

**SAN DIEGO UNIFIED PORT DISTRICT  
DEVELOPMENT SERVICES DEPARTMENT**

P.O. BOX 120488  
SAN DIEGO, CA 92112-0488  
(619) 686-6291

**COASTAL DEVELOPMENT PERMIT**

**Applicant:** Ernesto Medina, P.E., Chief Engineer, San Diego Unified Port District  
3165 Pacific Highway, San Diego, CA 92101

**Project:** Fender System Upgrade at North Berth of B Street Pier Project

**Location:** B Street Pier, 1140 N. Harbor Drive, San Diego, CA 92101

You are hereby granted a Coastal Development Permit. This Permit is issued in conformance with the California Coastal Act of 1976 and the Coastal Permit Regulations of the San Diego Unified Port District, as adopted by the Board of Port Commissioners on July 1, 1980, Resolution No. 80-193, and as amended on December 2, 1980, Resolution No. 80-343, and on February 14, 1984, Resolution No. 84-62, in accordance with the provisions for the issuance of an ☐ Emergency ☒ Non-Appealable ☐ Appealable Coastal Development Permit.

**Date of Board Action:** January 16, 2019

**Board of Port Commissioners Resolution Number:** 2019-XX

**Date of Permit:** XXXXX XX, 2019

**Application Number:** 2018-227

**Permit Number:** CDP-2019-XX

The Project, as defined below, is located within the jurisdiction of the San Diego Unified Port District (District) and in California Coastal Zone. The Project constitutes development pursuant to Coastal Act Section 30106 and the District's Coastal Development Permit Regulations as it would result in the placement or erection of solid material or structure and involves replacement of the existing deteriorated fender system, among other items. Pursuant to the California Coastal Act, the proposed development is considered "non-appealable". Chapter 8 of the Coastal Act regulates port development within the California Coastal Zone. Section 30715 of Chapter 8 specifies the sole categories of development that may be appealed to the Coastal Commission. The demolition and construction of a fender mooring system is not listed as appealable in Section 30715.

The Project is located between the sea (as defined in the Coastal Act) and the first inland continuous road paralleling the sea. The Project is fully consistent with Public Resources

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Code Sections 30604(c) and 30212(a)(1), as the provision of public access to the facility would be inconsistent with public safety. As designed and conditioned, the Project results in a net decrease of 269.3 square feet (sf) of fill and a net decrease of 192 sf of over-water coverage, resulting in a Project where there is no feasible less environmentally damaging alternative for a development that involves replacement of an existing fender system associated with a port facility. As noted, the development results in a decrease in fill and over-water coverage compared to existing conditions. The Project is fully consistent with Chapters 3 and 8 of the Coastal Act.

The Project is consistent with the Precise Plan text in the Centre City Embarcadero Planning District of the District's certified Port Master Plan (PMP) and conforms to the land and water use designations of "Marine Terminal" and "Terminal Berthing". Fender systems, which are ancillary or accessory to a marine terminal, are allowed uses in the Marine Terminal and Terminal Berthing designations because they allow for the safe berthing of vessels. Therefore, the Project is fully consistent with the District's certified PMP.

This Permit is limited to the development described below and set forth in material on file with the District and subject to the terms, conditions, and provisions hereinafter stated:

## **DEVELOPMENT**

The District (referred to herein as "Permittee"), proposes replacement of the existing fender system serving the northern side of B Street Pier and relocation of submerged riprap. The limits of the Project are depicted in Exhibit 1. The entire Project shall include the development, operation, use and maintenance of the following components/features:

### **1. Demolition and removal:**

- 1.1 80 16-inch (in)-diameter driven timber fender piles;
- 1.2 77 16-in-diameter driven plastic fender piles;
- 1.3 68 16-in-diameter hung timber fender piles;
- 1.4 1 45-foot (ft)-long by 30-in-diameter timber floating camel;
- 1.5 8 45-ft-long by 30-in-diameter plastic floating camel;
- 1.6 6 15-ft-long by 10-ft-diameter foam filled floating fenders;
- 1.7 100 20-ft-long by 12-in-high by 12-in-wide timber wales;
- 1.8 400 5-ft-long by 12-in-high by 10-in-wide timber chocks;
- 1.9 Relocation of 412.5 sf of submerged riprap by side casting southward onto existing submerged riprap; and
- 1.10 Miscellaneous wood members and steel hardware.

### **2. Installation:**

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- 2.1 70 24-in-wide by 24-in-deep concrete piles;
- 2.2 61 14-in-wide by 14-in-deep concrete piles;
- 2.3 10 eight-ft-wide by 16-ft-long foam filled floating fenders;
- 2.4 Eight 35-foot (ft)-long by 30-in-diameter floating camels;
- 2.5 Two 50-foot (ft)-long by 30-in-diameter floating camels;
- 2.6 Miscellaneous wood members and steel hardware.

Table 1 below provides a summary comparison of existing over-water coverage compared to the Project.

<b>Table 1: Project Features Over-Water Coverage Comparison</b>			
<b>Project Component</b>	<b>Existing</b>	<b>Proposed</b>	<b>Change</b>
<b>Wale</b>	980 sf	1,005 sf	+25 sf
<b>Chocks</b>	708 sf	442 sf	-266 sf
<b>Piles</b>	314 sf (225 piles)	363 sf (131 piles)	+49 sf
<b>Total Water Coverage</b>	<b>2,002 sf</b>	<b>1,810 sf</b>	<b>- 192 sf</b>

Table 2 below provides a summary comparison of existing fill compared to the Project.

<b>Table 2: Project Features Fill Comparison</b>			
<b>Project Component</b>	<b>Existing</b>	<b>Proposed</b>	<b>Change</b>
<b>Piles</b>	219.8 sf (157 piles)	363 sf (131 piles)	+143.2 sf (-26 piles)
<b>Riprap</b>	412.5 sf	0 sf	-412.5 sf
<b>Total Fill</b>	<b>632.3 sf</b>	<b>363 sf</b>	<b>-269.3 sf</b>

The piles would be installed utilizing an impact hammer. The Project is covered under the U.S. Army Corps of Engineers Regional General Permit 72 for Dock/Wharf/Pier/Pile Maintenance, which includes the following required best management practices:

- Conducting a pre-construction *Caulerpa taxifolia* and eelgrass survey; and
- Not conducting pile-driving activities if Federally listed green sea turtles or marine mammals are located within a 500-meter radius of the project site prior to start.

The Project would involve in-water work during both demolition and constructions phases. The in-water work would be conducted from barges. Staging would take place on B Street pier. It is anticipated that construction of the Project would commence in December 2018 and be completed in October 2019, for a total construction duration of approximately ten months. At the height of construction, the Project would generate an average of approximately ten truck trips per day, with a total of 50 truck trips over the ten-month duration. Vehicle and truck trips would be associated with the delivery of materials, removal of demolition debris, and transport of construction workers.

## **STANDARD PROVISIONS**

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1. Permittee shall adhere to the current plans (Exhibit 2) for the Project as approved by the District and the Project features, described above, for the Project.
2. Permittee and the Project shall meet all applicable codes, statutes, ordinances and regulations, and Permittee shall obtain all necessary permits from local, regional, state, and federal agencies.
3. Permittee shall conform to, and this Permit is subject to, the permit rules and regulations of the District, including, but not limited to, the District's Coastal Development Permit Regulations.
4. Permittee shall be responsible for compliance with ADA and Title 24 specifications.
5. Permittee shall commence development within two (2) years following the date of permit issuance by the District. Construction shall be pursued in a diligent manner and completed within a reasonable period of time.
6. The Permit is in no way intended to affect the rights and obligations heretofore existing under private agreements nor to affect the existing regulations of other public bodies.
7. This Permit shall not be valid unless two copies have been returned to the Development Services Department of the District, upon which copies the Permittee has signed a statement agreeing that the Permittee will abide by the terms, conditions, limitations, and provisions of the permit.
8. The Permittee and contractor shall perform all best management practices (BMPs) during construction and maintenance operations. This includes no pollutants in the discharges to storm drains or to Pacific Ocean, to the maximum extent practicable.
9. All District tidelands are regulated under Regional Water Quality Control Board Order No. R9-2013-0001, National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0109226, Waste Discharge Requirements for Discharges of Urban Runoff from the Municipal Separate Storm Sewer Systems (MS4s) Draining the Watersheds Within the San Diego Region (Municipal Permit). The Municipal Permit prohibits any activities that could degrade stormwater quality.

The Permittee shall ensure that post-construction / operational use of this Project site complies with the Municipal Permit and District direction related to permitted activities including the requirements found in the District's Jurisdictional Runoff Management Program (JRMP). The JRMP is available on the District website: <https://www.portofsandiego.org/environment/clean-water> or by contacting the Stormwater Department, (619) 686-6254.

10. This Project may be subject to the District post-construction BMP requirements. If so, approval of the Project by the District is necessarily conditioned upon submission by the Permittee of a specific Stormwater Quality Management Plan (SWQMP) for



the Project that meets District requirements and is compliant with the District BMP Design Manual (JRMP Appendix D). The Permittee shall implement all post-construction structural and non-structural BMPs throughout the life of the Project.

The implementation and maintenance of the post-construction BMPs constitute regulatory obligations for the Permittee, and failure to comply with the Municipal Permit, the JRMP, or the District approved SWQMP, including the specific BMPs contained therein, may be considered a violation of the permit and a violation of District Code.

### **SHORT TERM CONSTRUCTION MEASURES**

1. To minimize noise during construction, the Permittee will require the construction contractor to (a) restrict normal construction activities from 7:00 am to 7:00 pm; (b) keep construction equipment as far as possible from sensitive receptors; and (c) provide acoustical shielding around equipment operating at night, from 10:00 pm to 7:00 am.
2. All construction equipment shall be maintained in peak condition to reduce operational emissions.
3. Diesel equipment shall use low-sulfur diesel fuel.
4. Electric equipment shall be used to the maximum extent feasible during construction.
5. The Permittee shall require the construction contractor to provide construction employees with transit and ride share information.
6. The Permittee shall ensure that any site contamination is identified and a site restoration plan, acceptable to the appropriate regulatory agencies, is prepared and implemented to reduce any existing contamination to a level that has no potential to threaten employee or human health as defined under existing regulations. If any potential exists for impacts to employee health from exposure to hazardous materials, workers shall be provided with adequate protective gear.
7. The Permittee shall require all employees that are exposed to noise levels in excess of Occupational Safety and Health Administration hearing protection thresholds, during construction or operation, to wear noise protection devices (ear plugs and covers) that are protective of individual hearing.
8. Permittee and/or contractor shall comply with State Water Resources Control Board Order No. 2009-0009-DWQ (NPDES General Permit No. CAS000002), and Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity (commonly known as the "Construction General Permit"), as adopted, amended, and/or modified. Construction activity subject to the Construction General Permit requires development and implementation of a Storm Water Pollution

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Prevention Plan (SWPPP). The Permittee and/or contractor are responsible for submitting to the District a SWPPP that is compliant with the Construction General Permit and District required minimum BMPs. The District requires the use of District SWPPP templates. Once approved, the SWPPP document shall be maintained on the construction site at all times and made available for review by the District or other regulatory agencies.

The Permittee and/or contractor is responsible for ensuring that the SWPPP document is maintained on the site, implemented, and amended as required throughout construction. No discharges of any material or waste, including potable water, wash water, dust, soil, trash, and debris, may contaminate stormwater or enter the stormwater conveyance system. Any such material that inadvertently contaminates stormwater or enters the stormwater conveyance system as part of site operations shall be removed immediately. All unauthorized discharges to the stormwater conveyance system or the Bay or the ocean shall be reported immediately to the District Stormwater Department, in order to address any regulatory permit requirements regarding spill notifications.

A project's total disturbed soil area (DSA) shall not exceed 5 acres during the rainy season (October 1 - April 30) and 17 acres during the non-rainy season (May 1 - September 30). The District may temporarily increase these limits if the individual site is in compliance with applicable stormwater regulations and the site has adequate control practices implemented to prevent stormwater pollution, including an erosion control mobilization plan. The erosion control mobilization plan is subject to post-construction BMP requirements.

### **SPECIAL PROVISIONS**

1. Permittee shall adhere strictly to with the Project Description under the above "DEVELOPMENT" section of this Permit.
2. Relocation of submerged riprap shall solely be limited to side casting southward onto existing submerged riprap. In no event shall the submerged riprap be relocated north of the existing footprint.

#### **Exhibits:**

1. Project Location and Boundaries
2. Design Plans

#### **Attachments:**

- A. Precise Plan Figure 11, Planning District 3

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If you have any questions on this permit, please contact the Development Services Department of the San Diego Unified Port District at (619) 686-6291.

RANDA CONIGLIO  
President/Chief Executive Officer

By: \_\_\_\_\_  
Wileen C. Manaois  
Director, Development Services

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I have read and understand the terms, conditions, limitations, and provisions of this Permit and agree to abide by them.

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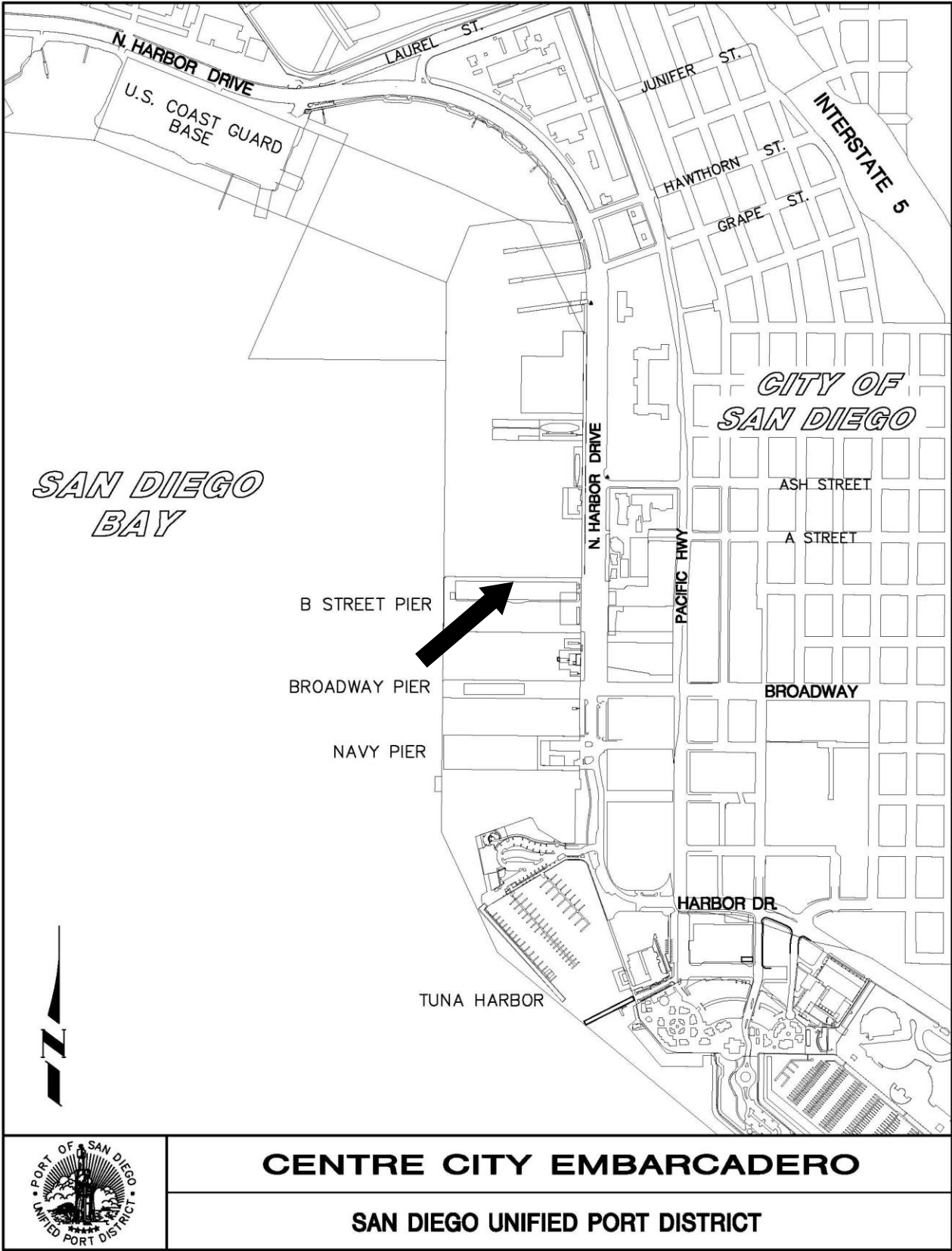
**Signature of Permittee**

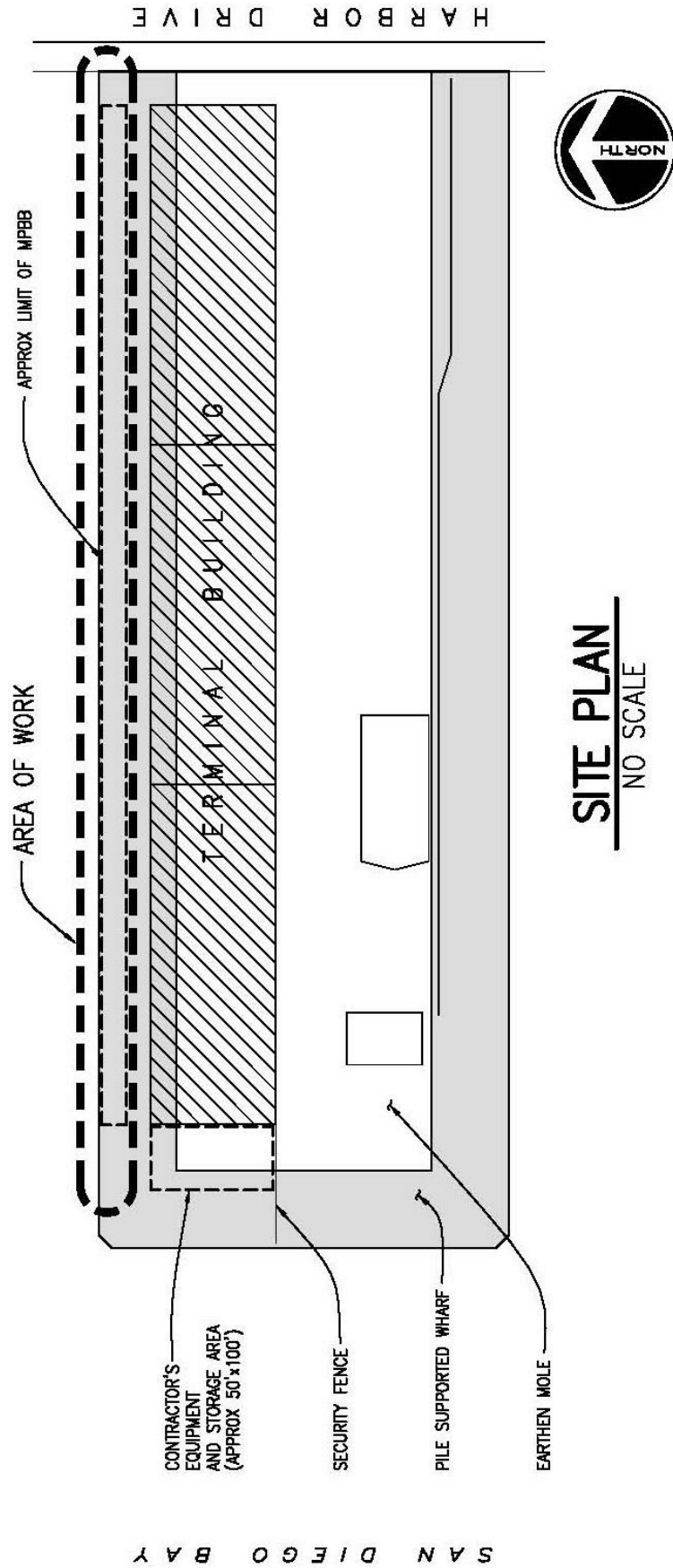
*Ernesto Medina, P.E., Chief Engineer  
San Diego Unified Port District*

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**Date**

DRAFT







## HARBOR DRIVE



**NOTE:**  
CONTRACTOR TO MAINTAIN CLEAR FIRE LANE (MIN WIDTH 15 FEET).

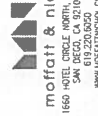
WORK TO BE DONE IN ACCORDANCE WITH DRAWING NO. EM-2018-01 AND SPECIFICATION NO. 2018-04 OF THE SAN DIEGO UNIFIED PORT DISTRICT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT, LABOR, MATERIALS AND SYSTEMS NECESSARY TO PERFORM THE FOLLOWING WORK:

1. DEMOLITION OF EXISTING FENDER PALES AND FENDER SYSTEM.
2. REMOVAL OF PILE STUBS AND BOTTOM DEBRIS.
3. REMOVAL AND SIDE CASTING OF ROCK (ON BAY BOTTOM).
4. INSTALLATION OF NEW PRIMARY AND SECONDARY FENDER SYSTEMS, INCLUDING PILING.
5. INCIDENTAL ITEMS OF WORK.

DECLARATION OF RESPONSIBLE IN CHARGE

I HEREBY DECLARE THAT I AM THE STRUCTURAL ENGINEER OF RECORD FOR THIS PROJECT, THAT I HAVE EXERCISED RESPONSIBLE CHARGE OVER THE DESIGN OF THE PROJECT AS DEFINED IN SECTION 6703 OF THE BUSINESS AND PROFESSIONS CODE, AND THAT THE DESIGN IS CONSISTENT WITH CURRENT STANDARDS.

I UNDERSTAND THAT THE CHECKING OF THE PROJECT DRAWINGS AND SPECIFICATIONS BY THE SAN DIEGO UNITED PORT DISTRICT IS CONFINED TO REVIEW ONLY AND DOES NOT RELIEVE ME, AS THE ENGINEER OF RECORD, OF MY RESPONSIBILITIES FOR PROJECT DESIGN.



<b>RECORD DRAWING</b> REVIEWED BY: _____ DESIGNED BY: <b>ALBERTO</b> DATE: _____	<b>NOTE:</b> THE DRAWING IS A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. UTILIZE GRAPHIC SCALES TO REDUCE AND ENLARGE SCALES ACCORDINGLY TO THE GRAPHIC SCALES SHOWN.		DATE: 2/18/24 PROJECT NUMBER: 1540 DRAWING NUMBER: 000000 DRAWING TITLE: FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER	SHEET NO.: 01 OF: 05	DATE: 06/03/2018 PROJECT NO.: EM-2018-01
	THE DRAWING IS A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. UTILIZE GRAPHIC SCALES TO REDUCE AND ENLARGE SCALES ACCORDINGLY TO THE GRAPHIC SCALES SHOWN.		SHEET NO.: 01 OF: 05	DATE: 06/03/2018 PROJECT NO.: EM-2018-01	


## STRUCTURAL NOTES AND DESIGN CRITERIA


## STRUCTURAL NOTES

1. THE SCHEDULING AND PHASING OF THE WORK SHALL BE COMPLETED AS REQUIRED BY THE SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL WORK AREAS, INCLUDING BUT NOT LIMITED TO, WORK SITES, MATERIALS, EQUIPMENT STORAGE, AND ANY OTHER ITEMS AS REQUIRED BY THE DISTRICT.
2. UNLESS NOTED OTHERWISE, MATERIAL TO BE "REMOVED" SHALL BE REMOVED AND DISPOSED-OF OFF DISTRICT TIELANDS AT AN APPROVED FACILITY AT CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL PROTECT THE EXISTING PIER STRUCTURE AND IMPROVEMENTS DURING THE WORK. PROVIDE BRACING, SHORING AND SPREADER BEAMS AS NECESSARY FOR CONSTRUCTION LOADS.
4. ACCESS TO THE UNDERSIDE OF THE PIER DECK IS RESTRICTED BY UTILITY BRINGS, FENDER SYSTEMS AND TIDAL FLUCTUATIONS. THE WORK MAY REQUIRE SCHEDULING COORDINATION WITH TIDAL FLUCTUATIONS.
5. DECONTAMINATION MATERIAL MAY NOT ACCUMULATE AT 8 ST. PIER NORTH BEHIND A 24 HOUR PERIOD. DECONTAMINATION MATERIAL MUST BE STORED ON CONTRACTOR BARGE OR IN 8 ST. PIER CONTRACTOR LANDOWN AREA, OR REMOVED FROM SITE. IF STORED ON A BARGE, THE CONTRACTOR CAN ARRANGE FOR OFFLOADING MATERIALS AT SQUID POINT AREA. MARINE TERMINAL AT CONTRACTOR'S EXPENSE.
6. THE DISTRICT MAY PERFORM AN UNDERWATER MIDLINE DEBRIS SURVEY BEFORE AND AFTER COMPLETION OF DEMOLITION AND CONSTRUCTION WORK. IF DEBRIS IS LOCATED AND FOUND TO BE RELATED TO THIS PROJECT, THE MATERIAL SHALL BE REMOVED AT THE CONTRACTOR'S EXPENSE.
7. THE CONTRACTOR SHALL DEPLOY A 10 FT-DEEP TURBIDITY CURTAIN (SLIT CURTAIN) LOCATED AROUND THE PERIMETER OF PILE DRIVING AND PILE EXTRACTION AREAS TO PREVENT TURBIDITY SPREADING DURING TURBIDITY CURTAIN AREA. SHOULD CONTRACTOR REQUIRE TO CHANGE THE SITE IN PREPARATION FOR DISTRICT BENTHIC ACTIVITY (CRUISE SURVEYS AND SAMPLING ACTIVITY) THE SLIT CURTAIN SHALL:
  - A) BE REMOVED FROM THE WATER ENTIRELY OR;
  - B) STORED IN THE WATER ALONG THE WEST END OF 8 ST. PIER
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING THE SLIT CURTAIN TO PREVENT DAMAGE TO THE CURTAIN, DAMAGE TO THE PIER FENDER SYSTEM, OR HINDERING OF NAVIGATION IN SAN DIEGO BAY. THE DISTRICT WILL NOT BE RESPONSIBLE FOR DAMAGE ASSOCIATED WITH MOVING AND STORING OF THE SLIT CURTAIN.
9. ALL PILES SHALL BE REMOVED FREE OF THE MIDLINE IN THEIR ENTIRETY. PILE JETTING TO AID IN EXTRACTION IS PERMITTED.
10. CONTRACTOR SHALL REMOVE, FREE OF THE MID, ALL DEBRIS, PILES AND ROCK THAT OBSTRUCTS DRIVING OF FENDER PILES.

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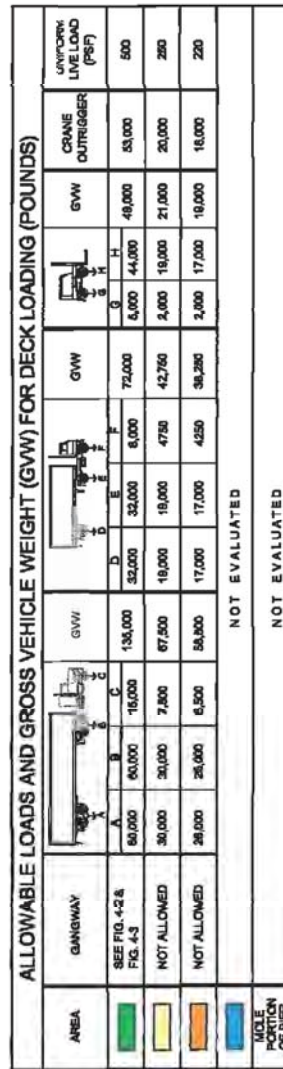
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GENERAL







1. THE "ALLOWABLE LOADS AND GROSS VEHICLE WEIGHT (GVW) FOR DECK LOADING" TABLE WAS OBTAINED FROM THE "B" ST. PIER LOAD CAPACITY STUDY - VOLUME 1" REPORT BY BLAYLOCK ENGINEERING GROUP, DATED FEBRUARY 18, 2002.

ALLOWABLE LOADS FOR B STREET PIER



**moffatt & nichol**  
 660 HOTEL CIRCLE, NORTH STE 500  
 SAN DIEGO, CA 92108  
 619.220.6050  
[WWW.MOFFATTNICHOL.COM](http://WWW.MOFFATTNICHOL.COM)

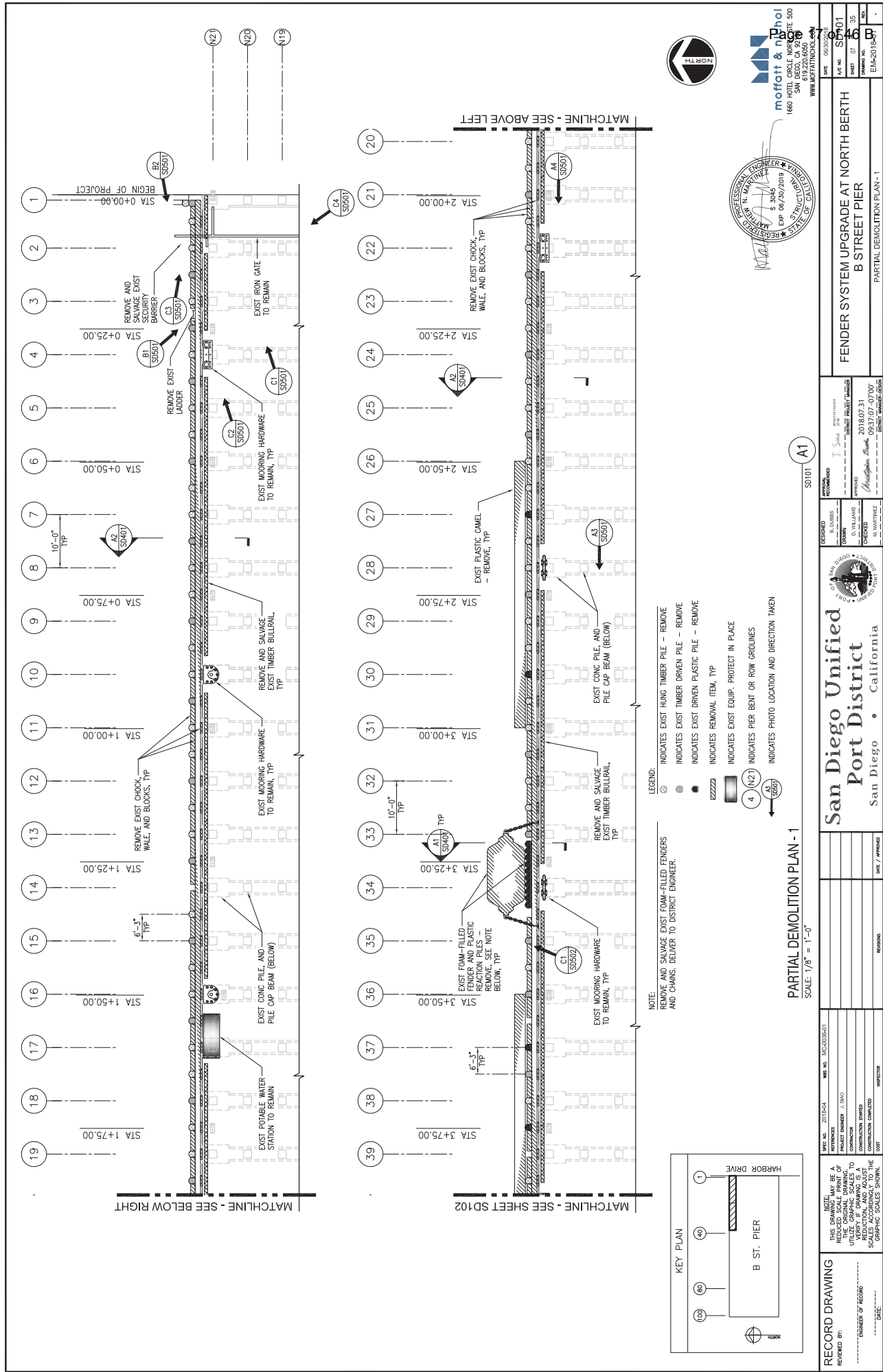
<p><b>RECORD DRAWING</b></p> <p>REVIEWED BY: _____</p> <p>DATE: _____</p> <p>ENGINEER OF RECORD: _____</p> <p>DATE: _____</p>	<p>NOTE: THIS DRAWING IS A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. UTILIZE GRAPHIC SCALES TO REDUCE AND INCREASE SCALES ACCORDING TO GRAPHIC SCALES SHOWN.</p>	<p>SPC. NO. 2016-04</p> <p>REFERENCES</p> <p>PROJECT NUMBER J.340</p> <p>CONTRACTOR</p> <p>CONSTRUCTION STARTED</p> <p>CONSTRUCTION COMPLETED</p> <p>COST</p>	<p>WBS NO. MC2008-471</p>	<p>DATE / APPROVED</p> <p>REVISIONS</p>	<p><b>San Diego Unified Port District</b></p> <p>San Diego • California</p>		<p>DESIGNED A. DAVIES DRAWN D. WILLIAMS CHECKED M. MANNING</p>	<p>APPROVED <i>Michael Davis</i> 2018.07.31 09:24:31 DATE PROJECT FINISHED 2018.07.31 09:24:31 DATE PROJECT STARTED 2018.07.31 09:24:31</p>	<p>APPROVAL J. Saxe 2018.07.31 09:24:31 DATE PROJECT FINISHED 2018.07.31 09:24:31 DATE PROJECT STARTED 2018.07.31 09:24:31</p>	<p>DATE 06/30/2016</p> <p>PROJECT NO. 0603</p> <p>SHEET 04 OF 05</p> <p>DRAWING NO. 0603</p> <p>REV. 01</p>	<p>FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER</p> <p>ALLOWABLE LOADING</p>

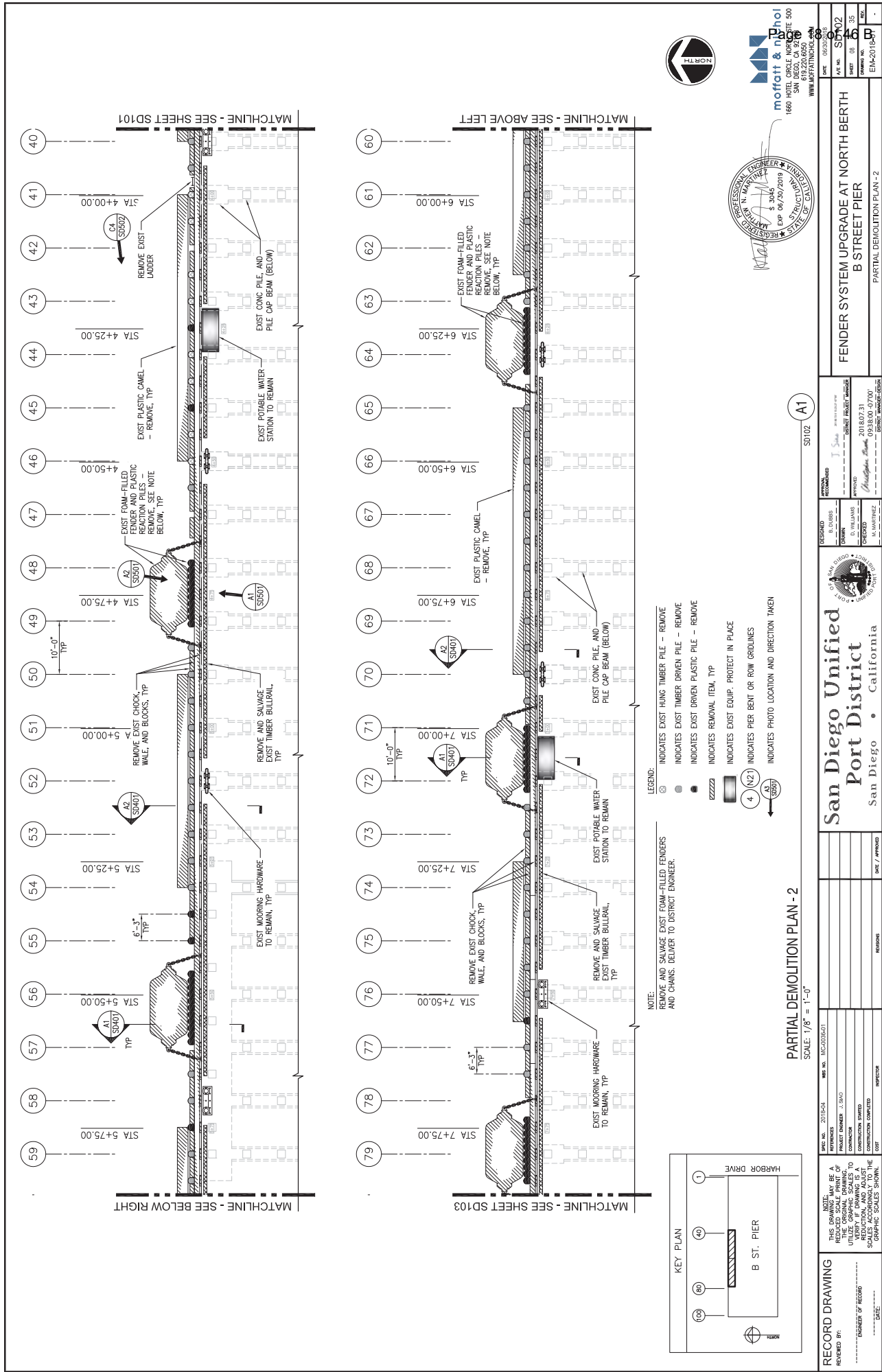






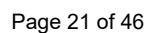


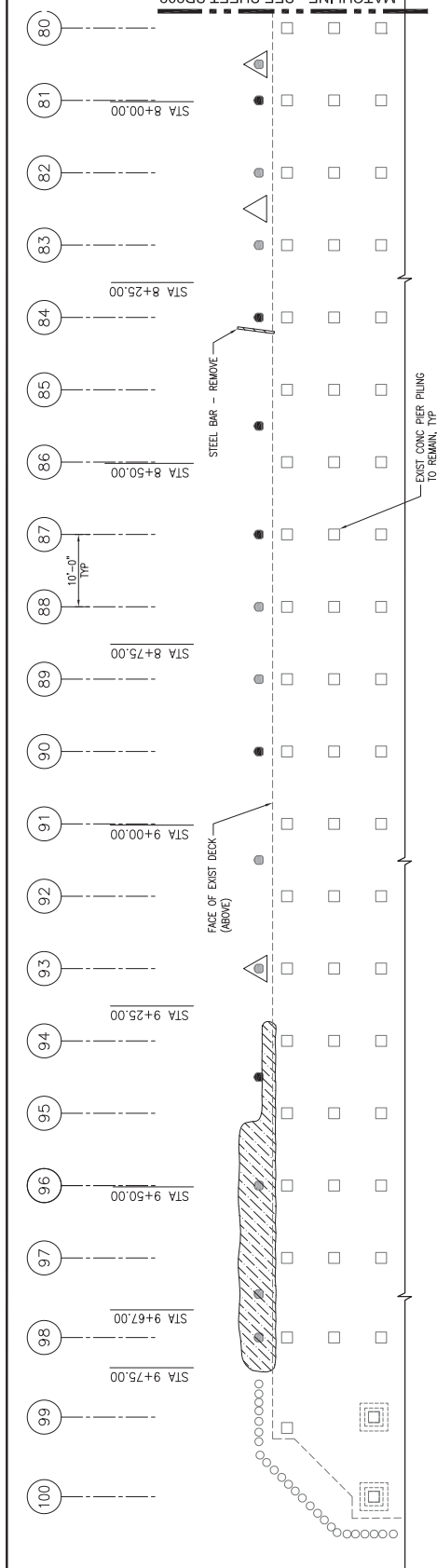








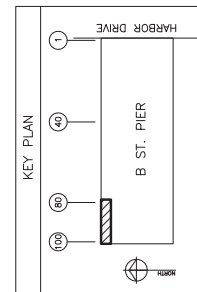




LEGEND:

- INDICATES EXIST TIMBER DRIVEN PILE - REMOVE ENTIRELY. SEE DEMO NOTE 7 AND 8 ON SHEET G-101
- INDICATES EXIST DRIVEN PLASTIC PILE - REMOVE ENTIRELY
- ▨ INDICATES APPROX EXTENT OF EXIST ROCK TO BE SIDE-CAST & CLEARED FOR PILE DRIVING AT NEW PILE LOCATIONS.
- △ INDICATES EXIST TIMBER PILE WITH SEVERE SECTION LOSS AT OR NEAR MUDLINE. EXCAVATE AS REQ'D FOR EXTRACTION OF STUB FROM BELOW MUDLINE.

PARTIAL BOTTOM DEBRIS SURVEY - 3  
SCALE: 1/8" = 1'-0"



# RECORD DRAWING

THIS DRAWING IS A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. THE ORIGINAL DRAWING IS THE AUTHORITY FOR THE DESIGN. VERIFY IF DRAWING IS A REDUCED SCALE PRINT BY CHECKING THE GRAPHIC SCALES SHOWN.

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moftatt & nphol  
1660 HOTEL CIRCLE NORTH STE 500  
SAN JOSE, CA 95128  
619.220.0650  
WWW.MOFTATTNPHOL.COM

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CHECKED: J. S. S.  
DATE: 06/30/2018

DESIGNED: J. S. S.  
CHECKED: J. S. S.  
DATE: 06/30/2018



San Diego Unified  
Port District  
San Diego • California

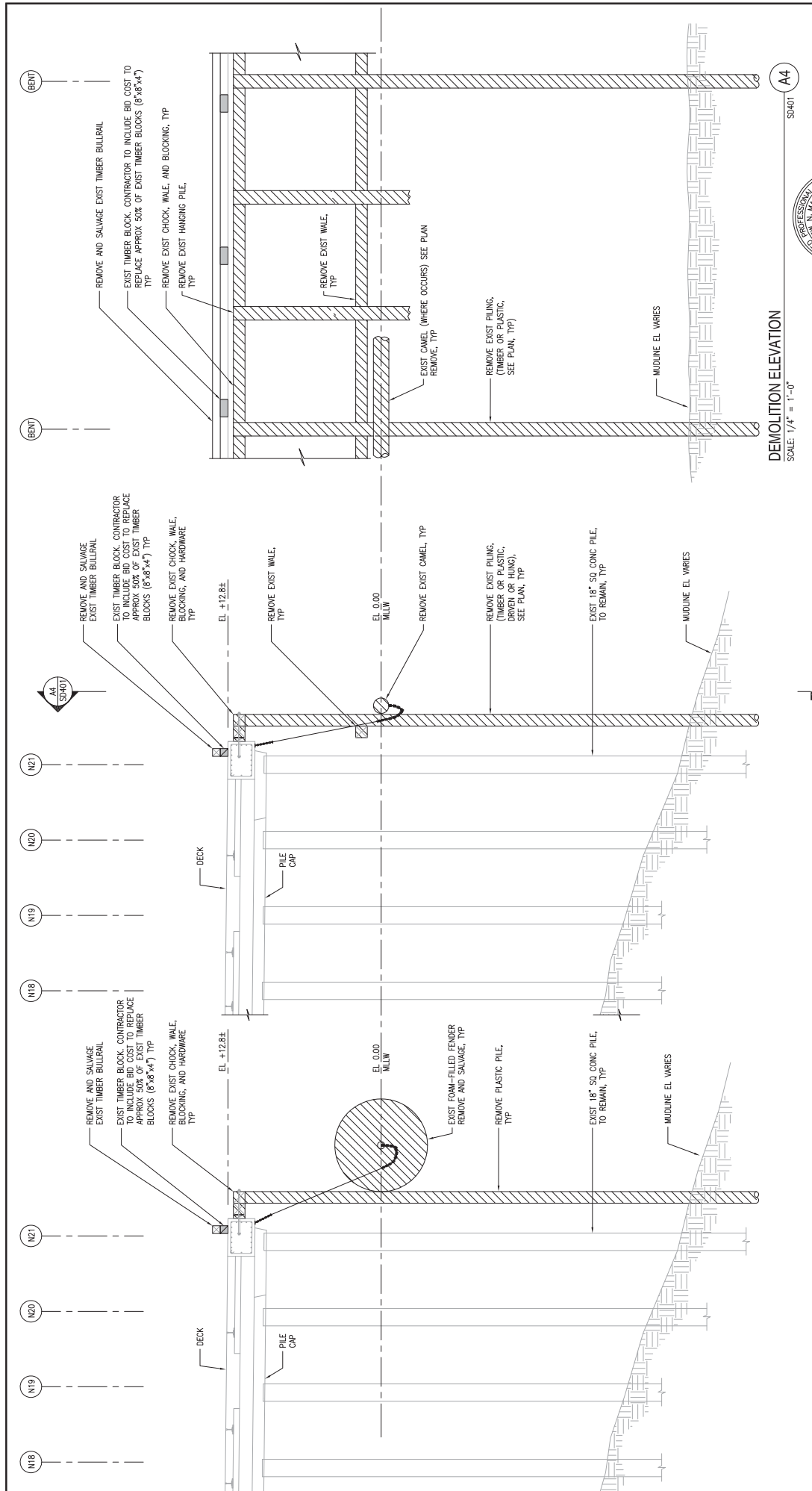
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REVIEWED BY: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

**San Diego Unified Port District**  
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**NOTES:**

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**LEGEND:**

INDICATES REMOVAL ITEM, TYP

**PROJECT INFORMATION:**

PROJECT NO.: 2018-04

DATE: 06/20/2018

PROJECT NAME: FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER

**DESIGNED BY:** J. Sosa

**CHECKED BY:** J. Sosa

**DATE:** 06/20/2018

**APPROVED BY:** J. Sosa

**DATE:** 06/20/2018

**PROJECT INFORMATION:**

PROJECT NO.: 2018-04

DATE: 06/20/2018

PROJECT NAME: FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER

**APPROVED BY:** J. Sosa

**DATE:** 06/20/2018

**PROJECT INFORMATION:**

PROJECT NO.: 2018-04

DATE: 06/20/2018

PROJECT NAME: FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER



**moffatt & nichol**  
660 HOTEL CIRCLE, NORTHSTE 500  
SAN DIEGO, CA 92108  
619.220.6050

RECORD DRAWING

<p><b>NOTE:</b></p> <p>THIS DRAWING MAY BE A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING.</p> <p>UTILIZE GRAPHIC SCALES TO VERIFY IF DRAWING IS A REDUCTION, AND ADJUST SCALES ACCORDING TO THE GRAPHIC SCALES SHOWN.</p>	SPEC. NO.	2016-04
	REFERENCES	
	PROJECT ENGINEER	J. SIA
	CONTRACTOR	
	CONSTRUCTION STARTED	
	CONSTRUCTION COMPLETED	
	COST	

[illegible][illegible]

APPROVAL  
RECOMMENDED

*J. Sims*

DISTRICT PROJECT MANAGER

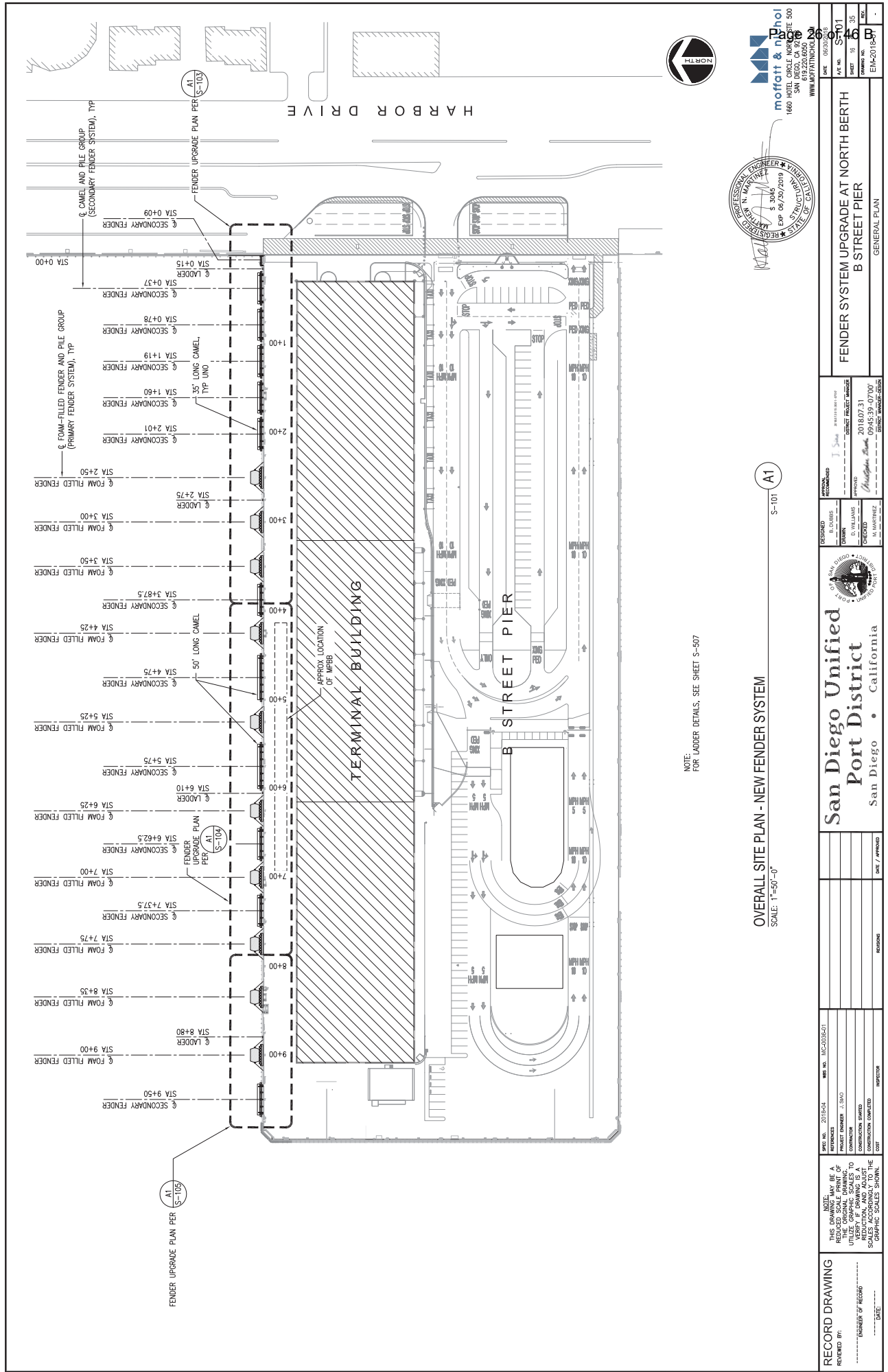
2018.07.31 09:43:44

*Christopher Sims*

-07'00"

FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER		DATE	06/30/2018
		AE NO.	SD901
		SHEET	14 OF 35
		DRAWING NO.	14-35
		REV	B
		ENR-2018-0	-
PHOTOS OF EXISTING -			





NOTE:  
FOR LADDER DETAILS, SEE SHEET S-507

OVERALL SITE PLAN - NEW FENDER SYSTEM

SCALE: 1"=50'-0"

A1  
S-101

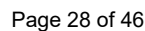


**moftatt & nash**  
1660 HOTEL CIRCLE, SUITE 500  
SAN DIEGO, CA 92108  
WWW.MOFTATTANDNASH.COM

<b>RECORD DRAWING</b> REVIEWED BY: _____ DATE: _____ CHECKED BY: _____ DATE: _____	THIS DRAWING IS A REDUCED SCALE PRINT OF THE ORIGINAL DRAWING. THE ORIGINAL DRAWING IS THE ONLY COPY OF THE ORIGINAL DRAWING. ANY CHANGES TO THE ORIGINAL DRAWING SHALL BE MADE TO THE ORIGINAL DRAWING. ANY CHANGES TO THE ORIGINAL DRAWING SHALL BE MADE TO THE ORIGINAL DRAWING. ANY CHANGES TO THE ORIGINAL DRAWING SHALL BE MADE TO THE ORIGINAL DRAWING.	PROJECT NO.: 2018-04 SHEET NO.: MC-0305-01 PROJECT NAME: B STREET PIER PROJECT LOCATION: SAN DIEGO, CALIFORNIA PROJECT OWNER: SAN DIEGO UNIFIED PORT DISTRICT PROJECT ENGINEER: N. MARK W. MOORE PROJECT DATE: 2018-07-31 PROJECT SCALE: 1"=50'-0"	DESIGNED BY: J. S. MOORE CHECKED BY: J. S. MOORE APPROVED BY: J. S. MOORE DATE: 2018-07-31 PROJECT NO.: 2018-04 SHEET NO.: MC-0305-01	SAN DIEGO UNIFIED PORT DISTRICT PORT DISTRICT SAN DIEGO, CALIFORNIA	<b>San Diego Unified Port District</b> San Diego • California	FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER GENERAL PLAN	SHEET NO.: 46 OF: 46 DATE: 06/30/2018 PROJECT NO.: 2018-04 SHEET NO.: MC-0305-01

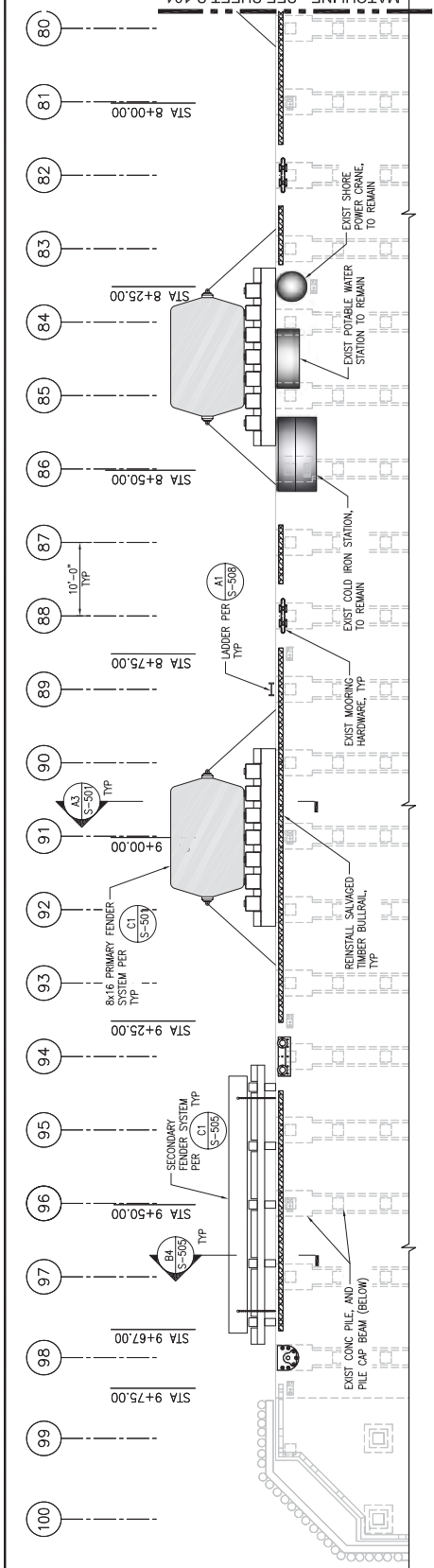






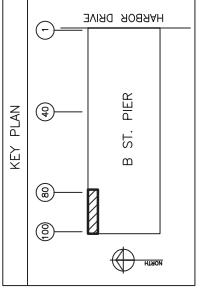






NOTE:  
1. EXIST ROCK SHOWN ON SHEETS S0201 THRU S0203 ARE TO BE CLEARED PRIOR TO PILE INSTALLATION.

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



RECORD DRAWING  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

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DATE / APPROVED  
REVISIONS

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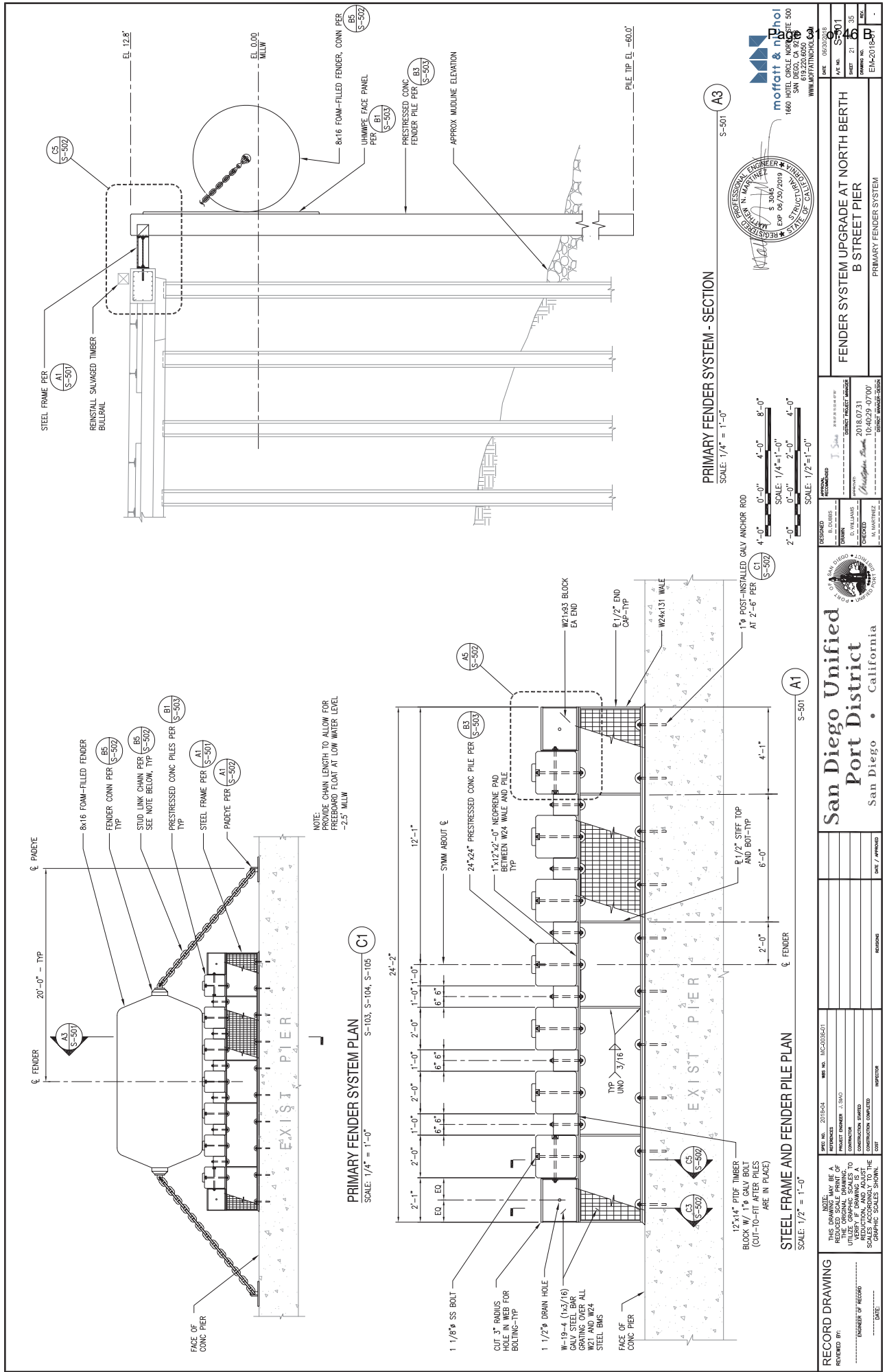
DESIGNED BY: J. Sandoval  
CHECKED BY: J. Sandoval  
APPROVED BY: J. Sandoval  
DATE: 2018.07.31  
PROJECT: 103245-0700  
SHEET: 103245-0700

FENDER SYSTEM UPGRADE AT NORTH BERTH  
B STREET PIER  
PARTIAL FENDER UPGRADE PLAN - 3

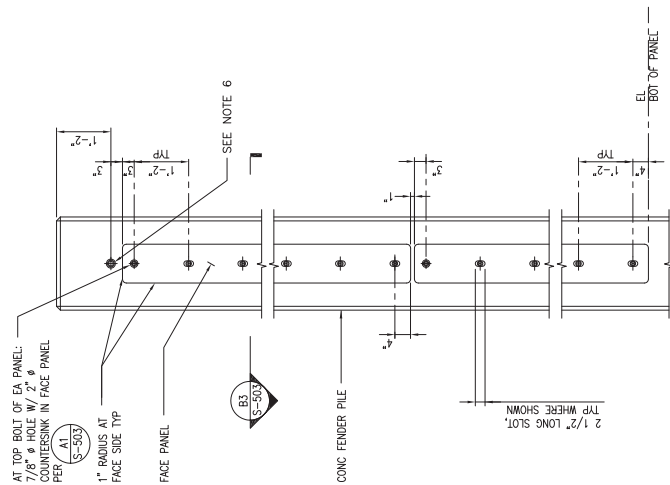
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SHEET: 35  
PROJECT: 103245-0700  
SHEET: 35  
DATE: 06/20/2018



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1660 HOTEL CIRCLE NORTH STE 500  
SAN DIEGO, CA 92108  
619.220.6650  
WWW.MOFTATTNPHOL.COM

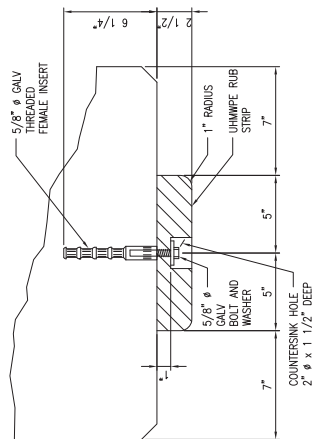






## UHMWPE FACE PANEL - ELEVATION

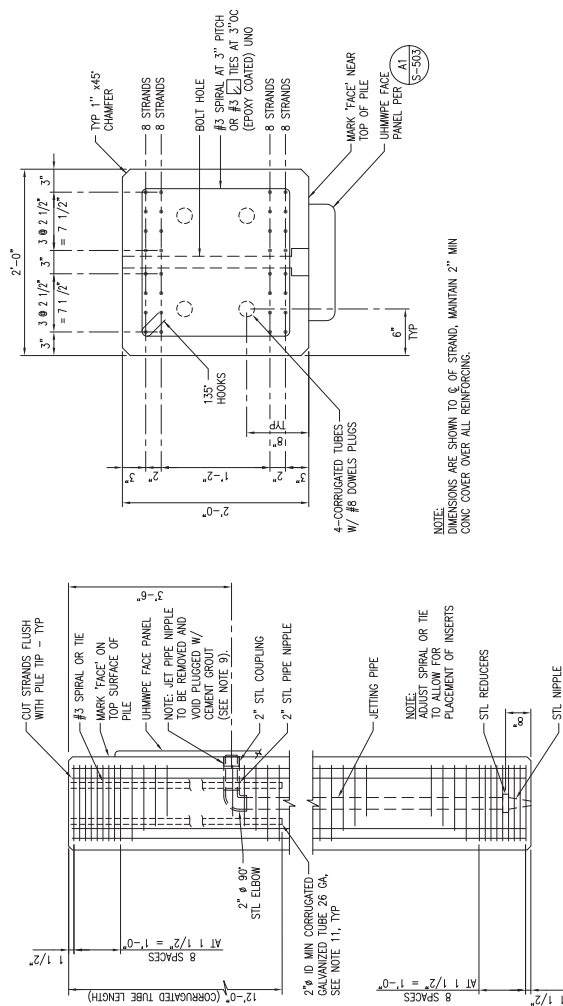
SCALE:  $3/4" = 1'-0"$



## JHMPWPE FACE PANEL - SECTION

SCALE: 3" = 1'-0"

DATE:-----	INSPECTOR	NO. 10	MC-000-00-01
DATE:-----	CONSTRUCTION COMPLETED	CONTRACTOR	J. SMO
DATE:-----	CONSTRUCTION STARTED	PROJECT ENGINEER	J. SMO
DATE:-----	COST	REFERENCES	
DATE:-----		NOTE:	
DATE:-----		THIS DRAWING MAY BE A	
DATE:-----		REPRODUCED FROM THE	
DATE:-----		ORIGINAL DRAWING.	
DATE:-----		UTILIZE GRAPHIC SCALES TO	
DATE:-----		VERIFY IF DRAWING IS A	
DATE:-----		REPRODUCTION OF THE	
DATE:-----		SCALES ACCORDING TO THE	
DATE:-----		GRAPHIC SCALES SHOWN.	



NOTE:  
DIMENSIONS ARE SHOWN TO C OF STRAND, MAINTAIN 2" MIN  
CONC COVER OVER ALL REINFORCING.

## 24in SQ PRESTRESSED CONCRETE FENDER PILE DETAILS

SCALE: 1-1/2" = 1'-0"

- NOTES:
  1. MINIMUM CONCRETE STRENGTHS:
    - 28 DAYS \_\_\_\_\_  $f_c = 7000$  PSI
    - AT TIME OF DRIVING \_\_\_\_\_  $f_c = 7000$  PSI
    - AT INITIAL PRESSING \_\_\_\_\_  $f_c = 5000$  PSI
    - AT FINAL PRESSING \_\_\_\_\_  $f_c = 5000$  PSI
  2. PRESTRESSING STEEL SHALL BE 0.5% 270 KSI SEVEN WIRE, UNCOATED, STRESS RELIEVED OR LOW RELAXATION STRANDS.
  3. #1 TIES OR SPIRALS SHALL CONFORM TO ASTM A934, GRADE 60 EPOXY COATED.
  4. RESIDUAL FINAL PRESTRESS AFTER LOSSES SHALL BE NOT LESS THAN 1142 PSI.
  5. INSTANT PILES WITH "FACE" MARK FACING AWAY FROM PIER INSTALLATION.
  6. CORE DRILL BOIT HOLES THROUGH PILES AFTER COMPLETION OF THE PILE PLACEMENT AND ATTACHMENT, FORM AND PLACE EPOXY SEALER ON TOP OF THE PILE.
  7. ADJUST SPIRAL SPACING IN JET PIPE PILES TO ALLOW FOR JET PIPE WHIPPLE.
  8. REMOVE JETTING PILE A MINIMUM OF 3" CLEAR OF FACE OF PILE AND FILL HOLE WITH EPOXY SEALER, 3" DEPTH MINIMUM.
  9. PREDRILLING OF PILES IS NOT PERMITTED.
  10. CORRUGATING DOWN TUBES TO BE PLUGGED PRIOR TO ERECTION. PILE TUBES

3

S-105, S-104, S-103, S-501, S-503



FENDER SYSTEM UPGRADE AT NORTH BERTH B STREET PIER		DATE	06/30/2016
		FILE NO.	S-803
		SHEET	23 OF 35
		CONTRACT NO.	EM-2018-B
PRIMARY FENDER SYSTEM - PILE DETAILS		NO.	-

DESIGNED B. DUBBS	APPROVAL RECOMMEND T. Sme	201007-201104-0700
DRAWN	APPROVED	DISTRICT PROJECT MANAGER
CHECKED	201007-201104-0700	201007-201104-0700
M. MARTINEZ	Christopher Smith	DISTRICT MANAGER



**San Diego Unified  
Port District**  
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						DATE / APPROVED

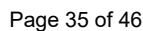
REVISIONS

2018-04	WBS NO.	MC-0036-01
ENGINEER J. SHAO		
N STARTED		
N COMPLETED		
INSPECTOR		

NOTE:  
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SCALES ACCORDINGLY TO THE  
GRAPHIC SCALES SHOWN.

NO. \_\_\_\_\_  
DATE: \_\_\_\_\_  
NUMBER OF RECORD \_\_\_\_\_











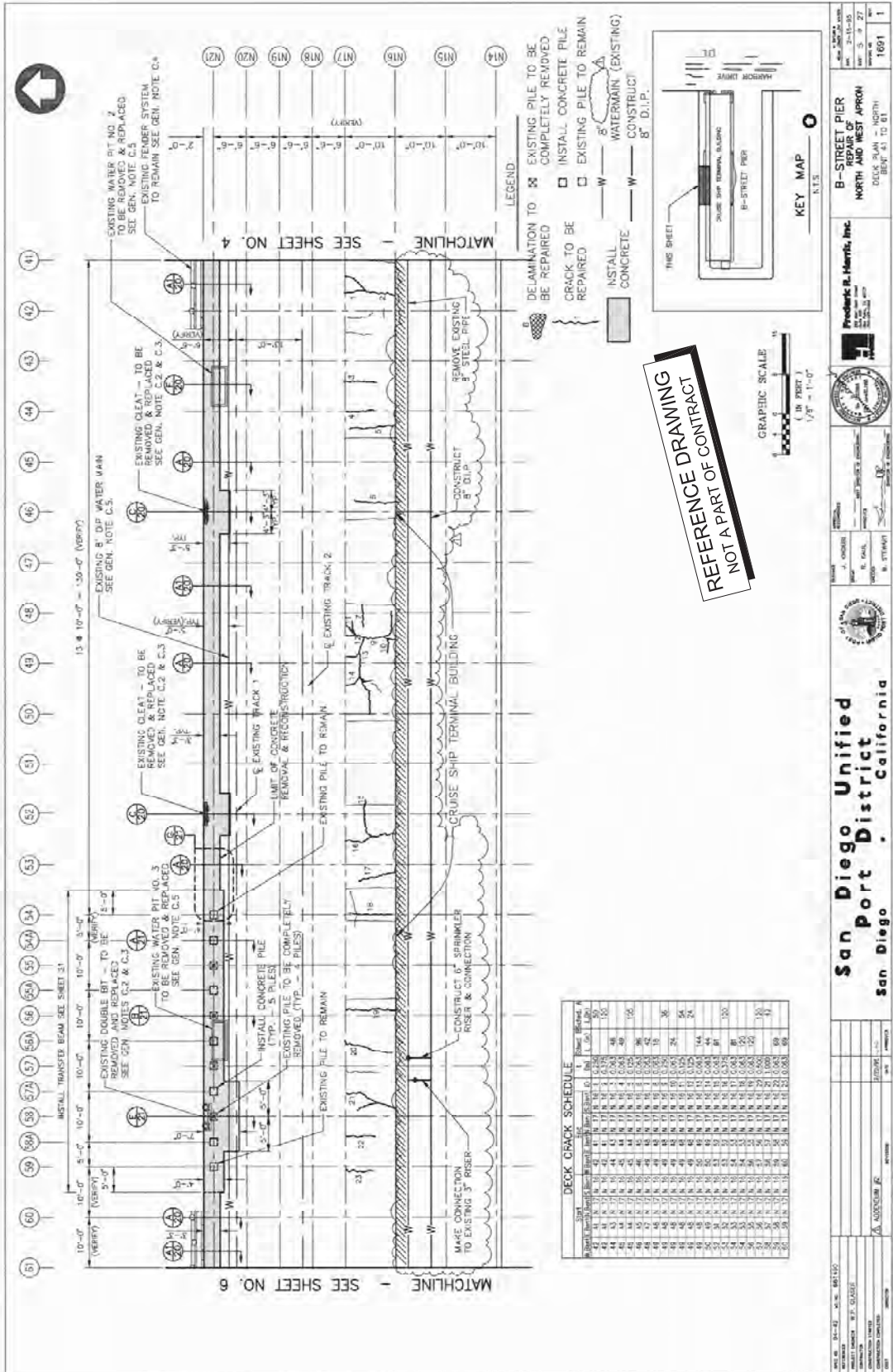












**DECK CRACK SCHEDULE**

Station	Crack No.	Crack Description	Crack Length (ft)	Crack Width (in)	Crack Depth (in)	Crack Status
41	1	Crack in concrete deck	10	0.05	2	Repaired
42	2	Crack in concrete deck	15	0.08	3	Repaired
43	3	Crack in concrete deck	12	0.06	2.5	Repaired
44	4	Crack in concrete deck	8	0.04	1.5	Repaired
45	5	Crack in concrete deck	11	0.07	2.2	Repaired
46	6	Crack in concrete deck	9	0.05	2	Repaired
47	7	Crack in concrete deck	13	0.09	3.5	Repaired
48	8	Crack in concrete deck	14	0.10	4	Repaired
49	9	Crack in concrete deck	16	0.12	4.5	Repaired
50	10	Crack in concrete deck	18	0.15	5	Repaired
51	11	Crack in concrete deck	20	0.18	6	Repaired
52	12	Crack in concrete deck	22	0.20	7	Repaired
53	13	Crack in concrete deck	24	0.22	8	Repaired
54	14	Crack in concrete deck	26	0.25	9	Repaired
55	15	Crack in concrete deck	28	0.28	10	Repaired
56	16	Crack in concrete deck	30	0.30	11	Repaired
57	17	Crack in concrete deck	32	0.32	12	Repaired
58	18	Crack in concrete deck	34	0.35	13	Repaired
59	19	Crack in concrete deck	36	0.38	14	Repaired
60	20	Crack in concrete deck	38	0.40	15	Repaired
61	21	Crack in concrete deck	40	0.42	16	Repaired

REFERENCE DRAWING  
NOT A PART OF CONTRACT

**San Diego Unified Port District**  
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San Diego, California

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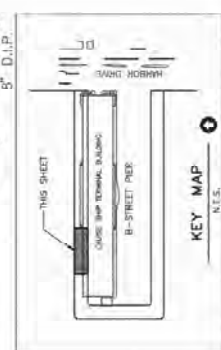
**San Diego Unified Port District**  
San Diego, California

**San Diego Unified Port District**  
San Diego, California

**San Diego Unified Port District**  
San Diego, California



GRAPHIC SCALE  
( IN FEET )  
1/8" = 1'-0"



**B-3-STREET PIER  
REPAIR OF  
NORTH AND WEST APRON**

**Frederick R. Harris, Inc.**  
100 West 42nd Street  
New York, NY 10018  
212-413-1000

[illegible]

	1. KROUS 2. BAUC 3. STENWART
	4. KROUS 5. BAUC 6. STENWART

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t District  
Califor

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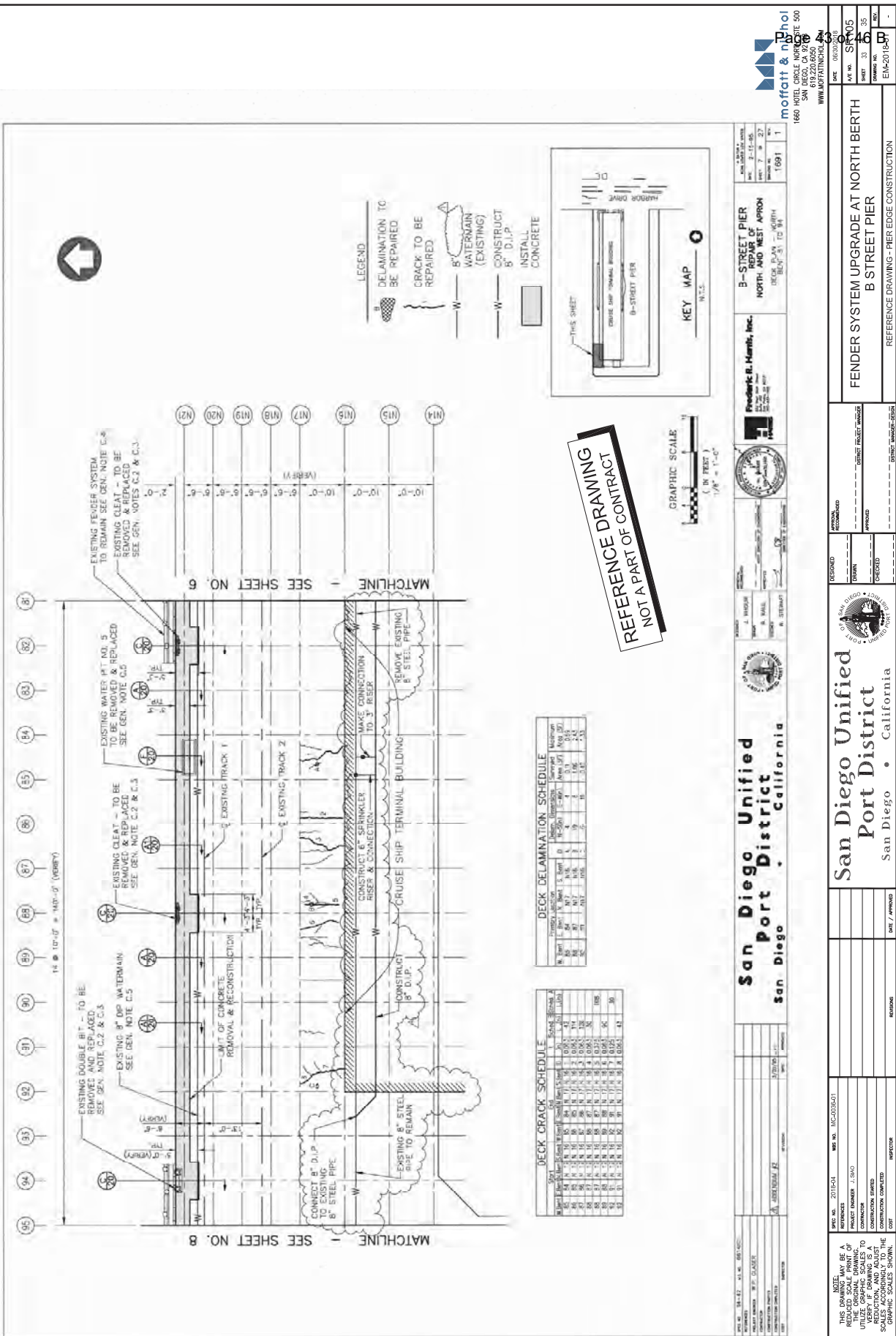
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NAME	ADARSH K
SECTION	
DATE	
NAME	
SECTION	
DATE	
NAME	
SECTION	

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9701-05 B St Plea

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RECORD DRAW  
REVIEWED BY: \_\_\_\_\_  
\_\_\_\_\_  
ENGINEER OF RECORD  
\_\_\_\_\_  
DATE: \_\_\_\_\_



RECORD DRAWING  
REVIEWED BY: \_\_\_\_\_  
DATE: \_\_\_\_\_

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THE ORIGINAL DRAWING.  
FOR VERIFICATION OF  
DIMENSIONS, REFER TO THE  
ORIGINAL DRAWING.  
GRAPHIC SCALES SHOWN.

DATE: 08/20/2018  
BY: J. H. HARRIS  
CHECKED BY: J. H. HARRIS  
APPROVED BY: J. H. HARRIS

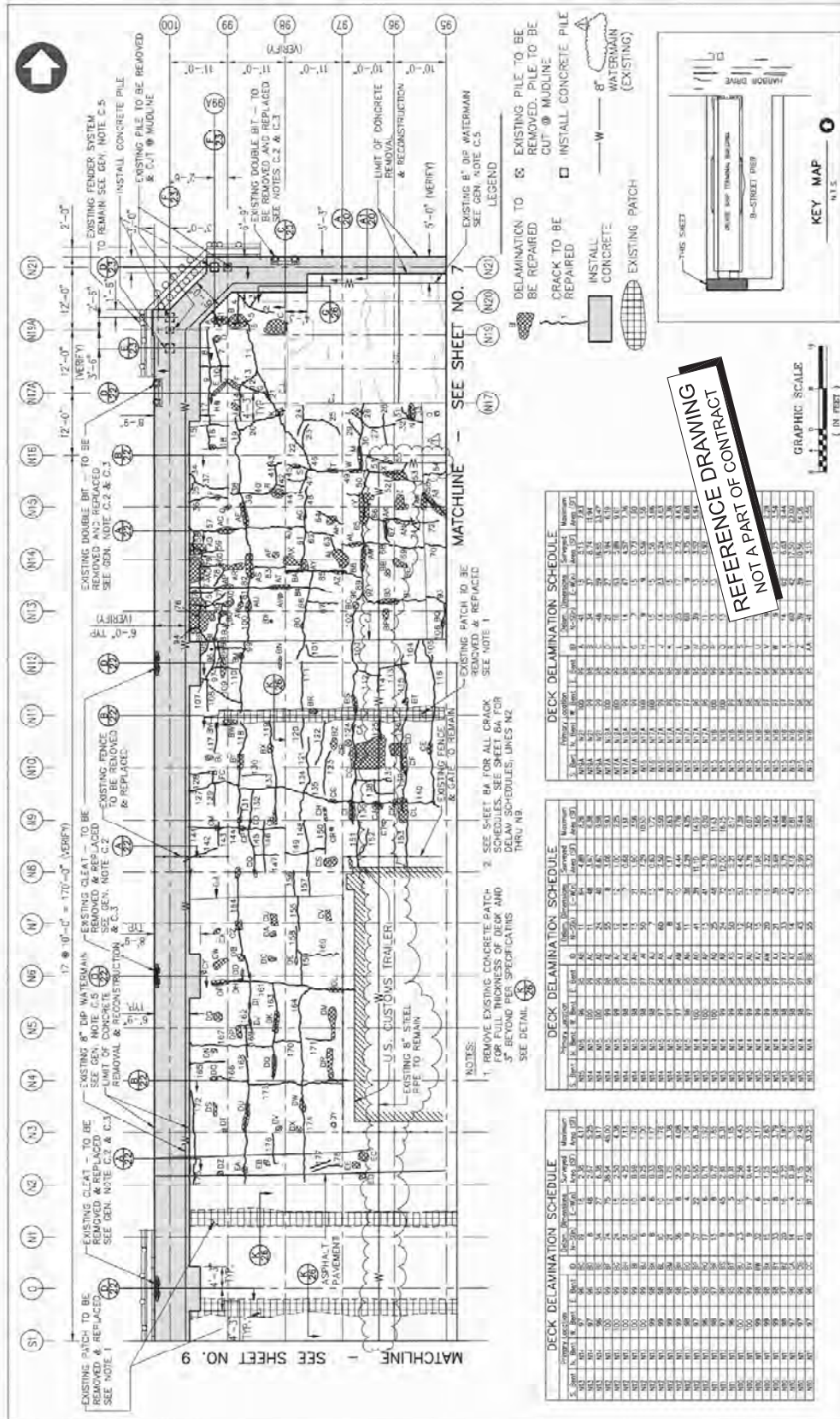
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SHEET NO. 18 OF 20  
SHEET TITLE: B-STREET PIER  
FENDER SYSTEM UPGRADE AT NORTH BERTH  
B STREET PIER  
REFERENCE DRAWING - PIER EDGE CONSTRUCTION

DESIGNED BY: J. H. HARRIS  
CHECKED BY: J. H. HARRIS  
APPROVED BY: J. H. HARRIS

PROJECT NO. 2018-04  
SHEET NO. 18 OF 20  
SHEET TITLE: B-STREET PIER  
FENDER SYSTEM UPGRADE AT NORTH BERTH  
B STREET PIER  
REFERENCE DRAWING - PIER EDGE CONSTRUCTION

DESIGNED BY: J. H. HARRIS  
CHECKED BY: J. H. HARRIS  
APPROVED BY: J. H. HARRIS





DECK DELAMINATION SCHEDULE									
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1113	113	113	113	113	113	113	113	113	113
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1125	125	125	125	125	125	125	125	125	125
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1151	151	151	151	151	151	151	151	151	151
1152	152	152	152	152	152	152	152	152	152

**DRAWING**  
**REFERENCE OF CONTRACT**  
**NOT A PART OF CONTRACT**

[illegible]





