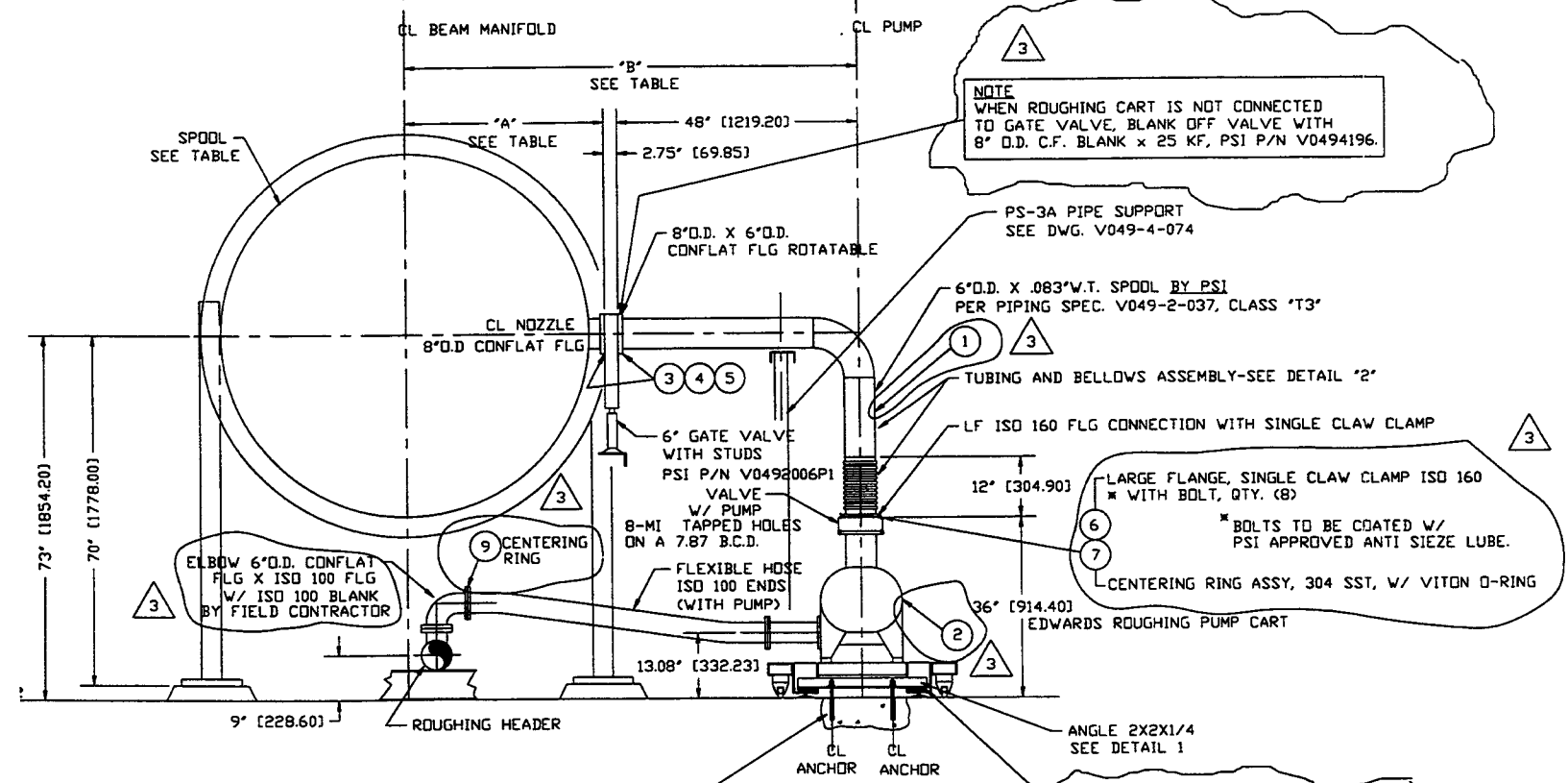
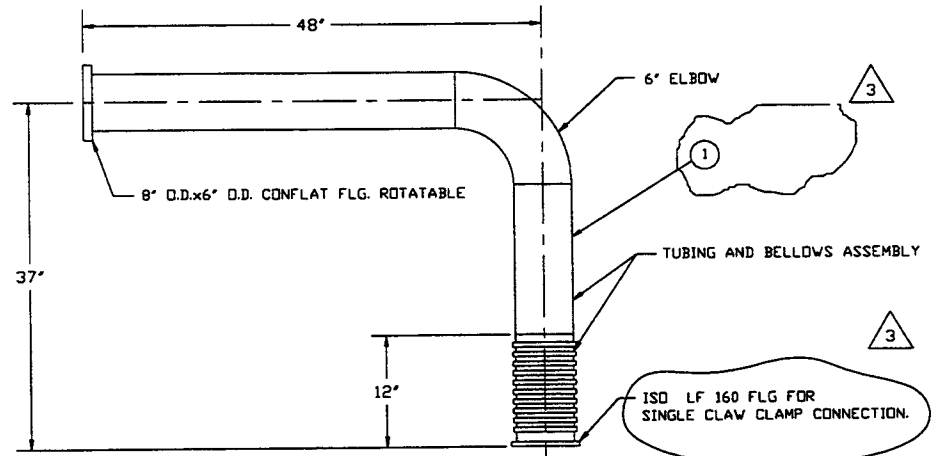


PLAN

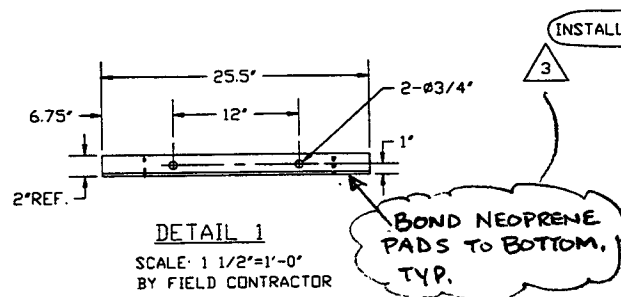


ELEVATION

ITEM	PART NO.	QTY.	DESCRIPTION
SEE NOTE 2	1	V0494010P1	1 SPOOL PIECE
SEE NOTE 2	2	V0492001	1 ROUGHING PUMP CART
SEE NOTE 3	3	V049M782	20 NUT, SILICON BRZ, HEX, 5/16"-18
SEE NOTE 3	4	V049M785	20 WASHER, SST, 18-8, FLAT, 5/16"
SEE NOTE 3	5	V049M263-3	1 GASKET, COP, CONFLAT 8" O.D. FLG.
SEE NOTE 2	6	V049M659	8 SINGLE CLAW CLAMP, ISO 160 WITH BOLT
SEE NOTE 2	7	V049M660	1 CENTERING RING, SST, ISO 160 W/ VITON O-RING
SEE NOTE 2	8	V049M414 CWS/CWR	2 3/4" I.D. RUBBER HOSE, x 16'-0" LG, ONE END 3/8" MPT, ONE END 1/2" QUICK DISCONNECT x 1/2" NPT
SEE NOTE 3	9	V049M664	1 CENTERING RING, SST, ISO 100 W/ VITON O-RING
BY SITE CONTRACTOR	10	AIR SUPPLY	AS REQ'D. 1/4" O.D. DEKERON TUBING WITH 1/4" SWAGelok BRASS FITTINGS ONE END 1/4" NPT, ONE END 1/2" QUICK DISCONNECT



DETAIL 2 BY PSI  
SCALE: 1 1/2"=1'-0"  
SPOOL PIECE PSI P/N V0494010P1



DETAIL 1  
SCALE: 1 1/2"=1'-0"  
BY FIELD CONTRACTOR

INSTALLATION DIM'S. FOR ANCHOR BOLT PLACEMENT

SPPOOL	'A'	'B'
WB-5B	18 5/8"	69 3/8"
WB-6	27 1/2"	78 1/4"
WBE-5	39 1/2"	90 1/4"
WBE-6	39 1/2"	90 1/4"
LB-5B	18 5/8"	69 3/8"
LBE-5	39 1/2"	90 1/4"
LBE-6	39 1/2"	90 1/4"

BOND NEOPRENE PADS TO BOTTOM, TYP.

- NOTES:
- 1) INSTALL PER VACUUM PUMP FIELD INSTALLATION PROCEDURE V049-2-175.
  - 2) SEE BOM V049-4-010.
  - 3) SEE CORNER STATION BOM. WA=V049100 WA LA=V049600 LA
  - 4) AIR & COOLING WATER SUPPLY AND RETURN MUST BE CONNECTED TO PIPING HEADERS BEFORE OPERATING UNIT.

APPROX. WT. 1200 #

<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: FRACTIONAL &amp; ANGULAR: 1/16" &amp; 30" BEND 1/2" TWO PLACE DECIMAL, ± .01 FURNISHED SURFACE HAS BREAK CORNERS IN OUT. REMOVE ALL BURRS</p> <p>DO NOT SCALE THIS DRAWING</p> <p>USED ON: _____</p> <p>NEXT ASS'Y: _____</p>		<p>PROCESS SYSTEMS INTERNATIONAL, INC. 20 WALKUP DR. WESTBOROUGH, MASSACHUSETTS 01581 USA</p> <p>ROUGHING PUMP CART ARRANGEMENT ASSEMBLY LIGO VACUUM EQUIPMENT</p> <p>CAD FILE: V0494010 SIZE: D DWG. NO.: V049-4-010 SHEET: 3</p> <p>SCALE: 3/4"=1'-0" SHEET: 1 OF 1</p>																
<p>REVISIONS:</p> <table border="1"> <thead> <tr> <th>REV</th> <th>DESCRIPTION</th> <th>ISSUE DESCRIPTION</th> </tr> </thead> <tbody> <tr> <td>3</td> <td>REISSUED FOR CONSTRUCTION</td> <td>DA 4/26/97 0472</td> </tr> <tr> <td>2</td> <td>ISSUED FOR FABRICATION</td> <td>PEF GS DMW RDC REC PV 02/20/97 0387</td> </tr> <tr> <td>1</td> <td>FDR DESIGN UPDATE/ ISSUED FOR BID</td> <td>DMW RDC REC PV 11/21/96</td> </tr> <tr> <td>0</td> <td>ISSUED FOR FDR</td> <td>DMW RDC REC TOV 4/26/96 0150</td> </tr> </tbody> </table>		REV	DESCRIPTION	ISSUE DESCRIPTION	3	REISSUED FOR CONSTRUCTION	DA 4/26/97 0472	2	ISSUED FOR FABRICATION	PEF GS DMW RDC REC PV 02/20/97 0387	1	FDR DESIGN UPDATE/ ISSUED FOR BID	DMW RDC REC PV 11/21/96	0	ISSUED FOR FDR	DMW RDC REC TOV 4/26/96 0150	<p>APPROVED: _____</p> <p>DATE: _____</p>	
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<p>CONFIDENTIAL</p> <p>THIS PROPRIETARY DRAWING IS THE PROPERTY OF PROCESS SYSTEMS INTERNATIONAL, INC. OR ITS AFFILIATES. IT IS TO BE USED FOR THE PURPOSE FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF PROCESS SYSTEMS INTERNATIONAL, INC.</p>		<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES</p> <p>TOLERANCES: FRACTIONAL &amp; ANGULAR: 1/16" &amp; 30" BEND 1/2" TWO PLACE DECIMAL, ± .01 FURNISHED SURFACE HAS BREAK CORNERS IN OUT. REMOVE ALL BURRS</p> <p>DO NOT SCALE THIS DRAWING</p> <p>USED ON: _____</p> <p>NEXT ASS'Y: _____</p>																
<p>DWG. NO. V049-0-100</p> <p>DESCRIPTION: DVG. TREE/BOM STRUCTURE</p>		<p>DATE: 4/26/97</p> <p>BY: DA</p>																

LIGO-D961097-03-V