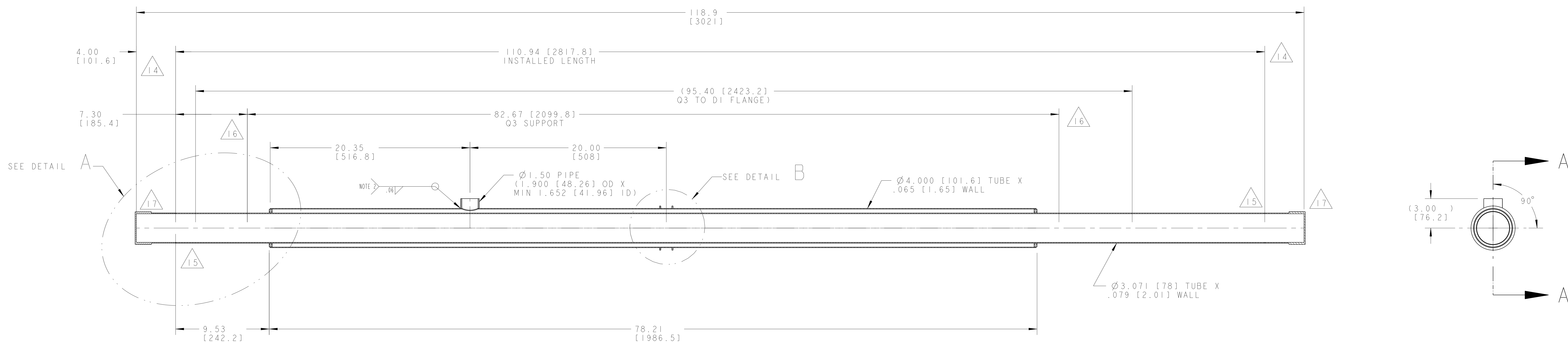
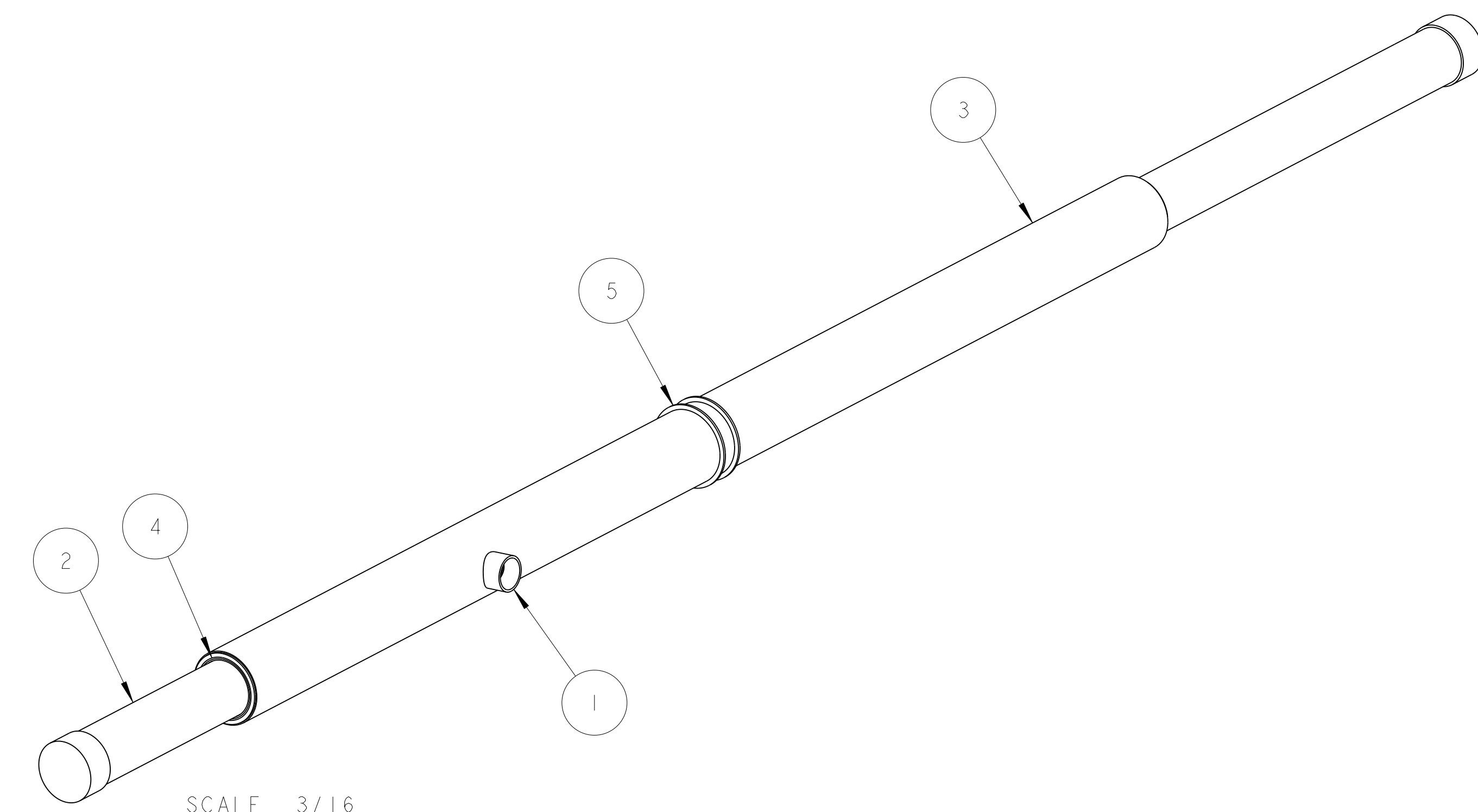
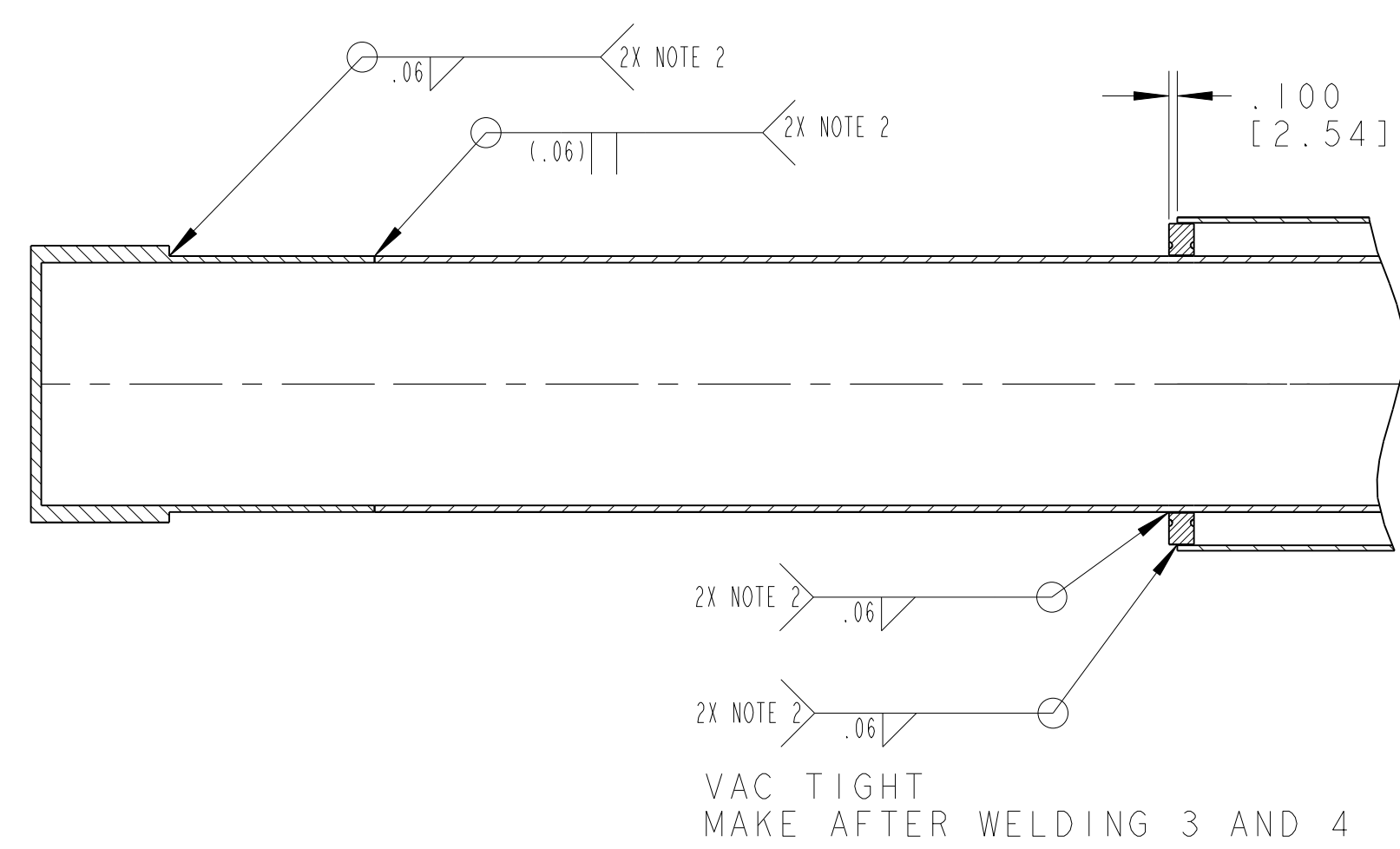


NOTES: (UNLESS OTHERWISE SPECIFIED)

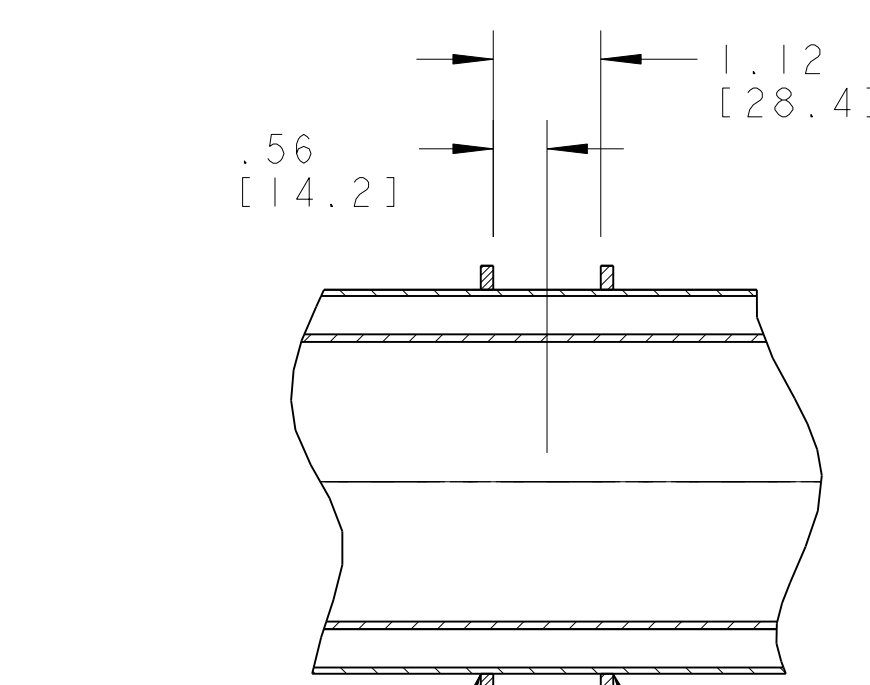
1. THIS IS A CRYOGENIC VACUUM COMPONENT.
2. WELDING PROCEDURE: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
3. CLEANING PROCEDURE : PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
4. PACKAGING AND STORAGE PROCEDURE OF THE COMPONENTS: PER VENDOR SPECIFICATION WITH LBNL APPROVAL.
5. DIMENSIONS AND TOLERANCING PER ANSI Y14.5M-1982. UNITS ARE IN INCHES [mm] UNLESS OTHERWISE SPECIFIED.
6. USE OF SULFUR OR SILICONE BEARING OILS, LUBRICANTS, OR COOLANTS ARE STRICTLY PROHIBITED.
7. USE OF RESIN OR RUBBER BONDED ABRASIVES UNDER POWER IS STRICTLY PROHIBITED. USE VITREOUS BONDED ABRASIVES ONLY.
8. VENDOR SUGGESTED CHANGES TO WELD PREPS; SUBJECT TO LBNL APPROVAL.
9. FITTINGS MAY BE USED IN PLACE OF BENDS; SUBJECT TO LBNL APPROVAL.
10. VENDOR SUGGESTED CHANGES TO TOLERANCES TO FACILITATE FABRICATION OR ASSEMBLY; SUBJECT TO LBNL APPROVAL.
11. REMOVE ALL THE BURRS AND REAM THE ENDS FOR CIRCULARITY AND CLEAN ENDS.
12. TUBE END SURFACE MUST BE PERPENDICULAR TO THE TUBE AXIS WITHIN +/- .010.
13. PERFORM ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.
14. 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".
15. 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.
16. PIPE MUST BE STRAIGHT AND SMOOTH (NO BUMPS) FOR 0.5" ON EITHER SIDE OF THE CENTER-PLANE OF THE SUPPORT.
17. CAP BOTH ENDS OF PIPE AFTER ACCEPTANCE TESTS PER SECTION 3.2 OF LBNL SPECIFICATION M856.



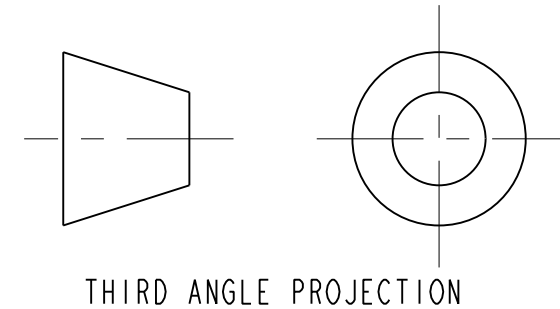
SECTION A - A



DETAIL A SCALE 1/2



DETAIL B SCALE 1/2



THIRD ANGLE PROJECTION

REV	DATE	BY	CHK	ZONE	DATE
A	10-23-01	ARHSPV			
INITIAL RELEASE CHANGES					

UNLESS OTHERWISE SPECIFIED  
 X.X ± 0.1 FRACTION ± 1/64  
 X.XX ± 0.03 FINISH ± 1.00"  
 X.XXX ± 0.010 FINISH ± 1.00"  
 DO NOT SCALE PRINT  
 CHECKED AND CLASS 2  
 CHAMFER ENDS OF ALL SCREW THREADS 30°  
 CUT ROUNDS, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES .156 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE  
 IN ACCORDANCE WITH ASME Y14.5M & B46.1

5	251513	2	GUIDE RING	SS 304L
4	251512	2	JACKET WELD CAP	SS 304L
3	-	1	TUBE, PER ASTM A269	SS 304L
2	-	1	TUBE (DELIVERED BY CERN)	SS 304L
1	-	1	NIPPLE, TUBE, PER ASTM A269	SS 304L

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
1			LHC IR FEEDBOX CRYOGENICS PIPE, V AND LD ASSY	

SHOP ORDERS	REV	DATE	BY	CHK	ZONE

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY	UNIVERSITY OF CALIFORNIA BERKELEY
LHC IR FEEDBOX CRYOGENICS PIPE, V AND LD ASSY	SCALE: 1/4
ASSEM	DATE: 15-Dec-01
Z5LC2	DATE: 10-Oct-03
LH2003	DATE: 08-SEP-03