
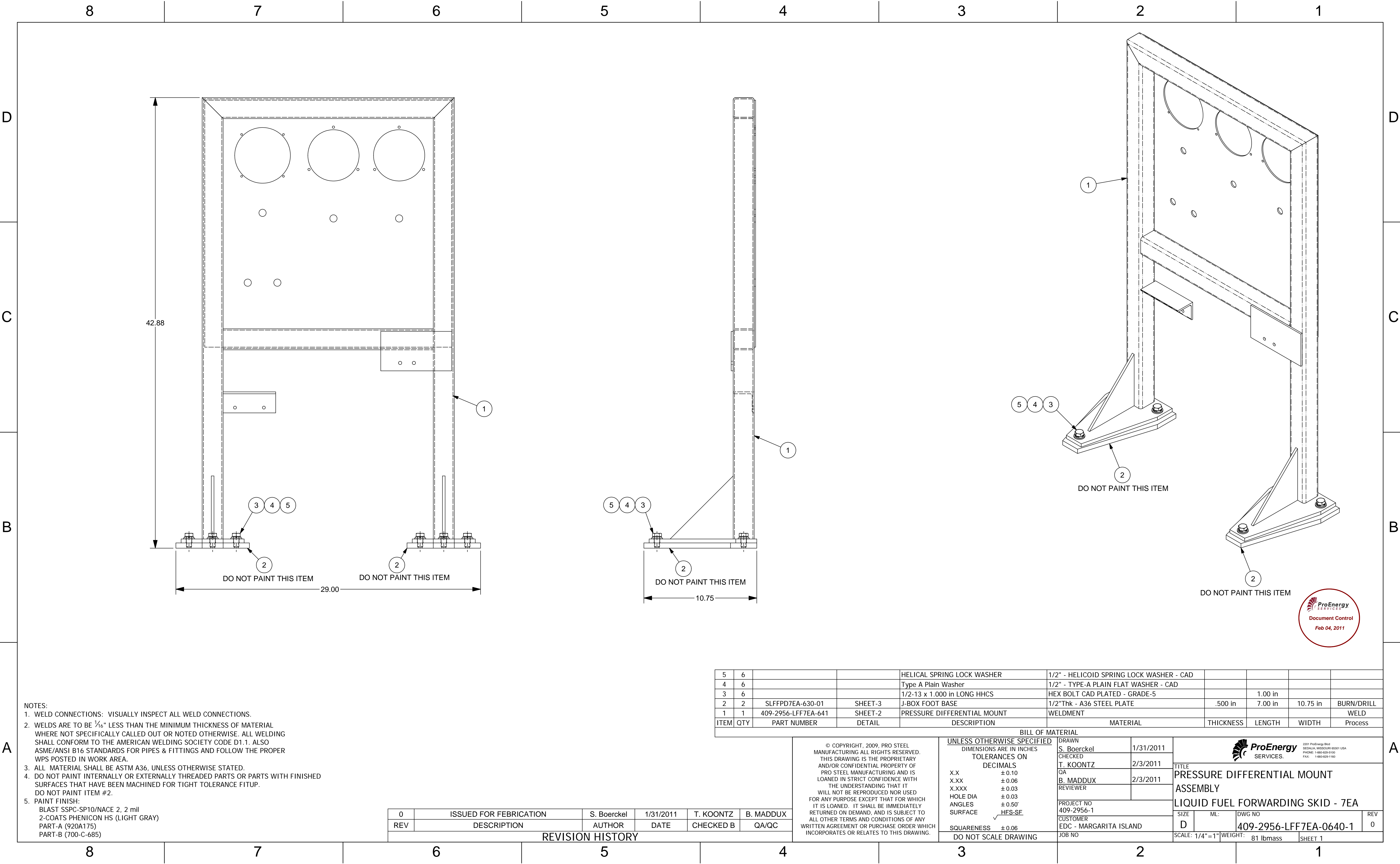
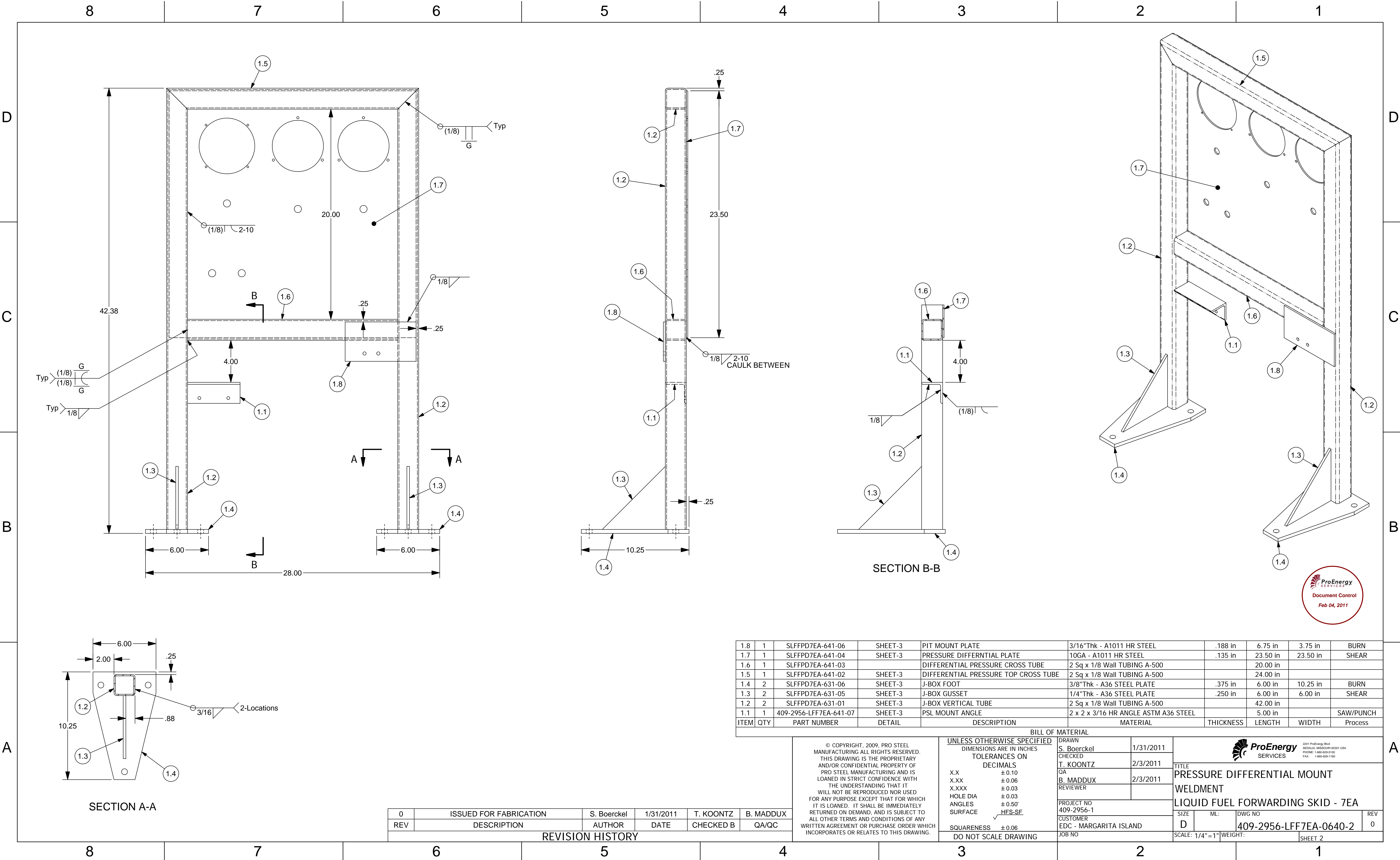


- NOTES:
- WELD CONNECTIONS: VISUALLY INSPECT ALL WELD CONNECTIONS.
 - WELDS ARE TO BE 1/16" LESS THAN THE MINIMUM THICKNESS OF MATERIAL WHERE NOT SPECIFICALLY CALLED OUT OR NOTED OTHERWISE. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1. ALSO ASME/ANSI B16 STANDARDS FOR PIPES & FITTINGS AND FOLLOW THE PROPER WPS POSTED IN WORK AREA.
 - ALL MATERIAL SHALL BE ASTM A36, UNLESS OTHERWISE STATED.


0	ISSUED FOR FABRICATION	S. Boerckel	1/27/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

QTY'S BASED ON 2 UNITS									
1	2	409-2956-LFF7EA-621-01	STRAINER FOOT PLATE	1-3/4" THK - A36 STEEL PLATE	1.750 in	6.00 in	6.00 in	BURN- DRILL-TAP	
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	THICKNESS	LENGTH	WIDTH	Process	
BILL OF MATERIAL									
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				CHECKED T. KOONTZ	2/3/2011				
				QA B. MADDUX	2/3/2011	LIQUID FUEL FORWARDING SKID - 7EA			
				REVIEWER					
				PROJECT NO 409-2956-1					
			CUSTOMER EDC - MARGARITA ISLAND	SIZE D	ML:	DWG NO 409-2956-LFF7EA-0621-1	REV 0		
				JOB NO	SCALE: 1" = 1"	WEIGHT: 18 lbmass	SHEET 1		





1.8	1	SLFFPD7EA-641-06	SHEET-3	PIT MOUNT PLATE	3/16"Thk - A1011 HR STEEL	.188 in	6.75 in	3.75 in	BURN
1.7	1	SLFFPD7EA-641-04	SHEET-3	PRESSURE DIFFERENTIAL PLATE	10GA - A1011 HR STEEL	.135 in	23.50 in	23.50 in	SHEAR
1.6	1	SLFFPD7EA-641-03		DIFFERENTIAL PRESSURE CROSS TUBE	2 Sq x 1/8 Wall TUBING A-500		20.00 in		
1.5	1	SLFFPD7EA-641-02	SHEET-3	DIFFERENTIAL PRESSURE TOP CROSS TUBE	2 Sq x 1/8 Wall TUBING A-500		24.00 in		
1.4	2	SLFFPD7EA-631-06	SHEET-3	J-BOX FOOT	3/8"Thk - A36 STEEL PLATE	.375 in	6.00 in	10.25 in	BURN
1.3	2	SLFFPD7EA-631-05	SHEET-3	J-BOX GUSSET	1/4"Thk - A36 STEEL PLATE	.250 in	6.00 in	6.00 in	SHEAR
1.2	2	SLFFPD7EA-631-01	SHEET-3	J-BOX VERTICAL TUBE	2 Sq x 1/8 Wall TUBING A-500		42.00 in		
1.1	1	409-2956-LFF7EA-641-07	SHEET-3	PSL MOUNT ANGLE	2 x 2 x 3/16 HR ANGLE ASTM A36 STEEL		5.00 in		SAW/PUNCH
ITEM	QTY	PART NUMBER	DETAIL	DESCRIPTION	MATERIAL	THICKNESS	LENGTH	WIDTH	Process

BILL OF MATERIAL									
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						CHECKED T. KOONTZ 2/3/2011			
						QA B. MADDUX 2/3/2011			
						REVIEWER			
						PROJECT NO 409-2956-1			
						CUSTOMER EDC - MARGARITA ISLAND			
B. MADDUX	QA/QC	TITLE PRESSURE DIFFERENTIAL MOUNT WELDMENT LIQUID FUEL FORWARDING SKID - 7EA	SIZE D	ML: D	DWG NO 409-2956-LFF7EA-0640-2	REV 0			
			SCALE: 1/4"=1"		WEIGHT:		SHEET 2		

0	ISSUED FOR FABRICATION	S. Boerckel	1/31/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

D

C

B

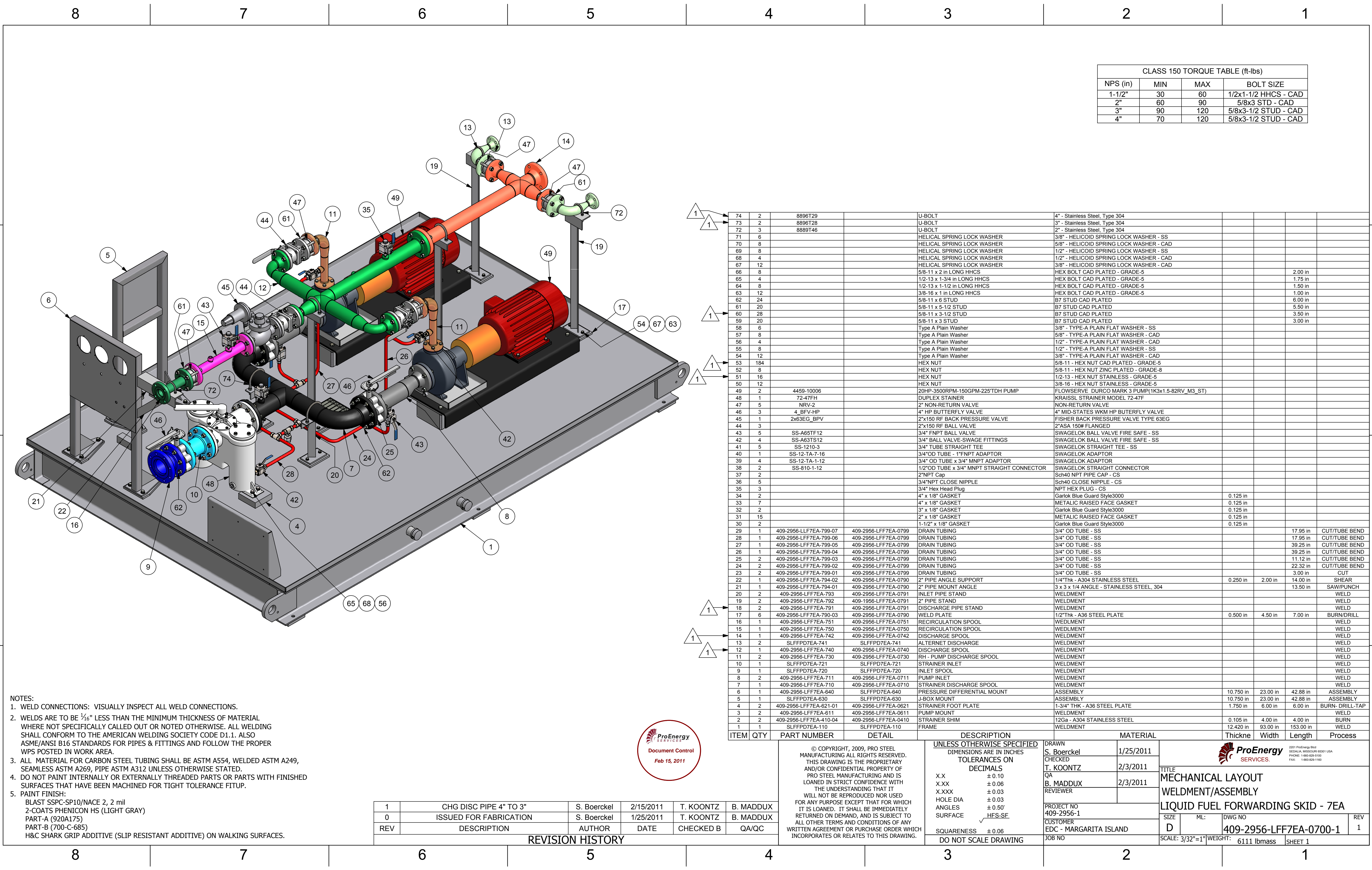
A

D

C

B

A



CLASS 150 TORQUE TABLE (ft-lbs)			
NPS (in)	MIN	MAX	BOLT SIZE
1-1/2"	30	60	1/2x1-1/2 HHCS - CAD
2"	60	90	5/8x3 STD - CAD
3"	90	120	5/8x3-1/2 STUD - CAD
4"	70	120	5/8x3-1/2 STUD - CAD

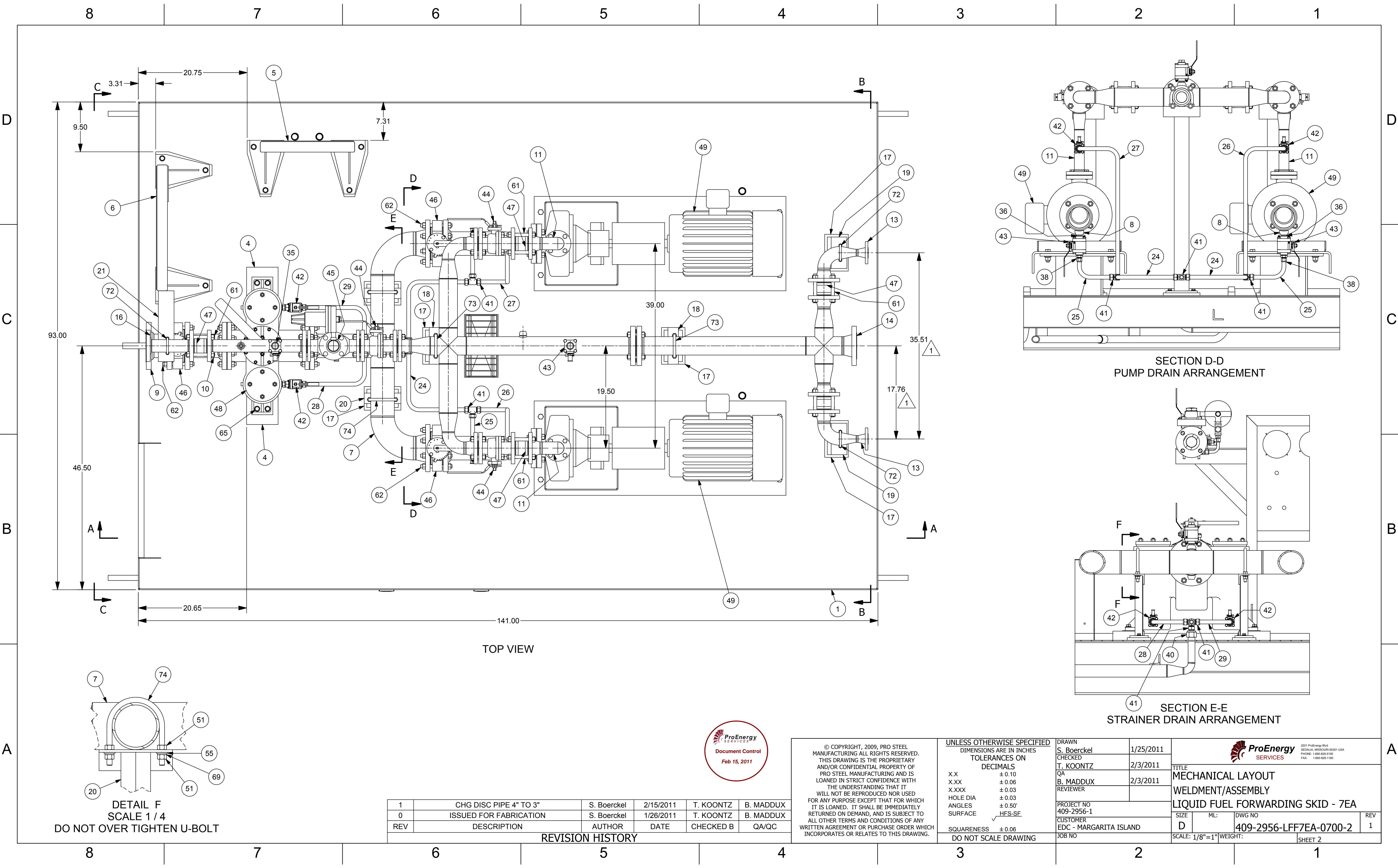
- NOTES:
- WELD CONNECTIONS: VISUALLY INSPECT ALL WELD CONNECTIONS.
 - WELDS ARE TO BE 3/16" LESS THAN THE MINIMUM THICKNESS OF MATERIAL WHERE NOT SPECIFICALLY CALLED OUT OR NOTED OTHERWISE. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1. ALSO ASME/ANSI B16 STANDARDS FOR PIPES & FITTINGS AND FOLLOW THE PROPER WPS POSTED IN WORK AREA.
 - ALL MATERIAL FOR CARBON STEEL TUBING SHALL BE ASTM A554, WELDED ASTM A249, SEAMLESS ASTM A269, PIPE ASTM A312 UNLESS OTHERWISE STATED.
 - DO NOT PAINT INTERNALLY OR EXTERNALLY THREADED PARTS OR PARTS WITH FINISHED SURFACES THAT HAVE BEEN MACHINED FOR TIGHT TOLERANCE FITUP.
 - PAINT FINISH:
BLAST SSPC-SP10/NACE 2, 2 mil
2-COATS PHENICON HS (LIGHT GRAY)
PART-A (920A175)
PART-B (700-C-685)
H&C SHARK GRIP ADDITIVE (SLIP RESISTANT ADDITIVE) ON WALKING SURFACES.

1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/25/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

74	2	8896T29	U-BOLT	4" - Stainless Steel, Type 304					
73	2	8896T28	U-BOLT	3" - Stainless Steel, Type 304					
72	3	8896T46	U-BOLT	2" - Stainless Steel, Type 304					
71	6		HELICAL SPRING LOCK WASHER	3/8" - HELICOID SPRING LOCK WASHER - SS					
70	8		HELICAL SPRING LOCK WASHER	5/8" - HELICOID SPRING LOCK WASHER - CAD					
69	8		HELICAL SPRING LOCK WASHER	1/2" - HELICOID SPRING LOCK WASHER - SS					
68	4		HELICAL SPRING LOCK WASHER	1/2" - HELICOID SPRING LOCK WASHER - CAD					
67	12		HELICAL SPRING LOCK WASHER	3/8" - HELICOID SPRING LOCK WASHER - CAD					
66	8		5/8-11 x 2 in LONG HHCS	HEX BOLT CAD PLATED - GRADE-5				2.00 in	
65	4		1/2-13 x 1-3/4 in LONG HHCS	HEX BOLT CAD PLATED - GRADE-5				1.75 in	
64	8		1/2-13 x 1-1/2 in LONG HHCS	HEX BOLT CAD PLATED - GRADE-5				1.50 in	
63	12		3/8-16 x 1 in LONG HHCS	HEX BOLT CAD PLATED - GRADE-5				1.00 in	
62	24		5/8-11 x 6 STUD	B7 STUD CAD PLATED				6.00 in	
61	20		5/8-11 x 5-1/2 STUD	B7 STUD CAD PLATED				5.50 in	
60	28		5/8-11 x 3-1/2 STUD	B7 STUD CAD PLATED				3.50 in	
59	20		5/8-11 x 3 STUD	B7 STUD CAD PLATED				3.00 in	
58	6		Type A Plain Washer	3/8" - TYPE-A PLAIN FLAT WASHER - SS					
57	8		Type A Plain Washer	5/8" - TYPE-A PLAIN FLAT WASHER - CAD					
56	4		Type A Plain Washer	1/2" - TYPE-A PLAIN FLAT WASHER - CAD					
55	8		Type A Plain Washer	1/2" - TYPE-A PLAIN FLAT WASHER - SS					
54	12		Type A Plain Washer	3/8" - TYPE-A PLAIN FLAT WASHER - CAD					
53	184		HEX NUT	5/8-11 - HEX NUT CAD PLATED - GRADE-5					
52	8		HEX NUT	5/8-11 - HEX NUT ZINC PLATED - GRADE-8					
51	16		HEX NUT	1/2-13 - HEX NUT STAINLESS - GRADE-5					
50	12		HEX NUT	3/8-16 - HEX NUT STAINLESS - GRADE-5					
49	2	4459-10006	20HP-3500RPM-150GPM-225"TDH PUMP	FLOWSERVE DURCO MARK 3 PUMP(1K3x1.5-82RV_M3_ST)					
48	1	72-47FH	DUPLEX STRAINER	KRAISSL STRAINER MODEL 72-47F					
47	5	NRV-2	2" NON-RETURN VALVE	NON-RETURN VALVE					
46	3	4_BFV-HP	4" HP BUTTERFLY VALVE	4" MID-STATES WKM HP BUTTERFLY VALVE					
45	1	2x63EG_BP	2"x150 RF BACK PRESSURE VALVE	FISHER BACK PRESSURE VALVE TYPE 63EG					
44	3		2"x150 RF BALL VALVE	2"ASA 150# FLANGED					
43	5	SS-A65TF12	3/4" FNPT BALL VALVE	SWAGelok BALL VALVE FIRE SAFE - SS					
42	4	SS-A63TS12	3/4" BALL VALVE-SWAGE FITTINGS	SWAGelok BALL VALVE FIRE SAFE - SS					
41	5	SS-1210-3	3/4" TUBE STRAIGHT TEE	SWAGelok STRAIGHT TEE - SS					
40	1	SS-12-TA-7-16	3/4"OD TUBE - 1"FNPT ADAPTOR	SWAGelok ADAPTOR					
39	4	SS-12-TA-1-12	3/4" OD TUBE x 3/4" MNPT ADAPTOR	SWAGelok ADAPTOR					
38	2	SS-810-1-12	1/2"OD TUBE x 3/4" MNPT STRAIGHT CONNECTOR	SWAGelok STRAIGHT CONNECTOR					
37	2		2"NPT Cap	Sch40 NPT PIPE CAP - CS					
36	5		3/4"NPT CLOSE NIPPLE	Sch40 CLOSE NIPPLE - CS					
35	3		3/4" Hex Head Plug	NPT HEX PLUG - CS					
34	2		4" x 1/8" GASKET	Garlok Blue Guard Style3000	0.125 in				
33	7		4" x 1/8" GASKET	METALIC RAISED FACE GASKET	0.125 in				
32	2		3" x 1/8" GASKET	Garlok Blue Guard Style3000	0.125 in				
31	15		2" x 1/8" GASKET	METALIC RAISED FACE GASKET	0.125 in				
30	2		1-1/2" x 1/8" GASKET	Garlok Blue Guard Style3000	0.125 in				
29	1	409-2956-LFF7EA-799-07	DRAIN TUBING	3/4" OD TUBE - SS				17.95 in	CUT/TUBE BEND
28	1	409-2956-LFF7EA-799-06	DRAIN TUBING	3/4" OD TUBE - SS				17.95 in	CUT/TUBE BEND
27	1	409-2956-LFF7EA-799-05	DRAIN TUBING	3/4" OD TUBE - SS				39.25 in	CUT/TUBE BEND
26	1	409-2956-LFF7EA-799-04	DRAIN TUBING	3/4" OD TUBE - SS				39.25 in	CUT/TUBE BEND
25	2	409-2956-LFF7EA-799-03	DRAIN TUBING	3/4" OD TUBE - SS				11.12 in	CUT/TUBE BEND
24	2	409-2956-LFF7EA-799-02	DRAIN TUBING	3/4" OD TUBE - SS				22.32 in	CUT/TUBE BEND
23	2	409-2956-LFF7EA-799-01	DRAIN TUBING	3/4" OD TUBE - SS				3.00 in	CUT
22	1	409-2956-LFF7EA-794-02	2" PIPE ANGLE SUPPORT	1/4"Thk - A304 STAINLESS STEEL	0.250 in	2.00 in	14.00 in		SHEAR
21	1	409-2956-LFF7EA-794-01	2" PIPE MOUNT ANGLE	3 x 3 x 1/4 ANGLE - STAINLESS STEEL, 304			13.50 in		SAW/PUNCH
20	2	409-2956-LFF7EA-793	INLET PIPE STAND	WELDMENT					WELD
19	2	409-2956-LFF7EA-792	2" PIPE STAND	WELDMENT					WELD
18	2	409-2956-LFF7EA-791	DISCHARGE PIPE STAND	WELDMENT					WELD
17	6	409-2956-LFF7EA-790-03	WELD PLATE	1/2"Thk - A36 STEEL PLATE	0.500 in	4.50 in	7.00 in		BURN/DRILL
16	1	409-2956-LFF7EA-751	RECIRCULATION SPOOL	WEDLMENT					WELD
15	1	409-2956-LFF7EA-750	RECIRCULATION SPOOL	WEDLMENT					WELD
14	1	409-2956-LFF7EA-742	DISCHARGE SPOOL	WELDMENT					WELD
13	2	SLFFPD7EA-741	ALTERNET DISCHARGE	WELDMENT					WELD
12	1	409-2956-LFF7EA-740	DISCHARGE SPOOL	WELDMENT					WELD
11	2	409-2956-LFF7EA-730	RH - PUMP DISCHARGE SPOOL	WELDMENT					WELD
10	1	SLFFPD7EA-721	STRAINER INLET	WELDMENT					WELD
9	1	SLFFPD7EA-720	INLET SPOOL	WELDMENT					WELD
8	2	409-2956-LFF7EA-711	PUMP INLET	WELDMENT					WELD
7	1	409-2956-LFF7EA-710	STRAINER DISCHARGE SPOOL	WELDMENT					WELD
6	1	409-2956-LFF7EA-640	PRESSURE DIFFERENTIAL MOUNT	ASSEMBLY	10.750 in	23.00 in	42.88 in		ASSEMBLY
5	1	SLFFPD7EA-630	J-BOX MOUNT	ASSEMBLY	10.750 in	23.00 in	42.88 in		ASSEMBLY
4	2	409-2956-LFF7EA-621-01	STRAINER FOOT PLATE	1-3/4" THK - A36 STEEL PLATE	1.750 in	6.00 in	6.00 in		BURN-DRILL-TAP
3	2	409-2956-LFF7EA-611	PUMP MOUNT	WELDMENT					WELD
2	2	409-2956-LFF7EA-410-04	STRAINER SHIM	12Ga - A304 STAINLESS STEEL	0.105 in	4.00 in	4.00 in		BURN
1	1	SLFFPD7EA-110	FRAME	WELDMENT	12.420 in	93.00 in	153.00 in		WELD
ITEM	QTY	PART NUMBER	DETAIL	DESCRIPTION	MATERIAL	Thickne	Width	Length	Process

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PROJECT NO 409-2956-1 CUSTOMER EDC - MARGARITA ISLAND JOB NO				SIZE D SCALE: 3/32"=1"		ML: DWG NO 409-2956-LFF7EA-0700-1		REV 1		WEIGHT: 6111 lbmass SHEET 1	

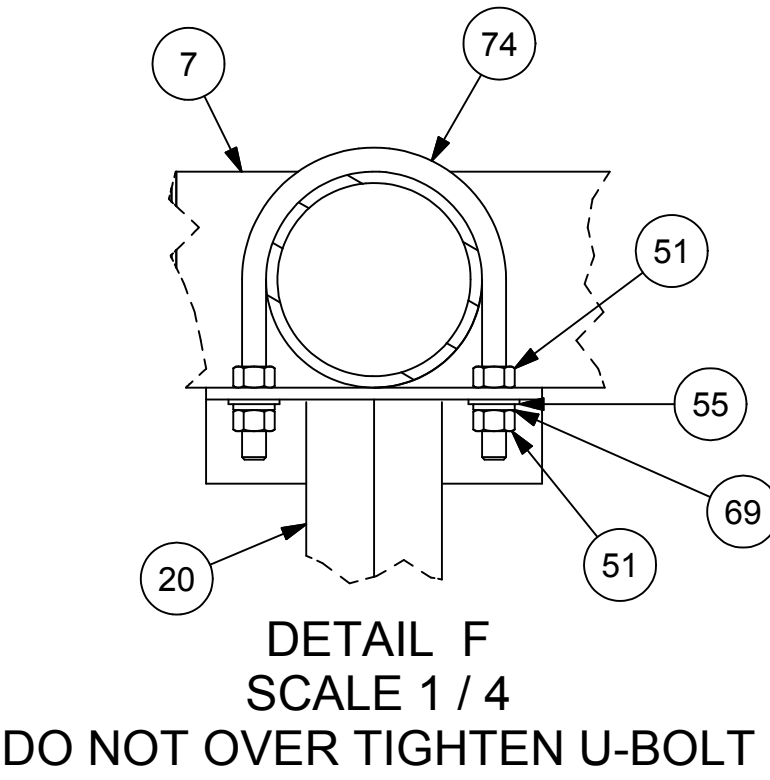




TOP VIEW

SECTION D-D
PUMP DRAIN ARRANGEMENT

SECTION E-E
STRAINER DRAIN ARRANGEMENT



1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/26/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC


REVISION HISTORY

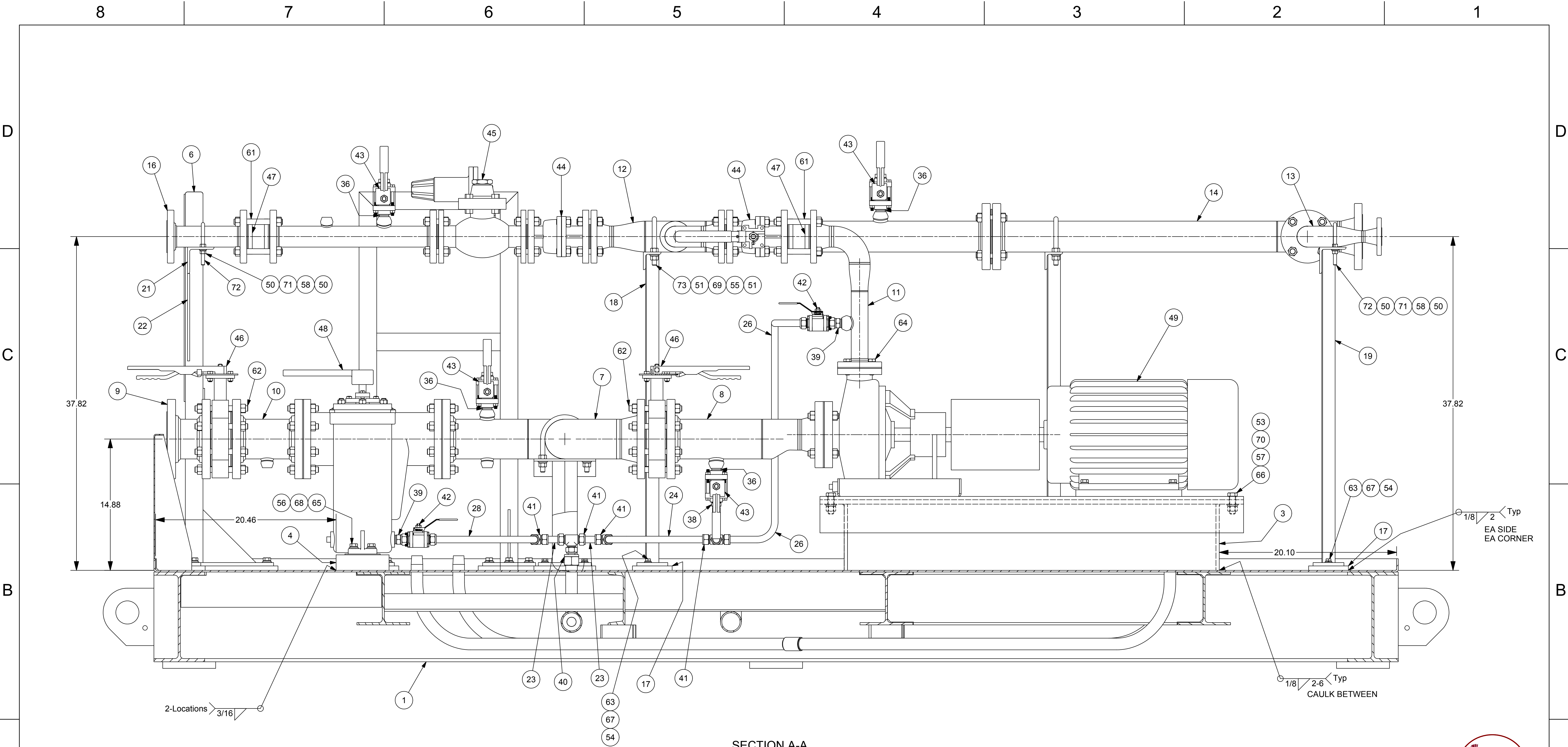


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UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON	
DECIMALS	
X.X	± 0.10
X.XX	± 0.06
X.XXX	± 0.03
HOLE DIA	± 0.03
ANGLES	± 0.50°
SURFACE	✓ HFS-SF
SQUARENESS	± 0.06
DO NOT SCALE DRAWING	

DRAWN	S. Boerckel	1/25/2011
CHECKED	T. KOONTZ	2/3/2011
QA	B. MADDUX	2/3/2011
REVIEWER		
PROJECT NO 409-2956-1		
CUSTOMER EDC - MARGARITA ISLAND		
JOB NO		

 2201 ProEnergy Blvd SEDAKA, MISSOURI 65201 USA PHONE: 1-800-829-5100 FAX: 1-800-829-1100			
TITLE MECHANICAL LAYOUT WELDMENT/ASSEMBLY LIQUID FUEL FORWARDING SKID - 7EA			
SIZE	ML:	DWG NO	REV
D		409-2956-LFF7EA-0700-2	1
SCALE: 1/8"=1"		WEIGHT:	SHEET 2



SECTION A-A


REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/25/2011	T. KOONTZ	B. MADDUX

REVISION HISTORY

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ALL OTHER TERMS AND CONDITIONS OF ANY
WRITTEN AGREEMENT OR PURCHASE ORDER WHICH
INCORPORATES OR RELATES TO THIS DRAWING.

UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON	
DECIMALS	
X.X	± 0.10
X.XX	± 0.06
X.XXX	± 0.03
HOLE DIA	± 0.03
ANGLES	± 0.50°
SURFACE	✓ HFS-SF
SQUARENESS	± 0.06
DO NOT SCALE DRAWING	

DRAWN	S. Boerckel	1/25/2011
CHECKED	T. KOONTZ	2/3/2011
QA	B. MADDUX	2/3/2011
REVIEWER		
PROJECT NO	409-2956-1	
CUSTOMER	EDC - MARGARITA ISLAND	
JOB NO		

 2201 ProEnergy Blvd SEDAUKA, MISSOURI 65201 USA PHONE: 1-800-829-5100 FAX: 1-800-829-1100			
TITLE MECHANICAL LAYOUT WELDMEN/ASSEMBLY LIQUID FUEL FORWARDING SKID - 7EA			
SIZE	ML	DWG NO	REV
D		409-2956-LFF7EA-0700-3	1
SCALE: 3/16"=1" WEIGHT:			
SHEET 3			



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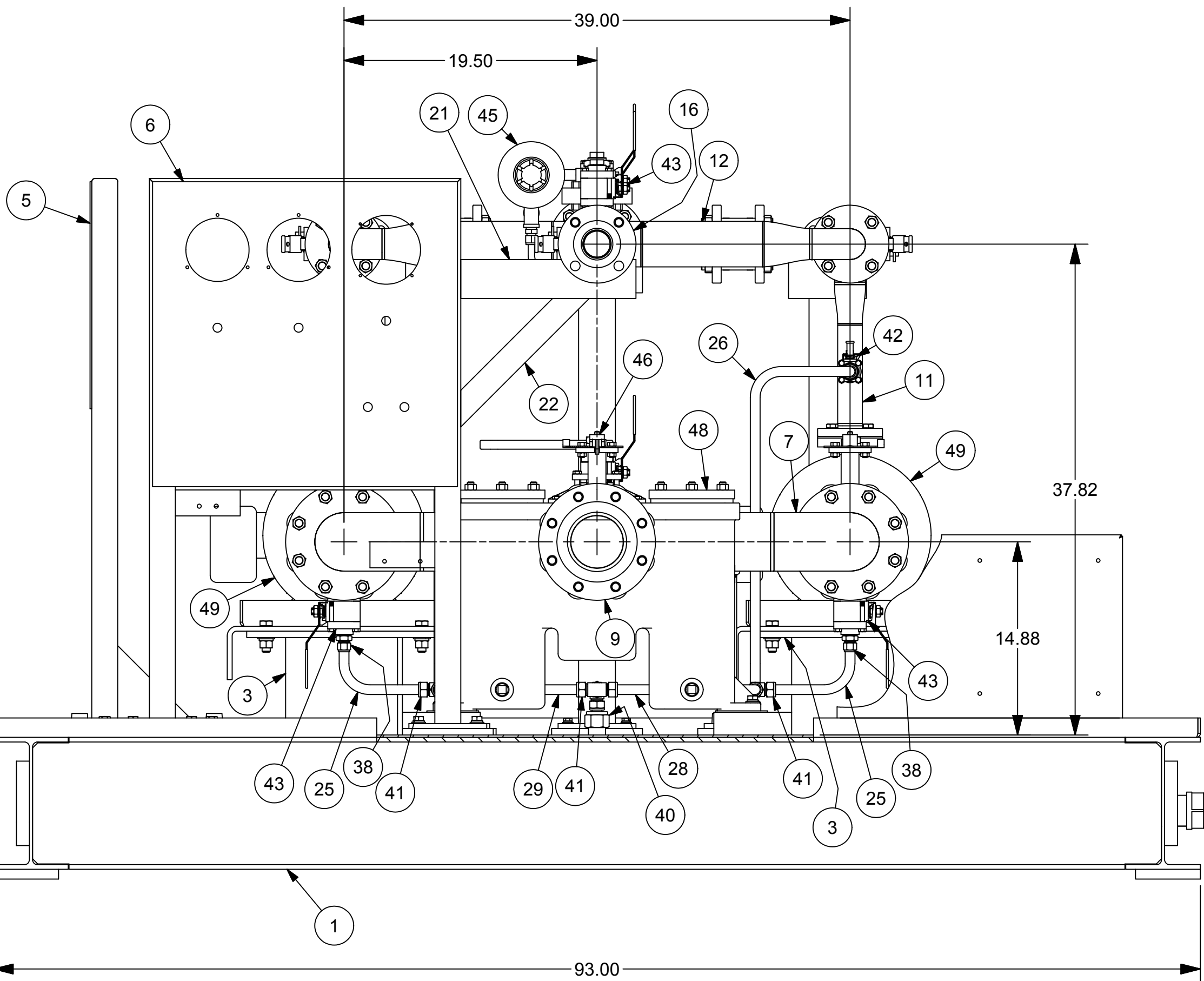
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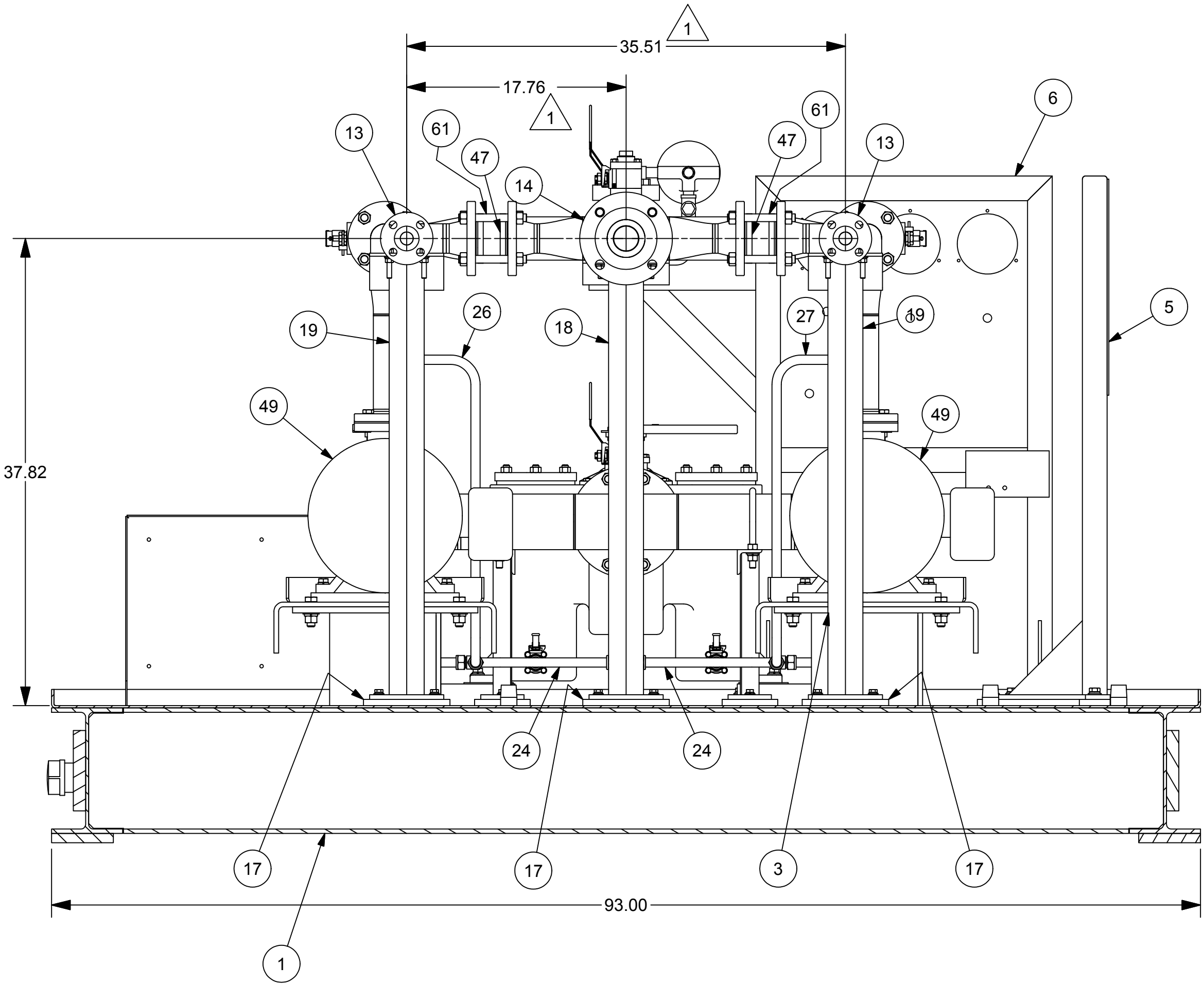
C

B

A



VIEW C-C




SECTION B-B



1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/26/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC

REVISION HISTORY

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	DIMENSIONS ARE IN INCHES		S. Boerckel									
	TOLERANCES ON		CHECKED		2/3/2011		TITLE					
	DECIMALS		T. KOONTZ				MECHANICAL LAYOUT					
	X.X ± 0.10	QA		B. MADDUX		2/3/2011		WELDMENT/ASSEMBLY				
	X.XX ± 0.06	REVIEWER						LIQUID FUEL FORWARDING SKID - 7EA				
	X.XXX ± 0.03	PROJECT NO		409-2956-1				SIZE		ML:	DWG NO	REV
HOLE DIA ± 0.03	SURFACE		✓ HFS-SF		CUSTOMER		D			409-2956-LFF7EA-0700-4	1	
ANGLES ± 0.50°	SQUARENESS ± 0.06				EDC - MARGARITA ISLAND		SCALE: 1/8"=1"		WEIGHT:		SHEET 4	
SURFACE	DO NOT SCALE DRAWING		JOB NO									

8

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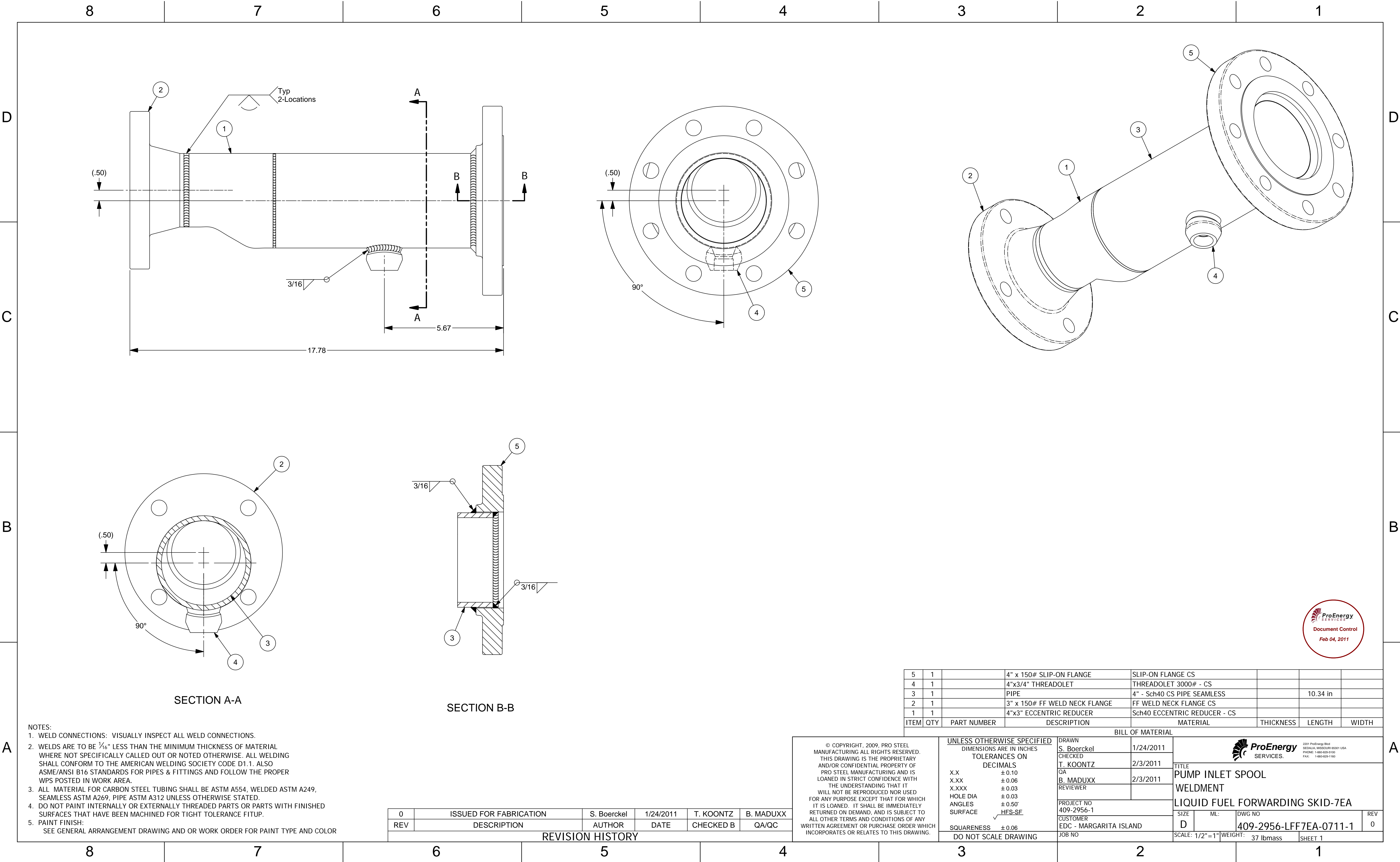
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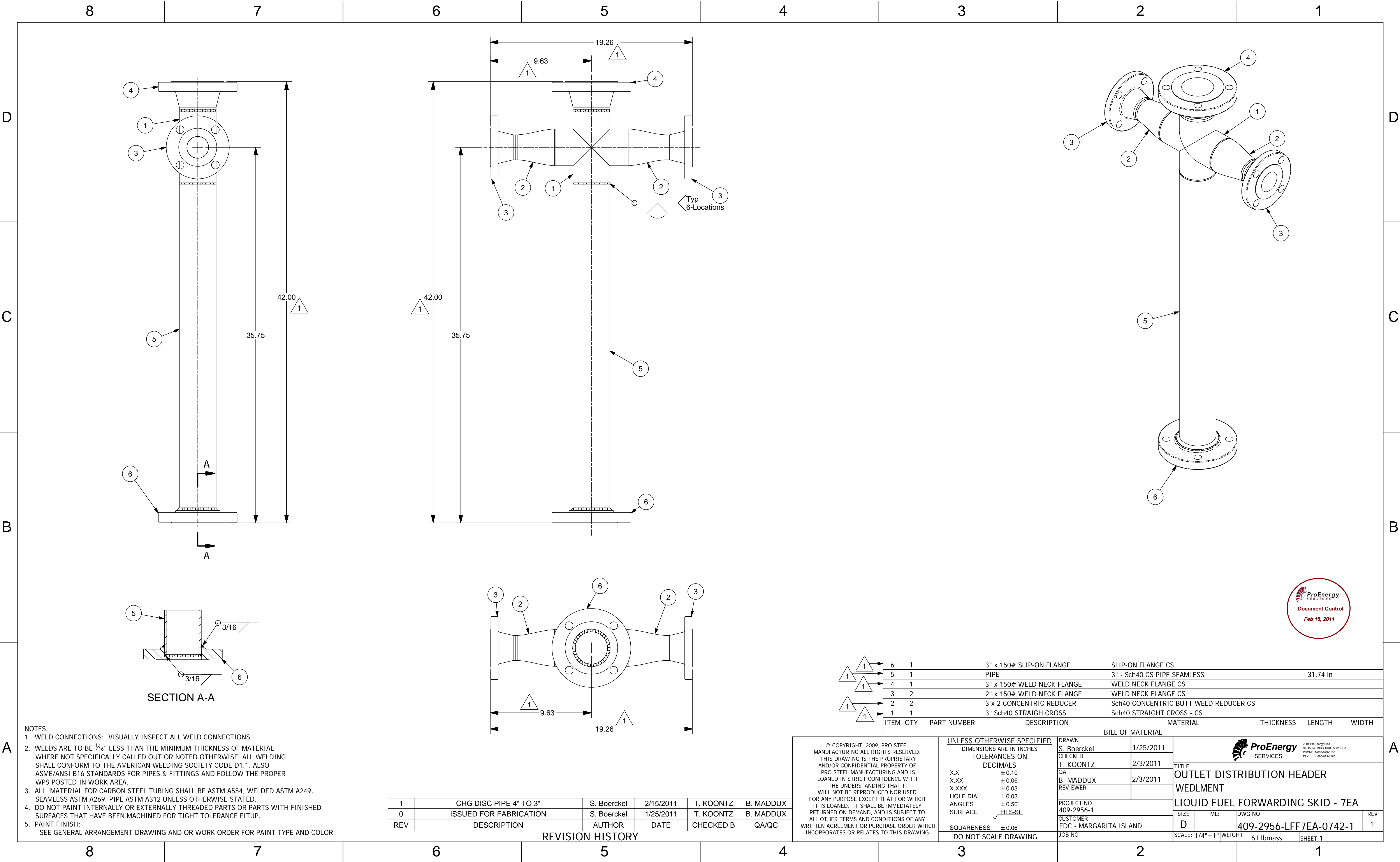
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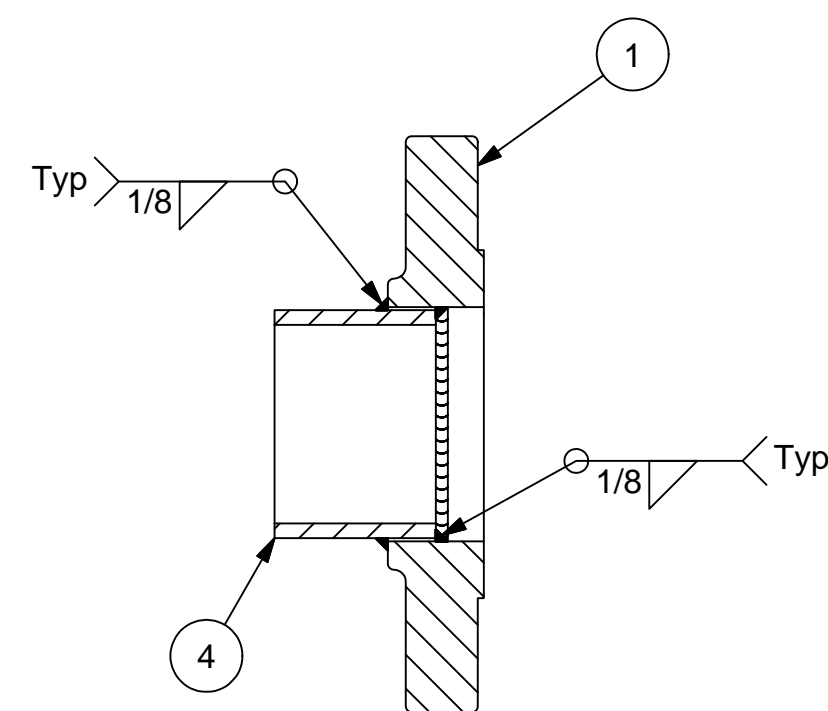
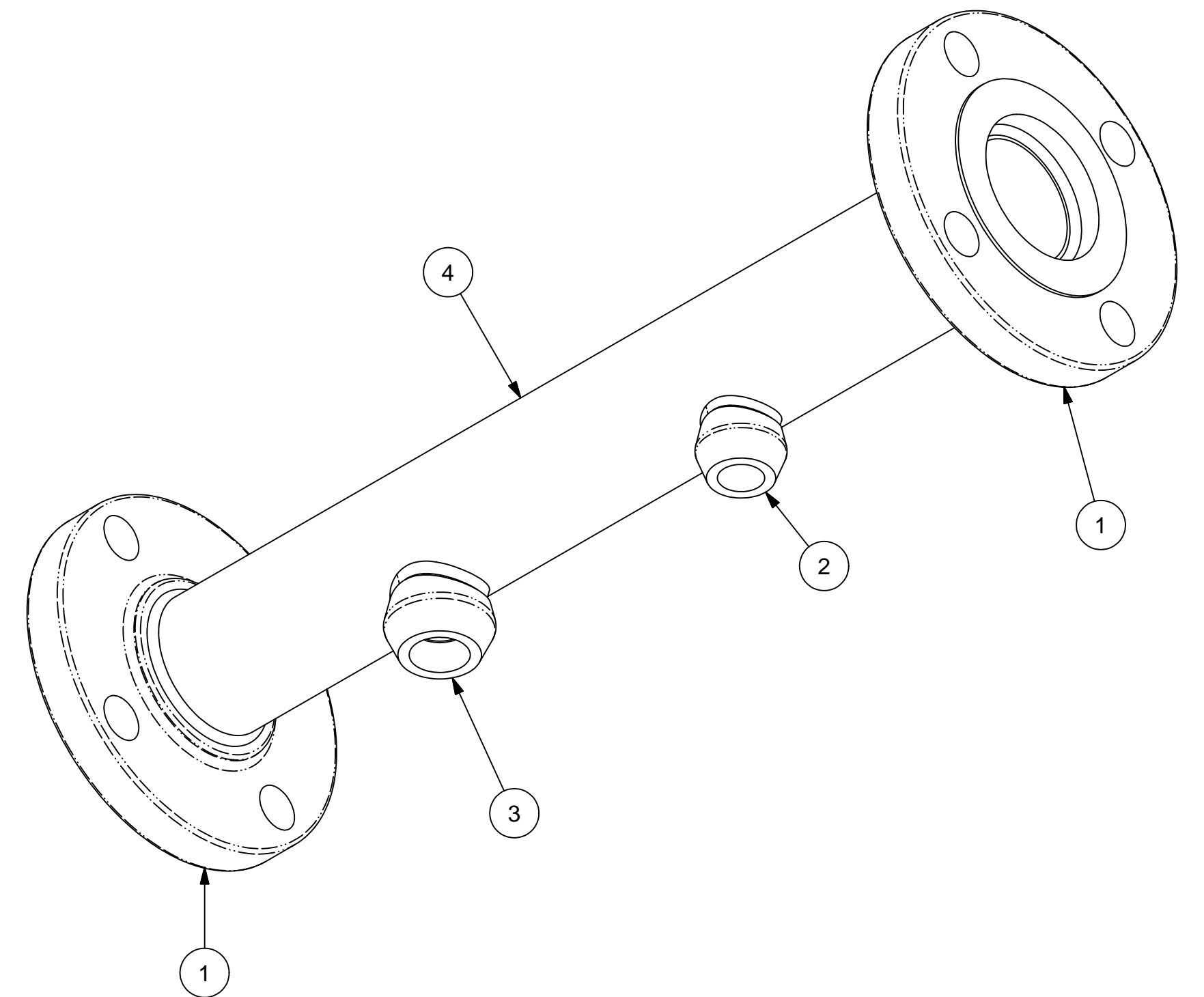
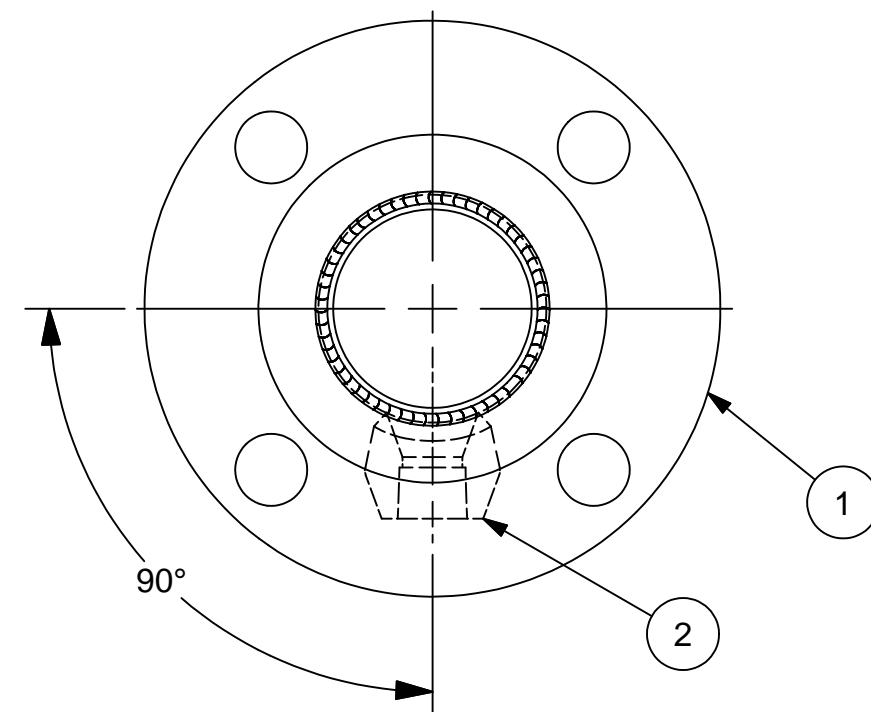
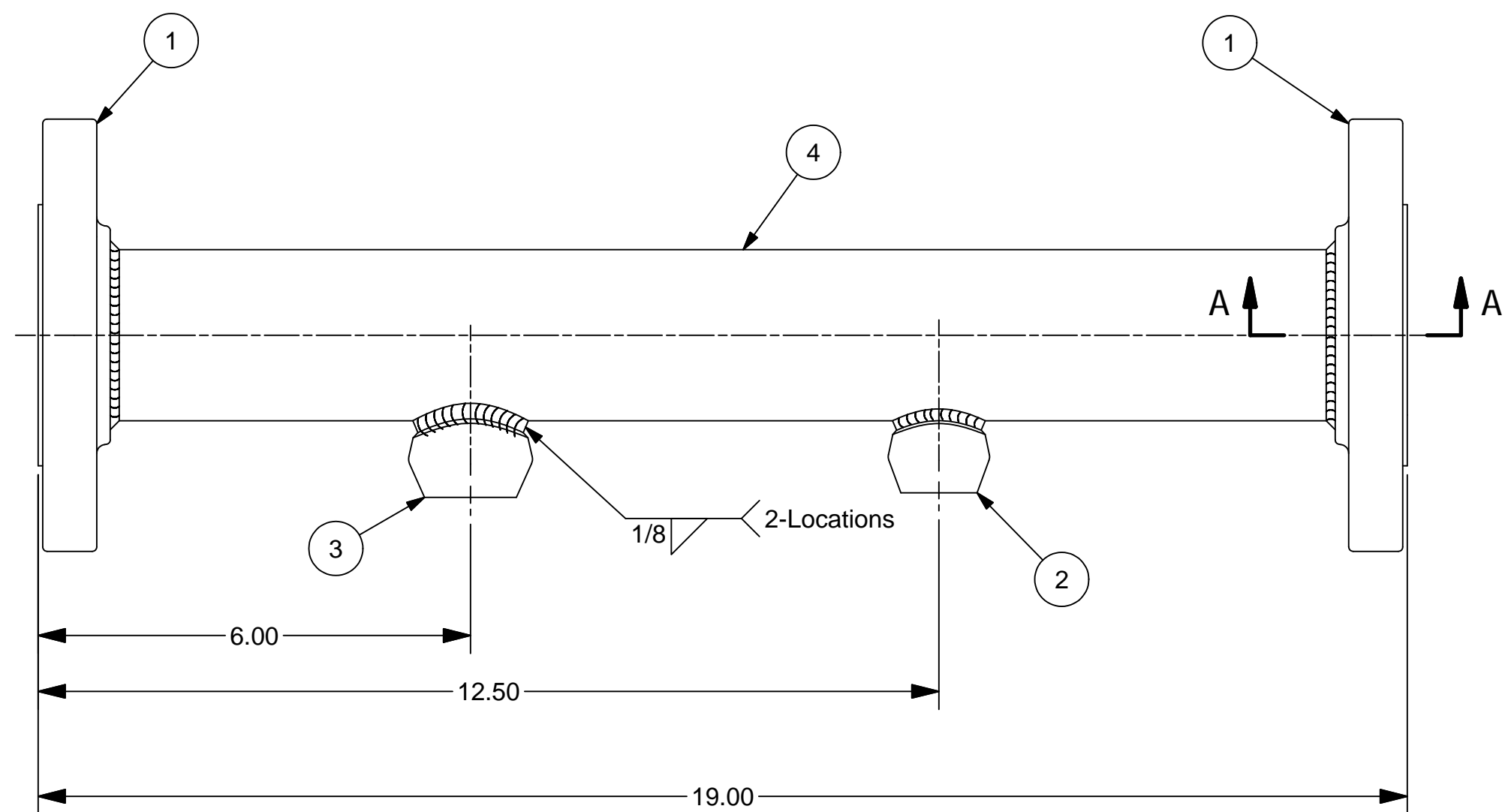
- NOTES:
- WELD CONNECTIONS: VISUALLY INSPECT ALL WELD CONNECTIONS.
 - WELDS ARE TO BE $\frac{1}{16}$ " LESS THAN THE MINIMUM THICKNESS OF MATERIAL WHERE NOT SPECIFICALLY CALLED OUT OR NOTED OTHERWISE. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1. ALSO ASME/ANSI B16 STANDARDS FOR PIPES & FITTINGS AND FOLLOW THE PROPER WPS POSTED IN WORK AREA.
 - ALL MATERIAL FOR CARBON STEEL TUBING SHALL BE ASTM A554, WELDED ASTM A249, SEAMLESS ASTM A269, PIPE ASTM A312 UNLESS OTHERWISE STATED.
 - DO NOT PAINT INTERNALLY OR EXTERNALLY THREADED PARTS OR PARTS WITH FINISHED SURFACES THAT HAVE BEEN MACHINED FOR TIGHT TOLERANCE FITUP.
 - PAINT FINISH:
SEE GENERAL ARRANGEMENT DRAWING AND OR WORK ORDER FOR PAINT TYPE AND COLOR

1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/25/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

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	TITLE OUTLET DISTRIBUTION HEADER WEDLMNT								
	LIQUID FUEL FORWARDING SKID - 7EA								
	SIZE D		ML: DWG NO 409-2956-LFF7EA-0742-1		REV 1				
	SCALE: 1/4" = 1"		WEIGHT: 61 lbmass		SHEET 1				
	JOB NO								



2011 ProEnergy Bldg
SECALIA, MISSOURI 65501 USA
PHONE: 1-800-829-5100
FAX: 1-800-829-1100



SECTION A-A



NOTES:

1. WELD CONNECTIONS: VISUALLY INSPECT ALL WELD CONNECTIONS.
2. WELDS ARE TO BE $\frac{1}{16}$ " LESS THAN THE MINIMUM THICKNESS OF MATERIAL WHERE NOT SPECIFICALLY CALLED OUT OR NOTED OTHERWISE. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1. ALSO ASME/ANSI B16 STANDARDS FOR PIPES & FITTINGS AND FOLLOW THE PROPER WPS POSTED IN WORK AREA.
3. ALL MATERIAL FOR CARBON STEEL TUBING SHALL BE ASTM A554, WELDED ASTM A249, SEAMLESS ASTM A269, PIPE ASTM A312 UNLESS OTHERWISE STATED.
4. DO NOT PAINT INTERNALLY OR EXTERNALLY THREADED PARTS OR PARTS WITH FINISHED SURFACES THAT HAVE BEEN MACHINED FOR TIGHT TOLERANCE FITUP.
5. PAINT FINISH:
SEE GENERAL ARRANGEMENT DRAWING AND OR WORK ORDER FOR PAINT TYPE AND COLOR

0	ISSUED FOR FABRICATION	S. Boerckel	1/25/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

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WRITTEN AGREEMENT OR PURCHASE ORDER WHICH
INCORPORATES OR RELATES TO THIS DRAWING.

UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON	
DECIMALS	
X.X	± 0.10
X.XX	± 0.06
X.XXX	± 0.03
HOLE DIA	± 0.03
ANGLES	± 0.50°
SURFACE	✓ <u>HFS-SF</u>
SQUARENESS	± 0.06
DO NOT SCALE DRAWING	

DRAWN	
S. Boerckel	1/25/2011
CHECKED	
T. KOONTZ	2/3/2011
QA	
B. MADDUX	2/3/2011
REVIEWER	
PROJECT NO 409-2956-1	
CUSTOMER EDC - MARGARITA ISLAND	
JOB NO	



ProEnergy
SERVICES.

201 ProEnergy Blvd
EDALLA, MISSOURI 65301 USA
PHONE: 1-888-829-5100
FAX: 1-888-829-1160

TITLE	RECIRCULATION SPOOL WELDMENT LIQUID FUEL FORWARDING SKID - 7EA
-------	--

SIZE D	ML:	DWG NO 409-2956-LFF7EA-0750-1	REV 0
SCALE: 1/2" = 1"		WEIGHT: 16 lbmass	SHEET 1

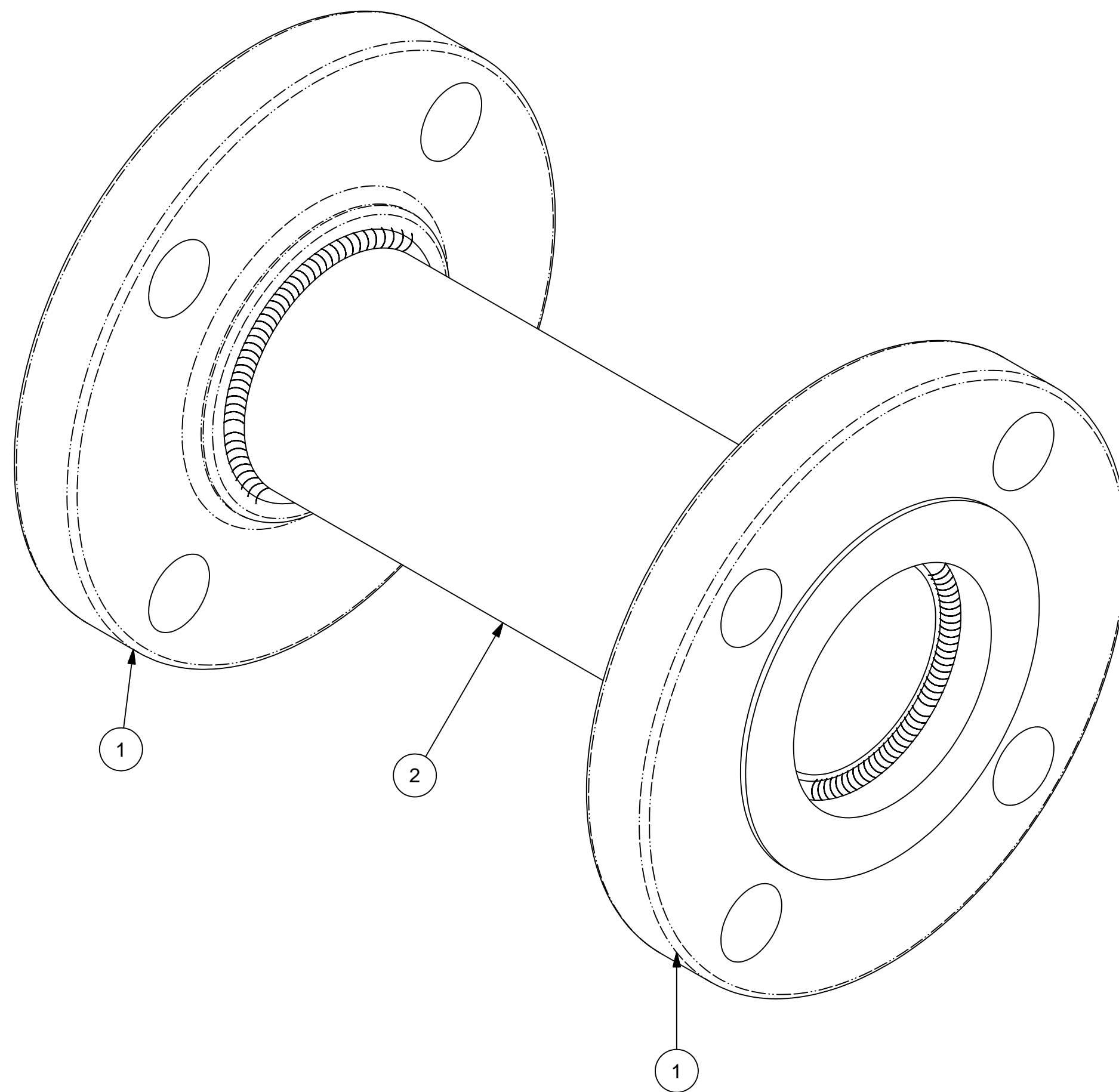
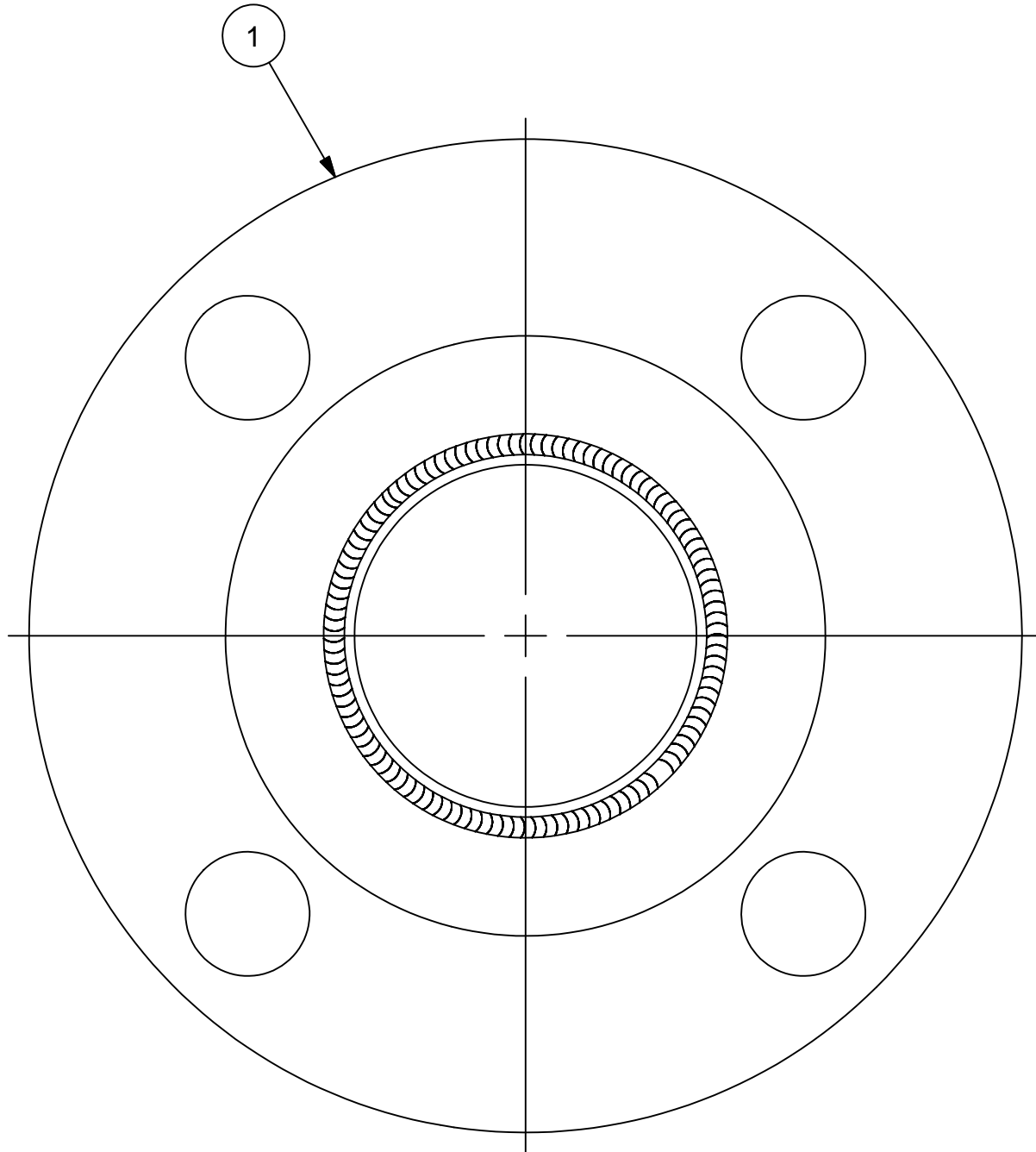
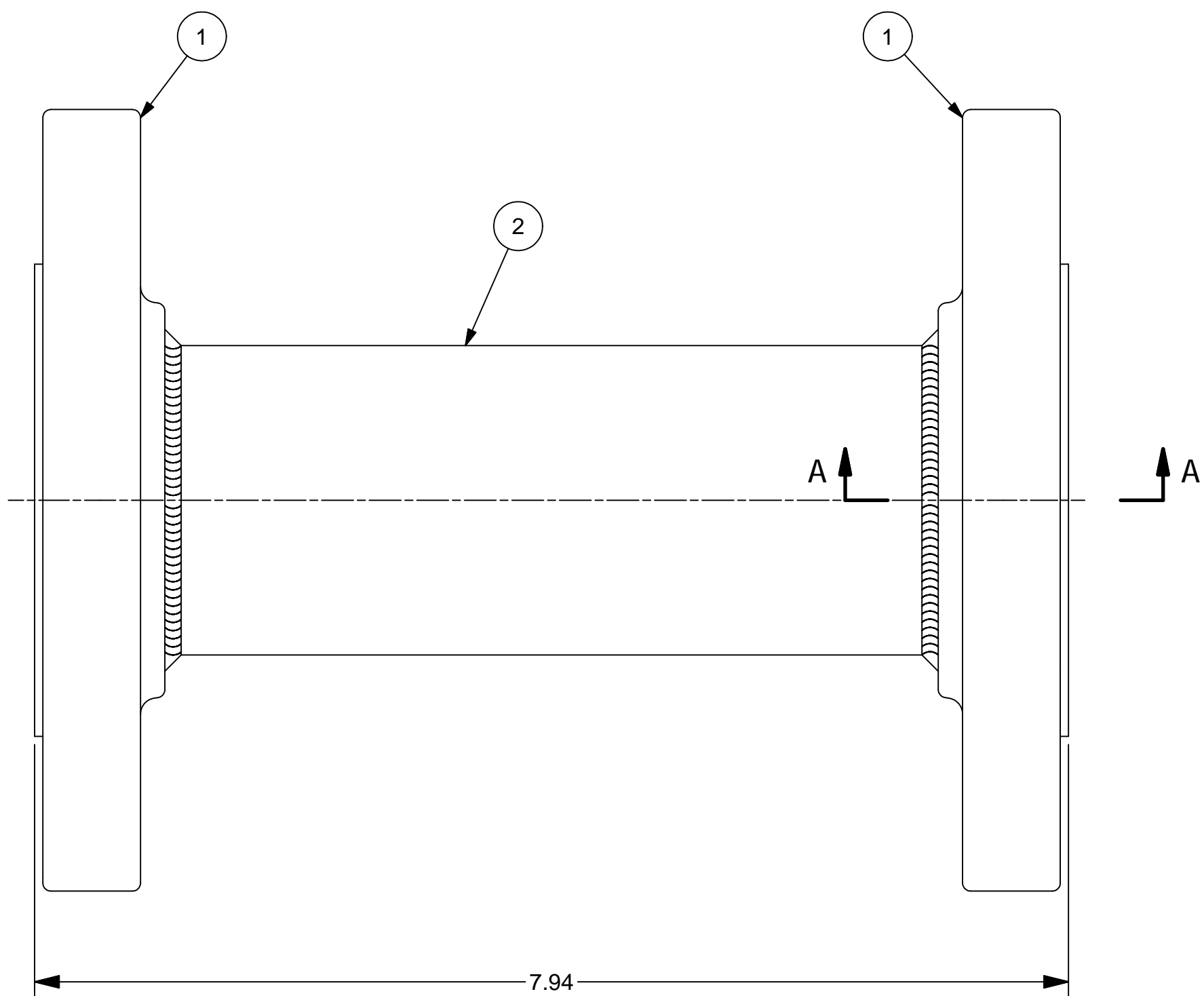
8 7 6 5 4 3 2 1

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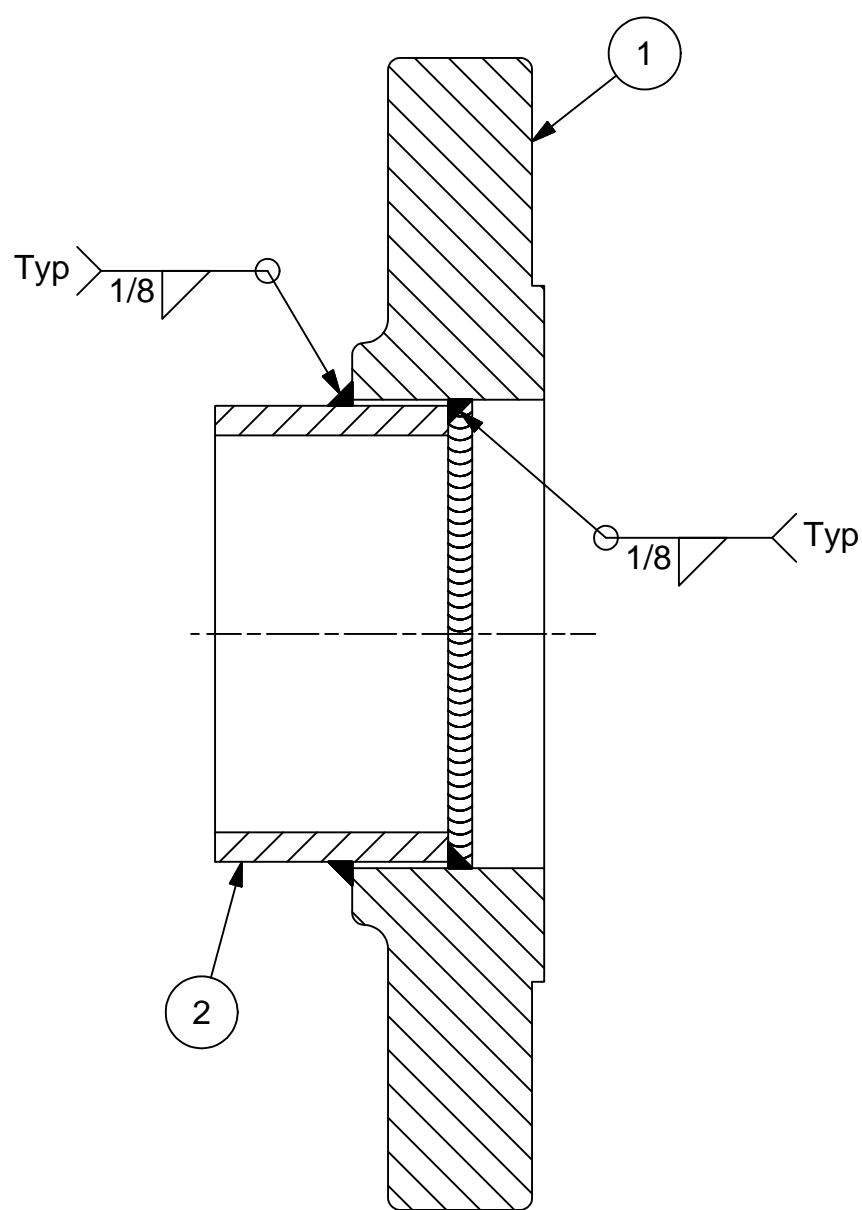


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SECTION A-A

- NOTES:
- WELD CONNECTIONS: VISUALLY INSPECT ALL WELD CONNECTIONS.
 - WELDS ARE TO BE $\frac{1}{16}$ " LESS THAN THE MINIMUM THICKNESS OF MATERIAL WHERE NOT SPECIFICALLY CALLED OUT OR NOTED OTHERWISE. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE D1.1. ALSO ASME/ANSI B16 STANDARDS FOR PIPES & FITTINGS AND FOLLOW THE PROPER WPS POSTED IN WORK AREA.
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 - DO NOT PAINT INTERNALLY OR EXTERNALLY THREADED PARTS OR PARTS WITH FINISHED SURFACES THAT HAVE BEEN MACHINED FOR TIGHT TOLERANCE FITUP.
 - PAINT FINISH:
SEE GENERAL ARRANGEMENT DRAWING AND OR WORK ORDER FOR PAINT TYPE AND COLOR

0	ISSUED FOR FABRICATION	S. Boerckel	1/25/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

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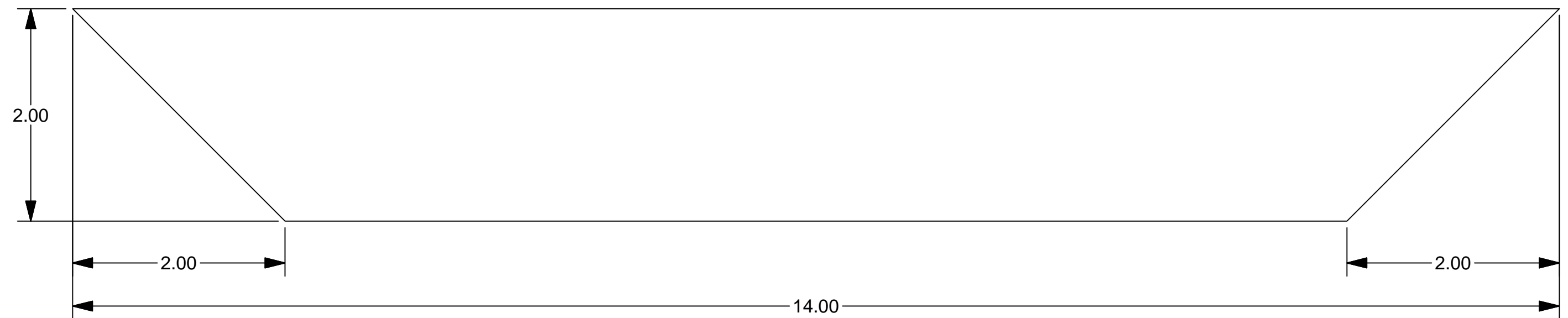
UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON	
DECIMALS	
X.X	± 0.10
X.XX	± 0.06
X.XXX	± 0.03
HOLE DIA	± 0.03
ANGLES	± 0.50°
SURFACE	✓ HFS-SF
SQUARENESS	± 0.06
DO NOT SCALE DRAWING	

DRAWN	
S. Boerckel	1/25/2011
CHECKED	
T. KOONTZ	2/3/2011
QA	
B. MADDUX	2/3/2011
REVIEWER	
PROJECT NO 409-2956-1	
CUSTOMER EDC - MARGARITA ISLAND	
JOB NO	

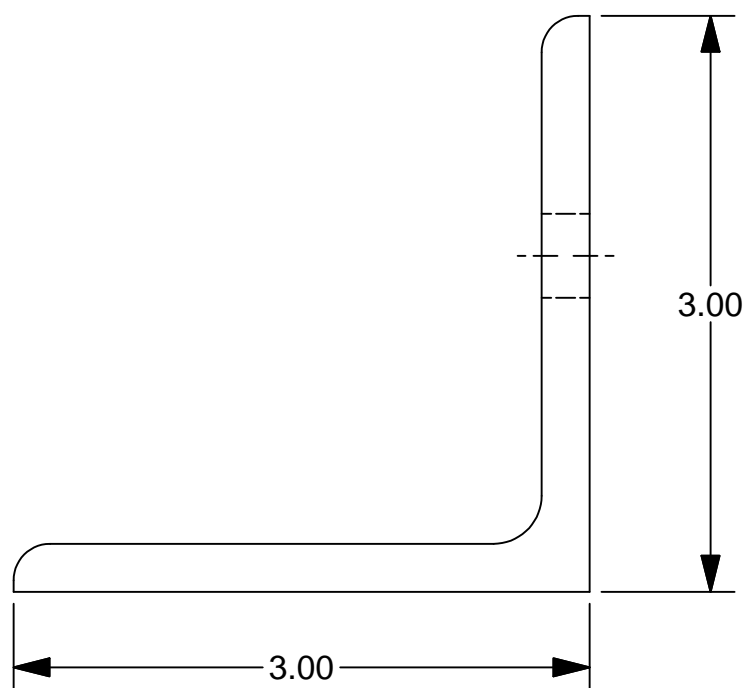
TITLE			
RECIRCULATION SPOOL WELDMENT LIQUID FUEL FORWARDING SKID - 7EA			
SIZE	ML:	DWG NO	REV
D		409-2956-LFF7EA-0751-1	0
SCALE: 1" = 1"		WEIGHT: 12 lbmass	SHEET 1



8 7 6 5 4 3 2 1



ITEM	QTY	PART NUMBER	MATERIAL
22	1	409-2956-LFF7EA-794-02	1/4"Thk - A304 STAINLESS STEEL



22	1	409-2956-LFF7EA-794-02	2" PIPE ANGLE SUPPORT	1/4"Thk - A304 STAINLESS STEEL	.250 in	14.00 in	2.00 in	SHEAR
21	1	409-2956-LFF7EA-794-01	2" PIPE MOUNT ANGLE	3 x 3 x 1/4 ANGLE - STAINLESS STEEL, 304		13.50 in		SAW/PUNCH
17	6	409-2956-LFF7EA-790-03	WELD PLATE	1/2"Thk - A36 STEEL PLATE	.500 in	7.00 in	4.50 in	BURN/DRILL
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	THICKNESS	LENGTH	WIDTH	Process

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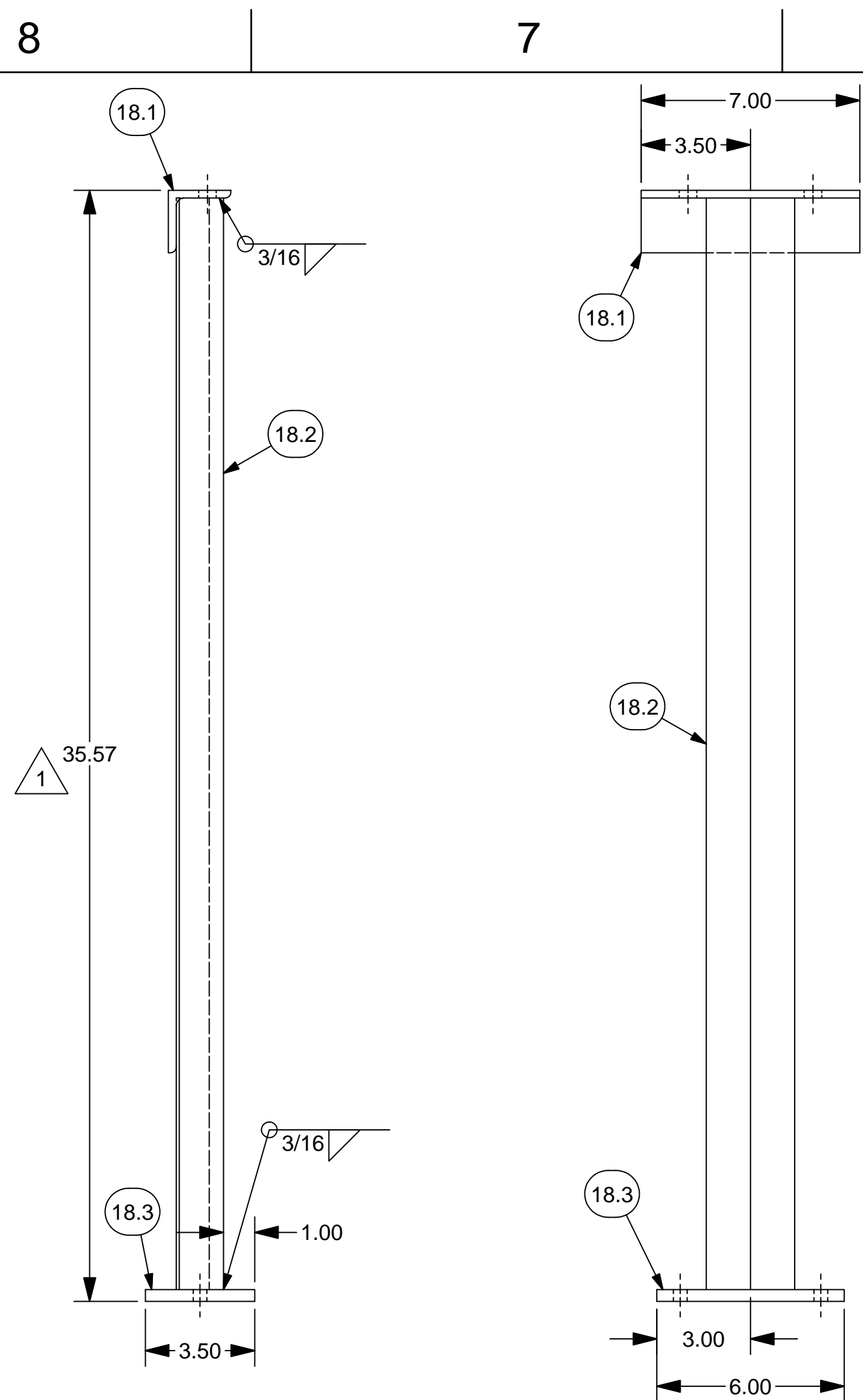
DRAWN S. Boerckel	1/27/2011
CHECKED T. KOONTZ	2/3/2011
QA B. MADDUX	2/3/2011
REVIEWER	
PROJECT NO 409-2956-1	
CUSTOMER EDC - MARGARITA ISLAND	
JOB NO	

LIQUID FUEL FORWARDING SKID - 7EA

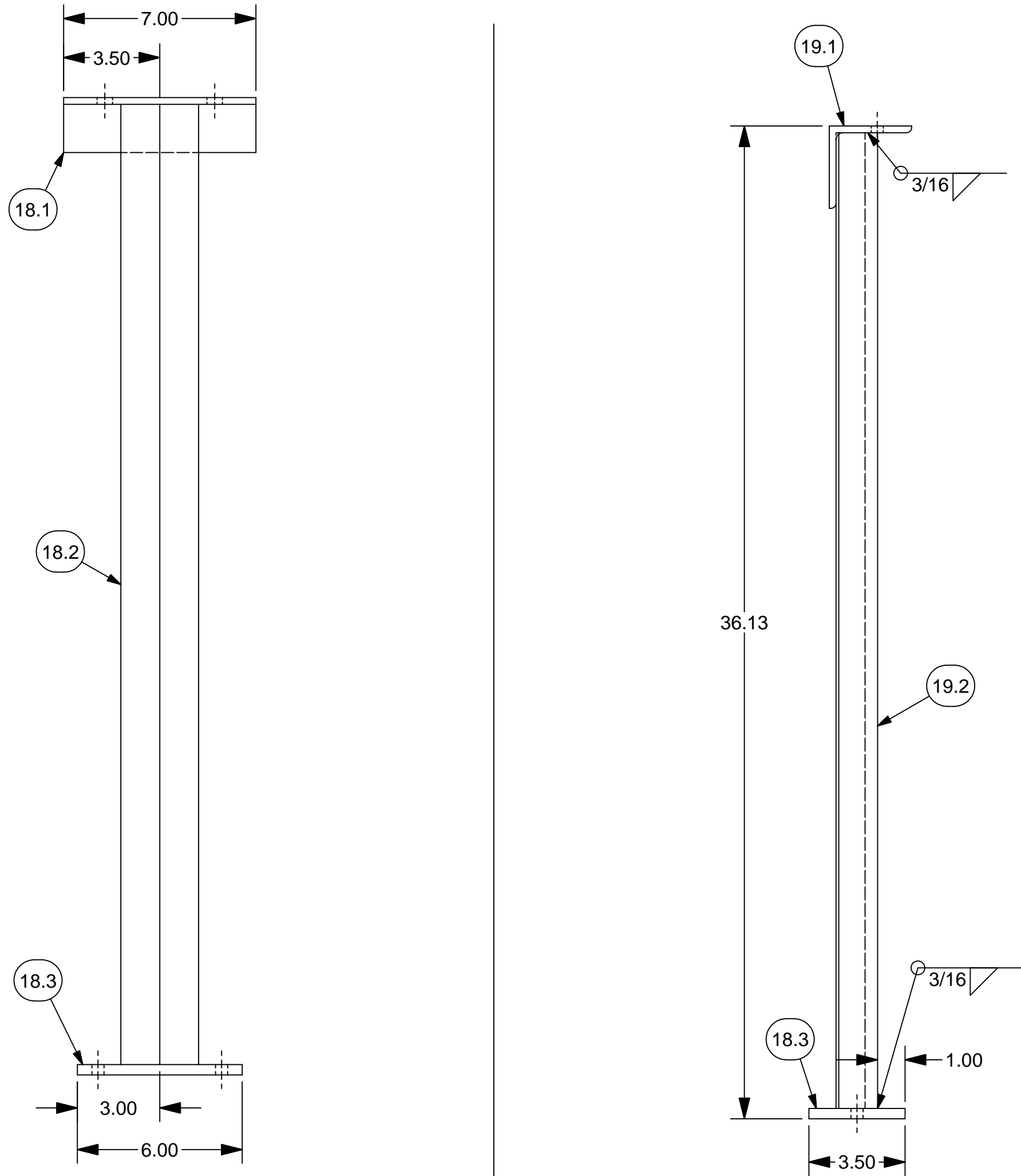
SIZE D	ML:	DWG NO 409-2956-LFF7EA-0790 -1	REV 0
SCALE: 1"=1"		WEIGHT: 4 lbmass	SHEET 1

0	ISSUED FOR FABRICATION	S. Boerckel	1/27/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					

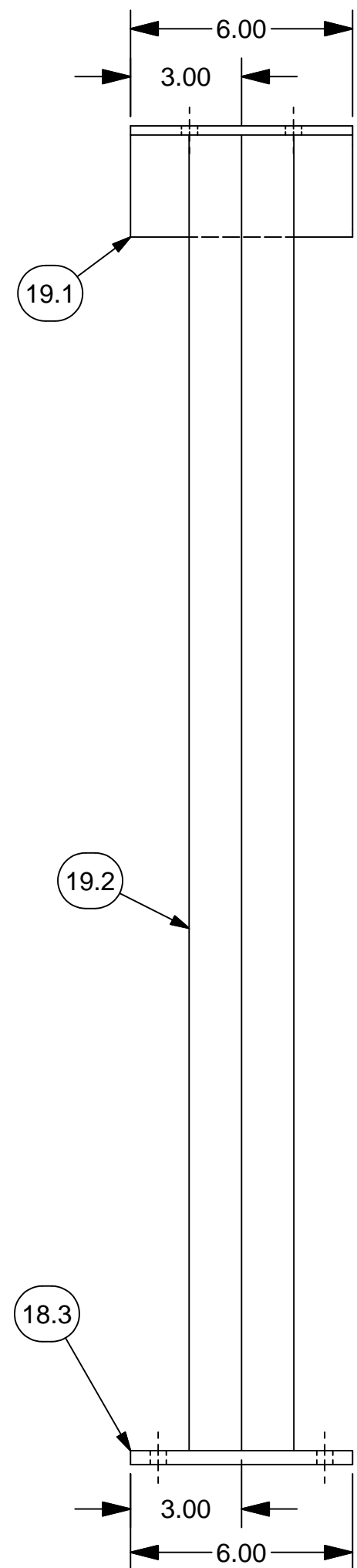




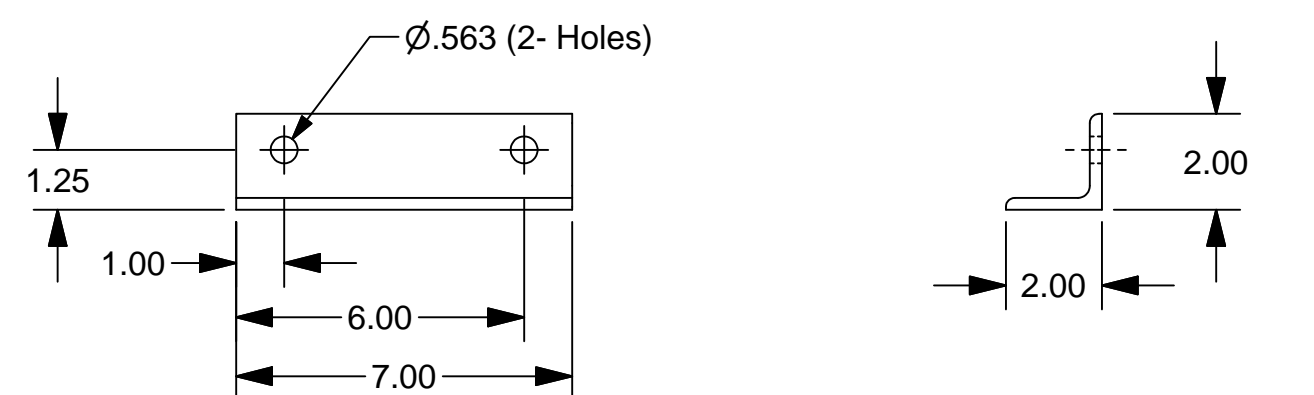
ITEM	QTY	PART NUMBER	MATERIAL
18	2	409-2956-LFF7EA-791	WELDMENT



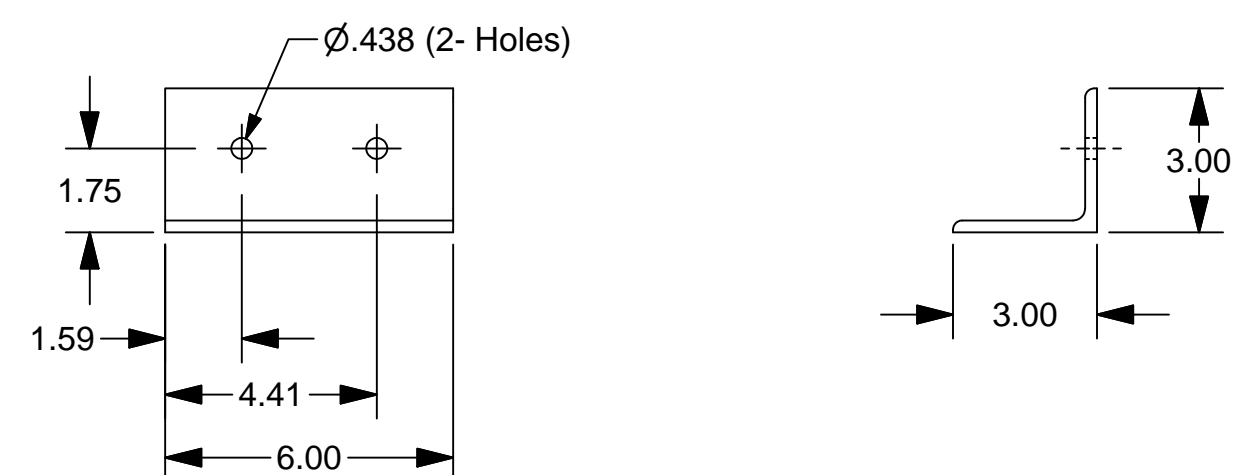
ITEM	QTY	PART NUMBER	MATERIAL
19	2	409-2956-LFF7EA-792	WELDMENT



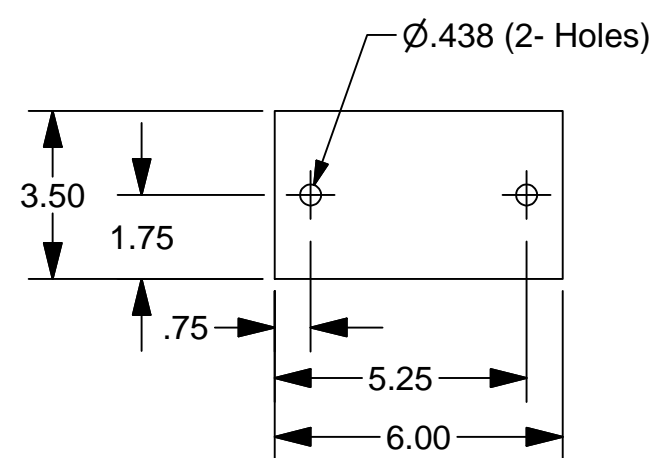
ITEM	QTY	PART NUMBER	MATERIAL
20	2	409-2956-LFF7EA-793	WELDMENT



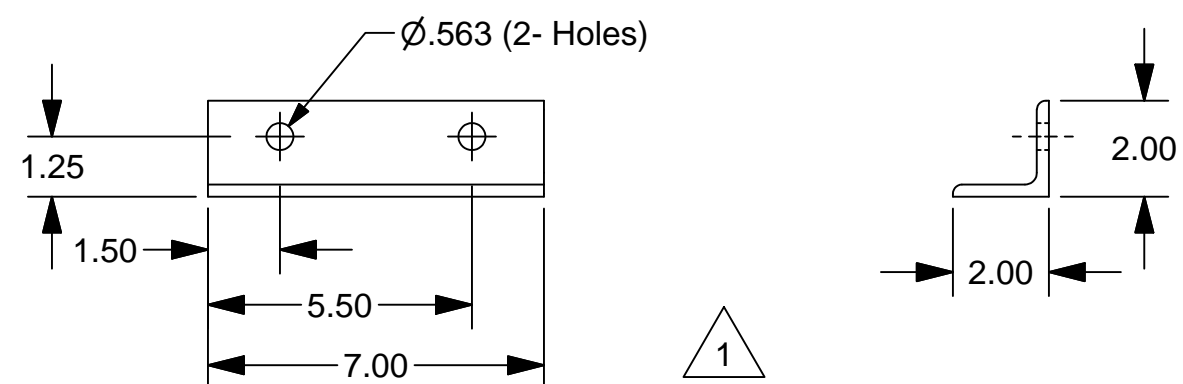
ITEM	QTY	PART NUMBER	MATERIAL
20.1	2	SLFFPD7EA-790-01	2 x 2 x 1/4 ANGLE - ASTM A36



ITEM	QTY	PART NUMBER	MATERIAL
19.1	2	409-2956-LFF7EA-792-02	3 x 3 x 1/4 ANGLE - STAINLESS STEEL, 304




ITEM	QTY	PART NUMBER	MATERIAL
18.3	6	409-2956-LFF7EA-790-02	3/8"Thk - A36 STEEL PLATE



ITEM	QTY	PART NUMBER	MATERIAL
18.1	2	409-2956-LFF7EA-790-01	2 x 2 x 1/4 ANGLE - ASTM A36

20.2	2	409-2956-LFF7EA-793-01	INLET PIPE STAND ANGLE	2 x 2 x 1/4 ANGLE - ASTM A36		11.50 in		SAW
20.1	2	SLFFPD7EA-790-01	4" PIPE MOUNT ANGLE	2 x 2 x 1/4 ANGLE - ASTM A36		7.00 in		SAW/PUNCH
20	2	409-2956-LFF7EA-793	INLET PIPE STAND	WELDMENT		12.13 in		WELD
19.2	2	409-2956-LFF7EA-792-01	DISCHARGE PIPE STAND ANGLE	2 x 2 x 1/4 ANGLE - ASTM A36		35.50 in		SAW
19.1	2	409-2956-LFF7EA-792-02	2" PIPE MOUNT ANGLE	3 x 3 x 1/4 ANGLE - STAINLESS STEEL, 304		6.00 in		SAW/PUNCH
19	2	409-2956-LFF7EA-792	2" PIPE STAND	WELDMENT		36.13 in		WELD
18.3	6	409-2956-LFF7EA-790-02	BASE PLATE	3/8"Thk - A36 STEEL PLATE	.375 in	6.00 in	3.50 in	BURN
18.2	2	409-2956-LFF7EA-791-01	DISCHARGE PIPE STAND ANGLE	2 x 2 x 1/4 ANGLE - ASTM A36		34.94 in		SAW
18.1	2	409-2956-LFF7EA-790-01	3" PIPE MOUNT ANGLE	2 x 2 x 1/4 ANGLE - ASTM A36		7.00 in		SAW/PUNCH
18	2	409-2956-LFF7EA-791	DISCHARGE PIPE STAND	WELDMENT		35.08 in		WELD
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	THICKNESS	LENGTH	WIDTH	Process

BILL OF MATERIAL

DRAWN S. Boerckel		1/27/2011		 <div> ProEnergy SERVICES. </div>		2011 ProEnergy Blvd SEDALIA, MISSOURI 65301 USA PHONE: 1-800-829-5100 FAX: 1-660-293-1180	
CHECKED T. KOONTZ		2/3/2011		TITLE PIPE SUPPORTS WELDMENTS LIQUID FUEL FORWARDING SKID - 7EA			
QA B. MADDUX		2/3/2011					
REVIEWER							
PROJECT NO 409-2956-1				SIZE D			
CUSTOMER EDC - MARGARITA ISLAND							
JOB NO							
				ML:	DWG NO	REV	
				409-2956-LFF7EA-0791-1		1	
SCALE: 1/4"=1"				WEIGHT: 69 LBS TOTAL		SHEET 1	

1	CHG DISC PIPE 4" TO 3"	S. Boerckel	2/15/2011	T. KOONTZ	B. MADDUX
0	ISSUED FOR FABRICATION	S. Boerckel	1/27/2011	T. KOONTZ	B. MADDUX
REV	DESCRIPTION	AUTHOR	DATE	CHECKED B	QA/QC
REVISION HISTORY					



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Feb 15, 2011

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UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
TOLERANCES ON	
DECIMALS	
X.X	± 0.10
X.XX	± 0.06
X.XXX	± 0.03
HOLE DIA	± 0.03
ANGLES	± 0.50°
SURFACE	<u>HFS-SF</u>

SQUARENESS ± 0.06

DATE OF REVIEW	
DRAWN S. Boerckel	1/27/2011
CHECKED T. KOONTZ	2/3/2011
QA B. MADDUX	2/3/2011
REVIEWER	
PROJECT NO 409-2956-1	

 **ProEnergy**
SERVICES.

2201 ProEnergy Blvd
SEDALIA, MISSOURI 65301 US
PHONE: 1-800-829-5100
FAX: 1-800-829-1160

TITLE
PIPE SUPPORTS
WELDMENTS
LIQUID FUEL FORWARDING SKID - 7EA

SIZE D	ML:	DWG NO 409-2956-LFF7EA-0791-1	REV 1
SCALE: 1/4" = 1"		WEIGHT: 69 LBS TOTAL	SHEET 1

NOTES:

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3. ALL MATERIAL SHALL BE ASTM A36, UNLESS OTHERWISE STATED.
4. DO NOT PAINT INTERNALLY OR EXTERNALLY THREADED PARTS OR PARTS WITH FINISHED SURFACES THAT HAVE BEEN MACHINED FOR TIGHT TOLERANCE FITUP.
5. PAINT FINISH:
BLAST SSPC-SP10/NACE 2, 2 mil
2-COATS PHENICON HS (LIGHT GRAY)
PART-A (920A175)
PART-B (700-C-685)

