MAINE MARITIME ACADEMY
A COLLEGE OF ENGINEERING, MANAGEMENT, SCIENCE, AND TRANSPORTATION

Maine Maritime Academy Waterfront Improvements Project

Project Summary and Construction Update

WEDA Eastern Chapter Meeting

Revitalizing Harbors, Balancing Economy, Environment and Community

15 October 2025

Maine Maritime Academy
Waterfront Improvements Project

DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES
BUREAU OF GENERAL SERVICES
STATE OF MAINE

Colliers Project Leaders

GZA

REED & REED

Maine Maritime Academy
Waterfront Improvements Project

- Maine Maritime Academy (MMA)
  - Castine, Maine
  - One of six U.S. maritime academies
- Academic program includes classroom instruction, pier-side and at-sea training on vessels
- The U.S. Department of Transportation Maritime Administration (MARAD) provides training vessels
- In 2017, the government approved the construction of five purpose-built training vessels

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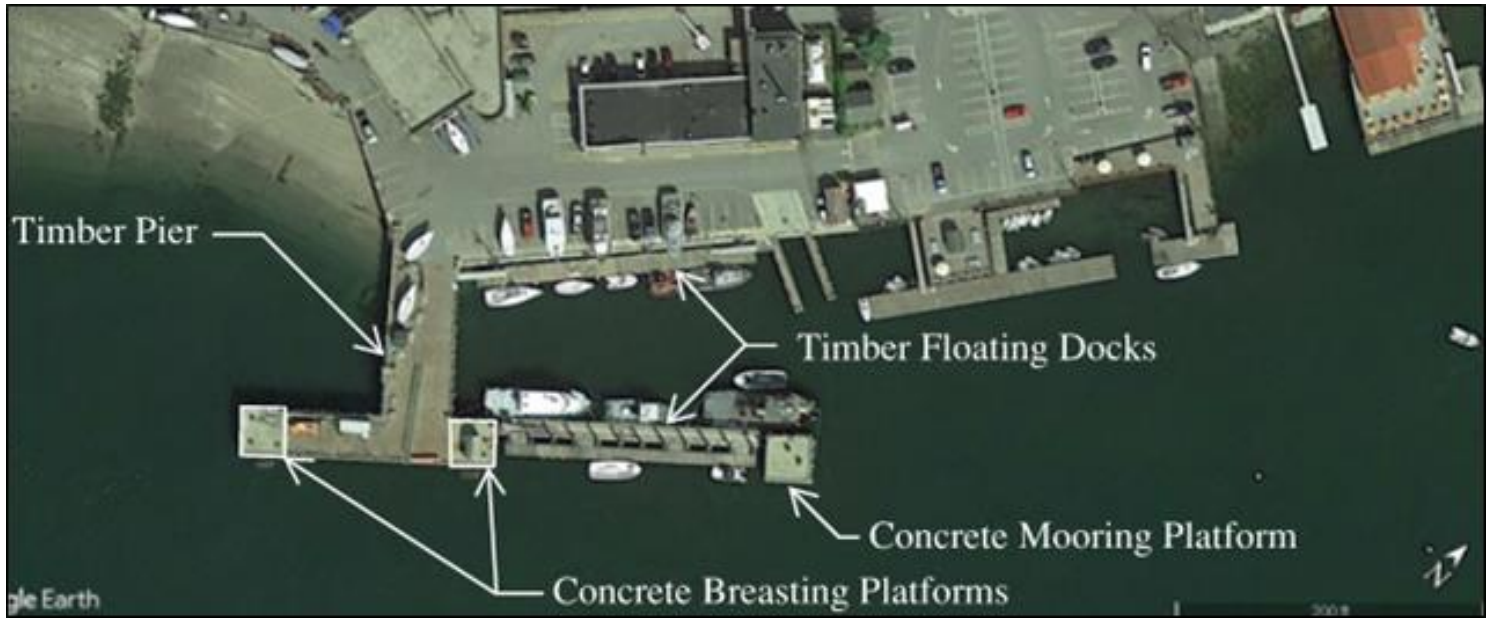
Waterfront Improvements Project

MMA Existing Waterfront

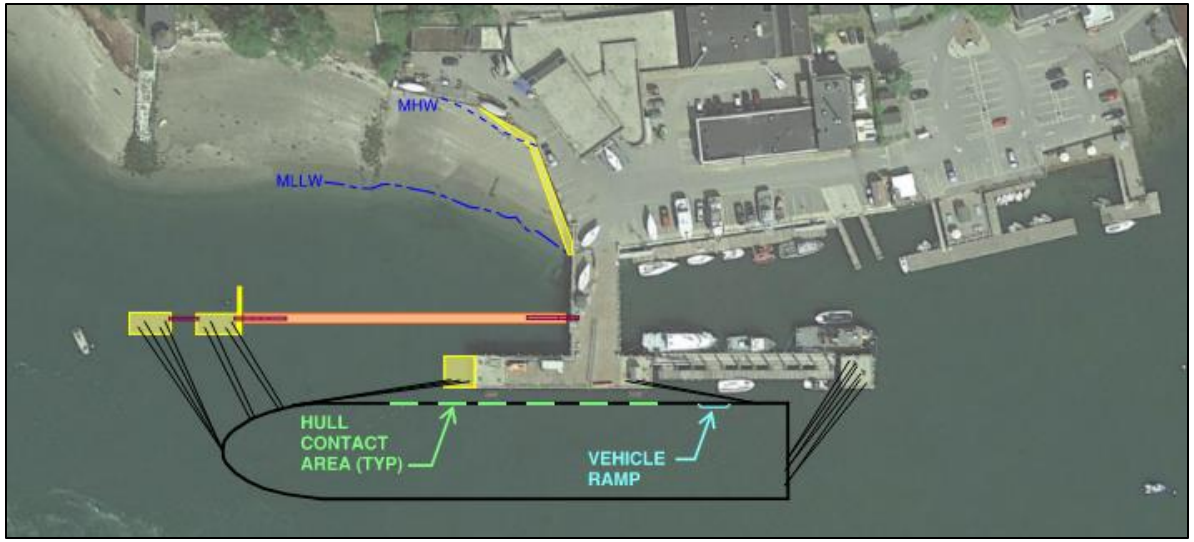
- Timber pier constructed in 1960s and 1990s
- 410 feet of steel sheet pile bulkhead
- 150 feet timber and composite lagging wall
- Two concrete breasting platforms
- One mooring platform
- Inboard and outboard section of timber floating docks
- Timber travel lift runway piers
- Constrained site abutting private property and Town Dock public water access



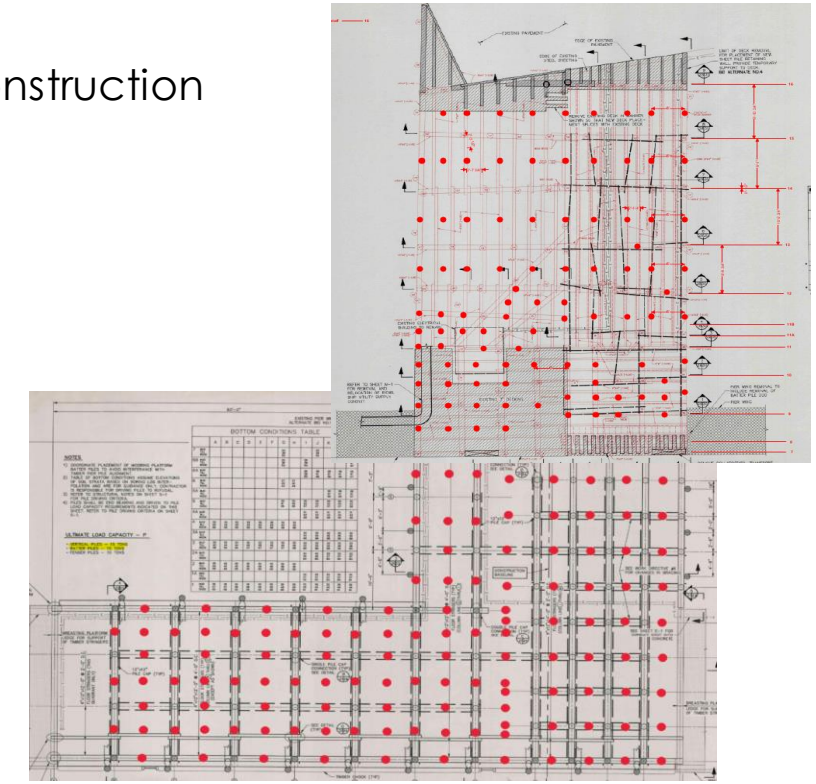
Maine Maritime Academy
Waterfront Improvements Project

MMA Alternatives – Schematic Design

Design Objectives: NSMV mooring and berthing *and*
MMA's operational/instructional requirements during construction



Strengthen Existing Pier
Replace Bulkhead and Retaining Wall
New Dolphins and Access



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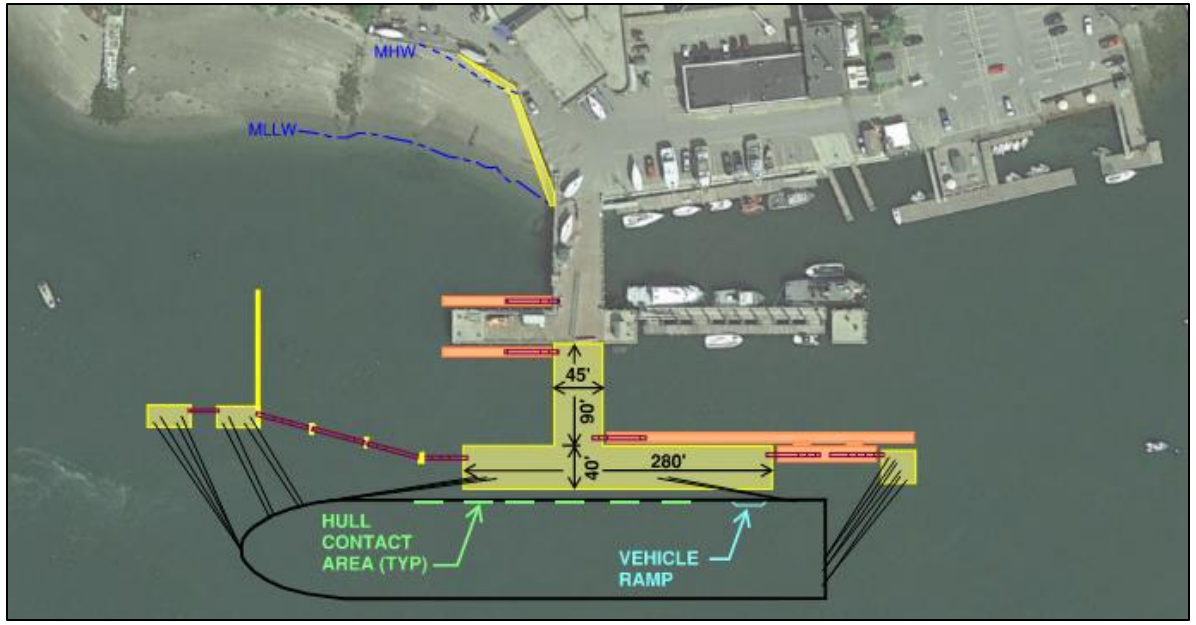
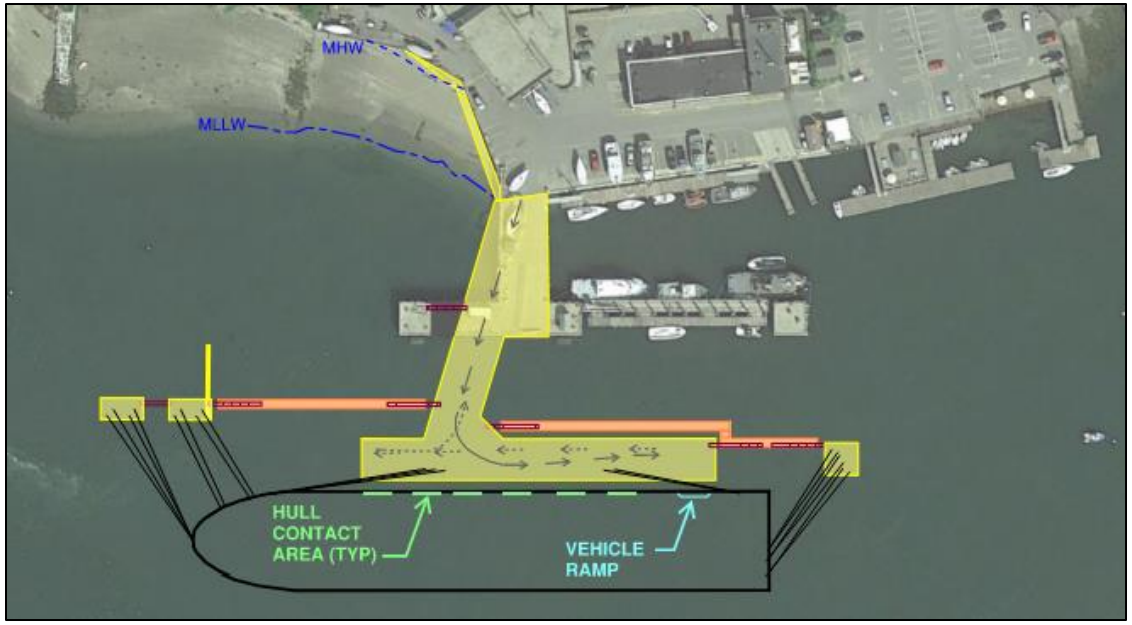
MMA Alternatives – Schematic Design



Rehabilitate Existing Structures
Replace Existing Pier, Bulkhead and Retaining Wall
New T-Head Pier Extension, Dolphins, Floating Docks and Floating Breakwater



Rehabilitate Existing Structures
Replace Existing Pier, Bulkhead and Retaining Wall
New Pier Extension with Truck Turning, Dolphins, Floating Docks and Floating Breakwater

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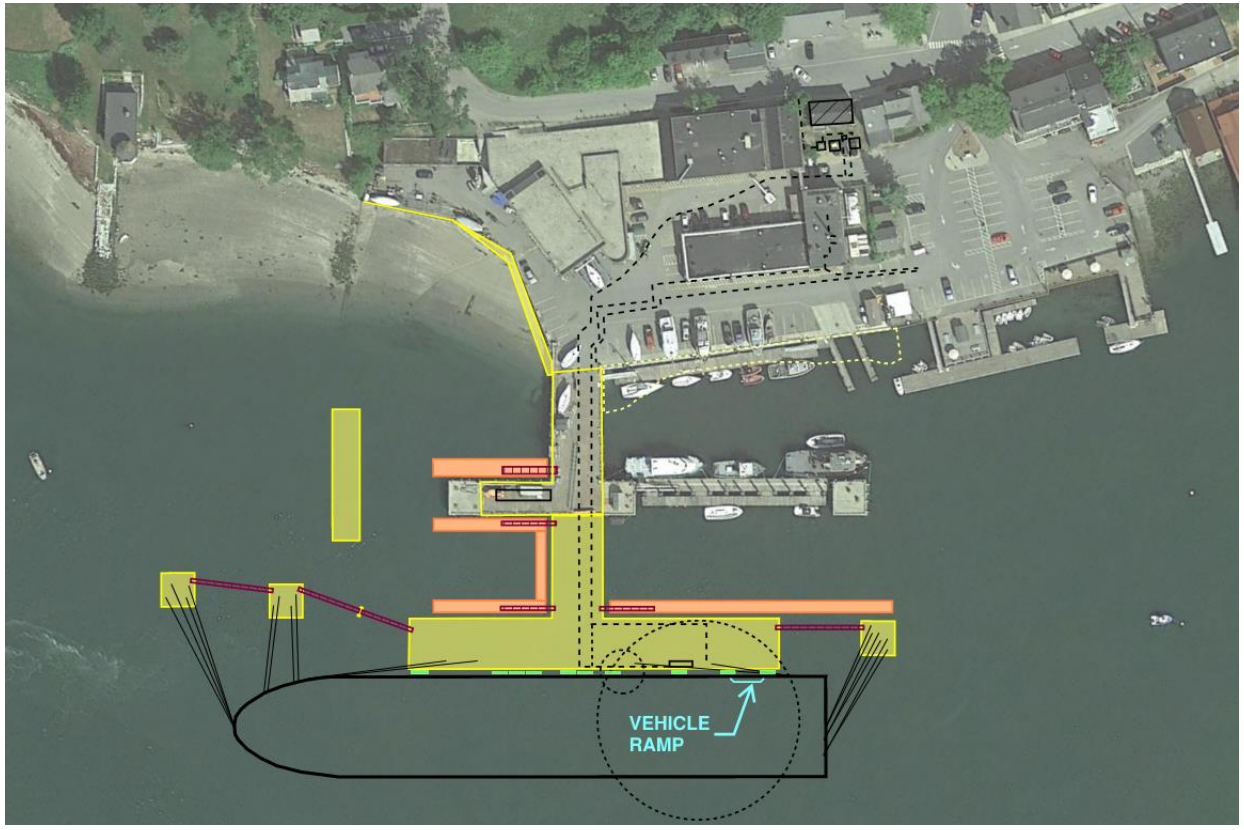
MMA Selected Alternative



- Replace existing pier (~ 7,500 sf)
- Pier extension (~ 18,700 sf)
- Three new, 30'x30' mooring dolphins
- Modify existing mooring and breasting platforms
- New timber floating docks (7,500 sf)
- New concrete floating breakwater (24' x 115')
- New steel sheet pile bulkhead (~ 115 lf)
- New precast concrete retaining wall (~187 lf)
- Recoat steel sheet pile bulkhead
- Repair timber travel lift piers
- Repair timber floating docks
- Maintenance dredge (~ 650 cy)
- Reconfigure and upgrade electrical, communications, steam, water and wastewater systems

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MMA Environmental and Regulatory Permits

Permit	Agency	Date Obtained
Site Plan Review*	Town of Castine Planning Board	April 13, 2023
Fill Permit	Town of Penobscot	May 2, 2023
Maine Wharves and Weirs Act Approval	Town of Castine Selectboard	June 5, 2023
Submerged Lands Lease	Maine Bureau of Parks and Lands	September 19, 2023
NRPA Permit for Pier Extension	Maine Department of Environmental Protection	November 20, 2023
NEPA Finding of No Significant Impact	Maritime Administration	December 27, 2023
USACE General Permit	U.S. Army Corps of Engineers	January 5, 2024
NRPA Permit for Maintenance Dredge	Maine Department of Environmental Protection	July 16, 2024

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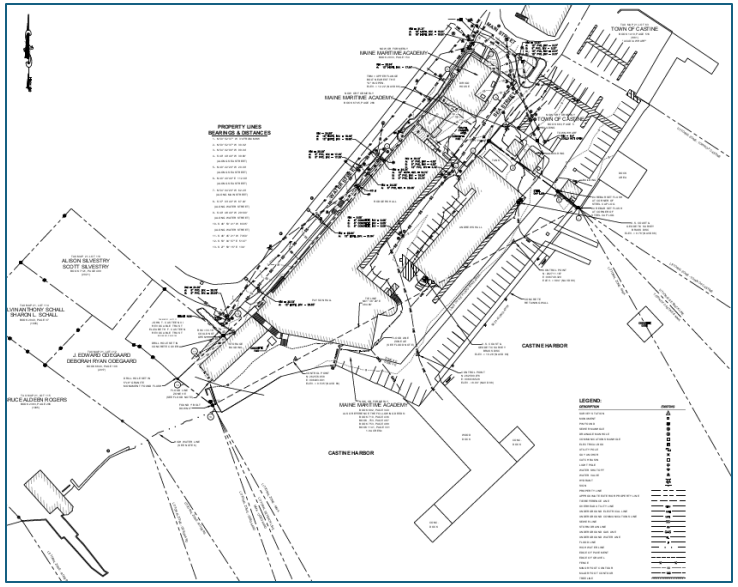
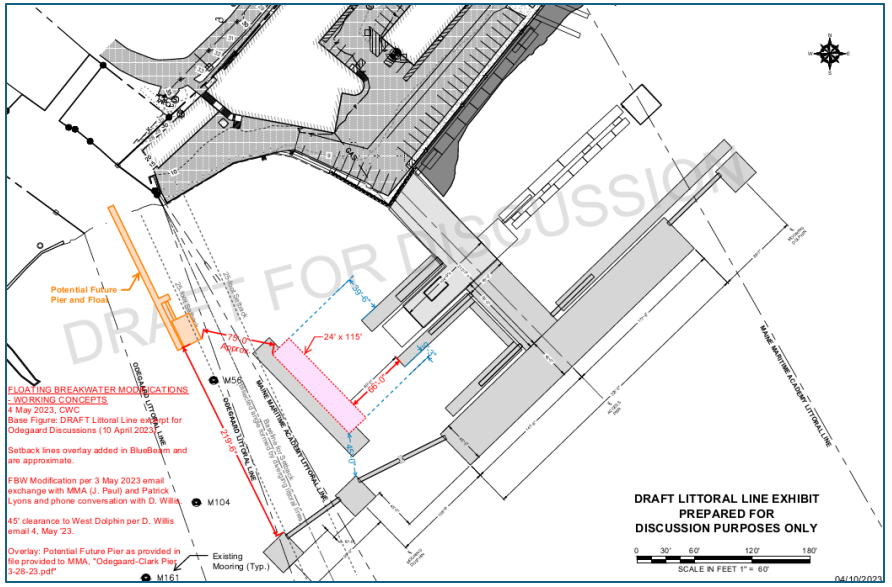
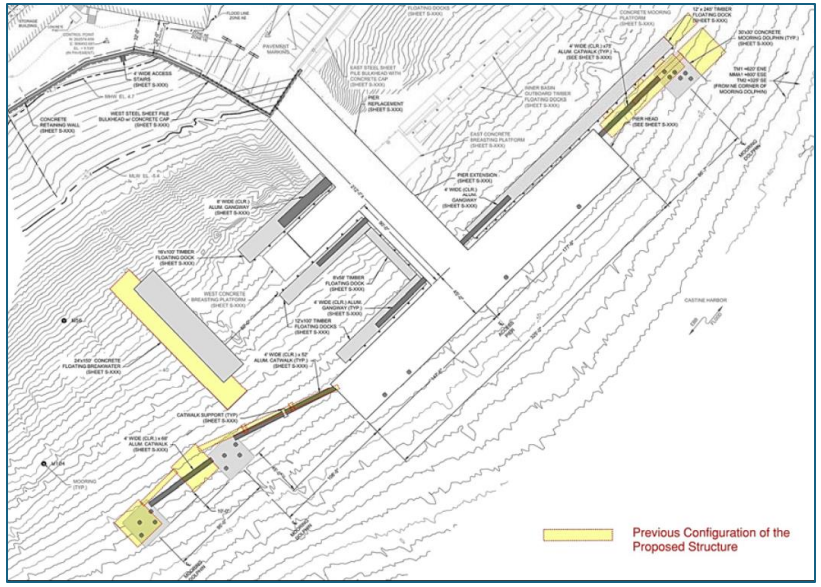
MMA Environmental and Regulatory Permits

- Maine DEP and USACE Public Comments: 9 rounds of comments totaling 93 comments
- Submerged Land Lease: Littoral Lines, Revise Dolphin & FBW layout, letters of no objection

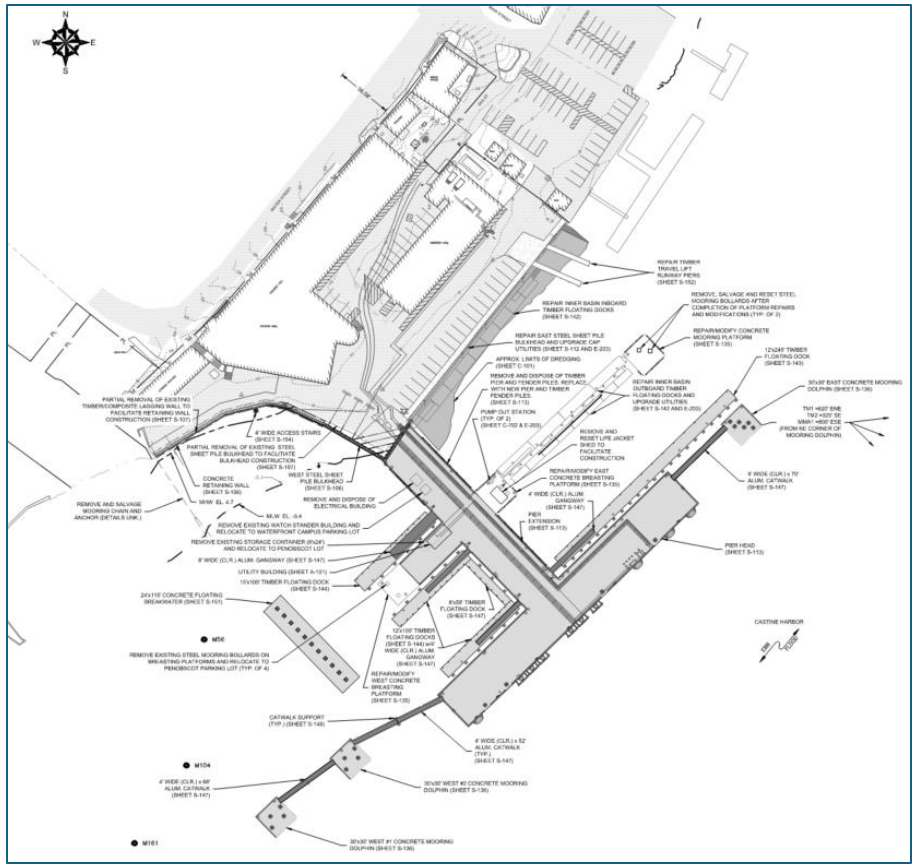




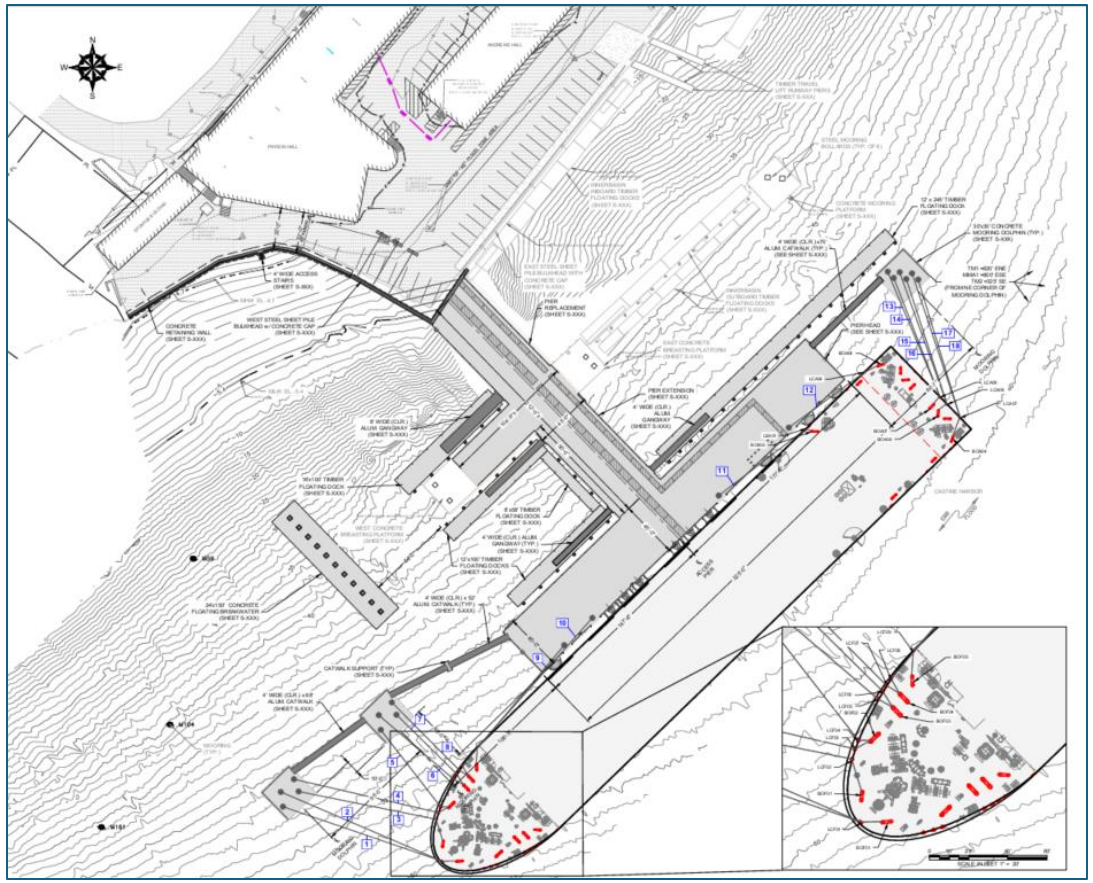


Maine Maritime Academy
Waterfront Improvements Project

Project Overview



Overall Work Plan



NSMV Mooring Arrangement Plan

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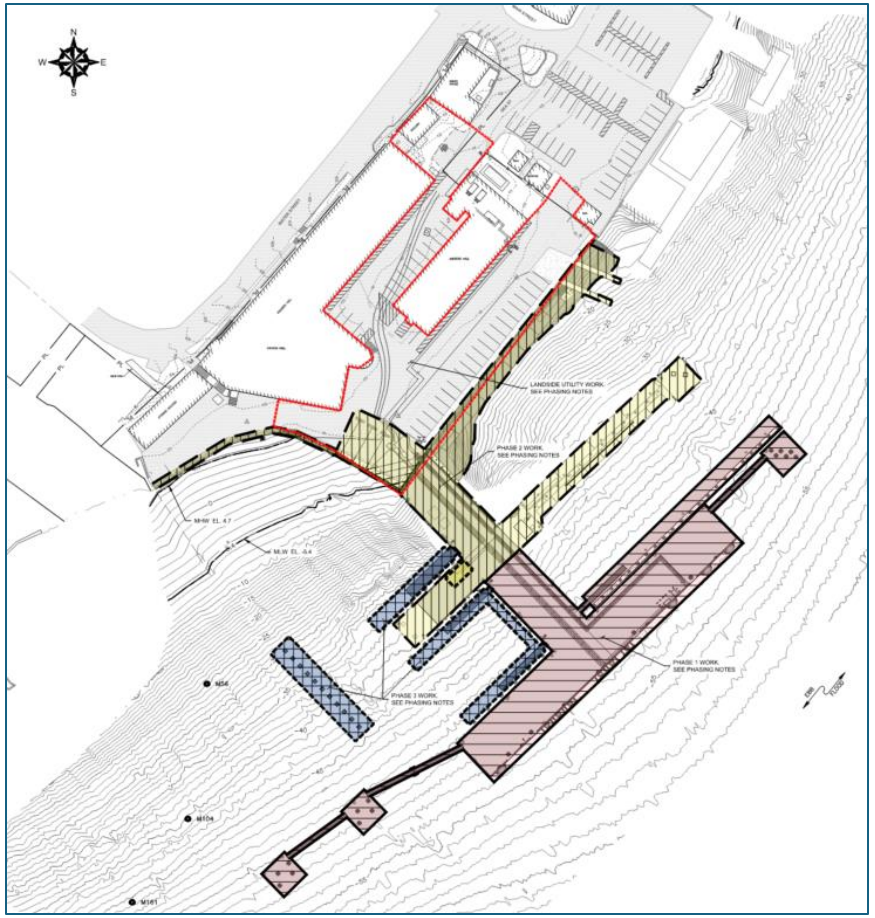
Phasing Schedule

- Phase 1: NSMV berthing and mooring elements, east floating dock
- Phase 2: Pier replacement, utilities, maintenance dredge, platform modifications and routine maintenance
- Phase 3: West floating docks and floating breakwater



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Key Milestones

Contract Award - Reed and Reed	20 May 2024
Mobilization	10 Jul 2024
Start Piling Installation	24 Dec 2024
Phase 1 Completion/Ready for TSSOM	15 Jun 2026
Commence Phase 2 Demolition	21 Jun 2026
Start Seawall Rehabilitation	22 Jun 2026
Start Phase 2 Piling	10 Aug 2026
Start Phase 2 Existing Dock Repairs	17 Aug 2026
Start Phase 3 Floating Breakwater	13 Oct 2026
Project Complete	20 Jun 2027

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Key Progress Metrics

Plumb Piles Installed	156	
Plumb Piles Socketed		156
Battered Piles Installed	65	
Battered Piles Socketed	61	
Rock Anchors Complete	36	
Grout Plugs Complete		69
Precast Headers Installed	6	
Precast Deck Panels Installed	15	
Precast Trench Sections Installed	9	

221 of 235 Phase One Piles Installed.
All Precast Components for Phase One Complete and Awaiting Installation

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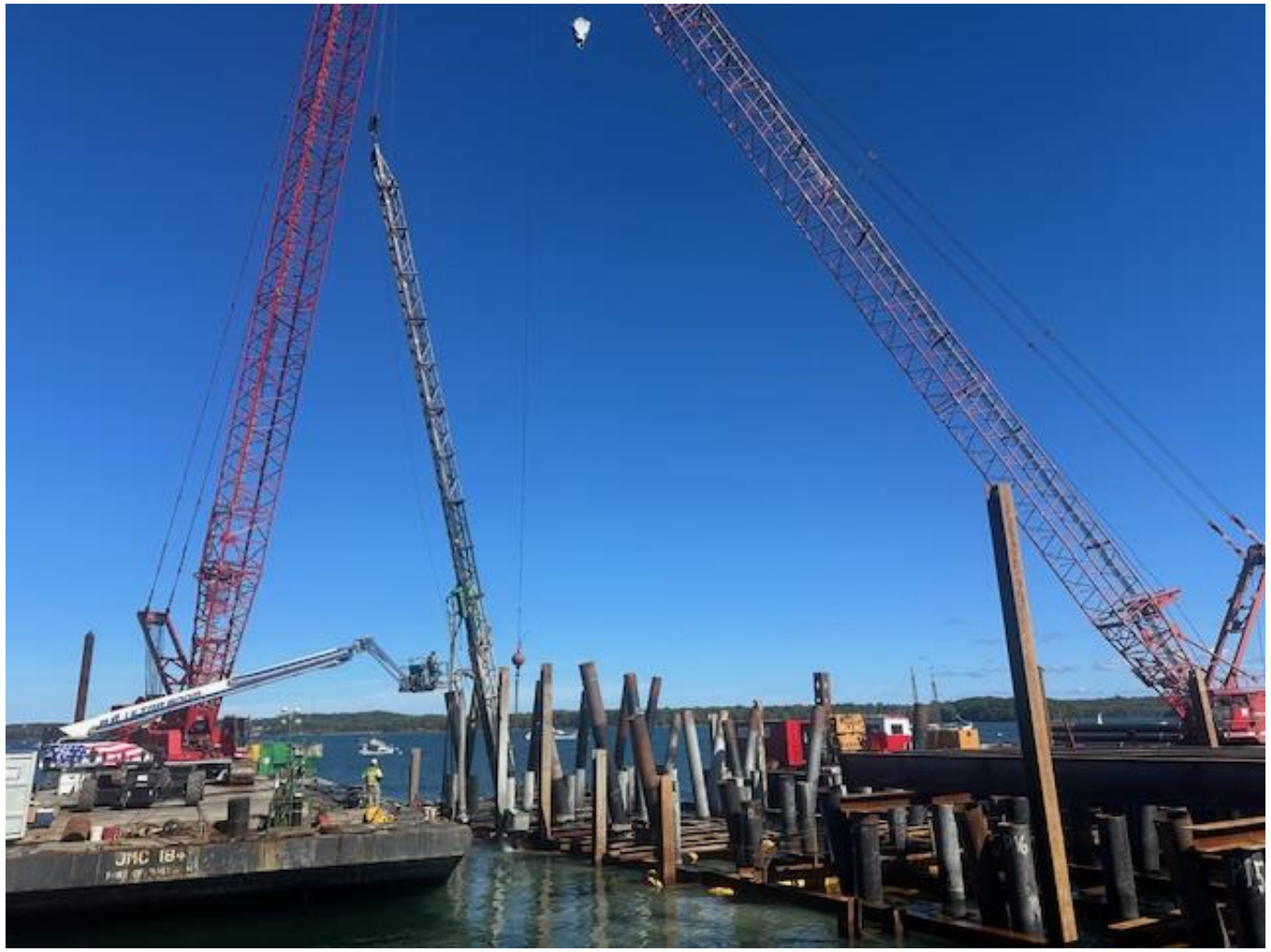

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Regional Companies
Average 50 workers during peak

REED & REED

M&B

CCB CONSTRUCTION SERVICES

EATON Paving & Excavation LLC 207-348-5630 www.eatonpaving.com

OWEN J. FOLSOM, INC OJF WWW.OJF-INC.COM

NUCOR HARRIS REBAR

HEDSTROM ELECTRIC

M & K COMMERCIAL DIVING

Copia Specialty Contractors, Inc.

DAMON DAMON INSULATION CO. MECHANICAL INSULATION CONTRACTORS

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Job Site Monitoring

Four seismograph units:
Featuring: Threshold Alerts Vibration Limiting Values

Deformation Monitoring Points:
Featuring: 33 prisms (bulkhead, Payson Hall, Rogers Hall, Andrews Hall)

Automated Total Station (ATS)
Featuring: DMPS transmit to this. Alerts may be sent. Zero so far.

10 Tilt Meters
Featuring: Meters monitor vertical and horizontal movement.

14 Crack Gauges
Featuring: Graphic indication of movement

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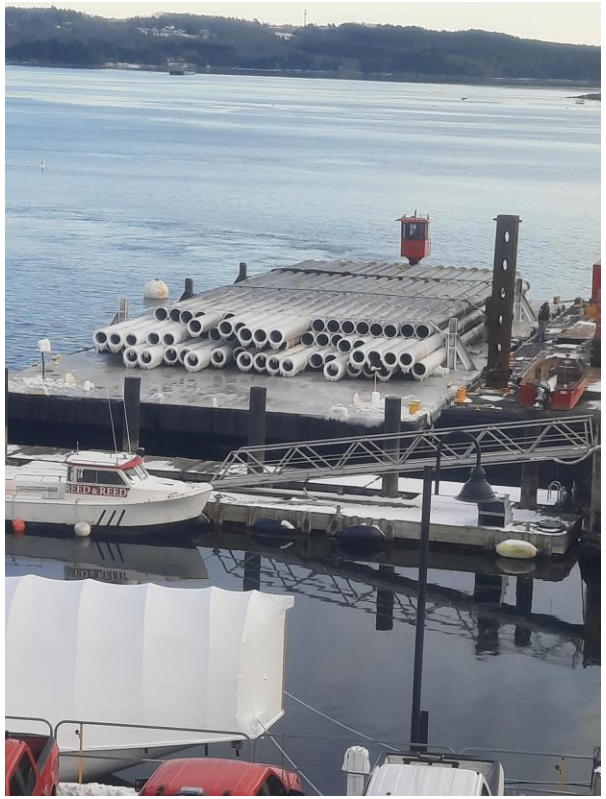
Operations and Challenges



Operations:
Receiving Deliveries
Building Frames
Laydown area
Barge shifting
Setting Piles
Drilling

Challenges:
Small workspace
Weather
Small Vessel Traffic

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WATERFRONT USE

Maintain & Operate 65 Vessels

Serving MMA Education, Athletics, Admissions, Clubs & Recreation Programs

Characteristic of a Standard Fall Semester Weekday 0530-1845

33 Vessels in Use

183 Students, Staff, Faculty & Guests

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WATERFRONT IMPROVEMENT BENEFITS

Safety

Efficiency

Improved Student Experience

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Waterfront Activities

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NSMV III - *State of Maine V*

- Federal asset capable of responding to humanitarian disasters.
- Berthing for 1000 with Helo Pad and Hospital.
- Roll-on/roll off container storage with a cargo crane.
- Water desalination capabilities
- World class training platform
- Training bridge, classrooms, auditorium
- Workshops and lab spaces
- Thrusters and flap rudder for maneuverability.

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NSMV III - *State of Maine V*

- Two bridges and two engine control rooms allow for a better balance between ship operations and live training
- 12 Classrooms and extensive dedicated teaching spaces provide an opportunity for significant improvements to at-sea learning.
- Large enclosed cargo bay and on-deck cargo area provide opportunities for additional training endorsements (forklift, cargo securing, rigging)
- State-of-the-art diesel-electric propulsion.
- Ample space for additional simulators and teaching labs.
- Plans to bring scientific research on board through collaboration with the Corning School of Ocean Studies.

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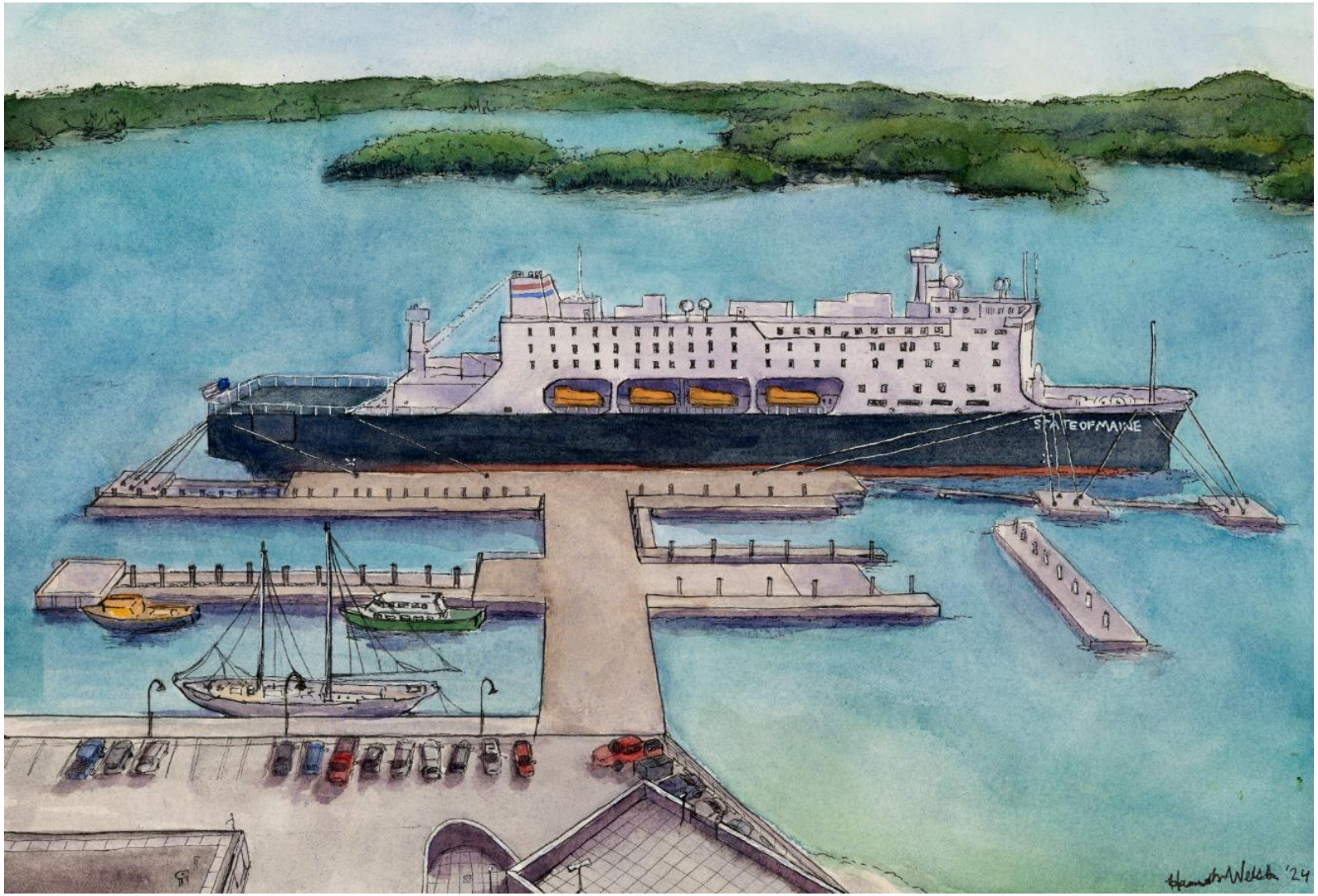
NSMV III - *State of Maine V*

- 4 – 4.2 mW generators in two engine rooms.
- 2 – 4500 kw (6048 hp) propulsion motors in 2 motor rooms
- Tier 4 emissions compliance (the most rigorous standard) on diesel generators.
- Bow and stern tunnel thrusters for unassisted mooring.
- Bow thruster drops down for “safe return to port” propulsion
- Top Speed – 18 knots
- Fuel consumption at normal transit speed (12 knots) 20mt / day
- Cadet Berths: 600 – compared to 245 on previous ship
- Total Berths: 760 compared to 298 on the previous ship

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