existing USCG aid to navigation structure (ATON). Please refer to the Notice of Intent application and supporting documentation for additional information on the proposed project.

7. Project Type Checklist

a. ☐ Single Family Home
b. ☐ Residential Subdivision
c. ☐ Limited Project Driveway Crossing
d. ☐ Commercial/Industrial
e. ☐ Dock/Pier
f. ☐ Utilities
g. ☑ Coastal Engineering Structure
h. ☐ Agriculture – cranberries, forestry
i. ☐ Transportation
j. ☐ Other

8. Property recorded at the Registry of Deeds

N/A a. County	N/A b. Page Number
N/A c. Book	N/A d. Certificate # (if registered land)

9. Total Fee Paid

$2,037.50 a. Total Fee Paid	$237.50 b. State Fee Paid	$1,800.00 c. City Fee Paid

B. BUFFER ZONE & RESOURCE AREA IMPACTS

Buffer Zone Only - Is the project located only in the Buffer Zone of a resource area protected by the Boston Wetlands Ordinance?

☐ Yes ☒ No

1. Coastal Resource Areas

Resource Area	**Resource Area Size**	**Proposed Alteration***	**Proposed Migitation**
❑ *Coastal Flood Resilience Zone*	*Square feet*	*Square feet*	*Square feet*
❑ *25-foot Waterfront Area*	*Square feet*	*Square feet*	*Square feet*
❑ *100-foot Salt Marsh Area*	*Square feet*	*Square feet*	*Square feet*
❑ *Riverfront Area*	*Square feet*	*Square feet*	*Square feet*

2. Inland Resource Areas

Resource Area	**Resource Area Size**	**Proposed Alteration***	**Proposed Migitation**
❑ *Inland Flood Resilience Zone*	*Square feet*	*Square feet*	*Square feet*
❑ *Isolated Wetlands*	*Square feet*	*Square feet*	*Square feet*
❑ *Vernal Pool*	*Square feet*	*Square feet*	*Square feet*
❑ *Vernal Pool Habitat (vernal pool + 100 ft. upland area)*	*Square feet*	*Square feet*	*Square feet*
❑ *25-foot Waterfront Area*	*Square feet*	*Square feet*	*Square feet*
❑ *Riverfront Area*	*Square feet*	*Square feet*	*Square feet*

C. OTHER APPLICABLE STANDARDS & REQUIREMENTS

1. What other permits, variances, or approvals are required for the proposed activity described herein and what is the status of such permits, variances, or approvals?

None

2. Is any portion of the proposed project located in Estimated Habitat of Rare Wildlife as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the Massachusetts Natural Heritage Atlas or go to http://www.mass.gov/dfwele/dfw/nhesp/nhregmap.htm.

❑ Yes ☒ No

If *yes*, the project is subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18).

A. Submit Supplemental Information for Endangered Species Review

☐ Percentage/acreage of property to be altered:

(1) within wetland Resource Area — N/A (percentage/acreage)

(2) outside Resource Area — N/A (percentage/acreage)

☐ Assessor's Map or right-of-way plan of site

3. Is any portion of the proposed project within an Area of Critical Environmental Concern?

❑ Yes ☒ No

If yes, provide the name of the ACEC: N/A

4. Is the proposed project subject to provisions of the Massachusetts Stormwater Management Standards?

❑ *Yes. Attach a copy of the Stormwater Checklist & Stormwater Report as required.*
- ❑ *Applying for a Low Impact Development (LID) site design credits*
- ❑ *A portion of the site constitutes redevelopment*
- ❑ *Proprietary BMPs are included in the Stormwater Management System*

☒ *No. Check below & include a narrative as to why the project is exempt*
- ❑ *Single-family house*
- ❑ *Emergency road repair*
- ❑ *Small Residential Subdivision (less than or equal to 4 single family houses or less than or equal to 4 units in a multifamily housing projects) with no discharge to Critical Areas*

The proposed project involves the in kind replacement of an existing ATON structure.

5. Is the proposed project subject to Boston Water and Sewer Commission Review?

❑ Yes ☒ No

D. SIGNATURES AND SUBMITTAL REQUIREMENTS

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the Wetlands Protection Ordinance.

Signature of Applicant	1-21-2022 Date
Signature of Property Owner (if different)	Date
Christine Perron Signature of Representative (if any)	1-21-2022 Date

UNITED STATES COAST GUARD

FEDERAL AIDS TO NAVIGATION (ATON) REPAIR PROJECT

MASSACHUSETTS BAY

MA WPA NOTICE OF INTENT

SUPPLEMENTAL PROJECT NARRATIVE

PREPARED FOR:

United States Coast Guard

Civil Engineering Unit Providence

475 Kilvert Street, Suite 100

Warwick, RI 02886

PREPARED BY:

McFarland-Johnson, Inc.

53 Regional Drive

Concord, NH 03301

Appledore Marine Engineering LLC

600 State Street, Suite E

Portsmouth, New Hampshire 03801

JANUARY 2022

Table of Contents

1.0 Introduction

The United States Coast Guard (USCG) is proposing repairs to and replacement of eight (8) existing Aid to Navigation (ATON) structures located off the coast of Massachusetts in Rockport, Manchester, Salem, Weymouth, Hull, Cohasset, and Boston, MA (**Figure 1**).

ATONs can include a variety of visible structures such as buoys, daybeacons, lights, lightships, marks, or audible and electronic signals or devices such as radio beacons, fog signals, and other devices used to assist with coastal navigation. Mariners use ATONs to determine position or chart a safe course through coastal waters. ATONs can also be used to mark isolated danger/hazards and/or navigational channels. The USCG is responsible for maintaining ATONs on US waters that are under federal jurisdiction.

The term ATON encompasses a wide range of floating and fixed objects mentioned above. A fixed object means one that is attached to the bottom or shore and typically consist of buoys and beacons. A buoy is a floating object that is anchored to the bottom, while a beacon is a permanent structure that is fixed to the seabed or land. Lighted beacons are called “lights” while unlighted beacons are called “daybeacons”. The ATONs included in the proposed project include four (4) daybeacons and four (4) lights. The proposed repairs and replacements are required in order to maintain safe navigation of vessels off the coast of Massachusetts.

2.0 Proposed Project

The following sections describe the five (5) existing ATON structures that require complete replacement and involve impacts to areas subject to protection under the Massachusetts Wetland Protection Act (WPA) (M.G.L. c. 131, § 40) administered by 310 CMR 10.00 Wetlands Protection. The following five (5) structures require the submittal of a Notice of Intent (NOI) for impacts to resource areas associated with the complete replacement of the existing structures:

- Londoner Rock Daybeacon, Rockport, MA
- Weymouth Fore River Channel Light 16, Weymouth, MA
- Harry's Rock Light HR, Hull, MA
- Cohasset Channel Light 8, Cohasset, MA
- Boston Main Channel Light 5, Boston, MA

The remaining three (3) structures included in the overall project only involve minor repairs to the above water portion of the existing structures and do not require any in-water work or impacts to any jurisdictional resource areas. Therefore, a NOI is not required for the proposed repairs to the following structures:

- Whaleback Daybeacon 8, Manchester, MA
- Brimbles Daybeacon 8, Salem, MA
- Satan Rock Daybeacon 6, Salem, MA

The three (3) structures that require only repairs and no in-water work are not discussed further in this submittal. **Table 1** below provides a summary of the eight (8) structures, locations, proposed work, and permitting requirements.

Table 1. USCG Massachusetts Bay ATON Repairs and Replacements

#	ATON NAME	TOWN	LAT/LONG	PROPOSED WORK	MA WPA NOI REQUIRED?
1	Londoner Rock Daybeacon	ROCKPORT	42-38-06.479N, 070-33-57.962W	Replacement	***YES***
2	Whaleback Daybeacon 8	MANCHESTER	42-32-54.760N, 070-47-04.641W	Repairs	**NO**
3	Brimbles Daybeacon 8	SALEM	42-31-16.576N, 070-48-28.608W	Repairs	**NO**
4	Satan Rock Daybeacon 6	SALEM	42-30-36.898N, 070-48-01.536W	Repairs	**NO**
5	Weymouth Fore River Channel Light 16	WEYMOUTH	42-16-03.129N, 070-56-06.484W	Replacement	***YES***
6	Harry's Rock Light HR	HULL	42-17-13.291N, 070-55-54.280W	Replacement	***YES***
7	Cohasset Channel Light 8	COHASSETT	42-15-05.497N, 070-47-00.665W	Replacement	***YES***
8	Boston Main Channel Light 5	BOSTON	42-20-0.162N, 071-0-3.732W	Replacement	***YES***

The proposed actions and associated impacts are discussed further in Section 4.0.

3.0 Resource Areas

Resource areas located within or in close proximity to the project areas include Land under the Ocean, Rocky Intertidal Shores, Land Containing Shellfish, and Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie Anadromous/Catadromous Fish Run. Additional resource area descriptions, impacts, and regulatory compliance/performance standards are discussed in greater detail

in Section 4.0. The following sections provide an overview of the resource areas in the vicinity of the project and definitions from the Massachusetts Wetland Protection Act. A summary of the Resource Areas subject to protection and under the jurisdiction of the WPA are provided in **Table 2**.

Table 2. MA WPA Resource Areas Summary

#	ATON NAME	TOWN	LAT/LONG	RESOURCE AREAS			
				Land Under Ocean Present?	Rocky Intertidal Shore Present?	Land Containing Shellfish Present?	Anadromous/ Catadromous Fish Run Present?
1	Londoner Rock Daybeacon	ROCKPORT	42-38-06.479N, 070-33-57.962W	-	***YES***	-	-
5	Weymouth Fore River Channel Light 16	WEYMOUTH	42-16-03.129N, 070-56-06.484W	***YES***	-	-	-
6	Harry's Rock Light HR	HULL	42-17-13.291N, 070-55-54.280W	***YES***	-	-	-
7	Cohasset Channel Light 8	COHASSETT	42-15-05.497N, 070-47-00.665W	***YES***	-	-	-
8	Boston Main Channel Light 5	BOSTON	42-20-0.162N, 071-0-3.732W	***YES***	-	-	-

3.1 Land under the Ocean

Land under the Ocean is defined by 310 CMR 10.25(2) as, "*land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries*." This section goes on further to define Nearshore Areas of Land under the Ocean as "*that land extending from the mean low water line to the seaward limit of a municipality's jurisdiction, but in no case beyond the point where the land is 80 feet below the level of the ocean at mean low water. However, the nearshore area shall extend seaward only to that point where the land is 30 feet below the level of the ocean at mean low water for municipalities bordering Buzzard's Bay and Vineyard Sound (west of a line between West Chop, Martha's Vineyard and Nobska Point, Falmouth), 40 feet below the level of the ocean at mean low water for Provincetown's land in Cape Cod Bay, and 50 feet below the level of the ocean at mean low water for Truro's and Wellfleet's land in Cape Cod Bay*."

The following four replacement USCG ATON structures are located within Land under the Ocean:

- Weymouth Fore River Channel Light 16
- Harry's Rock Light HR
- Cohasset Channel Light 8
- Boston Main Channel Light 5

3.2 Rocky Intertidal Shores

Rocky Intertidal Shores are defined by 310 CMR 10.31(2) as, "*naturally occurring rocky areas, such as bedrock or boulder strewn areas between the mean high water line and the mean low water line.*"

The Londoner Rock Daybeacon in Rockport, MA is located on an isolated rock outcrop approximately 2,300 feet east of Thacher Island, the closest land mass off the coast of Rockport. The rock outcrop is exposed at the Mean Low Water (MLW) elevation and is inundated at the Mean High Water (MHW) elevation. Therefore, the site meets the WPA definition of the Rocky Intertidal Shore resource area.

3.3 Land Containing Shellfish

Land Containing Shellfish is defined by 310 CMR 10.34(2) as, "*land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish*." The regulations further define the term "shellfish" as the following species: Bay scallop (*Argopecten irradians*); Blue mussel (*Mytilus edulis*); Ocean quahog (*Arctica islandica*); Oyster (*Crassostrea virginica*); Quahog (*Mercenaria merceneria*); Razor clam (*Ensis directus*); Sea clam (*Spisula solidissima*); Sea scallop (*Placopecten magellanicus*); Soft shell clam (*Mya arenaria*).

The Shellfish Suitability Areas GIS data layer (*May 2011*), *delineate areas that are believed to be suitable for shellfish based on the expertise of the Massachusetts Division of Marine Fisheries (Marine Fisheries) and local Shellfish Constables, input from commercial fishermen, and information contained in maps and studies of shellfish in Massachusetts. The areas covered include sites where shellfish have been observed since the mid-1970's, but may not currently support any shellfish. Therefore, these maps represent potential habitat areas.*

Based on the Shellfish Suitability Areas GIS data layer, none of the five replacement USCG ATON structures are located within an area identified as potentially suitable for shellfish (**Figures 2-1 – 2-5**). Formal dive surveys have not been conducted to confirm the presence or absence of shellfish. However, given the relatively small area and nature of the proposed impacts associated with each of the ATON replacements, impacts to shellfish populations located within the vicinity of the ATON structures is assumed to be minimal. Therefore, the proposed project is not anticipated to impact the Land Containing Shellfish Resource Area.

3.4 Land Under the Ocean that Underlie an Anadromous/Catadromous Fish Run

Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run is defined by 310 CMR 10.35(2) as, "*that area within estuaries, ponds, streams, creeks, rivers, lakes or coastal waters, which is a spawning or feeding ground or passageway for anadromous or catadromous fish and which is identified by the Division of Marine Fisheries or has been mapped on the Coastal Atlas of the Coastal Zone Management Program. Such fish runs shall include those areas which have historically served as fish runs and are either being restored or are planned to be restored at the time the Notice of Intent is filed. For the purposes of 310 CMR 10.21 through 10.37, such fish runs shall extend inland no further than the inland boundary of the coastal zone.*" Anadromous fish "*means fish that enter fresh water from the ocean to spawn, such as alewives, shad and salmon*", while Catadromous Fish "*means fish that enter salt water from fresh water to spawn, such as eels*."

The five replacement USCG ATON structures are located within Massachusetts Bay. Various species of anadromous and catadromous fish have the potential to be found within the project area at various times of year and life cycle stages. However, none of the replacement structures are located within an area that meets the definition of an Anadromous / Catadromous Fish Run as defined by 310 CMR 10.35(2). Appropriate BMPs (outlined in the sections below) will be implemented throughout the duration of construction in order to avoid or minimize impacts to fish and other wildlife. In addition, impacts from the proposed project are limited to the replacement of existing structures. Impacts will be located within the same footprint of the existing structures and are localized and short term in nature. The proposed project does not require dredging. The proposed project could cause minor, short-term changes in behavior due to construction activities (e.g., pile driving); however, with the implementation of BMPs, physiological impacts are not anticipated. Overall, the proposed project is not anticipated to result in adverse impacts to any anadromous or catadromous fish or fish runs.

4.0 Proposed ATON Replacement Structures

The following sections describe the existing conditions, resource areas, rare species, proposed actions, and impacts associated with the five (5) ATON structure replacements. Each section corresponds to a different structure and Massachusetts City/Town.

Section	City/Town	ATON Structure Name
4.1	ROCKPORT, MA	Londoner Rock Daybeacon
4.2	WEYMOUTH, MA	Weymouth Fore River Channel Light 16
4.3	HULL, MA	Harry's Rock Light HR
4.4	COHASSET, MA	Cohasset Channel Light 8
4.5	BOSTON, MA	Boston Main Channel Light 5

4.1 Rockport, MA - Londoner Rock Daybeacon

4.1.1 Existing Conditions

The Londoner Rock Daybeacon (42° 38’ 6.479” N, 70° 33’ 57.962” W) is an ATON structure servicing the northernmost area of Massachusetts Bay, located east of Rockport, MA. The Londoner Rock Daybeacon consists of a cast-iron spindle founded on a large rock outcropping that is exposed at the MLW elevation. The existing spindle was originally installed prior to 1937 and currently does not serve a navigational function, other than identifying the rock outcropping. The ATON is located approximately 2,300 feet east of Thacher Island, the closest land mass off the coast of Rockport and the Massachusetts mainland.

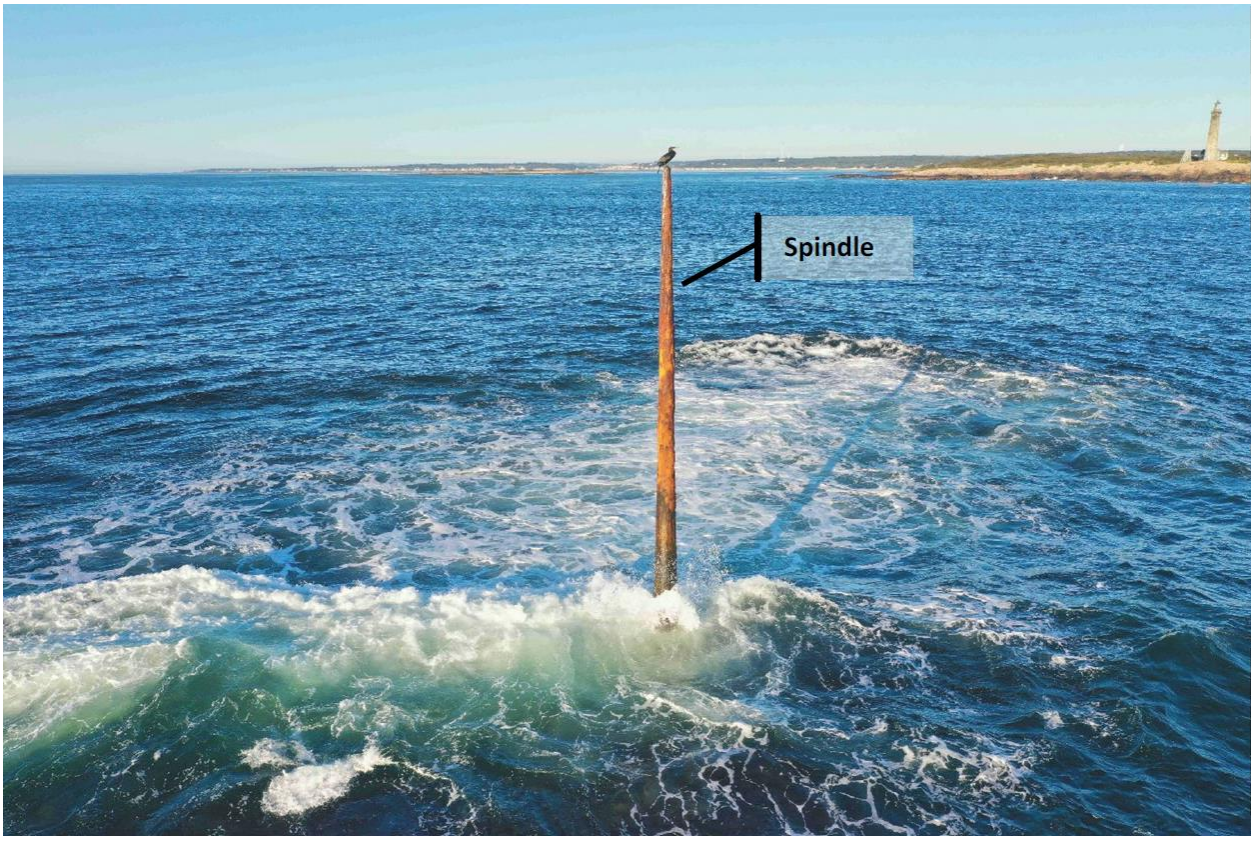


Photo 1: The Londoner Rock Daybeacon

4.1.2 Resource Area Descriptions

4.1.2.1 Rocky Intertidal Shores

The existing spindle is located on a bedrock outcropping that is exposed at the MLW elevation. Approximately 1’-8” of the rock is exposed at the MLW elevation and the rock outcrop is covered by approximately 7’-0” of water at the MHW elevation. The site meets the definition of the Rocky Intertidal Shore in the WPA.

4.1.3 Rare, Threatened, and Endangered Species

The Londoner Rock Daybeacon is not located within or in close proximity to any MA Natural Heritage & Endangered Species Program (NHESP) Priority or Estimated Habitats. The nearest mapped habitat polygons include PH 1893 and PH 1884 / EH 1227, located approximately 7,500' and 8,500' west of the ATON respectively.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.1.4 Proposed Action

The proposed project involves replacing the existing spindle with a new monopile foundation that will be drilled and socketed into the rock. The project also involves installing a new platform, ladder, safety climb system, and new dayboards as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing spindle will be demolished. A rock socket will be drilled into the bedrock to install the steel monopile. The steel monopile will be installed and the annulus between the rock and pile will be grouted. The remaining components will then be installed.

The following Best Management Practices (BMPs) will be implemented during construction of the Londoner Rock Daybeacon in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

2. Vessels will operate at speeds of less than 10 knots. A look out will be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.1.5 Impacts

The proposed project is anticipated to result in approximately 3 square feet (SF) of permanent impacts to the Rocky Intertidal Shore resource area. The impacts are associated with the drilling and installation of a new steel monopile.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA.

4.1.6 Regulatory Compliance and MA WPA Performance Standards

The only jurisdictional resource area subject to protection under the WPA that will be impacted by the proposed project is the Rocky Intertidal Shore. The proposed project will require 3 SF of permanent impacts to replace an existing cast iron spindle with a steel monopile ATON structure.

The WPA does not provide specific performance standards for the Rocky Intertidal Shore resource area. However, the WPA outlines the following protective measures:

(3) When a Rocky Intertidal Shore Is Determined to Be Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed, using the best practical measures, so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.

The proposed project is located on a small bedrock outcropping approximately 2,300 feet east of Thacher Island, a small island off the coast of Rockport, MA. Given the small size and location, the existing outcropping does not provide significant storm damage protection, flood control, or protection of wildlife habitat. The proposed project will not adversely effect the form or volume of exposed intertidal bedrock or boulders.

(4) When a Rocky Intertidal Shore is Determined to Be Significant to the Protection of Marine Fisheries or Wildlife Habitat, any proposed project shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on water circulation and water quality. Water quality impacts include, but are not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.

The proposed ATON replacement is considered a water-dependent project. The existing bedrock outcropping has not been identified as significant to the protection of marine fisheries or wildlife habitat. In addition, marine fisheries and wildlife habitat will be protected to the maximum extent practicable through the implementation of appropriate BMPs outlined in Section 4.1.4 above. The proposed project could cause minor, short-term changes in behavior of fish and wildlife due to disturbance from construction activities, however, with the implementation of BMPs, physiological impacts are not anticipated. Overall, the proposed project is not anticipated to result in adverse impacts to fish or wildlife in the vicinity. The proposed project is not anticipated to result in water quality impacts.

(5) Notwithstanding the provisions of 310 CMR 10.31(3) and (4), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The proposed project is not located within mapped NHESP Priority or Estimated Habitats. The proposed project was submitted to and reviewed by NHESP via a Request for State-listed Species Information, and NHESP's response letter indicated that there were no rare species concerns at the Londoner Rock Daybeacon project site.

4.2 Weymouth, MA - Weymouth Fore River Channel Light 16

4.2.1 Existing Conditions

Weymouth Fore River Channel Light 16 (42° 16' 3.129" N, 70° 56' 6.484" W) is an ATON structure servicing the navigational channel in the Weymouth Fore River located in Weymouth, MA. The structure consists of a braced steel four-pile substructure supporting a 10-foot x 10-foot steel framed deck. The four (4) steel battered piles are each 16 inches in diameter and are capped with 1/2-inch thick steel plates. There is 6-inch diameter metal pipe bracing located above mean high water (MHW) and just above the mudline. The existing piles are heavily corroded in the tidal zone and are considered to be in poor condition. Portions of the deck and tower have failed, the ladder is missing, and one of the dayboards is missing.

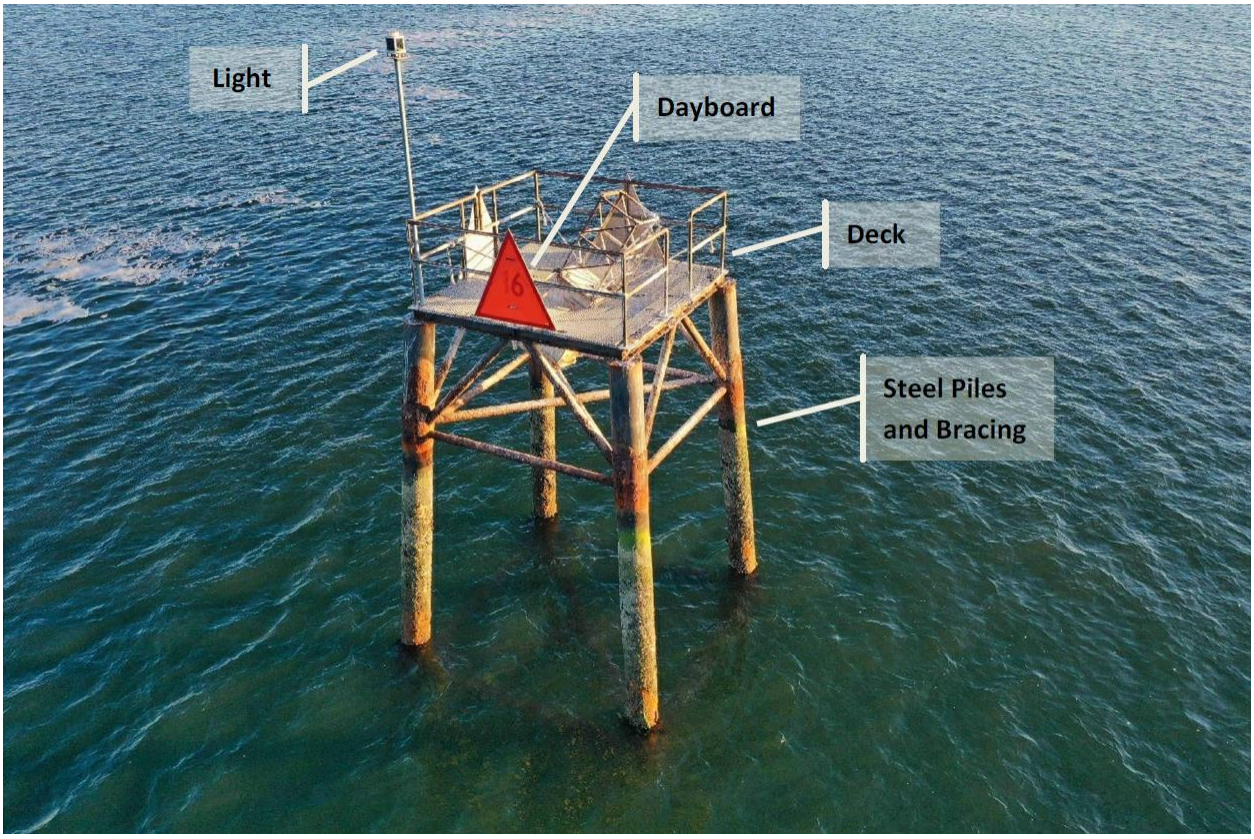


Photo 2: Weymouth Fore River Channel Light 16

4.2.2 Resource Area Descriptions

4.2.2.1 Land under the Ocean

The existing Weymouth Fore River Channel Light 16 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 13'-4" (MLW) to 23'-9" (MHW).

4.2.3 Rare, Threatened, and Endangered Species

Weymouth Fore River Channel Light 16 is not located within or in close proximity to any NHESP Priority or Estimated Habitats. The nearest mapped habitat polygon includes PH 1156, located approximately 2,500' east of the ATON.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.2.4 Proposed Action

The proposed project involves complete replacement of the existing ATON, including installing a new pile foundation, most likely drilled and socketed into bedrock, installation of a new deck, tower, ladder and safety climb system, dayboards, and new lighting.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing steel ATON structure will be demolished in its entirety. Next, four (4) steel casings will be driven to the bedrock (elevations vary) using a vibratory hammer or pile driving. A rock drill bit will be inserted into the steel casings and advanced to bedrock. A rock socket will be drilled out in the bedrock for installation of the steel pipe piles. The rock drill bit and casings will be removed and steel piles installed. The annulus between the rock and piles will be grouted.

The following Best Management Practices (BMPs) will be implemented during construction of the Weymouth Fore River Channel Light 16 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.2.5 Impacts

The proposed replacement of the Weymouth Fore River Channel Light 16 is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.2.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (7) do not apply. In order to minimize and avoid impacts to fisheries and wildlife to the maximum extent practicable the BMPs outlined in Section 4.2.4 above will be implemented throughout the duration of the project.

4.3 Hull, MA - Harry's Rock Light HR

4.3.1 Existing Conditions

Harry's Rock Light HR (42° 17' 13.291" N, 70° 55' 54.280" W) is an ATON structure servicing the navigational channel in Weymouth Fore River located in Weymouth, MA. The structure is a braced steel 3-pile substructure that supports an 8-foot diameter steel deck. It is accessible via water, has two (2) diamond NR dayboards and a flashing white light at a height of 26 feet. The existing steel piles and bracing are severely corroded and overall the structure is in critical condition. The decking, handrails, and framing are heavily corroded and portions are missing. The steel ladder is also damaged and nonfunctional.

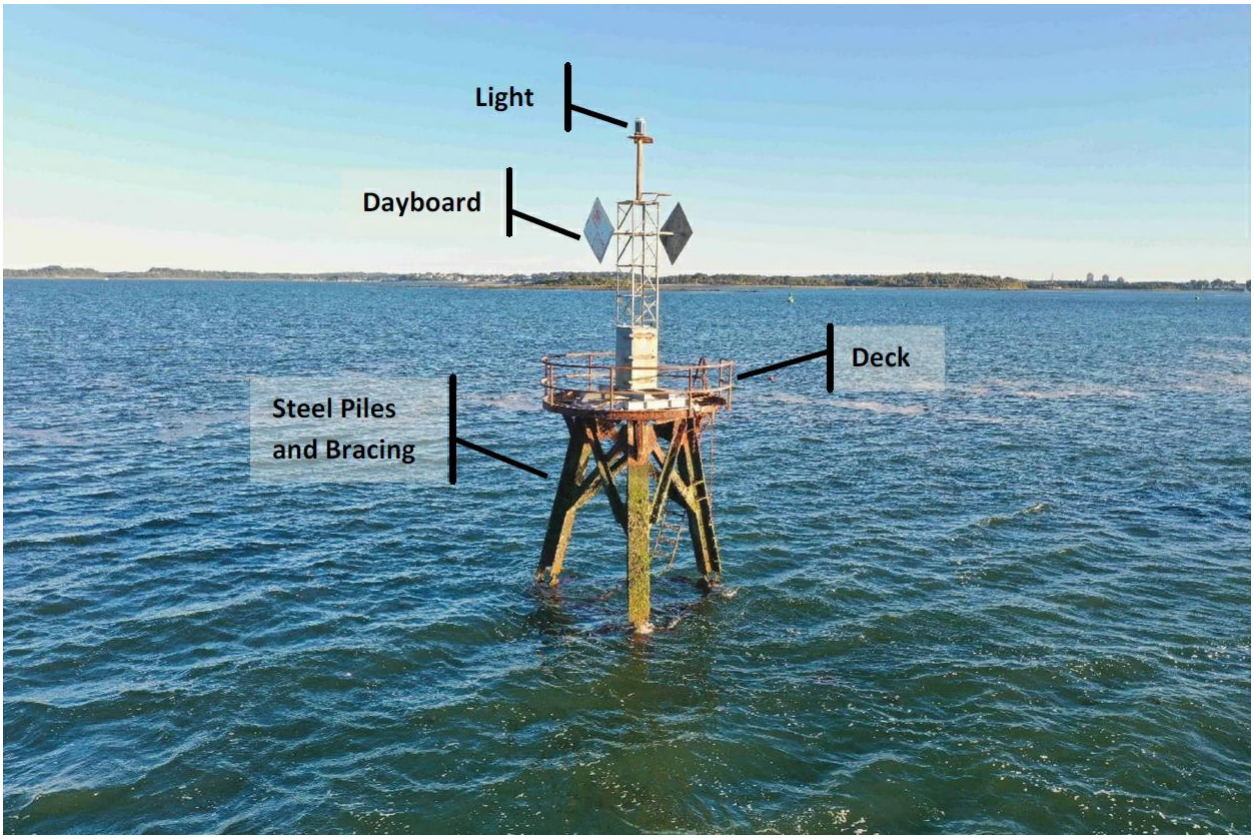


Photo 3: Harry's Rock Light HR

4.3.2 Resource Area Descriptions

4.3.2.1 Land under the Ocean

The existing Harry's Rock Light HR structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 13'-4" (MLW) to 23'-9" (MHW).

4.3.3 Rare, Threatened, and Endangered Species

Harry's Rock Light HR is not located within any NHESP Priority or Estimated Habitat polygons. However, PH 1282 / EH 923 are located in the vicinity of the ATON, approximately 400' to the north. PH 1205 is also located approximately 1,600'-2,000' to the west.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.3.4 Proposed Action

The proposed project involves the complete replacement of the existing ATON, including installing a new pile foundation, most likely drilled and socketed into rock, installing a new deck, tower, ladder and safety climb system, dayboards, and new lighting as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing steel ATON structure will be demolished in its entirety. Next, four (4) steel casings will be driven to the bedrock (elevations vary) using a vibratory hammer or pile driving. A rock drill bit will be inserted into the steel casings and advanced to bedrock. A rock socket will be drilled out in the bedrock for installation of the steel pipe piles. The rock drill bit and casings will be removed and steel piles installed. The annulus between the rock and piles will be grouted.

The following Best Management Practices (BMPs) will be implemented during construction of Harry's Rock Light HR in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.3.5 Impacts

The proposed replacement of Harry's Rock Light HR is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.3.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (7) do not apply. In order to minimize and avoid impacts to fisheries and wildlife to the maximum extent practicable the BMPs outlined in Section 4.3.4 above will be implemented throughout the duration of the project.

4.4 Cohasset, MA - Cohasset Channel Light 8

4.4.1 Existing Conditions

Cohasset Channel Light 8 (42° 15' 5.497" N, 70° 47' 0.665" W) is an ATON structure servicing Cohasset Channel in Cohasset, MA. The structure is a 5-pile timber substructure that supports an approximately 8-foot x 8-foot timber deck. It is accessible via water, has four (4) red triangle dayboards and a flashing red light at a height of 29 feet. The existing timber piles and bracing are heavily deteriorated and overall, the substructure is in serious condition. The timber deck is missing several deck boards, and a large bird's nest has been built on the deck. The bottom portion of the ladder is heavily corroded and two of the four dayboards are damaged and one is missing.

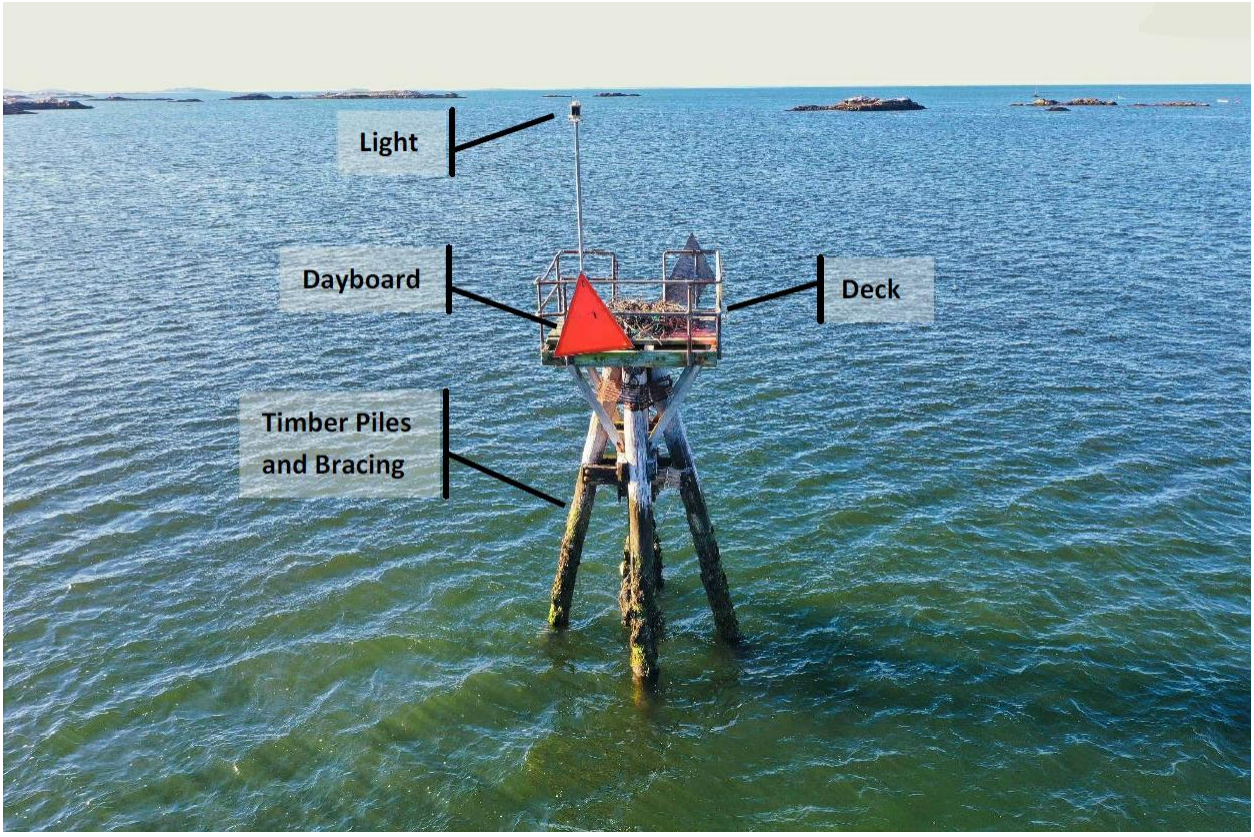


Photo 4: Cohasset Channel Light 8

4.4.2 Resource Area Descriptions

4.4.2.1 Land under the Ocean

The existing Cohasset Channel Light 8 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 8'-4" (MLW) to 17'-4" (MHW).

4.4.3 Rare, Threatened, and Endangered Species

Cohasset Channel Light 8 is located within NHESP Priority and Estimated Habitat polygons PH 1148 / EH 836. These polygons encompass the Cohasset Harbor and waters surrounding the Scituate Neck peninsula (**Figure 2-7**). A Request for State-listed Species Information was submitted to the NHESP. NHESP's response letter dated December 16, 2021 (NHESP Tracking No.: 21-40627) indicated that least tern (*Sternula antillarum*), a state listed Special Concern species, has the potential to occur in the vicinity of the Cohasset Channel Light 8 site. The project is being submitted concurrently to NHESP as a Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

There is currently a nest on the deck of this structure, which is likely an osprey nest. Ospreys often reuse nests, with nesting season occurring between March and August. Ospreys are protected under the Migratory Bird Treaty Act (MBTA), which prohibits the purposeful take or attempting to purposefully take any migratory bird, nest, and eggs or parts thereof, unless permitted by the U.S. Fish and Wildlife Service. All osprey nests are deemed inactive from September through February when ospreys are at their wintering grounds in Central and South America. Inactive nests do not need a migratory bird permit or permission to remove nests.

4.4.4 Proposed Action

The proposed project involves the installation of a new piled foundation, most likely drilled and socketed into rock, installation of a new deck and raptor platform, installation of a new ladder and safety climb system, and new dayboards and light as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing timber ATON structure will be demolished in its entirety. Five (5) new timber piles will be installed using a vibratory hammer, and the rest of the components will be installed.

The following Best Management Practices (BMPs) will be implemented during construction of Cohasset Channel Light 8 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

7. Least terns nest on the shoreline from May through July, chicks fledge by August, and migration starts in August. To avoid impacting nesting terns, no pile driving will occur between May 1 and August 15.

8. The osprey nest located on this ATON will be removed between September and February when it is inactive. If the ATON replacement is not carried out at that time, temporary exclusion measures must be installed to prevent nesting from occurring prior to construction

9. A dedicated nesting platform will be installed on the proposed ATON.

4.4.5 Impacts

The proposed replacement of the Cohasset Channel Light 8 is anticipated to result in approximately 4.0 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the five (5) timber piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.4.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (6) do not apply.

310 CMR 10.25(7) states, "*Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37*."

The proposed project is not anticipated to have an adverse effect on least terns with the time of year restriction on pile driving during the nesting season from May 1 through August 15. In addition, the existing osprey nest will be removed when the nest is inactive, and a dedicated nesting platform will be

installed on the new structure. These measures along with the additional BMPs outlined in Section 4.4.4 above will minimize and avoid adverse impacts to fish and wildlife including rare species to the maximum extent practicable.

4.5 Boston, MA - Boston Main Channel Light 5

4.5.1 Existing Conditions

Boston Main Channel Light 5 (42° 20’ 0.162” N, 71° 0’ 3.732” W) is an ATON tower servicing the entrance to Boston Harbor. The tower is a USCG-standard 5-foot x 5-foot steel skeleton frame supported on a steel-framed deck on a braced steel four-pile substructure. The ATON is accessible via water and has a flashing green light, square green dayboards, and a height of 32 feet.

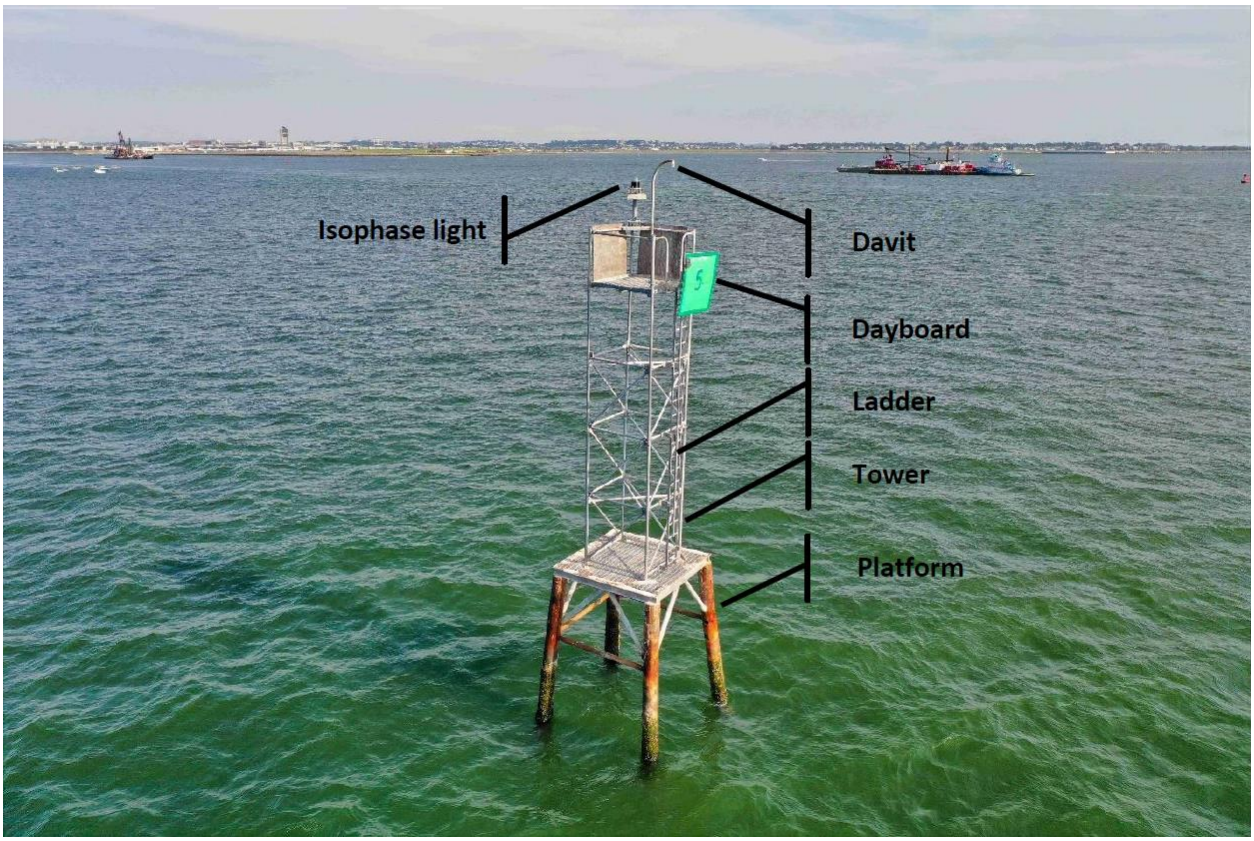


Photo 5: Boston Main Channel Light 5

The existing piles exhibit severe defects above the water including localized buckling and cracking as well as coating loss and moderate corrosion and pitting. Overall, the piles and bracing are in critical condition. The deck is in serious condition, with isolated severe defects along the perimeter beams from overstressing, as well as isolated coating loss and moderate corrosion. The existing tower is in satisfactory condition and the light, three out of four dayboards, and tower ladder all appear intact. The primary access ladder to the ATON is detached.

4.5.2 Resource Area Descriptions

4.5.2.1 Land under the Ocean

The existing Boston Main Channel Light 5 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 12'-4" (MLW) to 21'-10" (MHW).

4.5.3 Rare, Threatened, and Endangered Species

Boston Main Channel Light 5 is not located within or in close proximity to any NHESP Priority or Estimated Habitats. The nearest mapped habitat polygon includes PH 1156, located approximately 2,500' east of the ATON.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.5.4 Proposed Action

The proposed project involves the replacement of the piles, most likely drilled and socketed into rock, and installation of a new platform, deck, and ladder.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing tower and all navigation appurtenances will be removed and salvaged for re-installation on the new substructure. Then the steel deck framing and bracing will most likely be cut with a torch and put on a salvage barge for disposal. Per the historical construction documents for the existing structure, the piles are embedded approximately 25 feet into the mudline, so the piles should be able to be fully extracted with a vibratory hammer. The existing piles, bracing, and beams are to be removed in their entirety.

Once the existing structure is fully removed, the four (4) steel pipe piles will be installed using a vibratory hammer and the rest of the above-water components will be installed.

The following Best Management Practices (BMPs) will be implemented during construction of the Boston Main Channel Light 5 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.5.5 Impacts

The proposed replacement of the Boston Main Channel Light 5 is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.5.6 Regulatory Compliance and MA WPA Performance Standards

The general performance standards are requirements for activities in or affecting the areas subject to protection under the WPA and are established by 310 CMR 10.00. The performance standards for Land under the Ocean are provided in 310 CMR 10.25(3) through (7). The following provides a summary of how the performance standards have been interpreted to protect the characteristics and resources of Land Under the Ocean to the maximum extent practicable.

310 CMR 10.25 Land under the Ocean

(3) Improvement dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in:

a) bottom topography which will result in increased flooding or erosion caused by an increase in the height or velocity of waves impacting the shore;
N/A – The proposed project does not involve any dredging or changes to the bottom topography and therefore, is not anticipated to result in increased wave heights or velocities that would result in increased flooding or erosion.

b) sediment transport processes which will increase flood or erosion hazards by affecting the natural replenishment of beaches;
N/A – The proposed project does not involve any dredging and therefore, it is not anticipated to affect sediment transport processes that would increase flood or erosion hazards by affecting the natural replenishment of beaches.

c) water circulation which will result in an adverse change in flushing rate, temperature, or turbidity levels; or

N/A – The proposed project does not involve any dredging and therefore, is not anticipated to result in water circulation resulting in an adverse change in flushing rate, temperature, or turbidity levels.

d) marine productivity which will result from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.

N/A – The proposed project does not involve any dredging and therefore, is not anticipated to result in impacts to marine productivity including impacts resulting from the suspension or transport of pollutants, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries or wildlife habitat.

(4) Maintenance dredging for navigational purposes affecting land under the ocean shall be designed and carried out using the best available measures so as to minimize adverse effects on such interests caused by changes in marine productivity which will result from the suspension or transport of pollutants, increases in turbidity, the smothering of bottom organisms, the accumulation of pollutants by organisms, or the destruction of marine fisheries habitat or wildlife habitat.

N/A – The proposed project does not involve any maintenance dredging for navigational purposes. Appropriate BMPs designed to minimize adverse effects are outlined in Section 4.5.4 and will be implemented throughout duration of the project.

(5) Projects not included in 310 CMR 10.25(3) or (4) which affect nearshore areas of land under the ocean shall not cause adverse effects by altering the bottom topography so as to increase storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes.

N/A – The proposed ATON structure replacement is not anticipated to result in changes to the bottom topography, and therefore, is not anticipated to result in an increase in storm damage or erosion of coastal beaches, coastal banks, coastal dunes, or salt marshes

(6) Projects not included in 310 CMR 10.25(3) which affect land under the ocean shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on marine fisheries habitat or wildlife habitat caused by:

a) alterations in water circulation;
The proposed ATON replacement is a water-dependent project and is not anticipated to result in alteration in water circulation. The project involves in kind replacement of an existing structure.

b) destruction of eelgrass (Zostera marina) or widgeon grass (Rupia maritina) beds;
There are no MassDEP mapped eelgrass or widgeon grass beds located in the vicinity of the proposed project. Water depths in the project area vary from approximately 12'-4" (MLW) to 21'-10" (MHW). Eelgrass typically grows in water depths less than 3 meters (9.8 feet). Suitable habitat for widgeon grass is not located within the project area. Therefore, the proposed project is not anticipated to result in the destruction of eelgrass or widgeon grass beds.

c) alterations in the distribution of sediment grain size;
The proposed ATON replacement project is not anticipated to result in alterations in the distribution of sediment grain size.

d) changes in water quality, including, but not limited to, other than natural fluctuations in the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or
The proposed project is not anticipated to result in adverse effects to water quality. The proposed project will result in temporary turbidity releases associated with the removal of existing piles and the installation of new piles. However, these impacts will be short term and temporary in nature.

e) alterations of shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae.
The proposed project is not anticipated to result in any alteration to shallow submerged lands with high densities of polychaetes, mollusks, or macrophytic algae. Water depths in the project area vary from approximately 12'-4" (MLW) to 21'-10" (MHW). No Shellfish Suitability Areas have been identified in the vicinity of the project area.

(7) Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

The proposed project is not located within any NHESP mapped Estimated Habitats of Rare Wildlife or Priority Habitats of Rare Species. The proposed project is not anticipated to result in an adverse effect on any rare vertebrate or invertebrate species.

5.0 Abutters

The proposed project is assumed to be exempt from abutter notification requirements pursuant to 310 CMR 10.05, "*Notwithstanding the foregoing, the requirement to provide Abutter notification is subject to the following limits. An applicant is required to provide notification to an Abutter whose Lot is separated from the Project Locus by a public or private street or body of water only if the Abutter's Lot is within 100 feet from the property line of the Project Locus. An applicant who proposes work solely within Land under Water Bodies or Waterways, or solely within a Lot with an area greater than 50 acres, is required to provide notification only to Abutters whose Lot is within one hundred feet from the Project Site…*"

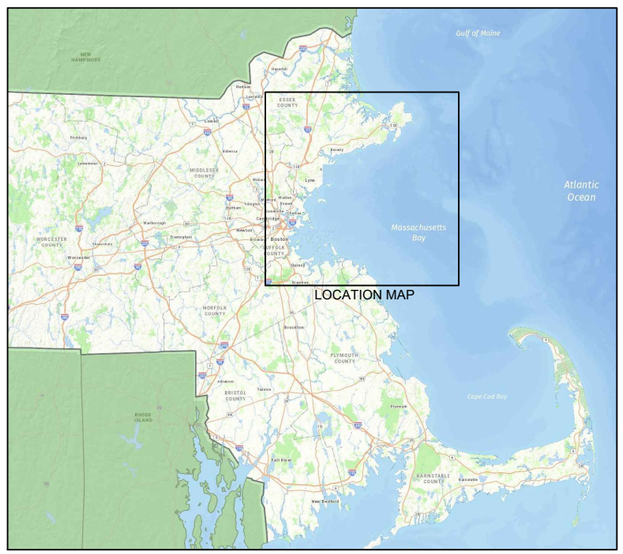
The proposed USCG ATON replacement structures are all located greater than 100 feet from the nearest property abutters and are separated by a body of water (**Figure 3-1 – 3-5**). Therefore, abutter notification is not required for any of the proposed ATON replacements.

U.S. COAST GUARD
CIVIL ENGINEERING
CEU PROVIDENCE

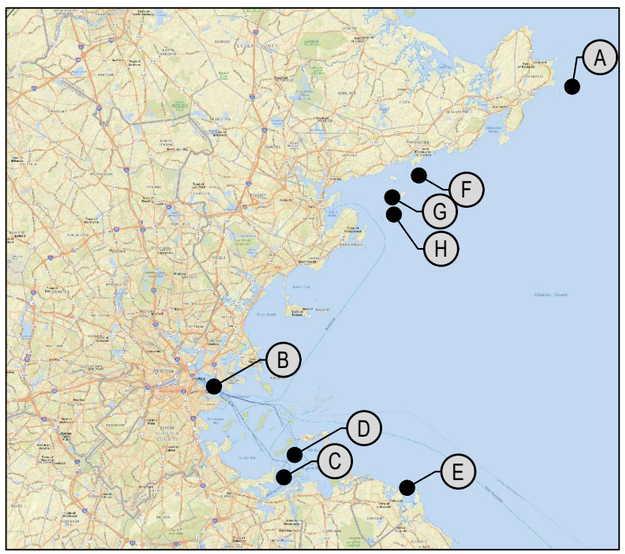
Appledore Marine Engineering, LLC

MASSACHUSETTS BAY ATON
MASSACHUSETTS
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
AT

LONDONER ROCK DAYBEACON (LLNR 315)
BOSTON MAIN CHANNEL LIGHT 5 (LLNR 10890)
WEYMOUTH FORE RIVER CHANNEL LIGHT 16 (LLNR 11715)
HARRY'S ROCK LIGHT HR (LLNR 11675)
COHASSET CHANNEL LIGHT 8 (LLNR 12185)
WHALEBACK DAYBEACON 8 (LLNR 9990)
BRIMBLES DAYBEACON (LLNR 10405)
SATAN ROCK DAYBEACON 6 (LLNR 10395)



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: NTS

DRAWING INDEX

SHEET ID	SHEET NO.	LEVEL II / SITE DESIGNATION	SITE	SHEET TITLE
G-001	01	-	ALL	COVER SHEET
G-002	02	-	ALL	GENERAL NOTES
S-201A	03	A	LONDONER ROCK DAYBEACON	EXISTING DEMOLITION
S-202A	04	A	LONDONER ROCK DAYBEACON	GENERAL ARRANGEMENT
S-501A	05	A	LONDONER ROCK DAYBEACON	GENERAL DETAILS
S-201B	06	B	BOSTON MAIN CHANNEL LIGHT 5	EXISTING DEMOLITION
S-202B	07	B	BOSTON MAIN CHANNEL LIGHT 5	GENERAL ARRANGEMENT
S-201C	08	C	WEYMOUTH FORE RIVER CHANNEL LIGHT 16	EXISTING DEMOLITION
S-202C	09	C	WEYMOUTH FORE RIVER CHANNEL LIGHT 16	GENERAL ARRANGEMENT
S-201D	10	D	HARRY'S ROCK LIGHT HR	EXISTING DEMOLITION
S-202D	11	D	HARRY'S ROCK LIGHT HR	GENERAL ARRANGEMENT
S-501	12	B, C, D	-	GENERAL DETAILS - 1
S-502	13	B, C, D	-	GENERAL DETAILS - 2
S-201E	14	E	COHASSET CHANNEL LIGHT 8	EXISTING DEMOLITION
S-202E	15	E	COHASSET CHANNEL LIGHT 8	GENERAL ARRANGEMENT
S-501E	16	E	COHASSET CHANNEL LIGHT 8	GENERAL DETAILS
S-201F	17	F	WHALEBACK DAYBEACON 8	EXISTING DEMOLITION
S-202F	18	F	WHALEBACK DAYBEACON 8	GENERAL ARRANGEMENT
S-201G	19	G	BRIMBLES DAYBEACON	EXISTING DEMOLITION
S-202G	20	G	BRIMBLES DAYBEACON	GENERAL ARRANGEMENT
S-201H	21	H	SATAN ROCK DAYBEACON 6	EXISTING DEMOLITION
S-202H	22	H	SATAN ROCK DAYBEACON 6	GENERAL ARRANGEMENT
R-701	23	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 01
R-702	24	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 02
R-703	25	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 03
R-704	26	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 04
R-705	27	-	HARRY'S ROCK LIGHT	TOWER REFERENCE - 05
R-706	28	-	MONO PILE DAYBEACONS	TOWER REFERENCE - 06
R-707	29	-	MONO PILE DAYBEACONS	TOWER REFERENCE - 07

BASE BID / BID OPTION INDEX

SITE	LEVEL II/ SITE DESIGNATION	BID DESIGNATION
LONDONER ROCK DAYBEACON (LLNR 315)	A	BASE BID
BOSTON MAIN CHANNEL LIGHT 5 (LLNR 10890)	B	BASE BID
WEYMOUTH FORE RIVER CHANNEL LIGHT 16 (LLNR 11715)	C	BASE BID
HARRY'S ROCK LIGHT HR (LLNR 11675)	D	BASE BID
COHASSET CHANNEL LIGHT 8 (LLNR 12185)	E	BASE BID
WHALEBACK DAYBEACON 8 (LLNR 9990)	F	BID OPTION #1
BRIMBLES DAYBEACON (LLNR 10405)	G	BID OPTION #2
SATAN ROCK DAYBEACON 6 (LLNR 10395)	H	BID OPTION #3

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53596
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

MICHAEL P. CAROSOTTO, P.E.
APPROVING OFFICER DATE

MICHAEL P. CAROSOTTO, P.E.
TECHNICAL DIRECTOR

DAVID GLASS, P.E.
BRANCH CHIEF

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MWM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020G-001.DWG
SHEET 01 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON
MA
GENERAL
COVER SHEET

SHEET ID
ALL
G-001

GENERAL NOTES:

1. THE DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS AND ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR MUST KEEP A COPY OF THE DRAWINGS AND THE SPECIFICATIONS ON SITE AT ALL TIMES DURING THE WORK.
2. IT IS RECOMMENDED TO COMPLETE A PRE-BID SITE VISIT TO VERIFY THE PROJECT SCOPE AND EXTENT OF WORK.
3. ELEVATIONS ARE IN FEET BASED ON MEAN LOWER LOW WATER (MLLW) PROJECT DATUM FOR THE 1983-2001 TIDAL EPOCH.
4. ALL NORTH ARROWS SHOWN ARE GRID NORTH BASED ON NAD83.
5. DIMENSIONS AND DETAILS OF THE EXISTING ELEMENTS ARE BASED ON LIMITED ARCHIVE DRAWINGS AND LIMITED FIELD MEASUREMENTS. WORK RELATED ELEVATIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELEMENTS MUST BE FIELD VERIFIED BY THE CONTRACTOR. DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE GOVERNMENT BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK.
6. DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES. ERECT, MAINTAIN AND REMOVE TEMPORARY ERECTION MATERIALS AND EQUIPMENT. COORDINATE ALL PROPOSED STAGING AREAS WITH THE GOVERNMENT BEFORE STARTING THE WORK.
7. MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.
8. SCHEDULE AND COORDINATE ALL WORK, INCLUDING ALLOWABLE WORK WINDOWS, WITH THE GOVERNMENT, AND MAINTAIN THE WORK SITE TO THE SATISFACTION OF THE GOVERNMENT.
9. PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS MUST INCLUDE BUT NOT BE LIMITED TO TURBIDITY AND DUST.
10. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DONE TO STRUCTURES AS A RESULT OF PERFORMING THE WORK.
11. THE CONTRACTOR MAY BE CHARGED ANY ADDITIONAL COST FOR REINSPECTION OR RETEST WHEN PRIOR REJECTION MAKES REINSPECTION OR RETESTING NECESSARY.

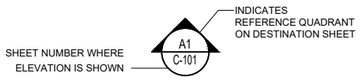
WORK DEFINITIONS

1. "REMOVE" IS DEFINED AS REMOVE AND DISPOSE OF STRUCTURE OR ELEMENT.
2. "REMOVE AND SALVAGE" IS DEFINED AS REMOVE THE STRUCTURE OR ELEMENT FROM THE EXISTING STRUCTURE AND SALVAGE FOR REINSTALLATION ON THE PROVIDED STRUCTURE.
3. "PROVIDE" IS DEFINED AS PROVIDE NEW STRUCTURE OR ELEMENT.

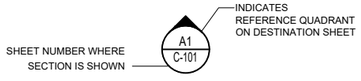
LEGEND

APPROX	APPROXIMATE
ATON	AID TO NAVIGATION
CIP	CAST-IN-PLACE
℄	CENTERLINE
CLR	CLEAR
CY	CUBIC YARD
DIA Ø	DIAMETER
EL	ELEVATION IN FEET
GALV	GALVANIZED
HDG	HOT DIPPED GALVANIZE
ID	INSIDE DIAMETER
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MHW	MEAN HIGH WATER
MIN	MINIMUM
MISC	MISCELLANEOUS
MLLW	MEAN LOWER LOW WATER
NTS	NOT TO SCALE
OC	ON CENTER
PP	PIPE PILE
PCF	POUNDS PER CUBIC FOOT
₱	PLATE
PLCS	PLACES
PSF	POUNDS PER SQUARE FOOT
REF	REFERENCE
SCH	SCHEDULE
SF	SQUARE FEET
SQ	SQUARE
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WORKING POINT

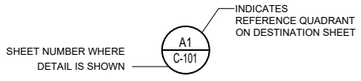
ELEVATION, SECTION OR DETAIL SYMBOLS



EXTERIOR ELEVATION/SECTION



INTERIOR ELEVATION/SECTION



DETAIL

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/31/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

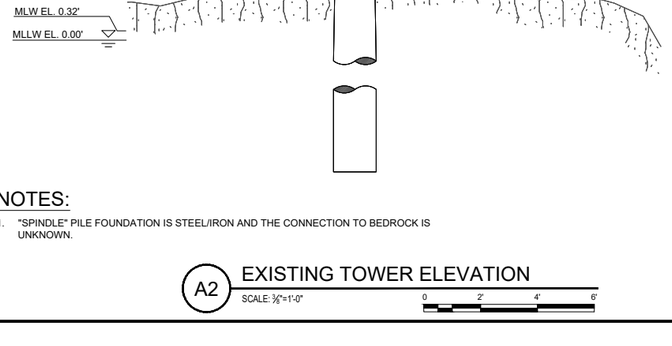
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
EDITED BY:
TJD
DRAWN BY:
MW/DM
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020G-002.DWG
SHEET 02 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON
MA
GENERAL
GENERAL NOTES

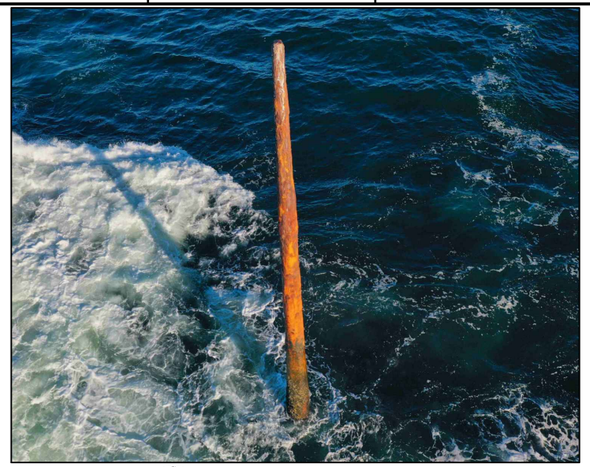
SHEET ID
ALL
G-002



NOTES:

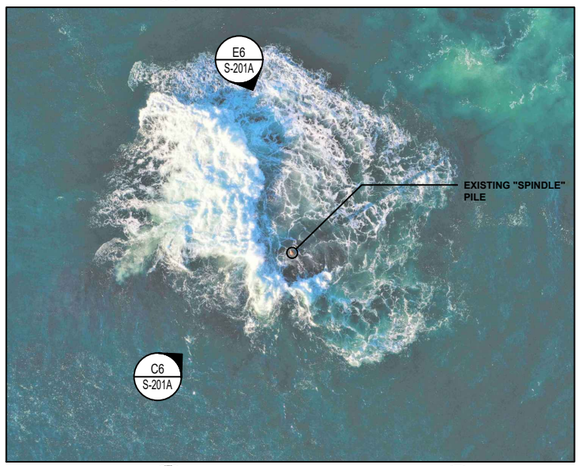
1. "SPINDLE" PILE FOUNDATION IS STEEL/IRON AND THE CONNECTION TO BEDROCK IS UNKNOWN.

A2 EXISTING TOWER ELEVATION
SCALE: 3/8"=1'-0"



E6 LOOKING NORTHWEST
SCALE: NTS

C6 LOOKING SOUTHWEST
SCALE: NTS



A6 EXISTING PLAN VIEW
SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING "SPINDLE" PILE IN ITS ENTIRETY TO TOP OF BEDROCK.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8441551	
ROCKPORT HARBOR, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.46
MEAN HIGH WATER	9.03
MEAN SEA LEVEL	4.71
MEAN TIDE LEVEL	4.68
MEAN LOW WATER	0.32
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	315
NAME AND LOCATION	LONDONER ROCK DAYBEACON
POSITION	42-38-06.479N 070-33-57.962W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURE TYPE	SPINDLE
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

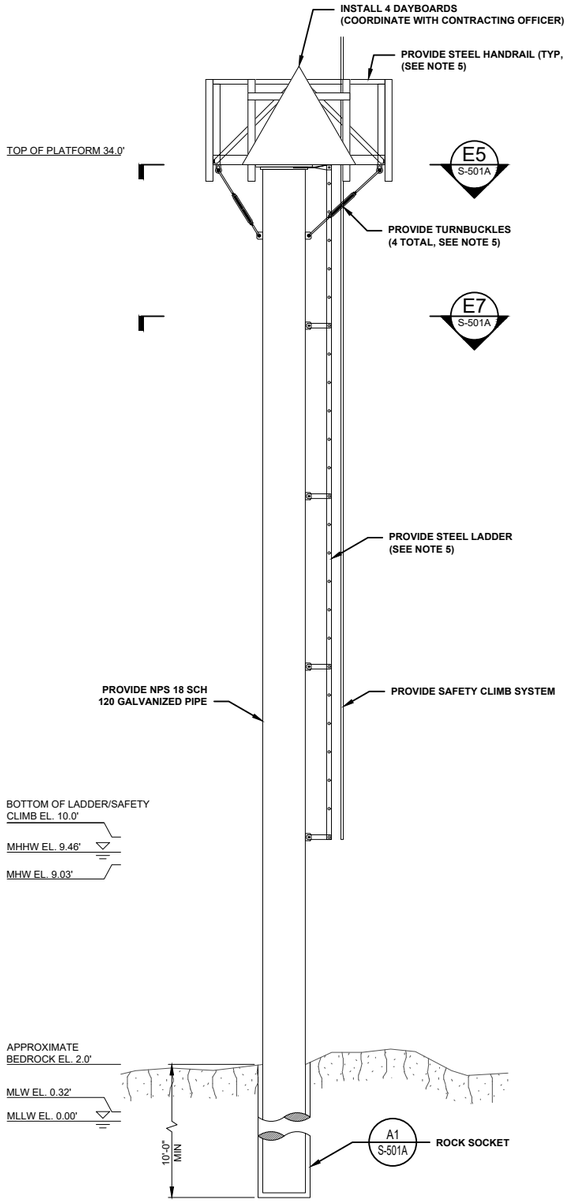
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DM/JE
EDITED BY:
TJD
CHECKED BY:
KFR

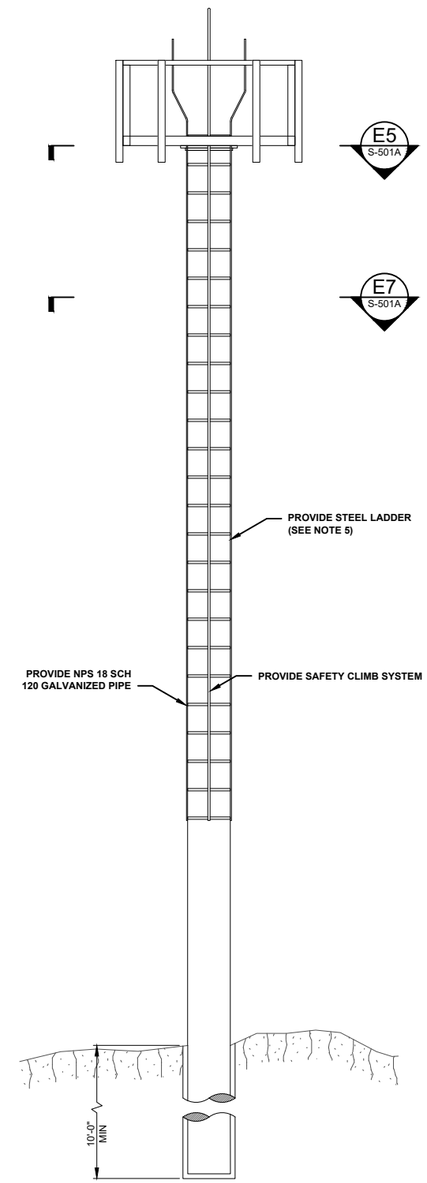
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201A.DWG
SHEET 03 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
EXISTING / DEMOLITION

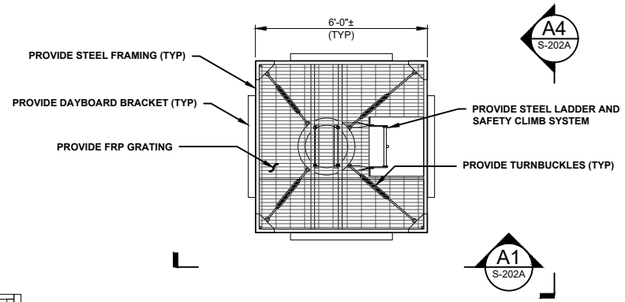
SHEET ID
LONDONER ROCK DAYBEACON
S-201A



A1 TOWER ELEVATION
SCALE: ⅜"=1'-0"



A4 TOWER ELEVATION
SCALE: ⅜"=1'-0"

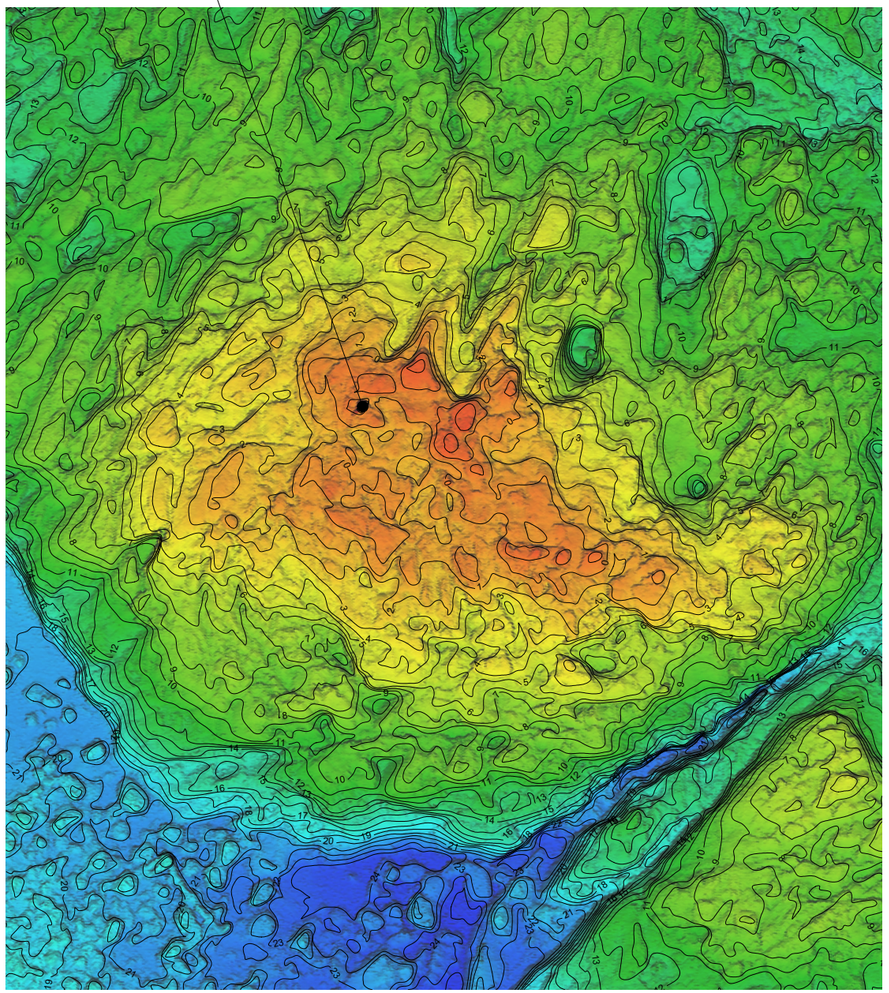


PLAN
SCALE: ⅜"=1'-0"

NOTES:

1. THIS HYDROGRAPHIC SURVEY REPRESENTS CONDITIONS EXISTING ON 10/8/21 AND MAY NOT BE REPRESENTATIVE OF CONDITIONS ON ANOTHER DATE.
2. THIS HYDROGRAPHIC SURVEY IS INTENDED FOR USE ON THIS PROJECT ONLY, AND IS NOT INTENDED FOR ANY OTHER PROJECT OR PURPOSE.
3. MULTI BEAM BATHYMETRIC DATA COLLECTED USING SURVEY VESSEL SEATRAC SP-48(ASV), A NORBIT iWBMS 400 KHZ SONAR, APPLANIX RTK GPS WITH INTEGRATED IMU, AML SVP, WITH SMARTNET VRS GPS CORRECTIONS, AND HYPACK 2019 FOR DATA ACQUISITION AND PROCESSING.
4. SOUNDINGS ARE IN FEET AND TENTHS BELOW MEAN LOWER LOW WATER (MLLW). SOUNDINGS GENERATED FROM 1'X1' MINIMUM DATA, SORTED TO 5' FOR PLOTTING. THE CORRECTION FROM NAVD(88) TO MLLW = -5.00 FT DETERMINED USING NOAA V-DATUM IN THE VICINITY OF LONDONER ATON, EAST OF THACHER ISLAND, ROCKPORT, MA. THE COORDINATE SYSTEM IS THE MA - MAINLAND STATE PLANE COORDINATE SYSTEM, DATUM: NAD83, UNITS: US SURVEY FEET.
5. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.
6. INSTALL THE PROVIDED MONOPILE AS CLOSE AS RECOMMENDED TO THE EXISTING SPINDLE. COORDINATE FINAL LOCATION WITH CONTRACTING OFFICER.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/12/2022



HYDROGRAPHIC SURVEY
SCALE: 1"=20'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

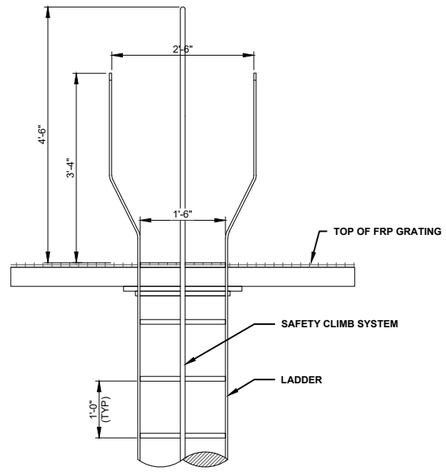
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: T.J.D.
DRAWN BY: MM/DM
CHECKED BY: KFR
EDITED BY: T.J.D.

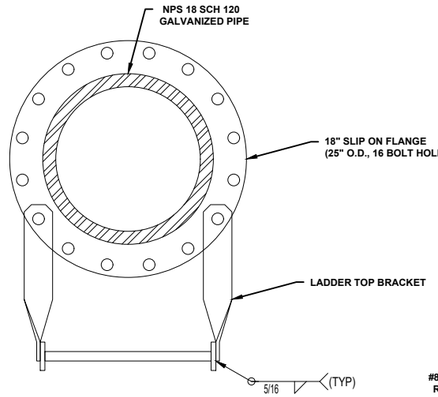
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202A.DWG
SHEET 04 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
GENERAL ARRANGEMENT

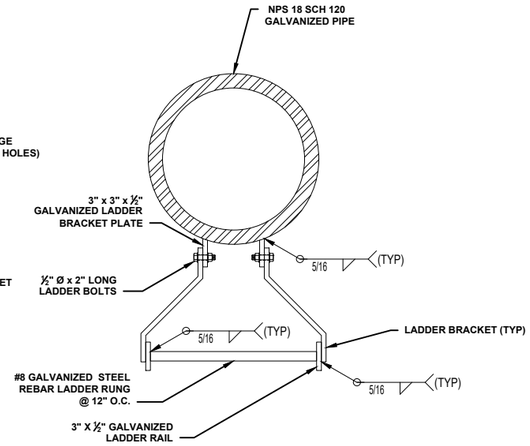
SHEET ID
LONDONER
ROCK
DAYBEACON
S-202A



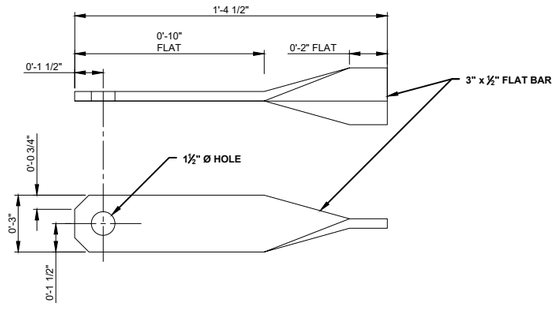
E1 LADDER WALK THROUGH DETAIL
SCALE: 3/4"=1'-0"



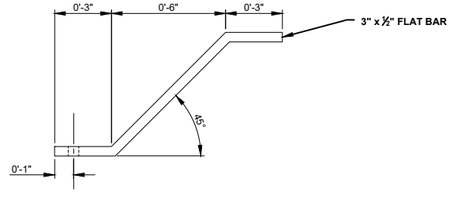
E5 LADDER CONNECTION AT FLANGE
SCALE: 1½"=1'-0"



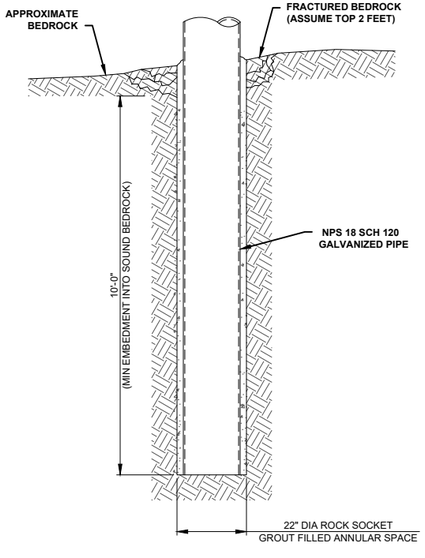
E7 TYPICAL LADDER CONNECTION
SCALE: 1½"=1'-0"



C5 LADDER TOP BRACKET
SCALE: 1½"=1'-0"



C7 TYPICAL LADDER BRACKET
SCALE: 1½"=1'-0"



A1 ROCK SOCKET DETAIL
SCALE: ½"=1'-0"

BASE BID

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

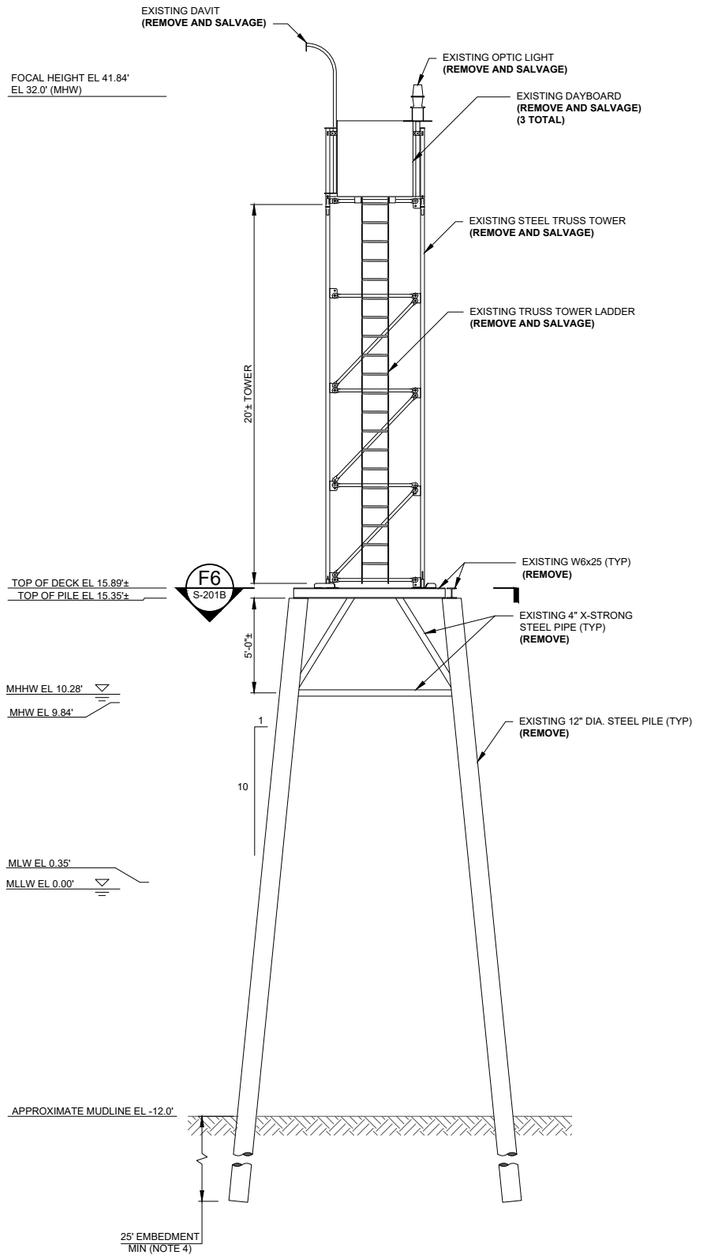
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

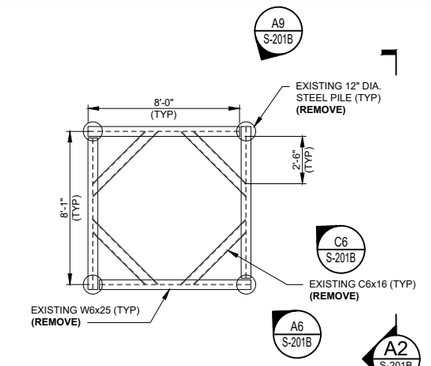
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-501A.DWG
SHEET 05 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
GENERAL DETAILS

SHEET ID
LONDONER ROCK DAYBEACON
S-501A



A2 EXISTING TOWER ELEVATION
SCALE: ¼"=1'-0"



F6 EXISTING DECK FRAMING PLAN
SCALE: ¼"=1'-0"

C6 LOOKING NORTH
SCALE: NTS

A6 LOOKING NORTH
SCALE: NTS

A9 LOOKING WEST
SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) AND UP TO 4 ABANDONED PILES IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE R-701, R-702, R-703, AND R-704 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8443970	
BOSTON LIGHT, MA	FEET
HIGHEST OBSERVED WATER (01/04/2018)	15.17
MEAN HIGHER HIGH WATER	10.28
MEAN HIGH WATER	9.84
MEAN SEA LEVEL	5.21
MEAN TIDE LEVEL	5.09
MEAN LOW WATER	0.35
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (03/24/1940)	-3.74

LIGHT LIST	
NUMBER	10890
NAME AND LOCATION	BOSTON MAIN CHANNEL LIGHT 5
POSITION	42-20-0.162N 071-0-3.732W
LIGHT CHARACTERISTIC	Fl G2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	32
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

BASE BID

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

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-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
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PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

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475 KILVERT ST., SUITE 100
WARWICK, RI 02886
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LT MATTHEW R. FANN, PE
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DRAWN BY:
MW/DM
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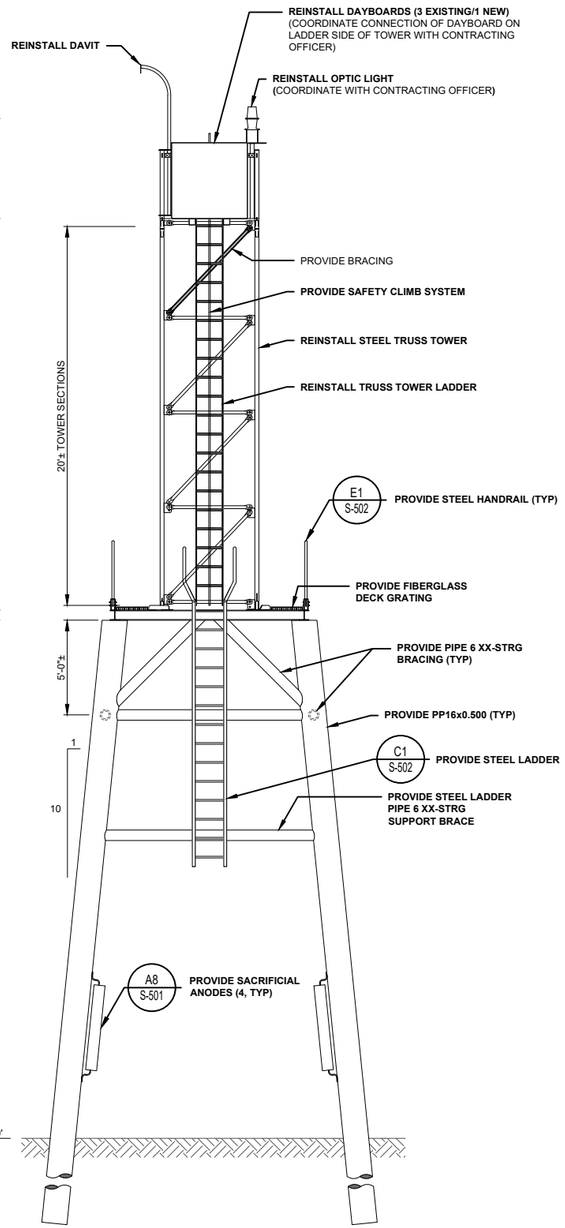
TJD
CHECKED BY:
KFR

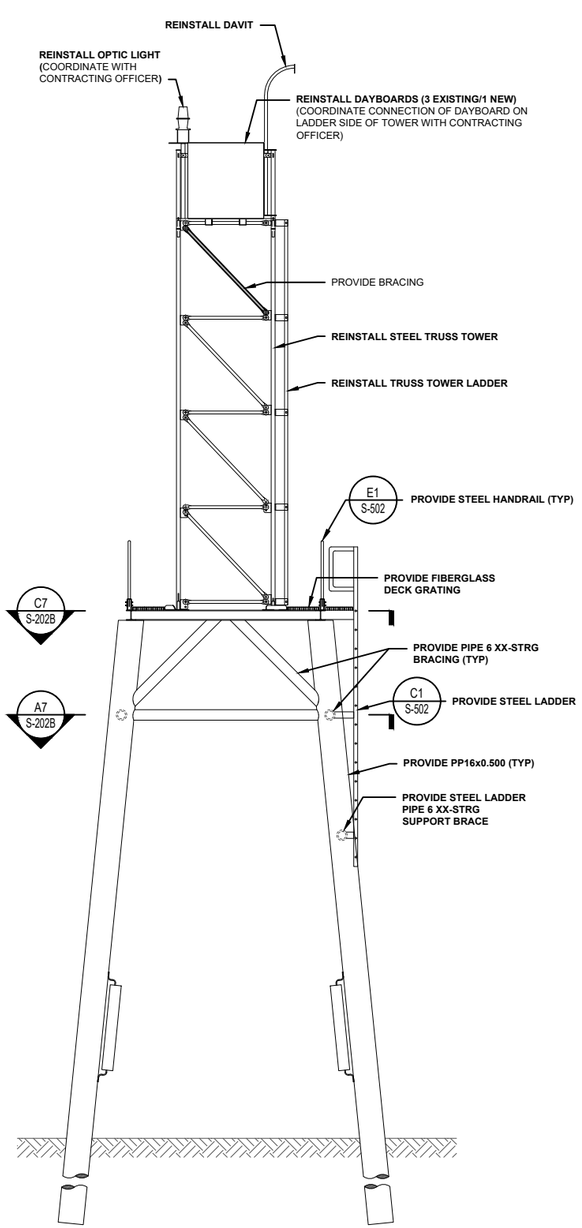
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P 13494020
USCG FILENAME
P13494020S-201B.DWG
SHEET 06 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
EXISTING / DEMOLITION

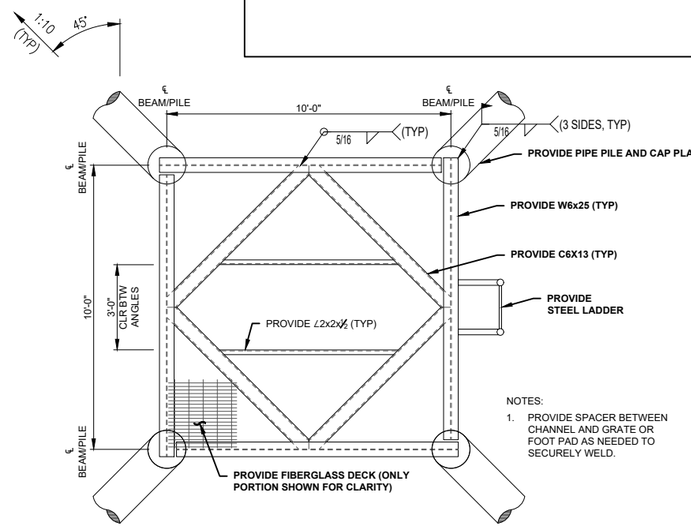
SHEET ID
BOSTON MAIN CHANNEL LIGHT 5
S-201B



A2 TOWER SOUTH ELEVATION
SCALE: 1/4"=1'-0"

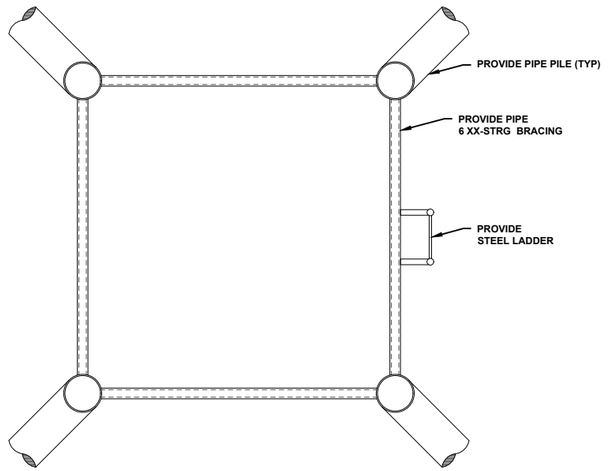


A5 TOWER WEST ELEVATION
SCALE: 1/4"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: 3/8"=1'-0"



A7 TOWER PILE PLAN
SCALE: 3/8"=1'-0"

NOTES:

1. FOR TRUSS TOWER, SAFETY CLIMB LADDER, DAVIT, AND OTHER TOWER APPURTENANCES SEE SHEETS R-701, R-702, R-703, AND R-704 OF THIS DRAWING SET.
2. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
3. THE DESIGN INTENT IS FOR THE PLATFORM TO BE FIELD WELDED TO THE PILE CAP PLATES AND THE PILE CAP PLATES FIELD WELDED TO THE PILES. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.

COMMONWEALTH OF MASSACHUSETTS
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No 53396
REGISTERED PROFESSIONAL ENGINEER
01/31/2022

BASE BID

U.S.C.G.
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CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

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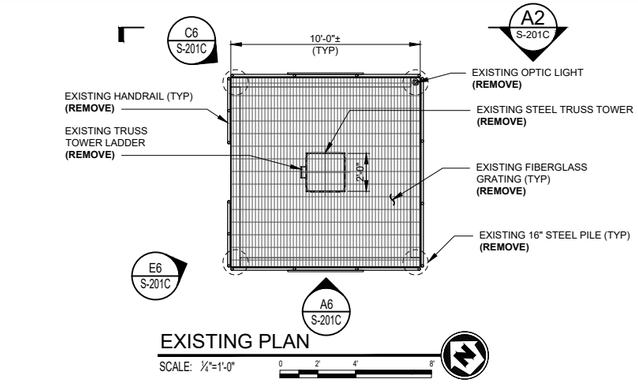
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202B.DWG
SHEET 07 OF 29

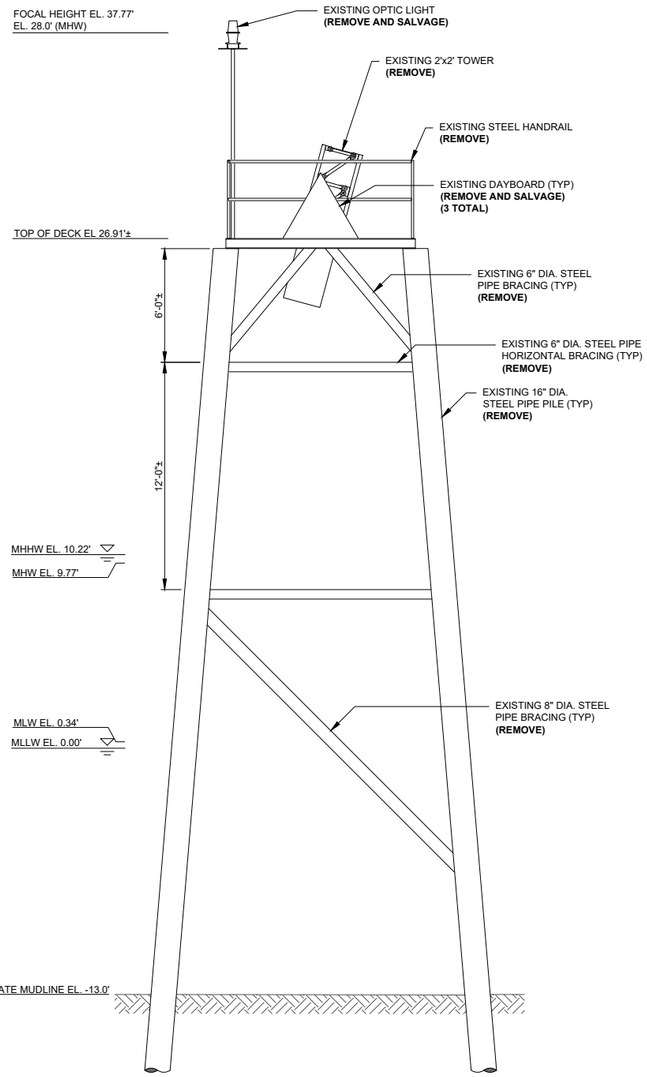
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
BOSTON MAIN CHANNEL LIGHT 5
S-202B



EXISTING PLAN

SCALE: ¼"=1'-0"



A2 EXISTING TOWER SOUTHWEST ELEVATION

SCALE: ¼"=1'-0"

E6 LOOKING EAST

SCALE: NTS

C6 LOOKING SOUTH

SCALE: NTS

A6 LOOKING NORTHEAST

SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL AND DRIVING.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8444525	
NUT ISLAND, MA	FEET
HIGHEST OBSERVED WATER (03/06/2001)	13.04
MEAN HIGHER HIGH WATER	10.22
MEAN HIGH WATER	9.77
MEAN SEA LEVEL	5.17
MEAN TIDE LEVEL	5.06
MEAN LOW WATER	0.34
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/11/2001)	-3.13

LIGHT LIST	
NUMBER	11715
NAME AND LOCATION	WEYMOUTH FORE RIVER CHANNEL LIGHT 16
POSITION	42-16-03.129N 070-56-06.484W
LIGHT CHARACTERISTIC	Fl R2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	28
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

BASE BID

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DW
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201C.DWG
SHEET 08 OF 29

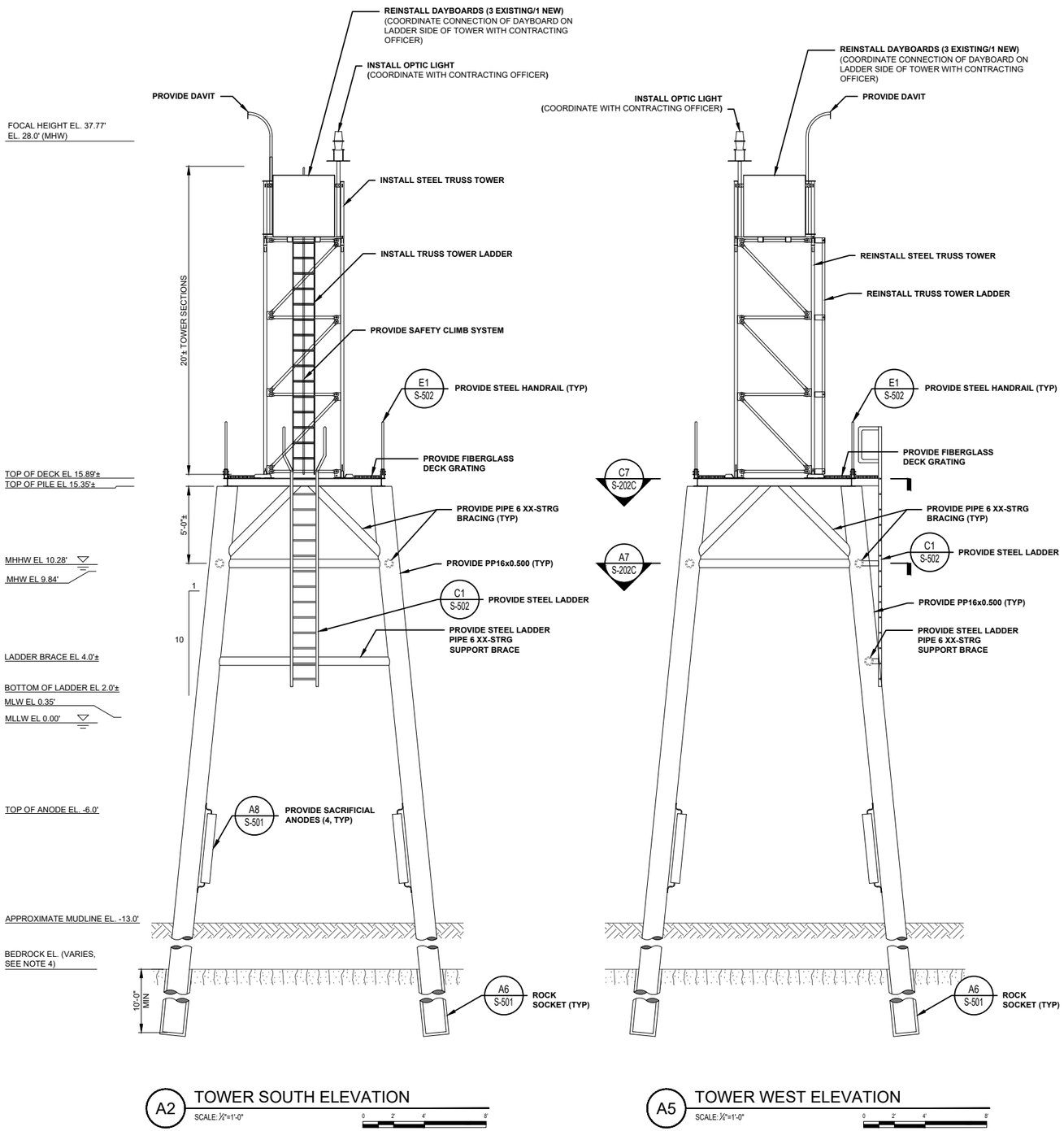
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
WEYMOUTH
FORE RIVER
CHANNEL LT16
S-201C

NOTES:

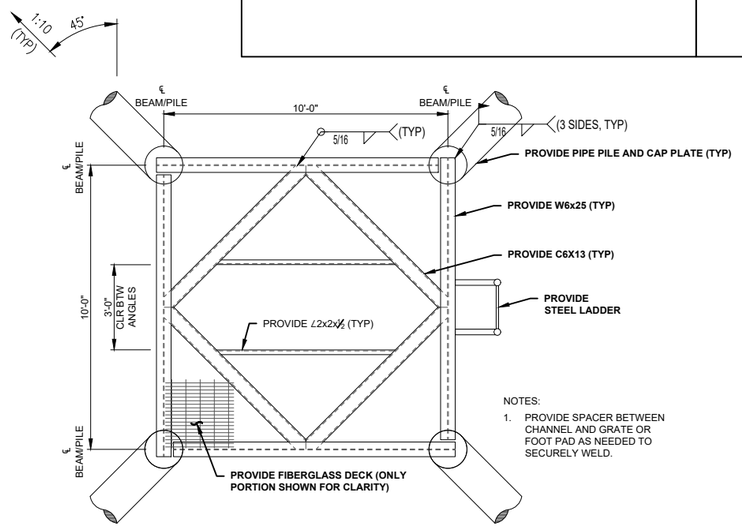
1. FOR TRUSS TOWER, SAFETY CLIMB LADDER, DAVIT, AND OTHER TOWER APPURTENANCES SEE SHEETS R-701, R-702, R-703, AND R-704 OF THIS DRAWING SET.
2. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
3. THE DESIGN INTENT IS FOR THE PLATFORM TO BE FIELD WELDED TO THE PILE CAP PLATES AND THE PILE CAP PLATES FIELD WELDED TO THE PILES. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
4. BEDROCK ELEVATION VARIES. ASSUME 100 FOOT LONG PILES FOR BIDDING PURPOSES.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/31/2022



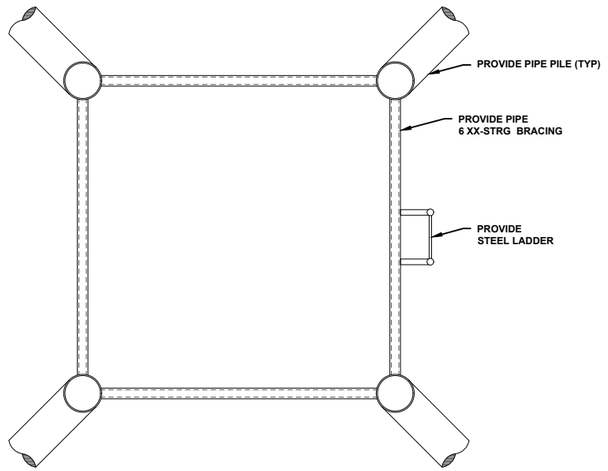
A2 TOWER SOUTH ELEVATION
SCALE: ⅛"=1'-0"

A5 TOWER WEST ELEVATION
SCALE: ⅛"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: ⅜"=1'-0"



A7 TOWER PILE PLAN
SCALE: ⅜"=1'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

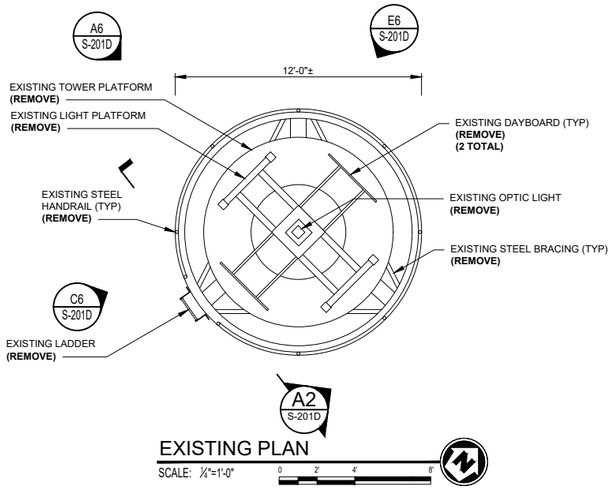
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202C.DWG
SHEET 09 OF 29

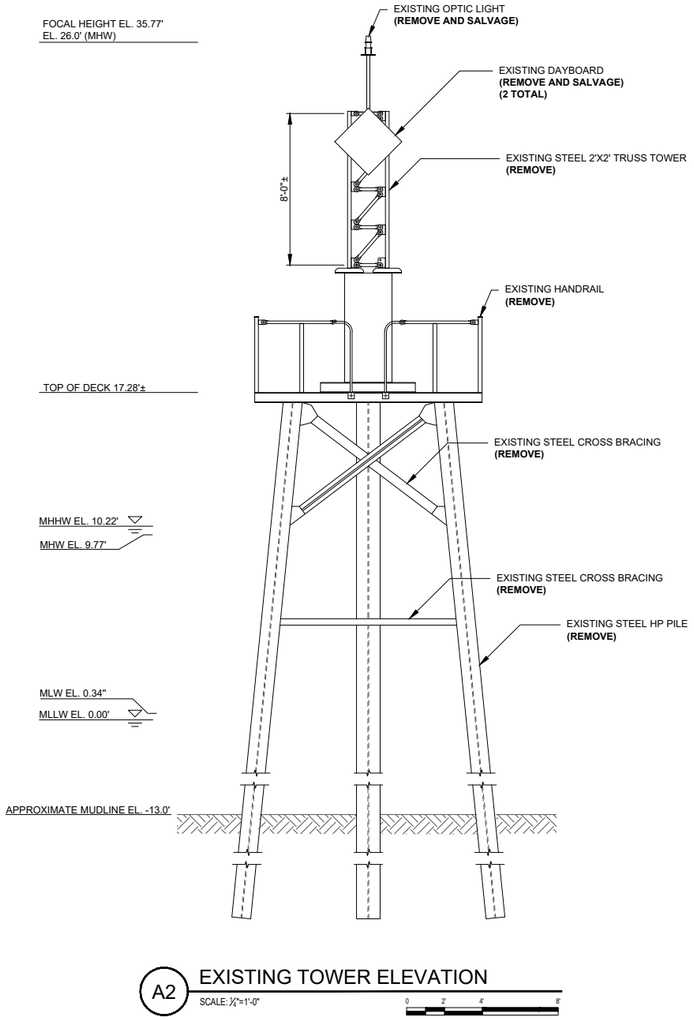
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
WEYMOUTH
FORE RIVER
CHANNEL LT16
S-202C



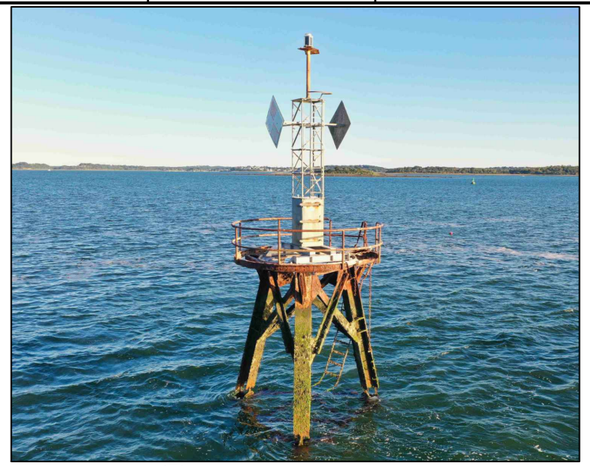
EXISTING PLAN

SCALE: ½"=1'-0"



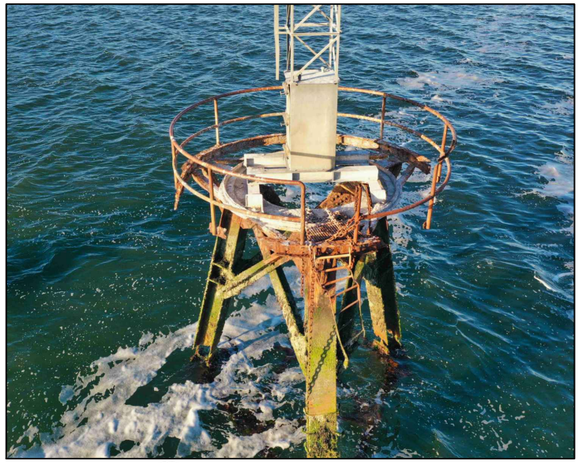
A2 EXISTING TOWER ELEVATION

SCALE: ½"=1'-0"



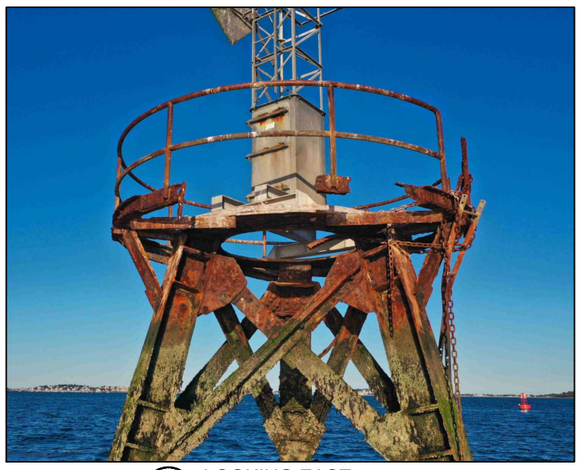
E6 LOOKING SOUTH

SCALE: NTS



C6 LOOKING NORTH

SCALE: NTS



A6 LOOKING EAST

SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEET R-705 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8444525	
NUT ISLAND, MA	FEET
HIGHEST OBSERVED WATER (03/06/2001)	13.04
MEAN HIGHER HIGH WATER	10.22
MEAN HIGH WATER	9.77
MEAN SEA LEVEL	5.17
MEAN TIDE LEVEL	5.06
MEAN LOW WATER	0.34
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/11/2001)	-3.13

LIGHT LIST	
NUMBER	11675
NAME AND LOCATION	HARRY'S ROCK LIGHT
POSITION	42-17-13.291N 070-55-54.280W
LIGHT CHARACTERISTIC	Fl W4s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	26
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DRAWN BY:
MM/DM
DESIGNED BY:
TJD
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201D.DWG
SHEET 10 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
EXISTING / DEMOLITION

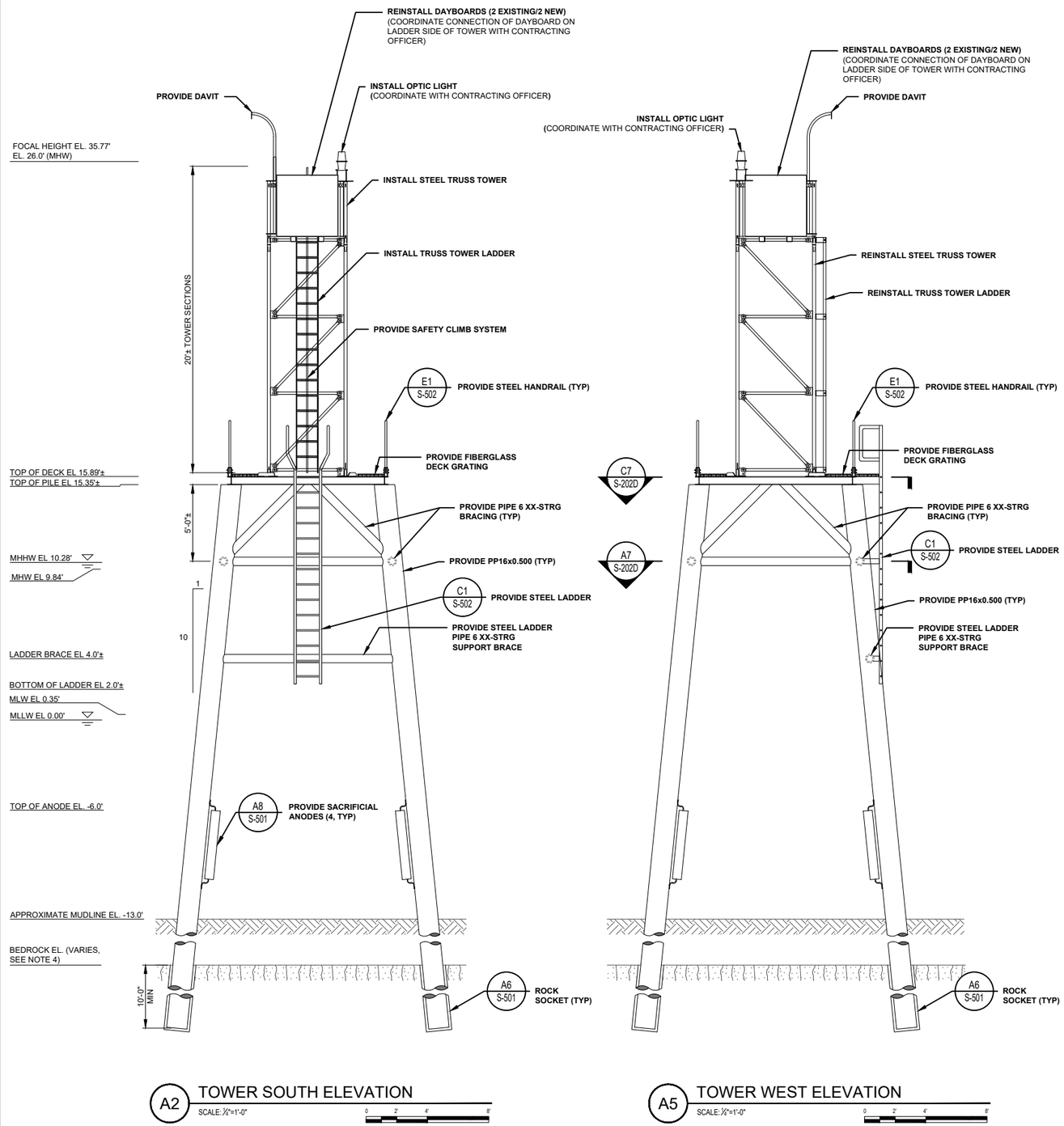
SHEET ID
HARRY'S
ROCK LIGHT
HR
S-201D

BASE BID

NOTES:

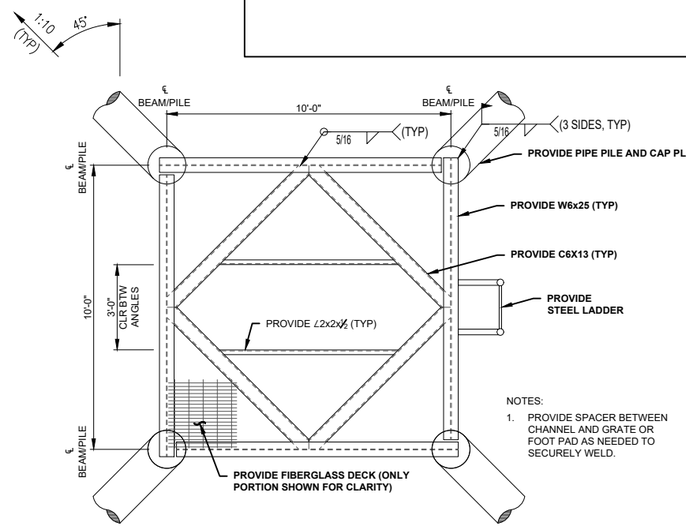
1. FOR TRUSS TOWER, SAFETY CLIMB LADDER, DAVIT, AND OTHER TOWER APPURTENANCES SEE SHEETS R-701, R-702, R-703, AND R-704 OF THIS DRAWING SET.
2. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
3. THE DESIGN INTENT IS FOR THE PLATFORM TO BE FIELD WELDED TO THE PILE CAP PLATES AND THE PILE CAP PLATES FIELD WELDED TO THE PILES. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
4. BEDROCK ELEVATION VARIES. ASSUME 100 FOOT LONG PILES FOR BIDDING PURPOSES.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/31/2022



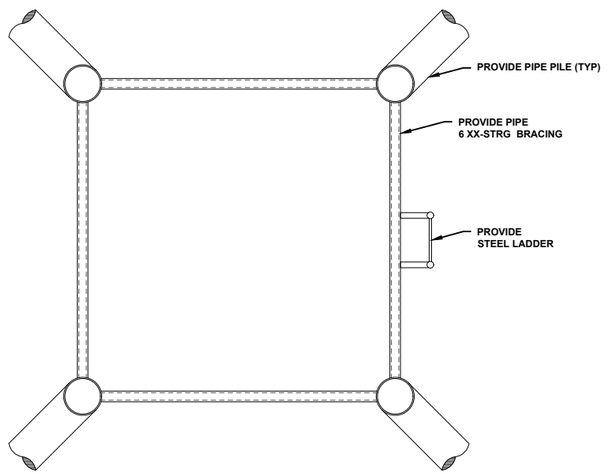
A2 TOWER SOUTH ELEVATION
SCALE: ⅛"=1'-0"

A5 TOWER WEST ELEVATION
SCALE: ⅛"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: ⅜"=1'-0"



A7 TOWER PILE PLAN
SCALE: ⅜"=1'-0"

BASE BID

U.S.C.G. CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

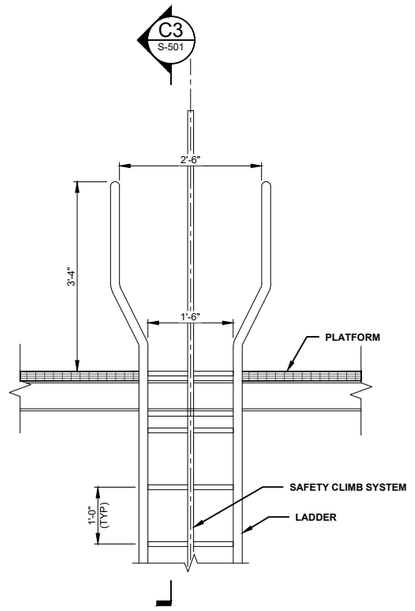
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

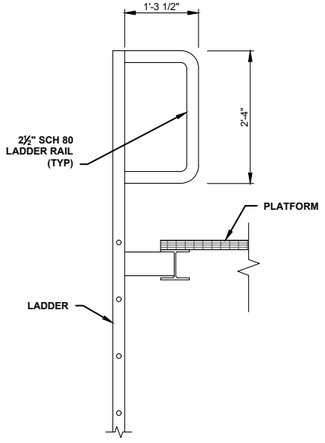
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202D.DWG
SHEET 11 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
GENERAL ARRANGEMENT

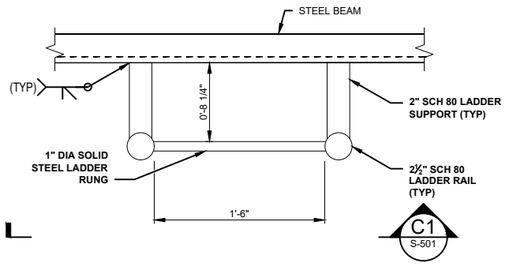
SHEET ID
HARRY'S ROCK LIGHT HR
S-202D



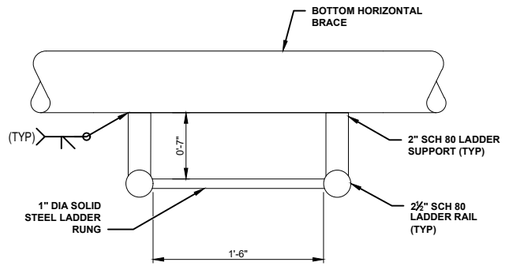
C1 LADDER WALK THROUGH DETAIL
SCALE: ¾"=1'-0"



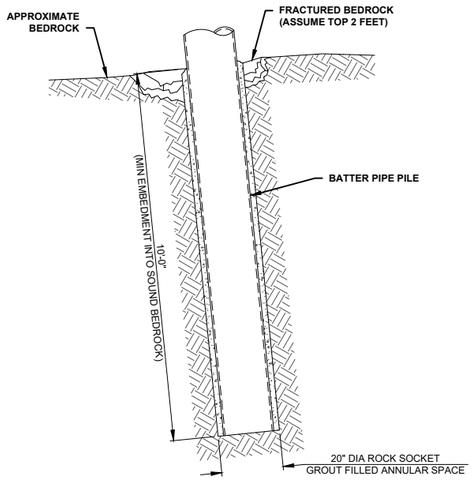
C3 LADDER SECTION
SCALE: ¾"=1'-0"



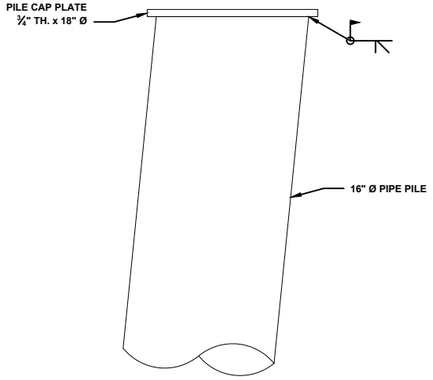
A1 LADDER CONNECTION AT PLATFORM
SCALE: ½"=1'-0"



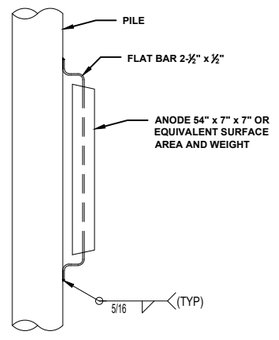
A3 LADDER CONNECTION AT BOTTOM BRACE
SCALE: ½"=1'-0"



A6 ROCK SOCKET DETAIL
SCALE: ½"=1'-0"



C8 PILE CAP PLATE CONNECTION
SCALE: 1½"=1'-0"



A8 SACRIFICIAL ANODE DETAIL
SCALE: ½"=1'-0"

BASE BID

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

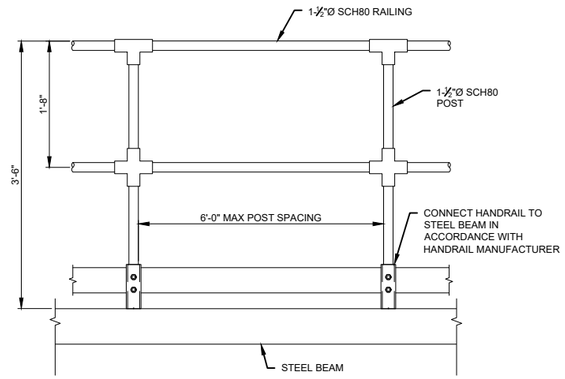
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
LT MATTHEW R. FANN, PE
DRAWN BY:
MW/DK
EDITED BY:
TJD
CHECKED BY:
KFR

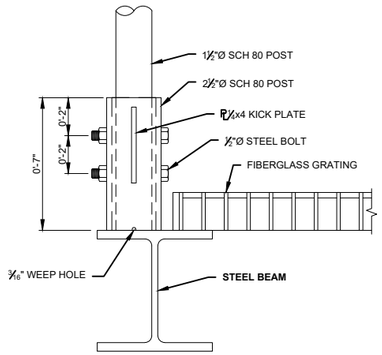
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P-13494020
USCG FILENAME
P13494020S-501.DWG
SHEET 12 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
-
MA
STRUCTURAL
GENERAL DETAILS - 1

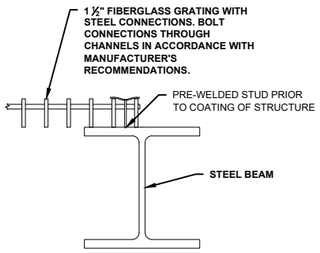
SHEET ID
B, C, D
S-501



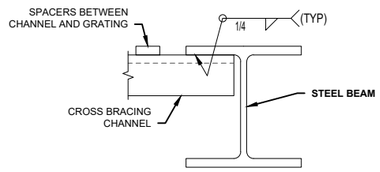
E1 HANDRAIL DETAIL
SCALE: 1"=1'-0"



E4 HANDRAIL CONNECTION
SCALE: 3"=1'-0"



C1 GRATING CONNECTION
SCALE: 3"=1'-0"



C1 GRATING CONNECTION
SCALE: 3"=1'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF MASSACHUSETTS
01/11/2022

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

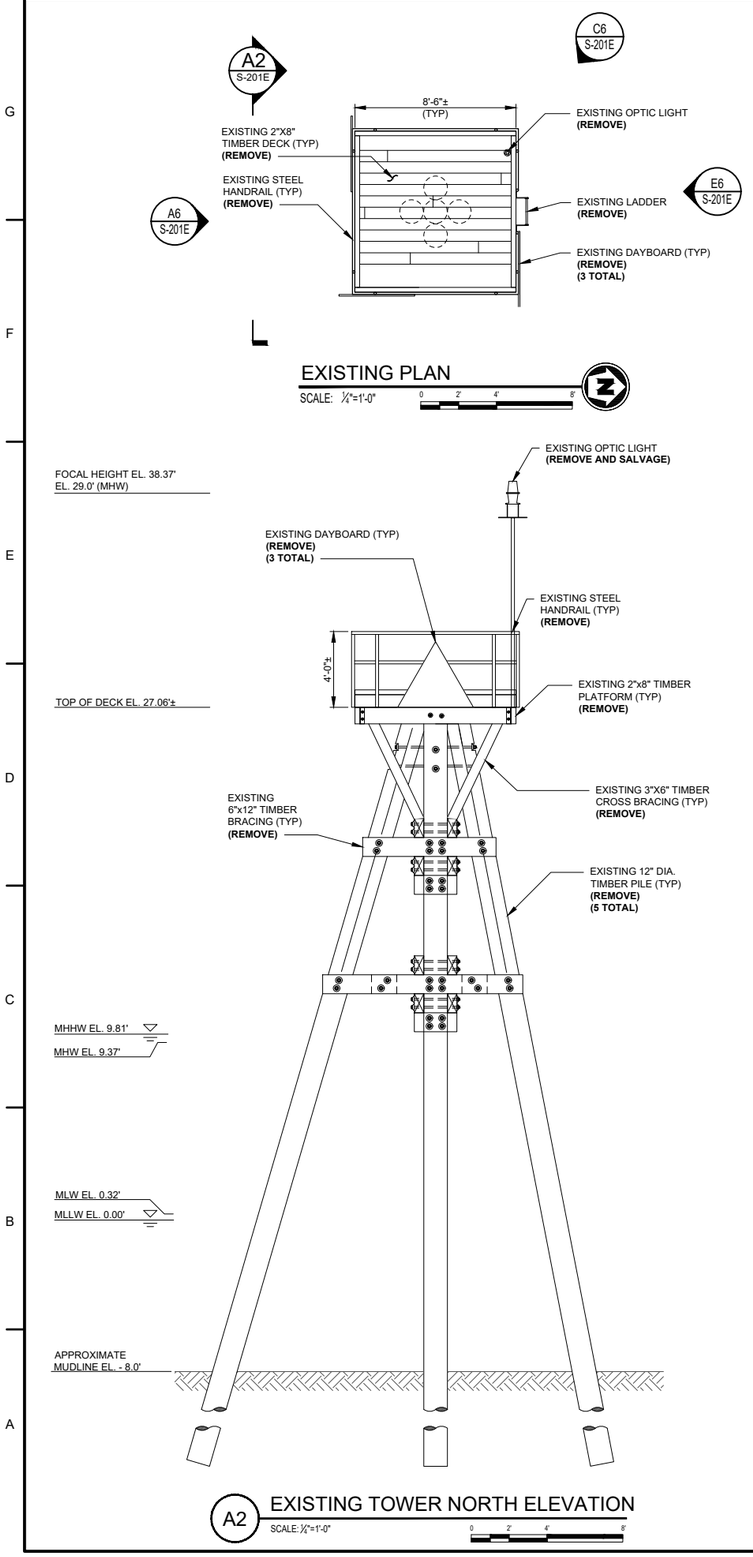
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
MW/AM
DRAWN BY:
MW/AM
EDITED BY:
TJD
CHECKED BY:
KFR

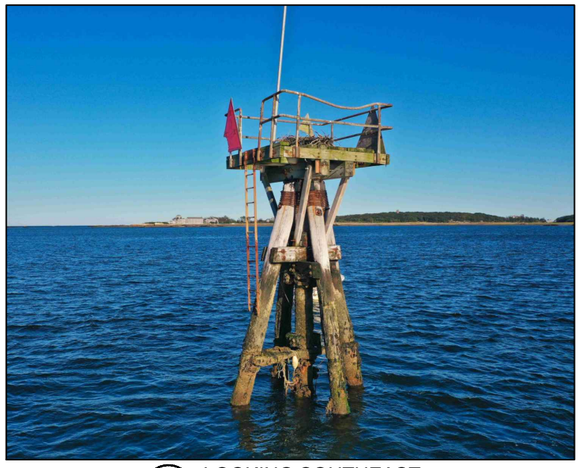
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-502.DWG
SHEET 13 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
-
MA
STRUCTURAL
GENERAL DETAILS - 2

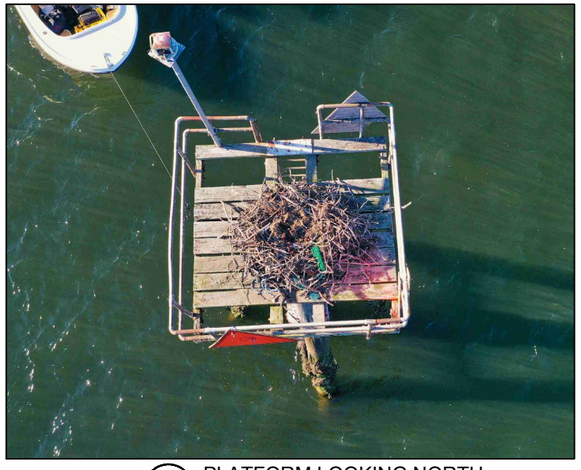
SHEET ID
B, C, D
S-502



E6 LOOKING SOUTH
SCALE: NTS



C6 LOOKING SOUTHEAST
SCALE: NTS



A6 PLATFORM LOOKING NORTH
SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT TIMBER FOUNDATION (PILES, BRACING, BEAMS) AND UP TO 5 ABANDONED TIMBER PILES IN THEIR ENTIRETY.
2. THE TIMBER PILES, BRACING AND BEAMS ARE ASSUMED TO CONTAIN CREOSOTE. ALL MATERIALS THAT ARE ASSUMED TO BE CONTAMINATED MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL AND DRIVING.
4. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8444162	
BOSTON LIGHT, MA	FEET
HIGHEST OBSERVED WATER (02/21/2004)	11.79
MEAN HIGHER HIGH WATER	9.81
MEAN HIGH WATER	9.37
MEAN SEA LEVEL	4.91
MEAN TIDE LEVEL	4.85
MEAN LOW WATER	0.32
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/12/2001)	-2.85

LIGHT LIST	
NUMBER	12185
NAME AND LOCATION	COHASSET CHANNEL LIGHT 8
POSITION	42-15-05.497N 070-47-00.665W
LIGHT CHARACTERISTIC	Fl R2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	29
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON TRIPOD
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53596
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

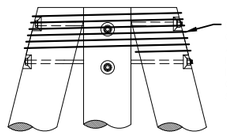
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DRAWN BY:
MW/DM
DESIGNED BY:
TJD
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201E.DWG
SHEET 14 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
EXISTING / DEMOLITION

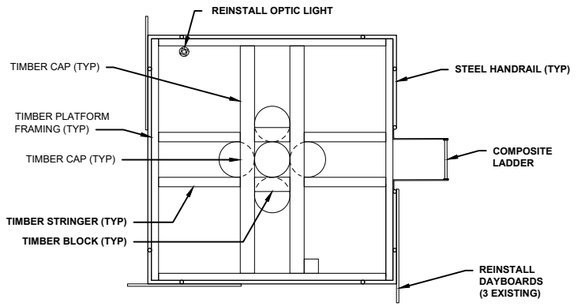
SHEET ID
COHASSET
CHANNEL
LIGHT 8
S-201E

BASE BID



TYPICAL PILE WRAP DETAIL

SCALE: ½"=1'-0" 0 1' 2' 4'



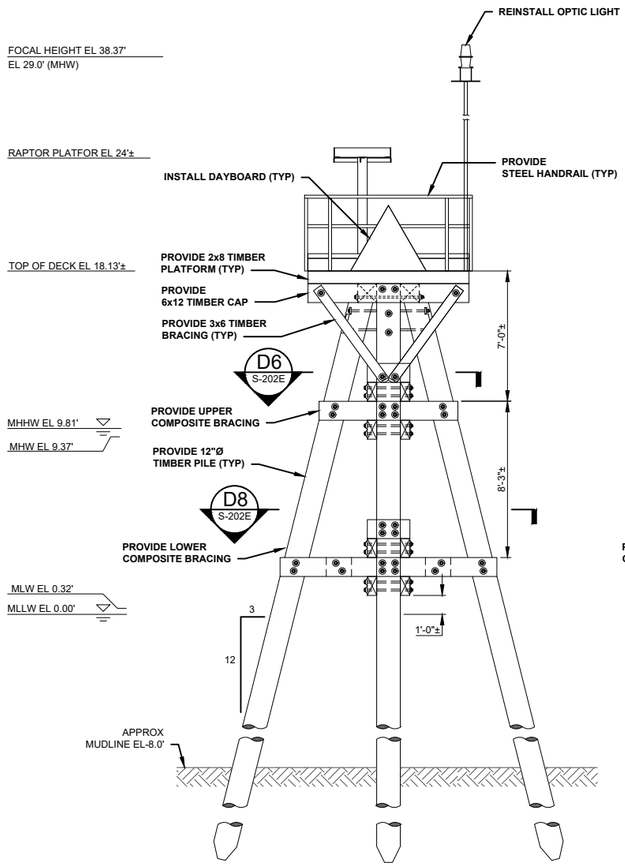
F4 UPPER BRACING

SCALE: ½"=1'-0" 0 2' 4' 6'

NOTES:

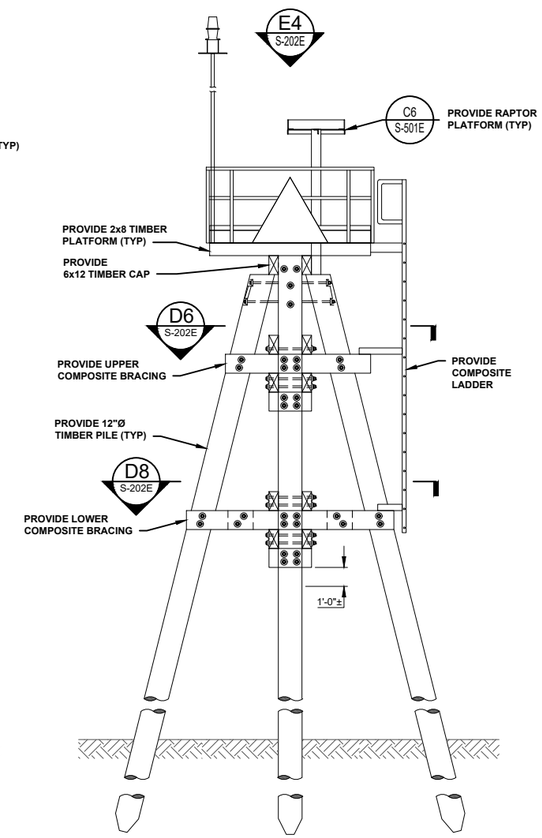
1. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
2. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
3. ALL MATERIAL SHALL BE MARINE HDPE PLASTIC UNLESS OTHERWISE NOTED.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/31/2022



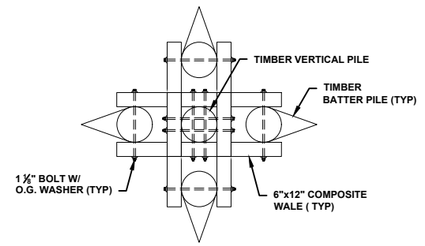
A2 TOWER ELEVATION

SCALE: ½"=1'-0" 0 2' 4' 8'



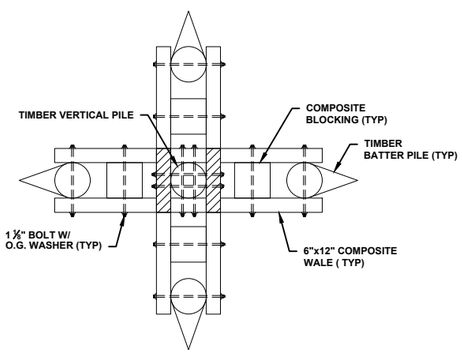
A4 TOWER ELEVATION

SCALE: ½"=1'-0" 0 2' 4' 8'



C6 UPPER BRACING

SCALE: ½"=1'-0" 0 2' 4' 6'



A6 LOWER BRACING

SCALE: ½"=1'-0" 0 2' 4' 6'

BASE BID

U.S.C.G. CE
U.S. COAST GUARD CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

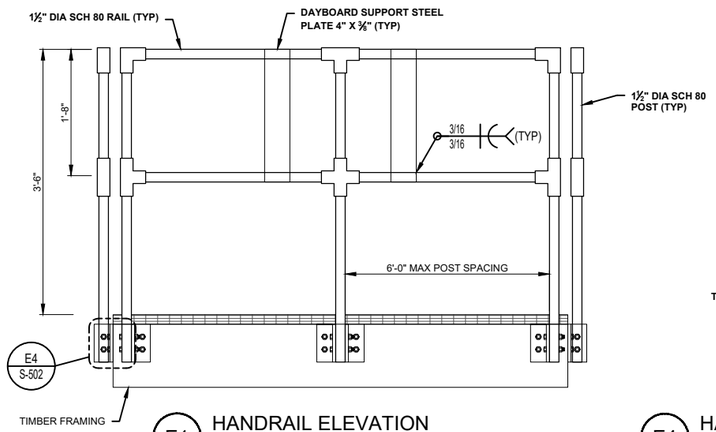
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: T.UD
DRAWN BY: MK/DM
EDITED BY: T.UD
CHECKED BY: KFR

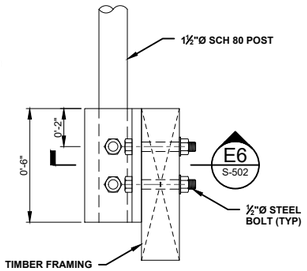
USCG PROJECT NO. 13494020
USCG DRAWING NO. P13494020
USCG FILENAME P13494020S-202E.DWG
SHEET 15 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
GENERAL ARRANGEMENT

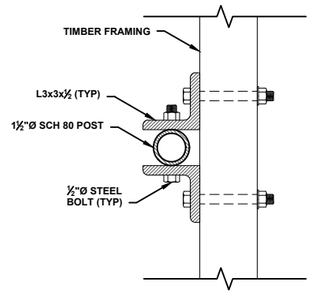
SHEET ID
COHASSET CHANNEL LIGHT 8
S-202E



E1 HANDRAIL ELEVATION
SCALE: 1"=1'-0"



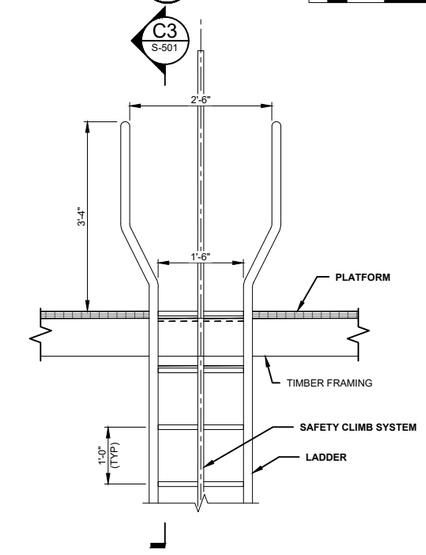
E4 HANDRAIL CONNECTION
SCALE: 3"=1'-0"



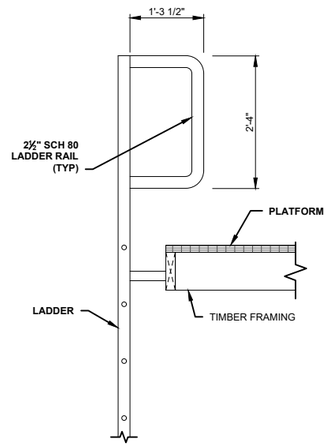
E6 HANDRAIL CONNECTION
SCALE: 3"=1'-0"

NOTES:

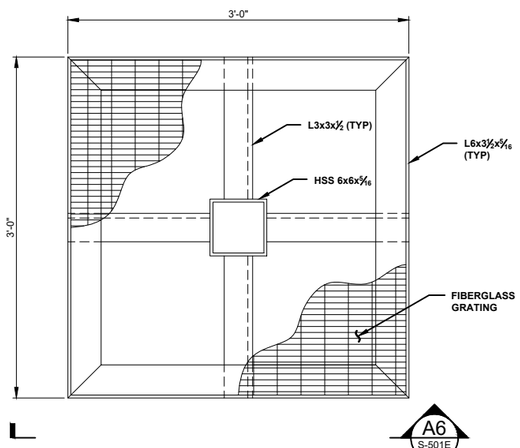
1. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
2. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
3. ALL MATERIAL SHALL BE MARINE HDPE PLASTIC UNLESS OTHERWISE NOTED.



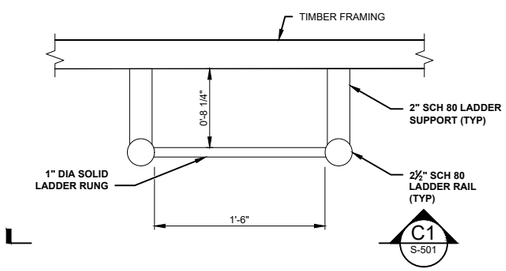
C1 LADDER WALK THROUGH DETAIL
SCALE: ¾"=1'-0"



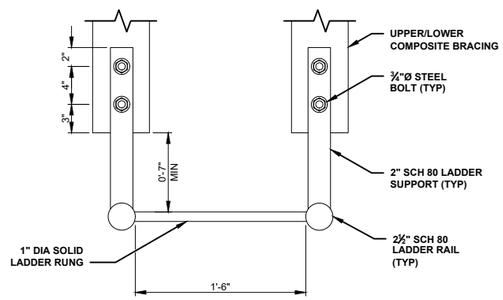
C3 LADDER SECTION
SCALE: ¾"=1'-0"



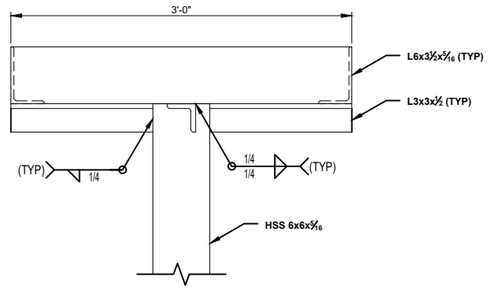
C6 RAPTOR PLATFORM PLAN
SCALE: 1½"=1'-0"



A1 LADDER CONNECTION AT PLATFORM
SCALE: 1½"=1'-0"



A3 LADDER CONNECTION AT BOTTOM BRACE
SCALE: 1½"=1'-0"



A6 RAPTOR PLATFORM ELEVATION
SCALE: 1½"=1'-0"

BASE BID

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

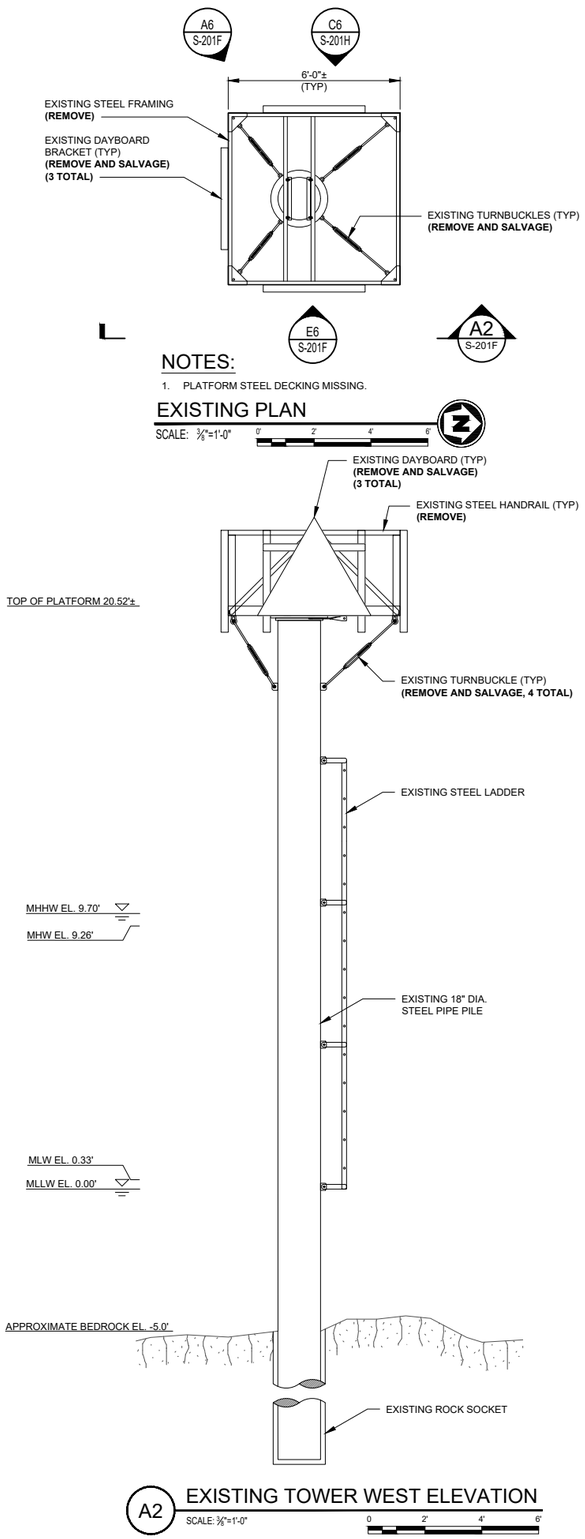
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202E.DWG
SHEET 16 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
GENERAL DETAILS

SHEET ID
COHASSET CHANNEL LIGHT 8
S-501E



A2 EXISTING TOWER WEST ELEVATION
SCALE: 3/8"=1'-0"

E6 LOOKING WEST
SCALE: NTS

C6 LOOKING EAST
SCALE: NTS

A6 PLATFORM LOOKING NORTHEAST
SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEETS R-706 AND R-707 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	9990
NAME AND LOCATION	WHALEBACK DAYBEACON 8
POSITION	42-32-54.760N 070-47-04.641W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

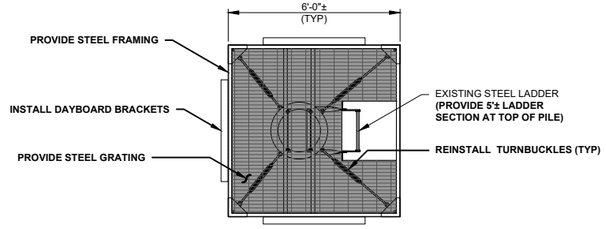
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DW
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201F.DWG
SHEET 17 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MANCHESTER MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
WHALEBACK DAYBEACON 8
S-201F

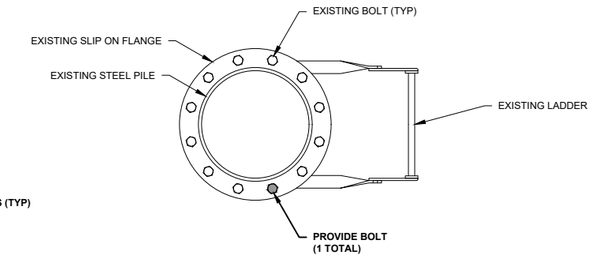
BID OPTION #1



A2 S-202F

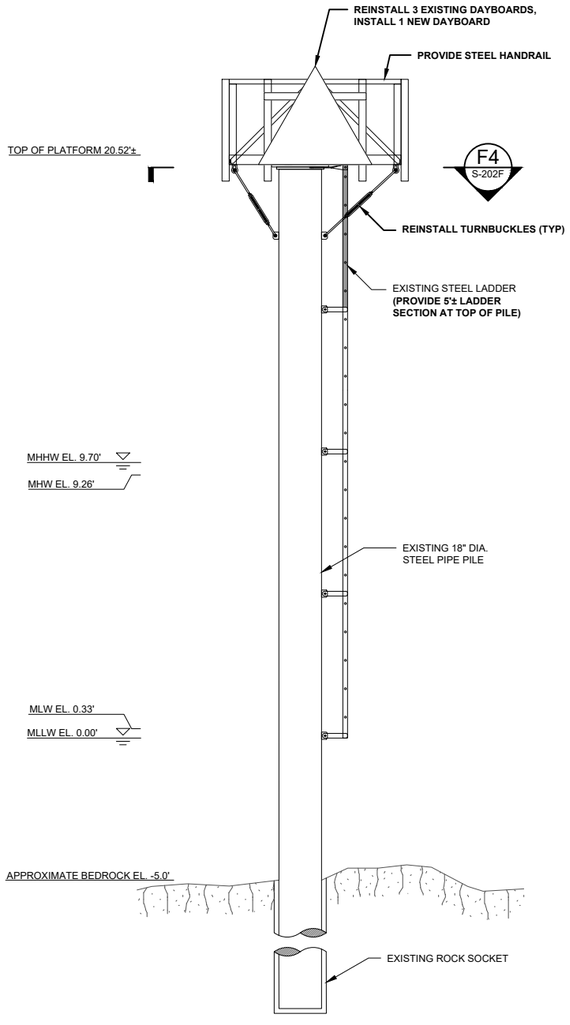
PLAN

SCALE: 3/8"=1'-0"



F4 FLANGE BOLT DETAIL

SCALE: 1"=1'-0"



A2 TOWER ELEVATION

SCALE: 3/8"=1'-0"

NOTES:

1. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

BID OPTION #1

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN

PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059

CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886

PROJECT ENGINEER:
LT MATTHEW R. T'ANN, PE

DESIGNED BY: T.J.D.
DRAWN BY: MW/DM
EDITED BY: T.J.D.
CHECKED BY: KFR

USCG PROJECT NO.
13494020

USCG DRAWING NO.
P13494020

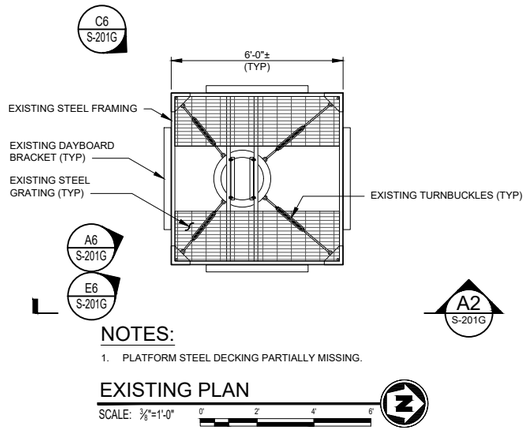
USCG FILENAME
P13494020S-202F.DWG

SHEET 18 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MANCHESTER MA

STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
WHALEBACK
DAYBEACON 8
S-202F

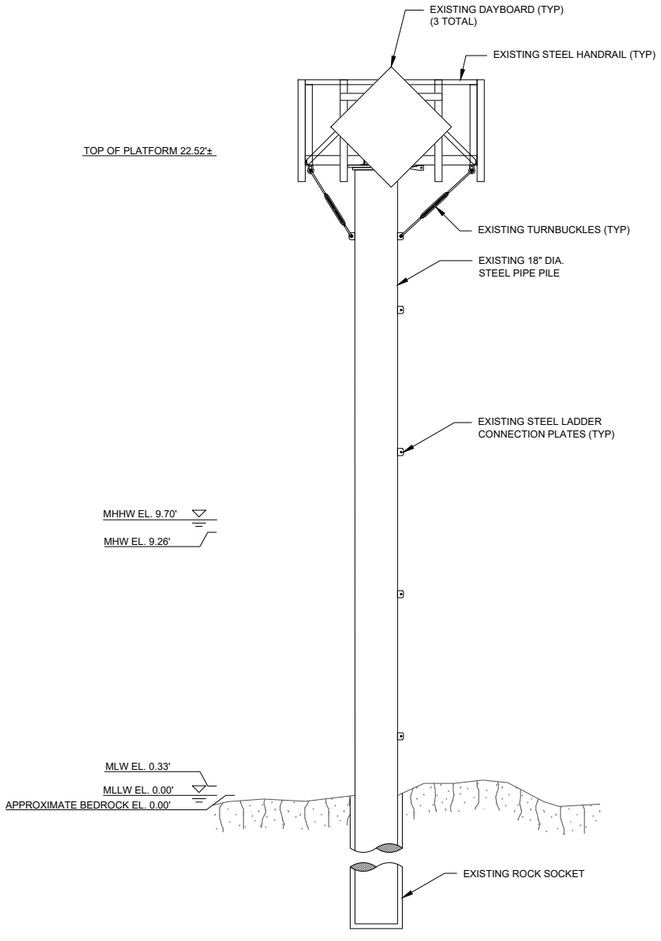


NOTES:

1. PLATFORM STEEL DECKING PARTIALLY MISSING.

EXISTING PLAN

SCALE: 3/8"=1'-0"

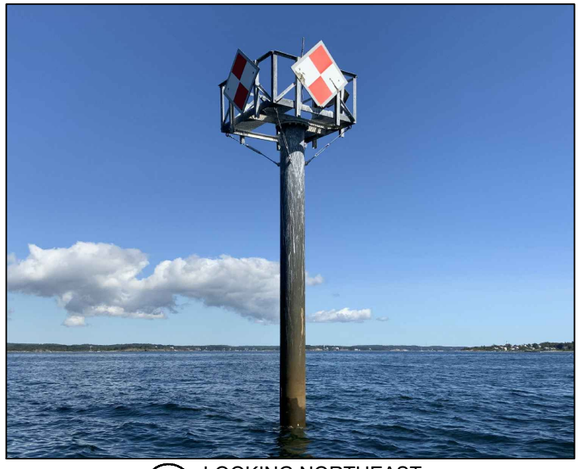


A2 EXISTING TOWER WEST ELEVATION

SCALE: 3/8"=1'-0"

E6 LOOKING NORTHWEST

SCALE: NTS



C6 LOOKING NORTHEAST

SCALE: NTS

A6 PLATFORM LOOKING NORTHWEST

SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
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STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	10405
NAME AND LOCATION	BRIMBLES DAYBEACON
POSITION	42-31-16.576N 070-48-28.608W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	28
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

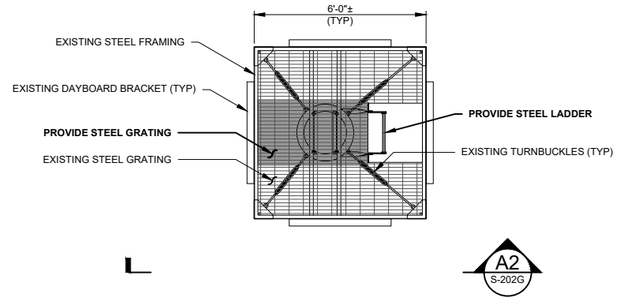
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
LTJG
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201G.DWG
SHEET 19 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
SALEM MA
STRUCTURAL
EXISTING / DEMOLITION

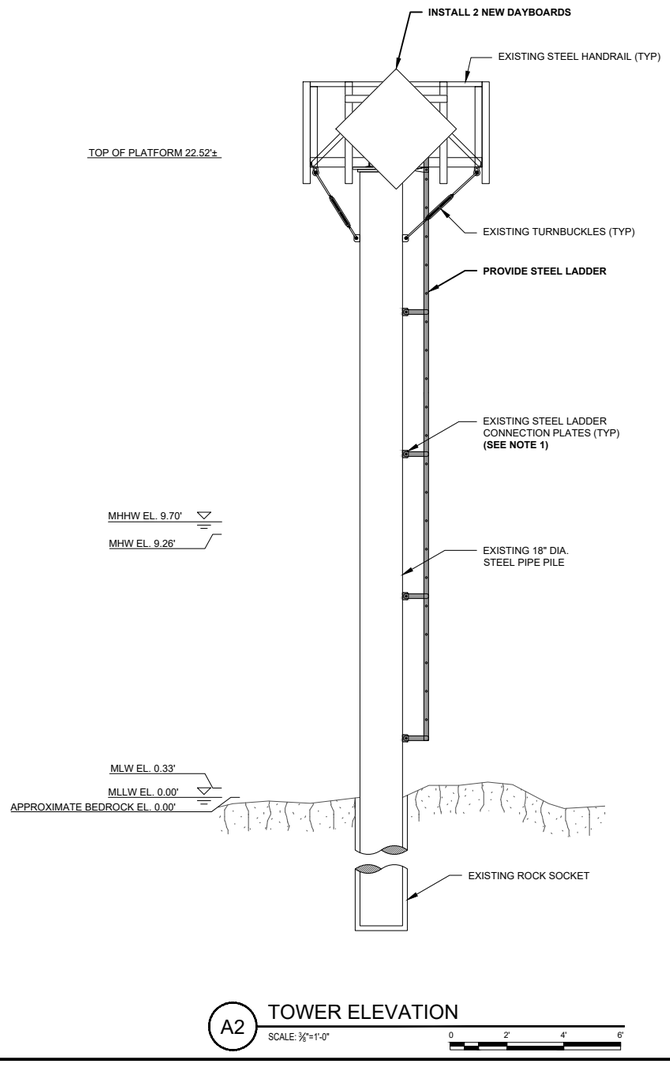
SHEET ID
BRIMBLES DAYBEACON
S-201G

BID OPTION #2



A2
S-202G

PLAN
SCALE: 3/8"=1'-0"



A2 TOWER ELEVATION
SCALE: 3/8"=1'-0"

NOTES:

1. EXISTING STEEL LADDER CONNECTION PLATES ARE BENT. STRAIGHTEN CONNECTION PLATES PRIOR TO INSTALLATION OF NEW LADDER .
2. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

BID OPTION #2

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

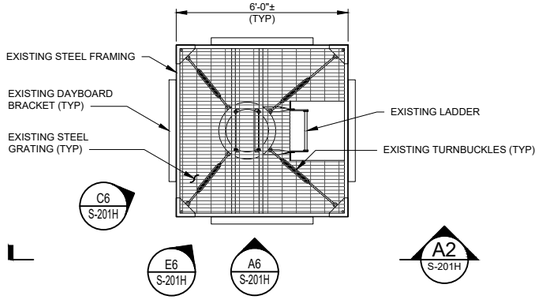
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: T.J.D.
DRAWN BY: MM/DM
EDITED BY: T.J.D.
CHECKED BY: KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202G.DWG
SHEET 20 OF 29

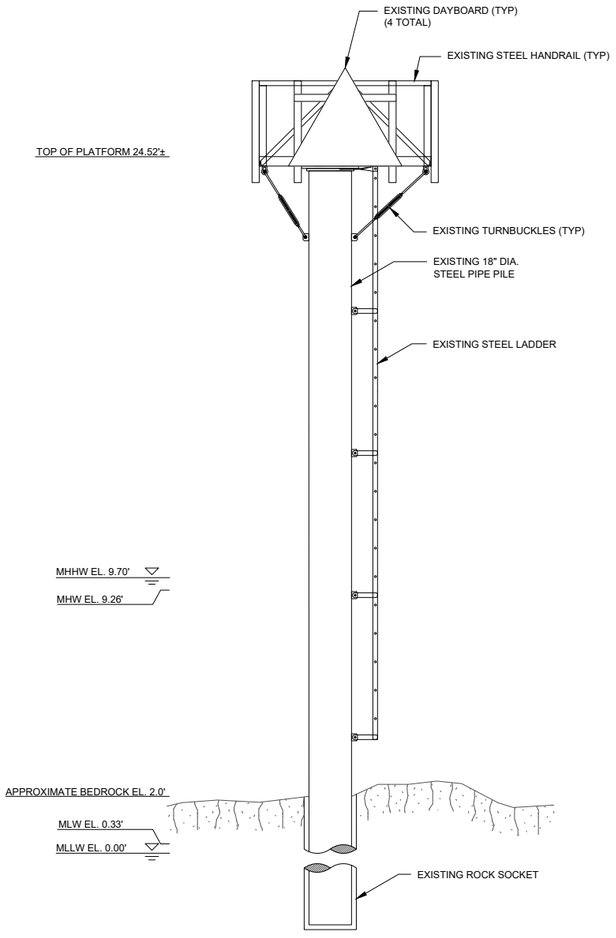
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
SALEM MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
BRIMBLES
DAYBEACON
S-202G



EXISTING PLAN

SCALE: 3/8"=1'-0"

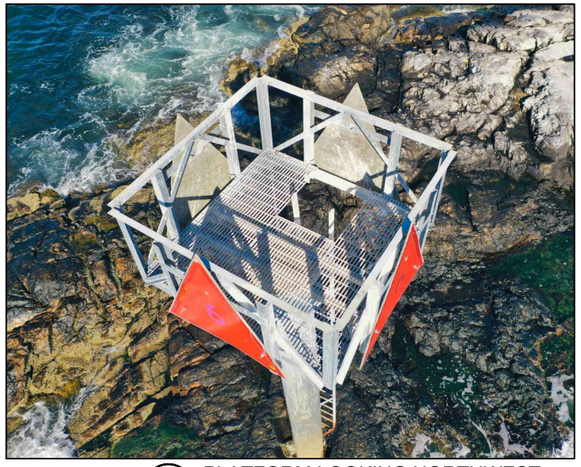


A2 EXISTING TOWER WEST ELEVATION

SCALE: 3/8"=1'-0"

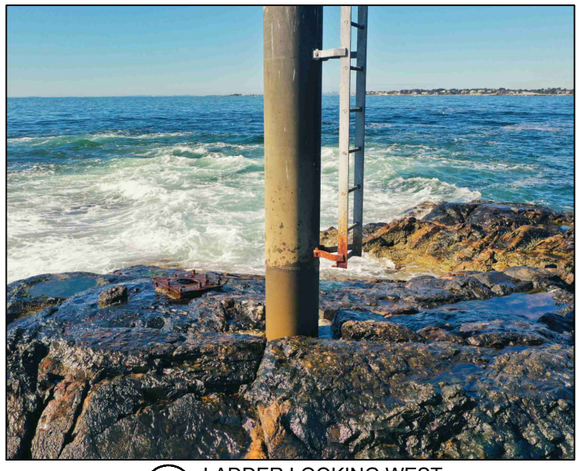
E6 LOOKING NORTHWEST

SCALE: NTS



C6 PLATFORM LOOKING NORTHWEST

SCALE: NTS



A6 LADDER LOOKING WEST

SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEETS R-706 AND R-707 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	10395
NAME AND LOCATION	SATAN ROCK DAYBEACON 6
POSITION	42-30-36.898N 070-48-01.536W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/12/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

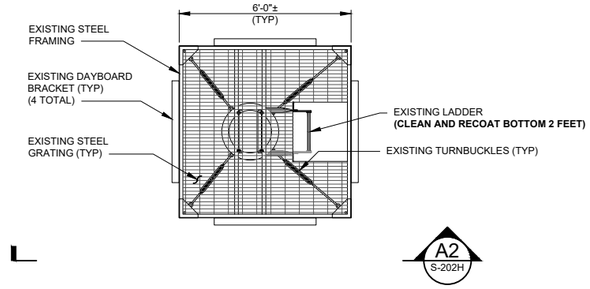
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
T.J.D.
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201H.DWG
SHEET 21 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MARBLEHEAD MA
STRUCTURAL
EXISTING / DEMOLITION

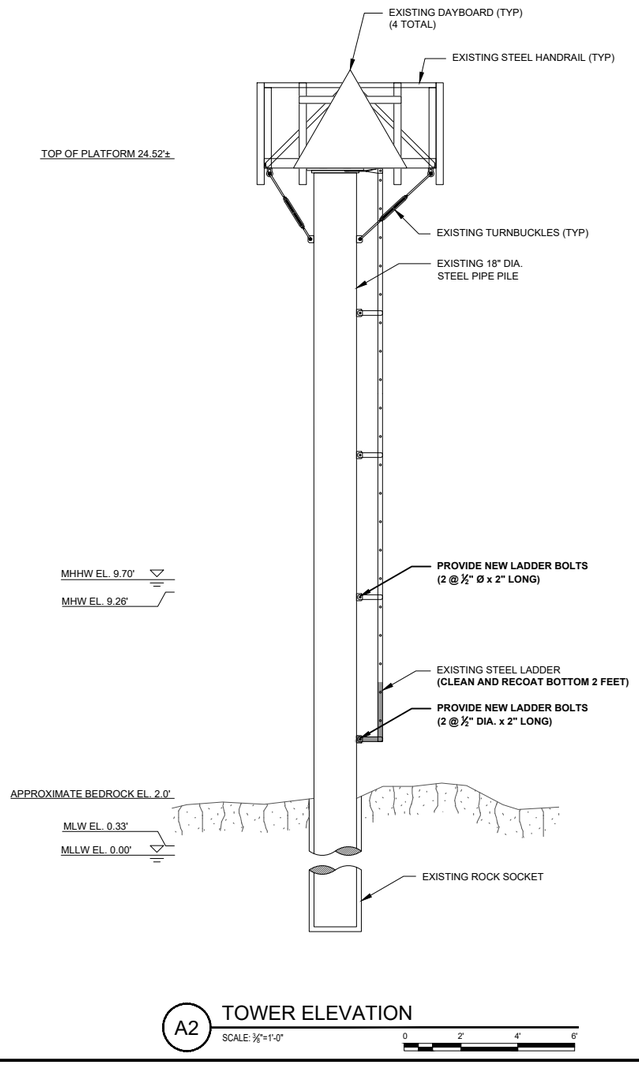
SHEET ID
SATAN ROCK DAYBEACON 6
S-201H

BID OPTION #3



A2
S-202H

PLAN
SCALE: 3/8"=1'-0"



A2 TOWER ELEVATION
SCALE: 3/8"=1'-0"

NOTES:

1. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

BID OPTION #3

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

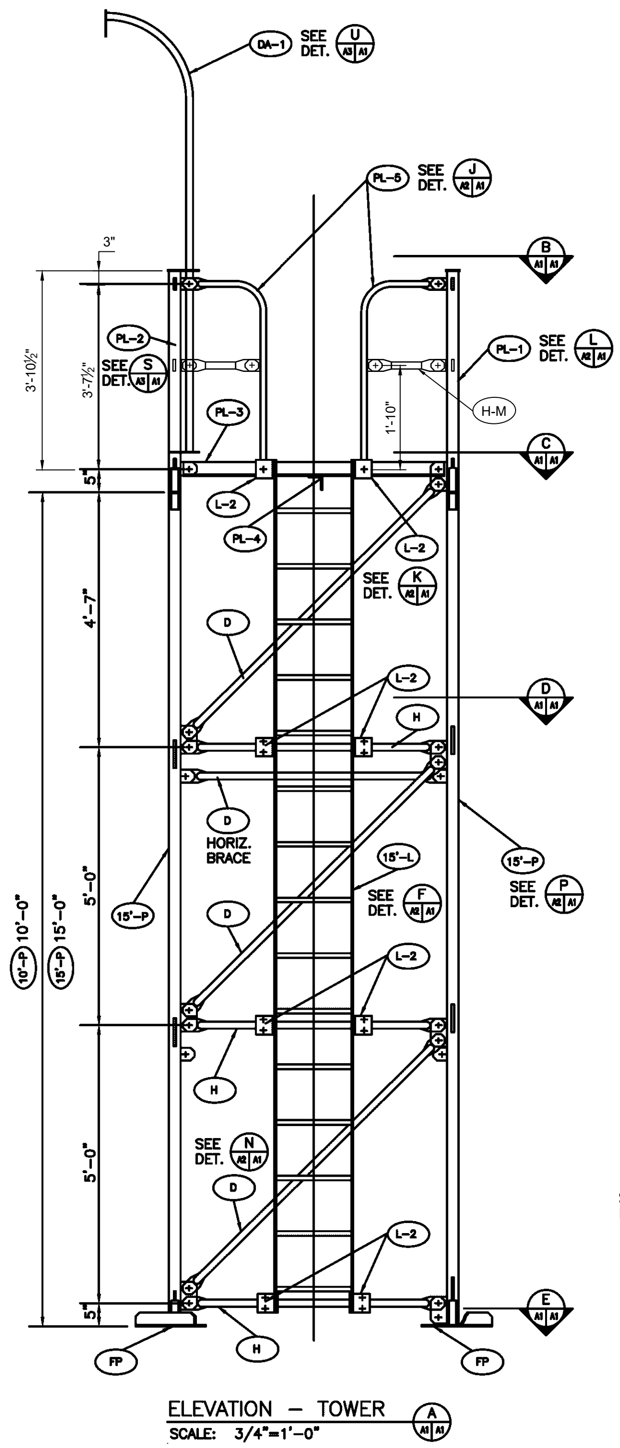
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
LT MATTHEW R. FANN, PE
DRAWN BY:
MWM
EDITED BY:
TJD
CHECKED BY:
KFR

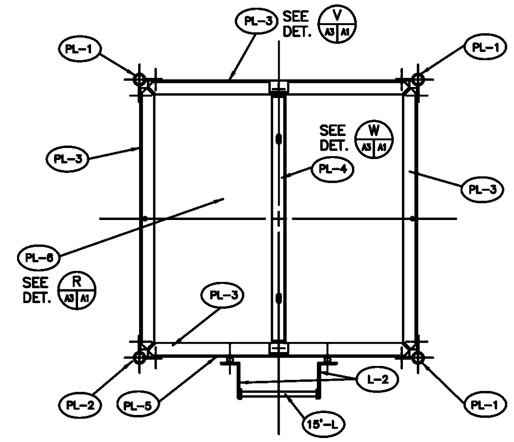
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202H.DWG
SHEET 22 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MARBLEHEAD MA
STRUCTURAL
GENERAL ARRANGEMENT

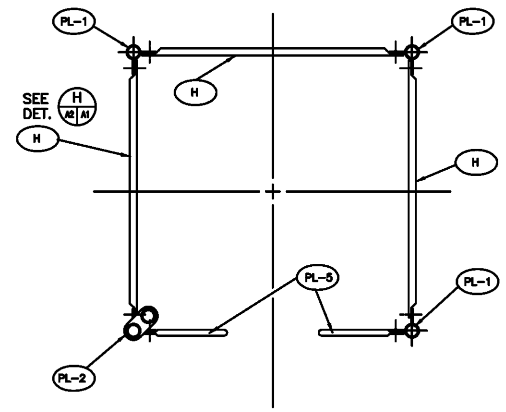
SHEET ID
SATAN ROCK
DAYBEACON 6
S-202H



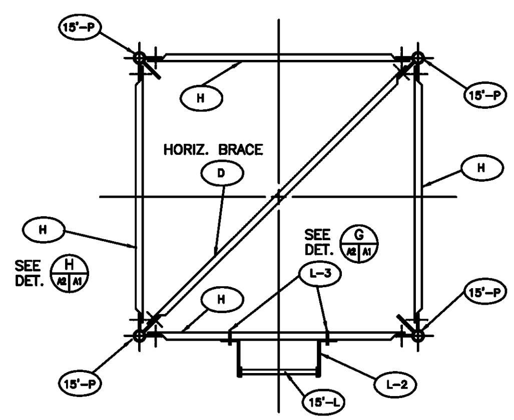
ELEVATION – TOWER (A)
SCALE: 3/4"=1'-0"
15 FT. TOWER SHOWN. 10 FT. AND OTHER HEIGHT SIMILAR.



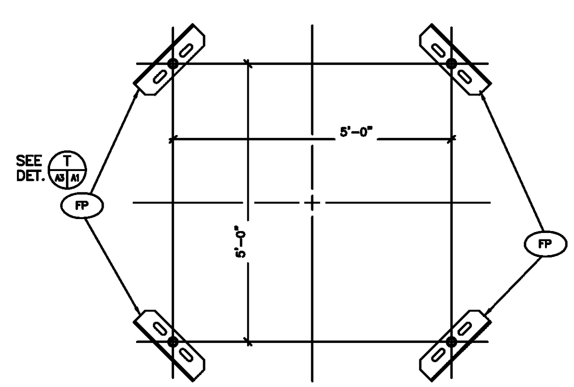
PLAN VIEW – PLATFORM (C)
SCALE: 3/4"=1'-0"



PLAN VIEW – HANDRAIL (B)
SCALE: 3/4"=1'-0"
NOTE: MIDRAIL SIMILAR



PLAN VIEW – HORIZONTAL BASE (D)
SCALE: 3/4"=1'-0"



PLAN VIEW – BASE (E)
SCALE: 3/4"=1'-0"

LIST OF MATERIAL–FABRICATION

TOWER ASSEMBLY (10 FT.)

SYM.	QTY.	NAME	DESCRIPTION	REMARKS
10'-P	4	POST	2" XS PIPE	W/ BOLTING TABS
H	8	HORIZONTAL	1 1/2" XS PIPE	SEE NOTE 6
D	10	DIAGONAL	1 1/2" XS PIPE	INC. HORIZ. BRACE
10'-L	1	LADDER	2"x3/8" FLAT BAR	W/ 1" DIA. BAR
L-2	4	LADDER CLIP	8"x4"x3/8" ANGLE	
L-3	4	U-BOLT	3/8" DIA. BAR	W/ LOCKNUTS & WASHERS (4)
B-1	48	BOLT	3/4"x2" LG.	W/ LOCKNUT & WASHER (4)
B-2	3	BOLT	3/4"x2 1/2" LG.	W/ LOCKNUT & WASHER (4)
B-3	9	BOLT	3/4"x3 3/4" LG.	W/ LOCKNUT & WASHER (4)

TOWER ASSEMBLY (15 FT.)

SYM.	QTY.	NAME	DESCRIPTION	REMARKS
15'-P	4	POST	2" XS PIPE	W/ BOLTING TABS
H	12	HORIZONTAL	1 1/2" XS PIPE	
D	14	DIAGONAL	1 1/2" XS PIPE	INC. HORIZ. BRACE
15'-L	1	LADDER	2"x3/8" FLAT BAR	W/ 1" DIA. BAR
L-2	6	LADDER CLIP	8"x4"x3/8" ANGLE	
L-3	6	U-BOLT	3/8" DIA. BAR	W/ LOCKNUTS & WASHERS (4)
B-1	70	BOLT	3/4"x2" LG.	W/ LOCKNUT & WASHER (4)
B-2	3	BOLT	3/4"x2 1/2" LG.	W/ LOCKNUT & WASHER (4)
B-3	9	BOLT	3/4"x3 3/4" LG.	W/ LOCKNUT & WASHER (4)

PLATFORM ASSEMBLY

SYM.	QTY.	NAME	DESCRIPTION	REMARKS
PL-1	3	CORNER POST	2" XS PIPE	W/ BOLTING TABS
PL-2	1	DAVIT CORNER POST	2" XS PIPE	W/ BOLT'G TABS & DAVIT TABS
PL-3	4	STRINGER	3"x3"x5/16" ANGLE	
PL-4	1	CENTER SUPPORT	3"x3"x5/16" ANGLE	W/ BOLTING PLATE
PL-5	2	RAILING	1 1/4" XS PIPE	
(1) PL-6	2	GRATING	OPEN STEEL GRATING	SEE NOTE 8
H	6	HORIZONTAL	1 1/2" XS PIPE	HANDRAIL AND MIDRAIL
L-2	2	LADDER CLIP	8"x4"x3/8" ANGLE	
DA-1	1	DAVIT	1 1/2" XS PIPE	
B-1	36	BOLT	3/4"x2" LG.	W/ LOCKNUT & WASHER (4)
B-2	11	BOLT	3/4"x3 3/4" LG.	W/ LOCKNUT & WASHER (4)
(1) B-4	7	BOLT–STD. HEX.	3/8"x2" LG.	W/ LOCKNUT; SEE NOTE 9 (4)
FP	4	FOOT PAD	5"x3"x3/8" ANGLE	W/ 1 1/2" XS PIPE (4)
H-M	2	MIDRAIL EXTENSION	1 1/2" XS PIPE	MIDRAIL AT LADDER

NOTES

1. ALL FORGED PARTS SHALL BE BENT OR FLATTENED AT FORGING TEMPERATURE.
2. QUANTITY OF FASTENERS IN LIST OF MATERIAL ARE 10% OVER ACTUAL REQUIRED TO PROVIDE FOR BREAKAGE AND LOSSES.
3. (1) ALL FASTENERS, INCLUDING U-BOLTS, SHALL BE TYPE 316 STAINLESS STEEL. (4) ALL NUTS SHALL BE NYLON-INSERT LOCKNUTS.
4. (3) WIPE AFTER GALVANIZING AND SAND OR GRIND SMOOTH TO PROVIDE ADEQUATE CLEARANCE FOR FIT-UP TO POST. NOTE 3/16" FILLET WELDS; LARGER WELDS MAY INTERFERE WITH ASSEMBLY.
5. (3) ALL PARTS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-153. FOR MOUNTING HOLES, ALLOW 1/8" OVERSIZE BEFORE GALVANIZING.
6. 'XS' REFERS TO SCHEDULE 80 PIPE.
7. ALL DRILLED HOLES SHALL BE POSITIONED WITHIN ± 1/32"
8. (1) PLATFORM GRATING SHALL BE OPEN STEEL GRATING WITH 3/4"X1/8" BEARING BAR SIZE, GALVANIZED AFTER FABRICATION.
9. (1) EACH PART B-4 BOLT SHALL BE SUPPLIED WITH (1) STND WASHER AND (1) 2" DIA. WASHER FOR ANCHORING GRATING.
10. (2) ENSURE DIMENSIONS OF ACTUAL PIPE USED WILL ALLOW PROPER FIT AFTER GALVANIZING, ESP. INSERTION OF CORNER POSTS INTO PART PL-1.

REV.	DATE	APPR.	DESCRIPTION	BY
4	12/95		SPECIFIED NYLON-INSERT LOCKNOUTS, REDUCED LADDER RUNG DIAMETER	JM
3	2/95		REVISED NOTES 4 & 5, INCREASED HOLE OVERSIZE	DCR
2	12/93		ADDED NOTE 10	DCR
1	10/92		CHANGED GRATING TYPE & ANCHORS, ADDED NOTES 8 & 9	DCR

DESIGNED –
DRAWN PRB
EDITED JLC
CHECKED DCR
REVIEWED BY: J. MCCAULEY, PROJECT ENGINEER
REVIEWED BY: D. RESSEL, LCDR, BRANCH CHIEF
REVIEWED BY: P.A. PETERS, TECHNICAL DIRECTOR

U.S. COAST GUARD PROVIDENCE, R.I.
CIVIL ENGINEERING UNIT

STANDARD 5 FT SQUARE PIPE TOWER
AID TO NAVIGATION

ELEVATION AND SECTIONS

APPROVED: G.L. ABBOTT, CDR
COMMANDING OFFICER, CEU — DATE
DISCIPLINE/SHT NO

DRAWING NUMBER: P000066
SCALE: AS SHOWN — SHEET 1 OF 4

USCG CEU PROVIDENCE — 3 12/22/95 — DCR — P0066S01

PLOTTING SCALE: 3/4" = 1'-0"

DRAWING MAY BE REDUCED. CHECK GRAPHIC SCALE(S).

U.S.C.G.
U.S. COAST GUARD CIVIL ENGINEERING

COMMONWEALTH OF MASSACHUSETTS — KIRK F. RIDEN — CIVIL — No 53396 — REGISTERED PROFESSIONAL ENGINEER — 01/14/2022

MARK | DESCRIPTION | DATE
- | - | -
SCALE: AS SHOWN
PLOTTING SCALE: 1:1

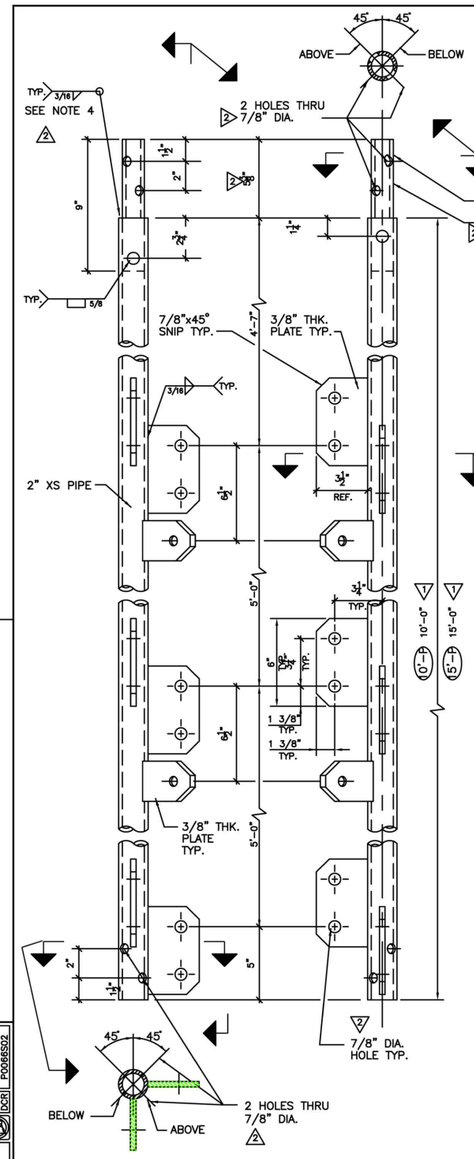
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.: 7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER: LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

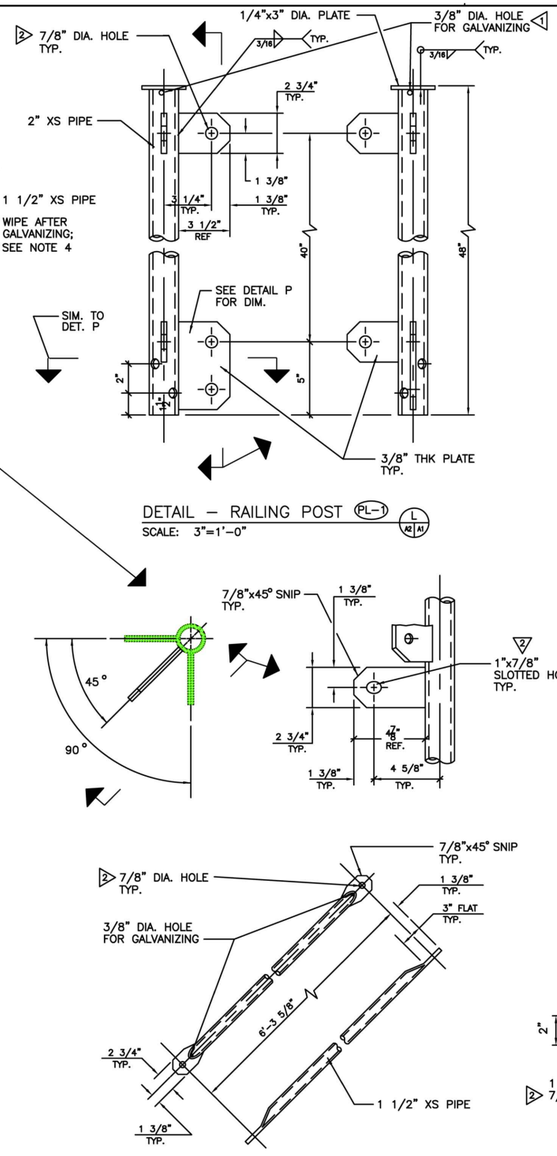
USCG PROJECT NO. 13494020
USCG DRAWING NO. P13494020
USCG FILENAME P13494020R-701.DWG
SHEET 23 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
TOWER REFERENCE - 01

SHEET ID
ALL
R-701

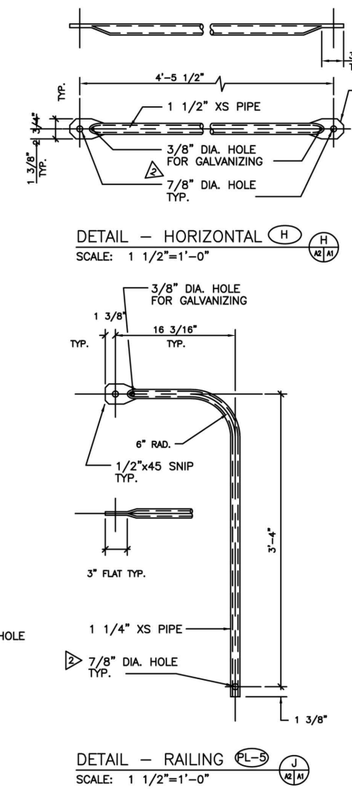


DETAIL – TOWER POST (P) A2 A1
SCALE: 3"=1'-0"

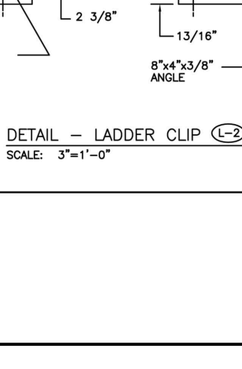


DETAIL – RAILING POST (PL-1) (L) A2 A1
SCALE: 3"=1'-0"

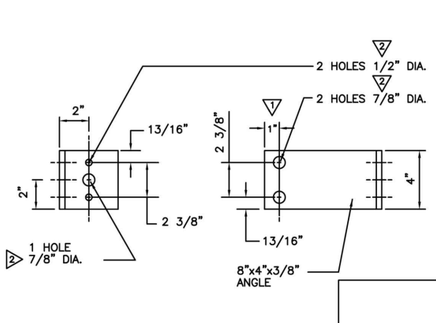
DETAIL – DIAGIONAL (D) (N) A2 A1
SCALE: 1 1/2"=1'-0"



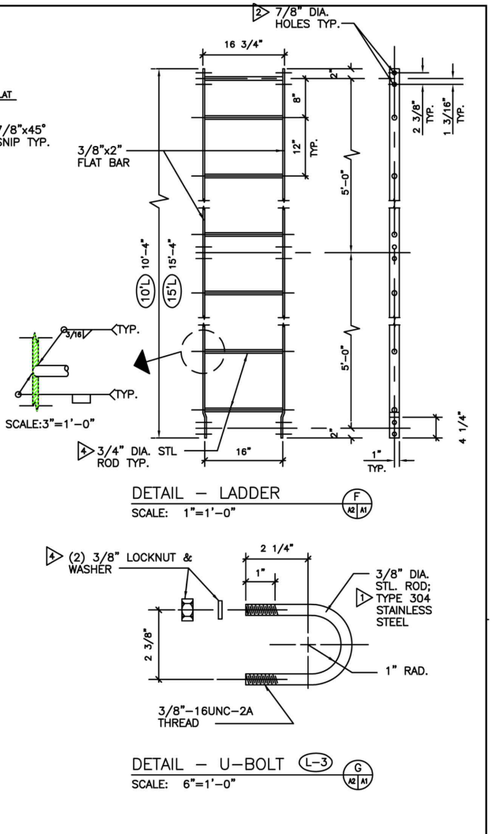
DETAIL – HORIZONTAL (H) (H) A2 A1
SCALE: 1 1/2"=1'-0"



DETAIL – RAILING (PL-5) (J) A2 A1
SCALE: 1 1/2"=1'-0"



DETAIL – LADDER CLIP (L-2) (K) A2 A1
SCALE: 3"=1'-0"



DETAIL – LADDER (F) A2 A1
SCALE: 1"=1'-0"

DETAIL – U–BOLT (L-3) (G) A2 A1
SCALE: 6"=1'-0"

1 0 1 2
SCALE IN INCHES

REV.	DATE	APPR.	DESCRIPTION	BY
4	12/95		SPECIFIED NYLON–INSERT LOCKNUTS, REDUCED LADDER RUNG DIAMETER	JM
3	2/95		INCREASED BOLT HOLE SIZES, LENGTHENED POST INSERT FITTINGS	DCR
2	10/92		CORRECTED DIMENSIONS, SPECIFIED SS U–BOLT, ADDED WEEP HOLE FOR GALV.	DCR
1	10/92		CORRECTED DIMENSIONS, SPECIFIED SS U–BOLT, ADDED WEEP HOLE FOR GALV.	DCR

DESIGNED –
DRAWN PRB
EDITED JLC
CHECKED
REVIEWED BY: J. MCCAULEY
PROJECT ENGINEER
REVIEWED BY: D. RESSEL, LCDR
BRANCH CHIEF
REVIEWED BY: P.A. PETERS
TECHNICAL DIRECTOR

U.S. COAST GUARD PROVIDENCE, RI
CIVIL ENGINEERING UNIT
STANDARD 5 FT. PIPE TOWER
AID TO NAVIGATION

FABRICATION DETAILS

APPROVED: G.L. ABBOTT, CDR
COMMANDING OFFICER, CEU
DATE
DISCIPLINE/SHT NO

DRAWING NUMBER
P000066

SCALE: AS SHOWN | SHEET 2 OF 4

2 12/22/95 DCR P0066S02

PLOTTING SCALE: 3" = 1'-0"

DRAWING MAY BE REDUCED. CHECK GRAPHIC SCALE(S).

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/1/2022

U.S.C.G. CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1 | SCALE: AS SHOWN

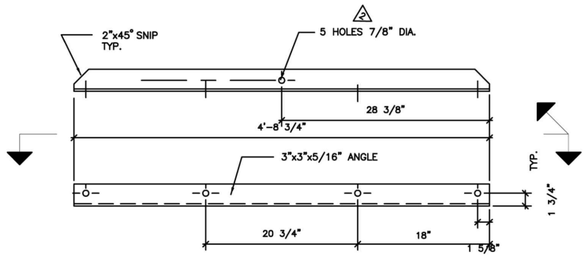
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: T.J.D.
DRAWN BY: MM/DM
EDITED BY: T.J.D.
CHECKED BY: KFR

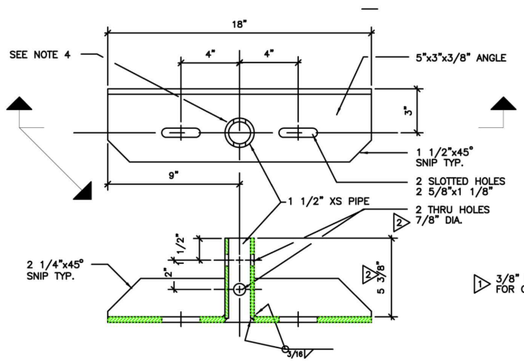
USCG PROJECT NO. 13494020
USCG DRAWING NO. P13494020
USCG FILENAME P13494020R-702.DWG
SHEET 24 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
TOWER REFERENCE - 02

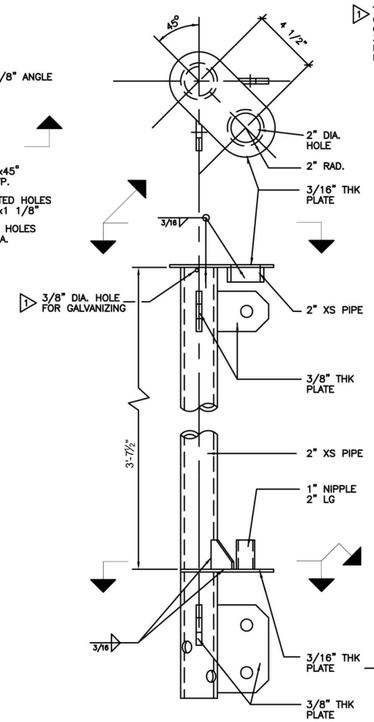
SHEET ID
ALL
R-702

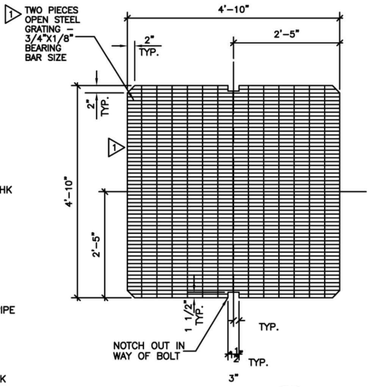


DETAIL – PLATFORM STRINGER (PL-3) (V A3 A1)
SCALE: 1 1/2"=1'-0"

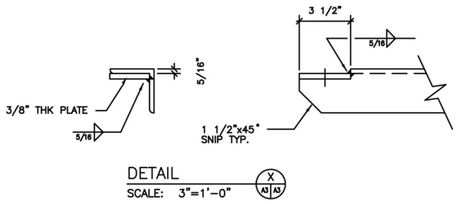


DETAIL – FOOT PAD (FP) (T A3 A1)
SCALE: 3"=1'-0"

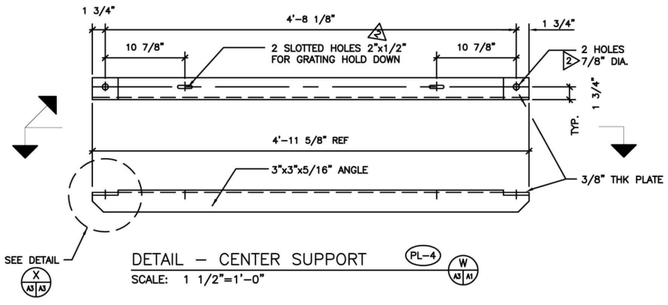




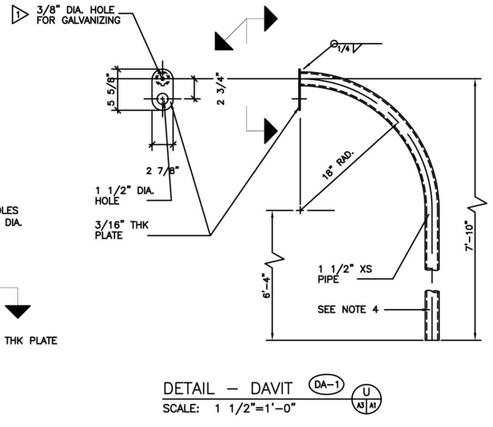
DETAIL – GRATING (PL-6) (R A3 A1)
SCALE: 3/4"=1'-0"



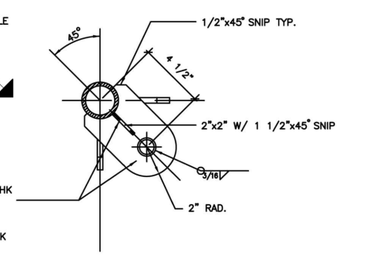
DETAIL (X A3 A3)
SCALE: 3"=1'-0"



DETAIL – CENTER SUPPORT (PL-4) (W A3 A1)
SCALE: 1 1/2"=1'-0"



DETAIL – DAVIT (DA-1) (U A3 A1)
SCALE: 1 1/2"=1'-0"



DETAIL – DAVIT CORNER POST (PL-2) (S A3 A1)
SCALE: 3"=1'-0"

NOTE:
FOR DIM. NOT SHOWN
SEE DET.I (SHT. 2)

SCALE IN INCHES
1 0 1 2

REV.	DATE	APPR.	DESCRIPTION	BY
2	2/95		INCREASED BOLT HOLE SIZES, LENGTHENED FOOTING INSERT FITTINGS	DCR
1	10/92		CHANGED GRATING, ADDED WEEP HOLES FOR GALVANIZING	DCR

DESIGNED –
DRAWN PRB
EDITED JLC
CHECKED DCR
REVIEWED BY: J. MCCAULEY
PROJECT ENGINEER
REVIEWED BY: D. RESSEL, LCDR
BRANCH CHIEF
REVIEWED BY: P.A. PETERS
TECHNICAL DIRECTOR

U.S. COAST GUARD PROVIDENCE, RI
CIVIL ENGINEERING UNIT

STANDARD 5 FT. SQUARE PIPE TOWER
AID TO NAVIGATION

FABRICATION DETAILS

APPROVED: G.L. ABBOTT,CDR
COMMANDING OFFICER, CEU
DATE

DISCIPLINE/SHT NO

DRAWING NUMBER
P000066

SCALE: AS SHOWN | SHEET 3 OF 4

2 12/22/95 DCR P0066503

PLOTTING SCALE: 3/4" = 1'-0"

DRAWING MAY BE REDUCED. CHECK GRAPHIC SCALE(S).

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G. CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

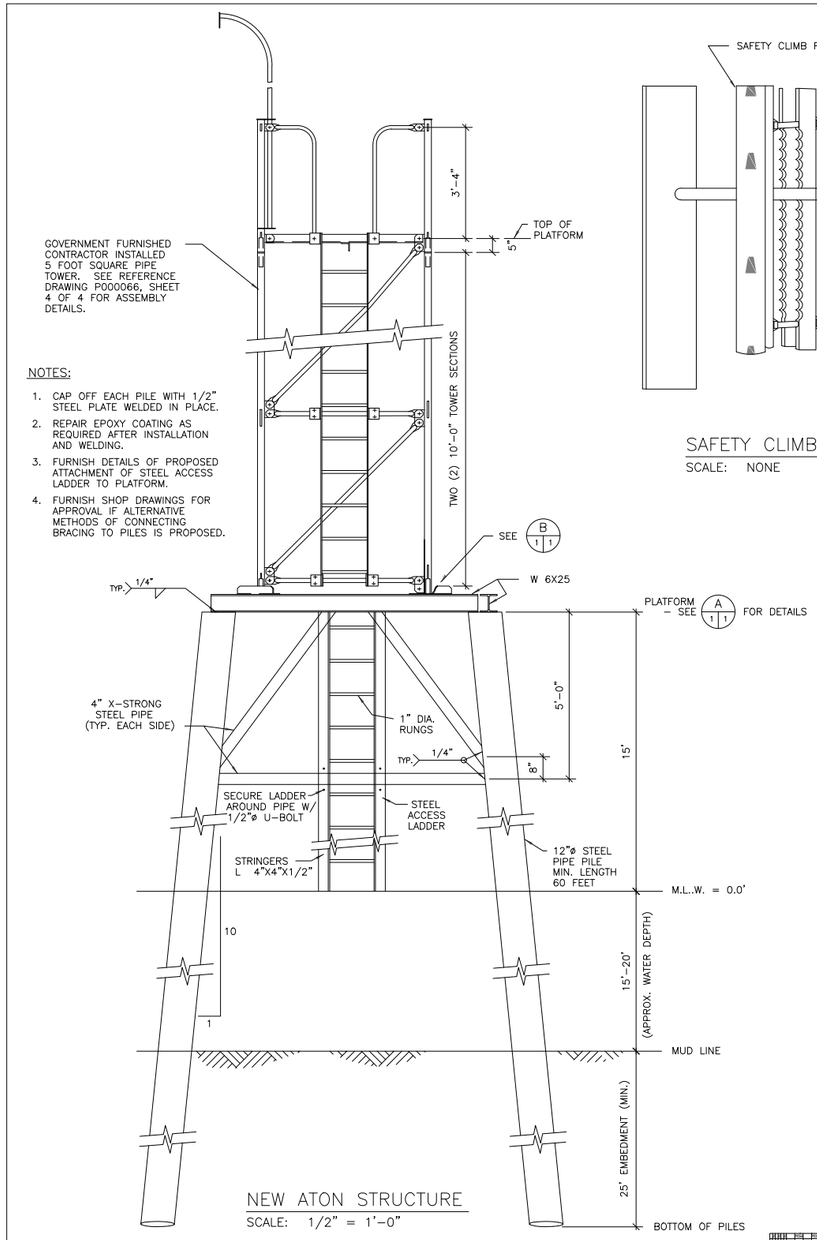
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.: 7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER: LT MATTHEW R. FANN, PE
DESIGNED BY: T.J.D.
EDITED BY: T.J.D.
DRAWN BY: MADORA
CHECKED BY: KFR

USCG PROJECT NO. 13494020
USCG DRAWING NO. P13494020
USCG FILENAME P13494020R-703.DWG
SHEET 25 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
TOWER REFERENCE - 03

SHEET ID
ALL
R-703



NOTES:

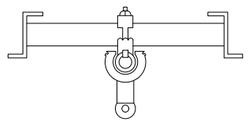
1. CAP OFF EACH PILE WITH 1/2" STEEL PLATE WELDED IN PLACE.
2. REPAIR EPOXY COATING AS REQUIRED AFTER INSTALLATION AND WELDING.
3. FURNISH DETAILS OF PROPOSED ATTACHMENT OF STEEL ACCESS LADDER TO PLATFORM.
4. FURNISH SHOP DRAWINGS FOR APPROVAL IF ALTERNATIVE METHODS OF CONNECTING BRACING TO PILES IS PROPOSED.

NEW ATON STRUCTURE
SCALE: 1/2" = 1'-0"

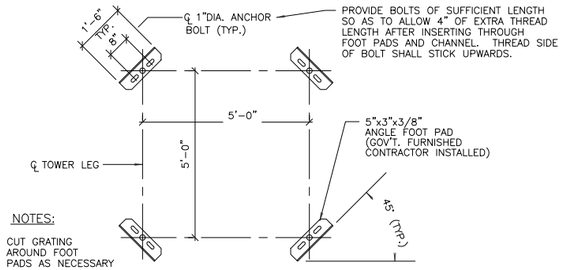
NOTE:

1. PROVIDE AND INSTALL SAFETY CLIMB RAIL ON THE 20' TOWER SECTIONS AT EACH LOCATION

SAFETY CLIMB RAIL C 1 1
SCALE: NONE



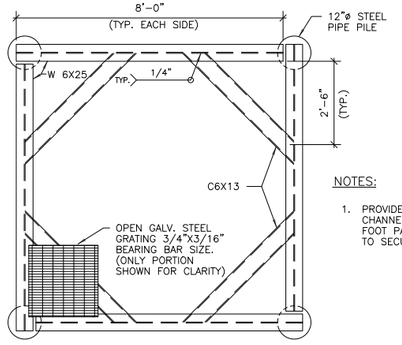
CROSS SECTION VIEW
SCALE: NONE



NOTES:

CUT GRATING AROUND FOOT PADS AS NECESSARY

BASE OF NEW PIPE TOWER B 1 1
SCALE: 1/2" = 1'-0"

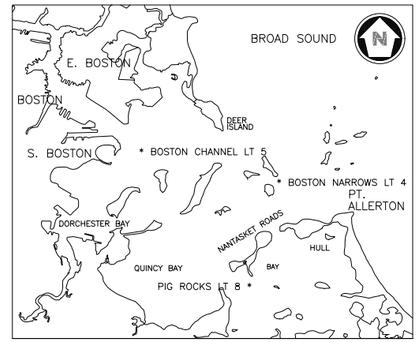


NOTES:

1. PROVIDE SPACERS BETWEEN CHANNELS AND GRATING OR FOOT PADS, AS NEEDED TO SECURELY WELD.

PLATFORM PLAN A 1 1
SCALE: 1/2" = 1'-0"

SCALE: 1/2"=1'-0"
8" 0 1' 2' 3' 4' 6' 8' 10'



LOCATION MAP
SCALE: NONE

LOCATION OF STRUCTURES

ATON	LATITUDE	LONGITUDE
BOSTON CHANNEL LIGHT 5	42-20.0	71-00.1
PIG ROCKS LIGHT 8	42-16.8	70-56.3
BOSTON NARROWS LIGHT 4	42-19.3	70-55.2

(SEE N.O.A.A. CHART NO. 13270 OF BOSTON HARBOR FOR ADDITIONAL SITE INFORMATION).

GENERAL NOTES:

1. ALL THREE AIDS-TO-NAVIGATION (ATON'S) WERE COMPLETELY DESTROYED AND NO LONGER EXIST. THE TIMBER PILES FROM THE PREVIOUS STRUCTURES WERE SNAPPED OFF AT THE MUDLINE.
2. NEW ATON STRUCTURE, AS DETAILED, TO BE CONSTRUCTED AT ALL THREE LOCATIONS.
3. APPROXIMATE LOCATIONS OF ATON'S ARE PRESENTLY MARKED BY BUOYS. COORDINATE, THROUGH THE GOVERNMENT INSPECTOR, WITH ANT BOSTON AND CG CUTTER PENDANT FOR THE EXACT LOCATION OF THE NEW STRUCTURES. (SEE NOTE 10).
4. WATER DEPTH AT MEAN LOW WATER AT EACH LOCATION IS BETWEEN 15 AND 20 FEET.
5. TIDAL VARIATION BETWEEN MEAN LOW AND MEAN HIGH WATER IS BETWEEN 9 AND 9-1/2 FEET AT THE 3 LOCATIONS.
6. ACCESS LADDER FOR NEW STRUCTURE TO BE INSTALLED ON THE SIDE OPPOSITE THE SHIPPING CHANNEL. COORDINATE WITH THE GOVT INSPECTOR.
7. ALL WELDS TO BE 1/4" FILLET, UNLESS OTHERWISE NOTED.
8. ALL ITEMS SHOWN ARE TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR, UNLESS OTHERWISE NOTED.
9. NEW LIGHT BEACONS, DAYBOARDS, AND OTHER ACCESSORIES WILL BE FURNISHED AND INSTALLED BY THE GOVERNMENT.
10. THE CONTRACTOR SHALL TAKE ADDITIONAL PRECAUTIONS TO ENSURE THAT TEMPORARY BUOYS ARE NOT DISTURBED DURING CONSTRUCTION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
11. ALL THREADED HARDWARE SHALL BE TYPE 304 STAINLESS STEEL.

REV.	DATE	APPR.	DESCRIPTION	BY

DESIGNED	RBC
DRAWN	TG
EDITED	TG
CHECKED	–
REVIEWED BY:	
PROJECT ENGINEER	
REVIEWED BY:	
BRANCH CHIEF	
REVIEWED BY:	
TECHNICAL DIRECTOR	

U.S. COAST GUARD PROVIDENCE, R.I.
CIVIL ENGINEERING UNIT
ATON REPLACEMENTS
CG ANT BOSTON & USCGC PENDANT
BOSTON HARBOR MA

PLANS AND DETAILS

APPROVED: COMMANDING OFFICER, CEU DATE
DISCIPLINE/SHT NO

01 01-P4086
P4227, P4344

DRAWING NUMBER
P000360

SCALE: AS SHOWN SHEET 1 OF 1

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G. CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

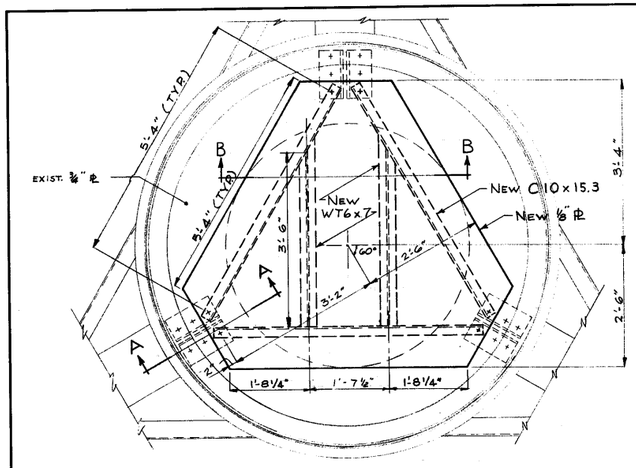
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: MWM
DRAWN BY:
EDITED BY: TJD
CHECKED BY: KFR

USCG PROJECT NO. 13494020
USCG DRAWING NO. P13494020
USCG FILENAME P13494020R-704.DWG
SHEET 26 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE RI
WARWICK
STRUCTURAL
TOWER REFERENCE - 04

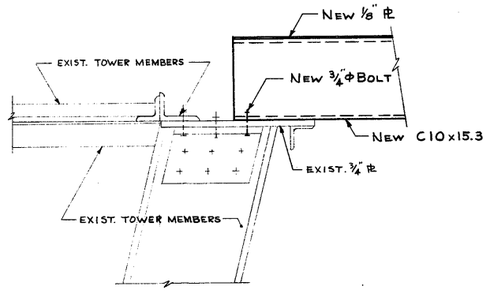
SHEET ID
BOSTON MAIN CHANNEL LIGHT 5
R-704

EASI FILE CORP. IRVINE, CA | EFH 24



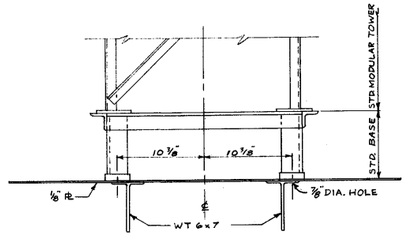
PLAN OF LANTERN PLATFORM

SCALE: ¾" = 1'-0"



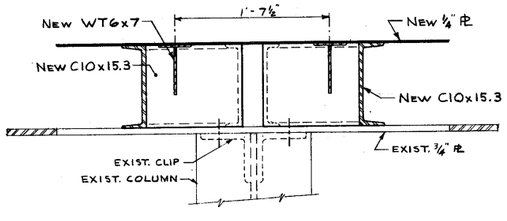
SECTION A-A

SCALE: 1½" = 1'-0"



DETAIL OF MODULAR TOWER MOUNTED TO NEW LANTERN PLATFORM

SCALE: 1½" = 1'-0"



SECTION B-B

SCALE: 1½" = 1'-0"

NOTE:
WELD ⅛" PLATE WITH CONTINUOUS ¼" FILLET WELDS ALONG FLANGE OF TEES AND CHANNELS.

REV.	DATE	APPR.	DESCRIPTION	BY

DESIGNED: JAF
DRAWN: WK
TRACED:
CHECKED: T.J.S.
REVIEWED BY:
REVIEWED BY:
REVIEWED BY:

U.S. COAST GUARD BOSTON, MASS.
1CGD
CIVIL ENGINEERING

HARRY'S ROCK LT. 2
HINGHAM BAY, MASS.
NEW
LANTERN PLATFORM

APPROVED: DATE 4/6/73
CDR. CHIEF OF BRANCH
DRAWING NUMBER
6317
SCALE: AS SHOWN SHEET 1 OF 1

U.S. GOVERNMENT PRINTING OFFICE : 1967 O—257-112 Dept. of Transp., USCG, CG-4061 (Rev. 5-67)

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
CE
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

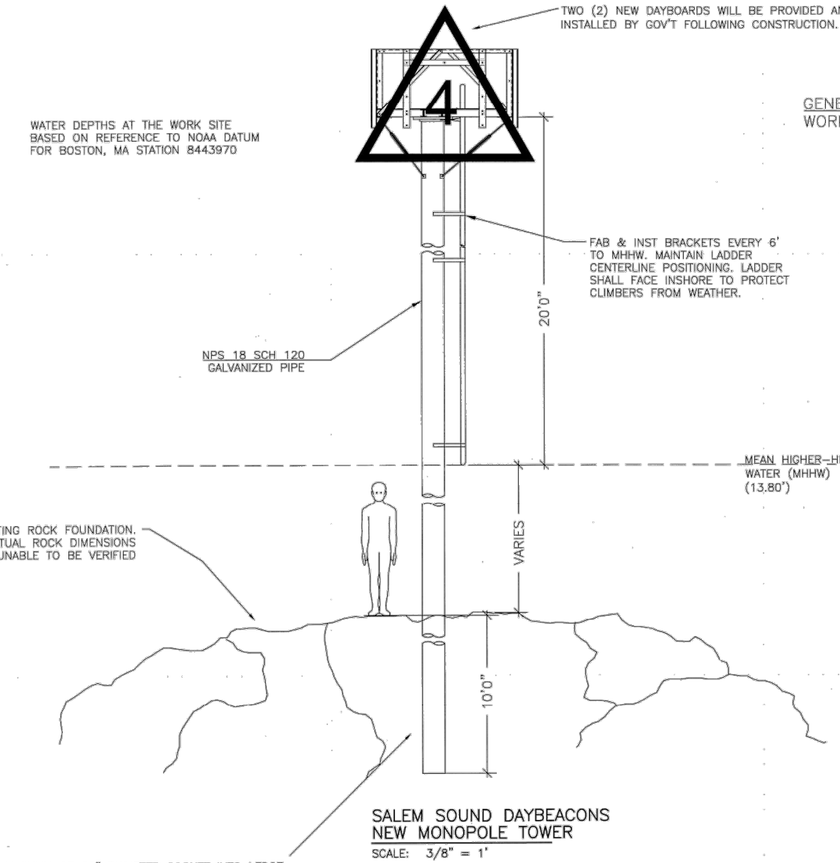
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: MW
EDITED BY: TJD
DRAWN BY: MW
CHECKED BY: KFR

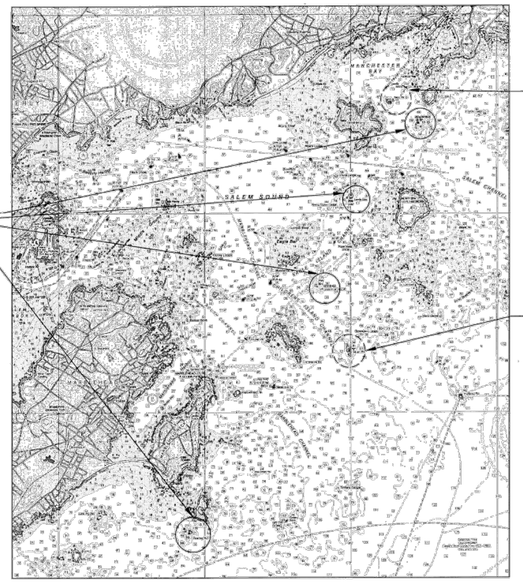
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P-13494020
USCG FILENAME
P13494020R-705.DWG
SHEET 27 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
WARWICK RI
STRUCTURAL
TOWER REFERENCE - 05

SHEET ID
HARRY'S ROCK LIGHT
R-705



SALEM SOUND DAYBEACONS
NEW MONOPOLE TOWER
SCALE: 3/8" = 1'



EXCERPT FROM CHART 13275
GENERAL WORK AREAS
SCALE: NTS

NOTES:

1. THIS WORK SHALL TAKE PLACE WITHIN 5 FEET OF ORIGINAL TOWER LOCATION. THESE TOWERS MARK TREACHEROUS ROCKS. SOME LOCATIONS ARE BOTH DIFFICULT TO ACCESS AND HAVE SHORT WORKING WINDOWS DUE TO TIDES AND SEAS.

2. THE TOWERS TO BE RENEWED ARE LISTED BELOW WITH TWO LOCATIONS THAT ARE OPTIONAL AT THE DISCRETION OF THE GOVERNMENT.

WHALEBACK DBN 8:	42°-32'-54.725"N, 70°-47'-04.629"W
HARDY RK DBN:	42°-32'-10.293"N, 70°-47'-59.667"W
BRIMBLES DBN:	42°-31'-16.500"N, 70°-48'-28.423"W
ROARING BULL DBN 2:	42°-28'-46.813"N, 70°-50'-12.801"W
OPTION1 SATAN RK DBN:	42°-30'-36.880"N, 70°-48'-01.496"W
OPTION2 SAULI RK DBN:	42°-33'-07.290"N, 70°-47'-28.020"W

3. SCOPE OF WORK INCLUDES THE FOLLOWING:

CONTRACTOR SHALL DRILL A 22"-30" DIAMETER SOCKET 10' INTO THE LEDGE. CONTRACTOR SHALL PLACE NPS18 SCH120 GALVANIZED PIPE INTO THE SOCKET AND PRESSURE GROUT FROM THE BOTTOM OF THE SOCKET UP. GROUT MUST BE A NON-SHRINK FLUID TYPE GROUT SUITABLE FOR UNDERWATER PLACEMENT WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI. FILL THE SOCKET TO THE LEDGE AND THE PIPE TO THE TOP OF THE PIPE SECTION.

FABRICATE AND INSTALL A NEW SINGLE STEEL PILE STRUCTURE & PLATFORM IN ACCORDANCE WITH REFERENCE DRAWING P3902202, SHEET 2. INSTALL PLATFORM A MINIMUM OF 20 FEET ABOVE MEAN HIGHER HIGH WATER (MHHW) OR ABOVE THE ROCK LEDGE, WHICHEVER IS HIGHER.

CONTRACTOR SHALL PERFORM A SURVEY THAT MEETS OR EXCEEDS USACE THIRD-ORDER CLASS 1 GEODETIC ACCURACY STANDARDS ON THE NEW STRUCTURE'S POSITIONS AS PER CONTRACT DOCS.

CONSULTANTS

U. S. COAST GUARD
CIVIL ENGINEERING UNIT PROVIDENCE

USCG CEU PROVIDENCE
300 METRO CENTER BLVD
WARWICK, RI 02886-1747

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO:	
CAD FILE NAME:	
DESIGNED BY:	1232
DRAWN BY:	1232
EDITED BY:	1232
CHECKED BY:	1232

SCALE: AS NOTED PLOT SCALE: AS NOTED

SHEET TITLE

SALEM SOUND ATON – RPR DBNS
CGC PENDANT
BOSTON MA

OCEAN ENGINEERING
PLAN & ELEVATION

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
J.MCFERRAN	J.HALL	A. A. JACOBS
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR
A. A. JACOBS, P.E.		
APPROVING OFFICER		DATE

PROJECT NUMBER	DRAWING NUMBER
3902202	P3902202
DISCIPLINE/SHT NO	
	SHEET 1 OF 2

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1 SCALE: AS SHOWN

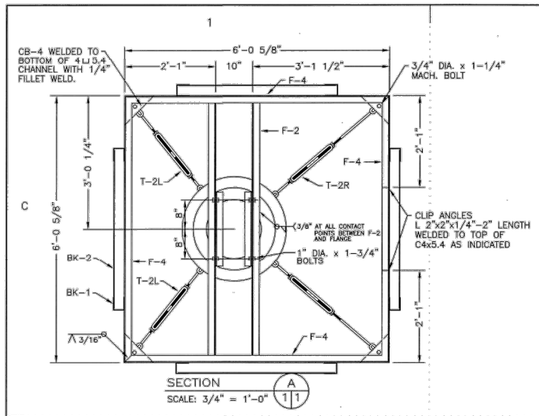
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

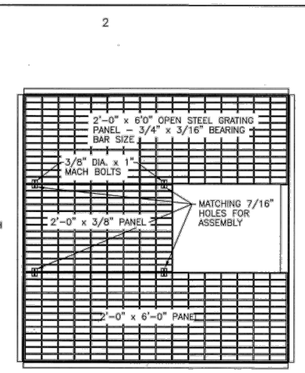
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/AM
EDITED BY: TJD
CHECKED BY: KFR

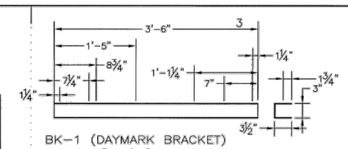
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020R-706.DWG
SHEET 28 OF 29

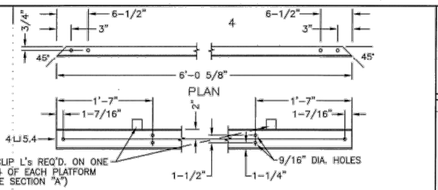
13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
WARWICK RI
STRUCTURAL
TOWER REFERENCE - 06

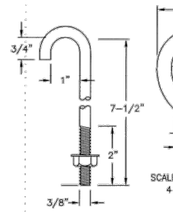
SHEET ID
MONO PILE DAYBEACONS
R-706

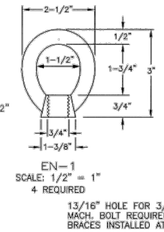


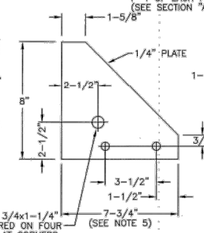


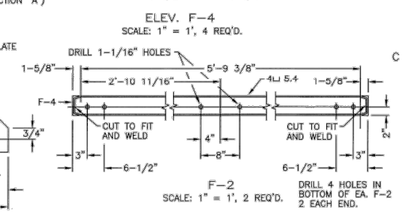


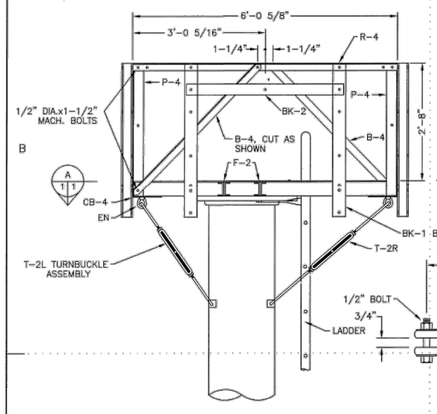


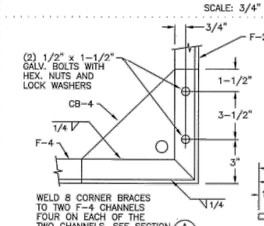


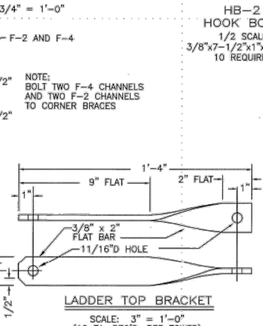


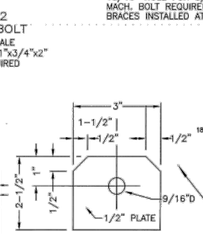


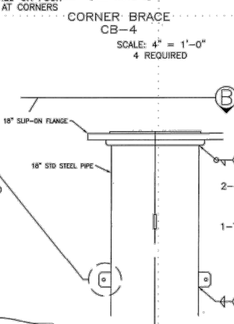


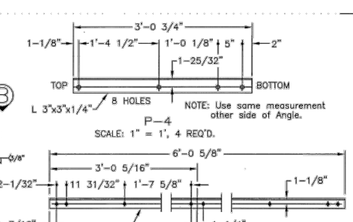


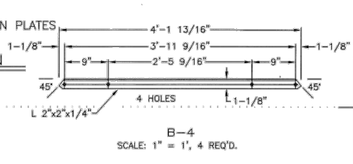


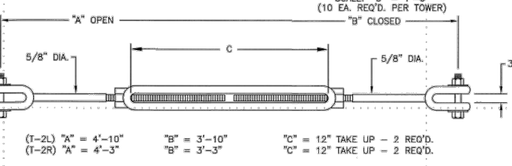


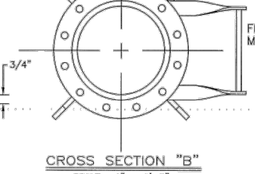












NOTES:

1. STEEL GRATINGS SHALL BE FASTENED TOGETHER WITH ⅜" GALVANIZED MACHINE BOLTS AS INDICATED, 6 REQUIRED.
2. ALL HOLES SHALL BE 9/16 " UNLESS OTHERWISE NOTED.
3. ALL WELDS SHALL BE ¼ " FILLET UNLESS OTHERWISE NOTED.
4. CORNER BRACE CB-4 WELDED TO C4x5.4 WITH ¼ " FILLET. PLACE CORNER BRACE ¼ " IN ON BOTH SIDES TO ALLOW FOR WELD.
5. ENDS OF B-4 SHOWN FOR CLARITY & FABRICATION, ORIENT ALL ANGLES (POSTS, RAILINGS, DIAGONALS) TO PRESENT A FLAT OUTWARD FACE TO WHICH THE DAYBOARD BRACKETS CAN BE ATTACHED.

SCALE: 1" = 1'

MATERIAL LIST

USE	ITEM	QUAN.	MATERIAL
PLATFORM ASS'Y BOLTS	1	40	GALV. 1/2"x1-1/2" BOLTS w/HEX NUTS
LADDER BRACKET MOUNTING BOLTS	2	10	GALV. 7/8"x4" BOLT w/HEX NUTS & LOCK WASHERS
BRACING	3	2	T-2L (5/8" DIA. TURNBUCKLE ASSEMBLY)
BRACING	4	2	T-2R (5/8" DIA. TURNBUCKLE ASSEMBLY)
DAY MARK MOUNTING	5	12	HB-2 (3/8" DIA. x SHAPE AS SHOWN WITH 2-1/2" FENDER WASHERS
	6	8	CB-4 (PL .5"x5"x1/4") CORNER BRACE WELDED TO F-4, SEE NOTE 5
TURNBUCKLE CONNECTION	7	4	EN-4 (3/4" DIA. EYE NUTS)
	8	4	F-4 (C4x5.4) FRAMING (ONE WITH CLIP ANGLES)
	9	2	F-2 (C4x5.4 FRAMING
	10	3	P-4 (L 3"x3"x1/4") – POST
	11	4	R-4 (L 2"x2"x1/4") – RAILING
	12	8	B-4 (L2"x2"x1/4") – BRACING
	13	8	BK-1 DAYMARK BRACKETS 3"x3-1/2"x1/8" CHANNEL
	14	2	GALVANIZED STEEL GRATING (2'-0"x6'-0" PANELS)
	15	1	GALVANIZED STEEL GRATING (2'-0"x3'-8" PANELS)
LADDER MOUNTING BOLTS	16	1	P-4A LANTERN POST
TURNBUCKLE CONNECTION	17	14	BOLTS (5/8"x1-1/2") NUT
PLATFORM TO CONNECTION PLATE	18	4	BOLTS ONLY, 3/4"x1-1/4"
	19	2	BOLTS (3/4"x1-1/4") WITH SQ. HD. & HEX NUTS
	20	2	L 2"x2"x1/8" 2" IN LENGTH (SEE NOTE 10)
GRATING FASTENERS	21	8	BOLTS (3/8" DIA. x 3/4") SQUARE HD. & NUT
	22	4	BK-2 DAYMARK BRACKET 3"x43"x1/8" STEEL PLATE
LADDER	23	1	2" X 3/8" FLAT BAR W/ 1" BAR @ 12"

CONSULTANTS

U. S. COAST GUARD
CIVIL ENGINEERING UNIT
PROVIDENCE

USCG. CEU PROVIDENCE
300 METRO CENTER BLVD.
WARWICK, RI 02886

ISSUE		
MARK	DATE	DESCRIPTION

A/E PROJECT NO:	
CAD FILE NAME:	
DESIGNED BY:	
DRAWN BY:	
EDITED BY:	
CHECKED BY:	
SCALE: AS SHOWN	PLOT SCALE: 1:1

SHEET TITLE

SALEM SOUND ATON – RPR DBNS
CGC PENDANT
BOSTON MA

OCEAN ENGINEERING
DETAILS

REVIEWED BY:	REVIEWED BY:	REVIEWED BY:
J. MCFERRAN	J. HALL	A. JACOBS
PROJECT ENG.	BRANCH CHIEF	TECH. DIRECTOR

A. A. JACOBS
APPROVING OFFICER — DATE

PROJECT NUMBER	DRAWING NUMBER
3902202	P3902202
DISCIPLINE/SHT NO	
	SHEET 2 OF 2

COMMONWEALTH OF MASSACHUSETTS
KIRK F. RIDER
No 53396
REGISTERED PROFESSIONAL ENGINEER
01/11/2022

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1 | SCALE: AS SHOWN

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
DRAWN BY:
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P-13494020
USCG FILENAME
P13494020R-707.DWG
SHEET 29 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY21 C-POP)
CEU PROVIDENCE
WARWICK RI
STRUCTURAL
TOWER REFERENCE - 07

SHEET ID
MONO PILE DAYBEACONS
R-707

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

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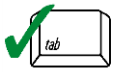
BOSTON
City/Town

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note: Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

N/A — a. Street Address
Boston — b. City/Town
N/A — c. Zip Code

Latitude and Longitude:
42° 20’ 0.162” N — d. Latitude
71° 0’ 3.732” W — e. Longitude

N/A — f. Assessors Map/Plat Number
N/A — g. Parcel /Lot Number

2. Applicant:

Michael — a. First Name
Carosotto — b. Last Name
United States Coast Guard — c. Organization
475 Kilvert Street, Suite 100 — d. Street Address
Warwick — e. City/Town
RI — f. State
02866 — g. Zip Code
h. Phone Number
i. Fax Number
j. Email Address

3. Property owner (required if different from applicant): ☐ Check if more than one owner

a. First Name
b. Last Name
c. Organization
d. Street Address
e. City/Town
f. State
g. Zip Code
h. Phone Number
i. Fax Number
j. Email address

4. Representative (if any):

Christine — a. First Name
Perron — b. Last Name
McFarland-Johnson, Inc. — c. Company
53 Regional Drive — d. Street Address
Concord — e. City/Town
NH — f. State
03301 — g. Zip Code
603-225-2978 — h. Phone Number
i. Fax Number
cperron@mjinc.com — j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

$2,037.50 — a. Total Fee Paid
$237.50 — b. State Fee Paid
$1,800.00 — c. City/Town Fee Paid

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

The proposed project involves repairs and replacement of existing aid to navigation structures. See attached Supplemental Project Narrative and supporting application materials for additional information.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

1. ☐ Single Family Home
2. ☐ Residential Subdivision
3. ☐ Commercial/Industrial
4. ☐ Dock/Pier
5. ☐ Utilities
6. ☐ Coastal engineering Structure
7. ☐ Agriculture (e.g., cranberries, forestry)
8. ☐ Transportation
9. ☒ Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

1. ☐ Yes ☒ No

If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

N/A
2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

a. County	b. Certificate # (if registered land) N/A
c. Book N/A	d. Page Number N/A

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

1. ☐ Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
2. ☐ Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Bank	1. linear feet	2. linear feet
b. ☐ Bordering Vegetated Wetland	1. square feet	2. square feet
c. ☐ Land Under Waterbodies and Waterways	1. square feet 3. cubic yards dredged	2. square feet

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. ☐ Bordering Land Subject to Flooding	1. square feet	2. square feet
	3. cubic feet of flood storage lost	4. cubic feet replaced
e. ☐ Isolated Land Subject to Flooding	1. square feet	
	2. cubic feet of flood storage lost	3. cubic feet replaced
f. ☐ Riverfront Area	1. Name of Waterway (if available) - **specify coastal or inland**	

2. Width of Riverfront Area (check one):

☐ 25 ft. - Designated Densely Developed Areas only

☐ 100 ft. - New agricultural projects only

☐ 200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project: _____ square feet

4. Proposed alteration of the Riverfront Area:

a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

5. Has an alternatives analysis been done and is it attached to this NOI? ☐ Yes ☐ No

6. Was the lot where the activity is proposed created prior to August 1, 1996? ☐ Yes ☐ No

3. ☒ Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f**. above.

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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. ☐ Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. ☒ Land Under the Ocean	5.6 (1. square feet) 0.0 (2. cubic yards dredged)	
c. ☐ Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. ☐ Coastal Beaches	1. square feet	2. cubic yards beach nourishment
e. ☐ Coastal Dunes	1. square feet	2. cubic yards dune nourishment

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
f. ☐ Coastal Banks	1. linear feet	
g. ☐ Rocky Intertidal Shores	1. square feet	
h. ☐ Salt Marshes	1. square feet	2. sq ft restoration, rehab., creation
i. ☐ Land Under Salt Ponds	1. square feet 2. cubic yards dredged	
j. ☐ Land Containing Shellfish	1. square feet	
k. ☐ Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above 1. cubic yards dredged	
l. ☐ Land Subject to Coastal Storm Flowage	1. square feet	

4. ☐ Restoration/Enhancement

If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. ☐ Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings

Massachusetts Department of Environmental Protection
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C. Other Applicable Standards and Requirements

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. ☐ Yes ☒ No

If yes, include proof of mailing or hand delivery of NOI to:

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

N/A
b. Date of map

If *yes*, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review*

1. ☐ Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____ percentage/acreage

(b) outside Resource Area _____ percentage/acreage

2. ☐ Assessor's Map or right-of-way plan of site

2. ☐ Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) ☐ Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) ☐ Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see https://www.mass.gov/ma-endangered-species-act-mesa-regulatory-review).
Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.
** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.

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C. Other Applicable Standards and Requirements (cont'd)

(c) ☐ MESA filing fee (fee information available at https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review).
Make check payable to "Commonwealth of Massachusetts - NHESP" and ***mail to NHESP*** at above address

*Projects altering **10 or more acres** of land, also submit:*

(d) ☐ Vegetation cover type map of site

(e) ☐ Project plans showing Priority & Estimated Habitat boundaries

(f) OR Check One of the Following

1. ☐ Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. ☐ Separate MESA review ongoing. a. NHESP Tracking # b. Date submitted to NHESP

3. ☐ Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

a. ☐ Not applicable – project is in inland resource area only b. ☒ Yes ☐ No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

c. ☐ Is this an aquaculture project? d. ☐ Yes ☒ No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).

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City/Town

C. Other Applicable Standards and Requirements (cont'd)

Online Users: Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

   a. ☐ Yes ☒ No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

   N/A
   b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

   a. ☐ Yes ☒ No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

   a. ☐ Yes ☒ No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

   a. ☐ Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
      1. ☐ Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
      2. ☐ A portion of the site constitutes redevelopment
      3. ☐ Proprietary BMPs are included in the Stormwater Management System.

   b. ☒ No. Check why the project is exempt:
      1. ☐ Single-family house
      2. ☐ Emergency road repair
      3. ☐ Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

☐ This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. ☒ USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)

2. ☒ Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

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D. Additional Information (cont'd)

3. ☐ Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. ☒ List the titles and dates for all plans and other materials submitted with this NOI.

13494020 REPAIR ATON MASSACHUSETTS BAY
a. Plan Title

Appledore Marine Engineering, LLC
b. Prepared By

c. Signed and Stamped by

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. ☐ If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. ☐ Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. ☒ Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. ☒ Attach NOI Wetland Fee Transmittal Form

9. ☐ Attach Stormwater Report, if needed.

E. Fees

1. ☐ Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

92946
2. Municipal Check Number

December 28, 2021
3. Check date

92949
4. State Check Number

December 28, 2021
5. Check date

McFarland-Johnson, Inc.
6. Payor name on check: First Name

N/A
7. Payor name on check: Last Name

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

BOSTON
City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

	1/03/2022
1. Signature of Applicant	2. Date
3. Signature of Property Owner (if different)	4. Date
	1/4/2022
5. Signature of Representative (if any)	6. Date

For Conservation Commission:
Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:
One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:
If the applicant has checked the “yes” box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

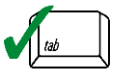
The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

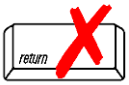
Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.





A. Applicant Information

1. Location of Project:

42° 20’ 0.162” N, 71° 0’ 3.732” W	Boston
a. Street Address	b. City/Town
92949	$237.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Michael		Carosotto	
a. First Name		b. Last Name	
United States Coast Guard			
c. Organization			
475 Kilvert Street, Suite 100			
d. Mailing Address			
Warwick	RI	02866	
e. City/Town	f. State	g. Zip Code	
h. Phone Number	i. Fax Number	j. Email Address	

3. Property Owner (if different):

a. First Name		b. Last Name	
c. Organization			
d. Mailing Address			
e. City/Town	f. State	g. Zip Code	
h. Phone Number	i. Fax Number	j. Email Address	

B. Fees

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract $12.50. To calculate the city/town share of the fee, divide the total fee in half and add $12.50.

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

NOI Wetland Fee Transmittal Form

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2: (d.) coastal limited project	1	$500	$500

Step 5/Total Project Fee: $500

Step 6/Fee Payments:

Total Project Fee:	$500 (a. Total Fee from Step 5)
State share of filing Fee:	$237.50 (b. 1/2 Total Fee **less $**12.50)
City/Town share of filling Fee:	$1,8000 (c. 1/2 Total Fee **plus** $12.50)

C. Submittal Requirements

a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
Box 4062
Boston, MA 02211

b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

UNITED STATES COAST GUARD

FEDERAL AIDS TO NAVIGATION (ATON) REPAIR PROJECT

MASSACHUSETTS BAY

MA WPA NOTICE OF INTENT

SUPPLEMENTAL PROJECT NARRATIVE

PREPARED FOR:

United States Coast Guard

Civil Engineering Unit Providence

475 Kilvert Street, Suite 100

Warwick, RI 02886

PREPARED BY:

McFarland-Johnson, Inc.

53 Regional Drive

Concord, NH 03301

Appledore Marine Engineering LLC

600 State Street, Suite E

Portsmouth, New Hampshire 03801

JANUARY 2022

Table of Contents

1.0 Introduction

The United States Coast Guard (USCG) is proposing repairs to and replacement of eight (8) existing Aid to Navigation (ATON) structures located off the coast of Massachusetts in Rockport, Manchester, Salem, Weymouth, Hull, Cohasset, and Boston, MA (**Figure 1**).

ATONs can include a variety of visible structures such as buoys, daybeacons, lights, lightships, marks, or audible and electronic signals or devices such as radio beacons, fog signals, and other devices used to assist with coastal navigation. Mariners use ATONs to determine position or chart a safe course through coastal waters. ATONs can also be used to mark isolated danger/hazards and/or navigational channels. The USCG is responsible for maintaining ATONs on US waters that are under federal jurisdiction.

The term ATON encompasses a wide range of floating and fixed objects mentioned above. A fixed object means one that is attached to the bottom or shore and typically consist of buoys and beacons. A buoy is a floating object that is anchored to the bottom, while a beacon is a permanent structure that is fixed to the seabed or land. Lighted beacons are called “lights” while unlighted beacons are called “daybeacons”. The ATONs included in the proposed project include four (4) daybeacons and four (4) lights. The proposed repairs and replacements are required in order to maintain safe navigation of vessels off the coast of Massachusetts.

2.0 Proposed Project

The following sections describe the five (5) existing ATON structures that require complete replacement and involve impacts to areas subject to protection under the Massachusetts Wetland Protection Act (WPA) (M.G.L. c. 131, § 40) administered by 310 CMR 10.00 Wetlands Protection. The following five (5) structures require the submittal of a Notice of Intent (NOI) for impacts to resource areas associated with the complete replacement of the existing structures:

- Londoner Rock Daybeacon, Rockport, MA
- Weymouth Fore River Channel Light 16, Weymouth, MA
- Harry's Rock Light HR, Hull, MA
- Cohasset Channel Light 8, Cohasset, MA
- Boston Main Channel Light 5, Boston, MA

The remaining three (3) structures included in the overall project only involve minor repairs to the above water portion of the existing structures and do not require any in-water work or impacts to any jurisdictional resource areas. Therefore, a NOI is not required for the proposed repairs to the following structures:

- Whaleback Daybeacon 8, Manchester, MA
- Brimbles Daybeacon 8, Salem, MA
- Satan Rock Daybeacon 6, Salem, MA

The three (3) structures that require only repairs and no in-water work are not discussed further in this submittal. **Table 1** below provides a summary of the eight (8) structures, locations, proposed work, and permitting requirements.

Table 1. USCG Massachusetts Bay ATON Repairs and Replacements

#	ATON NAME	TOWN	LAT/LONG	PROPOSED WORK	MA WPA NOI REQUIRED?
1	Londoner Rock Daybeacon	ROCKPORT	42-38-06.479N, 070-33-57.962W	Replacement	***YES***
2	Whaleback Daybeacon 8	MANCHESTER	42-32-54.760N, 070-47-04.641W	Repairs	**NO**
3	Brimbles Daybeacon 8	SALEM	42-31-16.576N, 070-48-28.608W	Repairs	**NO**
4	Satan Rock Daybeacon 6	SALEM	42-30-36.898N, 070-48-01.536W	Repairs	**NO**
5	Weymouth Fore River Channel Light 16	WEYMOUTH	42-16-03.129N, 070-56-06.484W	Replacement	***YES***
6	Harry's Rock Light HR	HULL	42-17-13.291N, 070-55-54.280W	Replacement	***YES***
7	Cohasset Channel Light 8	COHASSETT	42-15-05.497N, 070-47-00.665W	Replacement	***YES***
8	Boston Main Channel Light 5	BOSTON	42-20-0.162N, 071-0-3.732W	Replacement	***YES***

The proposed actions and associated impacts are discussed further in Section 4.0.

3.0 Resource Areas

Resource areas located within or in close proximity to the project areas include Land under the Ocean, Rocky Intertidal Shores, Land Containing Shellfish, and Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes or Creeks that Underlie Anadromous/Catadromous Fish Run. Additional resource area descriptions, impacts, and regulatory compliance/performance standards are discussed in greater detail

in Section 4.0. The following sections provide an overview of the resource areas in the vicinity of the project and definitions from the Massachusetts Wetland Protection Act. A summary of the Resource Areas subject to protection and under the jurisdiction of the WPA are provided in **Table 2**.

Table 2. MA WPA Resource Areas Summary

#	ATON NAME	TOWN	LAT/LONG	RESOURCE AREAS			
				Land Under Ocean Present?	Rocky Intertidal Shore Present?	Land Containing Shellfish Present?	Anadromous/ Catadromous Fish Run Present?
1	Londoner Rock Daybeacon	ROCKPORT	42-38-06.479N, 070-33-57.962W	-	***YES***	-	-
5	Weymouth Fore River Channel Light 16	WEYMOUTH	42-16-03.129N, 070-56-06.484W	***YES***	-	-	-
6	Harry's Rock Light HR	HULL	42-17-13.291N, 070-55-54.280W	***YES***	-	-	-
7	Cohasset Channel Light 8	COHASSETT	42-15-05.497N, 070-47-00.665W	***YES***	-	-	-
8	Boston Main Channel Light 5	BOSTON	42-20-0.162N, 071-0-3.732W	***YES***	-	-	-

3.1 Land under the Ocean

Land under the Ocean is defined by 310 CMR 10.25(2) as, "*land extending from the mean low water line seaward to the boundary of the municipality's jurisdiction and includes land under estuaries*." This section goes on further to define Nearshore Areas of Land under the Ocean as "*that land extending from the mean low water line to the seaward limit of a municipality's jurisdiction, but in no case beyond the point where the land is 80 feet below the level of the ocean at mean low water. However, the nearshore area shall extend seaward only to that point where the land is 30 feet below the level of the ocean at mean low water for municipalities bordering Buzzard's Bay and Vineyard Sound (west of a line between West Chop, Martha's Vineyard and Nobska Point, Falmouth), 40 feet below the level of the ocean at mean low water for Provincetown's land in Cape Cod Bay, and 50 feet below the level of the ocean at mean low water for Truro's and Wellfleet's land in Cape Cod Bay*."

The following four replacement USCG ATON structures are located within Land under the Ocean:

- Weymouth Fore River Channel Light 16
- Harry's Rock Light HR
- Cohasset Channel Light 8
- Boston Main Channel Light 5

3.2 Rocky Intertidal Shores

Rocky Intertidal Shores are defined by 310 CMR 10.31(2) as, "*naturally occurring rocky areas, such as bedrock or boulder strewn areas between the mean high water line and the mean low water line.*"

The Londoner Rock Daybeacon in Rockport, MA is located on an isolated rock outcrop approximately 2,300 feet east of Thacher Island, the closest land mass off the coast of Rockport. The rock outcrop is exposed at the Mean Low Water (MLW) elevation and is inundated at the Mean High Water (MHW) elevation. Therefore, the site meets the WPA definition of the Rocky Intertidal Shore resource area.

3.3 Land Containing Shellfish

Land Containing Shellfish is defined by 310 CMR 10.34(2) as, "*land under the ocean, tidal flats, rocky intertidal shores, salt marshes and land under salt ponds when any such land contains shellfish*." The regulations further define the term "shellfish" as the following species: Bay scallop (*Argopecten irradians*); Blue mussel (*Mytilus edulis*); Ocean quahog (*Arctica islandica*); Oyster (*Crassostrea virginica*); Quahog (*Mercenaria merceneria*); Razor clam (*Ensis directus*); Sea clam (*Spisula solidissima*); Sea scallop (*Placopecten magellanicus*); Soft shell clam (*Mya arenaria*).

The Shellfish Suitability Areas GIS data layer (*May 2011*), *delineate areas that are believed to be suitable for shellfish based on the expertise of the Massachusetts Division of Marine Fisheries (Marine Fisheries) and local Shellfish Constables, input from commercial fishermen, and information contained in maps and studies of shellfish in Massachusetts. The areas covered include sites where shellfish have been observed since the mid-1970's, but may not currently support any shellfish. Therefore, these maps represent potential habitat areas.*

Based on the Shellfish Suitability Areas GIS data layer, none of the five replacement USCG ATON structures are located within an area identified as potentially suitable for shellfish (**Figures 2-1 – 2-5**). Formal dive surveys have not been conducted to confirm the presence or absence of shellfish. However, given the relatively small area and nature of the proposed impacts associated with each of the ATON replacements, impacts to shellfish populations located within the vicinity of the ATON structures is assumed to be minimal. Therefore, the proposed project is not anticipated to impact the Land Containing Shellfish Resource Area.

3.4 Land Under the Ocean that Underlie an Anadromous/Catadromous Fish Run

Banks of or Land under the Ocean, Ponds, Streams, Rivers, Lakes, or Creeks that Underlie an Anadromous/Catadromous Fish Run is defined by 310 CMR 10.35(2) as, "*that area within estuaries, ponds, streams, creeks, rivers, lakes or coastal waters, which is a spawning or feeding ground or passageway for anadromous or catadromous fish and which is identified by the Division of Marine Fisheries or has been mapped on the Coastal Atlas of the Coastal Zone Management Program. Such fish runs shall include those areas which have historically served as fish runs and are either being restored or are planned to be restored at the time the Notice of Intent is filed. For the purposes of 310 CMR 10.21 through 10.37, such fish runs shall extend inland no further than the inland boundary of the coastal zone.*" Anadromous fish "*means fish that enter fresh water from the ocean to spawn, such as alewives, shad and salmon*", while Catadromous Fish "*means fish that enter salt water from fresh water to spawn, such as eels*."

The five replacement USCG ATON structures are located within Massachusetts Bay. Various species of anadromous and catadromous fish have the potential to be found within the project area at various times of year and life cycle stages. However, none of the replacement structures are located within an area that meets the definition of an Anadromous / Catadromous Fish Run as defined by 310 CMR 10.35(2). Appropriate BMPs (outlined in the sections below) will be implemented throughout the duration of construction in order to avoid or minimize impacts to fish and other wildlife. In addition, impacts from the proposed project are limited to the replacement of existing structures. Impacts will be located within the same footprint of the existing structures and are localized and short term in nature. The proposed project does not require dredging. The proposed project could cause minor, short-term changes in behavior due to construction activities (e.g., pile driving); however, with the implementation of BMPs, physiological impacts are not anticipated. Overall, the proposed project is not anticipated to result in adverse impacts to any anadromous or catadromous fish or fish runs.

4.0 Proposed ATON Replacement Structures

The following sections describe the existing conditions, resource areas, rare species, proposed actions, and impacts associated with the five (5) ATON structure replacements. Each section corresponds to a different structure and Massachusetts City/Town.

Section	City/Town	ATON Structure Name
4.1	ROCKPORT, MA	Londoner Rock Daybeacon
4.2	WEYMOUTH, MA	Weymouth Fore River Channel Light 16
4.3	HULL, MA	Harry's Rock Light HR
4.4	COHASSET, MA	Cohasset Channel Light 8
4.5	BOSTON, MA	Boston Main Channel Light 5

4.1 Rockport, MA - Londoner Rock Daybeacon

4.1.1 Existing Conditions

The Londoner Rock Daybeacon (42° 38’ 6.479” N, 70° 33’ 57.962” W) is an ATON structure servicing the northernmost area of Massachusetts Bay, located east of Rockport, MA. The Londoner Rock Daybeacon consists of a cast-iron spindle founded on a large rock outcropping that is exposed at the MLW elevation. The existing spindle was originally installed prior to 1937 and currently does not serve a navigational function, other than identifying the rock outcropping. The ATON is located approximately 2,300 feet east of Thacher Island, the closest land mass off the coast of Rockport and the Massachusetts mainland.

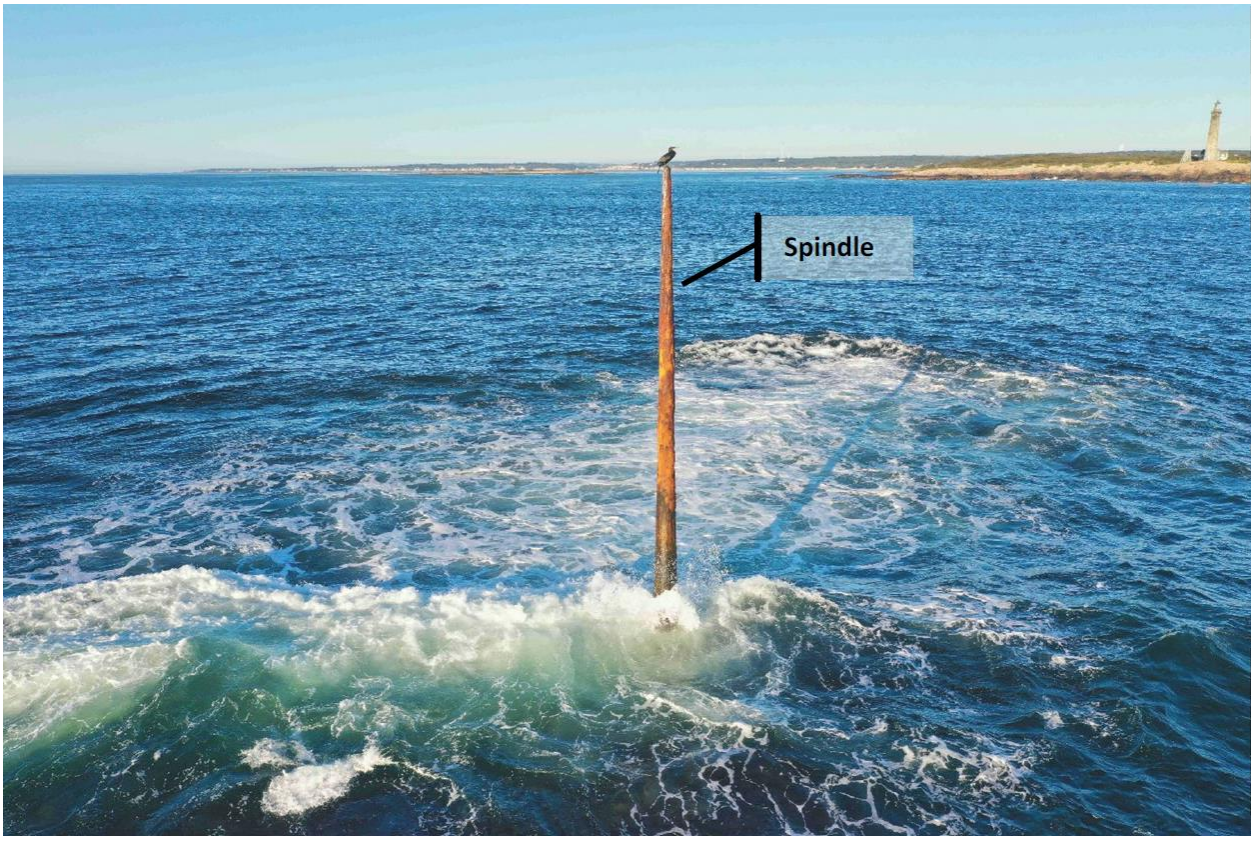


Photo 1: The Londoner Rock Daybeacon

4.1.2 Resource Area Descriptions

4.1.2.1 Rocky Intertidal Shores

The existing spindle is located on a bedrock outcropping that is exposed at the MLW elevation. Approximately 1’-8” of the rock is exposed at the MLW elevation and the rock outcrop is covered by approximately 7’-0” of water at the MHW elevation. The site meets the definition of the Rocky Intertidal Shore in the WPA.

4.1.3 Rare, Threatened, and Endangered Species

The Londoner Rock Daybeacon is not located within or in close proximity to any MA Natural Heritage & Endangered Species Program (NHESP) Priority or Estimated Habitats. The nearest mapped habitat polygons include PH 1893 and PH 1884 / EH 1227, located approximately 7,500' and 8,500' west of the ATON respectively.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.1.4 Proposed Action

The proposed project involves replacing the existing spindle with a new monopile foundation that will be drilled and socketed into the rock. The project also involves installing a new platform, ladder, safety climb system, and new dayboards as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing spindle will be demolished. A rock socket will be drilled into the bedrock to install the steel monopile. The steel monopile will be installed and the annulus between the rock and pile will be grouted. The remaining components will then be installed.

The following Best Management Practices (BMPs) will be implemented during construction of the Londoner Rock Daybeacon in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

2. Vessels will operate at speeds of less than 10 knots. A look out will be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.1.5 Impacts

The proposed project is anticipated to result in approximately 3 square feet (SF) of permanent impacts to the Rocky Intertidal Shore resource area. The impacts are associated with the drilling and installation of a new steel monopile.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA.

4.1.6 Regulatory Compliance and MA WPA Performance Standards

The only jurisdictional resource area subject to protection under the WPA that will be impacted by the proposed project is the Rocky Intertidal Shore. The proposed project will require 3 SF of permanent impacts to replace an existing cast iron spindle with a steel monopile ATON structure.

The WPA does not provide specific performance standards for the Rocky Intertidal Shore resource area. However, the WPA outlines the following protective measures:

> ***(3) When a Rocky Intertidal Shore Is Determined to Be Significant to Storm Damage Prevention, Flood Control, or Protection of Wildlife Habitat, any proposed project shall be designed and constructed, using the best practical measures, so as to minimize adverse effects on the form and volume of exposed intertidal bedrock and boulders.***
>
> The proposed project is located on a small bedrock outcropping approximately 2,300 feet east of Thacher Island, a small island off the coast of Rockport, MA. Given the small size and location, the existing outcropping does not provide significant storm damage protection, flood control, or protection of wildlife habitat. The proposed project will not adversely effect the form or volume of exposed intertidal bedrock or boulders.
>
> ***(4) When a Rocky Intertidal Shore is Determined to Be Significant to the Protection of Marine Fisheries or Wildlife Habitat, any proposed project shall if water-dependent be designed and constructed, using best available measures, so as to minimize adverse effects, and if non-water-dependent, have no adverse effects, on water circulation and water quality. Water quality impacts include, but are not limited to, other than natural fluctuations in the levels of dissolved oxygen, temperature or turbidity, or the addition of pollutants.***
>
> The proposed ATON replacement is considered a water-dependent project. The existing bedrock outcropping has not been identified as significant to the protection of marine fisheries or wildlife habitat. In addition, marine fisheries and wildlife habitat will be protected to the maximum extent practicable through the implementation of appropriate BMPs outlined in Section 4.1.4 above. The proposed project could cause minor, short-term changes in behavior of fish and wildlife due to disturbance from construction activities, however, with the implementation of BMPs, physiological impacts are not anticipated. Overall, the proposed project is not anticipated to result in adverse impacts to fish or wildlife in the vicinity. The proposed project is not anticipated to result in water quality impacts.
>
> ***(5) Notwithstanding the provisions of 310 CMR 10.31(3) and (4), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.***
>
> The proposed project is not located within mapped NHESP Priority or Estimated Habitats. The proposed project was submitted to and reviewed by NHESP via a Request for State-listed Species Information, and NHESP's response letter indicated that there were no rare species concerns at the Londoner Rock Daybeacon project site.

4.2 Weymouth, MA - Weymouth Fore River Channel Light 16

4.2.1 Existing Conditions

Weymouth Fore River Channel Light 16 (42° 16' 3.129" N, 70° 56' 6.484" W) is an ATON structure servicing the navigational channel in the Weymouth Fore River located in Weymouth, MA. The structure consists of a braced steel four-pile substructure supporting a 10-foot x 10-foot steel framed deck. The four (4) steel battered piles are each 16 inches in diameter and are capped with 1/2-inch thick steel plates. There is 6-inch diameter metal pipe bracing located above mean high water (MHW) and just above the mudline. The existing piles are heavily corroded in the tidal zone and are considered to be in poor condition. Portions of the deck and tower have failed, the ladder is missing, and one of the dayboards is missing.

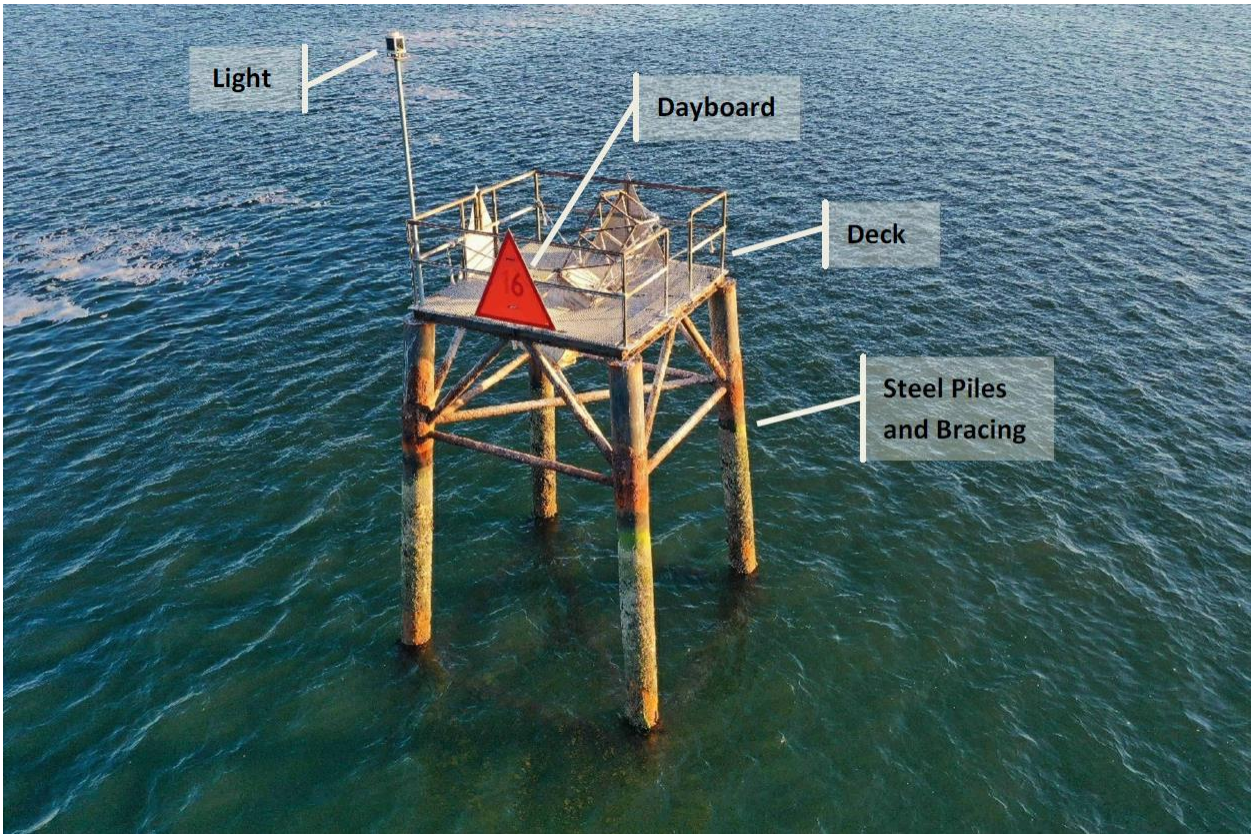


Photo 2: Weymouth Fore River Channel Light 16

4.2.2 Resource Area Descriptions

4.2.2.1 Land under the Ocean

The existing Weymouth Fore River Channel Light 16 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 13'-4" (MLW) to 23'-9" (MHW).

4.2.3 Rare, Threatened, and Endangered Species

Weymouth Fore River Channel Light 16 is not located within or in close proximity to any NHESP Priority or Estimated Habitats. The nearest mapped habitat polygon includes PH 1156, located approximately 2,500' east of the ATON.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.2.4 Proposed Action

The proposed project involves complete replacement of the existing ATON, including installing a new pile foundation, most likely drilled and socketed into bedrock, installation of a new deck, tower, ladder and safety climb system, dayboards, and new lighting.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing steel ATON structure will be demolished in its entirety. Next, four (4) steel casings will be driven to the bedrock (elevations vary) using a vibratory hammer or pile driving. A rock drill bit will be inserted into the steel casings and advanced to bedrock. A rock socket will be drilled out in the bedrock for installation of the steel pipe piles. The rock drill bit and casings will be removed and steel piles installed. The annulus between the rock and piles will be grouted.

The following Best Management Practices (BMPs) will be implemented during construction of the Weymouth Fore River Channel Light 16 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.2.5 Impacts

The proposed replacement of the Weymouth Fore River Channel Light 16 is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.2.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (7) do not apply. In order to minimize and avoid impacts to fisheries and wildlife to the maximum extent practicable the BMPs outlined in Section 4.2.4 above will be implemented throughout the duration of the project.

4.3 Hull, MA - Harry's Rock Light HR

4.3.1 Existing Conditions

Harry's Rock Light HR (42° 17' 13.291" N, 70° 55' 54.280" W) is an ATON structure servicing the navigational channel in Weymouth Fore River located in Weymouth, MA. The structure is a braced steel 3-pile substructure that supports an 8-foot diameter steel deck. It is accessible via water, has two (2) diamond NR dayboards and a flashing white light at a height of 26 feet. The existing steel piles and bracing are severely corroded and overall the structure is in critical condition. The decking, handrails, and framing are heavily corroded and portions are missing. The steel ladder is also damaged and nonfunctional.

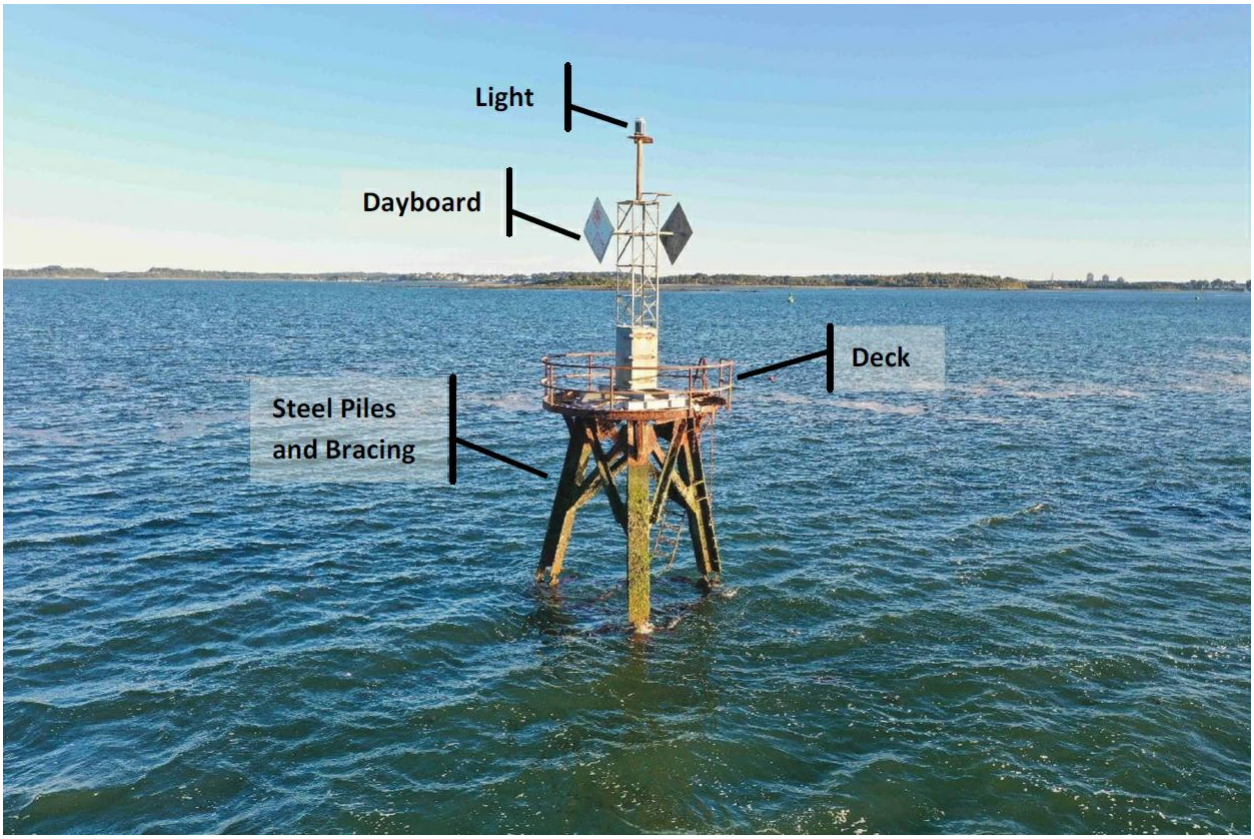


Photo 3: Harry's Rock Light HR

4.3.2 Resource Area Descriptions

4.3.2.1 Land under the Ocean

The existing Harry's Rock Light HR structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 13'-4" (MLW) to 23'-9" (MHW).

4.3.3 Rare, Threatened, and Endangered Species

Harry's Rock Light HR is not located within any NHESP Priority or Estimated Habitat polygons. However, PH 1282 / EH 923 are located in the vicinity of the ATON, approximately 400' to the north. PH 1205 is also located approximately 1,600'-2,000' to the west.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.3.4 Proposed Action

The proposed project involves the complete replacement of the existing ATON, including installing a new pile foundation, most likely drilled and socketed into rock, installing a new deck, tower, ladder and safety climb system, dayboards, and new lighting as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing steel ATON structure will be demolished in its entirety. Next, four (4) steel casings will be driven to the bedrock (elevations vary) using a vibratory hammer or pile driving. A rock drill bit will be inserted into the steel casings and advanced to bedrock. A rock socket will be drilled out in the bedrock for installation of the steel pipe piles. The rock drill bit and casings will be removed and steel piles installed. The annulus between the rock and piles will be grouted.

The following Best Management Practices (BMPs) will be implemented during construction of Harry's Rock Light HR in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.3.5 Impacts

The proposed replacement of Harry's Rock Light HR is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.3.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (7) do not apply. In order to minimize and avoid impacts to fisheries and wildlife to the maximum extent practicable the BMPs outlined in Section 4.3.4 above will be implemented throughout the duration of the project.

4.4 Cohasset, MA - Cohasset Channel Light 8

4.4.1 Existing Conditions

Cohasset Channel Light 8 (42° 15’ 5.497” N, 70° 47’ 0.665” W) is an ATON structure servicing Cohasset Channel in Cohasset, MA. The structure is a 5-pile timber substructure that supports an approximately 8-foot x 8-foot timber deck. It is accessible via water, has four (4) red triangle dayboards and a flashing red light at a height of 29 feet. The existing timber piles and bracing are heavily deteriorated and overall, the substructure is in serious condition. The timber deck is missing several deck boards, and a large bird’s nest has been built on the deck. The bottom portion of the ladder is heavily corroded and two of the four dayboards are damaged and one is missing.

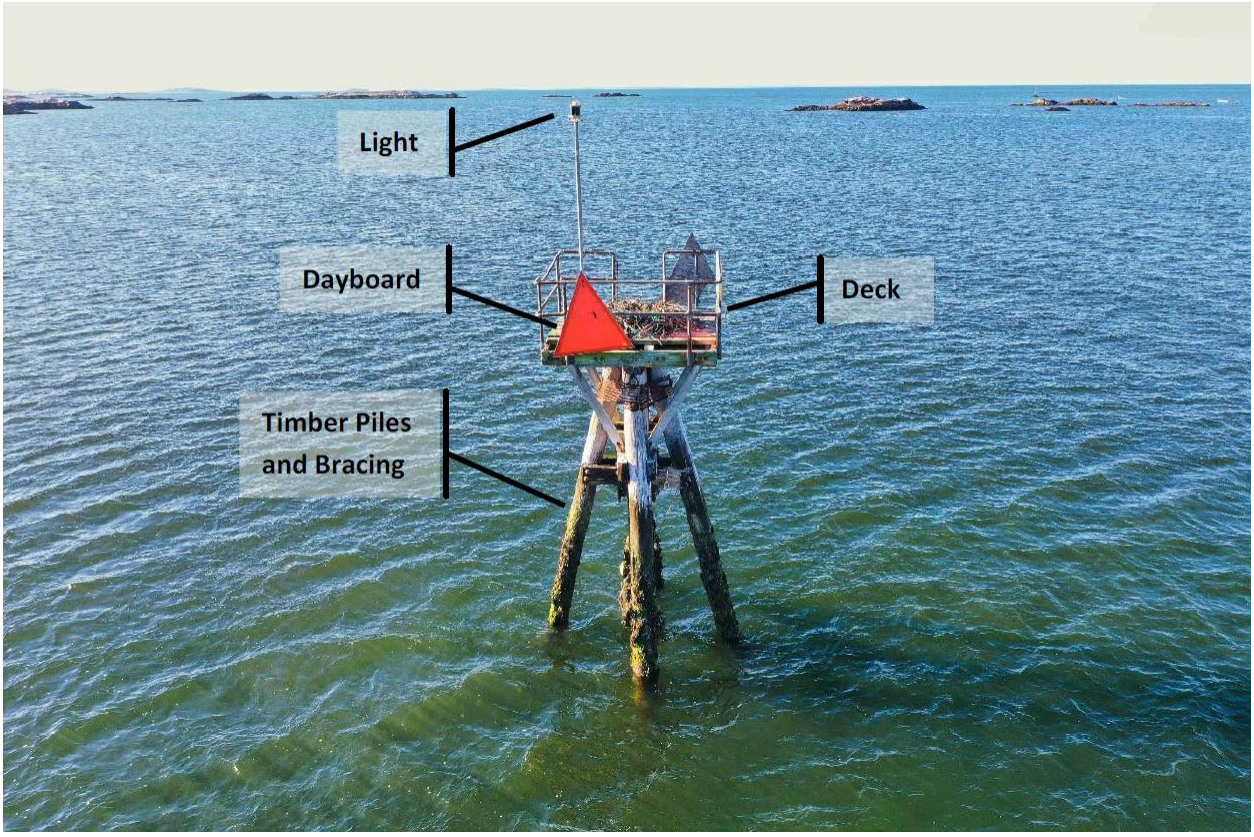


Photo 4: Cohasset Channel Light 8

4.4.2 Resource Area Descriptions

4.4.2.1 Land under the Ocean

The existing Cohasset Channel Light 8 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 8’-4” (MLW) to 17’-4” (MHW).

4.4.3 Rare, Threatened, and Endangered Species

Cohasset Channel Light 8 is located within NHESP Priority and Estimated Habitat polygons PH 1148 / EH 836. These polygons encompass the Cohasset Harbor and waters surrounding the Scituate Neck peninsula (**Figure 2-7**). A Request for State-listed Species Information was submitted to the NHESP. NHESP's response letter dated December 16, 2021 (NHESP Tracking No.: 21-40627) indicated that least tern (*Sternula antillarum*), a state listed Special Concern species, has the potential to occur in the vicinity of the Cohasset Channel Light 8 site. The project is being submitted concurrently to NHESP as a Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

There is currently a nest on the deck of this structure, which is likely an osprey nest. Ospreys often reuse nests, with nesting season occurring between March and August. Ospreys are protected under the Migratory Bird Treaty Act (MBTA), which prohibits the purposeful take or attempting to purposefully take any migratory bird, nest, and eggs or parts thereof, unless permitted by the U.S. Fish and Wildlife Service. All osprey nests are deemed inactive from September through February when ospreys are at their wintering grounds in Central and South America. Inactive nests do not need a migratory bird permit or permission to remove nests.

4.4.4 Proposed Action

The proposed project involves the installation of a new piled foundation, most likely drilled and socketed into rock, installation of a new deck and raptor platform, installation of a new ladder and safety climb system, and new dayboards and light as required.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing timber ATON structure will be demolished in its entirety. Five (5) new timber piles will be installed using a vibratory hammer, and the rest of the components will be installed.

The following Best Management Practices (BMPs) will be implemented during construction of Cohasset Channel Light 8 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

7. Least terns nest on the shoreline from May through July, chicks fledge by August, and migration starts in August. To avoid impacting nesting terns, no pile driving will occur between May 1 and August 15.

8. The osprey nest located on this ATON will be removed between September and February when it is inactive. If the ATON replacement is not carried out at that time, temporary exclusion measures must be installed to prevent nesting from occurring prior to construction

9. A dedicated nesting platform will be installed on the proposed ATON.

4.4.5 Impacts

The proposed replacement of the Cohasset Channel Light 8 is anticipated to result in approximately 4.0 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the five (5) timber piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

4.4.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (6) do not apply.

310 CMR 10.25(7) states, "*Notwithstanding the provisions of 310 CMR 10.25(3) through (6), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37*."

The proposed project is not anticipated to have an adverse effect on least terns with the time of year restriction on pile driving during the nesting season from May 1 through August 15. In addition, the existing osprey nest will be removed when the nest is inactive, and a dedicated nesting platform will be

installed on the new structure. These measures along with the additional BMPs outlined in Section 4.4.4 above will minimize and avoid adverse impacts to fish and wildlife including rare species to the maximum extent practicable.

4.5 Boston, MA - Boston Main Channel Light 5

4.5.1 Existing Conditions

Boston Main Channel Light 5 (42° 20’ 0.162” N, 71° 0’ 3.732” W) is an ATON tower servicing the entrance to Boston Harbor. The tower is a USCG-standard 5-foot x 5-foot steel skeleton frame supported on a steel-framed deck on a braced steel four-pile substructure. The ATON is accessible via water and has a flashing green light, square green dayboards, and a height of 32 feet.

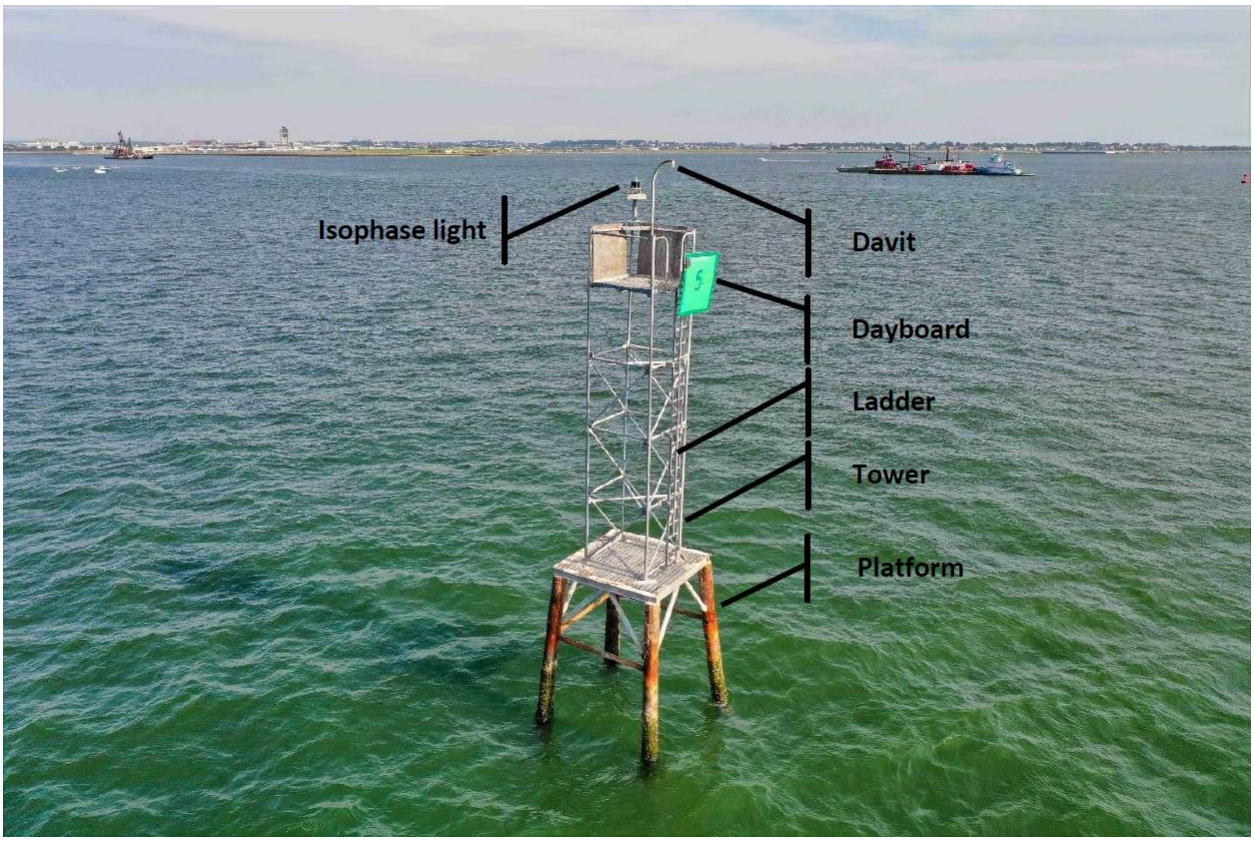


Photo 5: Boston Main Channel Light 5

The existing piles exhibit severe defects above the water including localized buckling and cracking as well as coating loss and moderate corrosion and pitting. Overall, the piles and bracing are in critical condition. The deck is in serious condition, with isolated severe defects along the perimeter beams from overstressing, as well as isolated coating loss and moderate corrosion. The existing tower is in satisfactory condition and the light, three out of four dayboards, and tower ladder all appear intact. The primary access ladder to the ATON is detached.

4.5.2 Resource Area Descriptions

4.5.2.1 Land under the Ocean

The existing Boston Main Channel Light 5 structure is located within the Land Under the Ocean resource area. No additional resource areas subject to jurisdiction under the WPA are located in the vicinity of the proposed project. Water depths in the vicinity of the structure vary from approximately 12'-4" (MLW) to 21'-10" (MHW).

4.5.3 Rare, Threatened, and Endangered Species

Boston Main Channel Light 5 is not located within or in close proximity to any NHESP Priority or Estimated Habitats. The nearest mapped habitat polygon includes PH 1156, located approximately 2,500' east of the ATON.

The project is located within the known and expected range of federally listed Atlantic sturgeon, shortnose sturgeon, sea turtles, North Atlantic right whale, and fin whale. The project is also located within federally designated critical habitat (Unit 1, feeding area) for the North Atlantic right whale. Migrating and foraging adults and subadults of each of these species could potentially occur within the project area.

4.5.4 Proposed Action

The proposed project involves the replacement of the piles, most likely drilled and socketed into rock, and installation of a new platform, deck, and ladder.

A barge will be mobilized to the project site from which the majority of the work and staging will be completed. The existing steel ATON structure will be demolished in its entirety. The four (4) steel pipe piles will be installed using a vibratory hammer and the rest of the above-water components will be installed.

The following Best Management Practices (BMPs) will be implemented during construction of the Boston Main Channel Light 5 in order to minimize and avoid potential impacts to fish and wildlife in the vicinity of the proposed project.

1. A vibratory hammer will be used as much as possible for all pile driving activities.

2. Any use of an impact hammer during pile driving will require the use of active attenuation measures (cushion blocks and bubble curtains).

3. Pile driving activities will be limited to no more than 12 hours per day during daytime hours.

4. A "soft start" will be used for a pile driving activities such that driving does not occur at full power at first.

5. Shallow draft vessels that maximize the navigational clearance between the vessel and the ocean floor will be used where possible.

6. Vessels will operate at speeds of less than 10 knots. A look out should be posted and measures taken to slow down and avoid any whales or sea turtles spotted.

4.5.5 Impacts

The proposed replacement of the Boston Main Channel Light 5 is anticipated to result in approximately 5.6 square feet (SF) of permanent impacts to the Land Under the Ocean resource area. The impacts are associated with the demolition of the existing structure and the installation of the four (4) steel pipe piles for the proposed ATON replacement structure.

The proposed project is not anticipated to result in any additional impacts to other resource areas subject to jurisdiction under the WPA. The proposed project is limited to in-kind replacement of the existing structure and does not involve any dredging.

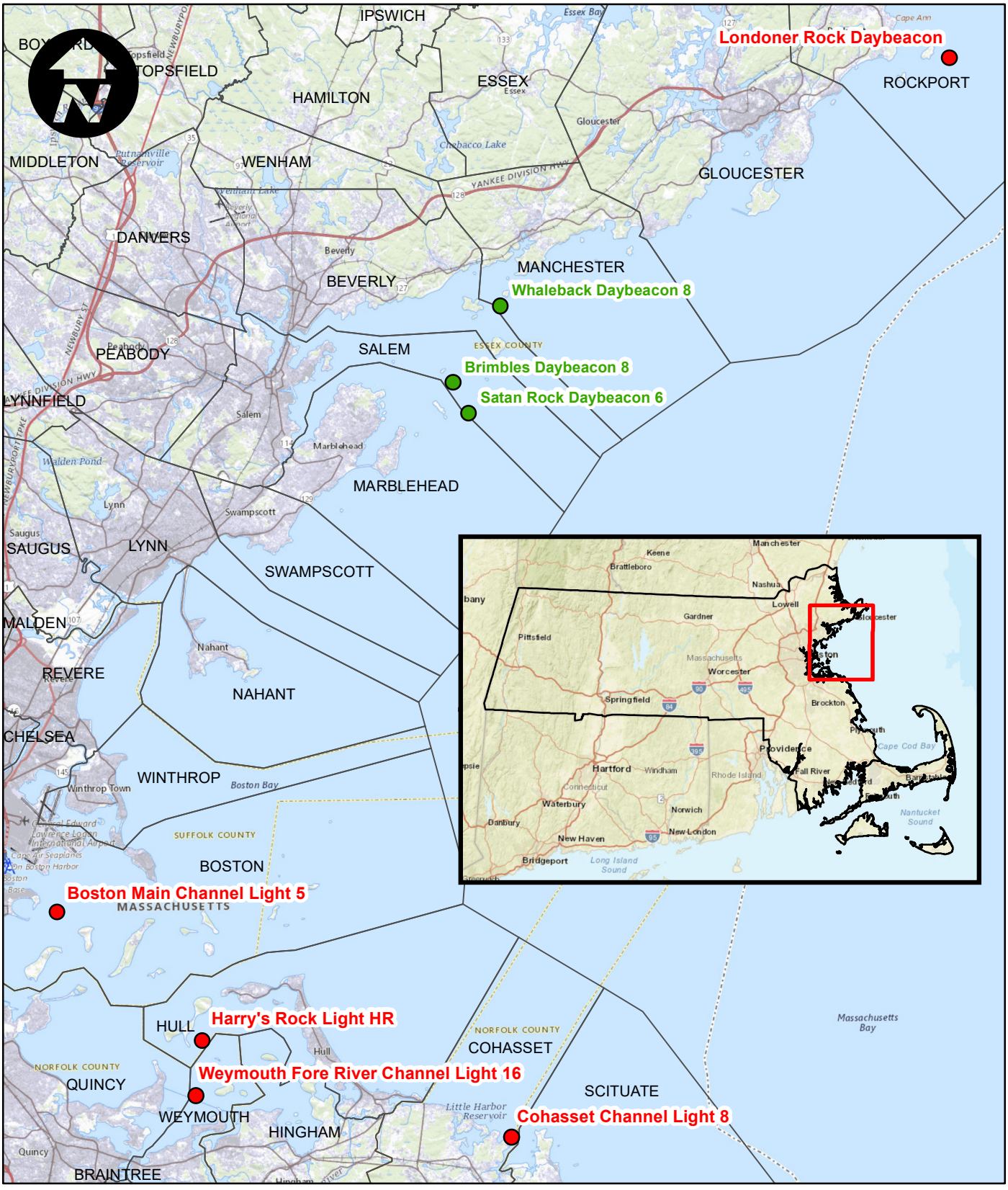
4.5.6 Regulatory Compliance and MA WPA Performance Standards

The WPA does not provide specific performance standards for the Land Under the Ocean resource area. The Land Under the Ocean located within the project area has not been found to be significant to the protection of marine fisheries, protection of wildlife habitat, storm damage prevention, or flood control. Therefore, 310 CMR 10.25(3) through (7) do not apply. In order to minimize and avoid impacts to fisheries and wildlife to the maximum extent practicable the BMPs outlined in Section 4.5.4 above will be implemented throughout the duration of the project.

5.0 Abutters

The proposed project is assumed to be exempt from abutter notification requirements pursuant to 310 CMR 10.05, "*Notwithstanding the foregoing, the requirement to provide Abutter notification is subject to the following limits. An applicant is required to provide notification to an Abutter whose Lot is separated from the Project Locus by a public or private street or body of water only if the Abutter's Lot is within 100 feet from the property line of the Project Locus. An applicant who proposes work solely within Land under Water Bodies or Waterways, or solely within a Lot with an area greater than 50 acres, is required to provide notification only to Abutters whose Lot is within one hundred feet from the Project Site…*"

The proposed USCG ATON replacement structures are all located greater than 100 feet from the nearest property abutters and are separated by a body of water (**Figure 3-1 – 3-5**). Therefore, abutter notification is not required for any of the proposed ATON replacements.



J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 1 - USGS Location Map USCG ATON.mxd

ATON Locations

Proposed Work

- Replace (MA WPA NOI Required)
- Repair (No In-Water Work / Impacts)

Town Boundary

0 18,000 36,000

Feet

APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

USGS LOCATION MAP

SCALE :	DATE :	FIGURE :
1 inch = 18,000 feet	NOVEMBER 2021	1

McFarland Johnson

ATON Locations (MA WPA NOI Required)

Town Boundary

Rare Species

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Flood Hazard Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Shellfish Suitability Areas

Species

Blue Mussel

European Oyster

Razor Clam

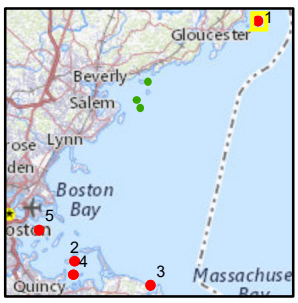
Sea Scallop

Soft-shelled Clam

Surf Clam

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

EXISTING RESOURCES

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	2-1

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 2 - NOI Existing Resources USCG ATON.mxd

ATON Locations (MA WPA NOI Required)

Town Boundary

Rare Species

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Flood Hazard Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Shellfish Suitability Areas

Species

Blue Mussel

European Oyster

Razor Clam

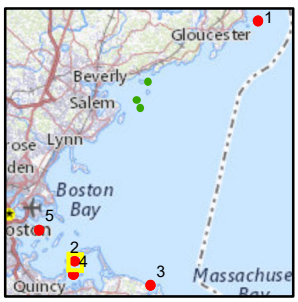
Sea Scallop

Soft-shelled Clam

Surf Clam

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

EXISTING RESOURCES

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	2-2

McFarland Johnson

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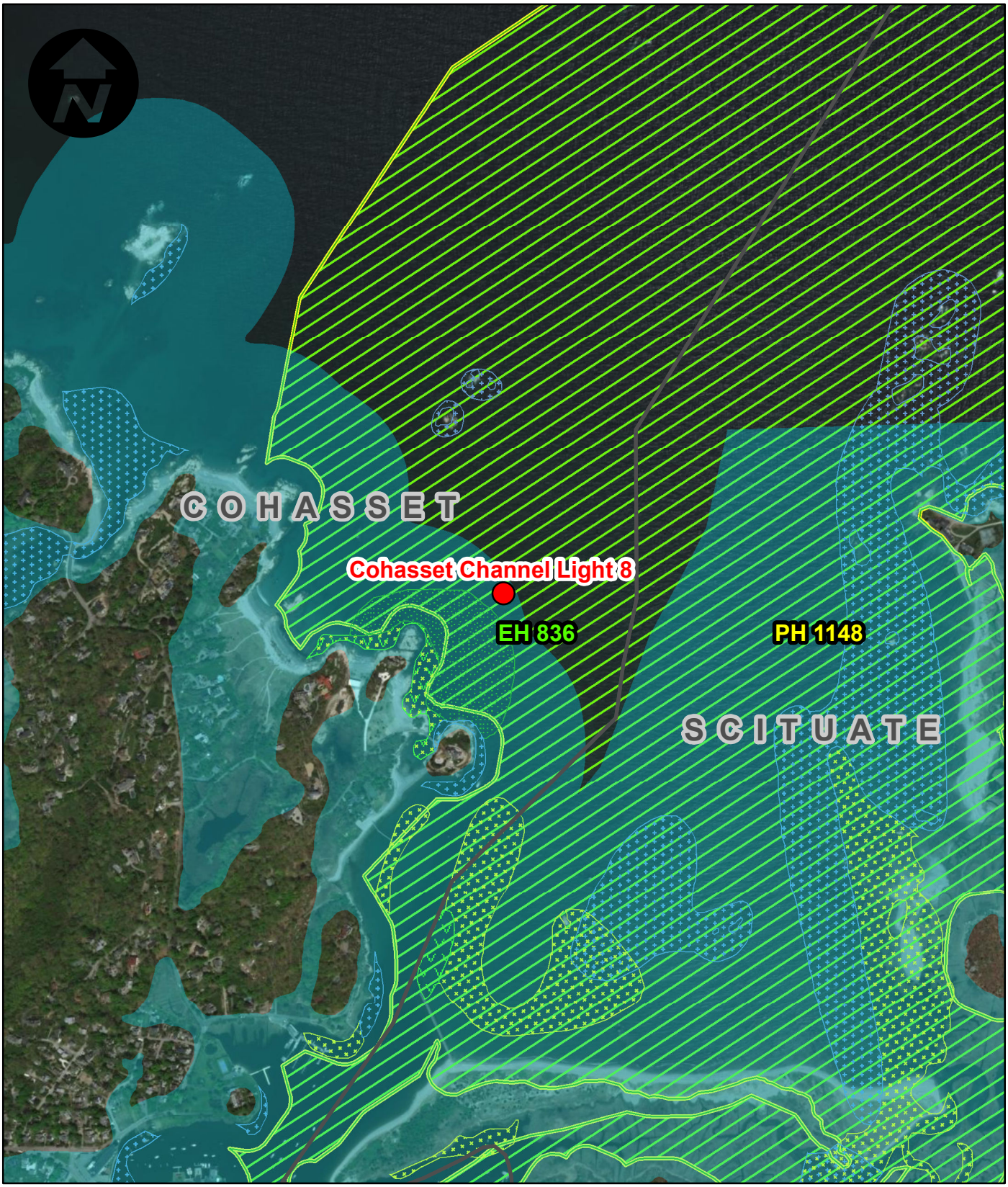


ATON Locations (MA WPA NOI Required)

Town Boundary

Rare Species

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Flood Hazard Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Shellfish Suitability Areas

Species

Blue Mussel

European Oyster

Razor Clam

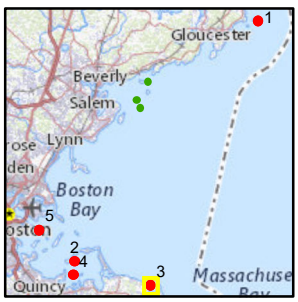
Sea Scallop

Soft-shelled Clam

Surf Clam

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

EXISTING RESOURCES

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	2-3

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 2 - NOI Existing Resources USCG ATON.mxd

ATON Locations (MA WPA NOI Required)

Town Boundary

Rare Species

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Flood Hazard Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Shellfish Suitability Areas

Species

Blue Mussel

European Oyster

Razor Clam

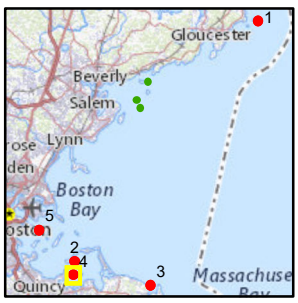
Sea Scallop

Soft-shelled Clam

Surf Clam

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

EXISTING RESOURCES

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	2-4

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 2 - NOI Existing Resources USCG ATON.mxd

ATON Locations (MA WPA NOI Required)

Town Boundary

Rare Species

NHESP Estimated Habitats of Rare Wildlife

NHESP Priority Habitats of Rare Species

Flood Hazard Zones

1% Annual Chance Flood Hazard

0.2% Annual Chance Flood Hazard

Shellfish Suitability Areas

Species

Blue Mussel

European Oyster

Razor Clam

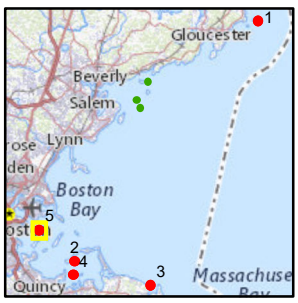
Sea Scallop

Soft-shelled Clam

Surf Clam

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

EXISTING RESOURCES

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	2-5

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 2 - NOI Existing Resources USCG ATON.mxd

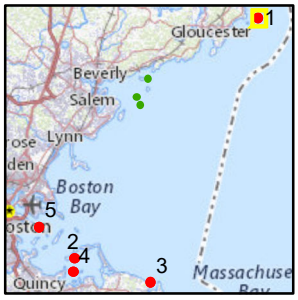
ATON Locations (MA WPA NOI Required)

Town Boundary

Tax Parcels

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

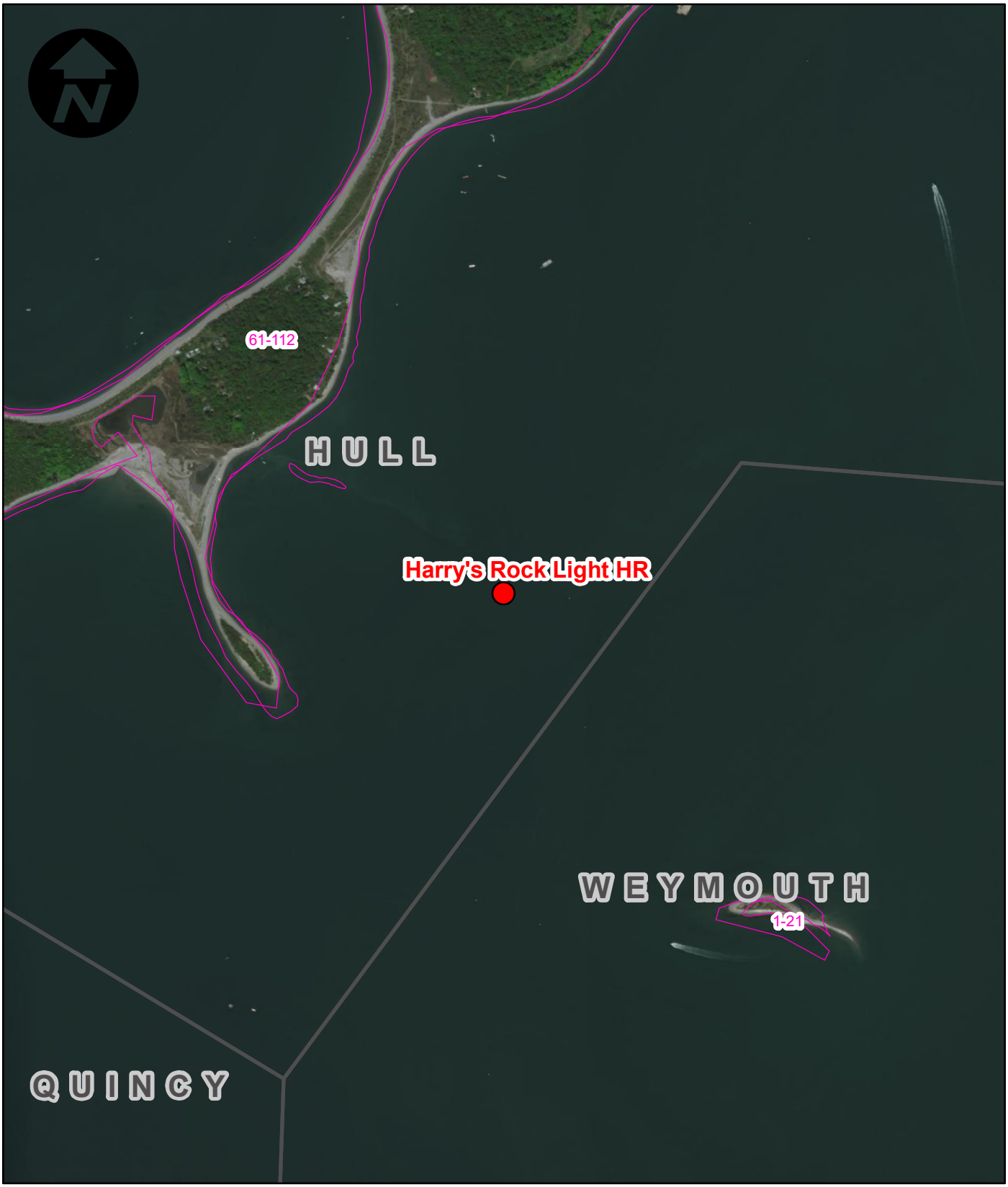
USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

TAX PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	3-1

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 3 - NOI Assessor Maps USCG ATON.mxd



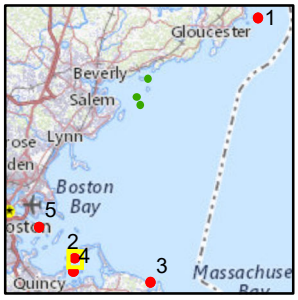
ATON Locations (MA WPA NOI Required)

Town Boundary

Tax Parcels

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

TAX PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	3-2

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 3 - NOI Assessor Maps USCG ATON.mxd

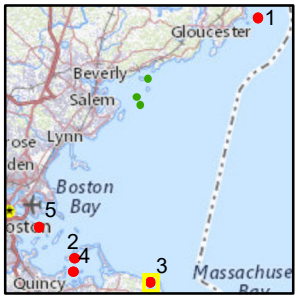
ATON Locations (MA WPA NOI Required)

Town Boundary

Tax Parcels

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

TAX PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	3-3

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 3 - NOI Assessor Maps USCG ATON.mxd

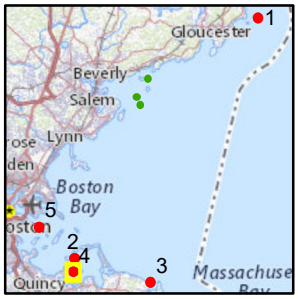
ATON Locations (MA WPA NOI Required)

Town Boundary

Tax Parcels

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

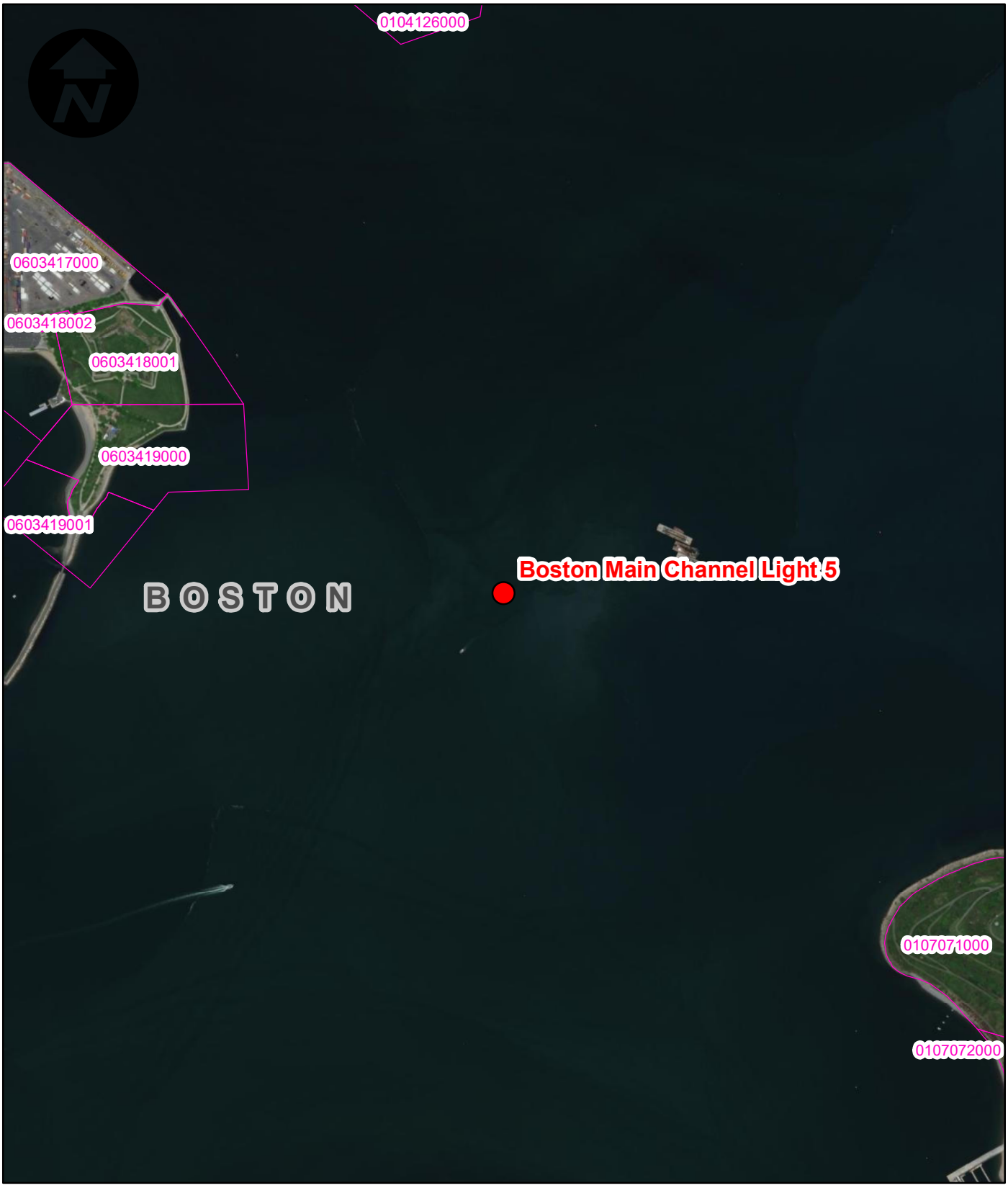
USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

TAX PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	3-4

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 3 - NOI Assessor Maps USCG ATON.mxd



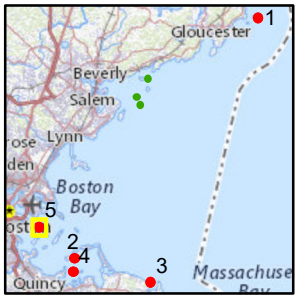
ATON Locations (MA WPA NOI Required)

Town Boundary

Tax Parcels

0 1,000 2,000

Feet



APPLEDORE MARINE ENGINEERING

USCG AIDS TO NAVIGATION (ATONS) IMPROVEMENTS

TAX PARCEL MAP

SCALE :	DATE :	FIGURE :
1 inch = 1,000 feet	NOVEMBER 2021	3-5

McFarland Johnson

J:\18872.00 Appledore Mass USCG ATON\Draw\GIS\NOI Figures\Figure 3 - NOI Assessor Maps USCG ATON.mxd

MASSWILDLIFE

DIVISION OF
FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581
p: (508) 389-6300 | f: (508) 389-7890
MASS.GOV/MASSWILDLIFE

December 16, 2021

Christine Perron
McFarland Johnson
53 Regional Drive
Concord NH 03301

RE: Project Location: Cohasset Channel Light 8
Town: COHASSET
NHESP Tracking No.: 21-40627

To Whom It May Concern:

Thank you for contacting the Natural Heritage and Endangered Species Program of the MA Division of Fisheries & Wildlife (the "Division") for information regarding state-listed rare species in the vicinity of the above referenced site. Based on the information provided, this project site, or a portion thereof, is located **within** *Priority Habitat 1148* (PH 1148) and *Estimated Habitat 836* (EH 836) as indicated in the *Massachusetts Natural Heritage Atlas* (15th Edition) for the following state-listed rare species:

Scientific name	Common Name	Taxonomic Group	State Status
Sternula antillarum	Least Tern	Bird	Special Concern

The species listed above is protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). State-listed wildlife are also protected under the state's Wetlands Protection Act (WPA) (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most state-listed rare species can be found on our website (www.mass.gov/nhesp).

Please note that projects and activities located within Priority and/or Estimated Habitat **must** be reviewed by the Division for compliance with the state-listed rare species protection provisions of MESA (321 CMR 10.00) and/or the WPA (310 CMR 10.00).

Wetlands Protection Act (WPA)

If the project site is within Estimated Habitat and a Notice of Intent (NOI) is required, then a copy of the NOI must be submitted to the Division so that it is received at the same time as the local conservation commission. If the Division determines that the proposed project will adversely affect the actual Resource Area habitat of state-protected wildlife, then the proposed project may not be permitted (310 CMR 10.37, 10.58(4)(b) & 10.59). In such a case, the project proponent may request a consultation with the Division to discuss potential project design modifications that would avoid adverse effects to rare wildlife habitat.

A streamlined joint MESA/WPA review process is available. When filing a Notice of Intent (NOI), the applicant may file concurrently under the MESA on the same NOI form and qualify for a 30-day

streamlined joint review. For a copy of the NOI form, please visit the MA Department of Environmental Protection's website: https://www.mass.gov/how-to/wpa-form-3-wetlands-notice-of-intent.

MA Endangered Species Act (MESA)

If the proposed project is located within Priority Habitat and is not exempt from review (see 321 CMR 10.14), then project plans, a fee, and other required materials must be sent to Natural Heritage Regulatory Review to determine whether a probable Take under the MA Endangered Species Act would occur (321 CMR 10.18). Please note that all proposed and anticipated development must be disclosed, as MESA does not allow project segmentation (321 CMR 10.16). For a MESA filing checklist and additional information please see our website: https://www.mass.gov/regulatory-review.

We recommend that rare species habitat concerns be addressed during the project design phase prior to submission of a formal MESA filing, as avoidance and minimization of impacts to rare species and their habitats is likely to expedite endangered species regulatory review.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. If the purpose of your inquiry is to generate a species list to fulfill the federal Endangered Species Act (16 U.S.C. 1531 et seq.) information requirements for a permit, proposal, or authorization of any kind from a federal agency, we recommend that you contact the National Marine Fisheries Service at (978)281-9328 and use the U.S. Fish and Wildlife Service's Information for Planning and Conservation website (https://ecos.fws.gov/ipac). If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at (508) 389-6385.

Sincerely,

Everose Schlüter

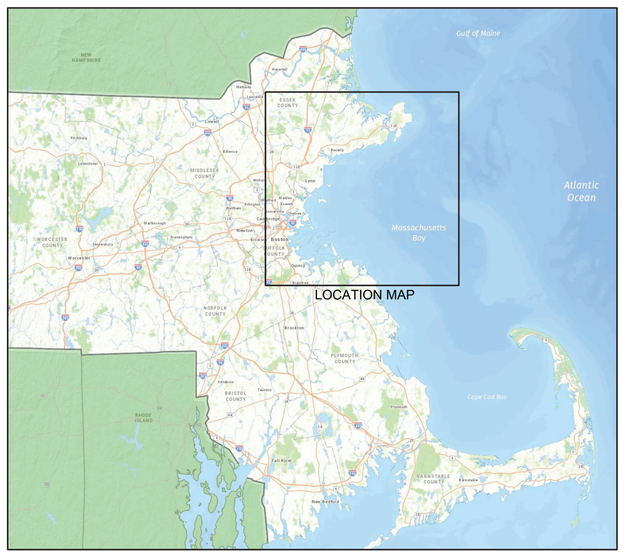
Everose Schlüter, Ph.D.
Assistant Director

U.S. COAST GUARD
CIVIL ENGINEERING
CEU PROVIDENCE

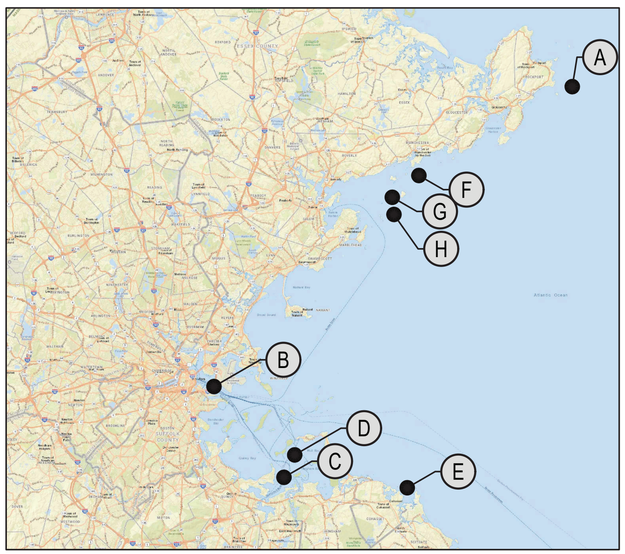
Appledore Marine Engineering, LLC

MASSACHUSETTS BAY ATON
MASSACHUSETTS
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
AT

LONDONER ROCK DAYBEACON (LLNR 315)
BOSTON MAIN CHANNEL LIGHT 5 (LLNR 10890)
WEYMOUTH FORE RIVER CHANNEL LIGHT 16 (LLNR 11715)
HARRY'S ROCK LIGHT HR (LLNR 11675)
COHASSET CHANNEL LIGHT 8 (LLNR 12185)
WHALEBACK DAYBEACON 8 (LLNR 9990)
BRIMBLES DAYBEACON (LLNR 10405)
SATAN ROCK DAYBEACON 6 (LLNR 10395)



VICINITY MAP
SCALE: NTS



LOCATION MAP
SCALE: NTS

DRAWING INDEX

SHEET ID	SHEET NO.	LEVEL II / SITE DESIGNATION	SITE	SHEET TITLE
G-001	01	-	ALL	COVER SHEET
G-002	02	-	ALL	GENERAL NOTES
S-201A	03	A	LONDONER ROCK DAYBEACON	EXISTING DEMOLITION
S-202A	04	A	LONDONER ROCK DAYBEACON	GENERAL ARRANGEMENT
S-501A	05	A	LONDONER ROCK DAYBEACON	GENERAL DETAILS
S-201B	06	B	BOSTON MAIN CHANNEL LIGHT 5	EXISTING DEMOLITION
S-202B	07	B	BOSTON MAIN CHANNEL LIGHT 5	GENERAL ARRANGEMENT
S-201C	08	C	WEYMOUTH FORE RIVER CHANNEL LIGHT 16	EXISTING DEMOLITION
S-202C	09	C	WEYMOUTH FORE RIVER CHANNEL LIGHT 16	GENERAL ARRANGEMENT
S-201D	10	D	HARRY'S ROCK LIGHT HR	EXISTING DEMOLITION
S-202D	11	D	HARRY'S ROCK LIGHT HR	GENERAL ARRANGEMENT
S-501	12	B, C, D	-	GENERAL DETAILS - 1
S-502	13	B, C, D	-	GENERAL DETAILS - 2
S-201E	14	E	COHASSET CHANNEL LIGHT 8	EXISTING DEMOLITION
S-202E	15	E	COHASSET CHANNEL LIGHT 8	GENERAL ARRANGEMENT
S-501E	16	E	COHASSET CHANNEL LIGHT 8	GENERAL DETAILS
S-201F	17	F	WHALEBACK DAYBEACON 8	EXISTING DEMOLITION
S-202F	18	F	WHALEBACK DAYBEACON 8	GENERAL ARRANGEMENT
S-201G	19	G	BRIMBLES DAYBEACON	EXISTING DEMOLITION
S-202G	20	G	BRIMBLES DAYBEACON	GENERAL ARRANGEMENT
S-201H	21	H	SATAN ROCK DAYBEACON 6	EXISTING DEMOLITION
S-202H	22	H	SATAN ROCK DAYBEACON 6	GENERAL ARRANGEMENT
R-701	23	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 01
R-702	24	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 02
R-703	25	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 03
R-704	26	-	BOSTON MAIN CHANNEL LIGHT 5	TOWER REFERENCE - 04
R-705	27	-	HARRY'S ROCK LIGHT	TOWER REFERENCE - 05
R-706	28	-	MONO PILE DAYBEACONS	TOWER REFERENCE - 06
R-707	29	-	MONO PILE DAYBEACONS	TOWER REFERENCE - 07

BASE BID / BID OPTION INDEX

SITE	LEVEL II/ SITE DESIGNATION	BID DESIGNATION
LONDONER ROCK DAYBEACON (LLNR 315)	A	BASE BID
BOSTON MAIN CHANNEL LIGHT 5 (LLNR 10890)	B	BASE BID
WEYMOUTH FORE RIVER CHANNEL LIGHT 16 (LLNR 11715)	C	BASE BID
HARRY'S ROCK LIGHT HR (LLNR 11675)	D	BASE BID
COHASSET CHANNEL LIGHT 8 (LLNR 12185)	E	BASE BID
WHALEBACK DAYBEACON 8 (LLNR 9990)	F	BID OPTION #1
BRIMBLES DAYBEACON (LLNR 10405)	G	BID OPTION #2
SATAN ROCK DAYBEACON 6 (LLNR 10395)	H	BID OPTION #3

100% SUBMISSION
NOT FOR CONSTRUCTION

MICHAEL P. CAROSOTTO, P.E.
APPROVING OFFICER DATE

MICHAEL P. CAROSOTTO, P.E.
TECHNICAL DIRECTOR

DAVID GLASS, P.E.
BRANCH CHIEF

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MWM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020G-001.DWG
SHEET 01 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON MA
GENERAL
COVER SHEET

SHEET ID
ALL
G-001

GENERAL NOTES:

1. THE DRAWINGS AND SPECIFICATIONS FORM A PART OF THE CONTRACT DOCUMENTS AND ALL WORK MUST BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR MUST KEEP A COPY OF THE DRAWINGS AND THE SPECIFICATIONS ON SITE AT ALL TIMES DURING THE WORK.
2. IT IS RECOMMENDED TO COMPLETE A PRE-BID SITE VISIT TO VERIFY THE PROJECT SCOPE AND EXTENT OF WORK.
3. ELEVATIONS ARE IN FEET BASED ON MEAN LOWER LOW WATER (MLLW) PROJECT DATUM FOR THE 1983-2001 TIDAL EPOCH.
4. ALL NORTH ARROWS SHOWN ARE GRID NORTH BASED ON NAD83.
5. DIMENSIONS AND DETAILS OF THE EXISTING ELEMENTS ARE BASED ON LIMITED ARCHIVE DRAWINGS AND LIMITED FIELD MEASUREMENTS. WORK RELATED ELEVATIONS, DIMENSIONS AND DETAILS OF THE EXISTING ELEMENTS MUST BE FIELD VERIFIED BY THE CONTRACTOR. DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE GOVERNMENT BEFORE ORDERING MATERIALS AND PROCEEDING WITH THE WORK.
6. DETERMINE CONSTRUCTION PROCEDURES AND SEQUENCE TO ENSURE THE SAFETY OF THE FACILITIES. ERECT, MAINTAIN AND REMOVE TEMPORARY ERECTION MATERIALS AND EQUIPMENT. COORDINATE ALL PROPOSED STAGING AREAS WITH THE GOVERNMENT BEFORE STARTING THE WORK.
7. MAINTAIN ADEQUATE SURVEY CONTROL AT ALL TIMES TO ESTABLISH AND MAINTAIN ALL LINES AND ELEVATIONS.
8. SCHEDULE AND COORDINATE ALL WORK, INCLUDING ALLOWABLE WORK WINDOWS, WITH THE GOVERNMENT, AND MAINTAIN THE WORK SITE TO THE SATISFACTION OF THE GOVERNMENT.
9. PROVIDE AND MAINTAIN ENVIRONMENTAL CONTROLS AS REQUIRED BY FEDERAL, STATE AND LOCAL REGULATIONS AND PERMITS. ENVIRONMENTAL CONTROLS MUST INCLUDE BUT NOT BE LIMITED TO TURBIDITY AND DUST.
10. THE CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGE DONE TO STRUCTURES AS A RESULT OF PERFORMING THE WORK.
11. THE CONTRACTOR MAY BE CHARGED ANY ADDITIONAL COST FOR REINSPECTION OR RETEST WHEN PRIOR REJECTION MAKES REINSPECTION OR RETESTING NECESSARY.

WORK DEFINITIONS

1. "REMOVE" IS DEFINED AS REMOVE AND DISPOSE OF STRUCTURE OR ELEMENT.
2. "REMOVE AND SALVAGE" IS DEFINED AS REMOVE THE STRUCTURE OR ELEMENT FROM THE EXISTING STRUCTURE AND SALVAGE FOR REINSTALLATION ON THE PROVIDED STRUCTURE.
3. "PROVIDE" IS DEFINED AS PROVIDE NEW STRUCTURE OR ELEMENT.

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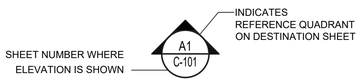
NOT FOR CONSTRUCTION

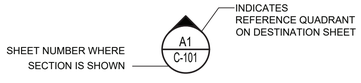
LEGEND

APPROX	APPROXIMATE
ATON	AID TO NAVIGATION
CIP	CAST-IN-PLACE
℄	CENTERLINE
CLR	CLEAR
CY	CUBIC YARD
DIA Ø	DIAMETER
EL	ELEVATION IN FEET
GALV	GALVANIZED
HDG	HOT DIPPED GALVANIZE
ID	INSIDE DIAMETER
LBS	POUNDS
LF	LINEAR FEET
MAX	MAXIMUM
MHW	MEAN HIGH WATER
MIN	MINIMUM
MISC	MISCELLANEOUS
MLLW	MEAN LOWER LOW WATER
NTS	NOT TO SCALE
OC	ON CENTER
PP	PIPE PILE
PCF	POUNDS PER CUBIC FOOT
₱	PLATE
PLCS	PLACES
PSF	POUNDS PER SQUARE FOOT
REF	REFERENCE
SCH	SCHEDULE
SF	SQUARE FEET
SQ	SQUARE
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
WP	WORKING POINT

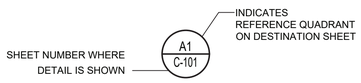
ELEVATION, SECTION OR DETAIL SYMBOLS



EXTERIOR ELEVATION/SECTION



INTERIOR ELEVATION/SECTION



DETAIL

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DT
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020G-002.DWG
SHEET 02 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON
MA
GENERAL
GENERAL NOTES

SHEET ID
ALL
G-002

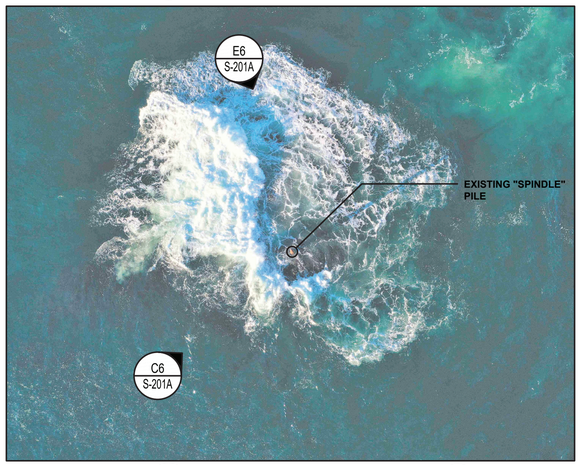
NOTES:

1. "SPINDLE" PILE FOUNDATION IS STEEL/IRON AND THE CONNECTION TO BEDROCK IS UNKNOWN.

A2 EXISTING TOWER ELEVATION
SCALE: 3/8"=1'-0"

E6 LOOKING NORTHWEST
SCALE: NTS

C6 LOOKING SOUTHWEST
SCALE: NTS



A6 EXISTING PLAN VIEW
SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING "SPINDLE" PILE IN ITS ENTIRETY TO TOP OF BEDROCK.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8441551	
ROCKPORT HARBOR, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.46
MEAN HIGH WATER	9.03
MEAN SEA LEVEL	4.71
MEAN TIDE LEVEL	4.68
MEAN LOW WATER	0.32
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	315
NAME AND LOCATION	LONDONER ROCK DAYBEACON
POSITION	42-38-06.479N 070-33-57.962W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURE TYPE	SPINDLE
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

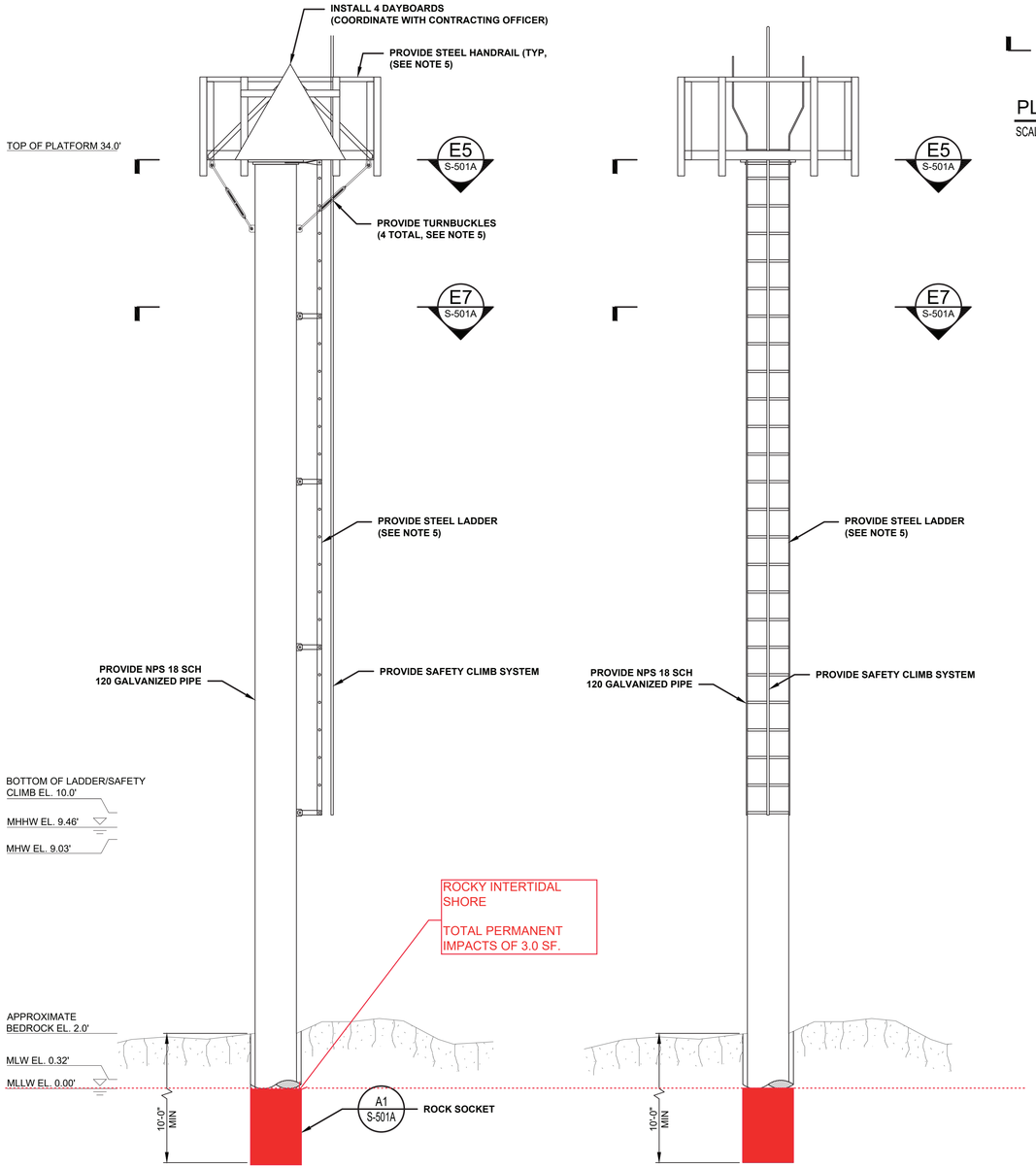
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201A.DWG
SHEET 03 OF 29

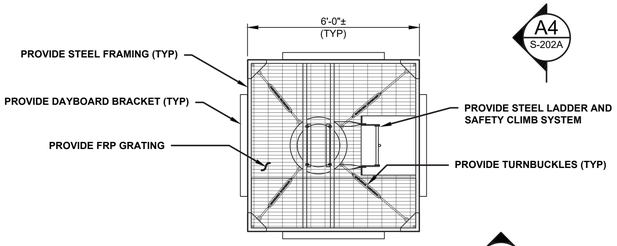
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
LONDONER ROCK DAYBEACON
S-201A



A1 TOWER ELEVATION
SCALE: 3/8"=1'-0"

A4 TOWER ELEVATION
SCALE: 3/8"=1'-0"



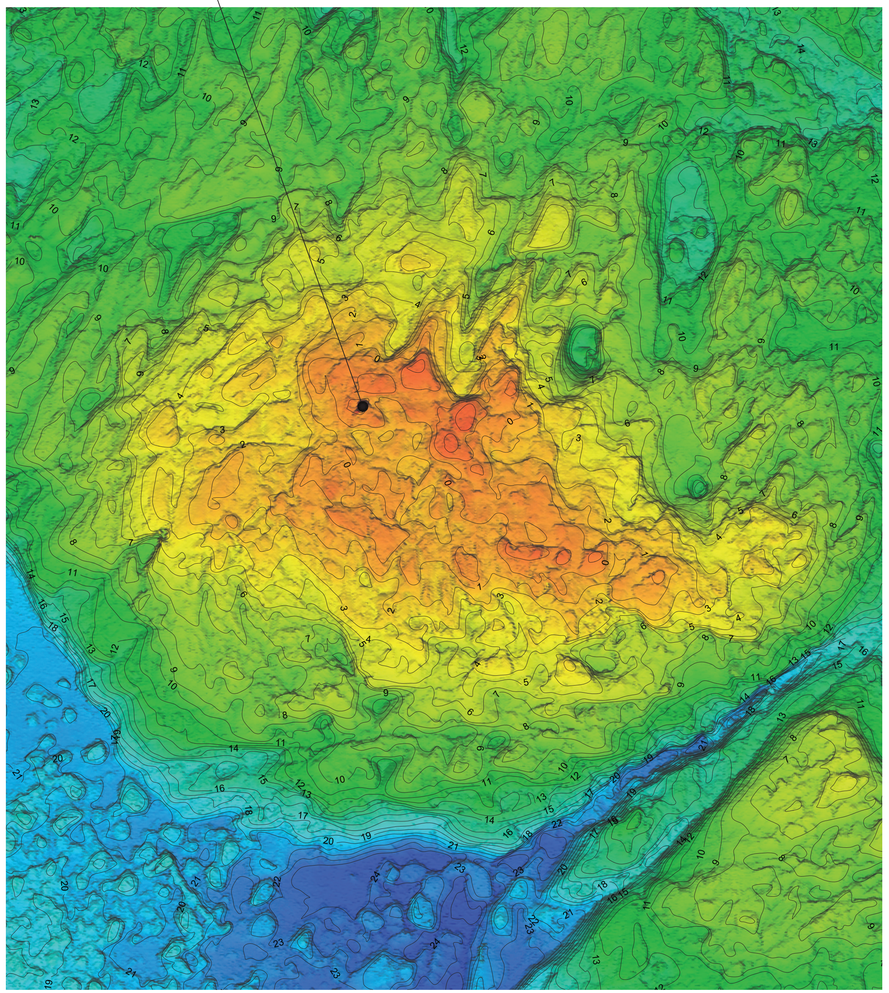
PLAN
SCALE: 3/8"=1'-0"

NOTES:

1. THIS HYDROGRAPHIC SURVEY REPRESENTS CONDITIONS EXISTING ON 10/8/21 AND MAY NOT BE REPRESENTATIVE OF CONDITIONS ON ANOTHER DATE.
2. THIS HYDROGRAPHIC SURVEY IS INTENDED FOR USE ON THIS PROJECT ONLY, AND IS NOT INTENDED FOR ANY OTHER PROJECT OR PURPOSE.
3. MULTI BEAM BATHYMETRIC DATA COLLECTED USING SURVEY VESSEL SEATRAC SP-48(ASV), A NORBIT iWBMS 400 KHZ SONAR, APPLANIX RTK GPS WITH INTEGRATED IMU, AML SVP, WITH SMARTNET VRS GPS CORRECTIONS, AND HYPACK 2019 FOR DATA ACQUISITION AND PROCESSING.
4. SOUNDINGS ARE IN FEET AND TENTHS BELOW MEAN LOWER LOW WATER (MLLW). SOUNDINGS GENERATED FROM 1'X1' MINIMUM DATA, SORTED TO 5' FOR PLOTTING. THE CORRECTION FROM NAVD(88) TO MLLW = -5.00 FT DETERMINED USING NOAA V-DATUM IN THE VICINITY OF LONDONER ATON, EAST OF THACHER ISLAND, ROCKPORT, MA. THE COORDINATE SYSTEM IS THE MA - MAINLAND STATE PLANE COORDINATE SYSTEM, DATUM: NAD83, UNITS: US SURVEY FEET.
5. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.
6. INSTALL THE PROVIDED MONOPILE AS CLOSE AS RECOMMENDED TO THE EXISTING SPINDLE. COORDINATE FINAL LOCATION WITH CONTRACTING OFFICER.

100% SUBMISSION
NOT FOR CONSTRUCTION

LOCATION OF EXISTING
LONDONER ATON
(LOCATED WITH SONAR)



DEPTH
FEET
-32 -31 -30 -29 -28 -27 -26 -25 -24 -23 -22 -21 -20 -19 -18 -17 -16 -15 -14 -13 -12 -11 -10 -9 -8 -7 -6 -5 -4 -3 -2 -1 +0 +1 +2 +3 +4 +5 +6

HYDROGRAPHIC SURVEY
SCALE: 1"=20'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

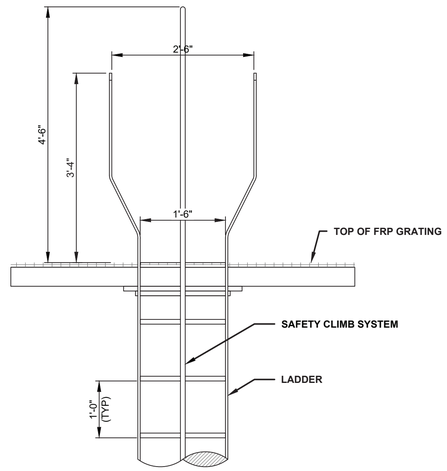
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: MW/KM
DRAWN BY: MW/KM
EDITED BY: TJD
CHECKED BY: KFR

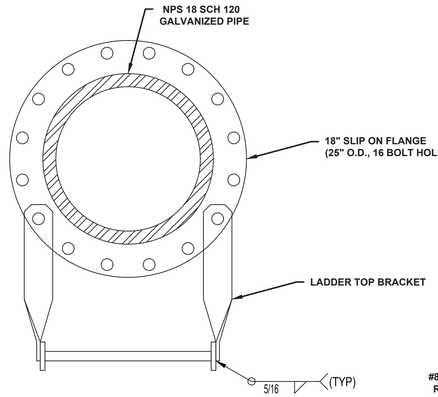
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202A.DWG
SHEET 04 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
GENERAL ARRANGEMENT

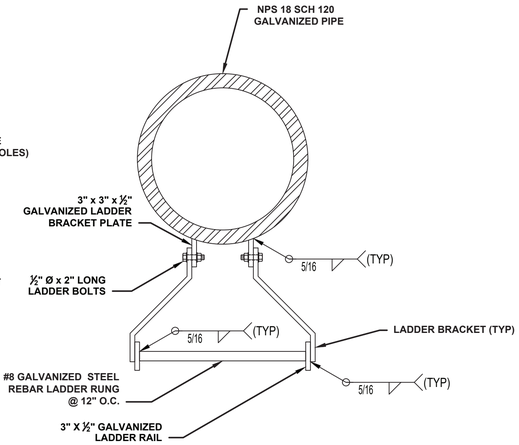
SHEET ID
LONDONER
ROCK
DAYBEACON
S-202A



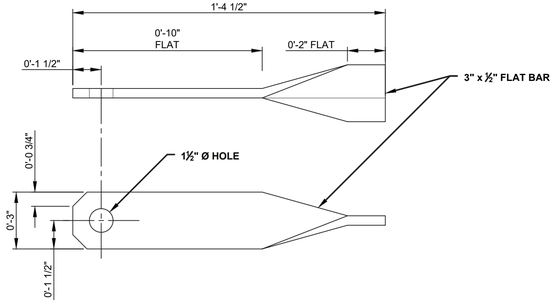
E1 LADDER WALK THROUGH DETAIL
SCALE: 3/4"=1'-0"



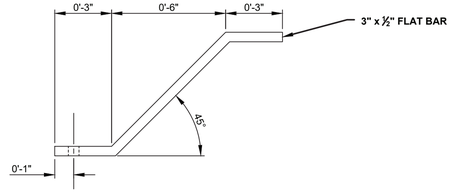
E5 LADDER CONNECTION AT FLANGE
SCALE: 1½"=1'-0"



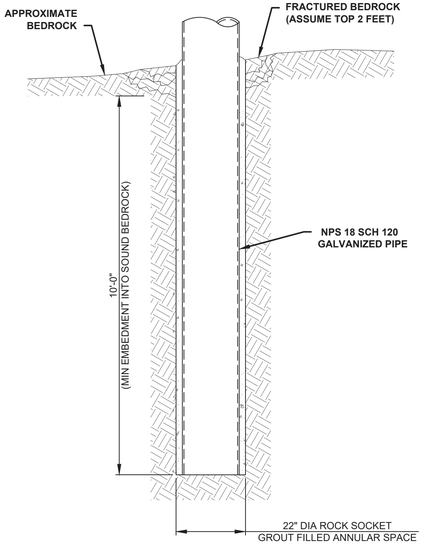
E7 TYPICAL LADDER CONNECTION
SCALE: 1½"=1'-0"



C5 LADDER TOP BRACKET
SCALE: 1½"=1'-0"



C7 TYPICAL LADDER BRACKET
SCALE: 1½"=1'-0"



A1 ROCK SOCKET DETAIL
SCALE: ½"=1'-0"

100% SUBMISSION NOT FOR CONSTRUCTION

BASE BID

U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

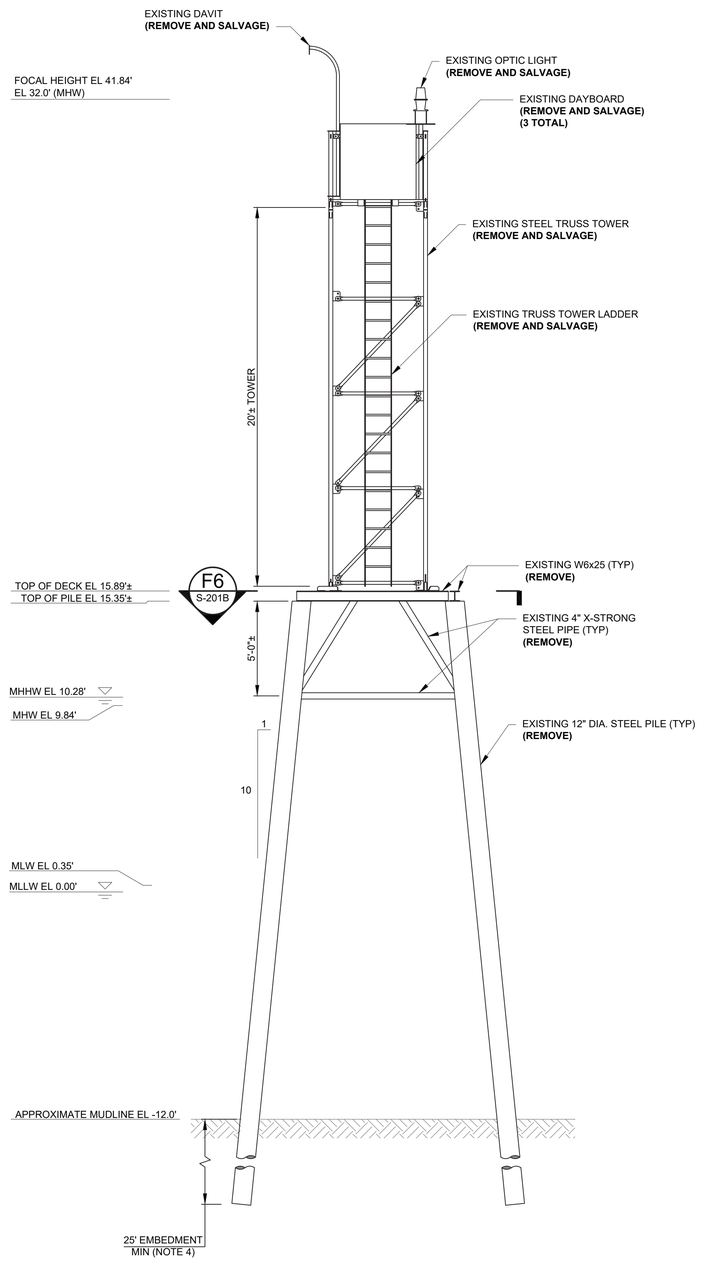
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
KMW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

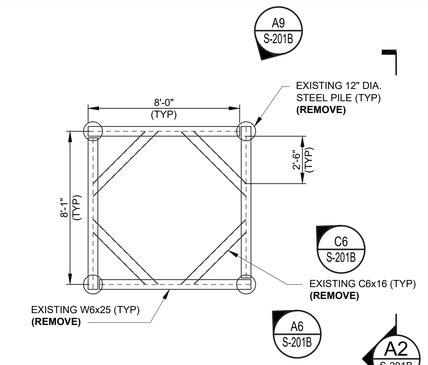
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-501A.DWG
SHEET 05 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
ROCKPORT MA
STRUCTURAL
GENERAL DETAILS

SHEET ID
LONDONER ROCK DAYBEACON
S-501A



A2 EXISTING TOWER ELEVATION
SCALE: ½"=1'-0"



F6 EXISTING DECK FRAMING PLAN
SCALE: ¼"=1'-0"

C6 LOOKING NORTH
SCALE: NTS

A6 LOOKING NORTH
SCALE: NTS

A9 LOOKING WEST
SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) AND UP TO 4 ABANDONED PILES IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE R-701, R-702, R-703, AND R-704 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8443970	
BOSTON LIGHT, MA	FEET
HIGHEST OBSERVED WATER (01/04/2018)	15.17
MEAN HIGHER HIGH WATER	10.28
MEAN HIGH WATER	9.84
MEAN SEA LEVEL	5.21
MEAN TIDE LEVEL	5.09
MEAN LOW WATER	0.35
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (03/24/1940)	-3.74

LIGHT LIST	
NUMBER	10890
NAME AND LOCATION	BOSTON MAIN CHANNEL LIGHT 5
POSITION	42-20-0.162N 071-0-3.732W
LIGHT CHARACTERISTIC	Fl G2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	32
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

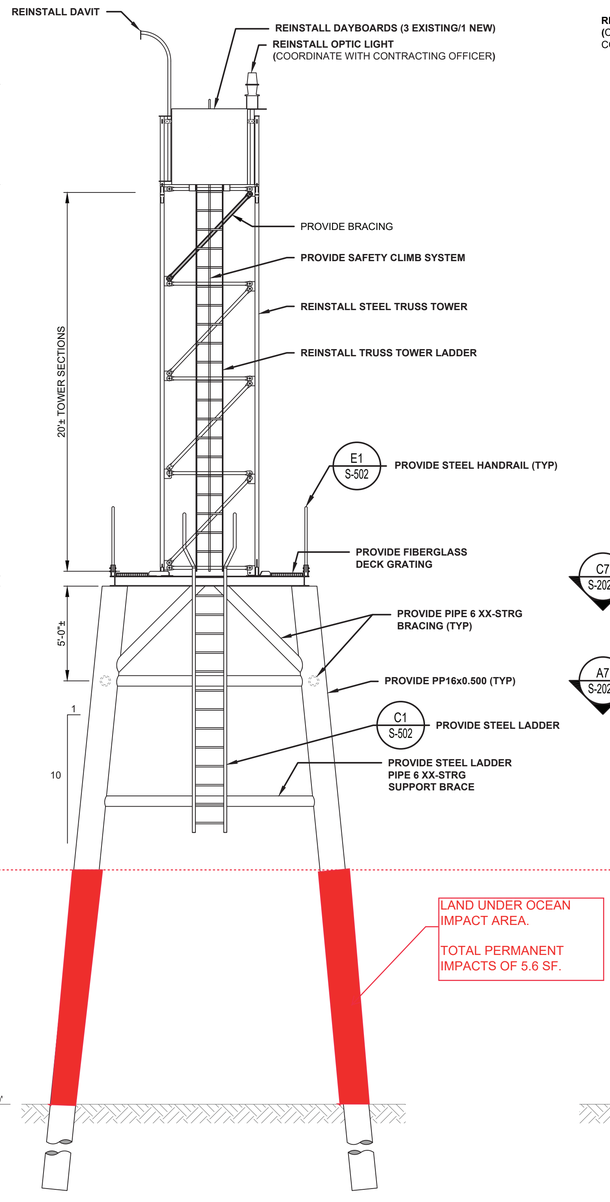
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/KM
EDITED BY:
TJD
CHECKED BY:
KFR

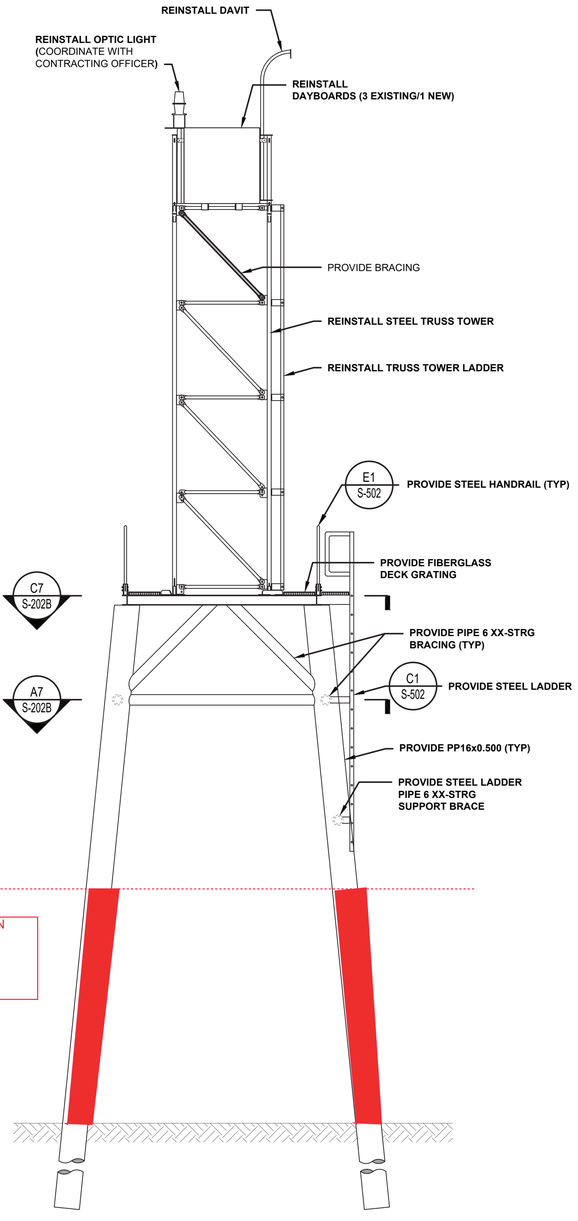
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201B.DWG
SHEET 06 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
EXISTING / DEMOLITION

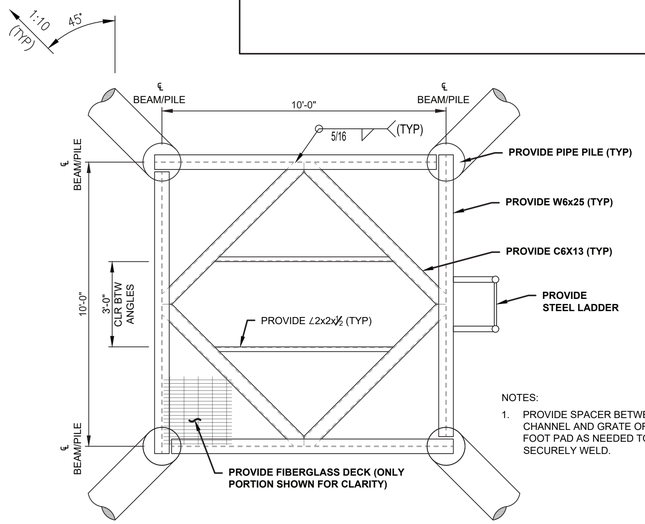
SHEET ID
BOSTON MAIN CHANNEL LIGHT 5
S-201B



A2 TOWER SOUTH ELEVATION
SCALE: 1/4"=1'-0"

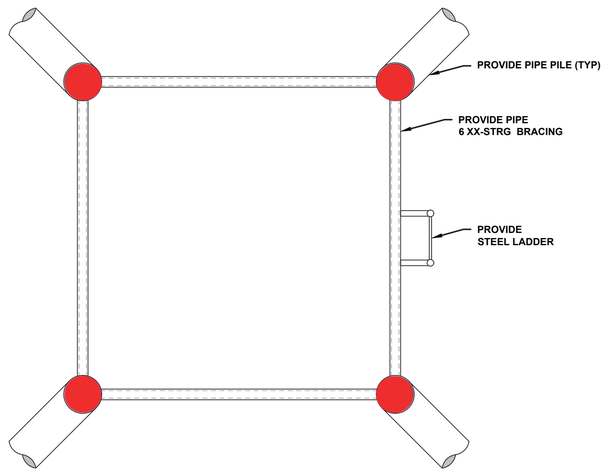


A5 TOWER WEST ELEVATION
SCALE: 1/4"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: 3/8"=1'-0"



A7 TOWER PILE PLAN
SCALE: 3/8"=1'-0"

BASE BID

100% SUBMISSION
NOT FOR CONSTRUCTION

U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

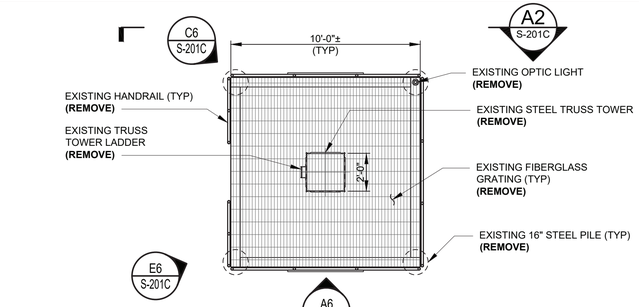
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
WWM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202B.DWG
SHEET 07 OF 29

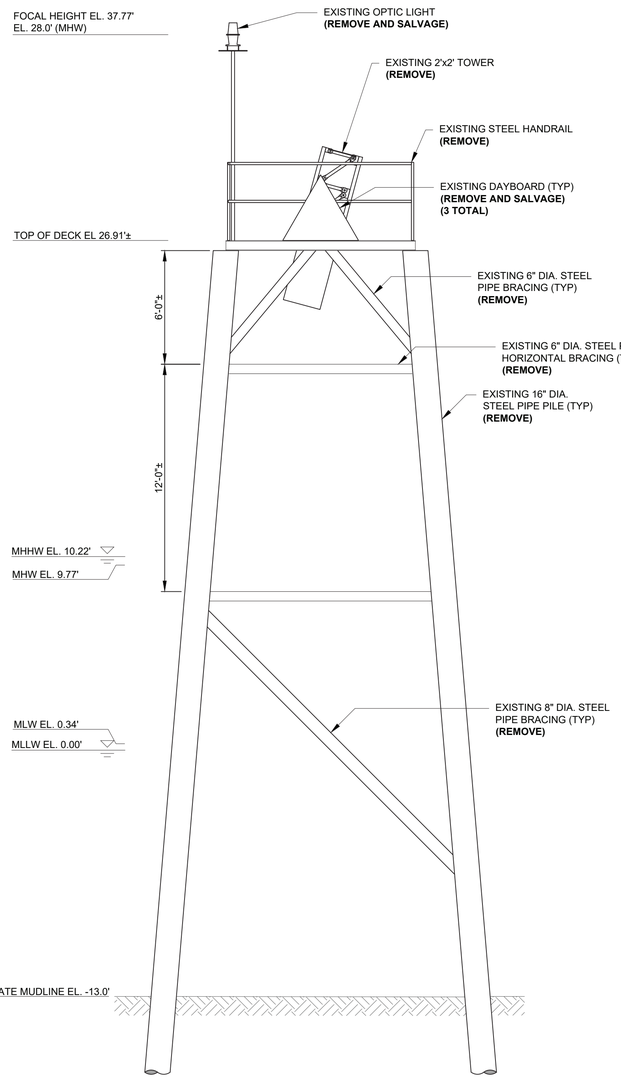
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
BOSTON MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
BOSTON MAIN
CHANNEL
LIGHT 5
S-202B



EXISTING PLAN

SCALE: ¼"=1'-0"



A2 EXISTING TOWER SOUTHWEST ELEVATION

SCALE: ½"=1'-0"

E6 LOOKING EAST

SCALE: NTS

C6 LOOKING SOUTH

SCALE: NTS

A6 LOOKING NORTHEAST

SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL AND DRIVING.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8444525	
NUT ISLAND, MA	FEET
HIGHEST OBSERVED WATER (03/06/2001)	13.04
MEAN HIGHER HIGH WATER	10.22
MEAN HIGH WATER	9.77
MEAN SEA LEVEL	5.17
MEAN TIDE LEVEL	5.06
MEAN LOW WATER	0.34
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/11/2001)	-3.13

LIGHT LIST	
NUMBER	11715
NAME AND LOCATION	WEYMOUTH FORE RIVER CHANNEL LIGHT 16
POSITION	42-16-03.129N 070-56-06.484W
LIGHT CHARACTERISTIC	Fl R2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	28
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MEDVEDEV
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201C.DWG
SHEET 08 OF 29

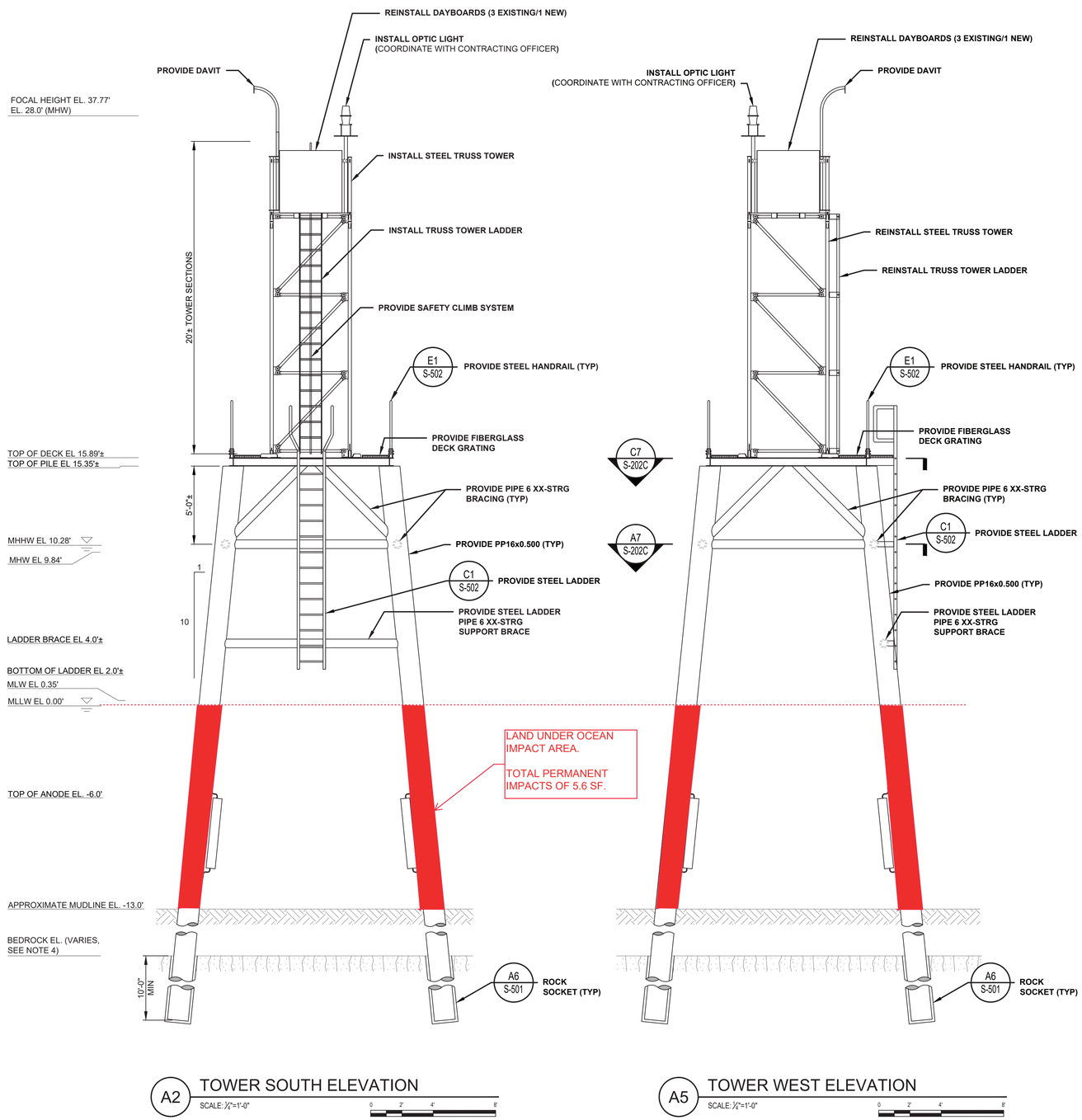
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
WEYMOUTH
FORE RIVER
CHANNEL LT16
S-201C

NOTES:

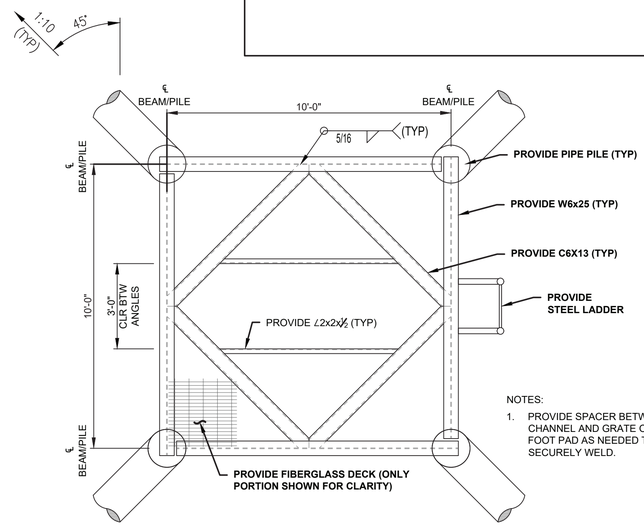
1. FOR TRUSS TOWER, SAFETY CLIMB LADDER, DAVIT, AND OTHER TOWER APPURTENANCES SEE SHEETS R-701, R-702, R-703, AND R-704 OF THIS DRAWING SET.
2. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
3. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
4. BEDROCK ELEVATION VARIES. ASSUME 100 FOOT LONG PILES FOR BIDDING PURPOSES.

100% SUBMISSION
NOT FOR CONSTRUCTION



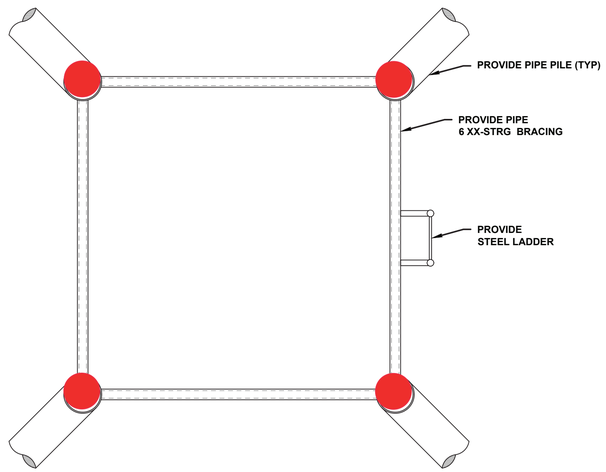
A2 TOWER SOUTH ELEVATION
SCALE: 1/8"=1'-0"

A5 TOWER WEST ELEVATION
SCALE: 1/8"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: 3/8"=1'-0"



A7 TOWER PILE PLAN
SCALE: 3/8"=1'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

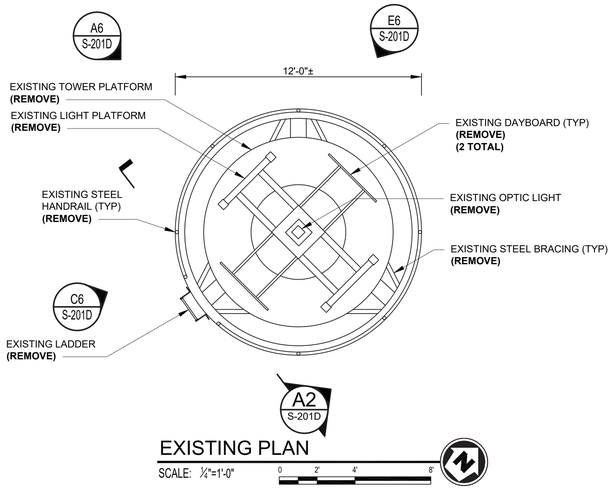
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: WWM
EDITED BY: TJD
CHECKED BY: KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202C.DWG
SHEET 09 OF 29

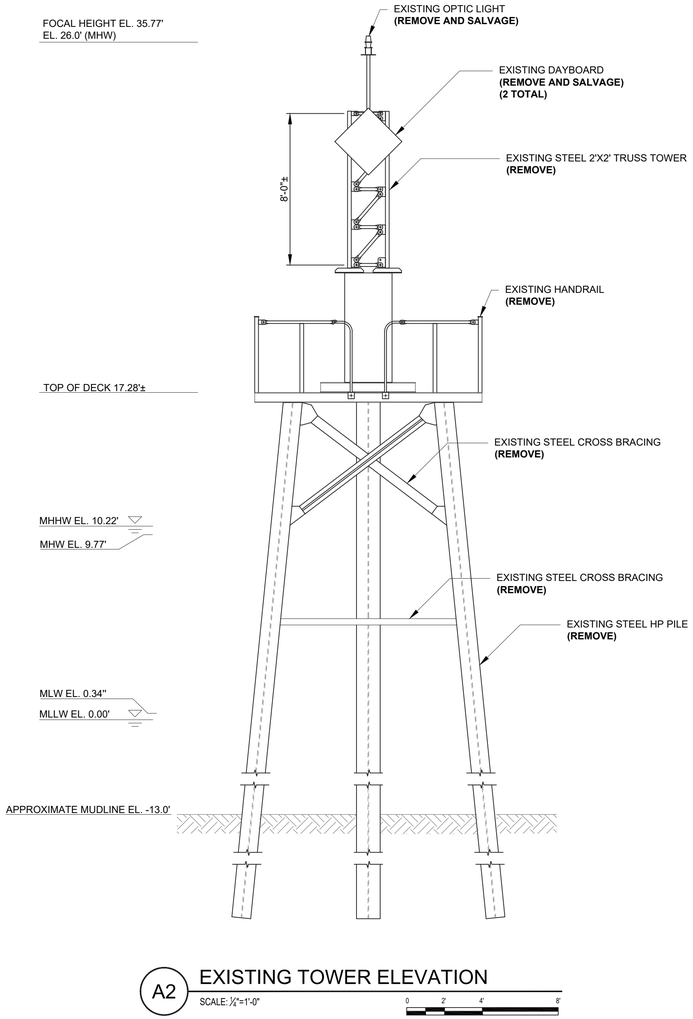
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
WEYMOUTH FORE RIVER CHANNEL LT16
S-202C



EXISTING PLAN

SCALE: ½"=1'-0"

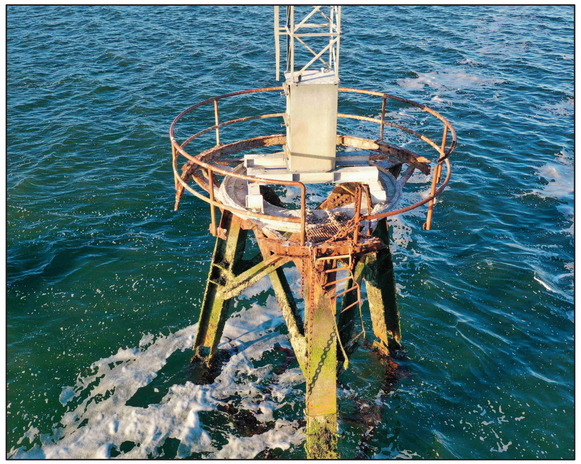


EXISTING TOWER ELEVATION

A2 SCALE: ½"=1'-0"

LOOKING SOUTH

E6 SCALE: NTS



LOOKING NORTH

C6 SCALE: NTS

LOOKING EAST

A6 SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT FOUNDATION (PILES, BRACING, BEAMS) IN THEIR ENTIRETY.
2. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEET R-705 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8444525	
NUT ISLAND, MA	FEET
HIGHEST OBSERVED WATER (03/06/2001)	13.04
MEAN HIGHER HIGH WATER	10.22
MEAN HIGH WATER	9.77
MEAN SEA LEVEL	5.17
MEAN TIDE LEVEL	5.06
MEAN LOW WATER	0.34
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/11/2001)	-3.13

LIGHT LIST	
NUMBER	11675
NAME AND LOCATION	HARRY'S ROCK LIGHT
POSITION	42-17-13.291N 070-55-54.280W
LIGHT CHARACTERISTIC	Fl W4s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	26
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	KGR ON SKELETON TOWER
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
J.M.
DRAWN BY:
MW/KM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201D.DWG
SHEET 10 OF 29

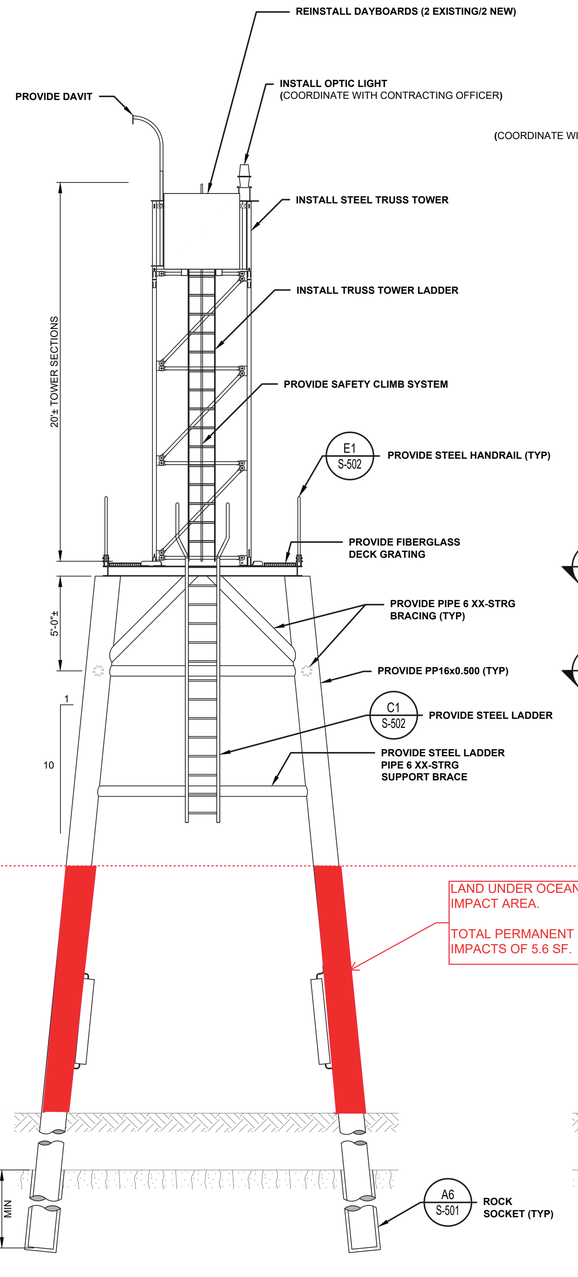
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
HARRY'S
ROCK LIGHT
HR
S-201D

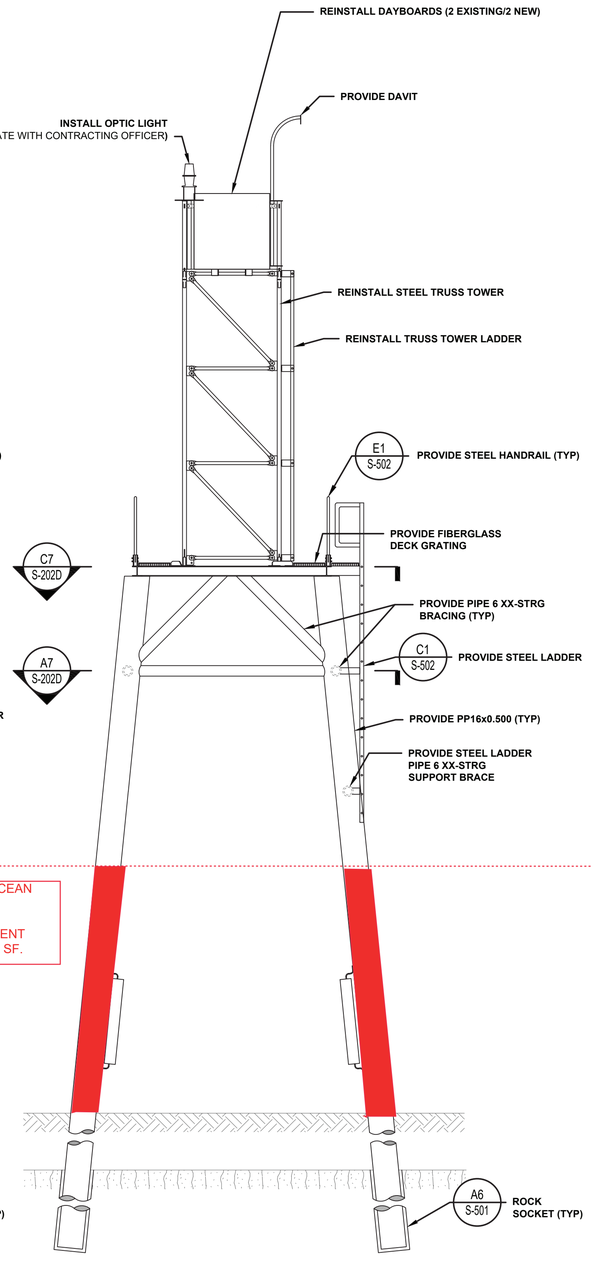
NOTES:

1. FOR TRUSS TOWER, SAFETY CLIMB LADDER, DAVIT, AND OTHER TOWER APPURTENANCES SEE SHEETS R-701, R-702, R-703, AND R-704 OF THIS DRAWING SET.
2. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
3. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
4. BEDROCK ELEVATION VARIES. ASSUME 100 FOOT LONG PILES FOR BIDDING PURPOSES.

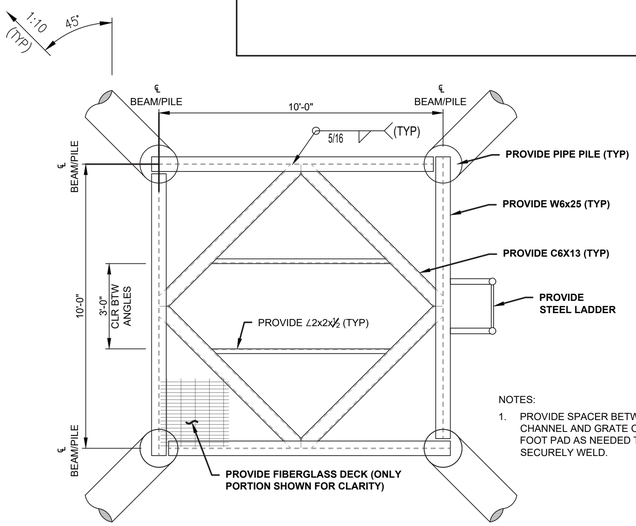
100% SUBMISSION
NOT FOR CONSTRUCTION



A2 TOWER SOUTH ELEVATION
SCALE: ½"=1'-0"

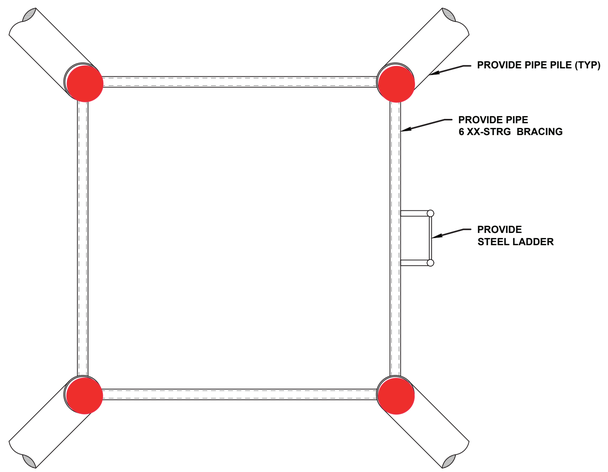


A5 TOWER WEST ELEVATION
SCALE: ½"=1'-0"



NOTES:
1. PROVIDE SPACER BETWEEN CHANNEL AND GRATE OR FOOT PAD AS NEEDED TO SECURELY WELD.

C7 TOWER DECK FRAMING PLAN
SCALE: ⅜"=1'-0"



A7 TOWER PILE PLAN
SCALE: ⅜"=1'-0"

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

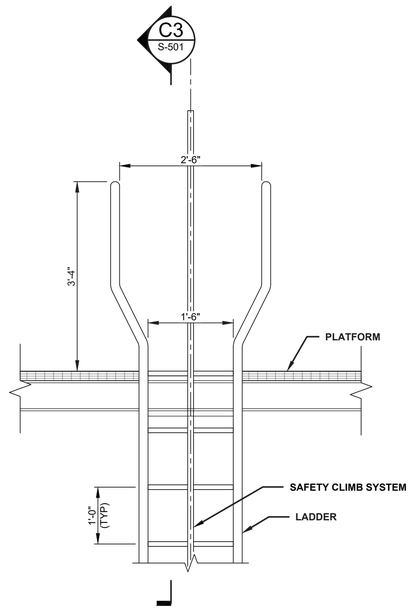
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: WWM
EDITED BY: TJD
CHECKED BY: KFR

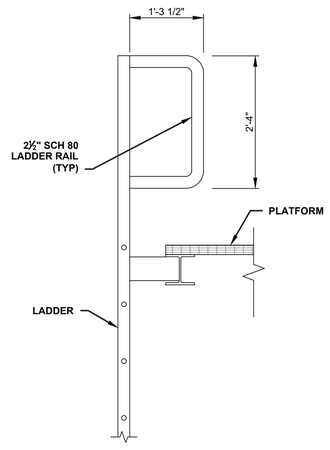
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202D.DWG
SHEET 11 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
WEYMOUTH MA
STRUCTURAL
GENERAL ARRANGEMENT

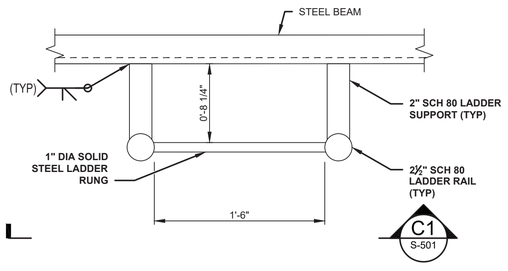
SHEET ID
HARRY'S
ROCK LIGHT
HR
S-202D



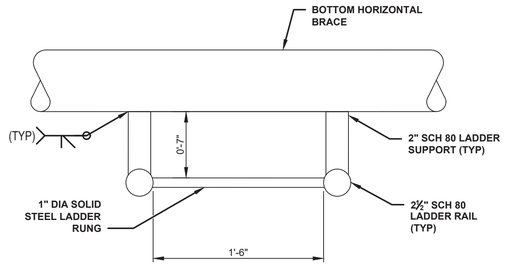
C1 LADDER WALK THROUGH DETAIL
SCALE: 3/4"=1'-0"



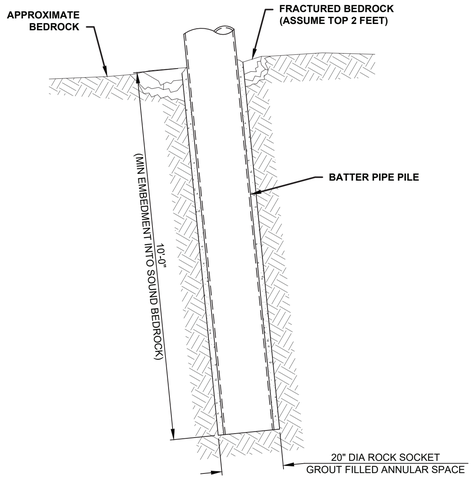
C3 LADDER SECTION
SCALE: 3/4"=1'-0"



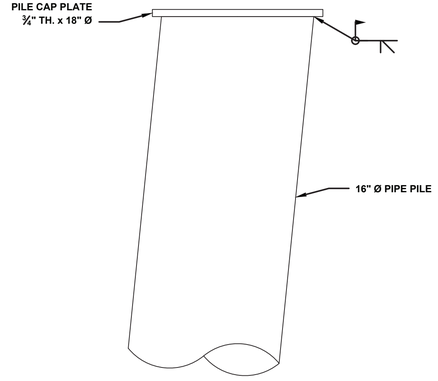
A1 LADDER CONNECTION AT PLATFORM
SCALE: 1½"=1'-0"



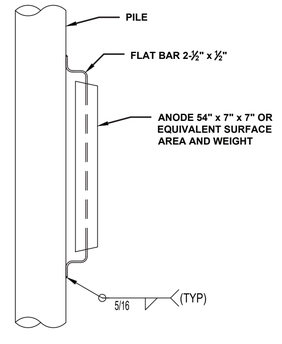
A3 LADDER CONNECTION AT BOTTOM BRACE
SCALE: 1½"=1'-0"



A6 ROCK SOCKET DETAIL
SCALE: ½"=1'-0"



C8 PILE CAP PLATE CONNECTION
SCALE: 1½"=1'-0"



A8 SACRIFICIAL ANODE DETAIL
SCALE: ½"=1'-0"

BASE BID

100% SUBMISSION
NOT FOR CONSTRUCTION

U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

PLOTTING SCALE: 1:1
SCALE: AS SHOWN

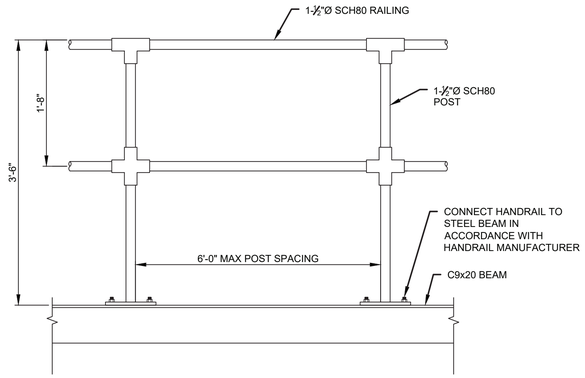
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: MW/DM
DRAWN BY: MW/DM
EDITED BY: TJD
CHECKED BY: KFR

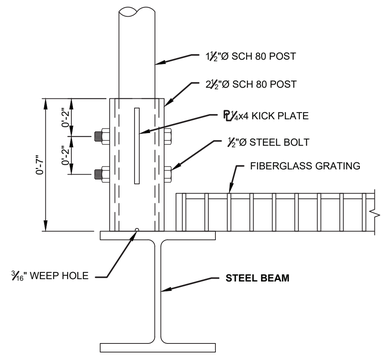
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-501.DWG
SHEET 12 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
-
MA
STRUCTURAL
GENERAL DETAILS - 1

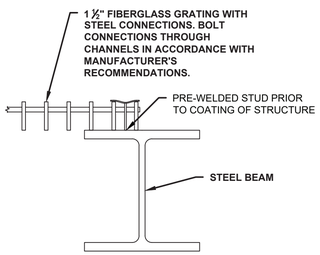
SHEET ID
B, C, D
S-501



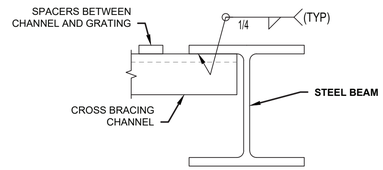
E1 HANDRAIL DETAIL
SCALE: 1"=1'-0"



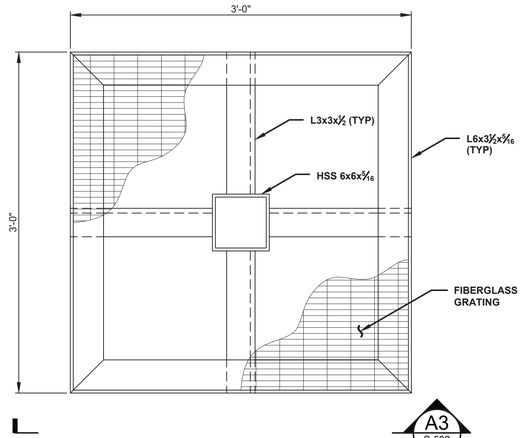
E4 HANDRAIL CONNECTION
SCALE: 3"=1'-0"



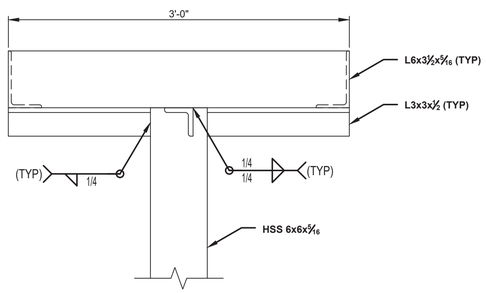
C1 GRATING CONNECTION
SCALE: 3"=1'-0"



C1 GRATING CONNECTION
SCALE: 3"=1'-0"



C8 RAPTOR PLATFORM PLAN
SCALE: 1½"=1'-0"



A8 RAPTOR PLATFORM ELEVATION
SCALE: 1½"=1'-0"

BASE BID

100% SUBMISSION NOT FOR CONSTRUCTION

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

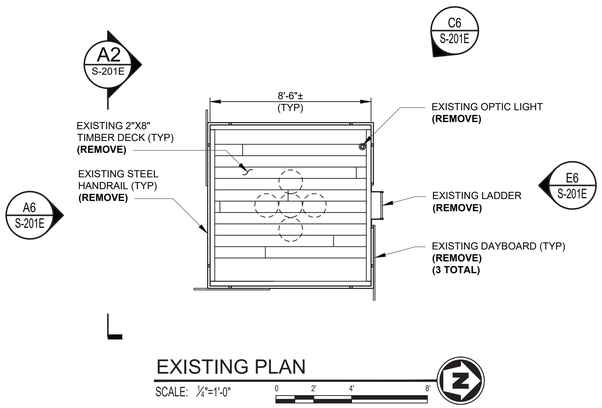
CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MM/KM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-502.DWG
SHEET 13 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
-
MA

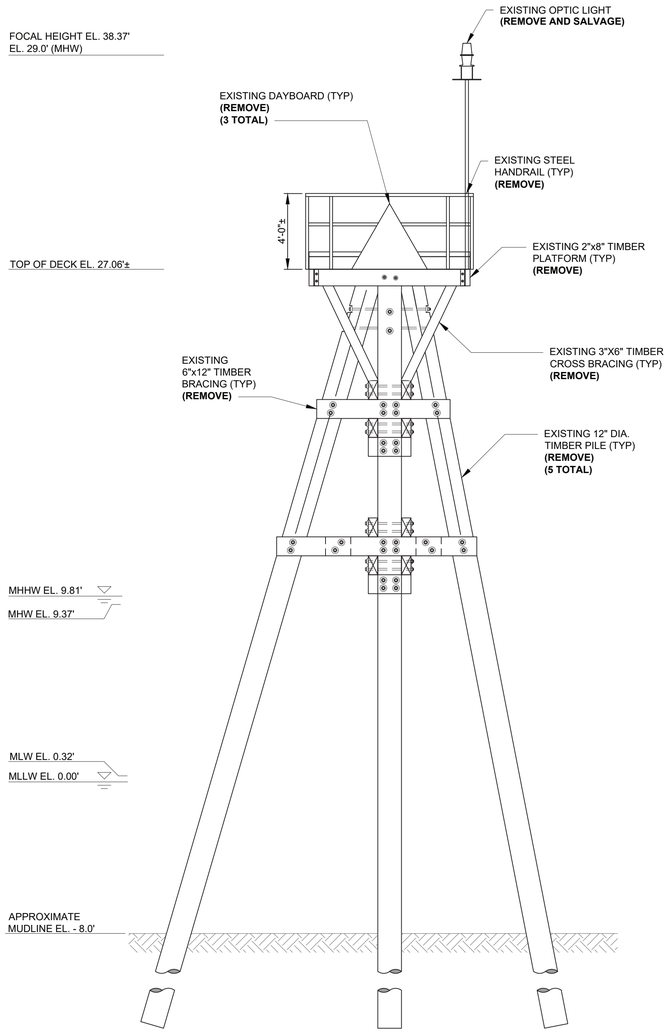
STRUCTURAL
GENERAL DETAILS - 2

SHEET ID
B, C, D
S-502



EXISTING PLAN

SCALE: 1/4"=1'-0"



A2 EXISTING TOWER NORTH ELEVATION

SCALE: 1/4"=1'-0"

E6 LOOKING SOUTH

SCALE: NTS

C6 LOOKING SOUTHEAST

SCALE: NTS

A6 PLATFORM LOOKING NORTH

SCALE: NTS

DEMOLITION NOTES:

1. REMOVE EXISTING LIGHT TIMBER FOUNDATION (PILES, BRACING, BEAMS) AND UP TO 5 ABANDONED TIMBER PILES IN THEIR ENTIRETY.
2. THE TIMBER PILES, BRACING AND BEAMS ARE ASSUMED TO CONTAIN CREOSOTE. ALL MATERIALS THAT ARE ASSUMED TO BE CONTAMINATED MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR PILE REMOVAL AND DRIVING.
4. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.

STATION ID: 8444162	
BOSTON LIGHT, MA	FEET
HIGHEST OBSERVED WATER (02/21/2004)	11.79
MEAN HIGHER HIGH WATER	9.81
MEAN HIGH WATER	9.37
MEAN SEA LEVEL	4.91
MEAN TIDE LEVEL	4.85
MEAN LOW WATER	0.32
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER (02/12/2001)	-2.85

LIGHT LIST	
NUMBER	12185
NAME AND LOCATION	COHASSET CHANNEL LIGHT 8
POSITION	42-15-05.497N 070-47-00.665W
LIGHT CHARACTERISTIC	Fl R2.5s
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	29
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON TRIPOD
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BASE BID

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN

PLOTTING SCALE: 1:1

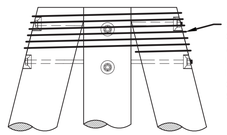
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MVDM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201E.DWG
SHEET 14 OF 29

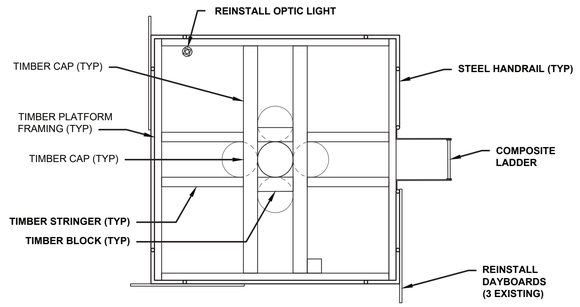
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
COHASSET
CHANNEL
LIGHT 8
S-201E



TYPICAL PILE WRAP DETAIL

SCALE: ½"=1'-0" 0 1' 2' 4'



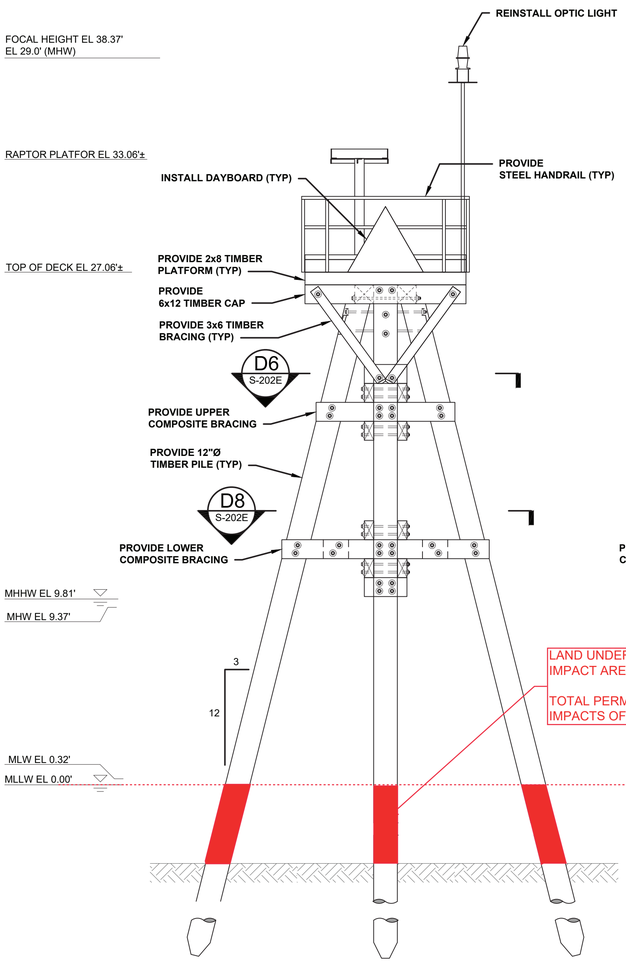
F4 UPPER BRACING

SCALE: ⅜"=1'-0" 0 2' 4' 6'

NOTES:

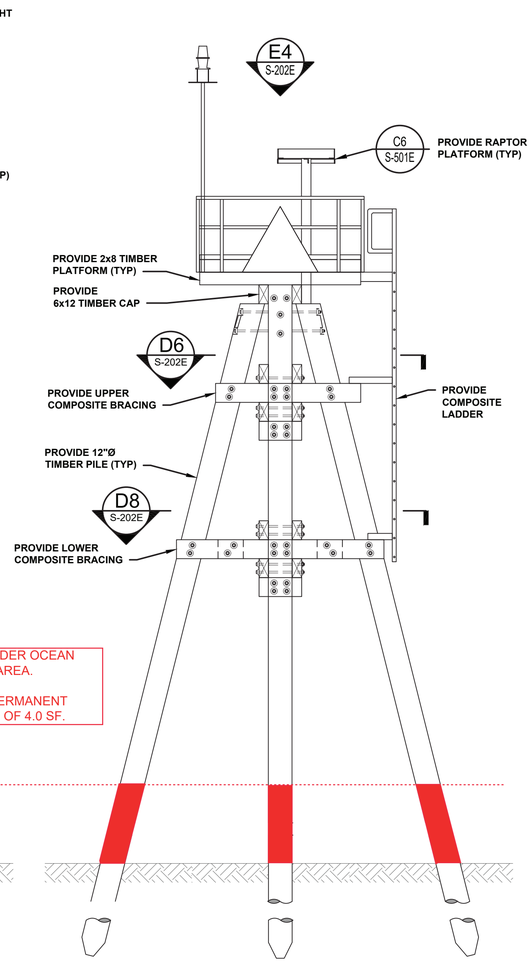
1. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
2. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
3. ALL MATERIAL SHALL BE MARINE HDPE PLASTIC UNLESS OTHERWISE NOTED.

100% SUBMISSION NOT FOR CONSTRUCTION



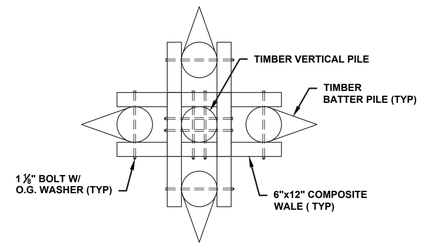
A2 TOWER ELEVATION

SCALE: ¼"=1'-0" 0 2' 4' 8'



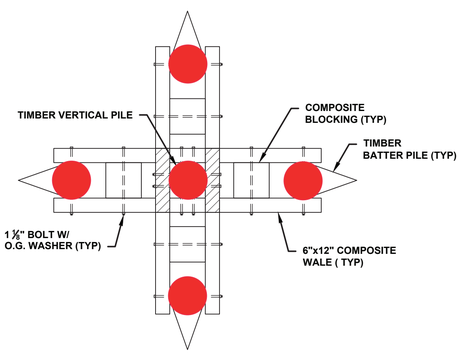
A4 TOWER ELEVATION

SCALE: ¼"=1'-0" 0 2' 4' 8'



C6 UPPER BRACING

SCALE: ⅜"=1'-0" 0 2' 4' 6'



A6 LOWER BRACING

SCALE: ⅜"=1'-0" 0 2' 4' 6'

BASE BID

U.S.C.G. CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN

PLOTTING SCALE: 1:1

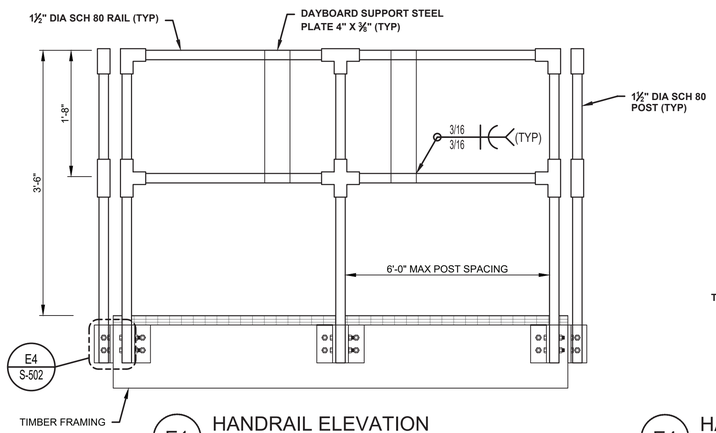
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY: TJD
DRAWN BY: MEM
EDITED BY: TJD
CHECKED BY: KFR

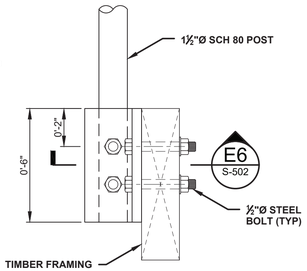
USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202E.DWG
SHEET 15 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
GENERAL ARRANGEMENT

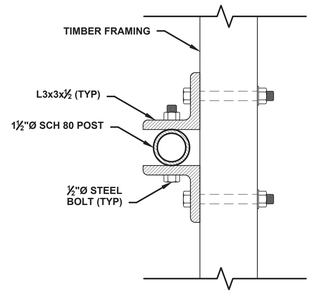
SHEET ID
COHASSET CHANNEL LIGHT 8
S-202E



E1 HANDRAIL ELEVATION
SCALE: 1"=1'-0"



E4 HANDRAIL CONNECTION
SCALE: 3"=1'-0"

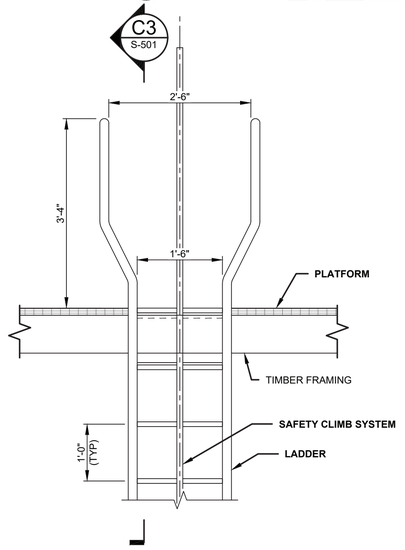


E6 HANDRAIL CONNECTION
SCALE: 3"=1'-0"

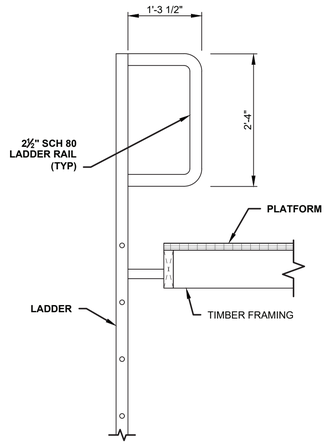
NOTES:

1. VERIFY POSITION OF EXISTING OPTIC LIGHT (COORDINATES AND ORIENTATION) WITH A PRE-CONSTRUCTION SURVEY. REINSTALL OPTIC LIGHT IN ITS EXISTING LOCATION; VERIFY WITH POST-CONSTRUCTION SURVEY.
2. THE DESIGN INTENT IS FOR THE PLATFORM AND PILE HEAD CONNECTIONS TO BE FABRICATED AT CONTRACTOR'S OFFSITE FACILITY. PLATFORM TO PILE HEAD CONNECTION IS TO BE FIELD WELDED. TOWER TO PLATFORM CONNECTION IS TO BE BOLTED.
3. ALL MATERIAL SHALL BE MARINE HDPE PLASTIC UNLESS OTHERWISE NOTED.

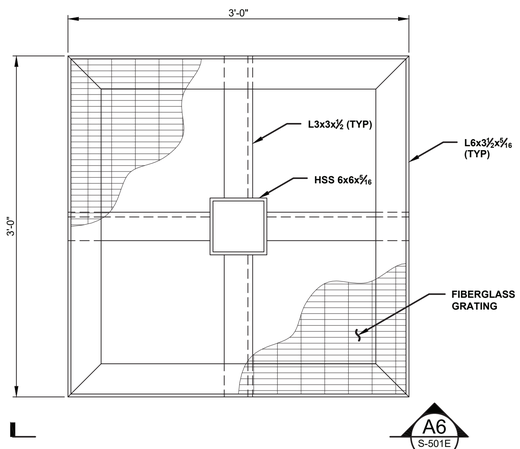
100% SUBMISSION NOT FOR CONSTRUCTION



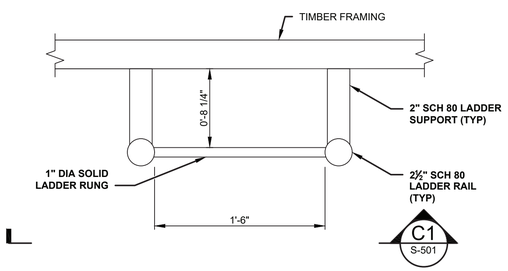
C1 LADDER WALK THROUGH DETAIL
SCALE: ¾"=1'-0"



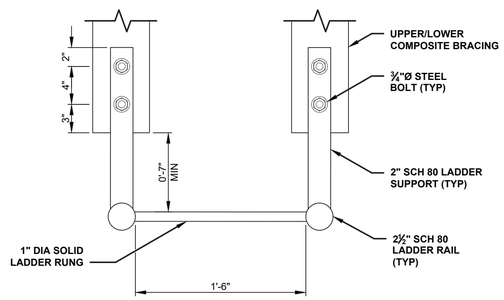
C3 LADDER SECTION
SCALE: ¾"=1'-0"



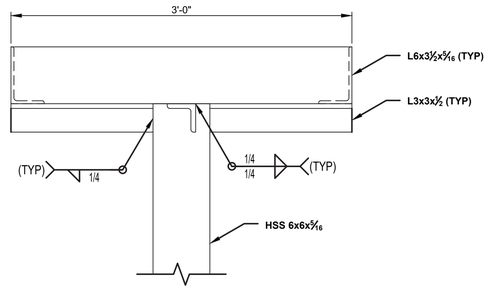
C6 RAPTOR PLATFORM PLAN
SCALE: 1½"=1'-0"



A1 LADDER CONNECTION AT PLATFORM
SCALE: 1½"=1'-0"



A3 LADDER CONNECTION AT BOTTOM BRACE
SCALE: 1½"=1'-0"



A6 RAPTOR PLATFORM ELEVATION
SCALE: 1½"=1'-0"

BASE BID

U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

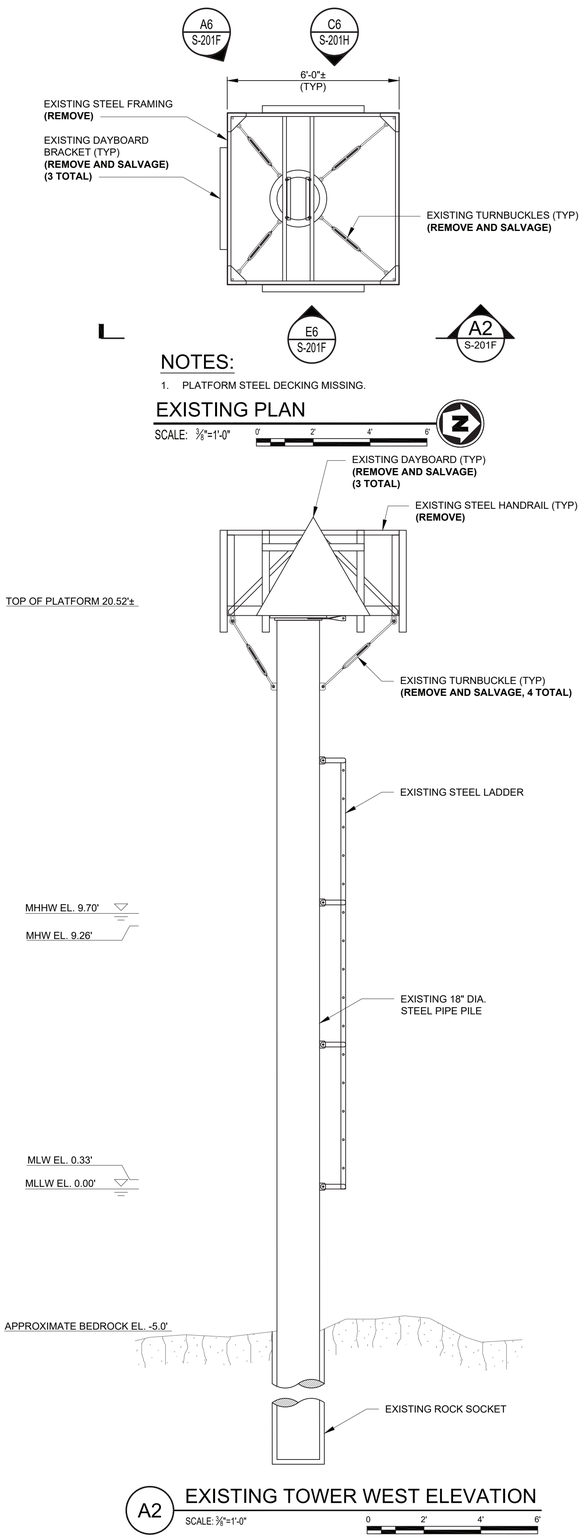
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
LT MATTHEW R. FANN, PE
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202E.DWG
SHEET 16 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
COHASSET MA
STRUCTURAL
GENERAL DETAILS

SHEET ID
COHASSET CHANNEL LIGHT 8
S-501E



NOTES:

1. PLATFORM STEEL DECKING MISSING.

EXISTING PLAN

SCALE: 3/8"=1'-0"

A2 EXISTING TOWER WEST ELEVATION

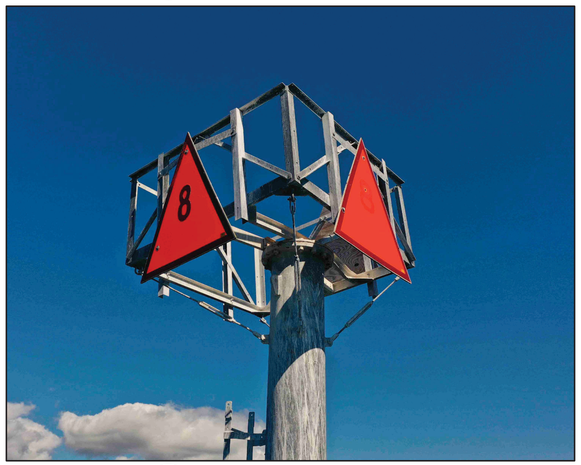
SCALE: 3/8"=1'-0"

E6 LOOKING WEST

SCALE: NTS

C6 LOOKING EAST

SCALE: NTS



A6 PLATFORM LOOKING NORTHEAST

SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEETS R-706 AND R-707 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	9990
NAME AND LOCATION	WHALEBACK DAYBEACON 8
POSITION	42-32-54.760N 070-47-04.641W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #1

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

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PLOTTING SCALE: 1:1

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CONSULTING A/E:

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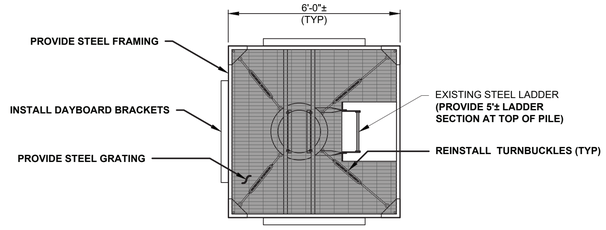
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201F.DWG
SHEET 17 OF 29

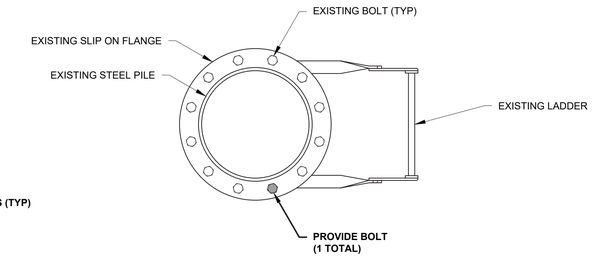
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MANCHESTER MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
WHALEBACK DAYBEACON 8
S-201F



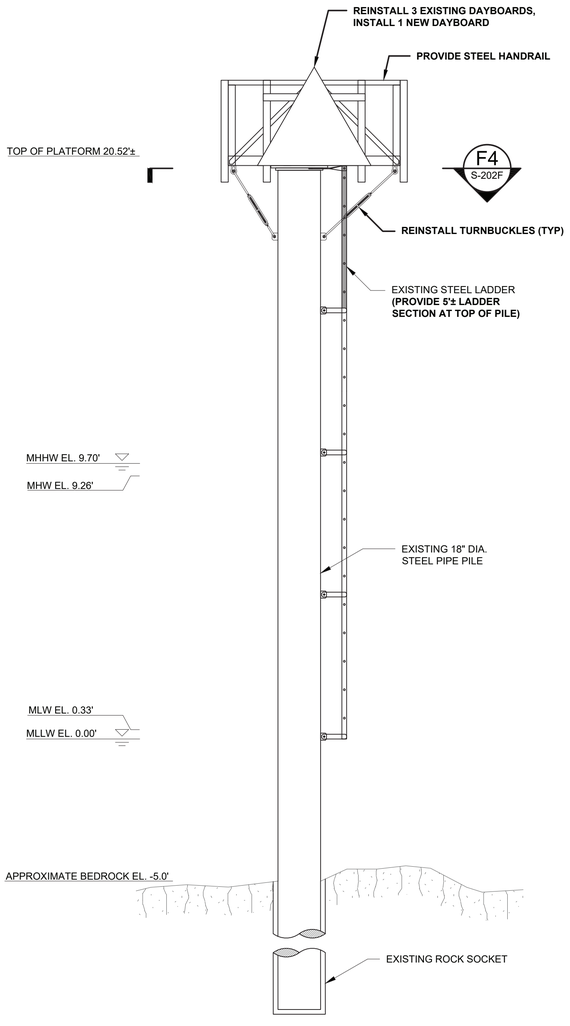
PLAN

SCALE: 3/8"=1'-0"



F4 FLANGE BOLT DETAIL

SCALE: 1"=1'-0"



A2 TOWER ELEVATION

SCALE: 3/8"=1'-0"

NOTES:

1. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #1

U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN

PLOTTING SCALE: 1:1

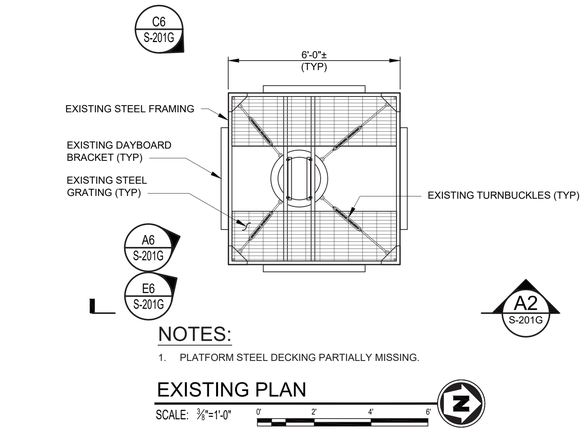
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DRAWN BY:
MW/DM
DESIGNED BY:
TJD
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202F.DWG
SHEET 18 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MANCHESTER MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
WHALEBACK
DAYBEACON 8
S-202F

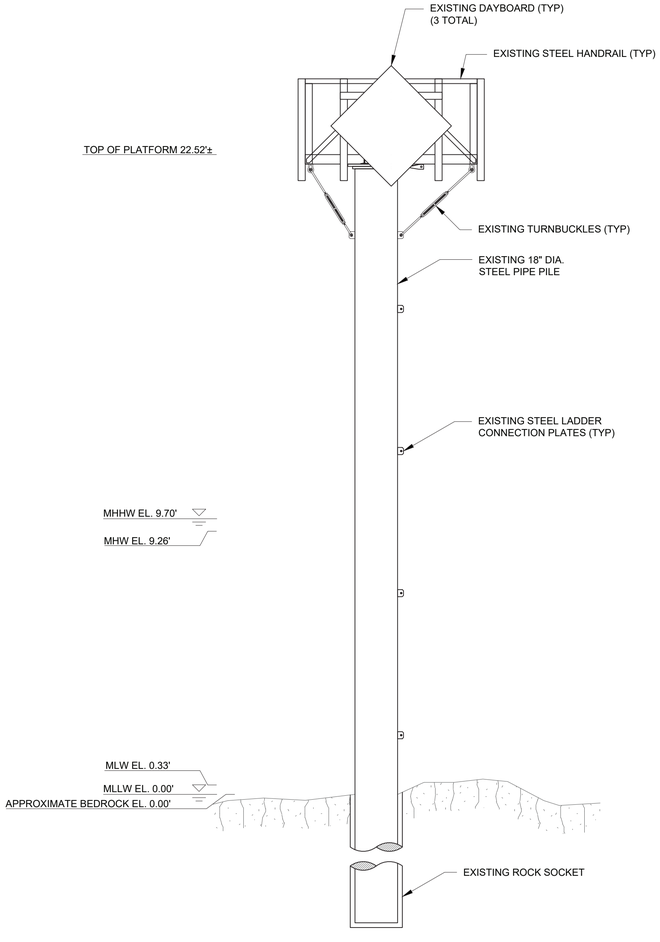


NOTES:

1. PLATFORM STEEL DECKING PARTIALLY MISSING.

EXISTING PLAN

SCALE: 3/8"=1'-0"



A2 EXISTING TOWER WEST ELEVATION

SCALE: 3/8"=1'-0"

E6 LOOKING NORTHWEST

SCALE: NTS

C6 LOOKING NORTHEAST

SCALE: NTS

A6 PLATFORM LOOKING NORTHWEST

SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEETS R-706 AND R-707 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	10405
NAME AND LOCATION	BRIMBLES DAYBEACON
POSITION	42-31-16.576N 070-48-28.608W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	28
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #2

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

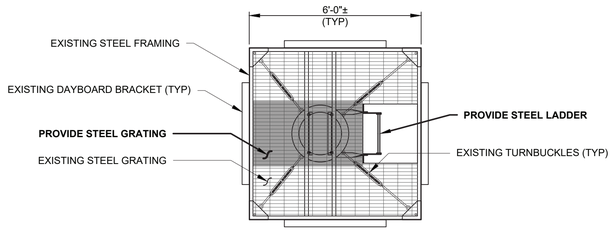
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
T.J.D.
DRAWN BY:
MW/DM
EDITED BY:
T.J.D.
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201G.DWG
SHEET 19 OF 29

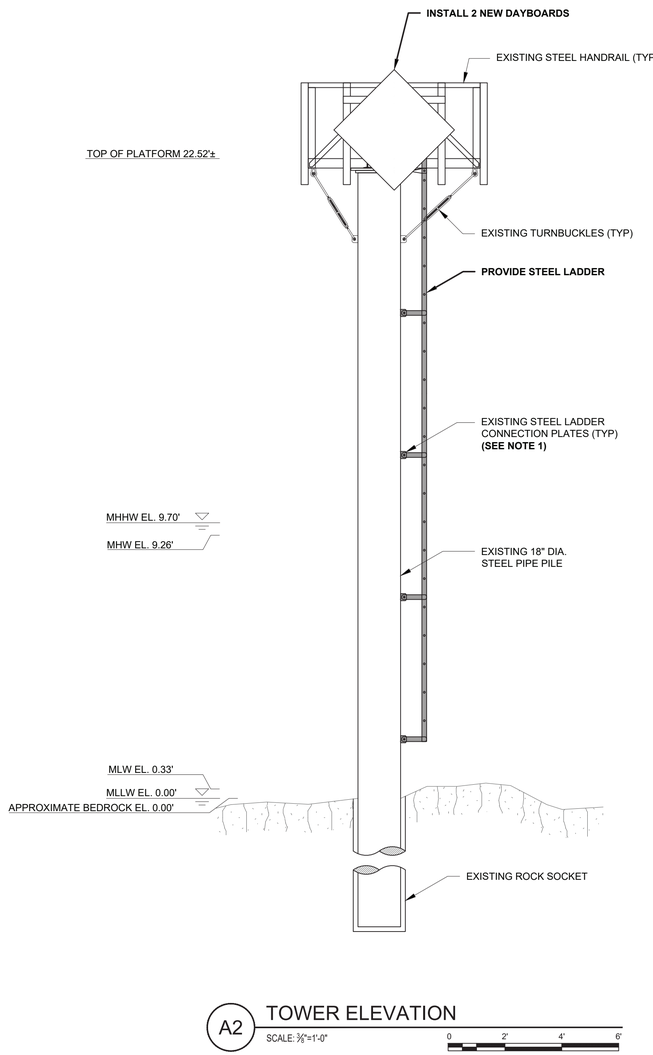
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
SALEM MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
BRIMBLES DAYBEACON
S-201G



A2
S-202G

PLAN
SCALE: 3/8"=1'-0"



A2 TOWER ELEVATION
SCALE: 3/8"=1'-0"

NOTES:

1. EXISTING STEEL LADDER CONNECTION PLATES ARE BENT. STRAIGHTEN CONNECTION PLATES PRIOR TO INSTALLATION OF NEW LADDER .
2. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #2

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

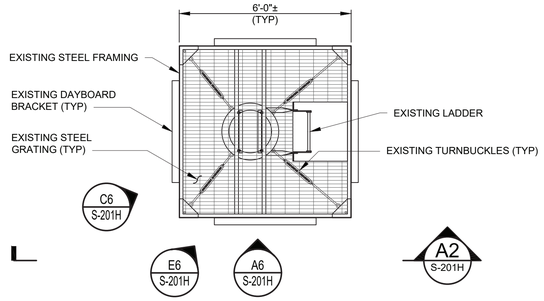
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DR
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202G.DWG
SHEET 20 OF 29

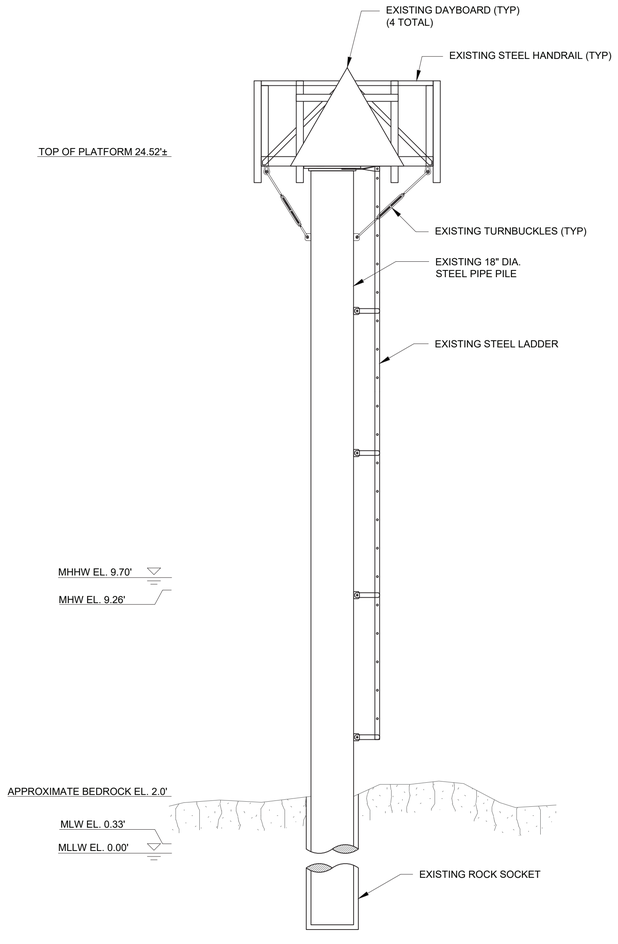
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
SALEM MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
BRIMBLES
DAYBEACON
S-202G



EXISTING PLAN

SCALE: 3/8"=1'-0"

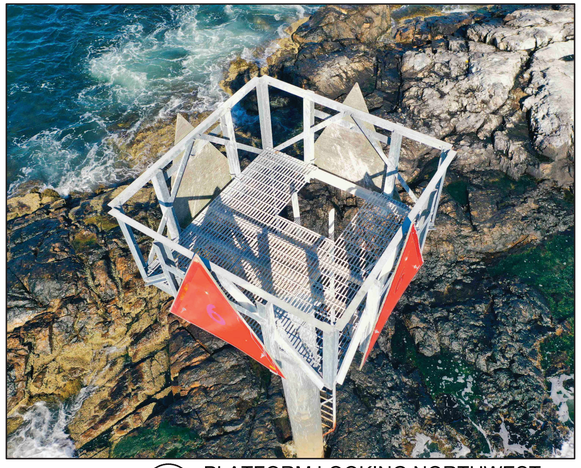


A2 EXISTING TOWER WEST ELEVATION

SCALE: 3/8"=1'-0"

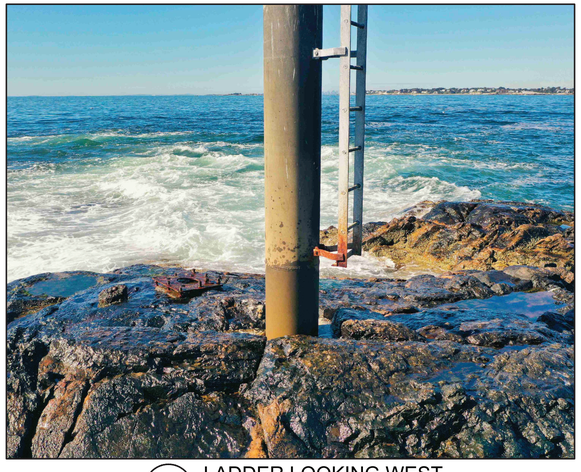
E6 LOOKING NORTHWEST

SCALE: NTS



C6 PLATFORM LOOKING NORTHWEST

SCALE: NTS



A6 LADDER LOOKING WEST

SCALE: NTS

DEMOLITION NOTES:

1. FOLLOW FEDERAL AND STATE PERMIT REQUIREMENTS FOR RECOATING OF STEEL ELEMENTS. PROVIDE MEASURES TO COLLECT AND DISPOSE OF ALL REMOVED COATING AND CLEANING MEDIUM.
2. ALL COATING IS ASSUMED TO BE HOT-DIP GALVANIZED AND MUST BE PROPERLY DISPOSED OF AT AN OFF SITE DISPOSAL FACILITY IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS, UNLESS PROPER MATERIAL TESTING IS COMPLETED TO DETERMINE OTHERWISE.
3. THESE DRAWINGS ARE DIAGRAMMATIC AND MAY NOT DEPICT ALL COMPONENTS OF THE EXISTING STRUCTURE.
4. SEE REFERENCE DRAWING SHEETS R-706 AND R-707 FOR ADDITIONAL INFORMATION OF EXISTING MEMBERS.

STATION ID: 8442645	
SALEM HARBOR, SALEM, MA	FEET
HIGHEST OBSERVED WATER	N/A
MEAN HIGHER HIGH WATER	9.70
MEAN HIGH WATER	9.26
MEAN SEA LEVEL	4.85
MEAN TIDE LEVEL	4.80
MEAN LOW WATER	0.33
MEAN LOWER LOW WATER	0.00
LOWEST OBSERVED WATER	N/A

LIGHT LIST	
NUMBER	10395
NAME AND LOCATION	SATAN ROCK DAYBEACON 6
POSITION	42-30-36.898N 070-48-01.536W
LIGHT CHARACTERISTIC	N/A
HEIGHT ABOVE MEAN HIGH WATER TO FOCAL PLANE (FEET)	UNK
NOMINAL RANGE OF LIGHTED ATON (KM)	N/A
STRUCTURAL CHARACTERISTIC	SG ON MONOPILE
ACCESS	WATER

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #3

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

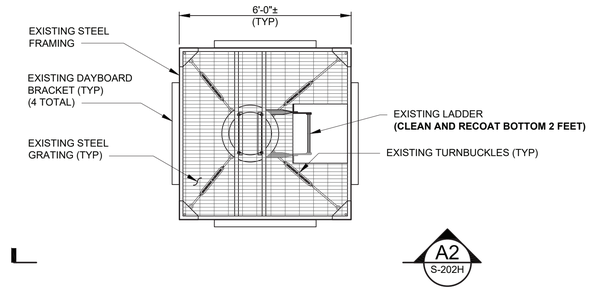
A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
TJD
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-201H.DWG
SHEET 21 OF 29

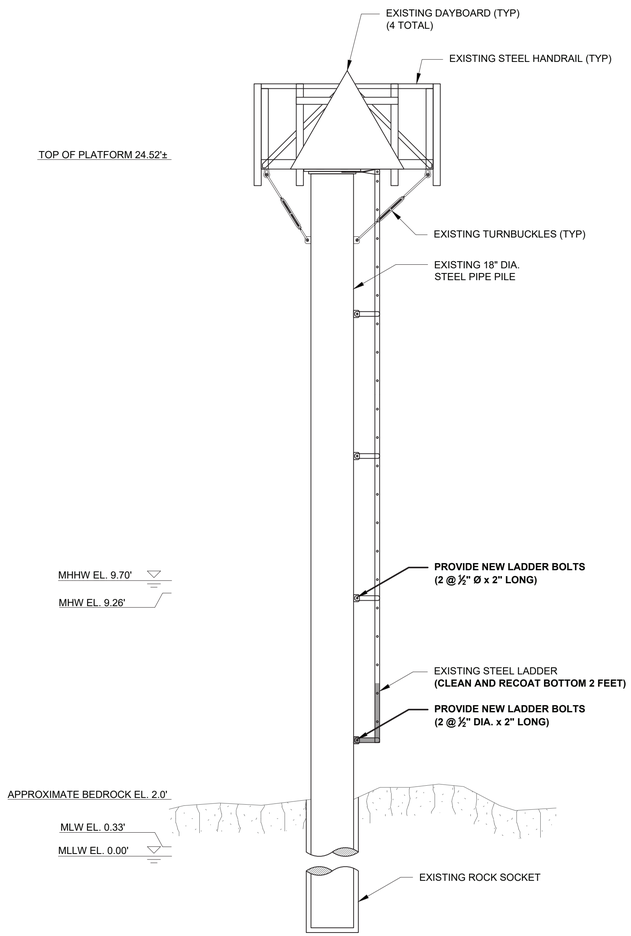
13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MARBLEHEAD MA
STRUCTURAL
EXISTING / DEMOLITION

SHEET ID
SATAN ROCK
DAYBEACON 6
S-201H



A2
S-202H

PLAN
SCALE: 3/8"=1'-0"
0' 2' 4' 6'



A2 TOWER ELEVATION
SCALE: 3/8"=1'-0"
0 2' 4' 6'

NOTES:

1. REFER TO DETAILS ON SHEETS R-706 AND R-707 UNLESS NOTED OTHERWISE.

100% SUBMISSION
NOT FOR CONSTRUCTION

BID OPTION #3

U.S.C.G.
U.S. COAST GUARD
CIVIL ENGINEERING

MARK	DESCRIPTION	DATE
-	-	-

SCALE: AS SHOWN
PLOTTING SCALE: 1:1

A/E COMPANY:
APPLEDORE MARINE ENGINEERING, LLC
PORTSMOUTH, NEW HAMPSHIRE 03801
(603) 766-1870
A/E PROJECT NO.:
7059
CONSULTING A/E:

CIVIL ENGINEERING UNIT PROVIDENCE
475 KILVERT ST., SUITE 100
WARWICK, RI 02886
PROJECT ENGINEER:
LT MATTHEW R. FANN, PE
DESIGNED BY:
LT MATTHEW R. FANN, PE
DRAWN BY:
MW/DM
EDITED BY:
TJD
CHECKED BY:
KFR

USCG PROJECT NO.
13494020
USCG DRAWING NO.
P13494020
USCG FILENAME
P13494020S-202H.DWG
SHEET 22 OF 29

13494020 REPAIR ATON MASSACHUSETTS BAY (FY22 C-POP)
CEU PROVIDENCE
MARBLEHEAD MA
STRUCTURAL
GENERAL ARRANGEMENT

SHEET ID
SATAN ROCK
DAYBEACON 6
S-202H

92946

McFarland Johnson
49 Court St., Suite 240
Binghamton, NY 13901-3236

M&T Bank Binghamton, NY
10-4/220

CHECK DATE
December 28, 2021

PAY One Thousand Eight Hundred and 00/100 Dollars

AMOUNT
1,800 00

TO City of Boston

McFarland-Johnson, Inc.

TWO SIGNATURES REQUIRED FOR CHECKS OVER $5 000

⑈092946⑈ ⑆022000046⑆ 8891643911⑈

McFarland-Johnson, Inc. 49 Court St., Suite 240 Binghamton, NY 13901-3236

92946

Check Date 12/28/2021

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
122721 - Boston	12/27/2021	000000082713	1,800 00			1,800 00
City of Boston		TOTAL	1,800 00			1,800 00
100200 Cash M&T Bank	2	CBOSTON				

92949

McFarland Johnson
49 Court St., Suite 240
Binghamton, NY 13901-3236

M&T Bank Binghamton, NY
10-4/220

CHECK DATE
December 28, 2021

PAY Two Hundred Thirty Seven and 50/100 Dollars

AMOUNT
237 50

TO Commonwealth of Massachusetts

McFarland-Johnson, Inc.

MP
TWO SIGNATURES REQUIRED FOR CHECKS OVER $5,000

MP

⑈092949⑈ ⑆022000046⑆ 8891643911⑈

McFarland-Johnson, Inc. 49 Court St , Suite 240 Binghamton, NY 13901-3236

92949

Check Date 12/28/2021

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
122721 - Boston	12/27/2021	000000082715	237 50			237 50
Commonwealth of Massachusetts		TOTAL	237 50			237 50
100200 Cash M&T Bank 5		COMMMA				

Stephen Hoffmann

From: Stephen Hoffmann
Sent: Monday, January 10, 2022 2:39 PM
To: 'dmf.envreview-north@mass.gov'
Cc: Christine J. Perron
Subject: MA WPA Notice of Intent Application - USCG ATON Replacement Project, City of Boston

To Whom it May Concern,

A Notice of Intent (NOI) for a coastal project involving impacts below the mean high water line is being submitted to MassDEP and the City of Boston for a proposed United States Coast Guard Aid to Navigation (ATON) structure replacement project. A copy of the NOI application is being submitted to the MA Division of Marine Fisheries for your review and records, per the instructions and as required by the NOI form and 310 CMR 10.00: The Wetlands Protection Act.

The NOI can be accessed via the following link: BOSTON_Main Channel Light 5_NOI_01-10-2022 (to MA DMF-North).pdf

Please let me know if you have any questions or concerns regarding the proposed project or NOI application.

Regards,
Steve