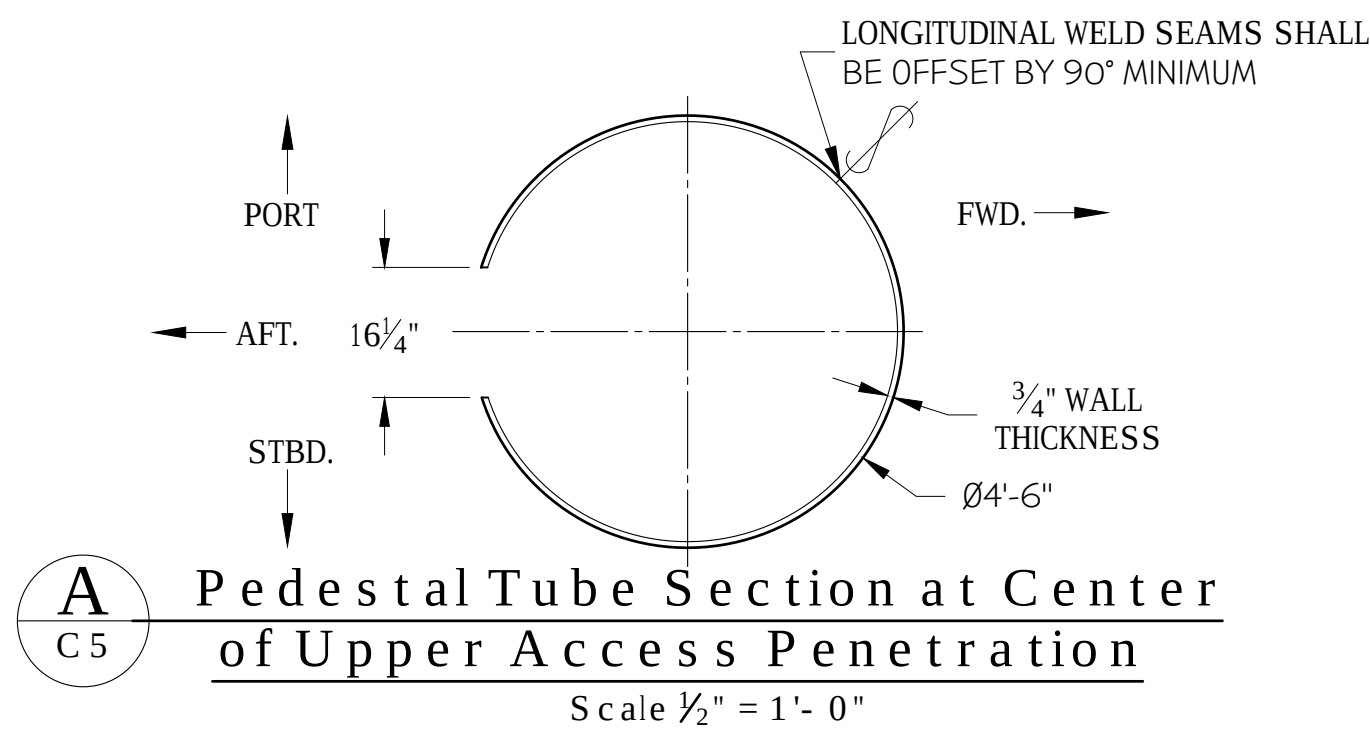
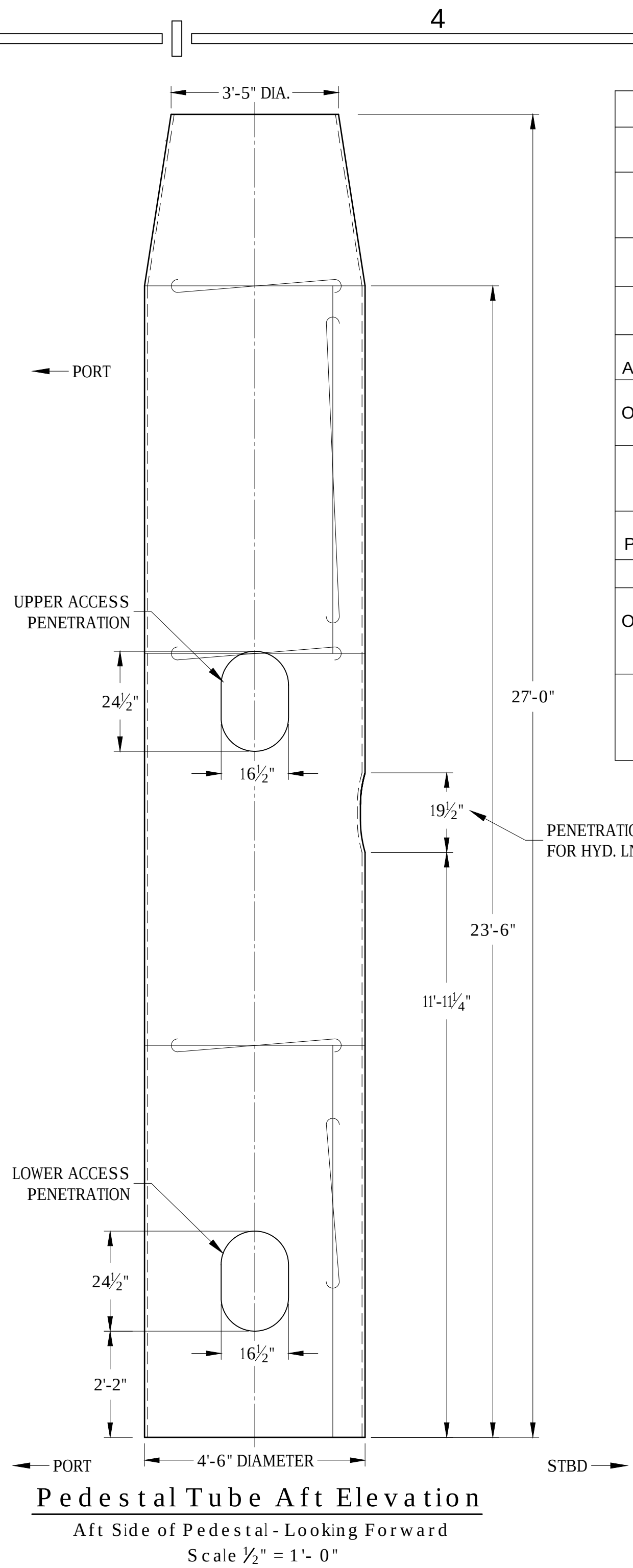
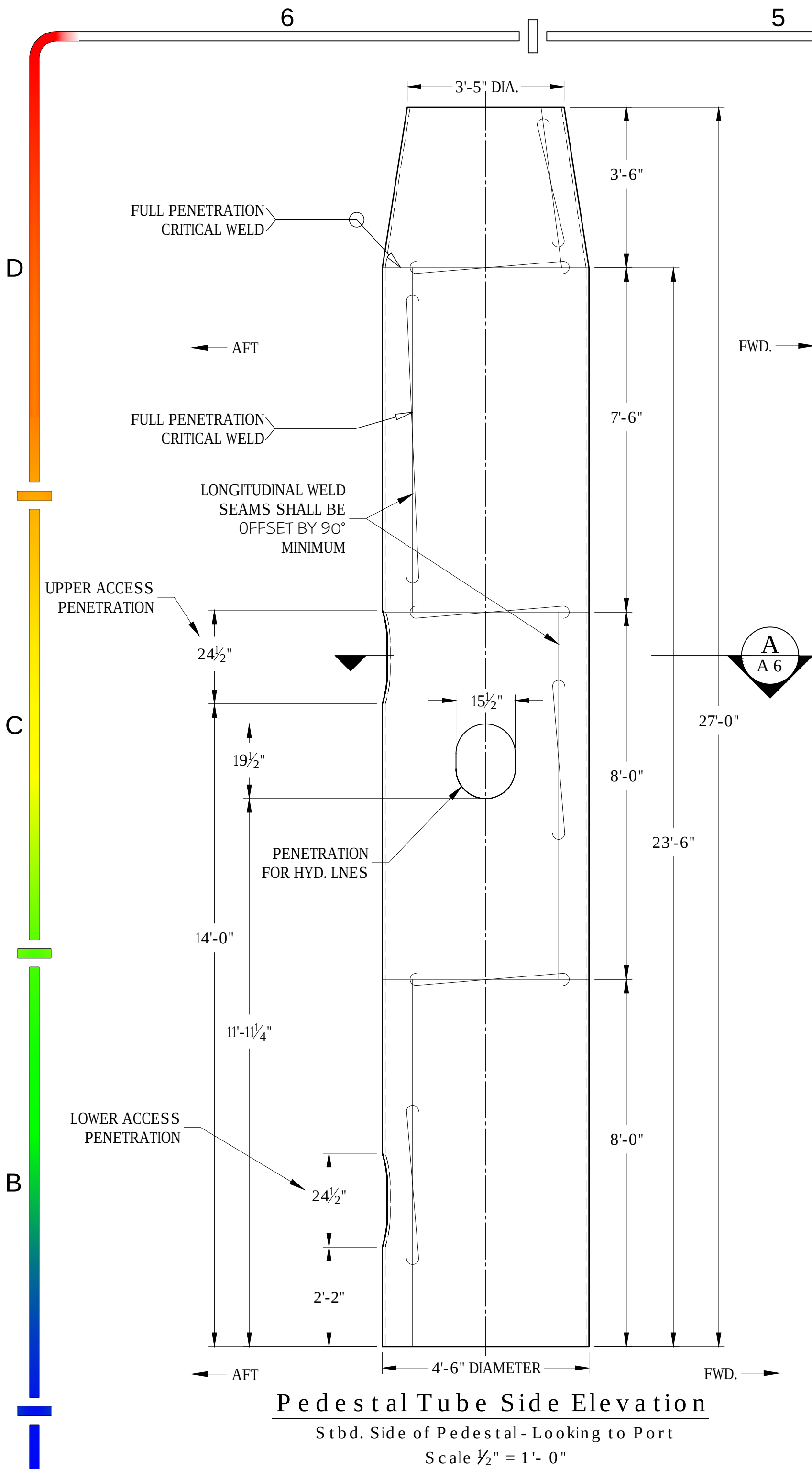




Design Requirements	
APPLICABLE REGULATIONS	ABS GUIDE FOR CERTIFICATION OF LIFTING APPLIANCES 2017
ENVIRONMENTAL CONDITIONS	2.5° VESSEL LIST 1° VESSEL TRIM 6 KNOTS WIND SPEED
LIFTING CATEGORY	CARGO AND EQUIPMENT ONLY (NO PERSONNEL)
MAXIMUM CAPACITY	8,000 LBS SWL @ 45 FT OUTREACH PER REFERENCE A)
VERTICAL AMPLIFICATION FACTOR	1.3
MAXIMUM OVERTURNING MOMENT	1,040,313 FT-LBS INCLUDES VERTICAL AMPLIFICATION FACTOR
PEDESTAL DESIGN VERTICAL LOAD	33,400 LBS INCLUDES VERTICAL AMPLIFICATION FACTOR
MAXIMUM AXIAL PEDESTAL DEFLECTION	0.31 INCHES (AT TOP OF PEDESTAL)
PEDESTAL FACTOR	1.5
PEDESTAL DESIGN OVERTURNING MOMENT	1,287,230 FT-LBS INCLUDES BOTH VERTICAL AMPLIFICATION FACTOR AND PEDESTAL FACTOR
PEDESTAL DESIGN VERTICAL LOAD	38,600 LBS INCLUDES BOTH VERTICAL AMPLIFICATION FACTOR AND PEDESTAL FACTOR

Material List				
ITEM	COMPONENT	MATERIAL	SIZE	COMMENTS
1	PEDASTAL TUBE	A572 GRADE 50 STEEL	3/4" PLATE	MINIMUM 50,000 PSI YIELD STRENGTH
2	CRANE BOLTING FLANGE	A572 GRADE 50 STEEL	1 1/2" PLATE	
3	BOLTING FLANGE BRACKETS	A572 GRADE 50 STEEL	3/4" PLATE	
4	UPPER ACCESS FLANGE	A572 GRADE 50 STEEL	5" X 1/2" FB	
5	HYDRAULIC ACCESS FLANGE	A572 GRADE 50 STEEL	5" X 1/2" FB	
6	DIAPHRAGM PLATE	ASTM A36	3/8" PL	MINIMUM 36,000 PSI YIELD STRENGTH
7	DIAPHRAGM STIFFENER	ASTM A36	4 x 3 x 5/16" L	
8	INNER & OUTER MAINTENANCE PLATFORM	ASTM A36 STEEL MOLDED FIBERGLASS GRATING (BLACK)		DESIGN AND MATERIALS BY CONTRACTOR
10	INTERNAL & EXTERNAL LADDER	ASTM A36		

Welding Specifications

1. **WELD SCHEDULE**
Unless specifically noted otherwise, all critical welds shall be full penetration welds.
Welding shall develop the full strength of the materials being joined. Welding electrodes shall be minimum E70.

2. **WELD PROCEDURES AND PREPARATION**
Prior to completing any welding, Contractor shall submit weld procedures to the Owner for approval. Weld procedures shall be based on ABS Rules for Material Welding, or similar AWS criteria. Weld procedures shall clearly describe allowable electrode, weld geometry, fit-up gap, edge preparation, weld type, amperage, gas, number of passes, etc.

3. **WELDER CERTIFICATION**
All welding shall be done by welders holding a valid qualification issued by ABS or AWS for the approved weld procedures. Contractor shall maintain a copy of all certifications for review by the State.

4. **WELD TESTING**
Weld testing shall occur as follows:
a. All pedestal critical welds shall be 100% radiographic (x-ray) tested, and 100% magnetic particle inspected in accordance with ABS Guide for Nondestructive Inspection of Hull Welds, or similar recognized code. Critical welds are identified in this drawing. X-ray testing shall occur prior to the installation of the pedestal in the vessel.
b. All non-critical welds shall be 100% visually inspected for defects.
c. After installation and a 125% load test, all critical welds shall be 100% visually inspected and 100% magnetic particle tested.

Any defects found during weld testing shall be removed, re-welded, and re-tested. Contractor shall submit all weld testing results to the Owner for approval.

General Notes

1. The intent of this drawing is to create a fully fabricated, assembled and tested pedestal for prior to installation in the vessel.

2. **DESIGN BASIS**
a. The new pedestal in this drawing was designed by Coastwise to meet ABS Rules for Certification of Lifting Appliances 2017. This engineering is based on the crane load capacities in Reference A) and the "Design Requirements" table in this drawing.
b. Contractor shall design and provide a crane bolting flange and associated brackets. The notional crane bolting flange and flange bracket details are shown for bidding purposes only. Contractor shall obtain written verification, from crane manufacturer, that the notional crane bolting flange is of acceptable strength and size for the rated crane loads and that the bolt holes match the existing crane turret holes
c. Contractor shall design and provide internal and external maintenance platforms and ladders. Additional design and fabrication requirements are included in the technical specifications.

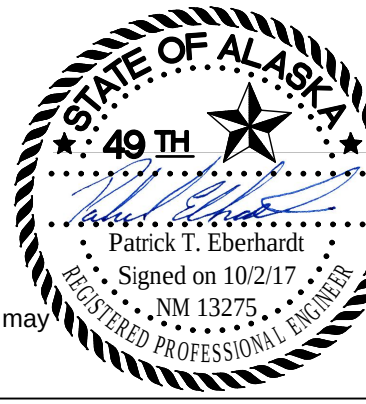
3. **CONSTRUCTION**
a. Pedestal shall be fabricated in accordance with ABS Rules for Certification of Lifting Appliances.
b. Pedestal plate shall be rolled to the diameters shown. Diameters shall be within 1/4" tolerance in accordance with ABS Guide for Shipbuilding and Repair Quality Standard for Hull Structures During Construction.
c. Sharp or ragged edges shall be ground smooth to prevent injury to personnel or damage to equipment.
d. Discontinuities, undercutting, notches, or other mechanical damage which might initiate or propagate cracks in the pedestal structure are not permitted and may result in rejection of the pedestal tube, at no cost to the Owner.

References			
No.			
A. NPCC SWEEP CHART, ALASKA MARINE CRANE MODEL MCKT-2265, AS RIGGED SWEEP LOAD CHART, SC-2154.			
B. HOMEPORNT MARINE dwg P-2 REV A FILLS, VENTS & SOUNDS			
Revisions			
Rev.	Sheet	Zone	Responsible Engineer
-	INITIAL ISSUE		10/2/17 PTE
Approvals			
Agency	Date	Action	
Responsible Engineer	Date	Company	Authorization Scope
PTE	10-2-17	COASTWISE	AECCI476 REV. - : TUBE STRUCTURE



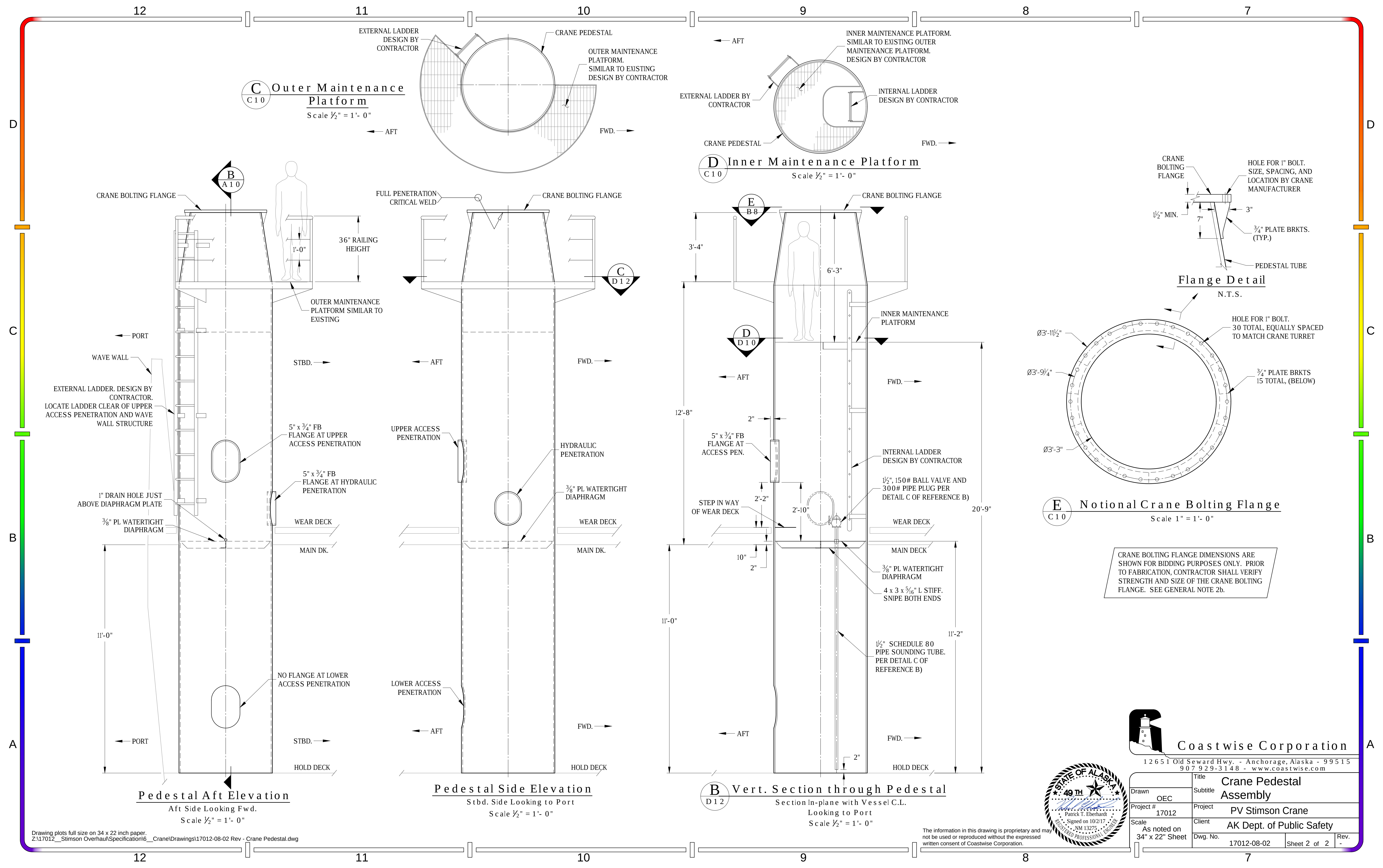
Coastwise Corporation

12651 Old Seward Hwy. - Anchorage, Alaska - 99515
907 929-3148 - www.coastwise.com



Drawn	OEC	Title	Crane Pedestal Tube & Notes	
Project #	17012	Project	PV Stimson Crane	
Scale	As noted on 34" x 22" Sheet	Client	AK Dept. of Public Safety	
		Dwg. No.	17012-08-02	Rev. -
			Sheet 1 of 2	

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Drawn	OEC	Title	Crane Pedestal Assembly
Project #	17012	Project	PV Stimson Crane
Scale	As noted on 34" x 22" Sheet	Client	AK Dept. of Public Safety
Dwg. No.	17012-08-02	Sheet 2 of 2	Rev. -