SYSTEM SPECIFICATIONS:

HDPE PIPE: HIGH DENSITY POLYETHYLENE PIPE (HDPE) SHALL BE GRADE 4710, & CONFORM TO ASTM D3350. THE PIPE SHALL BE STANDARD DIMENSION RATIO (SDR) 32.5 OR AS OTHERWISE NOTED ON

FOAM BILLETS: SHALL BE VACUUM-MOLDED, RIGID CELLULAR EXPANDED POLYSTYRENE, 1.0 LB. PER CU. FT. NOMINAL DENSITY, MEETING THE REQUIREMENTS OF ASTM SPECIFICATION C-578-85, TYPE I MATERIAL FOR DENSITY, COMPRESSIVE AND FLEXURAL STRENGTH, WATER VAPOR PERMEABILITY, WATER ABSORPTION AND DIMENSION. REGROUND OR REPROCESSED MATERIALS OF UP TO 10%.

<u>DECKING:</u> FIBERGRATE MOLDED MICRO-MESH GRATED DECKING WITH 3/4"x3/4" GRID PATTERN, AND 1 1/2" DEPTH, CONFORMING TO ADA REQUIREMENTS.

PILES: 12" Std STEEL PIPE, A252 GR 3, MIN Fy = 50 KSI. CUTOFF = EL 1106, MIN 27 FT EMBED

STEEL: ALL FRAMING ANGLES, PLATES, AND OTHER STEEL SHAPES SHALL CONFORM TO ASTM A36. WIDE FLANGE BEAMS SHALL BE A992. PIPES SHALL BE A53B.

<u>BOLTS:</u> MINIMUM BOLT DIAMETER SHALL BE 3/4" FOR ALL FRAME CONNECTIONS. BOLTS SHALL MEET ASTM SPECIFICATION A-307, GRADE A, AND BE HOT-DIP GALVANIZED, PER ASTM A-153. STAINLESS HARDWARE SHALL BE TYPE 316.

GALVANIZING: FRAME FOR FLOAT FRAMES SHALL BE HOT DIP GALVANIZED. ALL MISCELLANEOUS STEEL HARDWARE SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A 123 AND ASTM A 153. ITEMS REQUIRING FABRICATION SHALL BE GALVANIZED AFTER FABRICATION TO A MINIMUM OF

WELDING: WELDERS SHALL BE QUALIFIED AS SPECIFIED IN AWS FOR THE PARTICULAR PROCESS AND PROCEDURE THAT THE WELDER WILL PERFORM. PROCEDURE QUALIFICATION TEST RECORDS FOR THE MATERIAL AND PROCEDURE PERFORMED WILL BE REQUIRED IN ACCORDANCE WITH AWS D1.1.

UHMW-PE: ULTRA HIGH MOLECULAR WEIGHT POLYETHYLENE SHALL BE FABRICATED FROM POLYMER INDUSTRIES, POLYSLICK BR, REPROCESSED WITH A TENSILE STRENGTH OF 3,300 PSI MIN PER ASTM

FLOAT DRUMS: ROTATIONALLY-MOLDED POLYETHYLENE, WITH MINIMUM WALL THICKNESS OF 0.15". FOAM CORE IS CELLULAR POLYSTYRENE, 1.0 LB PER CF PER ASTM C-578-85.



CHELAN BAY COMMERCIAL DOCK TRANSPAC CHELAN, WA

TRIPEN INC Project #

TRANSPAC MARINAS Project # 2236

June 23, 2022

DESIGN SPECIFICATIONS:

WAVE: SIGNIFICANT WAVE 1.8FT, 2.2 SECOND PERIOD

CURRENT: ONE KNOT

BOAT: 28 & 30' BOATS - TRANSIENT MOORAGE ONLY

LIVE LOAD: 25 PSF

CONFIDENTIAL:

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REV BY DATE DESCRIPTION AID f (360) 766-6013

Engineering llen@aidengineering.cor

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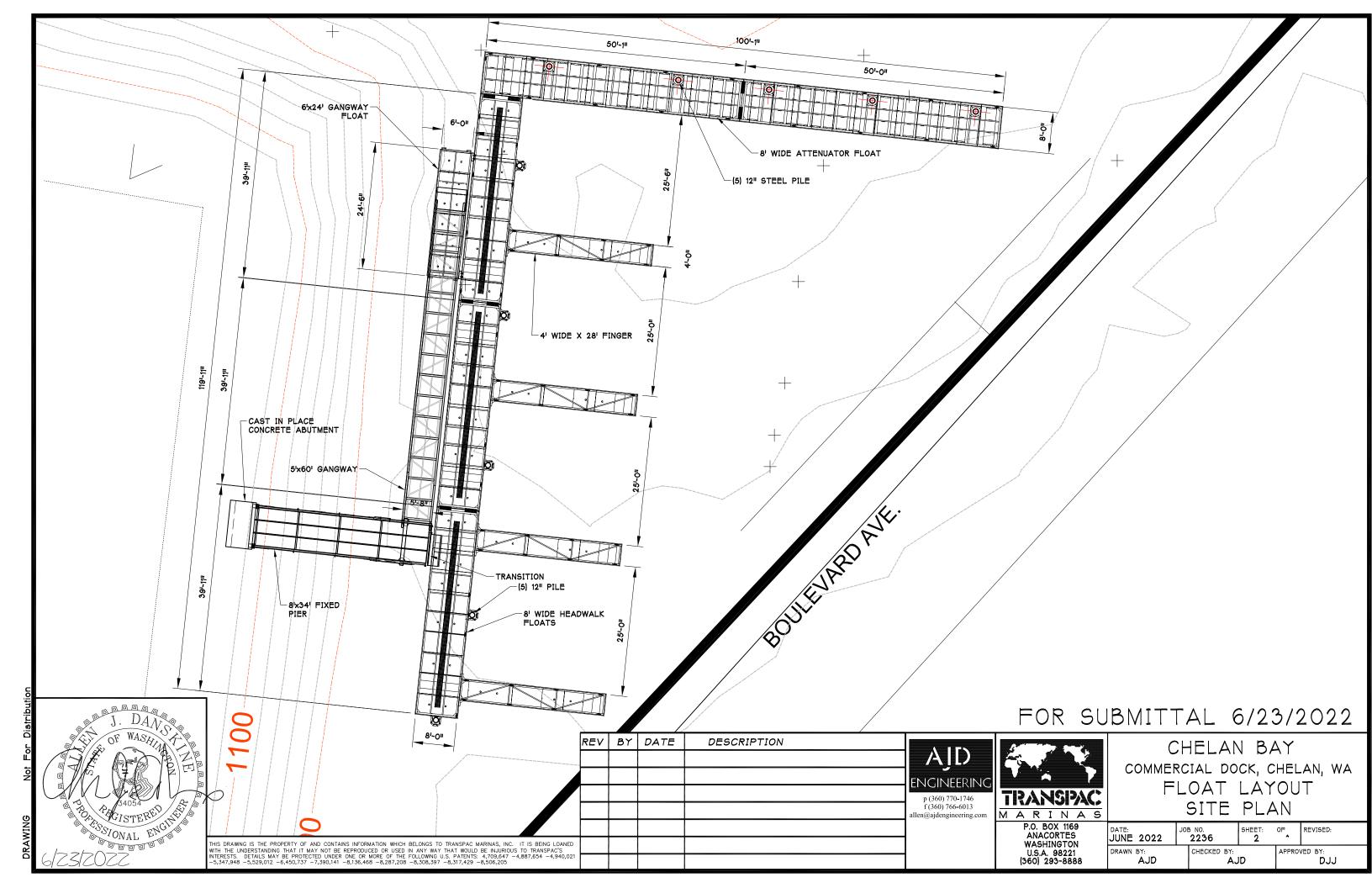
WASHINGTON

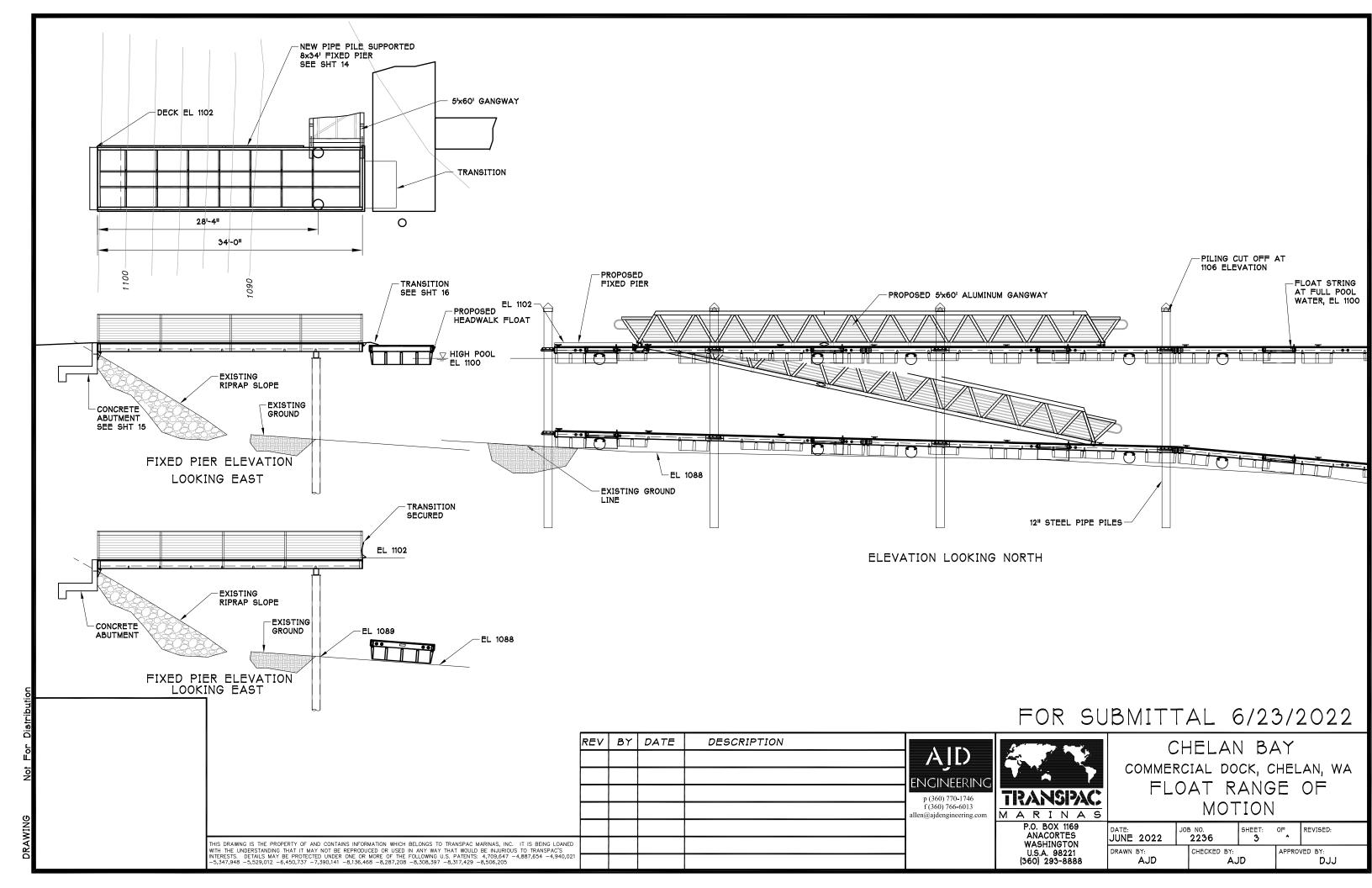
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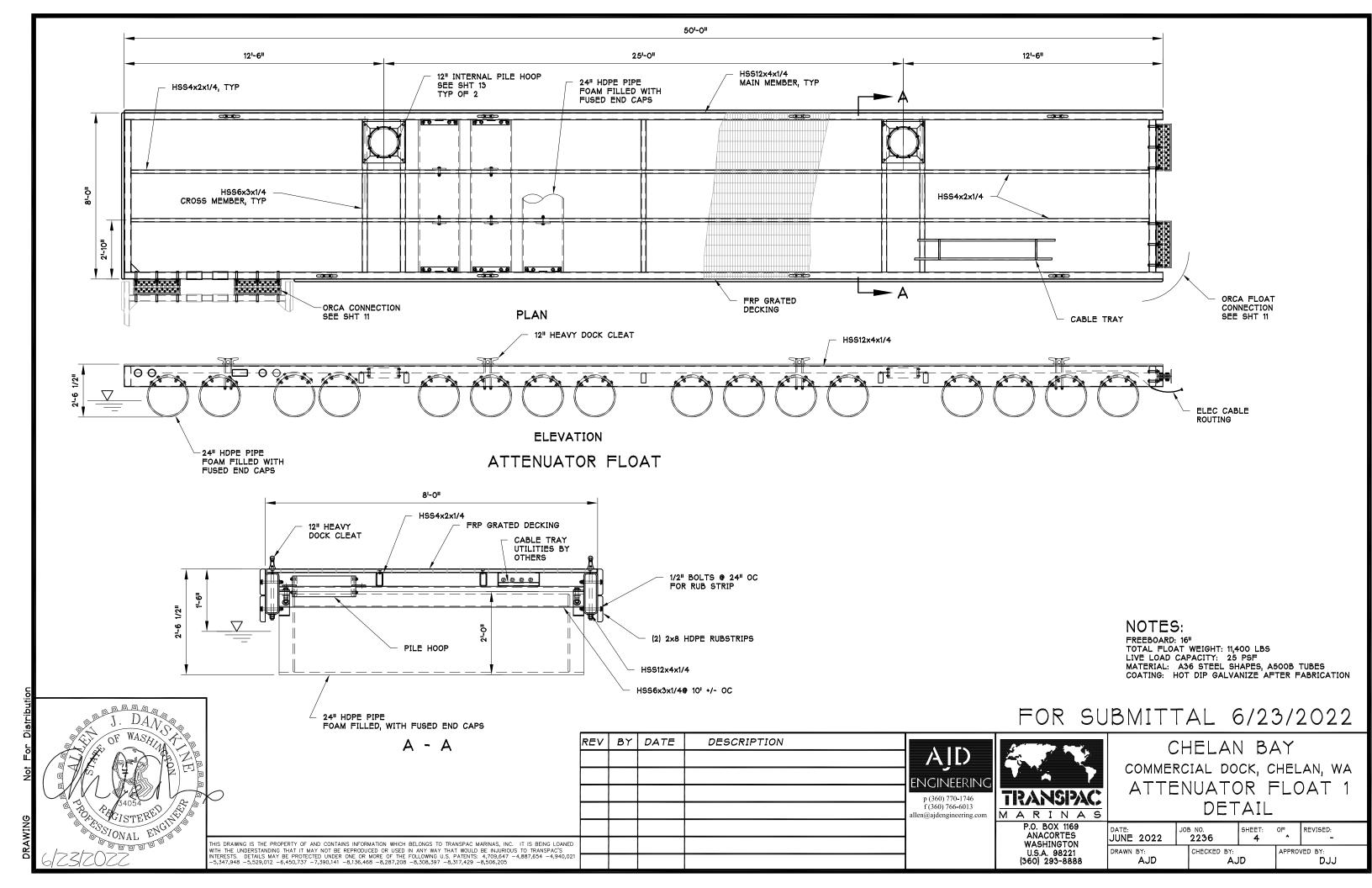
CHELAN BAY COMMERCIAL DOCK, CHELAN, WA COVER SHEET

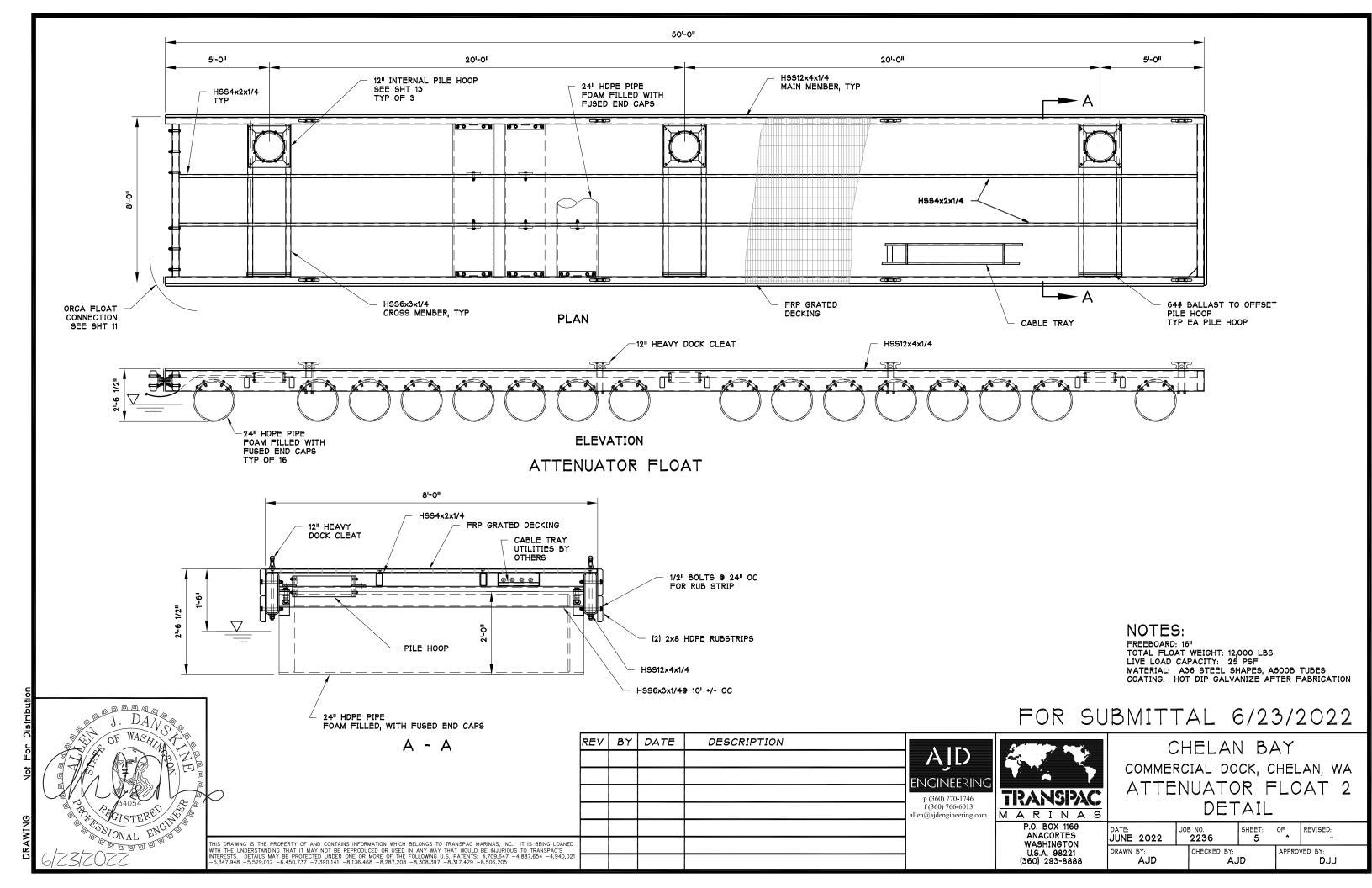
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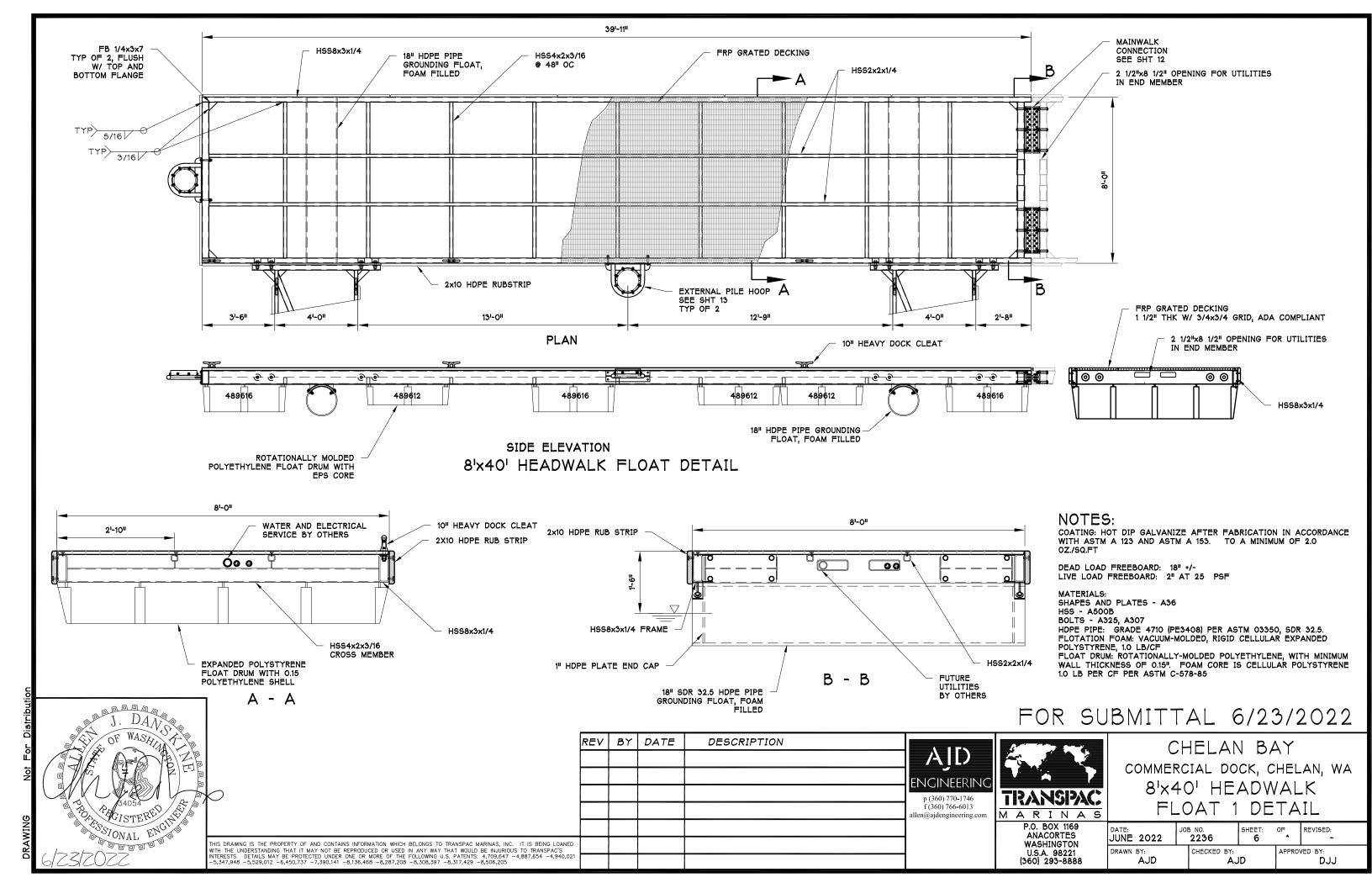
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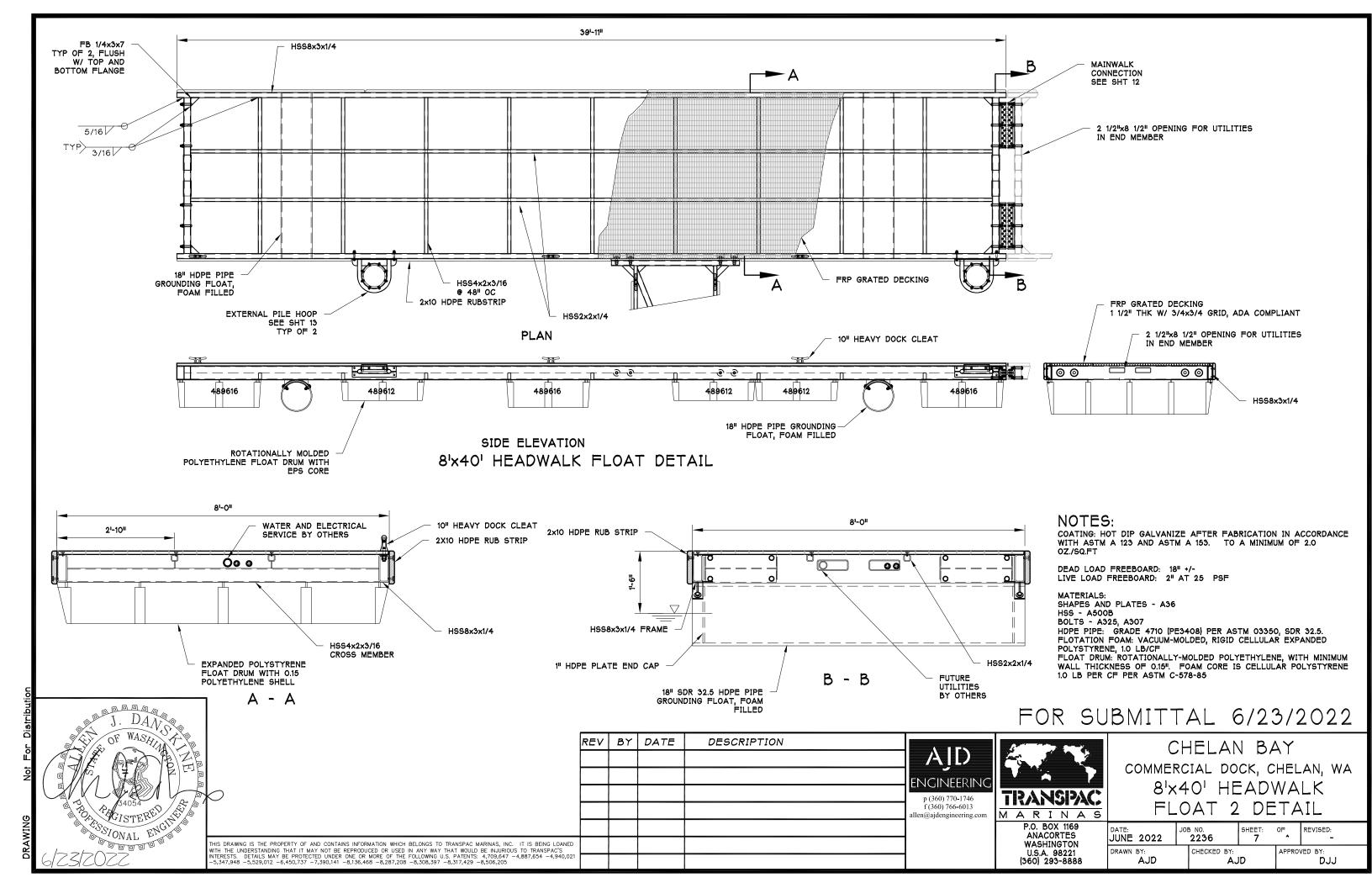


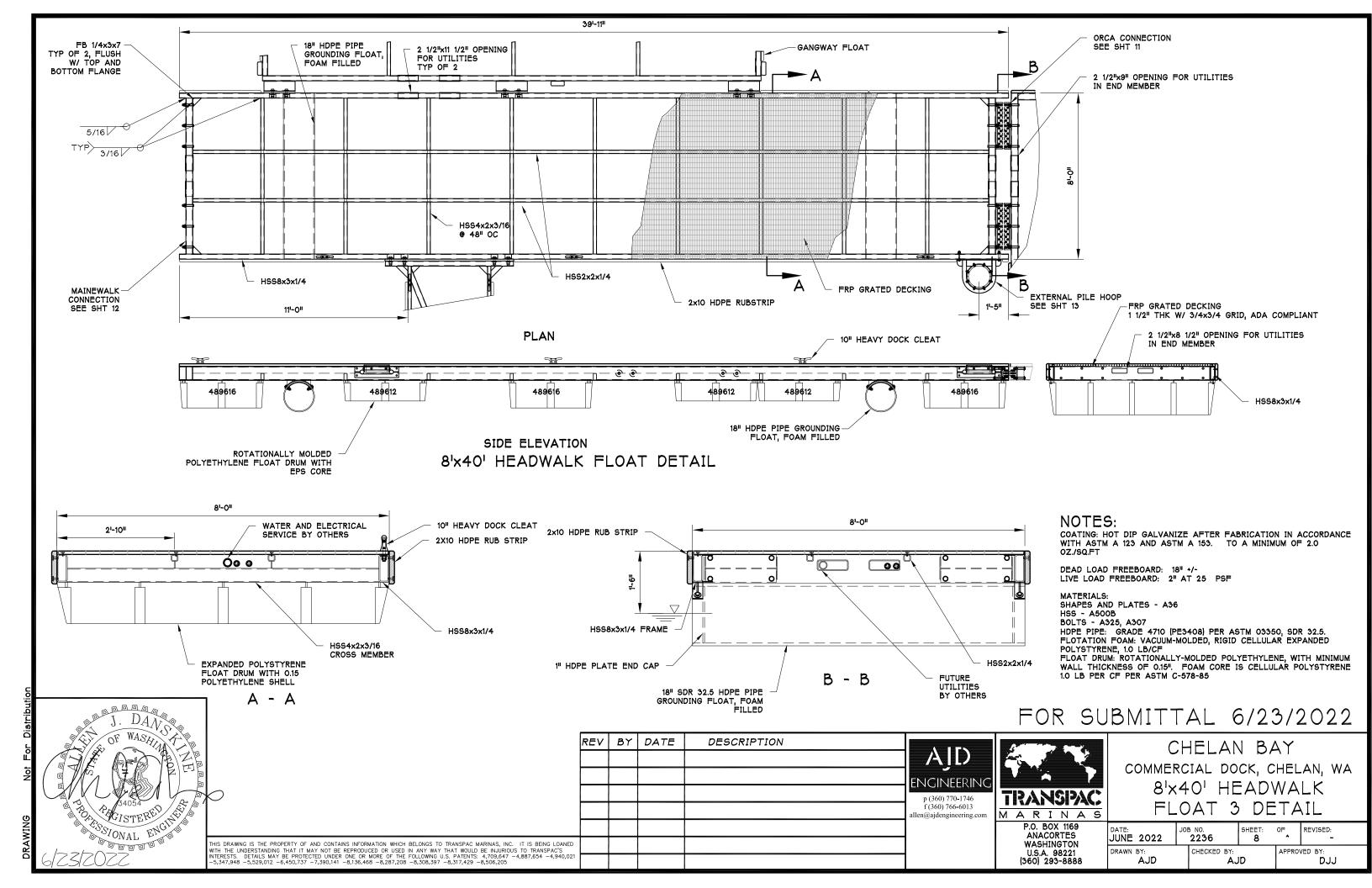


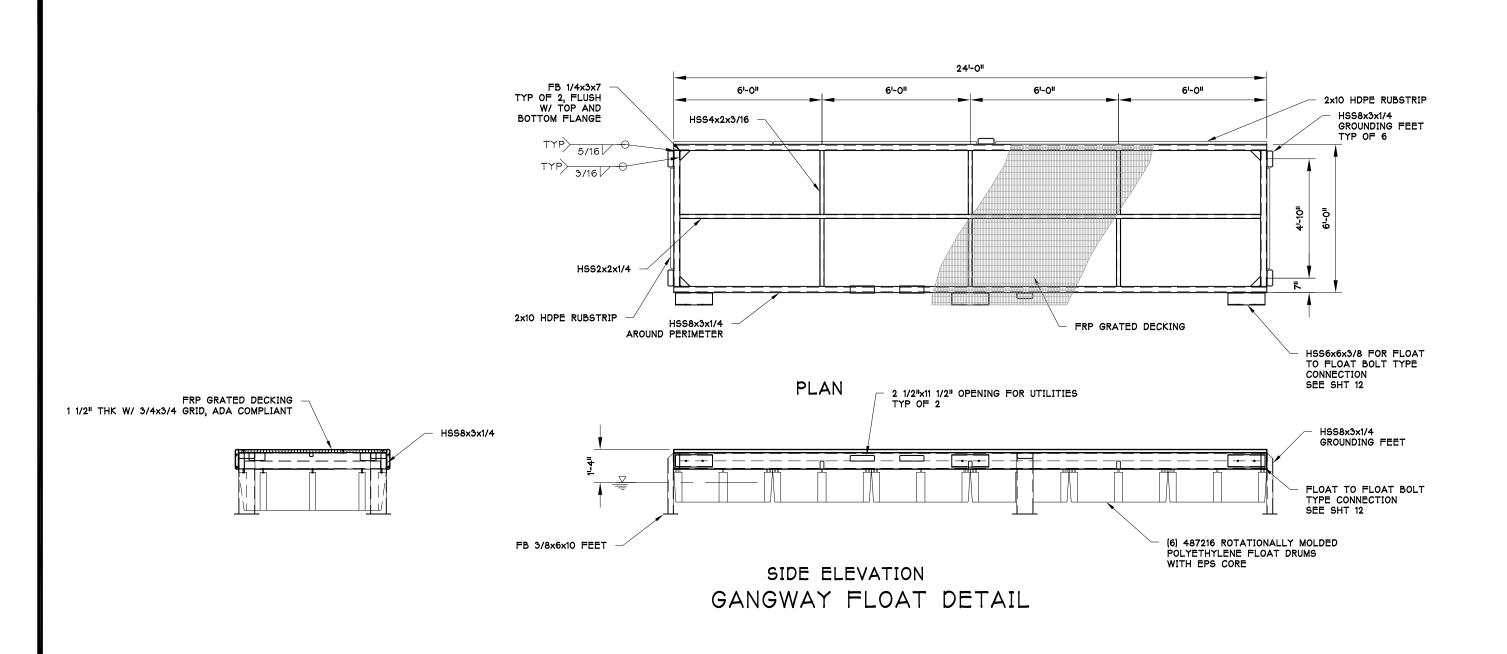










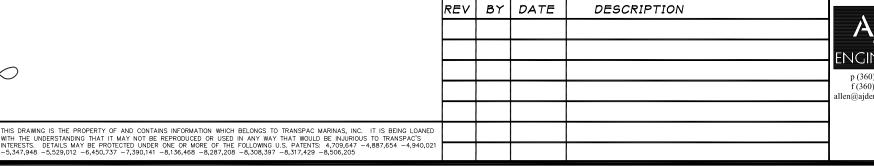


NOTES:

COATING: HOT DIP GALVANIZE AFTER FABRICATION.

MATERIALS: HSS - A500B SHAPES AND PLATES - A36 BOLTS - A325

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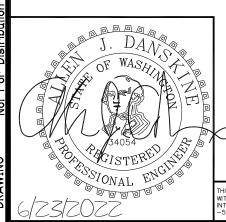


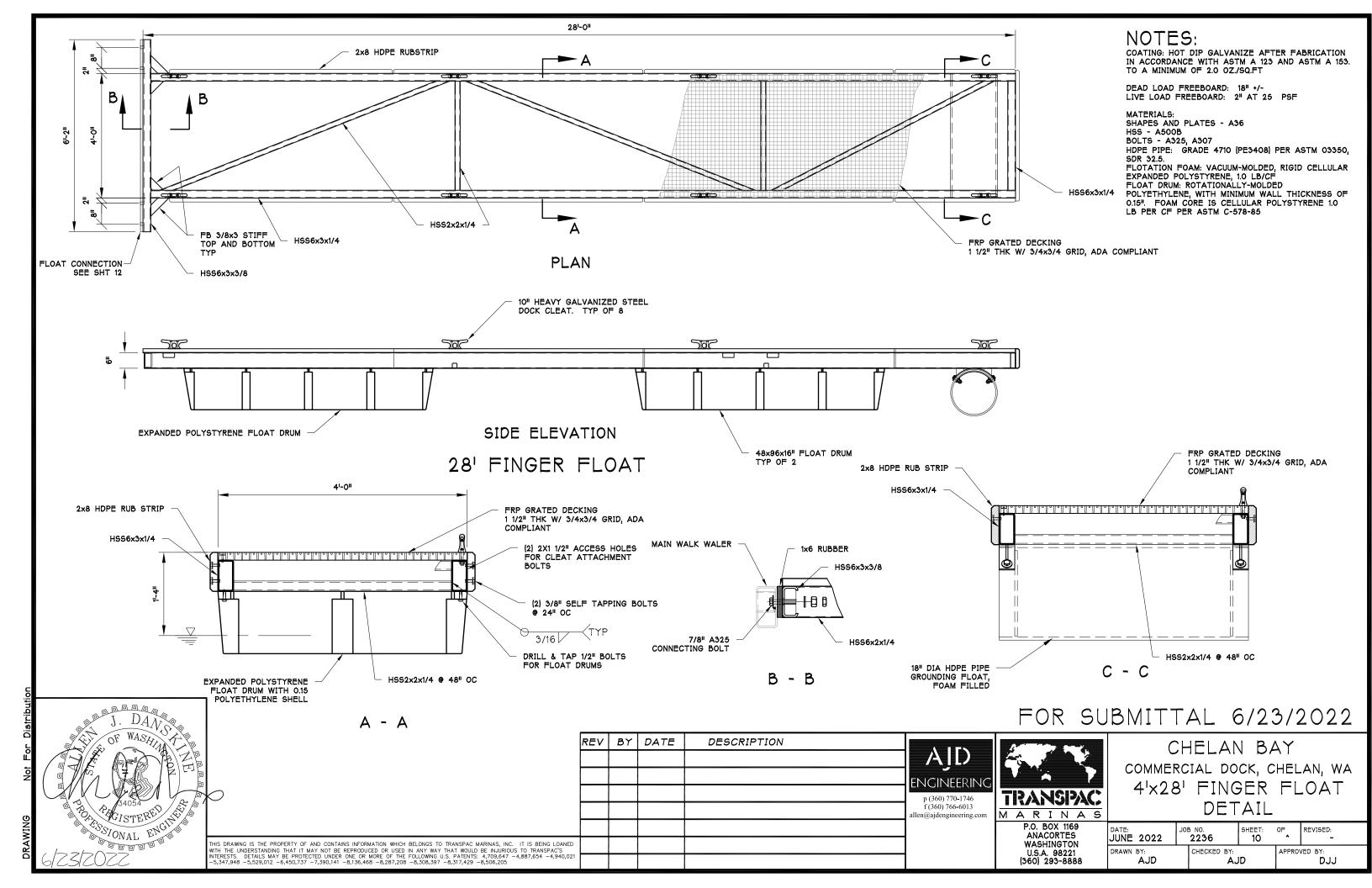


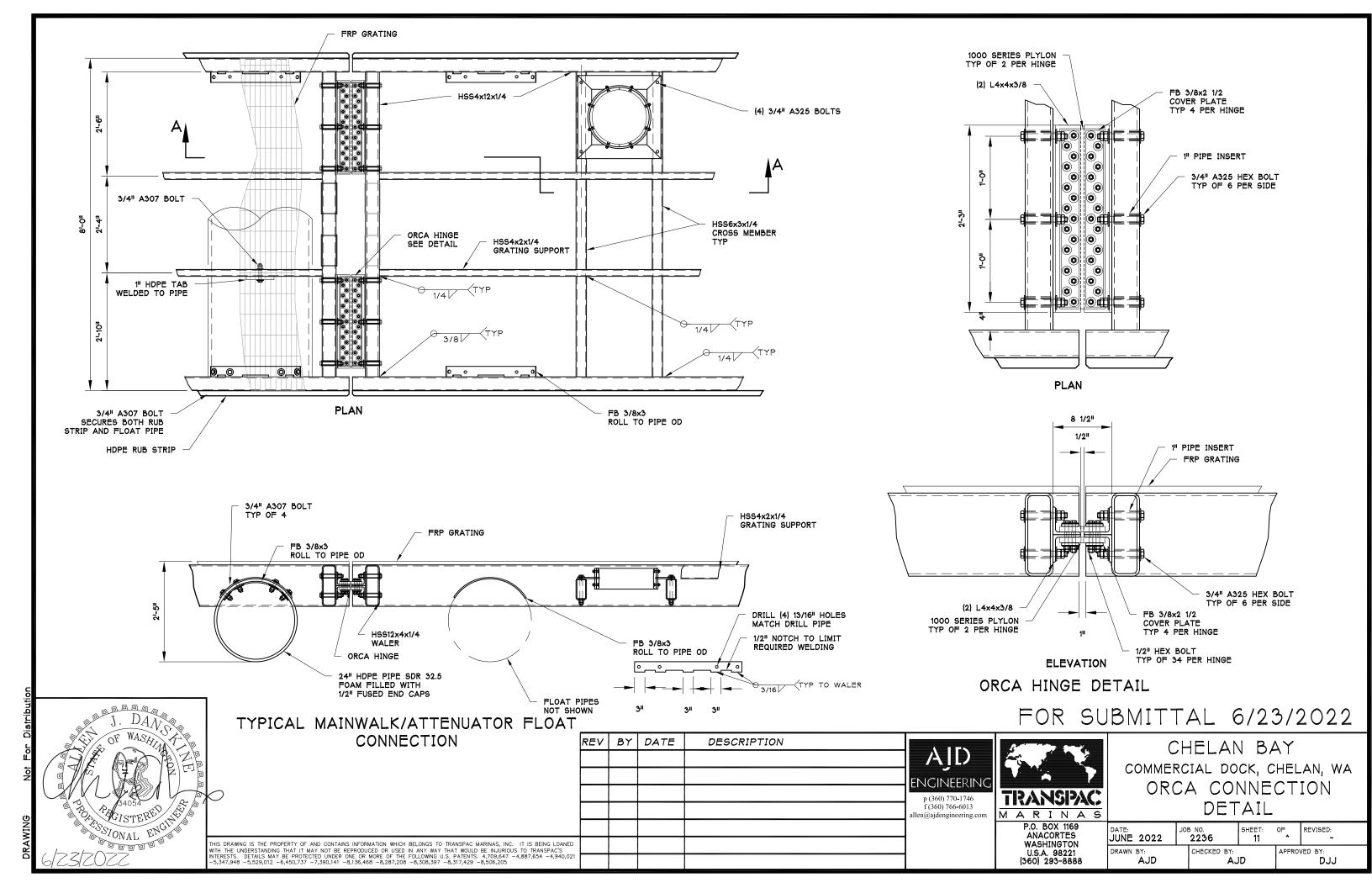
MARINAS P.O. BOX 1169 ANACORTES WASHINGTON U.S.A. 98221 (360) 293-8888

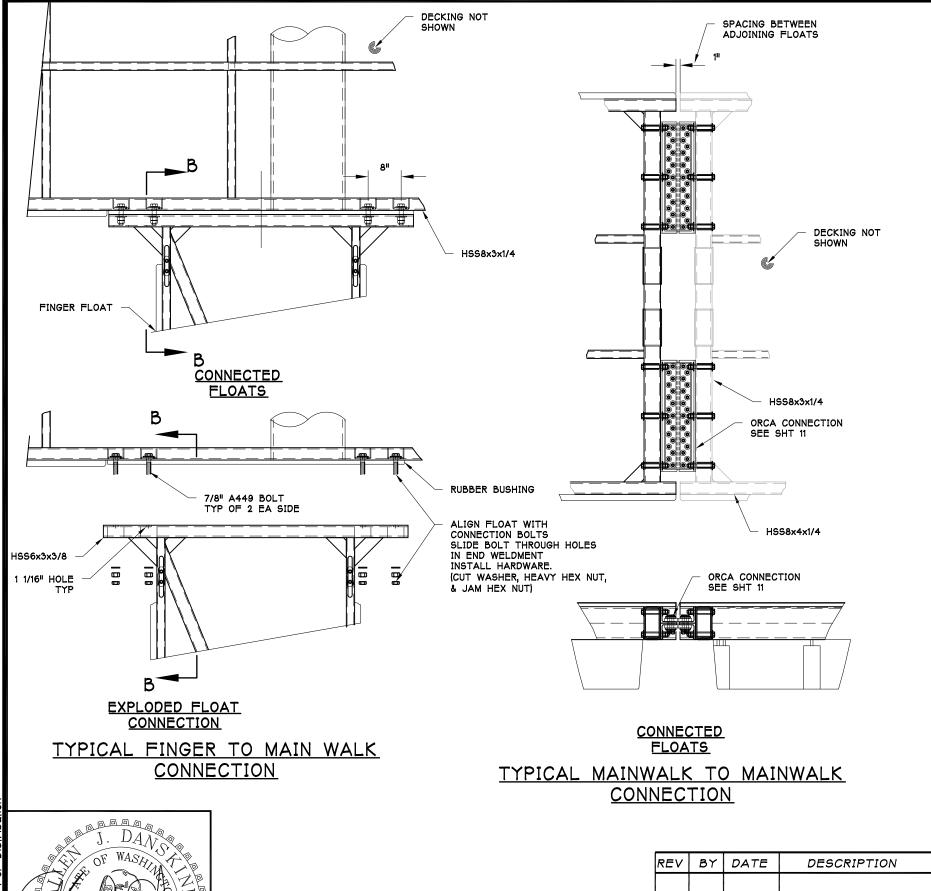
CHELAN BAY COMMERCIAL DOCK, CHELAN, WA 8'x20' GANGWAY FLOAT DETAIL

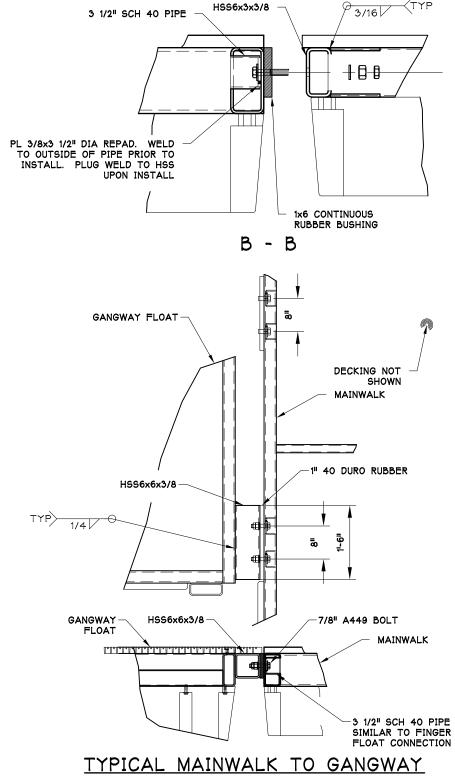
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CONNECTION

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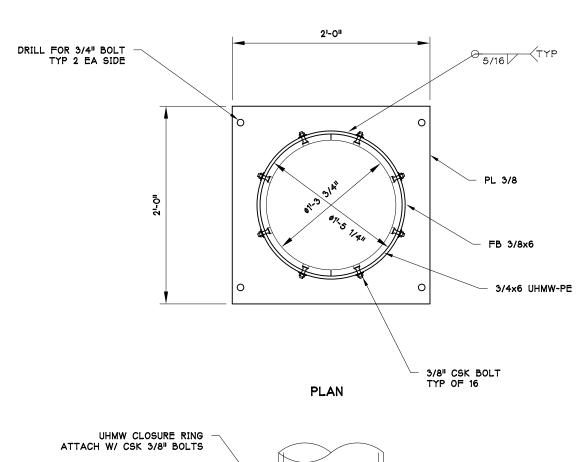


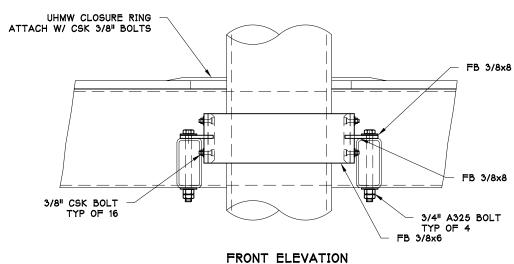
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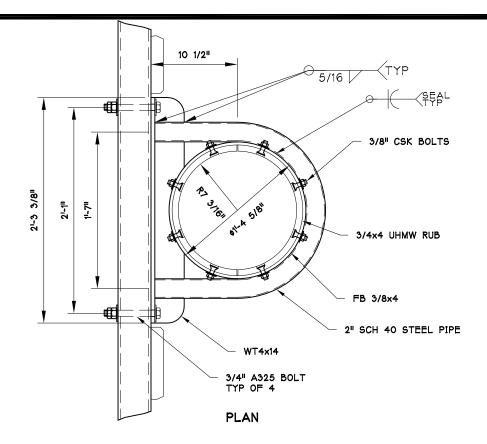
CHELAN BAY COMMERCIAL DOCK, CHELAN, WA MAINWALK CONNECTION DETAIL

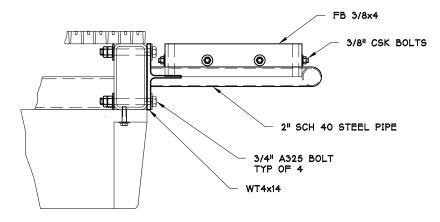
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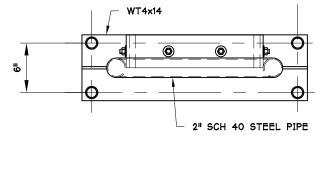




INTERNAL 12" PILE HOOP







SIDE ELEVATION FRONT ELEVATION

12" EXTERNAL PILE HOOP DETAIL

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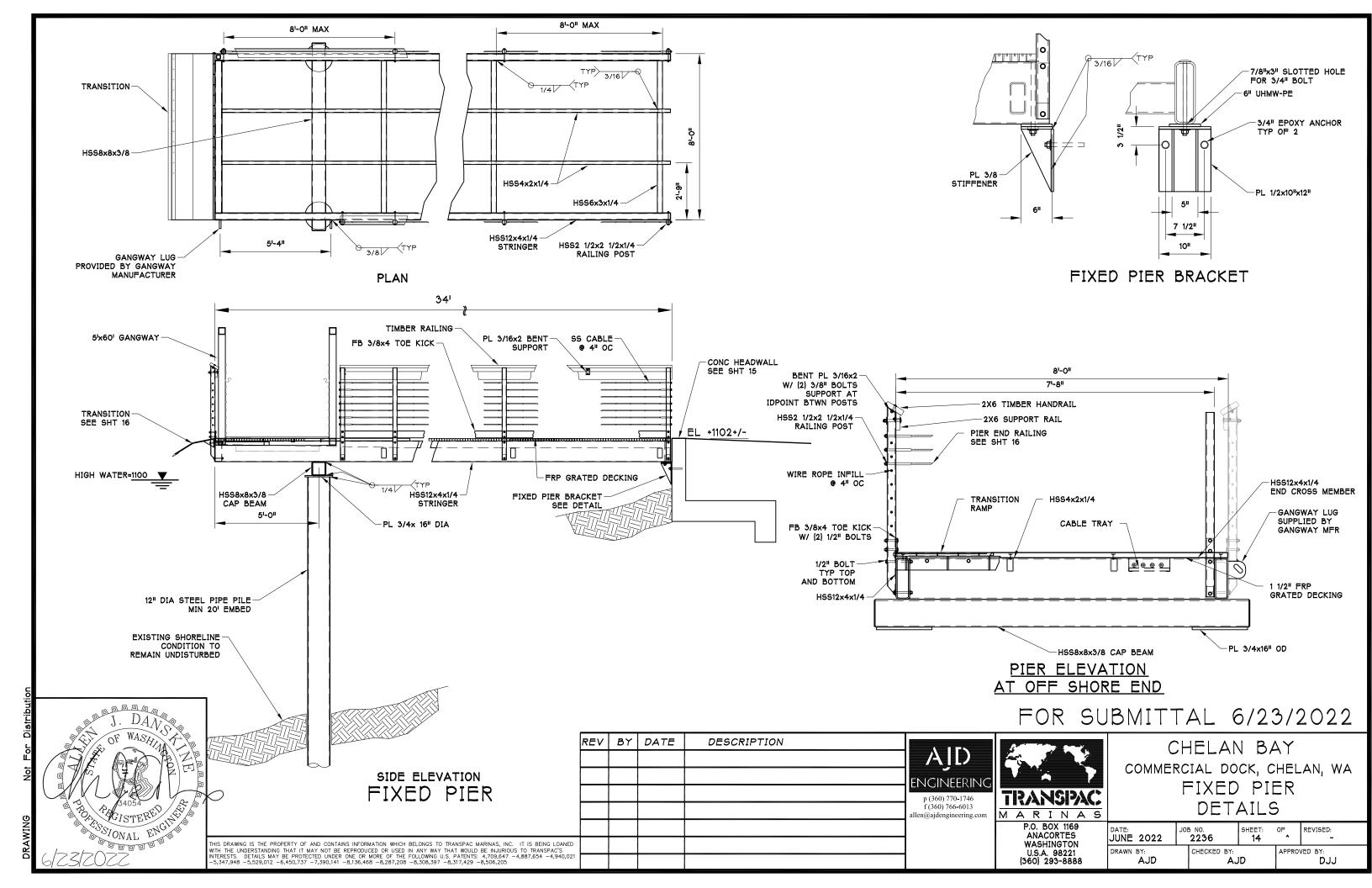
REV BY DATE DESCRIPTION AJD ENGINEERING p (360) 770-1746 f (360) 766-6013 llen@ajdengineering.com

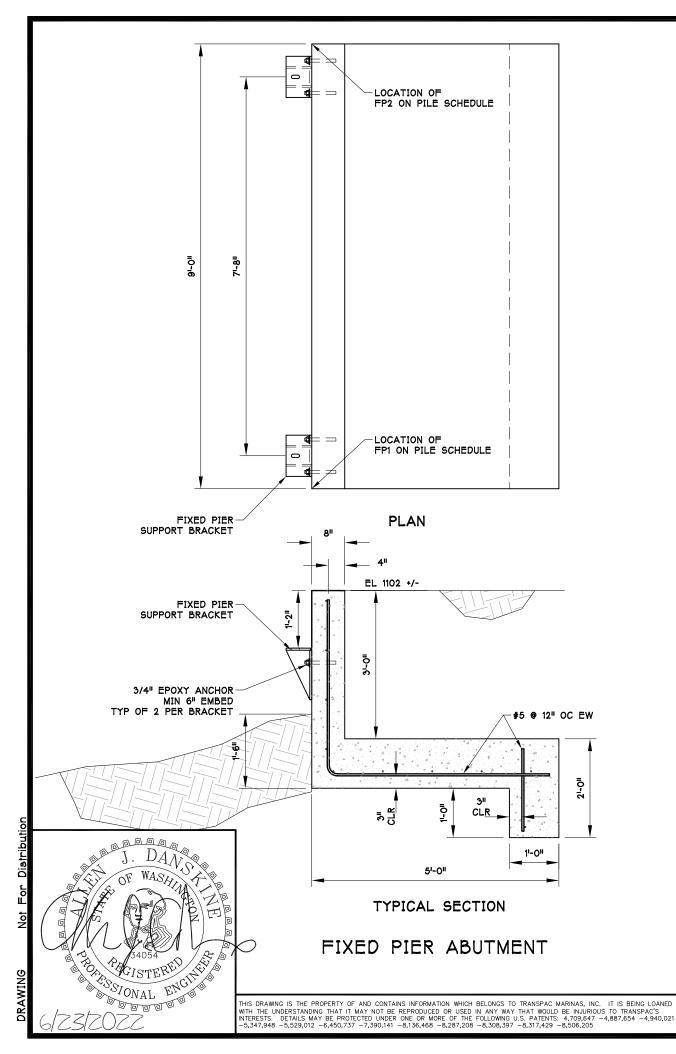
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CHELAN BAY COMMERCIAL DOCK, CHELAN, WA PILE HOOP DETAILS

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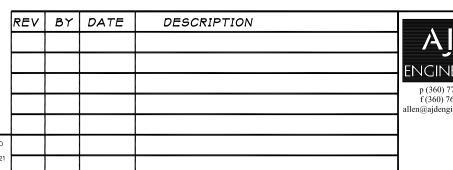




NOTES:

CONCRETE F'c = 3,000 PSI
REINFORCING Fy = 60,000 PSI

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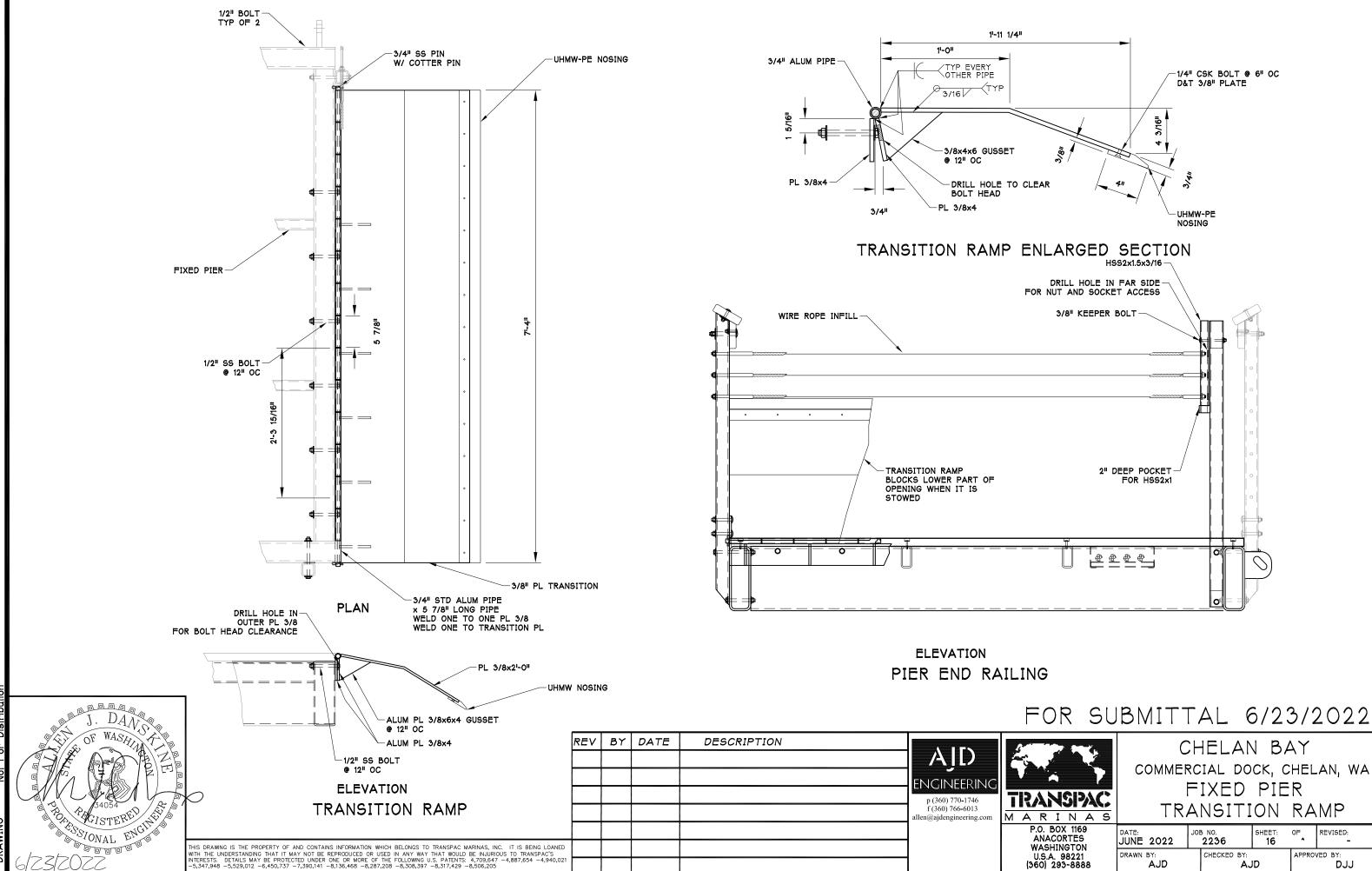


CHELAN BAY

COMMERCIAL DOCK, CHELAN, WA

FIXED PIER ABUTMENT

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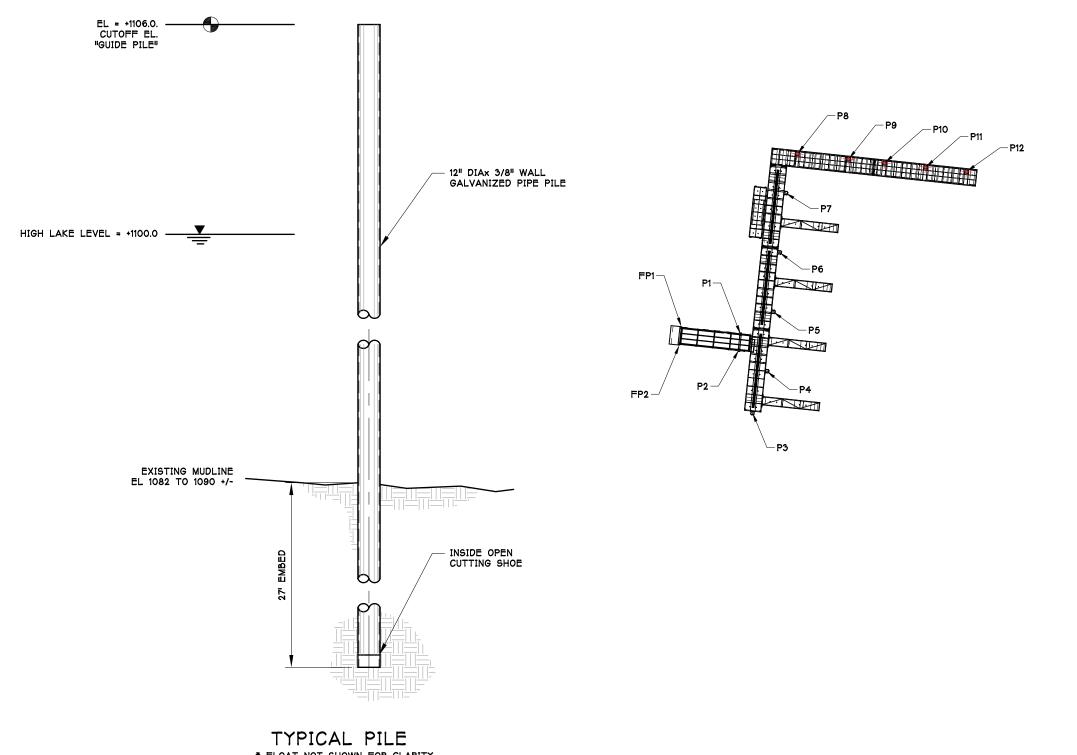
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DRAWN BY:

AJD

CHECKED BY:

APPROVED BY:



PILE/ABUTMENT SCHEDULE							
FLOAT	PILE DIAMETER	PILE Fy	LENGTH	EMBEDMENT	NORTHING	EASTING	
FP 1	•	-	-	-	305,576.26	1,835,039.13	
FP 2	•	-	-	-	305,567.31	1,835,038.19	
P1	12"x3/8"w	35KSI	32	20 ¹	305,572.51	1,835,067.90	
P2	12"x3/8"w	35KSI	32	20 ¹	305,564.96	1,835,067.10	
P3	12"x3/8"w	35KSI	38'	20 ¹	305,534.44	1,835,073.68	
P4	12 ¹¹ x3/8 ¹¹ w	35KSI	381	20 ¹	305,554.65	1,835,080.68	
P5	12 ¹¹ x3/8 ¹¹ w	35KSI	421	20 ¹	305,583.49	1,835,083.72	
P6	12"x3/8"w	35KSI	441	20¹	305,612.33	1,835,086.77	
P7	12 ¹¹ x3/8 ¹¹ w	35KSI	441	20¹	305,641.17	1,835,089.81	
P8	12"x3/8"w	35KSI	46¹	20 ¹	305,660.26	1,835,095.51	
P9	12"x3/8"w	50KSI	46¹	20¹	305,657.63	1,835,120.37	
P10	12 ¹¹ x3/8 ¹¹ w	35KSI	46¹	20¹	305,655.79	1,835,137.86	
P11	12 ¹¹ x3/8 ¹¹ w	35KSI	46¹	20 ¹	305,653.69	1,835,157.75	
P12	12"x3/8"w	35KSI	46¹	20 ¹	305,651.59	1,835,177.64	

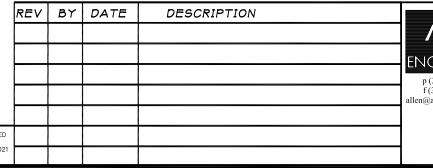
NOTES:

1) ASSUMES A WATER ELEVATION OF EL. 1095, MAX WATER LEVEL DURING THE WINTER SEASON AND FULL POOL OF EL. 1100 DURING THE MAY-SEPTEMBER SUMMER SEASON.

2) PILE CUTOFF EL = 1106, BASED ON MAX WATER EL OF 1100.

* FLOAT NOT SHOWN FOR CLARITY

FOR SUBMITTAL 6/23/2022





CHELAN BAY COMMERCIAL DOCK, CHELAN, WA PILE DETAILS

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