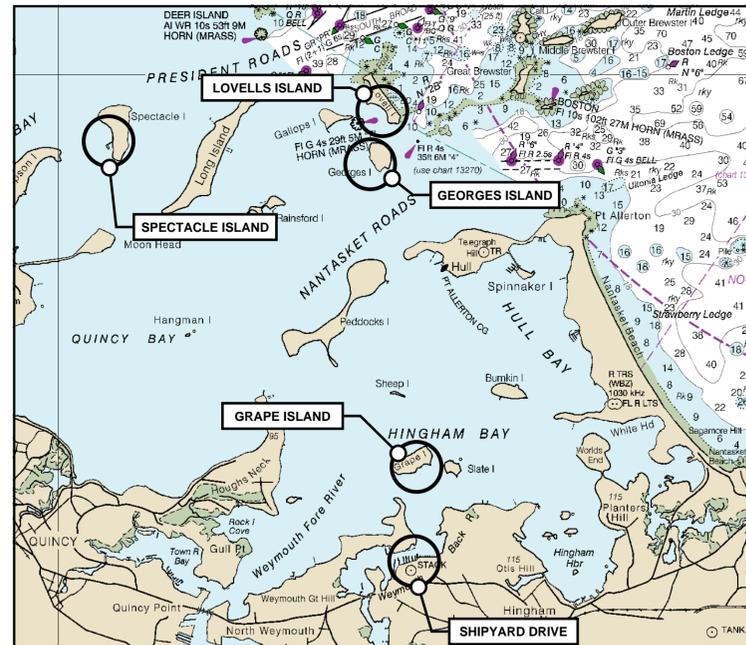


BOSTON HARBOR ISLANDS WATERFRONT REPAIRS ISSUED FOR CONSTRUCTION

FEBRUARY 2026
PROJECT NUMBER: P26-3663-C2A (4062-C)



LOCUS (NOAA CHART No. 13267: 2023)

SHEET INDEX

N-01 NOTES

LOVELLS ISLAND

LI-01 EXISTING
LI-02 PROPOSED
LI-03 DETAILS: LAYOUT AND GANGWAY
LI-04 DETAILS: BARGE COATINGS AND DAMAGE
LI-05 DETAILS: PILE GUIDE AND CATHODIC PROTECTION

GEORGES ISLAND

GE-01 EXISTING
GE-02 PROPOSED
GE-03 DETAILS: BARGE LAYOUT AND PILE GUIDE REPLACEMENT
GE-04 DETAILS: PILE GUIDE REPAIR
GE-05 MHW GANGWAY AND LANDING REPAIR
GE-06 PROPOSED STAFF GANGWAY

SPECTACLE ISLAND

SI-01 EXISTING
SI-02 PROPOSED
SI-03 DETAILS

GRAPE ISLAND

GR-01 EXISTING
GR-02 DEMOLITION
GR-03 LAYOUT

SHIPYARD DRIVE

SD-01 EXISTING
SD-02 DEMOLITION

GENERAL

- These drawings apply to marine rehabilitation work at multiple locations within Boston Harbor as identified on the individual plan sheets.
- Continuous on-site presence is not required. Work may be performed in phases and off-site fabrication and repair is anticipated.
- Work includes rehabilitation, repair, selective demolition, salvage, and disposal of existing marine structures. Except where specifically shown, no new construction is proposed.
- The Contractor shall perform all Work in accordance with the Drawings and Specifications. Where discrepancies occur, the Specifications shall govern.
- Contractor shall be responsible for all means and methods of construction, including marine access, staging, temporary mooring, lifting, temporary supports, and stabilization necessary to perform the Work.
- Sequencing of work shall maintain safe access to the islands and shall not interfere with park operations except as approved.
- Contractor is responsible for lifting and rigging procedures for barges, gangways, floats, and pile guides. Provide lifting methods that do not damage existing structures.
- pre-repair and post-repair photographs of barge, gangway, and pile guide repairs, and document the length of the Lovells Pile Gangway recovered.
- Protect adjacent structures, floats, utilities, and timber members from damage during demolition, welding, and coating operations.

DRAWINGS

- These drawings consist of sketches, excerpts from record drawings, aerial imagery, and field photographs, with proposed work annotated, and are intended to illustrate general existing conditions and the intent of the repairs.
- Drawings are not to scale. Field verify dimensions.
- Record drawing excerpts and detail references shown on these sheets are provided for context only. Sheet numbers, detail tags, and callouts shown on copied or excerpted drawings may not correspond to the current drawing set and shall not be relied upon as governing details.
- The record drawings, aerial imagery, and photographs shown may not reflect current field conditions.
- Aerial imagery downloaded from GoogleEarth Pro on January 14, 2026.
- These drawings and images are not to scale and shall not be used for measurement or quantity take-offs.
- Record drawings and other reference documents cited herein are provided for reference only and are included in the contract attachments.
- Text for callouts and notes added by DCR have boarders.

EXISTING CONDITIONS

- All structures shown are existing. Dimensions, elevations, and conditions shown are approximate and are based on available records and field observations.
- The Contractor shall verify all existing conditions in the field prior to construction.
- Notify the Engineer of any discrepancies, conflicts, or field conditions differing from those shown on the Drawings or described in the Specifications before proceeding with the affected work.
- The Contractor shall verify existing conditions prior to construction and report discrepancies to the Engineer.
- Variations in condition due to corrosion, wear, impact damage, or marine exposure are anticipated.

MARINE SURVEY

- Provide a qualified marine surveyor to assess the interior and exterior condition of each barge identified in the Contract Documents prior to commencement of rehabilitation work.
- The survey shall include a visual inspection of accessible hull plating, framing, deck structures, pile guides, attachments, and areas of known or suspected deterioration.
- Provide a written report documenting observed conditions, photographic documentation, and recommended repair locations.
- Marine survey and ultrasonic thickness testing shall be performed by an independent marine surveyor or firm.
- The surveyor shall be qualified and poses one or more of the following qualifications:
 - Society of Accredited Marine Surveyors (SAMS);
 - The National Association of Marine Surveyors (NAMS-CMS);
 - or a Professional Engineer licensed in MA with relevant experience.
- The survey shall be completed prior to initiation of structural steel repairs.
- As part of the marine survey, perform ultrasonic thickness testing at selected locations on each barge to assess remaining steel thickness.
- UT testing shall be conducted at representative locations including, but not limited to, areas of visible corrosion, dented or deformed plating, splash zones,

areas adjacent to pile guides, and other locations where section loss is suspected.

- Document UT readings and test locations in the survey report.

DEMOLITION

- Salvaged materials shall be disposed of or recycled in accordance with Section 02 81 00.

CARBON STEEL

- New structural steel shapes shall conform to ASTM A992 or ASTM A572 Grade 50 unless otherwise noted. Where specifically indicated for marine exposure, steel shapes shall conform to ASTM A690.
- Steel plates, angles, channels, and bar stock used for primary new structural members shall conform to ASTM A572 Grade 50 unless otherwise noted.
- Welding materials and procedures shall conform to AWS D1.1. Electrodes shall be E70XX or as required for the base materials being welded.
- Unless otherwise noted on the Drawings or specified, steel plates, angles, channels, and bar stock used for repairs and miscellaneous fabricated components shall conform to ASTM A36.
- Remove coatings, corrosion, and contaminants in weld areas and prepare to sound metal prior to welding. Do not weld over coated or deteriorated surfaces.
- Provide non-conductive separation between aluminum, carbon steel, and stainless-steel components where in contact unless specifically detailed otherwise.

HARDWARE

- Carbon steel nuts shall conform to ASTM A563 unless otherwise noted.
- Carbon steel bolts, nuts, and washers shall be hot-dip galvanized. Galvanizing for high-strength bolts shall conform to ASTM F2329. Galvanizing for other hardware shall conform to ASTM A153.
- Hardware used to secure aluminum components shall be Stainless Steel unless otherwise noted.
- Stainless steel bolts and studs shall conform to ASTM F593. Stainless steel nuts shall conform to ASTM F594. Stainless steel hardware shall be Type 316 unless otherwise specified.
- Provide non-conductive isolation washers or sleeves where stainless steel fasteners connect dissimilar metals.
- Provide non-conductive separation between aluminum, carbon steel, and stainless-steel components where in contact unless specifically detailed otherwise.

GANGWAYS

- Gangways shall be designed to resist the following minimum loads and conditions, unless more stringent requirements govern:
 - 100 psf uniform live load.
 - 500 lb concentrated load applied over a 4" x 4" area, placed to produce the maximum effect.
 - 25 psf snow load.
 - Wind loads determined in accordance with 780 CMR and ASCE/SEI 7 for the project location.
 - Maximum vertical deflection: L/240.
 - Maximum horizontal deflection: L/300.
- Decking shall consist of mechanically interlocked extruded aluminum slats, embossed to provide a non-slip surface, installed transversely, with slat width not exceeding 9" and clear spacing between slats not exceeding 3/8".
- Gangways shall be designed to avoid excessive vibration and lateral sway under anticipated staff use and site wind conditions.
- connection forces for new gangways and for any modified or replaced hinge or connection systems. Calculations shall be stamped by a Professional Engineer licensed in the Commonwealth of Massachusetts.
- Gangways shall be securely fastened to fixed structures. Provide landing plates, transition plates, and lateral and vertical guidance components as required for proper alignment, load transfer, and restraint at the float interface, including prevention of uplift and lateral walk-off under service conditions. Mechanical or tethered vertical guidance systems shall be compatible with operation of the existing davit.
- Field verify all dimensions, elevations, and interface conditions prior to fabrication. Coordinate gangway geometry with existing structures, floats, and tidal conditions.
- Field repairs of the existing gangways rely on bolted connections unless welding is authorized in writing by the Engineer.

CATHODIC PROTECTION

- Sacrificial anodes shall be zinc alloy anodes for seawater service, sized and furnished as shown. Provide manufacturer cut sheets and certifications.
- Verify electrical continuity between steel elements intended to be protected (deck steel, pile guides, brackets, and attached steel appurtenances) so that

installed anodes provide effective protection. Provide bonding jumpers where discontinuities are found, as directed.

- Anodes shall be mechanically secured.

COATINGS

- Store coating materials in accordance with the manufacturer's written recommendations and protect from temperature extremes and moisture.
- All coating materials within a system shall be compatible, supplied by a single manufacturer, and applied in accordance with the manufacturer's written instructions.
- Surface preparation shall conform to the requirements of the coating specification and manufacturer's recommendations. Remove rust, scale, oil, grease, salts, and contaminants prior to coating.
- Use immersion-grade, two-component epoxy systems for all steel surfaces at or below the splash zone or subject to periodic immersion.
- Topcoats exposed to sunlight shall be aliphatic polyurethane or polysiloxane for UV stability.
- Stripe-coat all welds, edges, bolts, corners, and attachments prior to full coat application using the same product as the intermediate coat unless otherwise recommended by the manufacturer.
- Apply coatings only when ambient conditions, steel temperature, and relative humidity are within manufacturer limits. Do not apply coatings to wet or damp surfaces or when condensation is present or expected before cure.
- Observe manufacturer minimum and maximum recoat windows. Prepare surfaces as required where recoat windows are exceeded.
- Repair coating damage caused by fabrication, handling, or installation in accordance with the coating manufacturer's written repair procedures.
- Non-skid aggregate shall be aluminum oxide or approved equal, broadcast into the wet intermediate coat on deck areas and sealed with the finish coat.

ELECTRICAL

- Electrical work is limited to removal and abandonment of inactive wiring and conduit as shown.
- The remaining electrical components shall terminate at the electrical box located on the adjacent wooden pier.

LOVELLS ISLAND
NOTES**N-01**

PROJECT: Boston Harbor Islands Waterfront Repairs
PROJECT No.: P26-3663-C2A (4062-C)
DRAWN BY: MNG
DATE: 1/27/2026

Department of Conservation & Recreation
 10 Park Plaza, Suite 6620
 Boston, MA 02116

Datum	Elevation
MHHW	+9.9 ft
MHW	+9.5 ft
NAVD88	+5.2 ft
MLW	+0.0 ft
MLLW	-0.3 ft
Tidal datums based from NOAA buoy 8443970: Boston, MA	



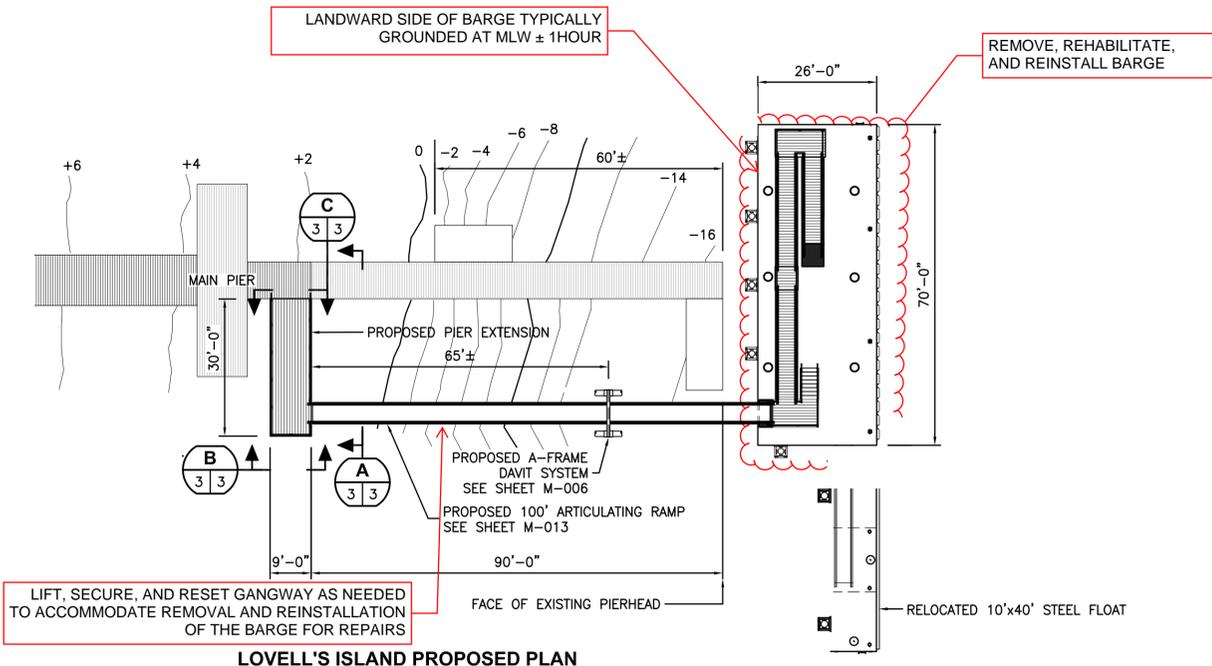
OVERVIEW: APPROACH TO LOVELLS ISLAND



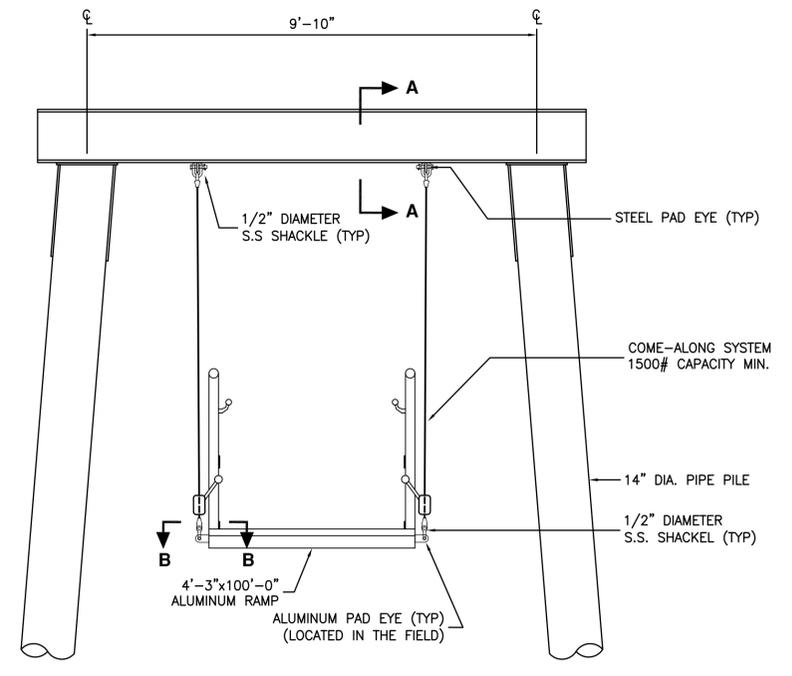
OVERVIEW: BARGE GROUNDED OUT AT APPROXIMATELY MLW







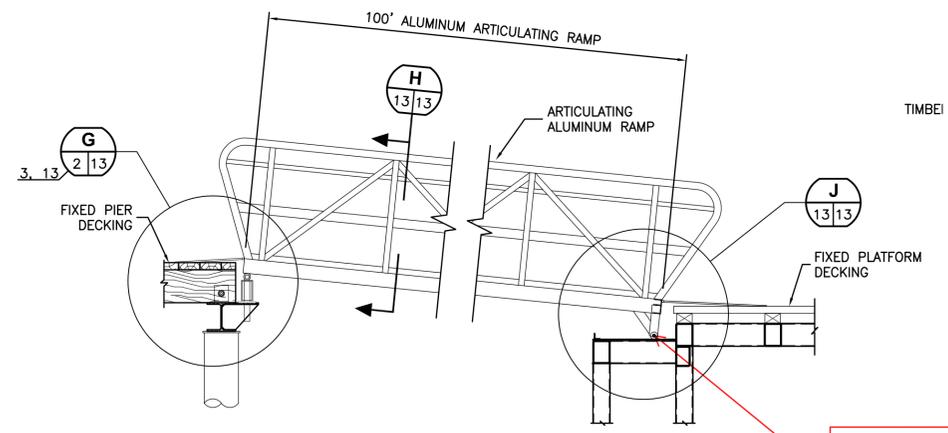
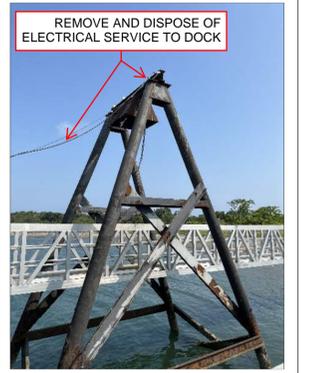
LOVELL'S ISLAND PROPOSED PLAN



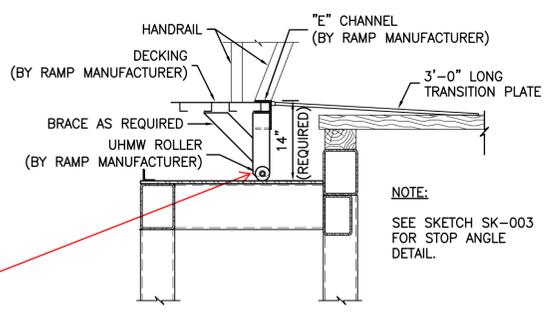
RAMP CONNECTION DETAIL



GANGWAY: A-FRAME GANGWAY LIFT, WINCH HOOD, AND ELECTRICAL SERVICE (ABOVE AND RIGHT)



ARTICULATING ALUMINUM RAMP ELEVATION



ARTICULATED RAMP END @ PLATFORM

AS BUILT



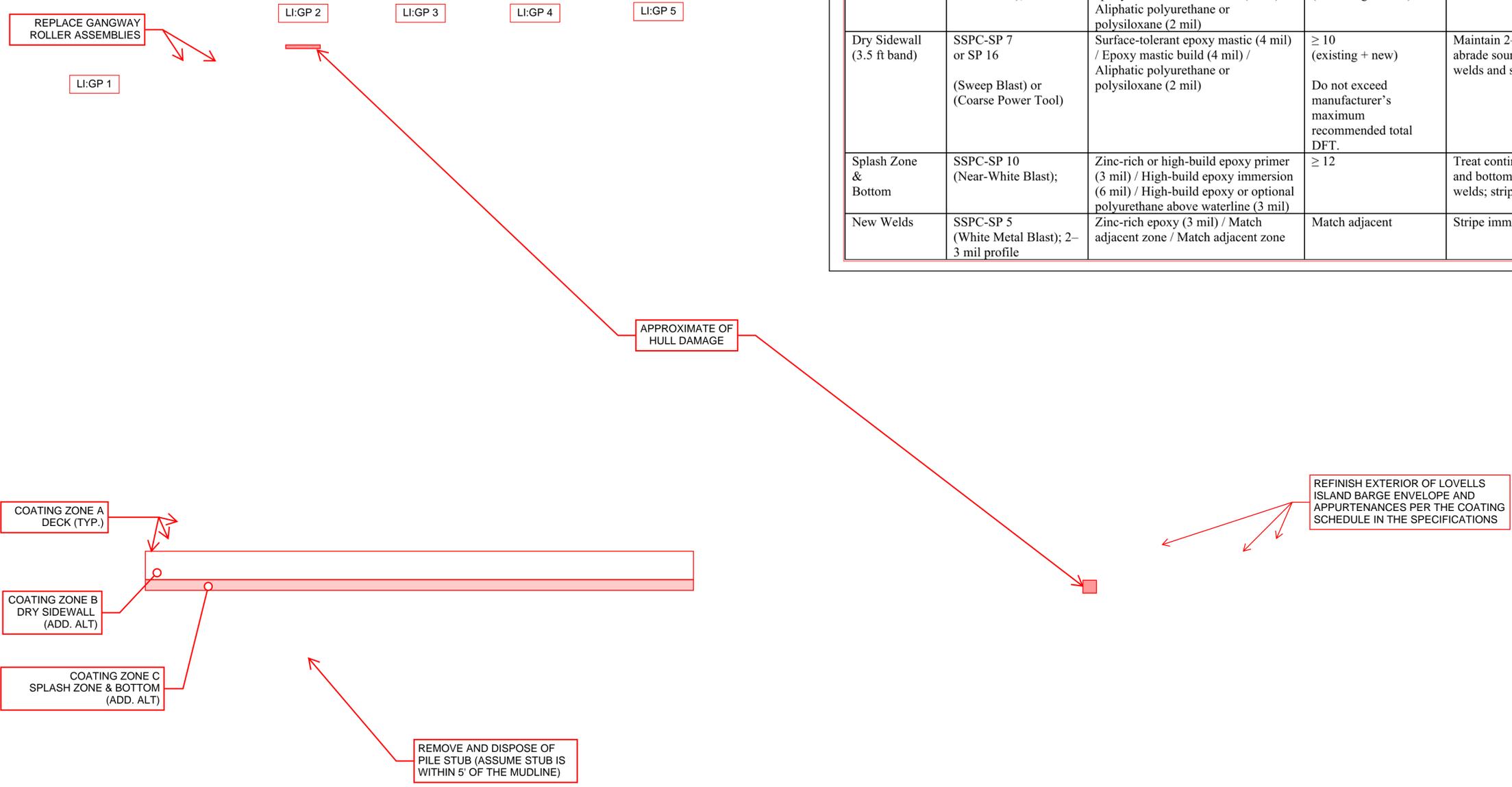
REPAIR OR REPLACE GANGWAY ROLLER ASSEMBLIES IN KIND

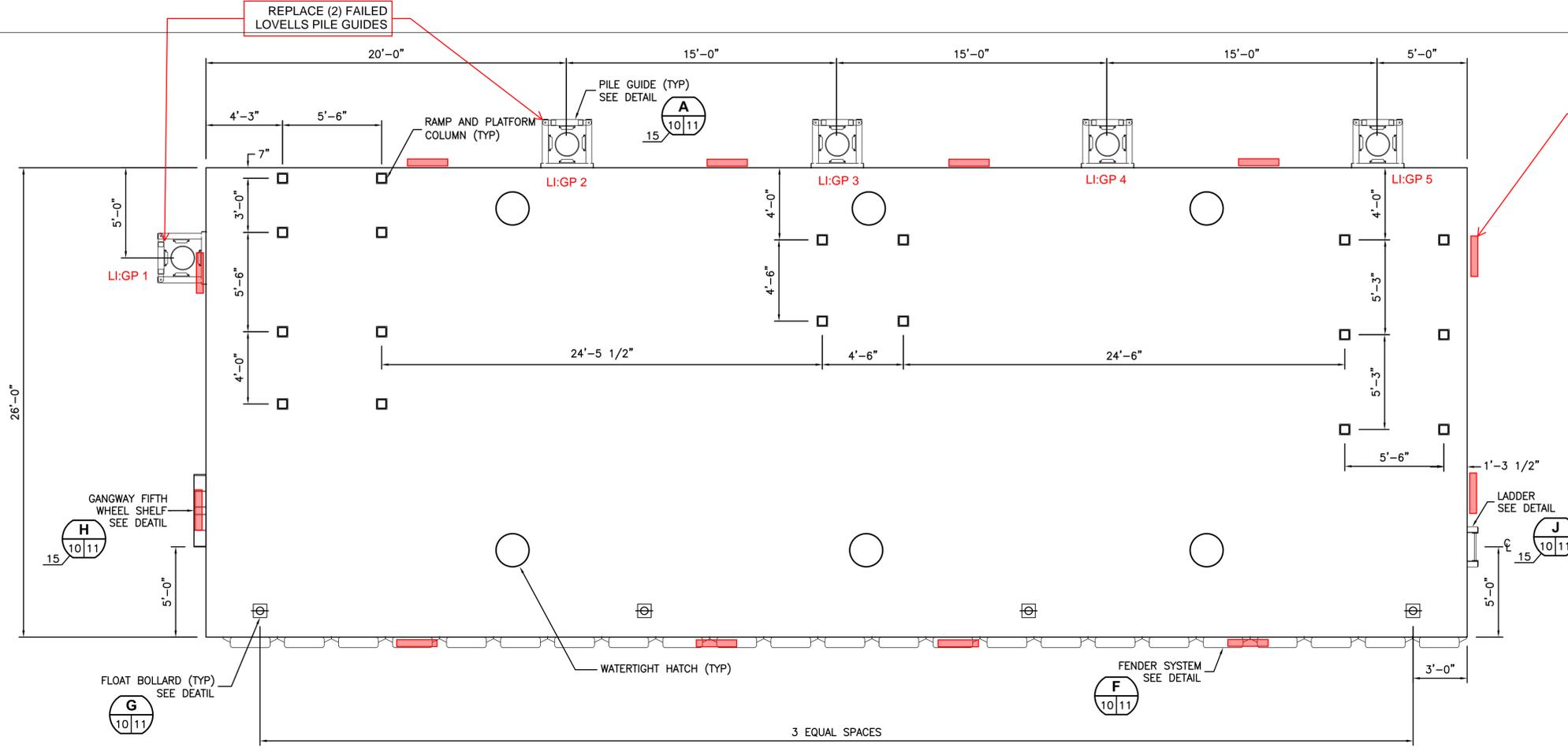
COATING NOTES

Component / Zone	Surface Preparation	Coating System Primer / Intermediate / Finish	Total DFT (mils)	Notes
Deck	SSPC-SP 10 (Near-White Blast);	High-build epoxy (4 mil) / High-build epoxy + non-skid broadcast (6 mil) / Aliphatic polyurethane or polysiloxane (2 mil)	≥ 12 (excluding texture)	Round edges 1/16 in min.; stripe coat welds and keel bases; non-skid on deck only.
Dry Sidewall (3.5 ft band)	SSPC-SP 7 or SP 16 (Sweep Blast) or (Coarse Power Tool)	Surface-tolerant epoxy mastic (4 mil) / Epoxy mastic build (4 mil) / Aliphatic polyurethane or polysiloxane (2 mil)	≥ 10 (existing + new) Do not exceed manufacturer's maximum recommended total DFT.	Maintain 2-3 mil anchor on bare steel; abrade sound coating to matte finish; stripe welds and stiffeners.
Splash Zone & Bottom	SSPC-SP 10 (Near-White Blast);	Zinc-rich or high-build epoxy primer (3 mil) / High-build epoxy immersion (6 mil) / High-build epoxy or optional polyurethane above waterline (3 mil)	≥ 12	Treat continuous belt ±18 in about waterline and bottom; mask anodes within 2-3 in of welds; stripe welds and fender contact arcs.
New Welds	SSPC-SP 5 (White Metal Blast); 2-3 mil profile	Zinc-rich epoxy (3 mil) / Match adjacent zone / Match adjacent zone	Match adjacent	Stripe immediately after priming.

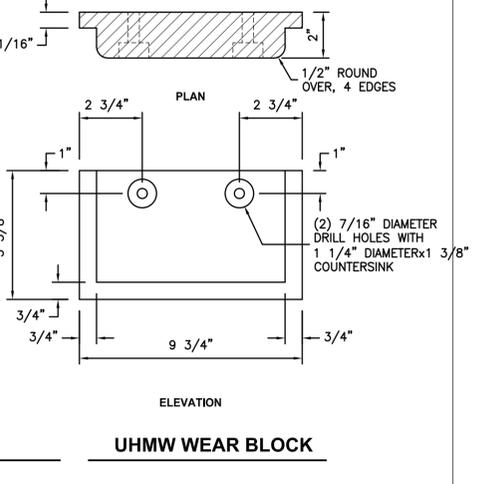
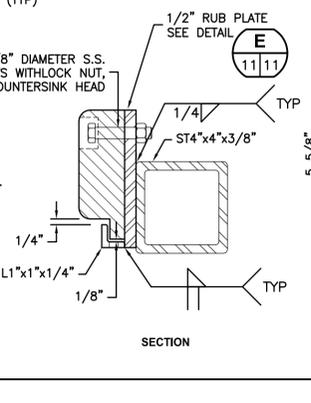
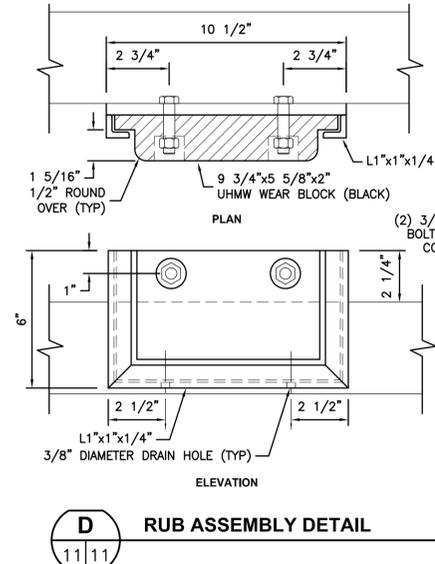
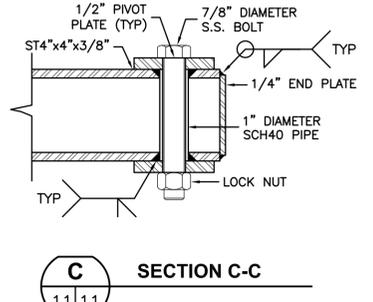
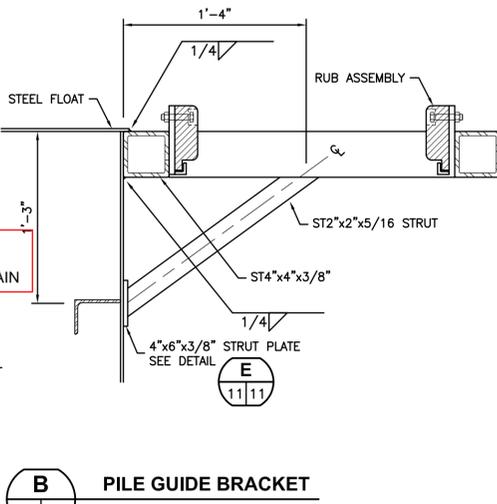
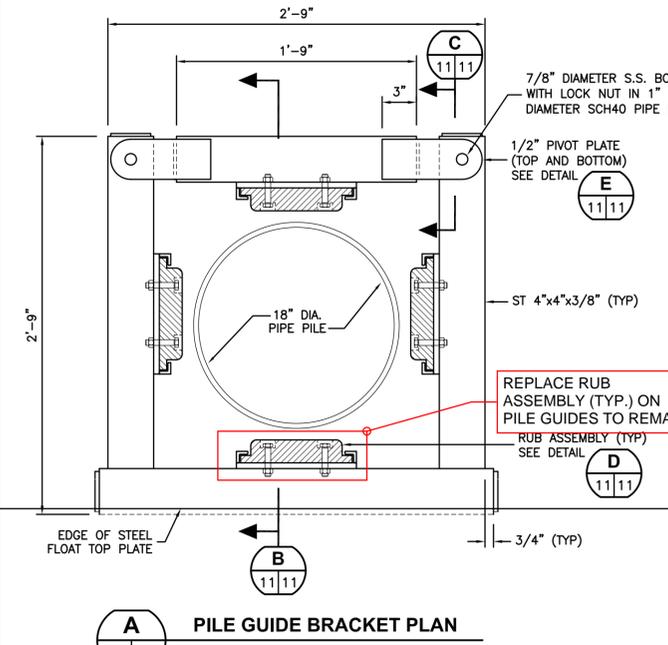


STEEL BARGE: DECK AND SIDE WALL





DECK LAYOUT PLAN



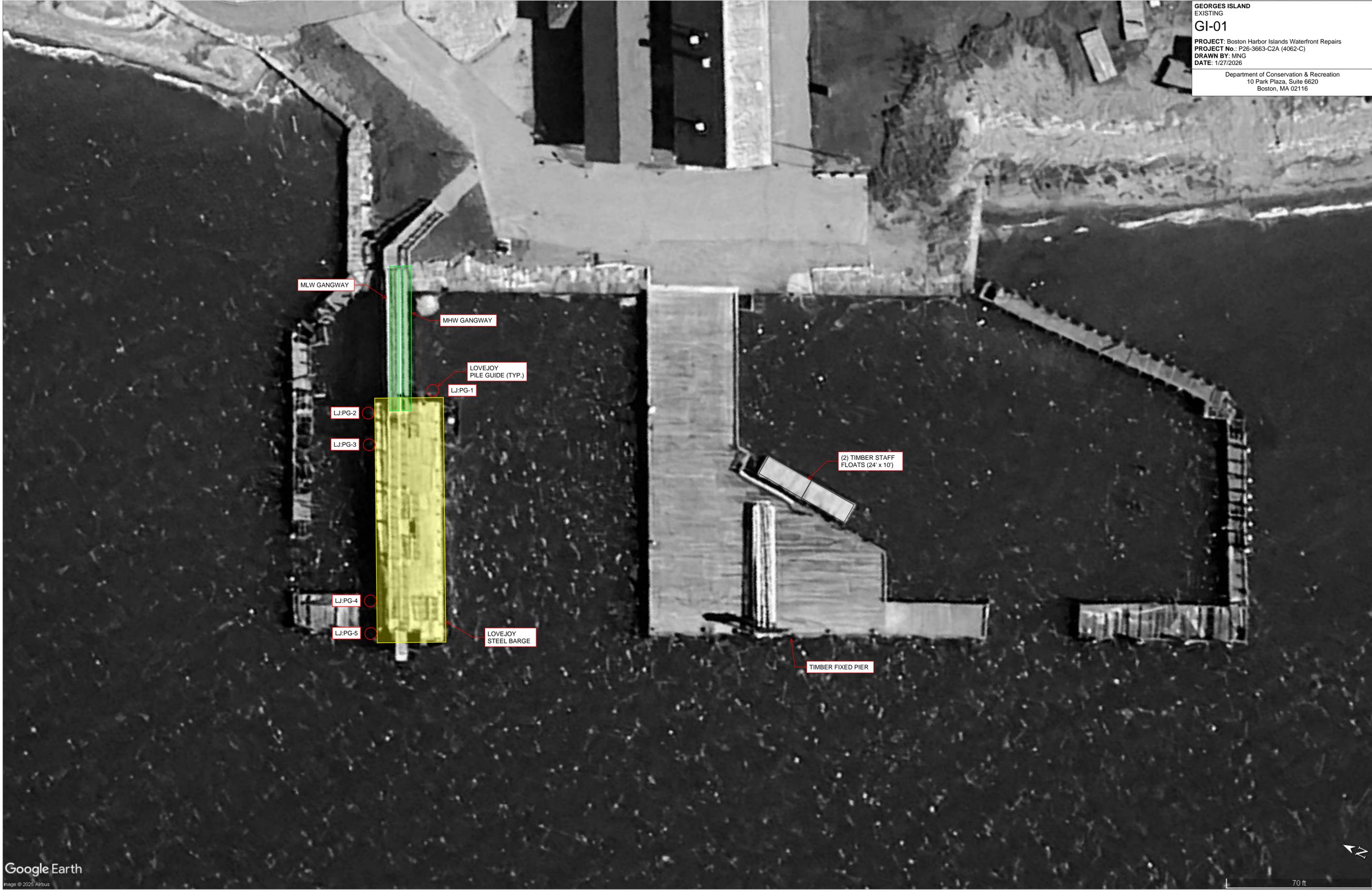
A PILE GUIDE BRACKET PLAN

B PILE GUIDE BRACKET

C SECTION C-C

D RUB ASSEMBLY DETAIL

E UHMW WEAR BLOCK



MLW GANGWAY

MHW GANGWAY

LOVEJOY
PILE GUIDE (TYP.)

LJ.PG-1

LJ.PG-2

LJ.PG-3

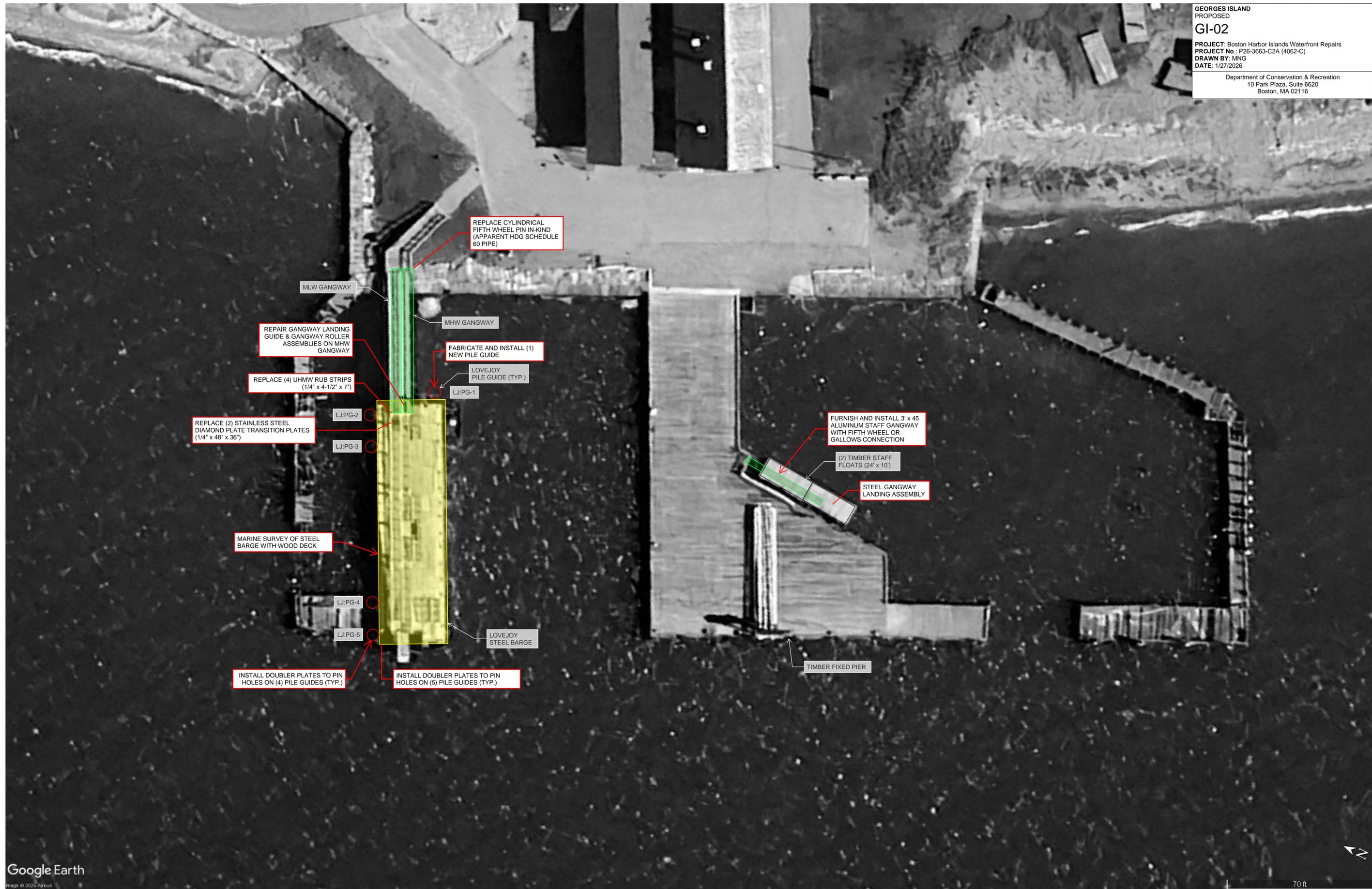
LJ.PG-4

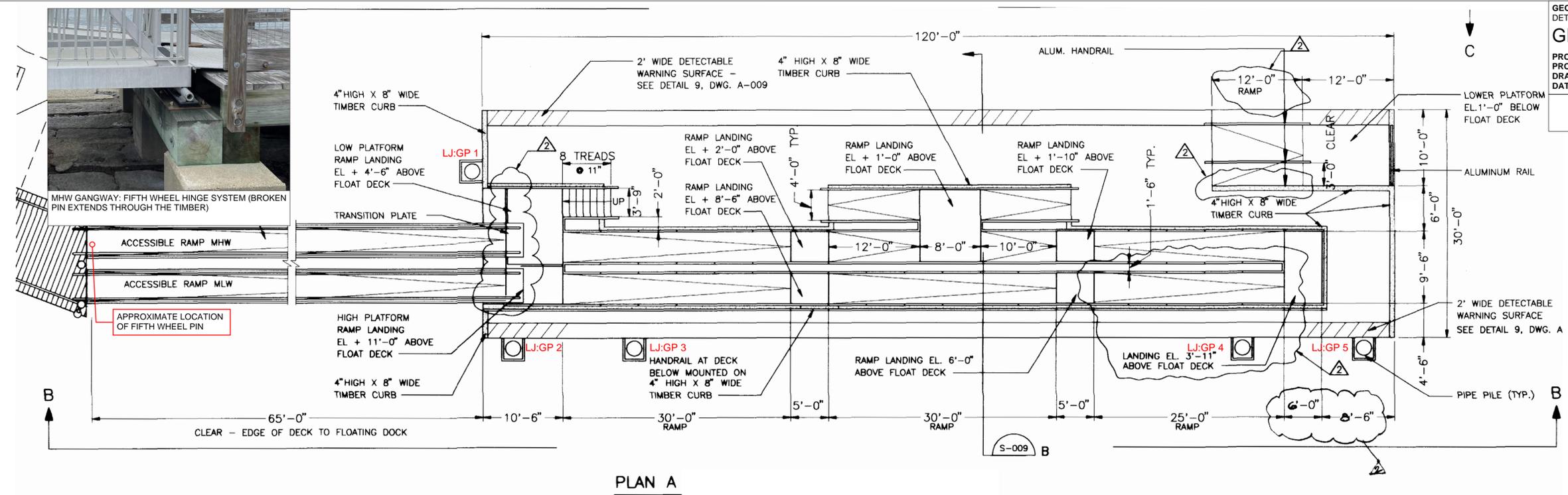
LJ.PG-5

LOVEJOY
STEEL BARGE

(2) TIMBER STAFF
FLOATS (24' x 10')

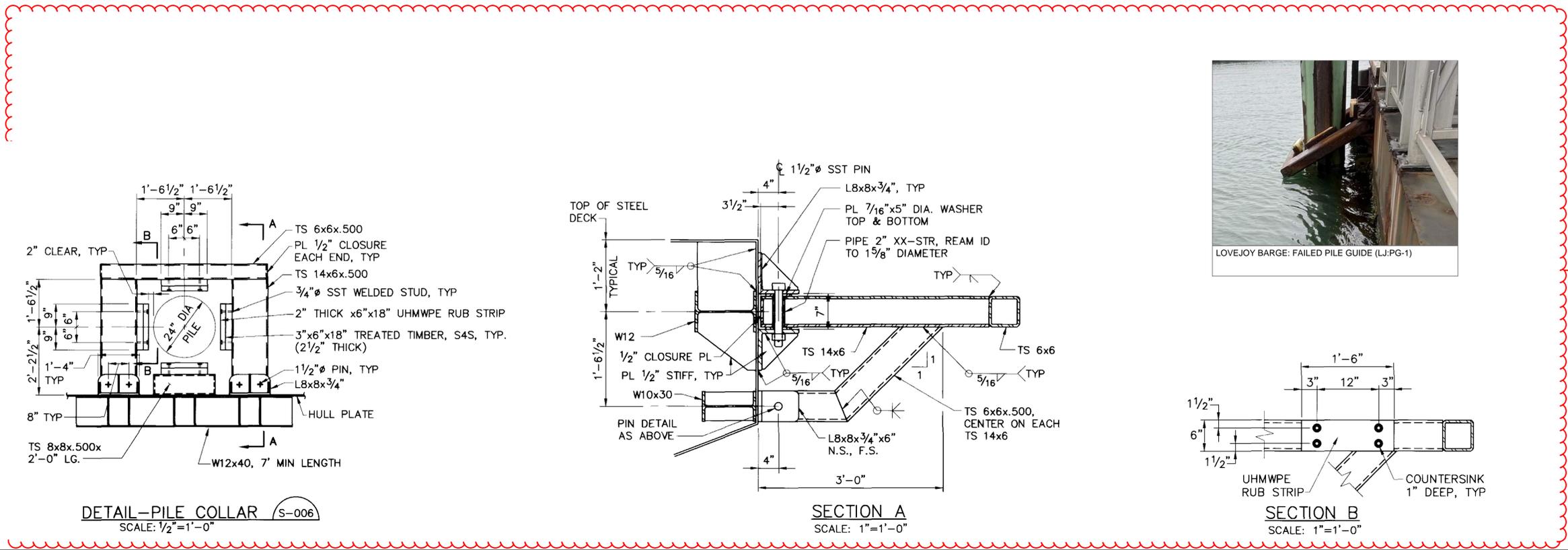
TIMBER FIXED PIER





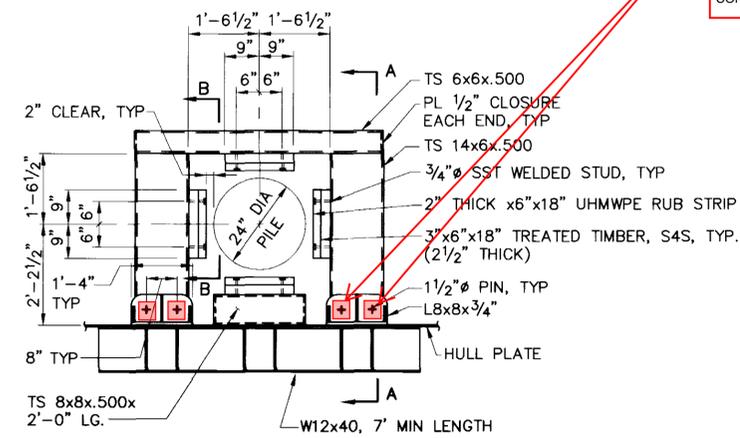
PLAN A

GEORGES ISLAND PILE GUIDE REPAIR SUMMARY BY LOCATION						
TASK	LJ:PG-1	LJ:PG-2	LJ:PG-3	LJ:PG-4	LJ:PG-5	TOTAL
FABRICATE AND REPLACE PILE GUIDE	X	---	---	---	---	1
REPAIR PILE GUIDE BRACKETS	X	X	X	X	X	5
REPAIR PILE GUIDE	---	X	X	X	X	4
REPLACE PINS AND PIPES	X	X	X	X	X	5



PILE GUIDE REPLACEMENT DETAILS

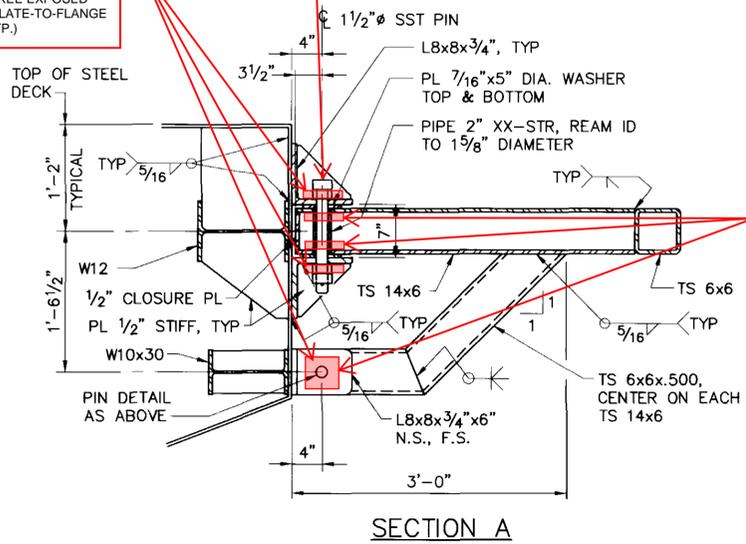
PILE GUIDE AND
PILE GUIDE BRACKET
REPAIR DETAILS



DETAIL-PILE COLLAR (S-006)

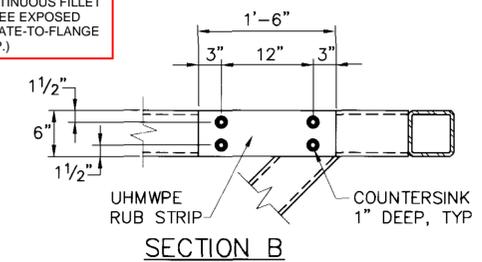
4" x 4" x 1/2" STEEL PLATE WELDED TO TO BRACKET FLANGES AT ALL PILE GUIDE CONNECTIONS (5 LOCATIONS TOTAL)
PROVIDE 1/4" CONTINUOUS FILLET WELD ALONG THREE EXPOSED EDGES OF THE PLATE-TO-FLANGE CONNECTION (TYP.)

REPLACE BOLTS AND PIPES EXTENDED AS NEEDED TO ACCOMMODATE DOUBLER PLATES

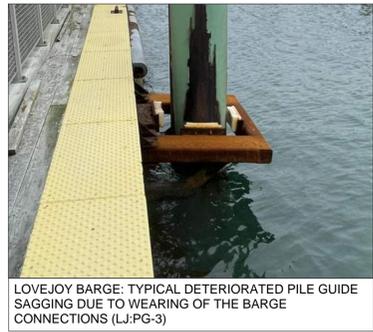


SECTION A

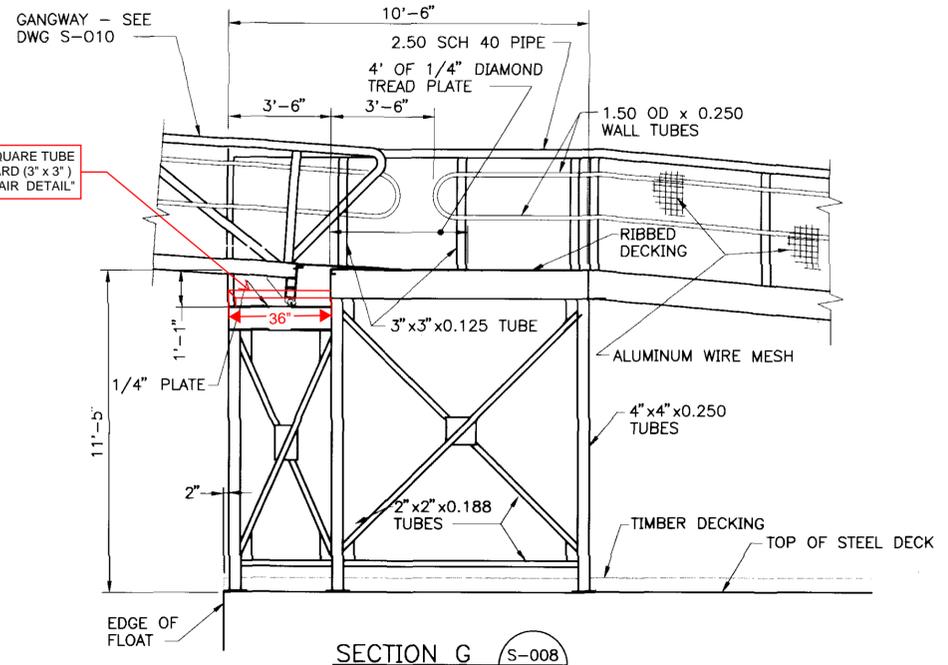
PILE GUIDE REPAIR:
4" x 4" x 1/2" STEEL PLATE WELDED TO THE FLANGES ON (1) PILE GUIDE TO BE RETAINED AND REUSED (TOP AND BOTTOM)
PILE GUIDE DOUBLER PLATES ARE INTERNAL TO THE MEMBERS AND WILL REQUIRE CREATING A HANDHOLE AND REPAIRING AS NEEDED
PROVIDE 1/4" CONTINUOUS FILLET WELD ALONG THREE EXPOSED EDGES OF THE PLATE-TO-FLANGE CONNECTION (TYP.)



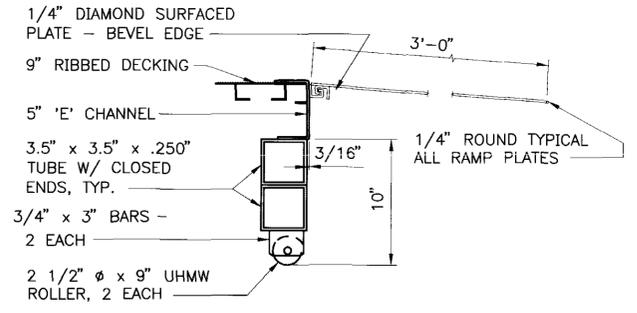
SECTION B



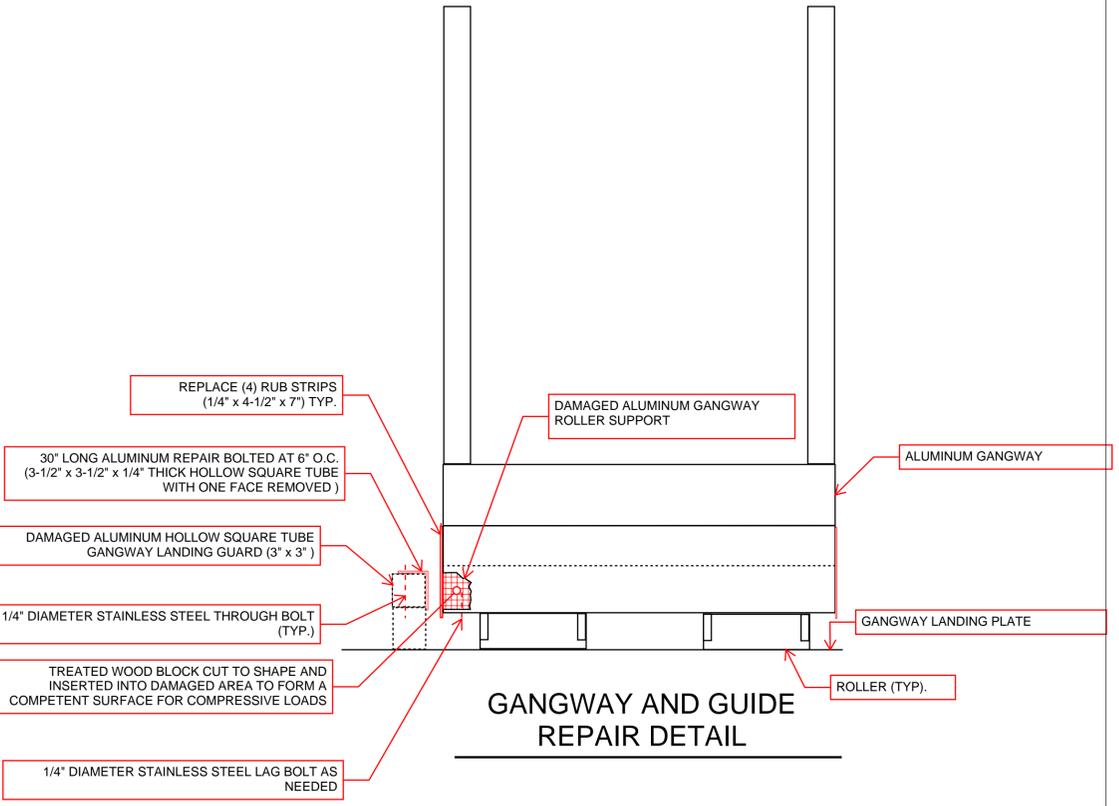
LOVEJOY BARGE: TYPICAL DETERIORATED PILE GUIDE SAGGING DUE TO WEARING OF THE BARGE CONNECTIONS (LJ:PG-3)

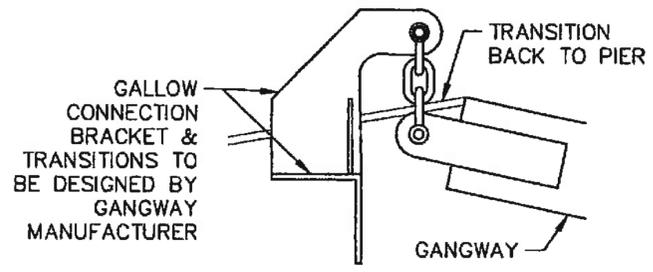
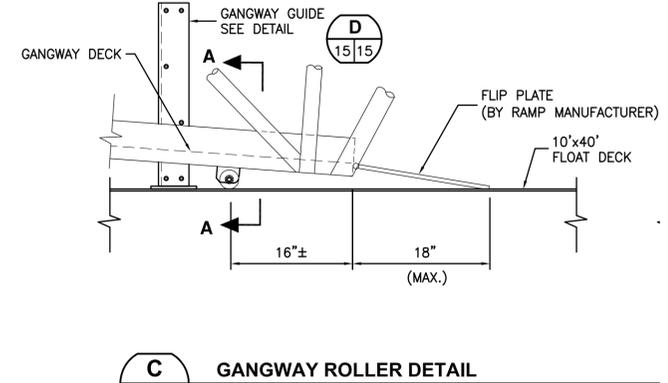
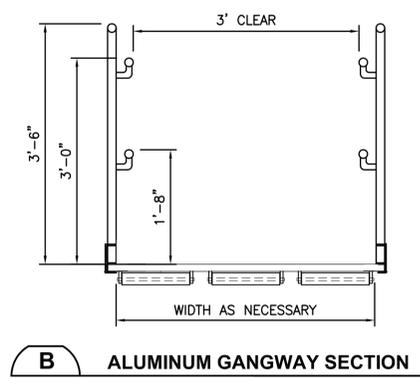
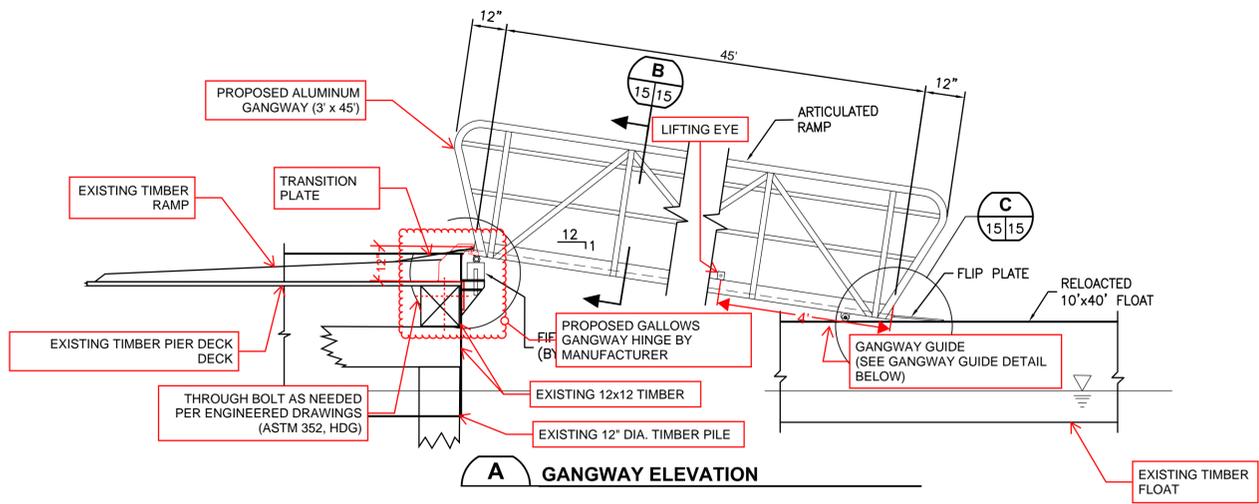


REPAIR DAMAGED ALUMINUM HOLLOW SQUARE TUBE GANGWAY LANDING GUARD (3' x 3') SEE "GANGWAY AND GUARD REPAIR DETAIL"

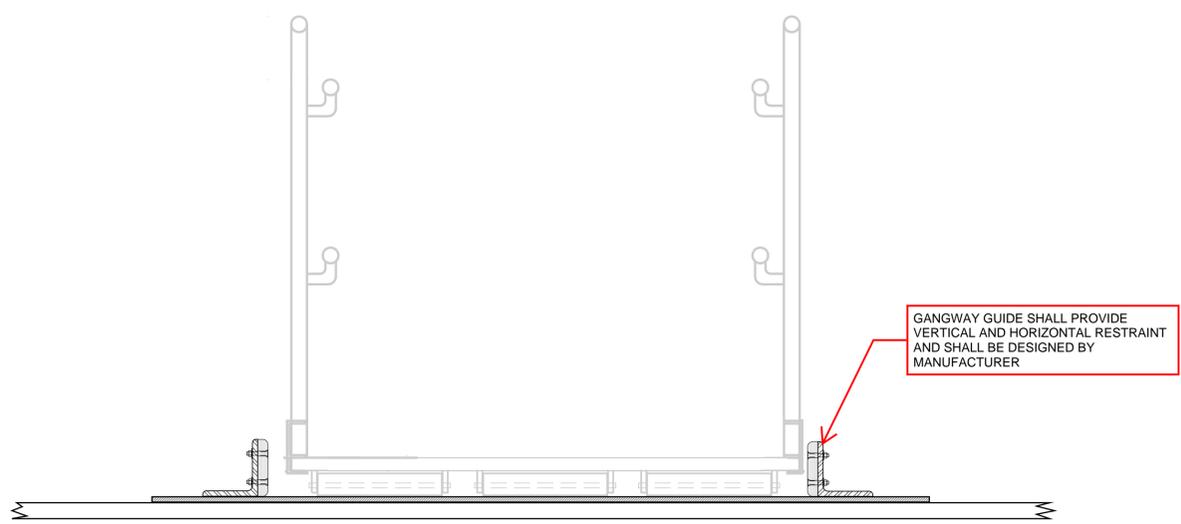


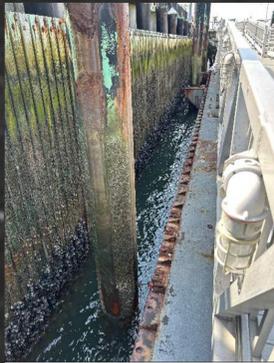
TREAD PLATE END DETAIL





GANGWAY GALLOWS CONNECTION





EXISTING PILE GUIDE (SI-PG-4) IS DETACHED FROM THE BARGE AND IS ON THE MUDLINE



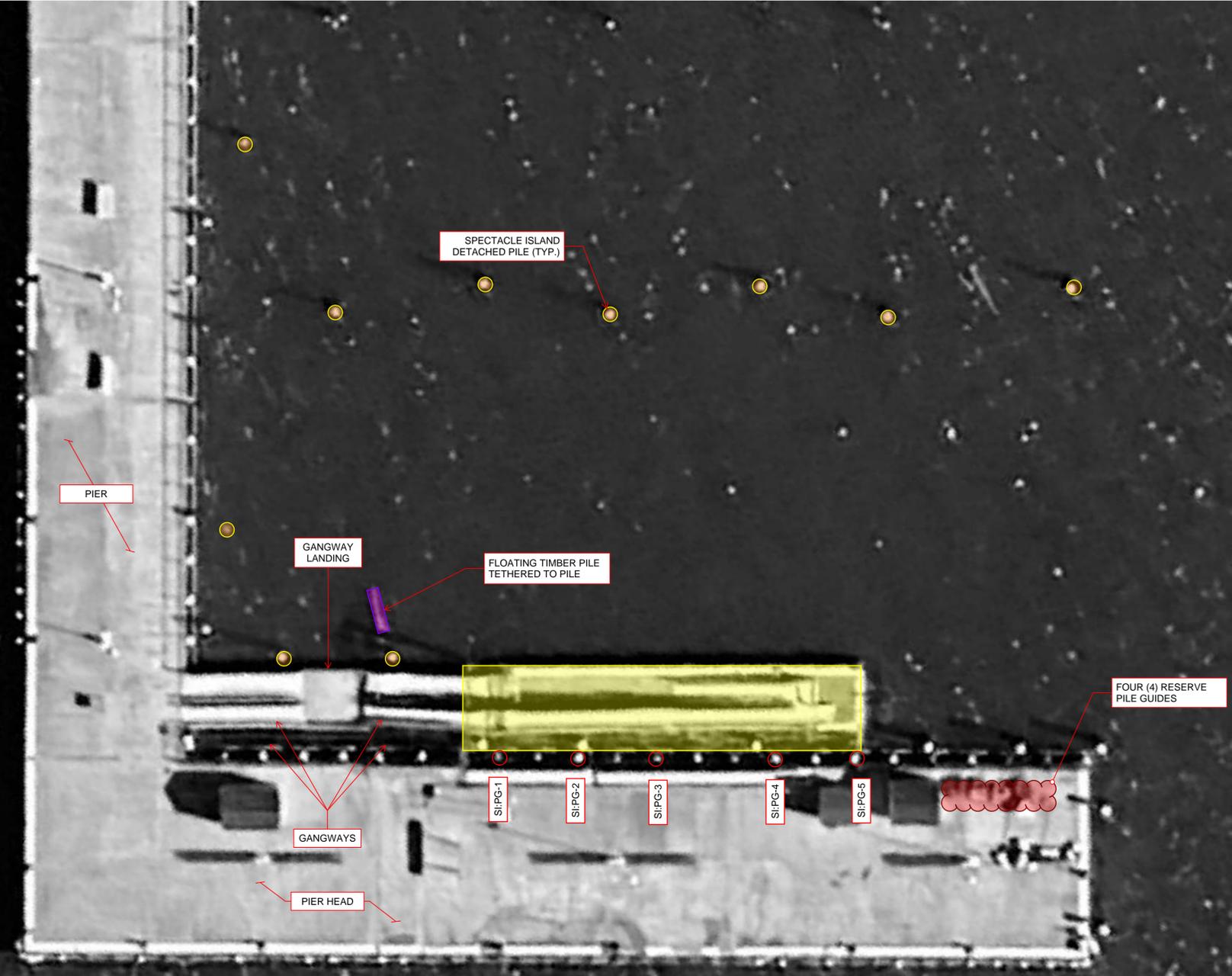
EXISTING PILE GUIDE (SI-PG-5)



WORN PIN HOLE ON PILE GUIDE AND CONNECTION BRACKET
 PILE GUIDE CONNECTION PIN WITH PREVIOUS REPAIR PLATE

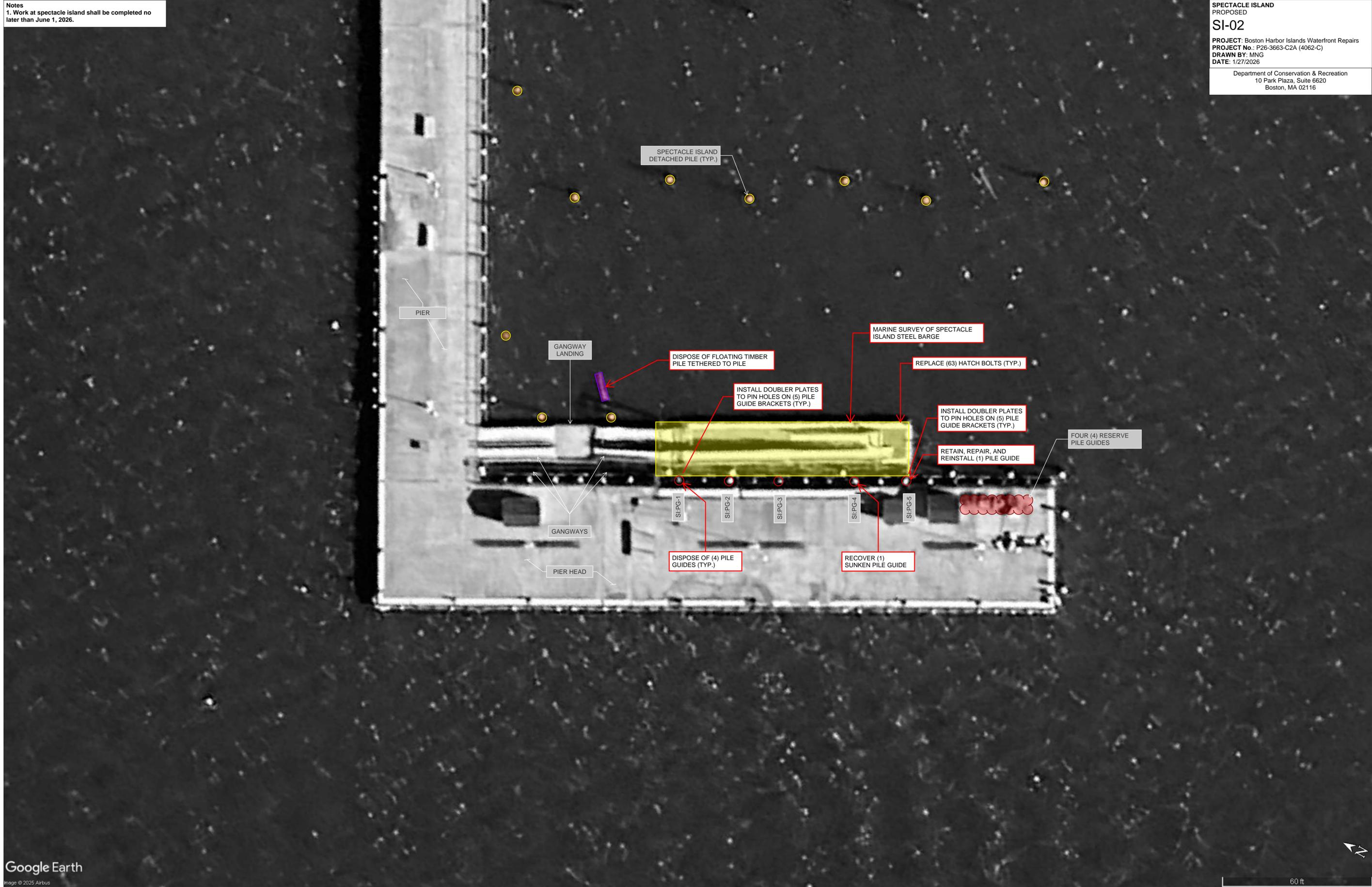


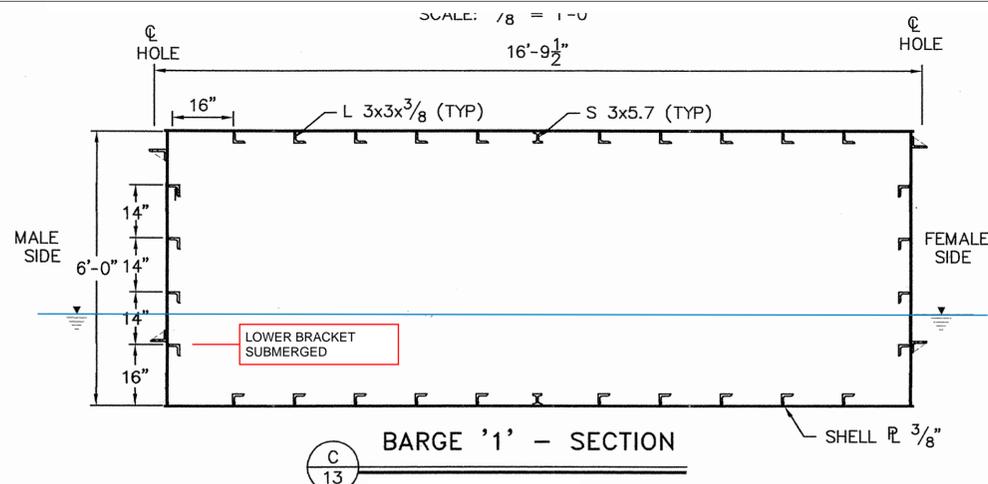
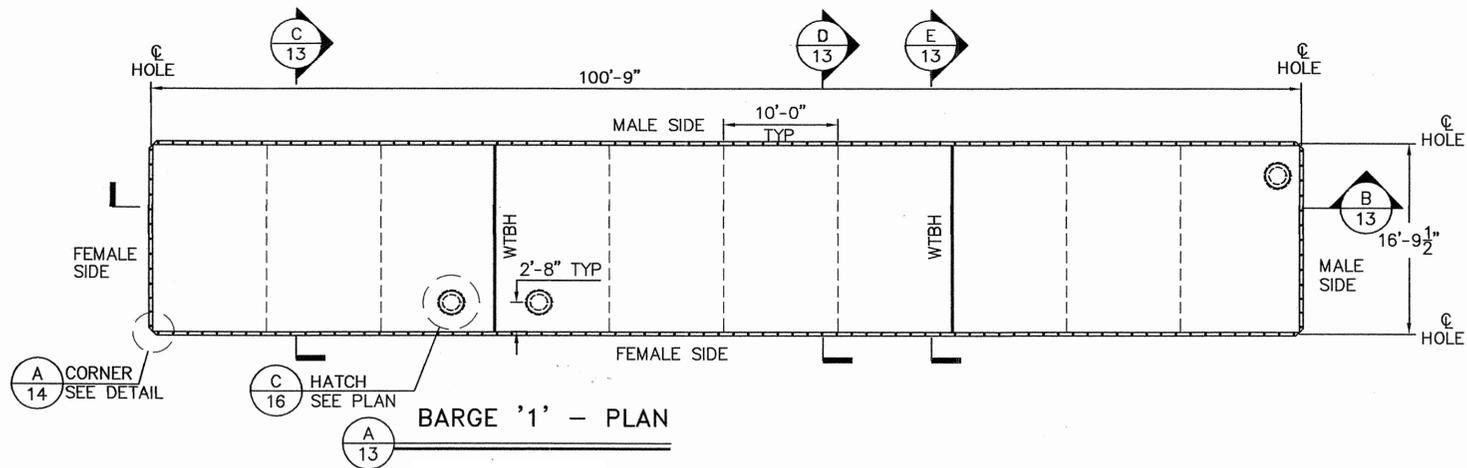
RESERVE PILE GUIDES STORED ON PIER HEAD



Notes
1. Work at spectacle island shall be completed no later than June 1, 2026.

SPECTACLE ISLAND
PROPOSED
SI-02
PROJECT: Boston Harbor Islands Waterfront Repairs
PROJECT No.: P26-3663-C2A (4062-C)
DRAWN BY: MNG
DATE: 1/27/2026
Department of Conservation & Recreation
10 Park Plaza, Suite 6620
Boston, MA 02116



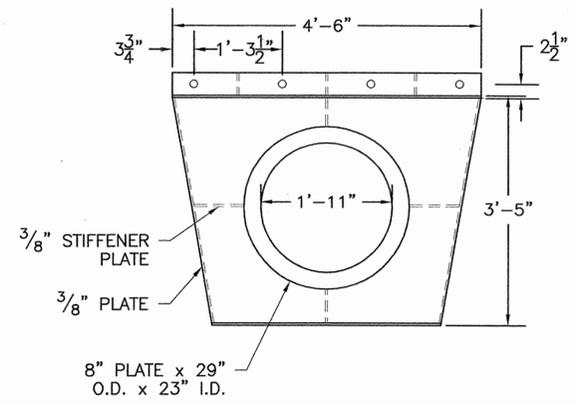
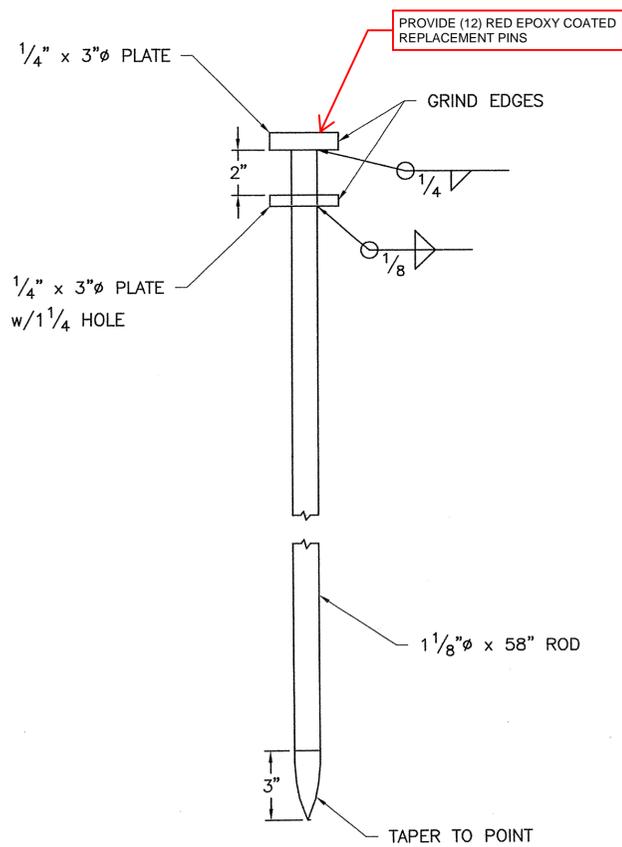


SPECTACLE ISLAND DETAILS
SI-03
 PROJECT: Boston Harbor Islands Waterfront Repairs
 PROJECT No.: P26-3663-C2A (4062-C)
 DRAWN BY: MNG
 DATE: 1/27/2026
 Department of Conservation & Recreation
 10 Park Plaza, Suite 6620
 Boston, MA 02116



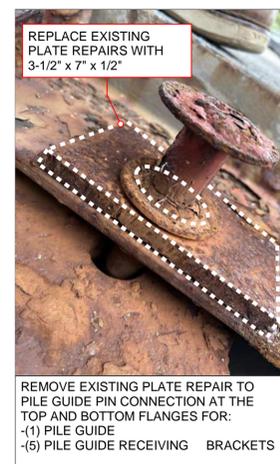
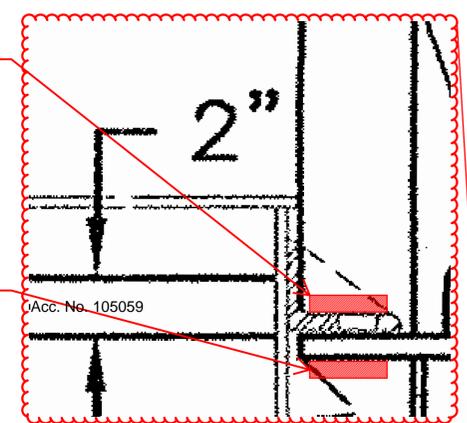
SPECTACLE ISLAND PILE GUIDE REPAIR SUMMARY BY LOCATION

TASK	SI:PG-1	SI:PG-2	SI:PG-3	SI:PG-4	SI:PG-5	TOTAL
FABRICATE AND REPLACE PILE GUIDE	---	---	---	X	---	1
REPAIR PILE GUIDE BRACKETS	X	X	X	X	X	5
REPAIR PILE GUIDE	X	X	X	---	X	4
REPLACE PINS	---	---	X	X	X	3

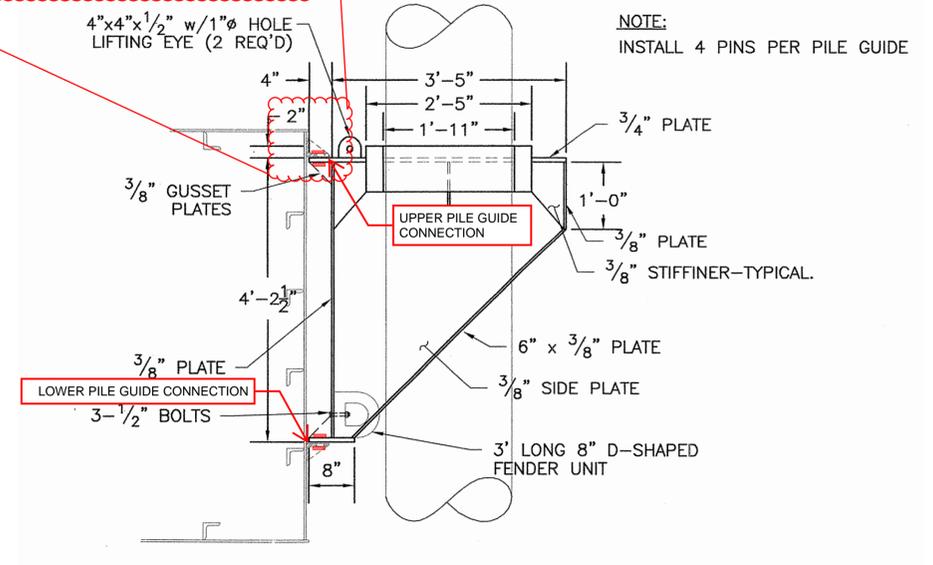


3-1/2" x 7" x 1/2" STEEL PLATE WELDED TO BRACKET FLANGES AT ALL PILE GUIDE CONNECTIONS (TOP AND BOTTOM)
 PROVIDE 1/4" CONTINUOUS FILLET WELD ALONG THREE EXPOSED EDGES OF THE PLATE-TO-FLANGE CONNECTION (TYP.)

3-1/2" x 7" x 1/2" STEEL PLATE WELDED TO THE FLANGES ON (1) PILE GUIDE TO BE RETAINED AND REUSED (TOP AND BOTTOM)
 PROVIDE 1/4" CONTINUOUS FILLET WELD ALONG THREE EXPOSED EDGES OF THE PLATE-TO-FLANGE CONNECTION (TYP.)



REMOVE EXISTING PLATE REPAIR TO PILE GUIDE PIN CONNECTION AT THE TOP AND BOTTOM FLANGES FOR:
 -(1) PILE GUIDE
 -(5) PILE GUIDE RECEIVING BRACKETS



B 14 PIN DETAIL

B 16 MALE PILE GUIDE - PLAN

A 16 MALE PILE GUIDE - SECTION



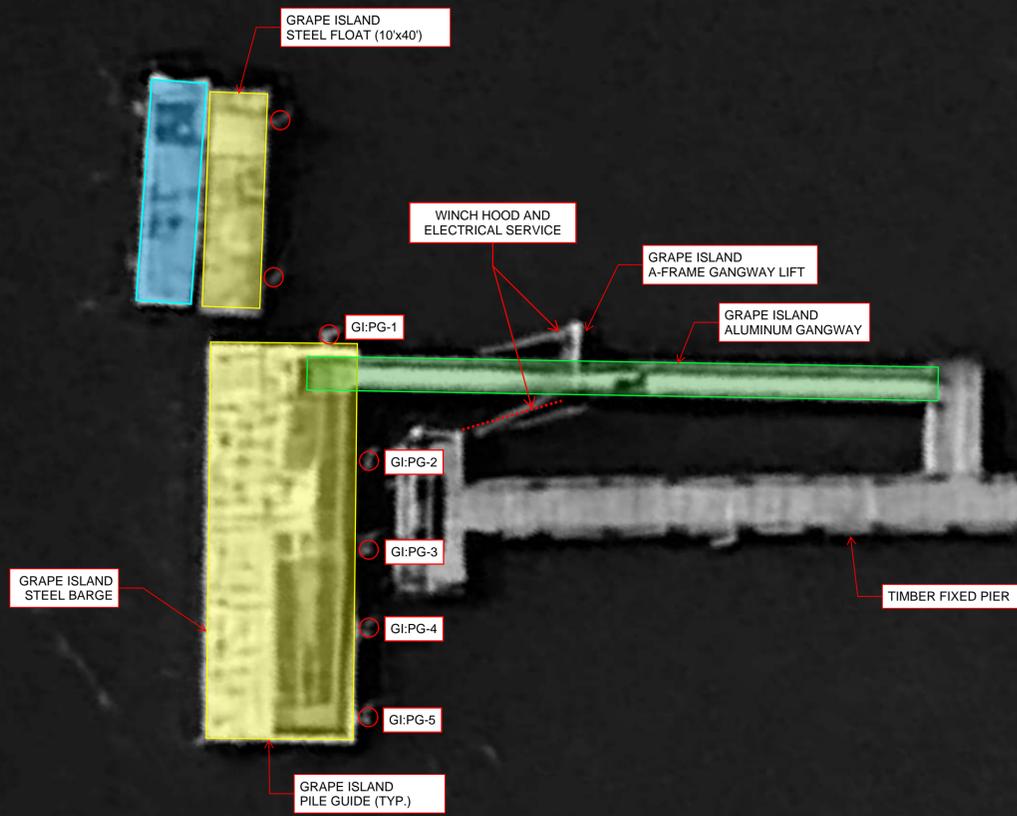
OVERVIEW: GRAPE ISLAND STEEL BARGE AND STEEL FLOAT

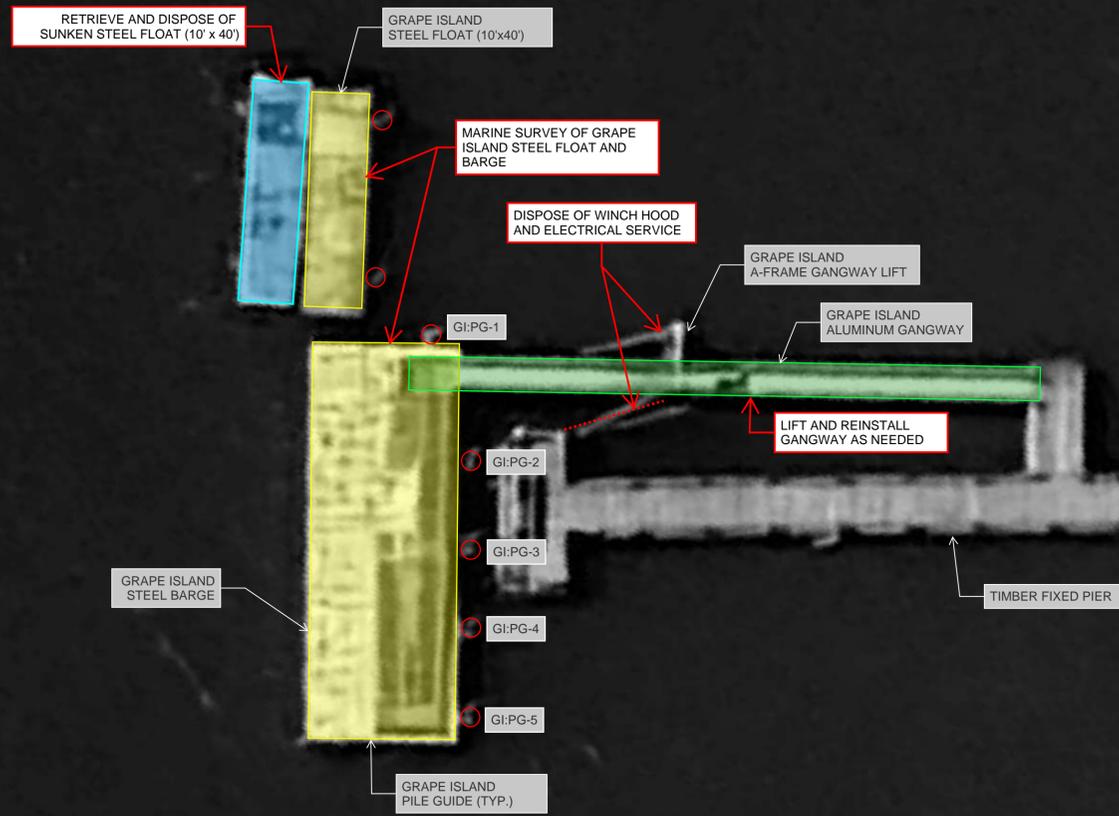


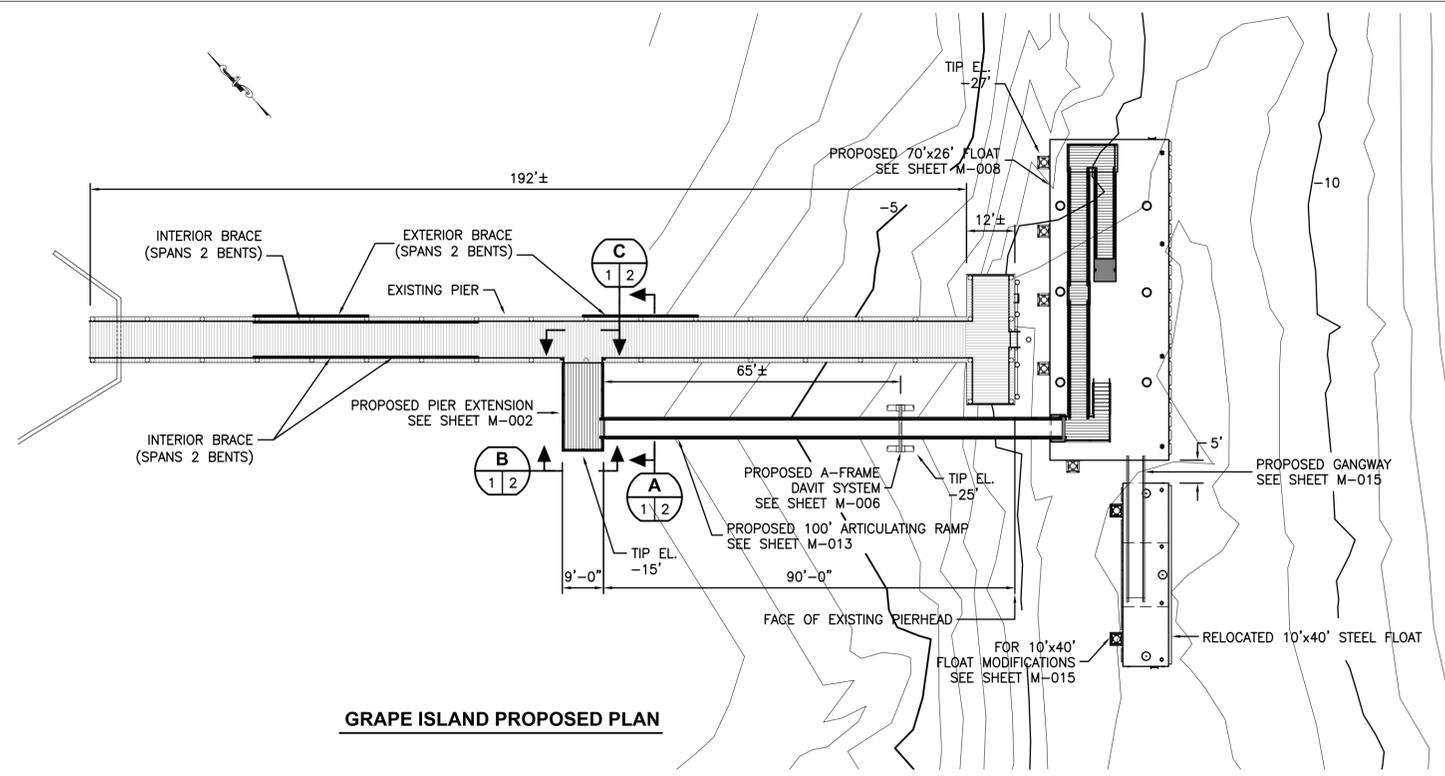
STEEL FLOAT: GRAPE ISLAND STEEL FLOAT (10' x 40')



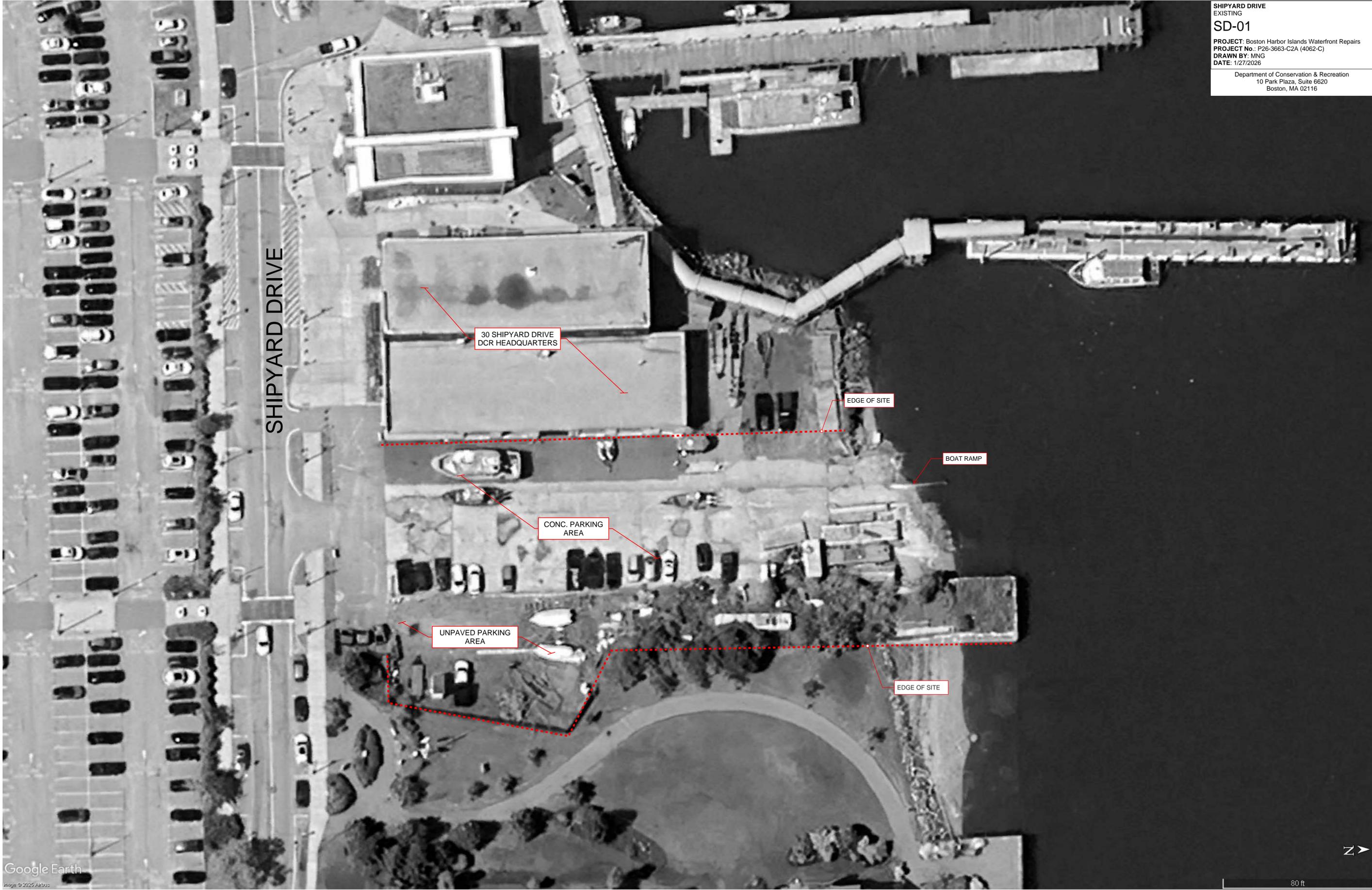
GANGWAY: A-FRAME GANGWAY LIFT, WINCH HOOD, AND ELECTRICAL SERVICE







GRAPE ISLAND PROPOSED PLAN



SHIPYARD DRIVE

30 SHIPYARD DRIVE
DCR HEADQUARTERS

EDGE OF SITE

BOAT RAMP

CONC. PARKING
AREA

UNPAVED PARKING
AREA

EDGE OF SITE

Shipyard Drive Disposal Schedule

Asset ID	Asset Type	Material	Dimensions (approx.)	Quantity
G-1	Gangway	Aluminum	4 ft x 35 ft	1
G-2	Gangway	Aluminum	4 ft x 30 ft	4
G-3	Gangway	Aluminum	3 ft x 30 ft	1
G-4	Gangway	Aluminum	4 ft x 17 ft	1
F-1	Float	Steel	3 ft x 8 ft x 35 ft	2
F-2	Float	Steel	3 ft x 10 ft x 40 ft	1

**SHIPYARD DRIVE
DEMOLITION**
SD-02
PROJECT: Boston Harbor Islands Waterfront Repairs
PROJECT No.: P26-3663-C2A (4062-C)
DRAWN BY: MNG
DATE: 1/27/2026
Department of Conservation & Recreation
10 Park Plaza, Suite 6620
Boston, MA 02116

