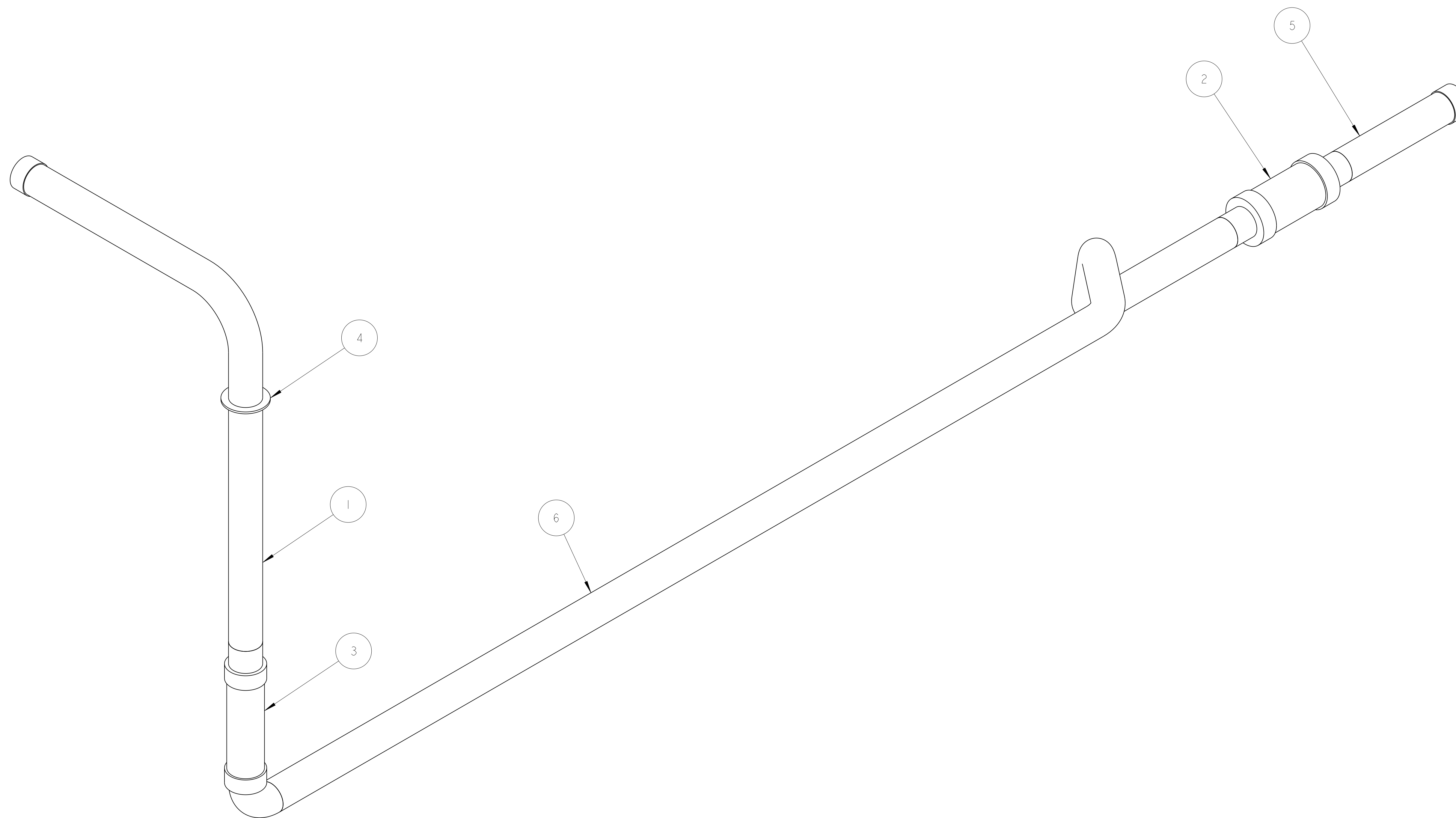
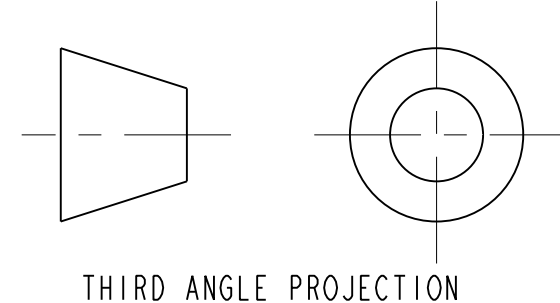


NOTES: (UNLESS OTHERWISE SPECIFIED)

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  $\pm 0.063$ ".
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.



SCALE 5/16



REV	DWG	CHK	ZONE	DATE	CHANGES
A	ARH	SPY		11-04-01	INITIAL RELEASE
					CHANGES

UNLESS OTHERWISE SPECIFIED  
 DECIMALS: X.X ± 0.1 FRACTION: ± 1/64  
 ANGLES: X.XX ± 0.03 FINISH:  $\sqrt{32}$   
 SURFACE: X.XXX ± 0.010  
 DO NOT SCALE PRINT  
 TOLERANCES AND CLASS 2  
 CHAMFER EDGES OF ALL SCREEN THREADS 30°  
 CUT ROUNDS, 1.5 THREAD RELIEF ON MACHINED THREADS  
 BREAK EDGES - 1/16 MAX. ON MACHINED WORK  
 REMOVE BURRS, WELD SPATTER & LOOSE SCALE  
 IN ACCORDANCE WITH SEMI E14.3M & B&I

ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
6	-	1	PIPE, PER ASTM A312	SS 304L
5	-	1	PIPE, PER ASTM A312	SS 304L
4	-	1	SUPPORT COLLAR	SS 304L
3	-	1	BRAIDED FLEX HOSE, 2" ID X 6.1" LL	SS 309 SERIES
2	-	1	BRAIDED FLEX HOSE, 2" ID X 4" LL	SS 309 SERIES
1	-	1	PIPE, PER ASTM A312	SS 304L

SHOP ORDERS		SET	-
NO	DATE	BY	
REV	DATE	BY	

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY UNIVERSITY OF CALIFORNIA BERKELEY		LHC IR FEEDBOX CRYOGENICS PIPE WELDMENT, LD2	
DWG. TYPE	ASSEM	SCALE	1/4
DWG. NO.	Z5LCE2	CATEGORY CODE	LH2003
DATE	05-Nov-02	DATE	05-Nov-02

REV	DATE	BY	REVISION
1	05-Nov-02	Jan Zboznik/S. Virroster	INITIAL RELEASE
2	05-Nov-02	Jan Zboznik/S. Virroster	CHANGES

8

7

6

5

4

3

2

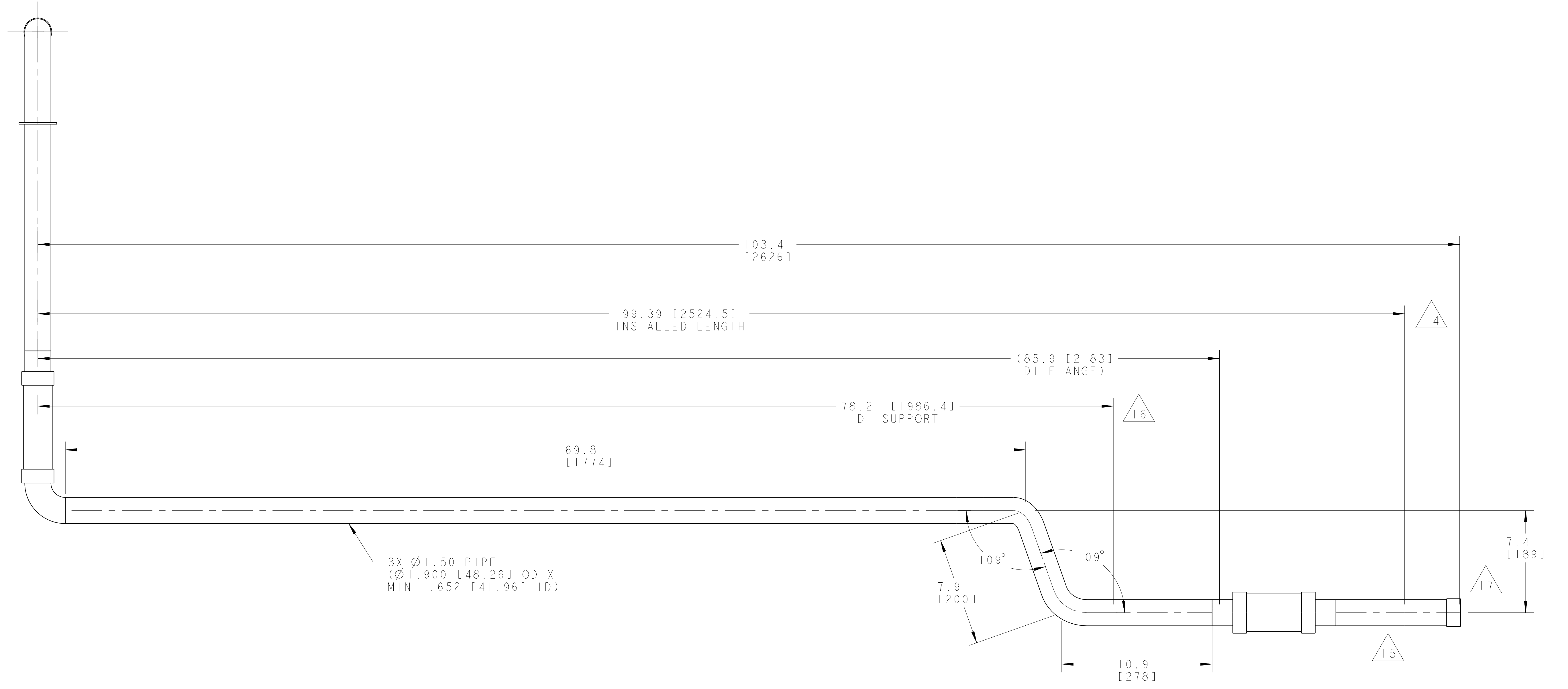
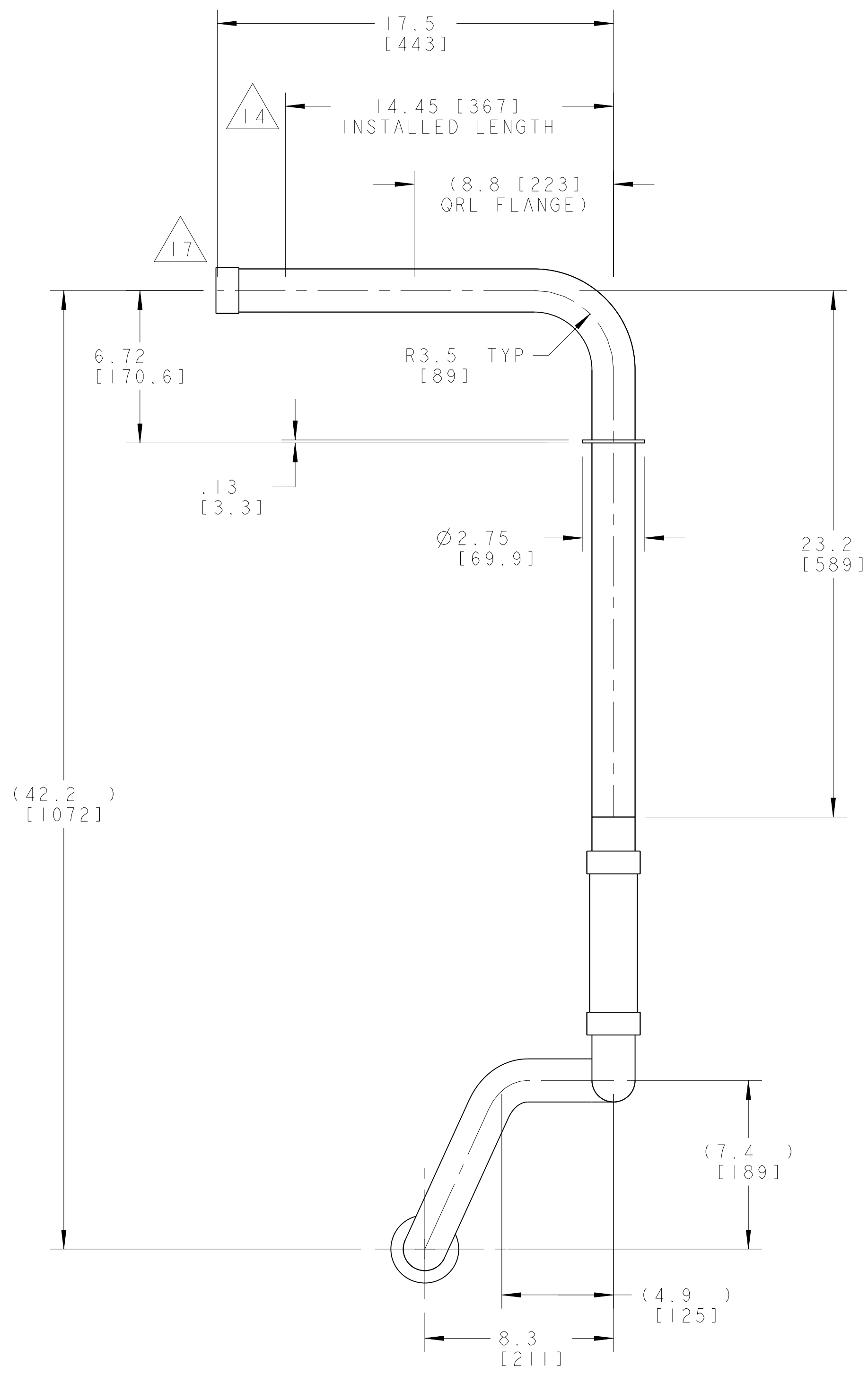
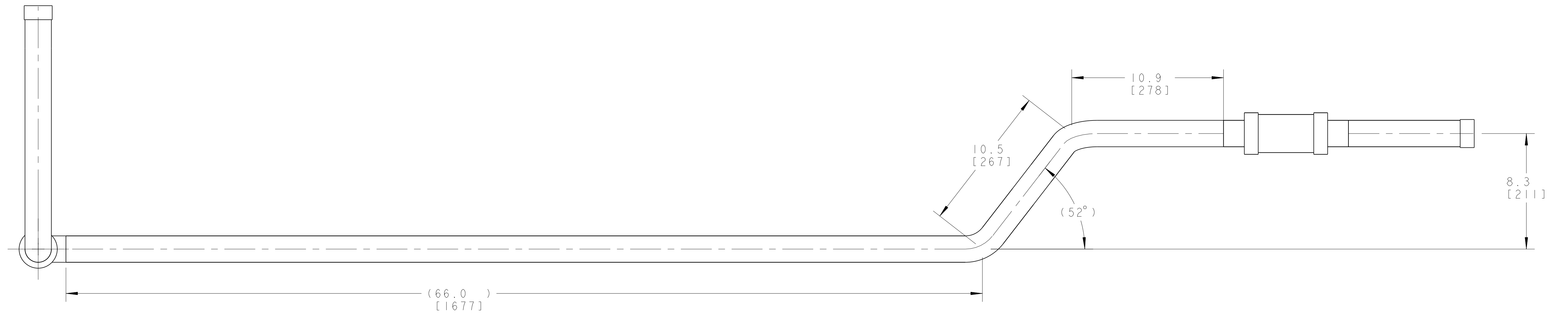
1

D

C

B

A



3X Ø1.50 PIPE  
 (Ø1.900 [48.26] OD X  
 MIN 1.652 [41.96] ID)

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

LHC IR FEEDBOX  
 CRYOGENICS  
 PIPE WELDMENT, LD2

MICROFILMED:	ENG. TYPE	SHOW ON	SCALE	DO NOT
	ASSEM		1/4	LOCK PRINTS
PATENT CLEAR:		REVISION NO.:	CATEGORY CODE:	ENG. NO.:
		Z5LCE2	LH2003	2512456

**SHEET 2 OF 2**  
 SIZE: A

2512456 A 2

NAME: ARHARRIS OBJECT: 251245.2 DATE: 25-Nov-02 14:28:14