

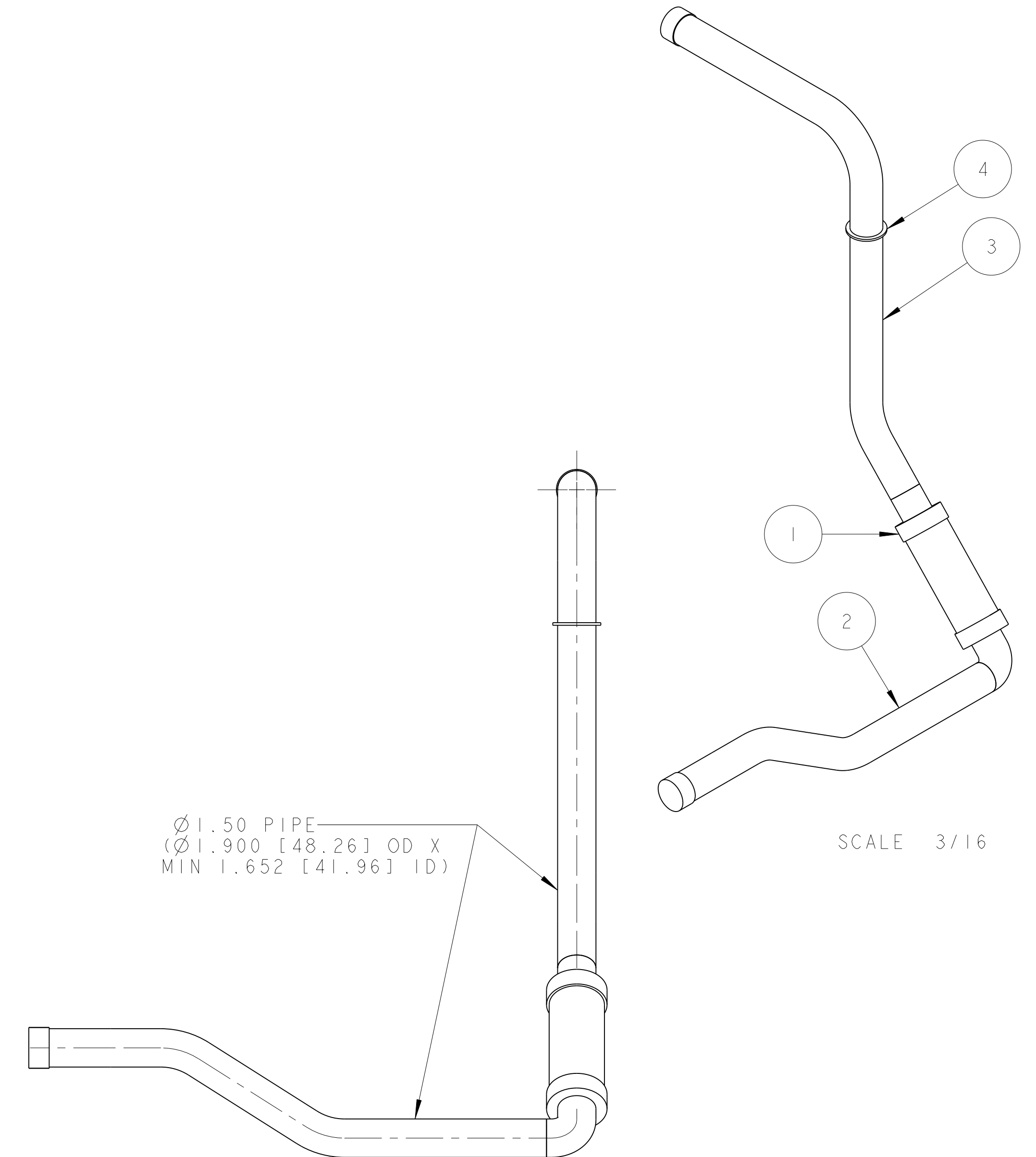
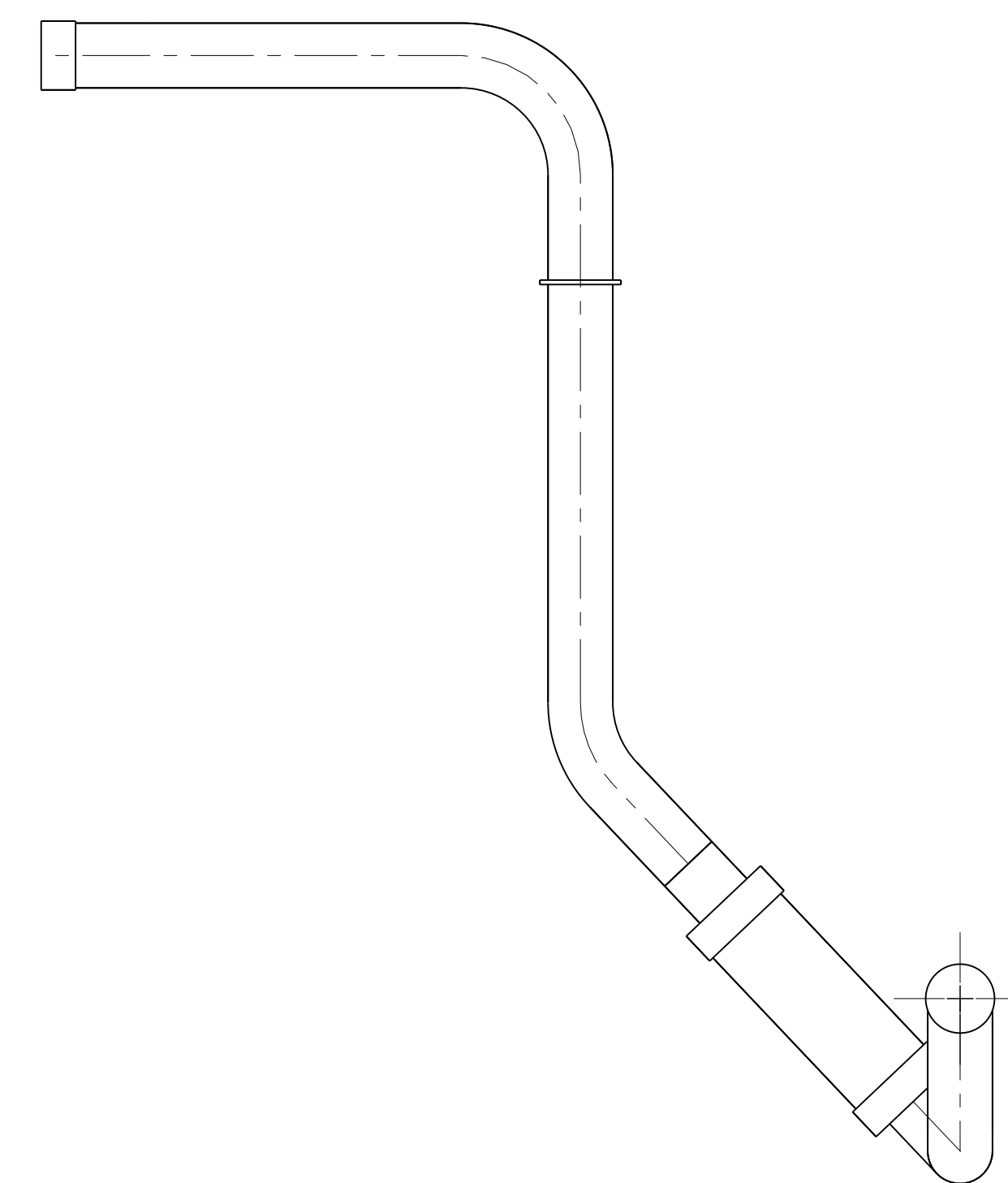
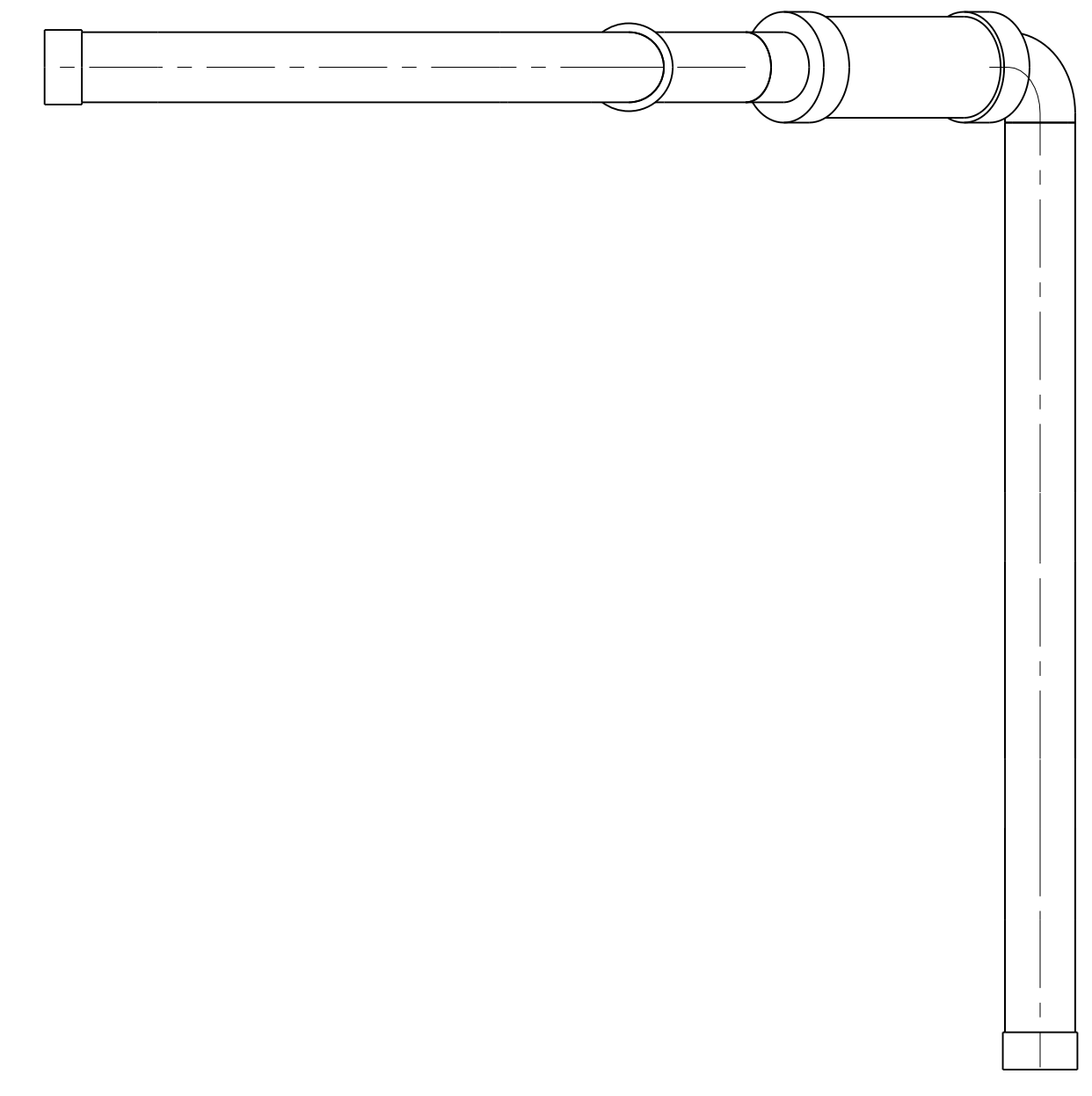
NAME: ARHARRIS OBJECT: 251439-1 DATE: 25-Nov-02 14:29:22

DWG. NO. 2514394 SIZE REV. SH. A 1

ITEM	PART NO	RECD	DESCRIPTION	MATERIAL
4	-	1	SUPPORT FLANGE	SS 304L
3	-	1	PIPE, PER ASTM A312	SS 304L
2	-	1	PIPE, PER ASTM A312	SS 304L
1	-	1	BRAIDED FLEX HOSE, 2" ID X 6.1 LL	SS 300 SERIES

NOTES: (UNLESS OTHERWISE SPECIFIED)

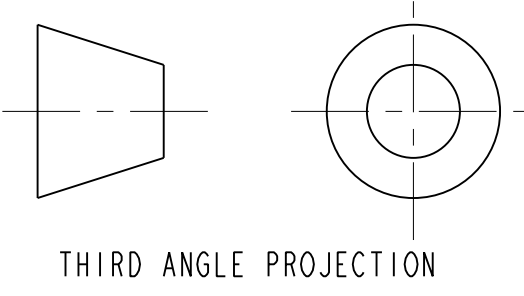
- THIS IS A CRYOGENIC VACUUM COMPONENT.
- WELDING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- CLEANING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- PACKAGING AND STORAGE PROCEDURE OF THE COMPONENTS: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
- DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982. UNITS ARE IN INCHES [mm] UNLESS OTHERWISE SPECIFIED.
- USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
- USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
- VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
- FITTINGS MAY BE USED IN PLACE OF BENDS; SUBJECT TO LBNL APPROVAL.
- VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE FABRICATION OR ASSEMBLY; SUBJECT TO LBNL APPROVAL.
- REMOVE ALL THE BURRS AND REAM THE ENDS FOR CIRCULARITY AND CLEAN ENDS.
- TUBE END SURFACE MUST BE PERPENDICULAR TO THE TUBE AXIS WITHIN +/- .010.
- PERFORM ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.
- A MARK DESIGNATING THE INSTALLED LENGTH WILL BE UTILIZED DURING FINAL INSTALLATION OF THE FEEDBOX ASSEMBLY. MARK, SCRIBE OR ETCH THIS LOCATION IN A PERMANENT MANNER, SUBJECT TO LBNL APPROVAL, TO AN ACCURACY OF ±0.063".
- PROVIDE A MINIMUM LENGTH OF 4.0" OF STRAIGHT, SMOOTH PIPE ON THE INDICATED SIDE OF THE INSTALLED LENGTH MARK FOR PIPE WELDING DURING FINAL INSTALLATION OF THE FEEDBOX ASSEMBLY.
- PIPE MUST BE STRAIGHT AND SMOOTH (NO BUMPS) FOR 0.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
- CAP BOTH ENDS OF PIPE AFTER ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.



Ø 1.50 PIPE
(Ø 1.900 [48.26] OD X
MIN 1.652 [41.96] ID)

SCALE 3/16

*****FOR ADDITIONAL TUBE DIMENSIONS SEE SHEET 2**

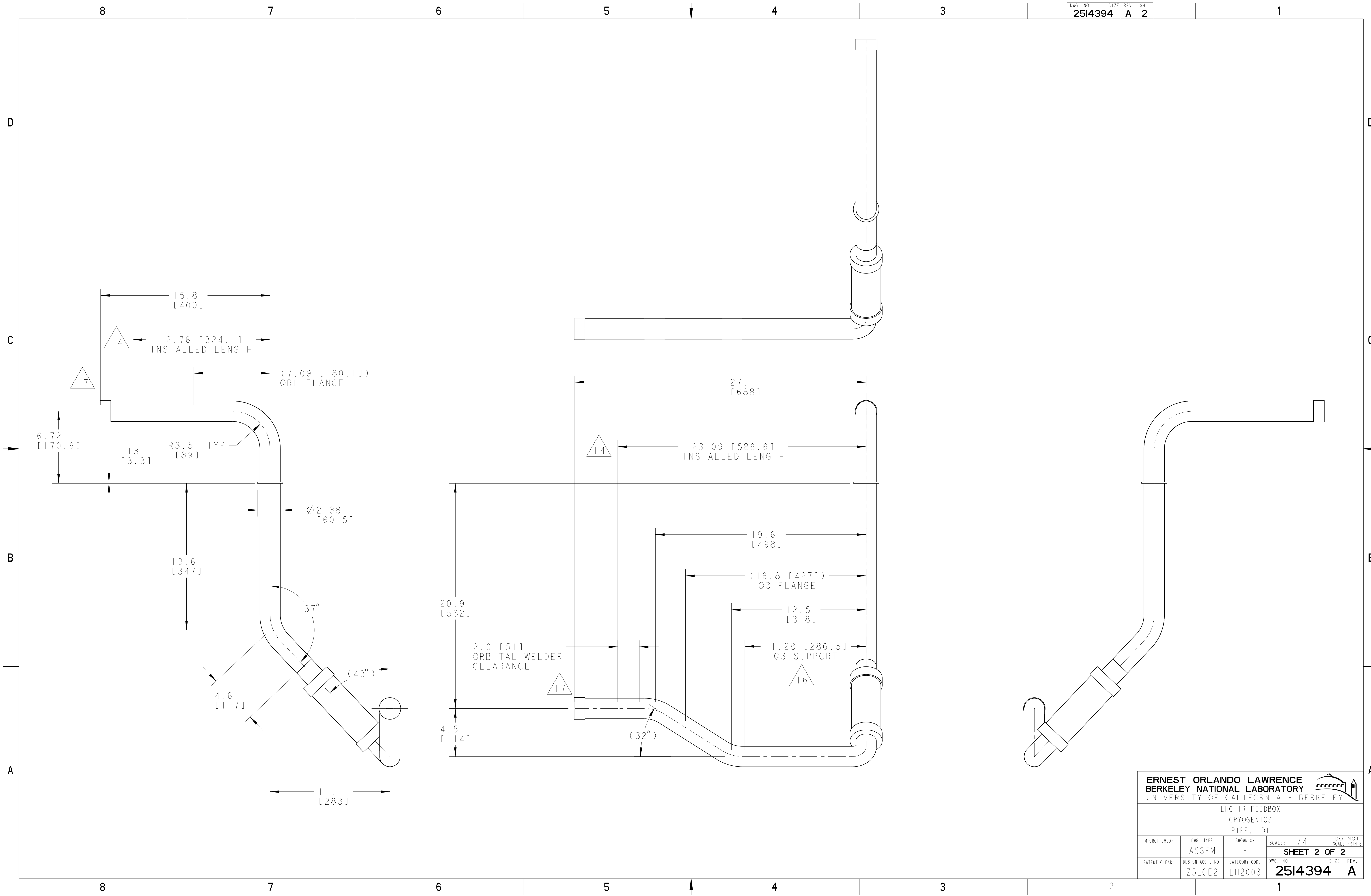


<table border="1"> <tr> <td>REV</td> <td>DWG</td> <td>CHK</td> <td>ZONE</td> <td>DATE</td> <td>CHANGES</td> </tr> <tr> <td>A</td> <td>ARH</td> <td>SPV</td> <td></td> <td>11-06-02</td> <td>INITIAL RELEASE</td> </tr> </table>				REV	DWG	CHK	ZONE	DATE	CHANGES	A	ARH	SPV		11-06-02	INITIAL RELEASE	<p>UNLESS OTHERWISE SPECIFIED</p> <p>TOLERANCES X.X ± 0.1 X.XX ± 0.03 X.XXX ± 0.010</p> <p>FINISH $\sqrt{32}$ μmax</p> <p>DO NOT SCALE PRINT</p> <p>THREADS ARE CLASS 2</p> <p>CHAMFER ENDS OF ALL SCREW THREADS 30°</p> <p>CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS</p> <p>BREAK EDGES .016 MAX. ON MACHINED WORK</p> <p>REMOVE BURRS, WELD SPLATTER & LOOSE SCALE</p> <p>IN ACCORDANCE WITH ASME Y14.5M & B46.1</p>				<p>SHOP ORDERS</p> <p>ACCT NO. [] NO. RECD []</p> <p>DEL TO []</p> <p>SURFACE TREATMT []</p> <p>TIDENT METHOD [] TAG []</p> <p>PROJECT NUMBER [] N/A</p> <p>PROJECT NAME [] N/A</p> <p>DWG BY R LA MANTIA DATE 12-Dec-01</p> <p>CHK BY Jon Zbosnik/S.Virostek DATE 04-Nov-02</p> <p>APR BY Jon Zbosnik/S.Virostek DATE 04-Nov-02</p>				<p>ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY</p> <p>LHC IR FEEDBOX CRYOGENICS PIPE, LDI</p> <p>MICROFILMED: [] DWG. TYPE ASSEM SHOWN ON []</p> <p>PATENT CLEAR: [] DESIGN ACCT. NO. Z5LCE2 CATEGORY CODE LH2003</p> <p>SCALE: 7/32 DO NOT SCALE PRINTS</p> <p>SHEET 1 OF 2</p> <p>DWG. NO. 2514394 SIZE REV. A</p>			
REV	DWG	CHK	ZONE	DATE	CHANGES																						
A	ARH	SPV		11-06-02	INITIAL RELEASE																						

8 7 6 5 4 3 2 1

D C B A

NAME: ARHARRIS OBJECT: 251439-2 DATE: 25-Nov-02 14:29:23



ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA - BERKELEY				
LHC IR FEEDBOX CRYOGENICS PIPE, LDI				
MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1/4	DO NOT SCALE PRINTS
	ASSEM	-	SHEET 2 OF 2	
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	DWG. NO.	SIZE REV.
	Z5LCE2	LH2003	2514394	A