



HUMBOLDT BAY HARBOR, RECREATION AND CONSERVATION DISTRICT



P.O. BOX 1030
Eureka, California 95502
phone (707) 443-0801
fax (707) 443-0800

PERMIT APPLICATION

Date Filed 9/23/2026

General Information	For District Use
1.) Name, Address, phone # and email of Developer, Project Sponsor and Legal Owner Zach Pecor Chevron Products Company USA 3400 Christie Street Eureka, CA 95501 916-869-7177 zpecor@chevron.com	A. Application No. <u>2026-03</u> Application Type: Franchise ☐ Permit ☒ Lease ☐
2.) Address of Project and Assessor's block, lot and Parcel Number 3400 Christie Street Eureka, CA 95502 APN 007-071-013; 007-071-008	B. Date Received by Harbor District <u>09/24/2026</u>
3.) Contact person Name, Address, phone # Travis Schneider Pacific Affiliates PO Box 133 Eureka, CA 95502 (707) 445-3001 tschneider@pacaff.com	C. Date Accepted for filing by Commission
	D. Date of Public Notice
	E. Date of Environmental Compliance
	F. Date of Public Notice
	G. Date of Public Hearings
4.) Attach list of names and addresses of all adjoining property owners	H. Date of Commission Action Approval: _____ Conditional _____ Disapproval _____
5.) List and describe any other related Project Permits & Other Public Approvals required, including those required by City, Regional, State & Federal Agencies. California Coastal Commission - CDP USACE - NWP NCRWQCB - 401 Certification City of Eureka - Building Permit	I. Expiration Date
6.) Existing City/County Zoning Tidelands/Coastal Industrial	Describe in detail the proposed project: Comments
7.) Proposed Site Use (Project Title) 2026 Chevron Eureka Terminal Berthing and Mooring Upgrades and MOTEMS Repairs	

Describe proposed project

See attached project description and plan sets:

- (1) Chevron Eureka Terminal - Berthing and Mooring Upgrades and MOTEMS Causeway Repairs Project Description
- (2) 8178-21 - CHEVRON EUREKA - MOORING BERTHING UPGRADES - 90p DWG SET
- (3) Eureka MOTEMS 2025 Pile Map 6-11-26

PRE-PROJECT EELGRASS CHECKLIST

Please complete the Eelgrass Pre-project Checklist below. Note that the checklist questions relate to the Area of Potential Effect (APE) associated with your project, which incorporates a surrounding buffer inclusive of the limits of potential construction and/or maintenance-related activities that could affect eelgrass habitat. Provide a copy of the completed questionnaire along with your permit application and a map depicting the proposed project location, potential eelgrass depth range -10 to +4 feet, and benchmark eelgrass distribution in the vicinity of the proposed project. Maps should be of an appropriate scale to clearly depict the preliminary/proposed APE boundary in relation to both existing and potential eelgrass resources as provided in the Humboldt Bay Eelgrass Comprehensive Management Plan and associated webpage (humboltdbay.org/eelgrass-management-plan). Here you'll find information and links including [eelgrass information for permit applicants](#), [a baseline eelgrass distribution map](#), and the [Humboldt Bay Eelgrass Comprehensive Management Plan](#). Contact the Harbor District office with questions (443-0801).

For New Projects:

		YES	NO
a)	Is the project located within 100 feet of previously mapped (known) eelgrass habitat?	x	
b)	Will any construction or new operational traffic occur within the vicinity of existing eelgrass?	x	
c)	Is any portion of the project located in an area with depths ranging from -10 to +4 feet?	x	
d)	Does the project result in new cover, shading or other form of light reduction of open water areas ranging in depth from -10 to +4 feet?		x
e)	Is the project anticipated to affect wind or tidal circulation patterns within the bay?		x
f)	Could the project affect ambient water temperature or clarity or result in new effluent (including stormwater) discharge point?		x
g)	Does the project result in any placement of fill, including shoreline armor?	x	
h)	Is the project anticipated to lead to an increase in boat traffic that could affect nearby eelgrass habitat through grounding, prop scarring, wake, or shading impacts?		x

For Maintenance/Repair Projects and Construction Activities:

		YES	NO
i)	Is project construction likely to increase turbidity? To what extent and for what duration?		x
j)	Will construction require the use of a barge or other vessel that may temporarily impact the bay floor (e.g. spud poles, anchoring, prop scarring, etc.) within known eelgrass habitat or within depths ranging from -10 to +4 feet?	x	
k)	Will construction require the use of turbidity curtains in proximity to eelgrass habitat?		x
l)	Will project construction result in temporary shading from moored/anchored working vessel(s)?	x	

If you responded yes to any of the questions above, your project may have the potential to affect eelgrass habitat and you'll need to conduct a preliminary eelgrass survey. Please refer to the District's [Eelgrass Management Plan webpage](#) for further guidance and a list of local agency contacts should you have additional questions.

Answer all questions completely on a separate page. If the question does not apply to your project, so indicate by marking N.A. Contact Harbor District Office with questions.

PROJECT DESCRIPTION

8. Site Size
9. Square Footage
10. Number of floors of construction
11. Amount of off-street parking provided
12. Attach plans
13. Proposed scheduling
14. Associated projects
15. Anticipated incremental development
16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.
17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities
18. If industrial, indicate type, estimated per shift employment & loading facilities.
19. If institutional, indicate the major function, estimated per shift employment, occupancy, loading facilities, and community benefits derived from the project.
20. If the project involves a variance, conditional use or recognizing application, state this and indicate clearly why the application is required.

Are the following items applicable to the project or its effects? Answer yes or no.
Discuss all items answered yes.

21. Change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours.
22. Change in scenic views or vistas from existing residential areas or public lands or roads.
23. Change in pattern, scale or character of general area of project.
24. Significant amounts of solid waste or litter.
25. Change in dust, ash, smoke, fumes or odors in vicinity.
26. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.
27. Substantial change in existing noise or vibration levels in the vicinity.
 - A. During Construction
 - B. During Project Utilization
28. Site on filled land or on slope of 10% or more.

29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives.
30. Substantial change in municipal services demand (police, fire, water, sewage, etc.)
31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).
32. Relationship to larger project or series of projects

ENVIRONMENTAL SETTING:

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Photos will be accepted.
34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Photos accepted.

----- Questions 35; and 36 MUST BE ANSWERED! -----

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?
36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

37. Financial statement:
 - A. Estimated project cost.
 - B. How will the project be financed?
38. Describe fully directions necessary to arrive at project site.
39. The Applicant agrees to as a condition of the permit being issued, to indemnify and hold harmless the Humboldt Bay, Harbor Recreation and Conservation District from any and all claims, demands, or liabilities for attorneys' fees obtained from or against demands for attorney's fees, costs of suit, and costs of administrative records made against District by any and all third parties as a result of third party environmental actions against District arising out of the subject matter of this application and permit, including, but not limited to, attorney's fees, costs of suit, and costs of administrative records obtained by or awarded to third parties pursuant to the California Code of Civil Procedure Section 1021.5 or any other applicable local, state, or federal laws, whether such attorneys' fees, costs of suit, and costs of administrative records are direct or indirect, or incurred in the compromise, attempted compromise, trial, appeal, or arbitration of claims for attorneys' fees and costs of administrative records in connection with the subject matter of this application and permit

NOTE

The District hereby advises the Applicant that, under California Public Resources Code (PRC) Section 21089, the District when a lead agency under the California Environmental Quality Act (CEQA) of 1970, as amended, pertaining to an Environmental Impact Report (EIR) or a Negative Declaration (MND/ND) may charge and collect from the Applicant a reasonable fee in order to recover the estimated costs incurred by the District in preparing an EIR or MND/ND for the project and the procedures necessary for PRC compliance on the Applicants project.

In the event your project contains an analysis of issues pertaining to CEQA, for which District staff is not competent to independently review, or District requires the same in preparation of an EIR or MND/ND for the project, the District may retain a reviewing consultant to evaluate the content of the Administrative-Draft EIR and Final EIR or MND/ND with respect to these issues. The cost of such reviewing consultant services shall be borne by the Applicant.

CERTIFICATION: I hereby certify that the statements furnished above and in the attached exhibits present the information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. And I agree to indemnify the District as described in part 39 of this application.

Dated: 9/21/26

Zach Pecor
For Chevron Products Company
a division of Chevron U.S.A. Inc.



**Chevron Marine Terminal
HBHRCD
Permit Questionnaire Response Sheet**

8. Site Size

APN 007-071-013: 5.7 acres

APN 007-071-008: 4.7 acres

9. Square Footage

Dock: 68,560 s.f.

10. Number of floors of construction

One floor.

11. Amount of off-street parking provided

7

12. Attach plans

Attached.

13. Proposed scheduling

July 2026 – October 2031

14. Associated projects

Ongoing MOTEMS repairs as required by state and federal agencies.

15. Anticipated incremental development

N/A

16. If residential, include the number of units, schedule of unit sizes, range of sale prices or rents, and type of household size expected.

N/A

17. If commercial, indicate the type, whether neighborhood, city or regionally oriented, square footage of sales area, and loading facilities

N/A

18. If industrial, indicate type, estimated per shift employment & loading facilities.

The project area is an active-use Coastal Dependent industrial site with a focus on the receipt and shipping of petroleum products via marine vessels and trucks. Per-shift staffing levels are estimated at 12 employees. The loading facilities consist of the CEMT dock, which primarily serve as off-loading points for laden marine vessels, and holding tanks which transfer petroleum products into trucks which transport said products to destinations throughout the region.

19. If institutional, indicate the major function, estimated per shift employment, occupancy, loading facilities, and community benefits derived from the project.

N/A

20. If the project involves a variance, conditional use or recognizing application, state this and indicate clearly why the application is required.

N/A

Are the following items applicable to the project or its effects? Answer yes or no. Discuss all items answered yes.

21. Change in existing features of any bays, tidelands, beaches, lakes or hills, or substantial alteration of ground contours.

No.

22. Change in scenic views or vistas from existing residential areas or public lands or roads.

No.

23. Change in pattern, scale or character of general area of project.

No.

24. Significant amounts of solid waste or litter.

No.

25. Change in dust, ash, smoke, fumes or odors in vicinity.

No.

26. Change in ocean, bay, lake, stream or ground water quality or quantity, or alteration of existing drainage patterns.

No.

27. Substantial change in existing noise or vibration levels in the vicinity.

A. During Construction

Yes. Project area may experience temporary increases in noise or vibration levels during course of construction work. The project's Biological Assessment and Hydroacoustic Monitoring Plan will address the potential impacts to the area and local wildlife and organisms. No long-term impacts related to noise or vibration are anticipated.

B. During Project Utilization

No.

28. Site on filled land or on slope of 10% or more.

No.

29. Use of disposal or potentially hazardous materials, such as toxic substances, flammable or explosives.

No.

30. Substantial change in municipal services demand (police, fire, water, sewage, etc.)

No.

31. Substantially increase fossil fuel consumption (electricity, oil, natural gas, etc.).

No.

32. Relationship to larger project or series of projects

Yes. This repair project is part of an ongoing series of repair and retrofit upgrades to the Marine Terminal. The entire series of repairs have been related to seismic safety

WWW.PACAFF.COM

retrofitting and required compliance with MOTEMS standards. Previous repair projects were completed under Harbor District Permits 2014-03 and 2016-02.

ENVIRONMENTAL SETTING:

33. Describe the project site as it exists before the project including information on topography, soil stability, plants and animals, and any cultural, historical, or scenic aspects. Describe any existing structures on the site and the use of the structures. Attach photographs of the site. Photos will be accepted.

Two parcels make up the project site: APN 007-071-013 and APN 007-071-008. The former is a tideland parcel owned by the City of Eureka and the latter is the adjacent upland parcel owned by Chevron Corporation. CEMT owns or leases the two parcels for the purpose of importing and shipping petroleum products.

The project site is located in Humboldt Bay along the western shore of the City of Eureka and on the east side of the maintained North Bay Channel. Tides in this channel range from a low of less than -2.00' MLLW to a high of almost 9.00' MLLW feet.

The upland area behind the dock is mostly developed for industrial use. Improvements include a truck scale, office buildings, maintenance shop, petroleum product storage tanks and equipment for unloading and loading activities within the facility. Vegetation is limited to sparse grasses growing on the unused portions of the site. Other than the small plants growing on the dock pilings, there is essentially no aquatic plant life present in the project area.

Birds

Humboldt Bay is a major wintering area and important stopover site for numerous species of migratory water-birds (Clowell 1994). Many species of shorebirds forage for invertebrates on intertidal mudflats, pastures, beach, sandflats, shoreline eelgrass, and in marshes (Barnhart et al. 1992). Black bellied Plover (*Pluvialis squatarola*), Willet (*Catoptrophorus semipalmatus*), Long-billed Curlew (*Numenius americanus*), Marbled Godwit (*Limosa fedoa*), Dunlin (*Calidris alpina*), Western Sandpiper (*Calidras mauri*) and Least Sandpiper (*Calidris minutilla*) are shorebirds species that may occur within the project area at low tide.

Ducks use open-water areas, water covered mudflats and eelgrass areas (Barnhart et al. 1992). Surf Scoters (*Melanitta perspicillata*), Bufflehead (*Bucephala albeola*), and greater Scaup (*Aythya marila*) are among the most commonly observed waterfowl in Eureka (pers. Obs. Ron LeValley). Humboldt Bay is an important migratory stopover site for Black Brant (*Branta bernicla nigricans*), a small migratory goose that feeds almost exclusively on eelgrass, principally in the South Bay (Barnhart et al. 1992). Black Brant show up in numbers in the fall to early winter. Thousands of Black Brant are present on South Bay during the peak period of migration in April.

Diving birds occur primarily in open-water areas of the Bay. Double-crested Cormorants (*phalacrocorax auritus*) are most abundant, followed by Red-throated Loons (*Gavia stellata*) and common Loons (*Gavia immer*). Western (*Aechmophorus occidentalis*), Horned (*podiceps auritus*), Eared (*P. nigricollis*) and Pied-billed (*Podilymbus podiceps*) grebes occur in Eureka Channel.

Hérons and egrets are regularly seen on Humboldt Bay (Barnhart et al. 1992, Harris 1996). Additionally, Humboldt Bay is important habitat for gulls and terns (Barnhart et al. 1992). In the summer, Western (*Larus occidentalis*) and Heermann's (*Larus heermanni*) gulls are most common. From October to March the following gull species are present on Humboldt Bay (listed in approximate order of decreasing abundance): Western Gull, Glaucous-winged Gull (*L. glaucescens*), New Gull (*L. canus*), and California Gull (*L. californicus*).

Marine Mammals

The Pacific harbor seal (*Phoca vitulina*), a small, non-migratory seal species (Griswold 1985), is the

most common marine mammal in Humboldt Bay (Barnhart et al. 1992). Seals haul on mudflats exposed during ebb tides adjacent to small tidal channels in upper Arcata and South Bays (pers. Obs.). Harbor seals are present in the Eureka Channel throughout the year.

California Sea Lion (*Zalophus californianus*) and the Steller Sea Lion (*Eumetopias jubatus*) are rarely observed in the Bay, but increasing numbers of California Sea lions are roosting on docks and boats at Woodley Island. While few California sea lions (*Zalophus californianus*) breed in Northern California, peak abundance occurs during the fall after the breeding season when the males migrate northward (Reeves et al. 2002). Females tend to stay close to the rookeries all year. The Federally threatened Steller Sea Lion (*Eumetopias jubatus*) favors the outer coast, preferring the haul-out on offshore rocks and rocky islands. Steller sea lions do not breed in Northern California but may occur in this region during fall, winter and spring (Reeves et al. 2002). Steller sea lions are not often found in river mouths, bays, or estuaries (Reeves et al. 2002).

Fish

Four listed anadromous fish species are known to occur within Humboldt Bay (Barnhart et al. 1994, Tauber 2002). Southern Oregon/Northern California Coho Salmon (*Oncorhynchus kisutch*), Chinook Salmon – California coastal ESU (Ecologically Significant Unit), (*Oncorhynchus tshawytscha*) and steelhead – Northern California ESU (*Oncorhynchus mykiss*) likely pass through the project site. Juvenile salmonids that are migrating to the ocean and adults migrating to freshwater streams to spawn use Humboldt Bay as a corridor. Juvenile salmonids also use Humboldt Bay as foraging habitat (Barnhart et al. 1992). Longfin smelt have an established population in Humboldt Bay and spawn in the freshwater streams which are tributaries to the Bay. The federally endangered tidewater goby (*Eucylogobius newberryi*) is also known to exist in Humboldt Bay

34. Describe the surrounding properties, including information on plants and animals and any cultural, historical, or scenic aspects. Indicate the type of land use (residential, commercial, etc.) intensity of land use (one-family, apartment houses, shops, department stores, etc.) and the scale of development (height, frontage, set-back, rear yard, etc.) Attach photographs of the vicinity. Photos accepted.

The surrounding properties are similar in character and appearance compared to the project site property proposed for dredging activity. Immediately adjacent properties are either vacant and undeveloped tidally influenced mudflats or undeveloped and vacant coastal scrub land. Proximal uses include light industrial and commercial uses.

35. How will the proposed use or activity promote the public health, safety, comfort, and convenience?

The CEMT serves as the primary import point for petroleum products such as gasoline and diesel for the greater North Coast area. Approximately 80+% of all gasoline in the area is delivered by barge to the CEMT dock. The proposed maintenance dredging project will allow for the continued operation of the CEMT facilities, thus preserving a critical pipeline for a crucial resource to be delivered to the area. Failure to perform the proposed dredging would eliminate the ability of barges to safely approach and moor at the CEMT dock.

36. How is the requested grant, permit, franchise, lease, right, or privilege required by the public convenience and necessity?

Approximately 80% of the fuel used in the greater Eureka area is delivered via barge at the Chevron terminal. If fuel deliveries via barge are interrupted, there would be a fuel shortage in the area which would have an impact on the local

economy and cause fuel prices to increase.

37. Financial statement:

A. Estimated project cost.

\$4,500,000.00

B. How will the project be financed?

Private funding.

38. Describe fully directions necessary to arrive at project site.

From Broadway Street (Highway 101) in Eureka, CA, proceed west on Truesdale Street for approximately 0.3 miles. Proceed north on Christie Street for Approximately 0.1 miles. Project site is located at 3400 Christie Street, Eureka, CA 95503



MOTEMS Mooring & Berthing Replacement **Chevron Eureka Marine Terminal**

Project Overview

In accordance with and as required by MOTEMS (Marine Oil Terminal Engineering & Maintenance Standards), Chevron Products Company proposes repair, replacement and construction of a new dock features at their facility on Humboldt Bay in Eureka, California. The Chevron Eureka Marine Terminal (CEMT) Mooring & Berthing Replacement project consists of the demolition of the existing timber mooring and berthing infrastructure and the construction of a new steel-pile-supported marine berthing system at the CEMT, which serves as a regionally critical import point for petroleum products. The work will be performed to maintain compliance with MOTEMS requirements pertaining to safety and structural integrity related to commercial marine facilities.

The work includes removal of existing marine structures, installation of new steel pipe piles, construction of reinforced-concrete dolphins, installation of new fender systems and mooring hardware, construction of catwalk support bents, and installation of new aluminum access catwalks.

In-water work will be performed within the existing terminal footprint and be performed using a combination of work barges, floating equipment, and the existing terminal facility as necessary. Based upon preliminary project plans, the active marine construction area is estimated to encompass approximately 30,000 to 32,000 square feet (approximately 0.68 to 0.75 acres).

Existing Structures to be Demolished

The existing facilities occupy a developed industrial marine terminal and are located within previously disturbed aquatic habitat associated with historic terminal operations. Water depths within the project area generally range from approximately -18 feet to -36 feet MLLW based on the project bathymetric survey.

Demolition activities will include the removal of five existing dolphins, catwalks, support piles, fender systems, and associated structural and utility components that will be replaced with the proposed new dock structure.

Structures to be Demolished	Quantity
Timber Mooring Dolphins	2
Timber Berthing Dolphins	3
Catwalk Support Bents	4
Catwalk Segments	6
Fender Structures	2
Associated Timber Piles (14" diameter)	169



Proposed New Construction

Major new construction elements include the construction of two new reinforced concrete mooring dolphins, two new reinforced concrete berthing dolphins, six new aluminum catwalk segments totaling approximately 300 linear feet, and four new catwalk support bents. Additional features will include two complete marine fender systems, four mooring hook assemblies, associated structural steel elements, guardrails, and other hardware and infrastructure supporting dock operations. No expansion of terminal operations is proposed. The project is limited to replacement and modernization of existing marine infrastructure.

Berthing Dolphins

Two new berthing dolphins to the north and south of the existing dock structure will each be supported by six 30-inch steel pipe piles. Installation components will include a reinforced concrete cap, a triple-hook mooring assembly, a marine fender system, and associated structural steel and hardware.

Mooring Dolphins

Project plans call for the construction of two new mooring dolphins to the north and south of the existing dock structure, each also supported by four 30-inch diameter steel pipe piles. Additional components will include a reinforced concrete cap, a double-hook mooring assembly with capstan, and associated structural steel and hardware.

Marine Fender and Mooring Systems

The project includes installation of two complete marine fender systems at the berthing dolphins. Each system includes fender panels, chains, weights, anchors, and associated hardware. New mooring equipment includes double-hook mooring assemblies with integrated capstans at the mooring dolphins and triple-hook mooring assemblies at the berthing dolphins.

Catwalk Support Bents and Catwalk System

Four catwalk support bents will be constructed between the dolphins and the unloading wharf. Each bent will consist of two 16-inch diameter steel pipe piles, a reinforced concrete cap, and structural support hardware. The new bents will support six aluminum catwalk segments totaling approximately 300 linear feet, providing access between the existing wharf and the new dolphins.

Pile Removal and Installation Summary

The removal of the timber piles supporting the existing berthing and mooring structure and subsequent installation of steel pipe piles for the new structure will create a net increase of 51.68 square feet of fill within the dock footprint.

Pile removal activities will be staged from floating work barges using a combination of methods that include crane hoists or vibratory hammer. Pile installation activities are



anticipated to include the use of vibratory hammer and pile-driving via impact hammer as necessary.

Pile Type (to be removed)	Quantity	Area of Pile Removal
14-inch timber piles	169	57.66 sq. ft.
Pile Type (to be installed)	Quantity	Area of Pile Impact (Fill)
30-inch Steel Pipe Piles (Dolphins)	20	98.17 sq. ft.
16-inch Steel Pipe Piles (Catwalk Bents)	8	11.17 sq. ft.
Total New Steel Pipe Piles	28	109.34 sq. ft.

Temporary Construction Impacts

Temporary impacts associated with project construction may include:

- Temporary underwater noise generated during pile removal and installation.
- Temporary turbidity associated with pile extraction and marine construction activities.
- Temporary displacement of fish and wildlife from active construction areas.
- Temporary vessel and marine traffic restrictions.
- Temporary use of barges and floating equipment within the terminal area.
- Short-term increases in construction-related noise and emissions.

Specific avoidance and minimization methods will be developed during the project permitting process offset or eliminate avoidable impacts.

Permanent Project Impacts

Permanent project impacts are expected to be limited as the project primarily replaces existing infrastructure within an active industrial marine zone. Identified potential permanent project impacts:

- Net increase of fill within the bay substrate created by installation of steel pipe piles
- Potential incidental take of marine wildlife during construction activities

The project plans to develop adequate compensatory mitigations measures in coordination with the relevant regulatory authorities to quantify and offset any potential permanent project impacts resulting from construction.

Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring_and_Berthing_Upgrade\817821T-01.dwg Feb 14, 2025 - 12:02pm



Chevron
Eureka

FACILITY OWNED & OPERATED BY:



CHEVRON PRODUCTS COMPANY
3400 CHRISTIE ST.
EUREKA, CA 95503

CHEVRON POINT OF CONTACT:

GERALD HENDERSON
NW OPERATIONS MANAGER
5531 NW DOANE AVE
PORTLAND, OR 97210
503-221-7714
HENDERSONJ@CHEVRON.COM

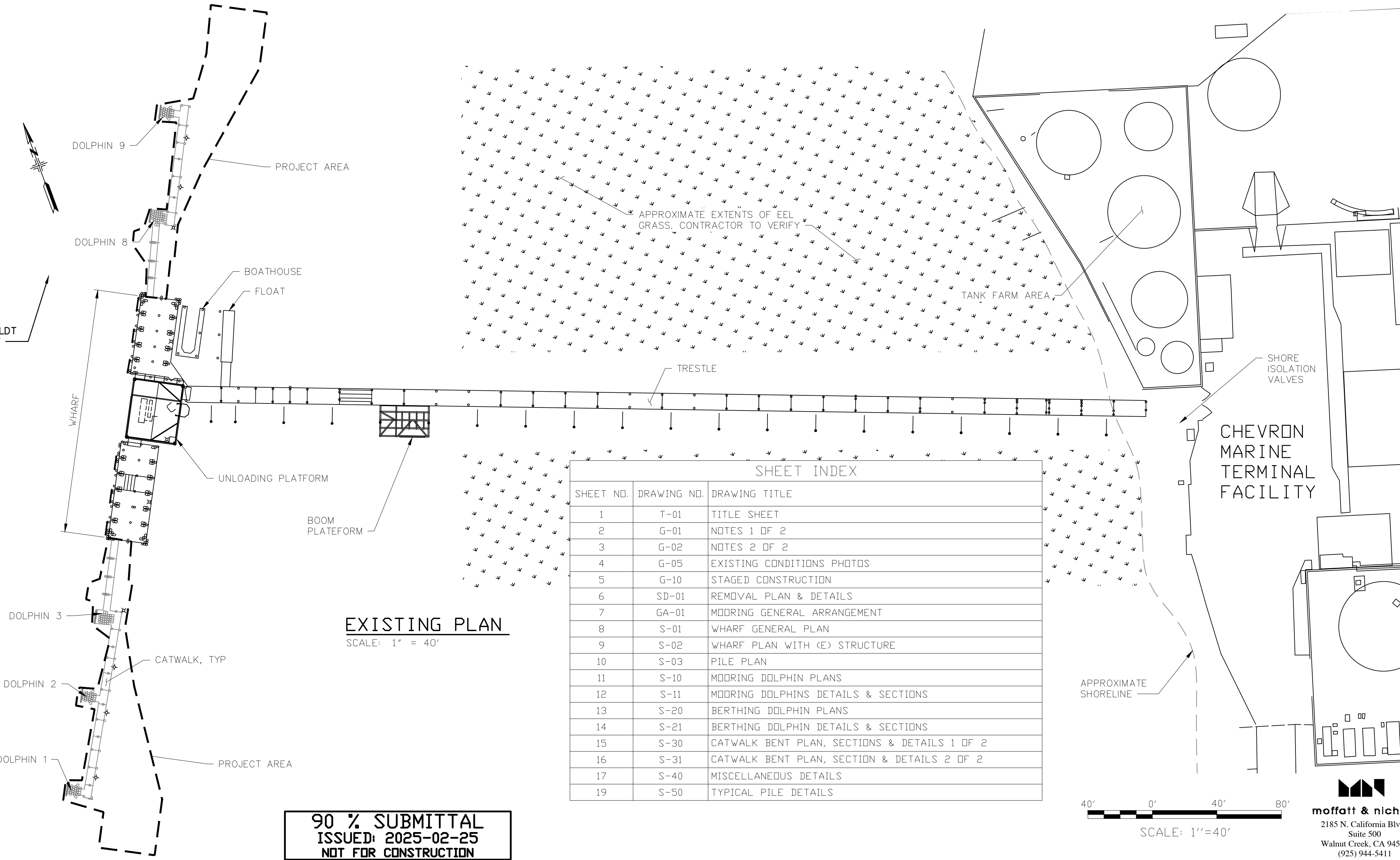


VICINITY MAP
SCALE: NTS



PROJECT
LOCATION

LOCATION PLAN
SCALE: NTS



EXISTING PLAN
SCALE: 1" = 40'

SHEET INDEX		
SHEET NO.	DRAWING NO.	DRAWING TITLE
1	T-01	TITLE SHEET
2	G-01	NOTES 1 OF 2
3	G-02	NOTES 2 OF 2
4	G-05	EXISTING CONDITIONS PHOTOS
5	G-10	STAGED CONSTRUCTION
6	SD-01	REMOVAL PLAN & DETAILS
7	GA-01	MOORING GENERAL ARRANGEMENT
8	S-01	WHARF GENERAL PLAN
9	S-02	WHARF PLAN WITH (E) STRUCTURE
10	S-03	PILE PLAN
11	S-10	MOORING DOLPHIN PLANS
12	S-11	MOORING DOLPHINS DETAILS & SECTIONS
13	S-20	BERTHING DOLPHIN PLANS
14	S-21	BERTHING DOLPHIN DETAILS & SECTIONS
15	S-30	CATWALK BENT PLAN, SECTIONS & DETAILS 1 OF 2
16	S-31	CATWALK BENT PLAN, SECTION & DETAILS 2 OF 2
17	S-40	MISCELLANEOUS DETAILS
19	S-50	TYPICAL PILE DETAILS

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

40' 0' 40' 80'
SCALE: 1"=40'

moftatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS

REVISIONS

ISSUED FOR REVIEW

02/13/25



Chevron
Eureka

SCALE: _____ DR. _____ DR. APP. _____ DATE _____
ENGR. _____ ENGR. DEPT. _____
DPR: G. DEPT. _____

APPROVED

TITLE SHEET
CHEVRON EUREKA TERMINAL
MOORING & BERTHING UPGRADES

M

W. D. _____
S. D. _____

T-01

C:\WC\8178-2\120 CADD\Active_Sheet\SettMooring_and_Berthing_Upgrade\817821G-01.dwg Feb 14, 2025 - 12:02pm

GENERAL NOTES:

1.

THE PROJECT REQUIRES THE IMPLEMENTATION OF A BEST MANAGEMENT PRACTICES PLAN (BMP) DURING ALL CONSTRUCTION WORK TO PREVENT/MINIMIZE CONSTRUCTION RELATED ACTIVITY IMPACTS.

A.

NO DEBRIS SHALL BE ALLOWED TO ENTER THE WATER. THE CONTRACTOR SHALL PROVIDE A SUITABLE POSITIVE MEANS OF CAPTURING DEBRIS FROM CONSTRUCTION AND DEMOLITION OPERATIONS. THESE FACILITIES SHALL BE IN PLACE AND APPROVED BY THE ENGINEER BEFORE STARTING DEMOLITION WORK.

B.

FRESH CONCRETE AND WATER WITH CEMENTITIOUS PARTICLES SHALL BE PREVENTED FROM ENTERING THE WATER DURING ALL CONCRETING WORK. ALL FORMS SHALL BE WATER TIGHT. CONCRETE AND WATER WITH CEMENTITIOUS PARTICLES SHALL NOT OVERFLOW FORMWORK. FORMWORK AND JOINTS SHALL BE SEALED TO PREVENT CONCRETE AND WATER WITH CEMENTITIOUS PARTICLES FROM LEAKING.
2.

DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOBSITE SAFETY.
3.

THE CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ALL TEMPORARY BRACING, SHORING, GUYS, ETC. NECESSARY TO PROTECT THE STRUCTURE FROM DAMAGE RESULTING FROM PROJECT WORK.
4.

THE CONSTRUCTION WORK SHALL NOT INTERFERE WITH ON-GOING TERMINAL OPERATIONS. COORDINATE WORK WITH CHEVRON TO MINIMIZE IMPACTS TO SHIPPING.
5.

ALL WORK SHOWN IS NEW UNLESS NOTED AS EXISTING.
6.

PRIOR TO COMMENCING THE WORK, THE CONTRACTOR SHALL CONFIRM EXISTING FIELD CONDITIONS AND CONFIRM DIMENSIONS AGAINST THESE DRAWINGS. NOTIFY ENGINEER OF ANY DISCREPANCIES.
7.

VERTICAL DATUM

a.

ELEVATIONS ARE RELATIVE TO MLLW, UDN

b.

ESTIMATED TIDAL PLANES: BASED ON NOAA STATION ID 9418767, NORTH SPIT, CA.

TIDAL DATUM

WATER ELEVATION (FT.)

MEAN HIGHER HIGH WATER (MHHW)..... 6.85

MEAN HIGH WATER (MHW)..... 6.14

MEAN TIDE ELEVATION (MTL)..... 3.70

MEAN LOW WATER (MLW)..... 1.25

NAD83..... 0.34

MEAN LOWER LOW WATER (MLLW)..... 0.00
8.

TOPOGRAPHY OF EXISTING STRUCTURE AND SURVEY CONTROL POINTS ARE BASED ON SURVEY PERFORMED BY POINT WEST SURVEYING COMPANY IN JANUARY 2016. THE AREA OF THE WHARF UNLOADING PLATFORM IS BASED ON THE RECORD SET DRAWING FOR "PIPEWAY AND UNLOADING PLATFORM RETROFIT" DATED 2017.
9.

BATHYMETRY IS BASED ON SURVEY PERFORMED BY PACIFIC AFFILIATES CONSULTING ENGINEERS ON OCTOBER 16, 2023

REMOVAL NOTES

1.

THE SITE SHALL BE CLEANED OF REMOVAL RUBBLE AT THE END OF EACH DAY AND THE CONCLUSION OF REMOVAL WORK.
2.

PROVIDE MEASURES NECESSARY TO PROTECT STRUCTURES THAT ARE TO REMAIN INCLUDING ALL UTILITIES.
3.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY SUPPORTS AND STAGING PLATFORM REQUIRED FOR REMOVAL WORK AND INSTALLATION OF NEW WORK.
4.

CONDUITS SHALL BE RELOCATED AS NECESSARY TO ACCOMMODATE NEW ELECTRICAL WORK PLANNED AS PART OF THIS CONSTRUCTION
5.

REMOVED PILES, BRACES AND STRUCTURAL COMPONENTS BECOME PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF DISPOSAL IN CONFORMANCE WITH THE PERMIT REQUIREMENTS.

STRUCTURAL NOTES

DESIGN CRITERIA

1.

WHARF RETROFIT DESIGN CRITERIA CBC 31F
2.

LIVE LOAD

a.

DOLPHINS

125PSF UNIFORM

b.

CATWALKS

75PSF UNIFORM
3.

WIND LOAD

a.

GENERAL

•

RISK CATEGORY: II

•

BASIC WIND SPEED: 92 MPH

•

WIND EXPOSURE CATEGORY: D

•

LATERAL DESIGN WIND PRESSURE 30 PSF

4.

BERTHING LOAD

248 KIPS FENDER REACTION NORMAL TO BERTH

50 KIPS FENDER REACTION DUE TO FRICTION PARALLEL TO BERTH

5.

SEISMIC DESIGN CBC 31F
- | PERIOD
(SEC) | ACCELERATION RESPONSE SPECTRAL VALUES (g) | |
|-----------------|---|------------------------------------|
| | LEVEL 1
(36 YEAR RETURN PERIOD) | LEVEL 2
(224YEAR RETURN PERIOD) |
| 0.0
(PGA) | 0.22 | 0.57 |
| 0.10 | 0.41 | 1.33 |
| 0.20 | 0.63 | 1.47 |
| 0.30 | 0.59 | 1.64 |
| 0.50 | 0.49 | 1.56 |
| 1.00 | 0.25 | 0.90 |
| 2.00 | 0.09 | 0.31 |
- CODES
1.

2022 CALIFORNIA BUILDING CODE (CBC)

3.

AMERICAN SOCIETY OF CIVIL ENGINEERS, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, ASCE 7-22.

4.

ANSI/AISC 360, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, LATEST EDITION

5.

AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.1, LATEST EDITION

6.

AMERICAN FOREST & PAPER ASSOCIATION, NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, NDS 2018

7.

AMERICA WOOD PROTECTION STANDARD, USE CATEGORY SYSTEM: USER SPECIFICATION FOR TREATED WOOD, AWWA-U1

8.

AMERICAN WOOD PROTECTION STANDARD, STANDARD FOR THE CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS, AWWA-M4

9.

ALUMINUM DESIGN MANUAL, ADM, LATEST EDITION
- STRUCTURAL OBSERVATION
1.

STRUCTURAL OBSERVATION SHALL BE PERFORMED BY THE ENGINEER-OF-RECORD FOR THIS PROJECT. AT THE MINIMUM, SUCH OBSERVATIONS AND RECORDS SHALL BE PROVIDED PRIOR TO PERMIT CLOSING.
- CONCRETE
1.

CAST-IN-PLACE CONCRETE SHALL BE NORMAL WEIGHT WITH 28 DAY COMPRESSIVE STRENGTH: f_c' = 5000 PSI

2.

PROVIDE 3/4" CHAMFER AT CONCRETE EDGES UNLESS OTHERWISE NOTED.

3.

WHERE CONCRETE IS PLACED AGAINST EXISTING SMOOTH CONCRETE, THE EXISTING CONCRETE SHALL BE INTENTIONALLY ROUGHENED TO 1/4" AMPLITUDE, UDN.

4.

LOCATION OF CONSTRUCTION JOINTS SHALL BE SUBMITTED TO THE EDR FOR APPROVAL PRIOR TO STARTING THE WORK.

5.

ALL CONSTRUCTION JOINTS SHALL BE CLEANED OF SURFACE LAITANCE, CURING COMPOUND, AND OTHER FOREIGN MATERIALS BEFORE PLACING FRESH CONCRETE AGAINST THE SURFACE OF THE JOINT. ABRASIVE BLAST METHODS SHALL BE USED TO CLEAN CONSTRUCTION JOINTS TO THE EXTENT THAT CLEAN AGGREGATE IS EXPOSED. BLASTING ABRASIVE SHALL BE CONTAINED. ALL CONSTRUCTION JOINTS SHALL BE FLUSHED WITH WATER AND ALLOWED TO DRY TO A SURFACE DRY CONDITION PRIOR TO PLACING FRESH CONCRETE.

6.

PROVIDE SETTING TEMPLATES TO POSITION ANCHOR BOLTS AND EMBEDS PRIOR TO PLACING CONCRETE. ACCURATELY POSITION ANCHOR BOLTS TO ASSURE CORRECT VERTICAL AND HORIZONTAL ALIGNMENT.

7.

CAST IN PLACE CONCRETE SHALL NOT BE LOADED UNTIL IT HAS ACHIEVED A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.

8.

ALL CONCRETE WALKING SURFACES SHALL RECEIVE A LIGHT BROOM FINISH
- REINFORCING STEEL
1.

ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 OR A706 GRADE 60.

2.

MINIMUM CONCRETE COVER FOR REINFORCING BARS SHALL BE 3" UNLESS OTHERWISE NOTED.

3.

REINFORCING BARS SHALL NOT BE WELDED WITHOUT ENGINEER'S APPROVAL.

4.

T-HEADS SHALL BE HRC555 OR APPROVAL EQUAL.
- EMBEDDED GALVANIC ANODES
1.

THE CONTRACTOR SHALL PROVIDE EMBEDDED VECTOR GALVASHIELD DAS TYPE M OR ENGINEER APPROVED EQUAL FOR ALL LOCATIONS INDICATED ON THE DRAWINGS

2.

ANODES SHALL PROVIDE 2 LBS OF ZINC PER FT OF ANODE.

3.

ANODES SHALL BE TIED TO CONCRETE REINFORCING AND INSTALLATION OF ANODES SHALL BE PER ANODE MANUFACTURER RECOMMENDATIONS.
- GROUT
1.

GROUT SHALL BE SIKAGROUT 328
- LUMBER
1.

TIMBERS SHOWN ON DRAWINGS ARE NOMINAL SIZES.

2.

TIMBERS SHALL BE DOUGLASS FIR-LARCH NO. 1 OR BETTER AS SPECIFIED BY THE WEST COAST LUMBER INSPECTION BUREAU, VISUALLY GRADED LUMBER.

3.

ALL TIMBERS SHALL BE PRESERVATIVE TREATED IN CONFORMANCE WITH AWWA-U1 USE CATEGORY UC5B. CUT, BEVEL & BORE TIMBERS PRIOR TO PRESERVATIVE TREATMENT TO THE MAXIMUM EXTENT PRACTICAL. FIELD TREAT CUTS, BEVELS & BORE HOLES MADE IN THE FIELD IN CONFORMANCE WITH AWWA-M4.
- STRUCTURAL STEEL, BOLTS & WASHERS
1.

MATERIALS:

PLATE

ASTM A572 GRADE 50

ANGLES

ASTM A36 GRADE 36

PIPE

ASTM A53 GRADE B

PIPE PILES

API 5L X52 OR ASTM A252 GR 3, FY = 50 KSI

ANCHOR BOLTS

ASTM F1554 GRADE 36, UDN

BOLTING FOR TIMBER MEMBERS

ASTM A307 GRADE A

DRIFT PINS FOR TIMBER MEMBERS

ASTM A36 GRADE 36

2.

ALL STEEL ITEMS SHALL BE HOT DIP GALVANIZED AFTER FABRICATION, UDN. PIPE PILES ARE EXEMPT FROM THIS HOT DIP GALVANIZING REQUIREMENT.

3.

BOLTS SHALL HAVE FLAT WASHERS AT THE NUT AND THE HEAD, UDN.

4.

MALLEABLE IRON DGEES WASHERS SHALL BE USED IN ALL AREAS WHERE THE BOLT HEAD OR NUT IS BEARING AGAINST WOOD.

5.

STEEL FABRICATIONS SHALL BE BY AN AISC CERTIFIED FABRICATOR.
- WELDING
1.

WELDING SHALL CONFORM TO AWS D1.1 AND CONSTRUCTION SPECIFICATIONS. WELD CONSUMABLES SHALL BE E70XX.

2.

ALL WELDS SHALL BE PREQUALIFIED OR QUALIFIED BY TEST IN CONFORMANCE WITH AWS D1.1. SUBMIT WELDING PROCEDURE SPECIFICATIONS TO CHEVRON & EDR FOR APPROVAL PRIOR TO PERFORMING WORK. SUBMIT PROCEDURE QUALIFICATION REPORT WITH WELDING PROCEDURE SPECIFICATIONS FOR WELDS QUALIFIED BY TEST.
- STEEL COATING
1.

STEEL PIPE PILES:

SURFACE PREPARATION:

ABRASIVE BLAST TO PROFILE OF 2.5 MILS

COMMERCIAL BLAST CLEANING (SSPC-SP 10)

PPG-SIGMASHIELD 880 @ 20 TO 30 MILS DFT

PRIME COAT:

PPG-SIGMASHIELD 880 @ 20 TO 30 MILS DFT

SECOND COAT:

PPG-SIGMASHIELD 880 @ 20 TO 30 MILS DFT

COAT STEEL PILES TO 10' BELOW MUDLINE MIN.
- ELECTRICAL CONDUITS
1.

REFER TO ELECTRICAL DRAWINGS FOR LAYOUT OF NEW CONDUITS.
- PILE DRIVING
1.

PILE DRIVING SHALL BE CONTINUOUS FROM START UNTIL THE REQUIRED TIP ELEVATION IS ACHIEVED.

2.

PILES SHALL BE DRIVEN TO THEIR SPECIFIED MINIMUM TIP ELEVATION.

3.

PILES SHALL NOT VARY MORE THAN 0.25 INCHES PER FOOT OF PILE LENGTH FROM VERTICAL FOR PLUMB PILES, OR MORE THAN 0.50 INCHES PER FOOT OF PILE LENGTH FROM THE REQUIRED ANGLE FOR BATTER PILES.

4.

PILES SHALL BE DRIVEN BY VIBRATORY METHODS TO THEIR SPECIFIED MINIMUM TIP ELEVATIONS.

5.

INSTALL PIPE PILES WITHIN THE FOLLOWING TOLERANCES FROM PLANNED LOCATIONS:

•

PLAN LOCATION = 3.0 INCHES

•

PLUMB = 0.5 PERCENT
- 90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION
- | REFERENCE DRAWINGS | | | | REVISIONS | | | | Chevron
Eureka | | | | THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY. | | | | | | | |
|--------------------|--|--|--|-----------|--|--|--|-------------------|--|--|--|---|-------------|--|------|--|--|--|--|
| | | | | | | | | | | | | NOTES 1 OF 2 | | | | | | | |
| | | | | | | | | | | | | CHEVRON EUREKA TERMINAL | | | | | | | |
| | | | | | | | | | | | | MOORING & BERTHING UPGRADES | | | | | | | |
| | | | | | | | | | | | | M | W. D. _____ | | G-01 | | | | |
| | | | | | | | | | | | | | S. D. _____ | | | | | | |
| | | | | | | | | | | | | SCALE _____ DR. _____ DR. APP. _____ DATE _____ | | | | | | | |
| | | | | | | | | | | | | ENGR. _____ ENGR. DEPT. _____ | | | | | | | |
| | | | | | | | | | | | | DPR' G. DEPT. _____ | | | | | | | |
| | | | | | | | | | | | | APPROVED | | | | | | | |

C:\WC\8178-2\120 CADD\Active_Sheet\SettMooring_and_Berthing_Upgrade\817821G-02.dwg Feb 14, 2025 - 12:02pm

MOORING HOOKS

1. MOORING HOOKS SHALL BE AS FOLLOWS:
- DOUBLE HOOK ASSEMBLY

-SHALL BE TRELLEBORG READYMOORE 50 DOWN RATED TO 40 TONS PER HOOK.

-SHALL BE FURNISHED WITH CAPSTAN
- TRIPLE HOOK ASSEMBLY

-SHALL BE TRELLEBORG READYMOORE 50 DOWN RATED TO 40 TONS PER HOOK.

FENDER SYSTEM

1. TRELLEBORG 950 WITH RUBBER GRADE 1.0

CATWALKS

1. ALUMINUM CATWALKS SHOWN HERE ARE TO BE DESIGNED BY OTHERS.

SPECIAL INSPECTION

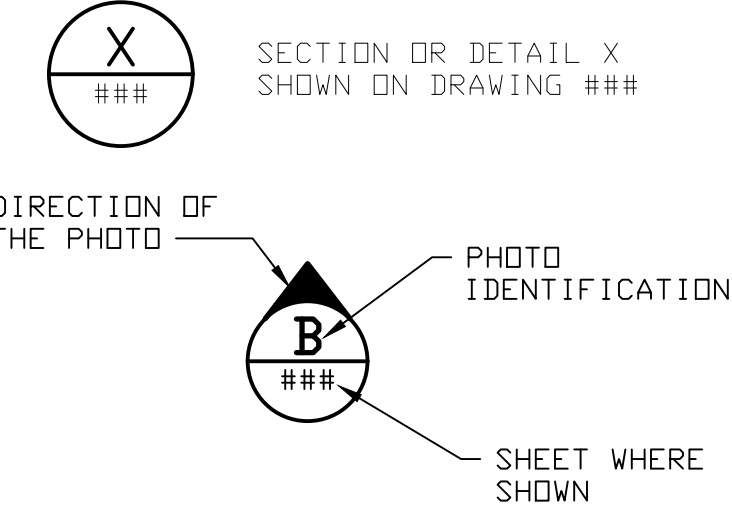
1. ALL INSPECTIONS SHALL BE PERFORMED IN COMPLIANCE WITH AND AS REQUIRED PER SPECIAL INSPECTIONS, AS DEFINED IN CHAPTER 17 OF THE 2022 CALIFORNIA BUILDING CODE.
2. ALL INSPECTION SHALL BE PERFORMED BY A CITY OF EUREKA APPROVED INSPECTION AGENCY.
3. EACH INSPECTION SHALL BE DOCUMENTED. INSPECTION RECORDS SHALL BE SUBMITTED FOR ENGINEER'S REVIEW.

SPECIAL INSPECTION TABLE			
VERIFICATION AND INSPECTION		CONTINUOUS	PERIODIC
STEEL CONSTRUCTION			
1. MATERIAL VERIFICATION OF STRUCTURAL STEEL:			
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		—	X
b. MANUFACTURER’S CERTIFIED MILL TEST REPORTS.		—	X
2. VERIFY MEMBER LOCATIONS, BRACES, STIFFENERS, AND APPLICATION OF JOINT DETAILS AT EACH CONNECTION COMPLY WITH THE CONSTRUCTION DOCUMENTS.		—	X
MATERIAL VERIFICATION OF WELD FILLER MATERIAL			
1. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		—	X
2. MANUFACTURER’S CERTIFICATE OF COMPLIANCE REQUIRED.		—	X
WELDING OF STRUCTURAL STEEL			
1. COMPLETE & PARTIAL PENETRATION GROOVE WELDS.		X	—
2. MULTI-PASS FILLET WELDS.		X	—
3. SINGLE-PASS FILLET WELDS > 5/16”		X	—
4. SINGLE-PASS FILLET WELDS < 5/16”		—	X
CONCRETE			
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT.		—	X
2. INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE.		X	—
3. VERIFYING USE OF REQUIRED DESIGN MIX.		—	X
4. AT THE TIME FRESH CONCRETE IS PLACED, TAKE SPECIMENS FOR STRENGTH TESTS, SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.		X	—
5. INSPECTION OF CONCRETE FOR PROPER PLACEMENT TECHNIQUES.		X	—
6. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.		—	X
7. INSPECT FORMWORK FOR SHAPE, LOCATION, WATERTIGHTNESS AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.		—	X
8. VERIFY THAT THE TYPE OF MECHANICAL COUPLERS AND T-HEADS ARE AS SHOWN ON THE PLANS AND SPECIFICATIONS. VERIFY LOCATION, COVER AND INSTALLATION OF COUPLERS AND T-HEADS.		—	X
GROUTING			
1. PRIOR TO GROUTING OPERATIONS, VERIFY THAT THE GROUT MATERIALS MEET OR EXCEED THOSE REQUIREMENTS STATED IN THE DRAWINGS AND SPECIFICATIONS.		—	X
2. INSPECTION FOR MIXING OF GROUT MATERIALS AND GROUT PLACEMENT.		X	—
3. AT THE TIME FRESH GROUT IS SAMPLED, TAKE SPECIMENS FOR STRENGTH TESTS, SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE GROUT.		X	—
EPOXY			
1. INSPECTION OF EPOXY MIXING & PLACEMENT.		—	X
PILES			
1. VERIFY PILE MATERIAL, SIZE AND LENGTHS COMPLY WITH THE PLANS.		X	—
2. OBSERVE DRIVING OPERATION AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PILE.		X	—
3. VERIFY PLACEMENT, LOCATION AND PLUMBNESS, CONFIRM TYPE AND SIZE OF HAMMER, RECORD NUMBER OF BLOWS PER FOOT OF PENETRATION, RECORD TIP & BUTT ELEVATIONS AND DOCUMENT ANY DAMAGE TO FOUNDATION ELEMENTS.		X	—

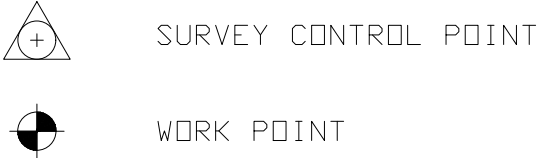
ABBREVIATIONS

@	AT
+/-	PLUS/MINUS
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
CL	CENTERLINE
CLR	CLEAR
CJ	CONSTRUCTION JOINT
EA	EACH
EL	ELEVATION
<E>	EXISTING
FT	FEET
FV	FIELD VERIFY
Fu	MINIMUM TENSILE STRESS
Fy	MINIMUM YIELD STRESS
HDG	HOT DIPPED GALVANIZED
KIP	KILO POUND
MAX	MAXIMUM
MIN	MINIMUM
MLLW	MEAN LOWER LOW WATER
NOM	NOMINAL
OC	ON CENTER
OPP	OPPOSITE
PL	PLATE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
SIM	SIMILAR
SQ	SQUARE
STD	STANDARD
T&B	TOP AND BOTTOM
TOC	TOP OF CONCRETE
TOG	TOP OF GRATING
TYP	TYPICAL
UDN	UNLESS OTHERWISE NOTED

SHEET REFERENCING LEGEND



LEGEND AND SYMBOLS



90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

PERMITS

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATORY
- US ARMY CORPS OF ENGINEERS

• REGIONAL WATER QUALITY CONTROL BOARD

• CALIFORNIA COASTAL COMMISSION

moffatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS				REVISIONS				Chevron		Chevron		NOTES 2 OF 2	
												CHEVRON EUREKA TERMINAL	
												MOORING & BERTHING UPGRADES	
												M	W. D. _____
													S. D. _____
												G—02	

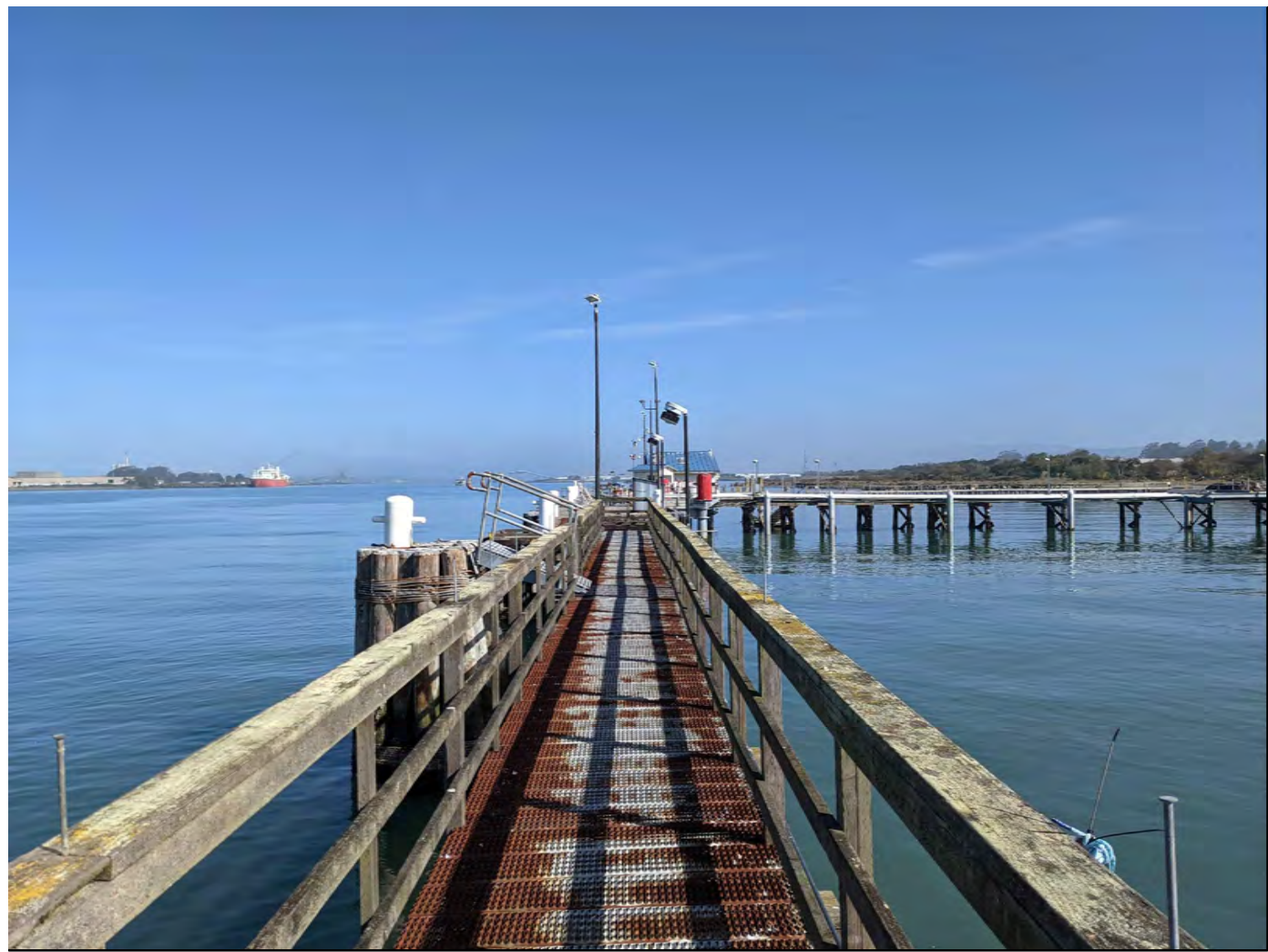
Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring and Berthing Upgrades\817821G-05.dwg Feb 14, 2025 - 12:02pm



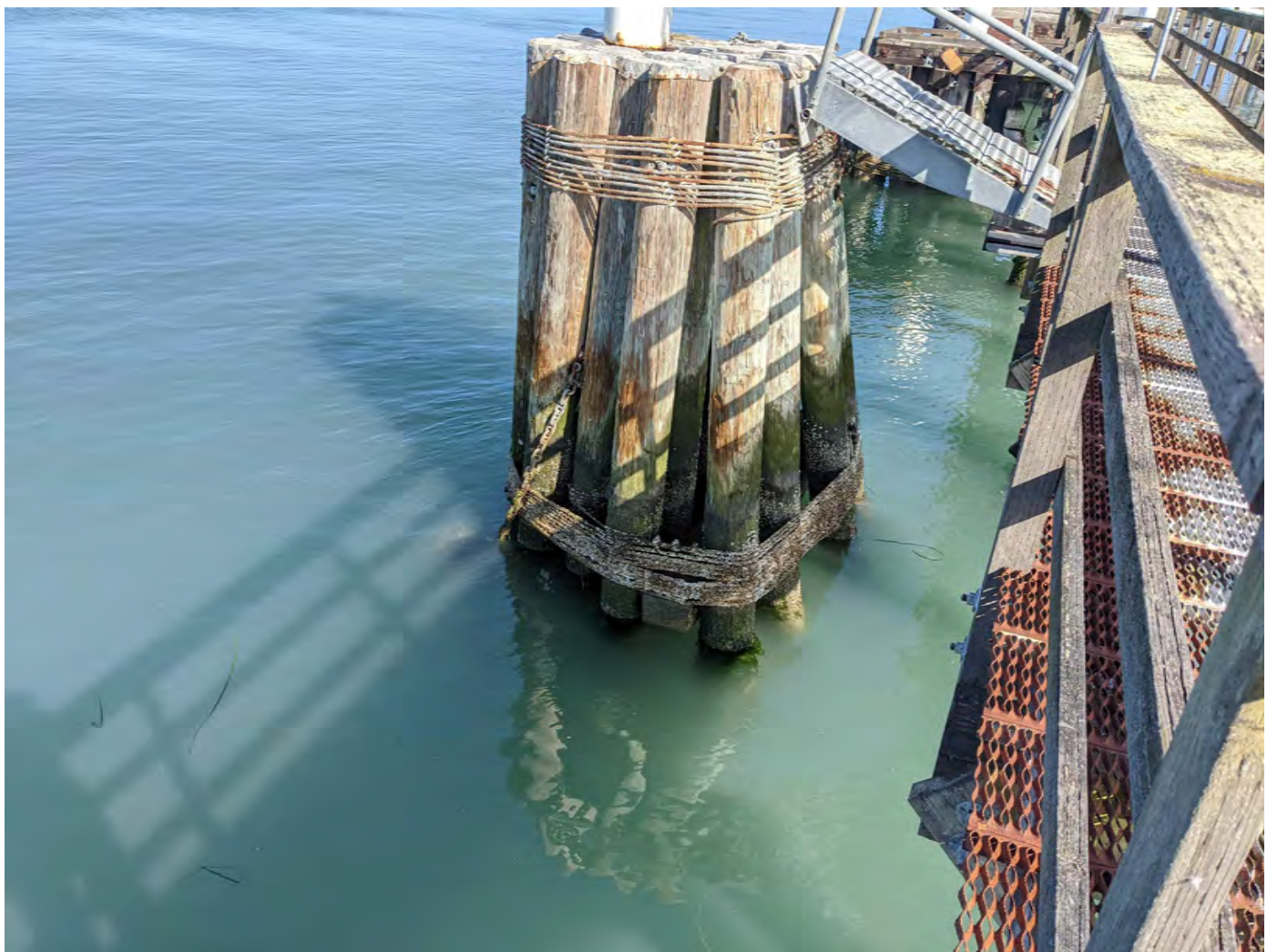
1 DOLPHIN 1
SD-01 SCALE: NTS



2 CATWALK & DOLPHIN 2
SD-01 SCALE: NTS



3 CATWALK BETWEEN DOLPHINS 1 - 2 & 3
SD-01 SCALE: NTS



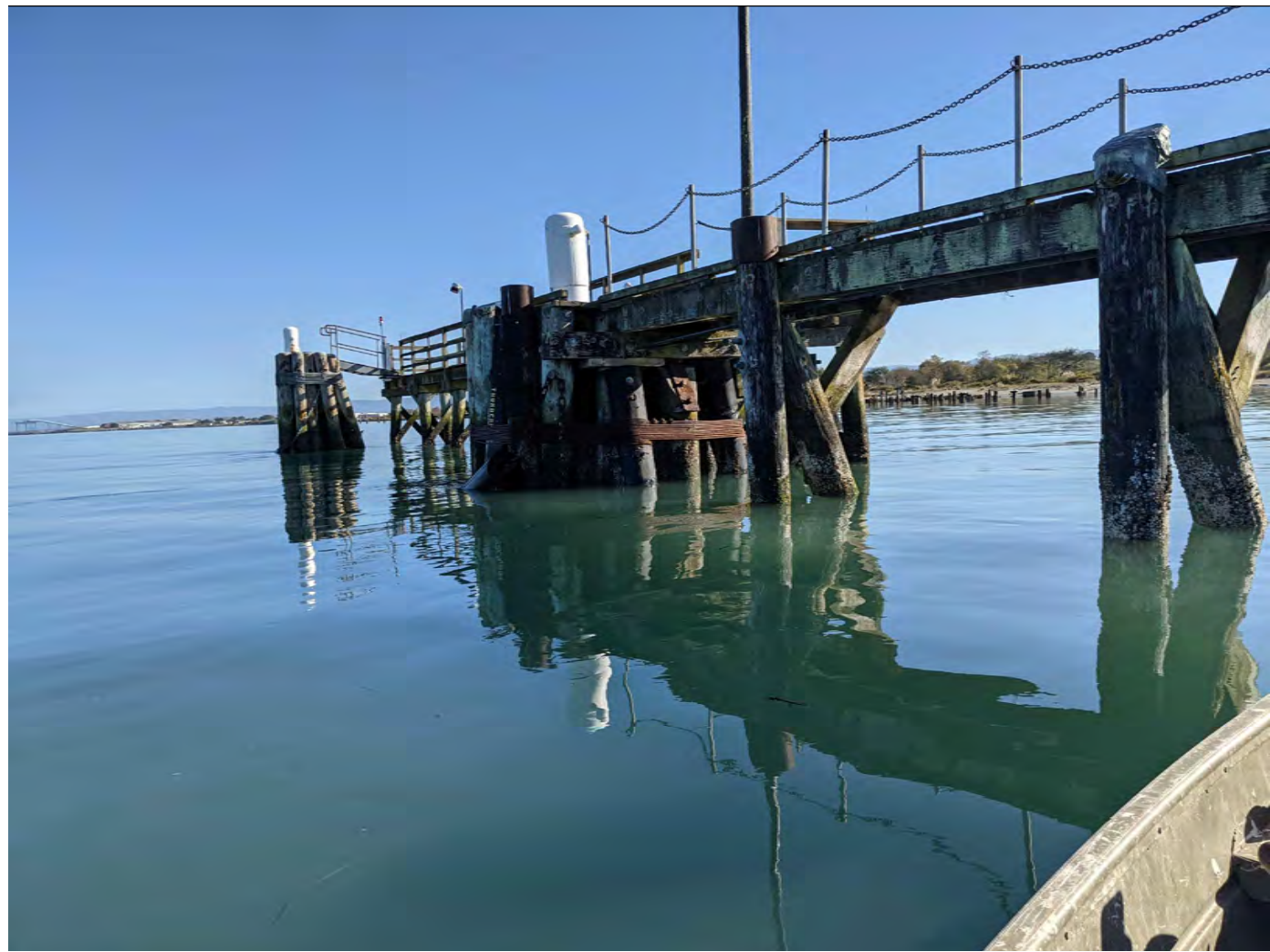
4 DOLPHIN 2
SD-01 SCALE: NTS



5 DOLPHIN 2
SD-01 SCALE: NTS



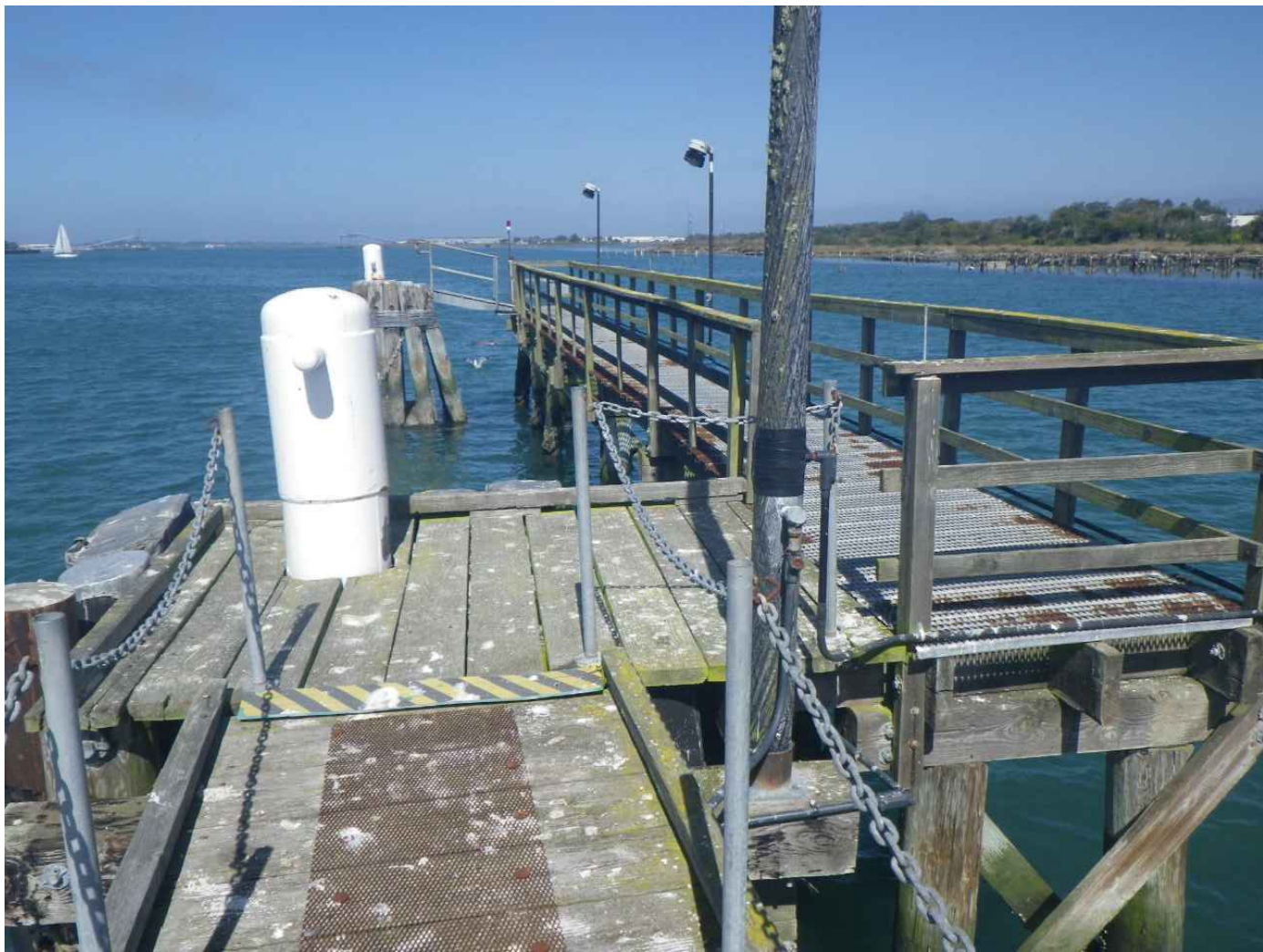
6 DOLPHIN 3
SD-01 SCALE: NTS



7 CATWALK AND DOLPHINS 8 & 9
SD-01 SCALE: NTS



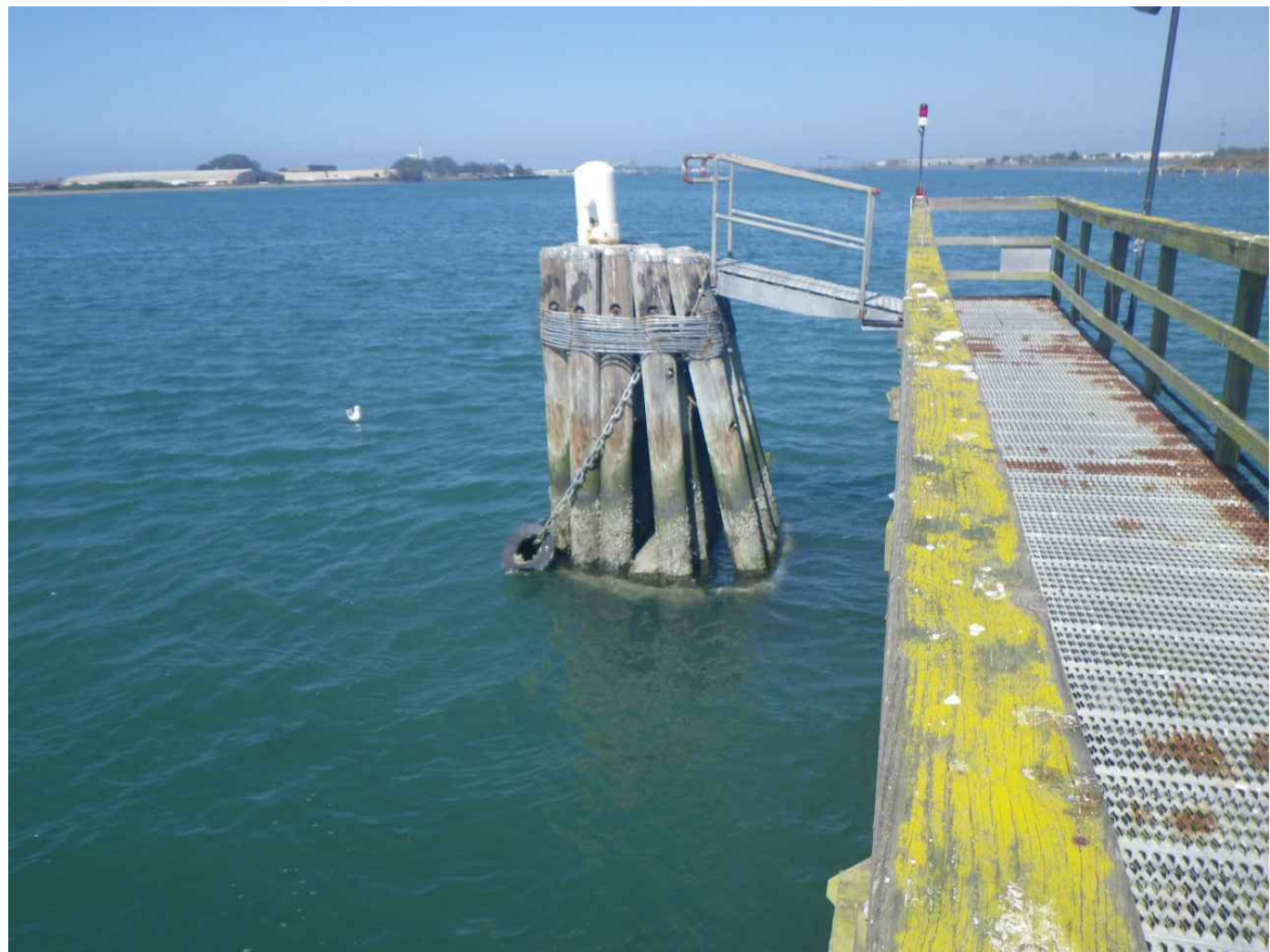
8 CATWALK BETWEEN DOLPHINS 8 & 9
SD-01 SCALE: NTS



9 CATWALK & TOP OF DOLPHIN 8
SD-01 SCALE: NTS



10 CATWALK BETWEEN DOLPHINS 8 & 9
SD-01 SCALE: NTS



11 CATWALK & DOLPHIN 9
SD-01 SCALE: NTS

NOTES:

1. PHOTOS SHOWN WERE TAKEN SEPTEMBER AND OCTOBER 2021.
2. REFER TO SHEET SD-01 FOR LOCATIONS OF STRUCTURES INDICATED.



moftatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS

REVISIONS



Chevron
Eureka

SCALE: _____ DR. _____ DR. APP. _____ DATE _____
ENGR. _____ ENGR. DEPT. _____
DPR. G. DEPT. _____

APPROVED

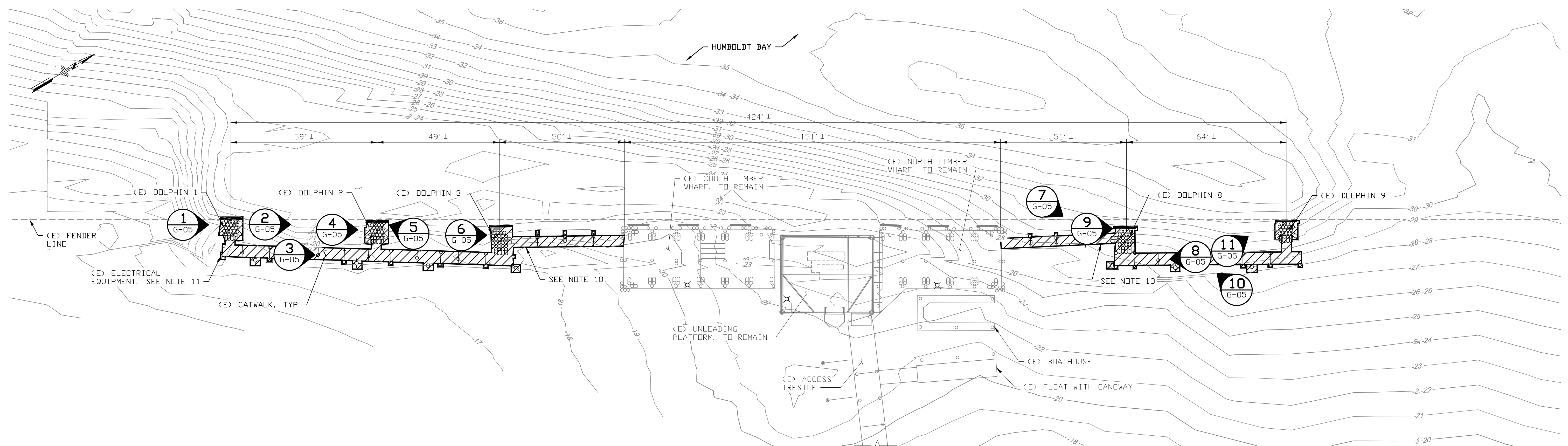
EXISTING CONDITIONS PHOTOS
CHEVRON EUREKA TERMINAL
MOORING & BERTHING UPGRADES

M

W. D. _____
S. D. _____

G-05

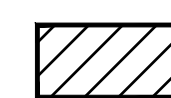
[illegible]



1 REMOVAL PLAN

SCALE: 1" = 20'

- LEGEND



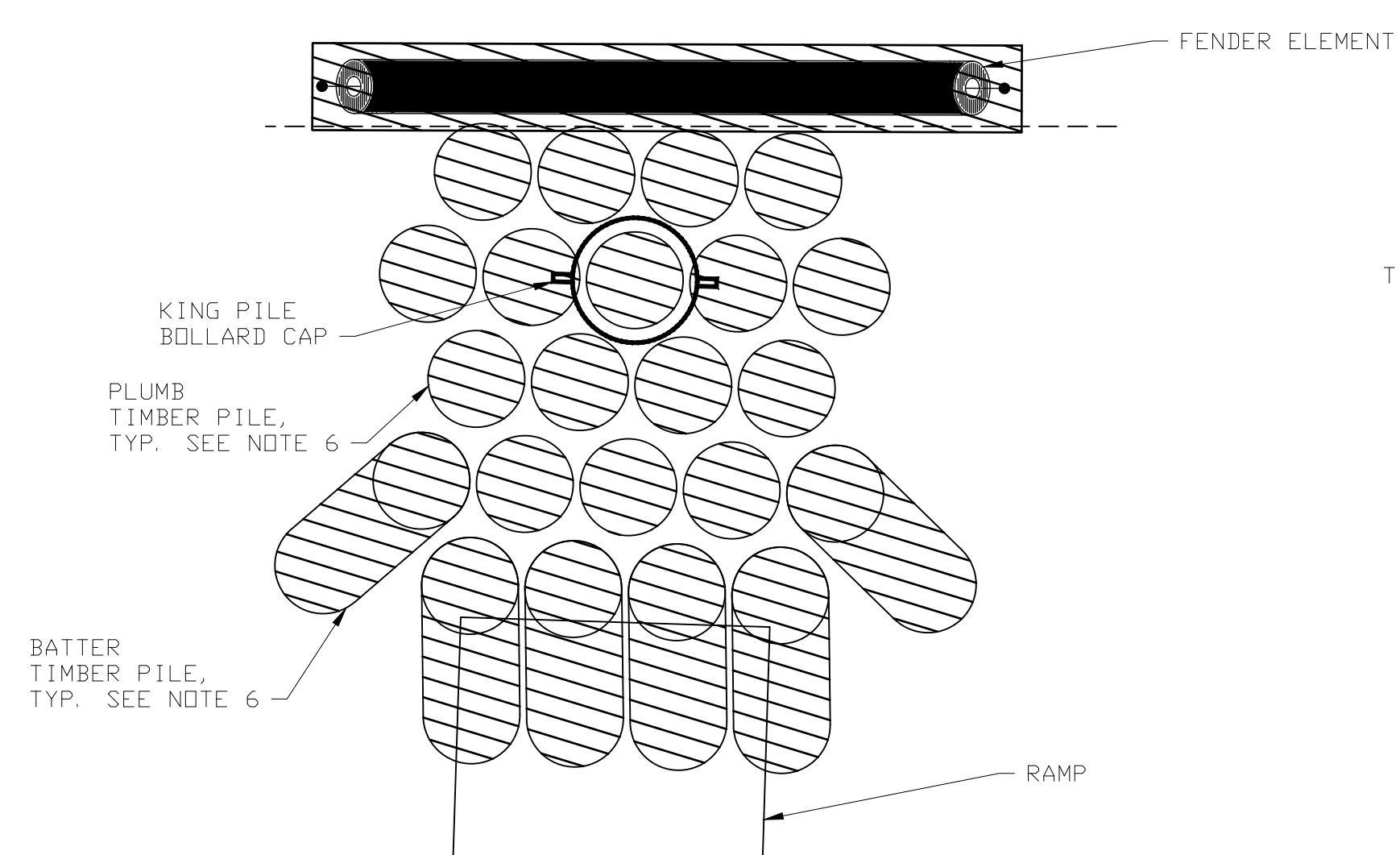
INDICATES REMOVAL

20 FT LIGHT POLE (2 TO BE REMOVED)

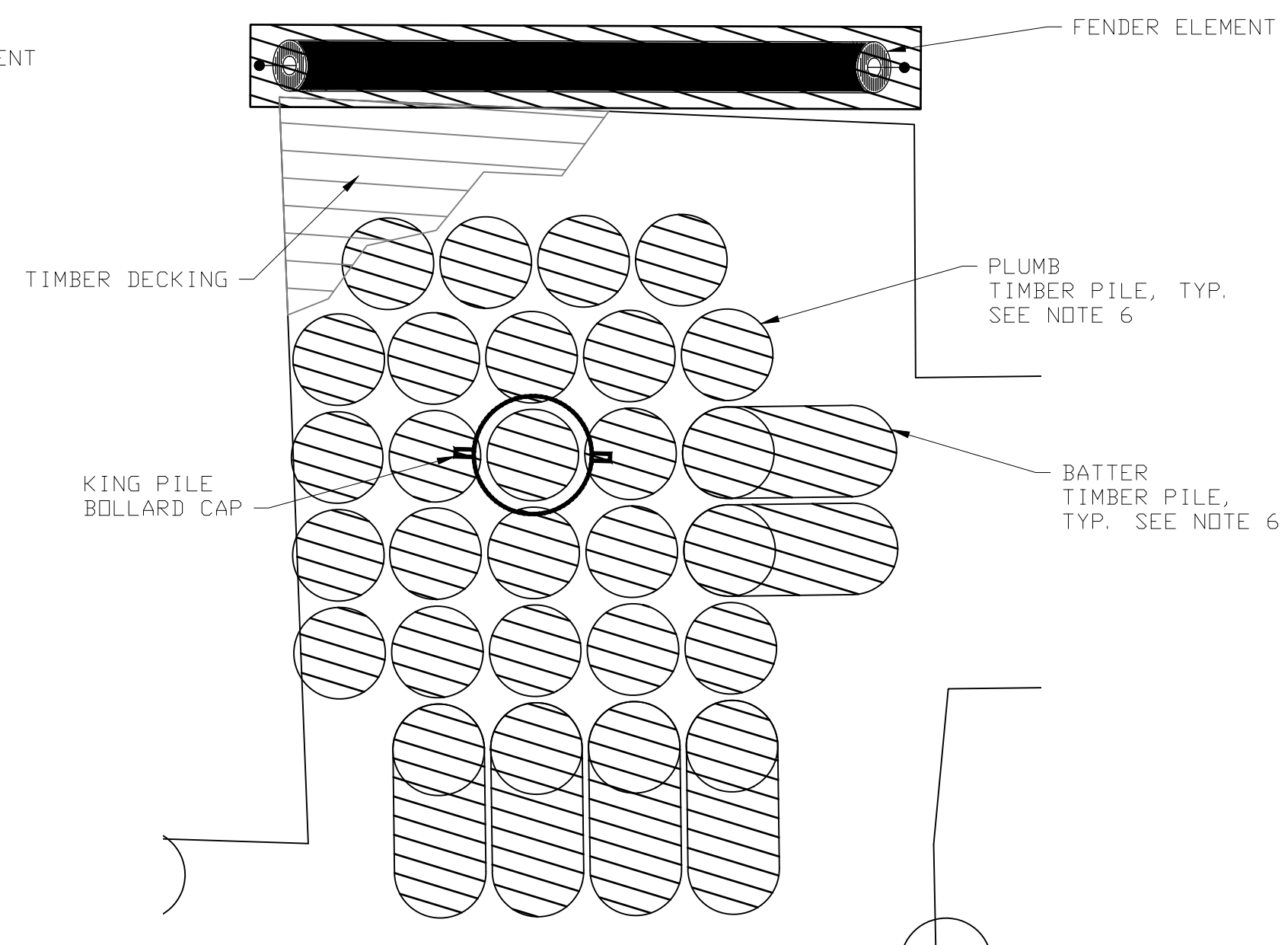
8 FT LIGHT POLE (5 TO BE REMOVED)

NOTES:

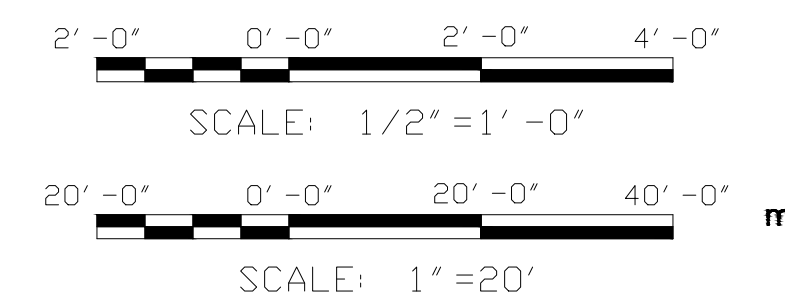
1. REMOVE ALL PILES AT DOLPHINS 1, 2, 3, 8, AND 9, INCLUDING CABLES, SPACERS & BLOCKING.
2. REMOVE ALL MOORING AND BERTHING HARDWARE INCLUDING FRAMING, FENDERS AND ANY ANCILLARY COMPONENTS AT DOLPHINS 1, 2, 3, 8, AND 9.
3. REMOVE ALL CATWALKS INCLUDING ALL SUPPORT PILES, FRAMING COMPONENTS, GRATING, UTILITIES AND RAILINGS.
4. THE REMOVAL OF PILES SHALL BE BY EXTRACTION.
5. REMOVE LIGHT POLES AND FIXTURES AT CATWALKS AND DOLPHINS THAT ARE INDICATED TO BE REMOVED. DISCONNECT ELECTRICAL SERVICE AT PULL BOXES ON THE WHARF.
6. NUMBER OF PLUMB AND BATTER PILES SHOWN FOR DEMOLITION IS APPROXIMATE. CONTRACTOR TO FIELD VERIFY
7. COORDINATE WITH CHEVRON PRIOR TO REMOVAL OF UTILITIES (ELECTRICAL) TO ENSURE SERVICE IS NOT INTERRUPTED TO AREAS THAT ARE TO REMAIN.
8. DEMOLITION AND REMOVAL WASTE AND DEBRIS SHALL BECOME CONTRACTOR'S PROPERTY AND BE DISPOSED PROPERLY IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS.
9. INFORMATION SHOWN IS BASED ON INTERPRETATION OF EXISTING CONDITIONS, AVAILABLE DRAWINGS, SURVEY, AND LIMITED VISUAL INSPECTION. CONTRACTOR SHALL VERIFY EXISTING CONDITION AND NOTIFY CHEVRON IF ANY DISCREPANCIES WITH THE DRAWING(S) ARE FOUND BEFORE PROCEEDING WITH THE WORK.
10. CONTRACTOR SHALL COORDINATE WITH CHEVRON FOR REMOVAL OF (E) CATWALKS AT THESE LOCATIONS (ADJACENT TO (E) DOLPHINS 3 AND 8). CONTRACTOR SHALL PROVIDE TEMPORARY ACCESS CATWALKS TO (E) DOLPHINS 3 AND 8 WHILE INSTALLING THE PILES FOR THE NEW NORTH AND SOUTH BERTHING DOLPHINS (IN THE AREAS OF REMOVED CATWALKS). SEE SHEET S-01 FOR LOCATION OF NEW NORTH AND SOUTH BERTHING DOLPHINS.
11. COORDINATE WITH CHEVRON TO REMOVE AND SALVAGE NOAA CURRENT METER & SUPPORT. (SEE G-05 PHOTO 2)



2 EXISTING DOLPHINS 1 2 & 9 -TYP PLAN
- SCALE: 1/2" = 1' -0"



3 EXISTING DOLPHINS 3 & 8 - TYP PLAN
SCALE: 1/2" = 1' - 0"

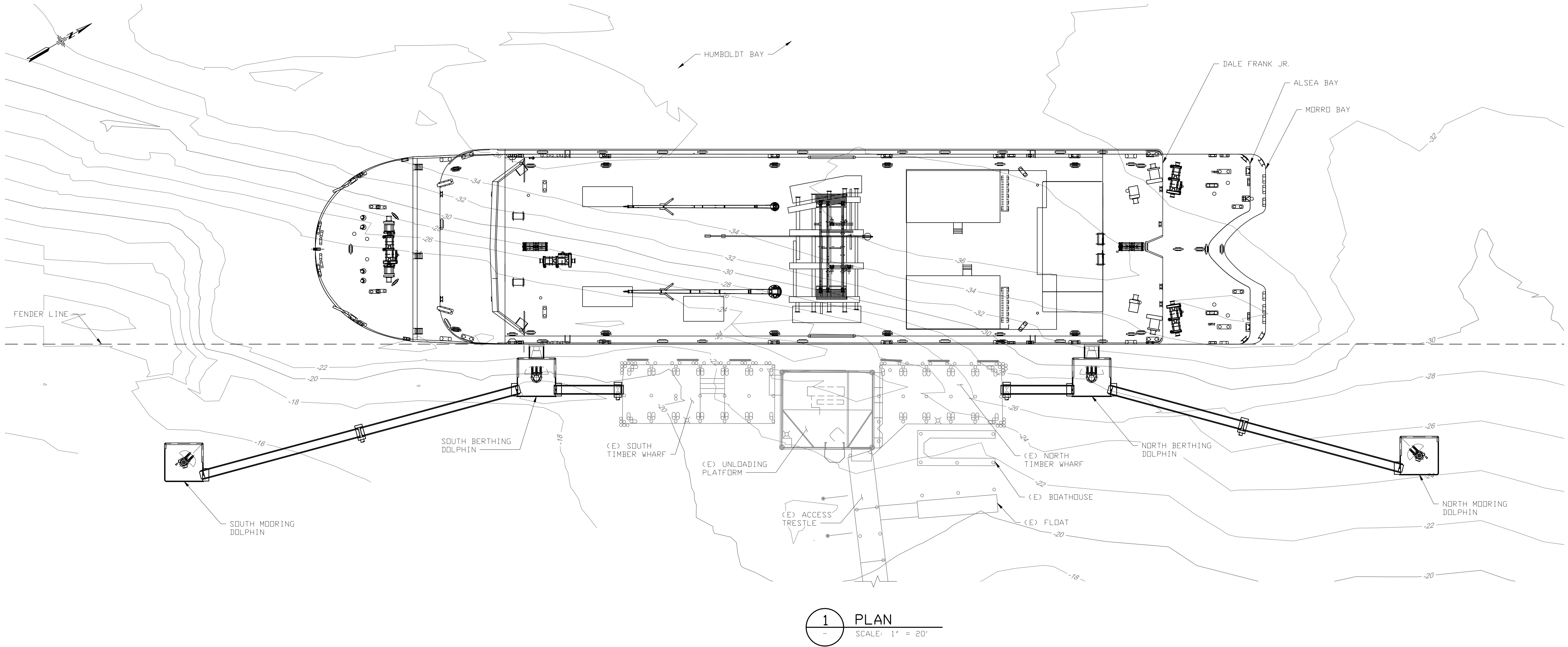


hoffatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS				REVISIONS										REMOVAL PLAN & DETAILS		
							ISSUED FOR REVIEW	SH	JB	SH			CHEVRON EUREKA TERMINAL			
								-	-	-			MOORING & BERTHING UPGRADES			
							02/13/25				SCALE _____ DR. _____ DR. APP. _____ DATE _____		APPROVED	M	W. O. _____ S. O. _____	SD-01
											ENGR. _____ ENGR. DEPT. _____					
											OPR' G. DEPT. _____					

Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring and Berthing Upgrades\817821GA-01.dwg Feb 14, 2025 - 12:03pm



- NOTES:
1. MOORING LINES NOT SHOWN FOR CLARITY

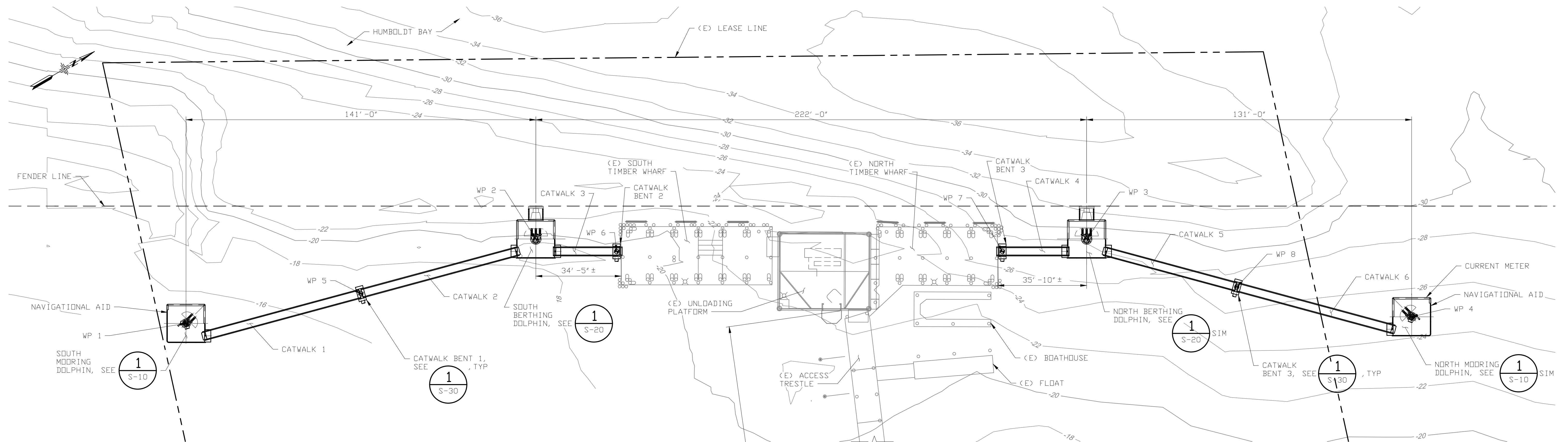
90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

20' -0" 0' -0" 20' -0" 40' -0"

SCALE: 1" = 20'

moffatt & nichol
2185 N. California Blvd., Suite 500
Walnut Creek, CA 94596
(925) 944-5411

REFERENCE DRAWINGS			REVISIONS						 Chevron Eureka		MOORING GENERAL ARRANGEMENT		
											CHEVRON EUREKA TERMINAL		
											MOORING & BERTHING UPGRADES		
											M W. D. GA-01		
											S. D.		



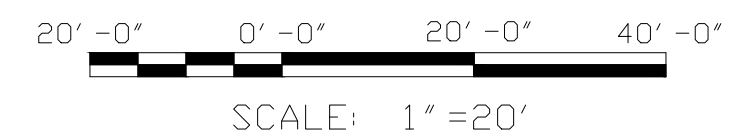
CATWALK SCHEDULE			
CATWALK #	LENGTH L	SOUTH END	NORTH END
1	64'-3"	PIN	SLIDE
2	64'-3"	SLIDE	PIN
3	25'-9"	PIN	SLIDE
4	27'-3"	SLIDE	PIN
5	54'-0"	PIN	SLIDE
6	64'-3"	SLIDE	PIN

SURVEY CONTROL POINTS				
NAME	NORTHING	EASTING	ELEVATION	DESC
5016	2174106. 999	5954170. 820	11. 3751	CP MAIL
5017	2174288. 136	5953700. 974	12. 2048	CP NAG DOCK

WP TABLE			
NAME	NORTHING	EASTING	DESC
WP-1	2174096. 946	5953448. 335	SOUTH MOORING DOLPHIN
WP-2	2174237. 394	5953484. 585	SOUTH BERTHING DOLPHIN
WP-3	2174433. 326	5953588. 963	NORTH BERTHING DOLPHIN
WP-4	2174534. 198	5953678. 234	NORTH MOORING DOLPHIN
WP-5	2174164. 819	5953470. 873	CATWALK BENT 1
WP-6	2174263. 772	5953504. 309	CATWALK BENT 2
WP-7	2174401. 005	5953577. 410	CATWALK BENT 3
WP-8	2174477. 643	5953634. 477	CATWALK BENT 4

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

1 PLAN
SCALE: 1" = 20'

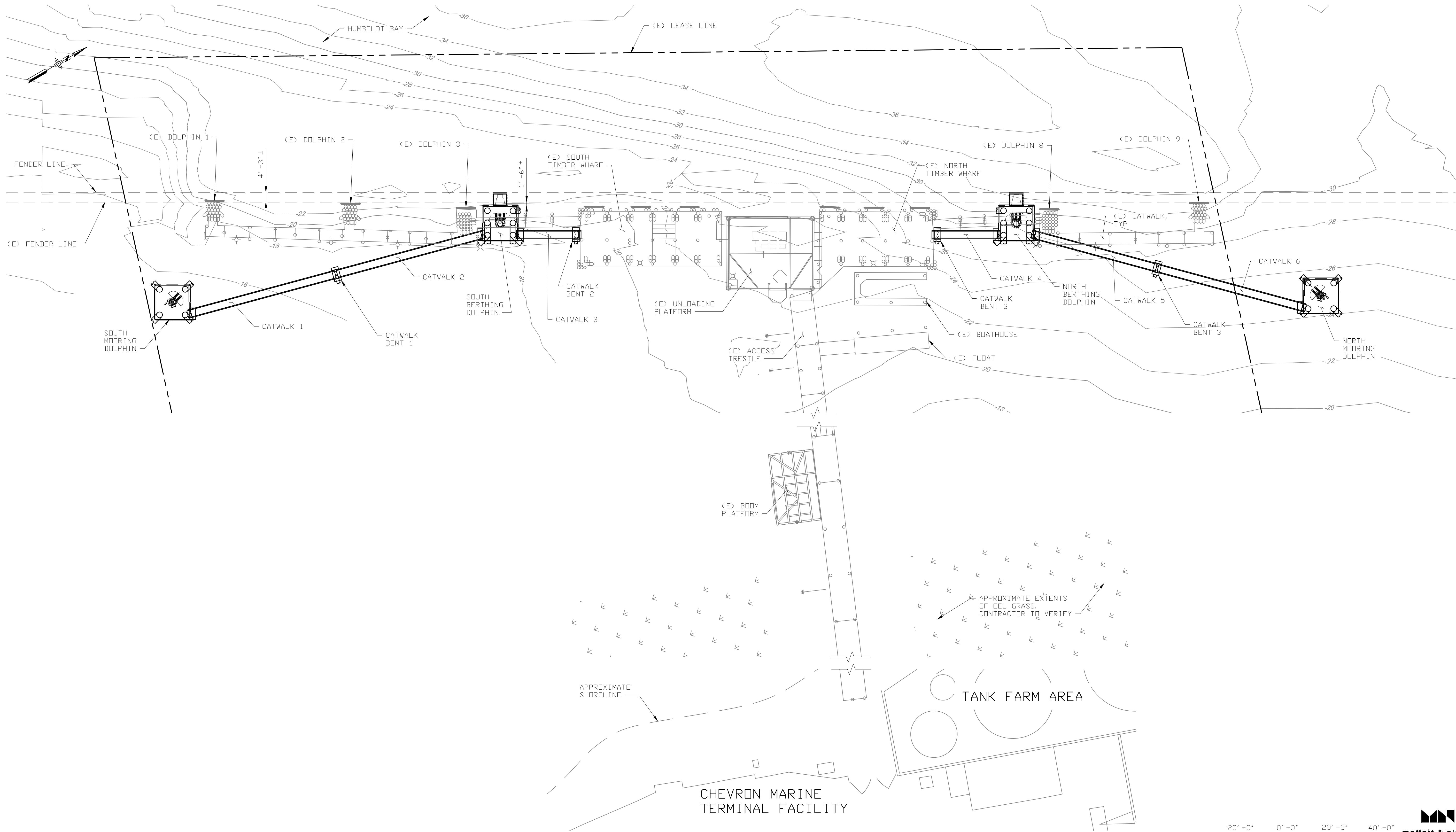


hoffatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

	REFERENCE	DRAWINGS	REVISIONS						 Chevron Eureka		WHARF GENERAL PLAN CHEVRON EUREKA TERMINAL MOORING & BERTHING UPGRADES	
						B	ISSUED FOR REVIEW	SH	JB	SH		
								-	-	-		
											SCALE _____ DR. _____ DR. APP. _____ DATE _____	APPROVED _____
											ENGR. _____ ENGR. DEPT. _____	M W. D. _____ S. D. _____
											DPR' G. DEPT. _____	S-01

Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring_and_Berthing_Upgrade\817821S-02.dwg Feb 14, 2025 - 12:03pm



90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

1 PLAN
SCALE: 1" = 20'

20' -0" 0' -0" 20' -0" 40' -0"
SCALE: 1" = 20'

moftatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS				REVISIONS				Chevron		Chevron		WHARF PLAN WITH (E) STRUCTURE	
												CHEVRON EUREKA TERMINAL	
												MOORING & BERTHING UPGRADES	
												M	W. D. _____
													S. D. _____
												S-02	

B

ISSUED FOR REVIEW

02/13/25

SH JB SH

- - -



Chevron
Eureka

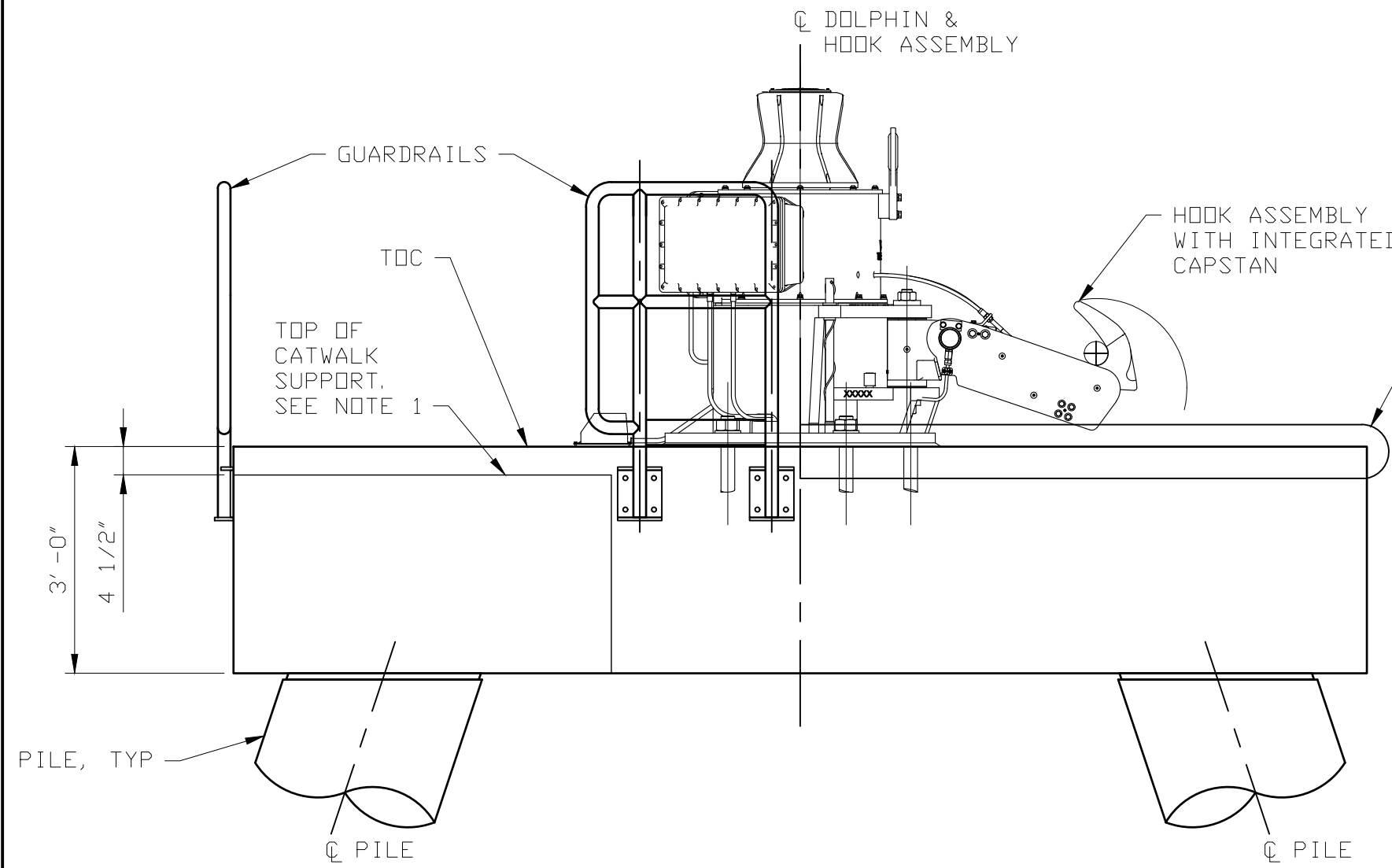
SCALE: _____ DR. _____ DR. APP. _____ DATE _____
ENGR. _____ ENGR. DEPT. _____
DPR. G. DEPT. _____

APPROVED

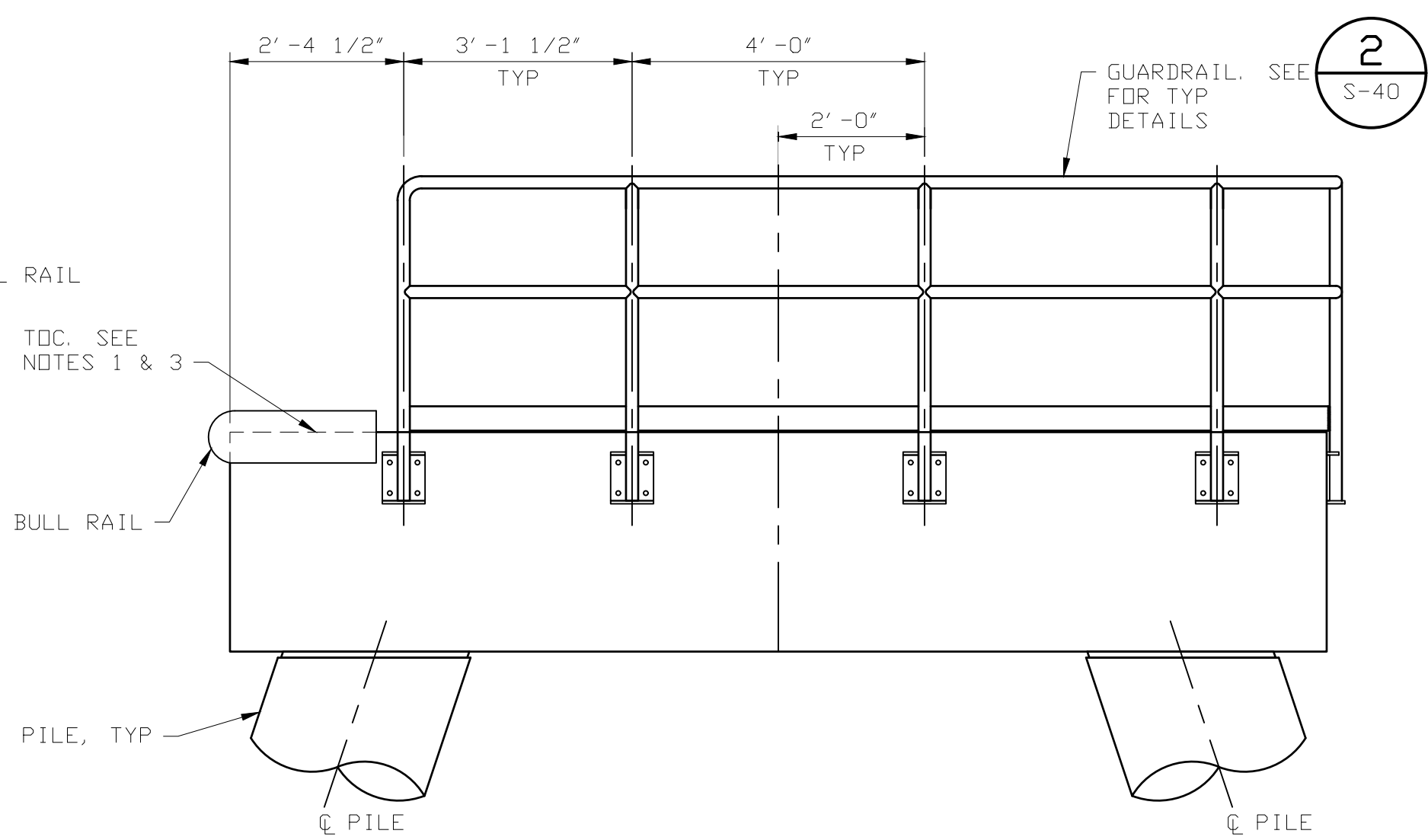
M

W. D. _____
S. D. _____

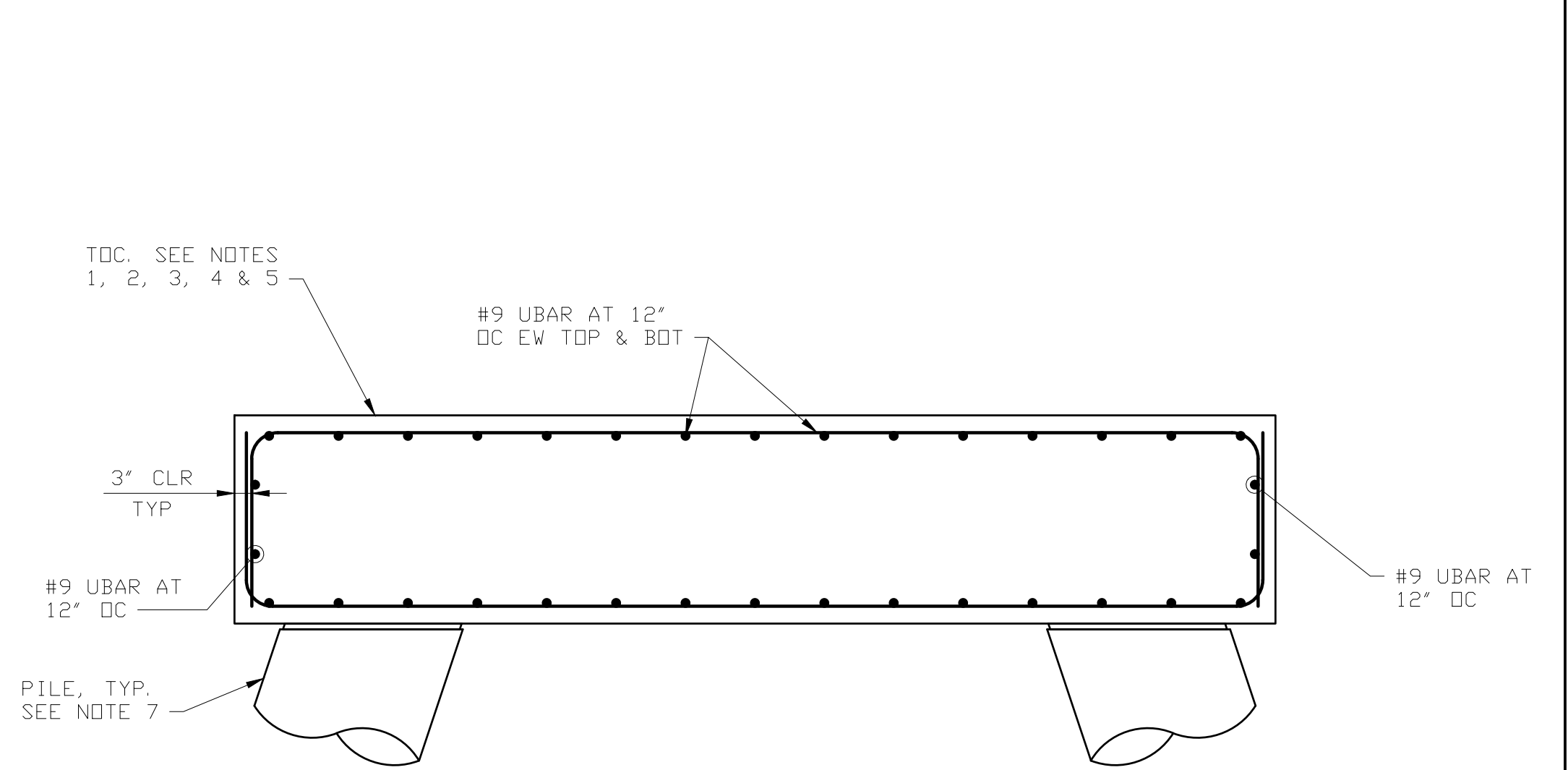
Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring and Berthing Upgrades\817821S-11.dwg Feb 14, 2025 - 12:04pm



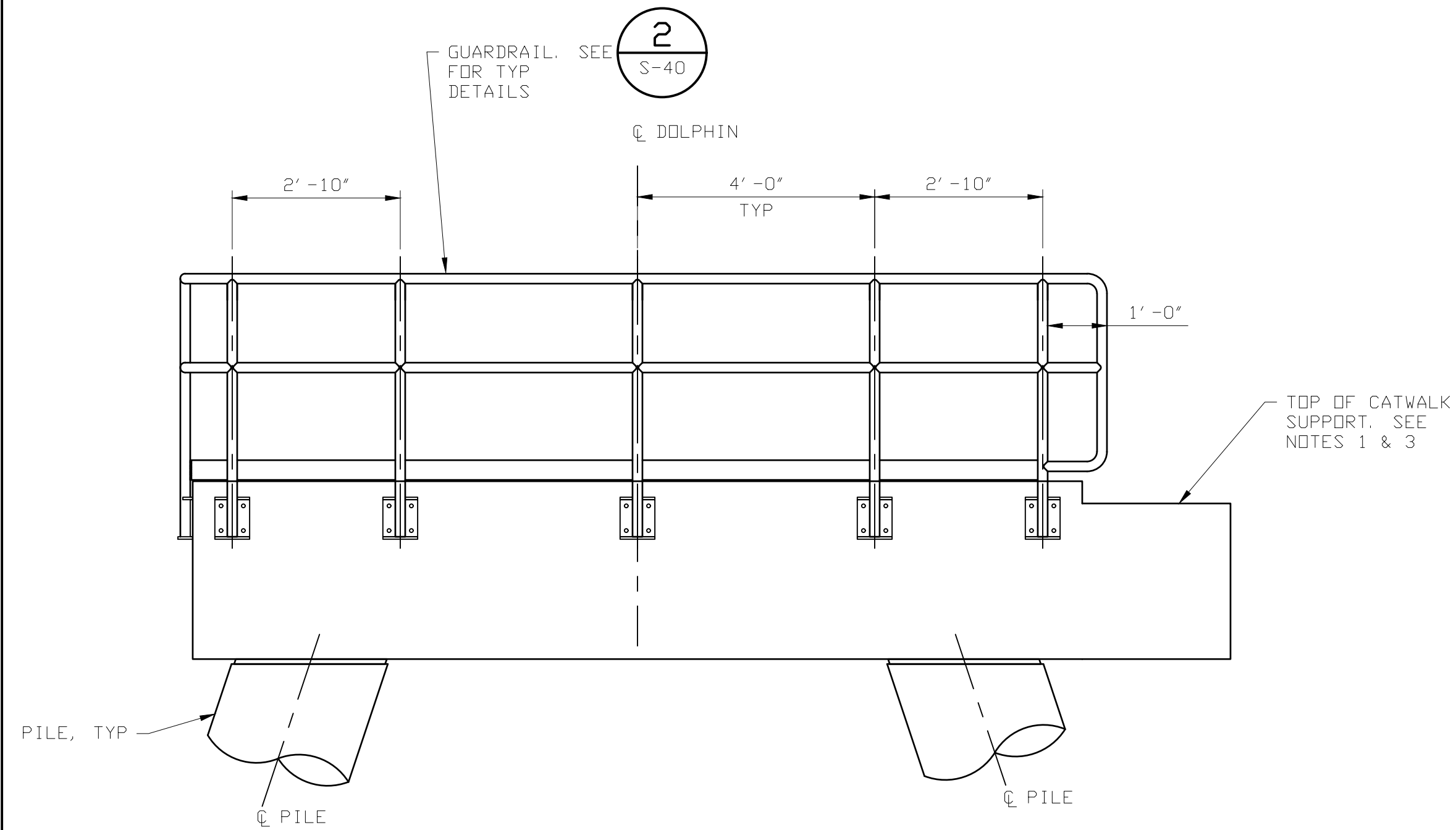
A ELEVATION
S-11 SCALE: 1/2" = 1'-0"



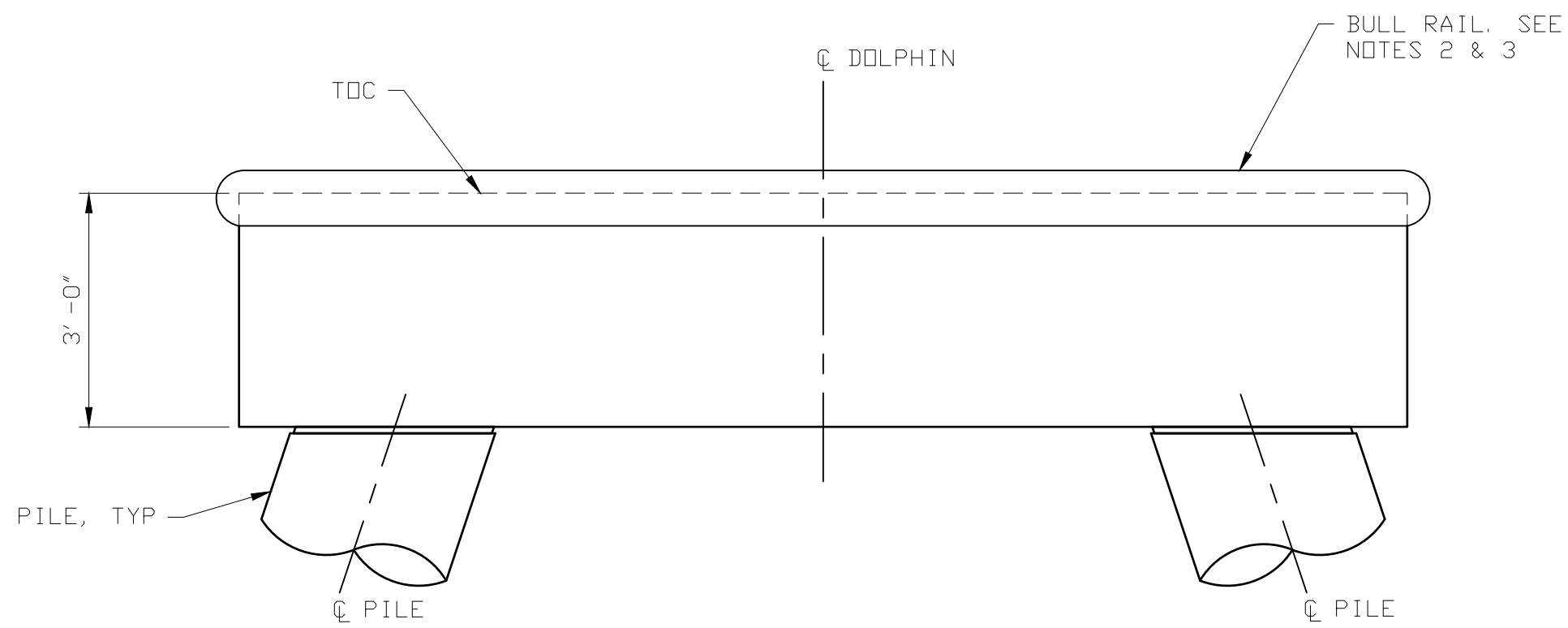
B ELEVATION
S-11 SCALE: 1/2" = 1'-0"



E SECTION
S-11 SCALE: 1/2" = 1'-0"



C ELEVATION
S-11 SCALE: 1/2" = 1'-0"



D ELEVATION
S-11 SCALE: 1/2" = 1'-0"

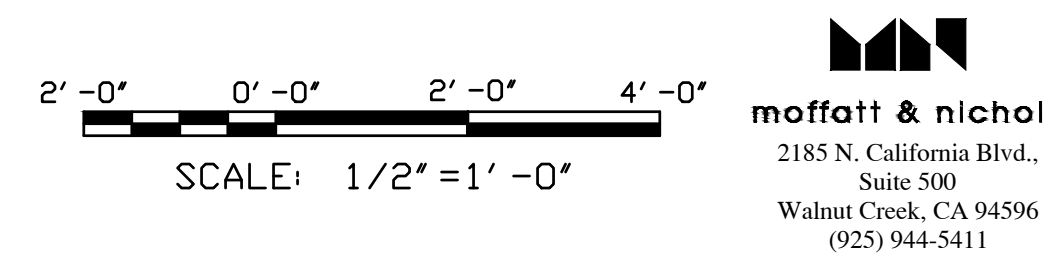
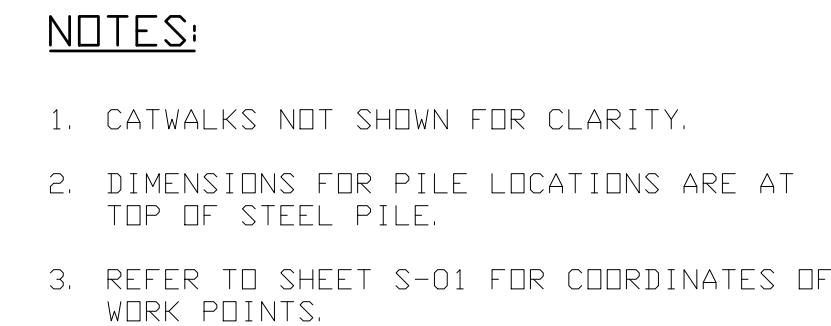
- NOTES:
- CATWALKS NOT SHOWN FOR CLARITY
 - GUARDRAILS NOT SHOWN FOR CLARITY
 - HOOK ASSEMBLY NOT SHOWN FOR CLARITY
 - PILE REINFORCING NOT SHOWN FOR CLARITY
 - BULL RAIL NOT SHOWN FOR CLARITY

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION

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

moffatt & nichol
2185 N. California Blvd., Suite 500
Walnut Creek, CA 94596
(925) 944-5411

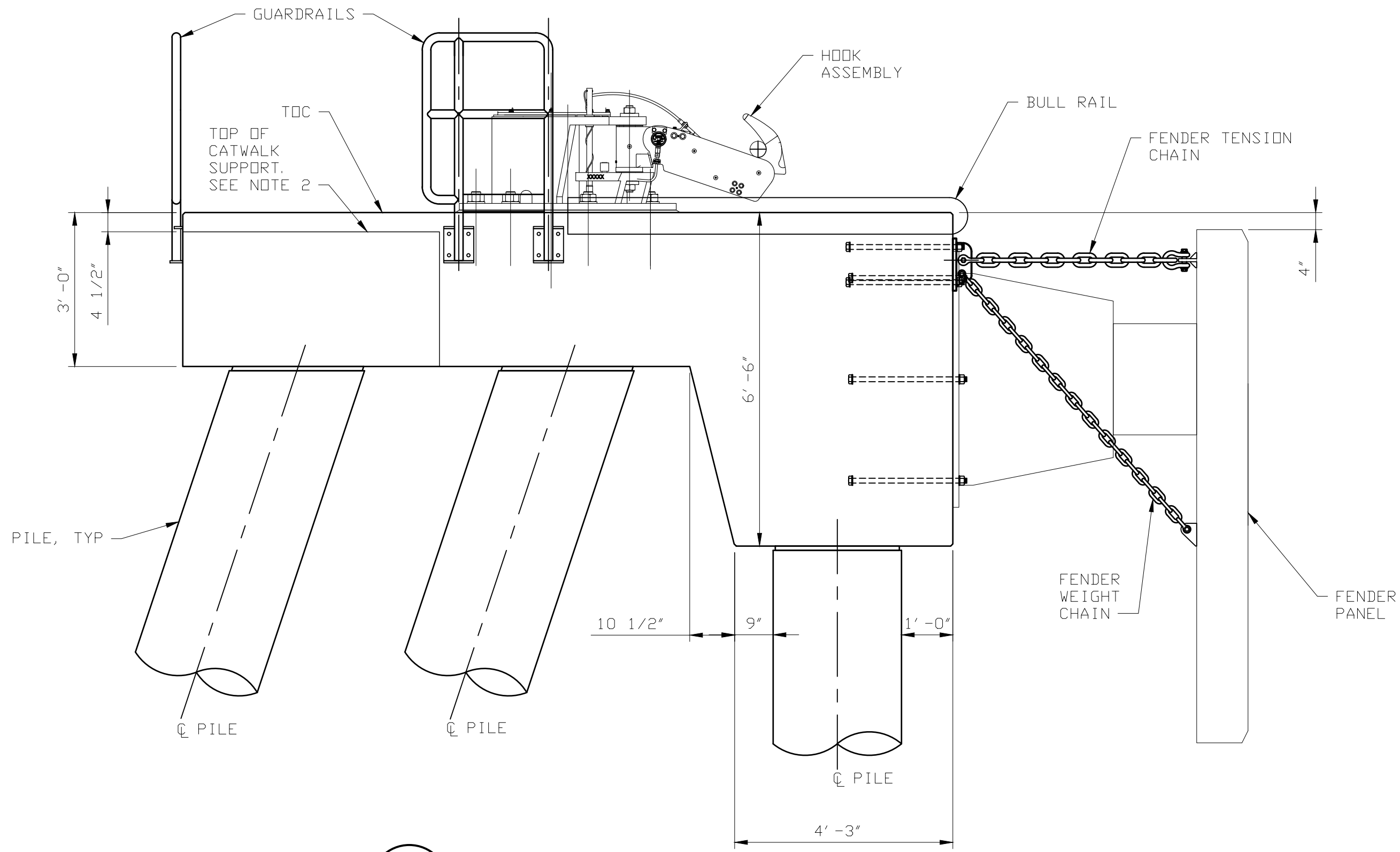
REFERENCE DRAWINGS			REVISIONS								MOORING DOLPHINS DETAILS & SECTIONS		
											CHEVRON EUREKA TERMINAL		
											MOORING & BERTHING UPGRADES		
											M W. D. S-11		
											S. D.		



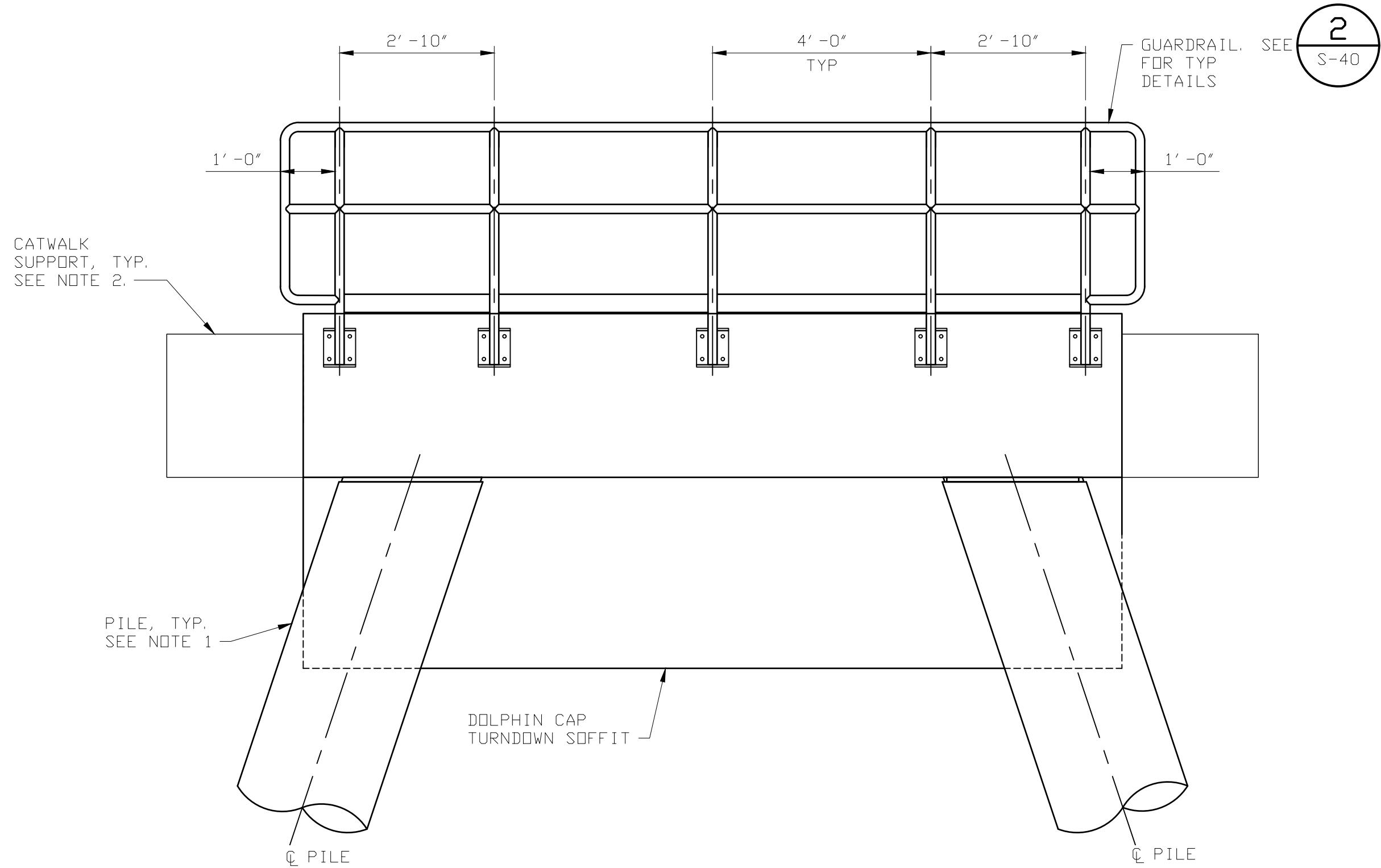
THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS										REVISIONS										 Chevron Eureka										BERTHING DOLPHIN PLANS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										

C:\WC\8178-21\20 CADD\Active_Sheet\Set\Mooring_and_Berthing_Upgrade\817821\S-21.dwg Feb 14, 2025 - 12:04pm

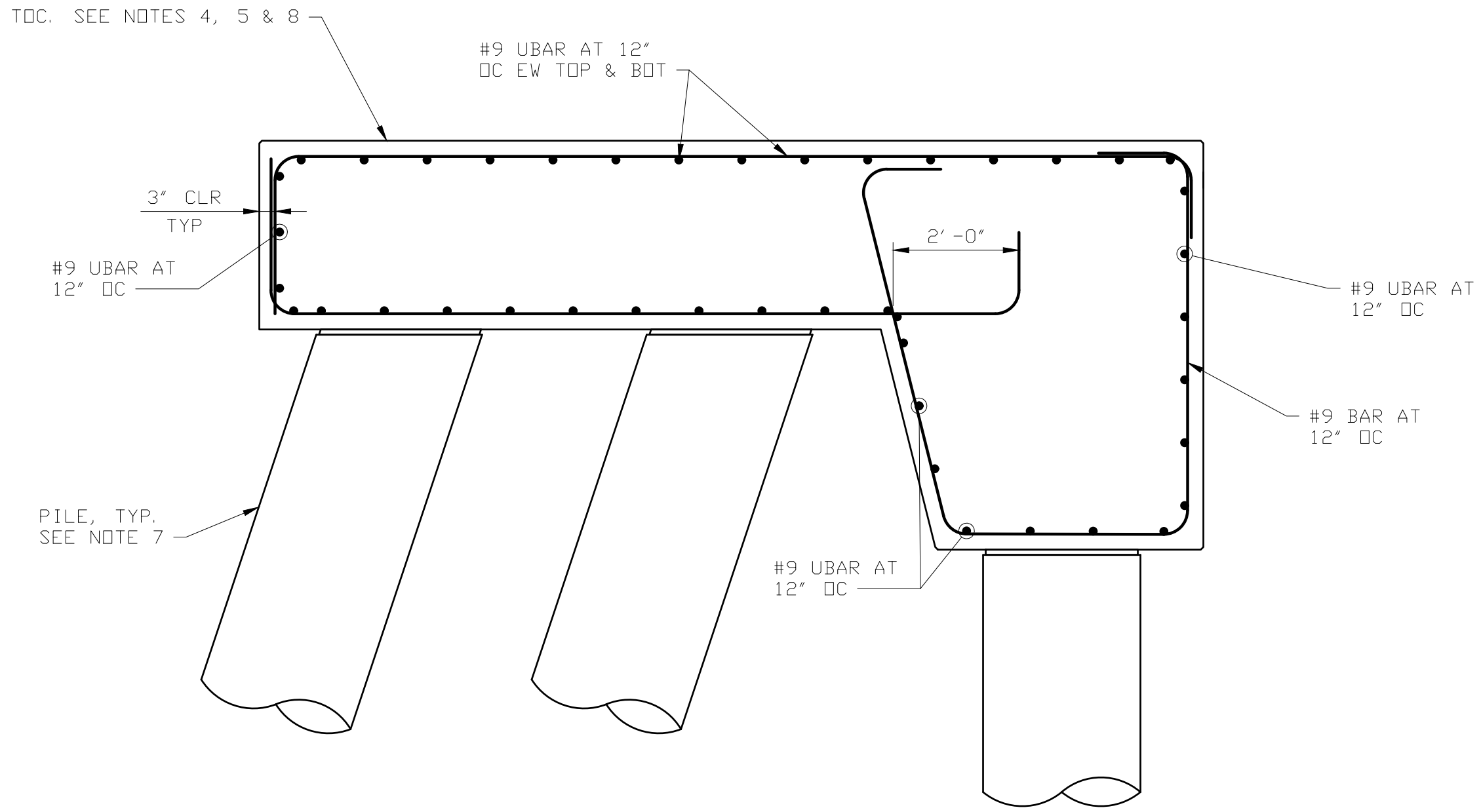


A ELEVATION
S-21 SCALE: 1/2" = 1'-0"

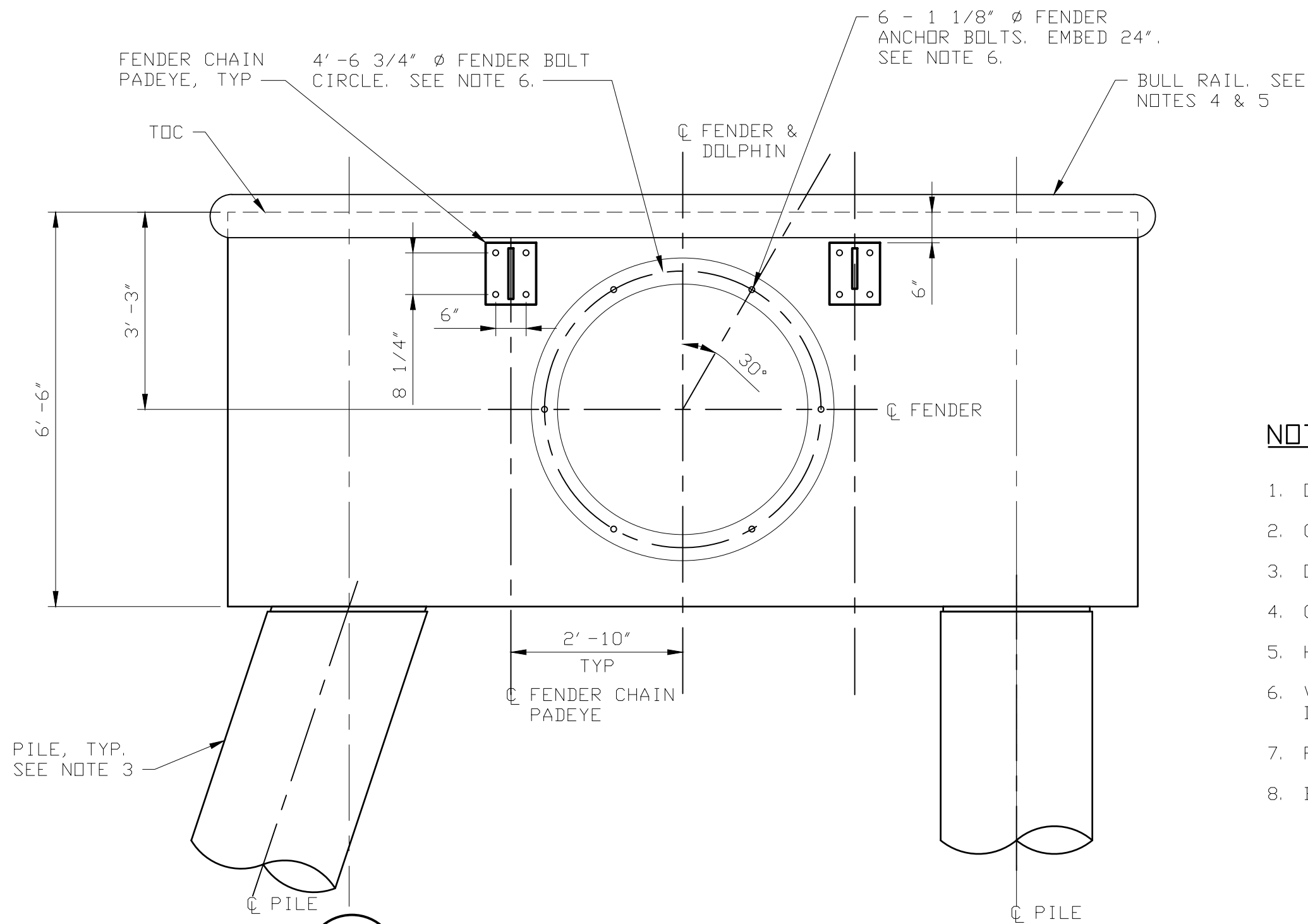


B ELEVATION
S-21 SCALE: 1/2" = 1'-0"

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION



D SECTION
S-21 SCALE: 1/2" = 1'-0"



C ELEVATION
S-21 SCALE: 1/2" = 1'-0"

NOTES:

1. ONLY PILES 5 & 6 SHOWN FOR CLARITY
2. CATWALKS NOT SHOWN FOR CLARITY
3. ONLY PILES 1 & 2 SHOWN FOR CLARITY
4. GUARDRAILS NOT SHOWN FOR CLARITY
5. HOOK ASSEMBLY NOT SHOWN FOR CLARITY
6. VERIFY WITH FENDER MANUFACTURER PRIOR TO INSTALLATION
7. PILE REINFORCING NOT SHOWN FOR CLARITY
8. BULL RAIL NOT SHOWN FOR CLARITY

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



moffatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS

REVISIONS

ISSUED FOR REVIEW

02/13/25



Chevron
Eureka

SCALE: _____ DR. _____ DR. APP. _____ DATE _____
ENGR. _____ ENGR. DEPT. _____
OPR. G. DEPT. _____

APPROVED

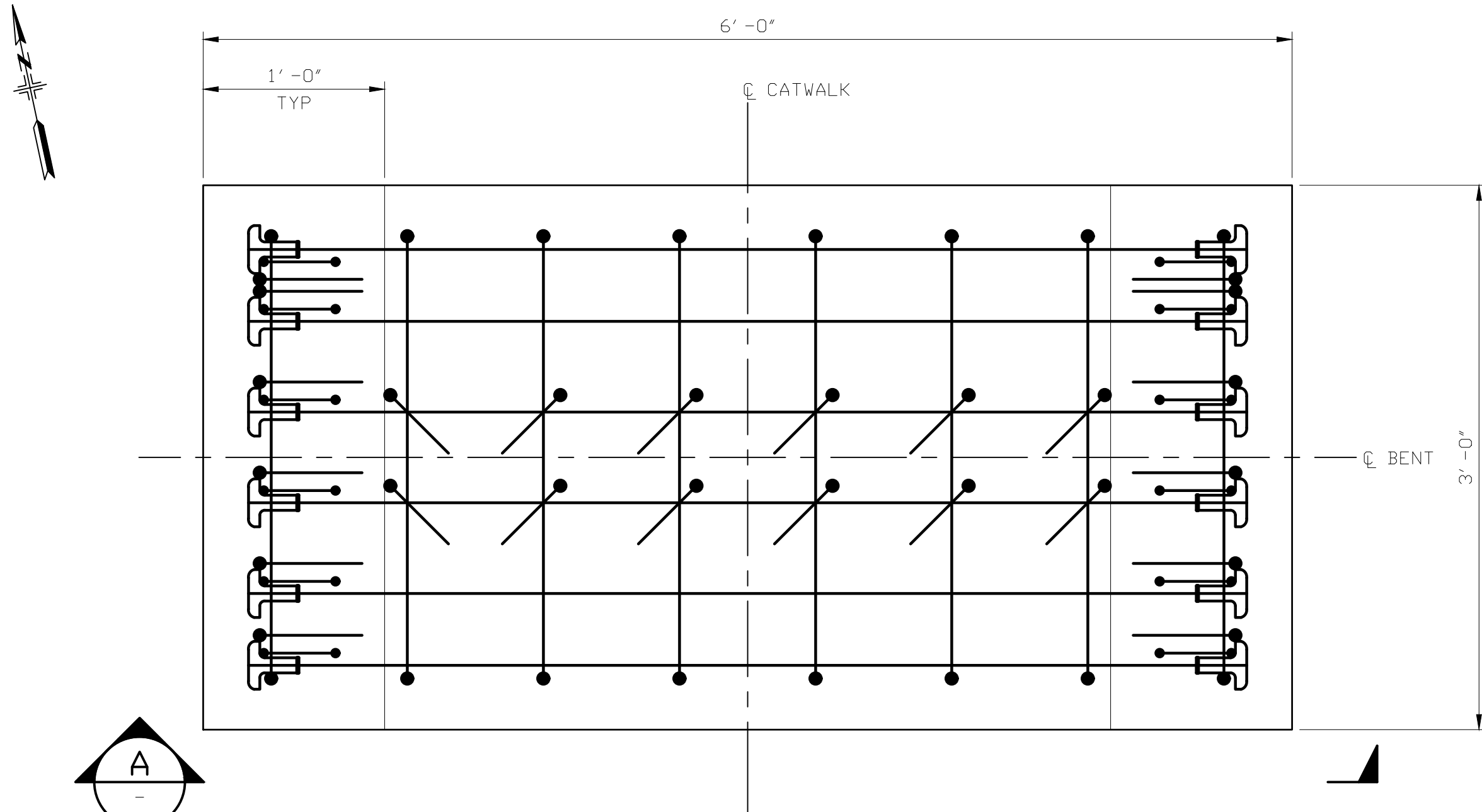
BERTHING DOLPHIN DETAILS & SECTIONS
CHEVRON EUREKA TERMINAL
MOORING & BERTHING UPGRADES

M

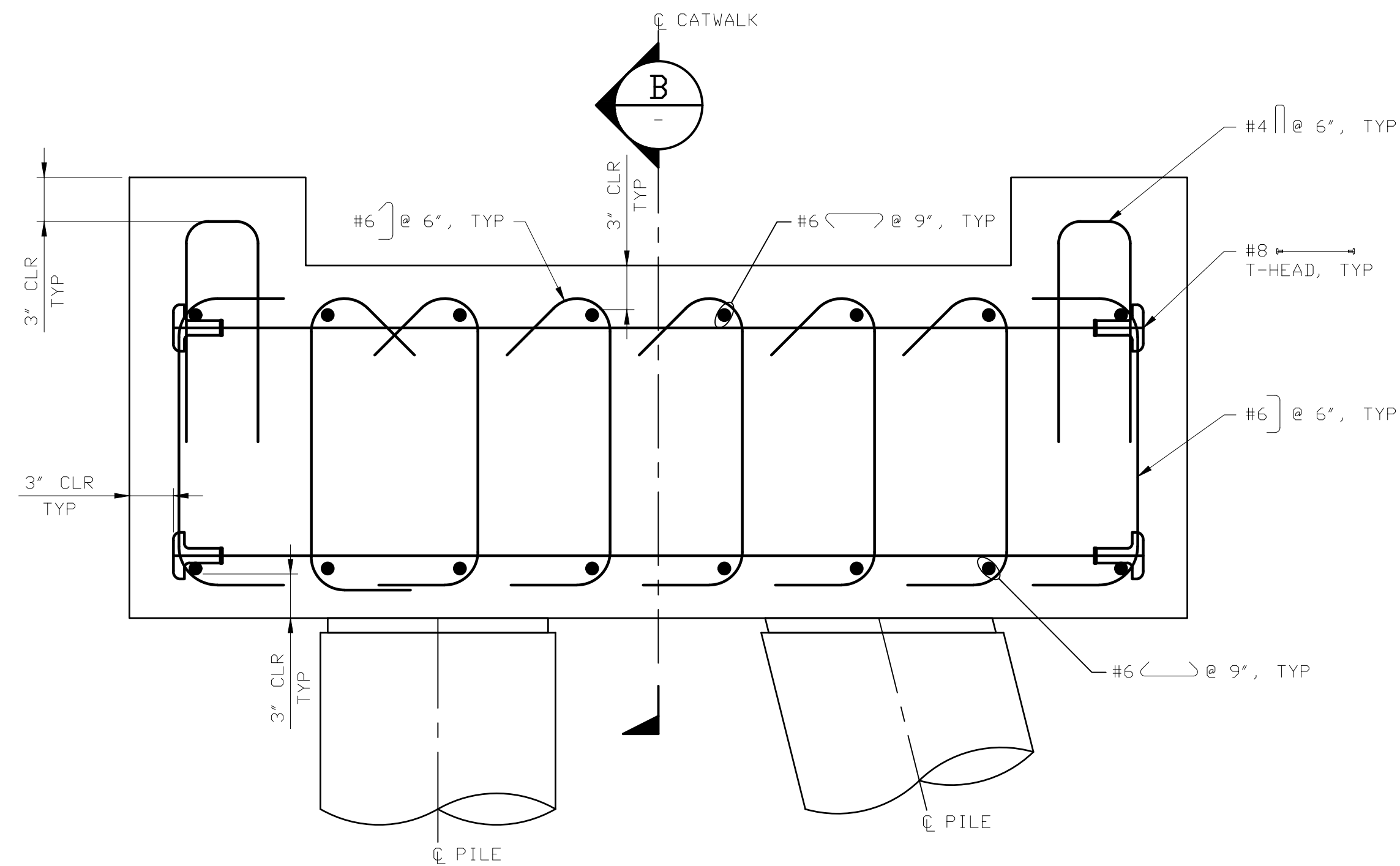
W. D. _____
S. D. _____

S-21

Q:\WC\8178-2\120 CADD\Active_Sheet\Set\Mooring_and_Berthing_Upgrade\817821S-31.dwg Feb 14, 2025 - 12:04pm

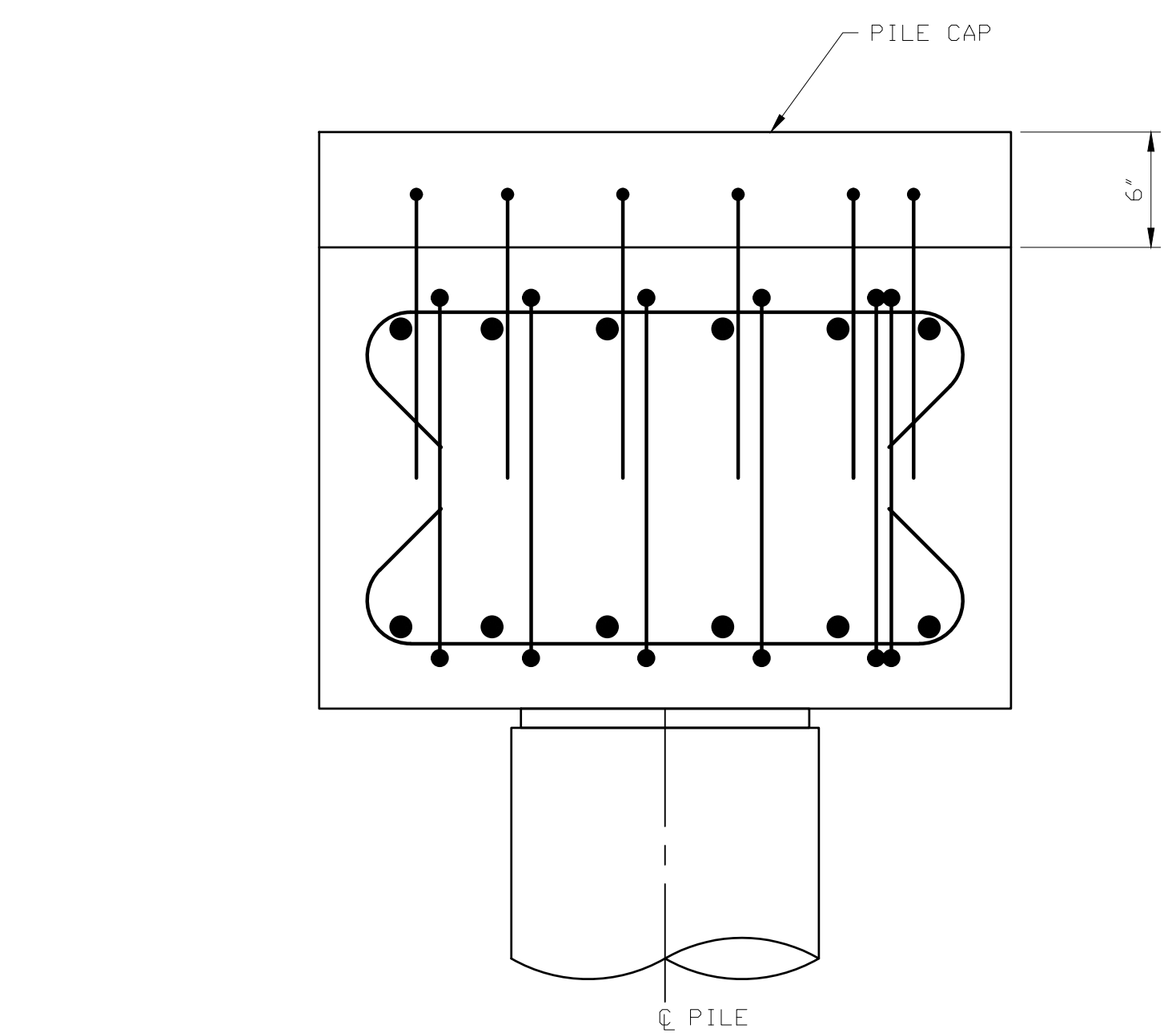


1 CATWALK BENT REINFORCING - PLAN
SCALE: 1-1/2" = 1'-0"



A CATWALK BENT REINFORCING - SECTION
SCALE: 1-1/2" = 1'-0"

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION



B CATWALK BENT REINFORCING - SECTION
SCALE: 1-1/2" = 1'-0"

1'-0"

0'-0"

6'

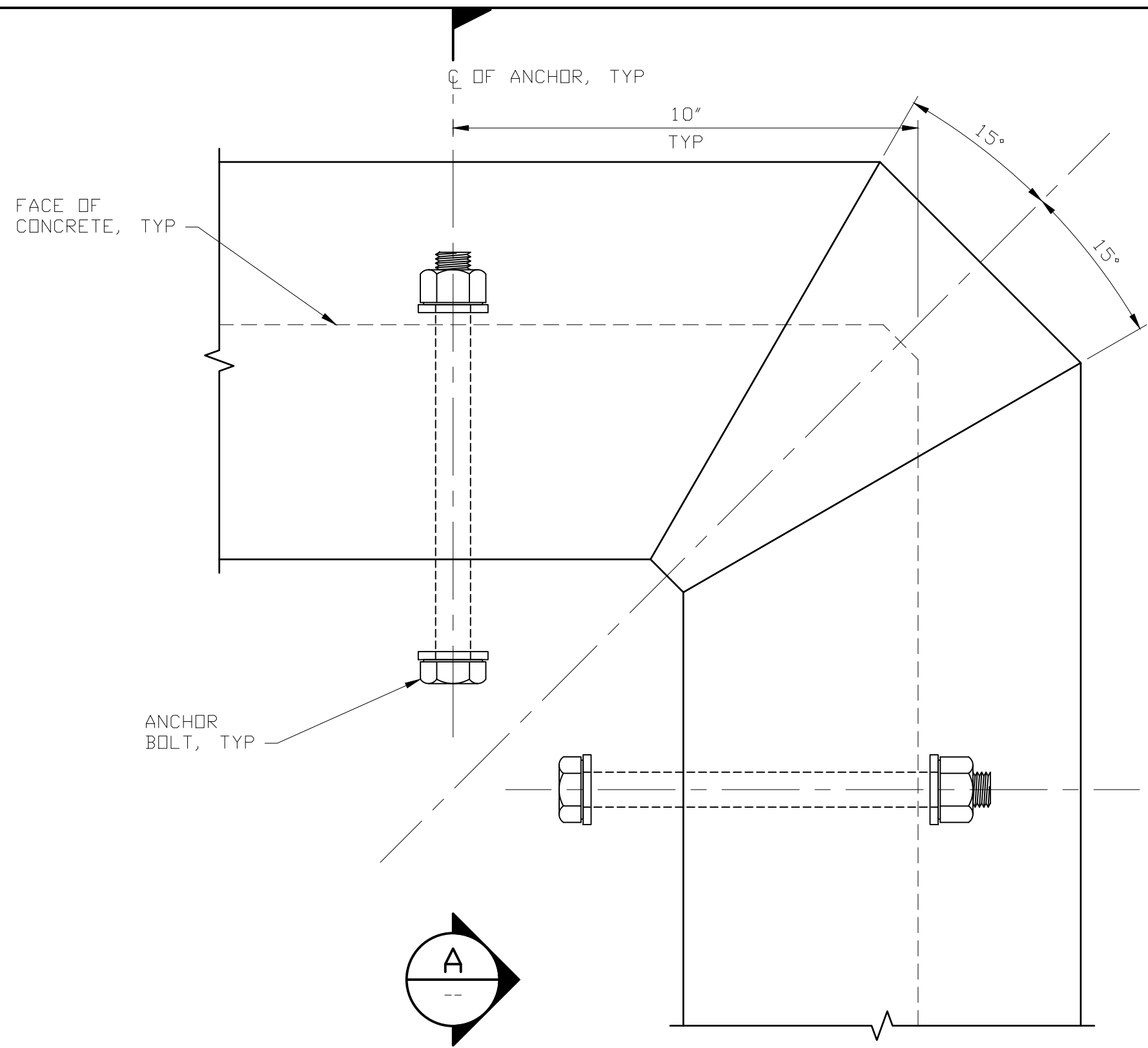
1'-0"

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

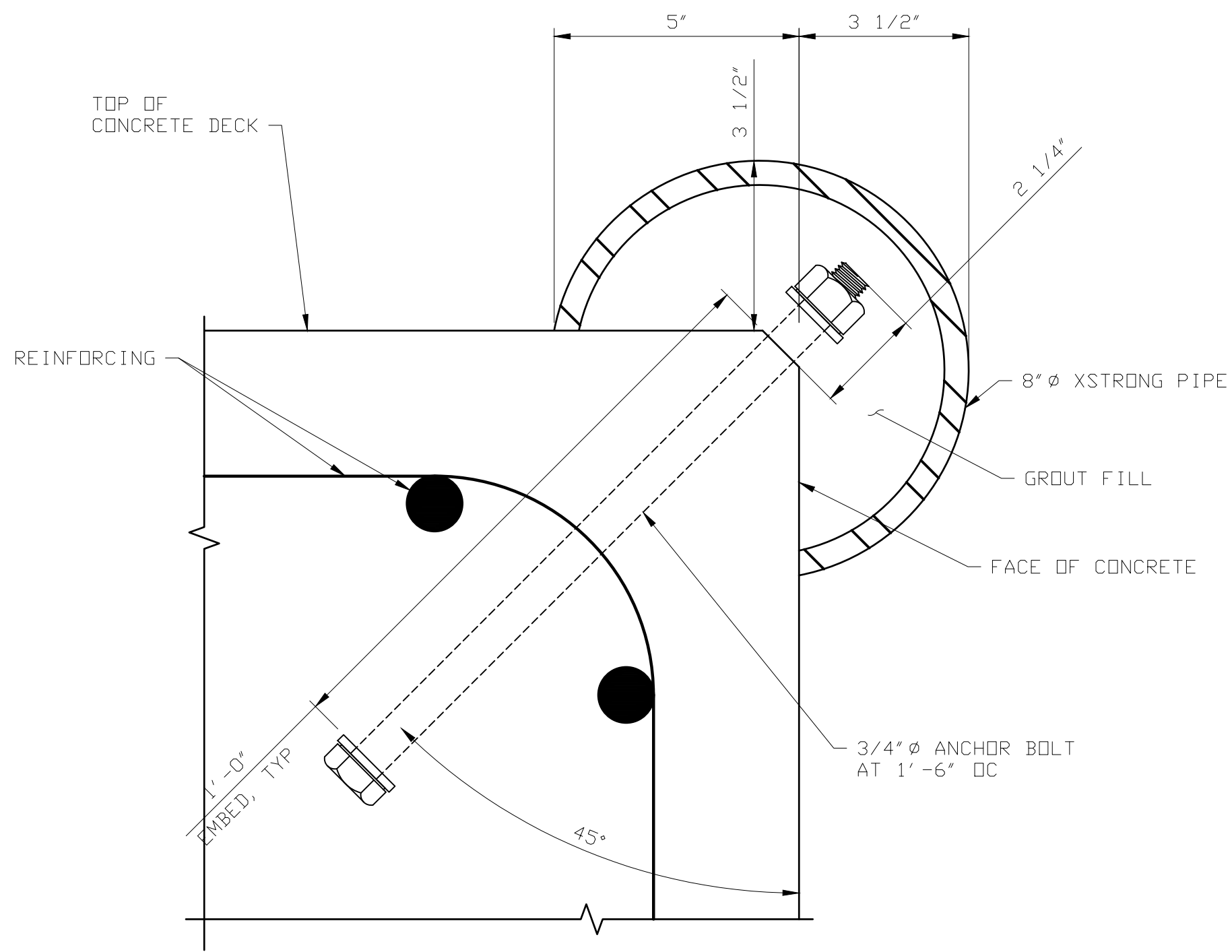

moffatt & nichol
2185 N. California Blvd., Suite 500
Walnut Creek, CA 94596
(925) 944-5411

REFERENCE DRAWINGS				REVISIONS				Chevron Eureka				THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.			
												CATWALK BENT PLAN, SECTION & DETAILS 2 OF 2			
												CHEVRON EUREKA TERMINAL			
												MOORING & BERTHING UPGRADES			
												SCALE: _____ DR. _____ DR. APP. _____ DATE _____			
												ENGR. _____ ENGR. DEPT. _____			
												DPR: G. DEPT. _____			
												APPROVED			
												M W. D. _____			
												S. D. _____			
												S-31			

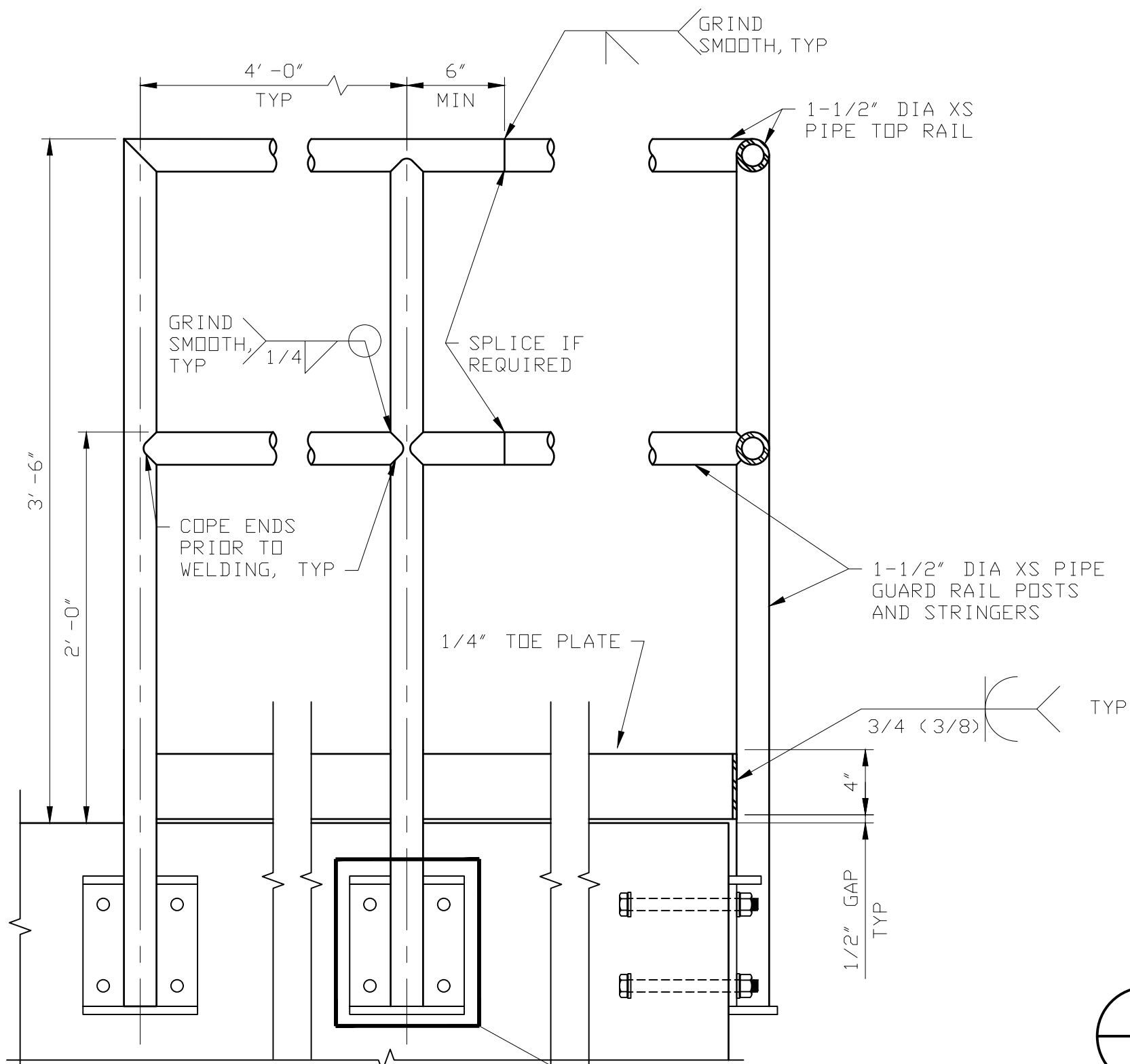
C:\WC\8178-2\120 CADD\Active\Sheet\Mooring and Berthing Upgrades\817821S-40.dwg Feb 14, 2025 - 12:05pm



1 BULL RAIL - DETAIL
S-40 SCALE: 3/8" = 1'-0"

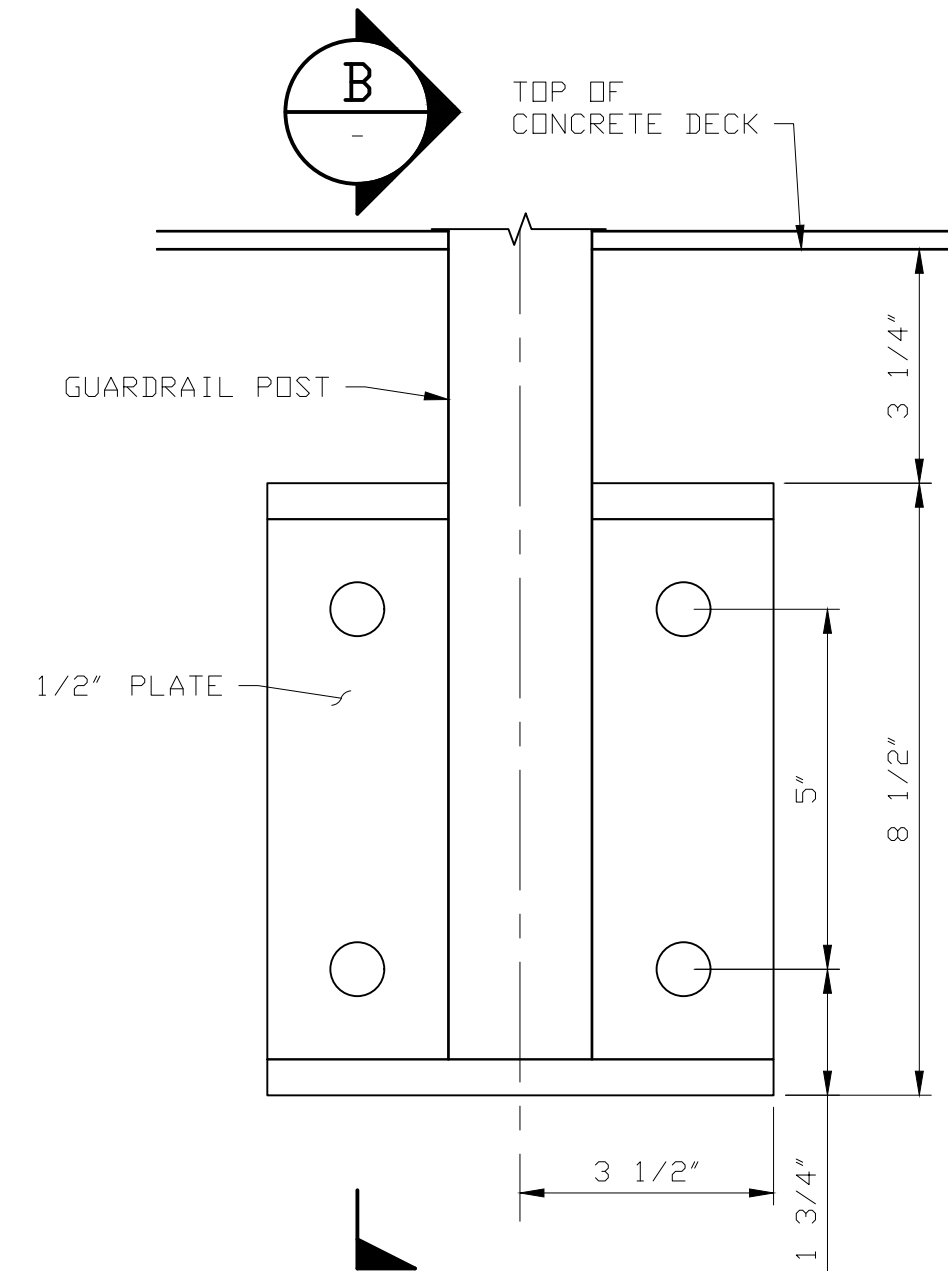


A BULL RAIL - SECTION
S-40 SCALE: 3/8" = 1'-0"

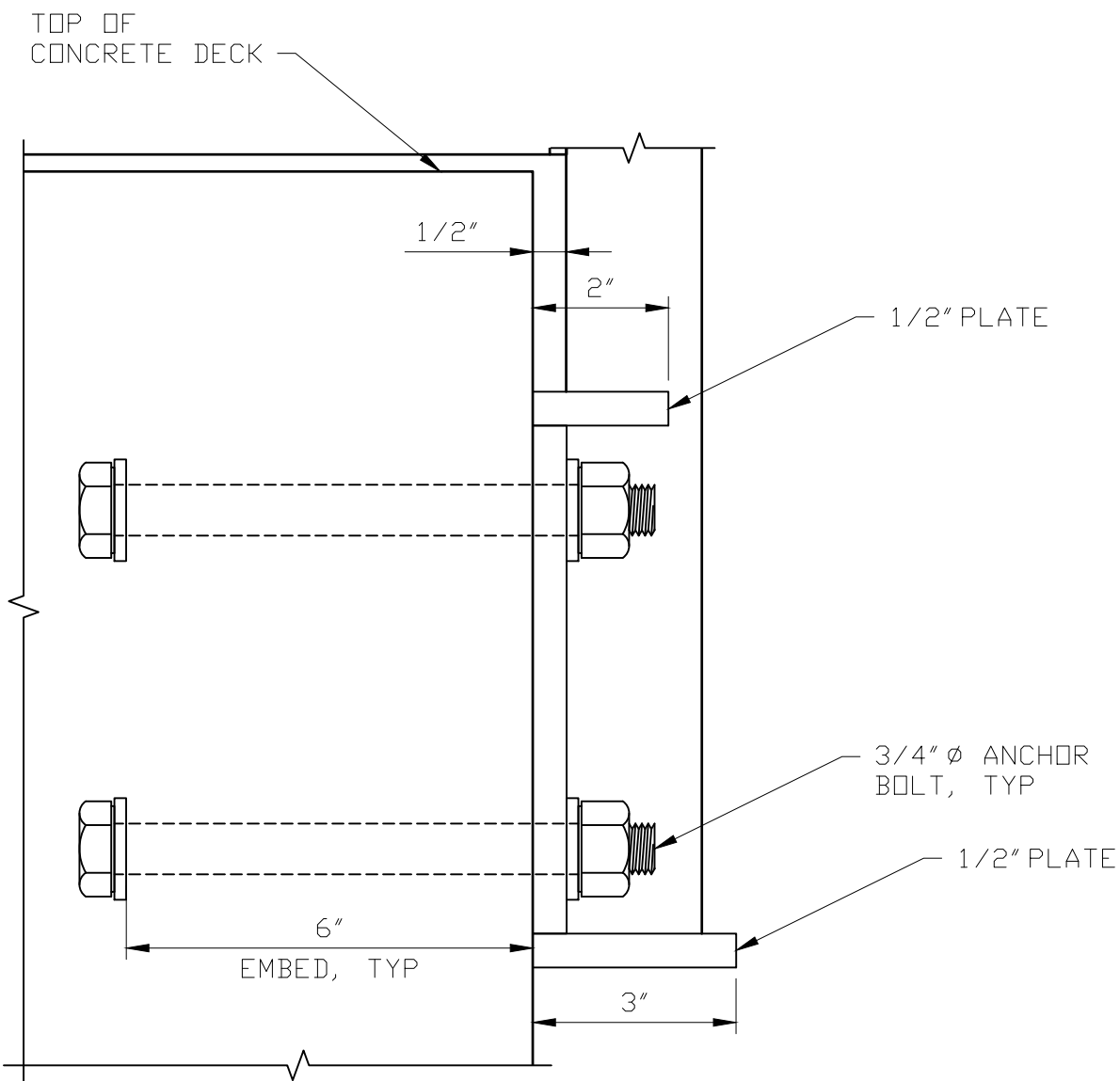


2 GUARDRAIL - DETAIL
S-40 SCALE: 1/8" = 1'-0"

3



3 GUARDRAIL MOUNTING PLATE - DETAIL
SCALE: 3/8" = 1'-0"



B GUARDRAIL MOUNTING PLATE - SECTION
S-40 SCALE: 3/8" = 1'-0"

90 % SUBMITTAL
ISSUED: 2025-02-25
NOT FOR CONSTRUCTION



moffatt & nichol
2185 N. California Blvd.,
Suite 500
Walnut Creek, CA 94596
(925) 944-5411

THIS IS AN AUTOCAD DRAWING. DO NOT REVISE MANUALLY.

REFERENCE DRAWINGS

REVISIONS

ISSUED FOR REVIEW

02/13/25



Chevron
Eureka

SCALE: _____ DR. _____ DR. APP. _____ DATE _____
ENGR. _____ ENGR. DEPT. _____
DPR: G. DEPT. _____

APPROVED

MISCELLANEOUS DETAILS
CHEVRON EUREKA TERMINAL
MOORING & BERTHING UPGRADES

M

W. D. _____
S. D. _____

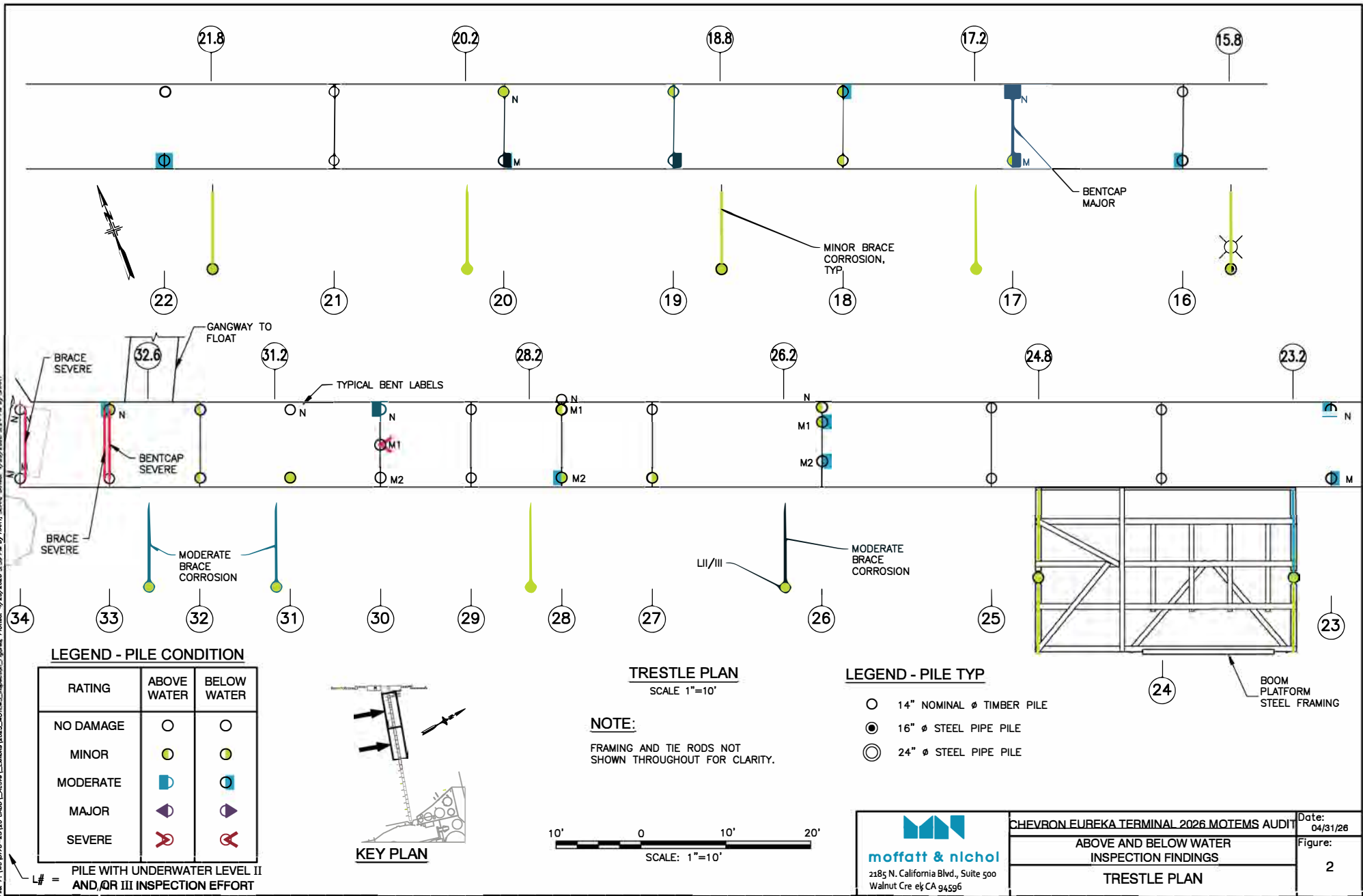
S-40

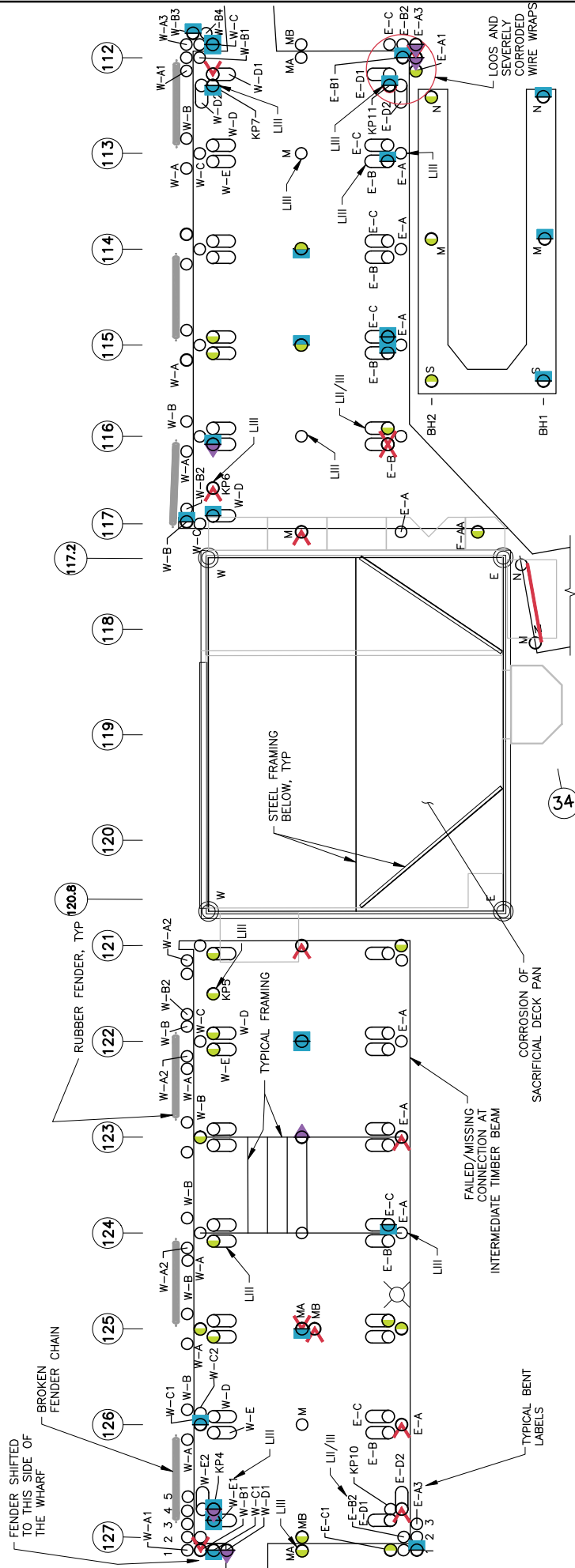
Site: P: \WC\8178-23\20 CAD\2025_MOTEMS_Inspection_Figures Plotted: 4/29/2026 5:39 PM by HART, SEAN; Saved: 4/29/2026 5:24 PM by SHART



CHEVRON EUREKA TERMINAL 2026 MOTEMS AUDIT	Date: 04/31/26
ABOVE AND BELOW WATER INSPECTION FINDINGS	Figure: T1
TITLE SHEET	

FILE: P:\V1\171718-23120 CAD\1\2026 MOTEMS AUDIT\2026 MOTEMS AUDIT.dwg Plot Date: 4/29/2026 3:24 PM by: MORT, SEAN, Sheet: 4/29/2026 3:24 PM by: SMW





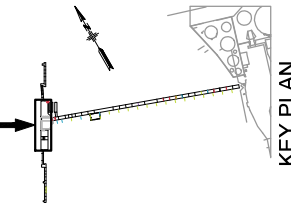
LEGEND - PILE CONDITION

RATING	ABOVE WATER	BELOW WATER
NO DAMAGE		
MINOR		
MODERATE		
MAJOR		
SEVERE		

PILE WITH UNDERWATER LEVEL II AND/OR III INSPECTION EFFORT

WHARF PLAN

SCALE 1"=10'



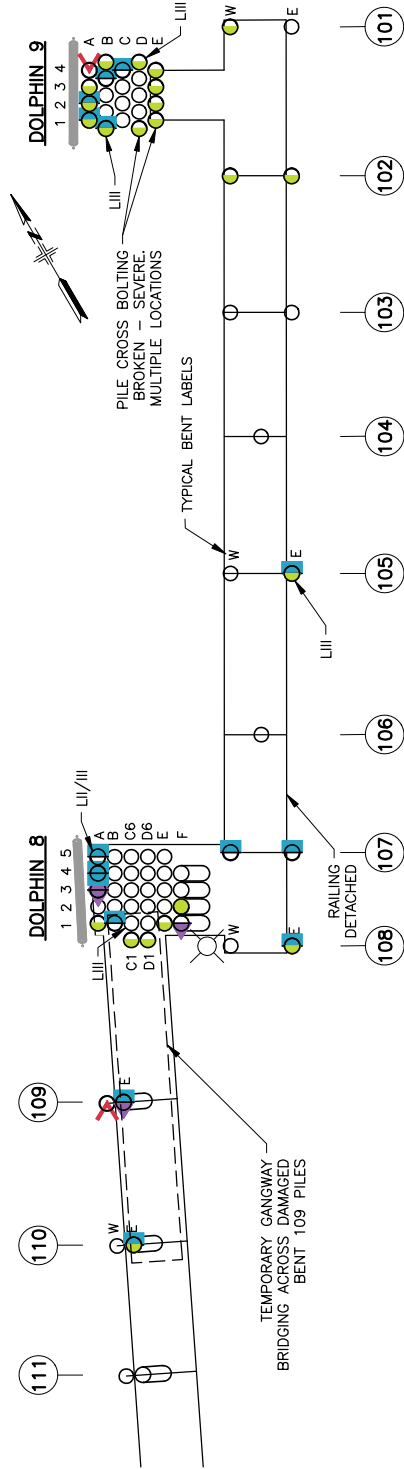
KEY PLAN

LEGEND - PILE TYP

- 14" NOMINAL ϕ TIMBER PILE
- 16" ϕ STEEL PIPE PILE
- 24" ϕ STEEL PIPE PILE

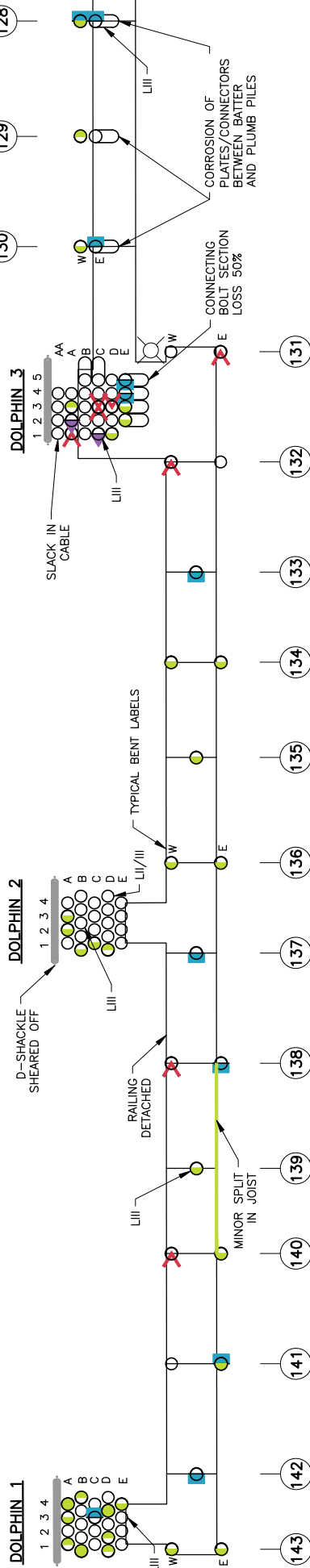
NOTE:

FRAMING AND TIE RODS NOT SHOWN THROUGHOUT FOR CLARITY.



NORTH WALKWAY PLAN

SCALE 1"=10'



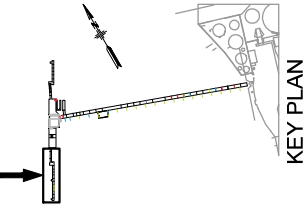
LEGEND - PILE CONDITION

RATING	ABOVE WATER	BELOW WATER
NO DAMAGE	○	○
MINOR	●	●
MODERATE	⊗	⊗
MAJOR	⊕	⊕
SEVERE	⊗	⊗

L# = PILE WITH UNDERWATER LEVEL II AND/OR III INSPECTION EFFORT

SOUTH WALKWAY PLAN

SCALE 1"=10'



NOTE:

FRAMING NOT SHOWN THROUGHOUT FOR CLARITY.

LEGEND - PILE TYPE

- 14" NOMINAL Ø TIMBER PILE
- 16" Ø STEEL PIPE PILE
- ⊗ 24" Ø STEEL PIPE PILE

