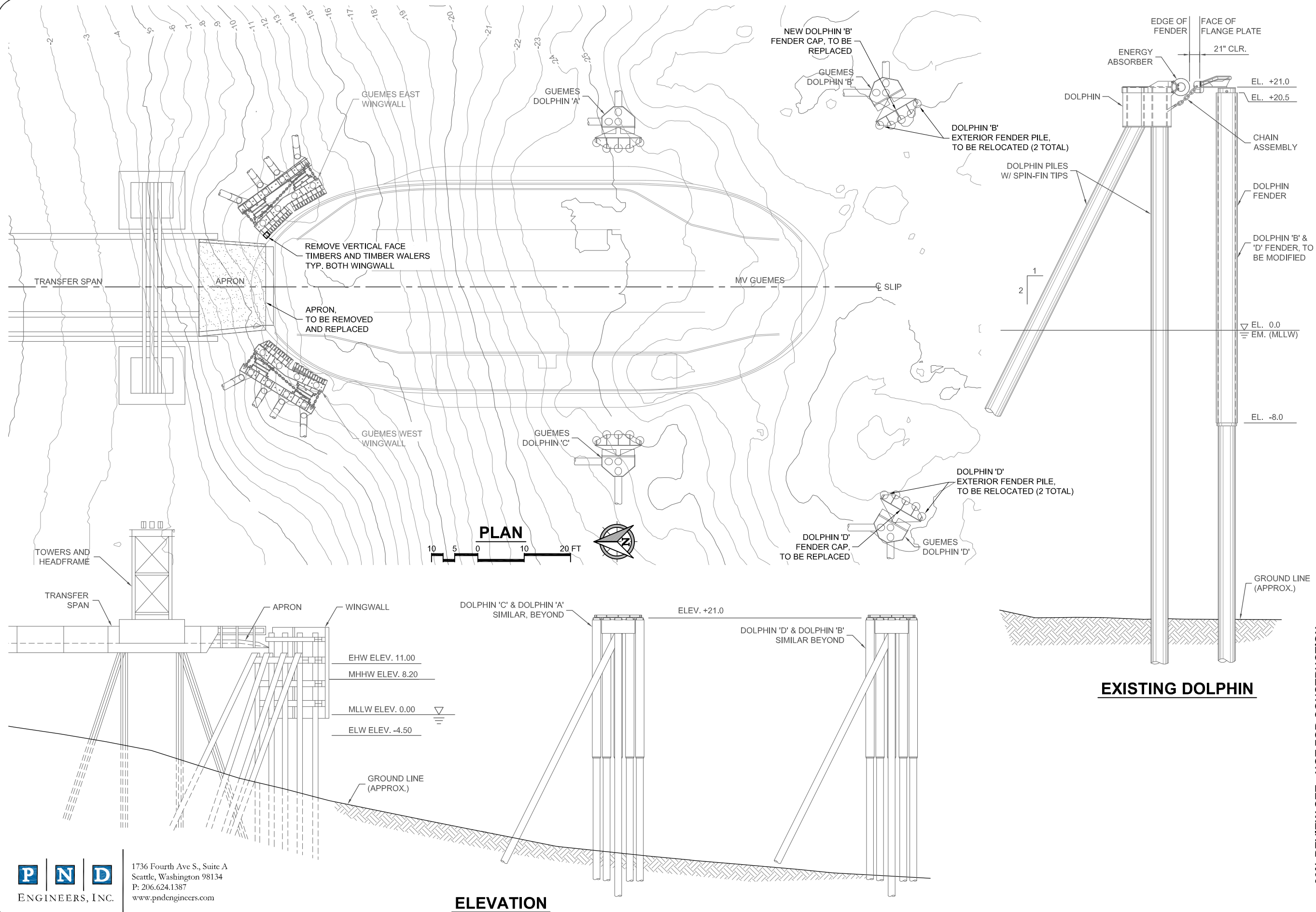


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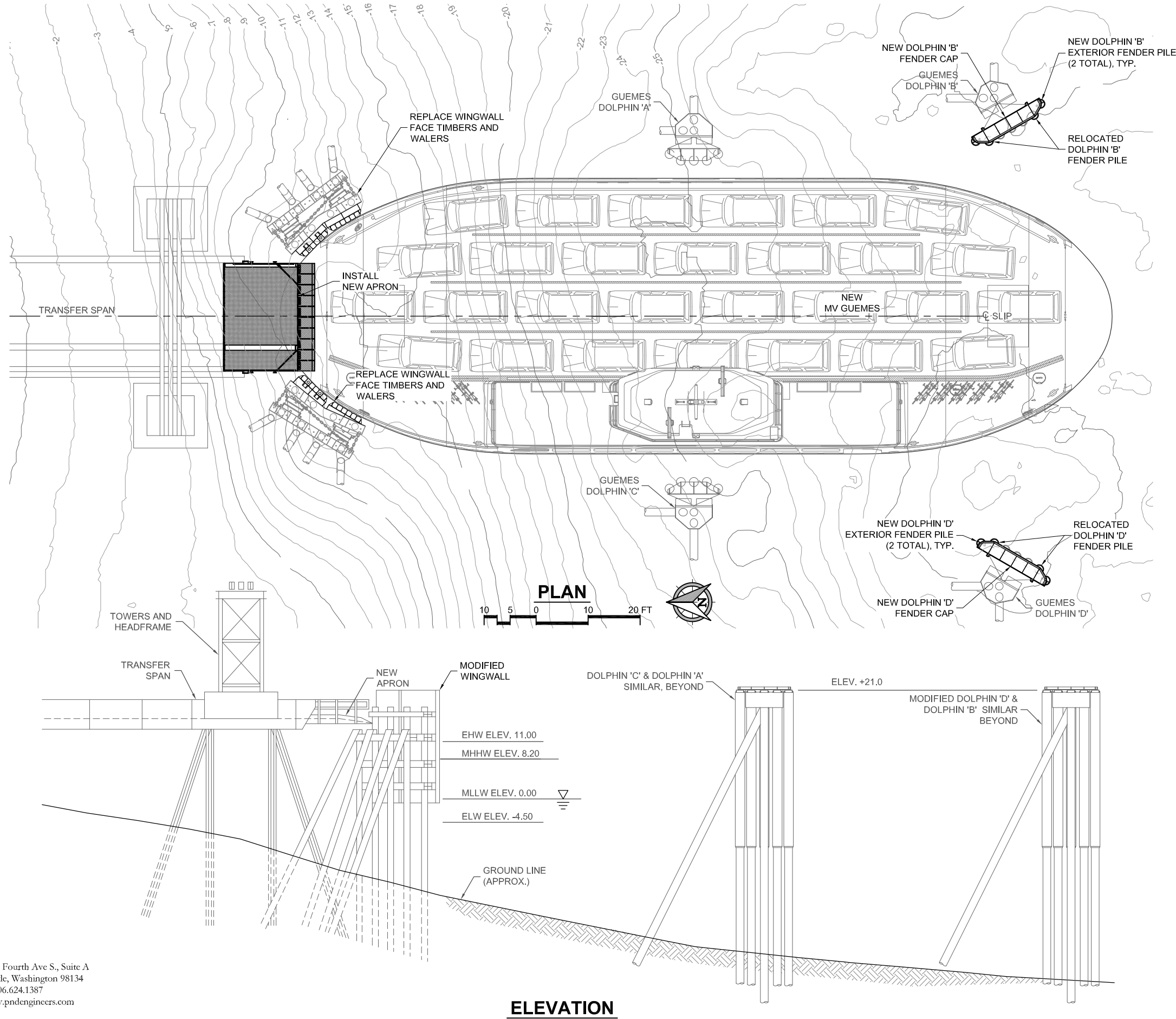
ANACORTES / GUEMES ISLAND FERRY REPLACEMENT GUEMES ISLAND SIDE EXISTING SITE AND DEMOLITION PLAN		PROJECT NO.: FEMP-5			NO.	REVISIONS	DATE
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		DESIGNED BY: CK	DRAWN BY: DM				
		CHECKED BY: JDO	APPROVED BY:				
		PROJECT LOCATED NEAR:					
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY		SKAGIT COUNTY PUBLIC WORKS 1800 CONTINENTAL PLACE MOUNT VERNON, WA 98273-5625 (360) 336-9400 FAX (360) 336 9477 					
SHEET							
2 OF 22							



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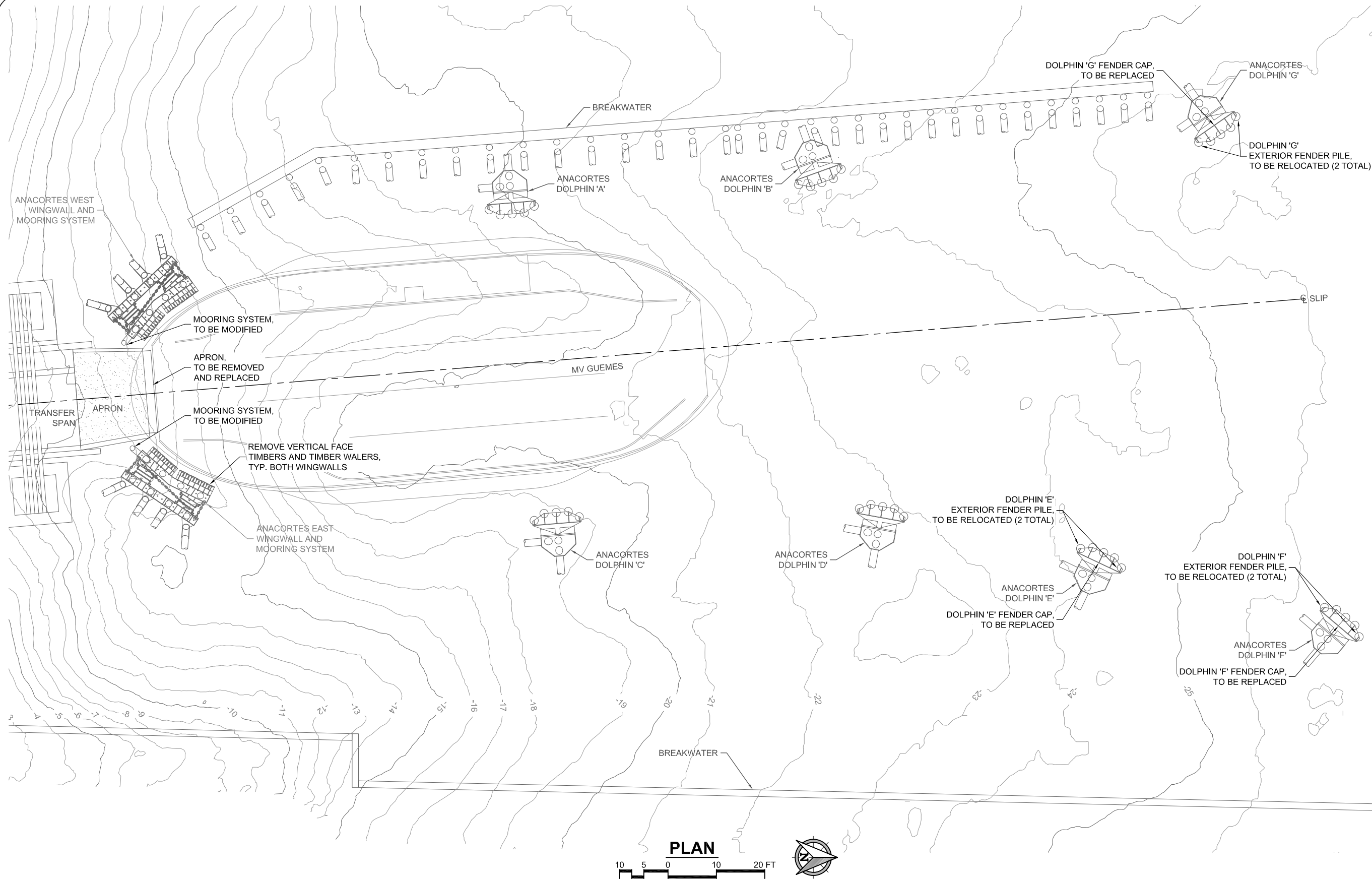


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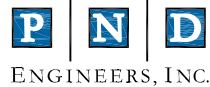


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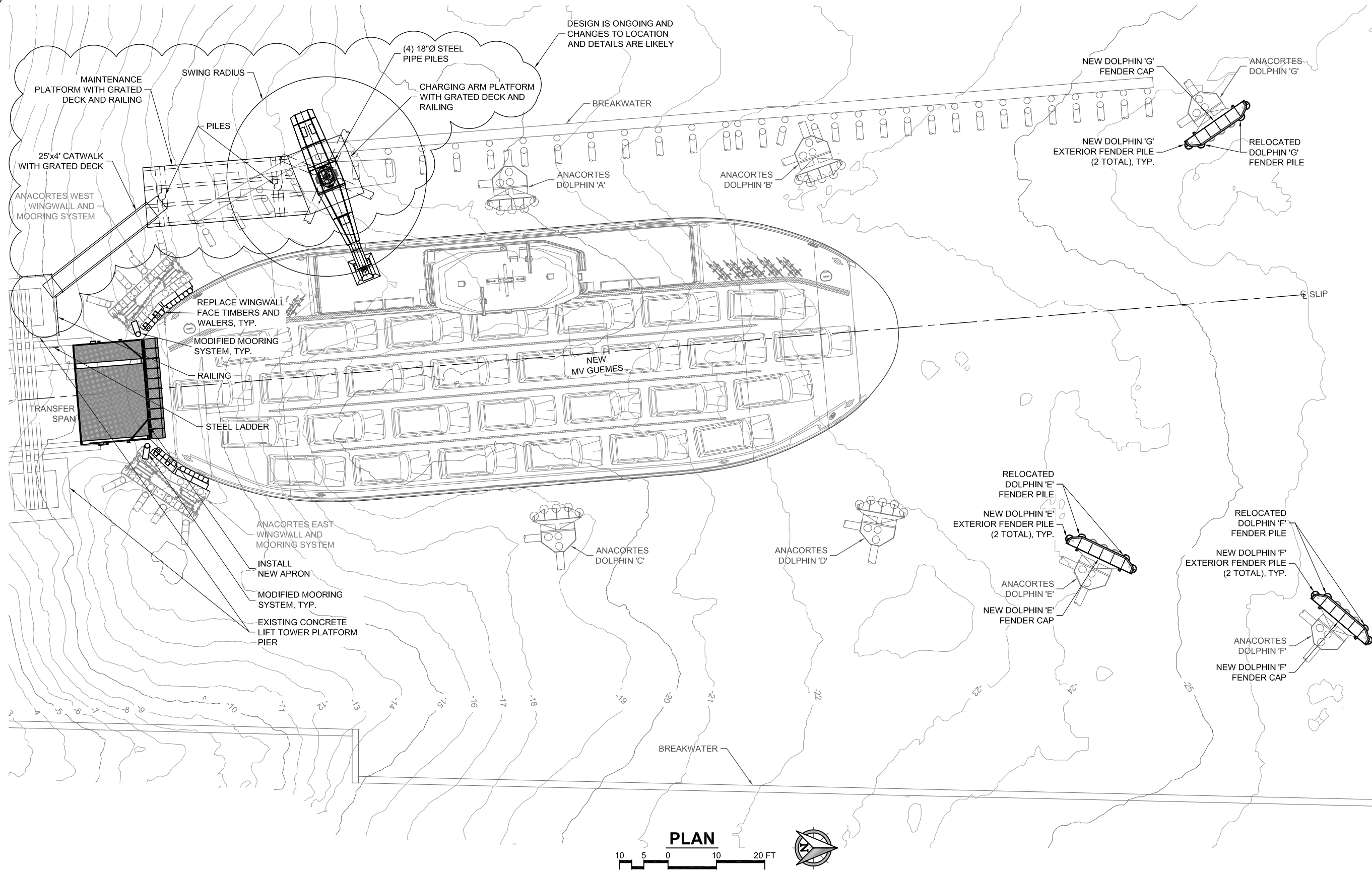
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				REVISIONS	
				No.	
PROJECT NO.: FEMP-5		DESIGNED BY: CK		DRAWN BY: DM	
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ANACORTES / GUEMES ISLAND FERRY REPLACEMENT		PROJECT LOCATED NEAR:			
GUEMES ISLAND SIDE PROPOSED SITE PLAN					
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY					
SHEET 3 OF 22					



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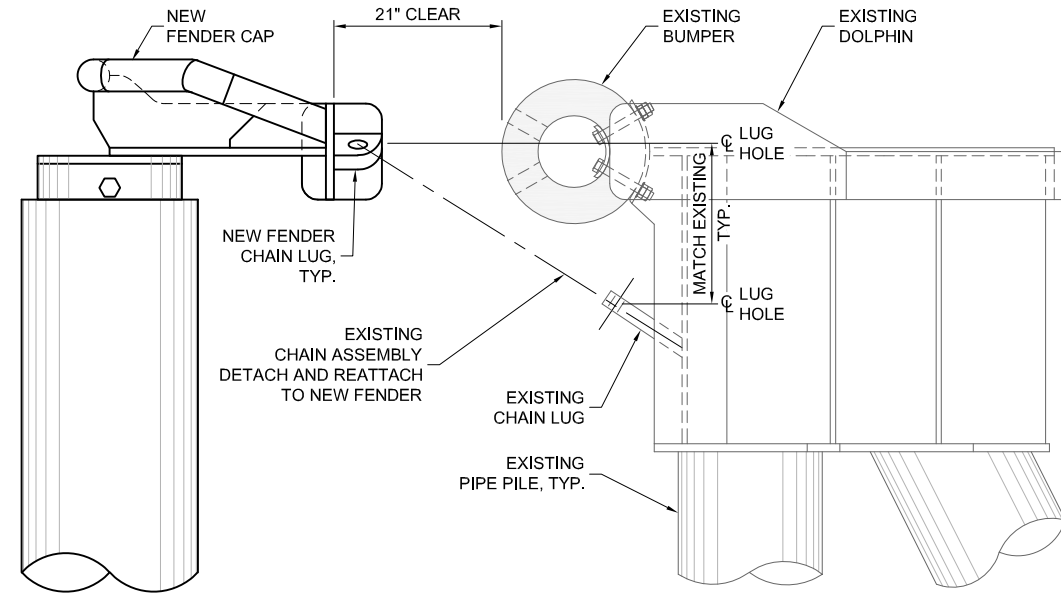
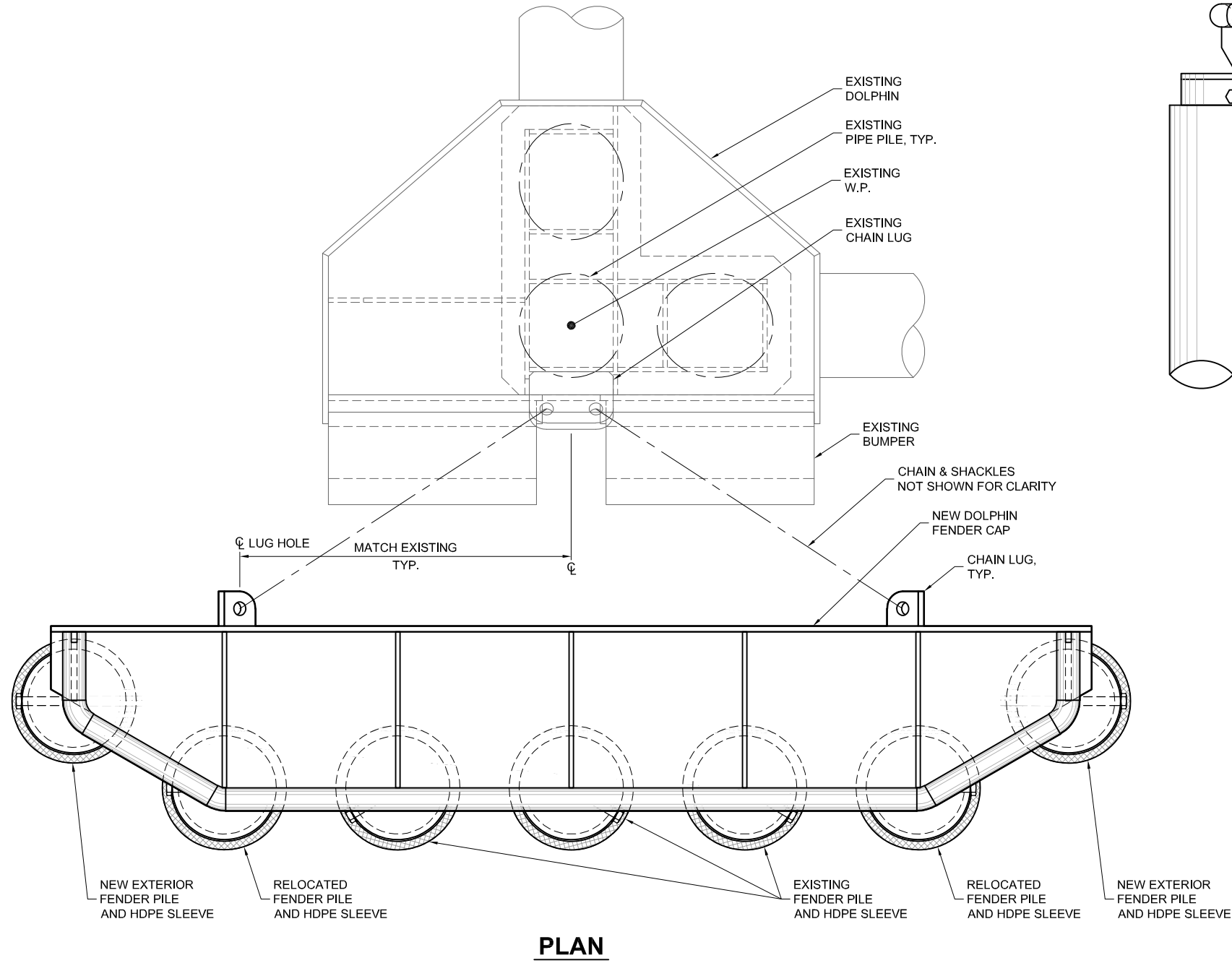


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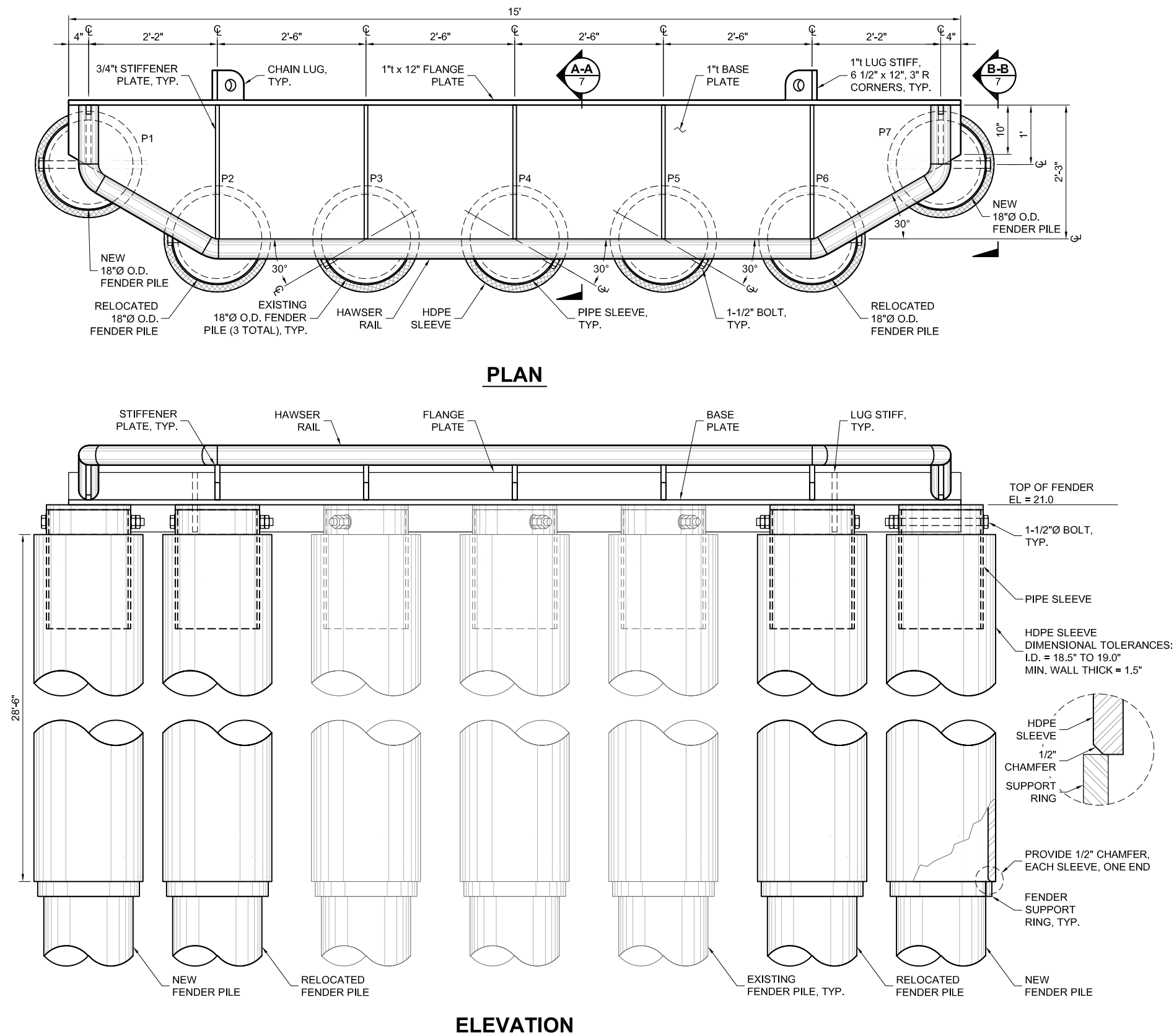
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		REVISIONS	
		NO.	
			
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DESIGNED BY: CK	CHECKED BY: JDO	PROJECT LOCATED NEAR:	
ANACORTES / GUEMES ISLAND FERRY REPLACEMENT		ANACORTES SIDE PROPOSED SITE PLAN	
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY		SHEET 5 OF 22	

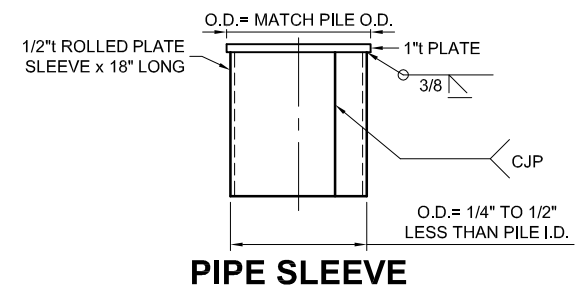
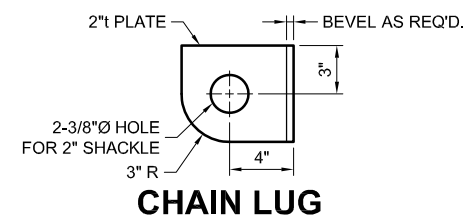
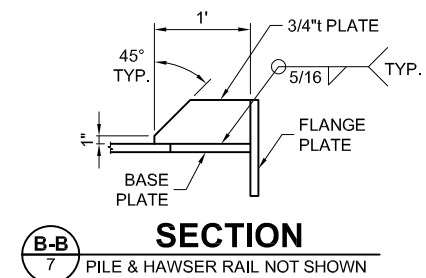
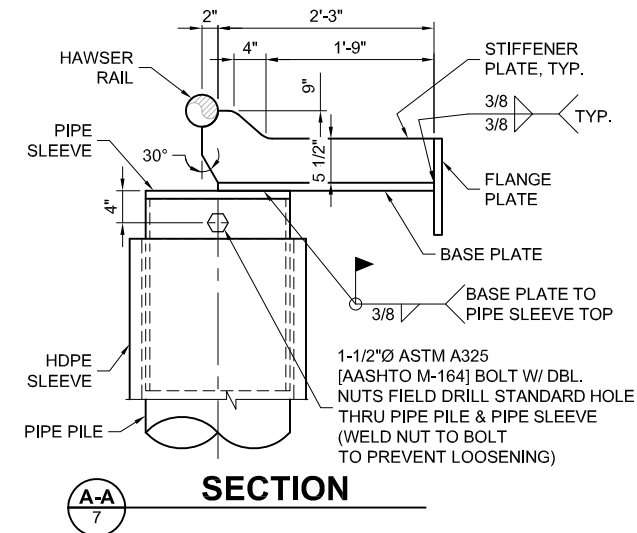
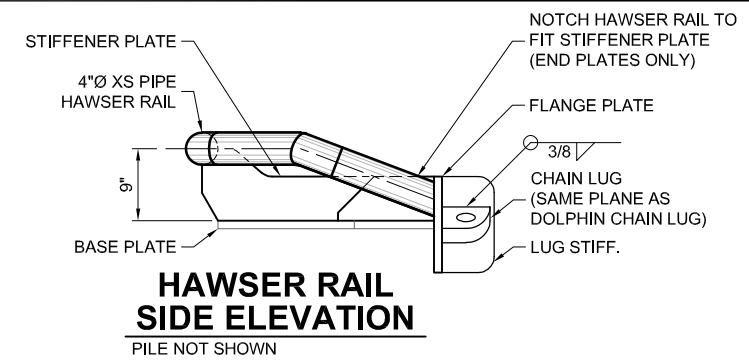


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ANACORTES / GUEMES ISLAND		FERRY REPLACEMENT		MODIFIED DOLPHIN											
1 INCH SCALE BAR		ADJUST SCALE ACCORDINGLY		SHEET		6		OF		22					



- FENDER CAP NOTES**
- 1) FABRICATE NEW FENDER CAP OR MODIFY EXISTING FENDER CAP.
 - 2) REMOVE TWO EXISTING EDGE PILES AND REINSTALL ALIGNED WITH CENTER THREE EXISTING PILES.
 - 3) INSTALL TWO NEW PILES OFFSET PER PLAN.
 - 4) ALL CHAIN LUG & CLEAT WELDS ARE 3/8" FILLET
 - 5) ALL OTHER WELDS ARE 5/16" FILLET, UNLESS OTHERWISE NOTED
 - 6) P# - PILE DESIGNATION



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ANACORTES / GUEMES ISLAND

FERRY REPLACEMENT

NEW FENDER CAP AND PILES

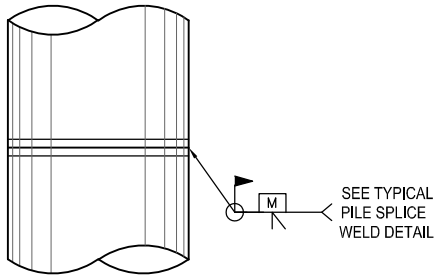
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APPROVED BY:
PROJECT LOCATED NEAR:



NO.	REVISIONS	DATE

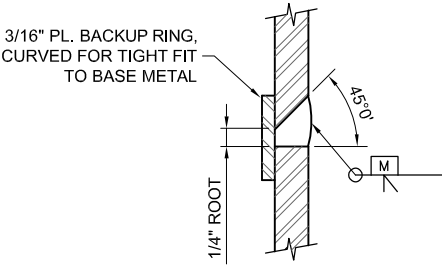
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PILE SCHEDULE										
Designation			Diameter (in)	Thickness (in)	Pile Tip	Batter		Supply Length (ft)	Ultimate Load (kips)	
						Design	As-Built		Tension	Compression
GUEMES ISLAND SIDE	Dolphin 'B' Fender Piles	1	18	0.5	Open	Vertical		80	-	100
		7	18	0.5	Open	Vertical		80	-	100
	Dolphin 'D' Fender Piles	1	18	0.5	Open	Vertical		80	-	100
		7	18	0.5	Open	Vertical		80	-	100
ANACORTES SIDE	Dolphin 'E' Fender Piles	1	18	0.5	Open	Vertical		80	-	100
		7	18	0.5	Open	Vertical		80	-	100
	Dolphin 'F' Fender Piles	1	18	0.5	Open	Vertical		80	-	100
		7	18	0.5	Open	Vertical		80	-	100
	Dolphin 'G' Fender Piles	1	18	0.5	Open	Vertical		80	-	100
		7	18	0.5	Open	Vertical		80	-	100
	Charging Arm Platform	1	18	0.5	Open	1:4		80		
		2	18	0.5	Open	1:4		80		
		3	18	0.5	Open	1:4		80		
		4	18	0.5	Open	1:4		80		
	Maintenance Platform	1	18	0.5	Open	Vertical		80		
		2	18	0.5	Open	Vertical		80		

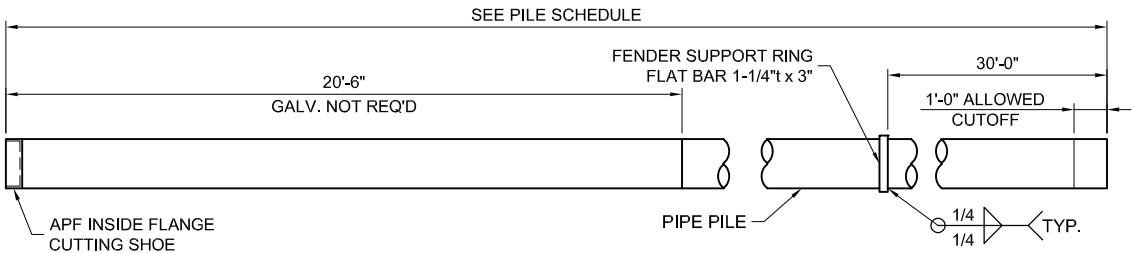


PILE SPLICE

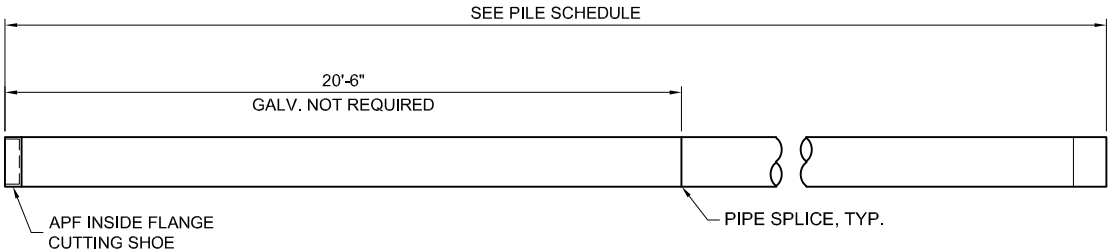
TYPICAL FOR ALL FIELD PIPE PILE SPLICES
(SHOP WELDS, IF REQ'D, SIMILAR)



TYPICAL
PILE SPLICE WELD



FENDER PILE



BEARING PILES

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FED. AID NO.: N/A

DESIGNED BY: CK

CHECKED BY: JDO

DRAWN BY: DM

APPROVED BY:

PROJECT LOCATED NEAR:

ANACORTES / GUEMES ISLAND
FERRY REPLACEMENT

PILE SCHEDULE
AND TYPICAL DETAILS

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

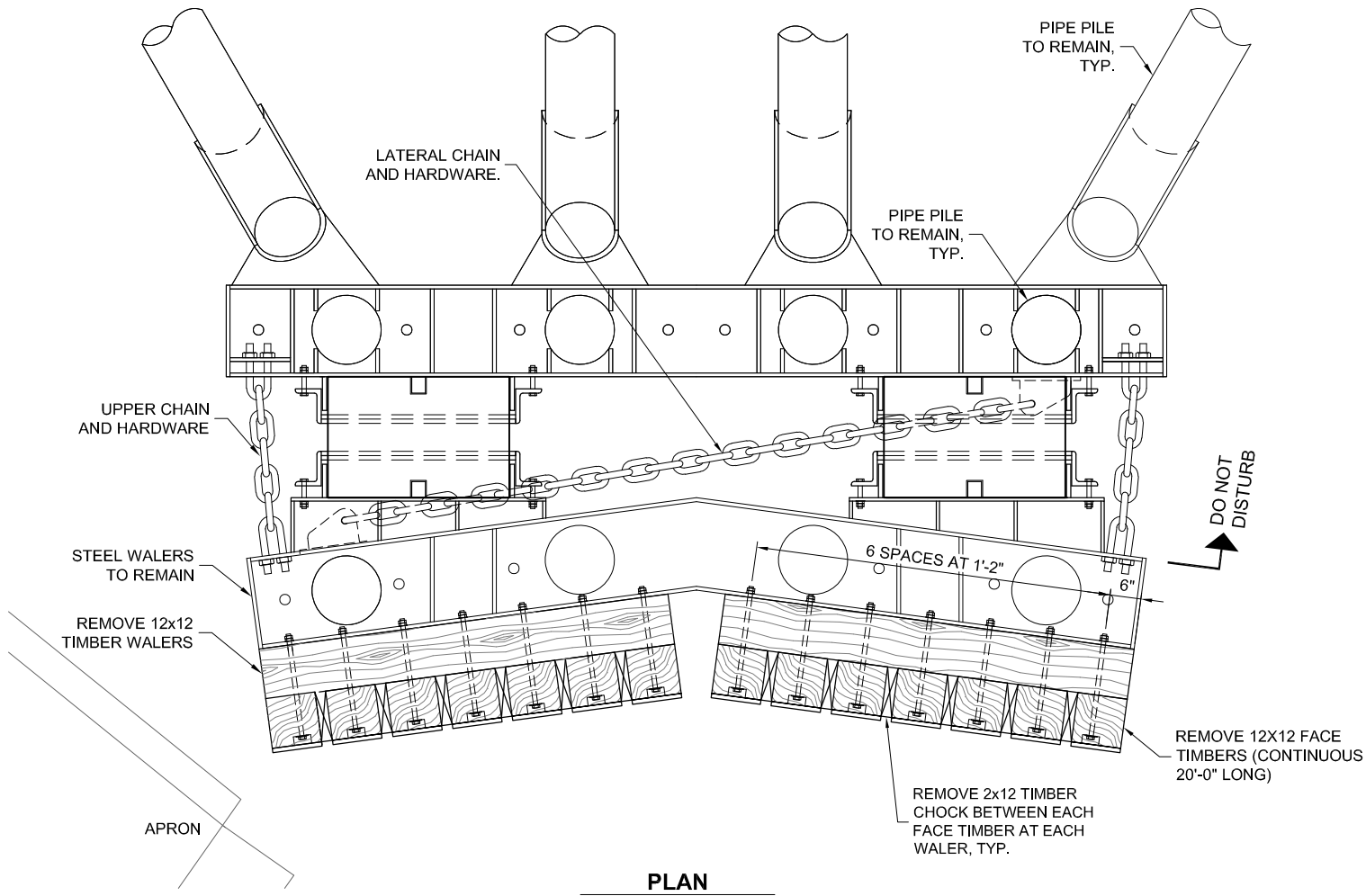
SHEET
8 OF 22

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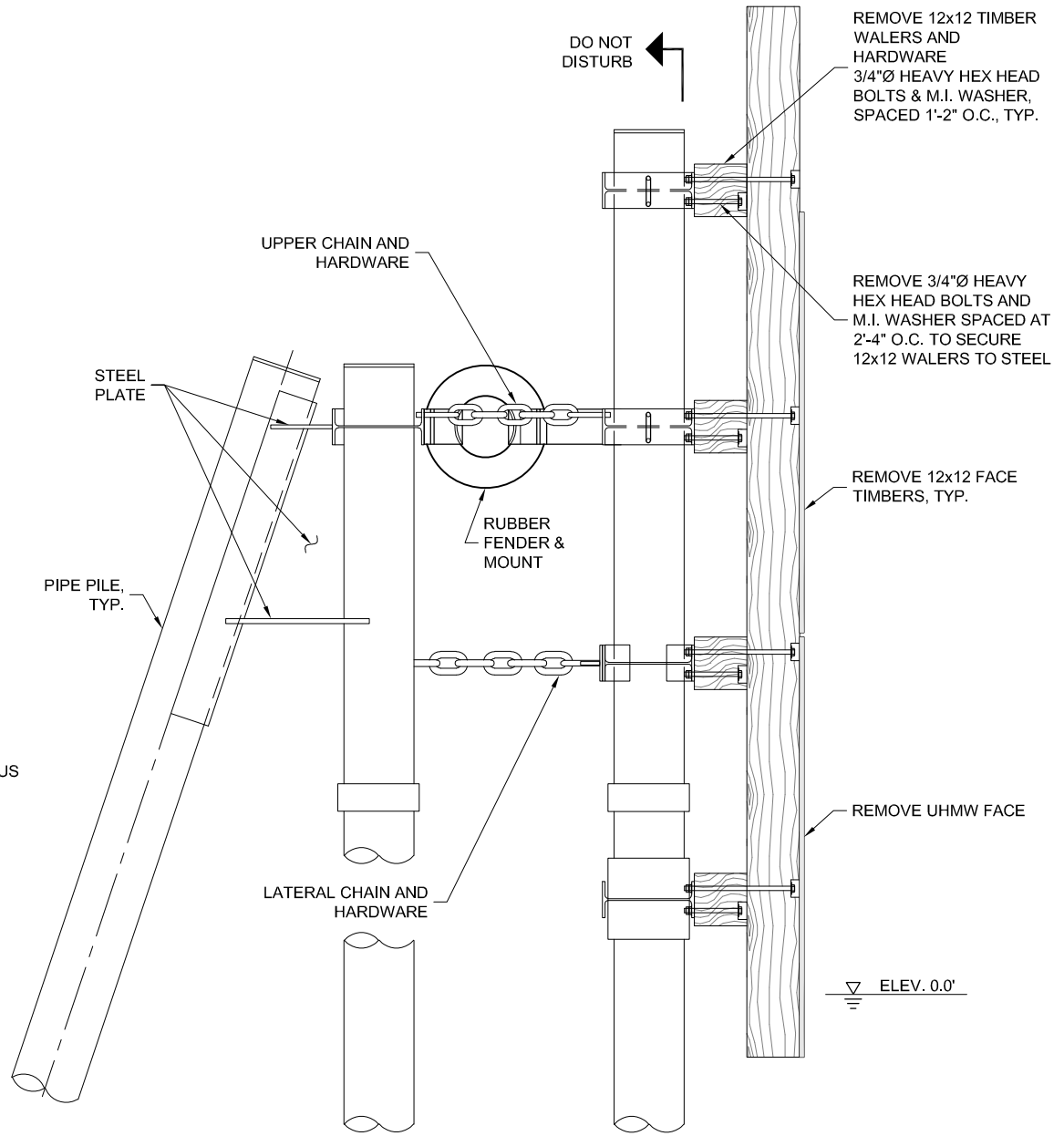
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PLAN



PROFILE

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ANACORTES / GUEMES ISLAND

FERRY REPLACEMENT

WINGWALL MODIFICATION
DEMOLITION

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
9 OF 22

PROJECT NO.: FEMP-5

FED. AID NO.: N/A

DESIGNED BY: CK

CHECKED BY: JDO

DRAWN BY: DM

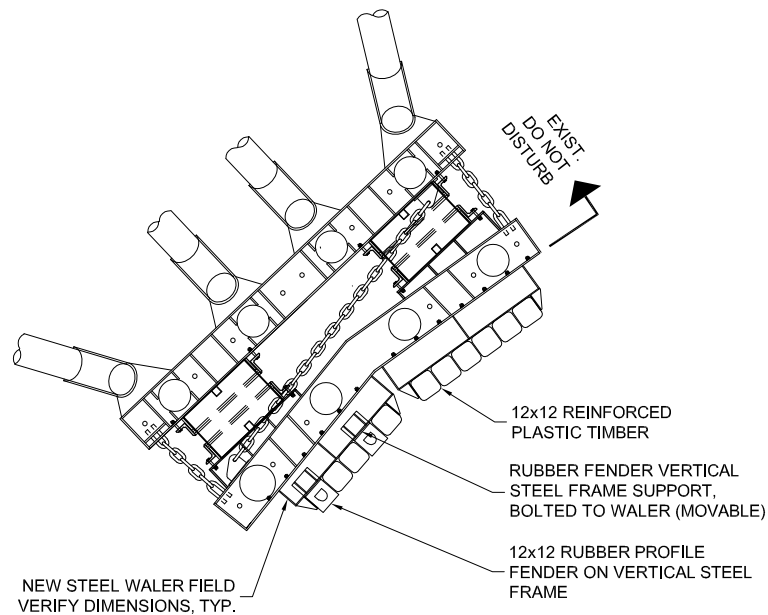
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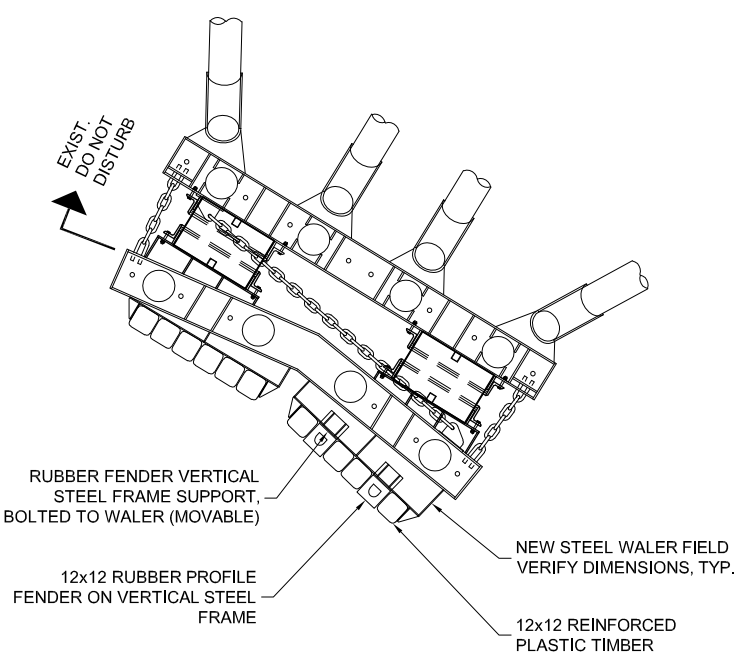


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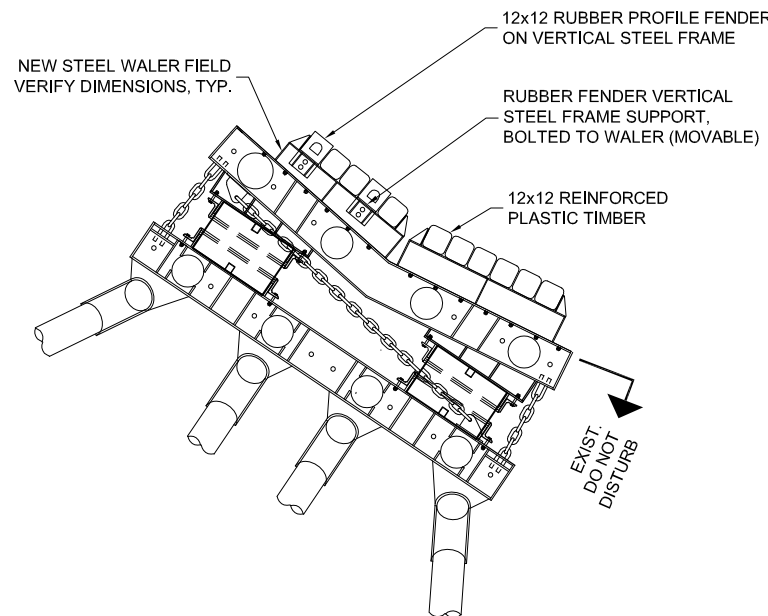
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REVISIONS
NO.



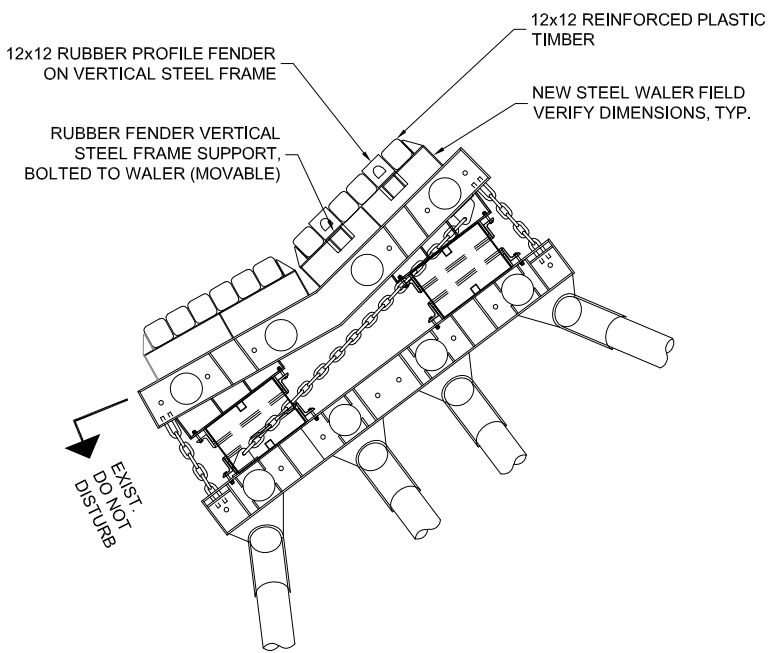
ANACORTES - WEST WINGWALL PLAN



GUEMES - WEST WINGWALL PLAN



ANACORTES - EAST WINGWALL PLAN



GUEMES - EAST WINGWALL PLAN

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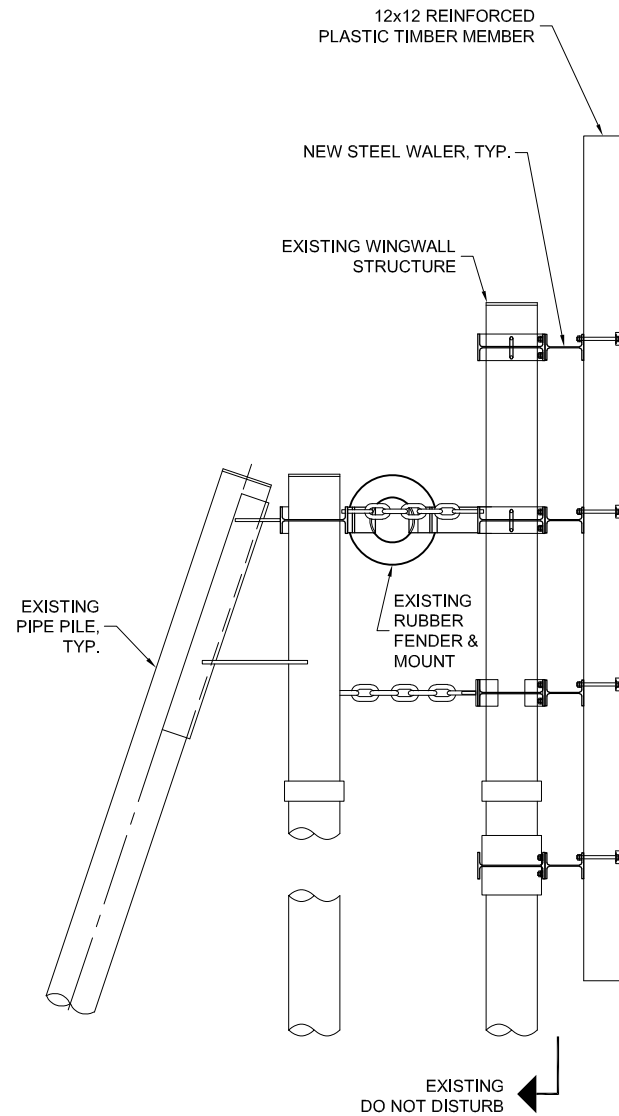
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ANACORTES / GUEMES ISLAND FERRY REPLACEMENT				PROJECT LOCATED NEAR:			
WINGWALL MODIFICATION PLANS							
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SHEET 10 OF 22							

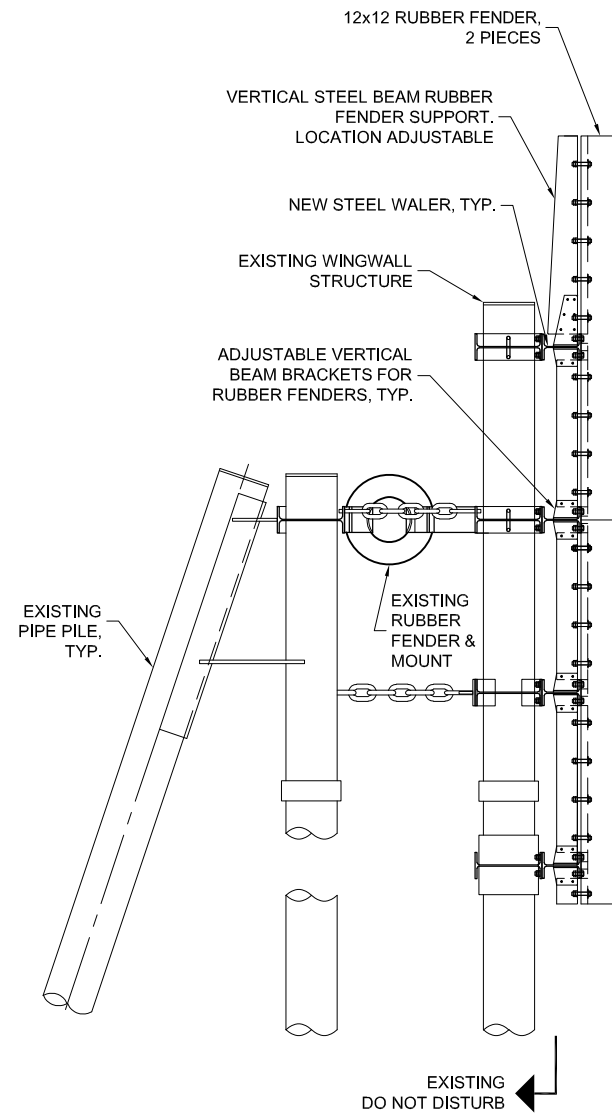


No.	REVISIONS	DATE

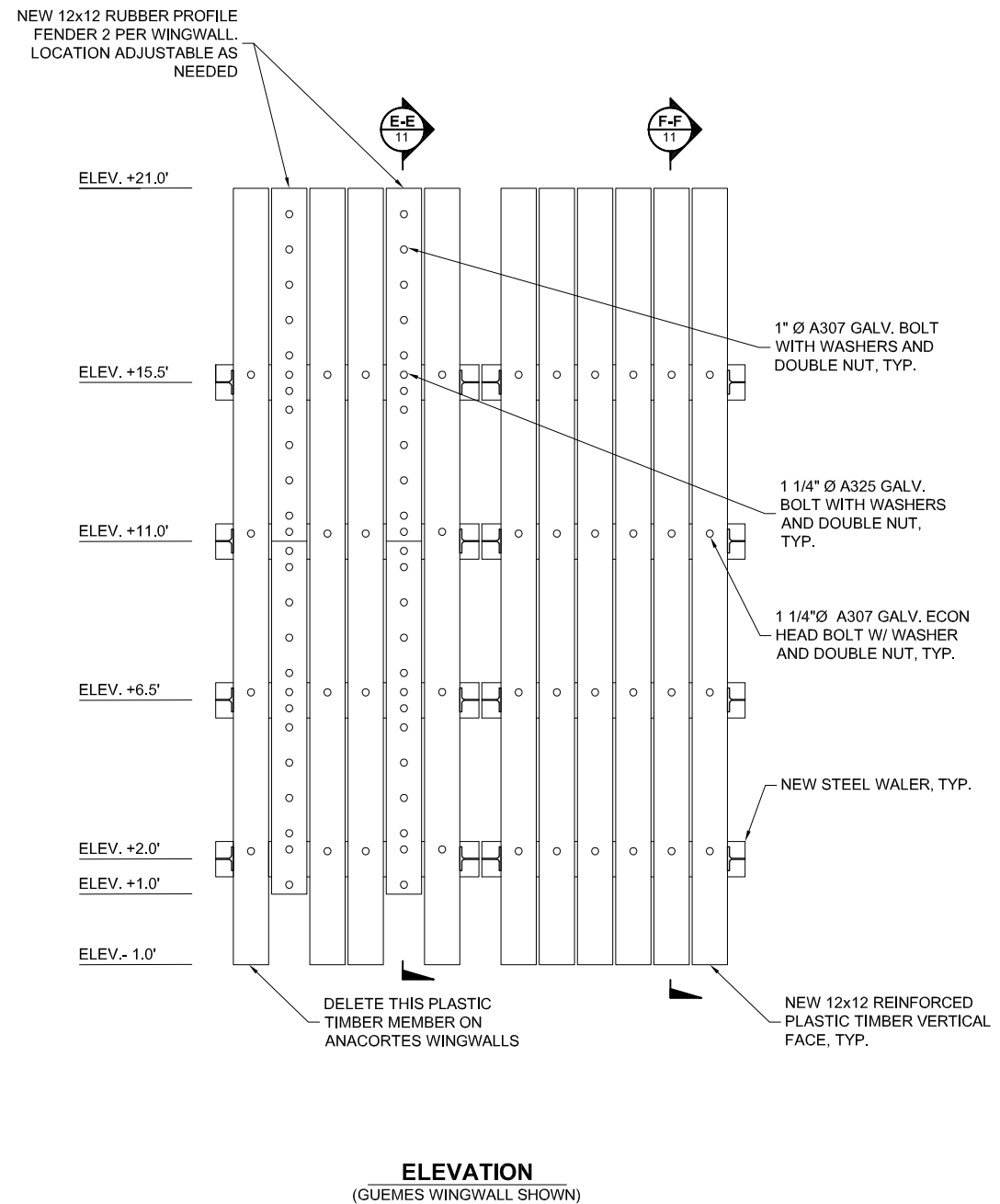
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F-F 11 **PLASTIC PROFILE**



E-E 11 **RUBBER PROFILE**



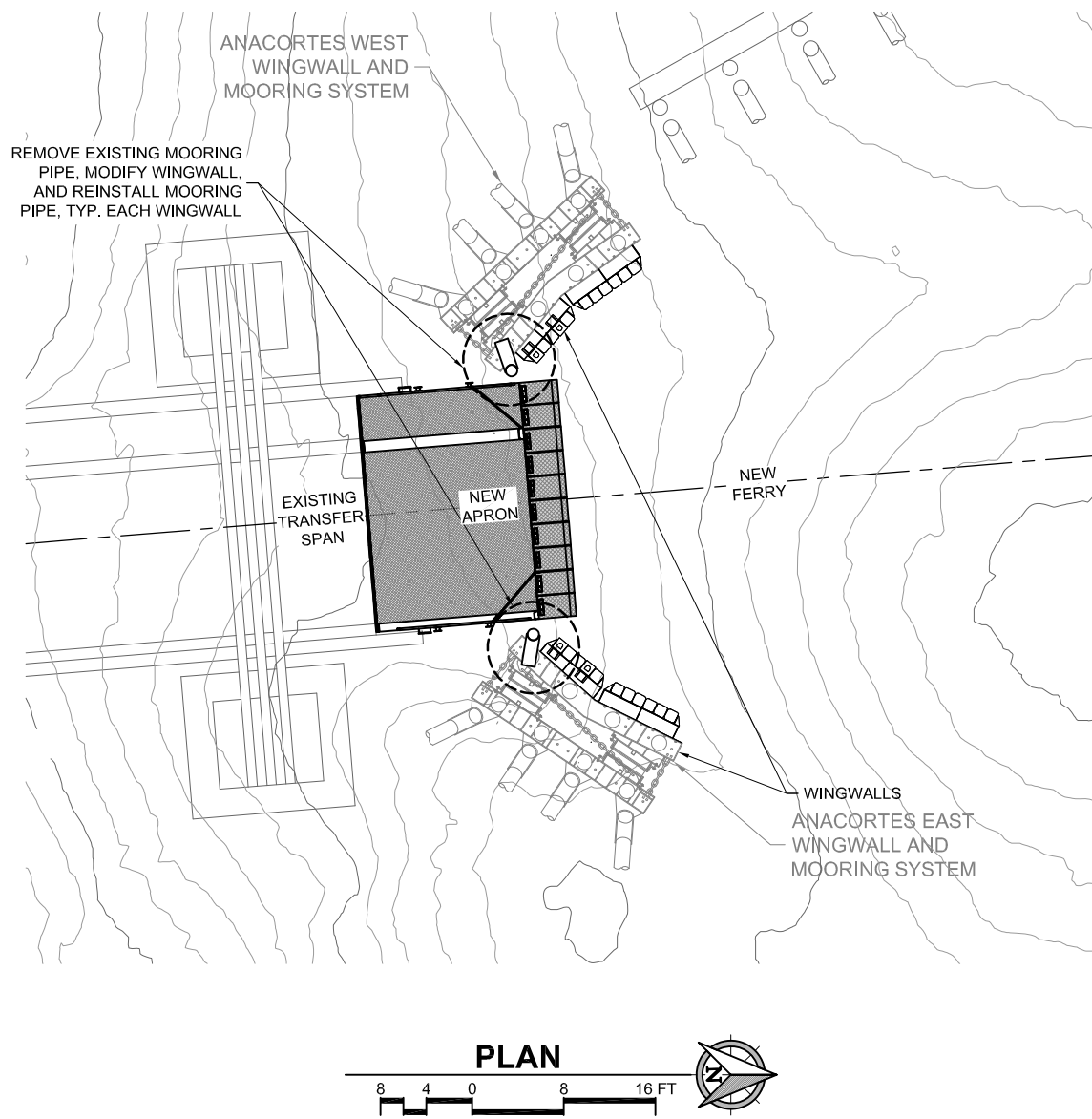
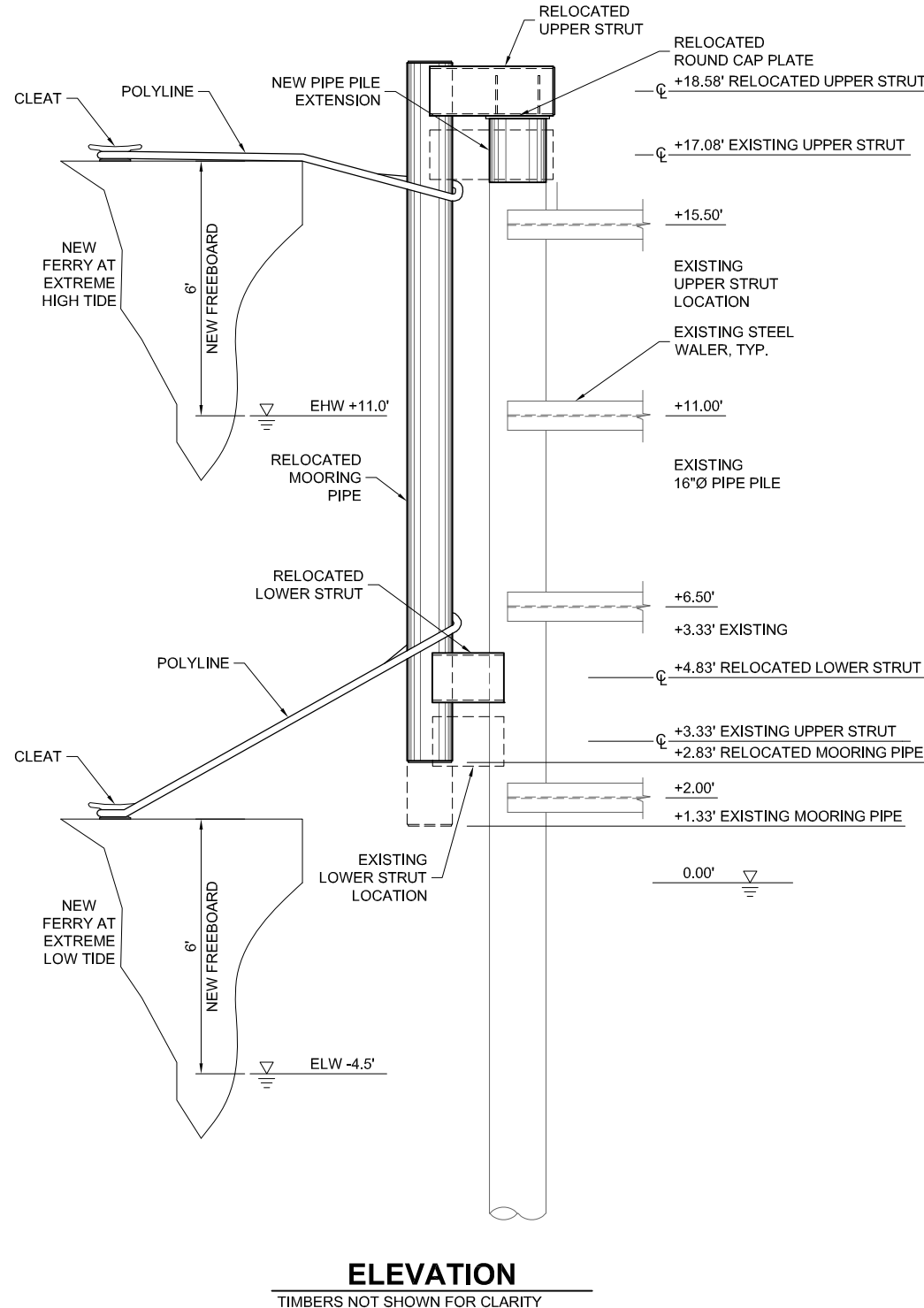
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		DATE	
		REVISIONS	
		NO.	
			
PROJECT NO.: FEMP-5		PROJECT LOCATED NEAR:	
FED. AID NO.: N/A	DESIGNED BY: CK	DRAWN BY: DM	APPROVED BY:
CHECKED BY: JDO			
ANACORTES / GUEMES ISLAND FERRY REPLACEMENT		WINGWALL MODIFICATION ELEVATION AND PROFILES	
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY			
SHEET 11 OF 22			

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- MODIFICATION STEPS:**
1. Cut off existing mooring pipes and struts at existing 16"Ø pipe pile. Existing round cap plate to remain attached to existing strut.
 2. Install 18"± of new 16"Ø pipe pile extension at top of existing 16"Ø pipe pile with CJP splice weld all around.
 3. Reinstall existing mooring pipes and struts in new location. Existing round cap plate to new 16"Ø pipe pile extension 1/2" fillet weld all around. Existing strut to Existing 16"Ø pipe pile per detail. Remove coating as required before welding, repair all coatings after welding.

OPERATIONS AND MAINTENANCE NOTES:

OPERATIONAL PLAN
County shall establish and adhere to an operational plan for use of the new mooring system. This system is designed to accommodate the assumed conditions and use at this site and for the MV Guemes specifically. Method of mooring, including slack line or tight, and back-up mooring systems should be part of the County's operational plan. Vessel shall be moored such that line pull does not exceed the rated strength of the polyline. Damage to mooring pipe or fender panel may result if line pull exceeds rated strength of polyline.

ANTICIPATED MAINTENANCE
It is anticipated that polyline will wear from regular use by contact with vessel edges and mooring pipe. Polyline should be inspected regularly and replaced using standard tuck splice when wear becomes evident. Additionally, the coating system on the mooring pipe should be monitored for corrosion and wear and damaged coatings repaired as part of routine maintenance.

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ANACORTES / GUEMES ISLAND		FERRY REPLACEMENT		MOORING SYSTEM MODIFICATIONS									
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY												SHEET 13 OF 22	

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REGISTERED PROFESSIONAL ENGINEER

WILLIAM K. BAKER
No. 10000
Exp. 12/31/2024

REVISIONS		DATE
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PROFESSIONAL ENGINEER
JAMES L. BAKER
NO. 12345
STATE OF WASHINGTON

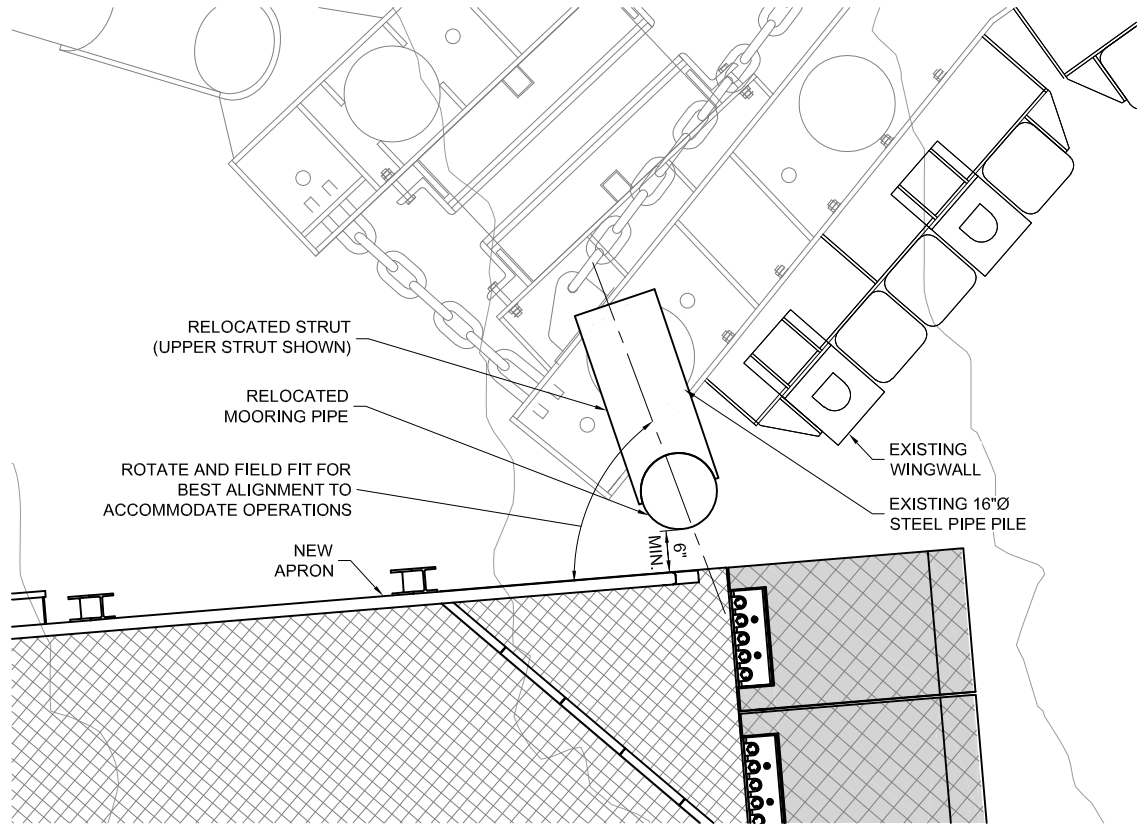
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DESIGNED BY: CK		
ANACORTES / GUEMES ISLAND FERRY REPLACMENT		
MOORING SYSTEM DETAILS		

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
14 OF 22

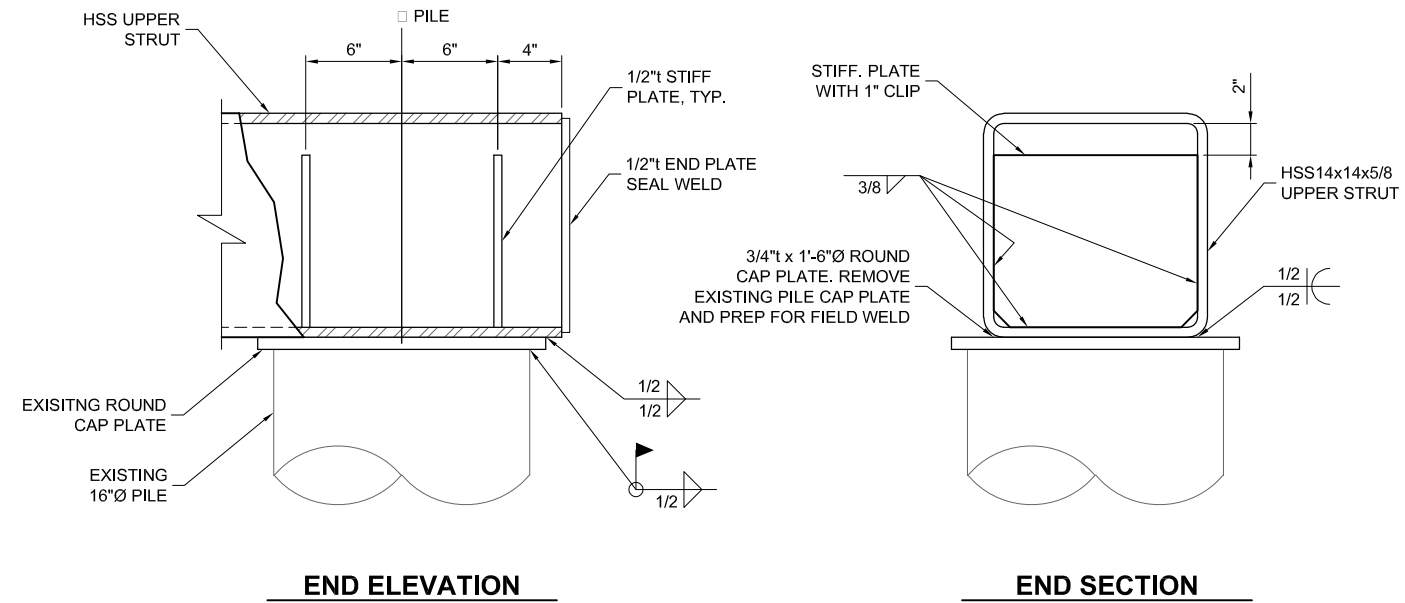
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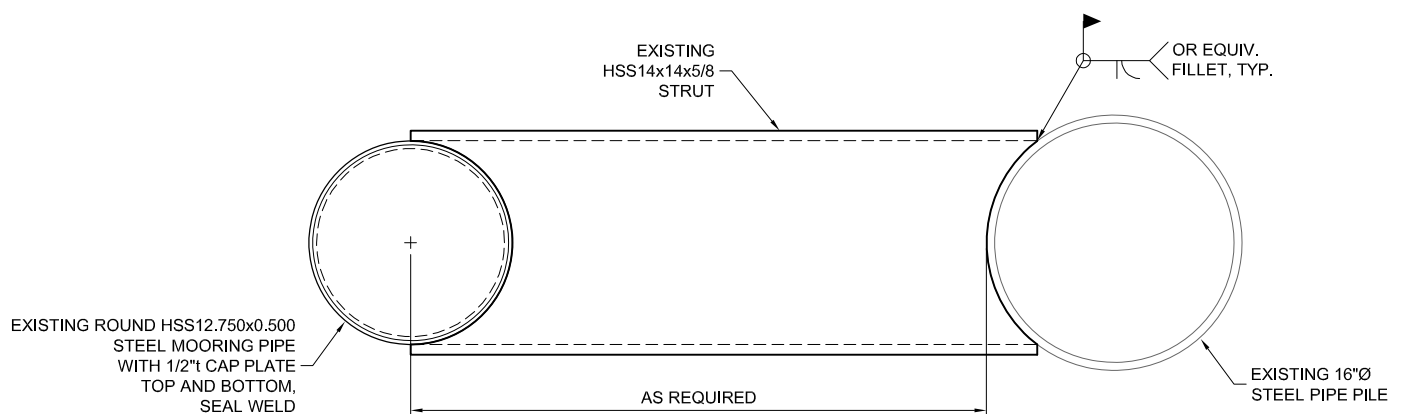
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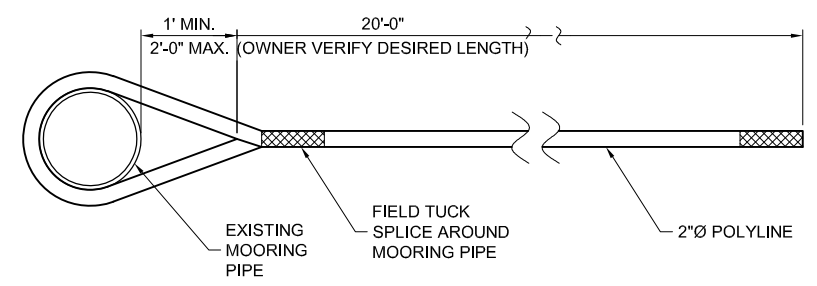
UPPER STRUT

EXISTING - FOR REFERENCE



LOWER STRUT

EXISTING - FOR REFERENCE



POLYLINE

EXISTING - FOR REFERENCE
REPLACE AS NEEDED

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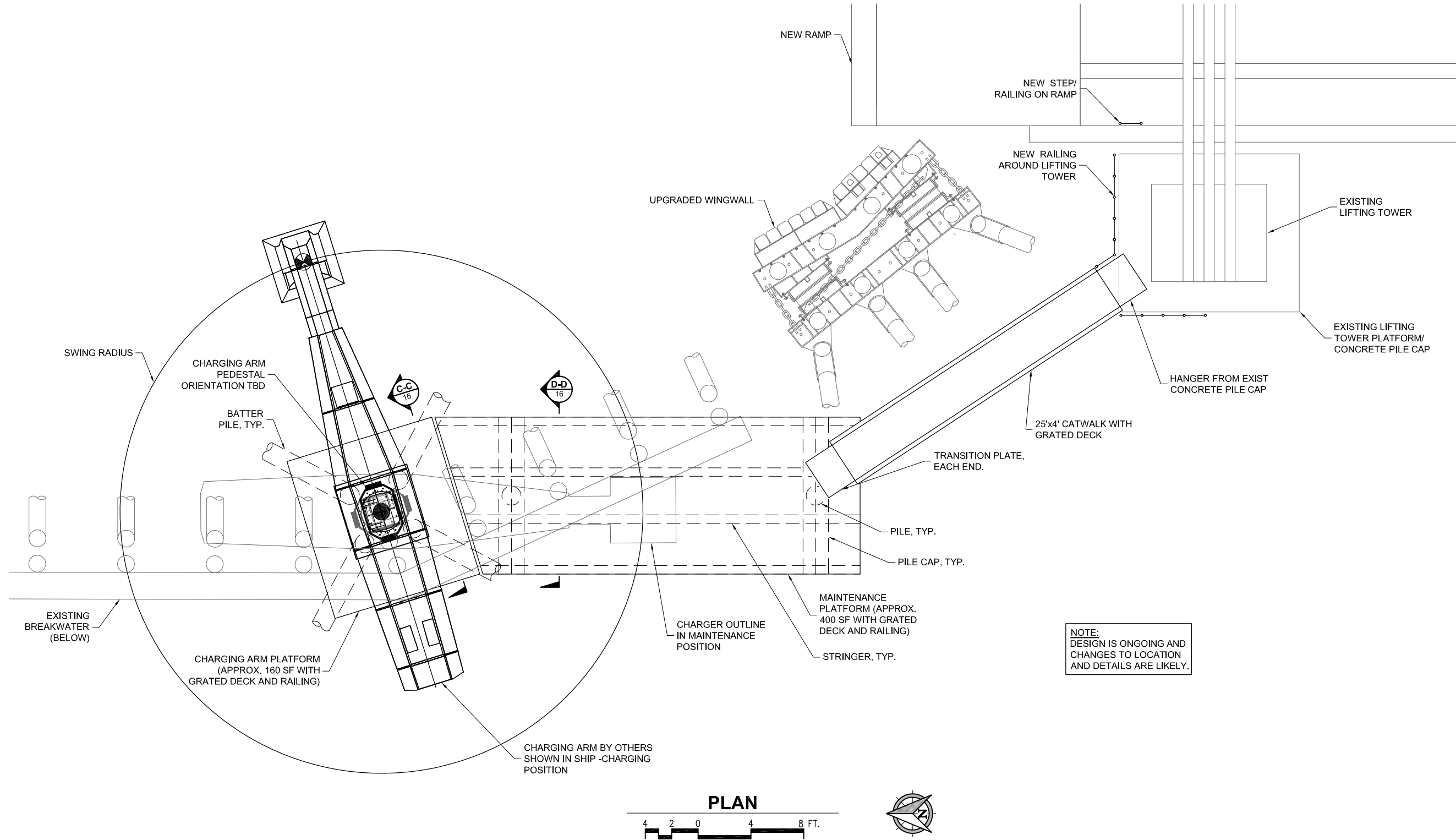


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ANACORTES / GUEMES ISLAND		FERRY REPLACEMENT		CHARGING ARM PLATFORM PLAN				
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY								
SHEET 15 OF 22								

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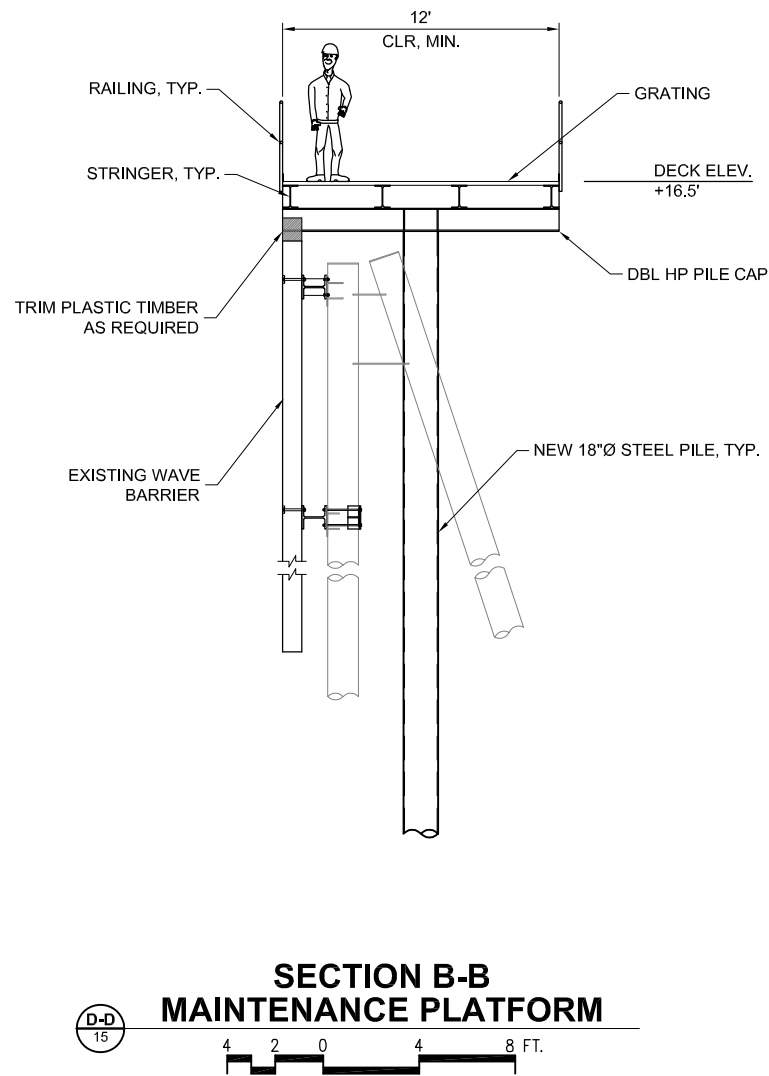
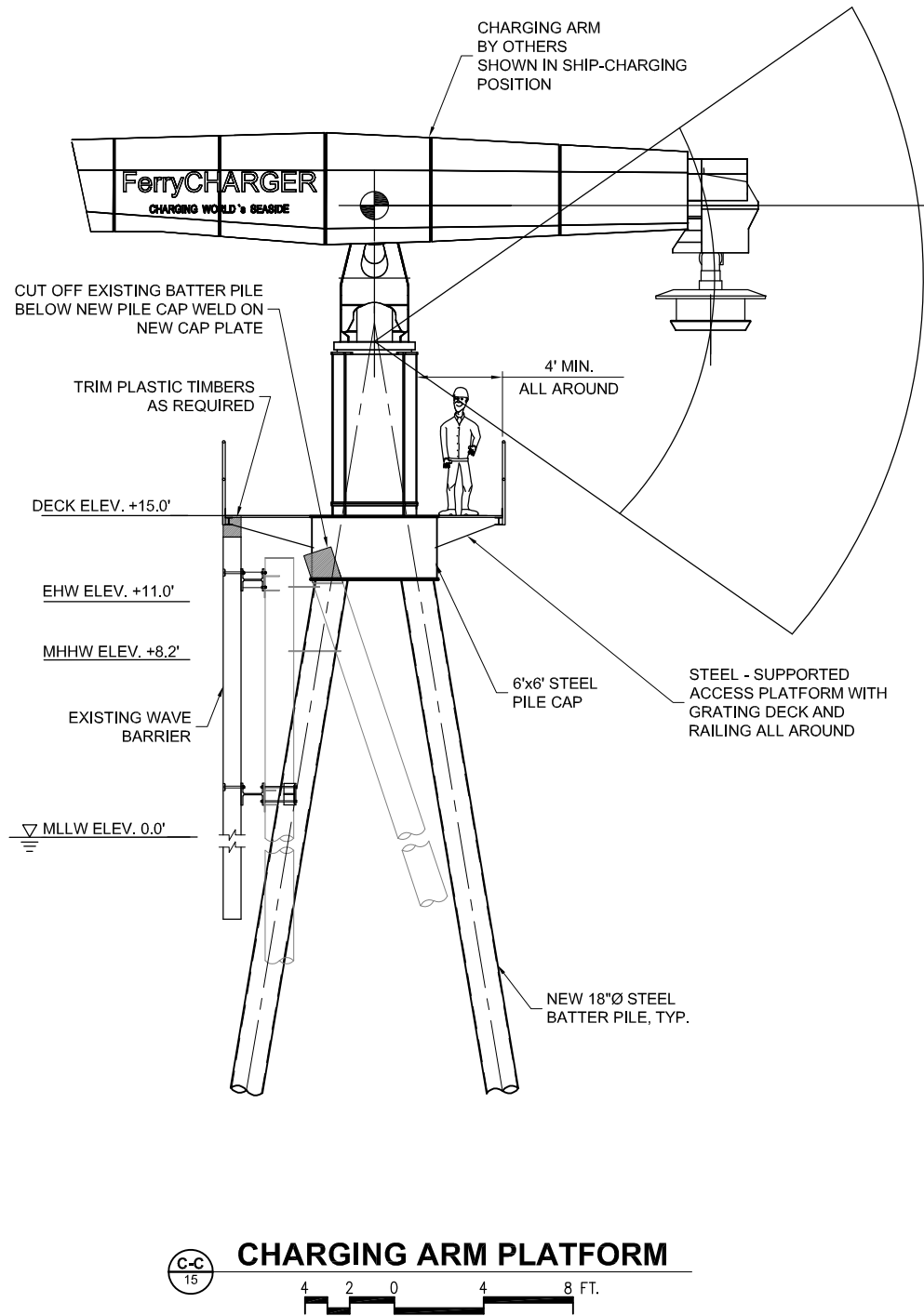
NO.	REVISIONS	DATE

WILLIAM R. SMITH
PROFESSIONAL ENGINEER
STATE OF WASHINGTON
LICENSE NO. 10000

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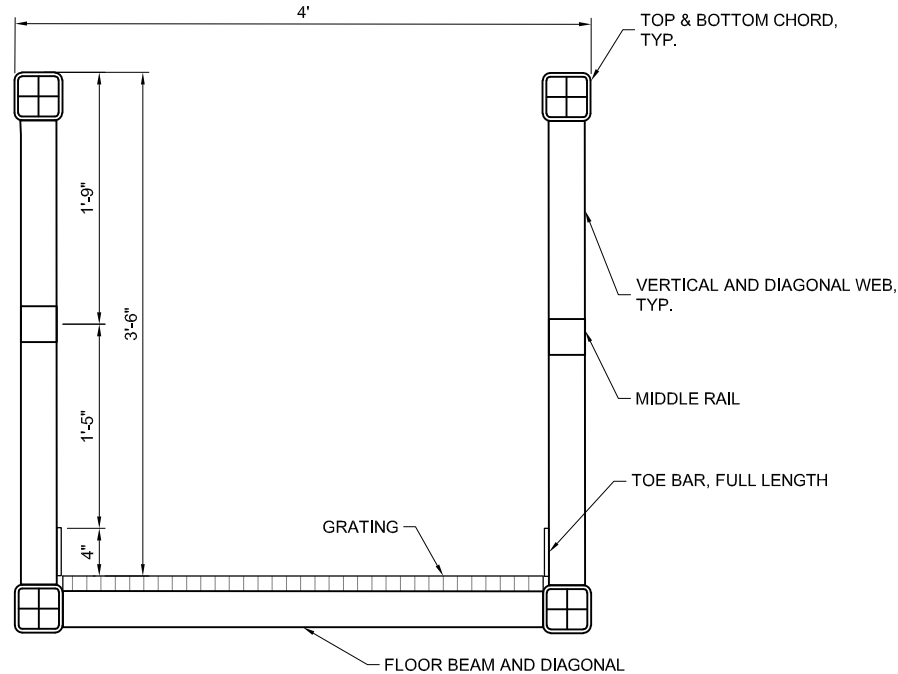
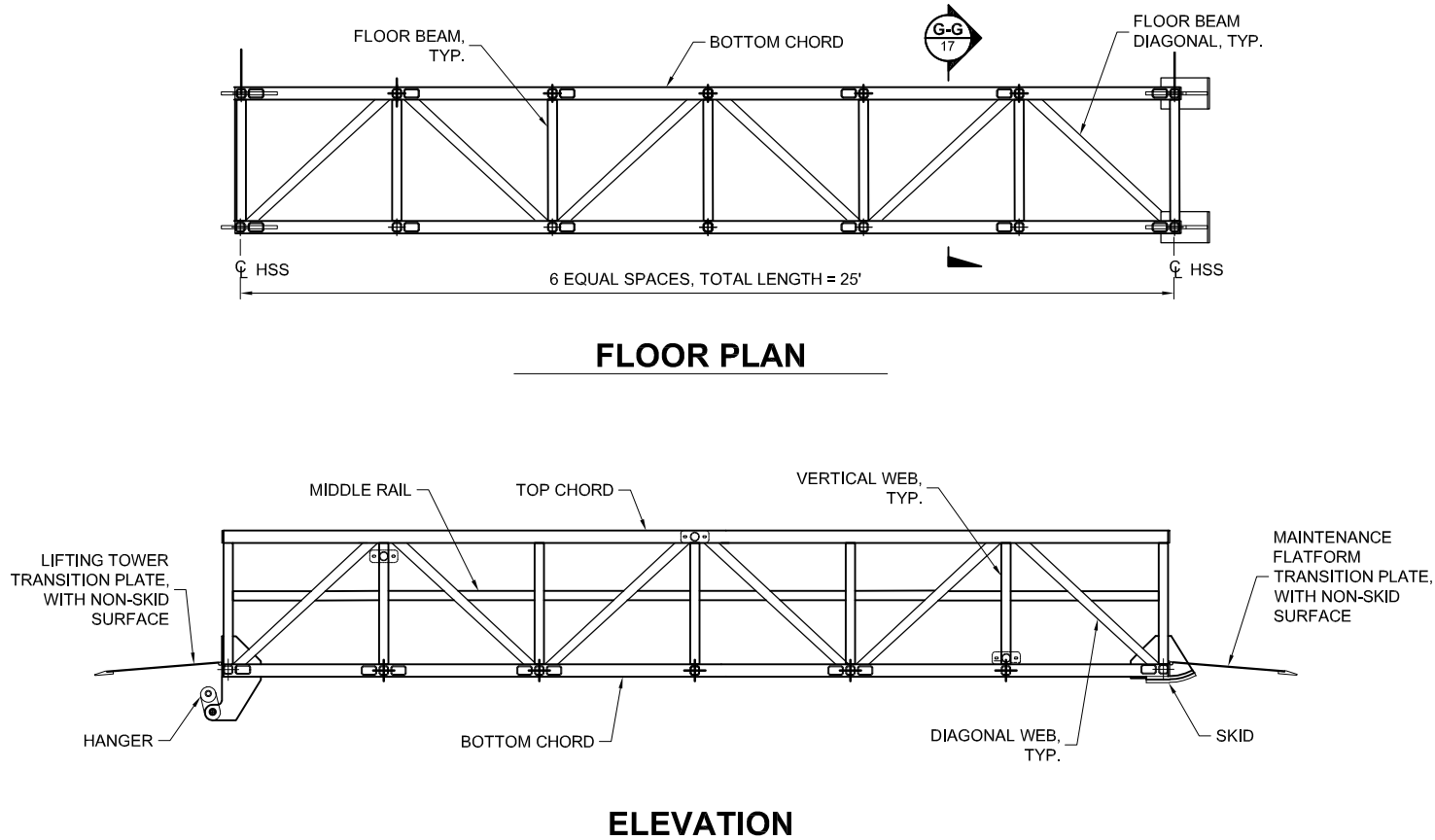
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FED. AID NO.: N/A	DESIGNED BY: CK	DRAWN BY: DM
CHECKED BY: JDO	APPROVED BY:	

ANACORTES / GUEMES ISLAND FERRY REPLACMENT	CHARGING ARM PLATFORM SECTIONS
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1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
16 OF 22

NO.	REVISIONS	DATE



NOTE:
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CHANGES TO LOCATION
AND DETAILS ARE LIKELY.

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ANACORTES / GUEMES ISLAND		FERRY REPLACEMENT		CHARGING ARM ACCESS		CATWALK DETAILS									
1 INCH SCALE BAR		ADJUST SCALE ACCORDINGLY													
SHEET		17		OF		22									



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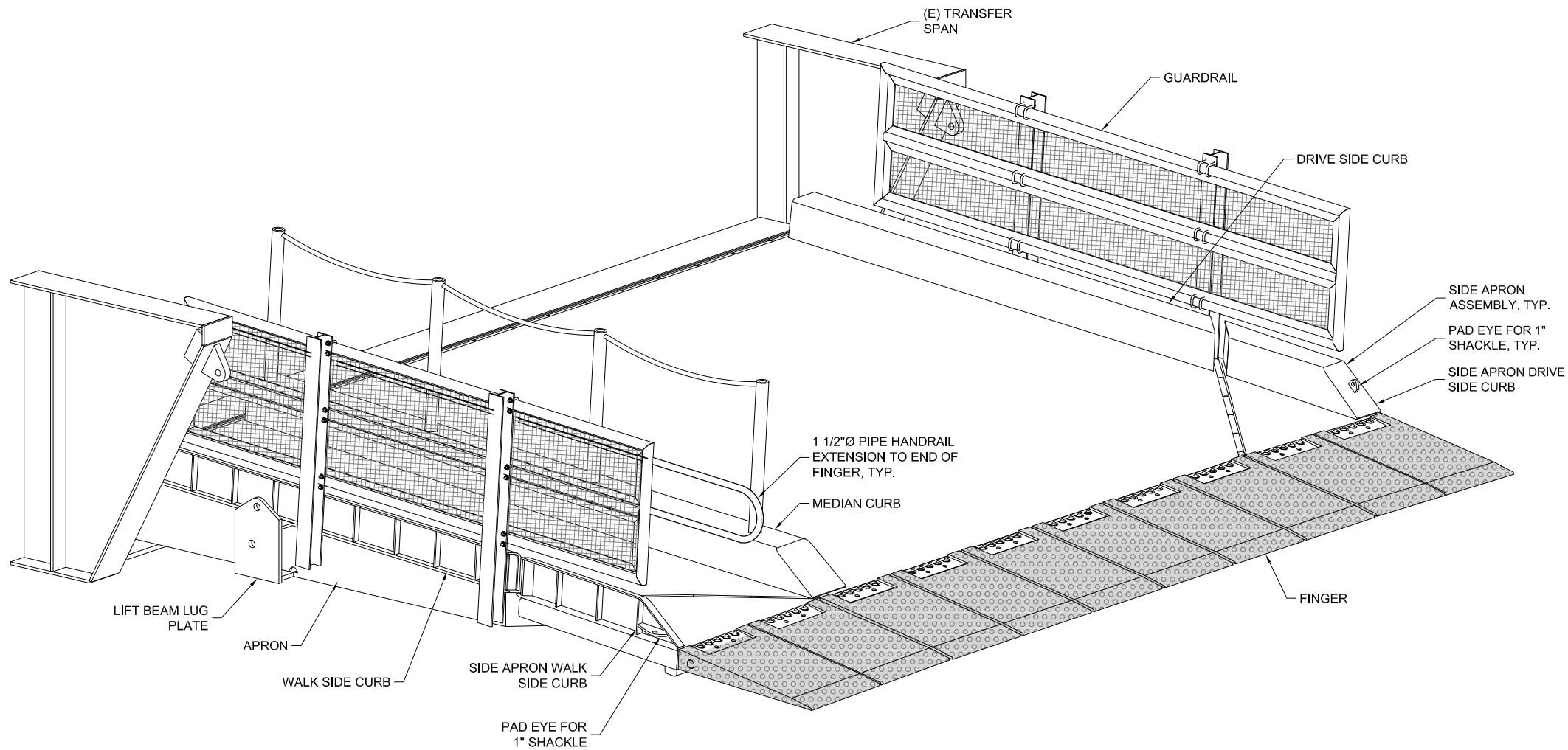
TO BE DEVELOPED

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ANACORTES / GUEMES ISLAND FERRY REPLACEMENT		PROJECT NO.: FEMP-5 FED. AID NO.: N/A			No.	REVISIONS	DATE
CHARGING ARM MISCELLANEOUS DETAILS		DESIGNED BY: CK CHECKED BY: JDO DRAWN BY: DM APPROVED BY: PROJECT LOCATED NEAR:					
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY							
SHEET 18 OF 22							
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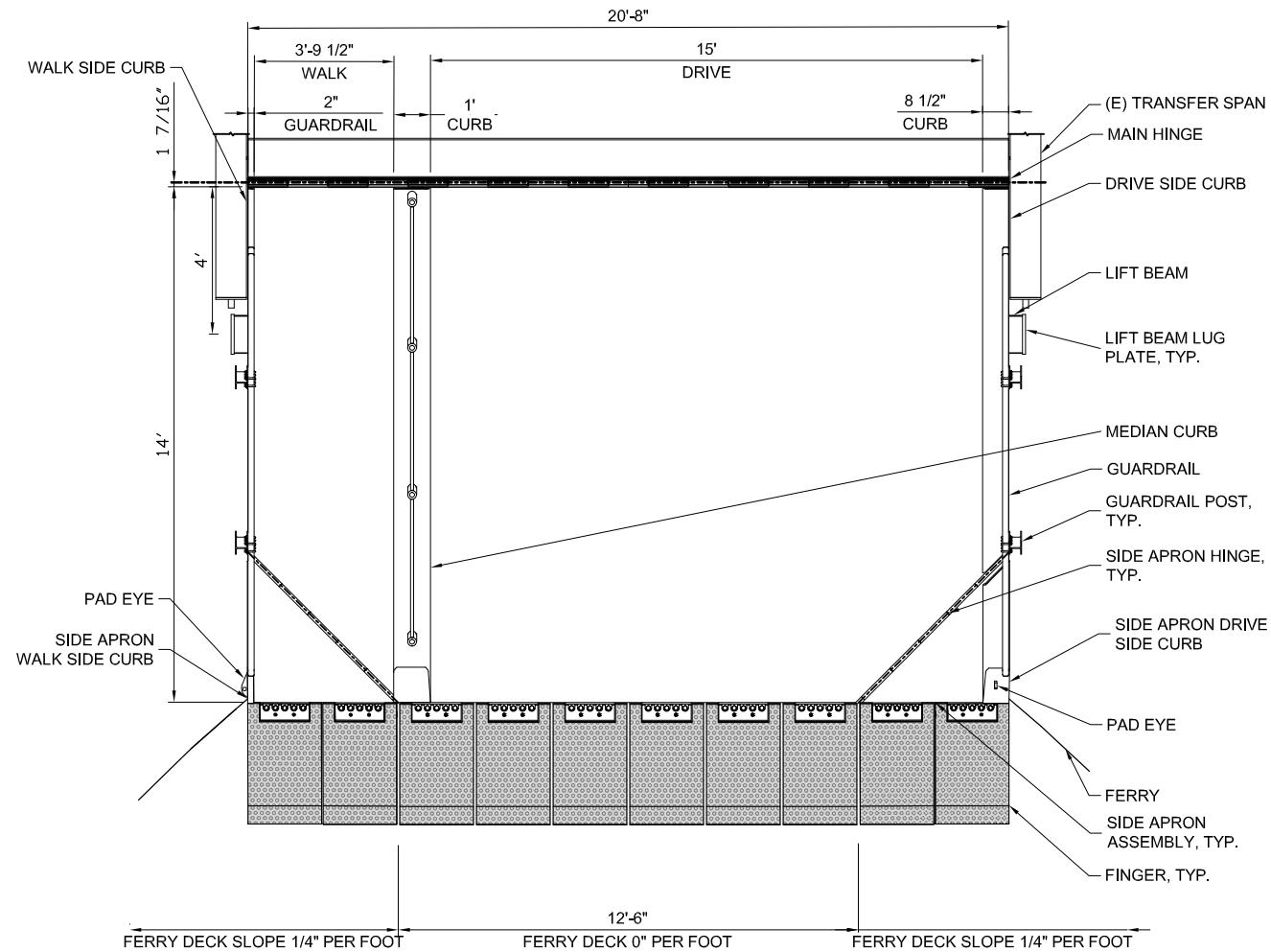


NOTE:
GUEMES APRON SHOWN,
MIRROR FOR ANACORTES SIDE.

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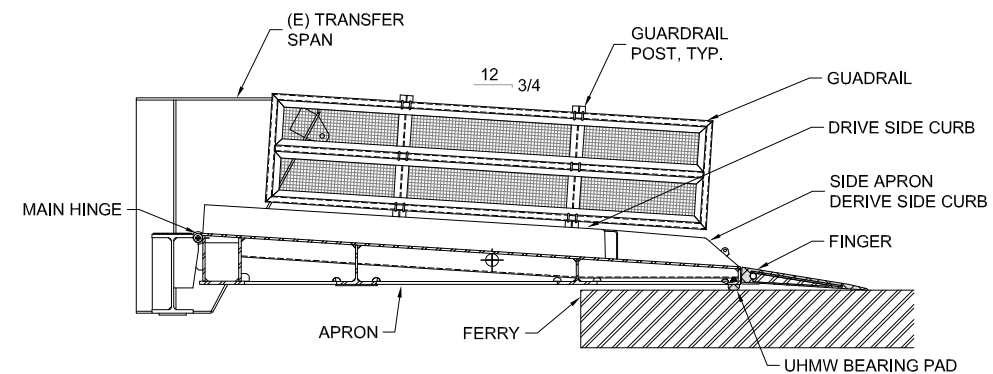
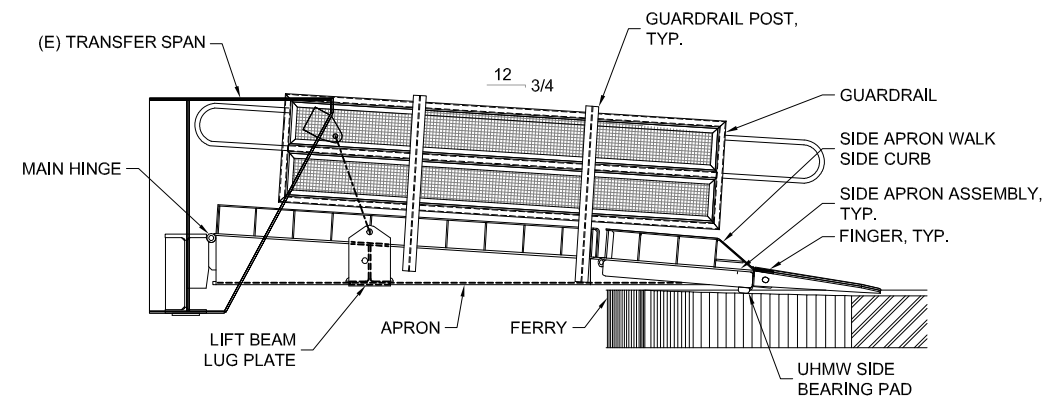
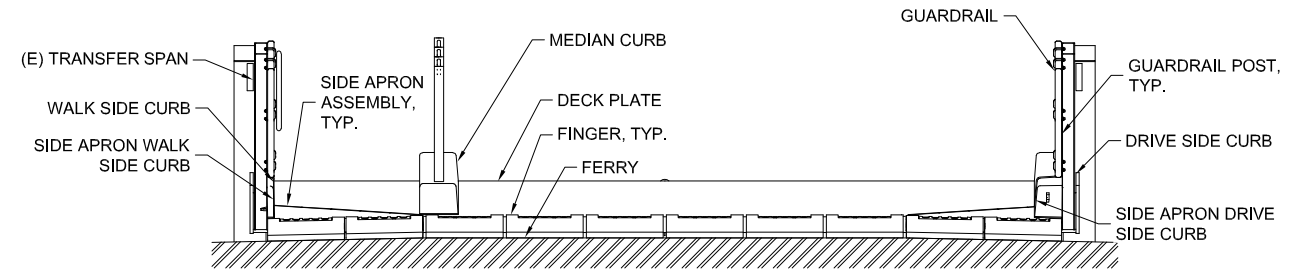
ANACORTES / GUEMES ISLAND FERRY REPLACEMENT		APRON ISOMETRIC	
PROJECT NO.: FEMP-5		PROJECT LOCATED NEAR:	
FED. AID NO.: N/A	DESIGNED BY: CK	DRAWN BY: DM	APPROVED BY:
	CHECKED BY: JDO		
1 INCH SCALE BAR ADJUST SCALE ACCORDINGLY		SHEET 19 OF 22	
NO.		REVISIONS	
DATE			

**SKAGIT COUNTY
PUBLIC WORKS**
1800 CONTINENTAL PLACE
MOUNT VERNON, WA 98273-5625
(360) 336-9400 FAX (360) 336 9478



NOTE

1. ALL PLATE STEEL SHALL BE 5/8"t, U.N.O.
2. ALL JOINTS SHALL BE WELDED WITH A 3/8" FILLET ONE SIDE, 5/16" FILLET BOTH SIDES, OR EQUIVALENT BEVEL, U.N.O.
3. IN ALL CASES THE EXTERIOR OF THE BUILT-UP BOX BEAM SHALL BE WELDED. WELDMENTS ARE TOTALLY SEALED, (NO RAT HOLES OR BRAIN HOLES EXCEPT AS SHOWN).
4. ALL BUTT JOINTS SHALL BE CJP, U.N.O.
5. ALL BOLTS SHALL BE A325 OR A449, U.N.O.
6. SEE GENERAL NOTES 'PAINT' FOR COATING REQUIREMENTS.



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ANACORTES / GUEMES ISLAND

FERRY REPLACEMENT

APRON
PLAN AND ELEVATIONS

PROJECT NO.: FEMP-5

FED. AID NO.: N/A

DESIGNED BY: CK

CHECKED BY: JDO

DRAWN BY: DM

APPROVED BY:

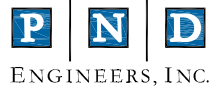
PROJECT LOCATED NEAR:



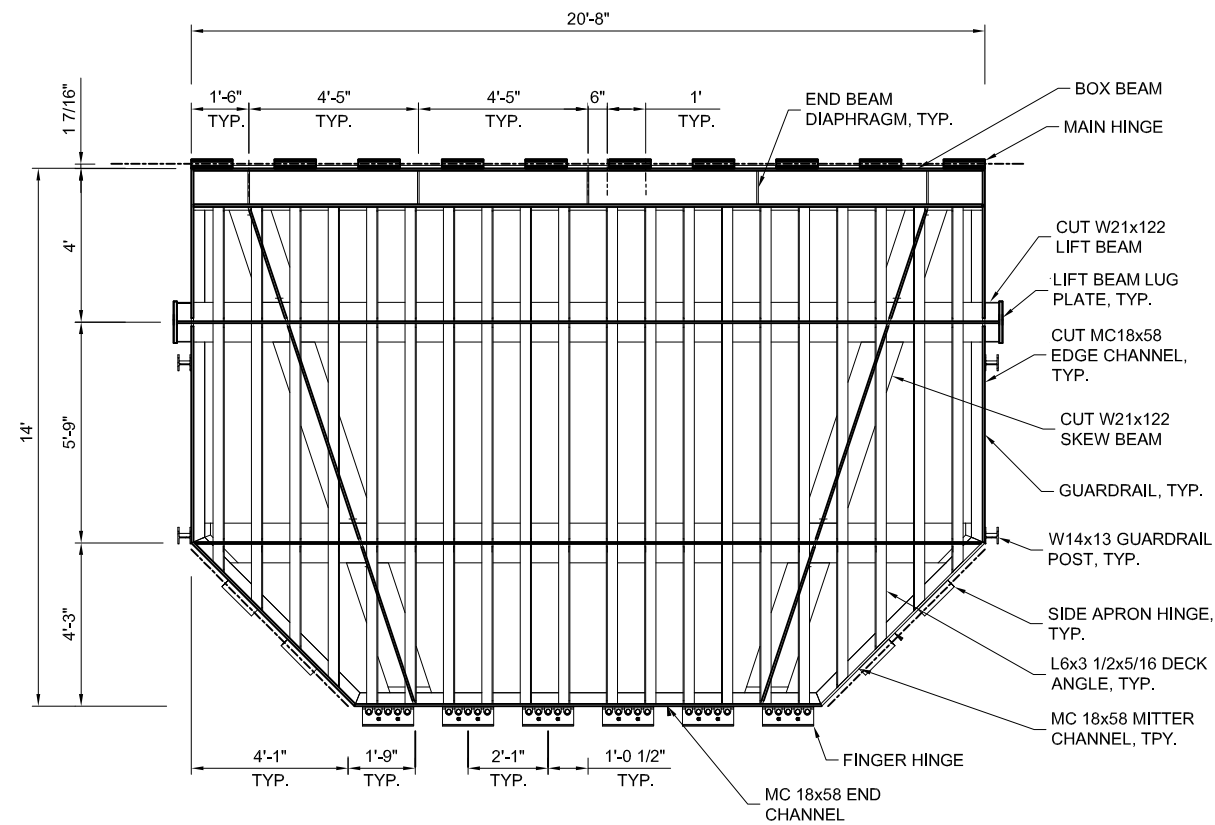
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NO.	REVISIONS	DATE

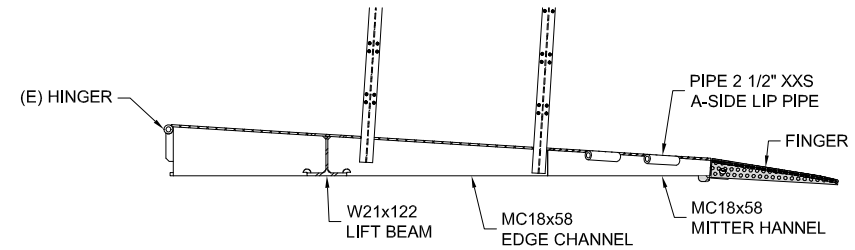
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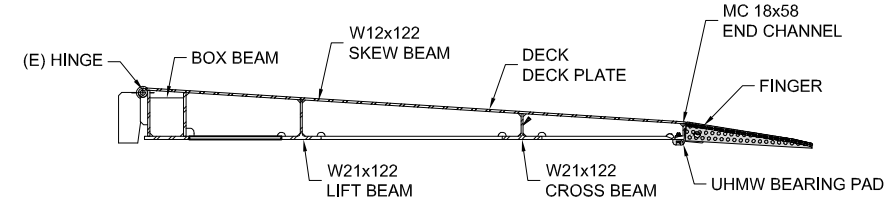
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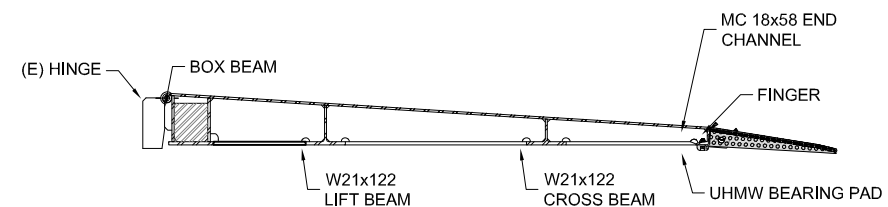
APRON PLAN



APRON EDGE CHANNEL



APRON SKEW BEAM



APRON CENTER FRAMING

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ANACORTES / GUEMES ISLAND
FERRY REPLACEMENT

APRON
FRAMING

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
21 OF 22

PROJECT NO.: FEMP-5

FED. AID NO.: N/A

DESIGNED BY: CK

CHECKED BY: JDO

DRAWN BY: DM

APPROVED BY:

PROJECT LOCATED NEAR:



SKAGIT COUNTY
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TO BE DEVELOPED

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**ANACORTES / GUEMES ISLAND
FERRY REPLACEMENT**

PROJECT NO.: FEMP-5	FEED AID NO.: N/A
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DESIGNED BY: CK

DRAWN BY: DM

APPROVED BY:	BY: JDU
PROJECT LOCATED NEAR:	



DATE _____

REVISIONS

No.	
1	1. The first step in the process of identifying a problem is to define the problem.
2	2. The second step in the process of identifying a problem is to identify the causes of the problem.
3	3. The third step in the process of identifying a problem is to identify the effects of the problem.
4	4. The fourth step in the process of identifying a problem is to identify the stakeholders involved in the problem.
5	5. The fifth step in the process of identifying a problem is to identify the resources available to solve the problem.
6	6. The sixth step in the process of identifying a problem is to identify the constraints on the solution.
7	7. The seventh step in the process of identifying a problem is to identify the potential solutions.
8	8. The eighth step in the process of identifying a problem is to identify the best solution.
9	9. The ninth step in the process of identifying a problem is to implement the solution.
10	10. The tenth step in the process of identifying a problem is to evaluate the results of the solution.

1 INCH SCALE BAR
ADJUST SCALE ACCORDINGLY

SHEET
22 OF 22