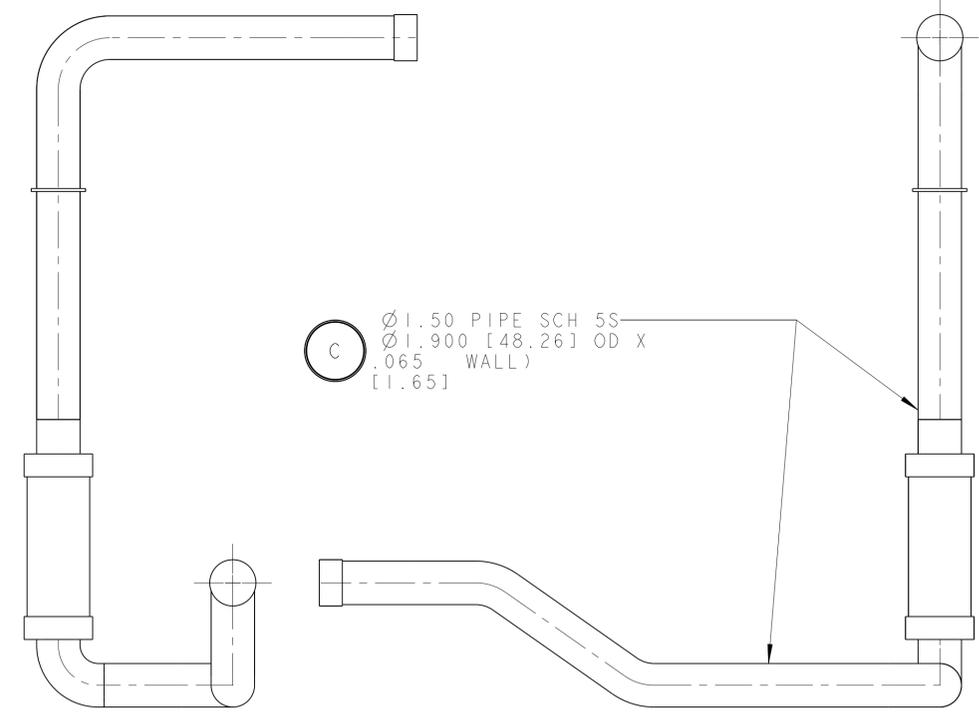
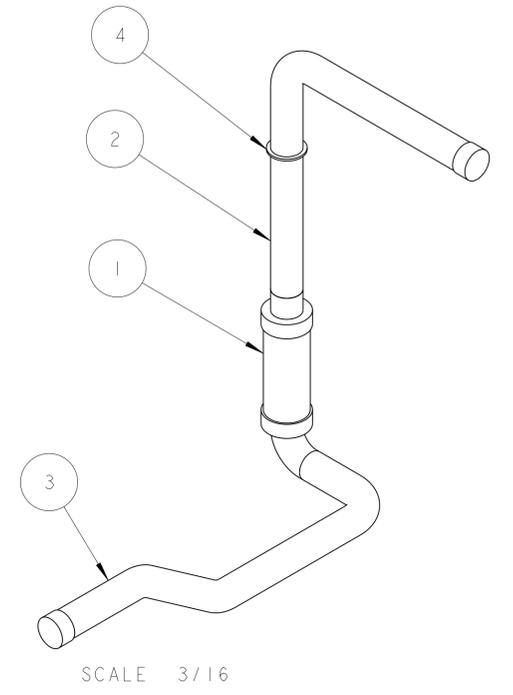
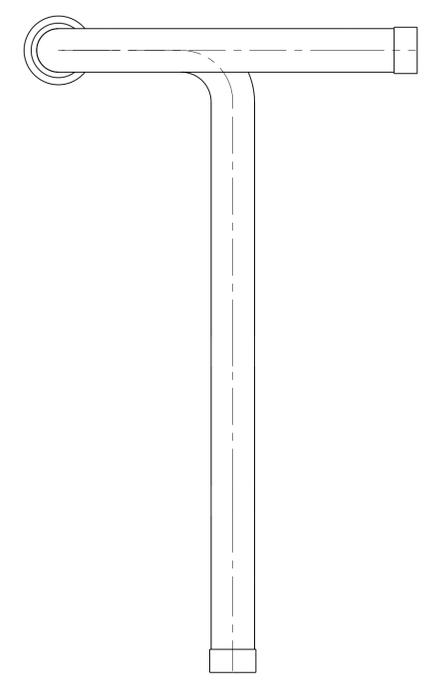


ITEM	PART NO	RECD	DESCRIPTION	MATERIAL
4	-	I	SUPPORT FLANGE	SS 304L
3	-	I	PIPE, PER ASTM A312	SS 304L
2	-	I	PIPE, PER ASTM A312	SS 304L
1	-	I	BRAIDED FLEX HOSE, 2" ID X 6.1 LL	SS 300 SERIES

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 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.



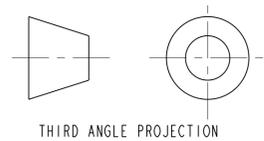
(B)

(B)

(B)

(C)

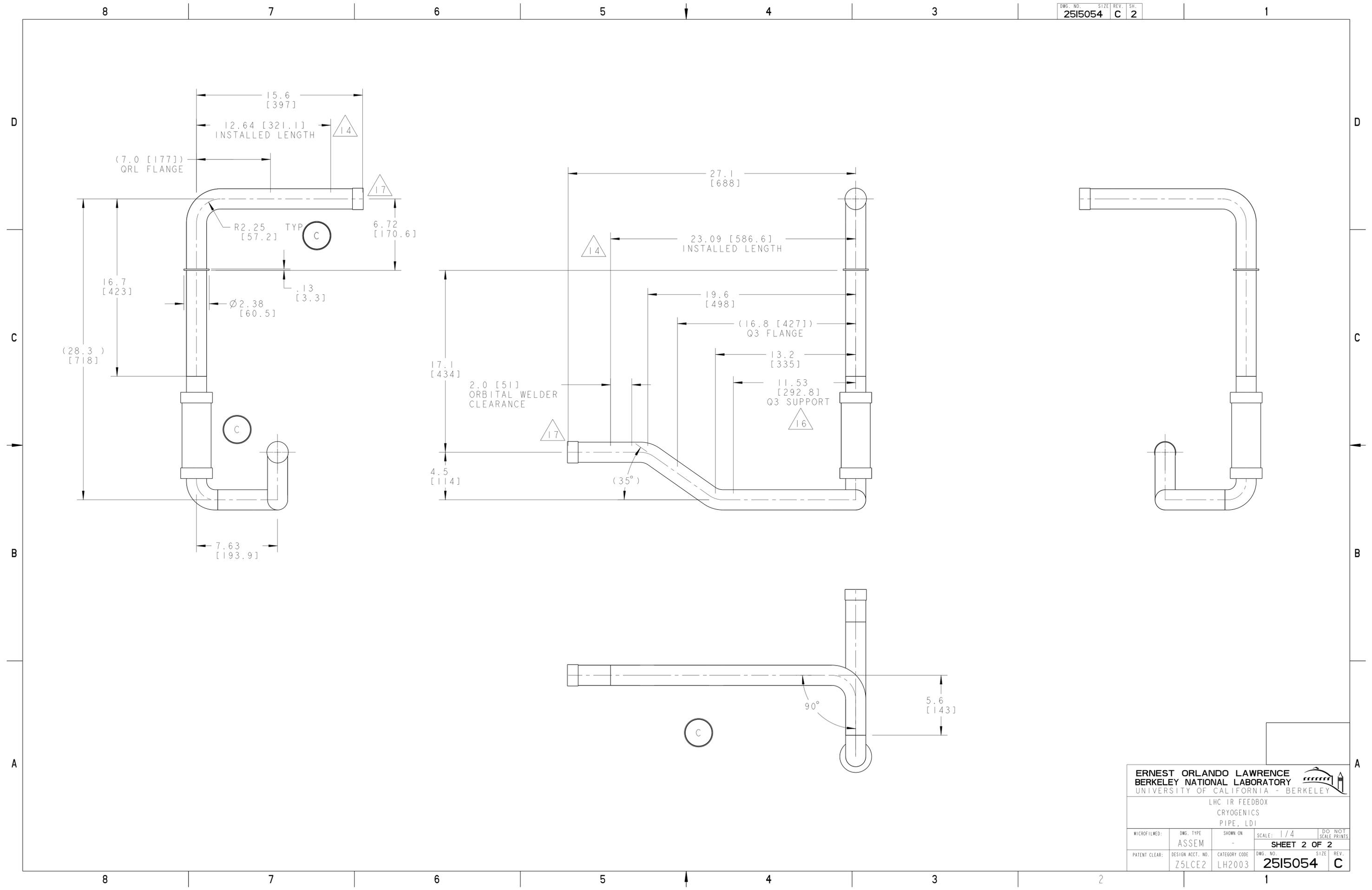
\*\*\* FOR ADDITIONAL TUBE DIMENSIONS, SEE SHEET 2



REV	DWG	CHK	ZONE	DATE	CHANGES
C	RLM	JPZ		4/3/03	REROUTE; PIPE CALL OUT; ADDED VIEW, R2.25 WAS R3.5
B	ARH	SPV		01/15/03	REVISED DRAWING NOTES 13, 16 & 17, MINOR DRAWING DIMENSIONAL CHANGES.
A	ARH	SPV		11-06-02	INITIAL RELEASE

TOLERANCES		UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		SER	
X.X ± 0.1	FRAC. ± 1/64	ACCT NO.	NO.	NO.	DATE	ISSD	DATE
X.XX ± 0.03	Angles ± 1.00°	DEL TO	NO.	NO.	DATE	ISSD	DATE
X.XXX ± 0.010	FINISH 125 $\sqrt{Ra}$	SURFACE TREATMT		METHOD		TAG	
DO NOT SCALE PRINT		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
THREADS ARE CLASS 2		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
CHAMFER ENDS OF ALL SCREW TRENDS 30°		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
CUT ROUND, 1.5 THREAD RELIEF ON MACHINED THREAD		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
BREAK EDGES .016 MAX. ON MACHINED WORK		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
REMOVE BURRS, WELD SPLATTER & LOOSE SCALE		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	
IN ACCORDANCE WITH ASME Y14.5M & B46.1		PROJECT NUMBER		PROJECT NAME		PROJECT TAG	

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY			
UNIVERSITY OF CALIFORNIA - BERKELEY			
LHC IR FEEDBOX CRYOGENICS PIPE, LDI			
MICROFILMED:	DWG. TYPE	SHOWN ON	SCALE: 1/4
	ASSEM		DO NOT SCALE PRINTS
PATENT CLEAR:	DESIGN ACCT. NO.	CATEGORY CODE	SHEET 1 OF 2
	Z5LCE2	LH2003	DWG. NO. 2515054
			SIZE C



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

LHC IR FEEDBOX  
 CRYOGENICS  
 PIPE, LDI

MICROFILMED:	DWG. TYPE ASSEM	SHOWN ON -	SCALE: 1/4	DO NOT SCALE PRINTS
PATENT CLEAR:	DESIGN ACCT. NO. Z5LCE2	CATEGORY CODE LH2003	<b>SHEET 2 OF 2</b> DWG. NO. 2515054 SIZE REV. C	