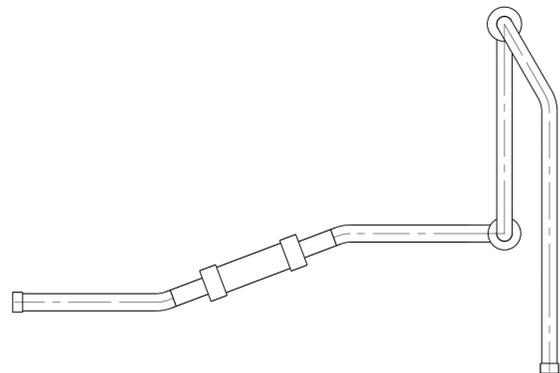


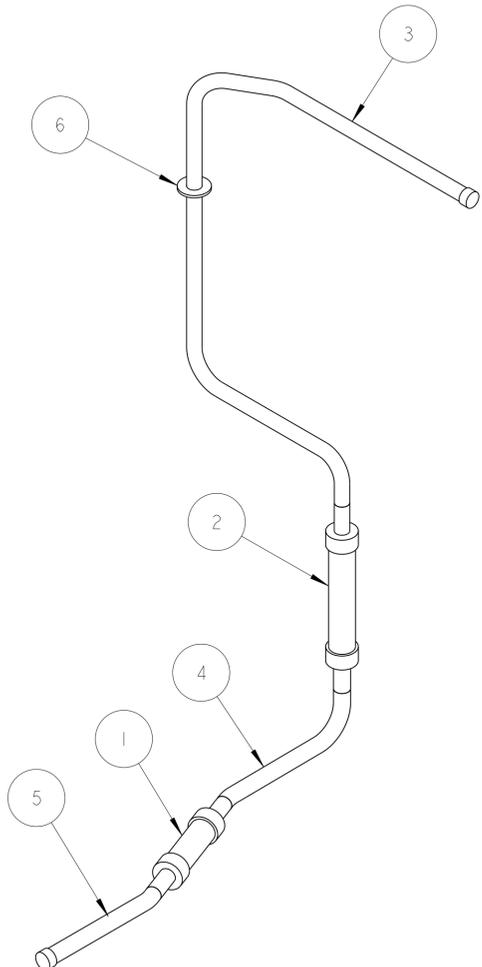
NOTES: (UNLESS OTHERWISE SPECIFIED)

- 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.

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
6	-	I	COLLAR	SS 304L
5	-	I	TUBE, PER ASTM A269	SS 304L
4	-	I	TUBE, PER ASTM A269	SS 304L
3	-	I	TUBE, PER ASTM A269	SS 304L
2	-	I	BRAIDED FLEX HOSE, 3/4" ID X 5.4" LL	SS 300 SERIES
1	-	I	BRAIDED FLEX HOSE, 3/4" ID X 3" LL	SS 300 SERIES

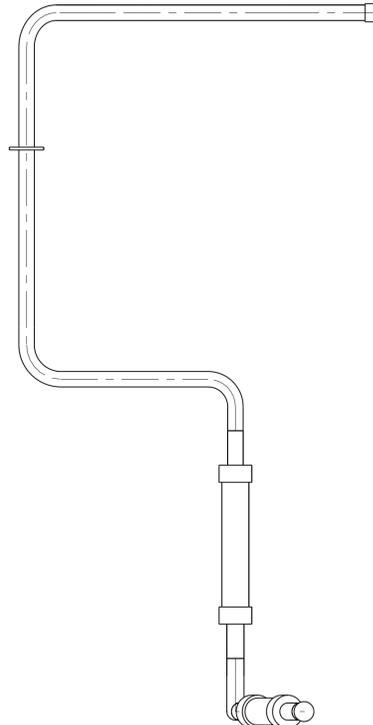


(B)



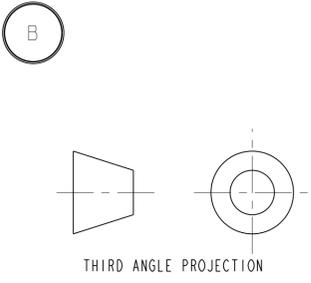
SCALE 1/4

- 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 LBNL SPECIFICATION M989.
- 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 1.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
- CAP BOTH ENDS OF PIPE TO FACILITATE ACCEPTANCE TESTS.



Ø.675 [17.15] TUBE X .039 [1] WALL

Ø.750 [19.05] TUBE X .065 [1.65] WALL



REV	DWG	CHK	ZONE	DATE	CHANGES
B	ARH	SPV		01/10/03	REVISED DRAWING NOTES 13, 16 & 17, ADDED QUANTITY REQ'D TO DRAWING BOM, MINOR DRAWING DIMENSIONAL CHANGES
A	ARH	SPV		10-25-02	INITIAL RELEASE

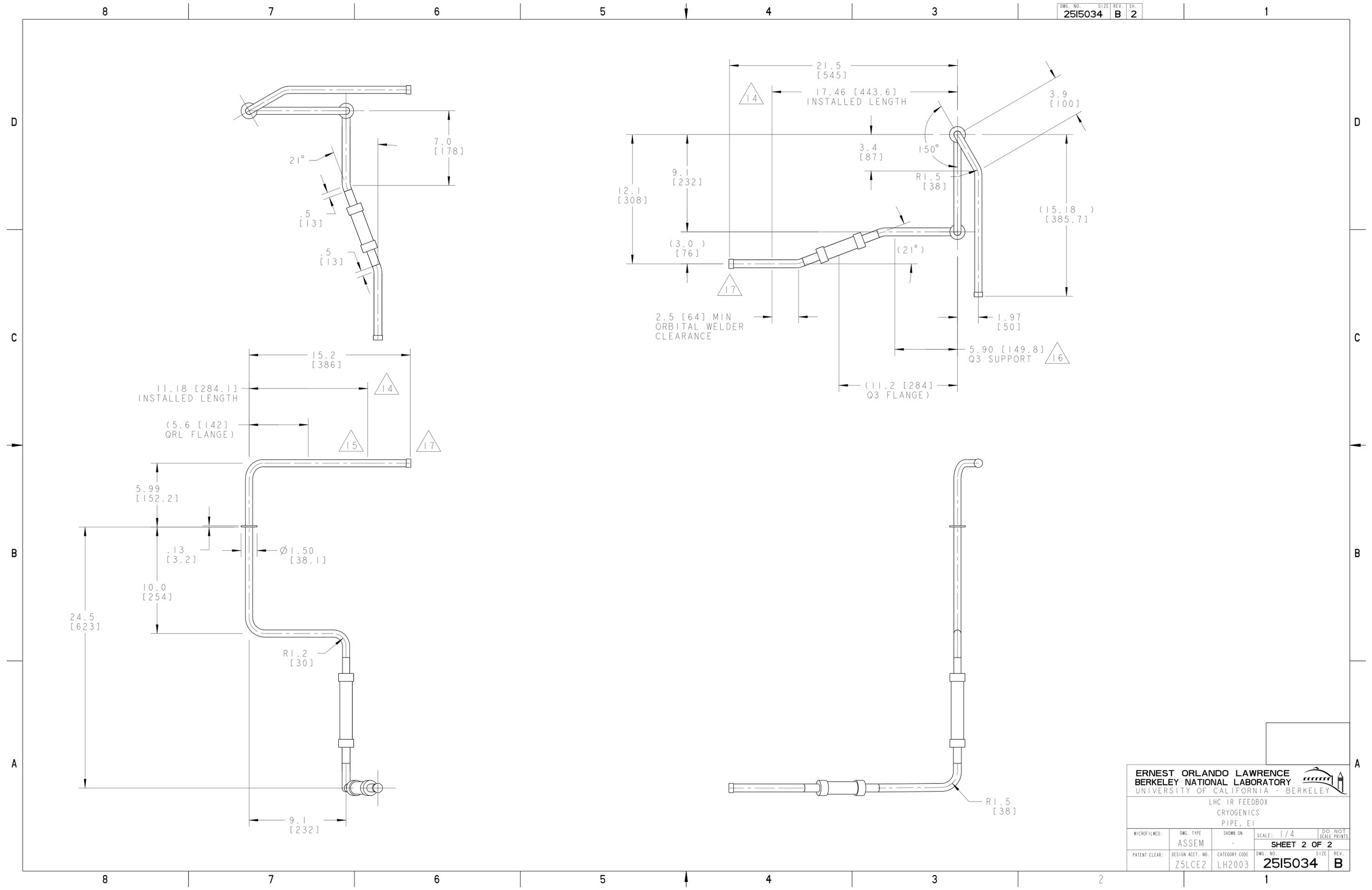
UNLESS OTHERWISE SPECIFIED  
 X.X ± 0.1    FRAC. ± 1/64  
 X.XX ± 0.03    Angles ± 1.00°  
 X.XXX ± 0.010    FINISH 125 $\sqrt{Ra}$   
 DO NOT SCALE PRINT  
 THREADS ARE CLASS 2  
 CHAMFER ENDS OF ALL SCREW THREADS 30°  
 CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .016 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPLATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

SHOP ORDERS		SER. NO.	DATE
ACCT NO.	Y	NO.	Y
DEL TO	Y	ISSD	-
SURFACE TREATMT		DATE	REQD
IDENT METHOD	TAG		
PROJECT NUMBER	N/A		
PROJECT NAME	N/A		
DWG BY	R. LA MANTIA	DATE	05-Apr-02
CHK BY	S. VIROSTEK	DATE	25-Oct-02
APP BY	D. OSHATZ	DATE	25-Oct-02

**ERNEST ORLANDO LAWRENCE  
 BERKELEY NATIONAL LABORATORY**  
 UNIVERSITY OF CALIFORNIA - BERKELEY

LHC IR FEEDBOX  
 CRYOGENICS  
 PIPE, EI

MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1/4	DO NOT SCALE PRINTS
	ASSEM	-		
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	SHEET 1 OF 2	
	Z5LCE2	LH2003	2515034 B	



ERNEST ORLANDO LAWRENCE  
 BERKELEY NATIONAL LABORATORY  
 UNIVERSITY OF CALIFORNIA - BERKELEY

LHC IR FEEDBOX  
 CRYOGENICS  
 PIPE, EI

MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON -	SCALE: 1/4	DO NOT SCALE PRINTS
PATENT CLEAR:	DESIGN ACCT. NO. Z5LCE2	CATEGORY CODE LH2003	SHEET 2 OF 2	
DWG. NO. 2515034			SIZE B	REV. B