

## Control Inspection Floating Dry Dock No.2

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## 1.0 INTRODUCTION

HEGER DRY DOCK, INC. has inspected Dry Dock No. 2 located at BAE Systems San Francisco Ship Repair in San Francisco, California. A structural and mechanical/electrical control inspection of the dry dock structure and machinery was conducted in accordance with MIL-STD-1625D in order to ascertain the overall condition of the dry dock. The results of the inspection survey will be used as a basis for setting up a routine schedule of repairs and maintenance of the dock.

The inspection was conducted from August 8<sup>th</sup> to August 12<sup>th</sup>, 2016, by Waleed Sayed, Project Engineer, and Michael D. Naylor, Engineer, both employed by Heger Dry Dock, Inc.

Mr. Sayed has been involved with the design, operation and inspection of dry docks since 2001. Mr. Sayed's resume is enclosed in Appendix A of this report.

## 2.0 **CONDUCT OF SURVEY**

This inspection survey consisted of the following:

- Visual inspection of all ballast tanks,
- Visual observation of all exterior portions of the dock with exception of the underwater areas,
- Visual observation of both safety decks and wing decks,
- Review of the UT Survey of hull structure conducted by International Inspection dated January 2016,
- Conduct an operational test of mechanical and electrical equipment of the dock during a submergence test.

## 3.0 **GENERAL DESCRIPTION**

Dry Dock No. 2 is one piece type steel floating dry dock. The structural analysis and design of the drydock was done by Earl and Wright, Consulting Engineers of San Francisco. The dry dock was constructed by the Bethlehem Steel Corporation at their San Francisco Yard in 1970.

The dock's pontoon is divided into forty (40) ballast tanks; twenty(20) port tanks and twenty(20) starboard tanks. Each ballast tank is 40'-0" long x 84'-0" wide. Each ballast tank is flooded via a 20" diameter butterfly valve operated by an electric actuator located on the safety deck. Each ballast tank is dewatered by a single-stage mixed flow vertical shaft pump with an approximate capacity of 6,000 GPM. The pumps and valves are operated remotely by push buttons in the control house. There is an 18'-0" wide buoyancy chamber located along the dock's centerline. The buoyancy chamber is divided into five(5) compartments of varying lengths longitudinally.

#### PRINCIPAL CHARACTERISTICS OF THE DOCK

Length Overall	900'-0"
Length of Pontoon	
Breadth Overall	186'-0"
Breadth between Wingwalls	150'-0"
Height of Wingwall Above Keel	66'-0"
Pontoon Depth	20'-0"
Original Design Capacity (18" Freeboard)	59,600 LT

Refer to Appendix B for a General Arrangement of the dry dock.

#### 4.0 **RESULTS OF STRUCTURAL SURVEY**

Refer to Appendix C "Photographs" for selected photographs of the dock structure.

Refer to Appendix D "Corrosion Ratings" for a description of corrosion types.

Refer to Appendix E for the Structural Control Inspection Check Off Sheets.

#### 4.1 Internal Ballast Tanks

In general the ballast compartments are in satisfactory condition. The following observations were made about the general condition of the internal portions of the ballast tanks:

- Safety Deck Throughout the dock, the overhead safety deck plate and stiffeners are in good condition. The painting system is 90% intact with areas of light rust bubbles.
- Inboard Wing Internally, the inboard wing structure (plate and stiffeners) has complete paint failure with medium to heavy rust scale. The most evident area of corrosion is in way of the connection of the inboard shell plate to the pontoon deck. There are numerous locations on the East and West wingwalls where a corrosion hole has developed at the weld seem of the inboard shell plate to the pontoon deck for a length of 3 to 10 feet (see Appendix C Photo 3). This area needs to be repaired for proper load transfer from the pontoon structure into the wing structure during a docking evolution and to maintain the watertight integrity of the ballast tanks.
- Outboard Wing Internally, the outboard shell is experiencing an accelerated amount of corrosion in comparison to the inboard shell structure due to a greater exposure to wind and external sea water. Similar to the inboard wing, the internal structure of the outboard wing shell has complete paint failure with medium to heavy rust scale throughout. The splash zone of the dock (2 feet below the pontoon deck to 10 feet above the pontoon deck) has the most significant

deterioration with an abundance of 1" to 5" holes throughout the length of the dock. The holes are typically grouped and concentrated in localized areas which suggest the plate panel has corroded to a point of structural inadequacy.

There are areas of the outboard wing shell that have been removed and replaced in 40' x 10' panels. These renovated areas of the wing shell are generally in good structural condition with the paint system 75% intact (see Appendix C - Photo 16). These areas of renovated panels are evident when observing the exterior of the dock's structure (see Appendix C - Photos 10 & 11). The east outboard shell has been more extensively renovated compared to the west outboard wing shell.

All holes in the outboard wing shells should be repaired to maintain the watertight integrity of the ballast tanks.

Transverse Frames (Wing Compartment) – The transverse frames in the wing compartments of the ballast tanks are spaced every 10 feet and their structure is generally in satisfactory condition. The framing structure no longer has an intact protective paint coating. The structure has medium rust scale and rust bubbles throughout.

There is an inspection and maintenance walkway elevated about 45 feet above the pontoon bottom in this compartment. The grating and structure appears to be heavily corroded rendering it unsafe for use of any capacity (see Appendix C - Photo 6). Access to these areas must be prohibited.

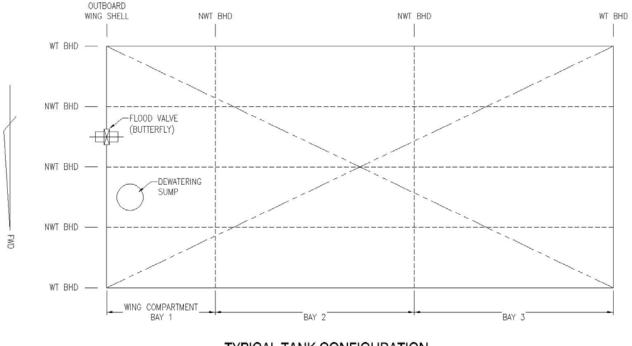
- Transverse Bulkheads (Pontoon Compartment) The transverse bulkheads in the pontoon compartments of the ballast tanks are spaced every 10 feet and their structure is generally in satisfactory condition. The structure no longer has an intact protective paint coating. The bulkhead plating and vertical stiffeners have medium to heavy rust scale and rust bubbles throughout. (See Appendix C - Photo 4)
- Longitudinal Bulkheads (Pontoon Compartment) The longitudinal bulkheads in the pontoon compartments split the pontoon structure into two(2) 33'-0" bays and a wing compartment. The longitudinal bulkhead structure is generally in satisfactory condition. The structure no longer has an intact protective paint coating. The bulkhead plating and stiffeners have medium to heavy rust scale and rust bubbles throughout. (See Appendix C - Photo 4)
- Pontoon Bottom The pontoon bottom plate is stiffened longitudinally and the structure is generally in good condition with no visible scaling. On average there is about 18 inches of mud through the tank with local areas of mud piling up to 4 feet in height (See Appendix C Photo 5). The amount mud consistently increased toward centerline of the dock. There was approximately 12 inches of residual ballast in the tanks at the time of the inspection.

Pontoon Deck (Overhead) – The pontoon deck plate is stiffened longitudinally with transverse panel stiffener plates located between stiffeners near the dock's centerline. The overhead structure is generally in satisfactory condition with medium rust bubbles throughout. There were local areas through the dock with minor lamination of overhead brackets on the watertight bulkheads. The most notable areas of corrosion in the overhead structure were noted on the pontoon deck plate from 0 to 30 feet inboard of the inboard wing shell. In this zone, there were many areas of isolated holes ranging from pin sized holes to holes about 3 inches in diameter.

A more concerning mode of pontoon deck failure was identified along frame 21 and along a longitudinal stiffener just inboard of the west wing between frames 78 & 79. In these two areas, the pontoon deck panel has begun to fail by fracturing along its supporting boundary (see Appendix C - Photo 2). Vehicle traffic on these pontoon deck panels, that are experiencing failing boundary support, should be deemed unsafe until proper repairs have been made.

All holes in the pontoon deck should be repaired to maintain the watertight integrity of the ballast tanks.

A plan of the typical tank configuration is shown in the figure below:



TYPICAL TANK CONFIGURATION

Exceptions to the general internal ballast tank condition including noted areas of deficiency are as follows:

## <u>Ballast Tank 1</u>

- At frame 0, in bay 2, there is a 2" diameter hole and crease in the transverse WT bulkhead about 2' below the pontoon deck.
- At frame 1, in bay 2, there is a 2"x6" hole and crease in the transverse NWT bulkhead.
- Between frames 1 and 2, in bay 3, the pontoon deck is 50% new, with holes in the pontoon deck where the deck has not been renewed.
- Between frames 3 and 4, in bay 2, 50% of the pontoon deck has been renewed. There was 1 hole in the pontoon deck at this location. In bay 3, there was a hole in the pontoon deck.
- The inboard wing shell has a 10' long hole in way of the connection to the pontoon deck plate.

## <u>Ballast Tank 2</u>

- The outboard wing shell plate has been renewed from frame 0 to frame 4.
- At frame 0, in bay 2, there were holes in the end watertight bulkhead at the water line.
- Between frames 0 and 1, in bay 3, there was a hole in the pontoon deck near frame 0
- Between frames 2 and 3, in bay 2, there were holes in the pontoon deck.
- Between frames 3 and 4, in bay 3, there were holes in the pontoon deck.

## <u>Ballast Tank 3</u>

- Areas of the outboard wing shell, above the waterline, have been replaced. Between frames 6 and 7, in way of the pontoon deck, there was a hole in the outboard wing shell.
- Between frames 7 and 8, there was a 8' long hole in the inboard wing shell in way of the connection to the pontoon deck plate
- In bay 2, there were holes varying from 1" diameter to 6" long tears at the bulkhead connection.

## <u>Ballast Tank 4</u>

- In between frames 4 and 6, from the pontoon deck to the safety deck, the outboard shell has been renewed.
- Between frames 4 and 6, in bay 2 and 3, there are holes in the pontoon deck.
- In between frames 6 and 7, in bay 3, there is a 36" to 42" long crack along the longitudinal stiffener just inboard of bay 2.
- The flood valve had a minor leak.
- At the intersection of the outboard shell and frame 4, at the waterline, there was a hole.

## <u>Ballast Tank 5</u>

- Between frames 8 and 12, throughout the entire tank, there was new outboard shell plate above the stability sponson.
- Throughout the tank, in bay 2, there were holes in the pontoon deck.

## <u>Ballast Tank 6</u>

- The flood valve had a minor leak.
- Throughout entire tank, bays 2 and 3, there are holes in the un-renewed section of pontoon deck plate.

## <u>Ballast Tank 7</u>

- Between frames 12 and 14, in bay 2, there were holes inboard of the replacement pontoon decking.
- At frame 14, at the inboard wing shell connection with the pontoon deck, there was a hole.

## <u>Ballast Tank 8</u>

- Between frames 13 and 14, in bay 2, there were multiple holes in the pontoon deck.
- Between frames 13 and 15, in bay 3, there were multiple holes in the pontoon deck.

## <u>Ballast Tank 9</u>

- Between frames 16 and 20, at the inboard wing shell connection to the pontoon deck, there were multiple holes.
- Throughout the tank, in bays 2 and 3, there were pin sized holes in the pontoon deck inboard of renewed pontoon deck plating.
- Throughout the entire tank, about 20' above the pontoon deck, the outboard wing shell plate has been renewed.

## Ballast Tank 10

- Between frames 16 and 20, in bay 2, the pontoon deck has been renewed inboard of wing shell.
- Between frames 17 and 18, in bay 2, there were holes in the pontoon deck inboard of the replacement pontoon decking.

## <u>Ballast Tank 11</u>

- Throughout the entire tank, the outboard wing shell plate above the pontoon deck has been renewed. There were numerous holes below the renewed plating to the waterline.
- Between frames 23 and 24, in bay 2, there was a hole in the pontoon deck inboard of the replacement pontoon decking.

• Throughout the entire tank, at the frames at the connections between the inboard wing shell and the pontoon deck, there were numerous holes.

## Ballast Tank 12

- Throughout the entire tank, in bay 2, 25% of the pontoon deck has been renewed inboard of the wing shell.
- In between frames 20 and 23, in bay 2, there were multiple holes in the pontoon deck inboard of the replacement pontoon decking.
- Between frames 21 and 22, in bay 3, there was a hole in the pontoon deck.
- Between frames 23 and 24, in bay 2, there was a large hole in the pontoon deck.

## <u>Ballast Tank 13</u>

- Between frame 26 and 28, at the inboard wing shell and pontoon deck connection, there was a long hole.
- Between frames 25 and 27, above the outboard wing shell and pontoon deck connection, there were holes along with heavy scaling.
- Between frames 25 and 26, in bay 2, there was a hole in the overhead pontoon deck. In bay 3, between longitudinal stiffeners L2 and L3 inboard of the off centerline bulkhead, there were missing pontoon deck panel stiffeners.

## Ballast Tank 14

• Throughout the tank, there were scattered holes inboard of the replacement pontoon decking.

#### Ballast Tank 15

- Along the entire length of the tank, about 15' above the pontoon deck, the outboard steel plate has been renewed. There were numerous holes below the renewed plating to the waterline.
- Between frames 32 and 34, there was a hole in way of the inboard wing shell and the pontoon deck connection.

## <u>Ballast Tank 16</u>

- Throughout the tank, about 8' above the pontoon deck on the outboard wing shell, there were four 2" diameter holes.
- Throughout the tank, about 12' to 28' above the pontoon deck, the outboard wing shell plate has been renewed.
- In bay 2, 25% of the pontoon deck plate has been renewed. Multiple holes were found inboard of the replacement pontoon decking.

## <u>Ballast Tank 17</u>

• At frames 32, 33, and 34, there were holes in way of the inboard wing shell and the pontoon deck connection.

• Along the entire length of the tank, 4' to 44' above the pontoon deck, the outboard wing shell plate has been renewed. There were pin holes below the renewed plating to the waterline.

## <u>Ballast Tank 18</u>

- Between frames 33 and 36, in bay 2, there were multiple holes in the pontoon deck inboard of the replacement pontoon decking.
- Between frames 35 and 36, on the inboard wing shell in way of the pontoon deck, there were multiple holes.
- Bottom longitudinals L4 and L5 inboard from the inboard wing shell were scoured at the scallop.

## <u>Ballast Tank 19</u>

- At frame 40, there was a hole in way of the inboard wing shell and pontoon deck connection.
- The outboard wing shell, about 20' to 50' above the pontoon deck level, has been renewed. There was heavy scaling and numerous holes below the renewed plating to the waterline.
- In bay 3, between the L1 and L2 longitudinal stiffeners inboard of bay 2, there was an overhead pontoon deck plate stiffener missing.

## Ballast Tank 20

• On the inboard wing shell in way of the pontoon deck connection, there were multiple holes.

## <u>Ballast Tank 21</u>

- In between frames 42 and 44, in way of the inboard wing shell and the pontoon deck connection, there were holes.
- The outboard wing shell about 20' to 30' above the pontoon deck level has been renewed. Between frames 41 and 43, there were holes in outboard wing shell from the top of the sponson to the bottom of the replaced plate.
- On frame 44, the overhead brackets were beginning to scale.

## <u>Ballast Tank 22</u>

• Typical condition.

## <u>Ballast Tank 23</u>

- Just above the pontoon deck, there was heavy outboard wing shell scaling with about 20 pin sized holes.
- In between frames 46.5 and 48, 30' above the pontoon deck, the outboard wing shell plate has been renewed.
- In the overhead of the watertight bulkhead 48, there was heavy scale and lamination on the brackets.

• At frame 46, in way of the inboard wing shell and the pontoon deck, there was a 6' long hole.

## Ballast Tank 24

- In between frames 45 and 46, 4' above the pontoon deck, the outboard wing shell had a 6" hole.
- In between frames 45 and 46, there were holes in the inboard wing shell plate at the pontoon deck connection.

## Ballast Tank 25

- Along the entire length of the tank, the outboard shell plate from about 30' to 50' above the pontoon deck has been renewed. Additionally, between frames 48 and 49, about 0' to 30' above the pontoon deck, the outboard shell plate has been renewed.
- Above the pontoon deck, there were pin sized holes on the outboard wing shell stiffeners were the plate had not been renewed.

## <u>Ballast Tank 26</u>

• Typical condition.

## <u>Ballast Tank 27</u>

- Along the entire length of the tank, the outboard shell plate from about 30' to 50' above the pontoon deck has been renewed.
- In between frames 53 and 55, on the outboard wing shell at the pontoon deck level, there were three 3" diameter holes.
- In between frames 55 and 56, in way of the inboard wing shell and the pontoon deck connection, there were holes.

#### Ballast Tank 28

• Typical condition.

## Ballast Tank 29

• Along the entire length of the tank, the outboard wing shell had extensive holes at the pontoon deck level. The outboard wing shell also had numerous holes running vertically along frame 56.

## <u>Ballast Tank 30</u>

• Typical condition.

## <u>Ballast Tank 31</u>

- In between frames 60 and 62, about 10' to 20' above the pontoon deck, the outboard wing shell plate has been renewed.
- In between frames 62 and 63, about 30' above the pontoon deck there were three 5" diameter holes in the outboard wing shell.

• In between frames 63 and 69, at the pontoon deck level, there were 4 large holes in the outboard wing shell.

## Ballast Tank 32

• Typical condition.

## Ballast Tank 33

- In between frames 68 and 69, in bay 2, there were holes in the pontoon deck.
- The outboard wing shell about 30' to 40' above the pontoon deck has been renewed. Below the renewed wing shell plate, there was heavy scaling and pin sized holes.

## <u>Ballast Tank 34</u>

- In between frames 64 and 65, in bay 2, there was a 2' x 2' perforation and pin hole in a pontoon deck panel.
- In between frames 64 and 68, in bay 2, the pontoon deck was 25% new.

## Ballast Tank 35

- The outboard wing shell plate about 30' to 50' above the pontoon deck has been renewed. Below the replaced plate to the water line, there were pin sized holes in the outboard wing shell.
- Between frames 71 and 72, in way of the inboard wing shell and the pontoon deck connection, there was a 3' long hole.
- Throughout bay 2, there were holes in the pontoon deck, some with temporary doubler plates.

#### Ballast Tank 36

• In between frames 69 and 70, in bay 2, there was a 1" dia. hole in the pontoon deck.

## Ballast Tank 37

- In between frames 75 and 76, along L1 from the inboard wing shell on the pontoon deck, there was a fracture in the pontoon deck plate.
- Throughout bay 2, there were holes in the pontoon deck varying from pin sized to 3" in diameter.
- The outboard wing shell about 10' to 20' above the waterline has been replaced. Below the renewed plating, there was heavy scaling and a number of pin sized holes.

## Ballast Tank 38

 In between frames 72 and 74, in bay 2, there were pin sized holes in the pontoon deck. • In between frames 75 and 76, in bay 3, L4/5 from the off centerline bulkhead, there was an overhead bracket missing.

## Ballast Tank 39

- The outboard wing shell about 20 to 40' above the waterline has been replaced. Below the renewed plating, there was heavy scaling and a number of pin sized holes.
- Throughout bay 2, there were holes in the pontoon deck varying from pin sized to 3" in diameter.
- Between frames 78 and 79, there is a tear along the entire pontoon deck panel in way of the first deck stiffener just inboard of the wing shell.

#### Ballast Tank 40

- Throughout the tank, in bay 2, there were holes in the pontoon deck.
- Outboard shell has localized areas above the waterline that have been renewed.

#### 4.2 Internal Buoyancy Chambers

In general, the five(5) buoyancy chamber compartments are in good condition. The paint is 70% intact in the upper 10 feet of each chamber. There are localized areas of paint failure on the overhead structure in way of the slot weld locations connecting the topside doubler plates to the original pontoon deck plate. Paint failure with light rust film and bubbles was observed in the lower 10 feet of the compartments (see Appendix C - Photo 9). The water level inside the chambers varied from zero to eighteen inches.

It is noted for information purposes only that many of the chambers contained staging, ladders, and strung up lighting equipment.

#### Exceptions to the general internal buoyancy chamber condition are as follows:

#### Buoyancy Chamber 1

- Paint failure with heavy rust film and medium rust scale throughout compartment.
- 18" of water accumulated inside compartment.
- Chamber contains abandoned CHT pump.

#### 4.3 Pontoon Deck

Doubler plates have been installed on the topside of the dry dock's original pontoon deck plate over about 65% of the surface with a concentration towards the dock's centerline. The doubler plates are 1/2" in thickness and are connected to the dock's original pontoon deck plate via 2" x 6" slot welds located along transverse and longitudinal structure. The half-inch doubler plates were installed to fortify the original deck plate as an alternative to removing and replacing the corroded plating and stiffeners.

The dock's original pontoon deck is severely corroded as reflected in the most recent ultrasonic thickness (UT) measurements surveyed by International Inspection in January 2016. UT measurements were taken internally and measured the thickness of the original deck plate only. In order to ascertain the overall condition of the pontoon deck, data on the topside doubler plates would also have to be collected.

The pontoon deck has been recently renovated in 40' x 10' panels by means of removing and replacing the corroded deck plate and stiffeners. These renovated plate inserts are located just inboard of the inboard wing shell on the south end of the dock.

Areas of the dock that have not been renovated by a doubler plate or plate inserts exhibit heavy pitting and rust film with isolated holes (see Appendix C - Photo 17). The doubler plates are generally in good condition with light rust film on the surface.

Refer to Appendix B for a plan view of the pontoon deck summarizing the UT measurements taken in 2016.

#### 4.4 Wing Decks

The wing deck structure, including the raised crane rail support structure and brackets, is generally in good condition with the coating system 75% intact. There are localized areas of paint failure and pitting.

The foundations for cleats, capstans, and other equipment appeared to be in satisfactory condition.

#### 4.5 Safety Deck Compartments

The safety deck is generally in good condition with paint protection still 85% intact (see Appendix C - Photo 18).

The foundations for pumps, valve actuators, and other equipment appeared to be in satisfactory condition.

#### 4.6 <u>Dock Exterior</u>

The inboard wing shells are generally in satisfactory condition. The paint system is about 60% intact with many areas of localized paint failure, corrosion, and scaling (see Appendix C - Photo 19). There are numerous locations on the East and West wingwalls where a corrosion hole has developed at the weld seam between the inboard shell plate and the pontoon deck for a length of 3 to 10 feet (see Appendix C - Photo 3). This area needs to be repaired for proper load transfer from the pontoon structure into the wing structure during a docking evolution and to maintain the watertight integrity of the ballast tanks.

The outboard shell is experiencing an accelerated amount of corrosion in comparison to the inboard shell structure due to a greater exposure to wind and external sea water. The splash zone of the dock (2 feet below the pontoon deck to 10 feet above the pontoon deck) has the most significant deterioration with an abundance of 1" to 5" diameter holes developing in this area throughout the length of the dock. The holes are typically grouped and concentrated in localized areas which suggest the associated plate panel has corroded to a point of structural inadequacy. Many of these holes have been patched over time with small "doubler" plates as a temporary fix (see Appendix C - Photo 13).

There are areas of the outboard wing shell that have been removed and replaced in 40' x 10' panels. These areas of renovated panels are evident when observing the exterior of the dock's structure (see Appendix C - Photo 10 & 11). The east outboard shell has been more extensively renovated than the west side.

Refer to Appendix B for an elevation view of the inboard and outboard wing shells summarizing the UT measurements taken in 2016. Also, highlighted in the UT sketches are the areas that have been renovated with 40'x10' insert plates. Many of the areas that have not been renovated with insert plates show UT measurements of 0.350 inches.

All holes in the outboard wing shells should be repaired to maintain the watertight integrity of the ballast tanks.

The draft boards measuring water over a 4'-0" keel block at fwd, amidship and aft port and staboard are in satisfactory condition. Note that the keel blocks are typically 5'-0" in height.

The stair towers at the South end of the dry dock were generally in good condition. The Southwest stairway had a broken strut in the tower framing. This strut should be repaired.

## 4.7 <u>Aprons</u>

#### North Apron

The North Apron is a removable type apron with a lay on stiffened deck plate. The deck plate has heavy pitting; random ultrasonic measurements (UT) taken on the plate registered an average thickness of 0.315" or 37% corrosion from the original 0.500".

The normally submerged portion of the apron structure exhibits moderate marine growth including seaweed and oysters. The coating on the exposed upper section above the typical waterline is no longer intact and the majority of the structure exhibits moderate to heavy rust scale (see Appendix C - Photo 13). In particular, the webs and flanges of the diagonal structural Tees have noticeable and significant metal loss.

It is recommended that the apron structure have a UT survey conducted in order to further evaluate its structural capacity.

In the northeast corner, the fourth and eighth transverse beams have buckled in their webs, potentially due to contact with tugs or vessels. Additionally, the end plate of the apron has developed significant corrosion holes and is currently in a laced curtain condition (see Appendix C - Photo 15). We recommend these areas be repaired.

#### South Apron

The South Apron is a removable type apron with a lay on grating. Steel plates have been placed on top of the grating due to the poor structural condition of the grating.

The apron structure could not be inspected due to tidal conditions at the time of the inspection. A low tide is required to get a boat underneath the pier structure and access the underside of the apron. The South Apron, however, appeared to be in a similar condition as the North Apron.

#### 4.8 <u>Moorings</u>

There are four spuds on the West side of the drydock which engage sliding keepers fastened to pile dolphins to moor the dock in place. The mooring points are located at frames 4, 28, 52, and 76.

The four(4) 90 degree vertical Tee spuds welded to the side of the wingwall are in satisfactory condition with paint protection mostly intact. The exception is at frame 28 where there are many areas of local paint failure, corrosion and scaling on the support brackets and adjacent shell structure (see Appendix C - Photo 20). The structure surrounding the Tee web is heavily corroded and may need to be replaced in the near future.

The four (4) mooring arms, grippers and pins were refurbished in October 2011 and appear to be in good condition.

#### 4.9 Docking Blocks

There are two types of timber/concrete composite docking blocks used on the dock:

- Typical keel block 42" x 54" in plan view
- Typical side block 42" x 48" in plan view

The blocks are 60" in height composed of an 8" thick hardwood timber base, 36" of concrete and topped by a hardwood/softwood cap. The blocks inspected on the dock are in good condition.

## 5.0 **RESULTS OF MECHANICAL/ELECTRICAL SURVEY**

Refer to Appendix F for Mechanical /Electrical Control Inspection Check Off Sheets.

#### 5.1 Ballast and De-ballast System

The ballast and de-ballast system was operated from the remote control room during a submergence test of the drydock. All forty(40) de-watering pumps and forty(40) flood butterfly valves were found to be in satisfactory operating condition.

#### 5.2 <u>ICCP System</u>

The dock has four(4) independent ICCP control panels. The units are Capac Engelhard model 36600. Each unit is located at a corner of the dry dock. All four units were in satisfactory working condition. Nodes #2 and #3 on the Southwest unit were down at the time of the inspection.

#### 5.3 Lighting

The port and starboard lighting on the weather deck was fully operational. The port and starboard lighting on the safety deck was fully operational.

#### 5.4 <u>Main and Backup Power</u>

The dock's main power source is brought on board to each safety deck through 12 kV lines. Distribution boards feed four(4) control centers on each side of the dock. The dock's shore power system operated satisfactorily.

During the submergence test, the dock was switched from shore power to back-up onboard generator power during the de-watering process. The onboard generator powered dock services, pumps, and valves satisfactorily during the test.

#### 5.5 Ship Handling System and Equipment

The seven(7) electric capstans port and starboard were tested and operated satisfactorily.

#### 5.6 <u>Fire Fighting System</u>

The fire main system was not tested during the inspection. BAE internally tests the system on a quarterly basis.

Fire extinguishers located on the safety decks and wing decks were found to be recently inspected and tagged.

#### 5.7 Dock Deflection Monitoring System

The dock's deflection is measured by means of a transit station at one end of the wing deck with targets located at the other end of the wing deck and amidship. The dock's deflection system is in satisfactory condition.

#### 5.8 System Services

The system services operated satisfactorily during the inspection. The services available on the dock are compressed air, potable water, and fire main. The shore connections on the Southeast wing appeared to be in good condition.

#### 5.9 Tank Level Indication System

The tank level indication system was in satisfactory operating condition at the time of inspection. The system is powered by shore supplied compressed air. There is an emergency backup air compressor located below the control house in the safety deck level. The backup air compressor was tested and found to be in good working condition.

#### 5.10 Event Log of Submergence Test

#### <u>8/12/2016</u>

- 0710 Commence Ballasting
- 0735 Water on the pontoon deck
- 0745 Pontoon deck awash
- 0755 Top of keel blocks covered
- 0758 5' on draft board
- 0801-11'6" on draft board
- 0805 17' on draft board
- 0808 22' on draft board
- 0813 24'6" on draft board
- 0816 30' on draft board (max submergence reached during this test)
- 0817 Commence dewatering to 25'
- 0825 25' draft board, secure dock.
- 0830- Shift of shower power to EDG. Open flood valves, 27' 6" draft.
- 0831 Secure valves, at 28' draft. Pump #39, #29, and #31
- 0832 Secure dock, and shift to shore power.
- Flood valve #1, 29, 34.
- 0843 Commence leak check. 22' draft.
- 0913 25' draft. Commence dewatering. Check pumps. In general, all pumps are running smoothly
- 0932 8' draft board
- 0937 Top of blocks
- 0943 Pontoon deck dry, east.
- 1006 Dock secured. 24" freeboard.

## 6.0 **CONCLUSIONS**

The purpose of HEGER DRY DOCK's inspection of Dry Dock No.2 was to ascertain the overall material and operational condition of the dry dock.

In general, the majority of the dry dock structure is in an acceptable condition with the exception of local areas of the dock's original plating located on the outboard wing shells (primarily the splash zone) and the pontoon deck. Despite efforts to install doubler plates on the pontoon deck as well as crop out and replaced corroded plate on the shells and deck, there are numerous holed areas on the dock's original plating. The holes range in size from pin holes to holes as large as 5 or 6 inches in diameter.

The holes compromise the watertight integrity of the dock's ballast tanks and create a flooding hazard as the dock lost about 1 foot of draft every 10 minutes during the submergence leak test. The heavily corroded plating on the side shell and pontoon deck with holes should be repaired. The leakage through the holes will exceed the capacity of the pumps to overcome the leaks at some point. Additionally, these heavily corroded areas have the potential to collapse from hydrostatic head pressure during a docking evolution.

The dock's framing including, wing compartment trusses, bulkheads, and hull plating stiffeners are typically in good condition. These structural members, however, have medium to heavy rust scale as the internal protective coatings of the ballast tanks have failed. If a protective system is not applied soon, an accelerated rate of corrosion will occur.

The removable dock aprons had significant corrosion on the external truss structure and the decking. It is recommended that the apron structures have a UT survey conducted in order to further evaluate their structural capacity. Apron loading should be restricted until a proper structural evaluation can be conducted.

All mechanical and electrical equipment such as pumps, valves, capstans, generators, etc. operated satisfactorily during the inspection.

The following work items are recommended to be accomplished as soon as possible:

- 1. Along frame 21 and along a longitudinal stiffener just inboard of the west wing between frames 6 & 7, 75 & 76, and 78 & 79, the fractured pontoon deck plate must be replaced. Vehicle traffic should be restricted from these areas until appropriate safety measures have been taken.
- 2. All the holes at the inboard wing shell at the connection to the pontoon deck must be repaired in order to allow for proper force transfer and restore the watertight integrity of the dock.

- 3. All holes in the outboard wing shell must be repaired in order to restore the watertight integrity of the ballast tanks.
- 4. All holes in the pontoon deck must be repaired in order to restore watertight integrity.

The following work items are recommended to be accomplished:

- 1. Construct a maintenance repair plan to schedule extensive steel repairs required to the wing shells and pontoon deck plating. This survey identified numerous areas of heavy corrosion. These areas of concern are reaffirmed in review of the latest UT survey conducted in 2016.
- 2. Dredge the dock's submergence berth. The maximum draft of the dock is currently restricted by the silt filling in the submergence berth. A dock of this capacity could dock a greater range of ships if a deeper maximum draft was achievable.
- 3. Apply a protective coating system to internal ballast tanks in an effort to protect steel structure from further corrosion.
- 4. The broken strut at the base of the Southwest pedestrian access tower should be repaired.

The sheets attached in Appendix D, E and F summarize the results of the survey. In marking the inspection check off sheets, the indication under "Condition" is based on the following:

- S = Condition is satisfactory for the facility to safely drydock a ship of the certified docking capacity.
- U = Condition is unsatisfactory and makes the facility unsafe to drydock a ship of the certified docking capacity.
- M = Condition is marginal. This rating is used for an item that is unsatisfactory but by itself does not make the facility unsafe to drydock a ship of the certified capacity. A number of such items can, as a group, make the dock unsafe. The rating is used also for items that are barely satisfactory within a five-year interval unless corrected.
- N/A = Not Applicable

Remarks and/or Notes are provided to explain all U and M markings.

Heger Dry Dock, Inc. August, 2016

# APPENDIX A

# RESUME OF SURVEYOR

# Resume for Waleed Sayed, P.E.

- Dry Dock Engineer -

wally@hegerdrydock.com www.hegerdrydock.com

## **Experience:**

## Heger Dry Dock, Inc., Holliston, MA 7/2007-Present

Dry Dock Engineer, Safety Manager

Primary responsibilities as Dry Dock Engineer are in support of Heger's maritime clientele, both Naval and commercial, in the various aspects of design, inspection and certification of dry dock facilities. Design responsibilities include longitudinal and transverse bending calculations for floating dry docks, as well as structural design and analysis of dry dock support equipment. Other design duties support the launching and dry docking of ships and submarines by determining dry dock and launch way loading, as well as ship stability/righting arm calculations. Customized programs are written in order to serve each clients unique circumstances and specific requests. On-site surveys are conducted in accordance with US Naval, Coast Guard and commercial standards in order to verify compliance prior to issuing dock rated certifications. This includes facility testing and compilation and interpretation of UT readings in order to calculate actual load capacities. Additionally, provide dry dock incident response with post-incident investigation, including damage surveys, procedural review and incident mitigation.

Secondary responsibilities as Safety Manager include the development and implementation of an in-house safety training program. In compliance with OSHA standards, the training program includes confined space entry, fire safety, fall protection and hazard communication.

## Metro Machine Corp., Norfolk, VA 5/2001-6/2007

Design Engineer, Asst. Dock Master

Primary responsibilities as Design Engineer supported Metro's Production Department. This included systems analyses of existing facility/utility equipment, custom design of new facility equipment as well as R&D. Additional support was provided as Rigging/Heavy Lift Engineer, responsible for coordinating all critical heavy lifts with the Rigging Foreman. This included full structural analysis in addition to designing engineering custom lifting rigs and lugs to facilitate lifting operations.

Accepted into Metro's Dockmaster Training program in order to gain the practical experience necessary to become a NAVSEA certified Dockmaster/Facilities Operation Supervisor (FOS). This included a working knowledge of graving and floating dock operations, ship handling methods and procedures, as well as dock loading and ship stability/righting arm calculations. Assigned as Lead Engineer responsible for troubleshooting and programming a Siemens Programmable Logic Controller (PLC) associated with a dry dock ship hauling system. This system is designed to control, haul and center a ship within the dry dock during docking evolutions.

#### Education:

#### Old Dominion University, Norfolk, VA, US 5/2001

• Bachelor of Science in Mechanical Engineering with an emphasis on mechanical design, and a minor in Engineering Management.

#### Lloyd's Maritime Academy and North Kent College National Maritime Training Centre, Gravesend, Kent, UK 1/2016

• Diploma in Marine Surveying with specialism in Non-Liquid Cargo Surveys and Marine Engineering Surveying.

#### Affiliations:

• AISC, American Institute of Steel Construction

#### Skills:

- SAP 2000 Finite Element Analysis (FEA)
- OSHA Safety Training
- General Hydrostatics (GHS)
- MS Office; Word, Excel, etc.
- MS Project 98
- AutoCAD, Mechanical Desktop, Inventor

#### **Additional Information:**

- Registered Professional Civil/Structural Engineer: Alabama License# 35117, Alaska License# CE-101104, Connecticut License# 30973, Florida License# 79476; Maine License# 13869; Maryland License# 49049; Massachusetts License# 51548; Mississippi License# 26386; Oregon License# 90643PE, Texas License# 120873; Virginia License# 0402054927; Washington License# 52581.
- Current certification for OSHA Course #7615 10-hour Maritime: Shipyard Employment.
- Current certification for OSHA Course #2264: Permit-Required Confined-Space Entry.
- Current First Aid/CPR/AED
- Current Fall Arrest Hazard Protection
- Current TSA Transportation Worker Identification Card (TWIC).
- Passed NAVSEA's Dry Dock Safety Course, January 2005.
- Working knowledge of NAVSEA Ch. 997 and MIL-STD-1625, USCG STD SPEC 8634, ABS Rules for Steel Floating Dry Docks, and DNV Rules for Classification of Floating Dry Docks.
- Working knowledge of NSTM Chapter 582 and NAVFAC DM 26-6 for the mooring, towing and heavy lifting of vessels.
- Working knowledge of AWS D1.1 welding standards, ASME Y14.5M drafting standards, AISC design standards, and OSHA design requirements for facilities.
- Bauer Compressor certified compressor technician for breathing and industrial air, as well as nitrogen generation compressors.
- Press brake and shear training by Fabricators and Manufacturers Association, International.
- Weld geometry and joint configuration training by ARCET.

#### **Major Projects:**

#### American Society of Civil Engineers (ASCE), Coasts, Oceans, Ports and Rivers Institute (COPRI)

Co-author assisting with the development of ASCE Manuals and Reports on Engineering Practice No. 121, "Safe Operation and Maintenance of Dry Dock Facilities".

#### **BAE Systems Southeast, Jacksonville, FL**

Project Engineer responsible for conducting structural surveys of a 13,500 LT capacity US Navy self-docking floating dry dock in accordance with NAVSEA MIL-STD-1625.

#### **BAE Systems Southeast, Mobile, AL**

Project Engineer responsible for conducting survey of a 46,000 LT and 12,000 LT capacity steel floating dry dock in accordance with .

#### **BAE Systems Ship Repair, Norfolk, VA**

- Project Engineer responsible for conducting structural surveys of a 56,500 LT and 14,000 LT capacity steel floating dry docks in accordance with NAVSEA MIL-STD-1625.
- Provided rapid response support for LHA-class vessel damaged during drydocking. Developed support method for block removal and facilitation of fixed skeg repairs.

#### **General Dynamics - Electric Boat, Groton, CT**

- > Project Engineer for docking Caisson Gate #3 in a floating dock using a floating derrick to assist.
- Project Engineer providing guidance for NAVSEA certification during reconstruction of Graving Dock #1 and #2.
- Project Engineer responsible for conducting structural and operational surveys of three graving docks in accordance with NAVSEA MIL-STD-1625.

#### Guam Shipyard, Apra Harbor, Guam

- Dry Dock Engineer providing calculations, blocking plans and technical assistance for numerous dockings of MSC vessels in a steel floating dry dock.
- Technical on-site engineer during the salvage and recovery operation of a sunken 35,000 LT capacity dry dock.

#### Huntington Ingalls, Gulfport, MS

Project Engineer responsible for conducting on-hire, cargo, and off-hire surveys of transport barges for DDG-X components.

#### Keppel AmFELS, Brownsville, TX

Technical on-site engineer for docking and undocking numerous semi-submersible and jack-up oil rigs on a 37,000 LT capacity steel floating dry dock.

#### Keppel BrasFELS, Angra dos Reis, Brazil

- Technical on-site engineer during the testing and commissioning of a 30,000 LT steel floating dry dock.
- Technical on-site engineer for docking and conversion/jumboization of several Noble drill ships on a 30,000 LT capacity steel floating dry dock.

#### Melita Marine Group, Valetta, Malta

- Technical on-site engineer during the repair and refloat of a 5,000 LT capacity composite steel/concrete dry dock bottom damaged during heavy lift.
- Training Instructor: Administered Heger Dry Dock, Inc. Dock Master training course for dock crew and engineers employed by Melita Marine Group.

#### Metro Machine Corporation, Norfolk, VA

- Project/Heavy Lift Engineer for U.S. Navy FFG class emergency diesel generator and A/C plant upgrade installations.
- Project Engineer for design of an 80,000 gallon waste water collection and transfer system for a 40,000 LT capacity steel floating dry dock.
- Project Engineer responsible for conducting structural and operational surveys of a 40,000 LT capacity steel floating dry dock in accordance with NAVSEA MIL-STD-1625.

#### Military Sealift Command (MSC), Washington, D.C.

Provided rapid response support and forensic engineering services for auxiliary vessel damaged during drydocking. Investigated cause of damage and provided recommendations to prevent further occurrences.

#### North Florida Shipyard, Jacksonville, FL

- Project Engineer responsible for conducting structural and operational surveys of a 2,700 LT capacity concrete floating dry dock in accordance with USCG Standard Specification 8634.
- Dry Dock Engineer providing calculations, blocking plans and technical assistance for numerous dockings of USCG cutters in a 2.700 LT capacity concrete floating dry dock.
- Dry Dock Engineer providing calculations, blocking plans and technical assistance for numerous dockings of USCG cutters using a 600 LT capacity Travel Lift.

#### **Oman Drydock Co., Duqm, Oman**

Project Engineer responsible for conducting structural and operational surveys of two 1500-ft graving docks in accordance with USCG SFLC STD 8634.

#### Portsmouth Naval Shipyard, Kittery, ME

- > Project Manager for the design, build and installation of Caisson #2.
- Project Manager for the design of Caisson #3.

#### SENESCO, North Kingstown, RI

Project Engineer responsible for conducting surveys of a 4,500 LT capacity steel floating dry dock in accordance with USCG Standard Specification 8634.

#### US Naval Academy, Annapolis, MD

Project Engineer responsible for designing a custom keel and side block support system for YP-class training vessels lifted with a 600 LT capacity Travel Lift and blocked on-shore.

#### VIGOR Shipyards: Ketchikan, AK

- Project Engineer responsible for the commissioning of a newly built and delivered 2,500 LT steel floating dry dock.
- Project Engineer responsible for conducting structural and operational surveys of a 9,600 LT and 2,500 LT capacity steel floating dry docks in accordance with USCG Standard Specification 8634.

#### **VIGOR Shipyards: Portland, OR**

- Project Engineer responsible for conducting structural and operational surveys of 4 steel floating dry docks with capacities from 13,000 to 80,000 LT capacity in accordance with USCG Standard Specification 8634 and NAVSEA MIL-STD 1625.
- Project Engineer responsible for the structural, operational and light-weight survey, and commissioning of a newly built and delivered 80,000 LT steel floating dry dock.

#### VIGOR Shipyards: Seattle, WA

Project Engineer responsible for conducting structural surveys of an 18,000 LT capacity US Navy self-docking floating dry dock in accordance with NAVSEA MIL-STD-1625.

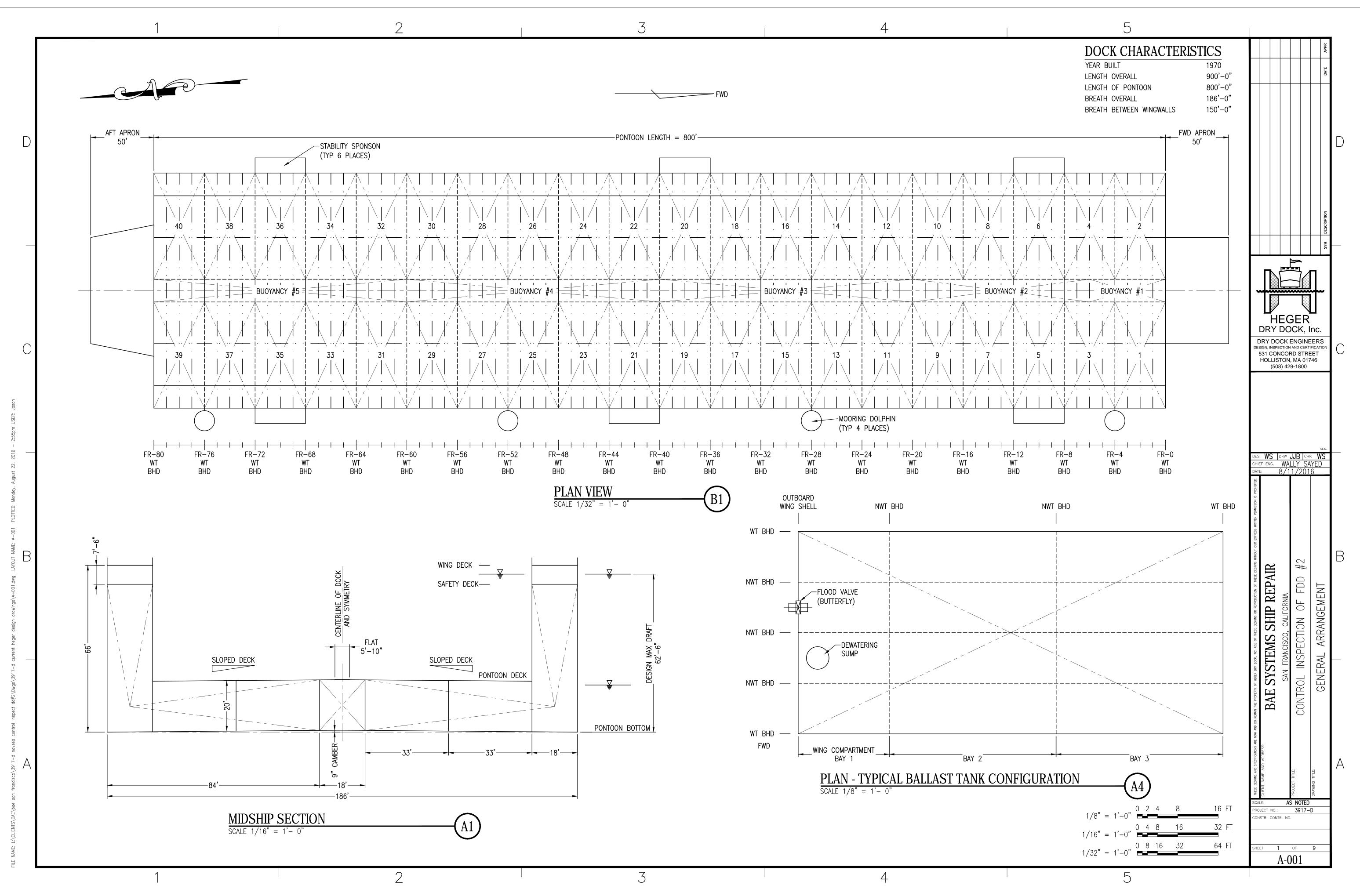
#### VT Halter Marine: Pascagoula, MS; Moss Point, MS

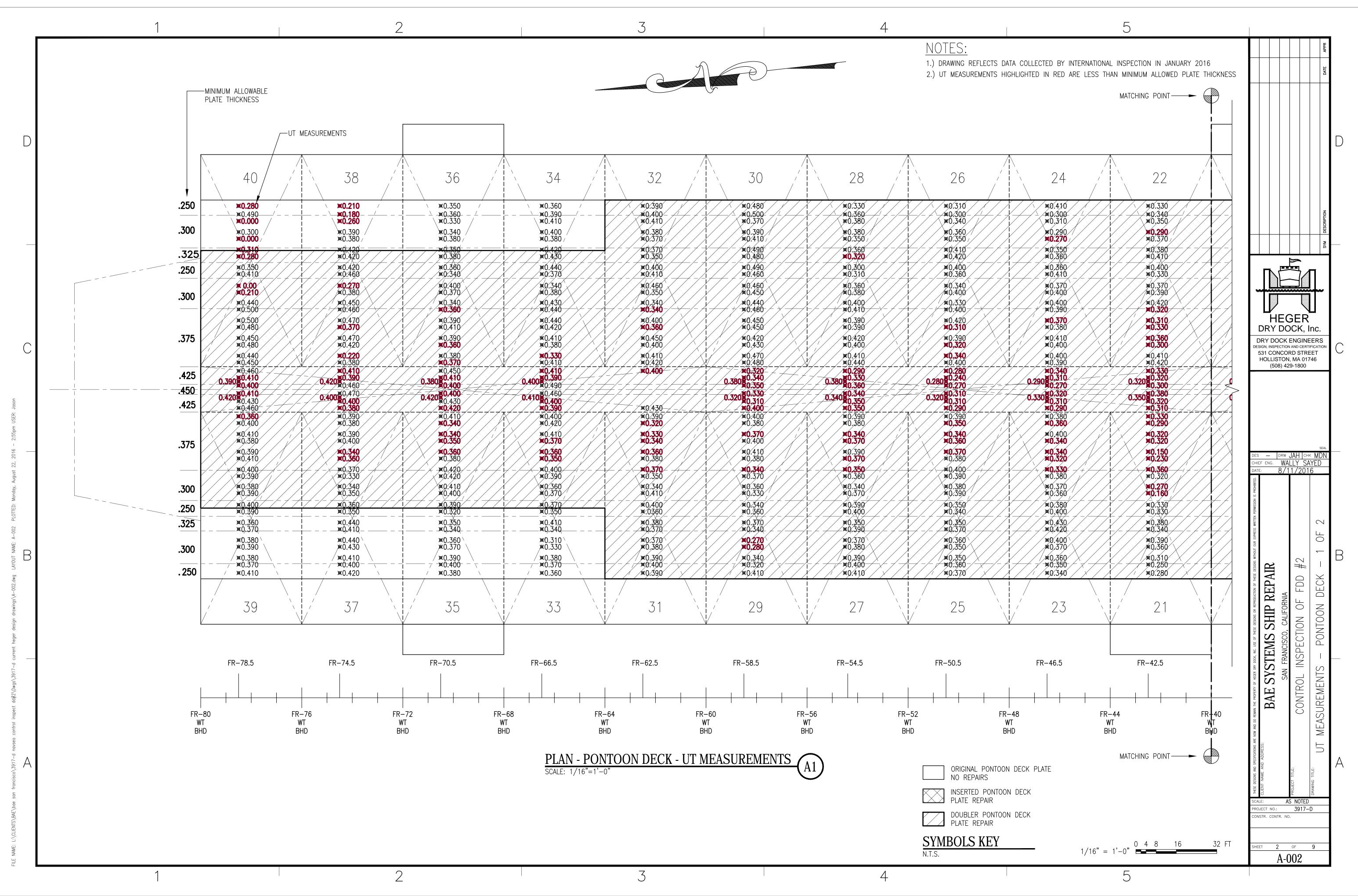
- Project Engineer responsible for conducting structural and operational surveys of a 12,000 MT steel floating dry dock in accordance with USCG Standard Specification 8634.
- Training Instructor: Administered Heger Dry Dock, Inc. Dock Master training course for dock crew and engineers employed by VT Halter.

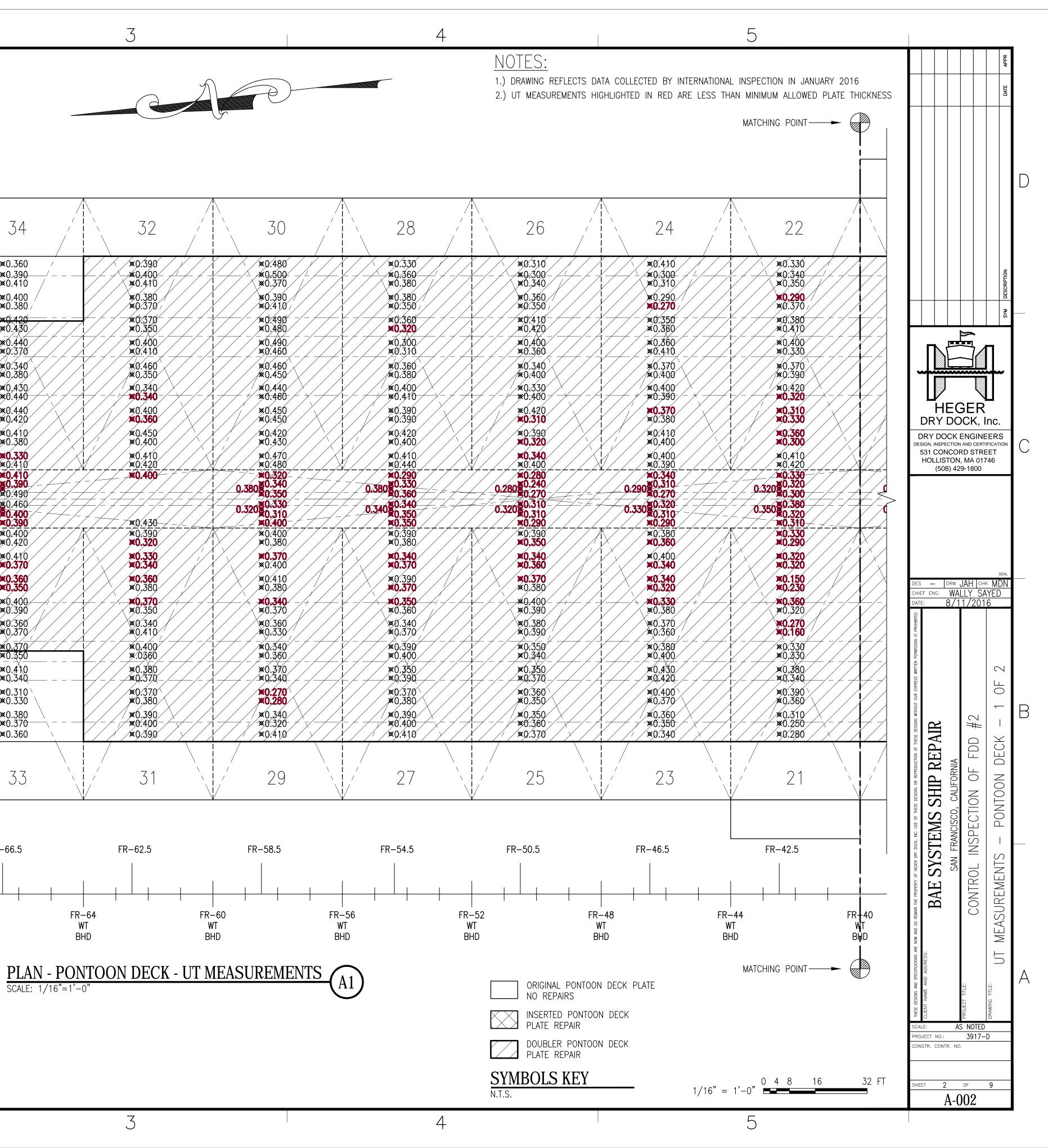
# APPENDIX B

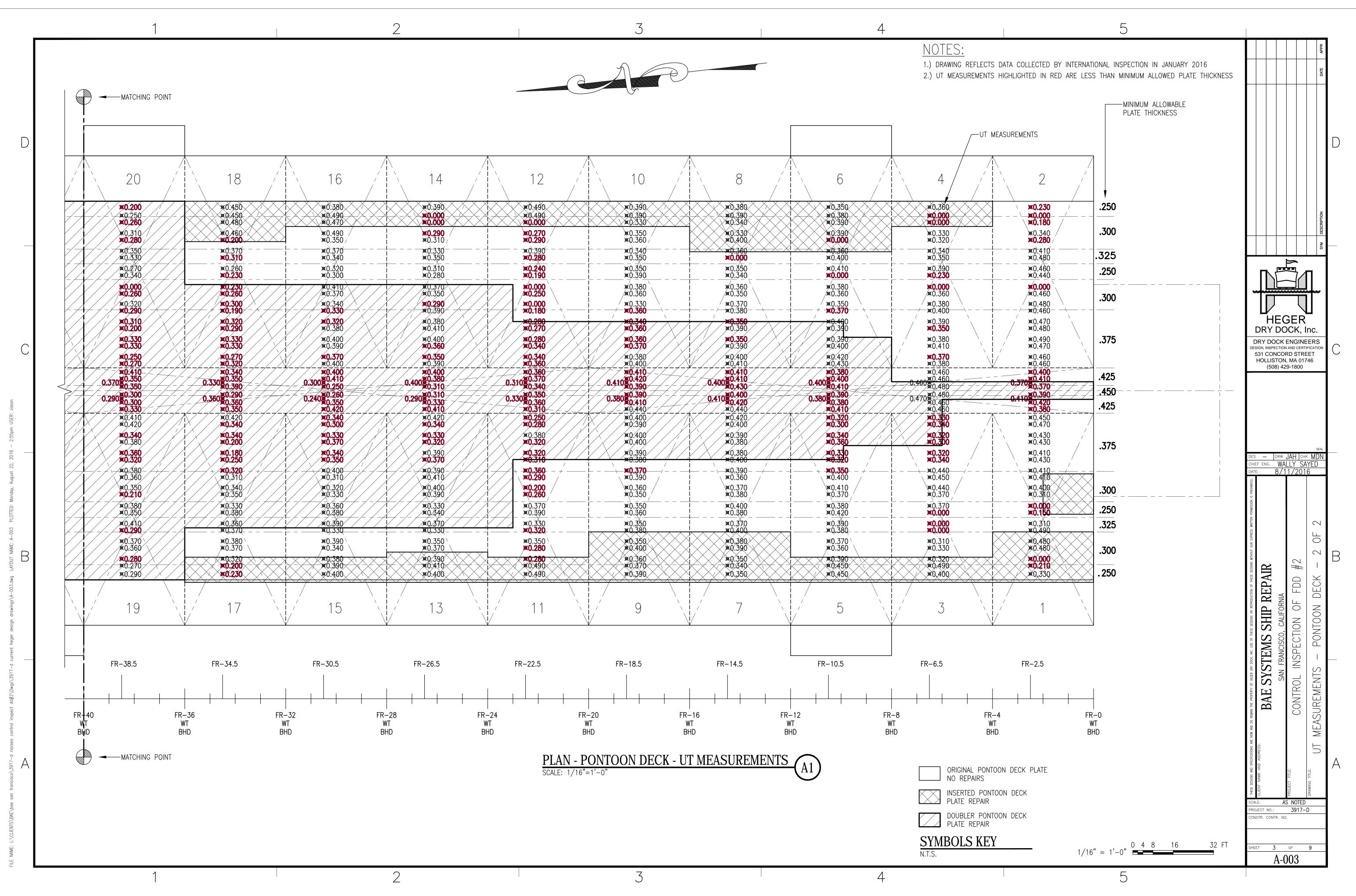
# GENERAL ARRANGEMENT and UT MEASUREMENT DRAWINGS

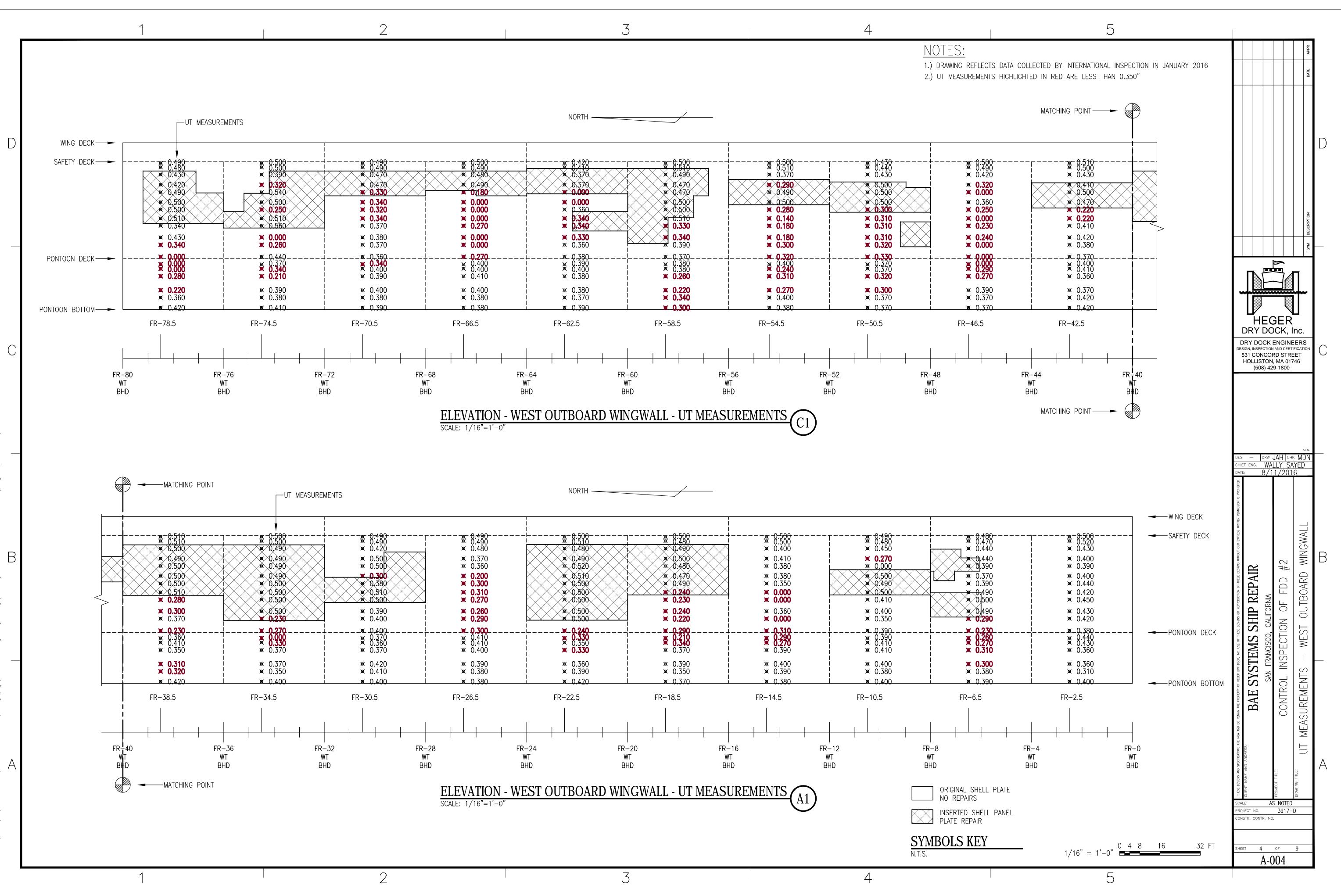
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ITEM	NO.	DRAWING TITLE						
1	A-001	GENERAL ARRANGEMENT						
2	A-002	UT MEASUREMENTS - PONTOON DECK - 1 OF 2						
3	A-003	UT MEASUREMENTS - PONTOON DECK - 2 OF 2						
4	A-004	UT MEASUREMENTS - WEST OUTBOARD WINGWALL						
5	A-005	UT MEASUREMENTS - EAST OUTBOARD WINGWALL						
6	A-006	UT MEASUREMENTS - WEST INBOARD WINGWALL						
7	A-007	UT MEASUREMENTS - EAST INBOARD WINGWALL						
8	A-008	UT MEASUREMENTS - PONTOON BOTTOM - 1 OF 2						
9	A-009	UT MEASUREMENTS - PONTOON BOTTOM - 2 OF 2						

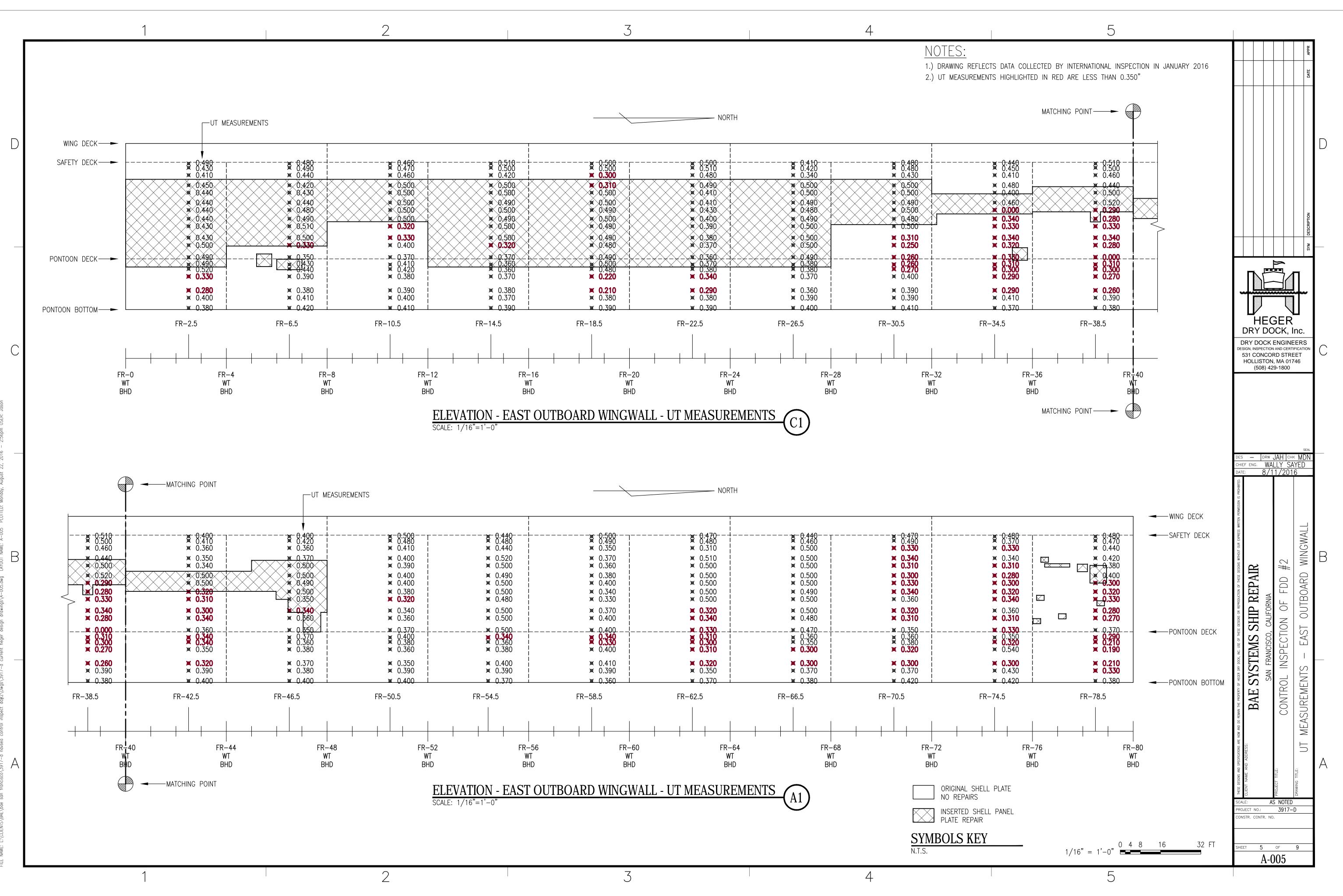


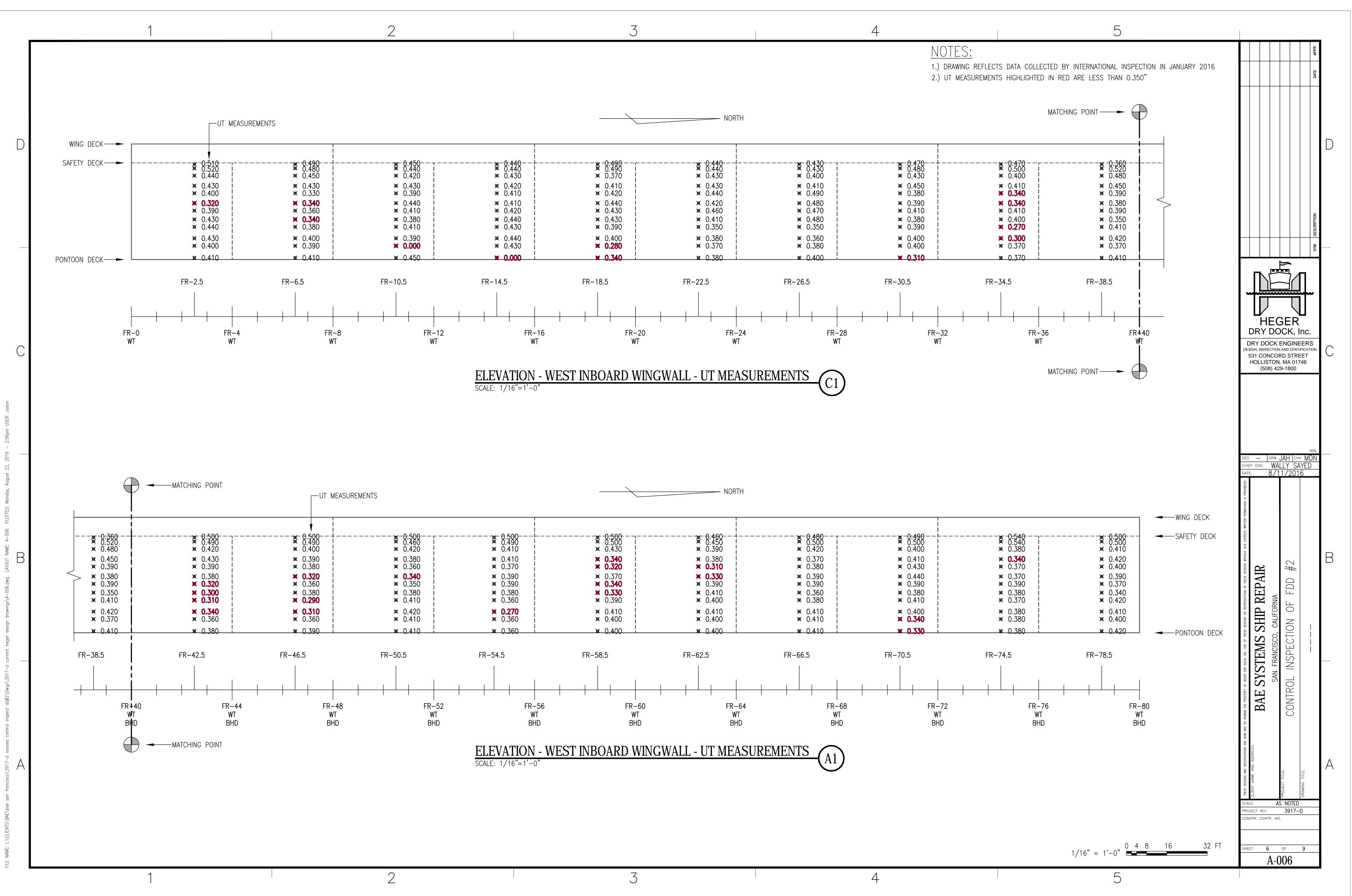


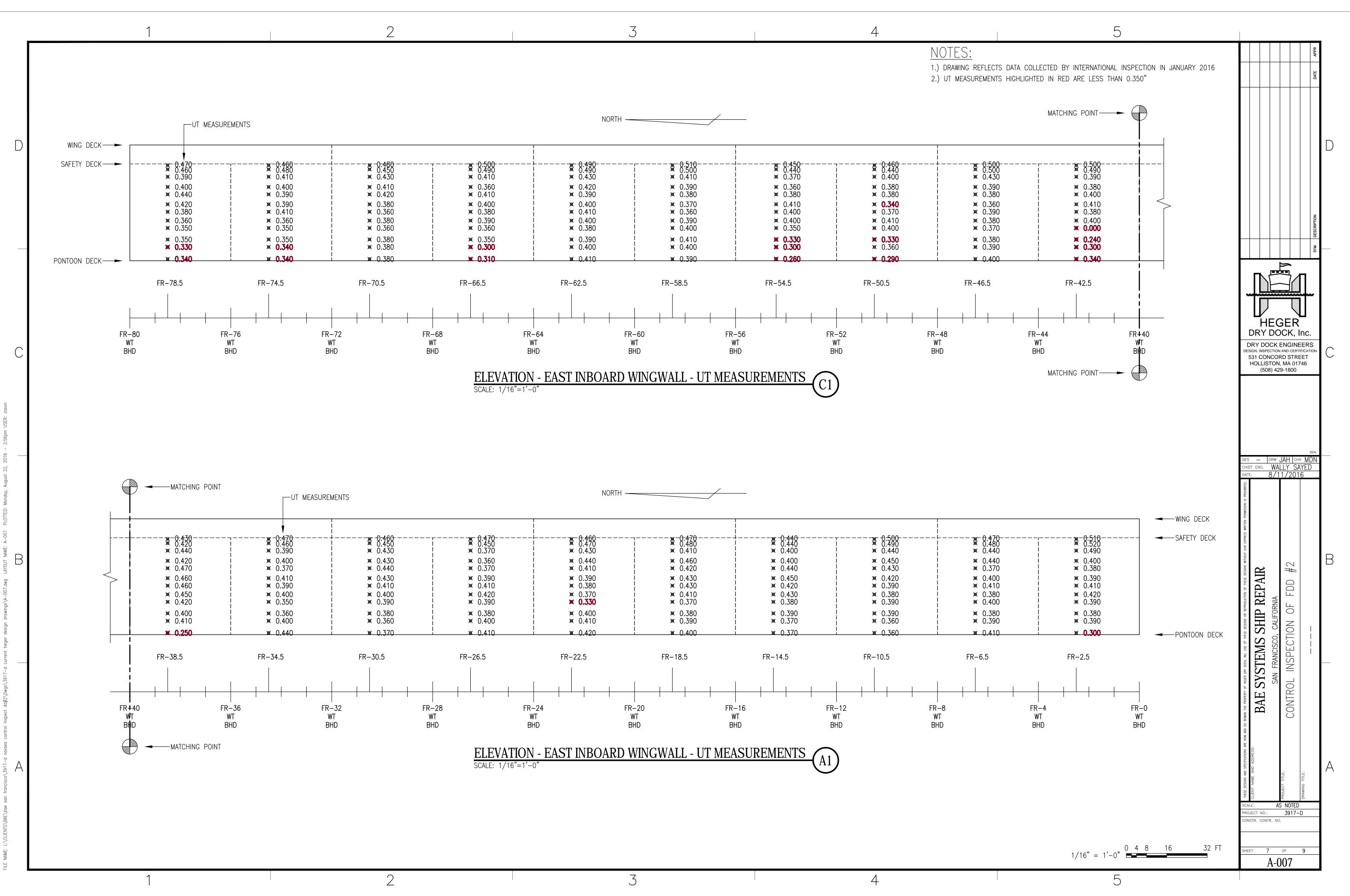


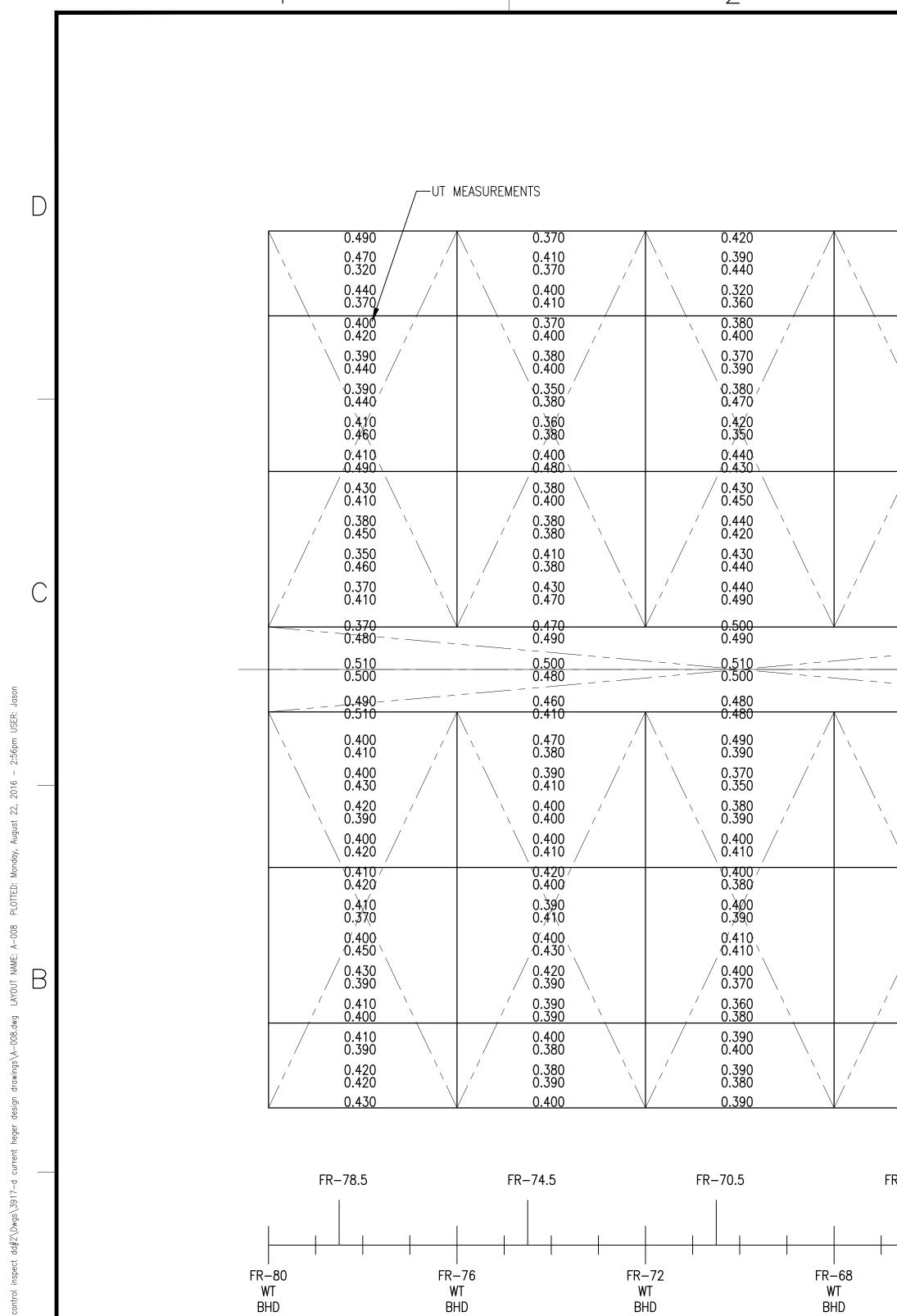




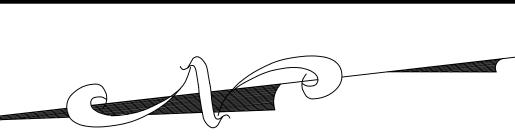




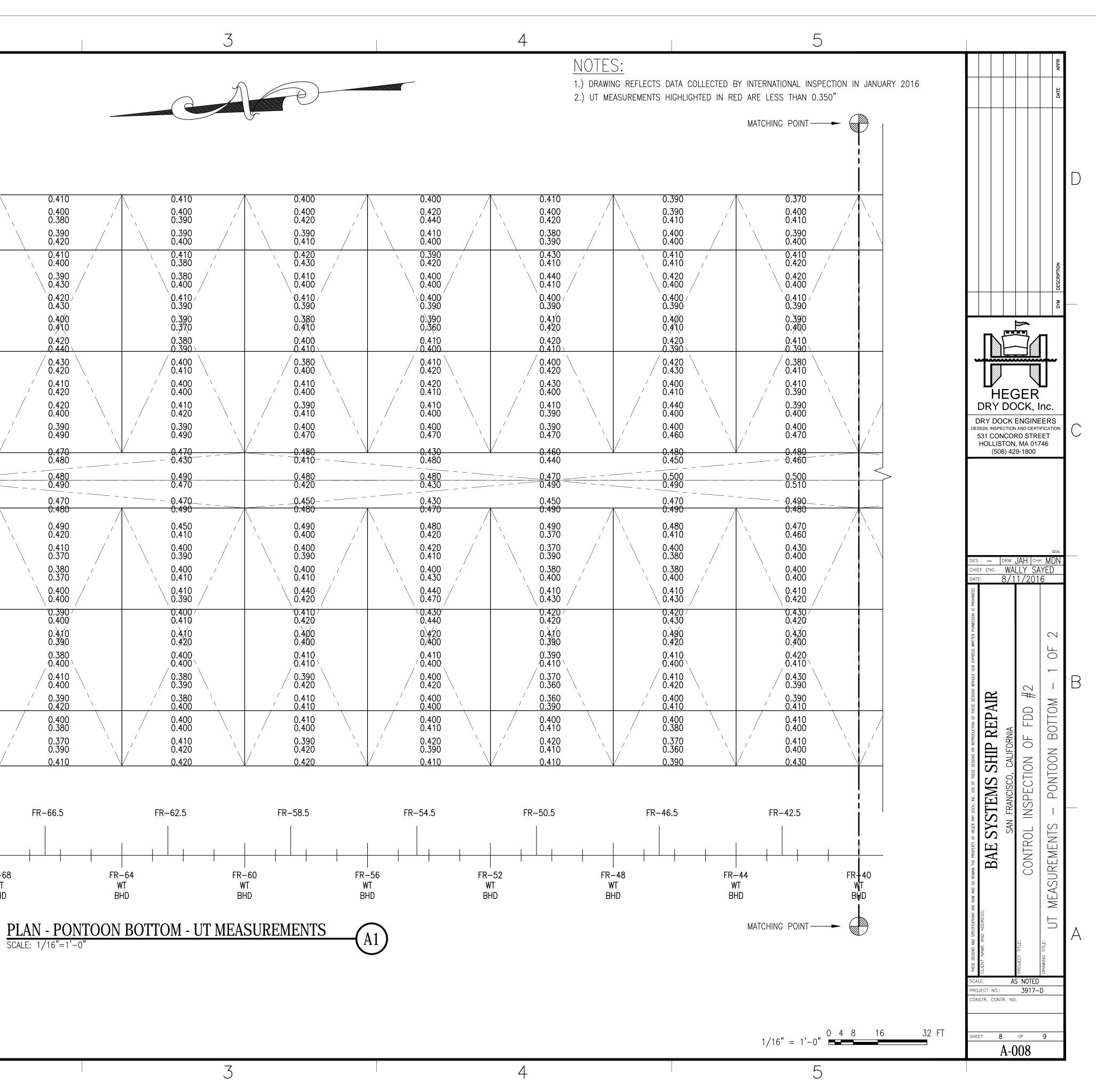


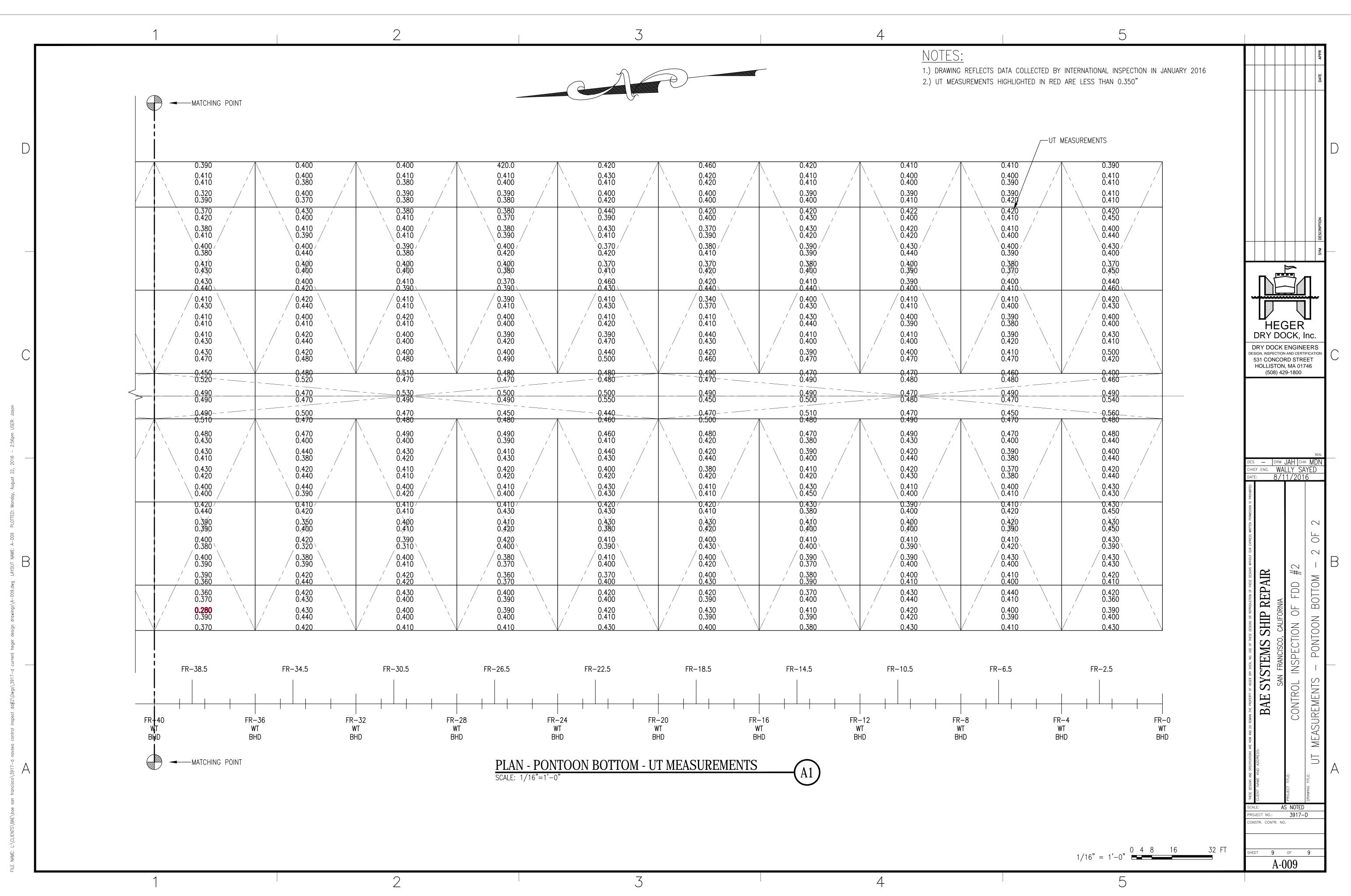


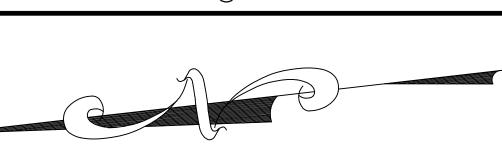
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# APPENDIX "C"

SELECTED PHOTOGRAPHS

## Control Inspection Floating Dry Dock No.2

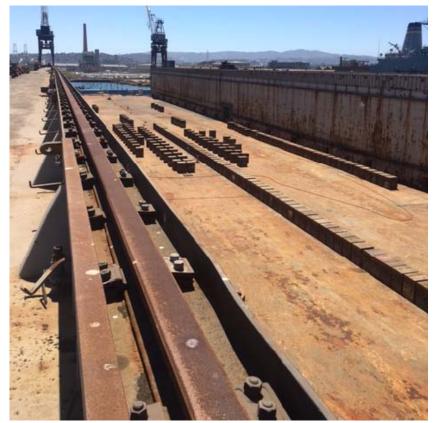
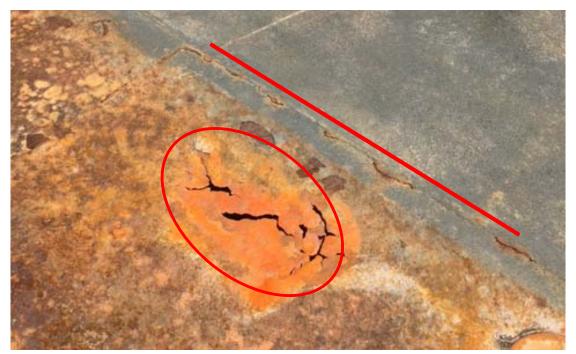


Photo 1: Drydock keel block set up.



**Photo 2:** Pontoon deck hole circled in red. Pontoon deck crack along transverse frame 21 outlined in red. Similar failure mode located along first longitudinal stiffener inboard of West wing between frames 6 & 7, 75 & 76, and 78 & 79.



**Photo 3:** Inboard wing shell has become disconnected from Pontoon Deck in numerous places along the docks length on the East and West wings. Above picture shows a typical corrosion hole along the weld seam of the pontoon deck and inboard wing shell.



**Photo 4:** Typical condition of pontoon ballast tanks. Paint failure with medium rust scale on hull structure, zinc anodes intact, and about 18 inches of mud throughout.



**Photo 5:** The extent of accumulated mud and sediment in the ballast tanks. Covered zinc annodes cannot adequately protect steel from deteriorating.



**Photo 6:** Looking up the wing compartment. Inspection and maintenance platform has extensive corrosion rendering it unsafe for use in any capacity.



Photo 7: Typical dewatering intake and piping.



Photo 8: Typical flood valve.

## Control Inspection Floating Dry Dock No.2



**Photo 9:** Typical condition of a buoyancy chamber. Paint failure and rust film beginning in lower 10 feet of tank with paint 70% intact in upper 10 feet.

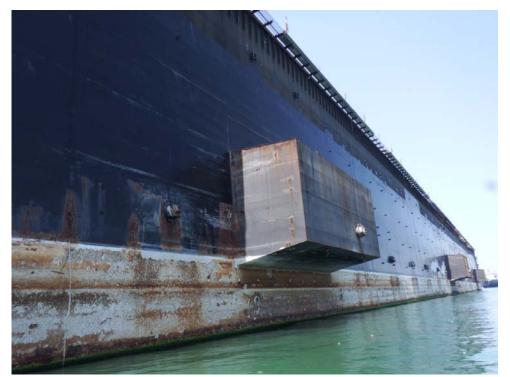
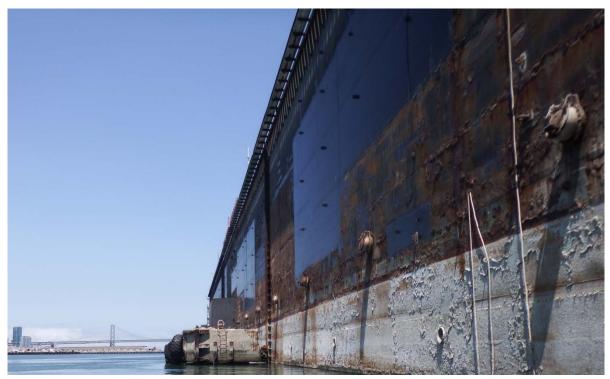


Photo 10: Typical condition of East outboard wing shell. Note the areas repaired and repainting of the shell.



**Photo 11:** Typical condition of West outboard wing shell. Note the areas repaired and repainting of the shell. Splash zone of the dock (zone from dock's typical operating freeboard to about 10' up) show signs of significant corrosion.



**Photo 13**: Example of the extensive amount of doubler plates found on the West outboard wing wall. Doubler plates server as a temporary water tight fix for a deteriorating plating structure.



**Photo 14:** Typical condition of the North Apron structure. Paint failure with heavy scaling and noticeable metal loss due to corrosion throughout.



**Photo 15:** Two buckled transverse beams in the North apron, East edge circled in red. End plate of apron has developed significant corrosion holes indicated by arrow.



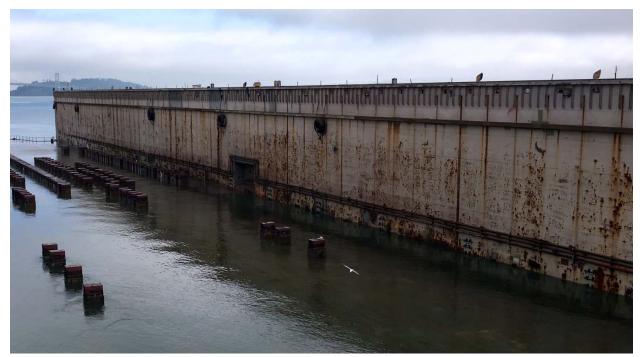
**Photo 16:** Internal outboard wing structure in way of renovated panel. The renovated panel is in good structural condition with paint 75% intact. Surrounding original plate is heavily scaled with no protective system.



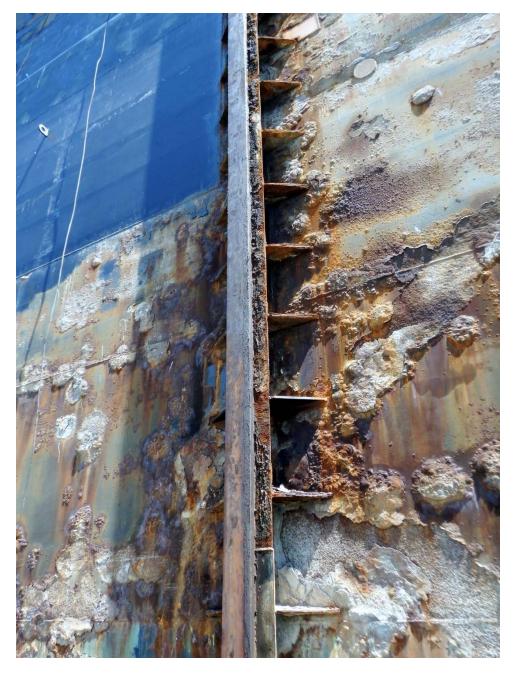
**Photo 17:** Pontoon Deck at Northwest corner of dry dock. Original plating has heavy pitting and rust film with isolated holes shown circled in red.



Photo 18: Typical condition of safety deck compartment.



**Photo 19:** Typical condition of inboard wing shell (East shown, West similar). Note the areas of local paint failure and corrosion.



**Photo 20:** Mooring spud located at dock frame 28. Vertical Tee structure is in satisfactory condition. Note the areas of local paint failure, corrosion and scaling on the support brackets and adjacent shell structure.

# APPENDIX "D"

CORROSION RATINGS

## **CORROSION RATING**

(In order of severity)

Light Rust Film	Rust colored staining of steel.
Rust colored staining of steel	Light rust powder on steel.
Heavy Rust Film	Heavy rust powder on steel.
Rust Bubbles	Small bubbles of rust in isolated areas of plate that has most of its protective coating still intact. Can vary from light, a few bubbles of rust over a large area, to heavy, and many bubbles almost touching.
Pitting	Small indentations (pits) in the plate that do not extend completely through the plate. Can vary from light, a few pits over a large area, to heavy, and many pits almost touching one another.
Light Rust Scale	Thin sheet of rust formed on steel, sheet can be broken off in small pieces with hammer. Minor loss of metal thickness from original.
Moderate Rust Scale	Thicker sheets of rust formed on steel, sheets can be broken off in larger pieces with hammer. Moderate loss of metal thickness from original.
Heavy Rust Scale	Multiple, thick sheets of rust formed on steel, sheets may have pulled away from steel under their own weight, large sheets of rust can be peeled away with hand. Significant loss of metal thickness from original.
Isolated Hole	Small hole in steel due to corrosion.
"Lace Curtain" Holes	Large number of small to medium size holes in plate creating a "lace curtain" effect.
Complete wastage	Large holes in plate or structural member with significant portion gone.

## <u>APPENDIX E</u>

STRUCTURAL CONTROL INSPECTION NAVSEA CHECK OFF SHEETS

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 1</u>

Sheet No. <u>1</u> of <u>47</u> Date <u>August 12, 2016</u>

REC	UE	NC	Y		CO	NDIT	ON	REMARKS
SA				ITEMS INSPECTED	S	U	M	(Additional Remarks Use Other Side)
				BASIC STRUCTURE				
				PONTOON TRANSV TRUSSES OR FRAMES	Х			
				PONTOON INTER TRANSV FRAMES	Х			
				WING WALL TRANSV TRUSSES OR FRAMES	Х			
				PONTOON COL'S ON CL	Х			
				BOTTOM PLATING	Х			
				PONTOON AND GIRDER	Х			
				BOTTOM AND GIRDER	Х			
				BOTTOM LONGITUDINALS	Х			
				PONTOON DECK LONG MEMBERS	Х			
				PLATING WT BHD NO.			Х	Hole @ frame 0 2ft below pontoon deck. See report.
				FRAMING WT BHD NO.	Х			
				PLATING SWASH BHD			Х	Hole @ frame 1 2 ft above pontoon bottom. See report
				FRAMING SWASH BHD	Х			
				BUOYANCY CHAMBER PLATING	Х			
				SIDES				
				SHELL PLATING ABOVE WATERLINE	X			
				SHELL PLATING BELOW WATERLINE	Х			
				WING WALLS				
				PLATING			Х	Hole in the inboard wing shell. See report.
				LONGITUDINALS	X			
				REINFORCEMENT OF ATTACHMENTS	Х			
				FASTENING OF ATTACHMENTS	Х			
				SHELL PLATING BELOW WL				
				PONTOON FRAMING	Х			
				WING WALL FRAMING	Х			
				REINFORCEMENT FOR ATTACHMENTS	Х			
				PONTOON DECK				
				PLATING			Х	Hole in plating. See report.
				FRAMING	Х			
				REINFORCEMENT FOR ATTACHMENTS	Х			
				FASTENING OF ATTACHMENTS	Х			
				LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 2</u>

Sheet No. <u>2</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
F۴	REQ	UE	ENC	Y	ITEMS INSPECTED	CO	NDITI	ON	REMARKS
А	SA	Q	۱	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	X			
					PLATING WT BHD NO.			Х	HOLES IN THE END WT BHD FR 0 @ WATERLINE
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	X			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE	Х			
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING	X			
					LONGITUDINALS	X			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	X			
					PONTOON DECK				
					PLATING			Х	Holes in plating. See report.
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

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- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 3</u>

Sheet No. <u>3</u> of <u>47</u> Date <u>August 12, 2016</u>

REQ	UE	NC	Y		CO	NDIT	ON	REMARKS
SA				ITEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)
				BASIC STRUCTURE				
				PONTOON TRANSV TRUSSES OR FRAMES	Х			
				PONTOON INTER TRANSV FRAMES	Х			
				WING WALL TRANSV TRUSSES OR FRAMES	Х			
				PONTOON COL'S ON CL	Х			
				BOTTOM PLATING	Х			
				PONTOON AND GIRDER	Х			
				BOTTOM AND GIRDER	Х			
				BOTTOM LONGITUDINALS	Х			
				PONTOON DECK LONG MEMBERS	Х			
				PLATING WT BHD NO.	Х			
				FRAMING WT BHD NO.	Х			
				PLATING SWASH BHD			Х	Holes in the bulkhead connection, bay 2. See report
				FRAMING SWASH BHD	Х			
				BUOYANCY CHAMBER PLATING	Х			
				SIDES				
				SHELL PLATING ABOVE WATERLINE			Х	Holes in outboard wing shell, see report.
				SHELL PLATING BELOW WATERLINE	Х			
				WING WALLS				
				PLATING			Х	Holes in inboard wing shell, see report.
				LONGITUDINALS	Х			
				REINFORCEMENT OF ATTACHMENTS	Х			
				FASTENING OF ATTACHMENTS	Х			
				SHELL PLATING BELOW WL				
				PONTOON FRAMING	Х			
				WING WALL FRAMING	Х			
				REINFORCEMENT FOR ATTACHMENTS	Х			
				PONTOON DECK				
				PLATING			Х	Holes in the pontoon deck, see report.
				FRAMING	Х			
				REINFORCEMENT FOR ATTACHMENTS	Х			
				FASTENING OF ATTACHMENTS	Х			
				LONGITUDINALS	Х			

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- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 4</u>

Sheet No. <u>4</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	EQ	UE	NC	Ϋ́	ITEMS INSPECTED	CO	NDITI	ON	REMARKS		
А	SA	Q	М	W		S	U	Μ	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Hole in the outboard shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х			Crack in stiffener. See report.		

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 5</u>

Sheet No. <u>5</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	REQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>		
А	SA	Q	۱M	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes throughout the tank. See report.		
		1		1	FRAMING	Х					
		1		1	REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

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- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. <u>DD #2 TANK 6</u>

Sheet No. <u>6</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDITI	ON	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

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- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 7</u>

Sheet No. <u>7</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
FR	EQ	UE	NC	Ϋ́	ITEMS INSPECTED	CO	NDIT	ION	REMARKS			
А	SA	Q	М	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING			Х	Hole in the inboard wing shell.			
					LONGITUDINALS	X						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	X						
					PONTOON DECK							
					PLATING	Х		Х	Holes in the pontoon deck. See report.			
				1	FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

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- 3 / For each bulkhead.

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 8</u>

Sheet No. <u>8</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	REQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>		
А	SA	Q	۱M	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	Х					
		ľ			REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

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- 3 / For each bulkhead.

Wald Soft

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#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 9</u>

Sheet No. <u>9</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
	EQ				ITEMS INSPECTED		NDITI	ON	REMARKS
А	SA	Q	۱) M	W		S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	X			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE	Х			
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Holes in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING			Х	Holes in the pontoon deck. See report.
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

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- 3 / For each bulkhead.

Wald Soft

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REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 10</u>

Sheet No. <u>10</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	REQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>		
А	SA	Q	۱M	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	Х					
		ľ			REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 11</u>

Sheet No. <u>11</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
F۴	REQ	U	ENC	Y		CO	NDITI	ON	<u>REMARKS</u>
А	SA	C	۹	W	ITEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Holes in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING			Х	Holes in the pontoon deck. See report.
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 12</u>

Sheet No. <u>12</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	REQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	X					
					BOTTOM LONGITUDINALS	X					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	X					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	X					
					BUOYANCY CHAMBER PLATING	X					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	X					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	X					
					REINFORCEMENT FOR ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 13</u>

Sheet No. <u>13</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	REQ				ITEMS INSPECTED		NDITI	ION	REMARKS		
А	SA	Q	Μ	W	TEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	X					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	X					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING			Х	Holes in the inboard wing shell. See report.		
					LONGITUDINALS	X					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	X					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	X			Missing transverse stiffener. See report.		
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 14</u>

Sheet No. <u>14</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	REQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	X					
					BOTTOM LONGITUDINALS	X					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	X					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	X					
					BUOYANCY CHAMBER PLATING	X					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	X					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	X					
					REINFORCEMENT FOR ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

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S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 15</u>

Sheet No. <u>15</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING			Х	Holes in the inboard wing shell. See report.		
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING	Х					
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

hald for

Signature of Inspector Heger Dry Dock, Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 16</u>

Sheet No. <u>16</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	REQ				ITEMS INSPECTED		NDITI	ION	REMARKS		
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	X					
					REINFORCEMENT FOR ATTACHMENTS	X					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

hald Safe

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 17</u>

Sheet No. <u>17</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
	EQ				ITEMS INSPECTED	CO	NDIT	ION	REMARKS
А	SA	C	ΩM	W		S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Holes in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

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- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock, Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 18</u>

Sheet No. <u>18</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDITI	ON	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х			Scoured @ scallop location. See report.		
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING			Х	Holes in the inboard wing shell. See report.		
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING			Х	Holes in the pontoon deck. See report.		
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 19</u>

Sheet No. <u>19</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
			ENC		ITEMS INSPECTED		NDITI	ON	REMARKS
А	SA	C	ΩM	W	TIEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Hole in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Hole in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			Missing transverse stiffener. See report.
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 20</u>

Sheet No. <u>20</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
			ENC		ITEMS INSPECTED		NDITI		<u>REMARKS</u>
А	SA	C	ΩM	W		S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE	Х			
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Hole in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 21</u>

Sheet No. <u>21</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
			ENC		ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>
А	SA	C	ΩM	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Holes in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
		1			REINFORCEMENT FOR ATTACHMENTS	X			
		T			FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

#### SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 TANK 22</u>

Sheet No. <u>22</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	EQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING	Х					
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 23</u>

Sheet No. <u>23</u> of <u>47</u> Date <u>August 12, 2016</u>

FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING			Х	Holes in the inboard wing shell. See report.		
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING	Х					
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector Heger Dry Dock, Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 24</u>

Sheet No. <u>24</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List												
	EQ				ITEMS INSPECTED	CO	NDITI	ION	REMARKS			
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.			
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING			Х	Holes in the inboard wing shell. See report.			
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 25</u>

Sheet No. <u>25</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List									
	REQ				ITEMS INSPECTED		NDITI	ON	REMARKS	
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)	
					BASIC STRUCTURE					
					PONTOON TRANSV TRUSSES OR FRAMES	Х				
					PONTOON INTER TRANSV FRAMES	Х				
					WING WALL TRANSV TRUSSES OR FRAMES	Х				
					PONTOON COL'S ON CL	Х				
					BOTTOM PLATING	Х				
					PONTOON AND GIRDER	Х				
					BOTTOM AND GIRDER	Х				
					BOTTOM LONGITUDINALS	Х				
					PONTOON DECK LONG MEMBERS	Х				
					PLATING WT BHD NO.	Х				
					FRAMING WT BHD NO.	Х				
					PLATING SWASH BHD	Х				
					FRAMING SWASH BHD	Х				
					BUOYANCY CHAMBER PLATING	Х				
					SIDES					
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.	
					SHELL PLATING BELOW WATERLINE	Х				
					WING WALLS					
					PLATING	Х				
					LONGITUDINALS	Х				
					REINFORCEMENT OF ATTACHMENTS	Х				
					FASTENING OF ATTACHMENTS	Х				
					SHELL PLATING BELOW WL					
					PONTOON FRAMING	Х				
					WING WALL FRAMING	Х				
					REINFORCEMENT FOR ATTACHMENTS	Х				
					PONTOON DECK					
					PLATING	Х				
					FRAMING	Х				
					REINFORCEMENT FOR ATTACHMENTS	Х				
					FASTENING OF ATTACHMENTS	Х				
					LONGITUDINALS	Х				

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 26</u>

Sheet No. <u>26</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>			
А	SA	G	ΩM	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING	Х						
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 27</u>

Sheet No. <u>27</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
			ENC		ITEMS INSPECTED	CO	NDITI	ON	REMARKS
А	SA	C	۹	W		S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING			Х	Holes in the inboard wing shell. See report.
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock, Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 28</u>

Sheet No. <u>28</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	EQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>		
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE	Х					
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING	Х					
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 29</u>

Sheet No. <u>29</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	.ist	
	EQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>
А	SA	Q	۱	W		S	U	Μ	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE			Х	Extensive holes in the outboard wing shell. See report.
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING	Х			
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
		1			REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 30</u>

Sheet No. <u>30</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspectio	n Chec	koff L	ist	
	EQ				ITEMS INSPECTED	CO	NDITI	ON	<u>REMARKS</u>
А	SA	C	۹M	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)
					BASIC STRUCTURE				
					PONTOON TRANSV TRUSSES OR FRAMES	Х			
					PONTOON INTER TRANSV FRAMES	Х			
					WING WALL TRANSV TRUSSES OR FRAMES	Х			
					PONTOON COL'S ON CL	Х			
					BOTTOM PLATING	Х			
					PONTOON AND GIRDER	Х			
					BOTTOM AND GIRDER	Х			
					BOTTOM LONGITUDINALS	Х			
					PONTOON DECK LONG MEMBERS	Х			
					PLATING WT BHD NO.	Х			
					FRAMING WT BHD NO.	Х			
					PLATING SWASH BHD	Х			
					FRAMING SWASH BHD	Х			
					BUOYANCY CHAMBER PLATING	Х			
					SIDES				
					SHELL PLATING ABOVE WATERLINE	Х			
					SHELL PLATING BELOW WATERLINE	Х			
					WING WALLS				
					PLATING	Х			
					LONGITUDINALS	Х			
					REINFORCEMENT OF ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					SHELL PLATING BELOW WL				
					PONTOON FRAMING	Х			
					WING WALL FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					PONTOON DECK				
					PLATING	Х			
					FRAMING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 31</u>

Sheet No. <u>31</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List										
	EQ				ITEMS INSPECTED		NDITI	ON	REMARKS		
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)		
					BASIC STRUCTURE						
					PONTOON TRANSV TRUSSES OR FRAMES	Х					
					PONTOON INTER TRANSV FRAMES	Х					
					WING WALL TRANSV TRUSSES OR FRAMES	Х					
					PONTOON COL'S ON CL	Х					
					BOTTOM PLATING	Х					
					PONTOON AND GIRDER	Х					
					BOTTOM AND GIRDER	Х					
					BOTTOM LONGITUDINALS	Х					
					PONTOON DECK LONG MEMBERS	Х					
					PLATING WT BHD NO.	Х					
					FRAMING WT BHD NO.	Х					
					PLATING SWASH BHD	Х					
					FRAMING SWASH BHD	Х					
					BUOYANCY CHAMBER PLATING	Х					
					SIDES						
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.		
					SHELL PLATING BELOW WATERLINE	Х					
					WING WALLS						
					PLATING	Х					
					LONGITUDINALS	Х					
					REINFORCEMENT OF ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					SHELL PLATING BELOW WL						
					PONTOON FRAMING	Х					
					WING WALL FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					PONTOON DECK						
					PLATING	Х					
					FRAMING	Х					
					REINFORCEMENT FOR ATTACHMENTS	Х					
					FASTENING OF ATTACHMENTS	Х					
					LONGITUDINALS	Х					

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 32</u>

Sheet No. <u>32</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED		NDITI	ON	<u>REMARKS</u>			
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING	Х						
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 33</u>

Sheet No. <u>33</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List												
	REQ				ITEMS INSPECTED		NDITI	ION	REMARKS			
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	X						
					BOTTOM LONGITUDINALS	X						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	X						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	X						
					BUOYANCY CHAMBER PLATING	X						
					SIDES							
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.			
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	X						
					REINFORCEMENT FOR ATTACHMENTS	X						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

hald for

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 34</u>

Sheet No. <u>34</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
FR	REQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	REMARKS			
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

hald for

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 35</u>

Sheet No. <u>35</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED		NDITI	ION	REMARKS			
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.			
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING			Х	Holes in the inboard wing shell. See report.			
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

hald for

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 36</u>

Sheet No. <u>36</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	<u>REMARKS</u>			
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Hole in the pontoon deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wale Sof

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 37</u>

Sheet No. <u>37</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED		NDITI	ON	REMARKS			
А	SA	Q	۱	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.			
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Fractured plating and holes. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 38</u>

Sheet No. <u>38</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED	CO	NDITI	ON	REMARKS			
А	SA	Q	۱	W	TIEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	Х			Bracket missing. See report.			
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 39</u>

Sheet No. <u>39</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
	EQ				ITEMS INSPECTED	CO	NDITI	ON	REMARKS			
А	SA	Q	Μ	W	TIEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE			Х	Holes in the outboard wing shell. See report.			
					SHELL PLATING BELOW WATERLINE							
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes and fracture in deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Will Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TANK 40</u>

Sheet No. <u>40</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
FR	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDIT	ION	<u>REMARKS</u>			
А	SA	Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)			
					BASIC STRUCTURE							
					PONTOON TRANSV TRUSSES OR FRAMES	Х						
					PONTOON INTER TRANSV FRAMES	Х						
					WING WALL TRANSV TRUSSES OR FRAMES	Х						
					PONTOON COL'S ON CL	Х						
					BOTTOM PLATING	Х						
					PONTOON AND GIRDER	Х						
					BOTTOM AND GIRDER	Х						
					BOTTOM LONGITUDINALS	Х						
					PONTOON DECK LONG MEMBERS	Х						
					PLATING WT BHD NO.	Х						
					FRAMING WT BHD NO.	Х						
					PLATING SWASH BHD	Х						
					FRAMING SWASH BHD	Х						
					BUOYANCY CHAMBER PLATING	Х						
					SIDES							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WATERLINE	Х						
					WING WALLS							
					PLATING	Х						
					LONGITUDINALS	Х						
					REINFORCEMENT OF ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					SHELL PLATING BELOW WL							
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					PONTOON DECK							
					PLATING			Х	Holes in the pontoon deck. See report.			
					FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					FASTENING OF ATTACHMENTS	Х						
					LONGITUDINALS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

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Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 Buoyancy 1</u>

Sheet No. <u>41</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List									
REQ				ITEMS INSPECTED		NDITI		REMARKS	
SA	Q	Μ	W		S	U	Μ	(Additional Remarks Use Other Side)	
				BASIC STRUCTURE					
				PONTOON TRANSV TRUSSES OR FRAMES	Х				
				PONTOON INTER TRANSV FRAMES	Х				
				WING WALL TRANSV TRUSSES OR FRAMES				N/A	
				PONTOON COL'S ON CL	Х				
				BOTTOM PLATING	Х				
				PONTOON AND GIRDER	Х				
				BOTTOM AND GIRDER	Х				
				BOTTOM LONGITUDINALS	Х				
				PONTOON DECK LONG MEMBERS	X				
				PLATING WT BHD NO.	Х				
				FRAMING WT BHD NO.	Х				
				PLATING SWASH BHD	Х				
				FRAMING SWASH BHD	X				
				BUOYANCY CHAMBER PLATING	X				
				SIDES				N/A	
				SHELL PLATING ABOVE WATERLINE				N/A	
				SHELL PLATING BELOW WATERLINE				N/A	
				WING WALLS				N/A	
				PLATING				N/A	
				LONGITUDINALS				N/A	
				REINFORCEMENT OF ATTACHMENTS				N/A	
				FASTENING OF ATTACHMENTS				N/A	
				SHELL PLATING BELOW WL					
	1	1		PONTOON FRAMING	Х				
				WING WALL FRAMING				N/A	
				REINFORCEMENT FOR ATTACHMENTS	Х				
				PONTOON DECK					
				PLATING	Х				
	1	1		FRAMING	Х				
1				REINFORCEMENT FOR ATTACHMENTS	Х	1			
	1	1		FASTENING OF ATTACHMENTS	Х				
				LONGITUDINALS	Х				

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 Buoyancy 2</u>

Sheet No. <u>42</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List									
REQ				ITEMS INSPECTED		NDITI		REMARKS	
SA	Q	Μ	W		S	U	Μ	(Additional Remarks Use Other Side)	
				BASIC STRUCTURE					
				PONTOON TRANSV TRUSSES OR FRAMES	Х				
				PONTOON INTER TRANSV FRAMES	Х				
				WING WALL TRANSV TRUSSES OR FRAMES				N/A	
				PONTOON COL'S ON CL	Х				
				BOTTOM PLATING	Х				
				PONTOON AND GIRDER	Х				
				BOTTOM AND GIRDER	Х				
				BOTTOM LONGITUDINALS	X				
				PONTOON DECK LONG MEMBERS	X				
				PLATING WT BHD NO.	X				
				FRAMING WT BHD NO.	Х				
				PLATING SWASH BHD	Х				
				FRAMING SWASH BHD	X				
				BUOYANCY CHAMBER PLATING	X				
				SIDES				N/A	
				SHELL PLATING ABOVE WATERLINE				N/A	
				SHELL PLATING BELOW WATERLINE				N/A	
				WING WALLS				N/A	
				PLATING				N/A	
				LONGITUDINALS				N/A	
				REINFORCEMENT OF ATTACHMENTS				N/A	
				FASTENING OF ATTACHMENTS				N/A	
				SHELL PLATING BELOW WL					
	1	1		PONTOON FRAMING	Х				
				WING WALL FRAMING				N/A	
				REINFORCEMENT FOR ATTACHMENTS	Х				
				PONTOON DECK					
				PLATING	Х				
	1	1		FRAMING	Х				
1				REINFORCEMENT FOR ATTACHMENTS	Х				
	1	1		FASTENING OF ATTACHMENTS	Х				
				LONGITUDINALS	Х				

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 Buoyancy 3</u>

Sheet No. <u>43</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List									
	=								
REC				ITEMS INSPECTED		NDITI		REMARKS	
N SA	۱Q	Μ	W		S	U	М	(Additional Remarks Use Other Side)	
				BASIC STRUCTURE					
				PONTOON TRANSV TRUSSES OR FRAMES	X				
				PONTOON INTER TRANSV FRAMES	Х				
				WING WALL TRANSV TRUSSES OR FRAMES				N/A	
				PONTOON COL'S ON CL	Х				
				BOTTOM PLATING	Х				
				PONTOON AND GIRDER	X				
				BOTTOM AND GIRDER	Х				
				BOTTOM LONGITUDINALS	Х				
				PONTOON DECK LONG MEMBERS	Х				
				PLATING WT BHD NO.	Х				
				FRAMING WT BHD NO.	Х				
				PLATING SWASH BHD	Х				
				FRAMING SWASH BHD	Х				
				BUOYANCY CHAMBER PLATING	Х				
				SIDES				N/A	
				SHELL PLATING ABOVE WATERLINE				N/A	
				SHELL PLATING BELOW WATERLINE				N/A	
				WING WALLS				N/A	
				PLATING				N/A	
				LONGITUDINALS				N/A	
				REINFORCEMENT OF ATTACHMENTS				N/A	
				FASTENING OF ATTACHMENTS				N/A	
				SHELL PLATING BELOW WL					
		1		PONTOON FRAMING	X	<u> </u>			
		+		WING WALL FRAMING				N/A	
		+		REINFORCEMENT FOR ATTACHMENTS	X				
		1		PONTOON DECK		<u> </u>			
			1	PLATING	X				
		+		FRAMING	X				
		+		REINFORCEMENT FOR ATTACHMENTS	X				
		1		FASTENING OF ATTACHMENTS	X	<u> </u>			
	+	-			X	<u> </u>			

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- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. <u>DD #2 Buoyancy 4</u>

Sheet No. <u>44</u> of <u>47</u> Date <u>August 12, 2016</u>

Inspection Checkoff List									
REQ				ITEMS INSPECTED		NDITI			
SA	Q	Μ	W		S	U	Μ	(Additional Remarks Use Other Side)	
				BASIC STRUCTURE					
				PONTOON TRANSV TRUSSES OR FRAMES	Х				
				PONTOON INTER TRANSV FRAMES	Х				
				WING WALL TRANSV TRUSSES OR FRAMES				N/A	
				PONTOON COL'S ON CL	Х				
				BOTTOM PLATING	Х				
				PONTOON AND GIRDER	Х				
				BOTTOM AND GIRDER	Х				
				BOTTOM LONGITUDINALS	X				
				PONTOON DECK LONG MEMBERS	Х				
				PLATING WT BHD NO.	X				
				FRAMING WT BHD NO.	Х				
				PLATING SWASH BHD	Х				
				FRAMING SWASH BHD	Х				
				BUOYANCY CHAMBER PLATING	Х				
				SIDES				N/A	
				SHELL PLATING ABOVE WATERLINE				N/A	
				SHELL PLATING BELOW WATERLINE				N/A	
				WING WALLS				N/A	
				PLATING				N/A	
				LONGITUDINALS				N/A	
				REINFORCEMENT OF ATTACHMENTS				N/A	
				FASTENING OF ATTACHMENTS				N/A	
				SHELL PLATING BELOW WL					
				PONTOON FRAMING	Х				
				WING WALL FRAMING				N/A	
				REINFORCEMENT FOR ATTACHMENTS	Х				
				PONTOON DECK					
1	1			PLATING	Х				
1	1			FRAMING	Х				
	1			REINFORCEMENT FOR ATTACHMENTS	X				
			1	FASTENING OF ATTACHMENTS	X		1		
	1	1		LONGITUDINALS	X				

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

- $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.
- 3 / For each bulkhead.

Wald Soft

Signature of Inspector Heger Dry Dock,Inc. Firm

REVISED 7/24/12 TO SUIT DD#2

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 END SOUTH</u>

Sheet No. <u>45</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List											
FF	EQ	UE	NC	Y	ITEMS INSPECTED	CO	NDITI	ON	REMARKS			
А	SA	Q	Μ	W	TIEMIS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)			
					SOUTH EAST/ FWD PORT							
					ENDS							
					SHELL PLATING ABOVE WATERLINE	Х						
					SHELL PLATING BELOW WL	Х						
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						
					SOUTH WEST/ FWD STBD							
					ENDS							
					SHELL PLATING ABOVE WATERLINE	Х			Hole in the end watertight bulkhead @ WL.			
					SHELL PLATING BELOW WL	Х						
					PONTOON FRAMING	Х						
					WING WALL FRAMING	Х						
					REINFORCEMENT FOR ATTACHMENTS	Х						

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

Wald Sont Signature of Inspector

<u>Heger Dry Dock,Inc.</u> Firm

3 / For each bulkhead.

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. DD #2 END NORTH

Sheet No. <u>46</u> of <u>47</u> Date <u>August 12, 2016</u>

	Inspection Checkoff List												
FF	EQ	UEI	NC	Y	ITEMS INSPECTED	CO	NDITI	ON	<u>REMARKS</u>				
А	SA	Q	Μ	W	TIEWS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)				
					NORTH EAST/ AFT PORT								
					ENDS								
					SHELL PLATING ABOVE WATERLINE	Х							
					SHELL PLATING BELOW WL	Х							
					PONTOON FRAMING	Х							
					WING WALL FRAMING	Х							
					REINFORCEMENT FOR ATTACHMENTS	X							
					NORTH WEST/ AFT STBD								
					ENDS								
					SHELL PLATING ABOVE WATERLINE	Х							
					SHELL PLATING BELOW WL	Х							
					PONTOON FRAMING	Х							
					WING WALL FRAMING	Х							
					REINFORCEMENT FOR ATTACHMENTS	Х							

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

Wald Sont Signature of Inspector

<u>Heger Dry Dock,Inc.</u> Firm

3 / For each bulkhead.

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

# FACILITY NO. <u>DD #2 TOPSIDE</u>

Sheet No. <u>47</u> of <u>47</u> Date <u>August 12, 2016</u>

					Inspect	ion Chec	koff L	.ist	
F۴	EQ	UE	ENC	Y	ITEMS INSPECTED	CO	NDITI	ON	REMARKS
А	SA	Q	M	W		S	U	М	(Additional Remarks Use Other Side)
					TOP DECK EAST/ PORT				
					PLATING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			
					CRANE RAILS AND SUPPORTS	Х			
					CRANE RAIL BUMPER	Х			
					SAFETY DECK/ MACHINERY DECK				
					PLATING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			
					TOP DECK WEST/ STBD				
					PLATING	Х			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	Х			
					CRANE RAILS AND SUPPORTS	Х			
					CRANE RAIL BUMPER	Х			
					SAFETY DECK/ MACHINERY DECK				
					PLATING	X			
					REINFORCEMENT FOR ATTACHMENTS	Х			
					FASTENING OF ATTACHMENTS	Х			
					LONGITUDINALS	X			

A = Annual SA = Semi Annual Q = Quarterly M = Monthly W = Weekly

Wale Sand

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

# <u>APPENDIX F</u>

# MECHANICAL/ELECTRICAL CONTROL INSPECTION NAVSEA CHECK OFF SHEETS

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

#### Inspection Checkoff List

REQ	UEI	VC)	(		CO	NDITI	ON	REMARKS
SA	Q	М	W	ITEMS INSPECTED	S	U	Μ	(Additional Remarks Use Other Side)
				DEWATERING / FLOODING SYSTEMS	Х			
				MAIN DEWATERING PUMPS	Х			
				MOTORS FOR DEWATERING PUMPS	Х			
				MOTOR CONTROLLERS	Х			
				LUBRICATION	Х			
				PIPING	Х			
				DRAINAGE PUMPS				
				SUCTION VALVES & VALVE OPERATORS	Х			
				DISCHARGE VALVES & VALVE OPERATORS	Х			
				FLOODING VALVES & VALVE OPERATORS	Х			
				CHECK VALVES & VALVE OPERATORS				
				SLUICE VALVES & VALVE OPERATORS				
				CROSS CONNECTION VALVES & VALVE OPERATORS				No Cross Connects between tanks
				TANK LEVEL INDICATOR SYSTEM				Back up air compressor tested - OK
				DRAFT INDICATOR SYSTEM	Х			
				DEFLECTION DETECTION SYSTEM	Х			
				INCLINOMETERS	Х			
				POWER SYSTEMS				
				ENGINE GENERATOR SETS	Х			
				SHORE PWR FOR MAIN PWR SOURCE	Х			
				ELECT POWER DISTRIBUTION SYSTEM	Х			
				SHORE PWR FOR BACK-UP SOURCE	Х			
				COMMUNICATION SYSTEMS	Х			
				SOUND POWERED				
				DIAL TELEPHONE	Х			
				PUBLIC ADDRESS SYSTEM	Х			
				FIRE ALARM	Х			
				FIRE PROTECTION SYSTEM				BAE internally tests system
				FIRE PUMP	Х			on a quarterly basis.
				FIREMAIN	Х			
				FIRE STATIONS - HOSES, NOZZLES AND CONNECTIONS	Х			
				CO2 FIRE EXTINGUISHERS	Х		1	

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

 $\frac{3}{2}$  / For each bulkhead.

Whele Sage

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

ENCLOSURE\_\_\_\_\_

Floating Dry Dock (Mechanical/Electrical) Inspection Checkoff List \_\_\_\_\_

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

					Inspection	h Chec	koff L	.ist	
FR	EQI	JEI	NC	Y		CO	NDITI	ON	REMARKS
				W	DEWATERING PUMP INSPECTIONS	S	U	М	(Additional Remarks Use Other Side)
					No. 1	Х			
					No. 2	Х			
					No. 3	Х			
					No. 4	Х			
					No. 5	Х			
					No. 6	Х			
					No. 7	Х			
					No. 8	Х			
					No. 9	Х			
					No. 10	Х			
					No. 11	Х			
					No. 12	Х			
					No. 13	Х			
					No. 14	Х			
					No. 15	Х			
					No. 16	Х			
					No. 17	Х			
					No. 18	Х			
					No. 19	Х			
					No. 20	Х			

 $A = Annual \quad SA = Semi \ Annual \quad Q = Quarterly \quad M = \ Monthly \quad W = Weekly$ 

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

Will Just

Signature of Inspector Heger Dry Dock,Inc. Firm

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

					Inspection	on Checkoff List						
FRE	QL	JEN	VC)	Y		CO	NDITI	ON	REMARKS			
	SA Q M W			DEWATERING PUMP INSPECTIONS	S	U	М	(Additional Remarks Use Other Side)				
					No. 21	Х						
					No. 22	Х						
					No. 23	Х						
					No. 24	Х						
					No. 25	Х						
					No. 26	Х						
					No. 27	Х						
					No. 28	Х						
					No. 29	Х						
					No. 30	Х						
					No. 31	Х						
					No. 32	Х						
					No. 33	Х						
					No. 34	Х						
					No. 35	Х						
					No. 36	Х						
					No. 37	Х						
					No. 38	Х						
					No. 39	Х						
					No. 40	Х						

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S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

Wale Jog

Signature of Inspector Heger Dry Dock,Inc.\_ Firm

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

## Inspection Checkoff List

FR	EQI	JEN	٩C,	Y		CO	NDITI	ON	REMARKS
	SA				DEWATERING MOTOR INSPECTIONIONS	S	U	M	(Additional Remarks Use Other Side)
					No. 1	Х			
					No. 2	Х			
					No. 3	Х			
					No. 4	Х			
					No. 5	Х			
					No. 6	Х			
					No. 7	Х			
					No. 8	Х			
					No. 9	Х			
					No. 10	Х			
					No. 11	Х			
					No. 12	Х			
					No. 13	Х			
					No. 14	Х			
					No. 15	Х			
					No. 16	Х			
					No. 17	Х			
					No. 18	Х			
					No. 19	Х			
					No. 20	Х			

 $A = Annual \quad SA = Semi \ Annual \quad Q = Quarterly \quad M = \ Monthly \quad W = Weekly$ 

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

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Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

					Inspection	Inspection Checkoff List									
	FREQUENCY			DEWATERING MOTOR INSPECTIONIONS		NDITI		REMARKS							
А	SA	Q	М	W		S	U	М	(Additional Remarks Use Other Side)						
					No. 21	Х									
					No. 22	Х									
					No. 23	Х									
					No. 24	Х									
					No. 25	Х									
					No. 26	Х									
					No. 27	Х									
					No. 28	Х									
					No. 29	Х			Slight irregular noise.						
					No. 30	Х									
					No. 31	Х			Slight irregular noise.						
					No. 32	Х									
					No. 33	Х									
					No. 34	Х									
					No. 35	Х									
					No. 36	Х									
					No. 37	Х			Slight irregular noise.						
					No. 38	Х									
					No. 39	Х									

 $\label{eq:annual} A = Annual \quad SA = Semi \ Annual \quad Q = Quarterly \quad M = \ Monthly \quad W = Weekly$ 

No. 40

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

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Signature of Inspector Heger Dry Dock,Inc. Firm

ENCLOSURE\_\_\_\_\_

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## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

					Inspection	Chec	koff L	ist	
FR	FOI	IFI	NC	V		0	NDITI		REMARKS
	REQUENCY			FLOOD VALVES AND CONTROLLERS	S	U	M	(Additional Remarks Use Other Side)	
					No. 1	Х			
					No. 2	Х			
					No. 3	Х			
					No. 4	Х			Minor leak in flood valve.
					No. 5	Х			
					No. 6	Х			Minor leak in flood valve.
					No. 7	Х			
					No. 8	Х			Minor leak in flood valve.
					No. 9	Х			
					No. 10	Х			
					No. 11	Х			
					No. 12	Х			
					No. 13	Х			
					No. 14	Х			
					No. 15	Х			
					No. 16	Х			
					No. 17	Х			
					No. 18	Х			
					No. 19	Х			
					No. 20	Х			

 $A = Annual \quad SA = Semi \ Annual \quad Q = Quarterly \quad M = \ Monthly \quad W = Weekly$ 

S = Satisfactory U = Unsatisfactory M = Marginal

 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

When South

Signature of Inspector Heger Dry Dock,Inc. Firm

ENCLOSURE

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

					Inspection	Chec	koff L	.ist	
FRF	-01	IEI	NC	Y		CO	NDITI	ON	REMARKS
	REQUENCY			FLOOD VALVES AND CONTROLLERS	S	U	M	(Additional Remarks Use Other Side)	
					No. 21	Х			
					No. 22	Х			
					No. 23	Х			
					No. 24	Х			
					No. 25	Х			
					No. 26	Х			
					No. 27	Х			
					No. 28	Х			
					No. 29	Х			
					No. 30	Х			
					No. 31	Х			
					No. 32	Х			
					No. 33	Х			
					No. 34	Х			
					No. 35	Х			
					No. 36	Х			
┠┼					No. 37	Х			
┠┼					No. 38	Х			
					No. 39	Х			
					No. 40	Х			

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 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

3 / For each bulkhead.

When Som

Signature of Inspector <u>Heger Dry Dock,Inc.</u> Firm

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

#### FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

				Inspection	Chec	koff L	.ist	
FREQI	IFI	NC	~		<u> </u>	NDITI		REMARKS
A SA				FLOOD VALVES AND CONTROLLERS	S	U	M	(Additional Remarks Use Other Side)
				DRY CHEMICAL EXTINGUISHERS	Х			
				MISCELLANOUS				
				ALARMS - FLOODING, ETC.				
				MOORING AND ANCHORING - SPUDS,	Х			
				CHAINS, ANCHORS & CONNECTIONS				
				CAPSTAN	Х			
				BLOCK HANDLING SYSTEMS				
				CRANE STOPS AND SECURING SYSTEM				
				STERN OR BOW CLOSURE MACHINERY				
				CATHODIC PROTECTION SYSTEM				
				AIR COMPRESSORS & DISTRIBUTION SYSTEM	Х			
				DECK AND BREASTING WINCHES				
				LIGHTING FOR OPERATIONS & SECURITY	Х			

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 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

 $\underline{3}$  / For each bulkhead.

What South

Signature of Inspector Heger Dry Dock,Inc. Firm

ENCLOSURE\_\_\_\_

Floating Dry Dock (Mechanical/Electrical) Inspection Checkoff List \_\_\_\_\_

## SUMMARY CHECKOFF LIST FOR FLOATING DOCKS

## FACILITY NO. DD #2

Sheet No. 1 of 9 Date 8/24/2016

## Inspection Checkoff List

REQUE	NC	Y		CO	NDITI	ON	REMARKS
SA Q			ITEMS INSPECTED	S	U	М	(Additional Remarks Use Other Side)
			FITTINGS				
			CLEATS	Х			
			BOLLARDS	Х			
			CHOCKS	Х			
			GRATINGS	Х			
			PLATFORMS	Х			
			WATERTIGHT DOORS, HATCHES, AIR	Х			
			FORTS AND MANHOLES	Х			
			ACCESS FOR OPERATIONS & SECURITY	Х			
	1						
	1						
	1	1					
	+	+					
	+					+ + + + + + + + + + + + + + + + + + +	
	+					$\vdash$	
	+					$\vdash$	
	-	-					
	-	-					
	+	-					
	+					$\vdash$	
+ $+$	_				ļ		

 $A = Annual \quad SA = Semi Annual \quad Q = Quarterly \quad M = Monthly \quad W = Weekly$ 

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 $\underline{1}$  / Required for U&M.  $\underline{2}$  / Under remarks last docking date.

 $\underline{3}$  / For each bulkhead.

What South Signature of Inspector

Signature of Inspector Heger Dry Dock,Inc.\_\_\_\_ Firm

ENCLOSURE\_\_\_\_\_

Floating Dry Dock (Mechanical/Electrical) Inspection Checkoff List \_\_\_\_\_