



CB AMC-160

Dimensions: Winches: Machinery: Mooring Array: Crane: Gross Tons: Net Tons:	 160' x 51' x 13' 50,000# Line pull BU-140 winches central air control 60 KW Generator ships air below deck 1-1/4" Wire Rope, Fixed Turning Blocks and Berger Fairleads, 6-Ton Anchors 4500 Manitowoc, Rated 100 Tons Over Stern, Boom Length 127' 925 Tons 925 Tons
Net Tons:	925 Tons
Official Number: Area of Operations:	1211112 Coastwise Registry

For further information please contact the American Marine Corporation office nearest you:

1500 S. Barracuda St. Berth 270/271	65 N. Nimitz Hwy. Pier 14	6000 "A" Street Anchorage, AK 99518
Terminal Island, CA 90731	Honolulu, HI 96817	Phone (907) 562-5420
Phone (310) 547-0919	Phone (808) 545-5190	Fax (907) 562-5426
Fax (310) 547-0031	Fax (808) 538-1703	

American Marine Corporation

Additional barge specifics;

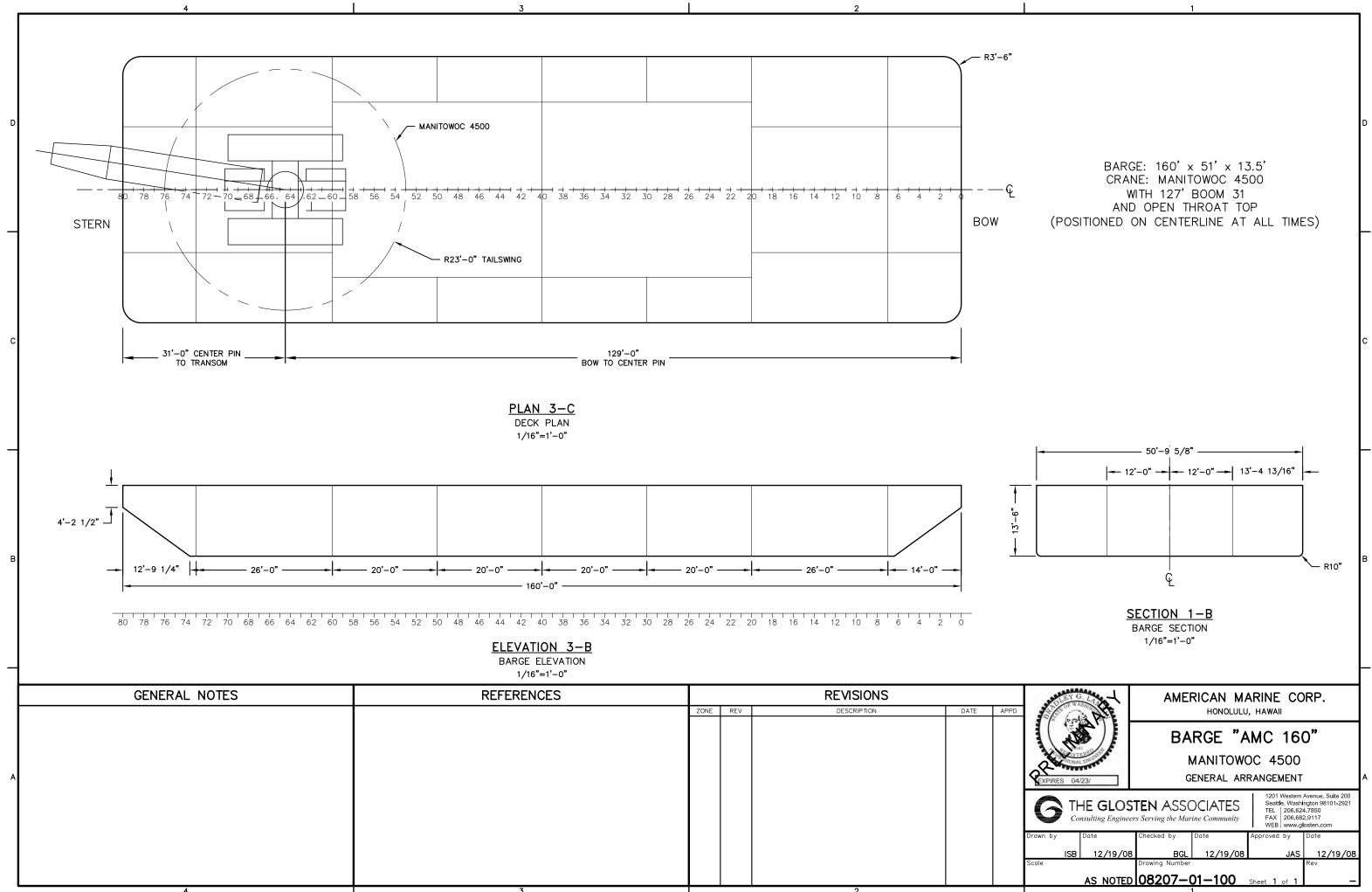
- 30 kw generator below decks
- 100 gal day tank.
- 7200 gallon below deck fuel tank.
- Electric pump system with deck fueling station.
- 2 ea. BU-140 waterfall winches, central Air Control station.
- Drums 1800 ft. 1.25 wire, 6 bergers for dredge set up flexibility.
- Engineered crane tie down system.
- \$400k investment during 2012 dry-docking.

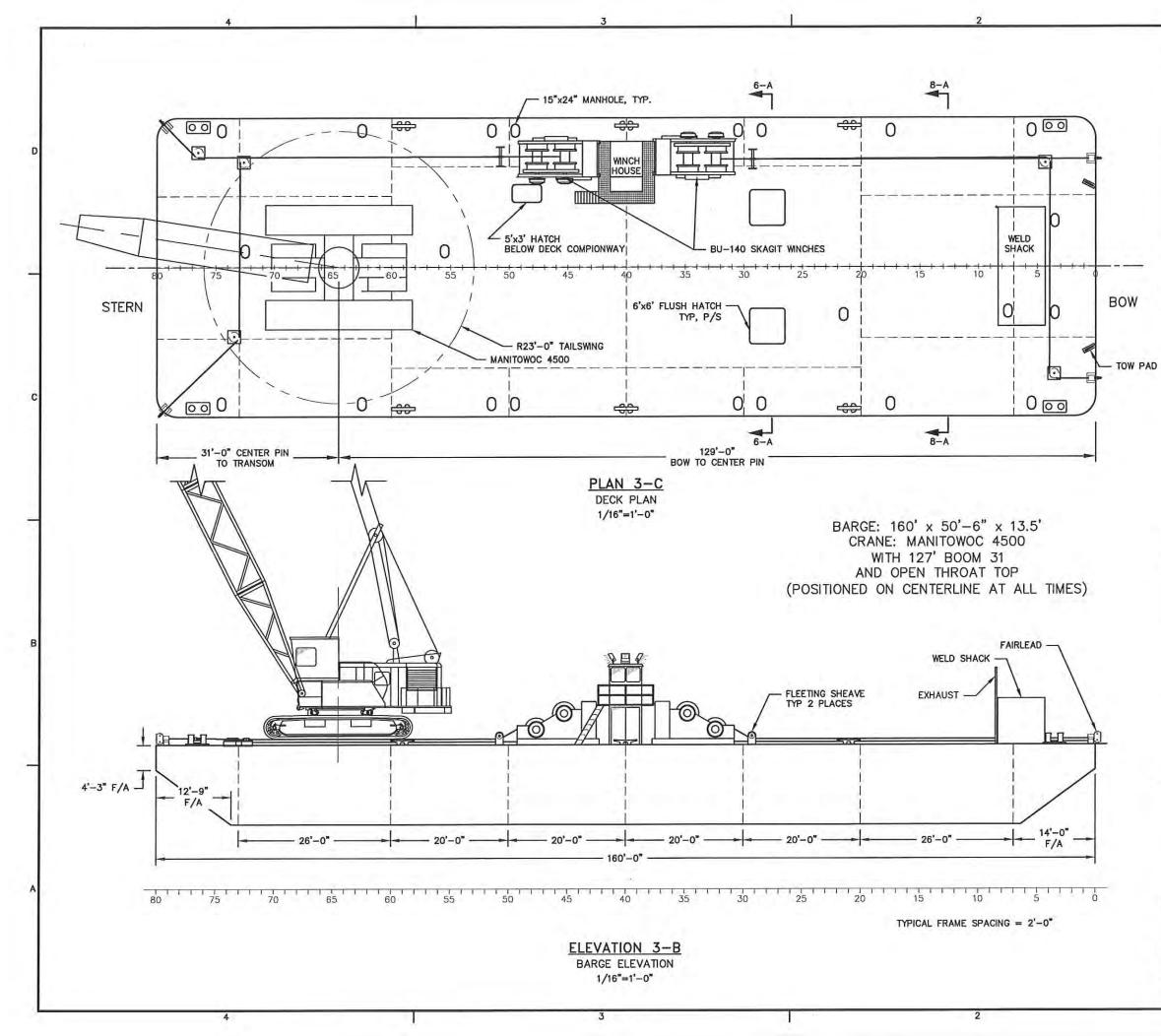
Regarding additional Crane specifics;

- Crane substantially rebuilt over two years ending 2015; \$541,000.00
- 4500 digging machine with factory installed third drum.
- Independent boom hoist, new engine and hydraulics 2014.
- Boom renewal of lacings, complete sandblast/paint.
- Rebuilt house rollers
- Raised cab 5 feet.

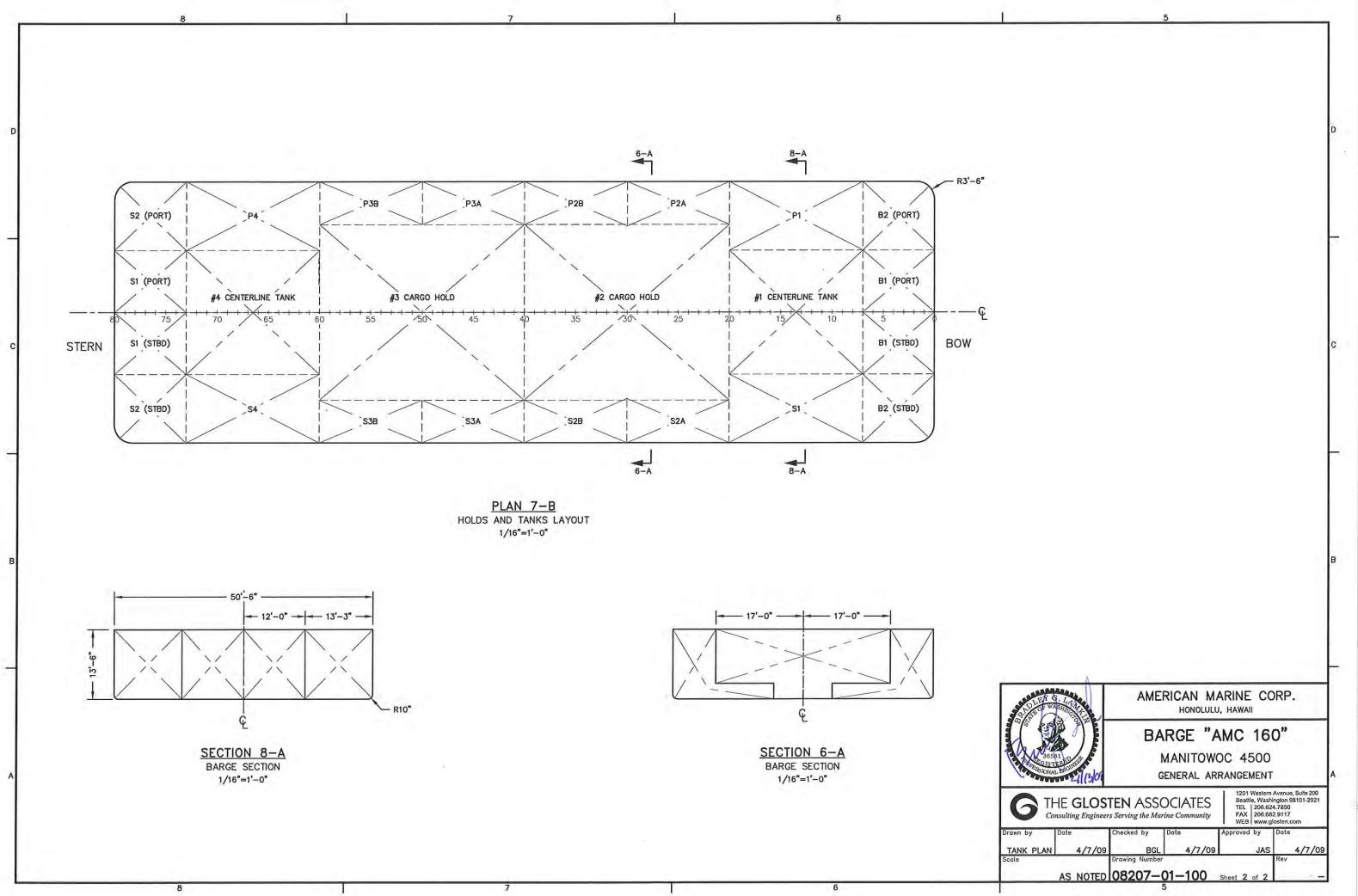
Additional Equipment Available:

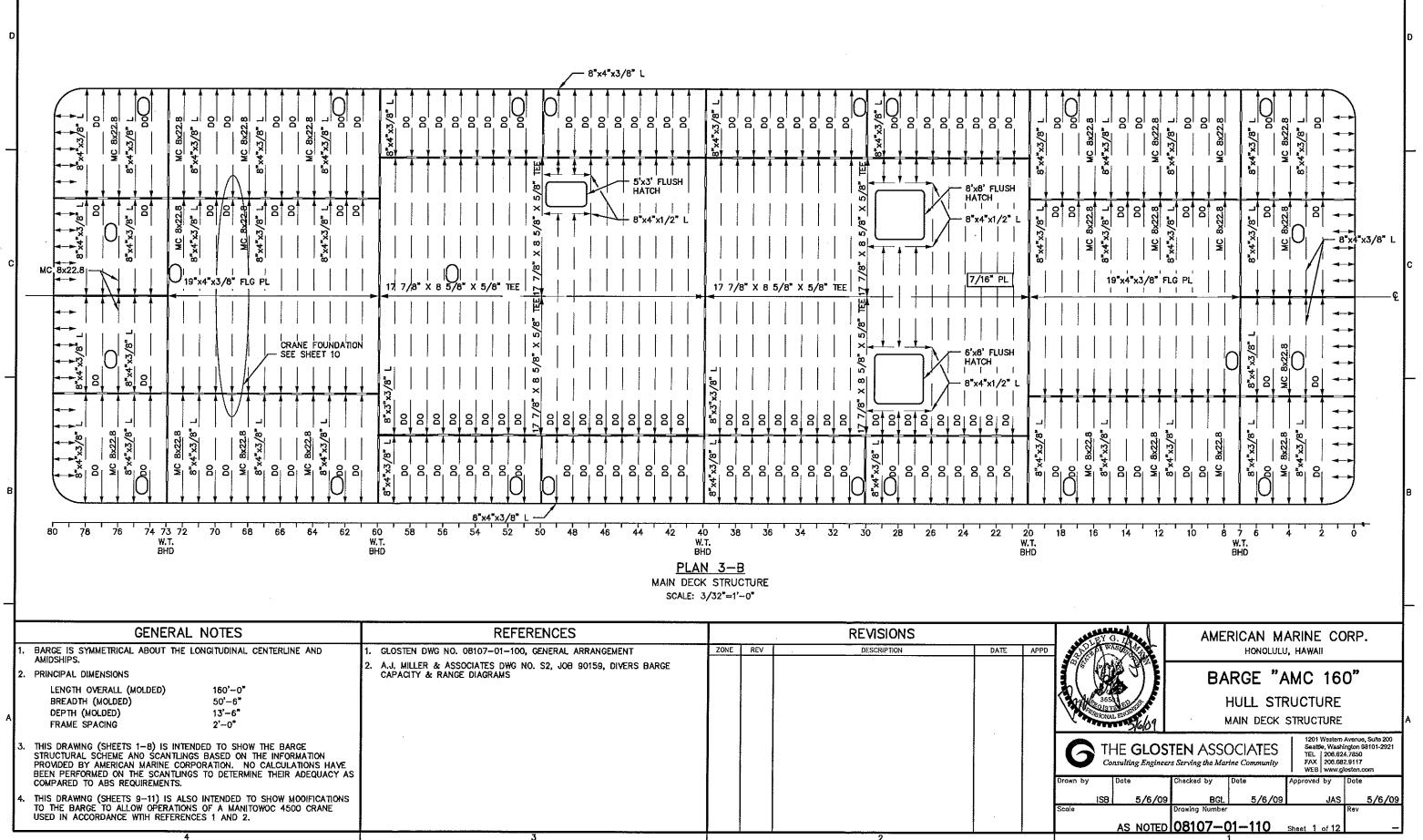
- 10 yard environmental material bucket
- 7 yard Hawco modified heavy material bucket (26,000 lb)
- 3.5 yard heavy digging bucket (small for the 4500)
- 42 x 10 Payco pile leads 100 ft long
- APE D 36 -42, Hydraulic trip (rebuilt fuel system)
- Hydraulic Spotter capable of 3 to 1 batter piles
- Various sized anchors (4 x 6 ton, 6 x 15 ton, and 1 x 8 ton)

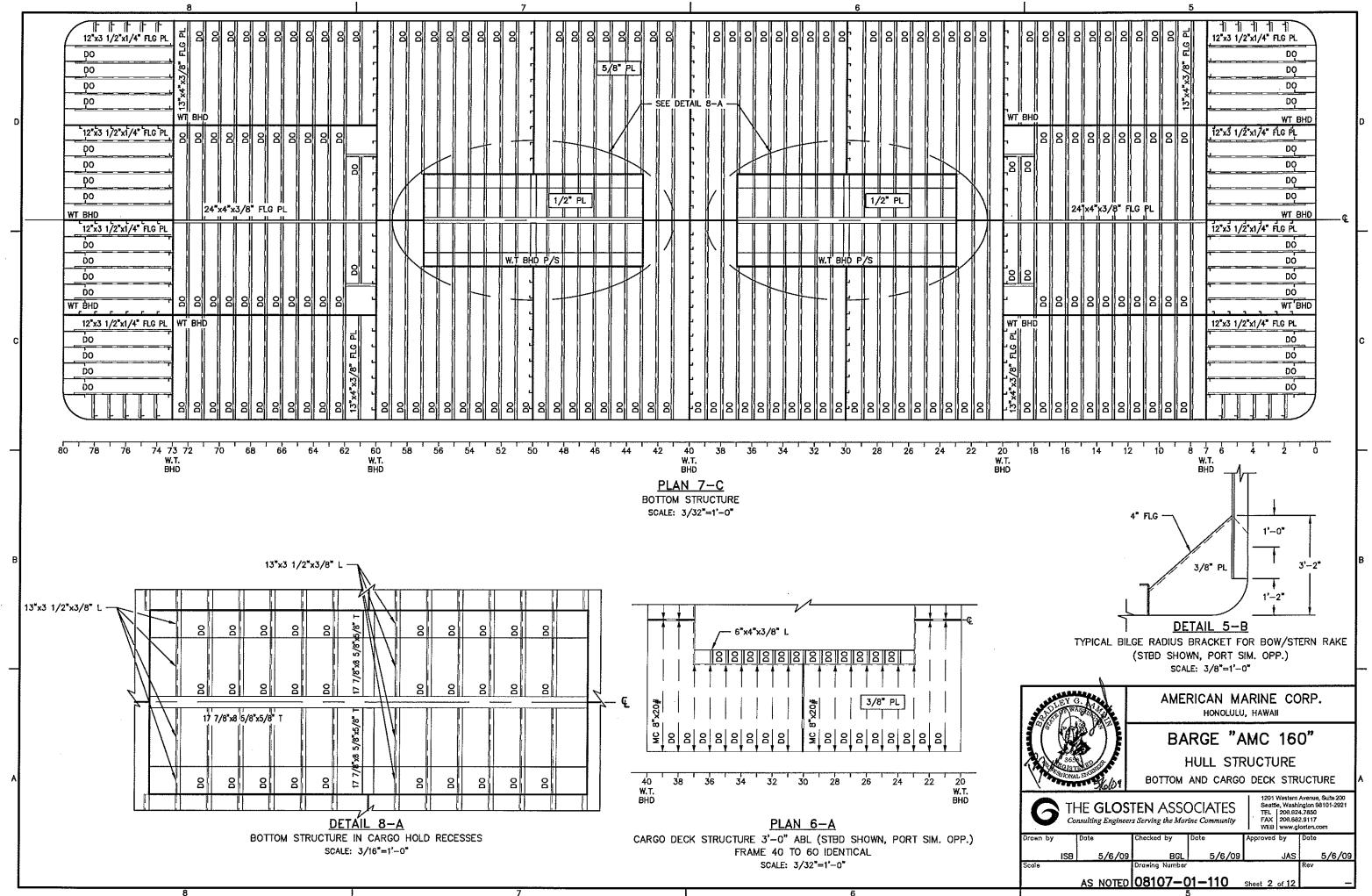




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-	G. L.		CORP.	
G		BARGE "AMC 1 GENERAL ARRANGE DECK PLAN & OUTBOARD	MENT	Suite 200
rawn by	ISB 4/	Checked by Date Approved by	ww.glosten.co / Date IAS Rev	

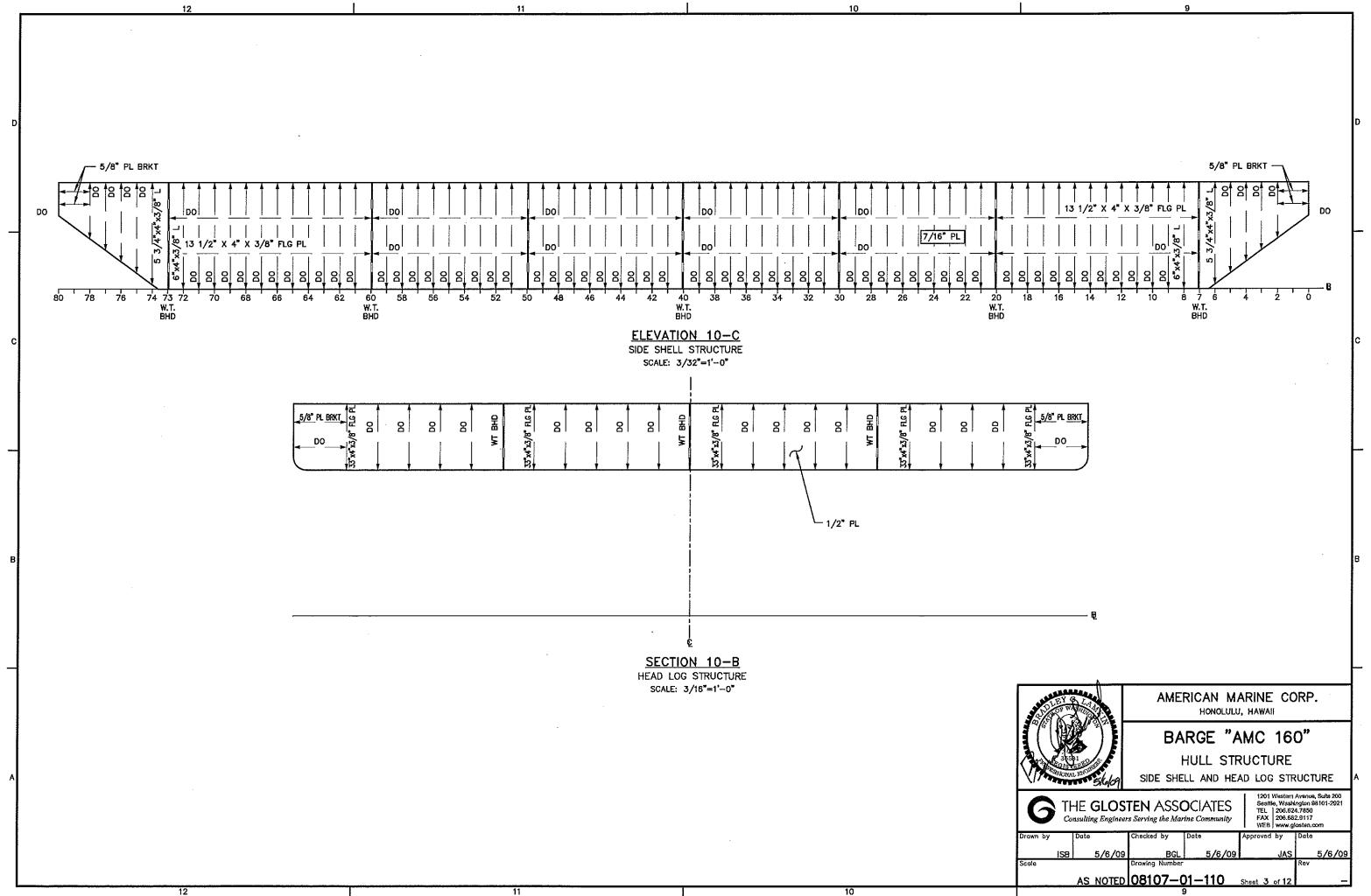


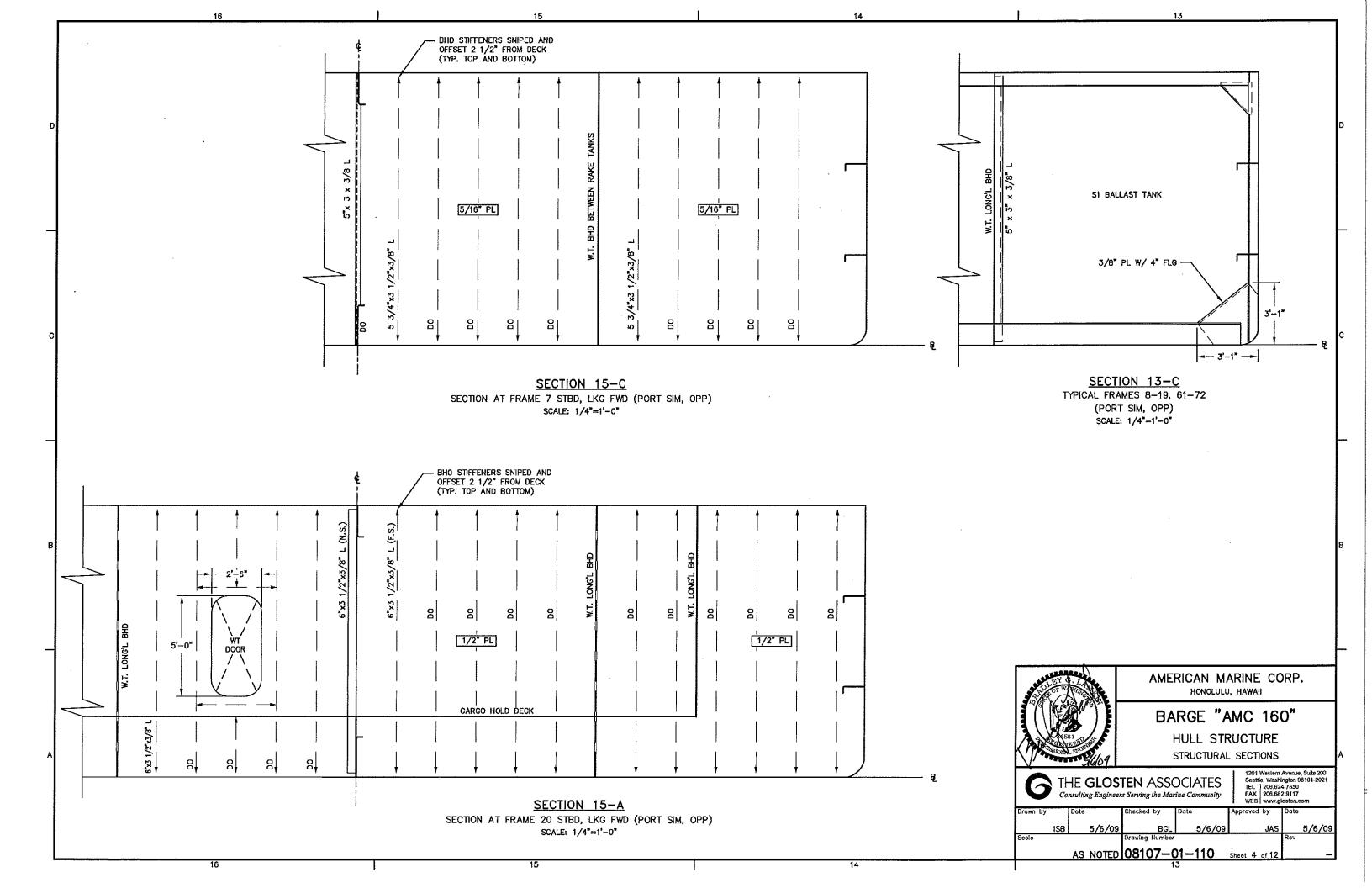


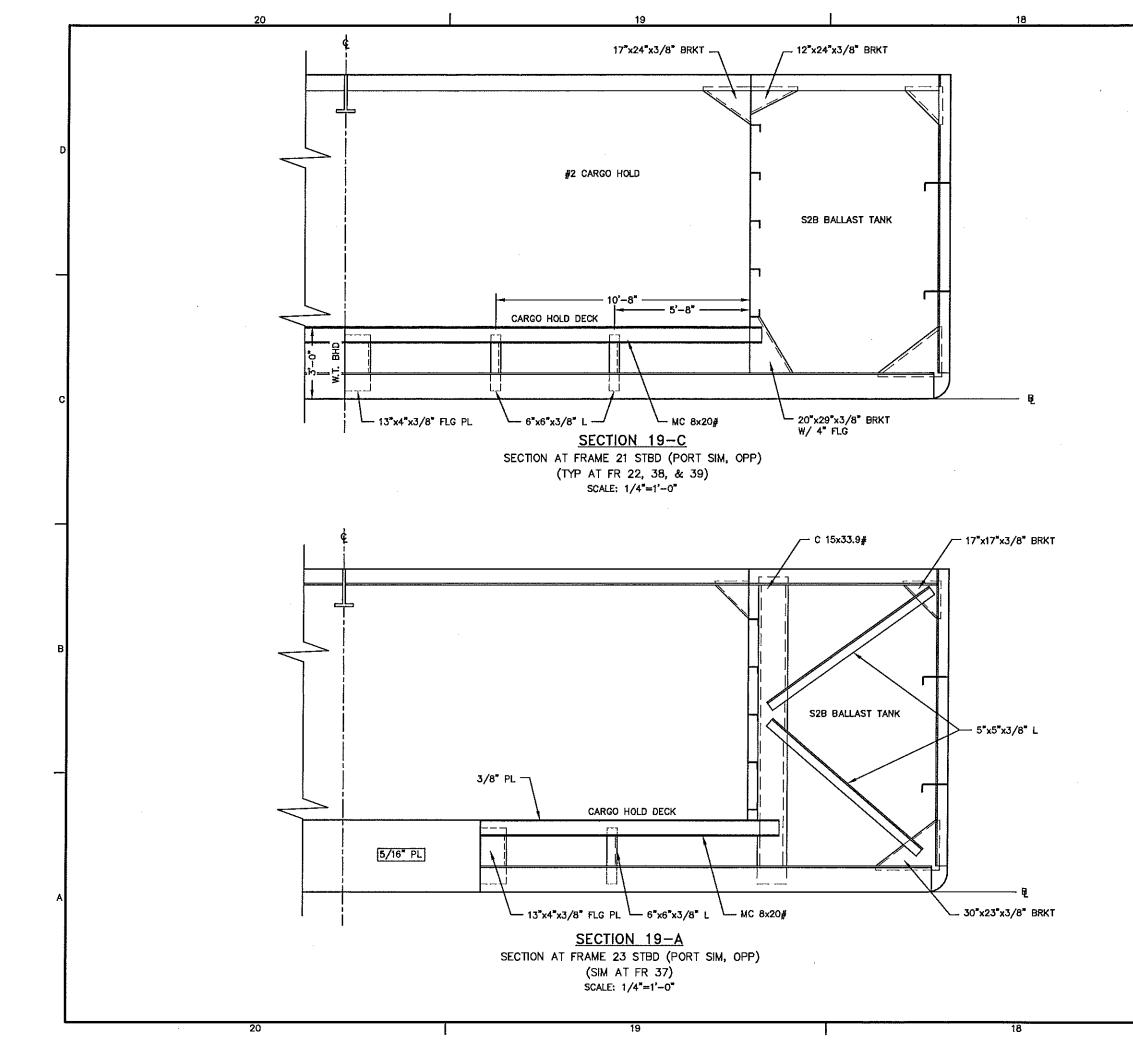


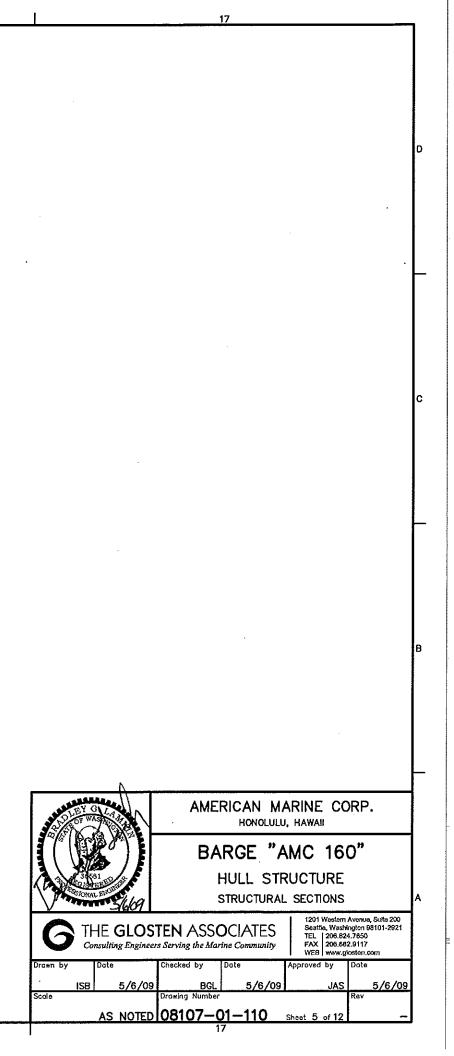
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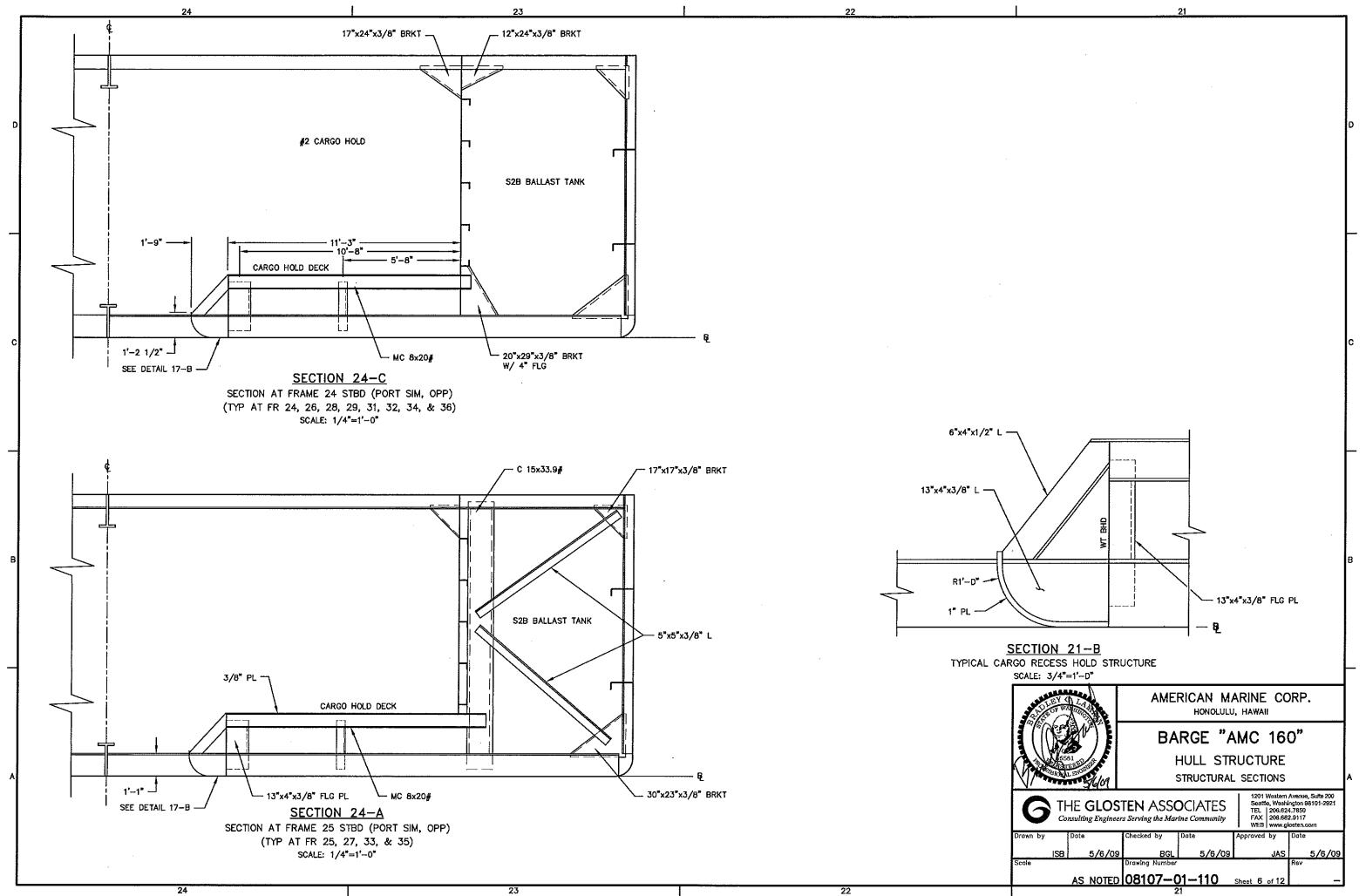
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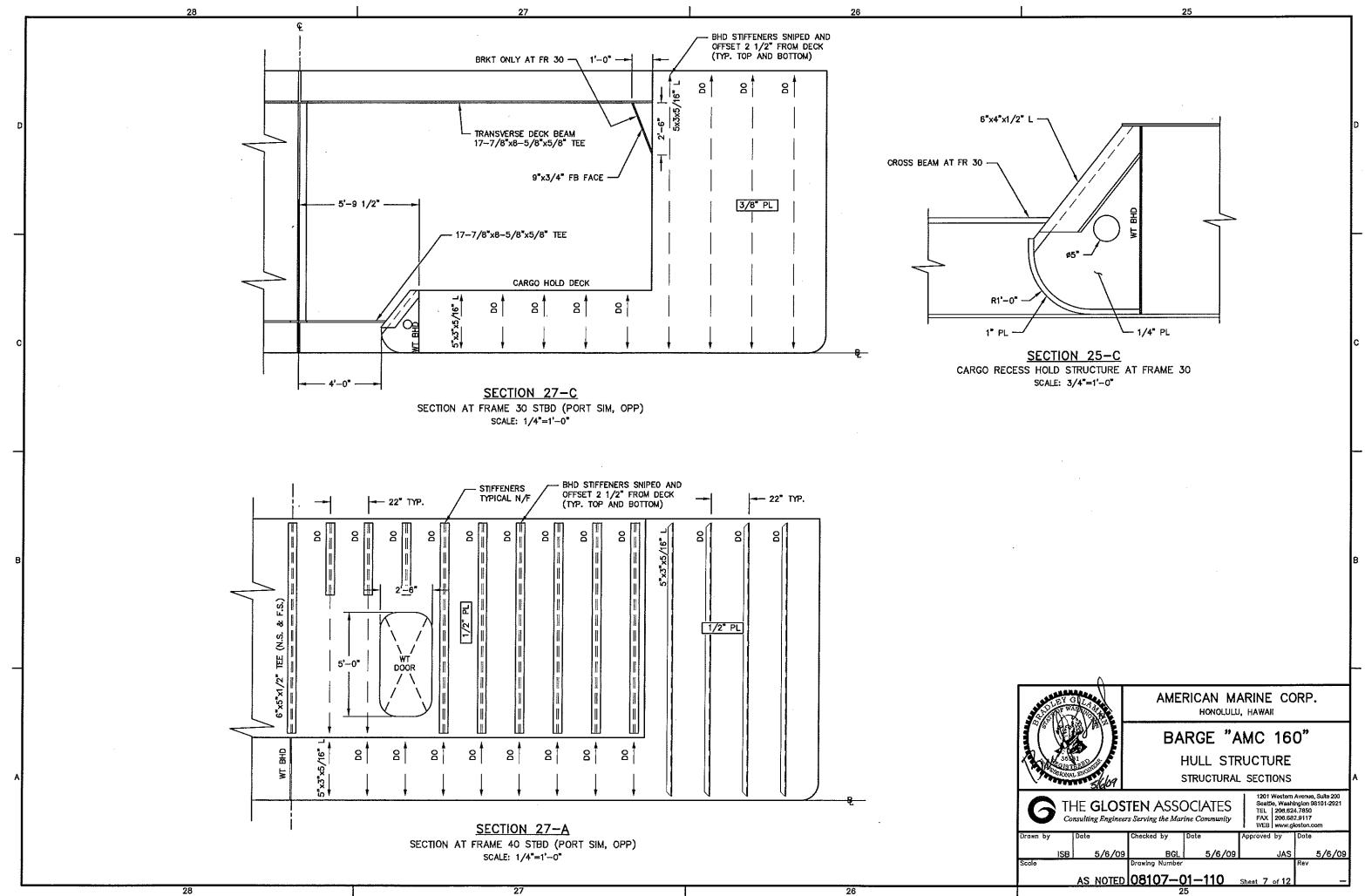


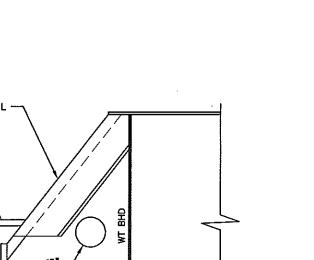


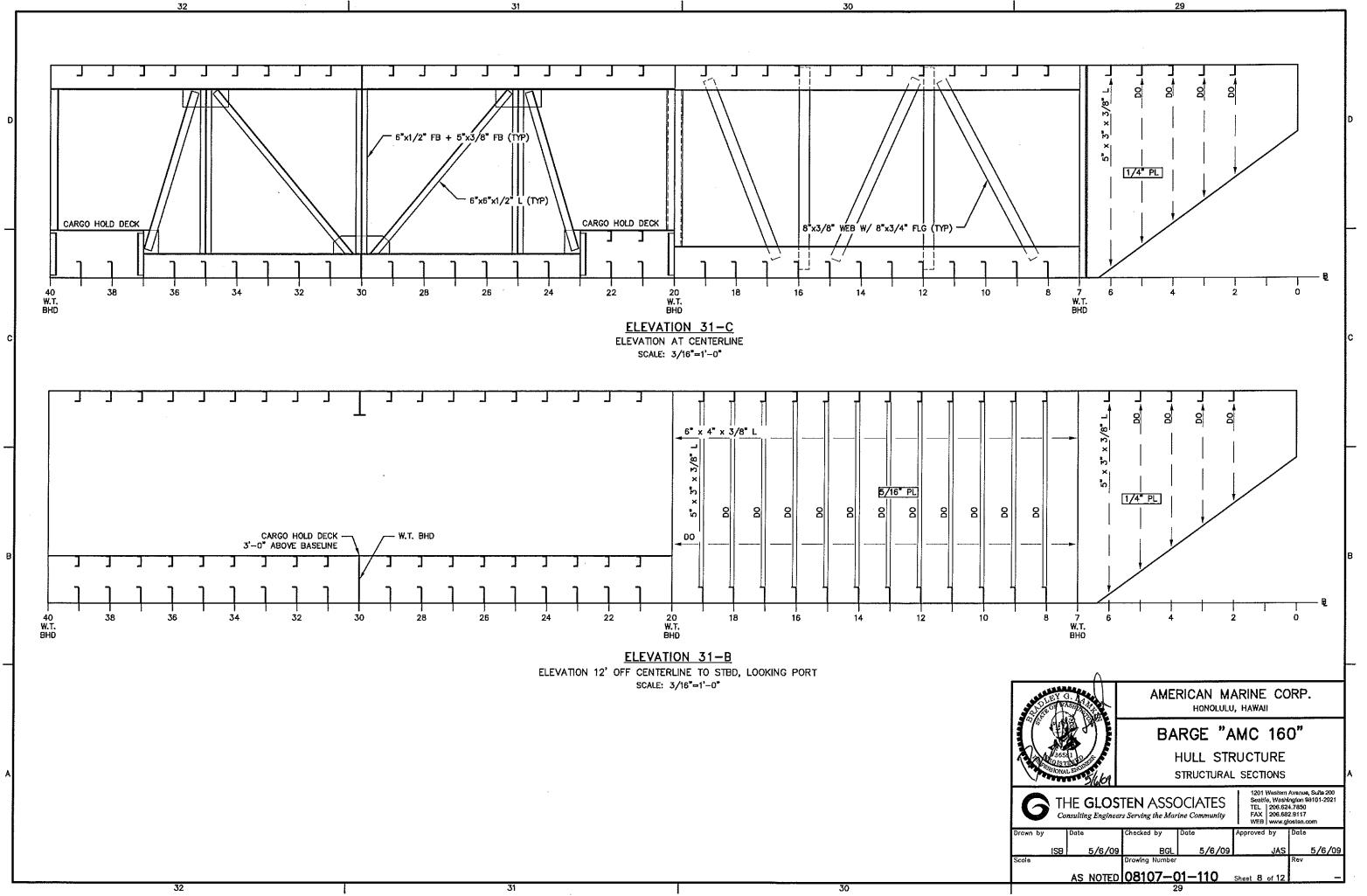


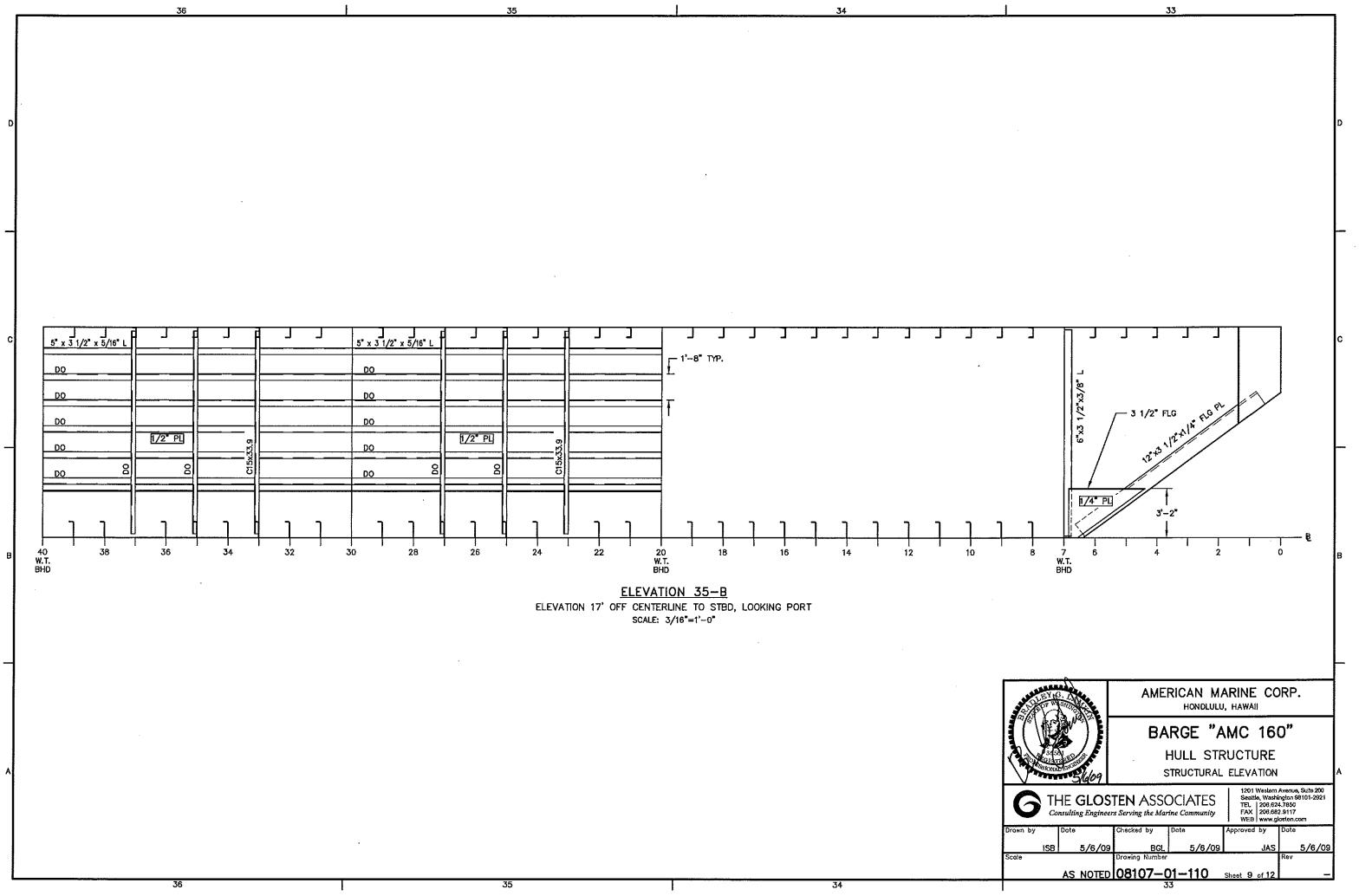


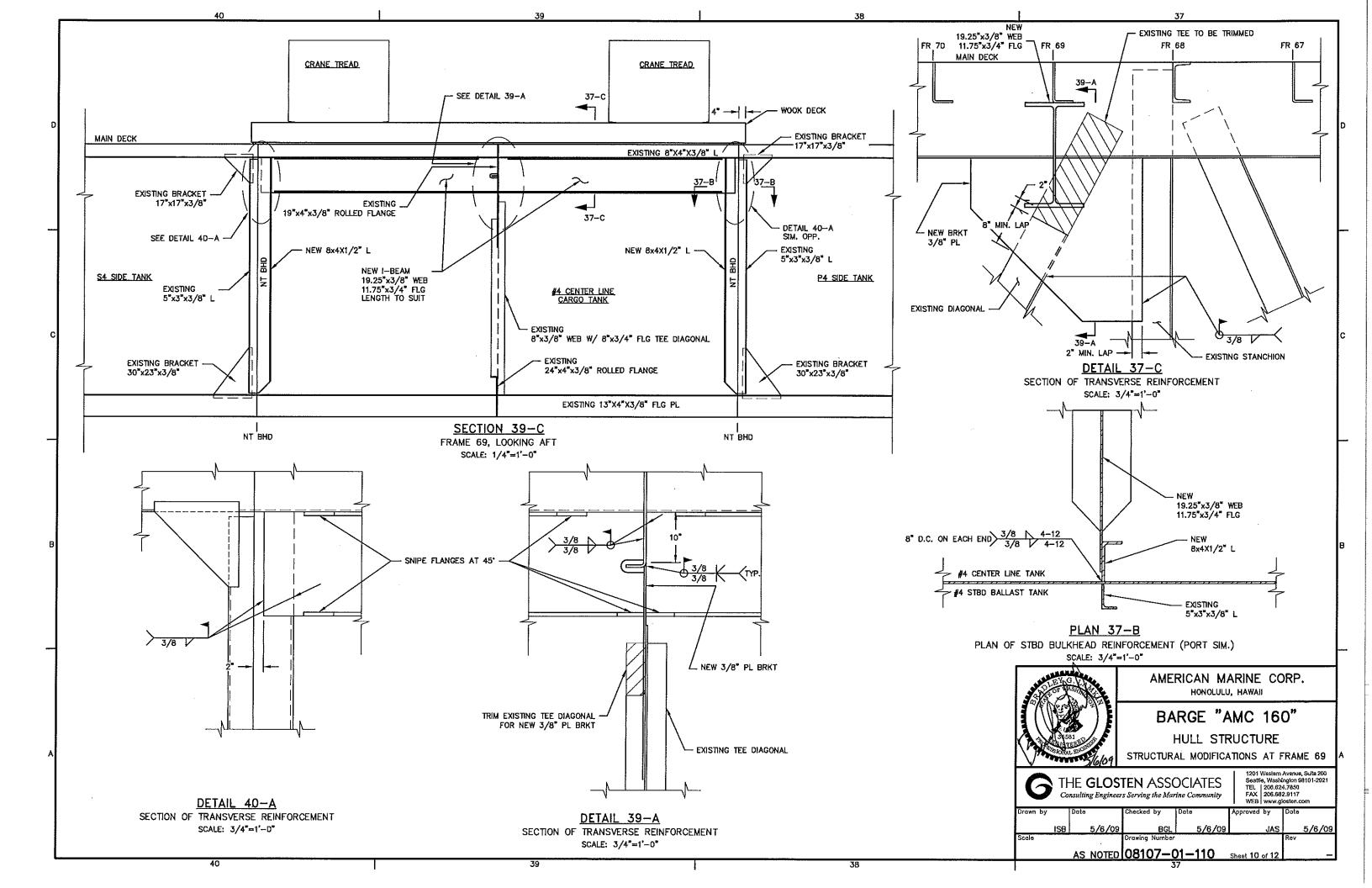


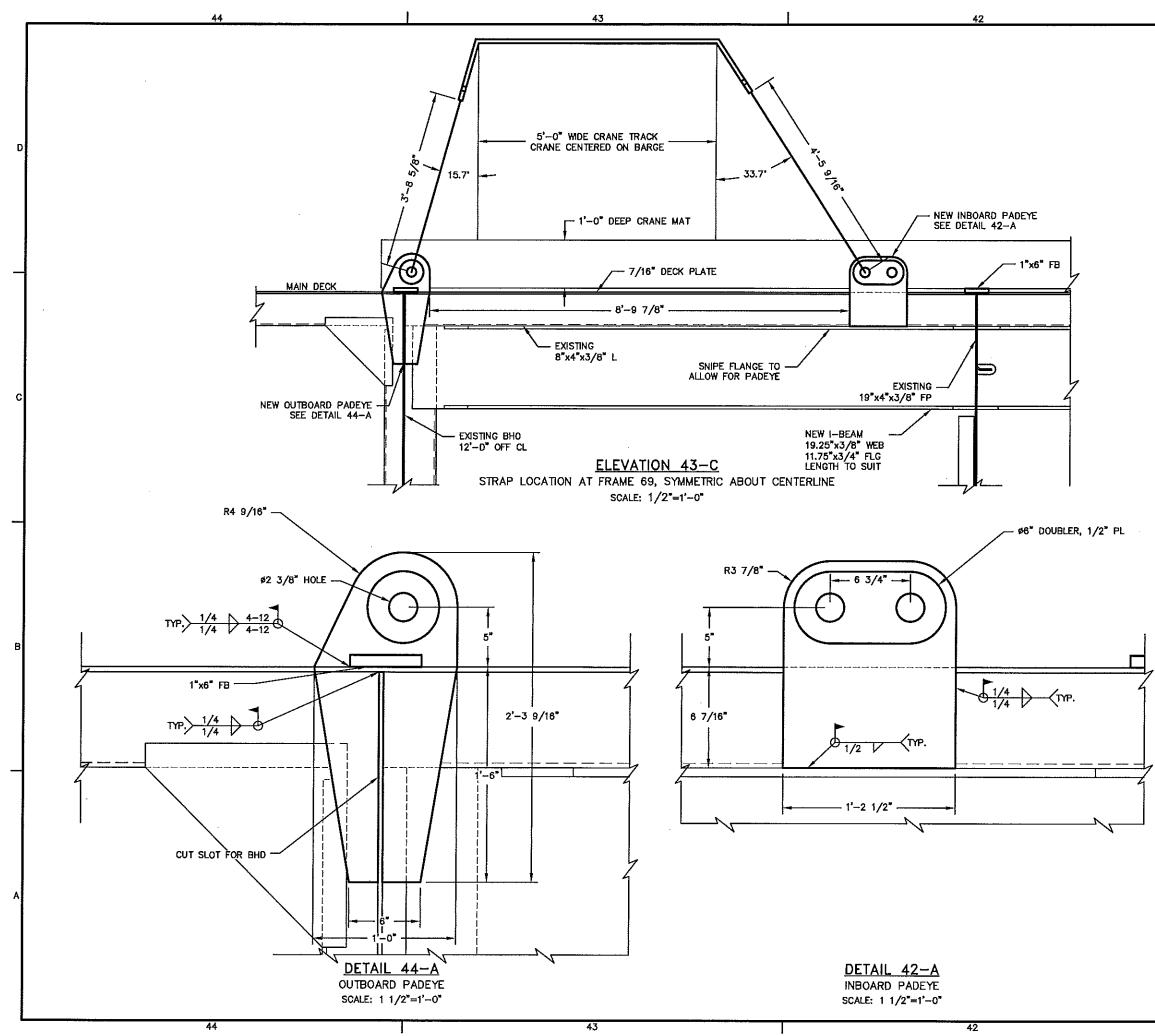




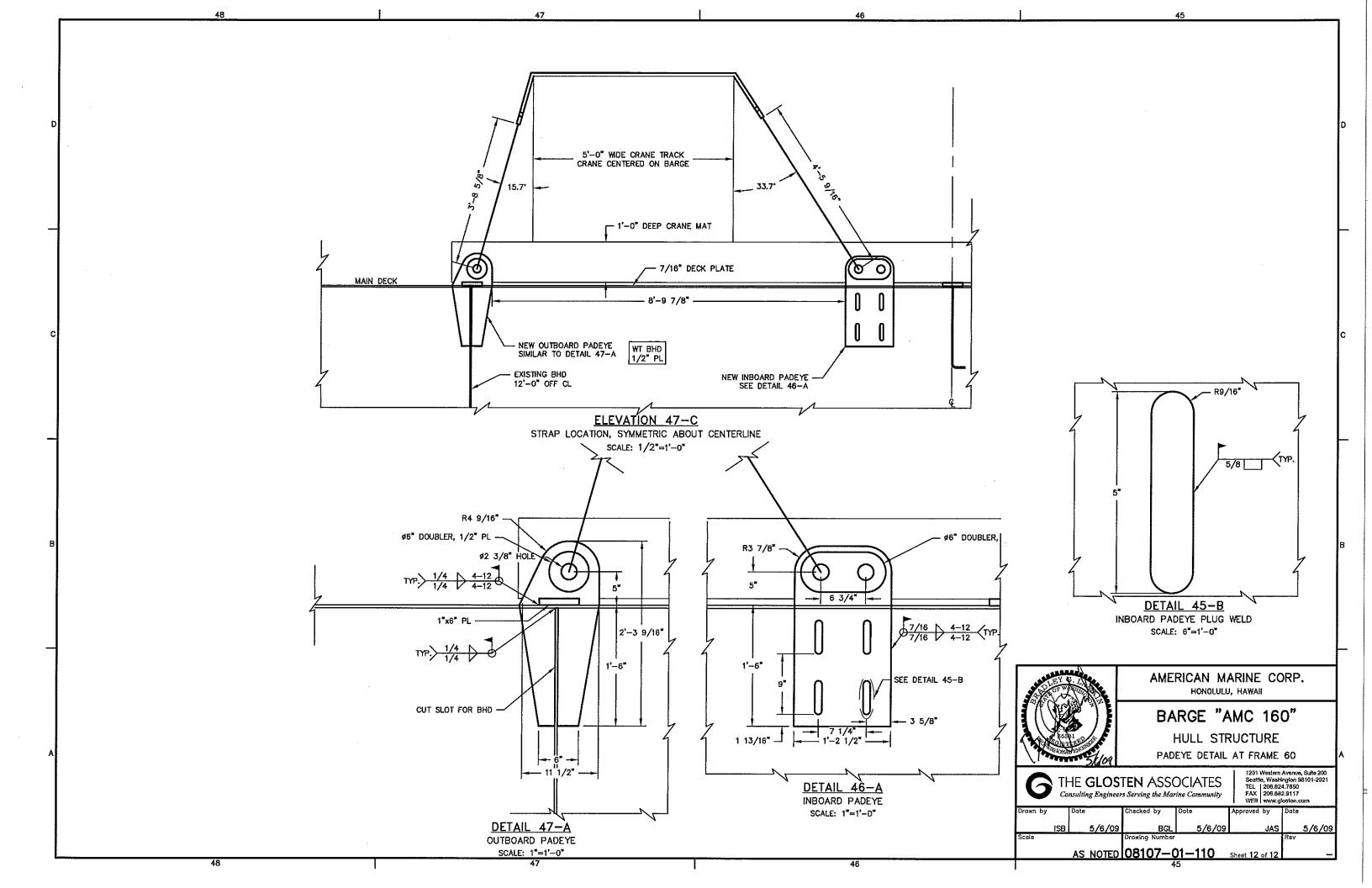








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A CONTRACTOR	AMERICAN MARINE CORP. HONOLULU, HAWAII	
	BARGE "AMC 160" HULL STRUCTURE PADEYES AT FRAME 69	A
Consulting Engine	STEN ASSOCIATES 1201 Western Avenue, Suits 200 Seattle, Washington 98101-2921 sers Serving the Marine Community TEL 200,652,1750 FAX 200,652,9117 WBB Www.glosten.com Western Avenue, Suits 200	
Drawn by Date ISB 5/6/0 Scale	Checked by Date Approved by Date 9 BGL 5/6/09 JAS 5/6/09 Drawing Number Rev Rev Rev Rev	
AS NOTE	0 08107-01-110 Sheet 11 of 12 -	





North American Marine Consultants, LLC

GENERAL CONDITION SURVEY

CRANE BARGE "AMC 160"

OFFICIAL NUMBER: 1211112

GROSS/NET REGISTERED TONNAGE: 925 TONS

OWNED BY: AMERICAN MARINE CORPORATION

At the request of Mr. Robert Shanazarian and for the account of American Workboats, Inc., the undersigned independent marine surveyor inspected the subject vessel as it lay afloat and moored in the Marine Corps Base Hawaii in Kaneohe, Hawaii.

The purpose of the inspection was to determine to the extent possible the general condition of the vessel and to prepare a record of same.

Date of Survey:	January 31, 2017
Persons in Attendance:	Mr. Shane McShane American Workboats, Inc.
Independent Marine Surveyor:	Capt. Steven J. Bahnsen, NAMS-CMS

GENERAL DESCRIPTION

The vessel was found to be an all steel, welded deck barge, originally built in 1942 for the U.S. Army by American Bridge Company (Hull No. YC1389) in Ambridge, Pennsylvania. Its hull was divided by two longitudinal and five transverse, watertight bulkheads into a raked bow, square transom stern and 12 midbody compartments. The barge was outfitted with two double drum anchor winches and a Manitowoc 4500 crawler crane.

Registered hull dimensions were 160.0' x 51.0' x 13.5'.

255 East Monroe – St. Louis, Missouri 63122 – 314-822-5452 – www. NAmarineconsultants.com Providing reliable commercial marine surveys and appraisals worldwide.



CERTIFICATION AND DOCUMENTATION

The vessel maintained a current U.S. Coast Guard Certificate of Documentation issued March 30, 2016 and valid through April 30, 2017.

BOW COMPARTMENT

The port bow side plates contained scattered abrasions and indentations from 0-3/8" with no one area worthy of specific mention, except as follows:

The port bow side plating was generally lightly washboarded from 0-1/2" with internal vertical framing outlined in way.

The port bow corner plates contained scattered abrasions and indentations from 0-3/8" with no one area worthy of specific mention.

The port bow corner plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult. The half-pipe rub rail was distorted from 0-1" over an area measuring 8" x 8" on the radius of the corner.

The headlog plates contained scattered abrasions and indentations from 0-3/8" with no one area worthy of specific mention.

The headlog plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult. The half-pipe rub rail was distorted from 0-1" for a length of 10', extending inboard from the starboard bow corner.

The starboard bow corner plates contained scattered abrasions and indentations from 0-3/8" with no one area worthy of specific mention.

The starboard bow corner plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult.

The starboard bow side plates contained scattered abrasions and indentations from 0-1/2" with no one area worthy of specific mention, except as follows:

The starboard bow side plating was distorted from 0-2", over an area measuring 2' x 2', centered 3' below deck and 4' aft the starboard bow corner.

The starboard bow side plating was equipped with a 72" heavy equipment tire fender, which was hung from chains shackled to padeyes welded on the side shell.



STARBOARD SIDE

The starboard side and gunwale plates in way of the midbody compartments contained scattered abrasions and indentations from 0-3/4" with no one area worthy of specific mention, except as follows:

The starboard side plating was distorted from 0-1" over an area measuring 2' x 4', centered 6' below deck and extending aft from the No. 1 midbody compartment forward bulkhead.

The starboard side plating was equipped with twenty two (22) 72" heavy equipment tire fenders, which were hung from chains shackled to padeyes welded to the side shell.

STERN COMPARTMENT

The starboard stern side plates contained scattered abrasions and indentations from 0-1" with no one area worthy of specific mention.

The starboard stern corner plates contained scattered abrasions and indentations from 0-3/8" with no one area worthy of specific mention.

The starboard stern corner plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult.

The sternlog plates contained scattered abrasions and minor indentations from 0-1/2" with no one area worthy of specific mention.

The sternlog plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult.

The port stern corner plates contained scattered abrasions and indentations from 0-1/2" with no one area worthy of specific mention.

The port stern rake knuckle plates contained scattered abrasions and indentations from 0-1/2" with no one area worthy of specific mention.

The port stern corner plating was fitted with a 10" half-pipe rub rail just below deck level, which made sighting the plate below difficult.



The port stern side plates contained scattered abrasions and indentations from 0-1/2" with no one area worthy of specific mention, except as follows:

The port stern side plating was distorted from 0-3/4" over an area measuring 2' x 3', centered 6' below deck and 6' forward the port stern corner.

PORT SIDE

The port side and gunwale plates in way of the midbody compartments contained scattered abrasions and indentations from 0-3/4" with no one area worthy of specific mention.

The port side plating was equipped with an 18" diameter, cylindrical rubber fender, which was hung longitudinally along the side shell by way of chains shackled to padeyes welded to the hull.

DECK

Deck Fittings:

Deck fittings appeared to be in good order unless otherwise noted and consisted of the following:

Bow:

- 10" double bitts to port and starboard
- Baier, flush mounted access hatch to port and starboard
- Anchor fairlead to port and starboard
- Tow bridle padeye to port and starboard equipped with 2.5" studded link tow bridle

Port and Starboard Midbody Compartments:

- (6) Baier, flush mounted access hatches to port and starboard
- (3) 48" cleats to port and starboard

Stern:

- 10" double bitt to port and starboard
- Anchor fairlead to port and starboard

Anchor Winches:



Fore and aft facing, double-drum anchor winches were welded to the port side of the barge at amidships. Each winch was powered by a Detroit Diesel, 6-71, marine diesel engine through a Twin Disc torque converter and chain drive. The winch drums were each spooled with approximately 1,500' of 1.25" steel anchor wire, which extended to their respective anchor fairleads and anchors.

A steel anchor winch control tower with an aft stairway was located above the winches. The control tower was painted blue and had windows in every bulkhead for visibility of the winch drums and all four anchors.

A steel control panel was located along the starboard bulkhead in the tower below the windows. The control panel was outfitted with the following:

- Fore and aft winch motor throttle actuators
- Fore and aft winch motor transmission selector
- No. 1 No. 4 drum friction actuators
- No. 1 No. 4 drum brake actuators
- No. 1 No. 4 drum dog actuators
- Uniden, VHF marine radio

Crane:

A Manitowoc 4500 crawler crane, built in 1959 (serial no. 4762), was secured by large turnbuckles and shackles to a 12" x 12" hardwood timber mat on the stern portion of the deck. The crane had a 127' boom and was painted blue on its exterior.

The crane was powered by a Cummins, VT 600, diesel engine rated at 550 horsepower. A Dyna-Gem, 20kW generator powered by a Perkins, four-cylinder, radiator cooled generator motor was also housed in the crane body.

Safe working loads of the crane at 127' of boom were as follows:

Boom Angle	<u>Radius</u>	Safe Working Load
76°	35'	170,000 lbs
70°	50'	104,000 lbs.
62°	65'	74,000 lbs.
45°	95'	44,000 lbs
35°	110'	36,000 lbs
27°	120'	31,000 lbs.

COATINGS



The black, exterior hull coatings appeared to be in good condition and approximately 98% intact.

The gray, non-skid deck coatings were in good condition and appeared to be approximately 90% intact.

INTERIOR COMPARTMENTS

A steel access trunk with a six-dog watertight door provided access to a steel stairway with nonskid treads that led down to the below deck machinery and storage spaces.

Generator Compartment:

The generator room was located at the forward extreme of the hull compartments. The exposed steel overhead and bulkheads were painted white, and a combination of plywood panels and fiberglass reinforced grating covered the bottom framing. The compartment was dry and clean and internal coatings were in very good condition.

The generator room was generally utilized for storage, but did contain a Marathon Electric, Magnaplus, 40 kW generator powered by a John Deere, four-cylinder, generator motor.

Rigging Room:

A six-dog watertight door in the aft bulkhead of the generator room opened to the rigging room. The overhead and bulkheads in the rigging room were painted white and the steel deck plating was painted gray. The compartment was dry and clean and internal coatings were in very good condition.

The compartment was utilized for stowing miscellaneous pieces of rigging such as wire, synthetic slings, turnbuckles, mooring line, spare anchor wires and spare parts for the crane and anchor winches.

The rigging room was also equipped with a Quincy, QT-10, air compressor mounted atop a 150 gallon air receiver and powered by a 10 horsepower electric motor.



Barge Office:

A six-dog watertight door in the aft bulkhead of the rigging room opened to the barge office. The steel overhead and bulkhead plating in the office were painted white and the deck was painted gray. The compartment was clean and dry, and internal coatings were in very good condition.

The barge office was mostly open space, but it did contain a steel desk and an engineer's table for the crew to maintain logs and store plans and drawings. The barge's 14,000 gallon diesel oil tank was situated along the aft bulkhead.

SURVEYOR'S COMMENTS

The crane barge "AMC 160" is utilized for pile driving and dredging operations throughout the Hawaiian Islands. In the opinion of the undersigned, the barge appeared to be in good condition and was suitable for its current utilization.

Only the void spaces noted above were entered. Internal framing in the compartments that were not entered was expected to be distorted to conform to external hull conditions and the compartments were expected to be in a condition generally similar to those that were entered.

No ultra-sonic gauging or other accurate measurements of hull plate thickness were made by the undersigned.

The undersigned independent marine surveyor submits the above survey report without prejudice to the rights of all parties concerned.

NORTH AMERICAN MARINE CONSULTANTS, LLC

Capt. Steven J. Bahnsen, NAMS-CMS Independent Marine Surveyor





Anchor winches and control tower



Port bow deck





Port bow deck



Port deck looking aft





Port deck looking forward



Port stern deck





Port deck looking forward

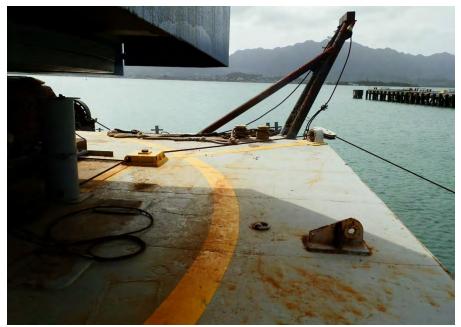


Starboard bow deck





Starboard deck looking aft



Starboard stern





Starboard deck looking forward



Bow





Port bow corner



Port bow





Starboard bow corner



Starboard bow





Starboard side



Starboard stern





Generator room



Office / storeroom





Rigging room



Rigging room





Crane



Crane cab





Crane generator



Crane engine





Crane



AMC 160 moored in Kaneohe Harbor





Anchor winch control tower

BARGE YC-1389 ULTRASONIC THICKNESS INSPECTION January 17, 2008

LOCATION

RESULTS

1) BOW RAKE

A)PORT 1

HEAD LOG	.460, .500
BOTTOM PLATE	505, .495
SIDE SHELL	.485, .445
CORNER (RAKE SIDE SHELL	
TRANSITION)	.740, .640
AFT BULKHEAD	.300

B)PORT 2

HEAD LOG	.490
BOTTOM PLATE	.500
PORT BULKHEAD	.240, .235
AFT BULKHEAD	.300

C)STARBOARD 2

HEAD LOG	.500
BOTTOM PLATE	.495
PORT BULKHEAD	.285
AFT BULKHEAD	.300

D)STARBOARD 1

HEAD LOG	.340, .435
BOTTOM PLATE	.485, .500
SIDE SHELL	.500
CORNER (RAKE SIDE SHELL	
TRANSITION)	.765, .755
PORT BULKHEAD	.240, .285
AFT BULKHEAD	.320

2) PORT #1 VOID

FORWARD BULKHEAD	.310, .375
SIDE SHELL	.505, .435
STARBOARD BULKHEAD	.310, .315
AFT BULKHEAD	.535

BOTTOM PLATE	.515, .490
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3) CENTER #1 VOID

FORWARD BULKHEAD	.225, .350
PORT BULKHEAD	.300
AFT BULKHEAD	.500
BOTTOM PLATE	.505, .480

4) STARBOARD #1 VOID

FORWARD BULKHEAD	.265
PORT BULKHEAD	.295, .315
AFT BULKHEAD	.490
SIDE SHELL	.470
BOTTOM PLATE	.470, .435, .395

5) PORT BALLAST TANK #2A

FORWARD BULKHEAD	.525
SIDE SHELL	.480
AFT BULKHEAD	.355
INBOARD BULKHEAD	.495
BOTTOM PLATE	.380, .460

6) PORT BALLAST TANK #2B

FORWARD BULKHEAD	.350
SIDE SHELL	.430
AFT BULKHEAD	.495
INBOARD BULKHEAD	.480
BOTTOM PLATE	.450

7) #2 CENTER CARGO TANK

FORWARD BULKHEAD	.430
PORT BULKHEAD	.345
AFT BULKHEAD	.475
STARBOARD BULKHEAD	.465
BOTTOM PLATE	.605
STEEL FLOOR UNDER CONCRETE	.480, .455

8) STARBOARD BALLAST TANK #2A

FORWARD BULKHEAD	.485
SIDE SHELL	.435

AFT BULKHEAD	.310
INBOARD BULKHEAD	.500
BOTTOM PLATE	.435, .485

9) STARBOARD BALLAST TANK #2B

FORWARD BULKHEAD	.355
SIDE SHELL	.385, .415
AFT BULKHEAD	.520
INBOARD BULKHEAD	.485
BOTTOM PLATE	.440, .500

10) PORT BALLAST TANK #3A

FORWARD BULKHEAD	.500
SIDE SHELL	.435
AFT BULKHEAD	.300
INBOARD BULKHEAD	.465
BOTTOM PLATE	.440

11) PORT BALLAST TANK #3B

FORWARD BULKHEAD	.300
SIDE SHELL	.500
AFT BULKHEAD	.500
INBOARD BULKHEAD	.495
BOTTOM PLATE	.423

12)#3 CENTER CARGO TANK

FORWARD BULKHEAD	.480, .405
PORT BULKHEAD	.420, .485
AFT BULKHEAD	.450, .475
STARBOARD BULKHEAD	.410, .485
BOTTOM PLATE	.630
STEEL FLOOR UNDER CONCRETE	.480, .490

13) STARBOARD BALLAST TANK #3A

FORWARD BULKHEAD	.500
SIDE SHELL	.405
AFT BULKHEAD	.370
INBOARD BULKHEAD	.485
BOTTOM PLATE	.485

14) STARBOARD BALLAST TANK #3B

FORWARD BULKHEAD SIDE SHELL AFT BULKHEAD INBOARD BULKHEAD BOTTOM PLATE	.325, .335 .415, .430 .480, .500 .450, .495 .495
15) PORT #4 VOID	
FORWARD BULKHEAD SIDE SHELL AFT BULKHEAD STARBOARD BULKHEAD BOTTOM PLATE 16) CENTER #4 VOID	.495 .495 .305, .280 .340, 355 .415, .490
FORWARD BULKHEAD PORT BULKHEAD AFT BULKHEAD STARBOARD BULKHEAD BOTTOM PLATE	.500 .323 .305 .300 .465
17) STARBOARD #4 VOID	
FORWARD BULKHEAD SIDE SHELL AFT BULKHEAD PORT BULKHEAD BOTTOM PLATE	.465 .365, . <u>315</u> .315 .310 .445
18) STERN RAKE	
A) PORT #1	
HEAD LOG BOTTOM PLATE SIDE SHELL INBOARD BULKHEAD CORNER (RAKE SIDE SHELL TRANSITION)	.555 .495 .495 .300 .630, .745
B) PORT #2	
HEADLOG	555

HEAD LOG	.555

B) PORT #2 CONT.

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BOTTOM PLATE	.495
FORWARD BULKHEAD	.300, .310
STARBOARD BULKHEAD	.220

C) STARBOARD #2

HEAD LOG	.500, .545
BOTTOM PLATE	.500
PORT BULKHEAD	.225, .240
FORWARD BULKHEAD	.360, .265
STARBOARD BULKHEAD	.220

D) STARBOARD #1

HEAD LOG	.500
BOTTOM PLATE	.360, .490
SIDE SHELL	.465, .340
PORT BULKHEAD	.240
CORNER (RAKE SIDE SHELL	
TRANSITION)	.740

