

WASHINGTON STATE PARKS & RECREATION COMMISSION

LAURIE CONNELLY, CHAIR

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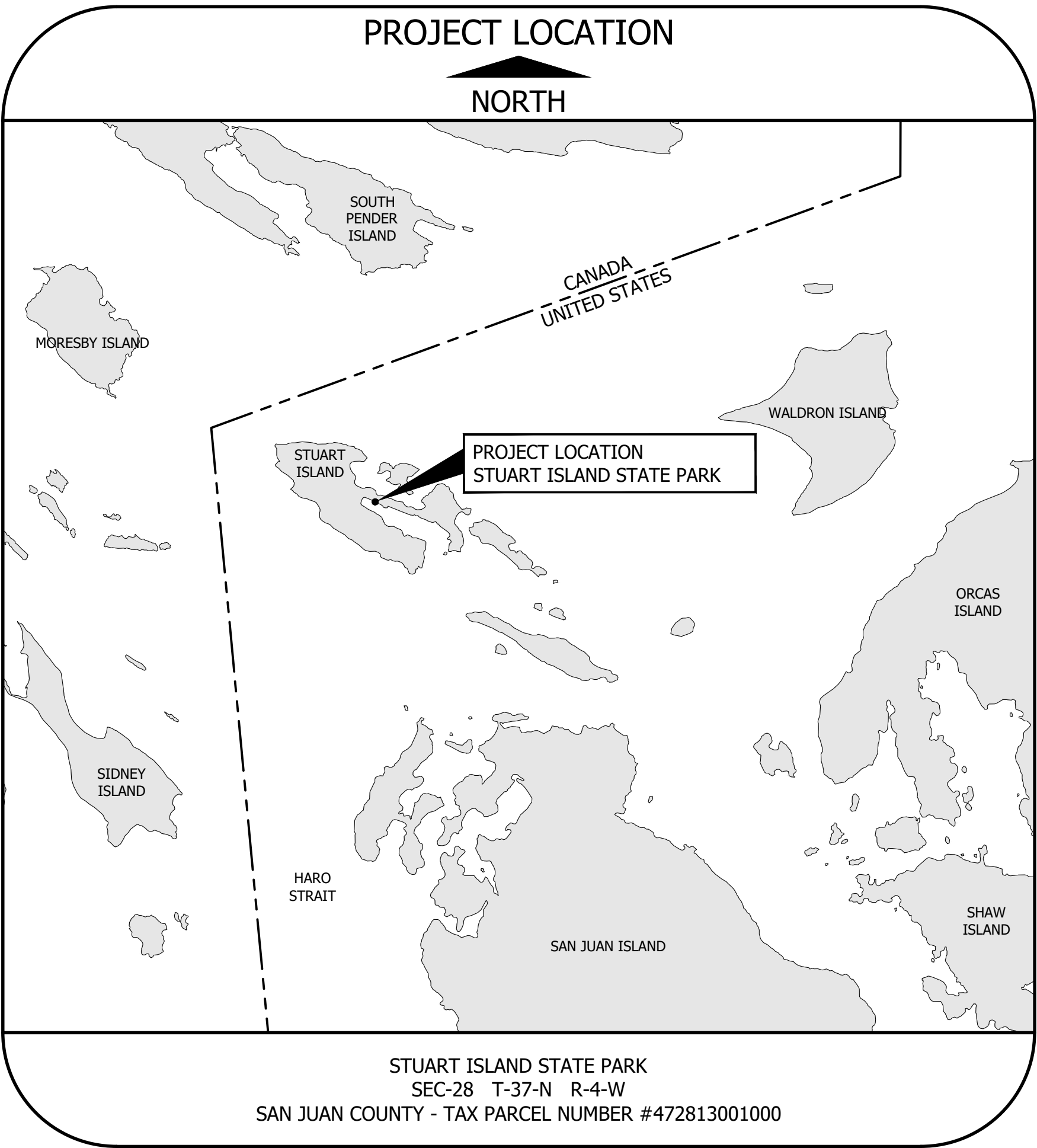
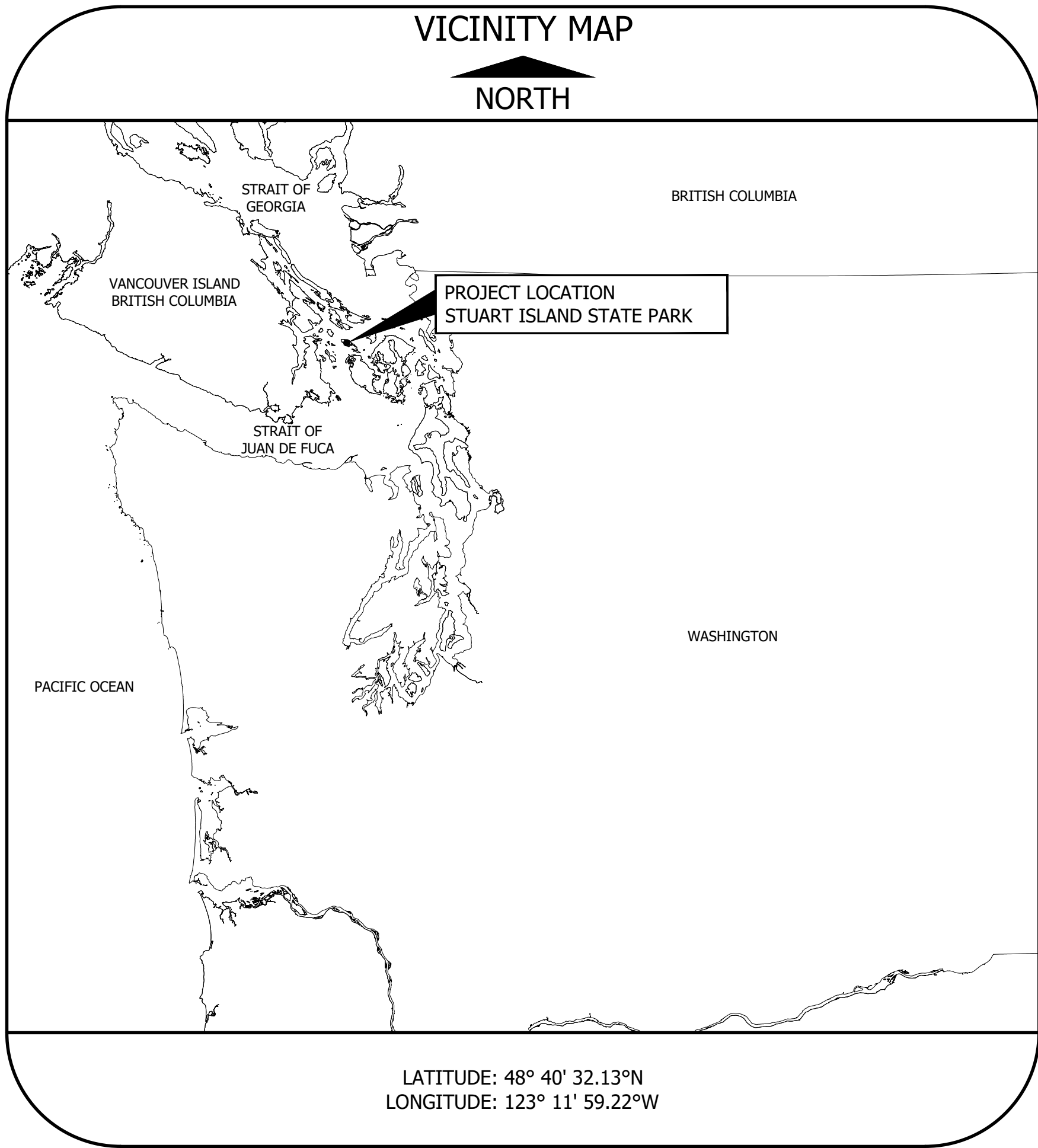
APPROVED FOR CONSTRUCTION

Heath Yates 06/16/2025
REGION MANAGER date

Kyle Murphy 07/08/25
CAPITAL PROGRAM MANAGER date

Area Manager: AARON DAVIDSON

STUART ISLAND STATE PARK REID HARBOR MOORAGE FACILITY IMPROVEMENTS



INDEX	
SHEET	DESCRIPTION
1	COVER SHEET
2	PROJECT TEAM
3	GENERAL NOTES 1
4	GENERAL NOTES 2
5	EXISTING SITE PLAN
6	DEMOLITION PLAN - OVERALL
7	DEMOLITION PLAN - MOORAGE FACILITY
8	SITE PHOTOS 1
9	SITE PHOTOS 2
10	SITE PLAN - OVERALL
11	SITE PLAN - MOORAGE FACILITY
12	SITE PLAN - UPLAND
13	SITE PLAN - FLOATS AND PLATFORM
14	SITE PLAN - ISLAND FLOATS AND PUMPOUT
15	PROFILE - MOORAGE FACILITY
16	ABUTMENT DETAILS
17	PLATFORM DETAILS 1
18	PLATFORM DETAILS 2
19	PLATFORM DETAILS 3
20	GANGWAY AND HEADFRAME DETAILS
21	PILE DETAILS AND SCHEDULE
22	MOORAGE FLOAT PLAN AND ELEVATION
23	ISLAND FLOAT PLAN AND ELEVATION
24	FLOAT NOTES
25	MOORAGE AND ISLAND FLOAT SECTIONS AND DETAILS
26	DINGHY FLOAT SECTIONS
27	TYPICAL FLOAT DETAILS
28	FLOAT 'A' PLAN, ELEVATION AND SECTION
29	FLOAT 'B' PLAN, ELEVATION AND SECTION
30	FLOAT 'C' PLAN, ELEVATION AND SECTION
31	FLOAT '1' PLAN, ELEVATION AND SECTION
32	FLOAT '2' PLAN, ELEVATION AND SECTION
33	FLOAT '3' PLAN, ELEVATION AND SECTION
34	FLOAT '4' PLAN, ELEVATION AND SECTION
35	FLOAT 'D1' PLAN, ELEVATION AND SECTION
36	FLOAT 'D2' PLAN, ELEVATION AND SECTION
37	FLOAT 'D3' PLAN, ELEVATION AND SECTION
38	STEEL FABRICATION WALERS 1
39	STEEL FABRICATION WALERS 2
40	STEEL FABRICATION WALERS 3
41	STEEL FABRICATION END PILE HOOP
42	STEEL FABRICATION LEDGERS
43	STEEL FABRICATION END CAPS
44	STEEL FABRICATION END CAPS 2
45	STEEL FABRICATION SILLS
46	STEEL FABRICATION COVER PLATES
47	HDPE FABRICATION RUBSTRIP

PROJECT TEAM

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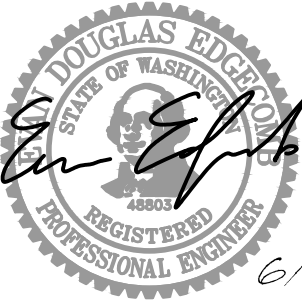
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CAD NO. S-4812-Z41-2022-PROJECT TEAM		
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DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
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CHECKED (HDQTS.)	EE	6/4/25



6/4/25

PROJECT ENGINEER

WASHINGTON
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AND
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COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

PROJECT TEAM

SCALE
NONE

PARKS FILE#

BID SET

SHEET 2 OF 47

GENERAL NOTES

- THESE NOTES CONTAIN GENERAL INFORMATION AND ARE NOT COMPREHENSIVE. VERIFY INFORMATION PROVIDED HERE WITH THE SPECIFICATIONS AND OTHER REFERENCED DOCUMENTS. BRING ANY CONFLICTS TO THE ATTENTION OF WASHINGTON STATE PARKS (OWNER) BEFORE WORK IS INITIATED. THE OWNER WILL RESOLVE ANY SUCH CONFLICT.
- FIELD VERIFY ALL DIMENSIONS AND DETAILS PRIOR TO FABRICATION AND CONSTRUCTION.
- ABIDE BY ALL APPLICABLE ENVIRONMENTAL PERMITTING REQUIREMENTS, WATER QUALITY REQUIREMENTS, LOCAL ENVIRONMENTAL PROTECTION STANDARDS, PERMITTING LAWS, AND REGULATIONS.
- FOLLOW ALL APPLICABLE SAFETY REGULATIONS. METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION OF STRUCTURAL MATERIAL ARE THE CONTRACTOR'S RESPONSIBILITY.
- CONFIRM EXTENT AND LOCATION OF STAGING AREAS WITH THE OWNER.
- ALL LOCATIONS OF EXISTING FEATURES ARE APPROXIMATE AND HAVE BEEN ESTABLISHED FROM AVAILABLE RECORDS AND LIMITED FIELD INVESTIGATIONS. FIELD VERIFY EXISTING FEATURES PRIOR TO STARTING CONSTRUCTION ACTIVITIES.
- PROTECT ALL EXISTING FEATURES LOCATED IN THE PROJECT AREA, INCLUDING TREES, UNLESS SPECIFICALLY CALLED OUT TO BE REMOVED.
- PRIOR TO ANY DEMOLITION AND EARTHWORK ACTIVITIES, VERIFY ALL EXISTING CONDITIONS, AND PROVIDE AND INSTALL ADEQUATE BMP'S TO CAPTURE ANY CONSTRUCTION DEBRIS IN ACCORDANCE WITH THE DRAWINGS, SPECIFICATIONS, AND PERMIT REQUIREMENTS.
- REVIEW SITE CONDITIONS INCLUDING EXISTING GROUND CONDITIONS AND GRADES PRIOR TO MOBILIZING ON SITE.
- UNLESS EXPLICITLY NOTED OTHERWISE, THE CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN IN DRAWINGS, INCLUDING ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT.
- FOR NOTES ON THE FLOAT CONSTRUCTION, SEE SHEET 24.

CODES AND STANDARDS

- ALL METHODS AND MATERIALS SHALL CONFORM TO THE IBC, AS AMENDED AND ADOPTED BY THE LOCAL AUTHORITIES.
- REINFORCED CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) AND "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318), LATEST EDITION.
- ALL STRUCTURAL STEEL DESIGN AND CONSTRUCTION SHALL COMPLY WITH ANSI/AISC 360.
- ALL STRUCTURAL WELDING SHALL COMPLY WITH ALL AWS D1.1 AND 1.2.
- REFERENCE TO ASTM AND OTHER STANDARDS SHALL MEAN THE LATEST EDITION IN EFFECT ON THE BID DATE, UNLESS NOTED OTHERWISE IN THESE DOCUMENTS OR DESIGNATED BY THE GOVERNING CODE.

WATER LEVELS

- REFER TO SPECIFIC REQUIREMENTS. WATER LEVELS SHOWN ARE FOR REFERENCE ONLY AND DO NOT INDICATE CONDITIONS DURING CONSTRUCTION.

TIDAL WATER LEVELS (MLLW)	
MEAN LOWER LOW WATER (DESIGN LOW)	0.00 FT
MEAN HIGH WATER	7.21 FT
MEAN HIGHER HIGH WATER	7.86 FT
HIGH TIDE LINE / ORDINARY HIGH WATER (DESIGN HIGH)	9.25 FT

SURVEY INFORMATION: (APPLIES TO ALL SITE PLANS)

- ESTABLISH SURVEY CONTROL POINTS AND DATUMS USING A LICENSED SURVEYOR AND SEND TO OWNER FOR APPROVAL. THE SAME DATUMS AND CONTROL POINTS SHALL BE APPLICABLE TO ALL SITES. CONTRACTOR SHALL SUBMIT SURVEY CONTROL AND DATUM INFORMATION FOR REVIEW AND APPROVAL BY THE OWNER AT LEAST 15 BUSINESS DAYS PRIOR TO COMMENCING WORK.
- TOPOGRAPHIC SURVEY PROVIDED BY WASHINGTON STATE PARKS IN 2020.
- BATHYMETRIC SURVEY PROVIDED BY DELPHIS IN 2018.
- HORIZONTAL DATUM IN NAD83, WASHINGTON STATE PLANE, NORTH ZONE, US FT.
- VERTICAL DATUM IN MEAN LOWER LOW WATER.
- NO PERMANENT BENCHMARKS EXIST IN THE VICINITY.

DEMOLITION

- WHERE INDICATED ON THE PLANS, REMOVE ALL EXISTING STRUCTURES, INCLUDING WALKWAYS, GANGWAYS, PILING, MISCELLANEOUS METALS, FLOATS, AND MISCELLANEOUS DEBRIS, TO THE DEPTH SPECIFIED IN THESE CONTRACT DOCUMENTS, OR TO THE DEPTH AS DIRECTED BY THE OWNER. BEFORE STARTING THE DEMOLITION WORK, SUBMIT A PLAN SHOWING THE PROPOSED METHOD, EQUIPMENT, AND SEQUENCE FOR THE REMOVAL WORK TO THE OWNER FOR APPROVAL. REVIEW THE CONTRACT DOCUMENTS FOR ALL SUBMITTAL REQUIREMENTS.
- FULLY EXTRACT PILES AS INDICATED IN THESE DRAWINGS. IF THE PILE BREAKS DURING EXTRACTION, REMOVE THE REMAINDER OF THE PILE OR CUT IT OFF THREE FEET BELOW THE MUDLINE.
- EXTRACTION OF PILES SHALL CONFORM TO SPECIFICATIONS AND THE APPROPRIATE REGULATORY PERMITS.

MATERIALS AND CONSTRUCTION

- PROVIDE ADEQUATE SHORING, BRACING, AND CUTTING OF ALL COMPONENTS AS REQUIRED FOR SAFETY AND STRUCTURAL INTEGRITY THROUGHOUT CONSTRUCTION IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.
- ALL REQUIRED SHOP DRAWINGS PER THE SPECIFICATIONS MUST BE SUBMITTED AND REVIEWED PRIOR TO FABRICATION.
- ALL STEEL SHALL BE HOT-DIPPED GALVANIZED. ALL STAINLESS STEEL SHALL BE TYPE 316.

STEEL

1. MATERIAL SPECIFICATION	MIN STRENGTH (Fy/Fu, KSI)	APPLICABILITY
A. ASTM A36:	36/58	C-, L-SHAPES, PLATE, BARS
B. ASTM A53, GR. B:	35/60	STEEL PIPE TYPE S
C. ASTM A252, GR. 3:	45/66	ALL PILES
D. ASTM A325:	-/120	BOLTS
E. ASTM A500, GR. B:	42,46/58	ROUND AND RECTANGULAR HSS
F. ASTM A563:	-/-	NUTS
G. ASTM A572, GR. 50	50/65	HP SHAPES
H. ASTM A615, GR. 60:	60/90	REINFORCING BAR
I. ASTM A992:	50/65	W-SHAPES
J. ASTM F1554, GR. 55:	55/75	ANCHOR RODS
K. ASTM F436:	-/-	WASHERS
L. AWS E70XX:	57/70	STEEL WELDING ELECTRODE
2. COATINGS:		HOT-DIP GALVANIZED, UNO (REFER TO SECTION 05 05 00)
3. PILE LENGTHS:		PILE CUTOFF ELEVATION - PILETIP ELEVATION +3 FT (MINIMUM) (REFER TO PILE SCHEDULE ON SHEET 22 FOR CUTOFF AND TIP ELEVATIONS)

ALUMINUM

1. MATERIAL SPECIFICATION	MIN STRENGTH (Fy/Fu, KSI)	APPLICABILITY
A. 6061-T6	35/42	ALL SHAPES
B. TYPE 316 SS	30/75	UNO
		FASTENERS BETWEEN ALUMINUM COMPONENTS

WELDING

- CONFORM TO THE LATEST EDITION OF AWS D1.1 FOR ALL STRUCTURAL AND MISCELLANEOUS STEEL WELDING.
- ALL WELDERS SHALL BE CERTIFIED BY WASHINGTON ASSOCIATION OF BUILDING OFFICIALS (WABO) OR AWS AND BE ABLE TO PRODUCE THE REQUIRED CONTINUITY RECORDS.
- CONFORM TO THE LATEST EDITION OF AWS D1.2 FOR ALL ALUMINUM WELDING.

CONCRETE

- REINFORCING STEEL
 - UNLESS NOTED OTHERWISE, PROVIDE THE FOLLOWING MINIMUM CONCRETE COVER FOR REINFORCING:

USE	COVER
CAST-IN-PLACE	3"
 - LAP REINFORCING BARS IN ACCORDANCE WITH ACI 318.
 - DETAIL REINFORCING STEEL IN ACCORDANCE WITH "ACI MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES", ACI 315.
- PROVIDE A CONCRETE MIX DESIGN WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS:

A. CAST-IN-PLACE CONCRETE	5,000 PSI
---------------------------	-----------
- PROVIDE CONCRETE ABUTMENT WITH A BROOM-FINISHED SURFACE AND A 1/2" RADIUS ON ALL EXPOSED CORNERS.
- WHERE NECESSARY, PROVIDE AND INSTALL ADDITIONAL REINFORCING (STEEL STIFFENERS, BRACING, LIFTING INSERTS, ETC.) TO RESIST ERECTION AND TRANSPORTATION STRESSES. LIFTING INSERTS SHALL BE INSTALLED AT LOCATIONS WHERE THEY WILL BE HIDDEN BY CONSTRUCTION OR OTHERWISE COVERED.

PILING CAPS (BIRD CAPS)

- PROVIDE BLACK FIBERGLASS PILING BIRD CAPS FOR ALL PILES INDICATED TO RECEIVE ONE ON THE PILE SCHEDULE.

ALUMINUM STRUCTURES

- PROVIDE FINAL DESIGN OF ALL ALUMINUM STRUCTURES, INCLUDING GANGWAYS, PLATFORMS, AND WALKWAYS, IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS.

DESIGN LOADS (FIXED STRUCTURES)

- DESIGN LOADS AND REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND THE SPECIFICATIONS.
- DEAD LOADS:
 - SELF WEIGHT OF STRUCTURES, INCLUDING APPURTENANCES AND ATTACHMENTS
- LIVE LOADS:
 - UNIFORM LOAD: 100 PSF OVER DECK SURFACE AREA
 - POINT LOAD: 400 LB ACTING ON A 1 SQ FT AREA AT ANY POINT ON DECK SURFACE
- SNOW LOADS:
 - 30 PSF OVER DECK SURFACE AREA
- WIND LOADS:
 - DESIGN WIND SPEED: V = 110 MPH
 - WIND IMPORTANCE FACTOR: I = 1.0 (OCCUPANCY CATEGORY II)
 - EXPOSURE CATEGORY: = D
- SEISMIC LOADS:
 - RISK CATEGORY: II
 - SEISMIC IMPORTANCE FACTOR: I = 1.0
 - SITE CLASS: C (UPLAND), E (IN-WATER)
 - SS = 1.201
 - S1 = 0.435
 - R = 3
- WAVE LOADS:
 - MIN 250 LB/FT
 - SIGNIFICANT WAVE HEIGHT: 3.5 FT
 - PEAK PERIOD: 3.2 SECONDS
- DEFLECTION:
 - LL ONLY: L/500
 - DL + LL: L/360
- DESIGN VESSEL
THE DESIGN VESSEL FOR THE FLOATING DOCK SYSTEMS IS A 60 FOOT LONG POWER BOAT.

SPECIAL INSPECTION

- THE CRITICAL ELEMENT REQUIRING SPECIAL INSPECTION PER IBC CHAPTER 17 ARE AS FOLLOWS:
 - CAST-IN-PLACE CONCRETE
 - REINFORCEMENT MATERIAL AND LAYOUT
 - CONCRETE PLACEMENT, PROTECTION, AND CURING
 - ANCHOR BOLT TESTING
 - CONCRETE CYLINDER TESTING
 - STRUCTURAL STEEL
 - MATERIALS SAMPLING, TESTING AND VERIFICATION
 - WELDING PROCEDURES SPECIFICATIONS
 - PILE DRIVING AND TESTING
 - PILE INSTALLATION
 - PILE DRIVING LOGS
 - PILE SPLICES

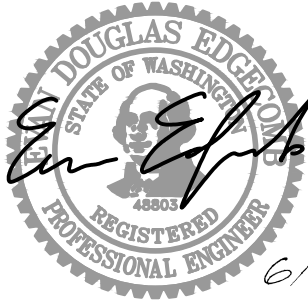
PILE DRIVING

- THE CONTRACTOR SHALL MOBILIZE ALL REQUIRED EQUIPMENT FOR PILE INSTALLATION WORK INCLUDING A VIBRATORY HAMMER, IMPACT HAMMER, DOWN-THE-HOLE HAMMER, AND BUBBLE CURTAIN.
- UTILIZE A TEMPLATE OR DRIVING FRAME TO MAINTAIN PROPER ALIGNMENT OF PILE DURING INSTALLATION. PILES SHALL BE INSTALLED TO ACHIEVE THE MINIMUM TIP ELEVATIONS SHOWN ON THE DRAWINGS. SELECT AN APPROPRIATE PILE DRILL AND VIBRATORY HAMMER TYPE AND SIZE, AS REQUIRED TO ACHIEVE THE PILE TIP DEPTHS AND REQUIRED LOAD CAPACITIES WITHOUT DAMAGING THE PILING, IN COMPLIANCE WITH THE RELEVANT PERMIT AND PROJECT DOCUMENTS. SUBMIT PILE LOGS WITHIN 24 HOURS OF EACH PILE INSTALLATION TO THE OWNER. MAINTAIN DRILLS AND HAMMERS IN PROPER ALIGNMENT DURING INSTALLATION OPERATIONS BY USE OF LEADS OR GUIDES ATTACHED TO THE HAMMER AND DRILL. REMOVE AND REPLACE PILES DAMAGED DURING INSTALLATION AT THE CONTRACTOR'S EXPENSE.
- ROCK SOCKETING MAY BE REQUIRED TO SEAT THE PILES. MOBILIZE EQUIPMENT AND PERSONNEL FOR DRILLING AND ROCK SOCKETING. SUBMIT A DRILLING AND ROCK SOCKETING PLAN TO THE OWNER AS PART OF THE BID PACKAGE.
- ENVIRONMENTAL PROTECTION MEASURES INCLUDING MARINE MAMMAL MONITORING AND MARBLED MURRELET MONITORING IS A REQUIREMENT OF THE PROJECT PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE QUALIFIED ON-SITE STAFF FOR MARINE MAMMAL AND MARBLED MURRELET MONITORING. CONDUCT WORK IN ACCORDANCE WITH RELEVANT MONITORING PLANS AND DEVELOP SUCH PLANS AS NECESSARY FOR APPROVAL BY THE OWNER.
- DETERMINE FINAL PILE LOCATIONS TO CORRESPOND WITH THE LOCATIONS OF PILE GUIDES ON THE FLOATS.
- DO NOT DEMOBILIZE PILE INSTALLATION EQUIPMENT PRIOR TO OWNER AND ENGINEER ACCEPTANCE OF AS-BUILT PILE LOCATIONS AND PLUMBNESS. REMOBILIZATION DUE TO NON-CONFORMANCE IN PILE INSTALLATION WILL BE AT THE CONTRACTOR'S EXPENSE.
- NOTIFY OWNER A MINIMUM OF FOUR WEEKS PRIOR TO THE START OF PILE INSTALLATION.

BID SET

SHEET 3 OF 47

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DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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IMPROVEMENTS

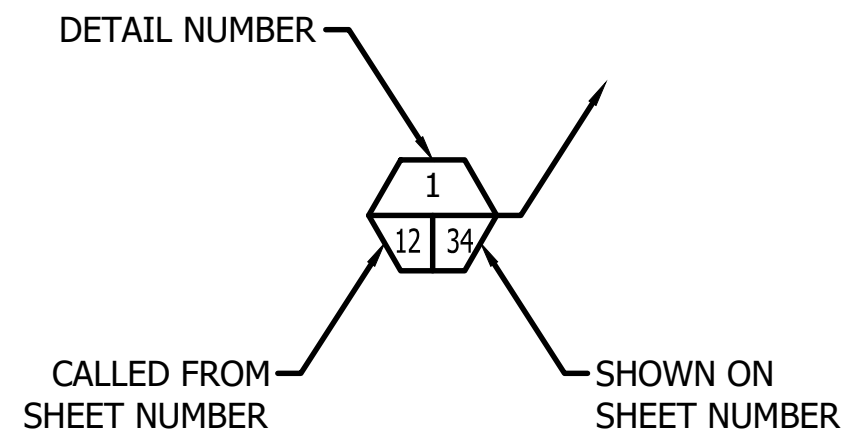
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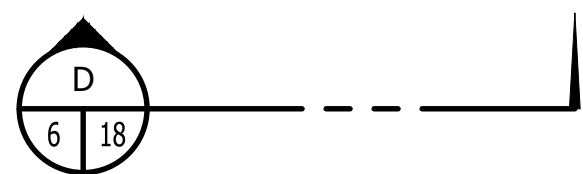
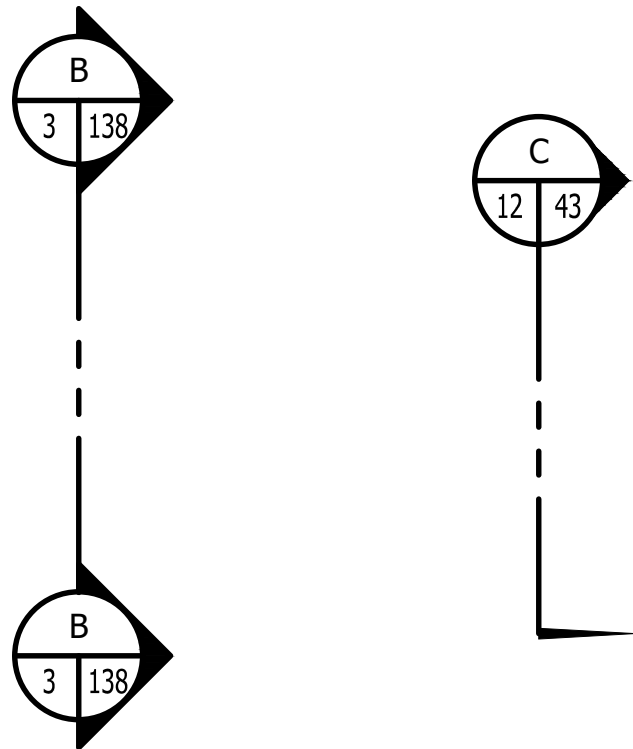
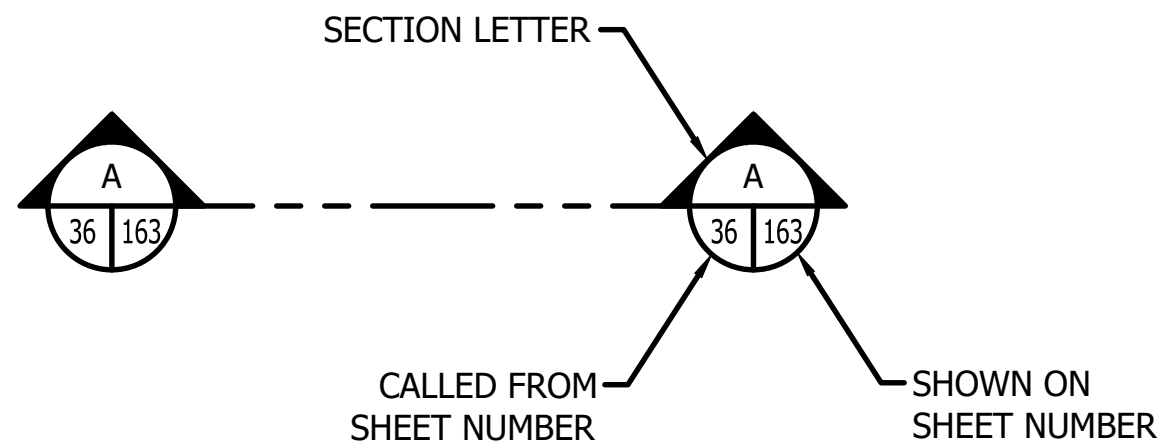
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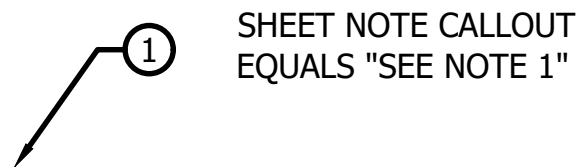
SHEET SYMBOLS



3 PART DETAIL CALLOUT



3 PART SECTION CALLOUTS



CALLOUTS



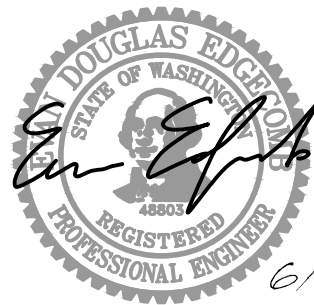
ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE	OHW	ORDINARY HIGH WATER
ADA	AMERICANS WITH DISABILITIES ACT	PL	PLATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	PSI	POUNDS PER SQUARE INCH
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	PSF	POUNDS PER SQUARE FOOT
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	REQ'D	REQUIRED
AWS	AMERICAN WELDING SOCIETY	SS	STAINLESS STEEL
ALUM	ALUMINUM	STA	STATION
ASSY	ASSEMBLY	SYM	SYMMETRICAL
B.O.	BOTTOM OF	SQ FT	SQUARE FOOT
BMP	BEST MANAGEMENT PRACTICES	TBM	TEMPORARY BENCH MARK
CL	CENTERLINE	T.O.	TOP OF
CIP	CAST-IN-PLACE	TESC	TEMPORARY EROSION AND SEDIMENT CONTROL
CRZ	CRITICAL ROOT ZONE	TYP	TYPICAL
CLR	CLEAR	UHMW	ULTRA HIGH MOLECULAR WEIGHT
Ø/DIA	DIAMETER	UNO	UNLESS NOTED OTHERWISE
DL	DEAD LOAD	V	VELOCITY / VERTICAL
ETC.	ET CETERA	W	WEST/WESTING
EA	EACH	WABO	WASHINGTON ASSOCIATION OF BUILDING OFFICIALS
EL	ELEVATION	WP#	WORK POINT
FT	FEET	W/	WITH
FRP	FIBER REINFORCED PLASTIC	@	AT
FY	YIELD STRENGTH	'	MINUTES OR FEET
FU	ULTIMATE STRENGTH	"	SECONDS OR INCHES
GALV.	GALVANIZED	°	DEGREES
GR	GRADE	%	PERCENT
H	HORIZONTAL	<	LESS THAN
HDQTS	HEADQUARTERS	+/-	PLUS OR MINUS
HDPE	HIGH DENSITY POLYETHYLENE		
HSS	HOLLOW STRUCTURAL SECTION		
HTL	HIGH TIDE LINE		
IBC	INTERNATIONAL BUILDING CODE		
INC.	INCORPORATED		
INIT	INITIAL		
KSI	KILOPOUND PER SQUARE INCH		
L	LENGTH		
LB	POUND		
LB/FT	POUND PER FOOT		
LL	LIVE LOAD		
LOC	LIMIT OF CONSTRUCTION		
MAX	MAXIMUM		
MHW	MEAN HIGH WATER		
MHHW	MEAN HIGHER HIGH WATER		
MIN	MINIMUM		
MLLW	MEAN LOWER LOW WATER		
MPH	MILES PER HOUR		
NAD83	NORTH AMERICAN DATUM OF 1983		
NO.	NUMBER		
O.C.	ON CENTER		

CAD NO. S-4812-Z41-2022-GENERAL NOTES 2

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	REVISIONS
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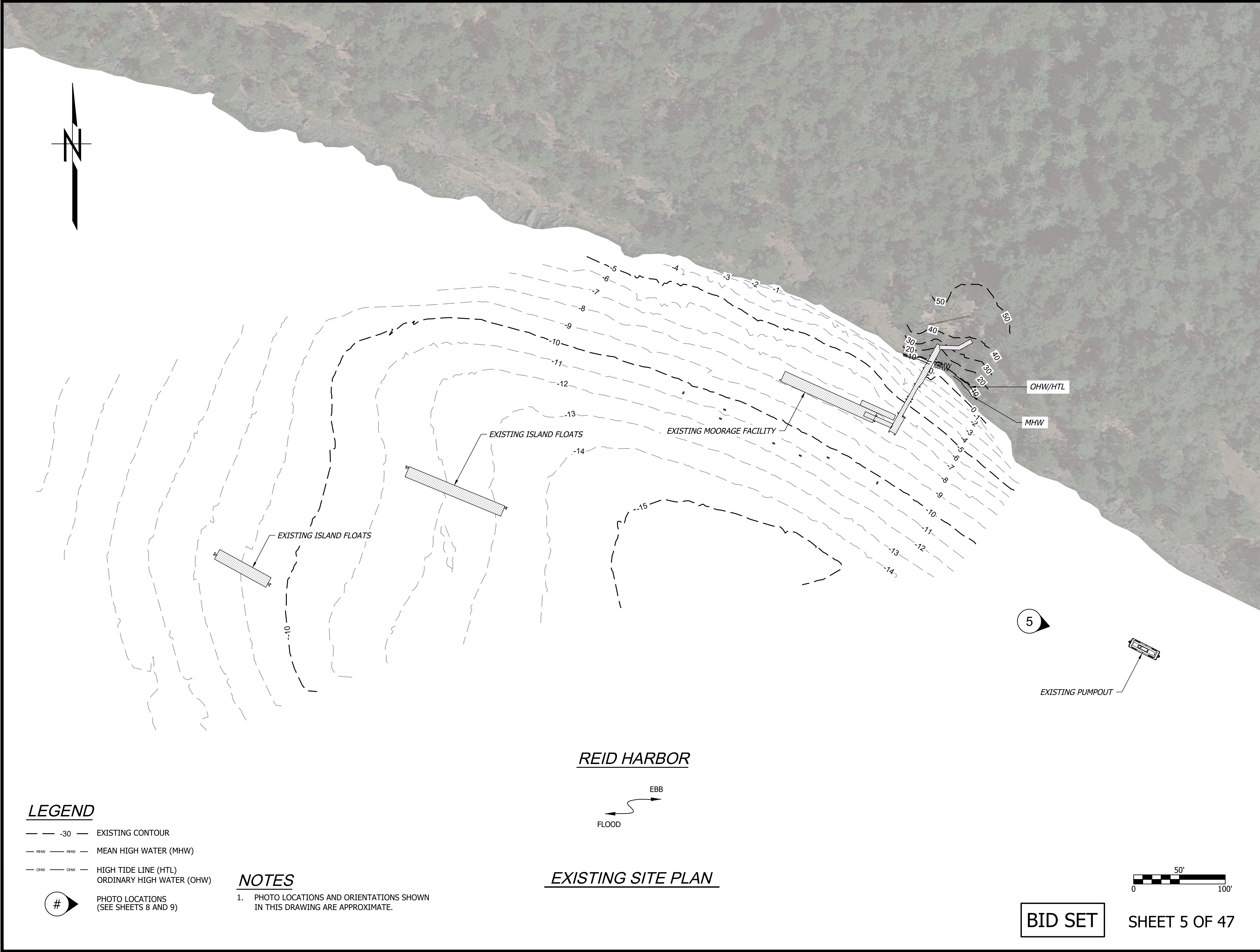
GENERAL NOTES 2

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PARKS FILE#

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SHEET 4 OF 47



LEGEND

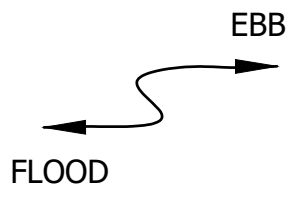
- -30 — EXISTING CONTOUR
- MHW — MHW — MEAN HIGH WATER (MHW)
- CHW — CHW — HIGH TIDE LINE (HTL)
ORDINARY HIGH WATER (OHW)

PHOTO LOCATIONS
(SEE SHEETS 8 AND 9)

NOTES

1. PHOTO LOCATIONS AND ORIENTATIONS SHOWN
IN THIS DRAWING ARE APPROXIMATE.

REID HARBOR



EXISTING SITE PLAN

BID SET

SHEET 5 OF 47

CAD NO. S-4812-Z41-2022-EXISTING SITE PLAN

		DATE
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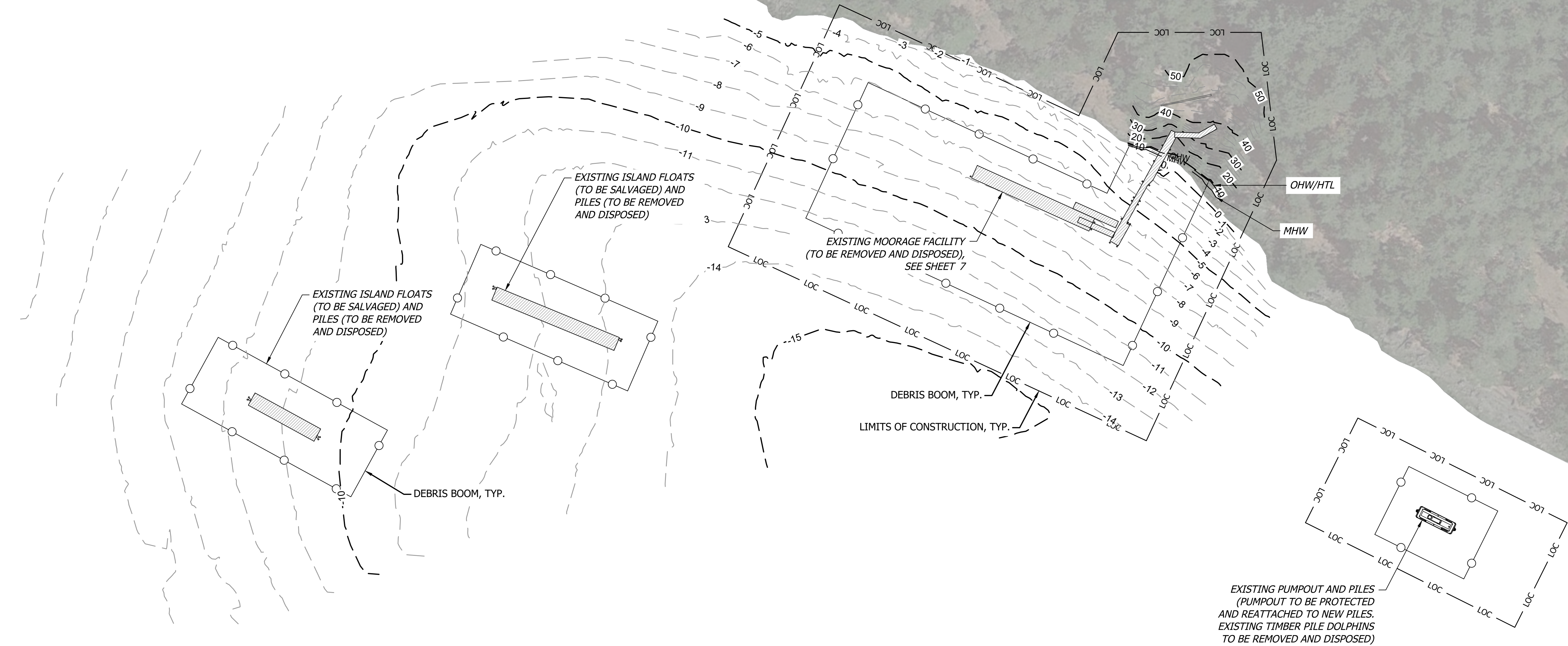
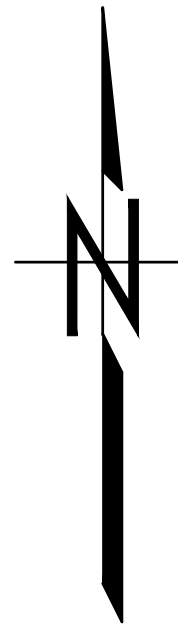
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

EXISTING SITE PLAN

SCALE

1" = 50'

PARKS FILE#



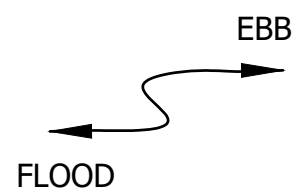
LEGEND

- DEBRIS BOOM
- EXISTING CONTOUR
- LOC LIMIT OF CONSTRUCTION (LOC)
- MEAN HIGH WATER (MHW)
- HIGH TIDE LINE (HTL)
ORDINARY HIGH WATER (OHW)

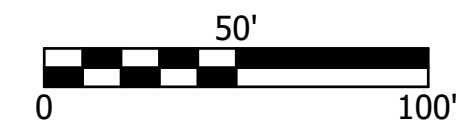
NOTES

- SALVAGED FLOATS AND GANGWAY ARE TO BE PROTECTED AND TRANSPORTED TO THE WASHINGTON STATE PARKS AND RECREATION COMMISSION CORNET BAY MAINTENANCE FACILITY LOCATED IN THE DECEPTION PASS STATE PARK. PROJECT SITE DOES NOT HAVE DESIGNATED LAYDOWN / STAGING AREA. COORDINATE WITH THE OWNER'S REPRESENTATIVE IF A LAYDOWN / STAGING AREA IS DESIRED. SEE SHEET 7 FOR POTENTIAL UPLAND LAYDOWN / STAGING AREA.

REID HARBOR



DEMOLITION PLAN



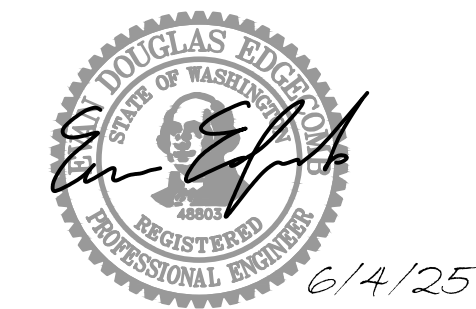
BID SET

SHEET 6 OF 47

CAD NO. S-4812-Z41-2022-DEMOLITION PLAN - OVERALL

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

DEMOLITION PLAN -
OVERALL

SCALE

1" = 50'

PARKS FILE#

BENCHMARKS			
POINT NO.	NORTHING	EASTING	ELEVATION (FT)
TBM1	620,043.49	1,068,661.96	+15.77'
TBM2	620,028.47	1,068,751.99	+39.52'

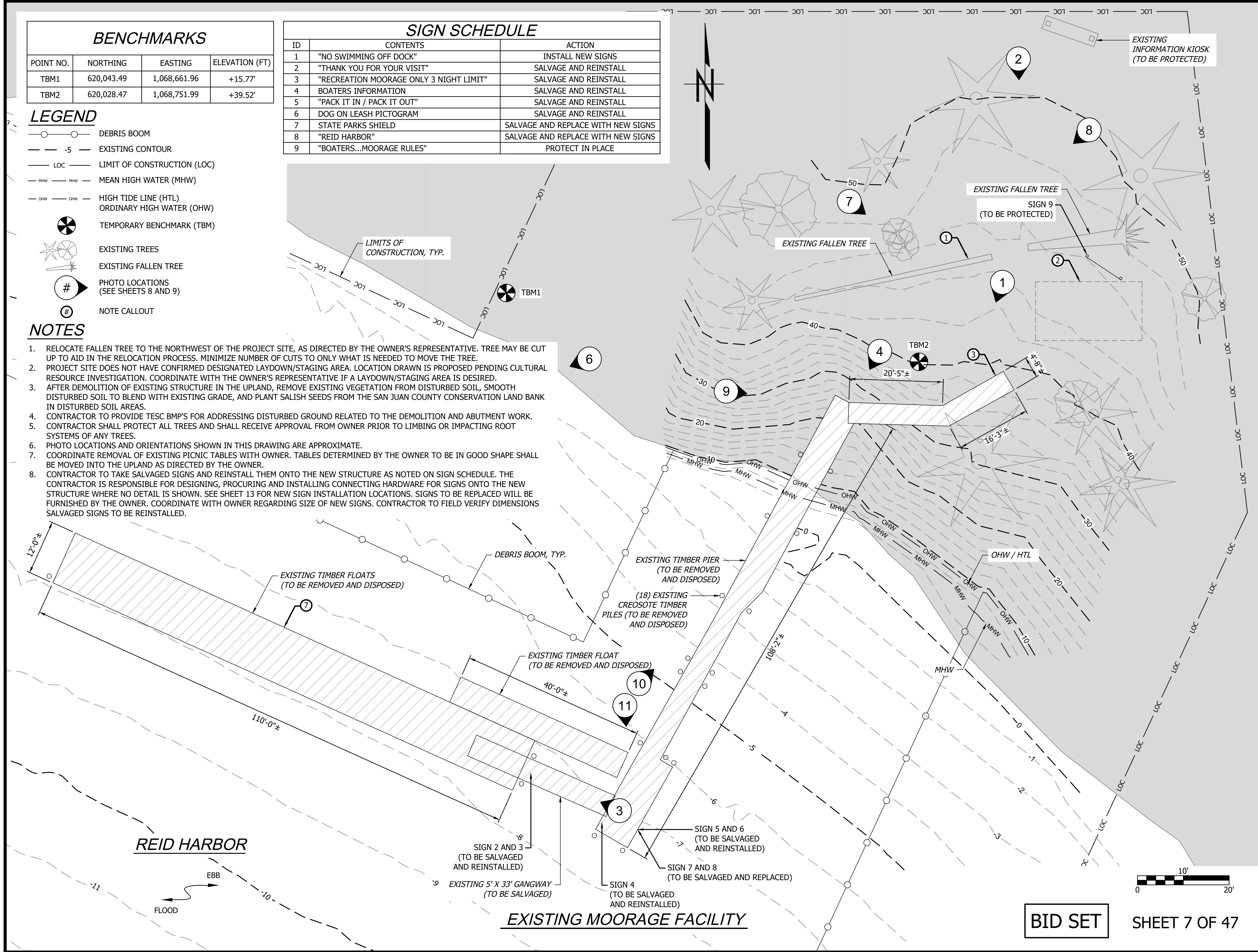
LEGEND

- DEBRIS BOOM
- 5- EXISTING CONTOUR
- LOC LIMIT OF CONSTRUCTION (LOC)
- MHW MEAN HIGH WATER (MHW)
- OHW HIGH TIDE LINE (HTL) ORDINARY HIGH WATER (OHW)
- TEMPORARY BENCHMARK (TBM)
- EXISTING TREES
- EXISTING FALLEN TREE
- # PHOTO LOCATIONS (SEE SHEETS 8 AND 9)
- # NOTE CALLOUT

NOTES

- RELOCATE FALLEN TREE TO THE NORTHWEST OF THE PROJECT SITE, AS DIRECTED BY THE OWNER'S REPRESENTATIVE. TREE MAY BE CUT UP TO AID IN THE RELOCATION PROCESS. MINIMIZE NUMBER OF CUTS TO ONLY WHAT IS NEEDED TO MOVE THE TREE.
- PROJECT SITE DOES NOT HAVE CONFIRMED DESIGNATED LAYDOWN/STAGING AREA. LOCATION DRAWN IS PROPOSED PENDING CULTURAL RESOURCE INVESTIGATION. COORDINATE WITH THE OWNER'S REPRESENTATIVE IF A LAYDOWN/STAGING AREA IS DESIRED.
- AFTER DEMOLITION OF EXISTING STRUCTURE IN THE UPLAND, REMOVE EXISTING VEGETATION FROM DISTURBED SOIL, SMOOTH DISTURBED SOIL TO BLEND WITH EXISTING GRADE, AND PLANT SALISH SEEDS FROM THE SAN JUAN COUNTY CONSERVATION LAND BANK IN DISTURBED SOIL AREAS.
- CONTRACTOR TO PROVIDE TESC BMP'S FOR ADDRESSING DISTURBED GROUND RELATED TO THE DEMOLITION AND ABUTMENT WORK.
- CONTRACTOR SHALL PROTECT ALL TREES AND SHALL RECEIVE APPROVAL FROM OWNER PRIOR TO LIMBING OR IMPACTING ROOT SYSTEMS OF ANY TREES.
- PHOTO LOCATIONS AND ORIENTATIONS SHOWN IN THIS DRAWING ARE APPROXIMATE.
- COORDINATE REMOVAL OF EXISTING PICNIC TABLES WITH OWNER. TABLES DETERMINED BY THE OWNER TO BE IN GOOD SHAPE SHALL BE MOVED INTO THE UPLAND AS DIRECTED BY THE OWNER.
- CONTRACTOR TO TAKE SALVAGED SIGNS AND REINSTALL THEM ONTO THE NEW STRUCTURE AS NOTED ON SIGN SCHEDULE. THE CONTRACTOR IS RESPONSIBLE FOR DESIGNING, PROCURING AND INSTALLING CONNECTING HARDWARE FOR SIGNS ONTO THE NEW STRUCTURE WHERE NO DETAIL IS SHOWN. SEE SHEET 13 FOR NEW SIGN INSTALLATION LOCATIONS. SIGNS TO BE REPLACED WILL BE FURNISHED BY THE OWNER. COORDINATE WITH OWNER REGARDING SIZE OF NEW SIGNS. CONTRACTOR TO FIELD VERIFY DIMENSIONS SALVAGED SIGNS TO BE REINSTALLED.

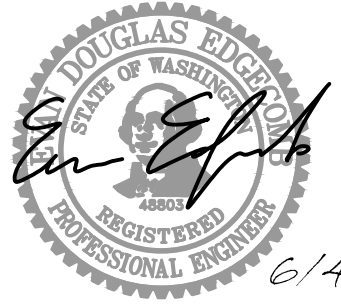
SIGN SCHEDULE		
ID	CONTENTS	ACTION
1	"NO SWIMMING OFF DOCK"	INSTALL NEW SIGNS
2	"THANK YOU FOR YOUR VISIT"	SALVAGE AND REINSTALL
3	"RECREATION MOORAGE ONLY 3 NIGHT LIMIT"	SALVAGE AND REINSTALL
4	BOATERS INFORMATION	SALVAGE AND REINSTALL
5	"PACK IT IN / PACK IT OUT"	SALVAGE AND REINSTALL
6	DOG ON LEASH PICTOGRAM	SALVAGE AND REINSTALL
7	STATE PARKS SHIELD	SALVAGE AND REPLACE WITH NEW SIGNS
8	"REID HARBOR"	SALVAGE AND REPLACE WITH NEW SIGNS
9	"BOATERS...MOORAGE RULES"	PROTECT IN PLACE



CAD NO. S-4812-Z41-2022-DEMOLITION PLAN - MOORAGE FACILITY

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

DEMOLITION PLAN -
MOORAGE FACILITY

SCALE

1" = 10'

PARKS FILE#



PHOTO 7

EXISTING UPLAND AREA - LOOKING EAST

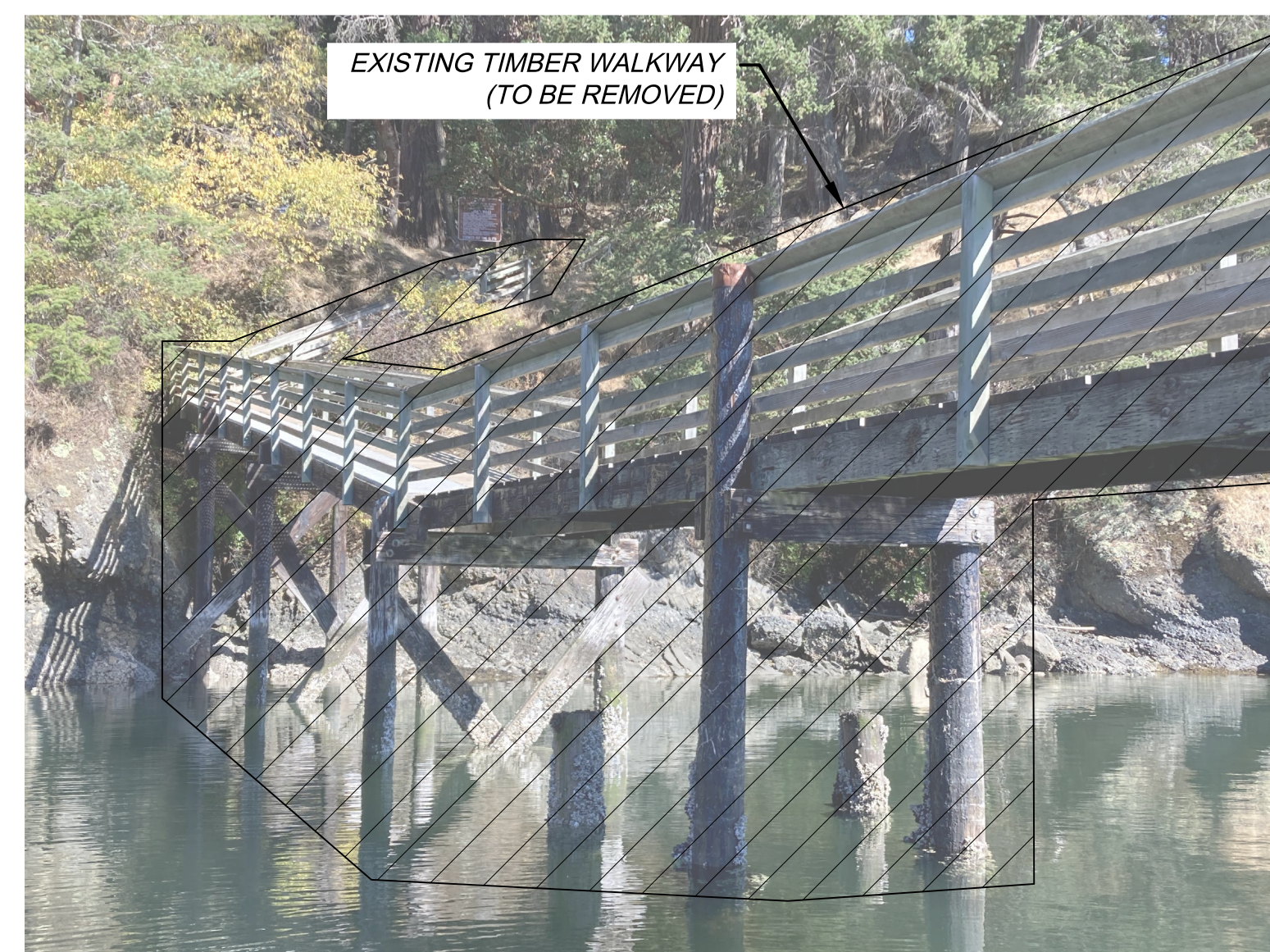


PHOTO 10

EXISTING PIER - LOOKING NORTHEAST

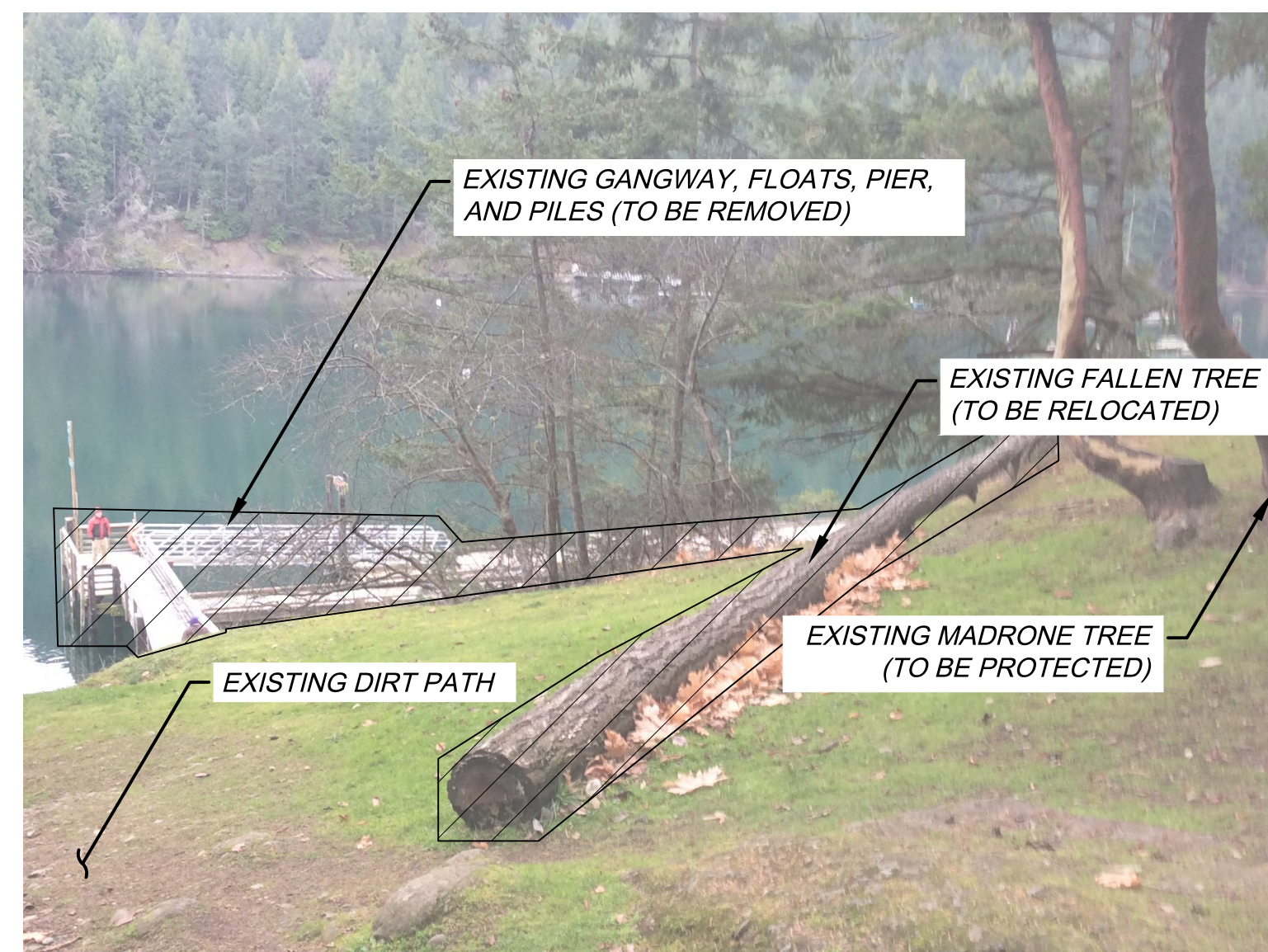


PHOTO 8

EXISTING UPLAND AREA AND TIMBER PIER - LOOKING SOUTHWEST



PHOTO 11

EXISTING PIER - LOOKING SOUTH



PHOTO 9

EXISTING UPLAND PIER SECTION - LOOKING EAST

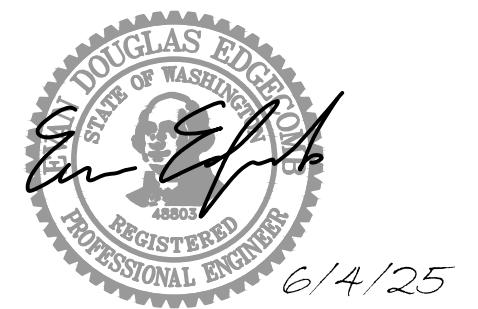
NOTES:

1. PHOTOS ARE PROVIDED FOR INFORMATION ONLY AND MAY NOT BE REPRESENTATIVE OF THE EXISTING CONDITIONS DURING CONSTRUCTION.
2. SEE SHEET 5 FOR LOCATION AND BEARING OF PHOTOS SHOWN HEREIN.

CAD NO. S-4812-Z41-2022-SITE PHOTOS 2

[illegible]

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

STUART ISLAND
STATE PARK

REID HARBOR MOORAGE FACILITY IMPROVEMENTS

SITE PHOTOS 2

SCALE

NONE

PARKS FILE#

BID SET

SHEET 9 OF 47

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

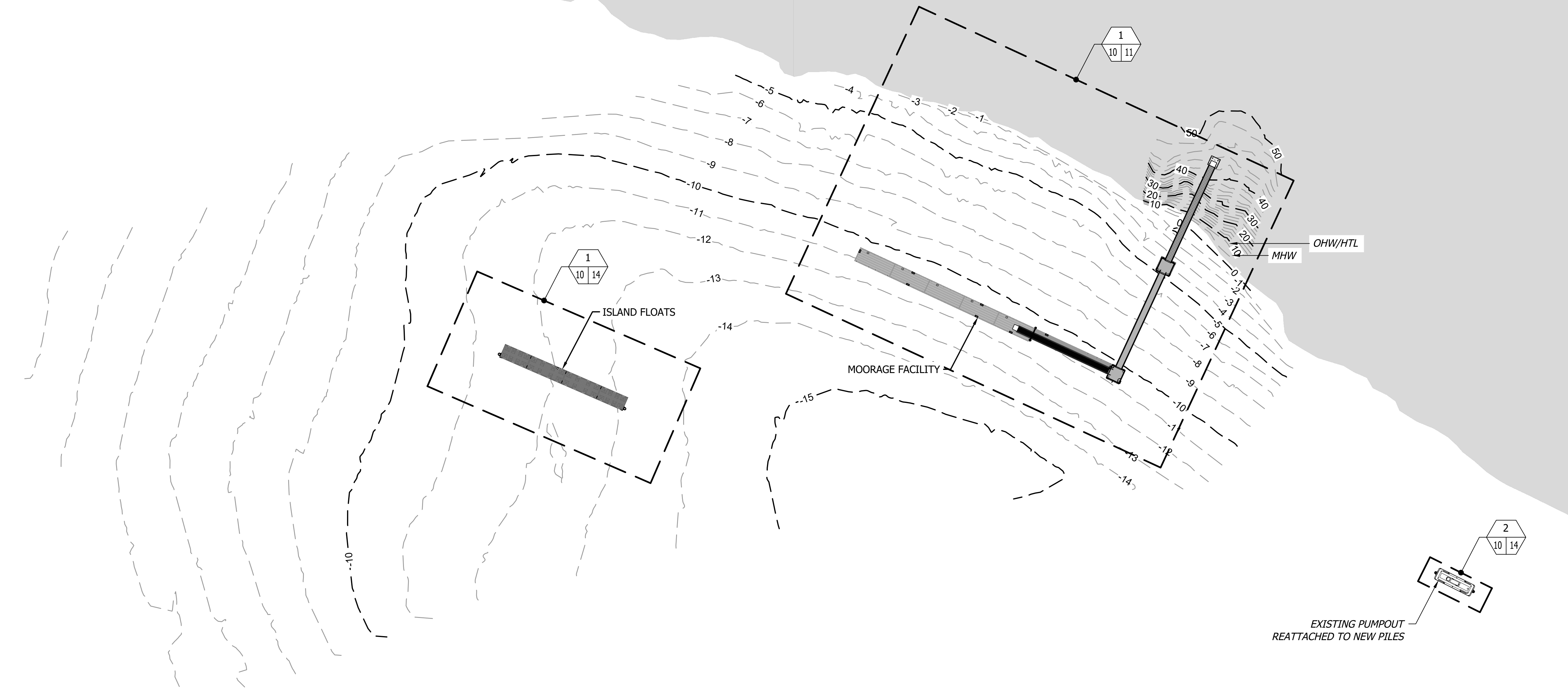
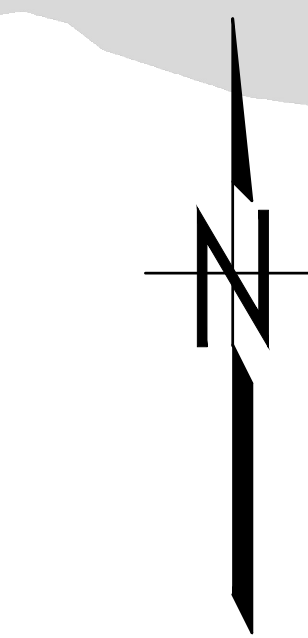
SITE PLAN -
OVERALL

SCALE

1" = 50'

PARKS FILE#

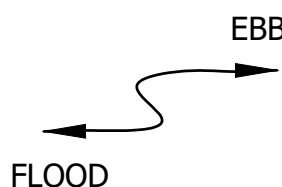
STUART ISLAND STATE PARK



LEGEND

- DEBRIS BOOM
- EXISTING CONTOUR
- LOC LIMIT OF CONSTRUCTION (LOC)
- MEAN HIGH WATER (MHW)
- HIGH TIDE LINE (HTL) ORDINARY HIGH WATER (OHW)

REID HARBOR

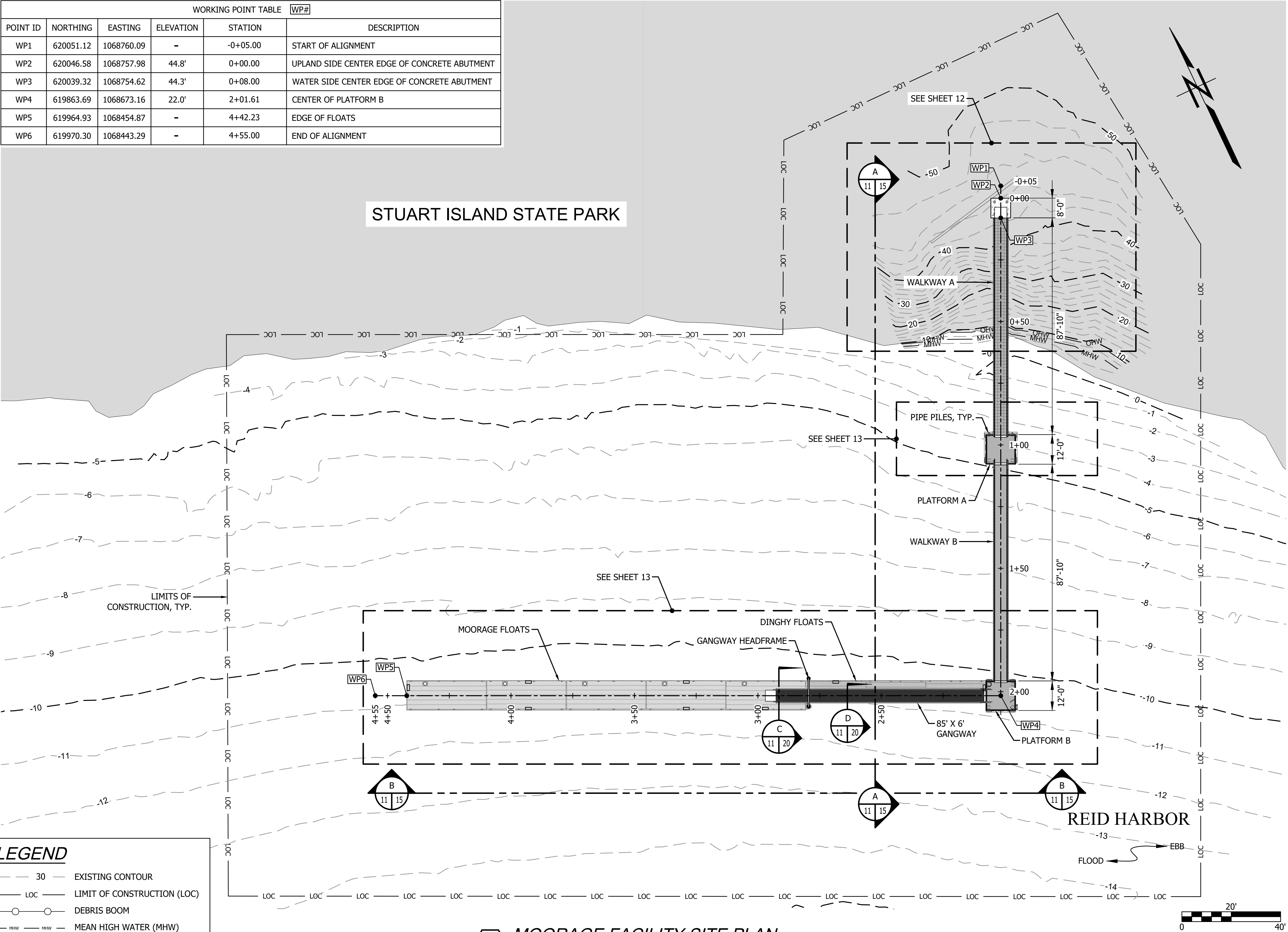


OVERALL PLAN

BID SET

SHEET 10 OF 47

WORKING POINT TABLE WP#					
POINT ID	NORTHING	EASTING	ELEVATION	STATION	DESCRIPTION
WP1	620051.12	1068760.09	-	-0+05.00	START OF ALIGNMENT
WP2	620046.58	1068757.98	44.8'	0+00.00	UPLAND SIDE CENTER EDGE OF CONCRETE ABUTMENT
WP3	620039.32	1068754.62	44.3'	0+08.00	WATER SIDE CENTER EDGE OF CONCRETE ABUTMENT
WP4	619863.69	1068673.16	22.0'	2+01.61	CENTER OF PLATFORM B
WP5	619964.93	1068454.87	-	4+42.23	EDGE OF FLOATS
WP6	619970.30	1068443.29	-	4+55.00	END OF ALIGNMENT



LEGEND	
30	EXISTING CONTOUR
LOC	LIMIT OF CONSTRUCTION (LOC)
○—○	DEBRIS BOOM
MHW	MEAN HIGH WATER (MHW)
OHW	HIGH TIDE LINE (HTL) ORDINARY HIGH WATER (OHW)

1 MOORAGE FACILITY SITE PLAN

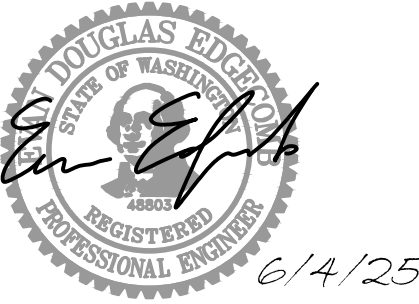
BID SET

SHEET 11 OF 47

CAD NO. S-4812-Z41-2022-SITE PLAN - MOORAGE FACILITY

		DATE
	APP.	
	INT.	
		REVISIONS
	NO.	

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

SITE PLAN -
MOORAGE FACILITY

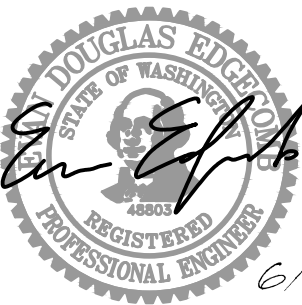
SCALE

1" = 20'

PARKS FILE#

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

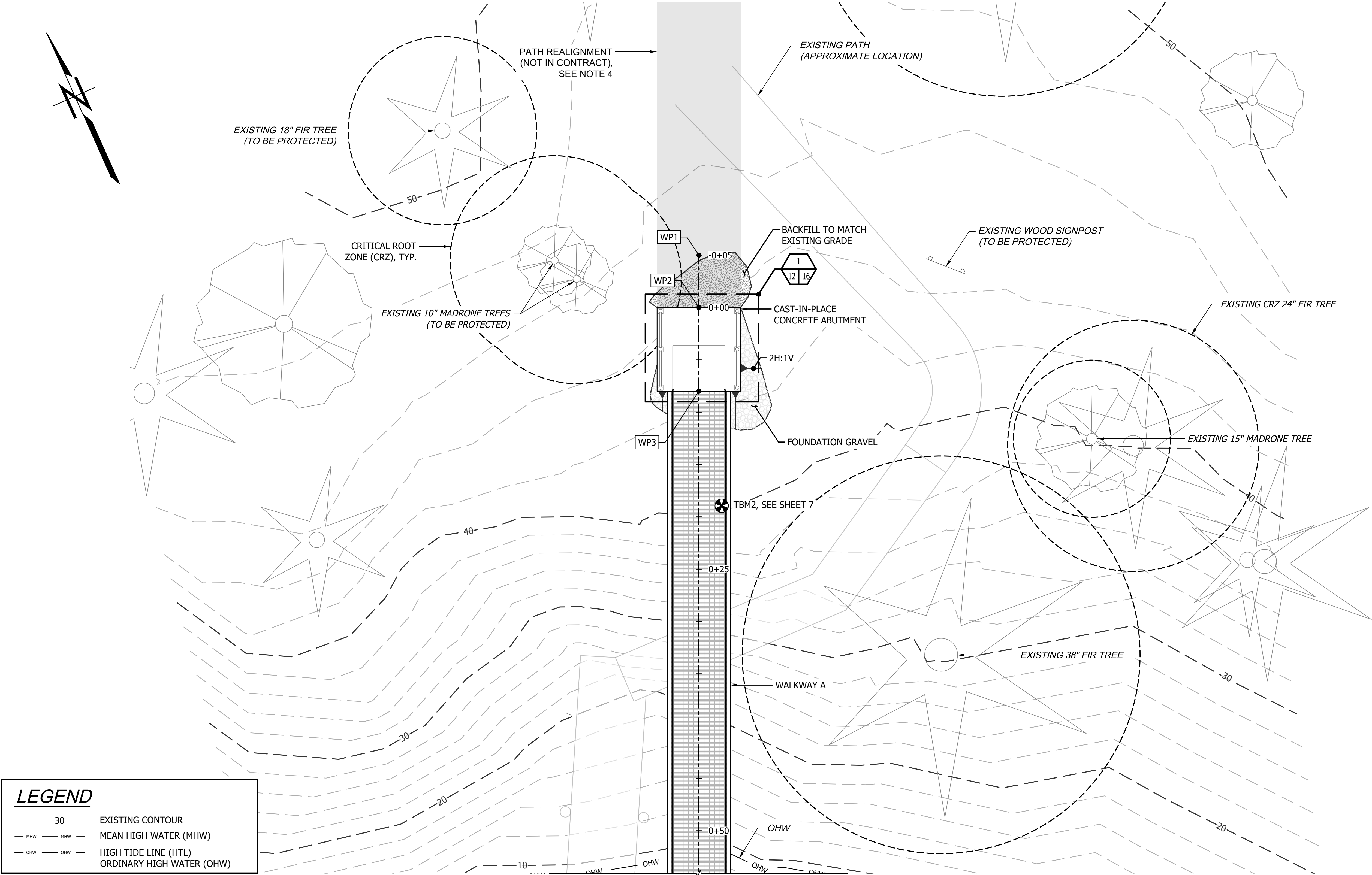
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

SITE PLAN -
UPLAND

SCALE

1" = 5'

PARKS FILE#



LEGEND

30 ——— EXISTING CONTOUR

MHW ——— MEAN HIGH WATER (MHW)

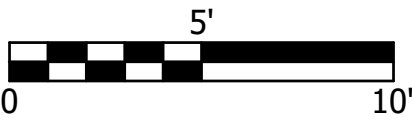
OHW ——— HIGH TIDE LINE (HTL)

————— ORDINARY HIGH WATER (OHW)

NOTES

- CONTRACTOR SHALL VERIFY THE SLOPE AND CONDITIONS OF THE EXISTING GROUND PRIOR TO INSTALLING ABUTMENT.
- SMOOTH OUT ALL DISTURBED SOIL AFTER DEMOLITION.
- CLEAR AND GRUB ALL SURFACE VEGETATION AT THE ABUTMENT LOCATION PLUS AN ADDITIONAL 6 INCHES AROUND THE ENTIRE PERIMETER OF THE ABUTMENT LOCATION.
- NEW PATH WILL BE CONSTRUCTED BY THE OWNER. COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE TO FACILITATE PATH CONSTRUCTION AFTER ABUTMENT HAS BEEN INSTALLED.
- CONTRACTOR RESPONSIBLE FOR DESIGNING THE SHOREMOUNT ANCHORAGE TO THE ABUTMENT AND ADDING SUPPLEMENTAL REINFORCING BARS AS REQUIRED TO ACCOMMODATE THE CONTRACTOR'S DESIGN.
- CONTRACTOR TO PROVIDE TESC BMP'S FOR ADDRESSING DISTURBED GROUND RELATED TO THE DEMOLITION AND ABUTMENT WORK.
- CONTRACTOR SHALL PROTECT ALL TREES AND SHALL RECEIVE APPROVAL FROM OWNER PRIOR TO LIMBING OR IMPACTING ROOT SYSTEMS OF ANY TREES.

UPLAND SITE PLAN

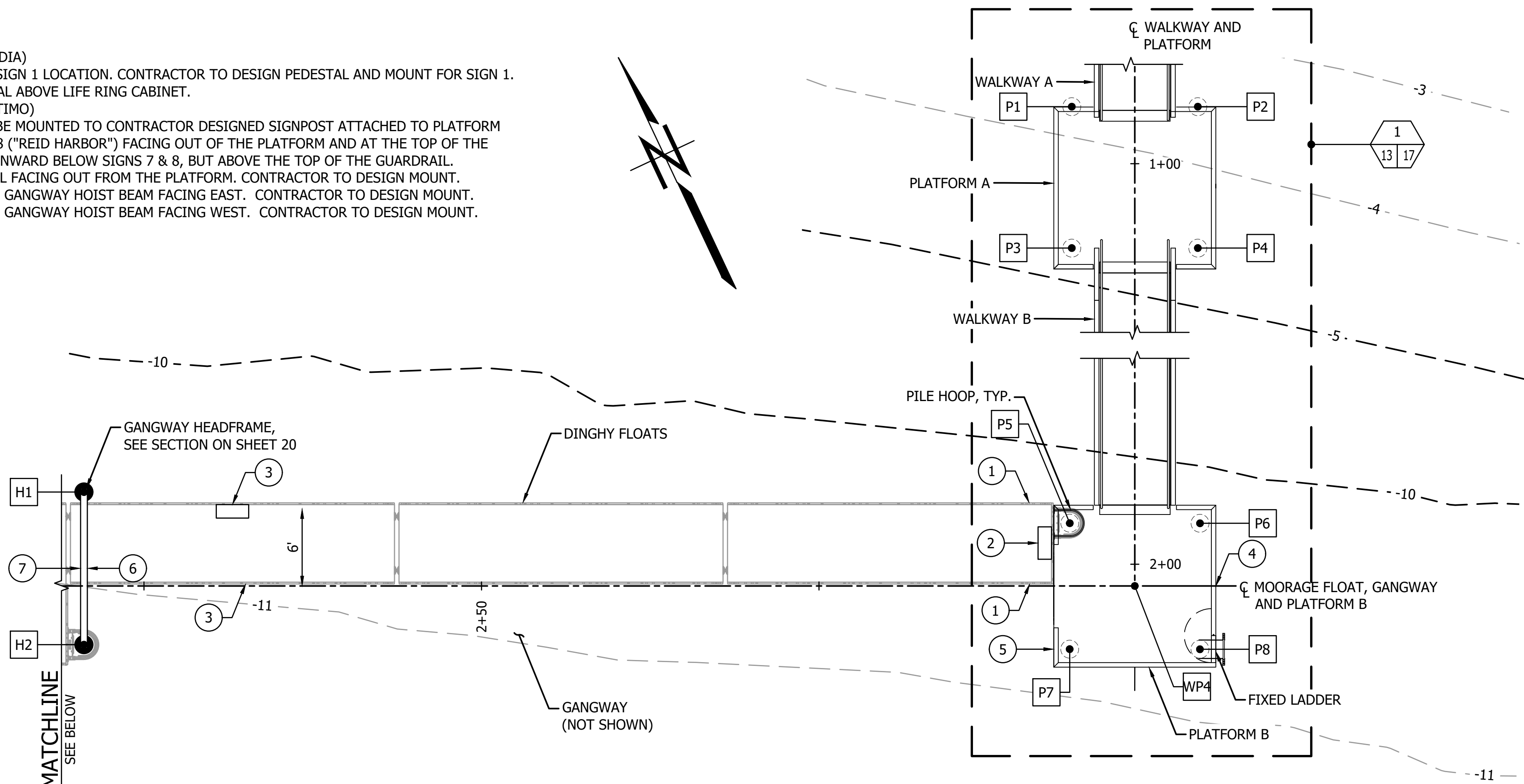


BID SET

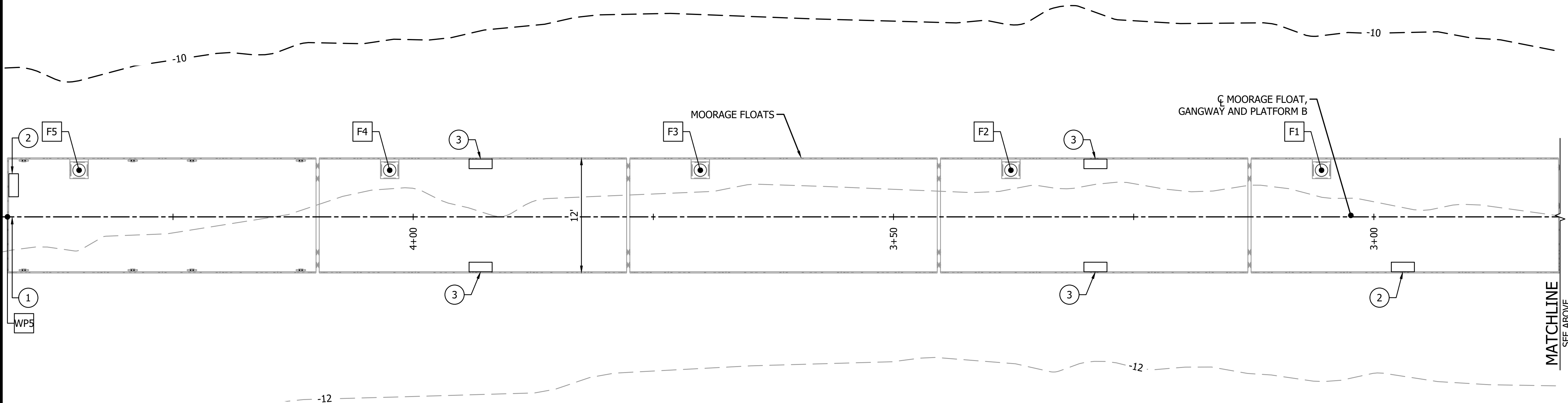
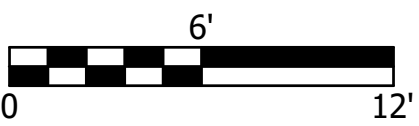
SHEET 12 OF 47

NOTES

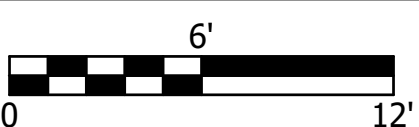
- 1. RETRACTABLE LADDER LOCATION. (SCANDIA)
- 2. LIFE RING CABINET AND PEDESTAL AND SIGN 1 LOCATION. CONTRACTOR TO DESIGN PEDESTAL AND MOUNT FOR SIGN 1. SIGN 1 TO BE MOUNTED TO THE PEDESTAL ABOVE LIFE RING CABINET.
- 3. RETRACTABLE LADDER LOCATION. (PLASTIMO)
- 4. SIGNS 5, 6, 7, & 8 LOCATION. SIGNS TO BE MOUNTED TO CONTRACTOR DESIGNED SIGNPOST ATTACHED TO PLATFORM GUARDRAIL. SIGN 7 (SHIELD) AND SIGN 8 ("REID HARBOR") FACING OUT OF THE PLATFORM AND AT THE TOP OF THE SIGNPOST. MOUNT SIGNS 5 & 6 FACING INWARD BELOW SIGNS 7 & 8, BUT ABOVE THE TOP OF THE GUARDRAIL.
- 5. SIGN 4 LOCATION. MOUNT TO GUARDRAIL FACING OUT FROM THE PLATFORM. CONTRACTOR TO DESIGN MOUNT.
- 6. SIGN 2 LOCATION. MOUNT CENTERED TO GANGWAY HOIST BEAM FACING EAST. CONTRACTOR TO DESIGN MOUNT.
- 7. SIGN 3 LOCATION. MOUNT CENTERED TO GANGWAY HOIST BEAM FACING WEST. CONTRACTOR TO DESIGN MOUNT.



DINGHY FLOAT AND PIER PLAN



MOORAGE FLOAT PLAN

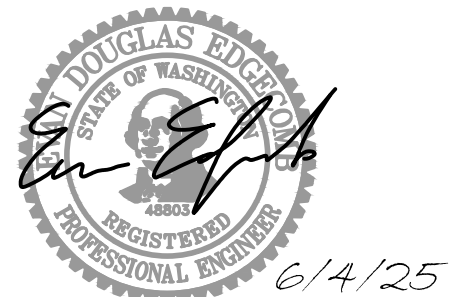


LEGEND

- F# FLOAT PILE (SEE SHEET 21)
- H# HEADFRAME PILE (SEE SHEET 21)
- P# PLATFORM PILE (SEE SHEET 21)
- WP# WORKING POINTS (SEE SHEET 11)

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

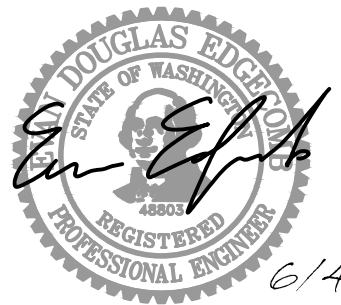
SITE PLAN -
FLOATS AND
PLATFORM

SCALE
1" = 6'

PARKS FILE#

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

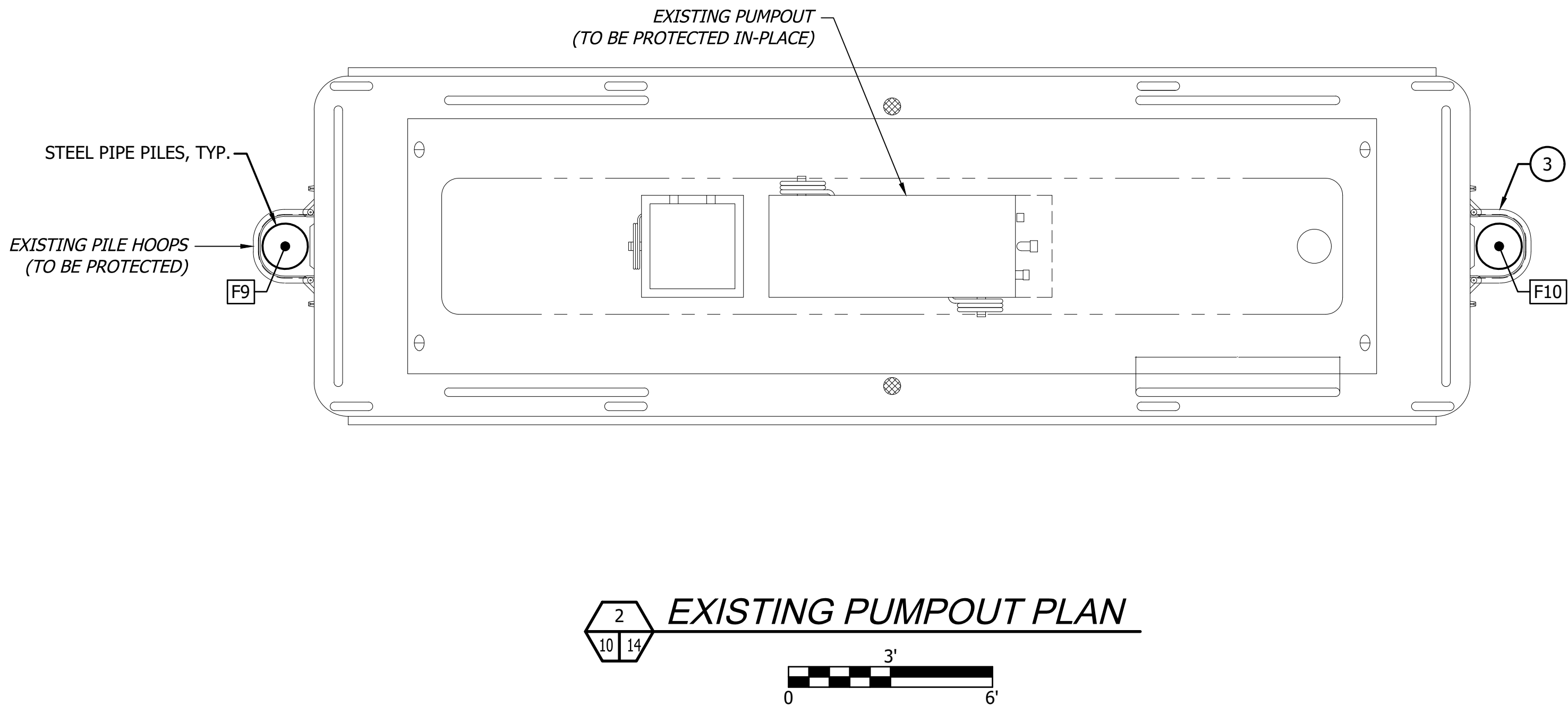
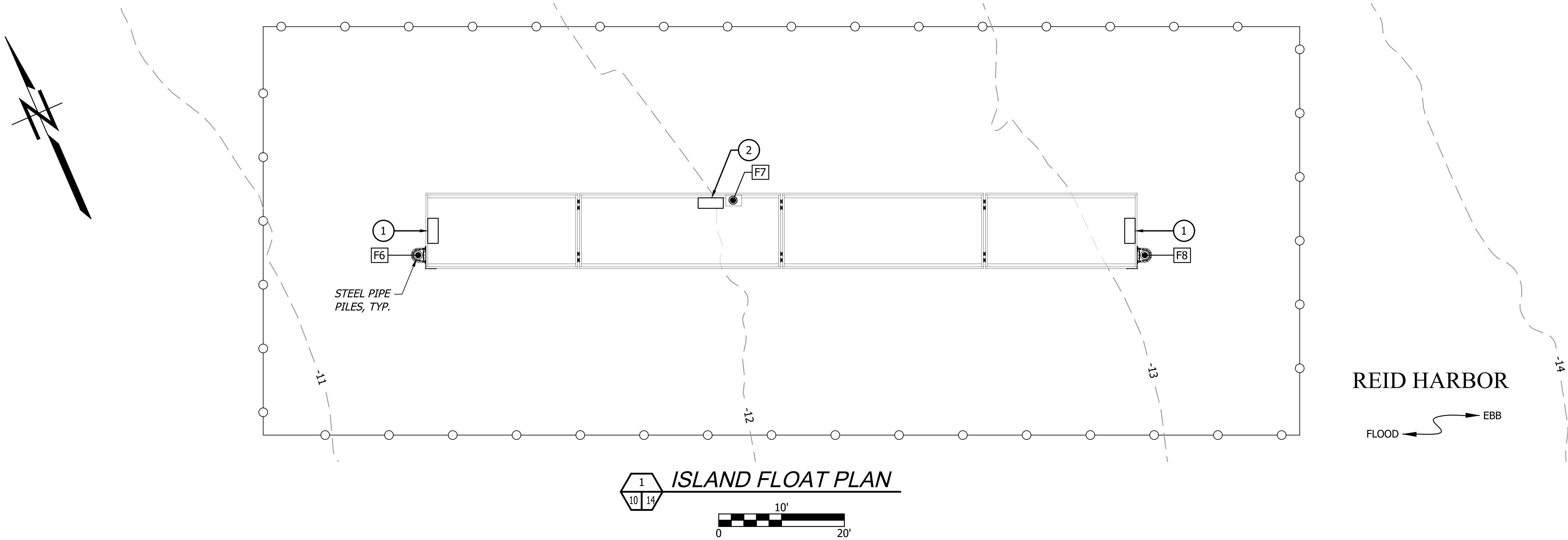
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

SITE PLAN -
ISLAND FLOATS
AND PUMPOUT

SCALE

AS SHOWN

PARKS FILE#



LEGEND

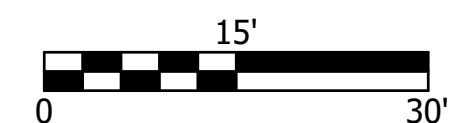
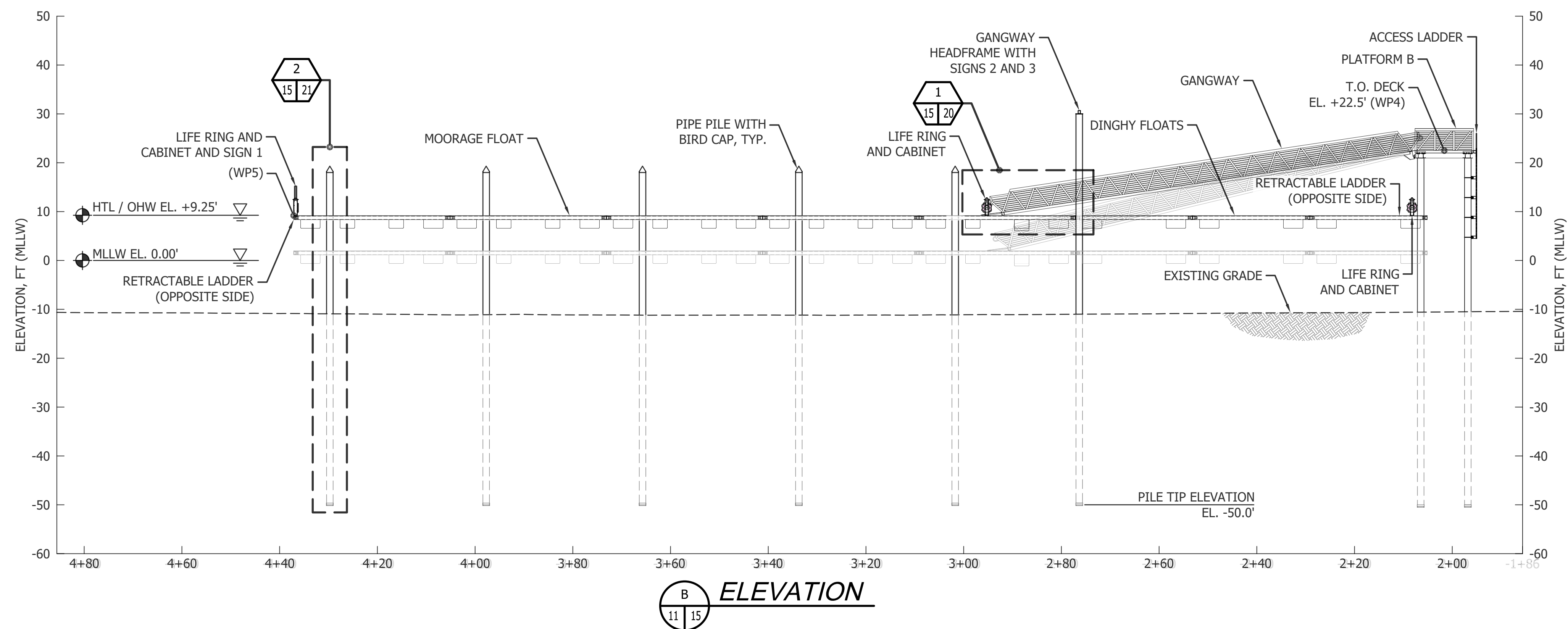
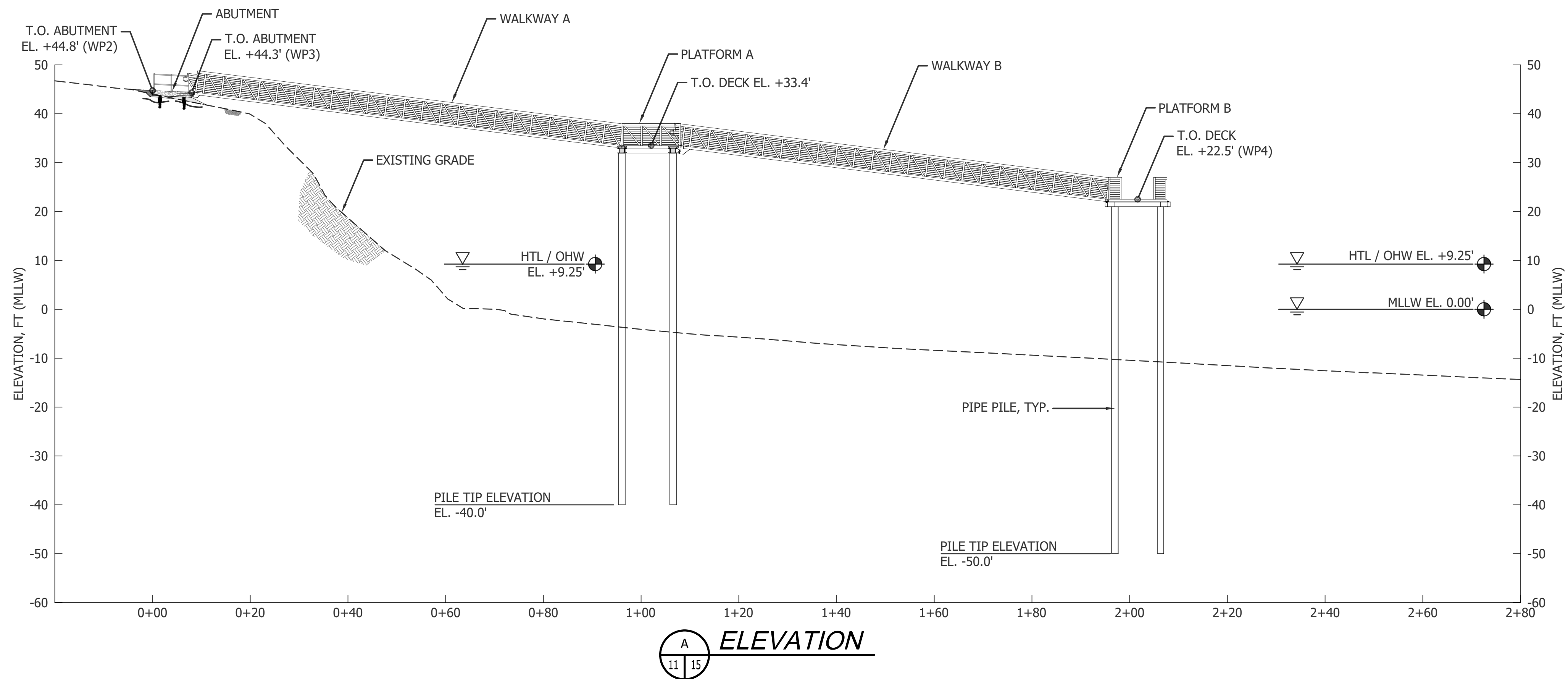
- — -30 — — EXISTING CONTOUR
- ○ — ○ — DEBRIS BOOM
- [F#] FLOAT PILE (SEE SHEET 21)

NOTE

- RETRACTABLE LADDER LOCATION (SCANDIA).
- LIFE RING CABINET AND PEDESTAL LOCATION.
- IF PILE HOOPS ON THE EXISTING PUMPOUT ARE NOT COMPATIBLE WITH THE NEW STEEL PILES, THEN INSTALL NEW PILE HOOPS WITH SIMILAR STRENGTH AND CAPACITY AS THE EXISTING AND SUBMIT TO THE OWNER FOR APPROVAL.

BID SET

SHEET 14 OF 47



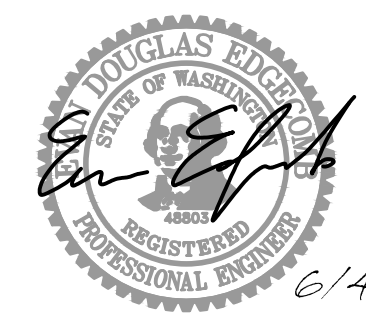
BID SET

SHEET 15 OF 47

CAD NO. S-4812-Z41-2022-PROFILE - MOORAGE FACILITY

DATE
APP.
INT.
NO.
REVISIONS

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

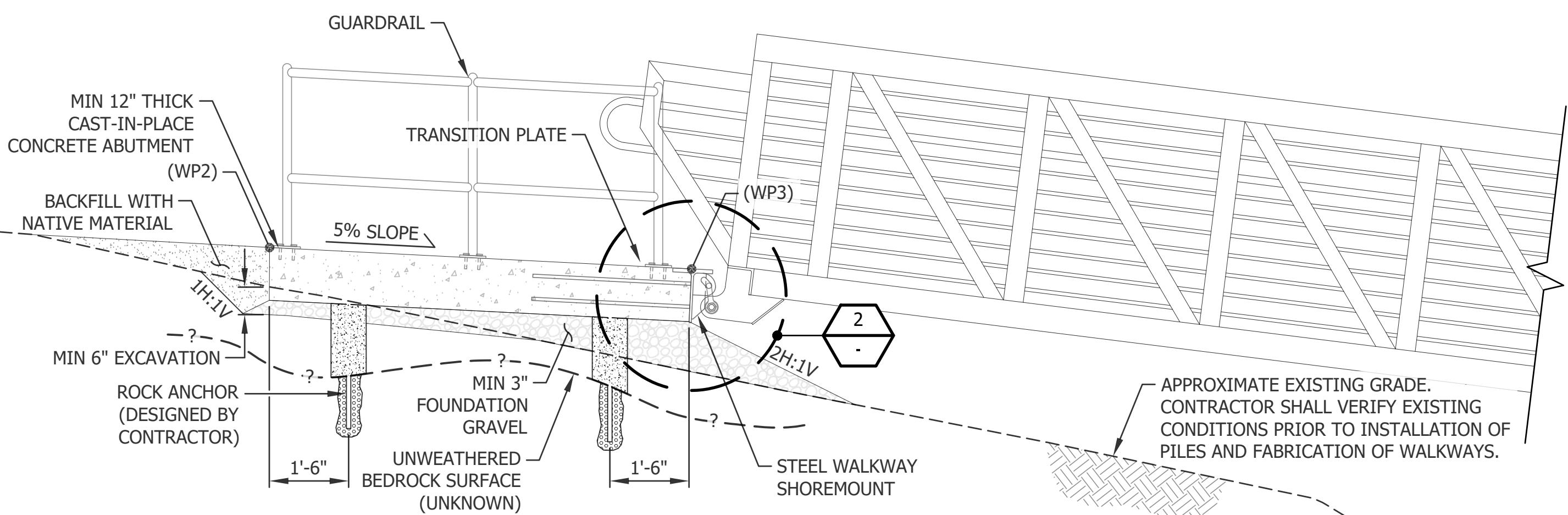
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

PROFILE -
MOORAGE FACILITY

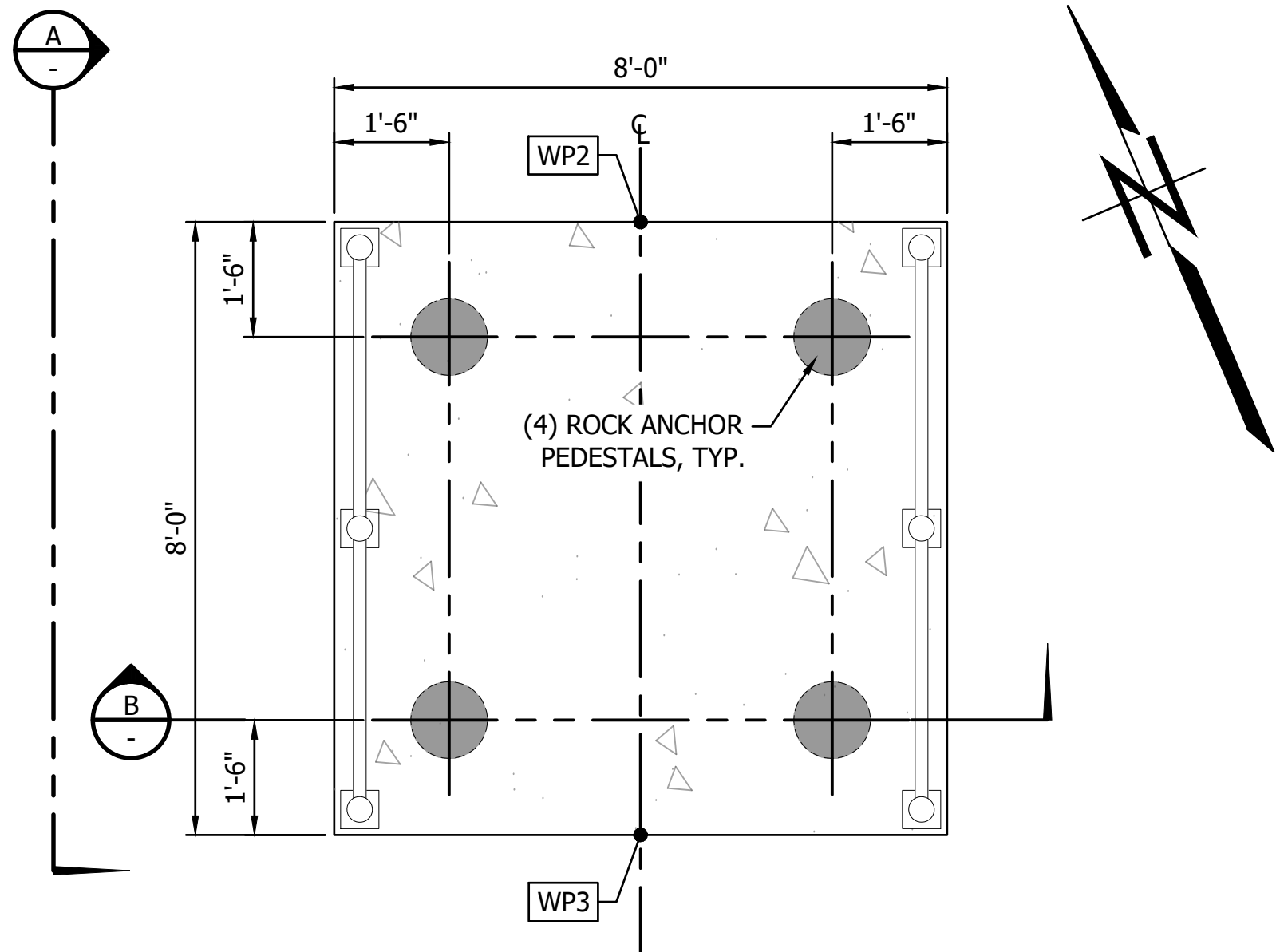
SCALE

1" = 15'

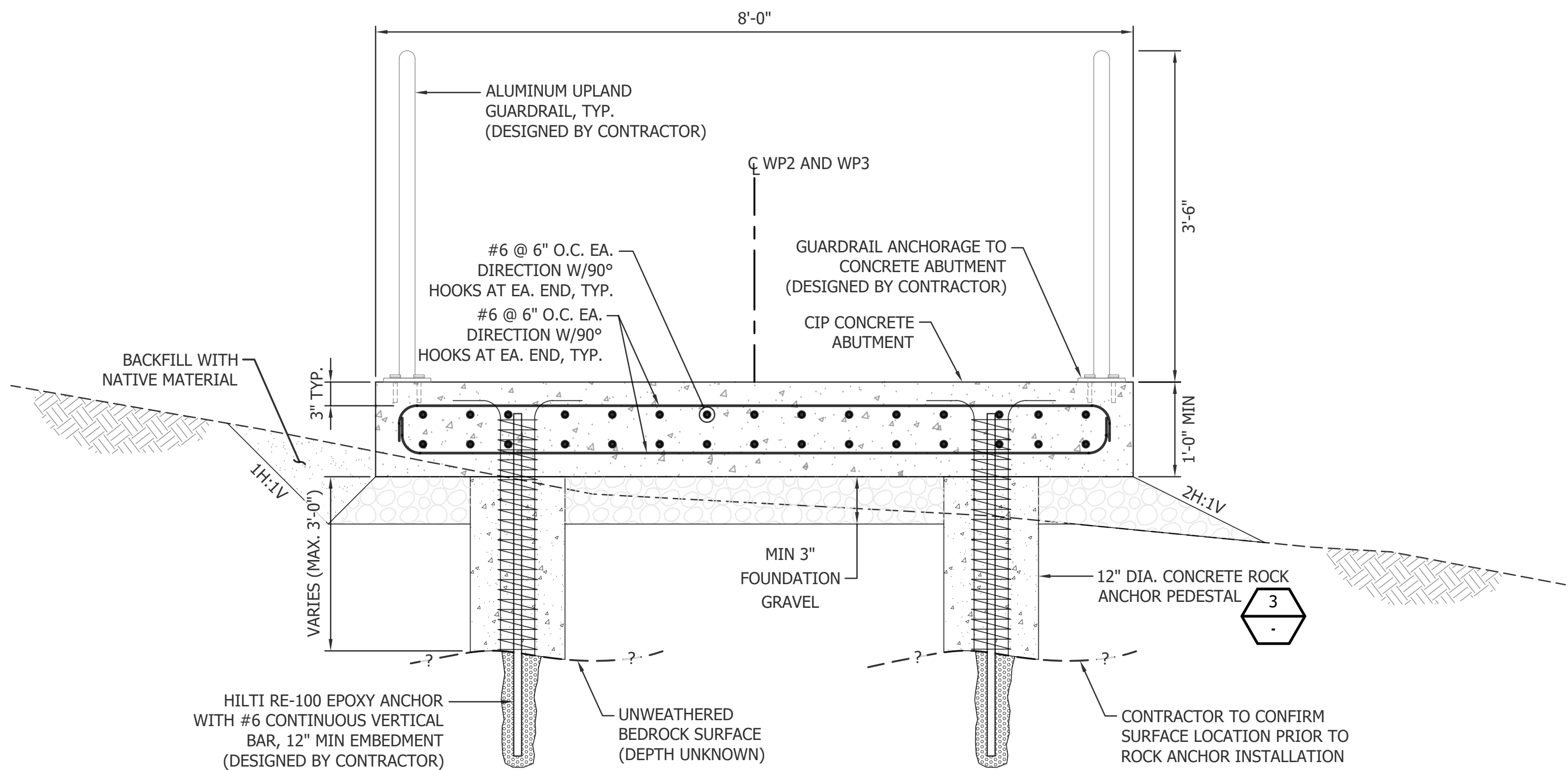
PARKS FILE#



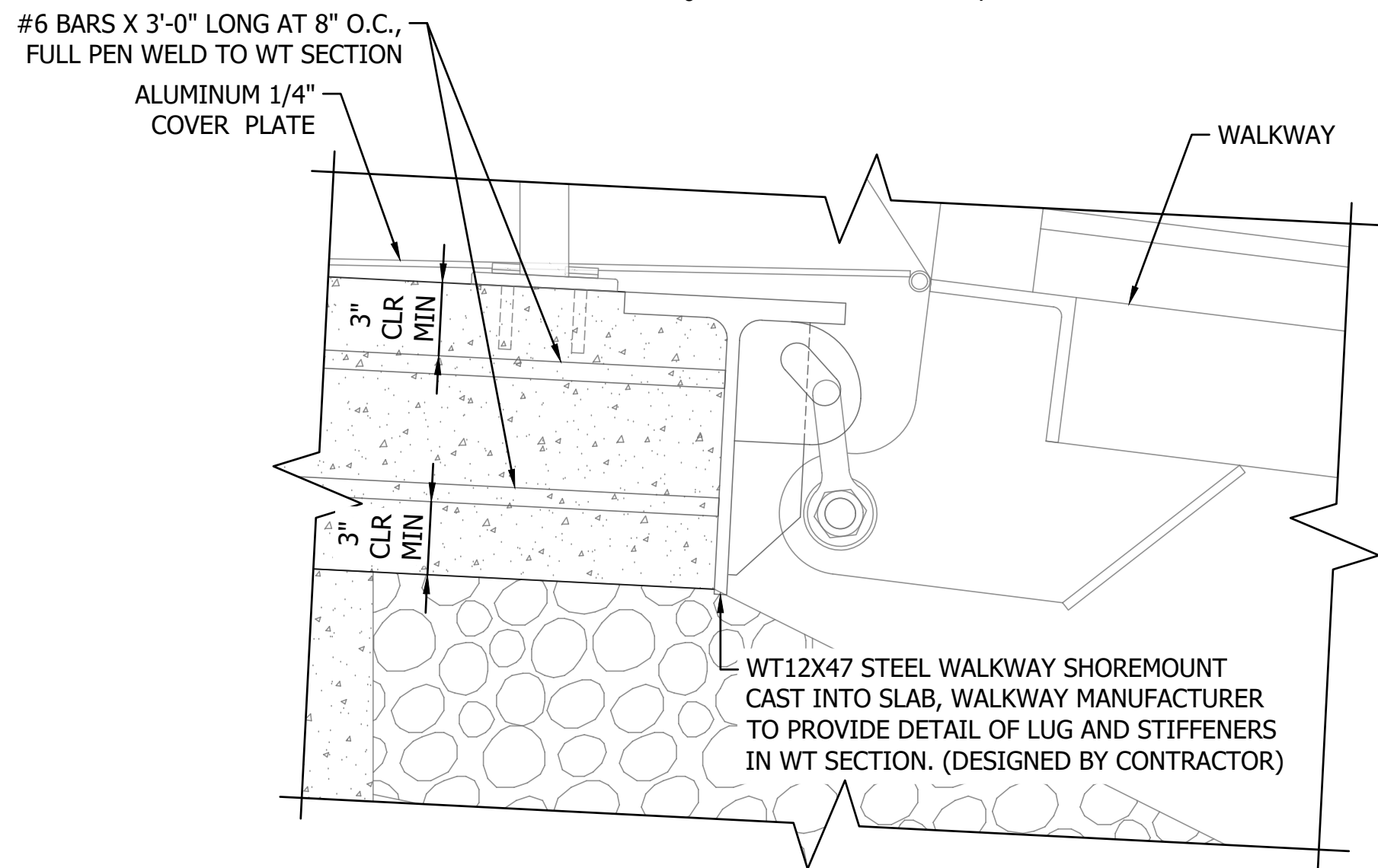
ELEVATION - ABUTMENT



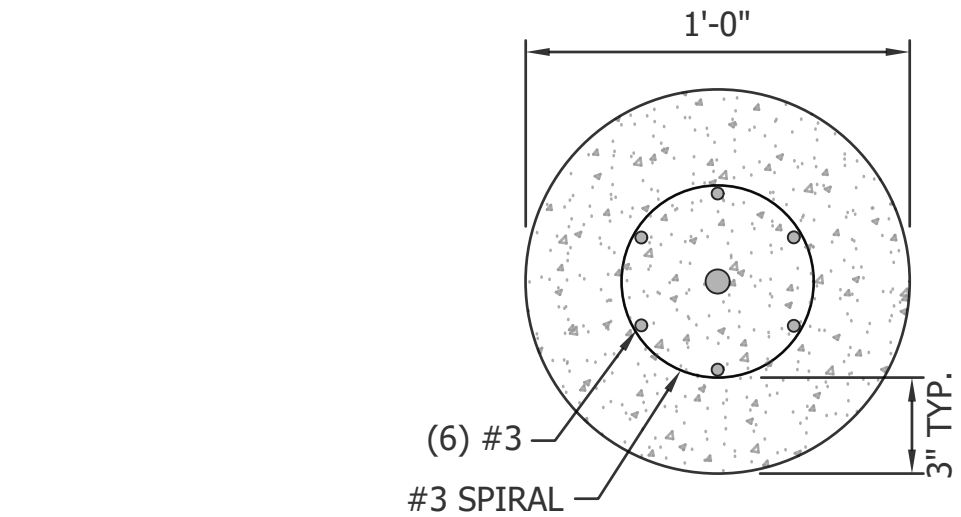
DETAIL - ABUTMENT



SECTION - ABUTMENT



DETAIL - SHOREMOUNT

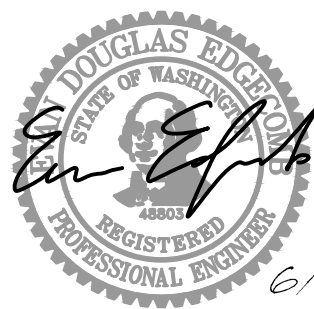


DETAIL - ANCHOR PEDESTAL

CAD NO. S-4812-Z41-2022-ABUTMENT DETAILS

DATE
APP.
INT.
NO.
REVISIONS

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

PROJECT ENGINEER

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

ABUTMENT DETAILS

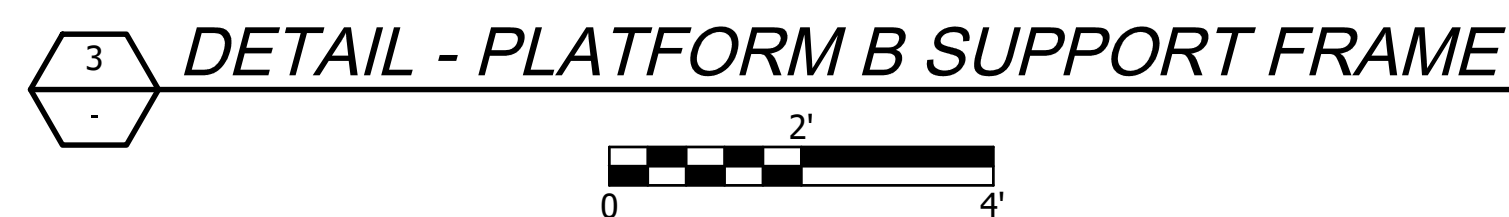
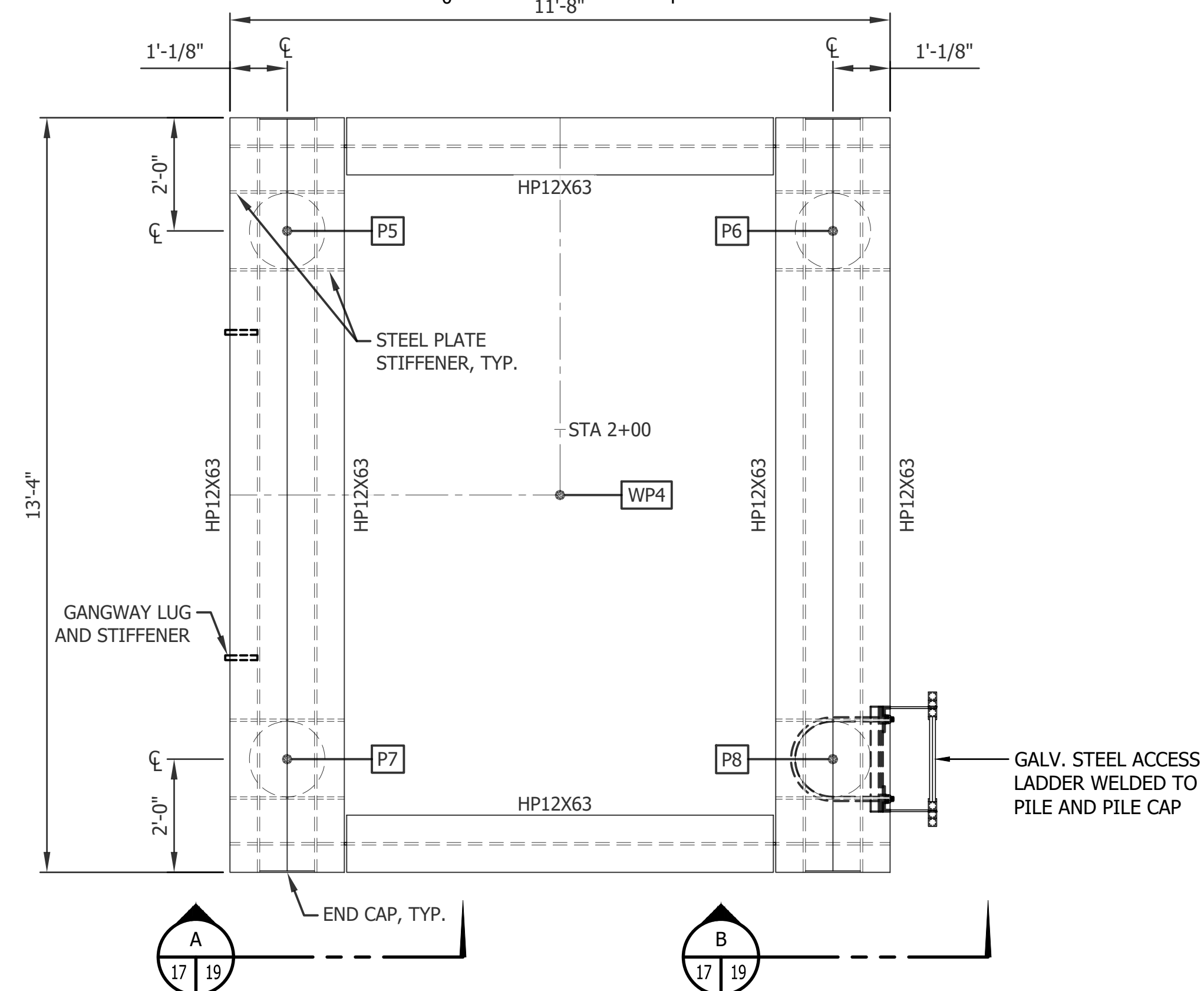
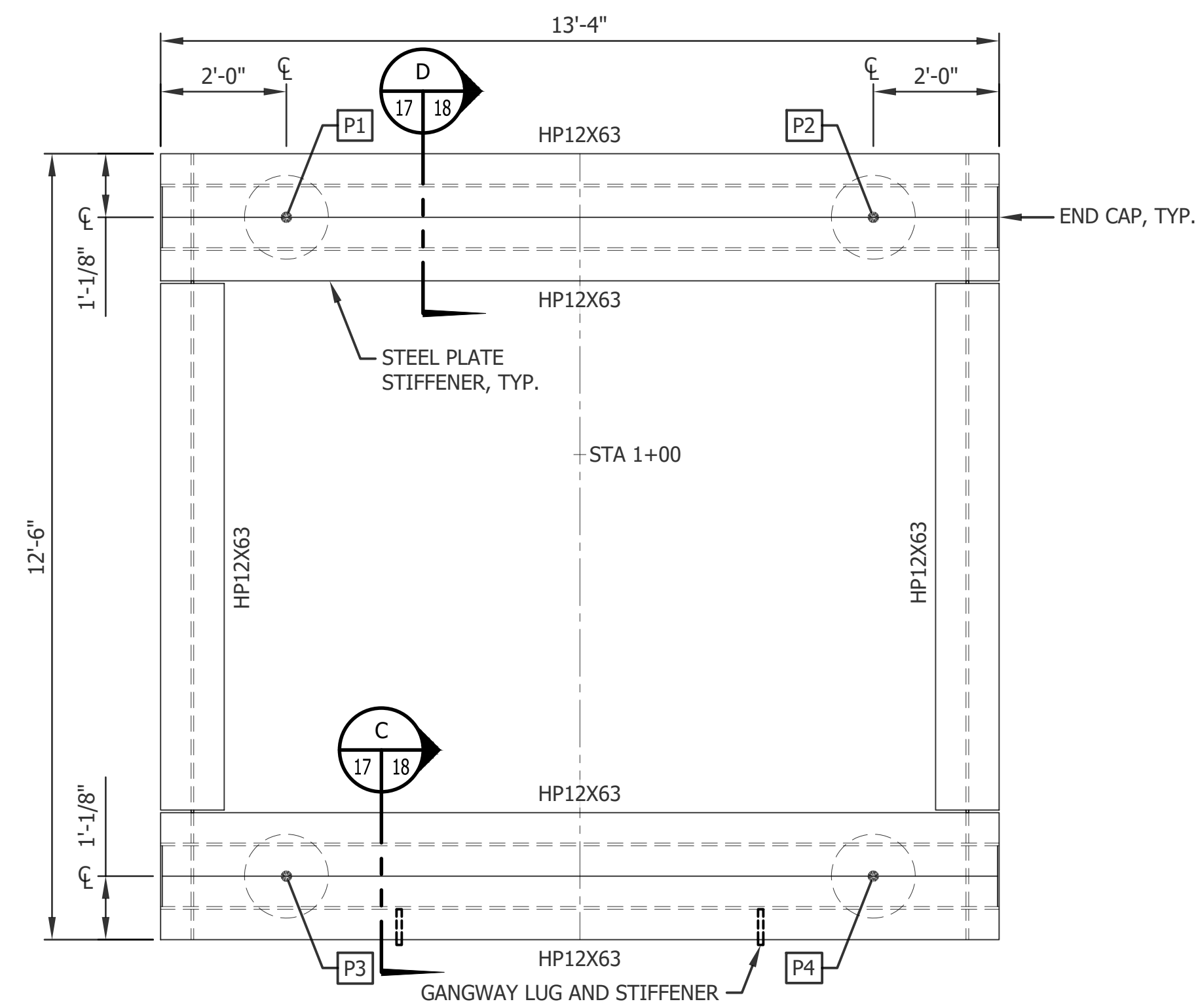
SCALE

AS SHOWN

PARKS FILE#

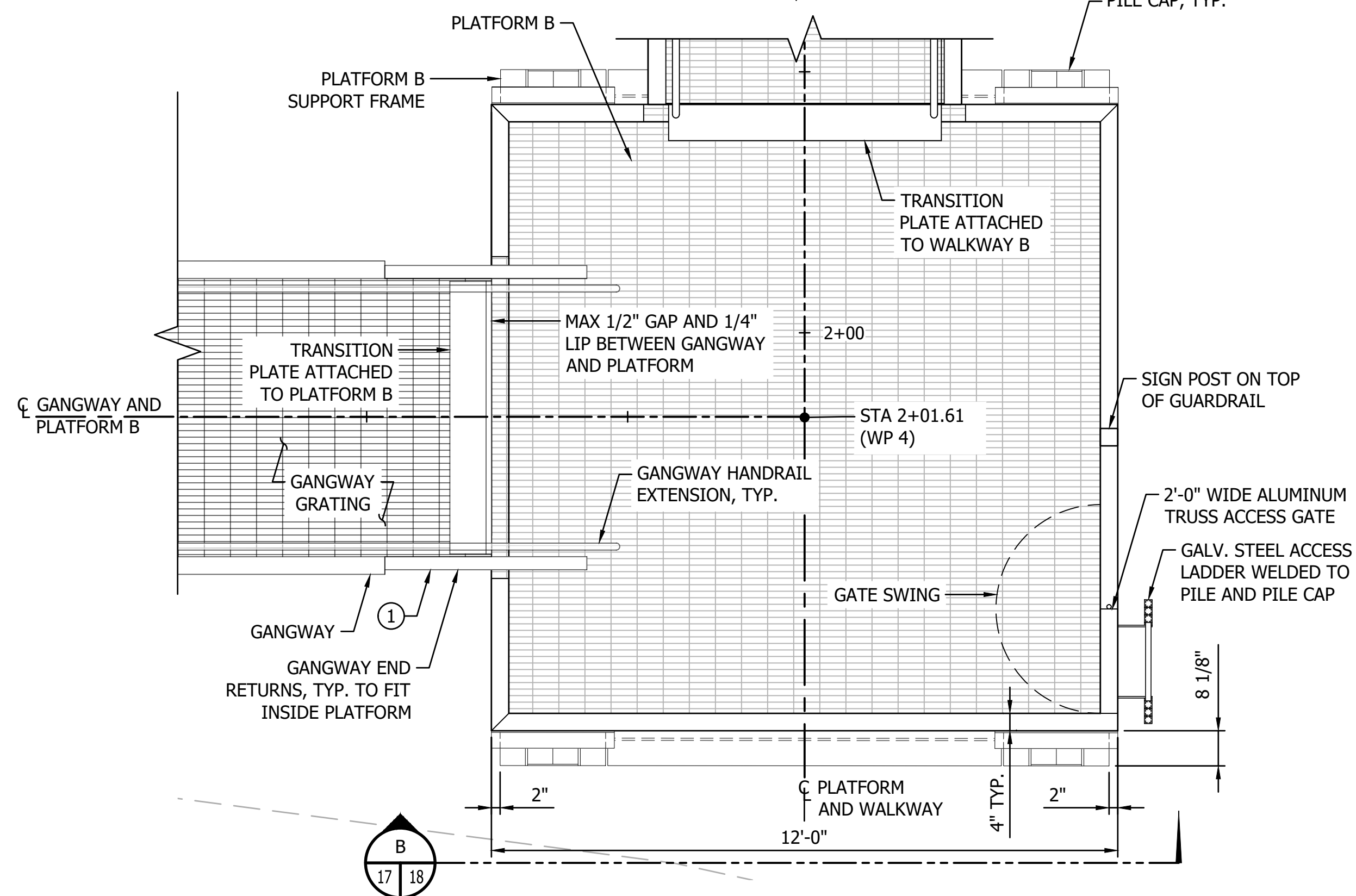
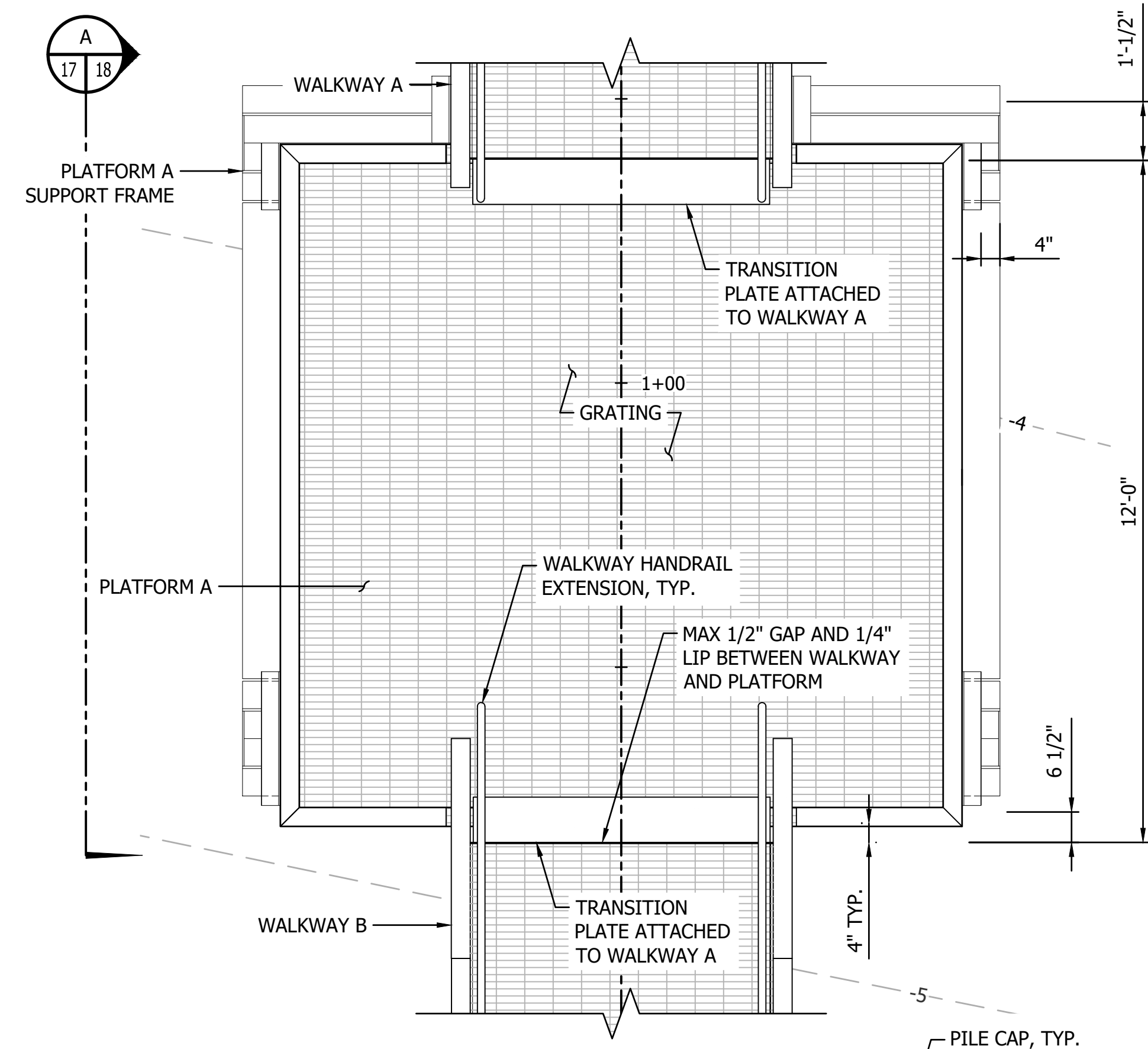
BID SET

SHEET 16 OF 47



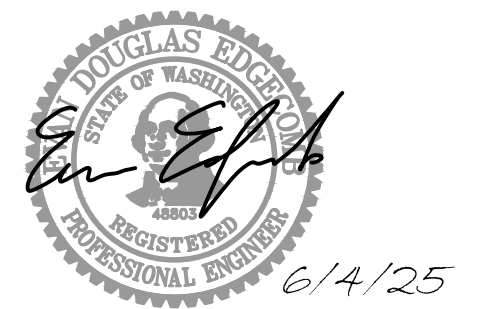
NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ENSURING WALKWAY AND GANGWAY CAN FUNCTION AT ALL WATER ELEVATIONS, AND THAT 4" MAX OPENING IS MAINTAINED.
2. PLATFORM FRAMING TO BE PREFABRICATED IN A SHOP.
3. THE ALUMINUM TRUSS ACCESS GATE SHALL BE FABRICATED TO BE FULL HEIGHT OF THE ADJACENT TRUSS. THE GATE SHALL BE ON A SPRING LOADED HINGE TO KEEP SHUT AND SHALL SWING INWARD. THE GATE SHALL ALSO INCLUDE A LATCH THAT CAN BE LOCKED.



NO.	REVISIONS	INT.	APP.	DATE

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
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CHECKED (HDQTS.)	EE	6/4/25



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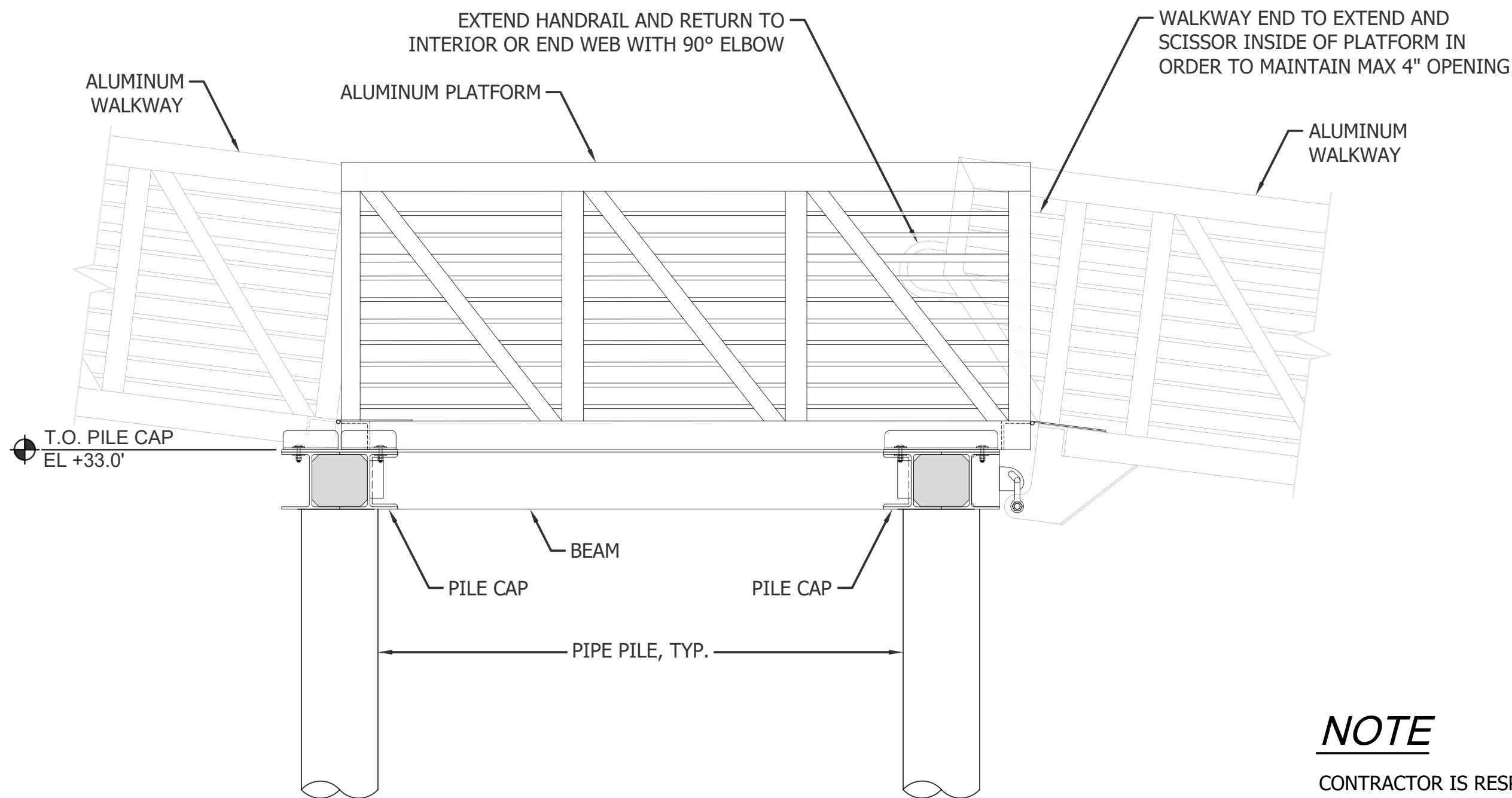
REID HARBOR MOORAGE FACILITY IMPROVEMENTS

PLATFORM DETAILS 1

SCALE

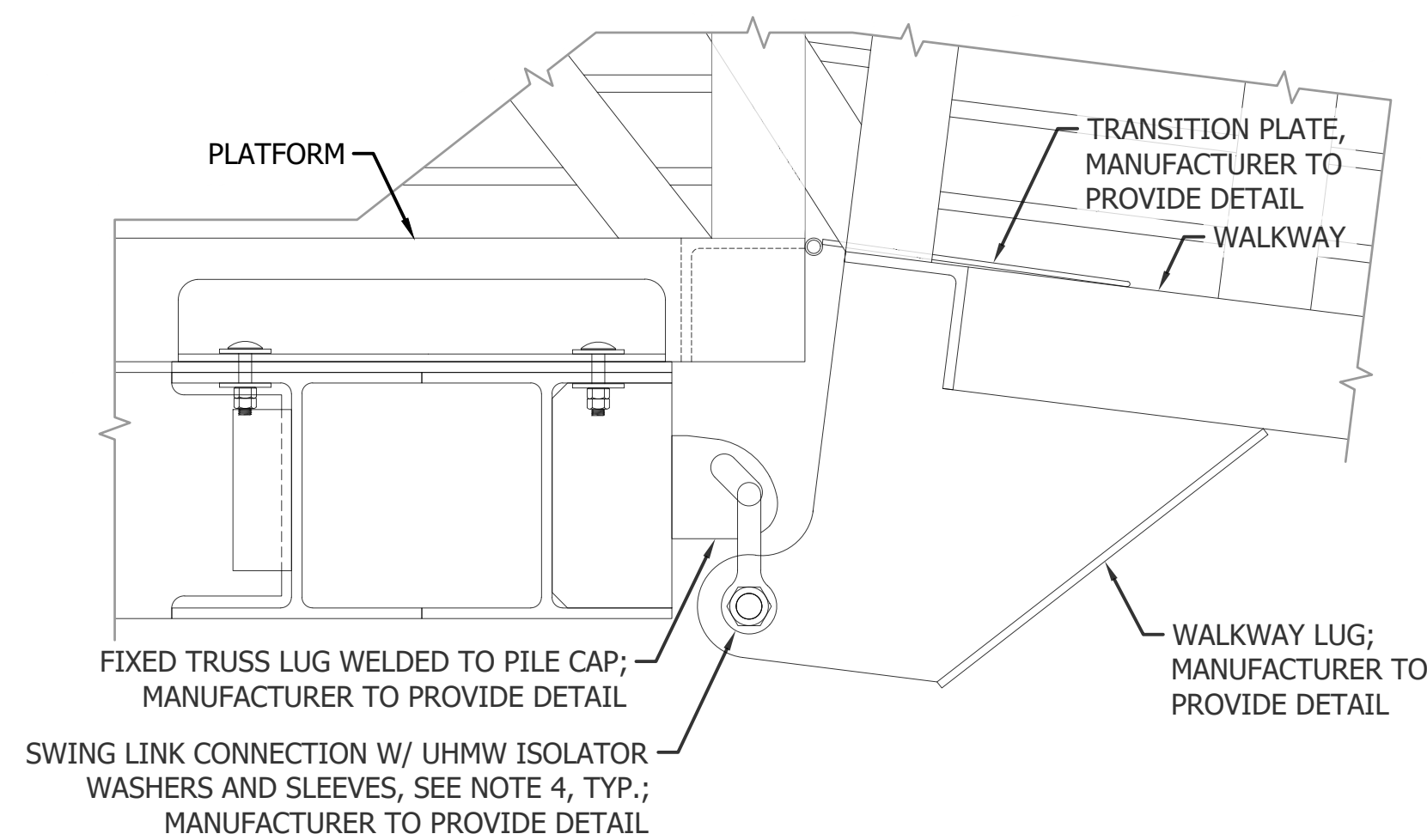
AS SHOWN

PARKS FILE#



ELEVATION - PLATFORM A

Scale: 0 to 4 feet



DETAIL - SWINGLINK CONNECTION

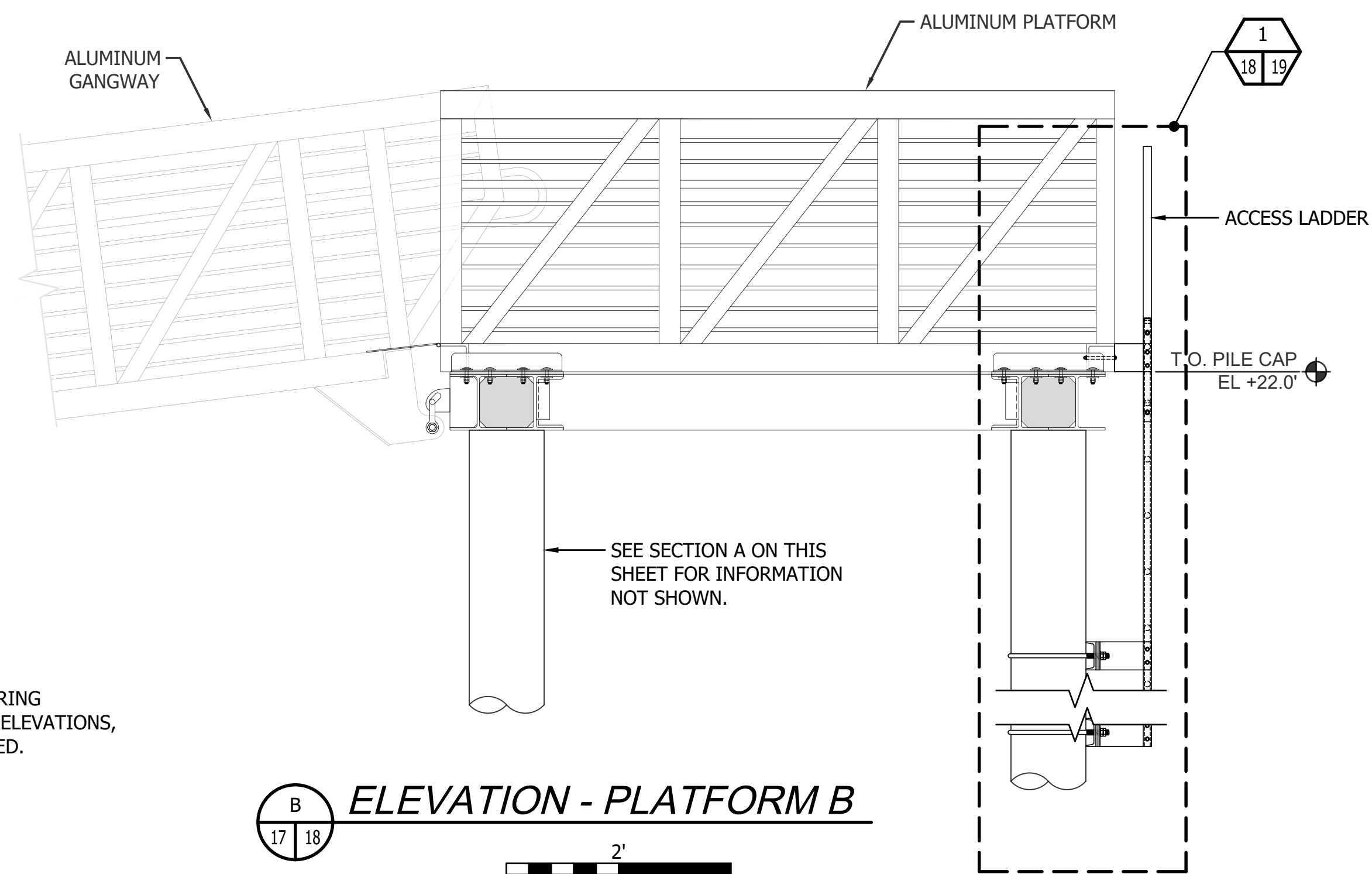
Scale: 0 to 16 inches

NOTES

- PERFORMANCE CRITERIA:
 - GANGWAY AND WALKWAYS ARE DESIGN-BUILD BY MANUFACTURER TO MEET TECHNICAL SPECIFICATIONS.
- SEE SHEET 21 FOR PILE SCHEDULE.
- GANGWAY AND ITS CONNECTIONS SHALL BE DESIGNED TO ACCOMMODATE FULL RANGE OF MOTION BETWEEN THE DESIGN WATER LEVELS.
- SWING LINK PIN SHALL BE STAINLESS STEEL AND SHALL BE BILLETED AS A SINGLE PIECE. WELDED HEADS ARE NOT ALLOWED ON THE PIN. TYPICAL ALL SWING LINK PINS.

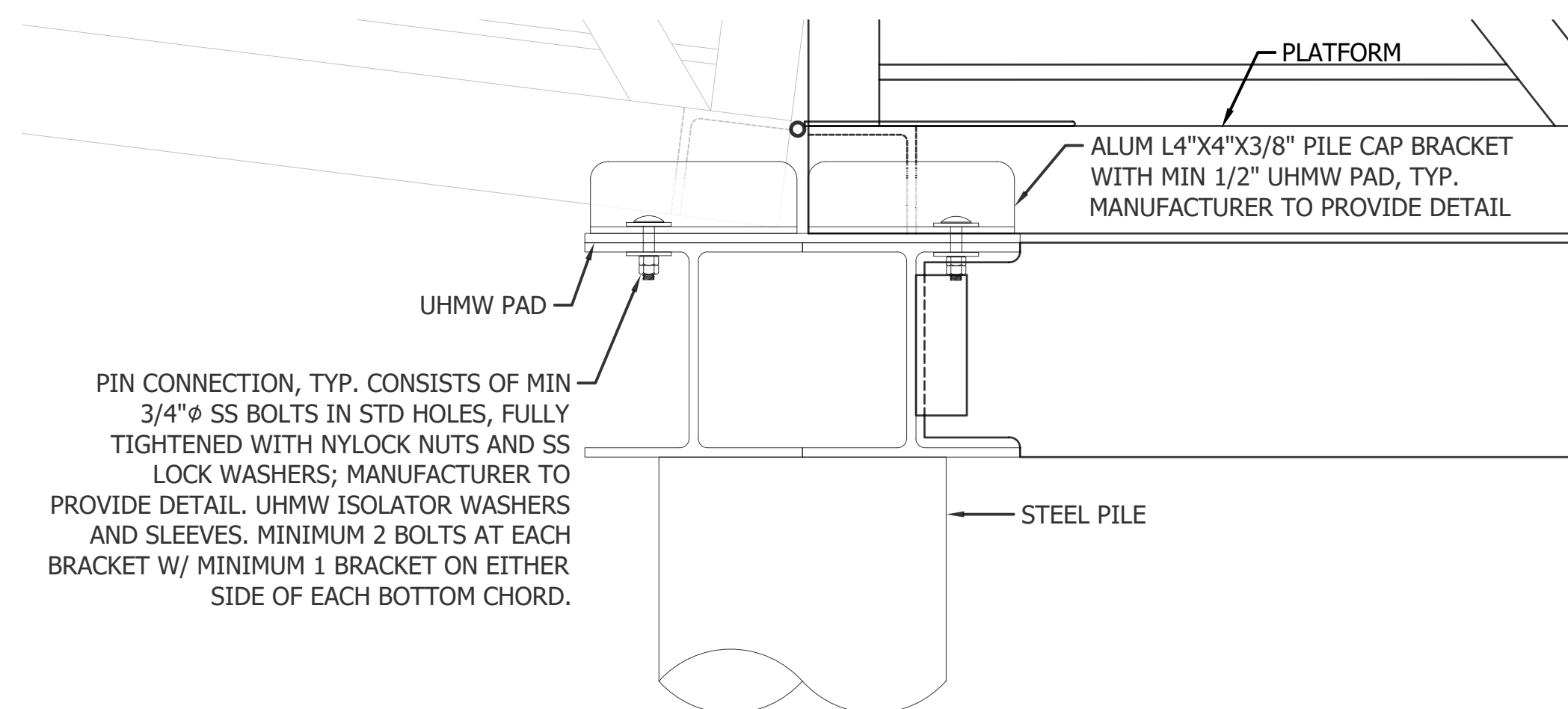
NOTE

CONTRACTOR IS RESPONSIBLE FOR ENSURING GANGWAY CAN FUNCTION AT ALL WATER ELEVATIONS, AND THAT 4" MAX OPENING IS MAINTAINED.



ELEVATION - PLATFORM B

Scale: 0 to 4 feet



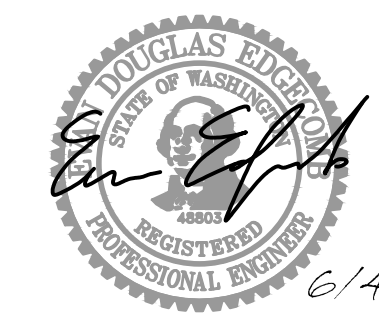
DETAIL - PLATFORM CONNECTION

Scale: 0 to 16 inches

CAD NO. S-4812-Z41-2022-PLATFORM DETAILS 2

	DATE
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	INT.
	NO.
	REVISIONS

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CHECKED (HDQTS.)	EE	6/4/25



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**REID HARBOR
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IMPROVEMENTS**

**PLATFORM
DETAILS 2**

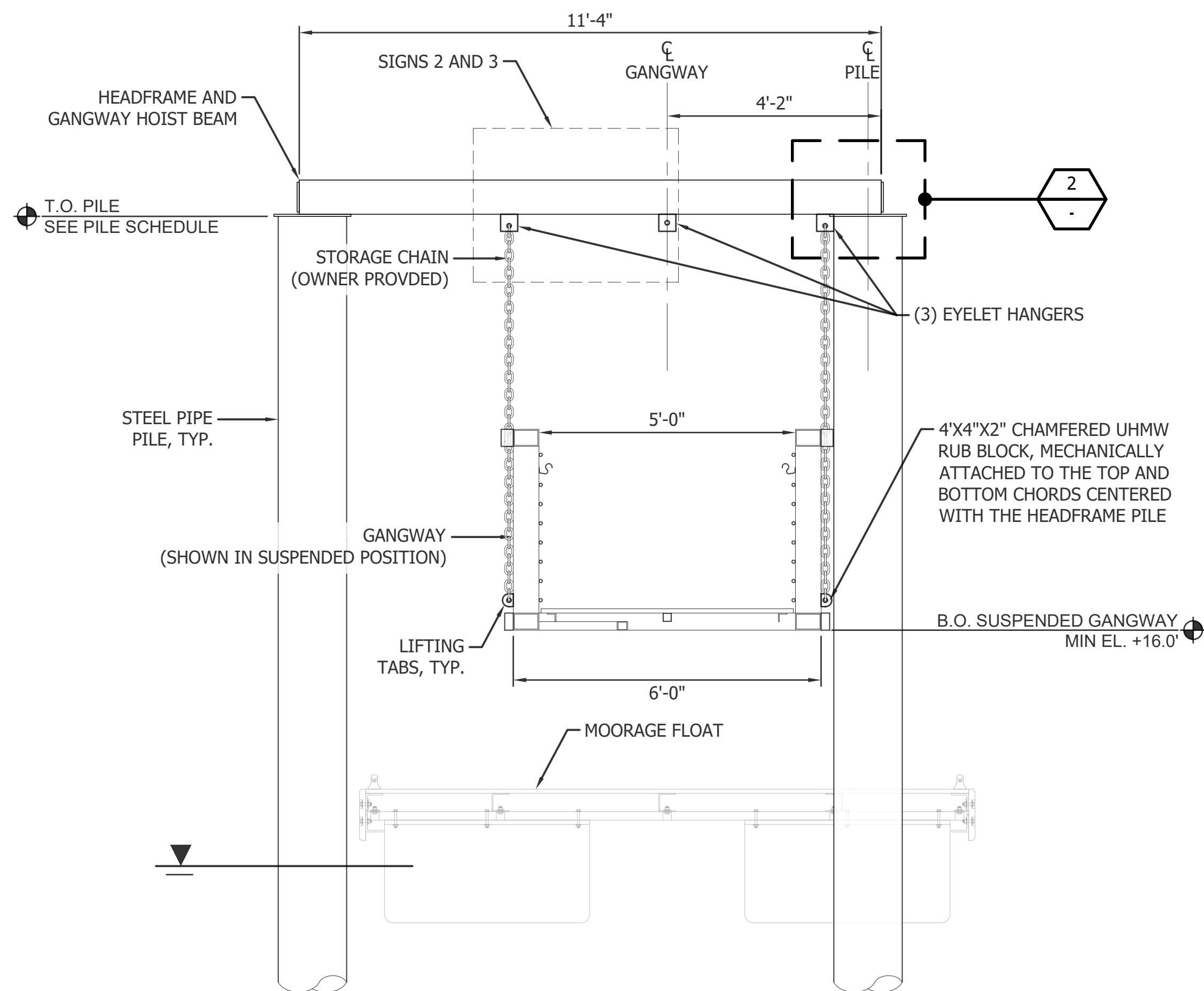
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AS SHOWN

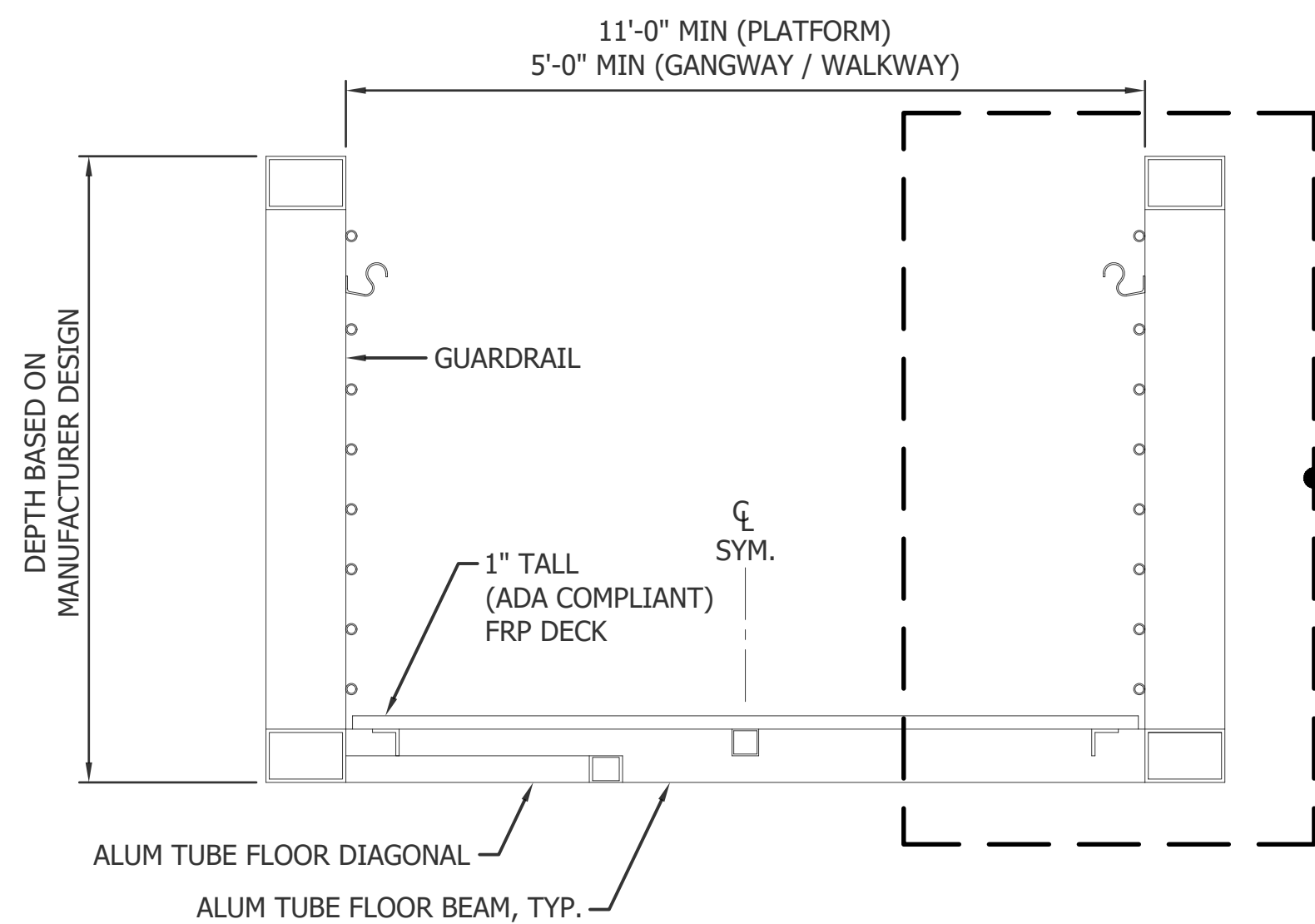
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BID SET

SHEET 18 OF 47



SECTION - GANGWAY AND HEADFRAME

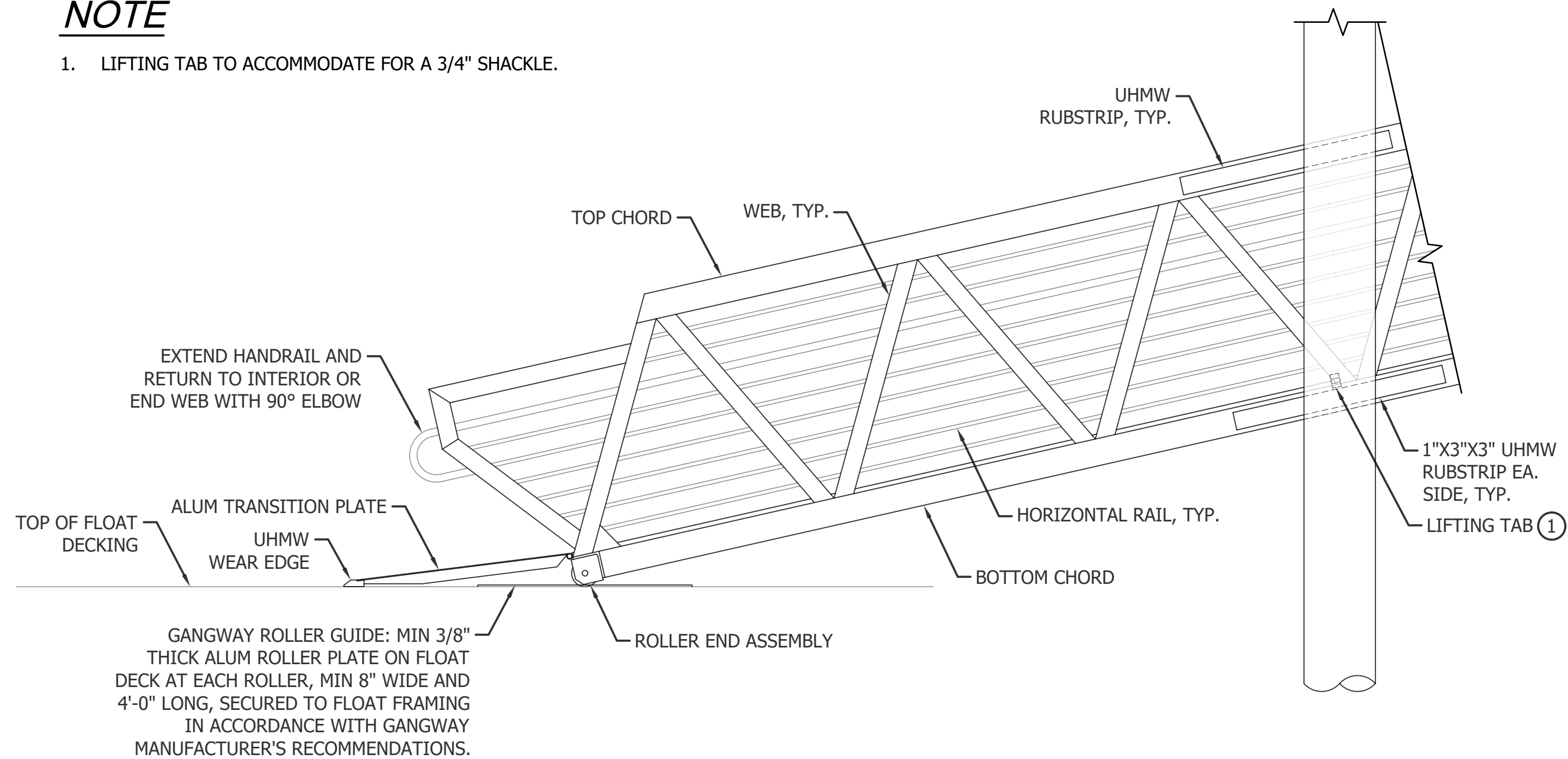


NOTE
FINAL DESIGN OF GANGWAY, WALKWAYS AND PLATFORM SHALL BE PERFORMED BY THE CONTRACTOR.

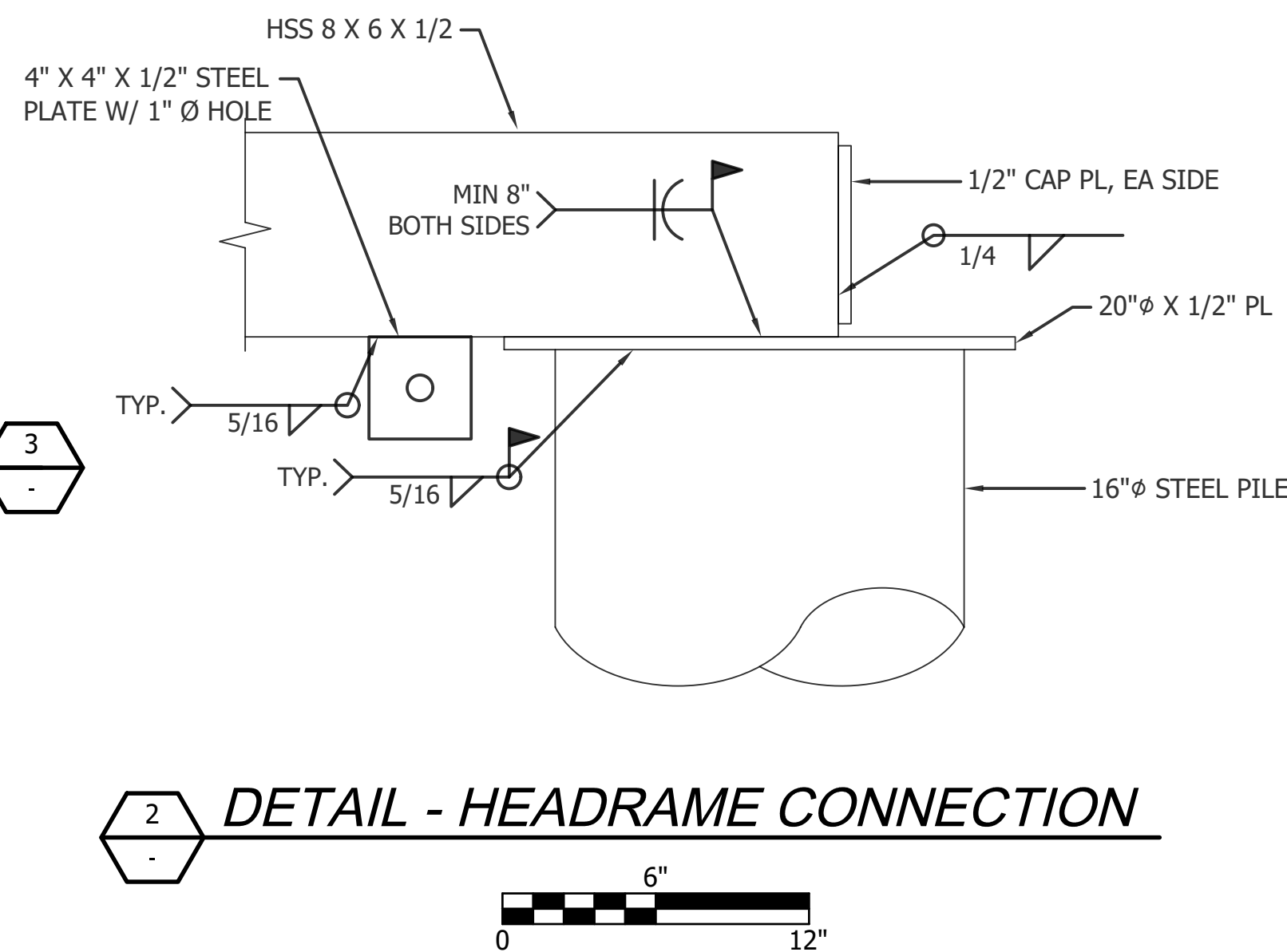
SECTION - TYPICAL GANGWAY / WALKWAY / PLATFORM

NOTE

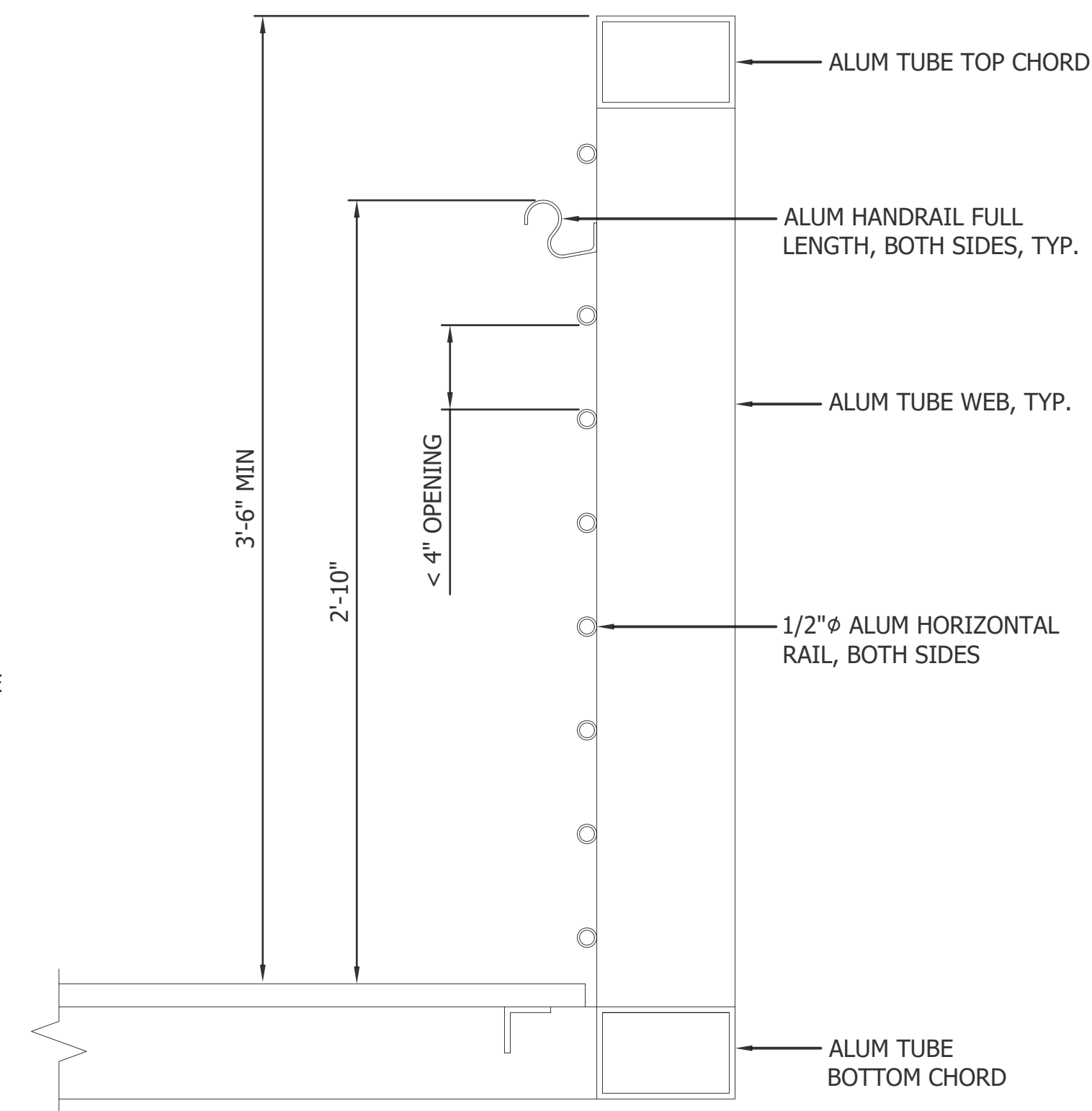
1. LIFTING TAB TO ACCOMMODATE FOR A 3/4" SHACKLE.



DETAIL - FLOAT LANDING



DETAIL - HEADFRAME CONNECTION



DETAIL - TYPICAL GUARDRAIL

CAD NO. S-4812-241-2022-GANGWAY AND HEADFRAME DETAILS		
	DATE	
	APP.	
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	REVISIONS	
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ACTION	BY	DATE
DESIGNED	EE	6/4/25
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IMPROVEMENTS

GANGWAY AND
HEADFRAME DETAILS

SCALE

AS SHOWN

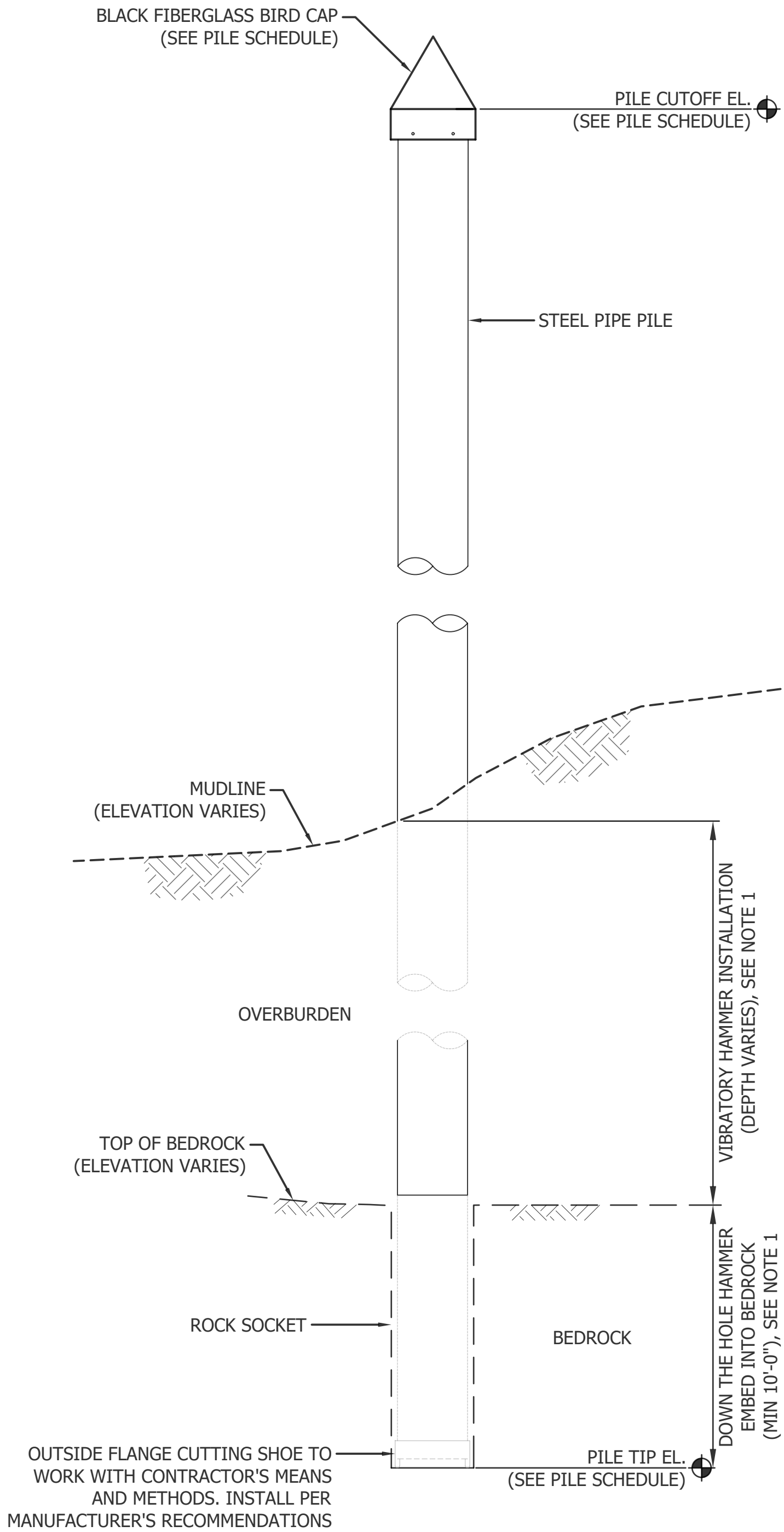
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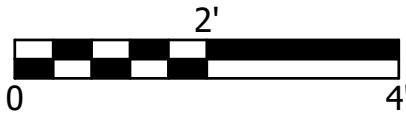
SHEET 20 OF 47

NOTES

- CONTRACTOR SHALL USE A VIBRATORY HAMMER TO INSTALL THE PILE TO SPECIFIED TIP ELEVATION. IF REFUSAL WITH VIBRATORY HAMMER IS ENCOUNTERED BEFORE REACHING THE SPECIFIED TIP ELEVATION, UTILIZE AN IMPACT HAMMER TO PROGRESS PILE. IF REFUSAL WITH IMPACT HAMMER IS ENCOUNTERED BEFORE TIP ELEVATION, THEN UTILIZE A DOWN THE HOLE HAMMER AND DRILL DEEP ENOUGH TO SEAT THE PILE A MINIMUM OF 10 FEET INTO THE HARD LAYER OR UNTIL SPECIFIED TIP ELEVATION HAS BEEN ACHIEVED. USE THE IMPACT HAMMER AFTER DRILLING TO SEAT THE PILE INTO THE DRILLED PORTION OF SOIL.
- PILE COORDINATES SHOWN IN THE PILE SCHEDULES ARE THE CENTER POSITION OF THE PILE.
- SEE SECTION 316216 FOR MORE INFORMATION REGARDING PILE INSTALLATION SUCH AS PILE DRIVING REQUIREMENTS, INSTALLATION TOLERANCES, AND A ACCEPTANCE CRITERIA.
- FOR SOIL AND SITE CONDITIONS, SEE GEOLOGIC AND GEOTECHNICAL ENGINEERING SERVICES REPORT "STUART ISLAND STATE PARK IMPROVEMENTS, SAN JUAN COUNTY, WASHINGTON" DATED NOVEMBER 25, 2020 AS DEVELOPED BY GEOENGINEERS, INC.
- ENSURE THAT BOULDERS AND OTHER OBSTRUCTIONS ON SITE DO NOT INTERFERE WITH THE PILE DRIVING AND INSTALLATION. LOCALLY MOVE ANY SUCH OBSTRUCTIONS TO ENSURE THAT PILES ARE INSTALLED IN THE CORRECT LOCATION AND ACHIEVE THE MINIMUM EMBEDMENT INTO ROCK AS SHOWN ON THE DRAWINGS.
- SURVEY AS-BUILT PILE LOCATIONS PER SECTION 010099 AND INCORPORATE PILE LOCATIONS INTO THE FINAL FLOAT SHOP DRAWINGS TO ENSURE FLOATS AND GANGWAY FUNCTIONS THROUGH THE FULL DESIGN WATER LEVEL RANGE WITHOUT BINDING.



2 15 21
DETAIL - PILE INSTALLATION



PILE SCHEDULE						
PILE ID	PILE SIZE	NORTHING	EASTING	PILE TIP ELEVATION (MLLW)	PILE CUTOFF ELEVATION (MLLW)	BIRD CAP
F1	16"Ø X 1/2"	619911.78	1068581.01	-50.0'	18.0'	Y
F2	16"Ø X 1/2"	619925.39	1068551.67	-50.0'	18.0'	Y
F3	16"Ø X 1/2"	619938.99	1068522.34	-50.0'	18.0'	Y
F4	16"Ø X 1/2"	619952.59	1068493.01	-50.0'	18.0'	Y
F5	16"Ø X 1/2"	619966.20	1068463.68	-50.0'	18.0'	Y
F6	16"Ø X 1/2"	619880.46	1068151.82	-50.0'	18.0'	Y
F7	16"Ø X 1/2"	619868.52	1068201.29	-50.0'	18.0'	Y
F8	16"Ø X 1/2"	619834.41	1068257.92	-50.0'	18.0'	Y
F9	16"Ø X 1/2"	619695.78	1068943.85	-50.0'	18.0'	Y
F10	16"Ø X 1/2"	619679.80	1068975.79	-50.0'	18.0'	Y
H1	16"Ø X 1/2"	619902.75	1068605.48	-50.0'	30.0'	N
H2	16"Ø X 1/2"	619892.49	1068600.72	-50.0'	30.0'	N
P1	16"Ø X 1/2"	619961.66	1068713.45	-40.0'	32.0'	N
P2	16"Ø X 1/2"	619957.73	1068721.92	-40.0'	32.0'	N
P3	16"Ø X 1/2"	619952.15	1068709.04	-40.0'	32.0'	N
P4	16"Ø X 1/2"	619948.22	1068717.51	-40.0'	32.0'	N
P5	16"Ø X 1/2"	619869.93	1068670.75	-50.0'	21.0'	N
P6	16"Ø X 1/2"	619865.87	1068679.49	-50.0'	21.0'	N
P7	16"Ø X 1/2"	619861.47	1068666.81	-50.0'	21.0'	N
P8	16"Ø X 1/2"	619857.40	1068675.56	-50.0'	21.0'	N

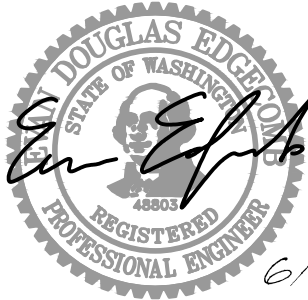
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SHEET 21 OF 47

CAD NO. S-4812-Z41-2022-PILE DETAILS AND SCHEDULE

	DATE
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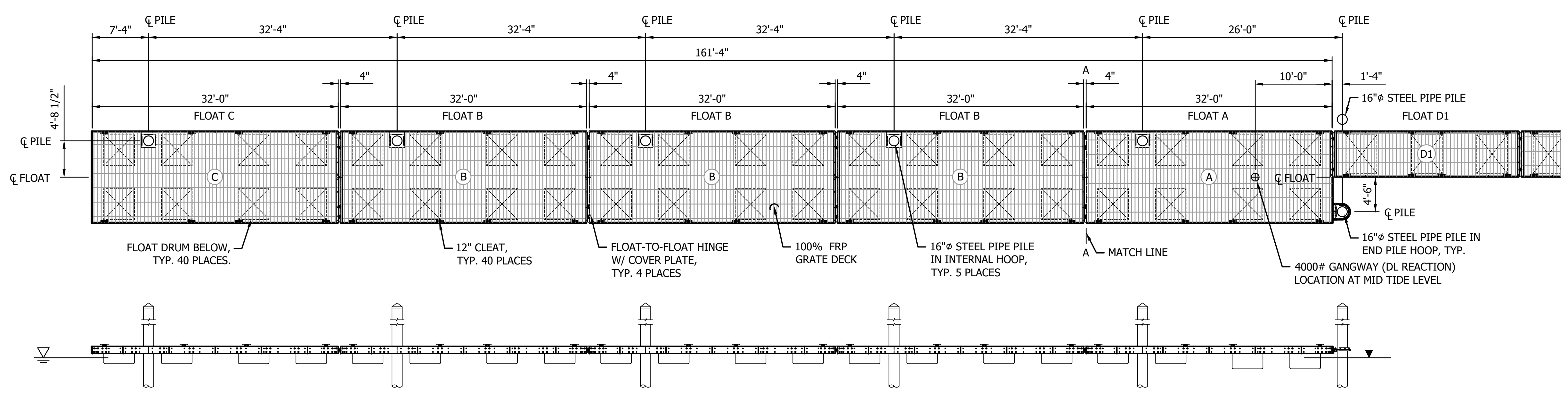
REID HARBOR
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IMPROVEMENTS

PILE DETAILS
AND SCHEDULE

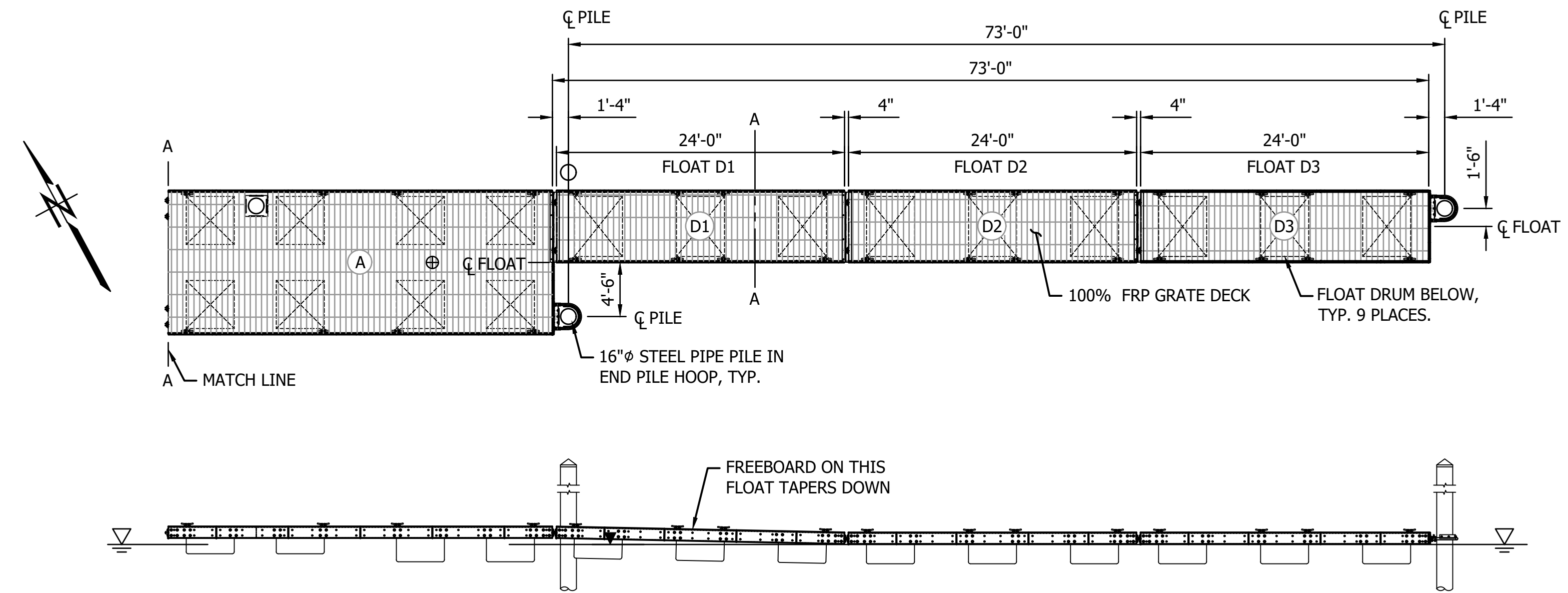
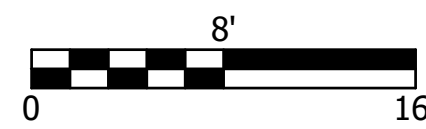
SCALE

1" = 2'

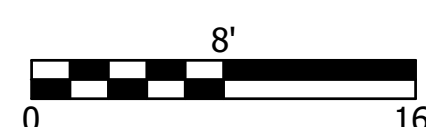
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MOORAGE FLOAT PLAN AND ELEVATION



DINGHY FLOAT PLAN AND ELEVATION



CAD NO. S-4812-Z41-2022-MOORAGE
FLOAT PLAN AND ELEVATION

REVISIONS

NO.

ACTION	BY	DATE
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DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25

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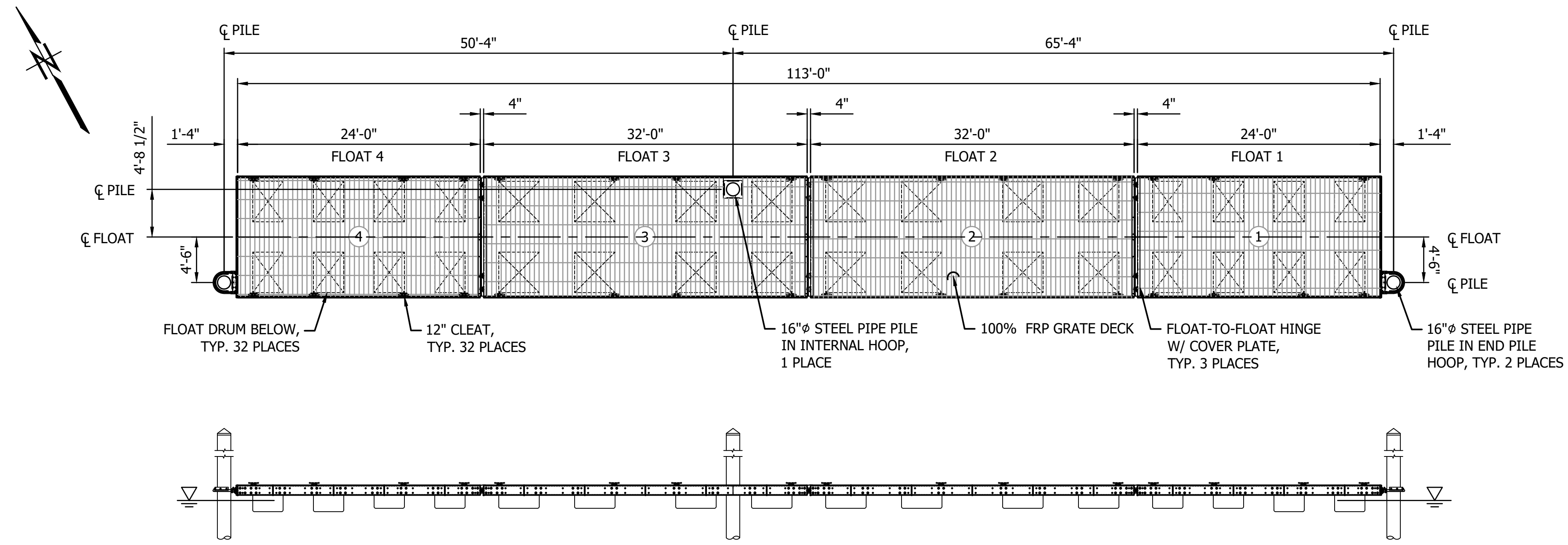
REID HARBOR
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IMPROVEMENTS

MOORAGE FLOAT
PLAN AND
ELEVATION

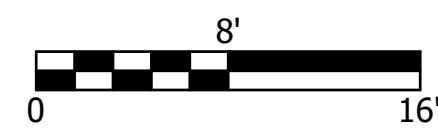
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PARKS FILE#

BID SET SHEET 22 OF 47



ISLAND FLOAT PLAN AND ELEVATION



CAD NO. S-4812-241-2022-ISLAND FLOAT PLAN AND ELEVATION

	DATE
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ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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IMPROVEMENTS

ISLAND FLOAT
PLAN AND
ELEVATION

SCALE

AS SHOWN

PARKS FILE#

BID SET

SHEET 23 OF 47

FLOAT NOTES

STRUCTURAL STEEL

1. STEEL SHAPES, BARS AND PLATES SHALL BE ASTM A36. STRUCTURAL PIPES SHALL BE ASTM A53 - GRADE B.

WELDING

1. ALL WELDING SHALL CONFORM TO THE LATEST AWS D1.1 (STEEL) OR AWS D1.2 (ALUMINUM) STRUCTURAL WELDING CODES AND SHALL BE PERFORMED BY AWS QUALIFIED STRUCTURAL WELDERS USING QUALIFIED WELDING PROCEDURES. WELDER QUALIFICATIONS AND WELDING PROCEDURES SHALL BE SUBMITTED TO OWNER FOR APPROVAL.
2. NO WELDING THROUGH GALVANIZING SHALL BE PERMITTED, ALL GALVANIZING WITHIN ONE INCH OF THE WELD SHALL BE REMOVED BY GRINDING AND REPAIRED AFTER WELDING IN ACCORDANCE WITH THE APPROVED COATING REPAIR PROCEDURE.
3. ALL WELDS SHALL BE 100% VISUALLY INSPECTED, PRIOR TO GALVANIZING, BY AN AWS QUALIFIED WELD INSPECTOR, AT THE FABRICATOR'S OR CONTRACTOR'S EXPENSE, IN ACCORDANCE WITH THE APPLICABLE AWS D1.1 STEEL WELDING CODE.

GALVANIZING

1. ALL MILD STEEL COMPONENTS SHALL BE HOT-DIP GALVANIZED IN STRICT ACCORDANCE WITH ASTM A123 OR A153 AS APPLICABLE AFTER FABRICATION UNLESS NOTED OTHERWISE. FABRICATION INCLUDES ALL PROCESSES THAT ADD OR SUBTRACT METAL, INCLUDING, BUT NOT LIMITED TO, CUTTING, GRINDING, DRILLING, PUNCHING, AND WELDING.

COATING REPAIR

1. ALL DAMAGED GALVANIZING OR GALVANIZING REMOVED FOR FIELD WELDING SHALL BE REPAIRED IN ACCORDANCE WITH ASTM A780 USING A HOT-STICK REPAIR AND ZINC-RICH PAINT TOP COAT. MINIMUM THICKNESS OF REPAIR COATING IS 12 MILS. REPAIR STICKS SHALL BE GALV-VIZ AS MANUFACTURED BY AMERICAN SOLDER AND FLUX OR APPROVED EQUAL AND SHALL BE MELTED AND EVENLY WIRE BRUSHED ONTO THE ENTIRE REPAIR AREA.

BOLTS AND HARDWARE

1. ALL CONNECTING BOLTS FOR STEEL-TO-STEEL SHALL BE ASTM A325 WITH APPROPRIATE HARDENED WASHERS, LOCK WASHERS, AND HEAVY HEX NUTS.
2. ALL STEEL-TO-PLASTIC FASTENERS SHALL BE ASTM A307 WITH APPROPRIATE WASHERS AND NUTS. ALL CARBON STEEL FASTENERS, NUTS, WASHERS ETC. SHALL BE HOT-DIP GALVANIZED.
3. ALL BOLTED CONNECTIONS THROUGH PLASTIC SHALL INCLUDE SPRING LOCK WASHERS OR LOCK NUTS AS NOTED.
4. ALL STAINLESS STEEL FASTENERS SHALL BE TYPE 316.
5. ALL STEEL-TO-STEEL CONNECTIONS USING A325 BOLTS SHALL BE FULLY TIGHTENED USING TURN-OF-THE-NUT METHOD IN ACCORDANCE WITH THE AISC SPECIFICATION.
6. ALL CONNECTIONS USING A307 OR STAINLESS STEEL BOLTS SHALL BE SNUG TIGHTENED TO THE FOLLOWING TORQUE:
- 1/2" BOLTS = 20 FT. LBS.
 - 5/8" BOLTS = 30 FT. LBS.
 - 3/4" BOLTS = 55 FT. LBS.
7. APPLY ANTI-SEIZE TO ALL STAINLESS STEEL THREADS BEFORE ASSEMBLY.

RUBSTRIPS

1. ALL RUBSTRIPS SHALL BE SELECTFORCE 100% RECYCLED HDPE LUMBER BY TANGENT PLASTICS OR OWNER APPROVED EQUAL. RUBSTRIPS SHALL BE GRAY IN COLOR TO MATCH DECK GRATES.

FLOAT DRUMS

1. FLOAT DRUMS SHALL BE "EAGLE" BY HENDREN PLASTICS OR OWNER APPROVED EQUIVALENT. FLOAT DRUMS SHALL BE SECURELY ATTACHED TO FLOAT SYSTEM SUPPORTS. EACH FLOAT DRUM SHALL HAVE A MINIMUM OF FOUR (4) MOLDED MOUNTING HOLES OR SLOTS.
2. FLOAT DRUMS SHALL PROVIDE 100% ENCAPSULATION OF FOAM CORE AND NOT ALLOW WATER TO ENTER THE UNIT. FLOAT DRUM OUTER SHELLS SHALL BE 100% VIRGIN, LINEAR LOW DENSITY POLYETHYLENE, BLACK IN COLOR, WITH A NOMINAL WALL THICKNESS OF 0.150 INCH AND MINIMUM WALL THICKNESS NOT LESS THAN 0.125 INCH.

UHMW POLYETHYLENE

1. PILE HOOP LINERS AND OTHER POLYETHYLENE COMPONENTS SHALL BE BLACK, FULLY OR PARTIALLY CROSS- LINKED, UV STABILIZED ULTRA-HIGH MOLECULAR WEIGHT (UHMW) POLYETHYLENE.

DECK GRATES

1. DECK GRATES SHALL BE ADA COMPATIBLE, MOLDED FIBERGRATE ECOGRATE 62, FIBER REINFORCED PLASTIC USING VINYLESTER, PREMIUM GRADE, FIRE RETARDENT, UV STABLE RESIN. GRATING SHALL HAVE A MINIMUM 60 PERCENT OPEN AREA AND BE DARK GRAY IN COLOR WITH INTEGRAL GRIT NON-SKID TOP SURFACE. DECK GRATES SHALL BE ATTACHED TO WALERS AND LEDGERS USING CLOSE FIT, 'G' STYLE CLIPS.

CLEATS

1. CLEATS SHALL BE 12" HEAVY-DUTY CAST STEEL WITH TOPS RECESSED FOR 5/8"Ø HEX HEAD BOLTS. CLEATS SHALL BE THROUGH-BOLTED IN THE LOCATIONS SHOWN ON THE DRAWINGS.

FLOAT IDENTIFICATION

1. EACH FLOAT SHALL INCLUDE A PERMANENTLY ATTACHED, DURABLE PLACARD AT EACH FLOAT END THAT LISTS THE FLOAT MANUFACTURER, DATE OF FABRICATION, FLOAT ID, AND WEIGHT IN POUNDS.

GENERAL DESIGN CRITERIA

1. THE INTENT OF THE DESIGN IS TO MEET OR EXCEED THE STRENGTH AND PERFORMANCE OF THE PREVIOUS WASHINGTON STATE PARKS TIMBER FRAMED FLOAT SYSTEM.
2. ALL WEIGHTS SHOWN IN THE DRAWINGS ARE APPROXIMATE AND PROVIDED FOR CONTRACTOR CONVENIENCE. ALL WEIGHTS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE SHIPPING TO SITE.
3. ALL QUANTITIES LISTED IN THE DRAWINGS PROVIDED FOR CONTRACTOR CONVENIENCE. ALL QUANTITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE SHIPPING TO SITE.
- WIND LOAD = 110 LBS./FT. (INCLUDES VESSEL PROFILE)
 - CURRENT LOAD = 5 LBS./FT. (INCLUDES VESSEL DRAFT)
 - WAVE LOAD = 250 LBS./FT.
 - ANTICIPATED DESIGN LIFE = 30 YEARS

12' X 32' MOORAGE FLOATS

- FLOAT WEIGHT = 6,900 LBS. (18 PSF)
- FLOTATION FOOTPRINT = 33%
- FUNCTIONAL GRATING = 47%
- DEAD LOAD FREEBOARD = 15.5"
- LIVE LOAD FREEBOARD = 7"
- LIVE LOAD CAPACITY = 13.0 PSF (5,000 LBS.)

6' X 24' DINGHY FLOATS

- FLOAT WEIGHT = 3,260 LBS. (22.6 PSF)
- FLOTATION FOOTPRINT = 42%
- FUNCTIONAL GRATING = 38%
- DEAD LOAD FREEBOARD = 13.5"
- LIVE LOAD FREEBOARD = 7"
- LIVE LOAD CAPACITY = 13.5 PSF (1,950 LBS.)

12' X 24' ISLAND FLOATS

- FLOAT WEIGHT = 5,700 LBS. (20 PSF)
- FLOTATION FOOTPRINT = 33%
- FUNCTIONAL GRATING = 47%
- DEAD LOAD FREEBOARD = 15.5"
- LIVE LOAD FREEBOARD = 7"
- LIVE LOAD CAPACITY = 13.0 PSF (3,800 LBS.)

ABBREVIATIONS

CARR	CARRIAGE HEAD
ECON	ECONOMY HEAD
EPS	EXPANDED POLYSTYRENE
MACH	MACHINE (HEX) HEAD
HFV	HARDENED FLAT WASHER
HHN	HEAVY HEX NUT
FW	FLAT (CUT) WASHER
PW	PLATE WASHER
LW	SPRING LOCK WASHER
MI	MALLEABLE IRON WASHER
N	HEX NUT
RPL	RECYCLED PLASTIC LUMBER
SS	STAINLESS STEEL
GALV.	GALVANIZED

CAD NO. S-4812-Z41-2022-FLOAT NOTES

	DATE
	APP.
	INT.
	REVISIONS
	NO.

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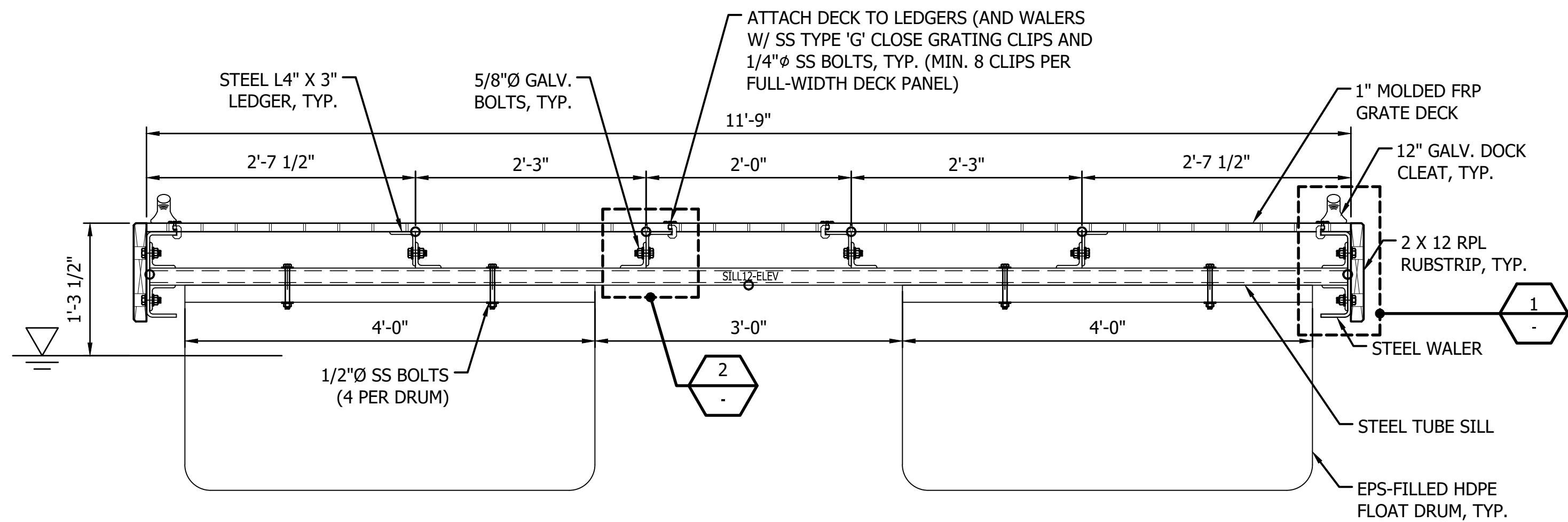
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FLOAT NOTES

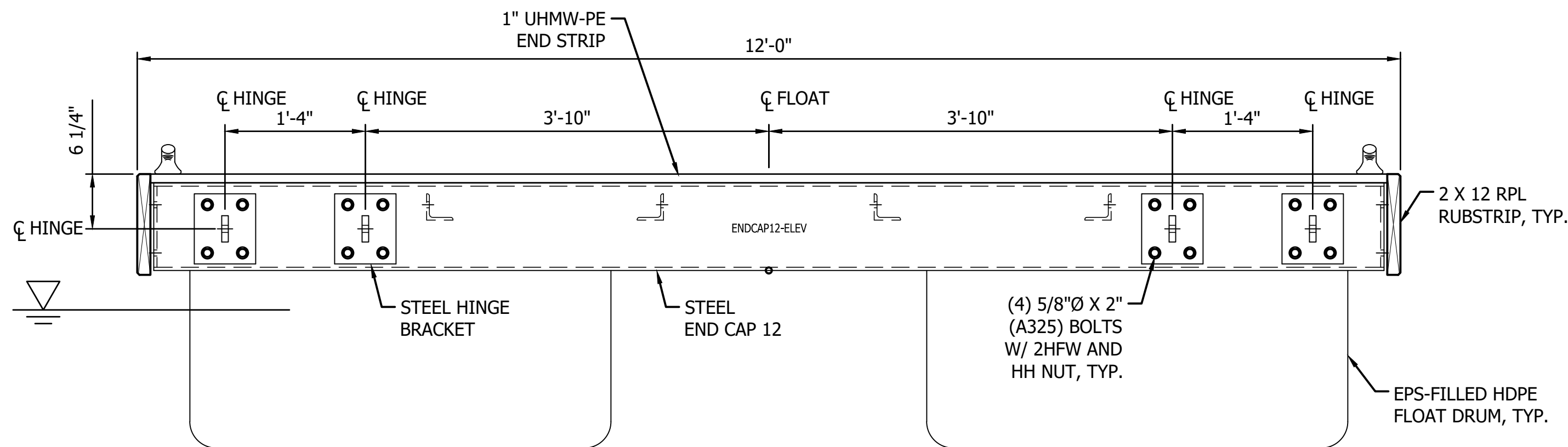
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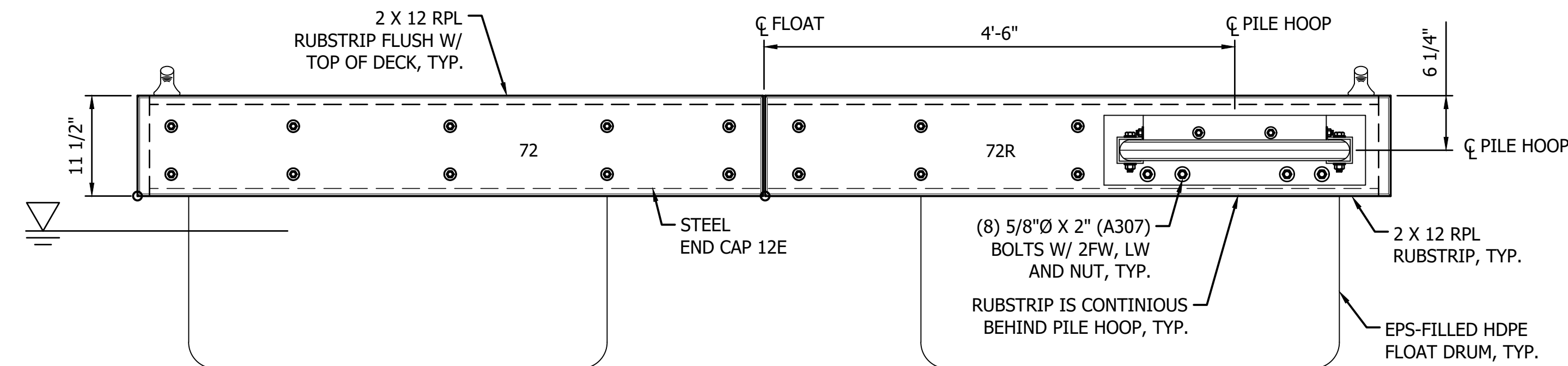
SHEET 24 OF 47



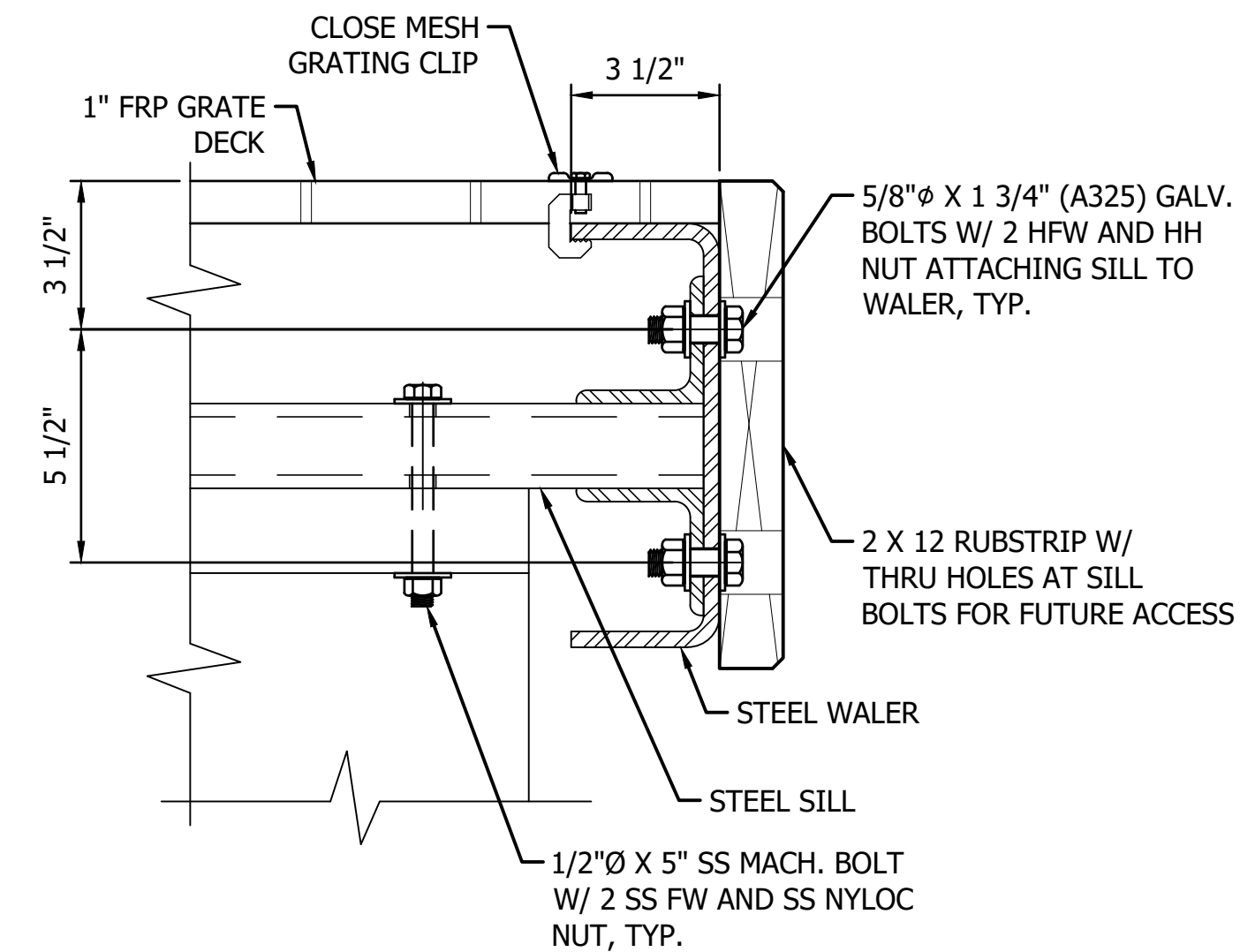
SECTION - FLOAT
 25 28
 0 1' 2'



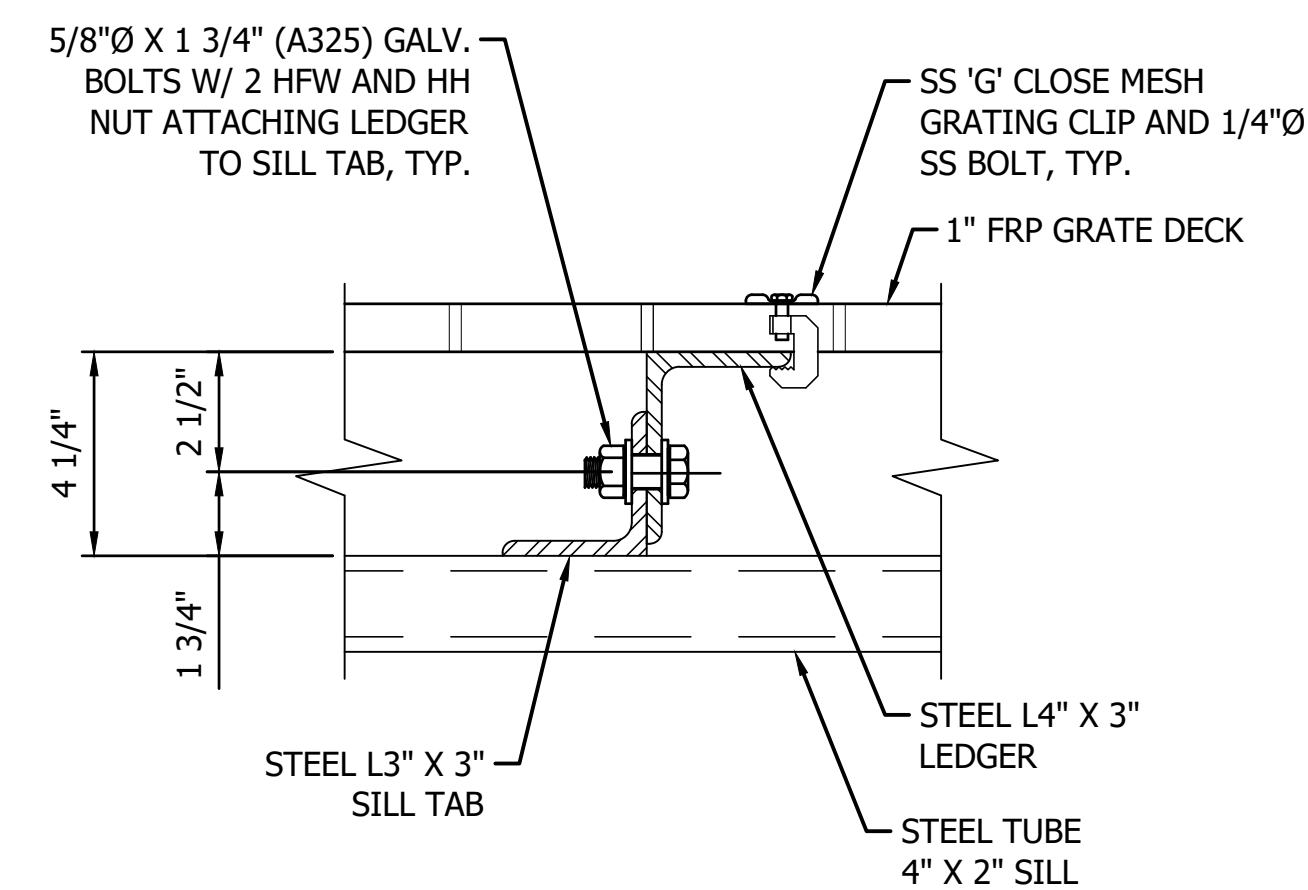
SECTION - HINGE ENDS
 25 28
 MALE FLOAT END SHOWN
 FEMALE FLOAT END SIMILAR
 0 1' 2'



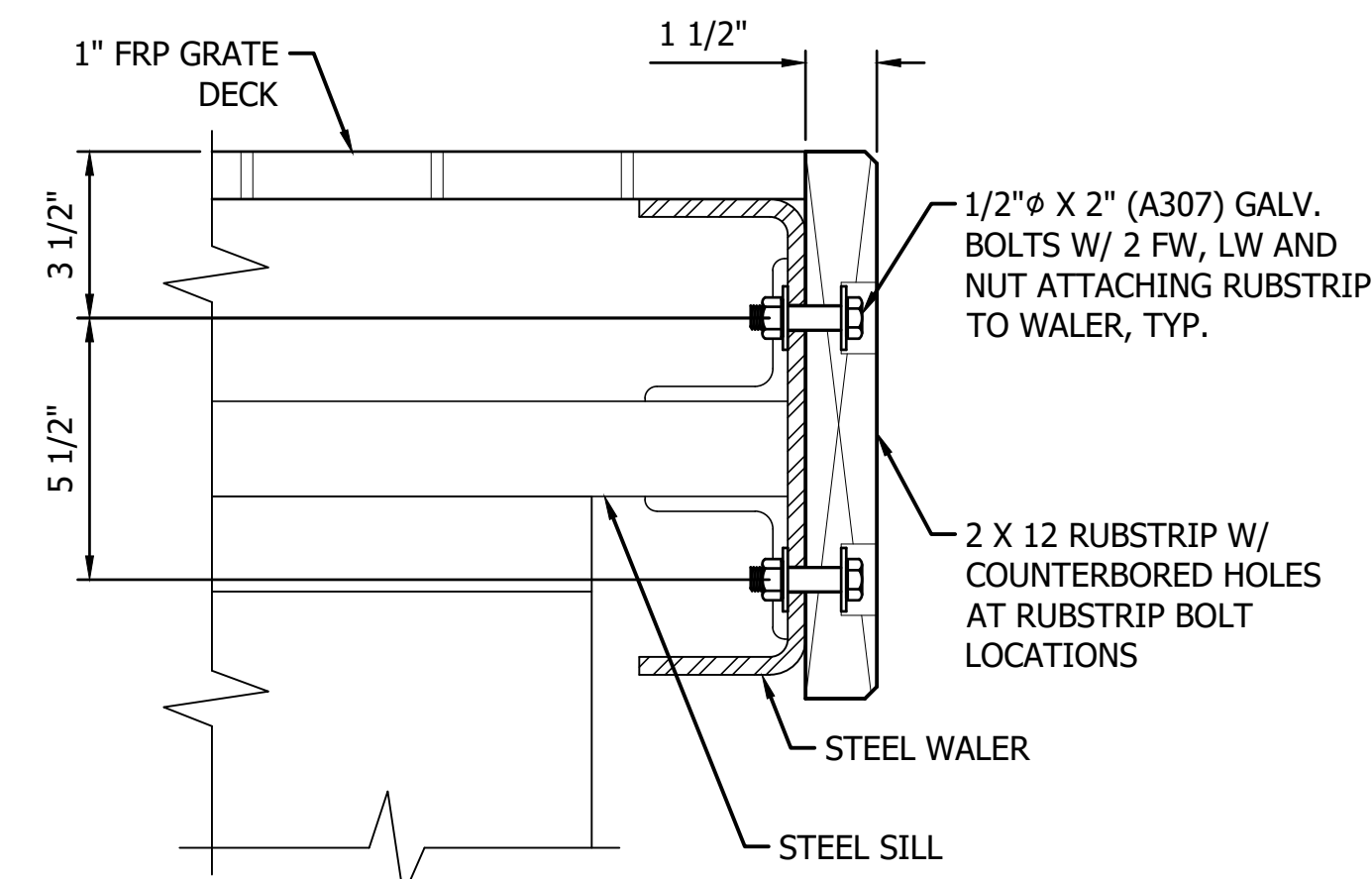
SECTION - PILE HINGE ENDS
 25 28
 RIGHT HAND PILE END SHOWN
 LEFT HAND PILE END SIMILAR
 0 1' 2'



DETAIL - WALER ASSEMBLY
 25 26
 0 4\"/>



DETAIL - LEDGER ASSEMBLY
 25 26
 0 4\"/>



DETAIL - RUBSTRIP ASSEMBLY
 25 26
 0 4\"/>

CAD NO. S-4812-Z41-2022-MOORAGE AND ISLAND FLOAT SECTIONS AND DETAILS

	DATE
	APP.
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 STATE
 PARKS
 AND
 RECREATION
 COMMISSION

STUART ISLAND
 STATE PARK

REID HARBOR
 MOORAGE FACILITY
 IMPROVEMENTS

MOORAGE AND
 ISLAND FLOAT
 SECTIONS AND
 DETAILS

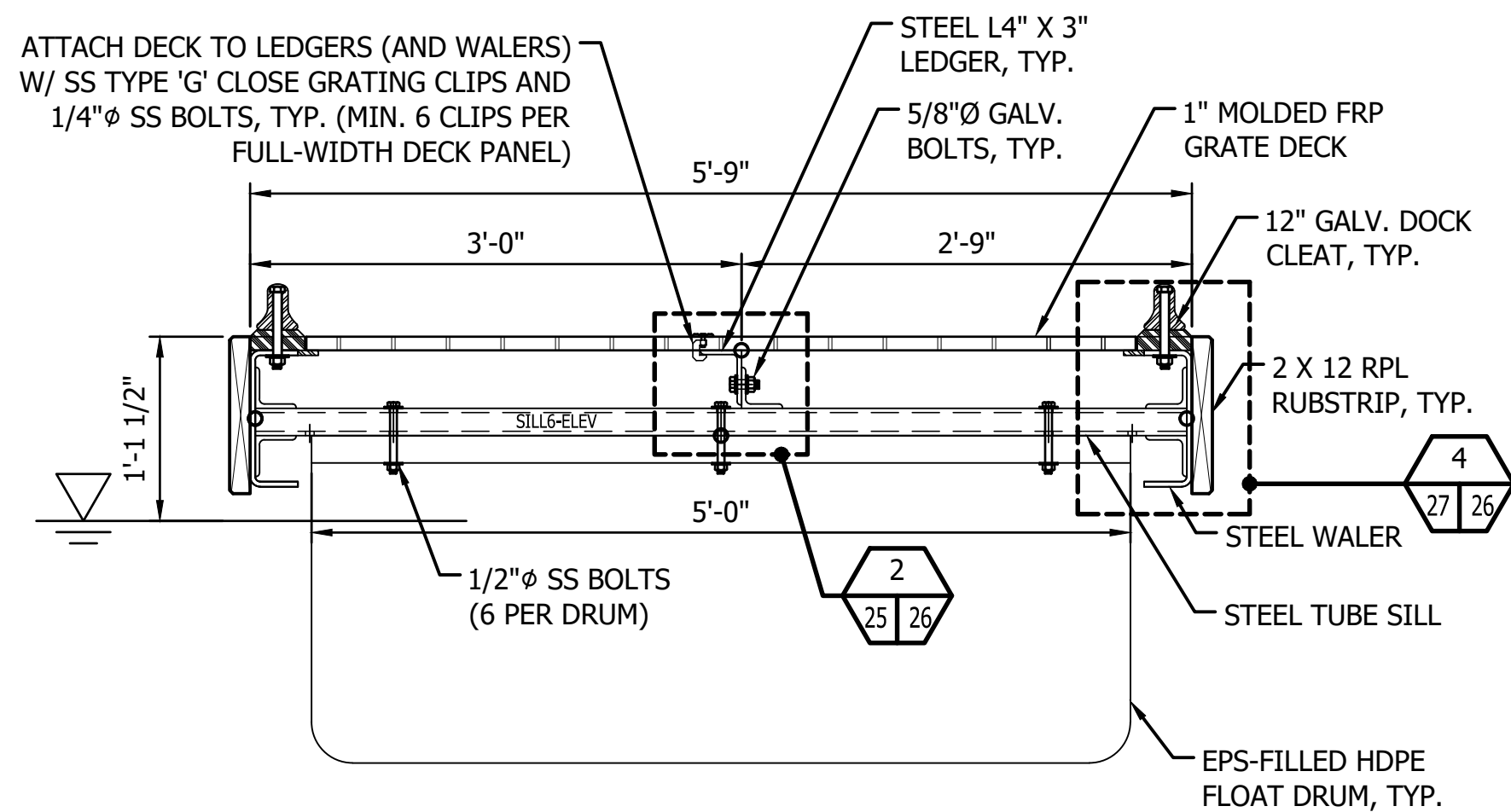
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AS SHOWN

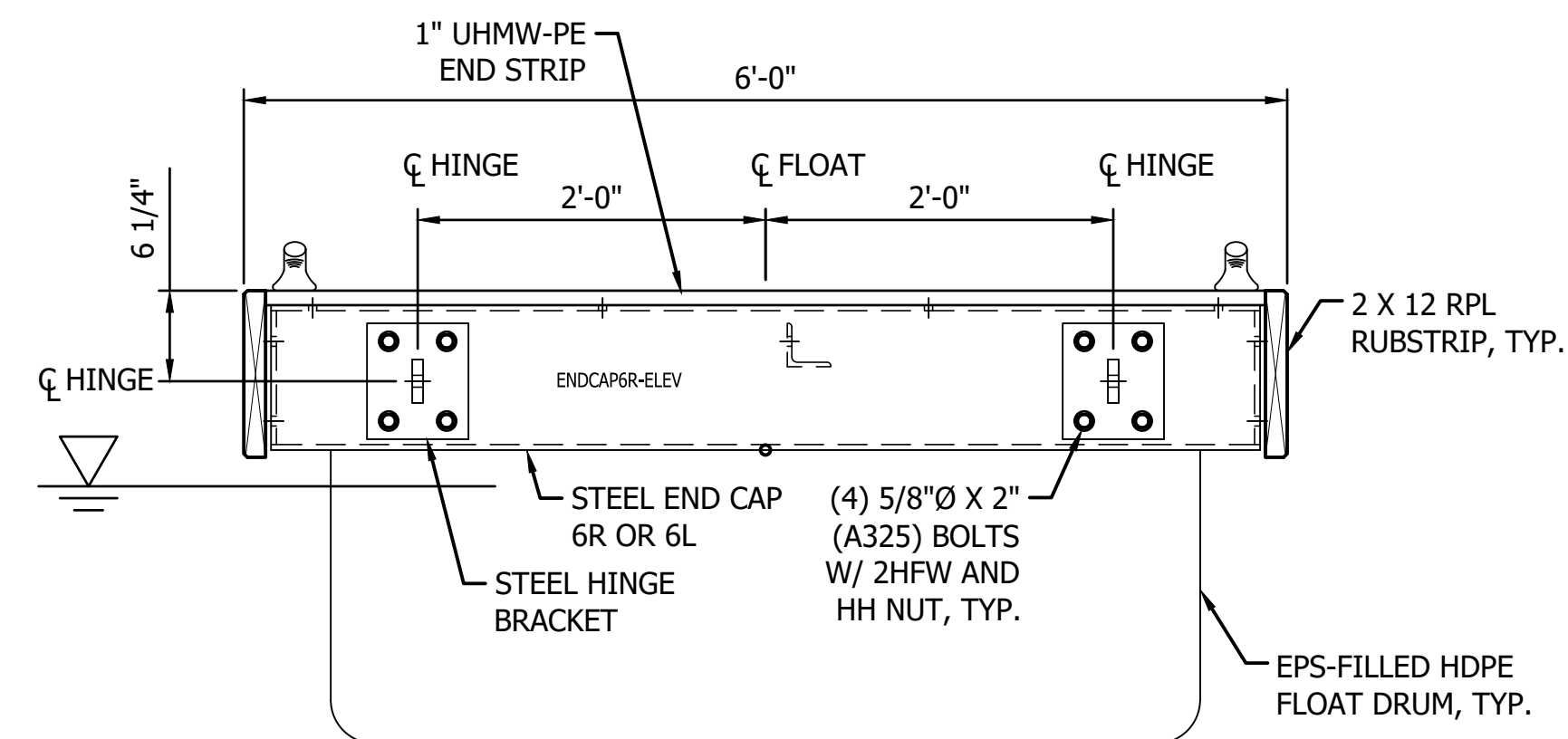
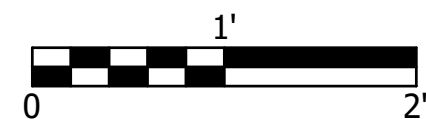
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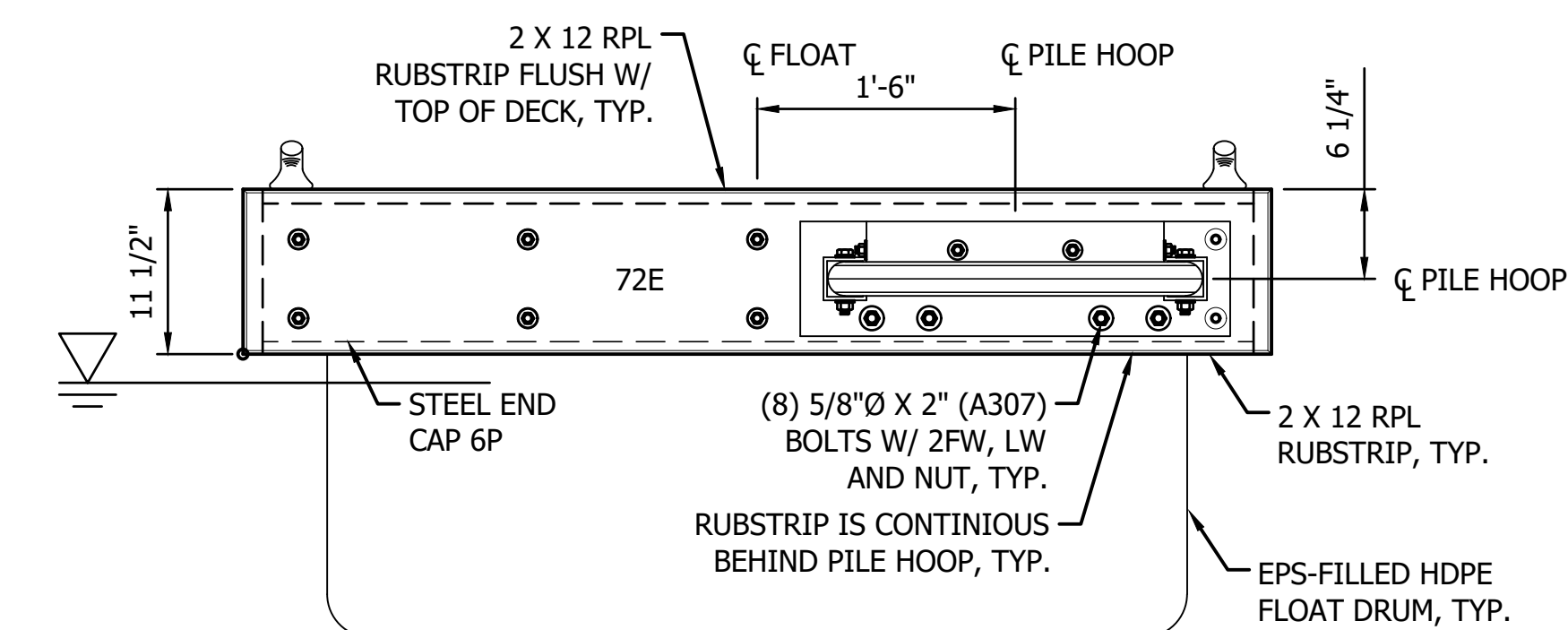
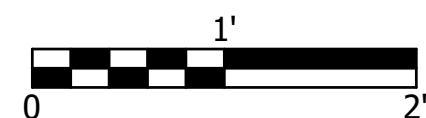
SHEET 25 OF 47



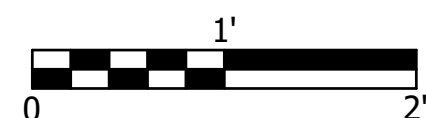
SECTION - DINGHY FLOAT



SECTION - DINGHY FLOAT HINGE ENDS
MALE FLOAT END SHOWN
FEMALE FLOAT END SIMILAR



SECTION - DINGHY FLOAT PILE HOOP END



CAD NO. S-4812-741-2022-DINGHY FLOAT SECTIONS

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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IMPROVEMENTS

DINGHY FLOAT
SECTIONS

SCALE
AS SHOWN

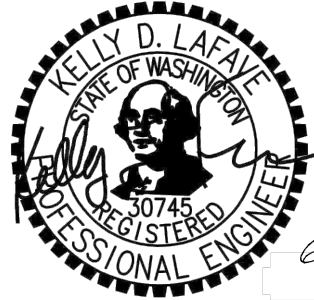
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BID SET

SHEET 26 OF 47

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

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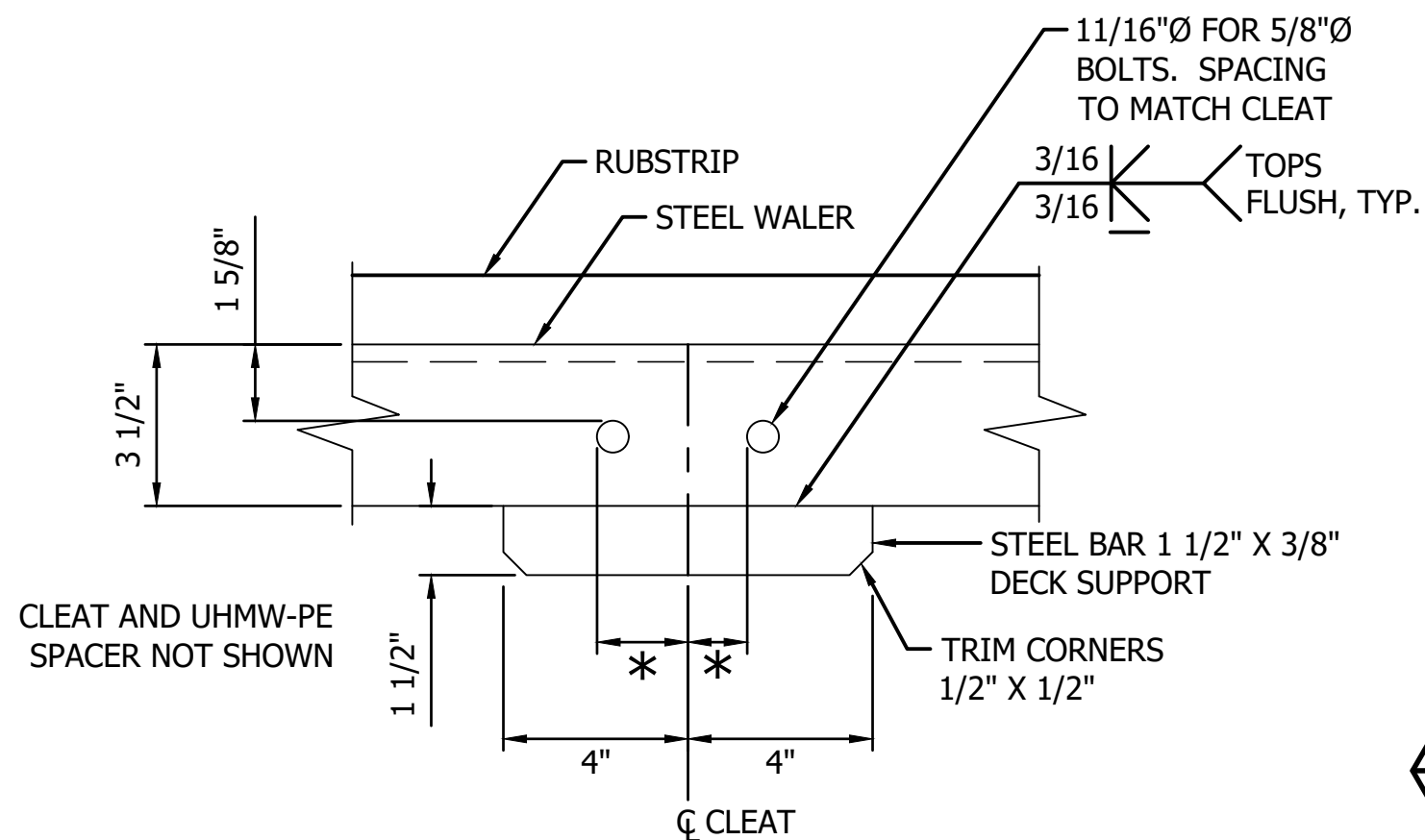
STUART ISLAND
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IMPROVEMENTS

TYPICAL FLOAT
DETAILS

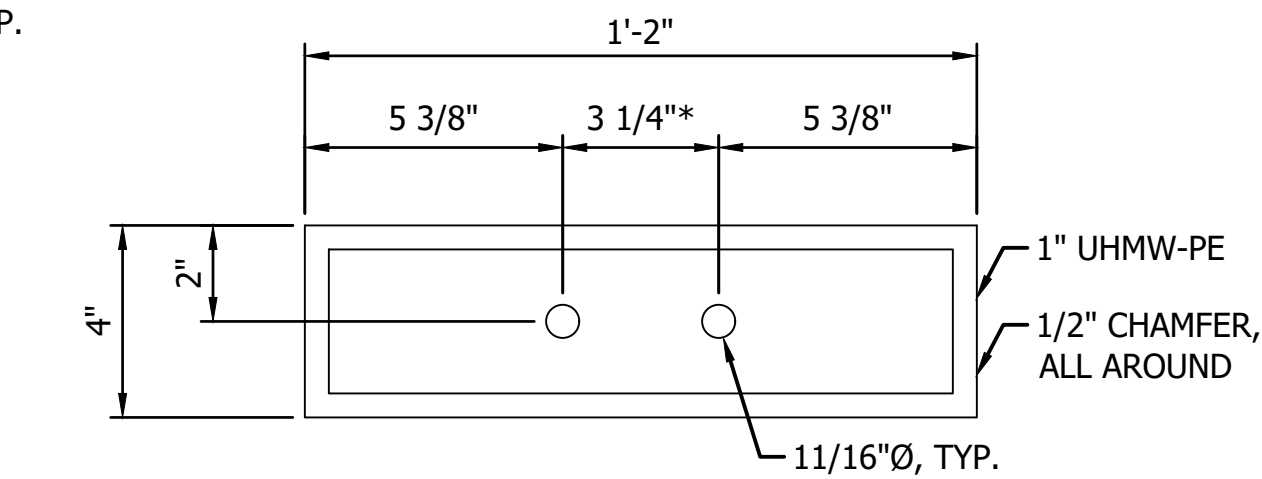
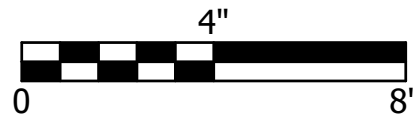
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PARKS FILE#



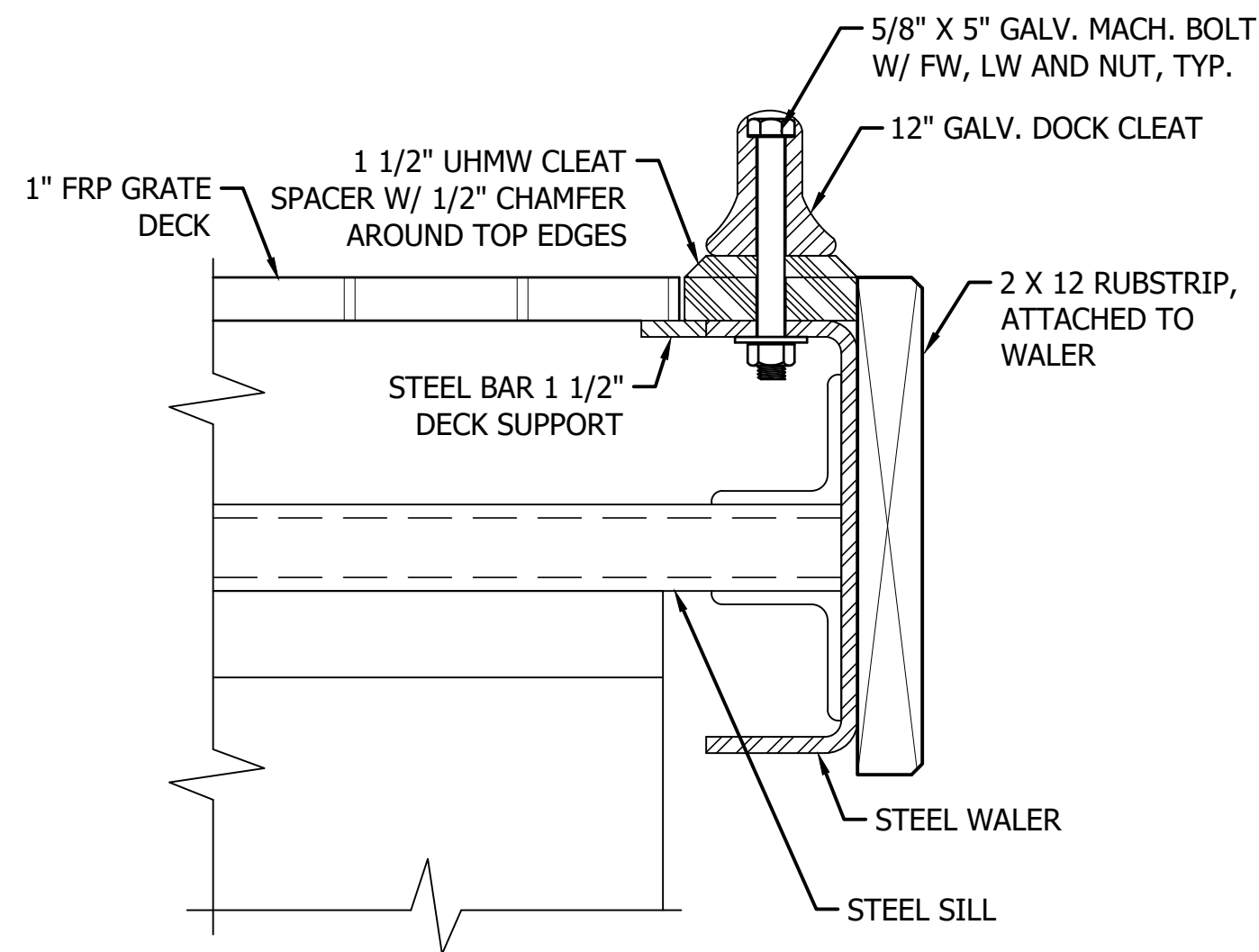
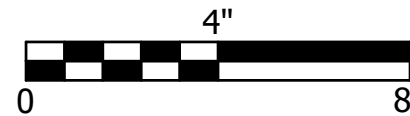
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27 28
DETAIL - CLEAT PLAN

*VERIFY AND MATCH CLEAT HOLE SPACING

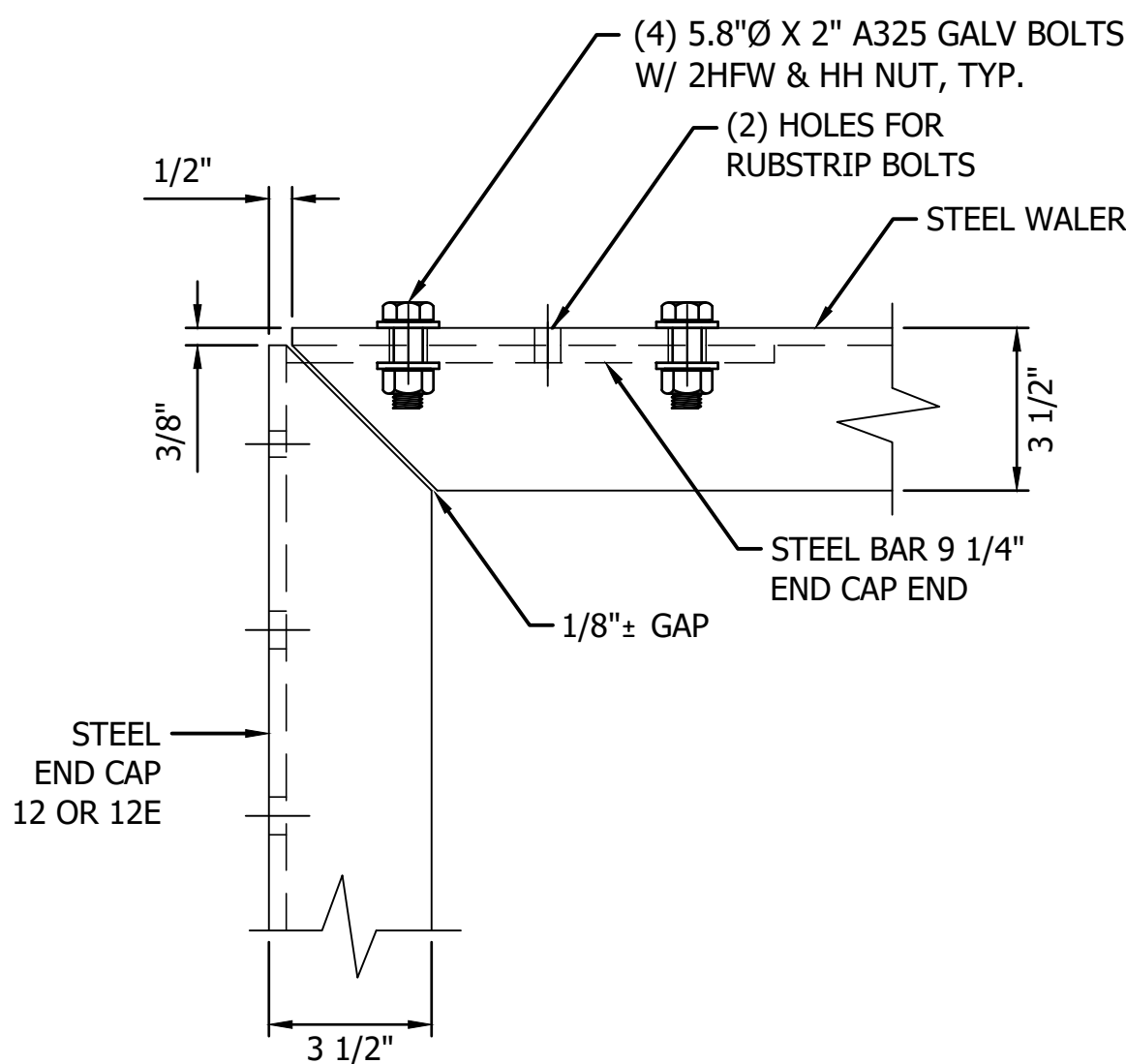
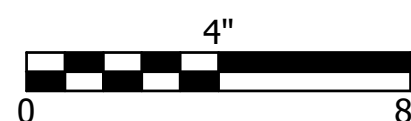


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DETAIL - UHMW CLEAT SPACER

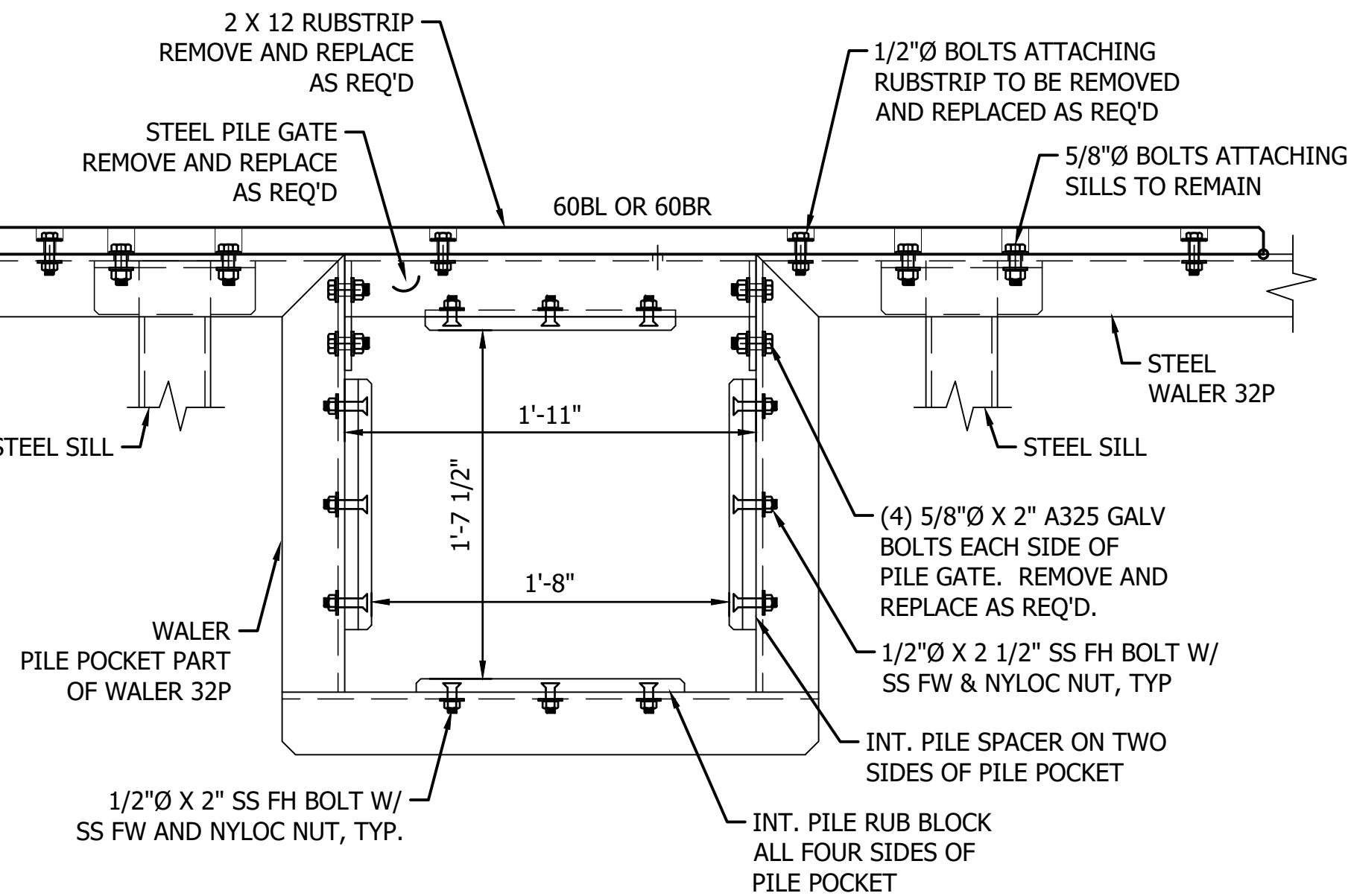
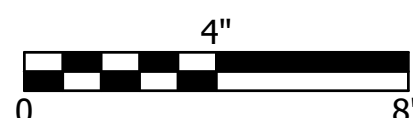
96 REQ'D
*VERIFY AND MATCH CLEAT HOLE SPACING



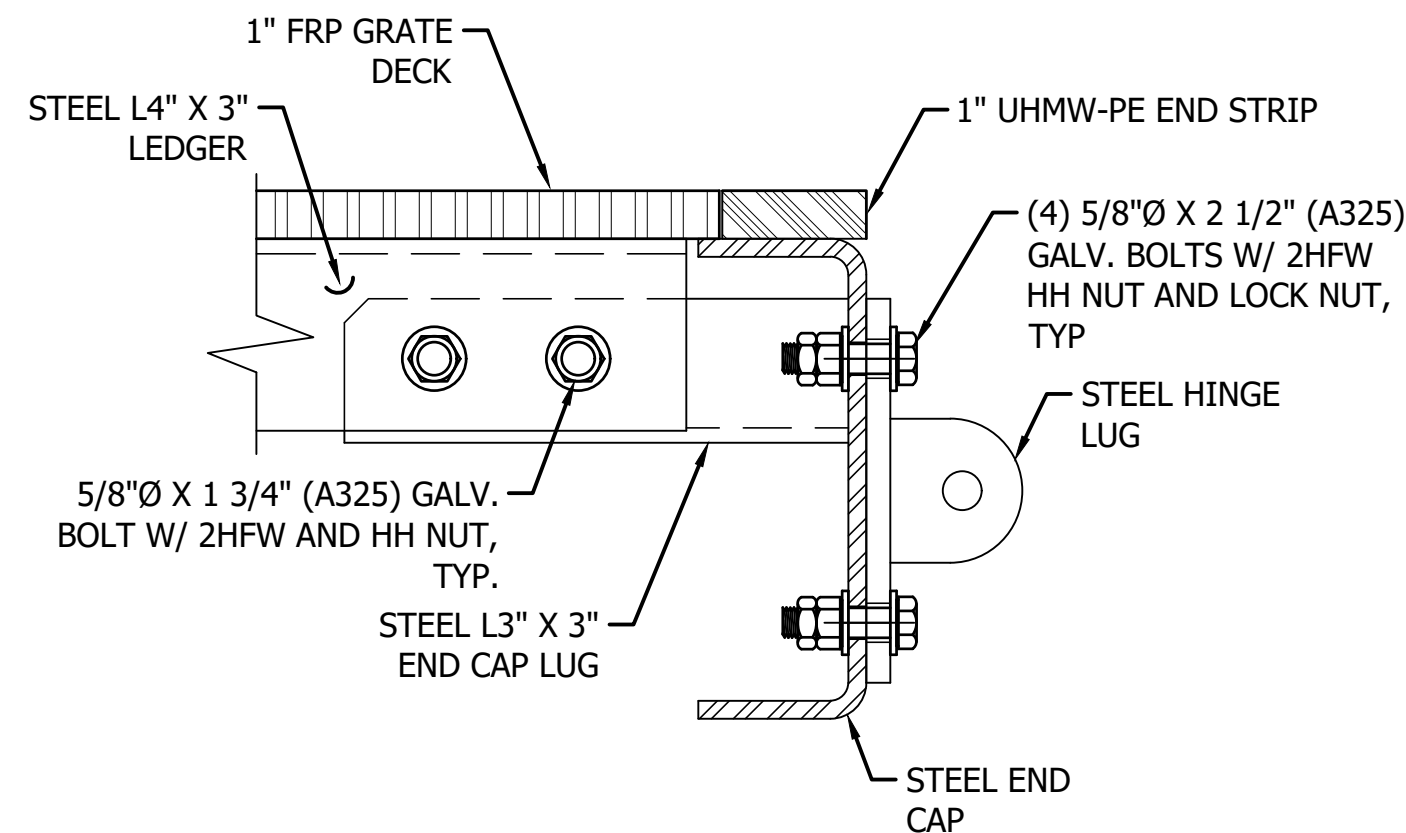
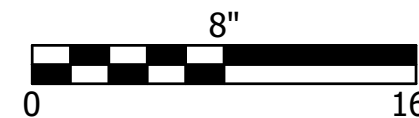
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DETAIL - CLEAT



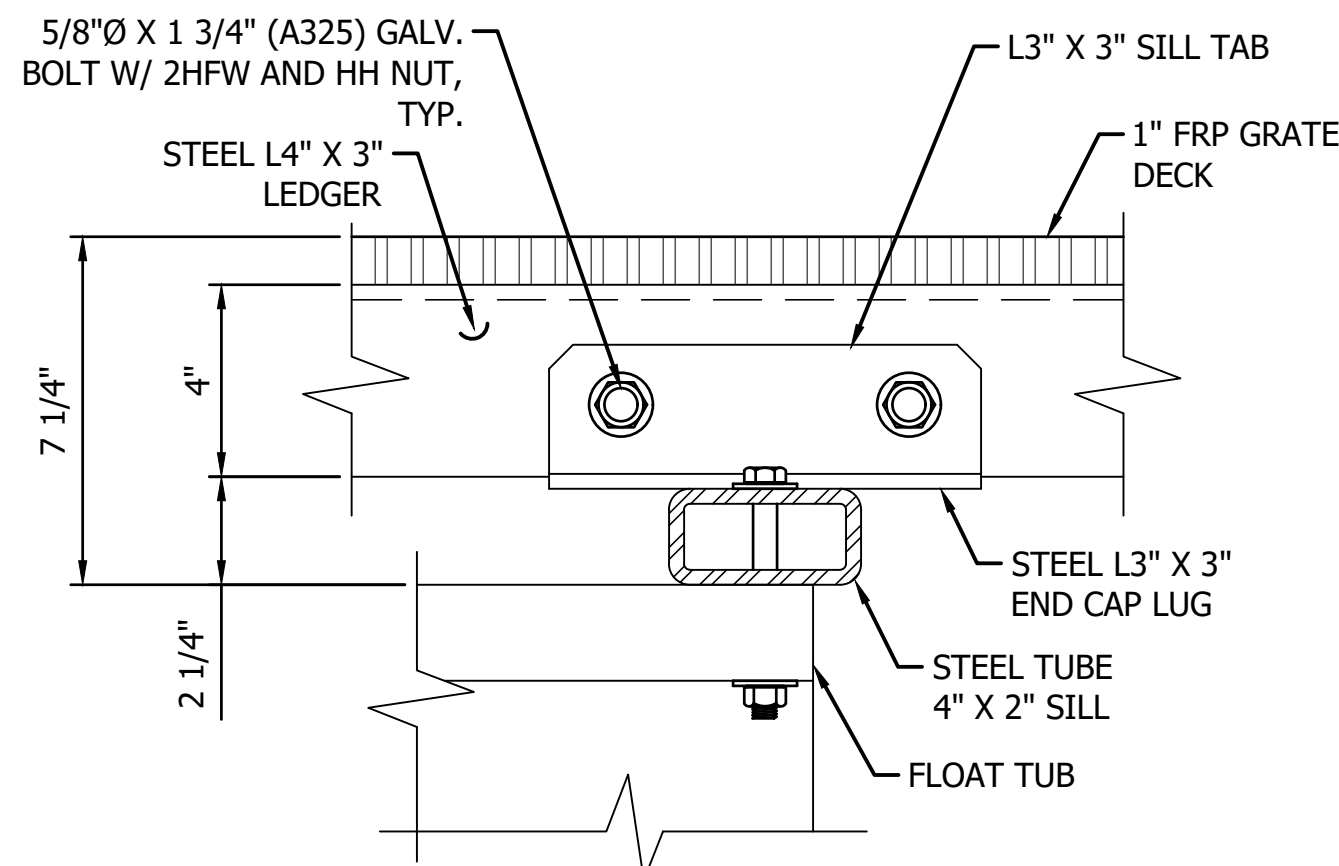
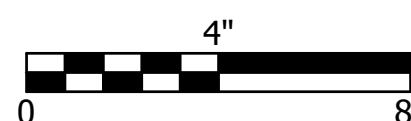
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DETAIL - CORNER PLAN



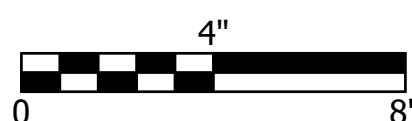
3
27 28
DETAIL - PILE POCKET ASSY



6
27 28
DETAIL - HINGE LUG

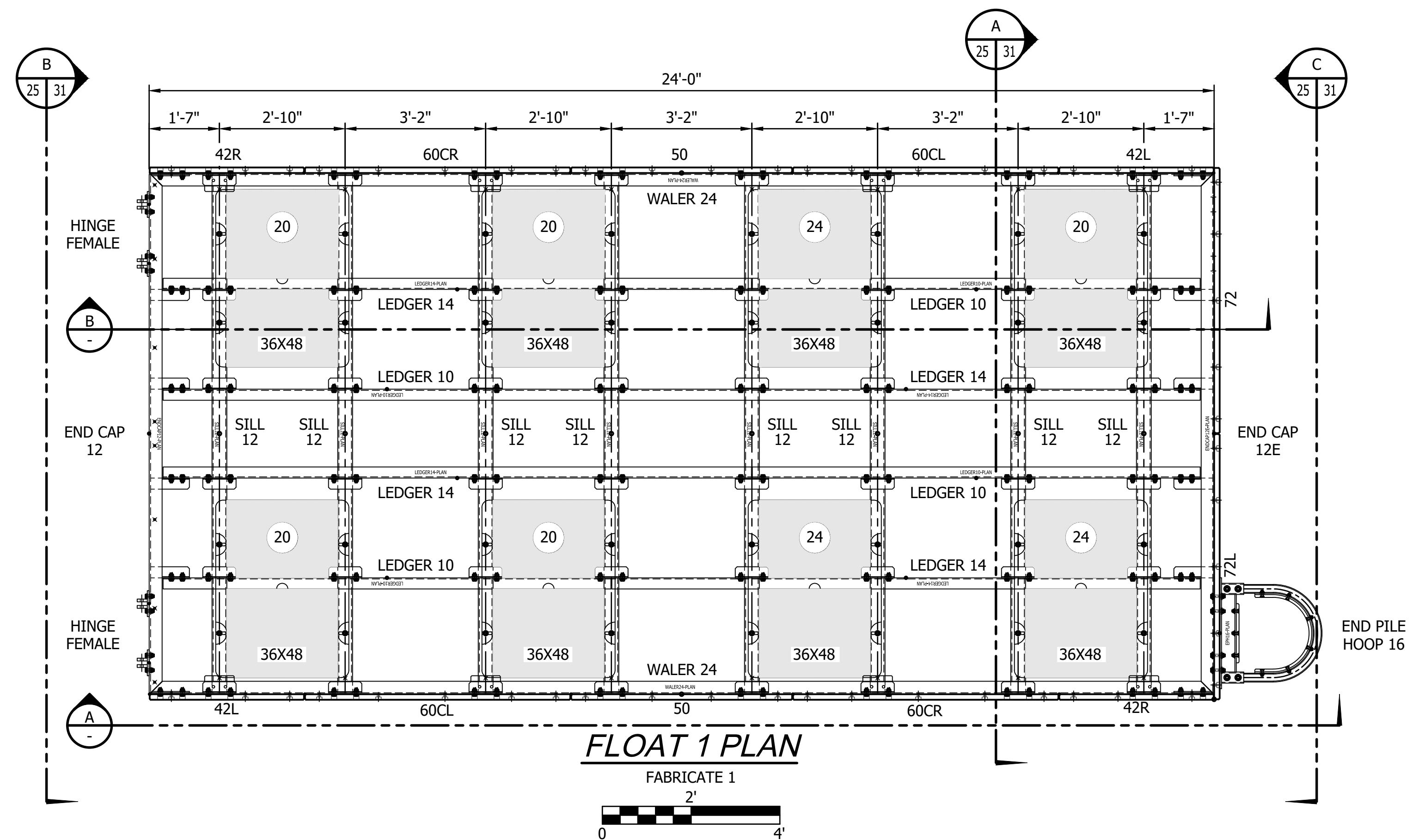


7
27 28
DETAIL - SILL-LEDGER



BID SET

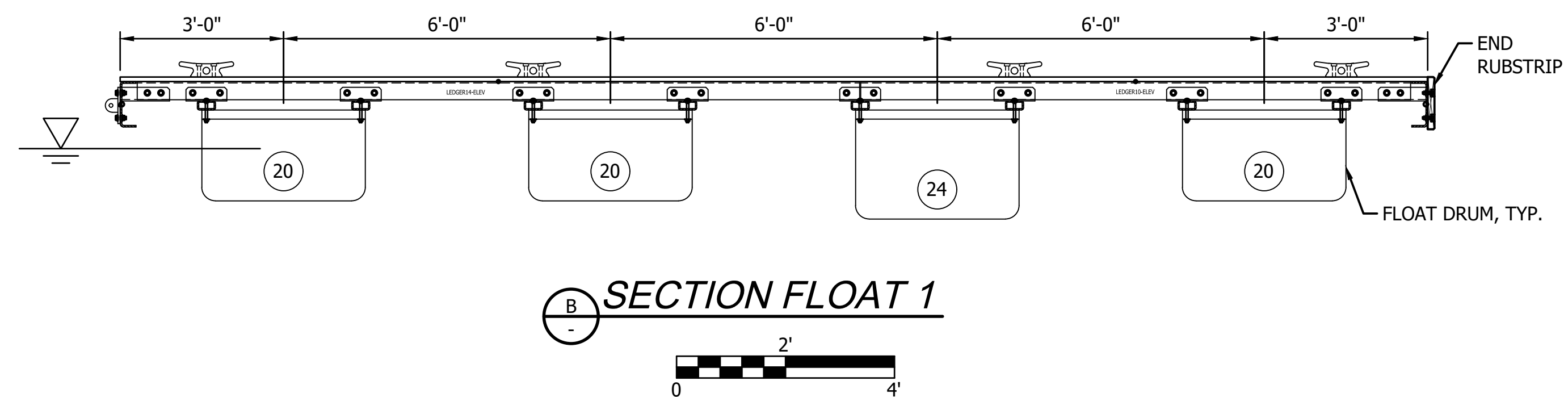
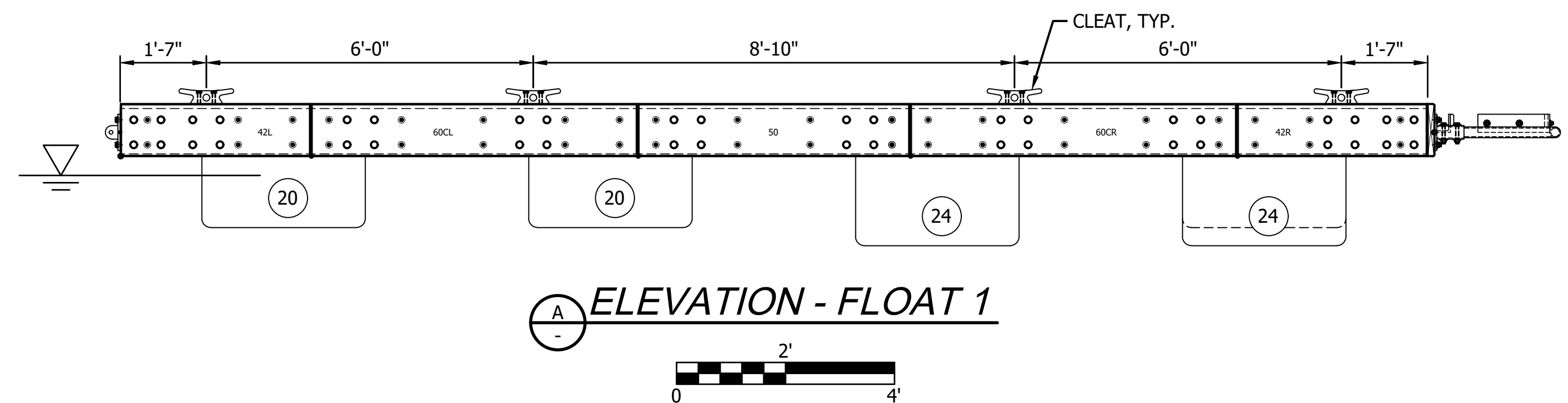
SHEET 27 OF 47



<u>PER ONE FLOAT UNIT</u>	
STEEL COMPONENTS	
<u>CODE</u>	<u>QUANTITY</u>
WALER 24	2
SILL 12	8
END CAP 12	1
END CAP 12E	1
LEDGER 14	4
LEDGER 10	4
END PILE HOOP 16	1
HINGE FEMALE	4

FLOAT DRUMS	
CODE	QUANTITY
36 X 48 X 20	5
36 X 48 X 24	3
	<hr/> 8

RUBSTRIP	
CODE	QUANTITY
42L	2
42R	2
60CL	2
60CR	2
50	2
72	1
72L	1
	<hr/> 12



NOTES

1. SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

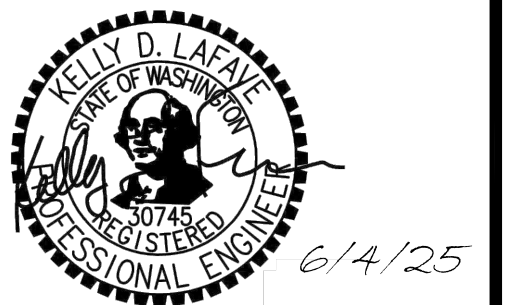
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SHEET 31 OF 47

CAD NO. S-4812-Z41-2022-FLOAT '1' PLAN,
ELEVATION AND SECTION

NO.	REVISIONS	INT.	APP.	DATE

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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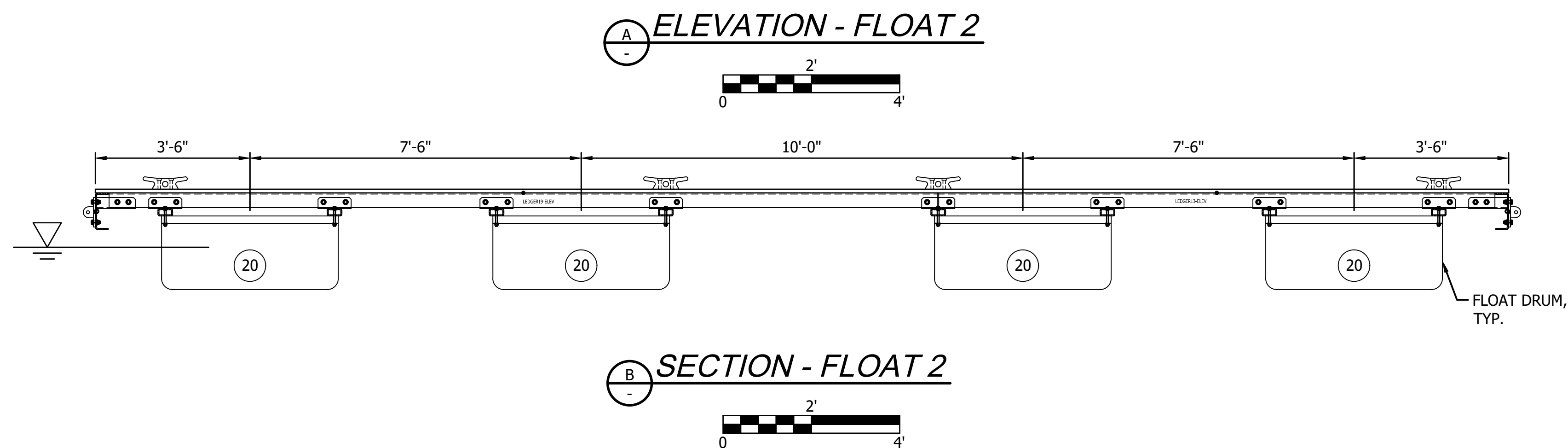
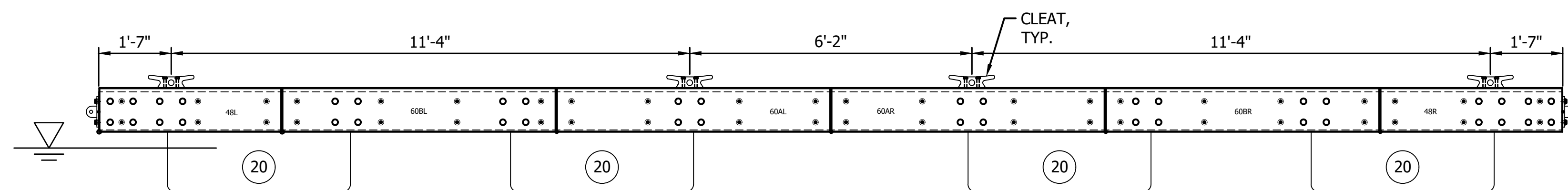
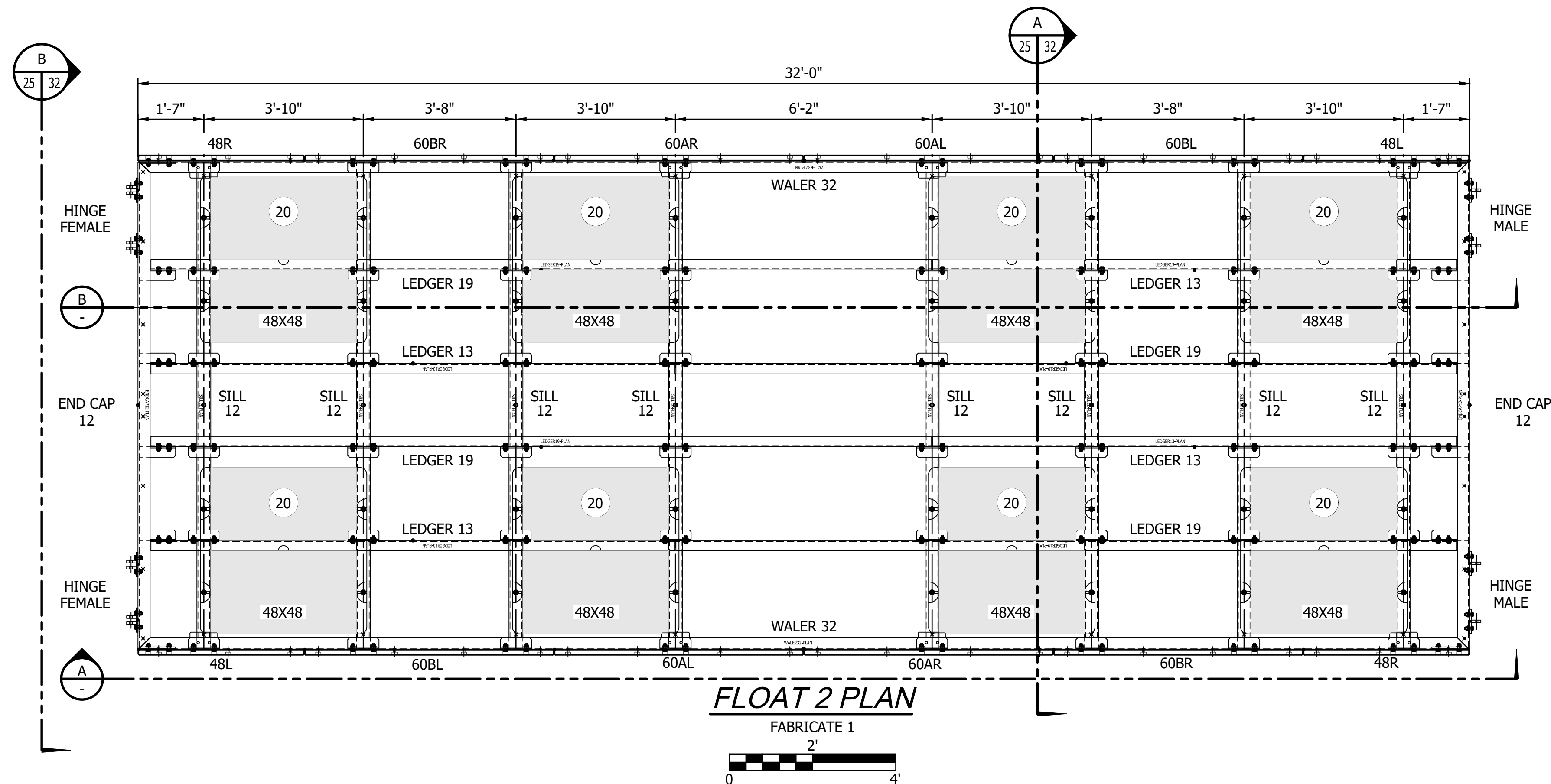
REID HARBOR MOORAGE FACILITY IMPROVEMENTS

FLOAT '1' PLAN,
ELEVATION AND
SECTION

SCALE

AS SHOWN

PARKS FILE#



PER ONE FLOAT UNIT	
STEEL COMPONENTS	
CODE	QUANTITY
WALER 32	2
SILL 12	8
END CAP 12	2
LEDGER 19	4
LEDGER 13	4
HINGE MALE	4
HINGE FEMALE	4

FLOAT DRUMS	
CODE	QUANTITY
48 X 48 X 20	8
	8

RUBSTRIP	
CODE	QUANTITY
48L	2
48R	2
60AL	2
60AR	2
60BL	2
60BR	2
	12

CAD NO. S-4812-Z41-2022-FLOAT '2' PLAN, ELEVATION AND SECTION

DATE

APP.

INT.

REVISIONS

NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25

6/4/25

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REID HARBOR MOORAGE FACILITY IMPROVEMENTS

FLOAT '2' PLAN, ELEVATION AND SECTION

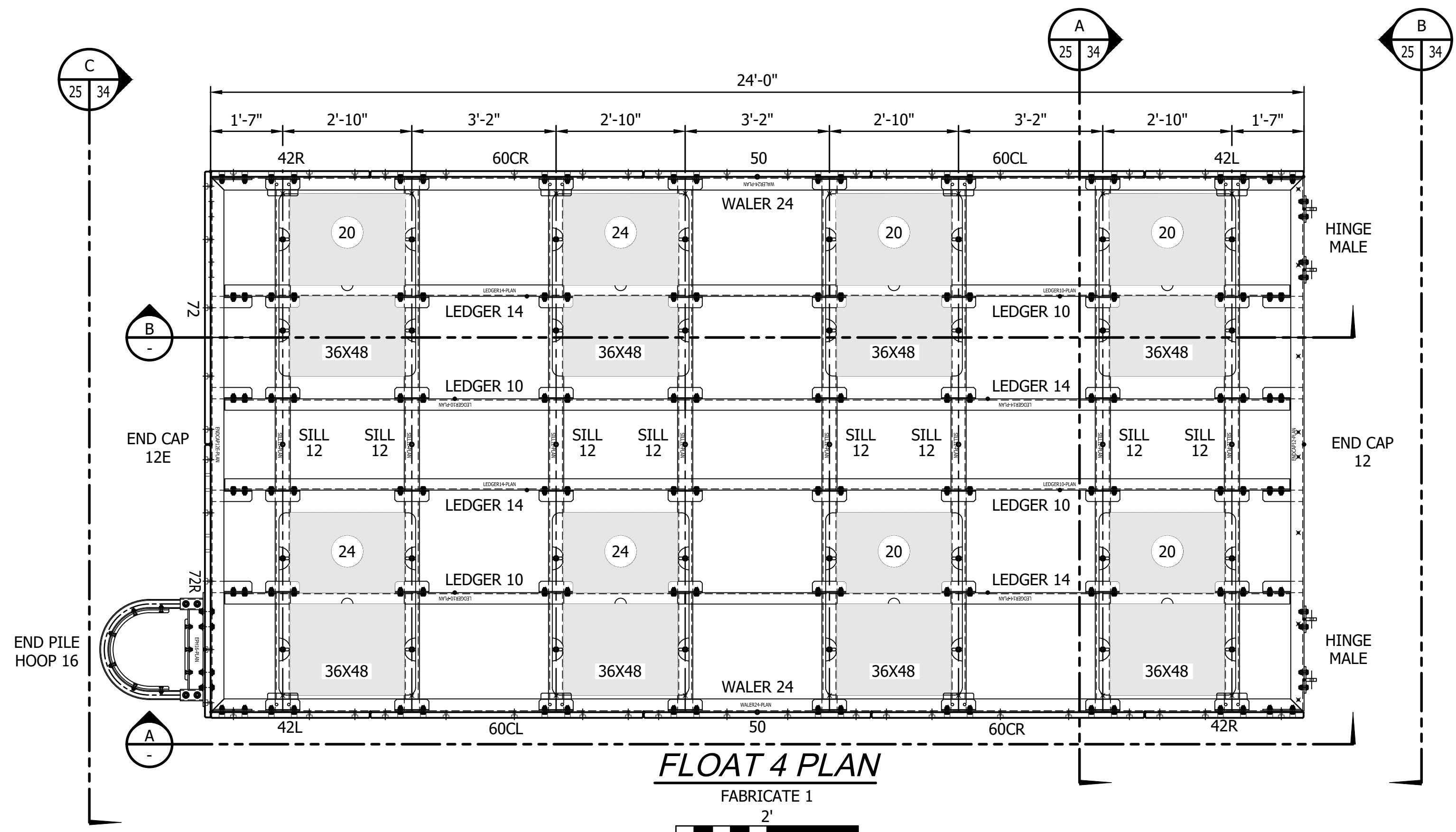
SCALE

AS SHOWN

PARKS FILE#

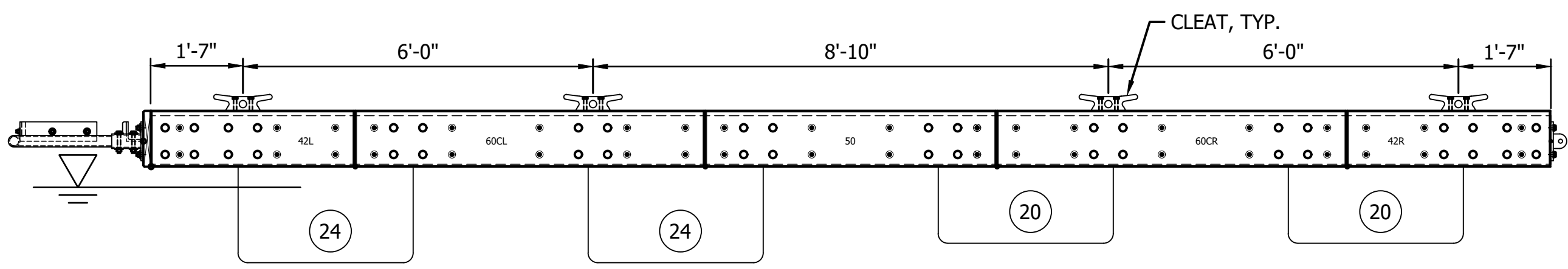
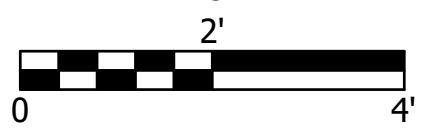
NOTES

1. SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

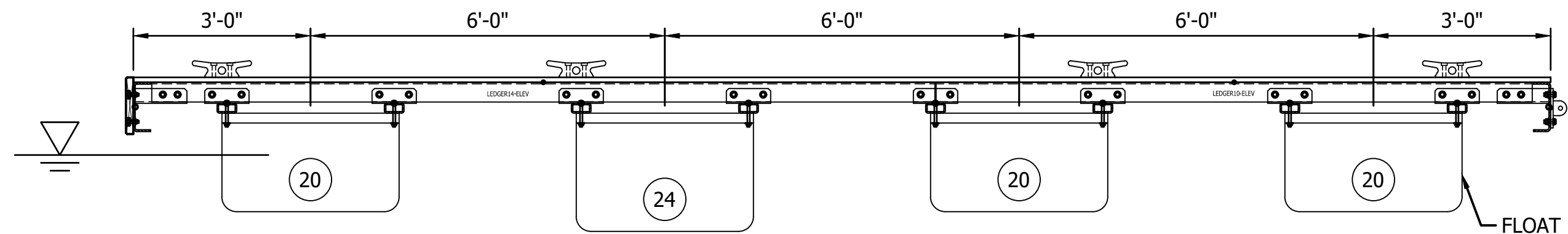
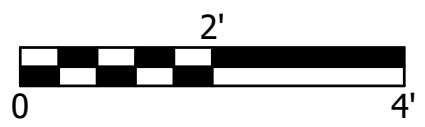


FLOAT 4 PLAN

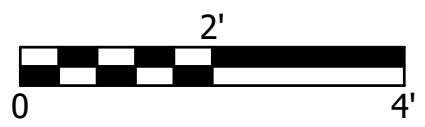
FABRICATE 1



ELEVATION - FLOAT 4



SECTION - FLOAT 4



PER ONE FLOAT UNIT	
STEEL COMPONENTS	
CODE	QUANTITY
WALER 24	2
SILL 12	8
END CAP 12	1
END CAP 12E	1
LEDGER 14	4
LEDGER 10	4
END PILE HOOP 16	1
HINGE MALE	4

FLOAT DRUMS	
CODE	QUANTITY
36 X 48 X 20	5
36 X 48 X 24	3
	8

RUBSTRIP	
CODE	QUANTITY
42L	2
42R	2
60CL	2
60CR	2
50	2
72	1
72R	1
	12

CAD NO. S-4812-Z41-2022-FLOAT '4' PLAN, ELEVATION AND SECTION

	DATE
APP.	
INT.	
REVISIONS	
NO.	

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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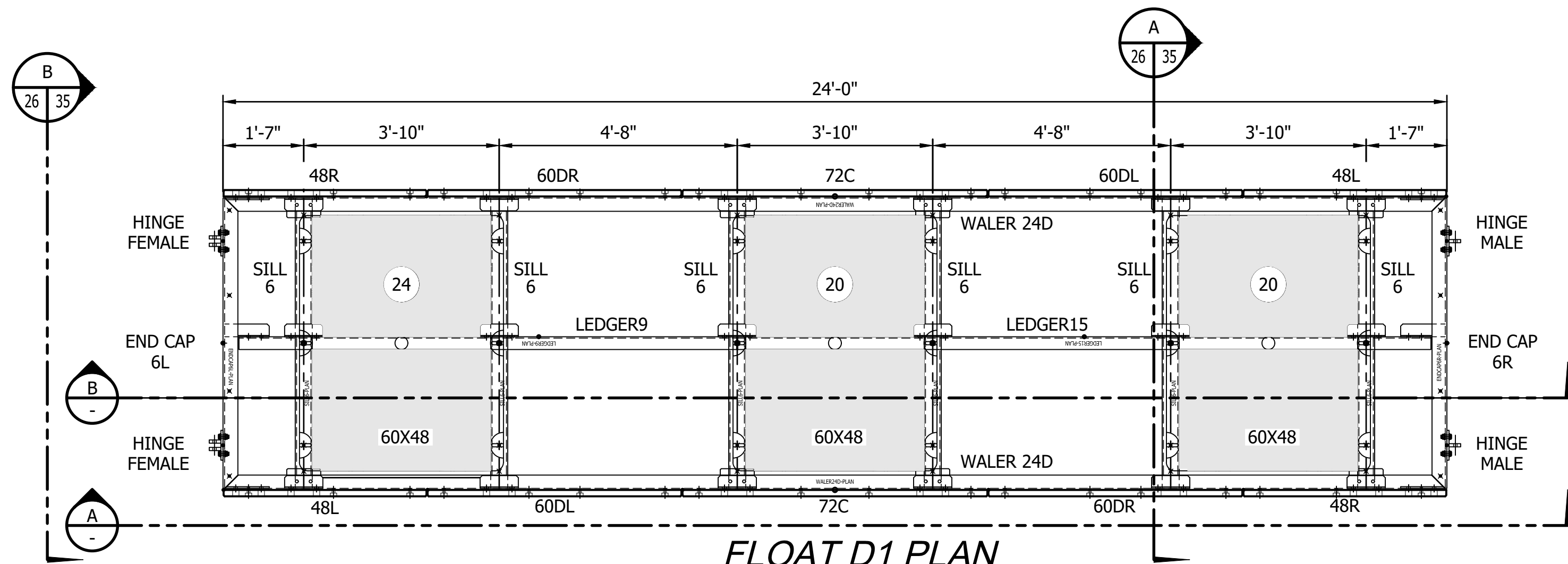
FLOAT '4' PLAN,
ELEVATION AND
SECTION

SCALE
AS SHOWN

PARKS FILE#

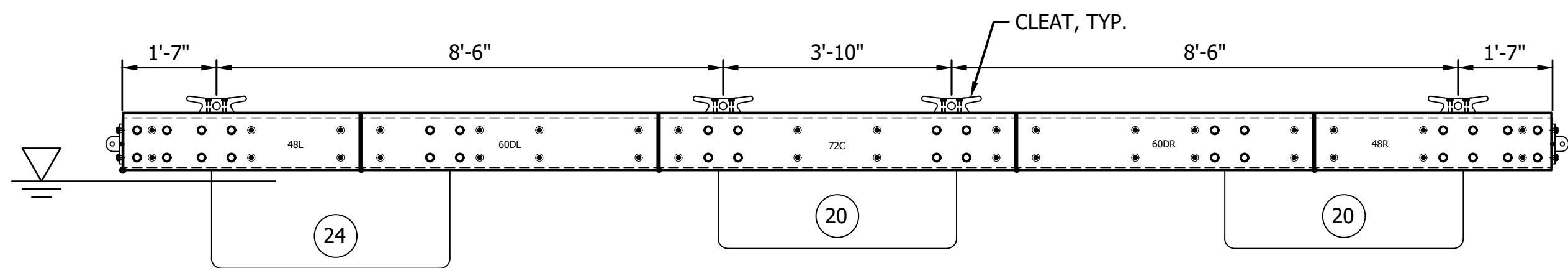
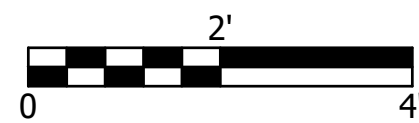
NOTES

- SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

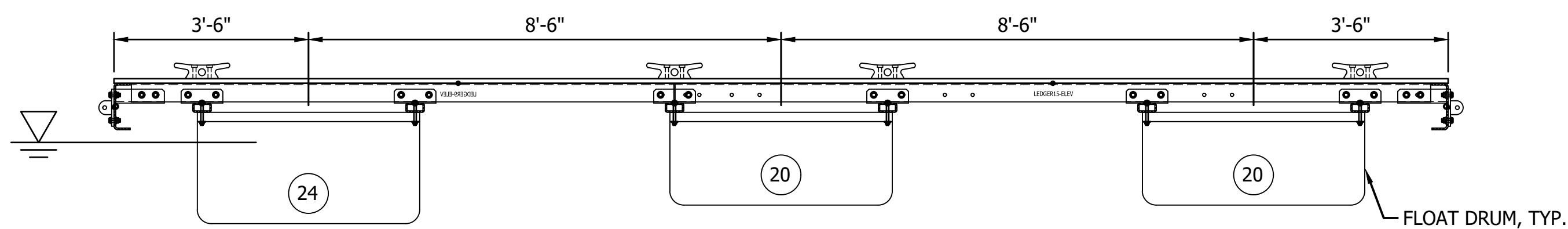
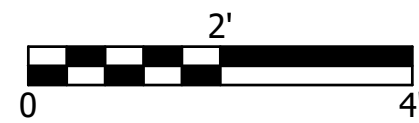


FLOAT D1 PLAN

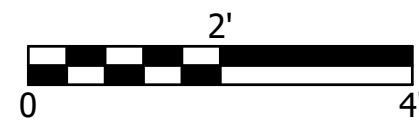
FABRICATE 1



ELEVATION - FLOAT D1



SECTION - FLOAT D1



PER ONE FLOAT UNIT

STEEL COMPONENTS

CODE	QUANTITY
WALER 24D	2
SILL 6	6
END CAP 6L	1
END CAP 6R	1
LEDGER 15	1
LEDGER 9	1
HINGE MALE	2
HINGE FEMALE	2

FLOAT DRUMS

CODE	QUANTITY
60 X 48 X 20	2
60 X 48 X 24	1
	3

RUBSTRIP

CODE	QUANTITY
48L	2
48R	2
60DL	2
60DR	2
72C	2
	10

CAD NO. S-4812-Z41-2022-FLOAT 'D1' PLAN,
ELEVATION AND SECTION

DATE	APP.	INT.	REVISIONS	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
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CHECKED (HDQTS.)	EE	6/4/25



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FLOAT 'D1' PLAN,
ELEVATION AND
SECTION

SCALE

AS SHOWN

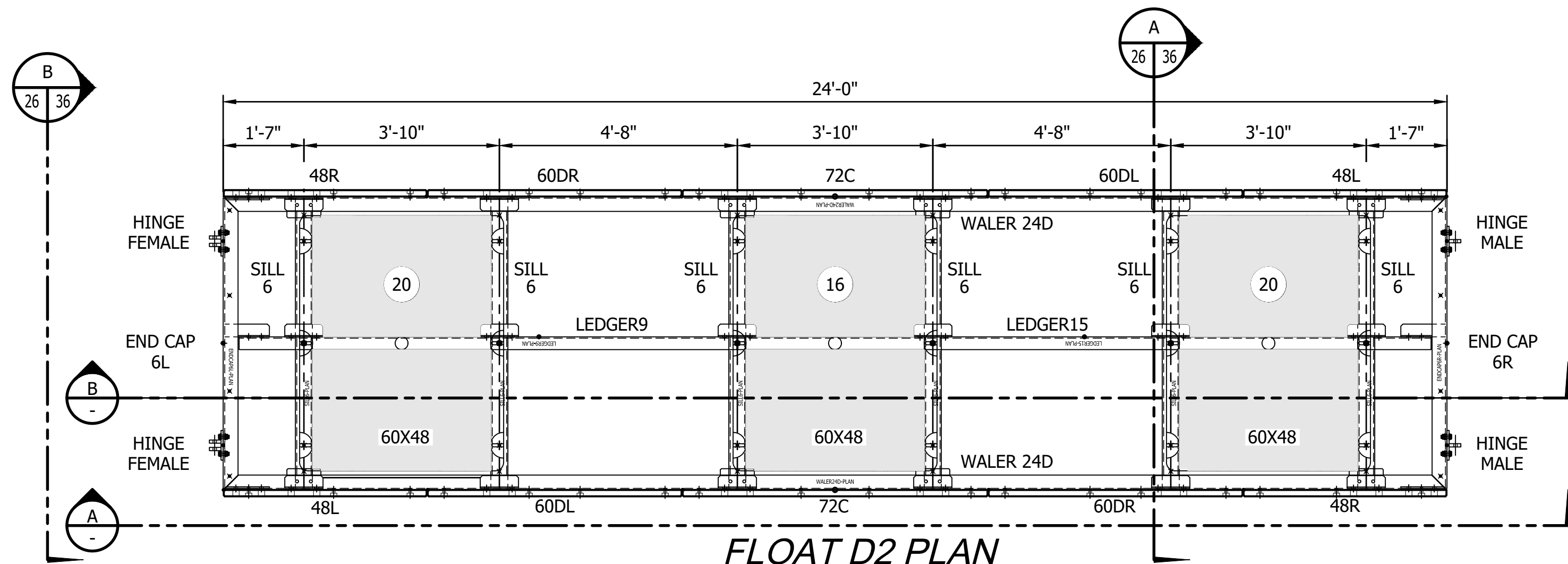
PARKS FILE#

NOTES

- SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

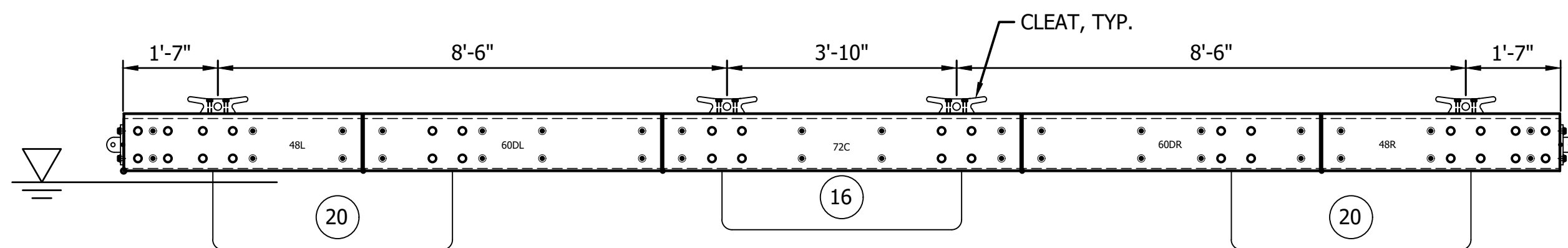
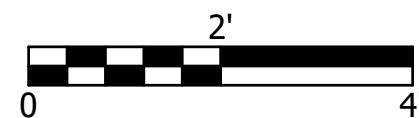
BID SET

SHEET 35 OF 47

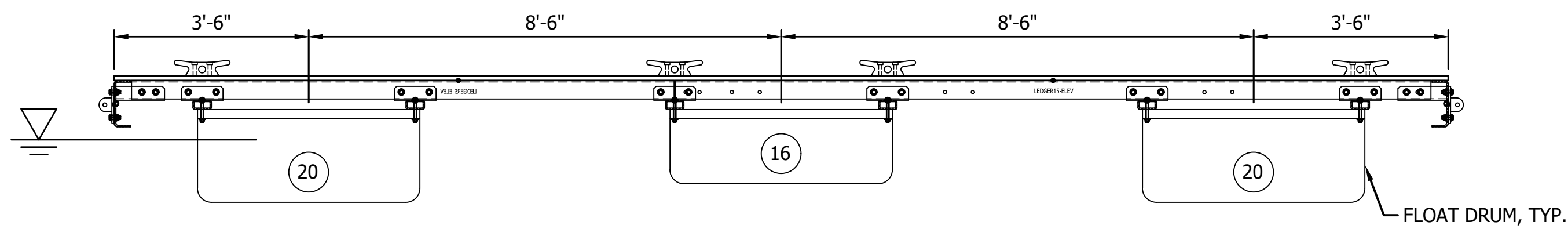
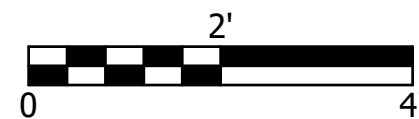


FLOAT D2 PLAN

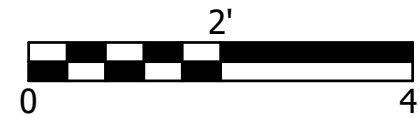
FABRICATE 1



ELEVATION - FLOAT D2



SECTION - FLOAT D2



PER ONE FLOAT UNIT	
STEEL COMPONENTS	
CODE	QUANTITY
WALER 24D	2
SILL 6	6
END CAP 6L	1
END CAP 6R	1
LEDGER 15	1
LEDGER 9	1
HINGE MALE	2
HINGE FEMALE	2

FLOAT DRUMS	
CODE	QUANTITY
60 X 48 X 16	1
60 X 48 X 20	2
	3

RUBSTRIP	
CODE	QUANTITY
48L	2
48R	2
60DL	2
60DR	2
72C	2
	10

S-4812-Z41-2022-FLOAT 'D2' PLAN,
CAD NO. ELEVATION AND SECTION

DATE	APP.	INT.	REVISIONS	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



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MOORAGE FACILITY
IMPROVEMENTS

FLOAT 'D2' PLAN,
ELEVATION AND
SECTION

SCALE
AS SHOWN

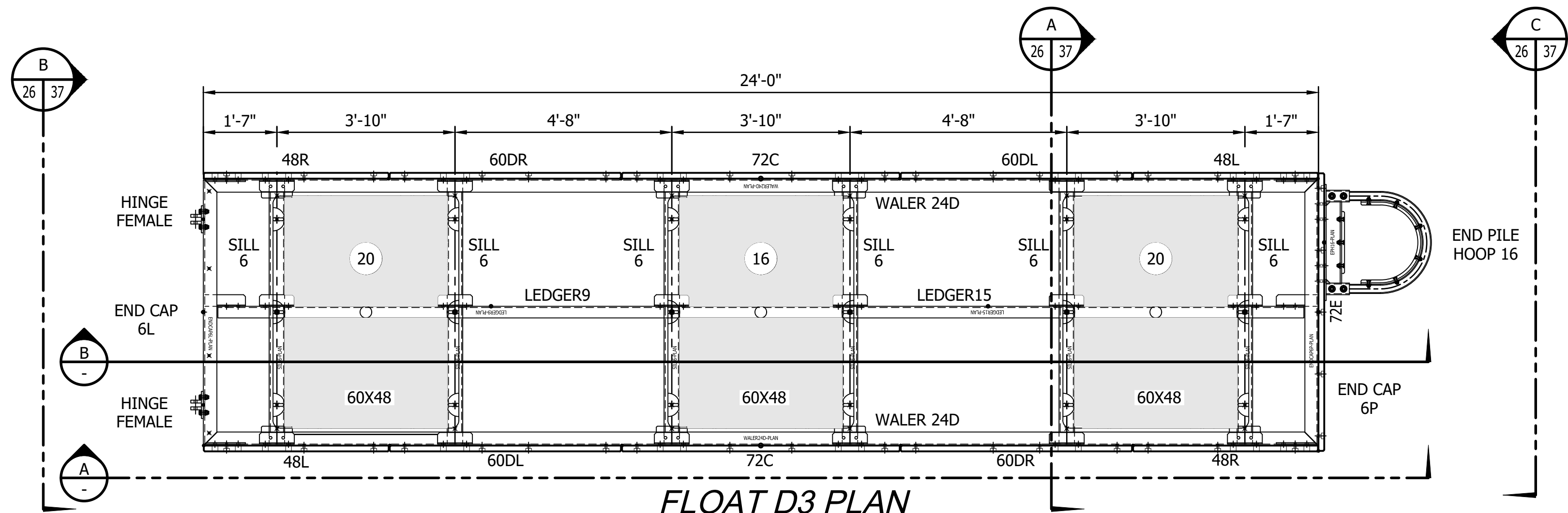
PARKS FILE#

NOTES

- SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

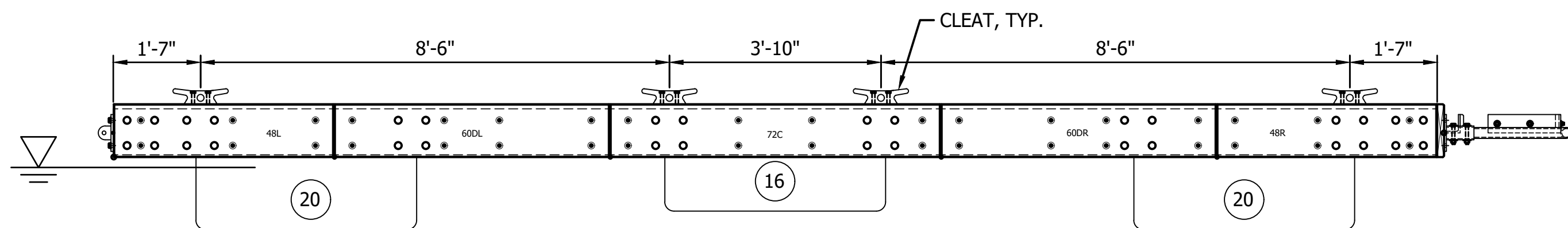
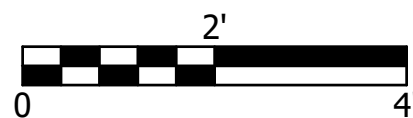
BID SET

SHEET 36 OF 47

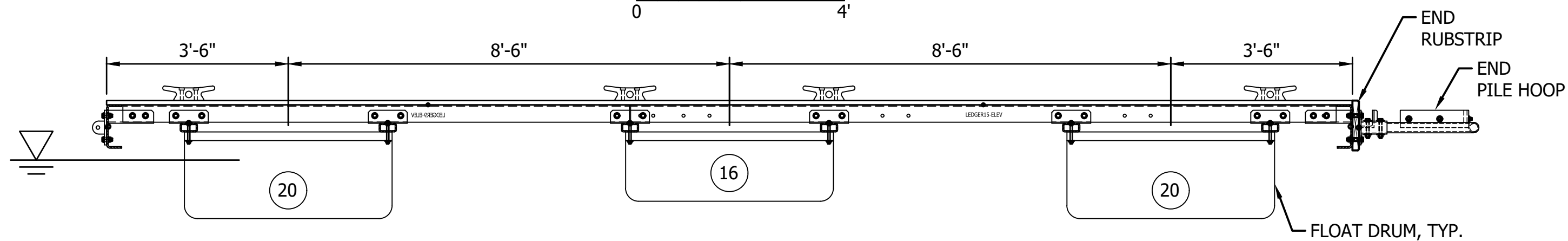
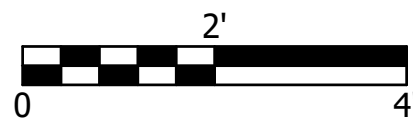


FLOAT D3 PLAN

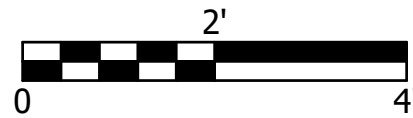
FABRICATE 1



ELEVATION - FLOAT D3



SECTION - FLOAT D3



PER ONE FLOAT UNIT	
STEEL COMPONENTS	
CODE	QUANTITY
WALER 24D	2
SILL 6	6
END CAP 6L	1
END CAP 6P	1
LEDGER 15	1
LEDGER 9	1
END PILE HOOP 16	1
HINGE FEMALE	2

FLOAT DRUMS	
CODE	QUANTITY
60 X 48 X 16	1
60 X 48 X 20	2
	3

RUBSTRIP	
CODE	QUANTITY
48L	2
48R	2
60DL	2
60DR	2
72C	2
72E	1
	11

S-4812-Z41-2022-FLOAT 'D3' PLAN,
ELEVATION AND SECTION

DATE	APP.	INT.	REVISIONS	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

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FLOAT 'D3' PLAN,
ELEVATION AND
SECTION

SCALE
AS SHOWN

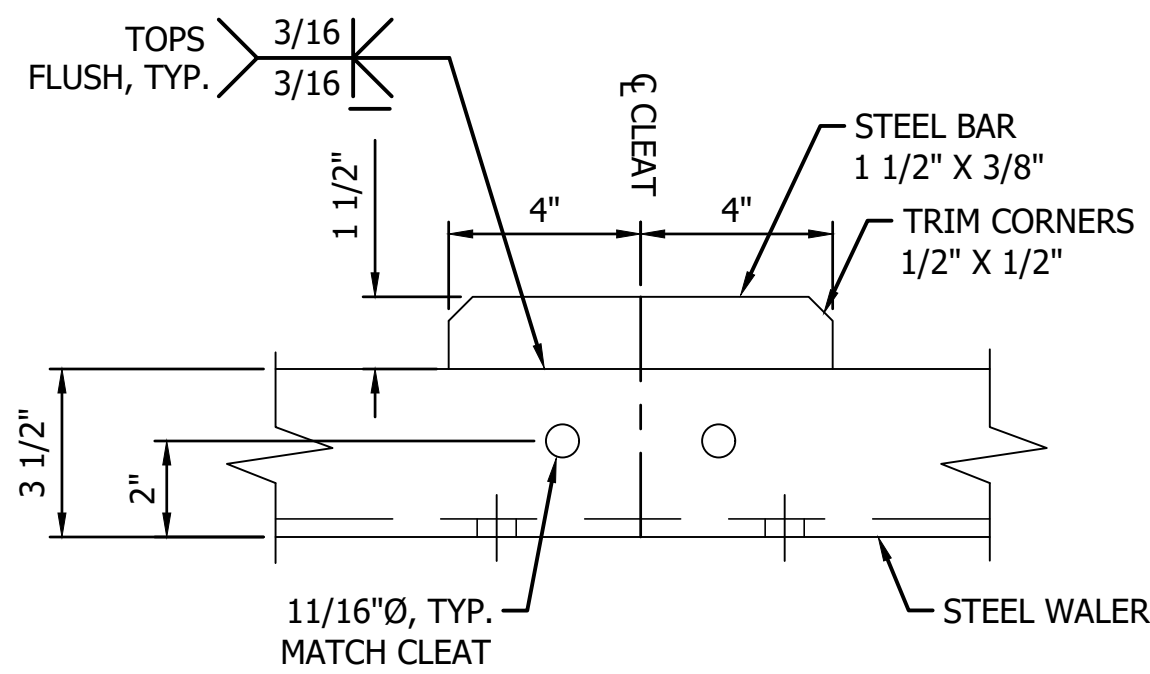
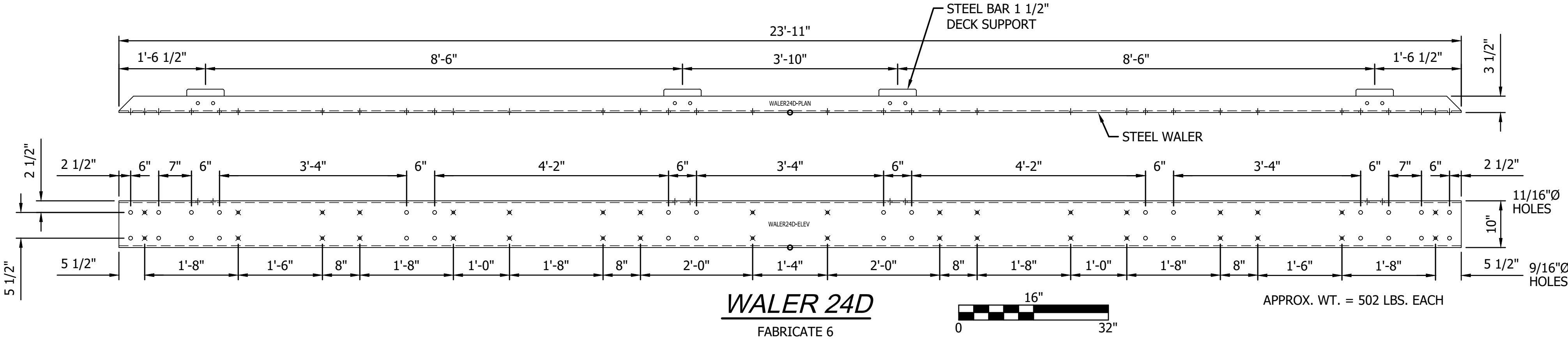
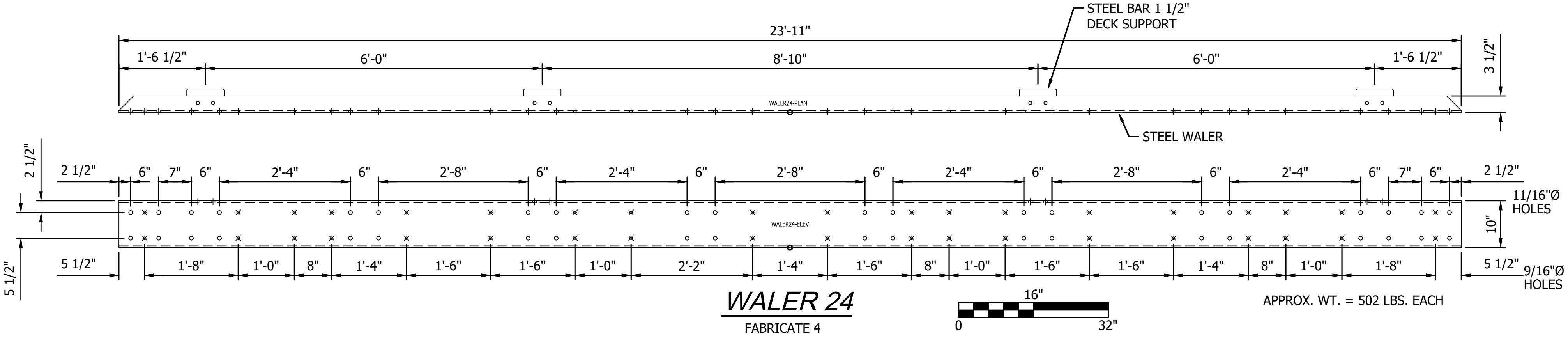
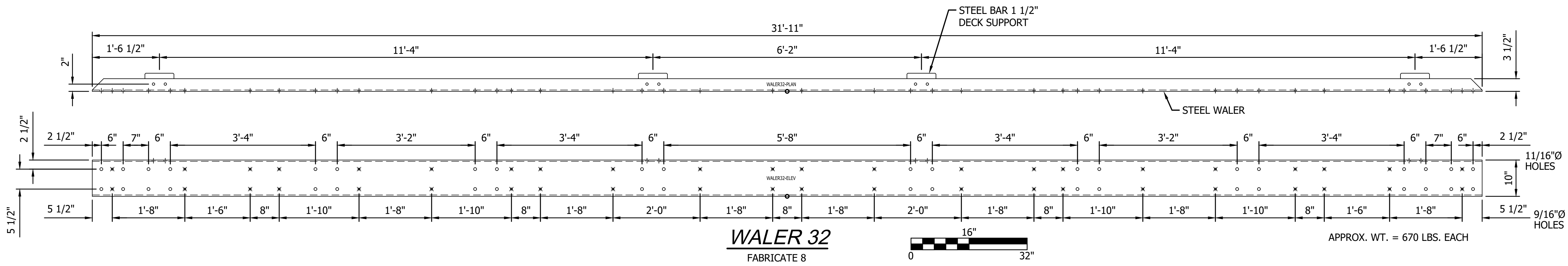
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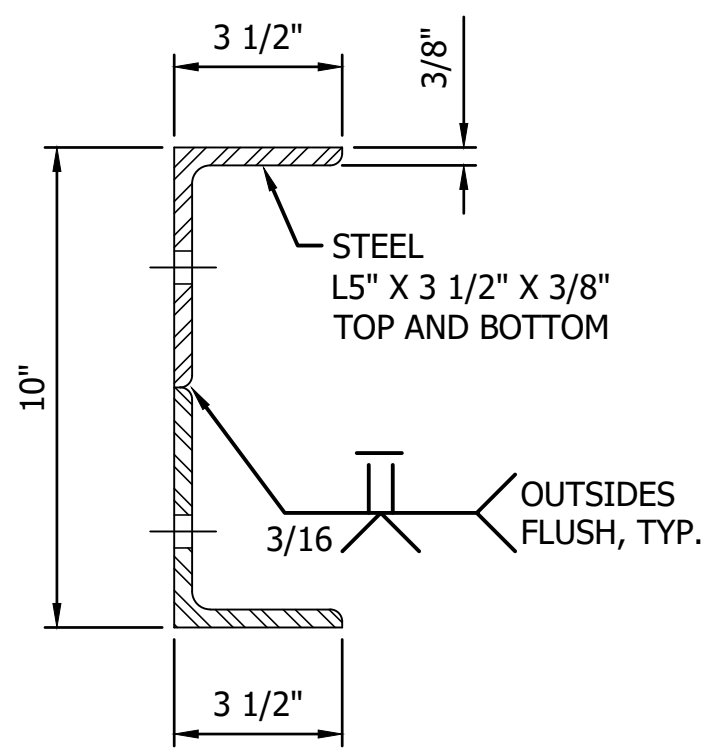
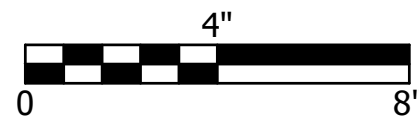
- SEE SHEET 28 FOR TYPICAL FLOAT DETAILS NOT CALLED OUT.

BID SET

SHEET 37 OF 47

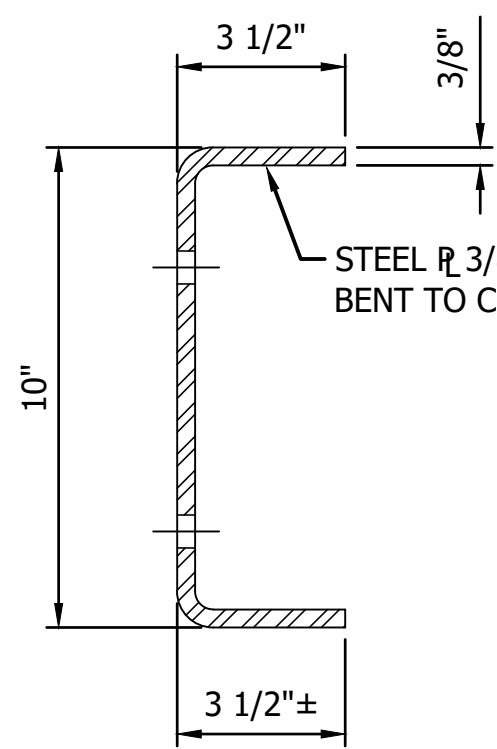
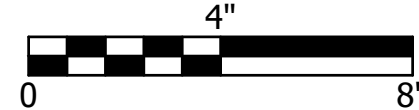


DECK SUPPORT AT CLEATS (PLAN)



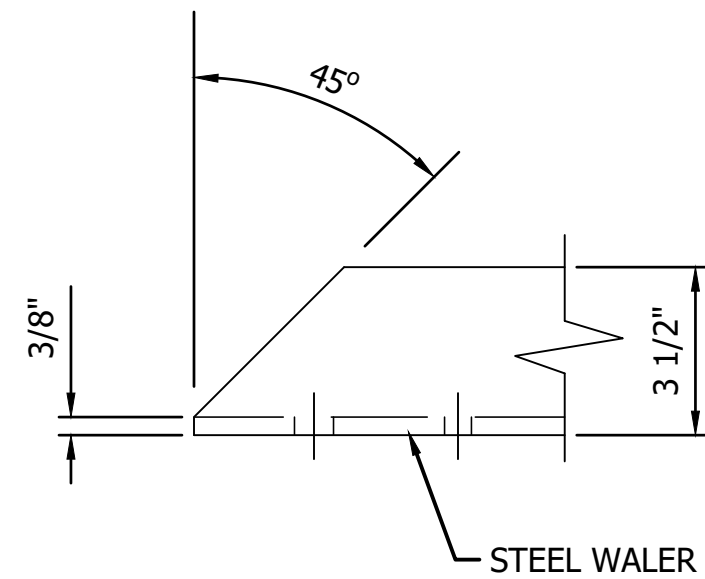
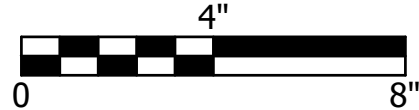
SECTION - ALTERNATE WALER

CJP BUTT WELDS
AT SPLICES

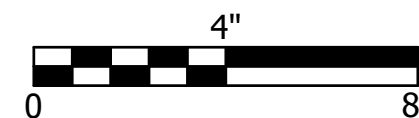


SECTION - WALER

CJP BUTT WELDS
AT SPLICES



WALER CORNERS



- ⊗ 9/16"Ø THRU
- 11/16"Ø THRU

ALL STEEL A-36, HOT DIP GALVANIZE
AFTER FABRICATION, SEE NOTES

APPROX. WT. = 670 LBS. EACH

APPROX. WT. = 502 LBS. EACH

APPROX. WT. = 502 LBS. EACH

CAD NO. S-4812-Z41-2022-STEEL FABRICATION WALERS 1

DATE	APP.	INT.	REVISIONS	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

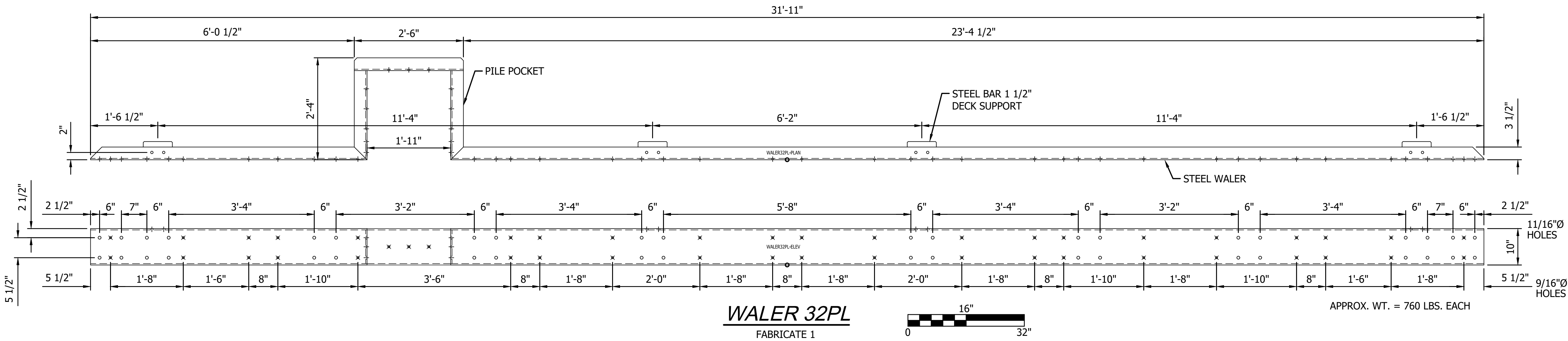
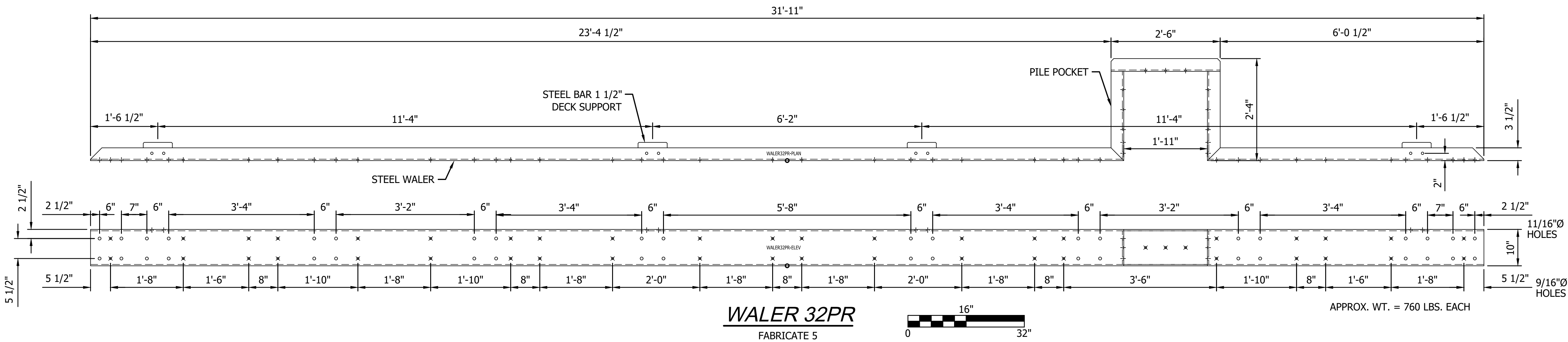
STEEL FABRICATION
WALERS 1

SCALE
AS SHOWN

PARKS FILE#

BID SET

SHEET 38 OF 47



⌘ 9/16"Ø THRU
○ 11/16"Ø THRU

ALL STEEL A-36, HOT DIP GALVANIZE
AFTER FABRICATION, SEE NOTES

CAD NO. S-4812-Z41-2022-STEEL FABRICATION WALERS 2

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

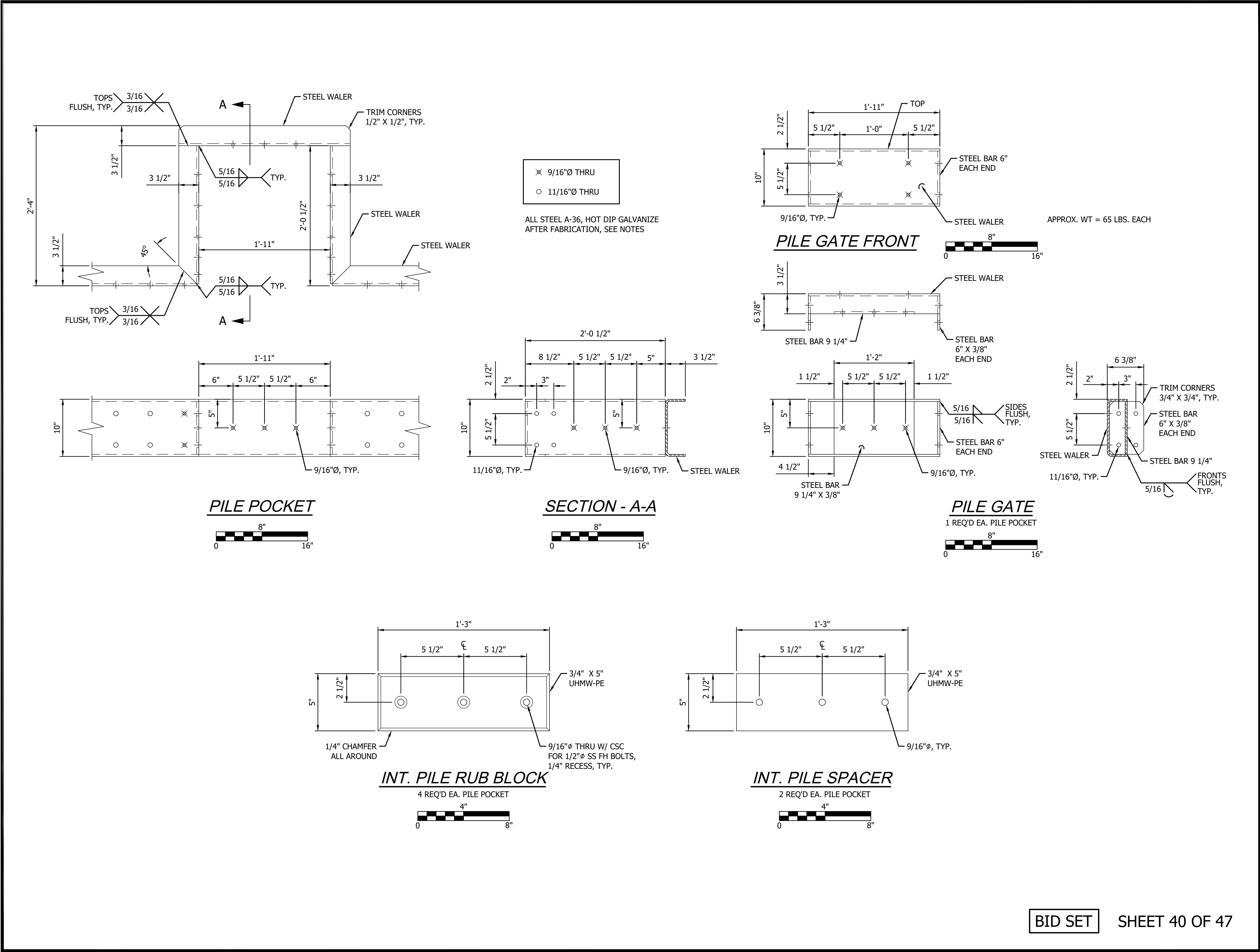
STEEL FABRICATION
WALERS 2

SCALE
AS SHOWN

PARKS FILE#

BID SET

SHEET 39 OF 47



CAD NO. S-4812-Z41-2022-STEEL FABRICATION WALERS 3

	DATE
	APP.
	INT.
	NO.
REVISIONS	

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25

6/4/25

REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

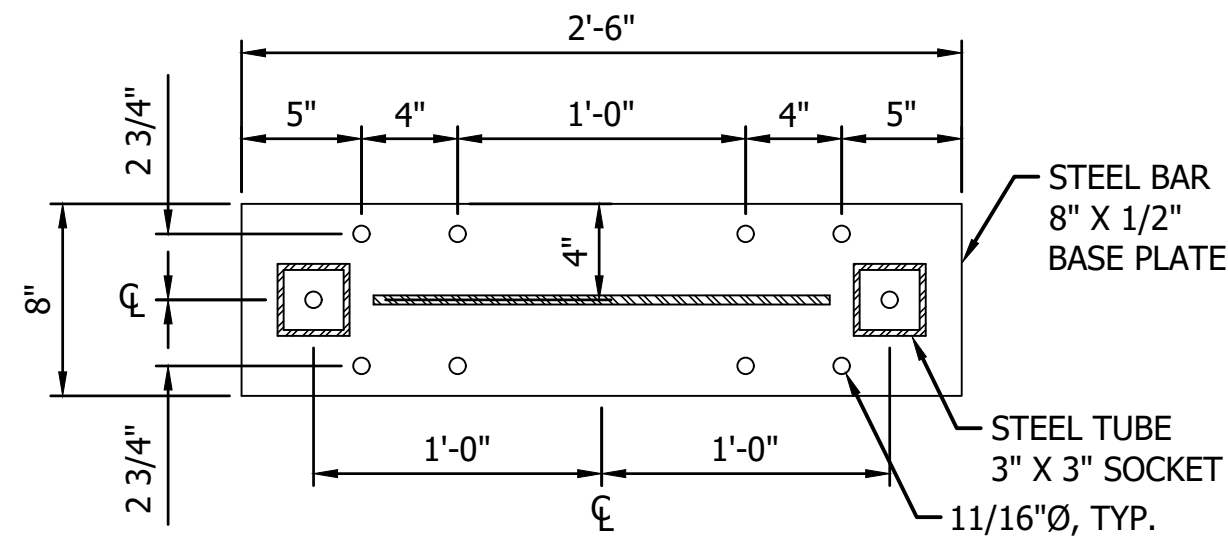
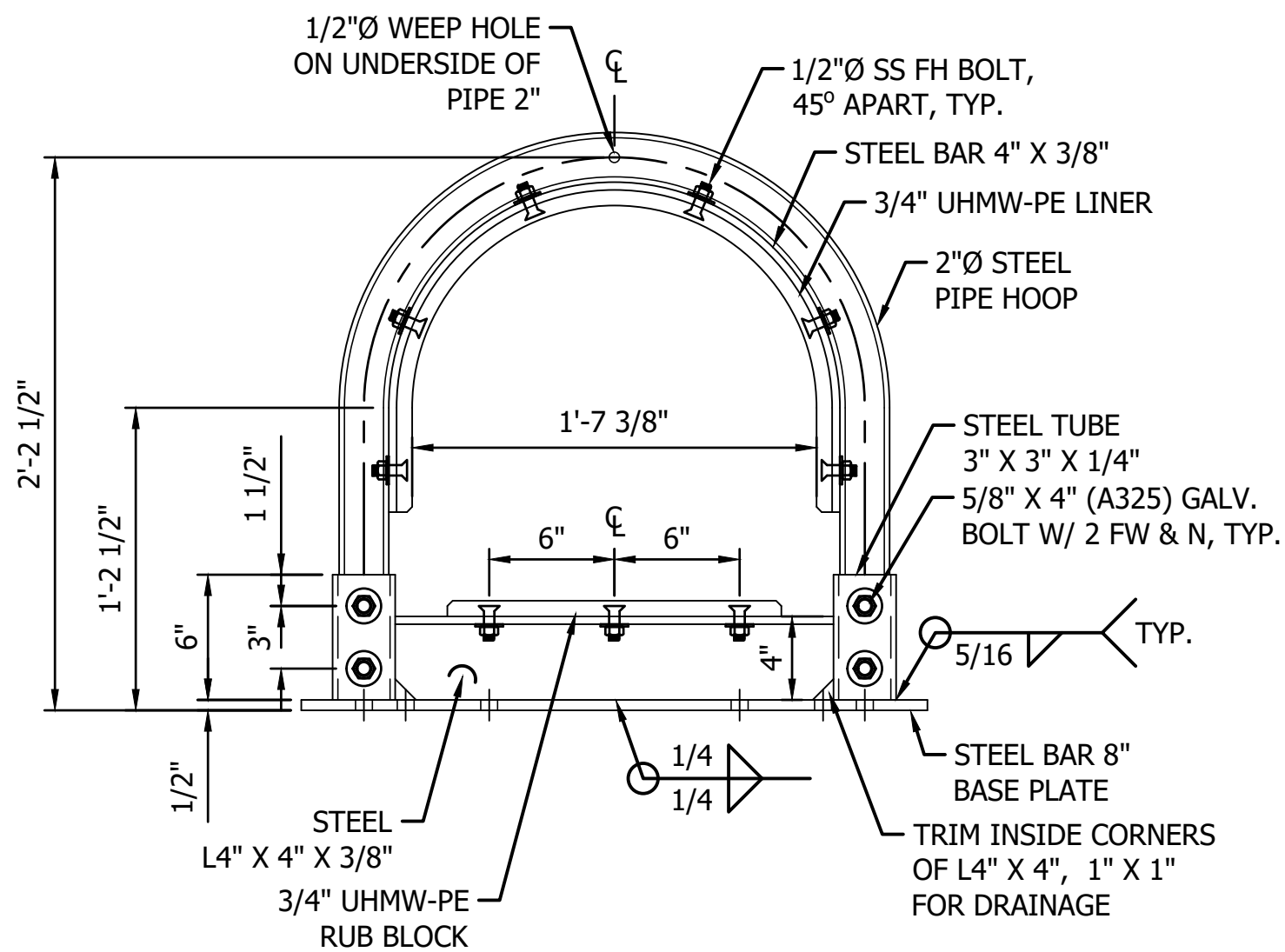
STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

STEEL FABRICATION
WALERS 3

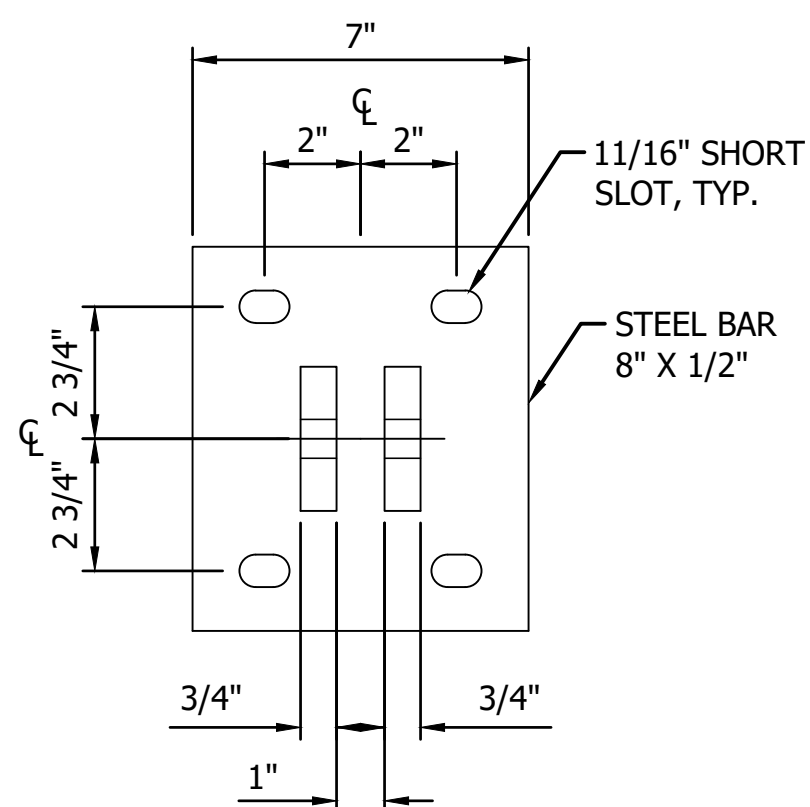
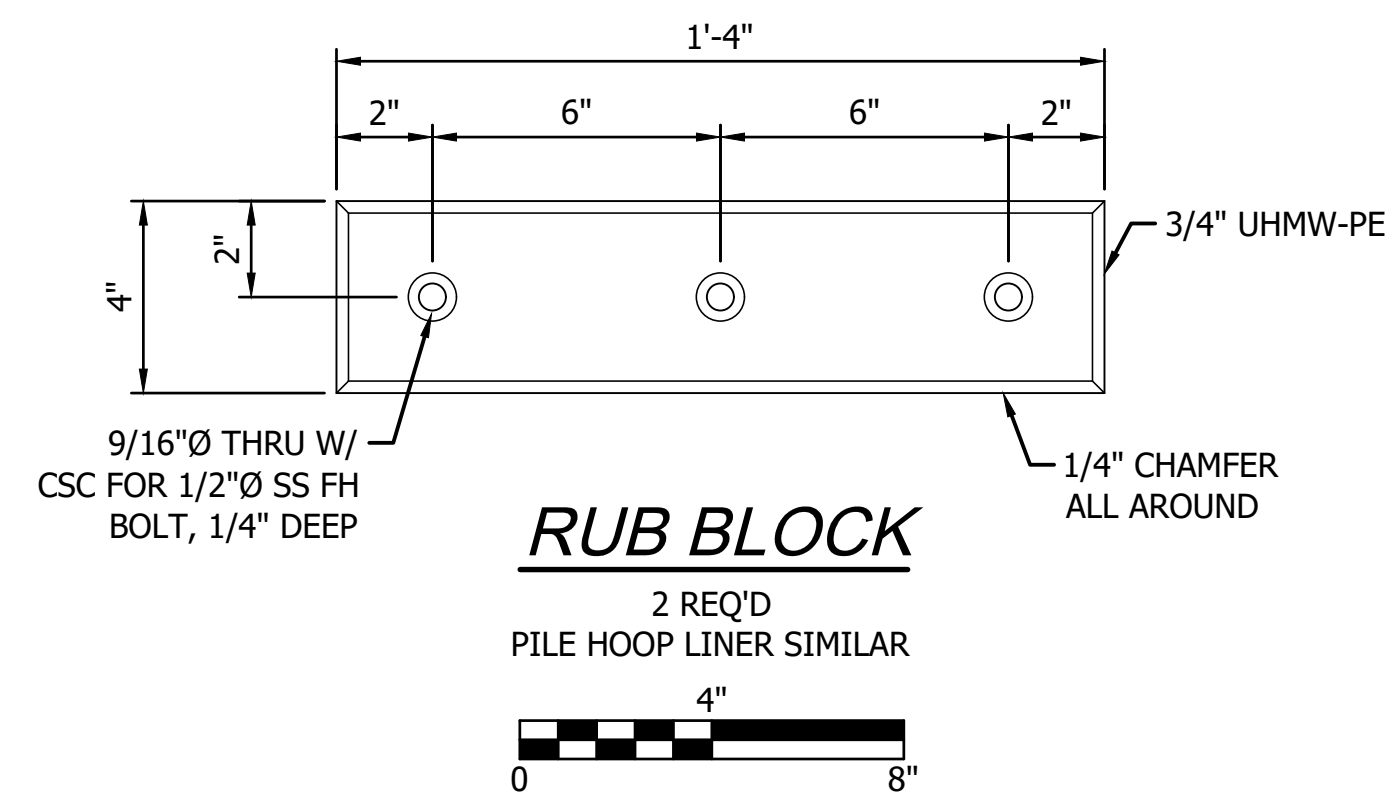
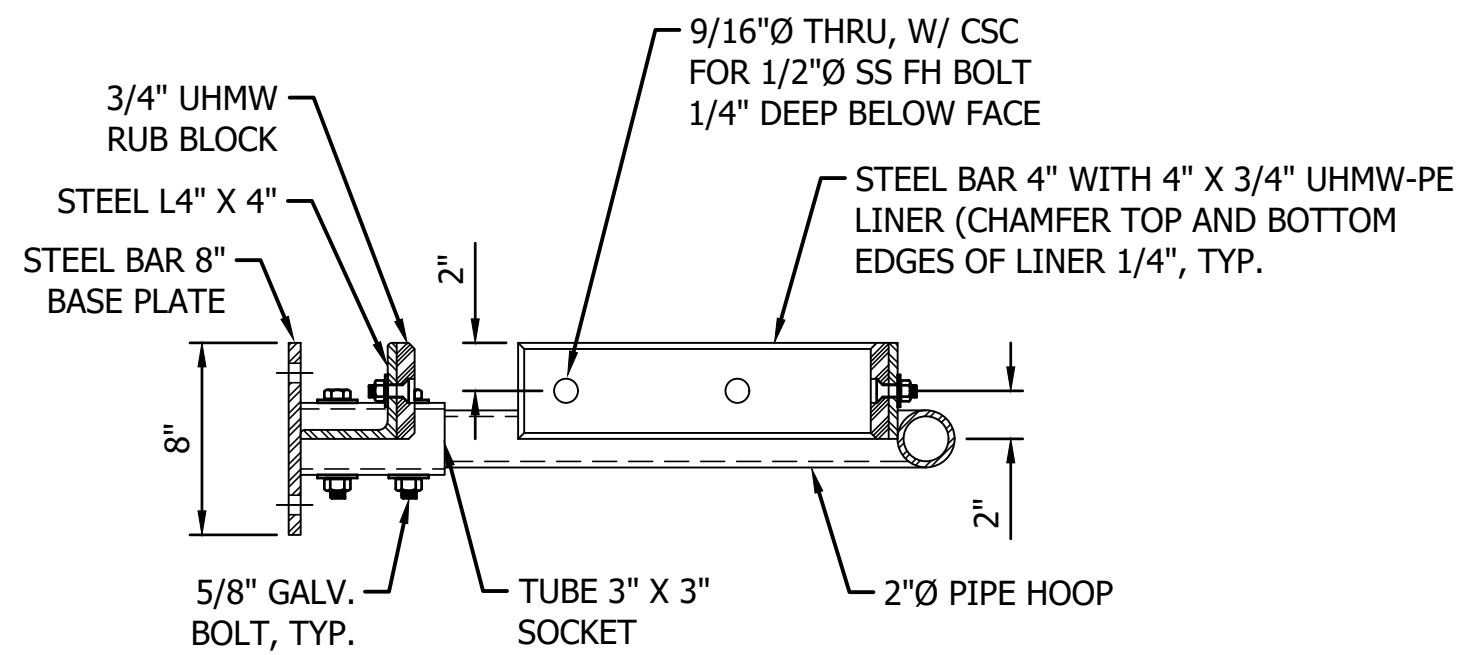
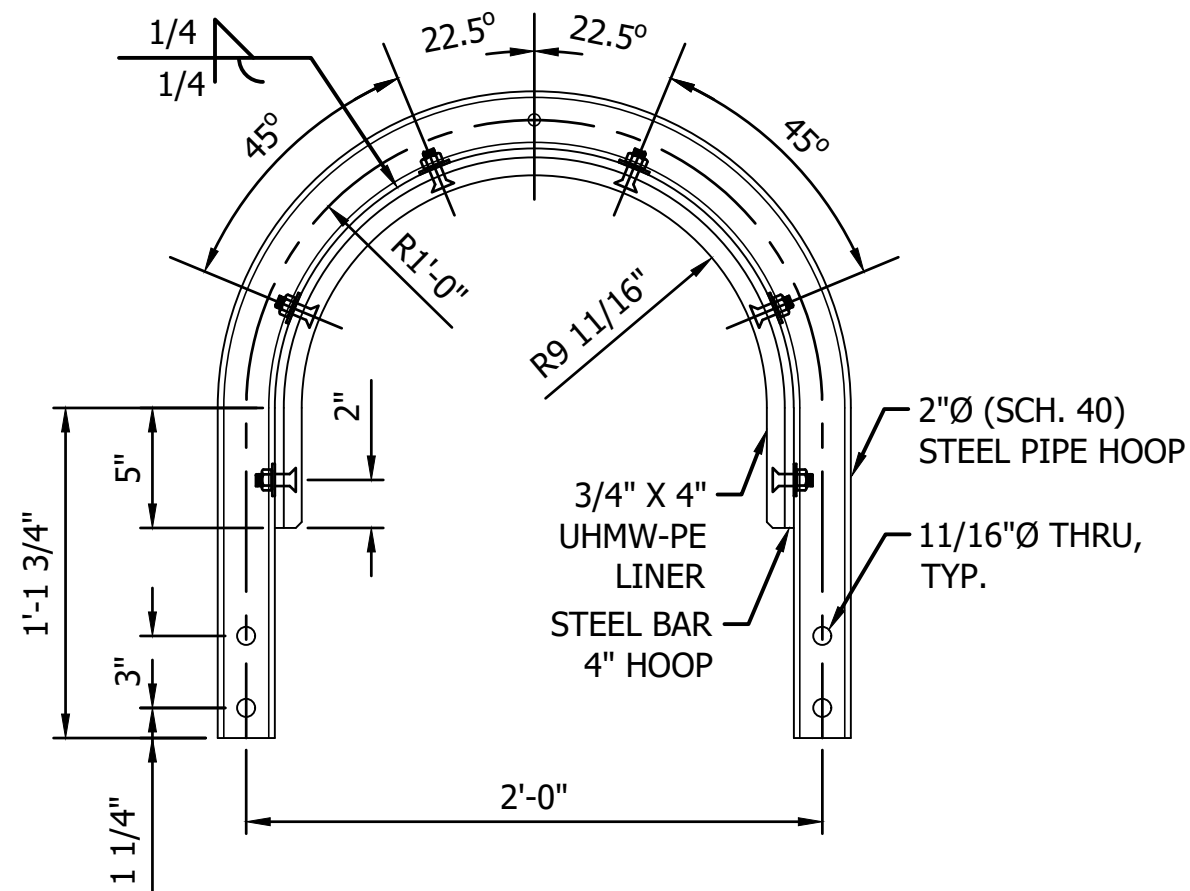
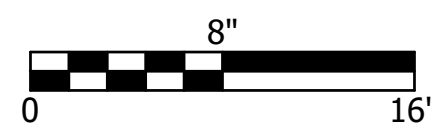
SCALE
AS SHOWN

PARKS FILE#



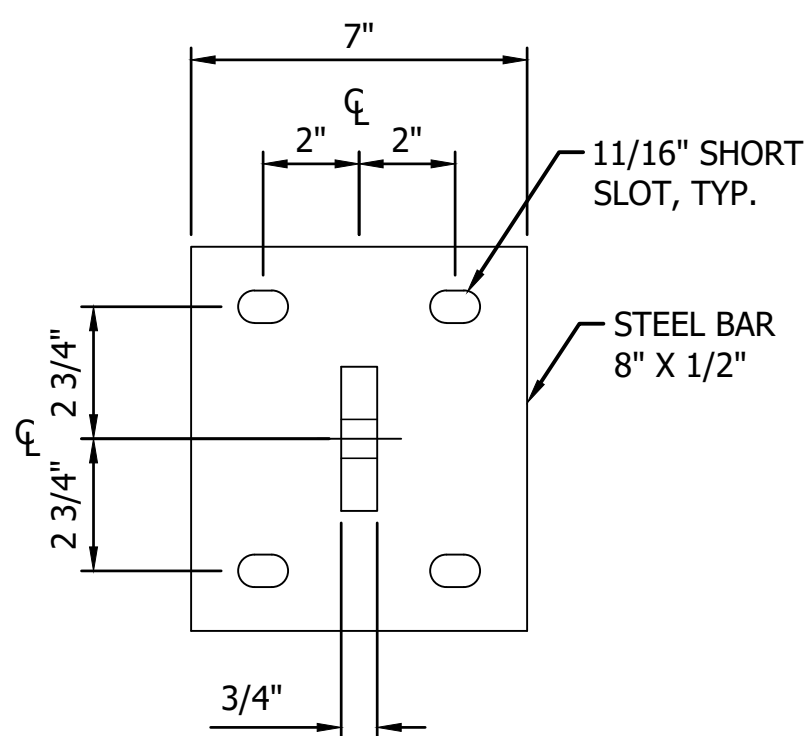
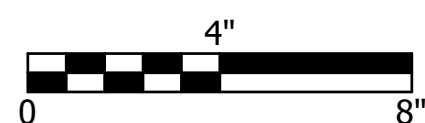
END PILE HOOP 16

4 REQ'D
APPROX. WT = 103 LBS.
HOT DIP GALVANIZE AFTER FABRICATION



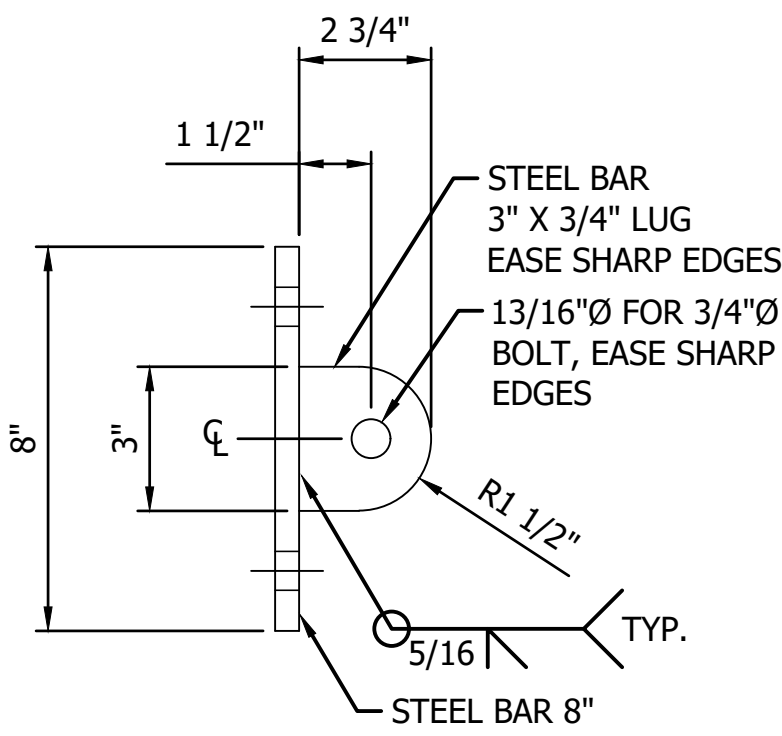
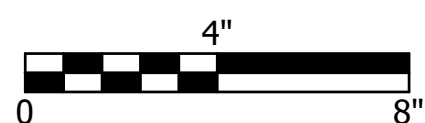
CLEAT SPACER

24 REQ'D
APPROX. WT = 11.0 LBS.

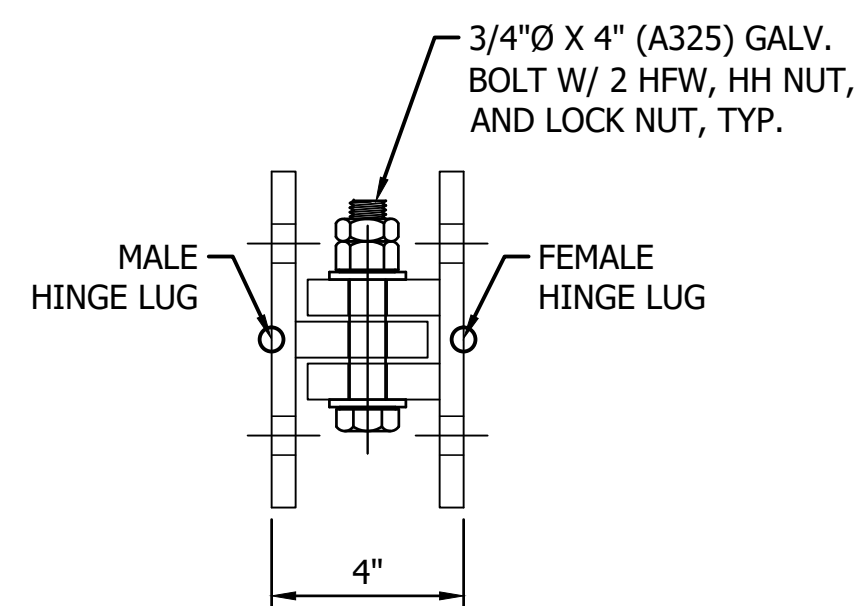
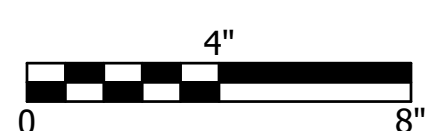


MALE HINGE BRACKET

24 REQ'D
APPROX. WT = 9.5 LBS.



SIDE VIEW



HINGE ASSY VIEW (PLAN)



BID SET

SHEET 41 OF 47

CAD NO. S-4812-Z41-2022-STEEL
FABRICATION END PILE HOOP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION

STUART ISLAND
STATE PARK

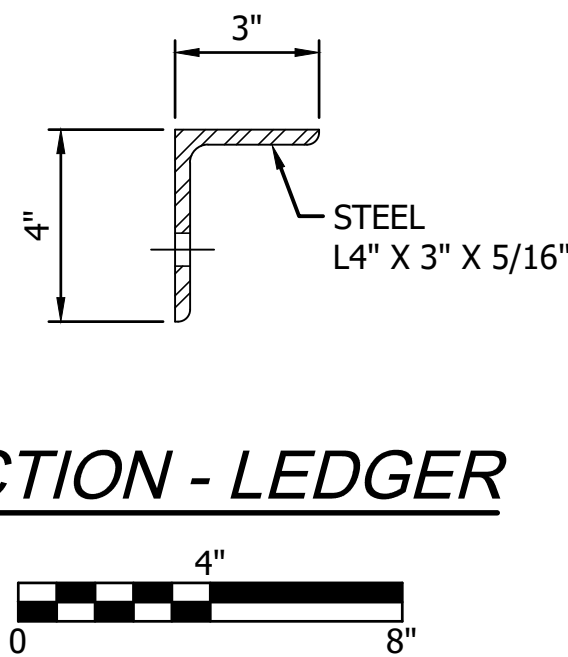
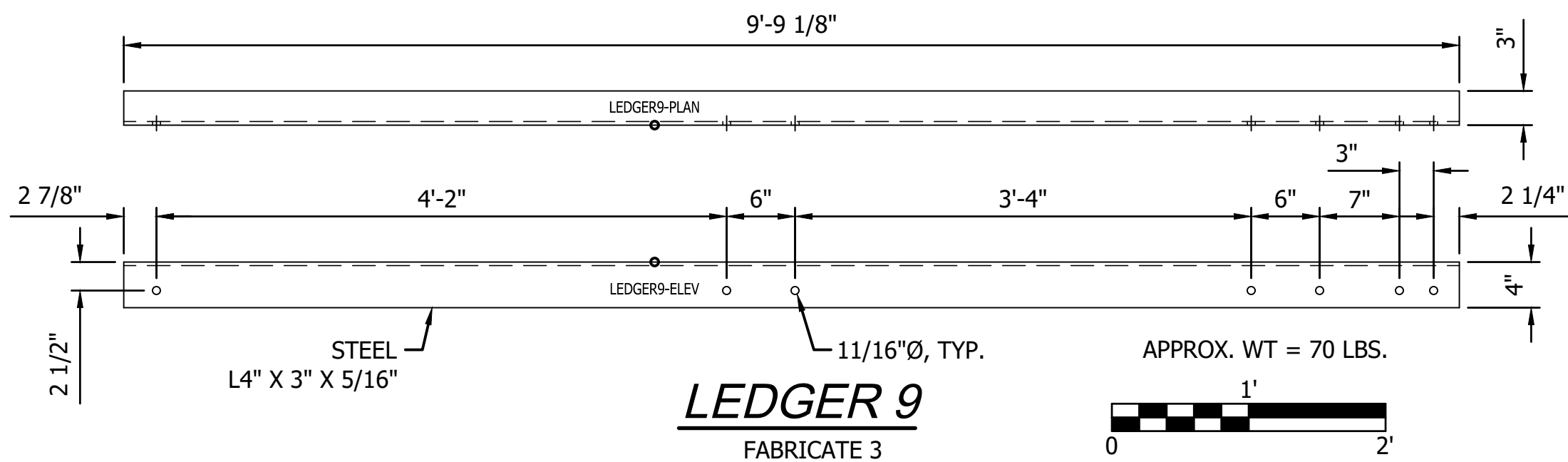
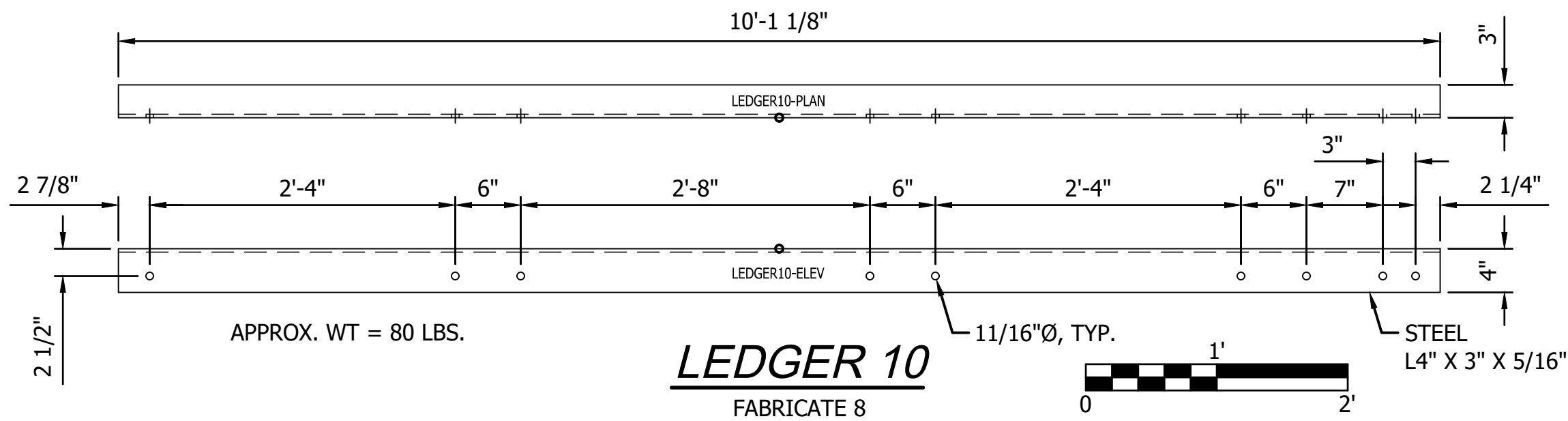
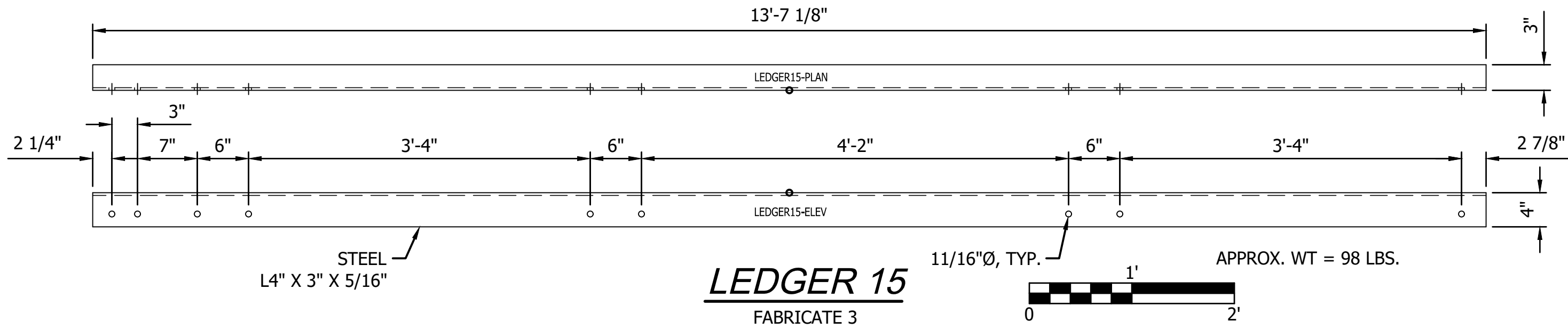
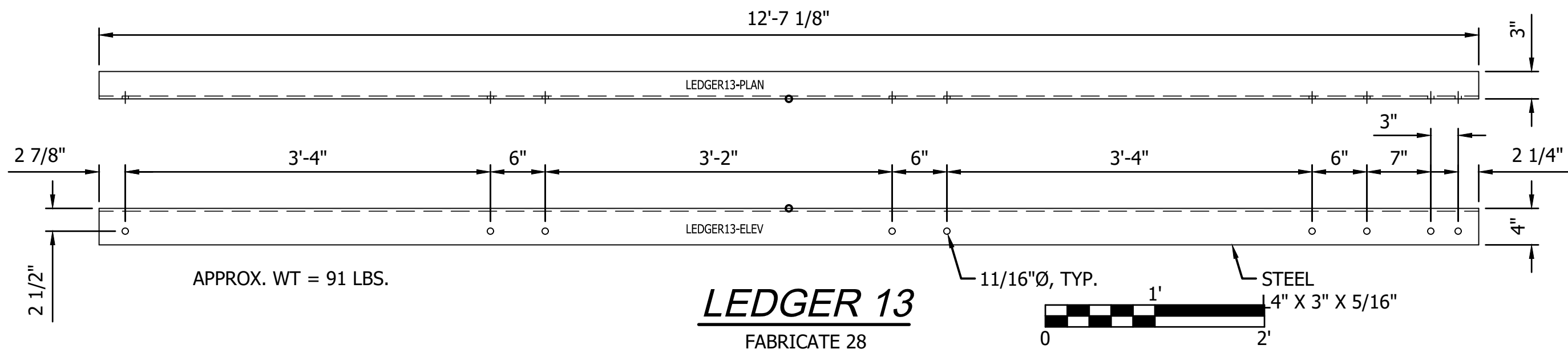
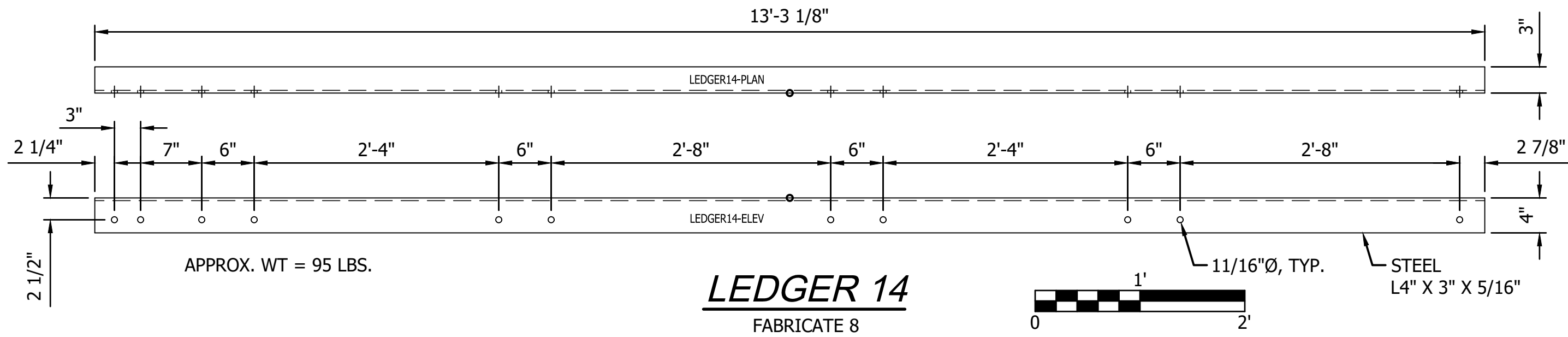
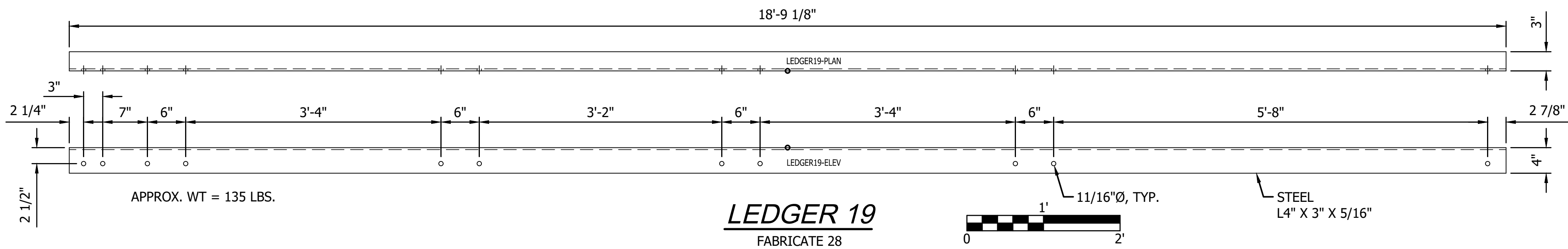
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

STEEL FABRICATION
END PILE HOOP

SCALE

AS SHOWN

PARKS FILE#



○ 11/16"Ø THRU

ALL STEEL A-36, HOT DIP GALVANIZE
AFTER FABRICATION, SEE NOTES

CAD NO. S-4812-Z41-2022-STEEL FABRICATION LEDGERS

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

STEEL FABRICATION
LEDGERS

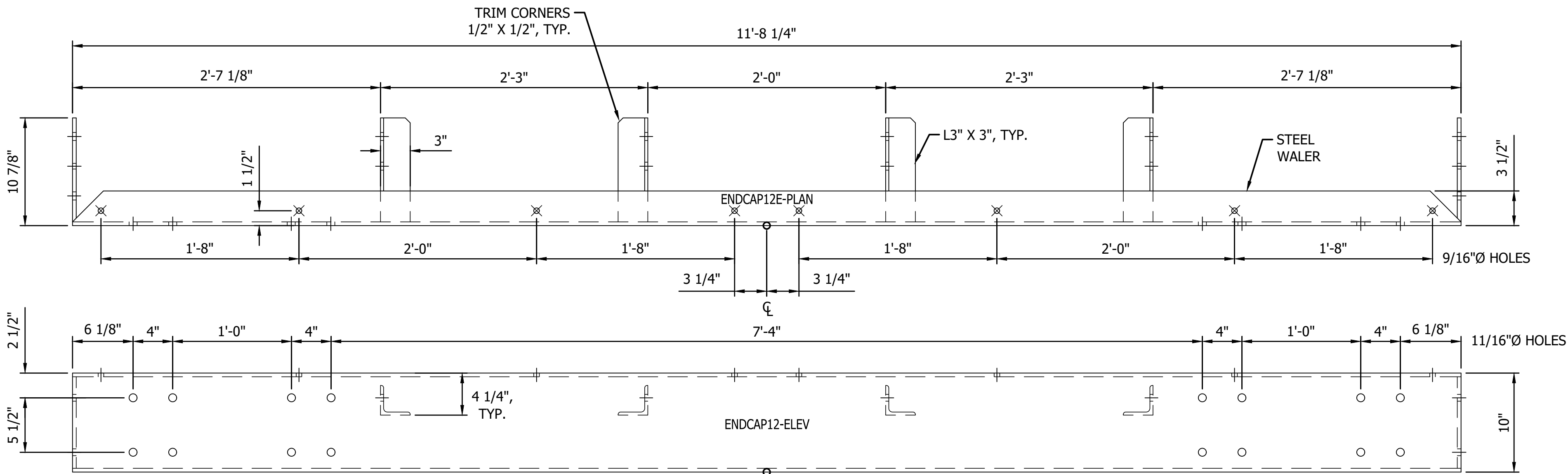
SCALE

AS SHOWN

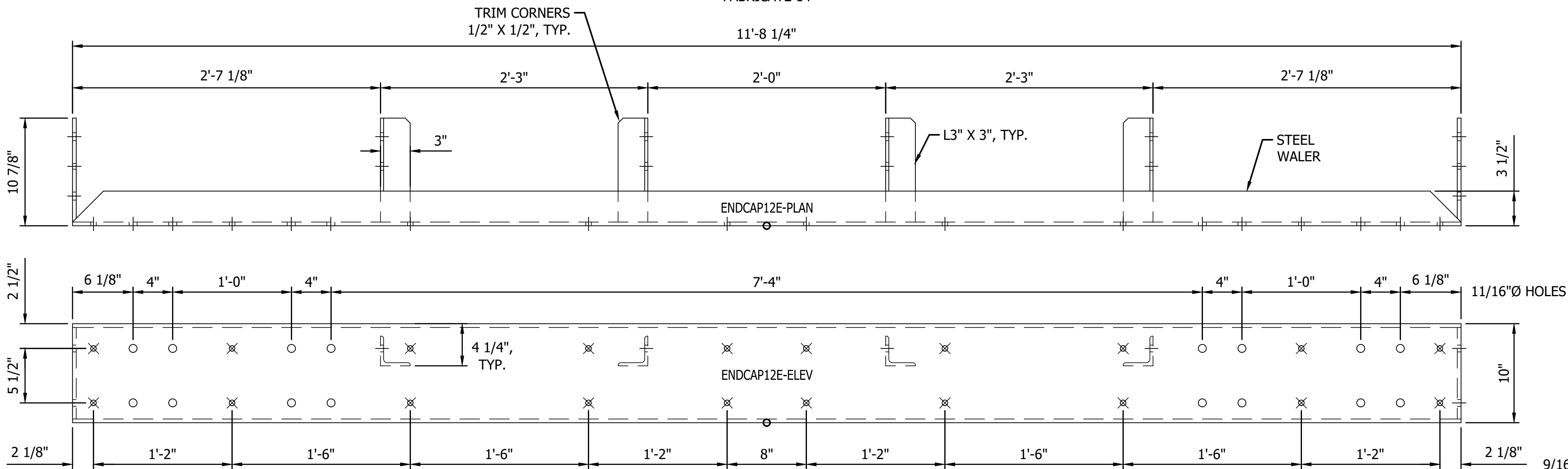
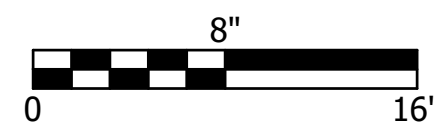
PARKS FILE#

BID SET

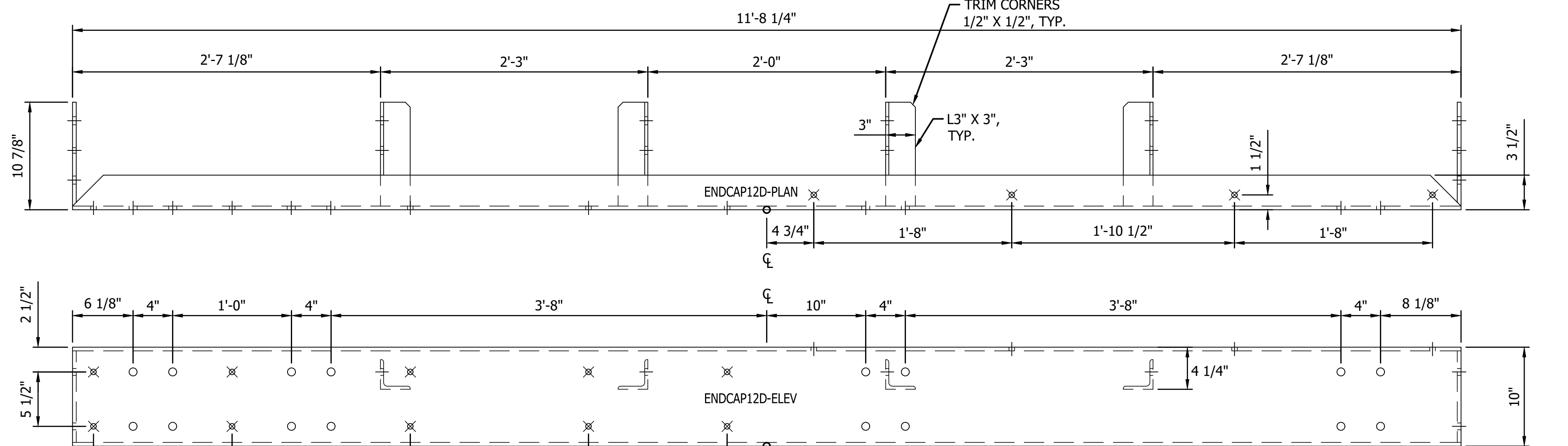
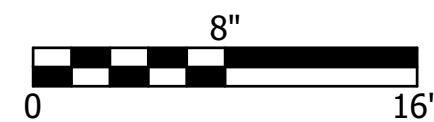
SHEET 42 OF 47



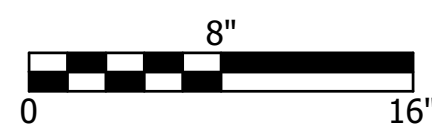
ENDCAP 12
FABRICATE 14



ENDCAP 12E
FABRICATE 3



ENDCAP 12D
FABRICATE 1



- ⊗ 9/16"Ø THRU
- 11/16"Ø THRU

ALL STEEL A-36, HOT DIP GALVANIZE
AFTER FABRICATION, SEE NOTES

APPROX. WT. = 286 LBS. EACH

CAD NO. S-4812-Z41-2022-STEEL FABRICATION END CAPS

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

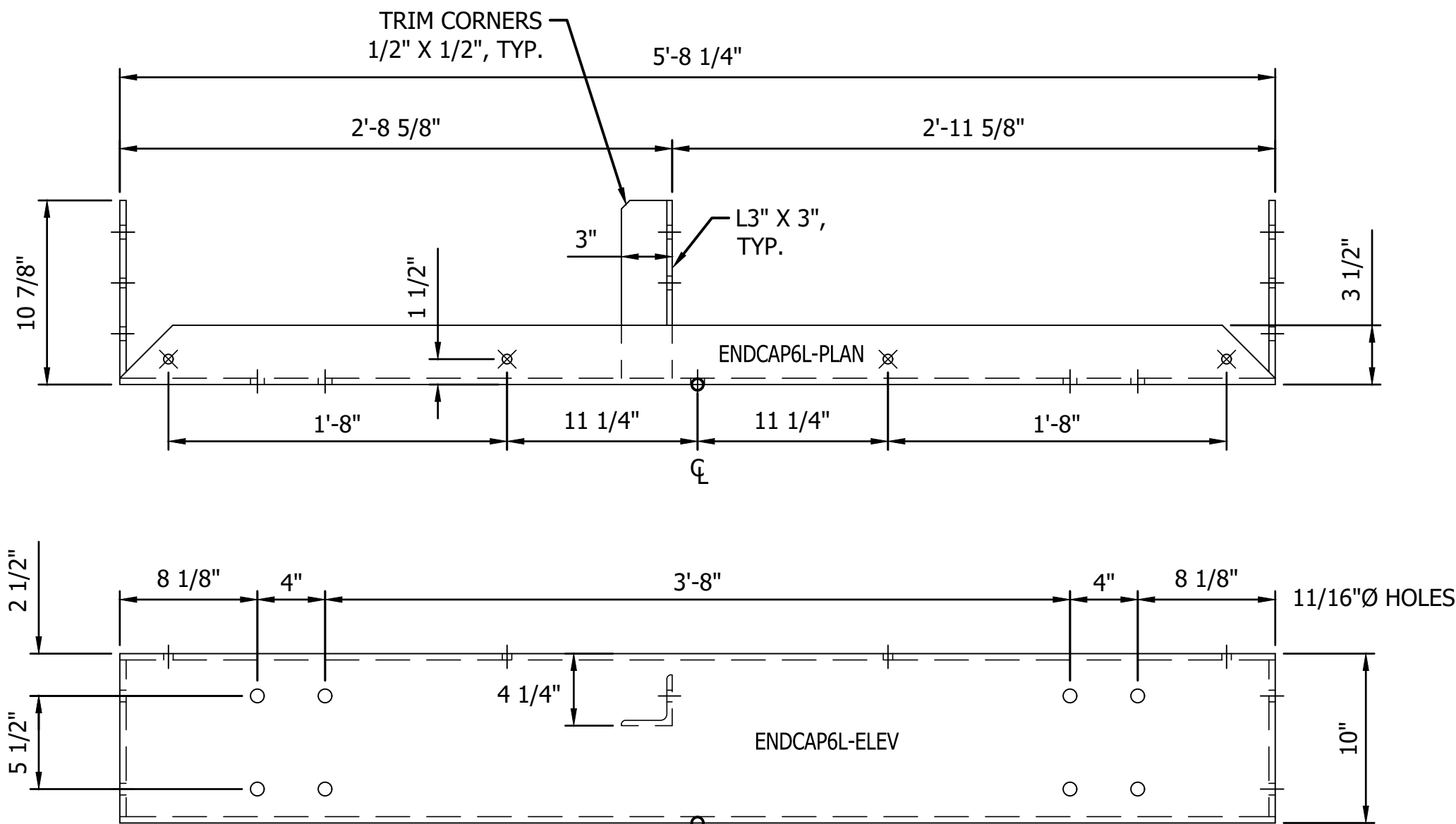
STEEL FABRICATION
END CAPS

SCALE
AS SHOWN

PARKS FILE#

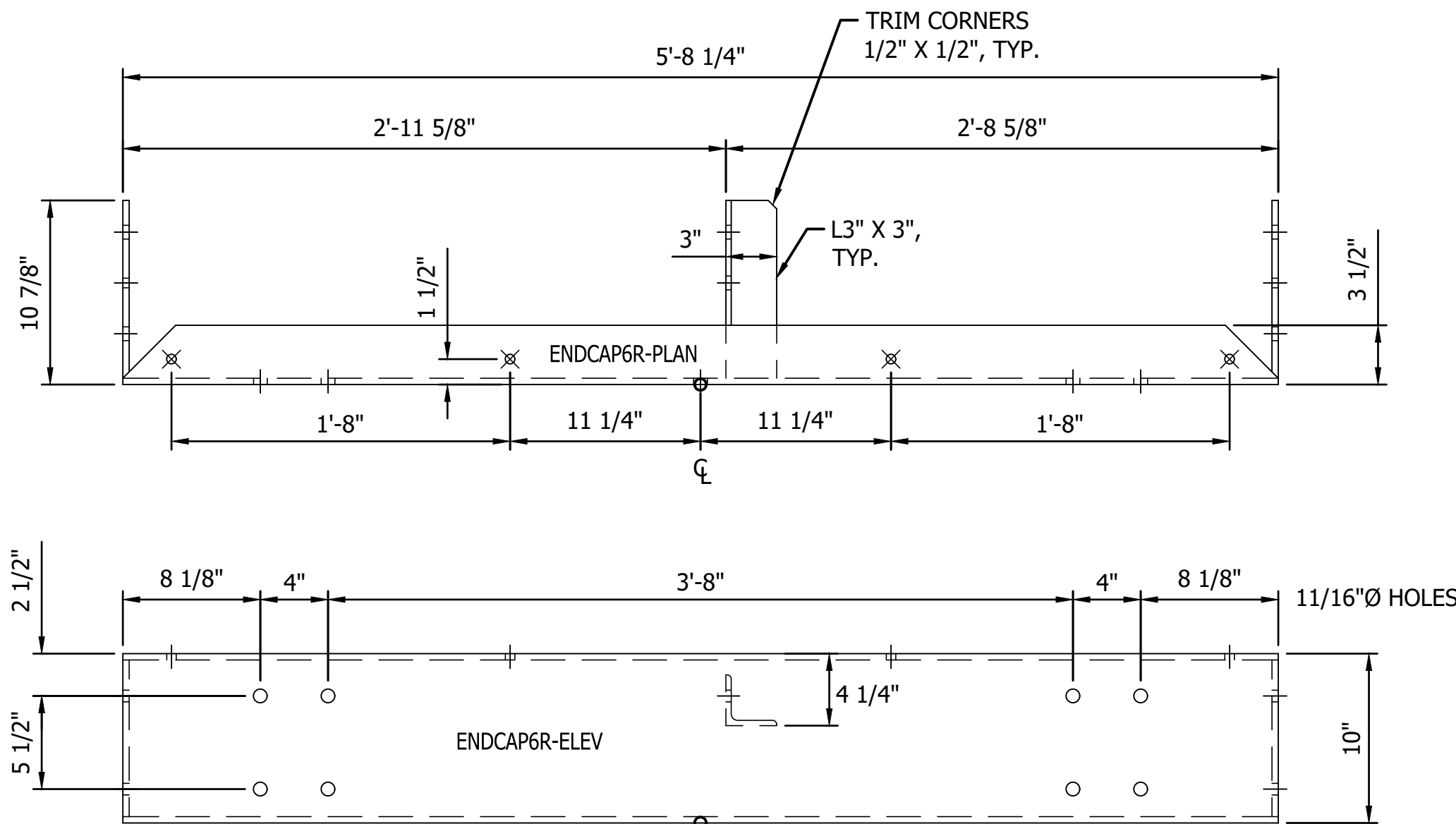
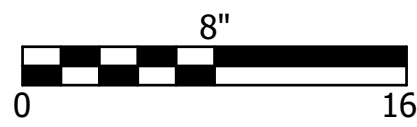
BID SET

SHEET 43 OF 47



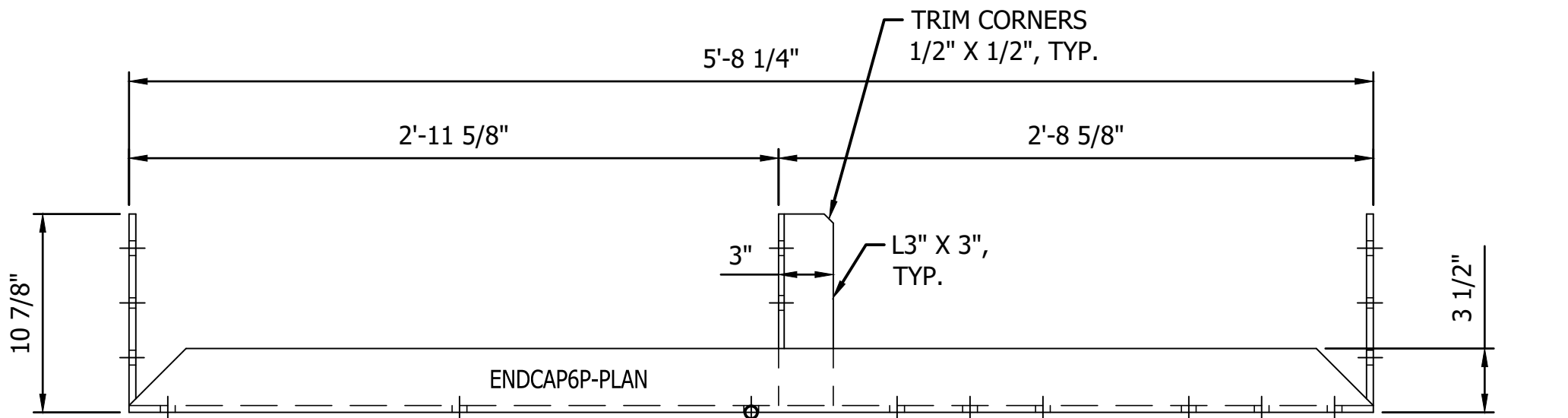
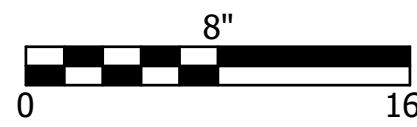
ENDCAP 6L

FABRICATE 3



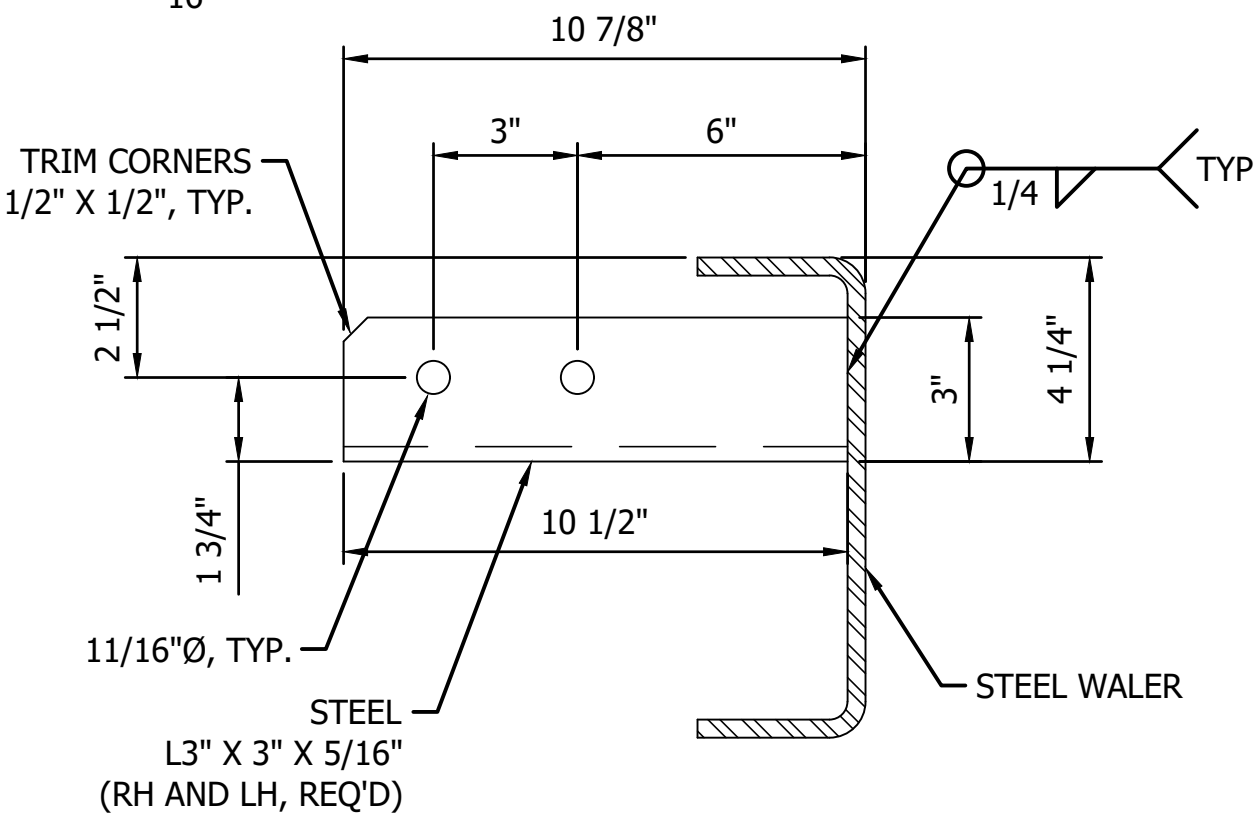
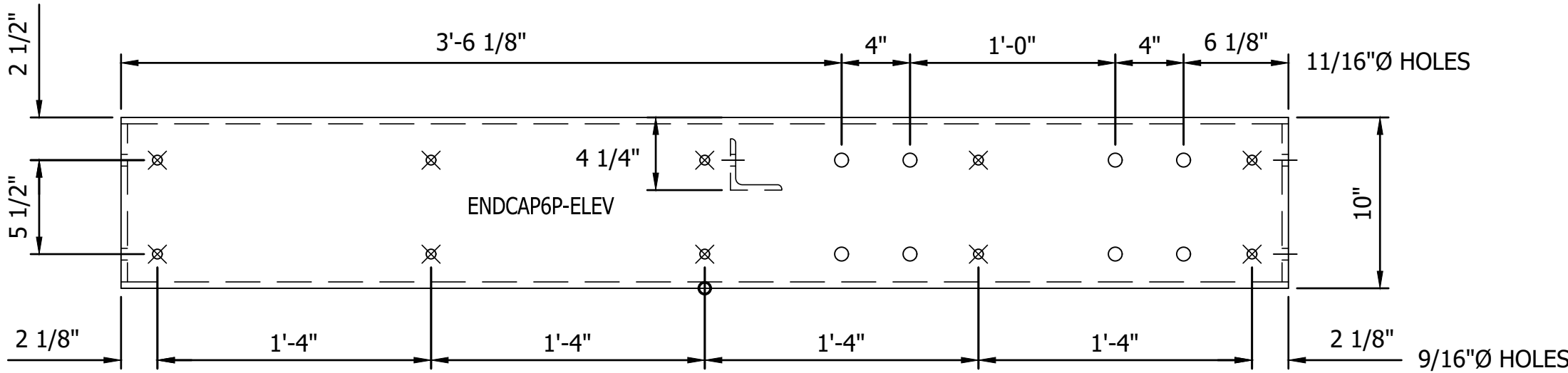
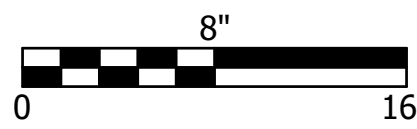
ENDCAP 6R

FABRICATE 2

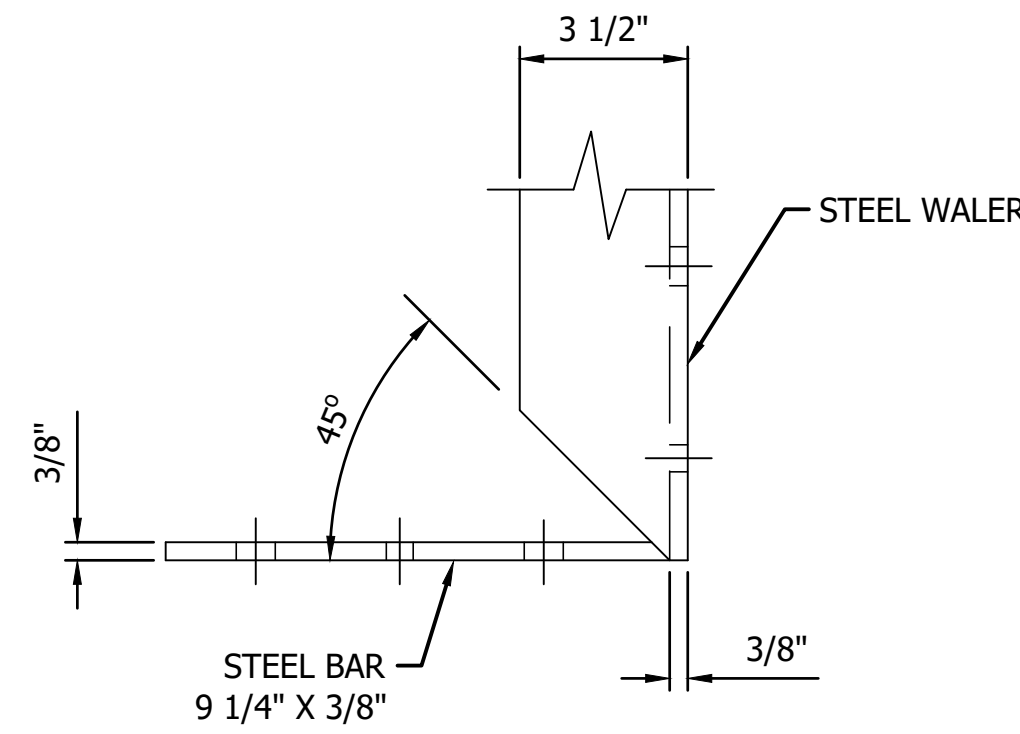
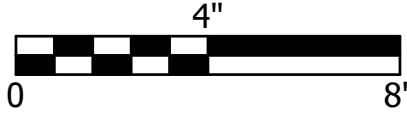


ENDCAP 6P

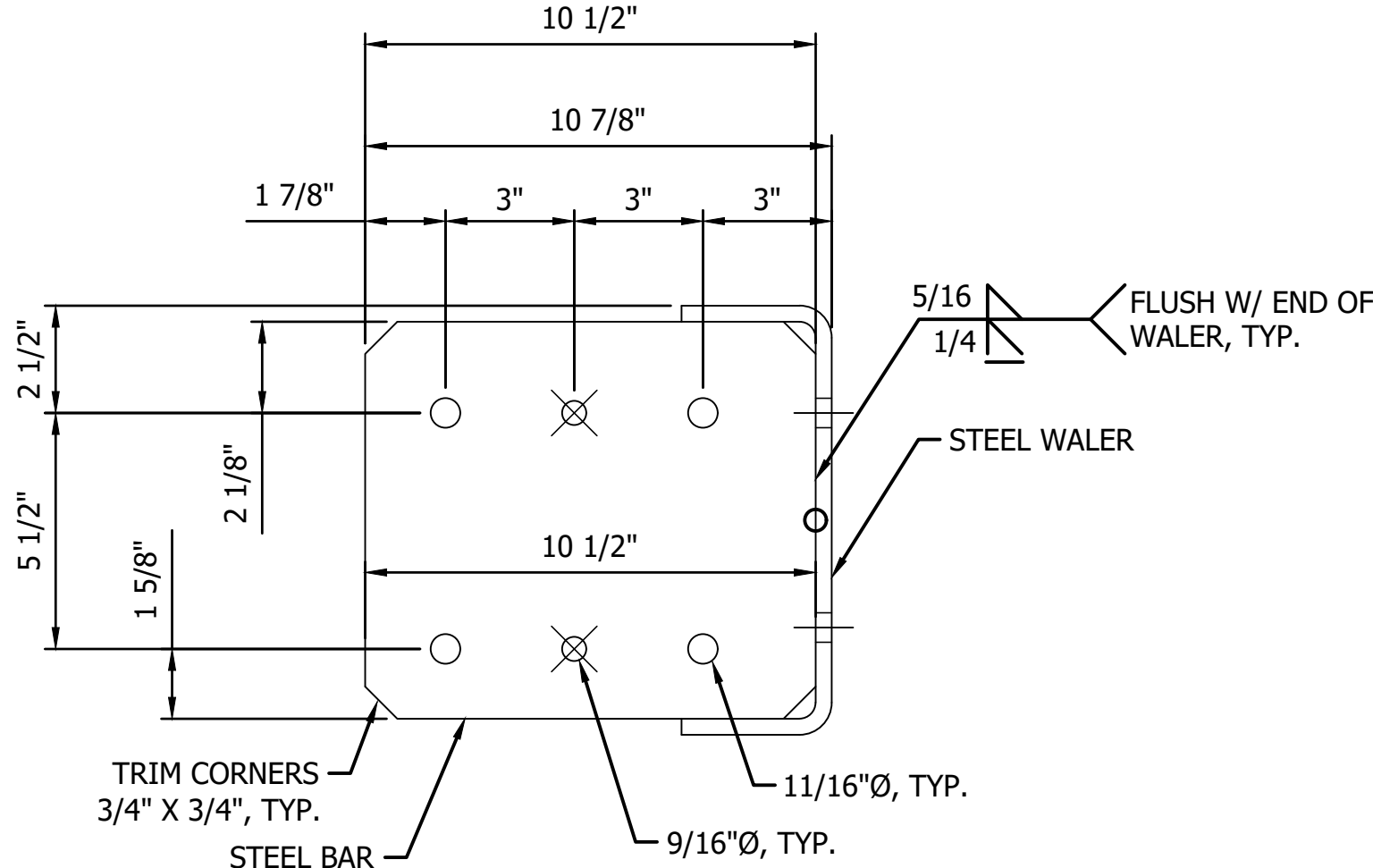
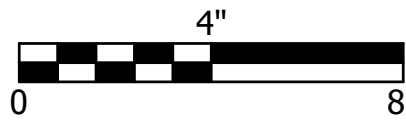
FABRICATE 1



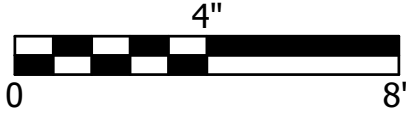
SECTION - ENDCAP



ENDCAP CORNERS



ENDCAP ENDS



CAD NO. S-4812-Z41-2022-STEEL FABRICATION END CAPS 2

DATE	---
APP.	---
INT.	---
REVISIONS	---
NO.	---

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

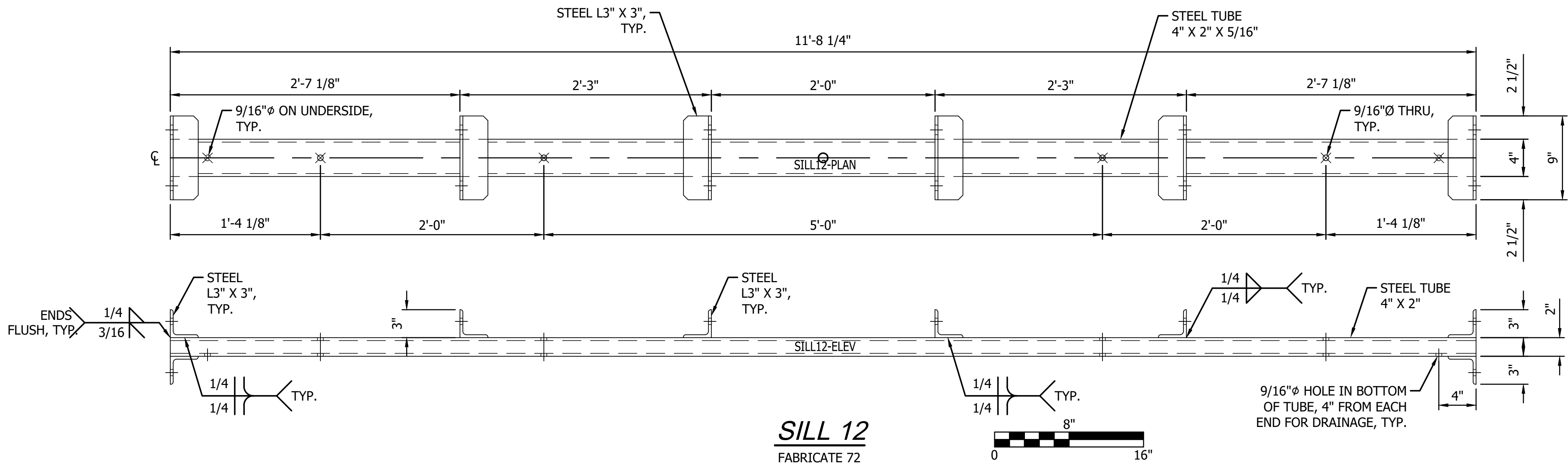
REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

STEEL FABRICATION
END CAPS 2

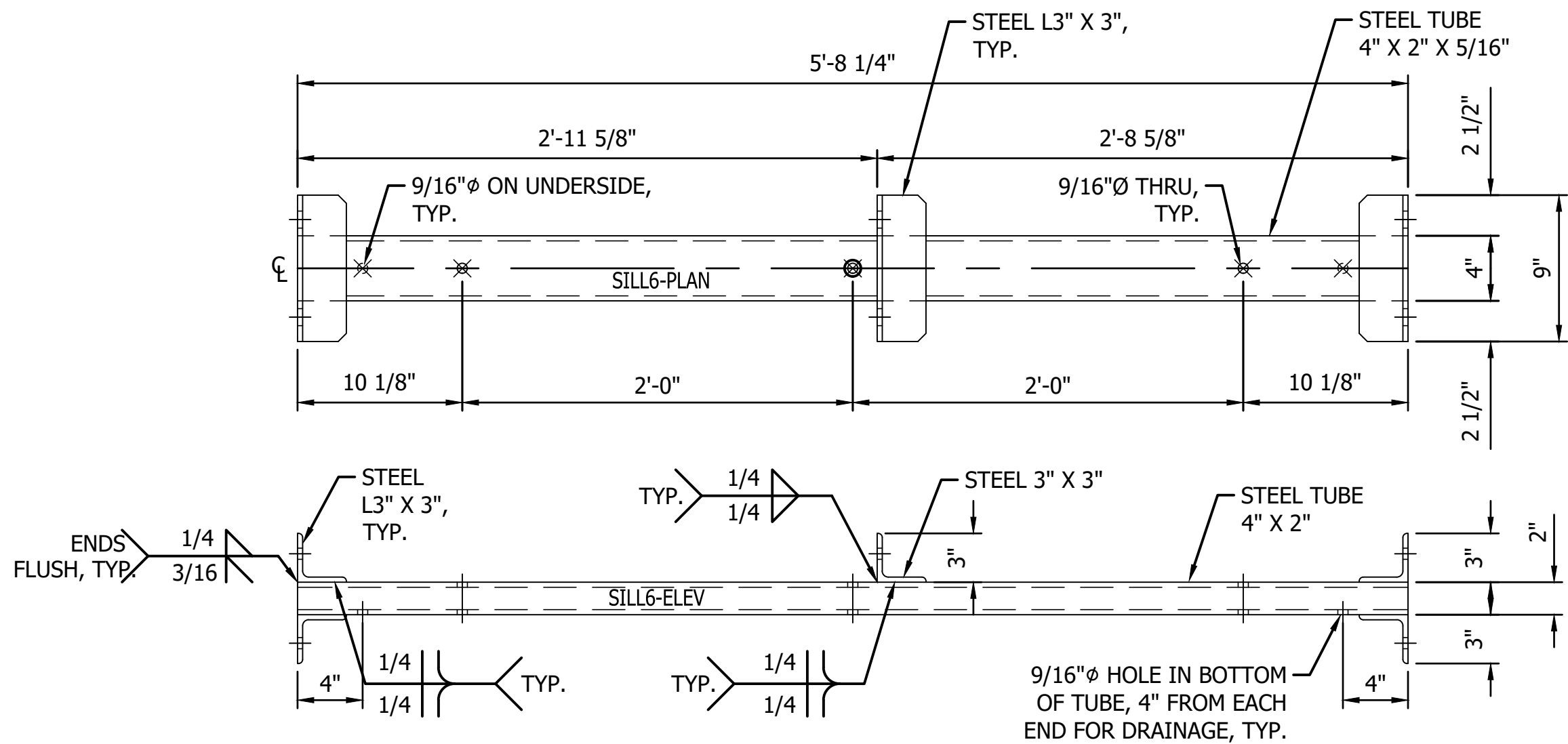
BID SET

SCALE
AS SHOWN

PARKS FILE#



SILL 12
FABRICATE 72



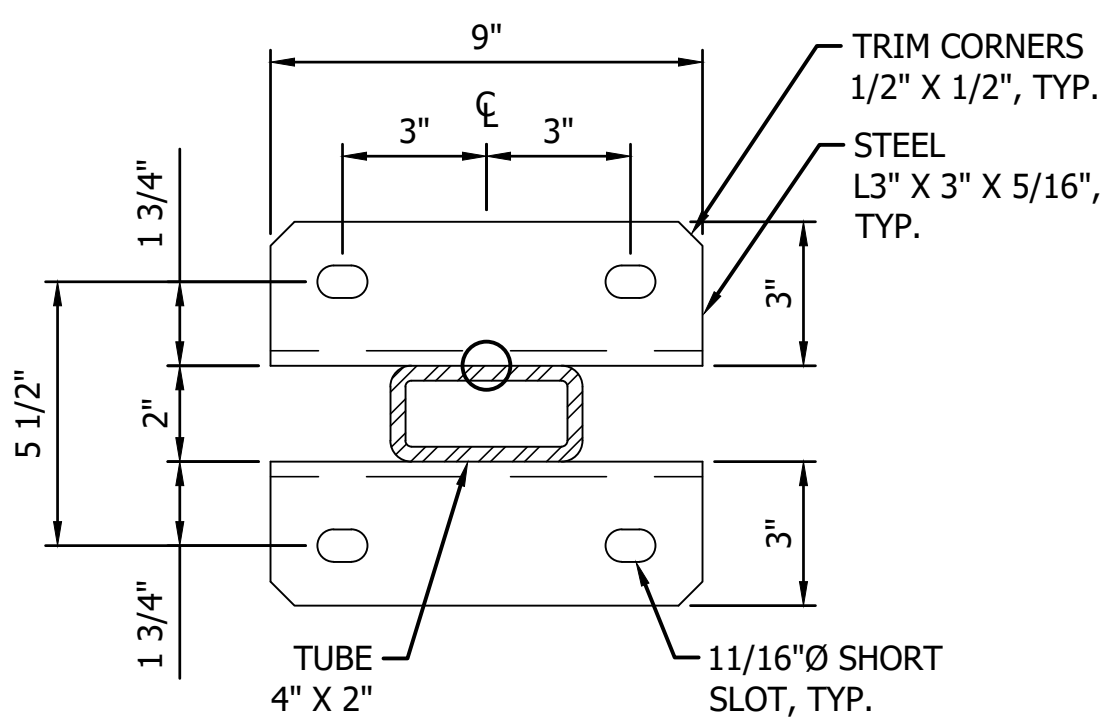
SILL 6
FABRICATE 18

- ✕ 9/16"Ø THRU ✕ 9/16"Ø ON UNDERSIDE
- 11/16"Ø THRU
- 11/16"Ø SHORT SLOT THRU

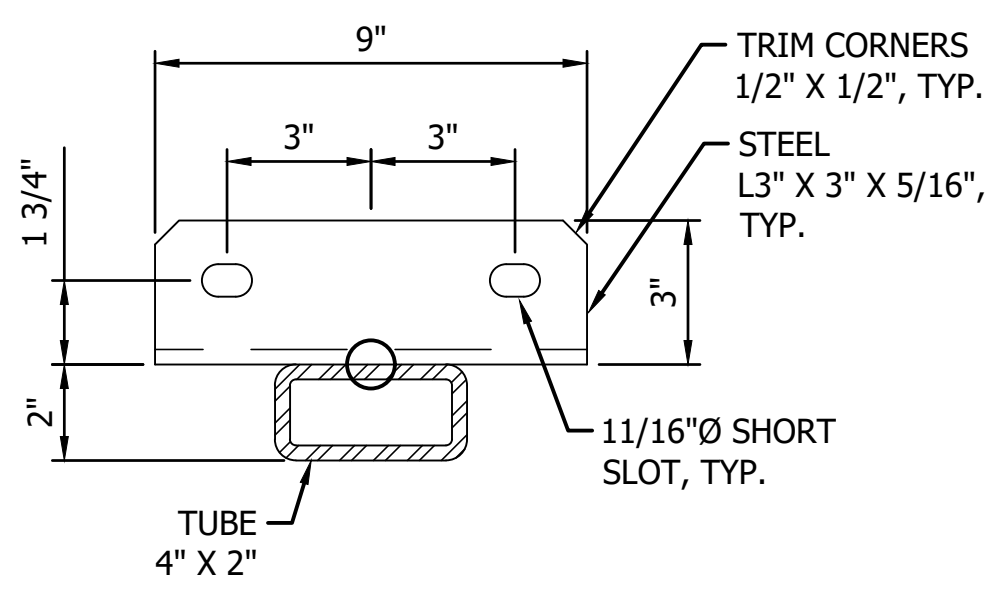
ALL STEEL A-36, HOT DIP GALVANIZE
AFTER FABRICATION, SEE NOTES

SILLS DESIGNED FOR "EAGLE" FLOAT
DRUMS. IF OTHER FLOAT DRUMS ARE
USED, THE ATTACHMENT HOLES NEED
TO BE MODIFIED.

APPROX. WT. = 160 LBS. EACH



SILL ENDS



SECTION - SILL

CAD NO. S-4812-741-2022-STEEL FABRICATION SILLS

DATE	...
APP.	...
INT.	...

REVISIONS	NO.
...	...
...	...
...	...

ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25



6/4/25

REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

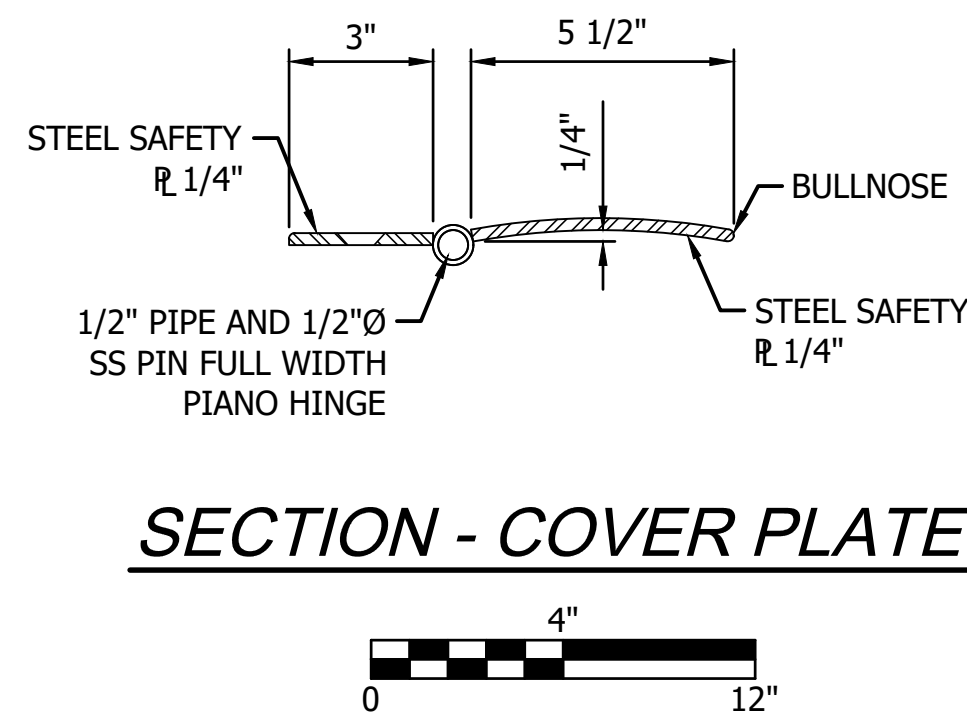
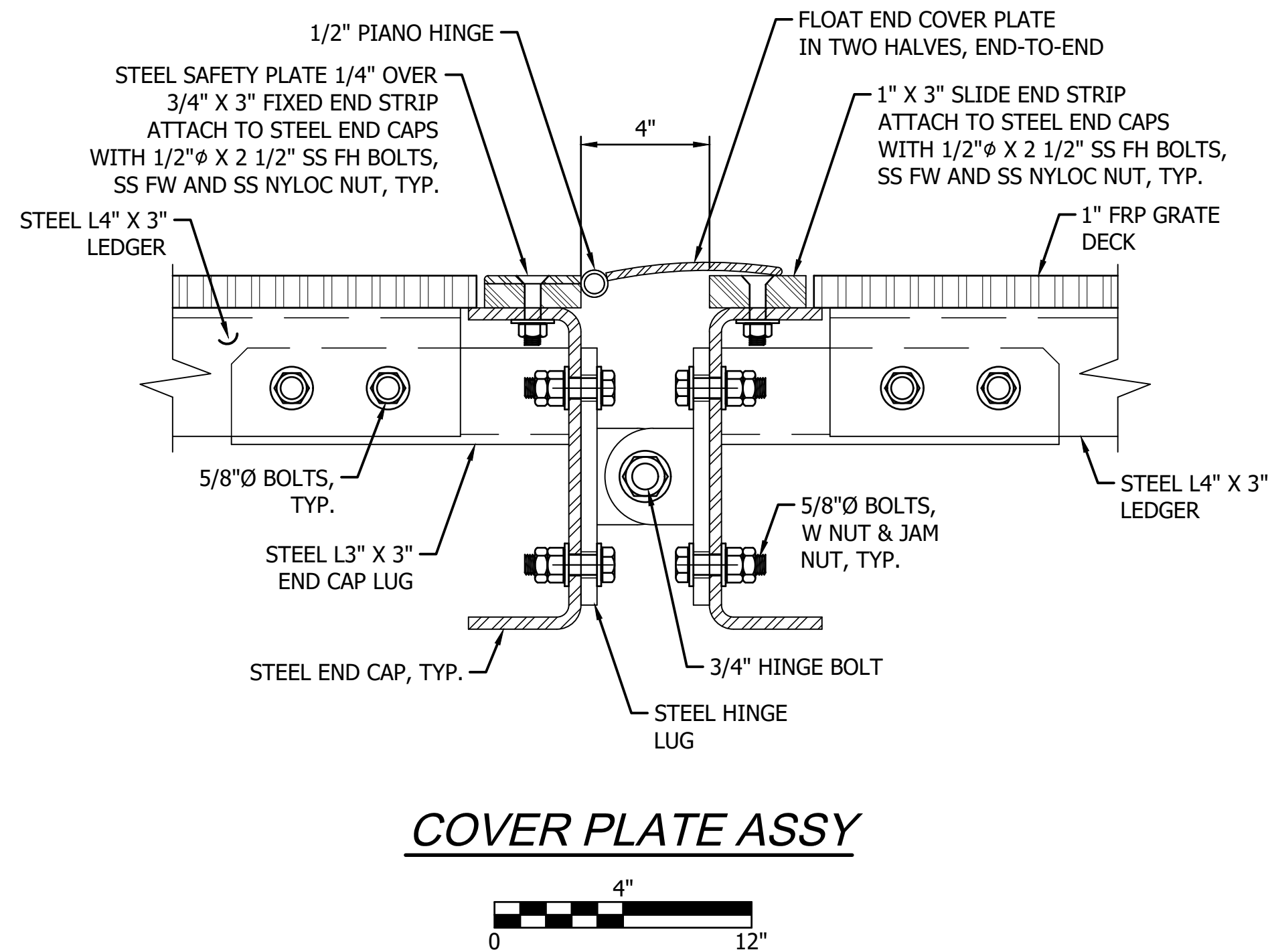
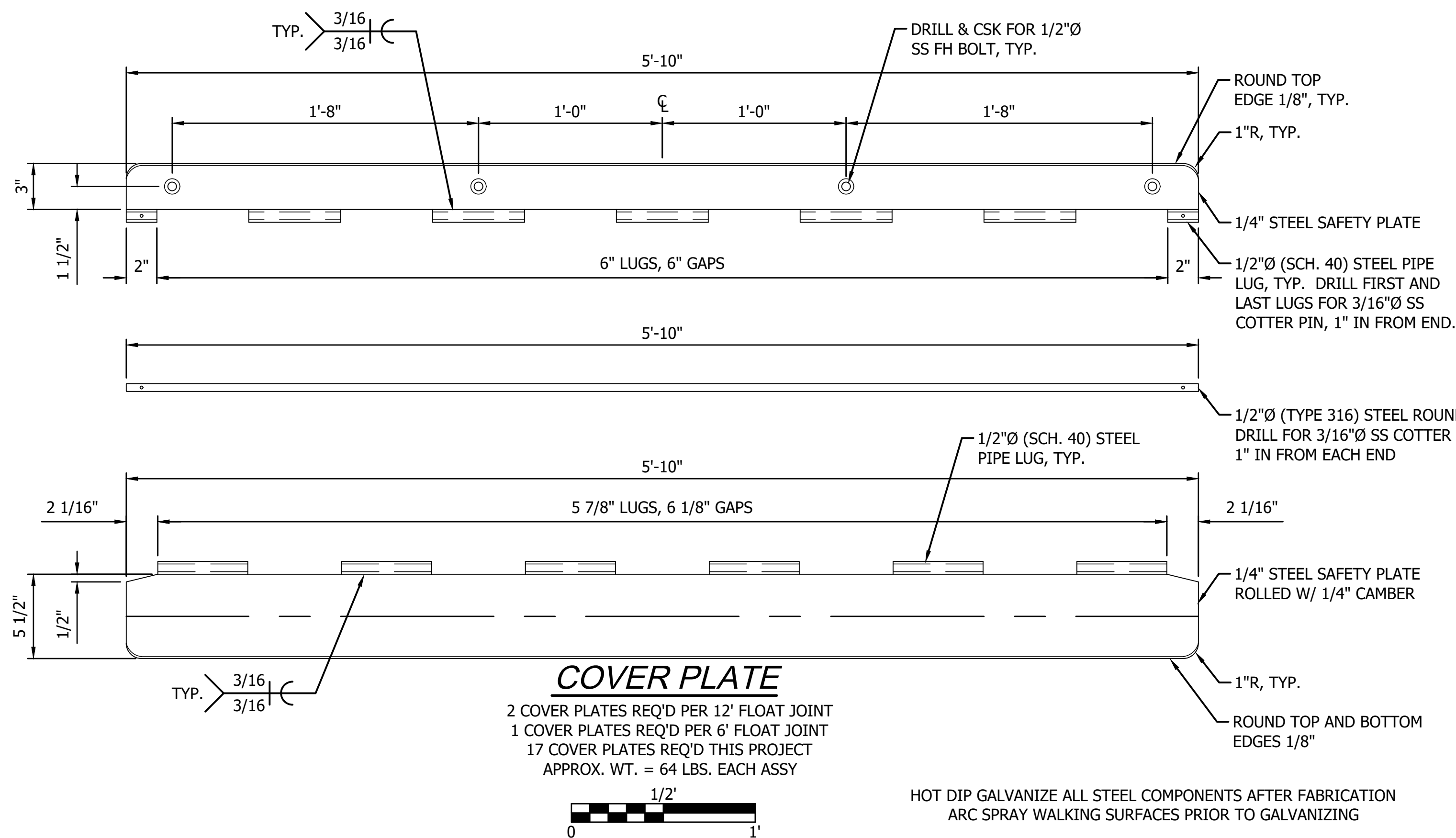
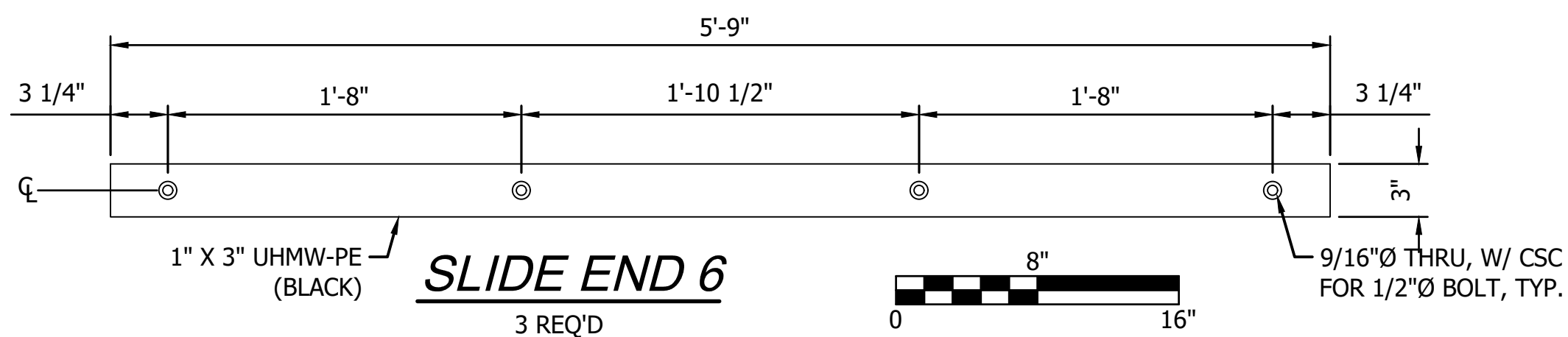
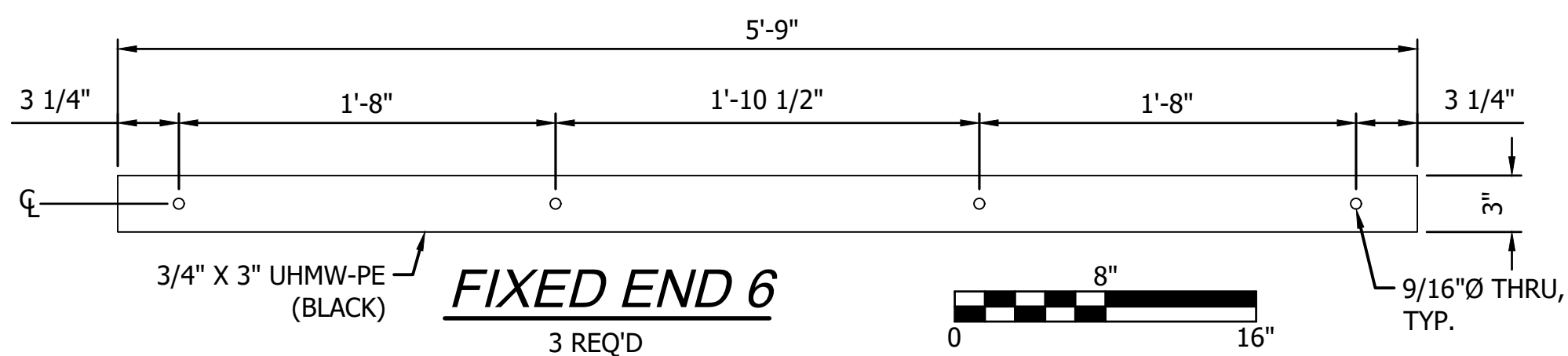
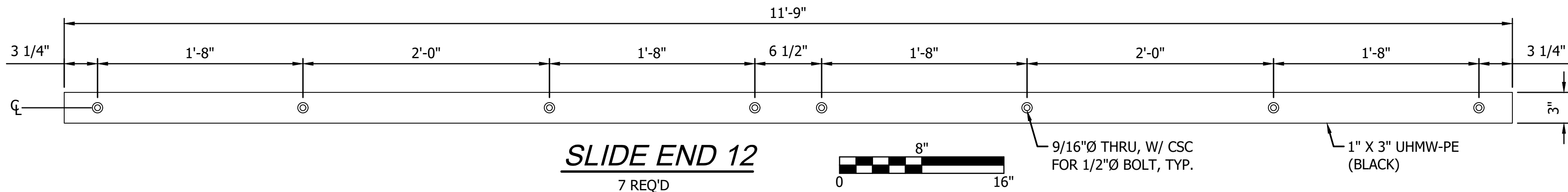
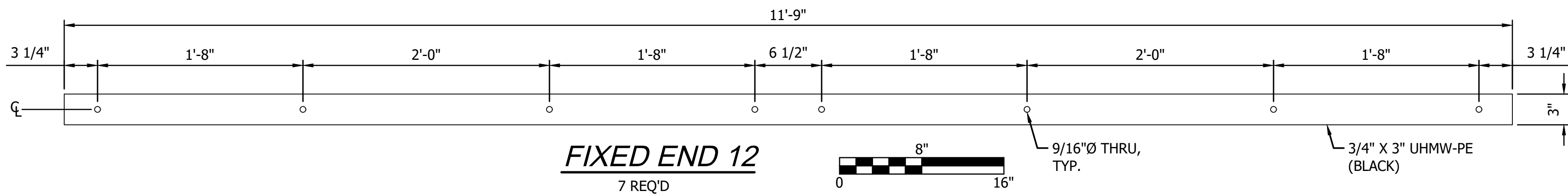
STEEL
FABRICATION SILLS

SCALE
AS SHOWN

PARKS FILE#

BID SET

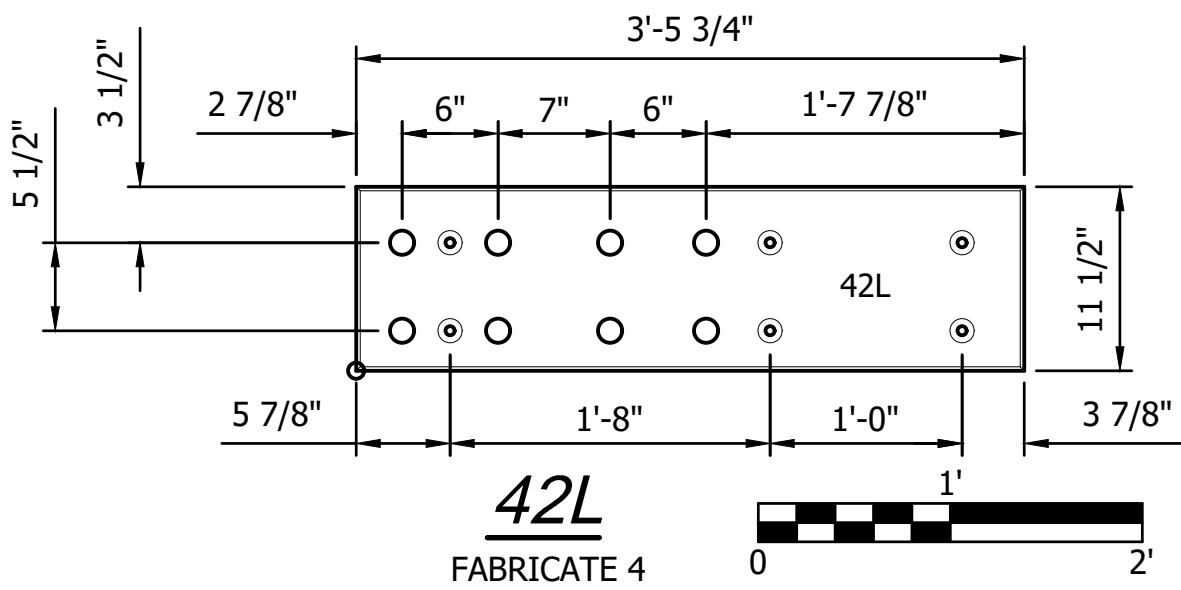
SHEET 45 OF 47



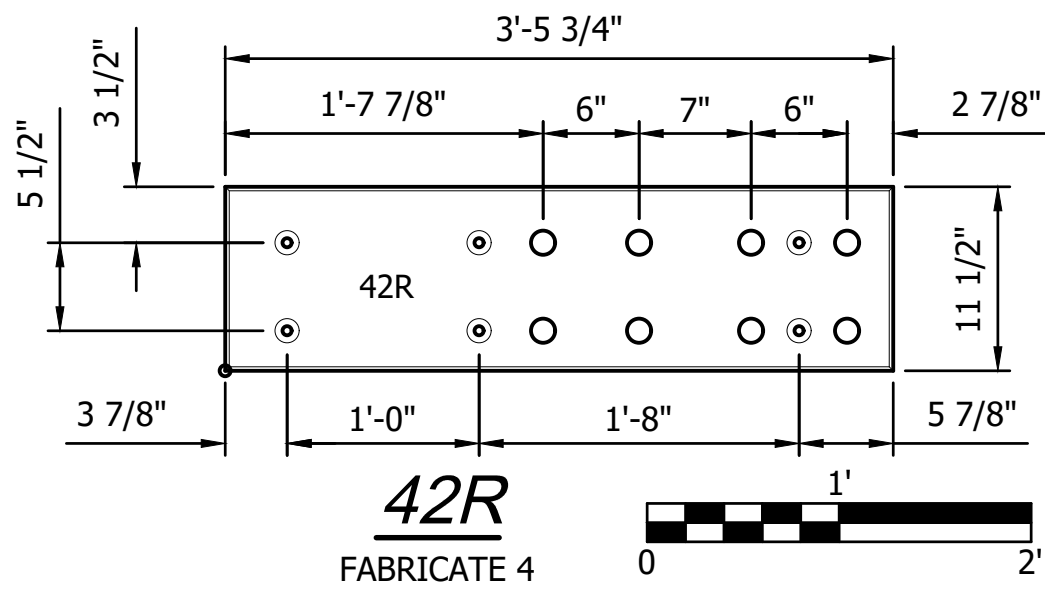
CAD NO. S-4812-Z41-2022-STEEL FABRICATION COVER PLATES		
	DATE	
	APP.	
	INT.	
	REVISIONS	
	NO.	
ACTION	BY	DATE
DESIGNED	EE	6/4/25
DRAWN	TM	6/4/25
CHECKED (FIELD)	PY	6/4/25
CHECKED (HDQTS.)	EE	6/4/25
		
REGISTERED STAMP		
WASHINGTON STATE PARKS AND RECREATION COMMISSION		
STUART ISLAND STATE PARK		
REID HARBOR MOORAGE FACILITY IMPROVEMENTS		
STEEL FABRICATION COVER PLATES		
SCALE AS SHOWN		
PARKS FILE#		

BID SET

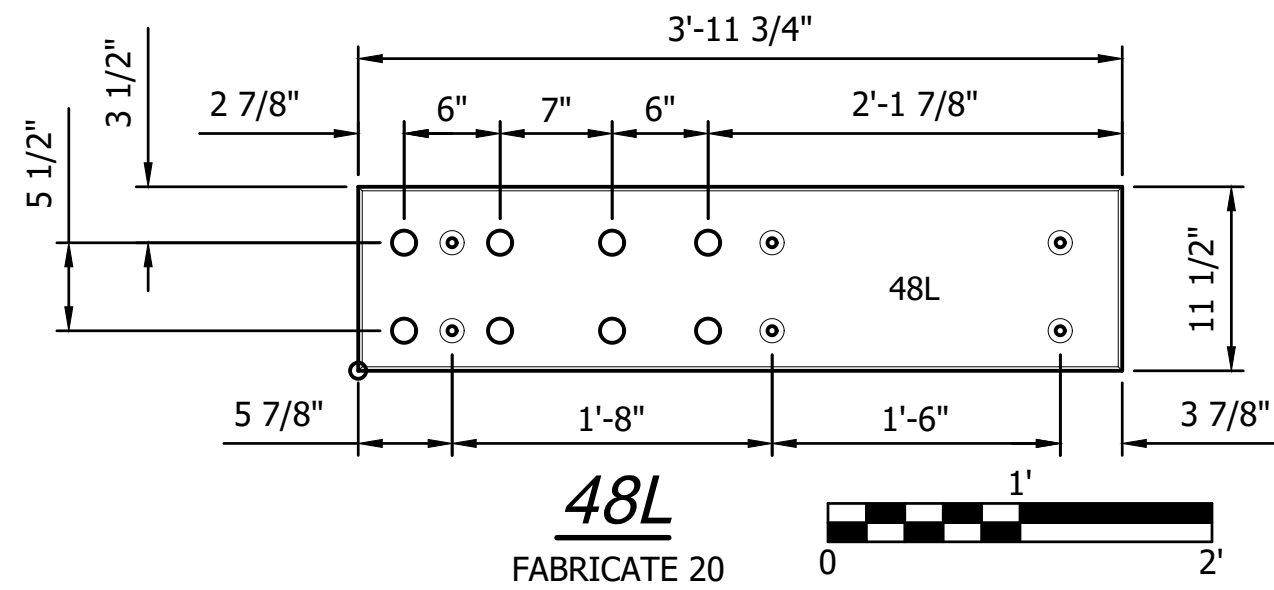
SHEET 46 OF 47



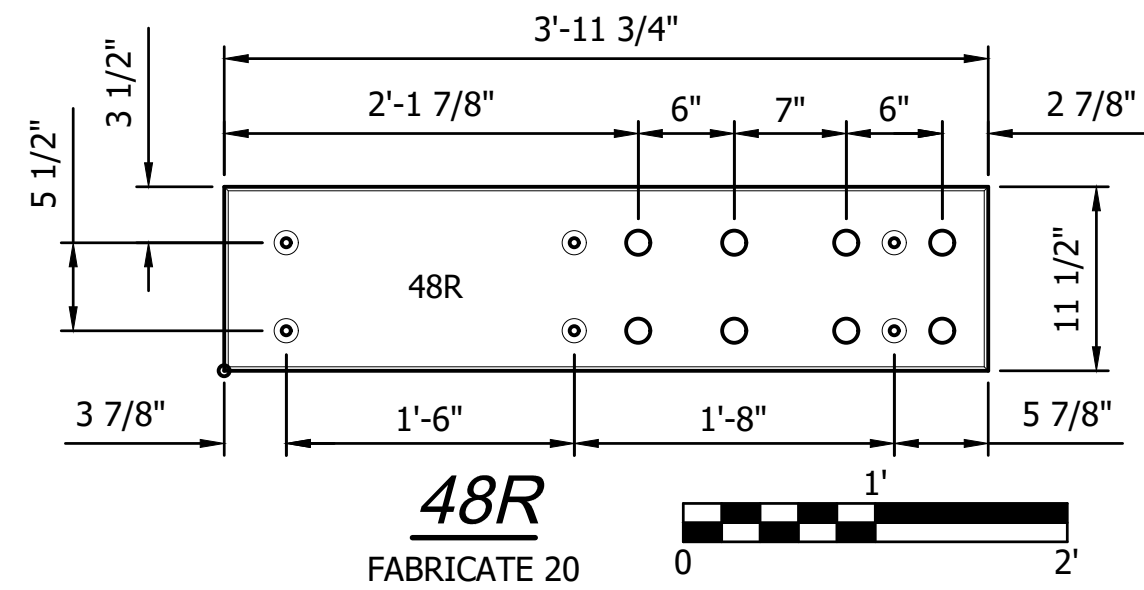
42L
FABRICATE 4



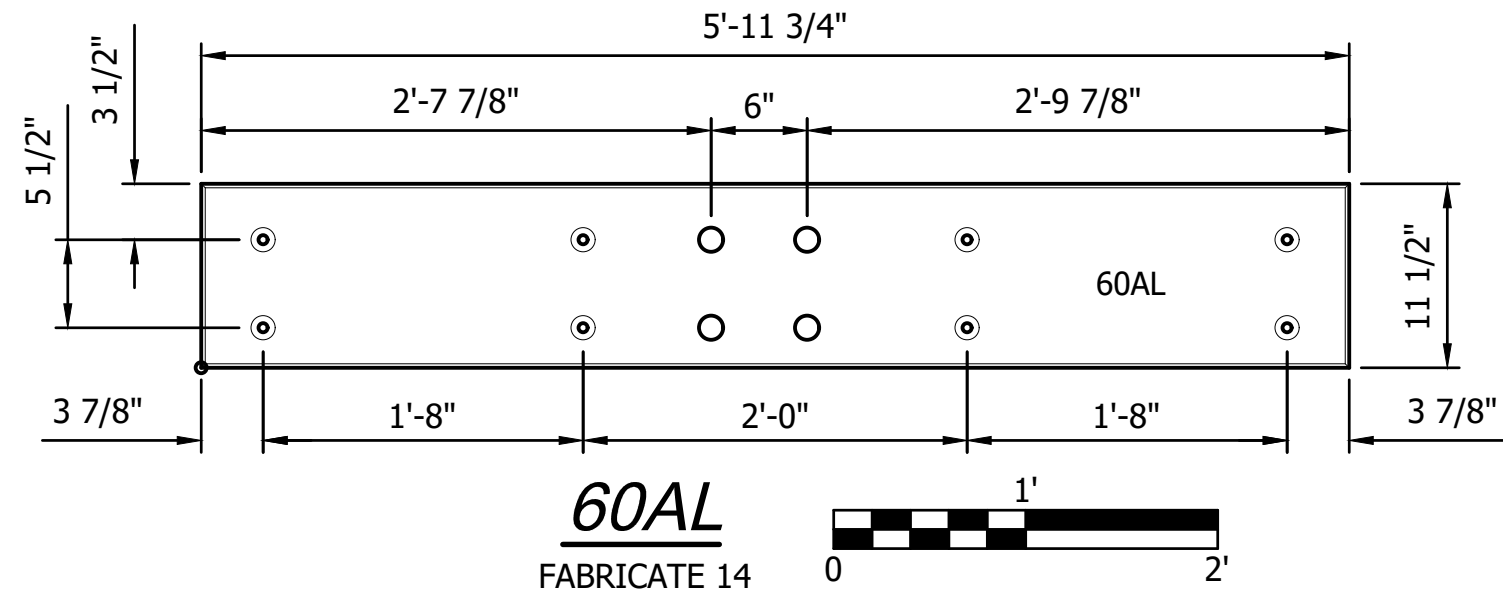
42R
FABRICATE 4



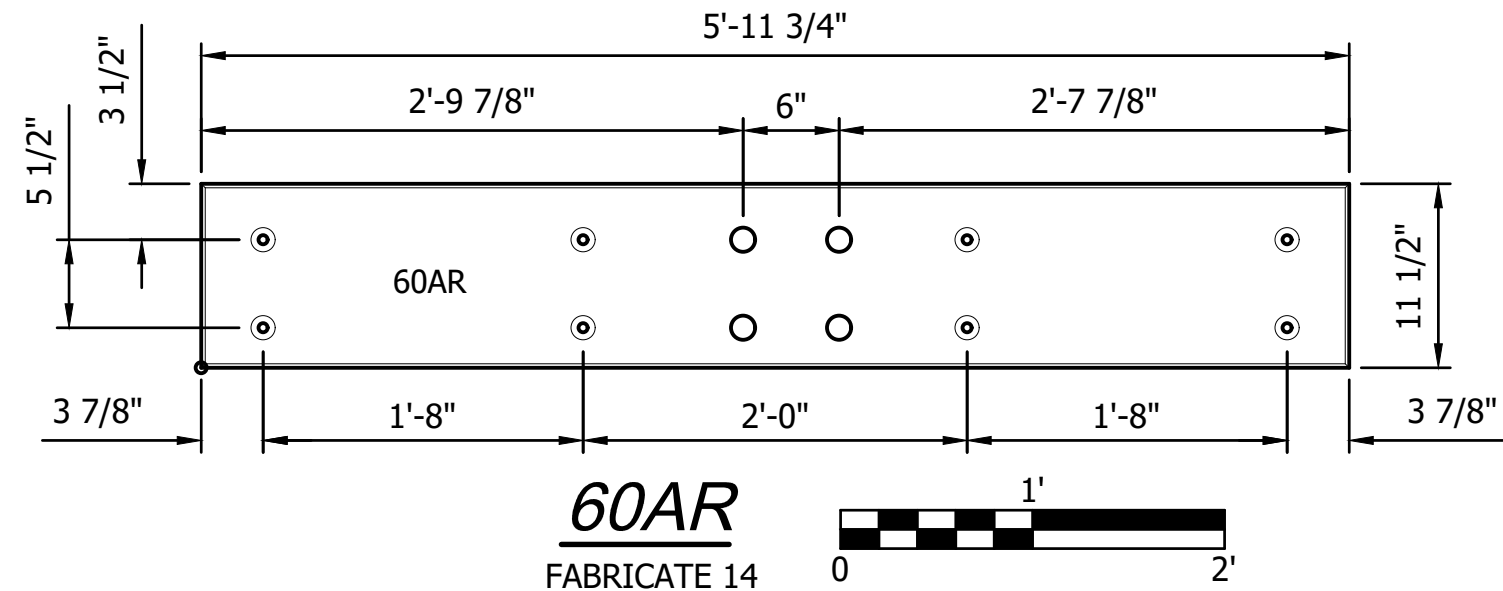
48L
FABRICATE 20



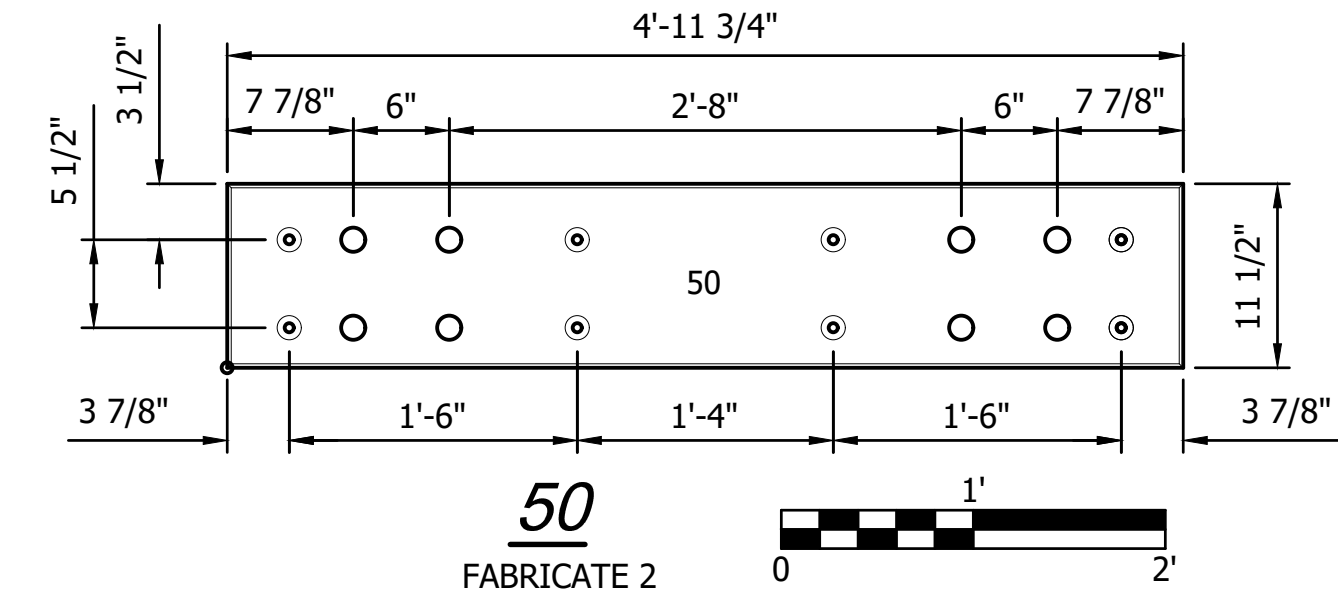
48R
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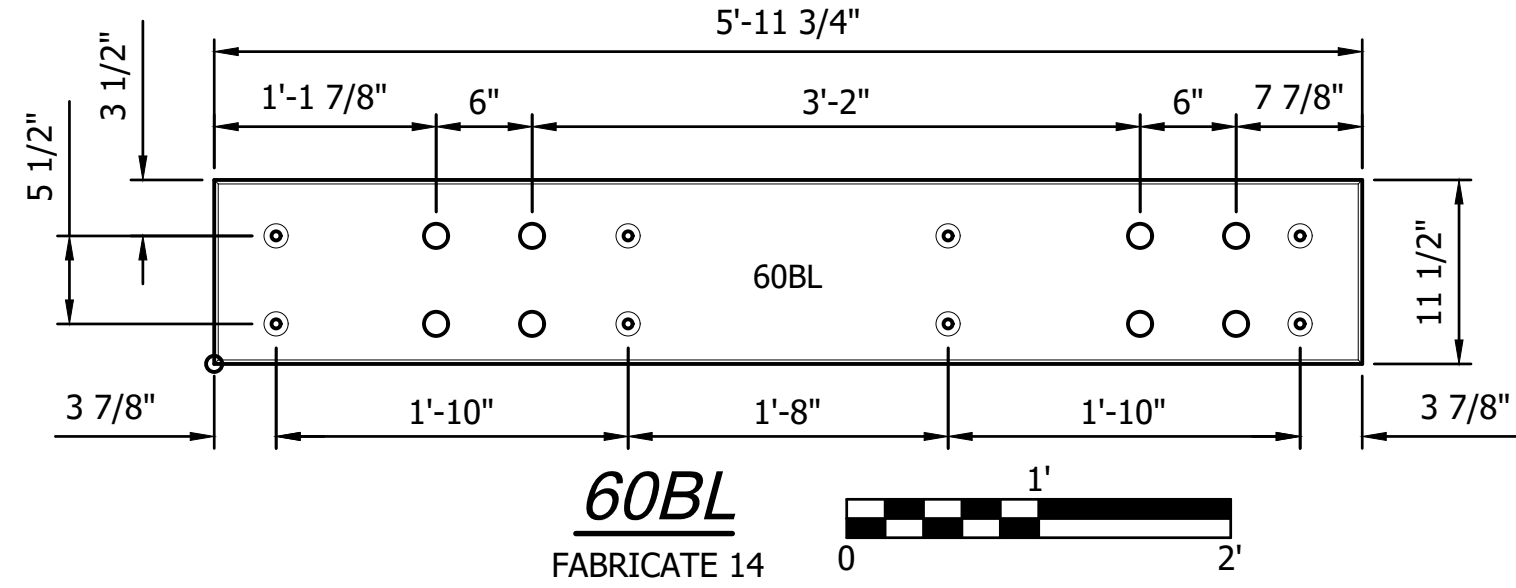
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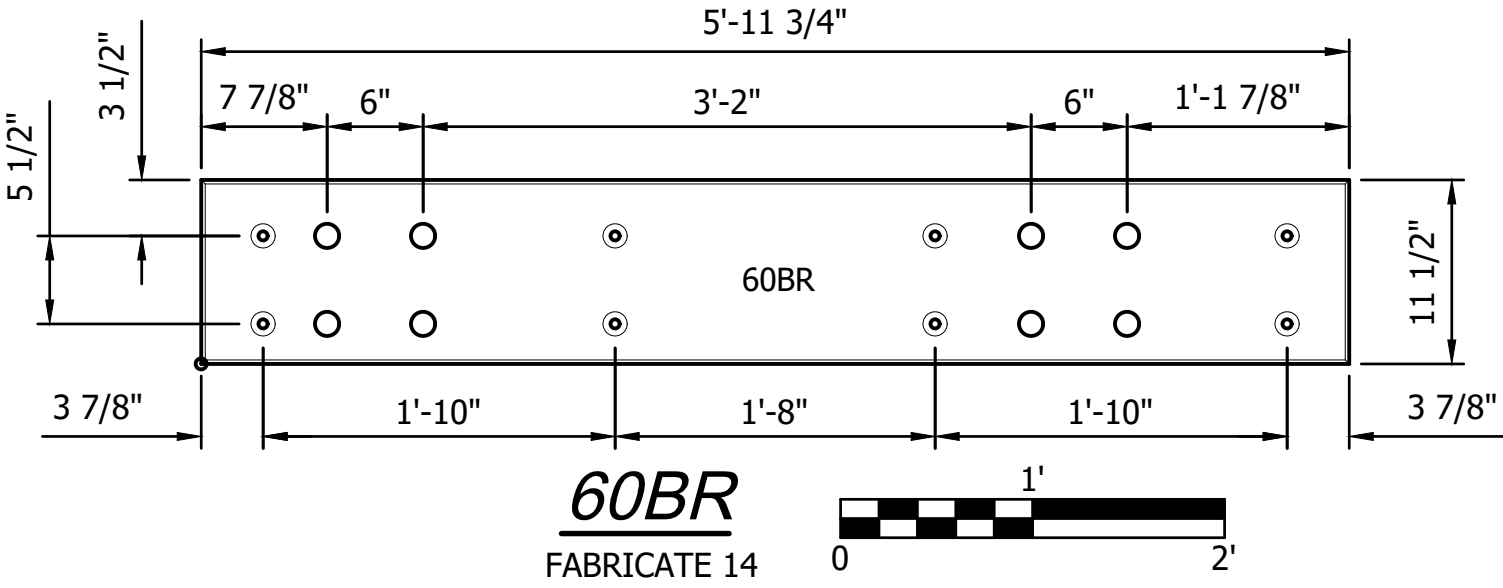
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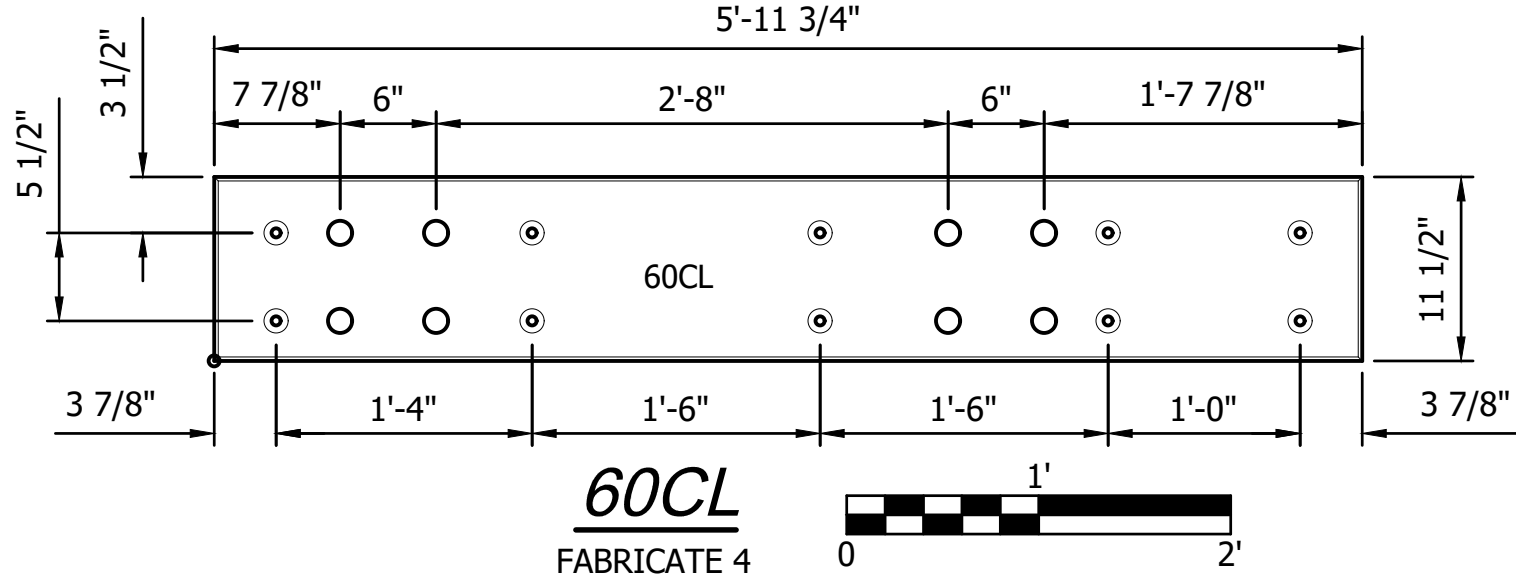
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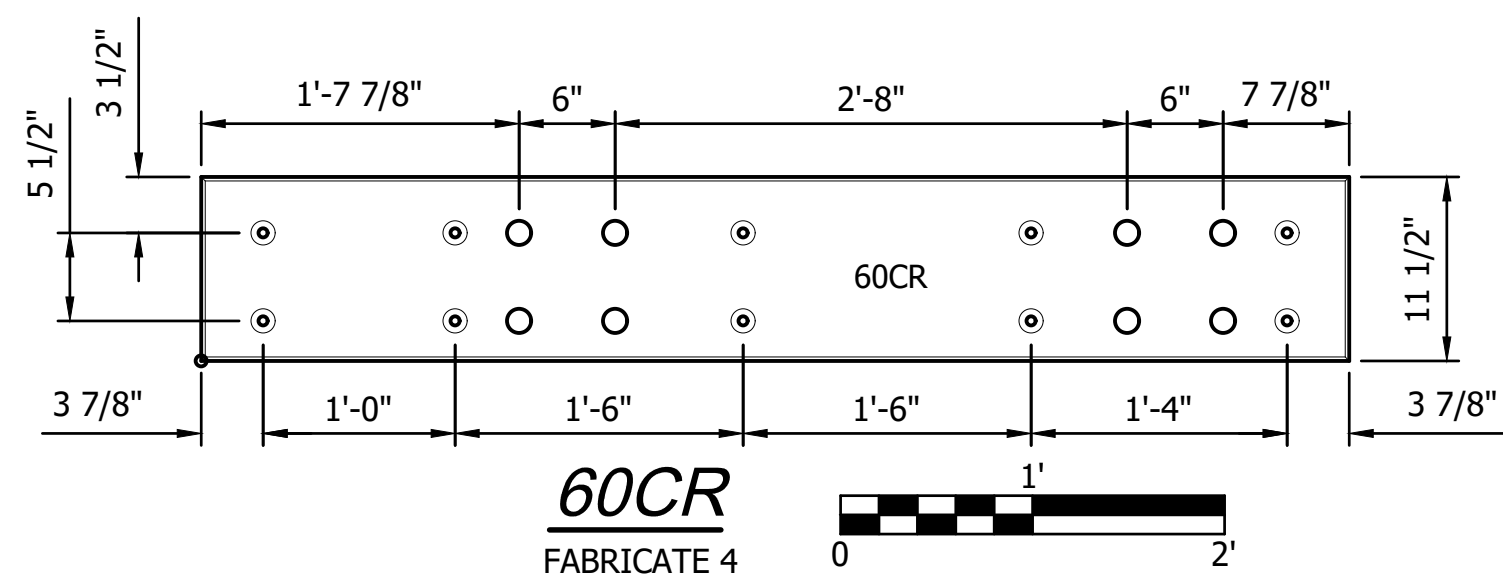
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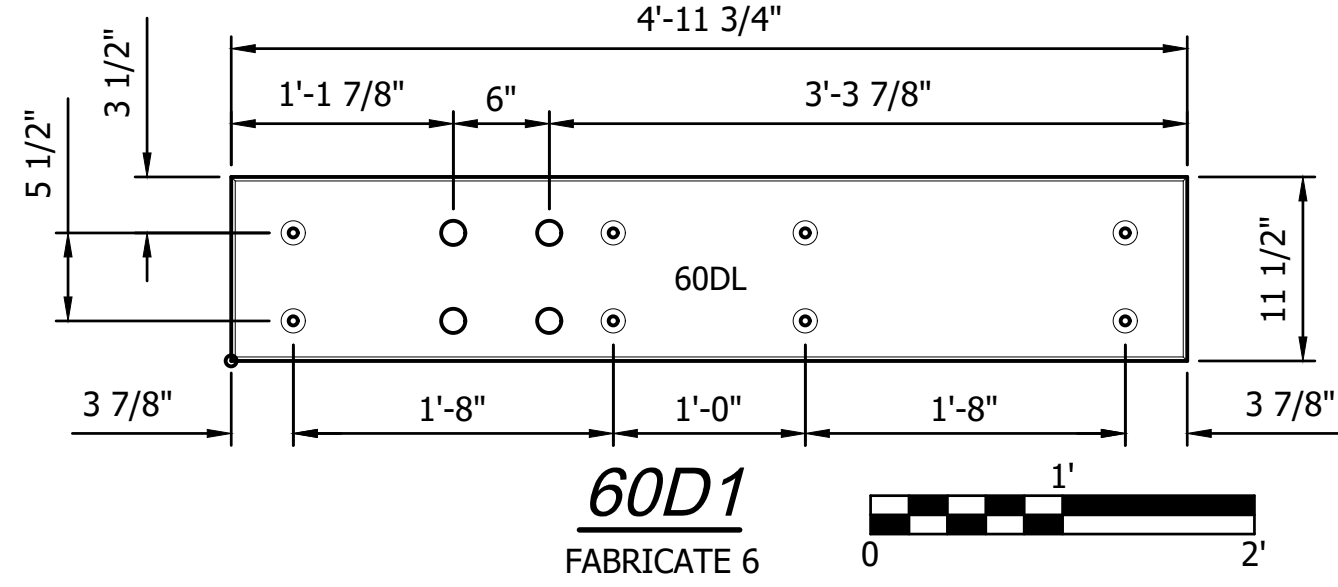
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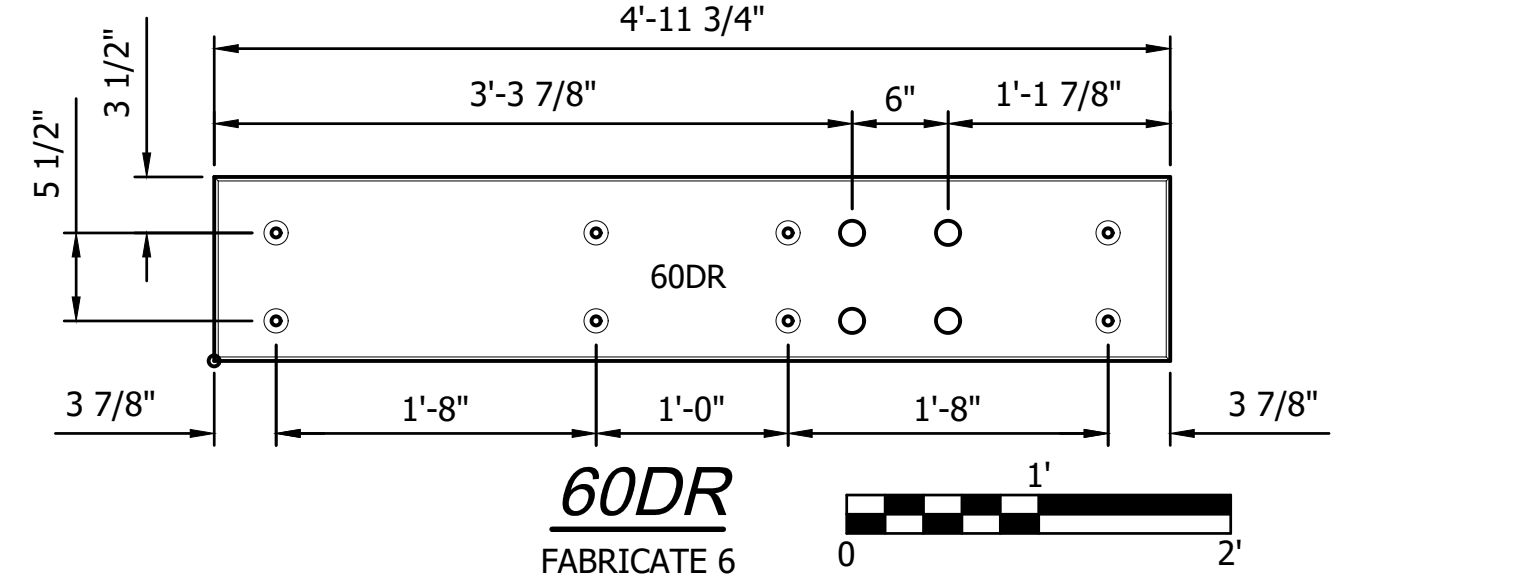
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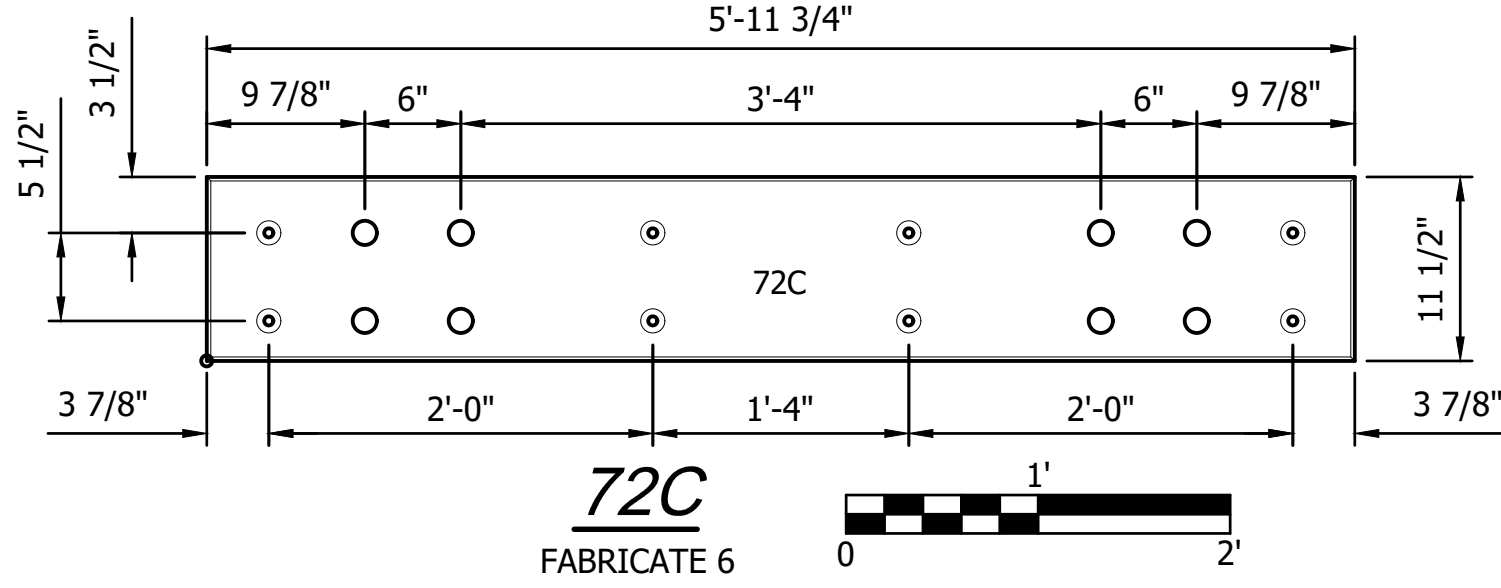
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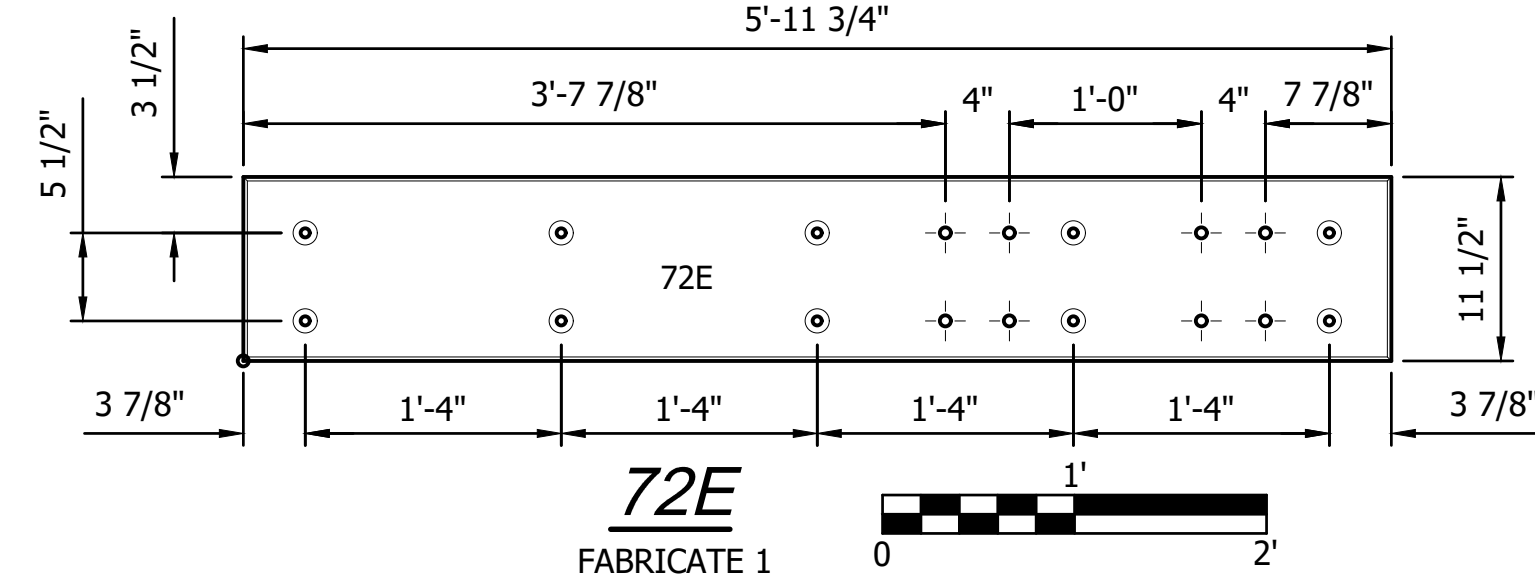
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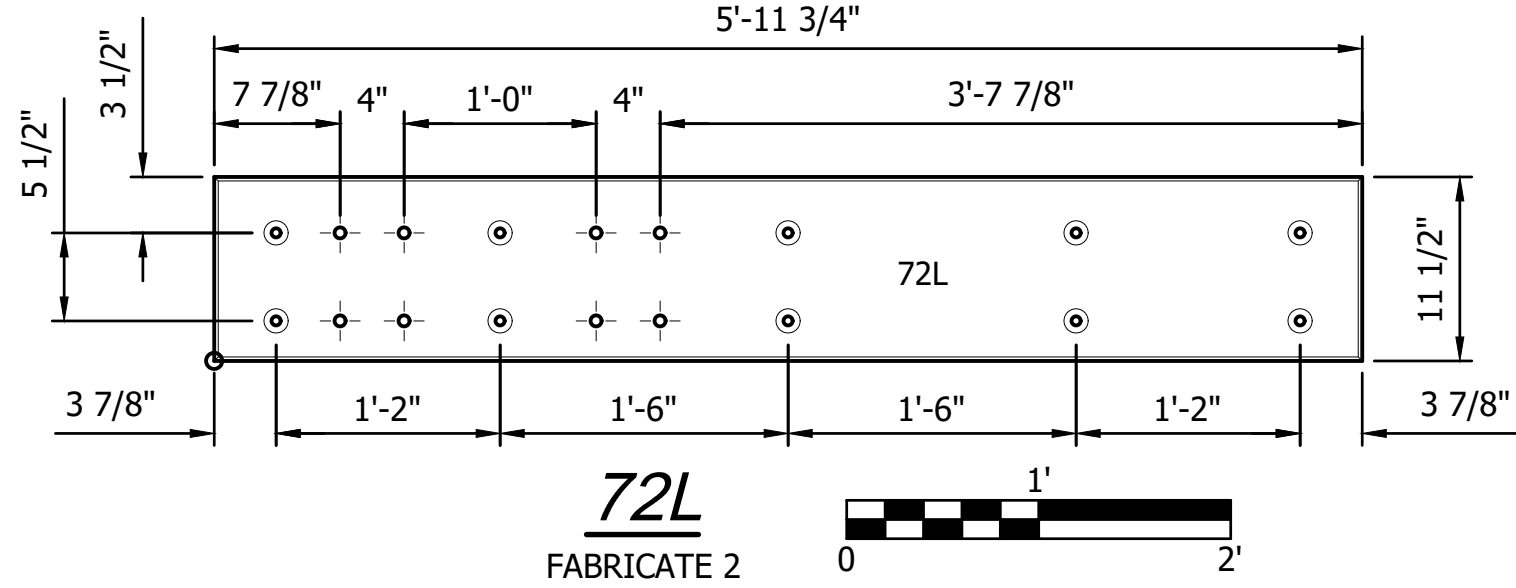
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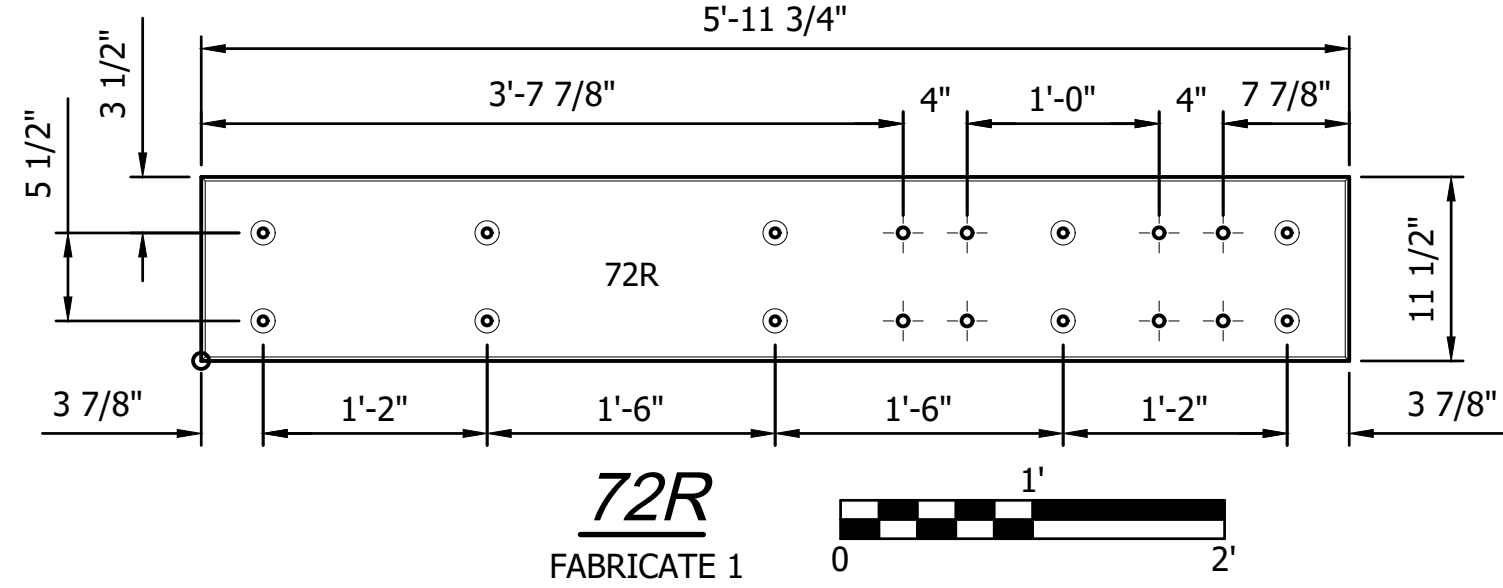
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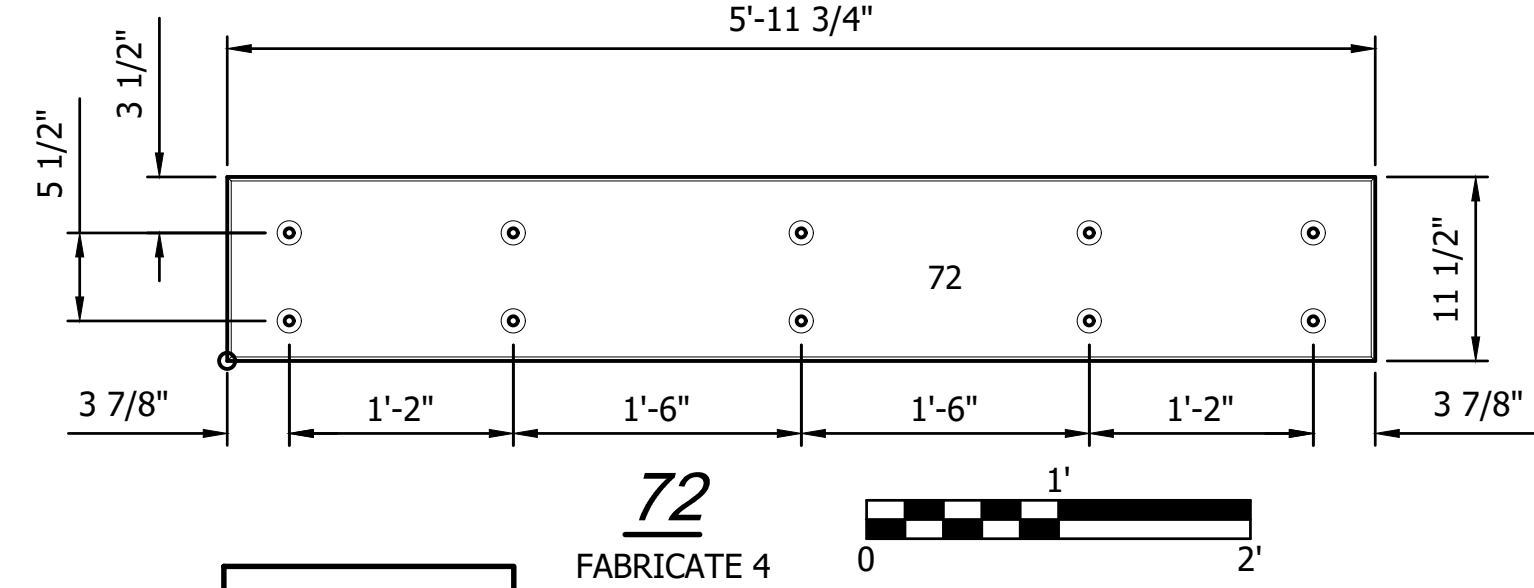
72E
FABRICATE 1



72L
FABRICATE 2



72R
FABRICATE 1



72
FABRICATE 4

- ALL RUBSTRIP 2 X 12 RECYCLED PLASTIC LUMBER, SEE NOTES
- CHAMFER OR ROUND ALL EXPOSED EDGES 3/16"
- MARK RUBSTRIP CODE WITH PERMANENT MARKER OR STAMP ON BACK SIDE
- 9/16"Ø THRU W/ 1 1/2"Ø CB, 3/4" DEEP
 - 11/16"Ø THRU
 - 1 1/2"Ø THRU



6/4/25

REGISTERED STAMP

WASHINGTON
STATE
PARKS
AND
RECREATION
COMMISSION



STUART ISLAND
STATE PARK

REID HARBOR
MOORAGE FACILITY
IMPROVEMENTS

HDPE FABRICATION
RUBSTRIP

SCALE
AS SHOWN

PARKS FILE#

BID SET

SHEET 47 OF 47

WASHINGTON STATE PARKS & RECREATION COMMISSION

LAURIE CONNELLY, CHAIR

SOPHIA DANENBERG

HOLLY WILLIAMS

ALI RAAD

MICHAEL LATIMER


SCOTT MERRIMAN

ALFIE ALVARADO-RAMOS

DIANA DUPUIS, DIRECTOR

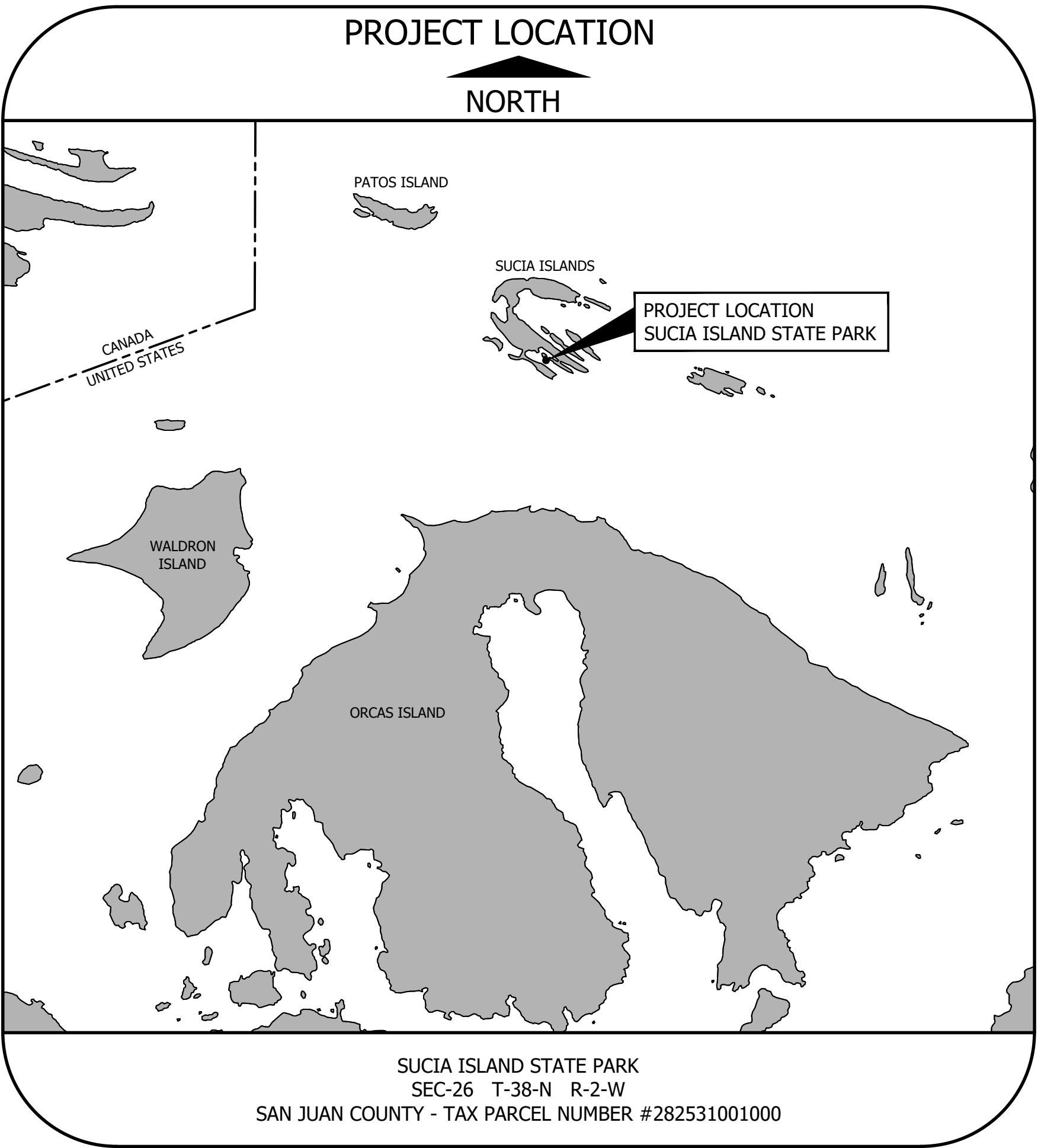
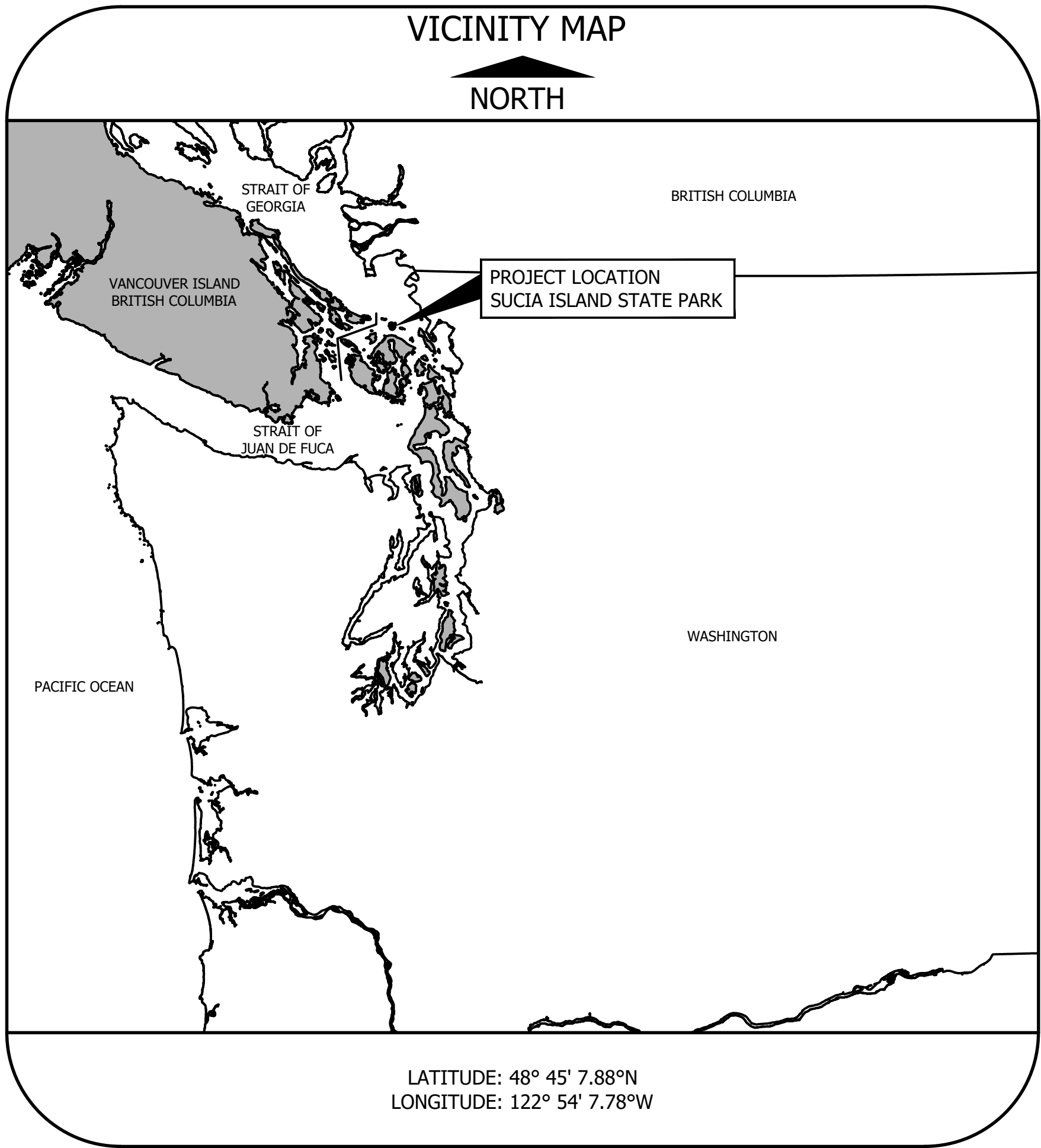


APPROVED FOR CONSTRUCTION

	06/16/2025
REGION MANAGER	date
	7/8/25
CAPITAL PROGRAM MANAGER	date

Area Manager: AARON DAVIDSON

SUCIA ISLAND STATE PARK FLOATING SEWER PUMPOUT STATION



INDEX	
SHEET	DESCRIPTION
1	COVER SHEET
2	PROJECT TEAM
3	GENERAL NOTES
4	OVERALL SITE PLAN
5	PUMPOUT BARGE SITE PLAN
6	BARGE DETAILS
7	PUMPOUT BARGE PROFILE

PROJECT TEAM

OWNER: STATE OF WASHINGTON
PARKS AND RECREATION COMMISSION
1111 ISRAEL ROAD SOUTHWEST
POST OFFICE BOX 42650
OLYMPIA, WASHINGTON 98504-2650
www.parks.wa.gov

OWNER'S REPRESENTATIVE: WASHINGTON STATE PARKS AND RECREATION COMMISSION
220 N. WALNUT STREET
BURLINGTON, WASHINGTON 98233

JONATHAN GIBSON, P.E.
PROJECT REPRESENTATIVE
TELEPHONE: (360) 755-5262
Jonathan.Gibson@parks.wa.gov



PROJECT ARCHITECTURAL AND ENGINEERING CONSULTANTS

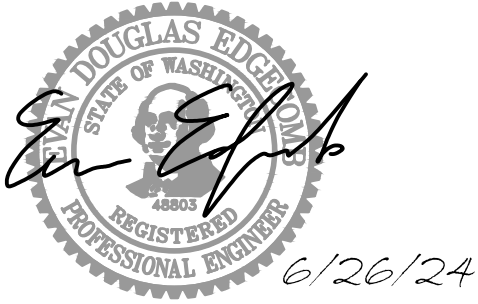
PROJECT LEAD:

M
M
MOTT
MACDONALD

MOTT MACDONALD
1601 5TH AVE, STE 800
SEATTLE, WA 98101
www.mottmac.com

EVAN EDGECOMB, P.E.
PRINCIPAL ENGINEER
TELEPHONE: (425) 977-2592
Evan.Edgecomb@mottmac.com

CAD NO. S890-3911-2022-PROJECT TEAM		
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DRAWN	TM	6/26/24
CHECKED (FIELD)	PY	6/26/24
CHECKED (HDQTS.)	EE	6/26/24



PROJECT ENGINEER

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COMMISSION



SUCIA ISLAND
STATE PARK

FLOATING SEWER
PUMPOUT STATION

PROJECT TEAM

SCALE
NONE

PARKS FILE#

BID SET

SHEET 2 OF 7

GENERAL NOTES

1. THESE DRAWINGS WERE DEVELOPED WITH THE INTENT OF SEPARATING THE WORK INTO TWO CONTRACTS:
 - A. SEWAGE PUMPOUT BARGE PROCUREMENT, FABRICATION, DELIVERY, AND COMMISSIONING (PERFORMED BY FABRICATOR CONTRACTOR)
 - B. INSTALLATION OF SEWER PUMPOUT BARGE AND PROCUREMENT AND INSTALLATION OF GUIDE PILES (PERFORMED BY INSTALL CONTRACTOR)
2. THESE NOTES CONTAIN GENERAL INFORMATION AND ARE NOT COMPREHENSIVE. VERIFY INFORMATION PROVIDED HERE WITH THE SPECIFICATIONS AND OTHER REFERENCED DOCUMENTS. BRING ANY CONFLICTS TO THE ATTENTION OF WASHINGTON STATE PARKS (OWNER) BEFORE WORK IS INITIATED. THE OWNER WILL RESOLVE ANY SUCH CONFLICT.
3. VERIFY ALL DIMENSIONS AND DETAILS PRIOR TO FABRICATION AND CONSTRUCTION.
4. ABIDE BY ALL APPLICABLE LOCAL ENVIRONMENTAL PROTECTION STANDARDS, PERMITTING LAWS, AND REGULATIONS.
5. FOLLOW ALL APPLICABLE SAFETY REGULATIONS. METHODS OF DEMOLITION, CONSTRUCTION, AND ERECTION OF STRUCTURAL MATERIAL IS THE CONTRACTOR'S RESPONSIBILITY.
6. ALL LOCATIONS OF EXISTING FEATURES ARE APPROXIMATE AND HAVE BEEN ESTABLISHED FROM AVAILABLE RECORDS AND LIMITED FIELD INVESTIGATIONS.
7. REVIEW SITE CONDITIONS PRIOR TO MOBILIZING ON SITE.
8. UNLESS EXPLICITLY NOTED OTHERWISE, THE FABRICATOR CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN IN DRAWINGS RELATED TO THE PROCUREMENT, FABRICATION, DELIVERY, AND PERMITS OF THE SEWER PUMPOUT BARGE, INCLUDING ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT.
9. UNLESS EXPLICITLY NOTED OTHERWISE, THE INSTALL CONTRACTOR IS RESPONSIBLE FOR ALL WORK SHOWN IN THE DRAWINGS RELATED TO THE PROCUREMENT AND INSTALLATION OF THE GUIDE PILES AND THE INSTALLATION AND COMMISSIONING OF THE SEWER PUMPOUT BARGE FOR OPERATIONS.

CODES AND STANDARDS

1. ALL METHODS AND MATERIALS SHALL CONFORM TO THE IBC, AS AMENDED AND ADOPTED BY THE LOCAL AUTHORITIES.
2. ALL STRUCTURAL STEEL DESIGN AND CONSTRUCTION SHALL COMPLY WITH ANSI/AISC 341.
3. REFERENCE TO ASTM AND OTHER STANDARDS SHALL MEAN THE LATEST EDITION IN EFFECT ON THE BID DATE, UNLESS NOTED OTHERWISE IN THESE DOCUMENTS OR DESIGNATED BY THE GOVERNING CODE.

WATER LEVELS

1. REFER TO SPECIFIC REQUIREMENTS. WATER LEVELS SHOWN ARE FOR REFERENCE ONLY AND DO NOT INDICATE CONDITIONS DURING CONSTRUCTION.

<i>TIDAL WATER LEVELS (MLLW)</i>	
MEAN LOWER LOW WATER (DESIGN LOW)	0.00 FT
MEAN HIGH WATER	7.86 FT
MEAN HIGHER HIGH WATER	8.66 FT
HIGH TIDE LINE / ORDINARY HIGH WATER (DESIGN HIGH)	10.87 FT

*DATUMS PROVIDED BY NOAA STATION 9449161 VILLAGE POINT

SURVEY INFORMATION: (APPLIES TO ALL SITE PLANS)

1. CONTRACTOR SHALL ESTABLISH SURVEY CONTROL POINTS AND DATUMS APPROVED BY THE OWNER. THE SAME DATUMS AND CONTROL POINTS SHALL BE APPLICABLE TO ALL SITES. CONTRACTOR SHALL SUBMIT SURVEY CONTROL AND DATUM INFORMATION FOR REVIEW AND APPROVAL BY THE OWNER AT LEAST 15 BUSINESS DAYS PRIOR TO COMMENCING WORK.

EELGRASS BEDS

1. EQUIPMENT OPERATION, INCLUDING SPUDDING, PROPWASH, AND SIMILAR CONSTRUCTION ACTIVITIES WHICH COULD AFFECT THE EELGRASS IS PROHIBITED IN CLOSE PROXIMITY TO THE EELGRASS BEDS.
2. EELGRASS BEDS SHALL NOT BE DISTURBED.
3. MITIGATION OF ANY DAMAGED EELGRASS AS A RESULT OF INSTALL CONTRACTOR ACTIVITIES IS THE INSTALL CONTRACTOR'S RESPONSIBILITY TO PROVIDE AT NO COST TO THE OWNER. EELGRASS CONDITION WILL BE MONITORED BASED ON COMPARISON OF PRE- AND POST-CONSTRUCTION SURVEYS CONDUCTED BY THE OWNER.

MATERIALS AND CONSTRUCTION

1. CONTRACTORS ARE RESPONSIBLE FOR ADEQUATE SHORING, BRACING, AND CUTTING OF ALL COMPONENTS AS REQUIRED FOR SAFETY AND STRUCTURAL INTEGRITY THROUGHOUT CONSTRUCTION IN ACCORDANCE WITH SOUND PRACTICE AND PER THE SPECIFICATIONS.
2. ALL SHOP DRAWINGS FOR STEEL PILES SHALL BE SUBMITTED TO AND REVIEWED BY THE OWNER PRIOR TO FABRICATION.

STEEL PILES

- | | |
|---------------------------|--|
| 1. MATERIAL SPECIFICATION | |
| A. ASTM A252, GRADE 3: | ALL PILES |
| 2. COATING: | HOT-DIP GALVANIZED |
| 3. PILES LENGTHS: | PILE CUTOFF ELEVATION - PILE TIP ELEVATION +3 FT (MINIMUM) (REFER TO PILE SCHEDULE ON SHEET 7 FOR CUTOFF AND TIP ELEVATIONS) |

ALUMINUM HULL

1. MATERIAL SPECIFICATION 5086
2. CORROSION PROTECTION: GALVANIC ANODES (ZINC)

PILING CAPS

1. ALL PILING CAPS SHALL BE BLACK FIBERGLASS AS MANUFACTURED BY CHEYENNE MANUFACTURING, INC. (1-855-337-1227) OR APPROVED EQUAL.

PUMPOUT BARGE

1. FABRICATOR CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL DESIGN OF THE PUMPOUT BARGE, IN ACCORDANCE WITH THESE DRAWINGS AND SPECIFICATIONS.
2. FABRICATOR CONTRACTOR TO DESIGN PUMPOUT BARGE TO BE COMPATIBLE WITH THE DESIGNED GUIDE PILES THROUGH THE DESIGN WATER LEVELS.
3. CONSTRUCT THE HULL IN ACCORDANCE WITH USCG APPROVED MARINE CONSTRUCTION PRACTICES AND WORKSMANSHIP IN ADDITION TO THE RULES AND CLASSIFICATION FOR ALUMINUM VESSELS, INCLUDING, BUT NOT LIMITED TO, MATERIALS AND WELDING PROCEDURES, HULL CONSTRUCTION, AND SURVEY AFTER CONSTRUCTION.
4. FABRICATOR CONTRACTOR TO DELIVER AND LAUNCH COMPLETED PUMPOUT BARGE AT THE MARINE CREW PIER AT CORNET BAY IN THE DECEPTION PASS STATE PARK (200 CORNET BAY RD, OAK HARBOR, WA 98279). COORDINATE DATE AND TIME OF DELIVERY WITH THE OWNER.

DESIGN LOADS

1. DESIGN LOADS AND REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND THE SPECIFICATIONS.
2. DEAD LOADS:
SELF WEIGHT OF STRUCTURES, INCLUDING APPURTENANCES AND ATTACHMENTS
3. LIVE LOADS:
 - UNIFORM LOAD: 100 PSF OVER DECK SURFACE AREA
 - POINT LOAD: 400 LB ACTING ON A 1 SQ FT AREA AT ANY POINT ON DECK SURFACE
4. SNOW LOADS: 30 PSF OVER DECK SURFACE AREA
5. WIND IN ACCORDANCE WITH PROJECT TECHNICAL SPECIFICATIONS:
DESIGN WIND SPEED: $V = 104$ MPH
WIND IMPORTANCE FACTOR: $I = 1.0$ (OCCUPANCY CATEGORY II)
EXPOSURE CATEGORY: = D
6. WAVE LOADS:
 - MIN 250 LB/FT
 - SIGNIFICANT WAVE HEIGHT: 2.5 FT
 - PEAK PERIOD: 2.4 SECONDS
7. DESIGN VESSEL:
THE DESIGN VESSEL FOR THE BARGE IS A 60 FOOT LONG POWER BOAT TIED UP TO THE BARGE CLEATS.
8. TOWING SPEED TO A MINIMUM OF 10 KNOTS.

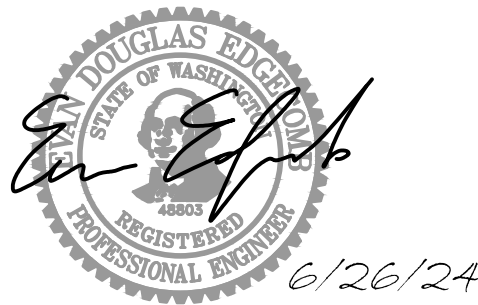
PILE DRIVING

1. UTILIZE A TEMPLATE OR DRIVING FRAME TO MAINTAIN PROPER ALIGNMENT OF PILE DURING INSTALLATION. PILES SHALL BE INSTALLED TO ACHIEVE THE MINIMUM TIP ELEVATIONS SHOWN ON THE DRAWINGS. SELECT AND MOBILIZE APPROPRIATELY SIZED DOWN-THE-HOLE, VIBRATORY, AND IMPACT HAMMERS, AS REQUIRED TO ACHIEVE THE PILE TIP DEPTHS SHOWN ON SHEET 7 WITHOUT DAMAGING THE PILING, IN COMPLIANCE WITH THE RELEVANT PERMIT AND PROJECT DOCUMENTS. SUBMIT PILE LOGS TO THE OWNER. MAINTAIN HAMMERS IN PROPER ALIGNMENT DURING INSTALLATION OPERATIONS BY USE OF LEADS OR GUIDES ATTACHED TO THE HAMMER AND DRILL. REMOVE AND REPLACE PILES DAMAGED DURING INSTALLATION AT THE CONTRACTOR'S EXPENSE.
2. ROCK SOCKETING WILL LIKELY BE REQUIRED FOR PILE INSTALLATION. MOBILIZE EQUIPMENT AND PERSONNEL FOR DRILLING AND ROCK SOCKETING. SUBMIT A DRILLING AND ROCK SOCKETING PLAN TO THE OWNER FOR APPROVAL AT LEAST 15 BUSINESS DAYS PRIOR TO COMMENCING WORK.
3. ENVIRONMENTAL PROTECTION MEASURES, INCLUDING MARINE MAMMAL MONITORING AND MARBLED MURRELET MONITORING ARE A REQUIREMENT OF THE PROJECT PERMITS. INSTALLATION CONTRACTOR SHALL CONDUCT WORK IN ACCORDANCE WITH MONITORING REQUIREMENTS. MARINE MAMMAL MONITORING AND MARBLED MURRELET MONITORING WILL BE PERFORMED BY OTHERS.
4. DETERMINE FINAL PILE LOCATIONS TO CORRESPOND WITH THE LOCATIONS OF PILE HOOPS ON THE PUMPOUT BARGE.
5. DO NOT DEMOBILIZE PILE INSTALLATION EQUIPMENT PRIOR TO OWNER AND ENGINEER ACCEPTANCE OF AS-BUILT PILE LOCATIONS AND PLUMBNESS. REMOBILIZATION DUE TO NON-CONFORMANCE IN PILE INSTALLATION WILL BE AT THE CONTRACTOR'S EXPENSE.
6. REFER TO SPECIFICATIONS REGARDING SOUND ATTENUATION, WATER QUALITY, AND SPILL PREVENTION REQUIREMENTS.

ABBREVIATIONS

ALUM	ALUMINUM	PE	POLYETHYLENE
BM	BENCHMARK	P.T.	PRESSURE TREATED
B.O.	BOTTOM OF	PVC	POLYVINYL CHLORIDE
CL	CENTERLINE	REF	FOR REFERENCE ONLY
CLR	CLEAR	REV	REVISION
DF-L	DOUGLAS FIR-LARCH	SF	SQUARE FEET
ø/DIA	DIAMETER	S.O.	START OF
E	EAST/EASTING	SR	STATE ROUTE
EA	EACH	SIM	SIMILAR
EL	ELEVATION	SS	STAINLESS STEEL
E.O.	END OF	STA	STATION
EW	EACH WAY	STD	STANDARD
FH	FLATHEAD	SYM	SYMMETRICAL
FT	FEET	T	THICK
FRP	FIBER REINFORCED PLASTIC	T.O.	TOP OF
HDPE	HIGH DENSITY POLYETHYLENE	UHMW	ULTRA HIGH
HSS	HOLLOW STRUCTURAL SECTION		MOLECULAR WEIGHT
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
MIN	MINIMUM	UV	ULTRAVIOLET
N	NORTH/NORTHING	W/	WITH
NTS	NOT TO SCALE	@	AT
O.C.	ON CENTER	'	MIN OR FEET
OHW	ORDINARY HIGH WATER	"	SECONDS OR INCHES
		°	DEGREES

CAD NO. S890-3911-2022-GENERAL NOTES			
			DATE
			APP.
			INT.
			REVISIONS
			NO.
ACTION	BY	DATE	
DESIGNED	EE	6/26/24	
DRAWN	TM	6/26/24	
CHECKED (FIELD)	PY	6/26/24	
CHECKED (HDQTS.)	EE	6/26/24	



PROJECT ENGINEER

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COMMISSION



SUCIA ISLAND STATE PARK

FLOATING SEWER PUMPOUT STATION

GENERAL NOTES

SCALE

NONE

PARKS FILE#

BID SET

SHEET 3 OF 7

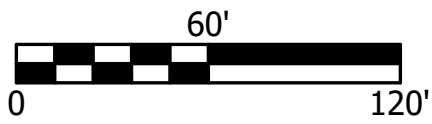


LEGEND

---	-10	---	EXISTING CONTOUR
---	MHW	---	MEAN HIGH WATER
---	MHHW	---	MEAN HIGHER HIGH WATER
---	HTL-OHW	---	HIGH TIDE LINE / ORDINARY HIGH WATER

- NOTES:**
- BATHYMETRIC SURVEY PROVIDED BY DELPHIS IN 2018.
 - HORIZONTAL DATUM IN WASHINGTON STATE PLANE, NORTH ZONE, US FT.
 - VERTICAL DATUM IN MEAN LOWER LOW WATER.
 - NO BENCHMARKS EXIST IN THE VICINITY.

OVERALL SITE PLAN



S890-3911-2022-
CAD NO. OVERALL SITE PLAN

	DATE
	APP.
	INT.
	REVISIONS
	NO.

ACTION	BY	DATE
DESIGNED	EE	6/26/24
DRAWN	TM	6/26/24
CHECKED (FIELD)	PY	6/26/24
CHECKED (HDQTS.)	EE	6/26/24

6/26/24

PROJECT ENGINEER

WASHINGTON STATE PARKS AND RECREATION COMMISSION

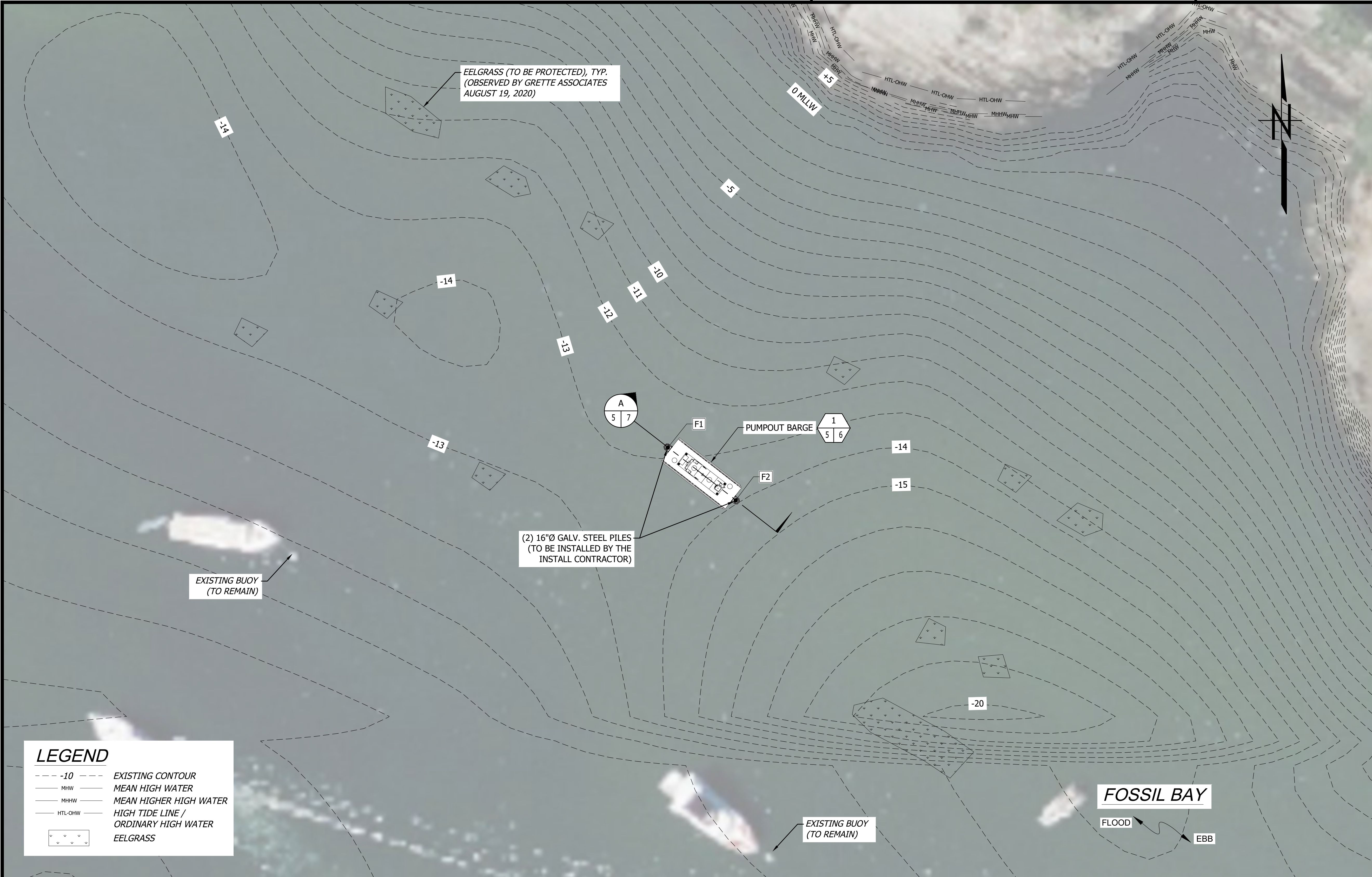
SUCIA ISLAND STATE PARK

FLOATING SEWER PUMPOUT STATION

OVERALL SITE PLAN

SCALE

1" = 60'

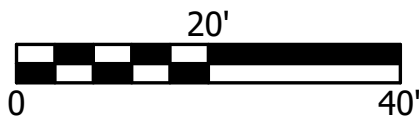


LEGEND

---	-10	---	EXISTING CONTOUR
---	MHW	---	MEAN HIGH WATER
---	MHHW	---	MEAN HIGHER HIGH WATER
---	HTL-OHW	---	HIGH TIDE LINE / ORDINARY HIGH WATER
			EELGRASS

- NOTES:**
- BATHYMETRIC SURVEY PROVIDED BY DELPHIS IN 2018.
 - HORIZONTAL DATUM IN WASHINGTON STATE PLANE, NORTH ZONE, US FT.
 - VERTICAL DATUM IN MEAN LOWER LOW WATER.
 - NO BENCHMARKS EXIST IN THE VICINITY.
 - SEE SHEET 7 FOR PILE SCHEDULE.

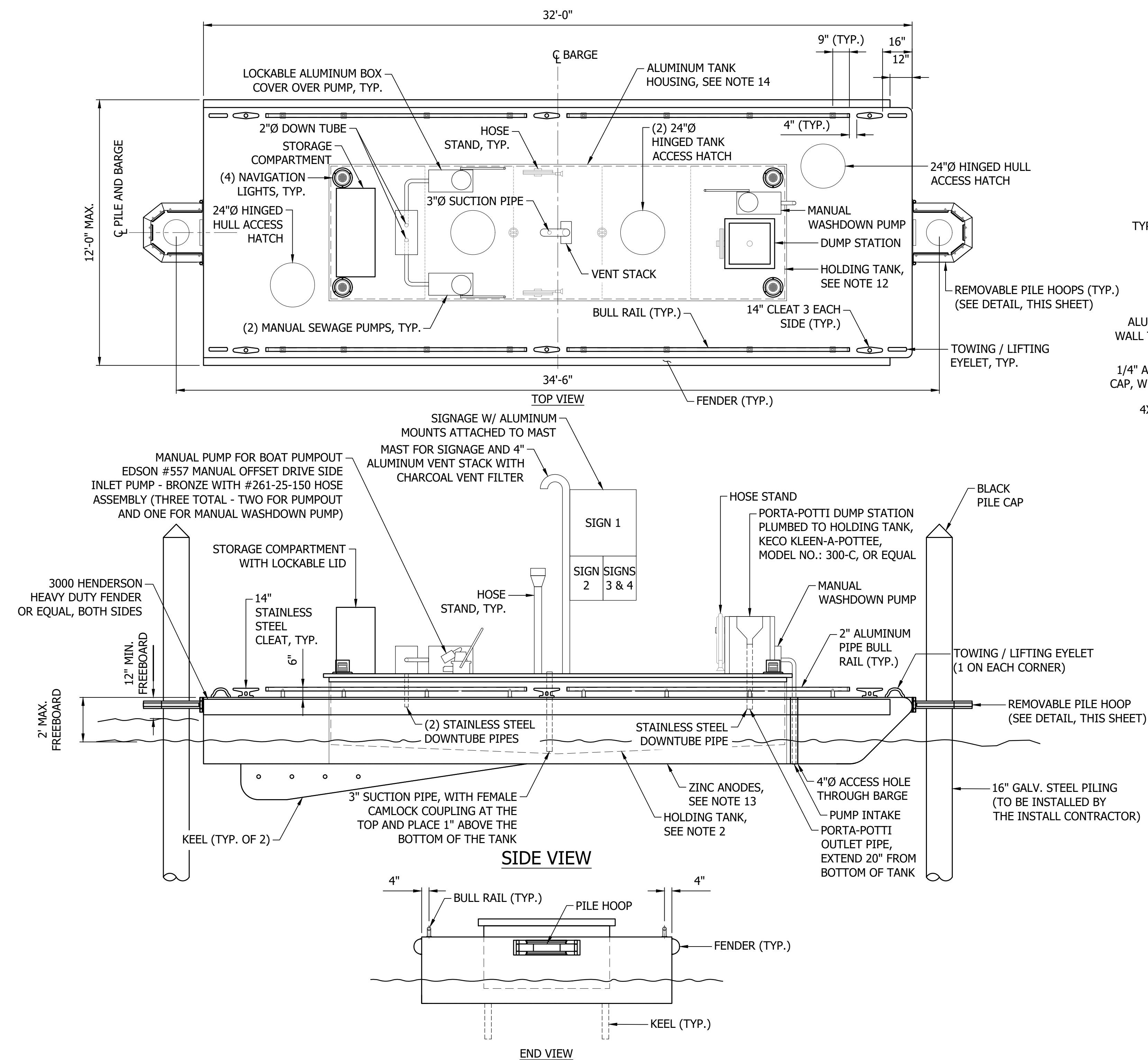
PROPOSED SITE PLAN





BID SET

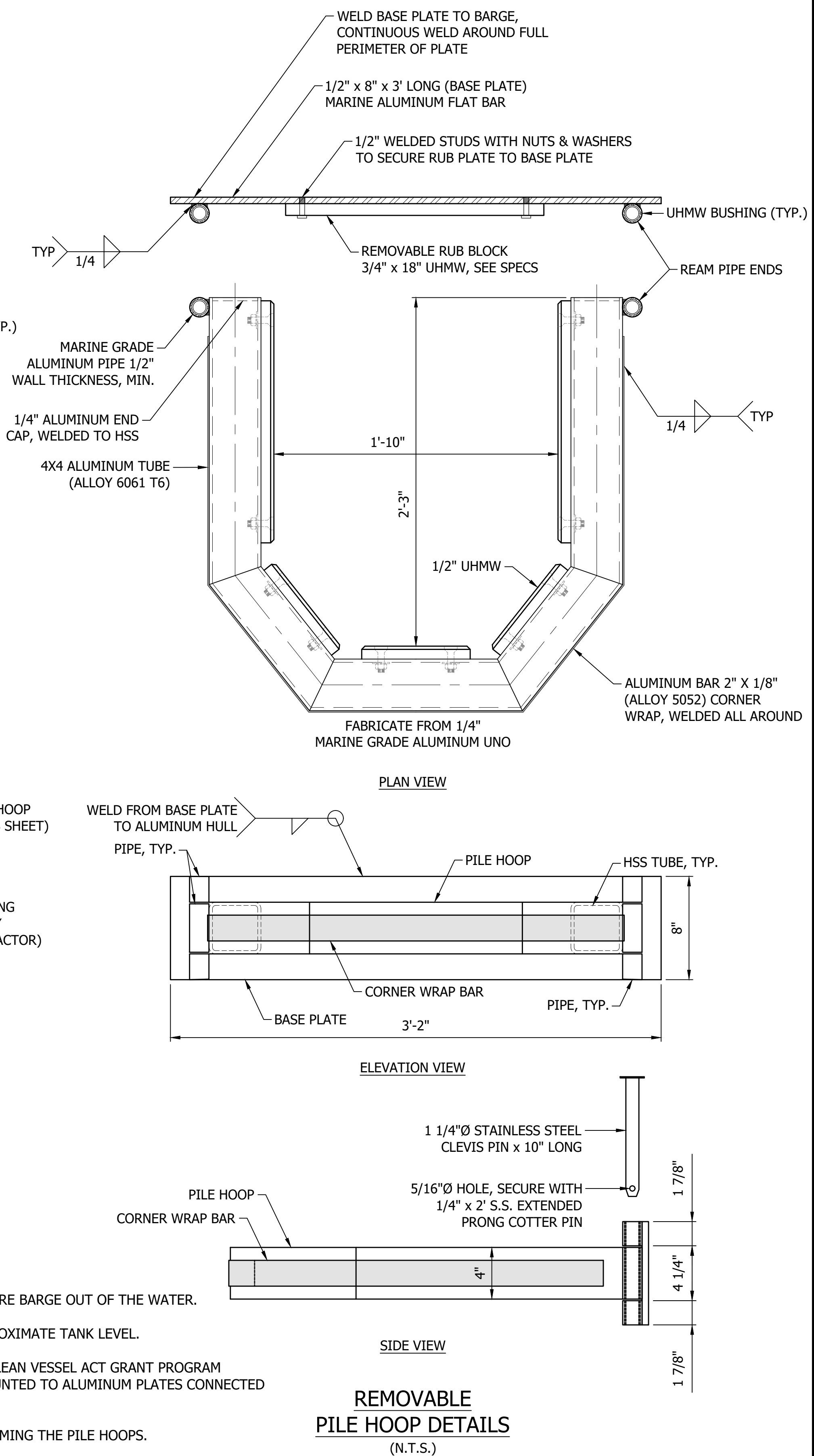
SHEET 5 OF 7

S890-3911-2022- CAD NO. PUMPOUT BARGE SITE PLAN		
	DATE	
	APP.	
	INT.	
	REVISIONS	
	NO.	
ACTION	BY	DATE
DESIGNED	EE	6/26/24
DRAWN	TM	6/26/24
CHECKED (FIELD)	PY	6/26/24
CHECKED (HDQTS.)	EE	6/26/24
 PROJECT ENGINEER		
WASHINGTON STATE PARKS AND RECREATION COMMISSION		
SUCIA ISLAND STATE PARK		
FLOATING SEWER PUMPOUT STATION		
PUMPOUT BARGE SITE PLAN		
SCALE 1" = 20'		
PARKS FILE#		

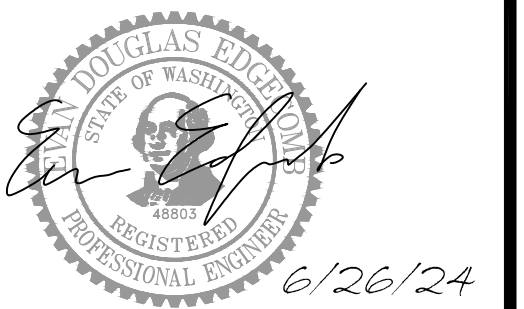


NOTES:

- | | | | |
|---|--|--|---|
| 1. SEWAGE PUMPOUT BARGE TO BE PROVIDED BY THE FABRICATION CONTRACTOR. |  | 8. PROVIDE LIFTING EYES TO THE HULL SUITABLE FOR LIFTING THE ENTIRE BARGE OUT OF THE WATER. |  |
| 2. BARGE AND HOLDING TANK SHALL HAVE TWO 24"Ø MIN. ROUND ACCESS HATCHES TO BE USED FOR PUMPING OUT SEWAGE. BOTH THE HULL AND TANK SHALL BE FULLY SEALED TO PREVENT ANY LEAKS TO PROVIDE A REDUNDANT CONTAINMENT SYSTEM. | | 9. PROVIDE PERMANENT MARKINGS ON SIDE OF HULL TO INDICATE APPROXIMATE TANK LEVEL. | |
| 3. FREEBOARD SHALL NOT EXCEED 24". | | 10. PROVIDE (4) SIGNS ATTACHED TO THE MAST COMPLYING WITH THE CLEAN VESSEL ACT GRANT PROGRAM REQUIREMENTS. SEE SPECIFICATIONS FOR DETAILS. SIGNS TO BE MOUNTED TO ALUMINUM PLATES CONNECTED TO THE MAST. | |
| 4. FREEBOARD SHALL NOT BE LESS THAN 12" UNDER BOTH TOTAL LIVE AND DEAD LOADING. | | 11. FABRICATOR CONTRACTOR TO PROVIDE EXTRA RUB BLOCKS FOR SHIMMING THE PILE HOOPS. | |
| 5. INNER TANK SHALL BE WATERTIGHT AND SHALL HAVE A BAFFLE SCHEME WITHIN THE TANK LIMITS. | | 12. HOLDING TANK SHALL HAVE A 3,000 GALLON CAPACITY AND BE LOCATED IN THE BARGE IN SUCH A MANNER AS TO PRODUCE EVEN DISPLACEMENT DURING FILLING AND PUMPING. | |
| 6. STORAGE COMPARTMENT TO BE PROVIDED FOR CLEANING SUPPLIES AND REPLACEMENT PARTS. COMPARTMENT SHALL HAVE A LOCKABLE ACCESS. MAY BE A SINGLE COMPARTMENT USED FOR ALL EQUIPMENT. | | 13. ATTACH ANODE TO HULL AS TO NOT BE DAMAGED BY VESSEL MOORAGE. | |
| 7. BACKUP PUMP HANDLE SHALL HAVE A REMOVABLE CLEVIS PIN FOR SECURING IN PLACE. | | 14. CREATE A WATERTIGHT TANK HOUSING WITHIN THE HULL OF THE BARGE. FABRICATE A REMOVABLE, WATERTIGHT TOP TO BE BOLTED TO THE HULL OF THE BARGE VIA FLANGES AROUND THE PERIMETER OF TANK HOUSING. | |



CAD NO. S890-3911-2022-BARGE DETAILS		
		DATE
		APP.
		INT.
		REVISIONS
		NO.
ACTION	BY	DATE
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DRAWN	TM	6/26/24
CHECKED (FIELD)	PY	6/26/24
CHECKED (HDQTS.)	EE	6/26/24



PROJECT ENGINEER

WASHINGTON
STATE
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COMMISSION

SUCIA ISLAND
STATE PARK

FLOATING SEWER PUMPOUT STATION

BARGE DETAILS

SCALE

$$1'' = 3'$$

PARKS FILE#

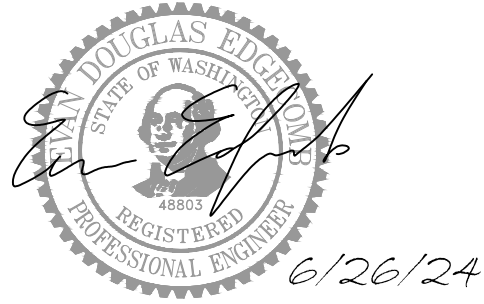
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SHEET 6 OF 7

S890-3911-2022-
CAD NO. PUMPOUT BARGE PROFILE

	DATE
	APP.
	INT.
	REVISIONS
	NO.

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RECREATION
COMMISSION



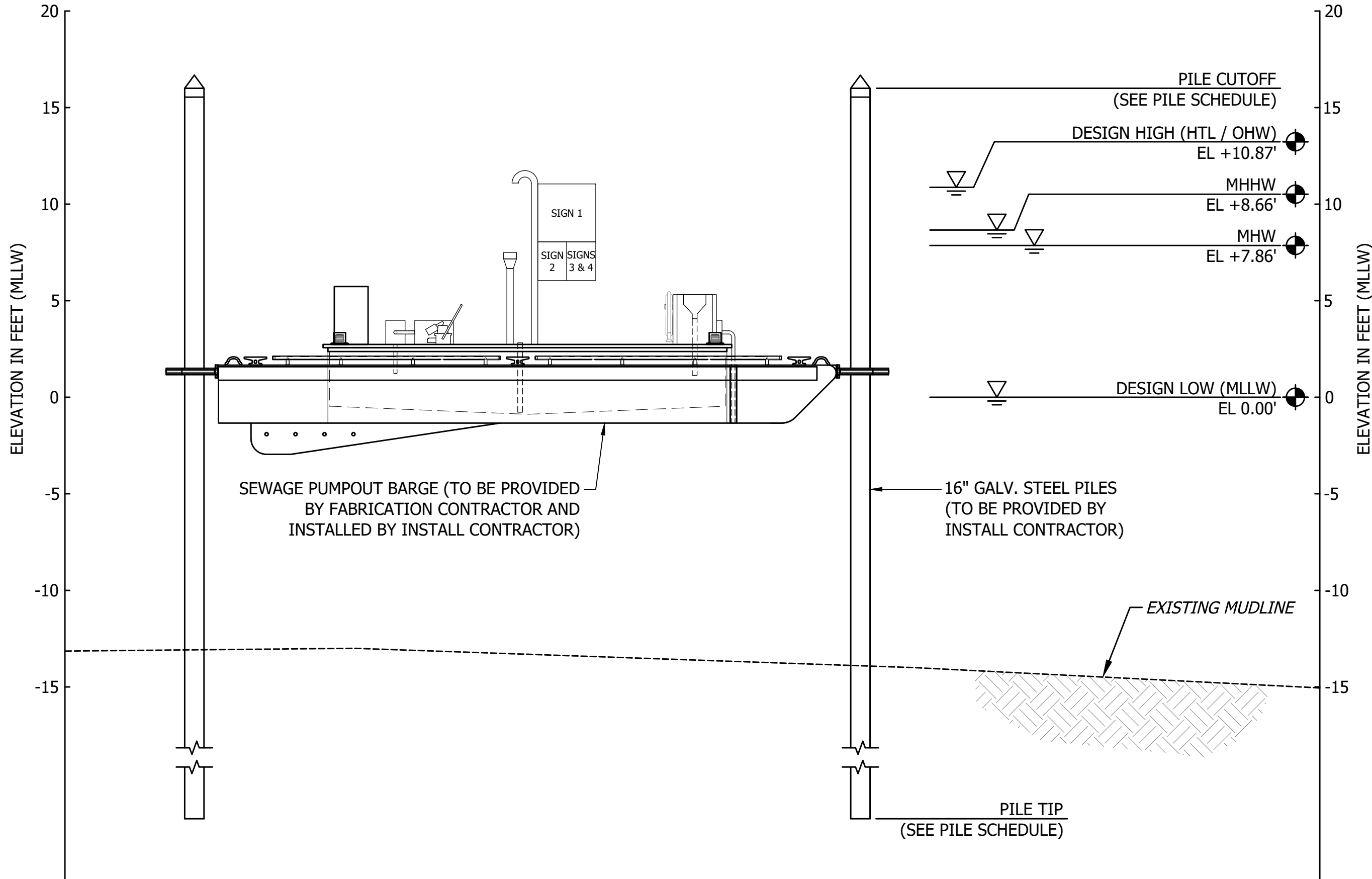
SUCIA ISLAND
STATE PARK

FLOATING SEWER
PUMPOUT STATION

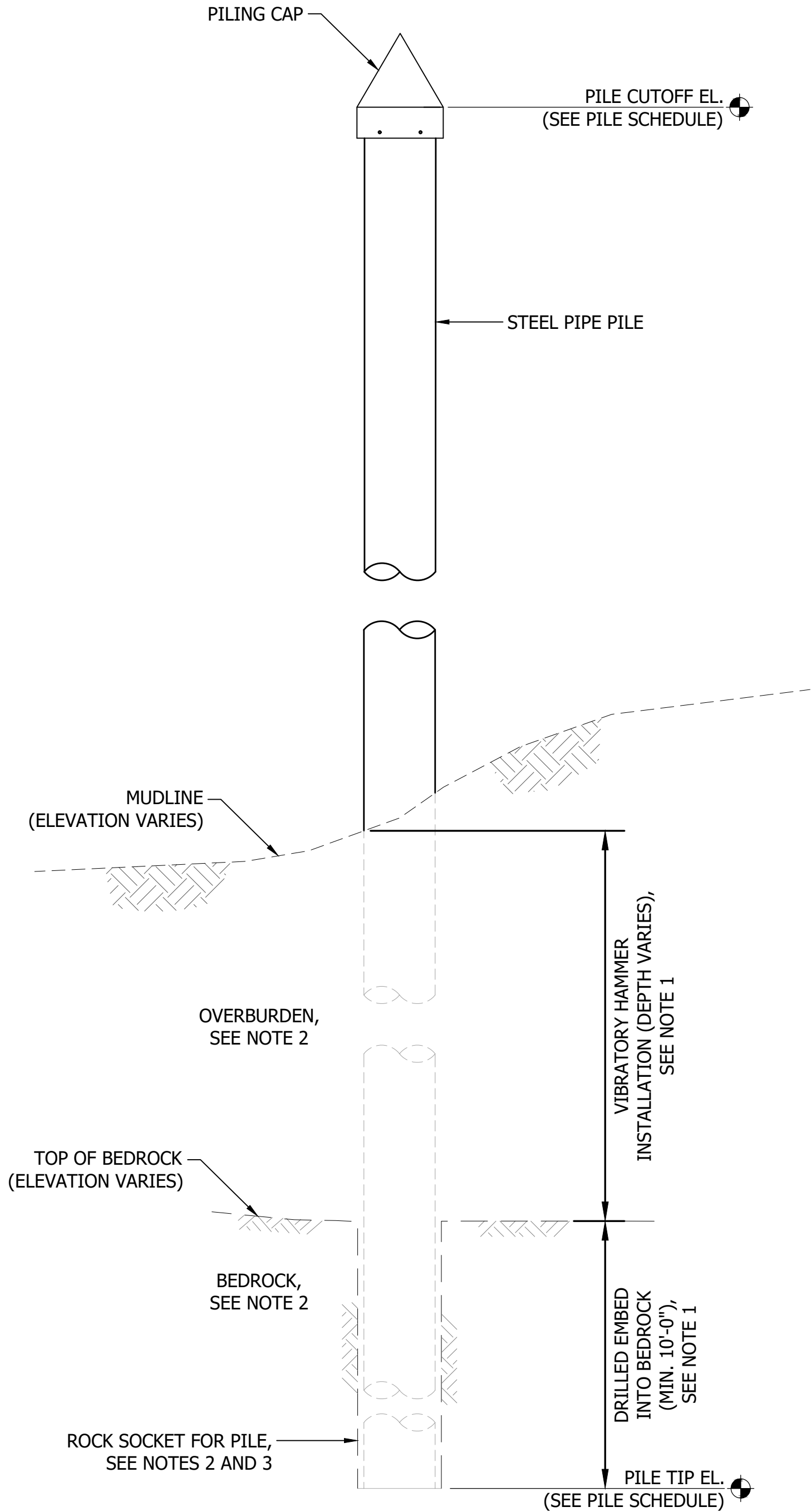
PUMPOUT BARGE
PROFILE

SCALE
AS NOTED

PARKS FILE#



PROFILE - PUMPOUT / BARGE



PILE ELEVATION

NOTES

- INSTALL CONTRACTOR SHALL USE A VIBRATORY HAMMER TO INSTALL THE PILE UNTIL REFUSAL. IF HARD DRIVING CONDITIONS ARE ENCOUNTERED BEFORE REACHING THE SPECIFIED TIP ELEVATION, UTILIZE AN IMPACT HAMMER TO PROGRESS PILE. IF THERE IS NO OBSERVABLE PROGRESS WITH THE IMPACT HAMMER, UTILIZE A DOWN THE HOLE HAMMER AND DRILL DEEP ENOUGH TO SEAT THE PILE A MINIMUM OF 10 FEET INTO THE HARD LAYER OR UNTIL SPECIFIED TIP ELEVATION HAS BEEN ACHIEVED. USE THE IMPACT HAMMER AFTER DRILLING TO SEAT THE PILE INTO THE DRILLED PORTION OF SOIL.
- FOR SOIL AND SITE CONDITIONS, SEE GEOLOGIC AND GEOTECHNICAL ENGINEERING SERVICES REPORT "SUCIA ISLAND STATE PARK IMPROVEMENTS, SAN JUAN COUNTY, WASHINGTON" DATED NOVEMBER 25, 2020 AS DEVELOPED BY GEOENGINEERS, INC.
- INSTALL CONTRACTOR SHALL ENSURE THAT BOULDERS AND OTHER OBSTRUCTIONS ON SITE DO NOT INTERFERE WITH THE PILE DRIVING AND INSTALLATION. CONTRACTOR SHALL LOCALLY MOVE ANY SUCH OBSTRUCTIONS TO ENSURE THAT PILES ARE INSTALLED IN THE CORRECT LOCATION AND ACHIEVE THE MINIMUM EMBEDMENT INTO ROCK AS SHOWN ON THE DRAWINGS. NO EXCAVATION OF THE SUBSTRATE IS ALLOWED.
- REFER TO SPECIFICATIONS SECTION 316216 FOR TOLERANCES IN PILE INSTALLATION.
- INSTALL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE PILE DRIVING WORK WITH THE NEW BARGE DESIGN TO ENSURE COMPATIBILITY AND TO ENSURE THE BARGE FUNCTIONS AS INTENDED THROUGH THE FULL RANGE OF RANGE OF MOTION BETWEEN THE DESIGN WATER LEVELS AND WAVES.

PILE SCHEDULE

PILE ID	PILE SIZE	NORTHING	EASTING	PILE TIP ELEVATION (MLLW)	PILE CUTOFF ELEVATION (MLLW)	PILING CAP
F1	16"Ø X 0.5"	645105.03	1142334.31	-52.0'	+16.0'	Y
F2	16"Ø X 0.5"	645083.89	1142361.53	-52.0'	+16.0'	Y

BID SET

SHEET 7 OF 7