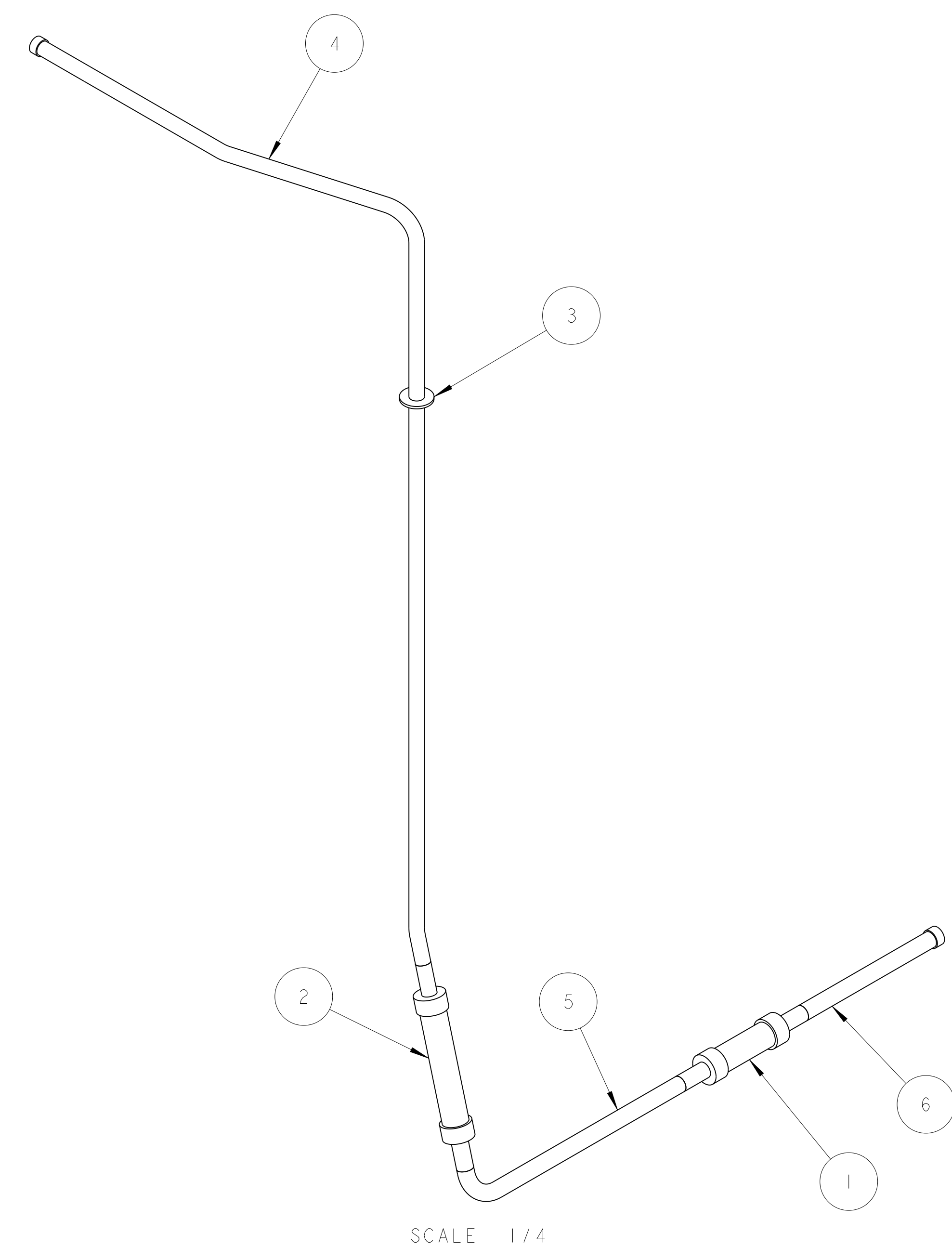
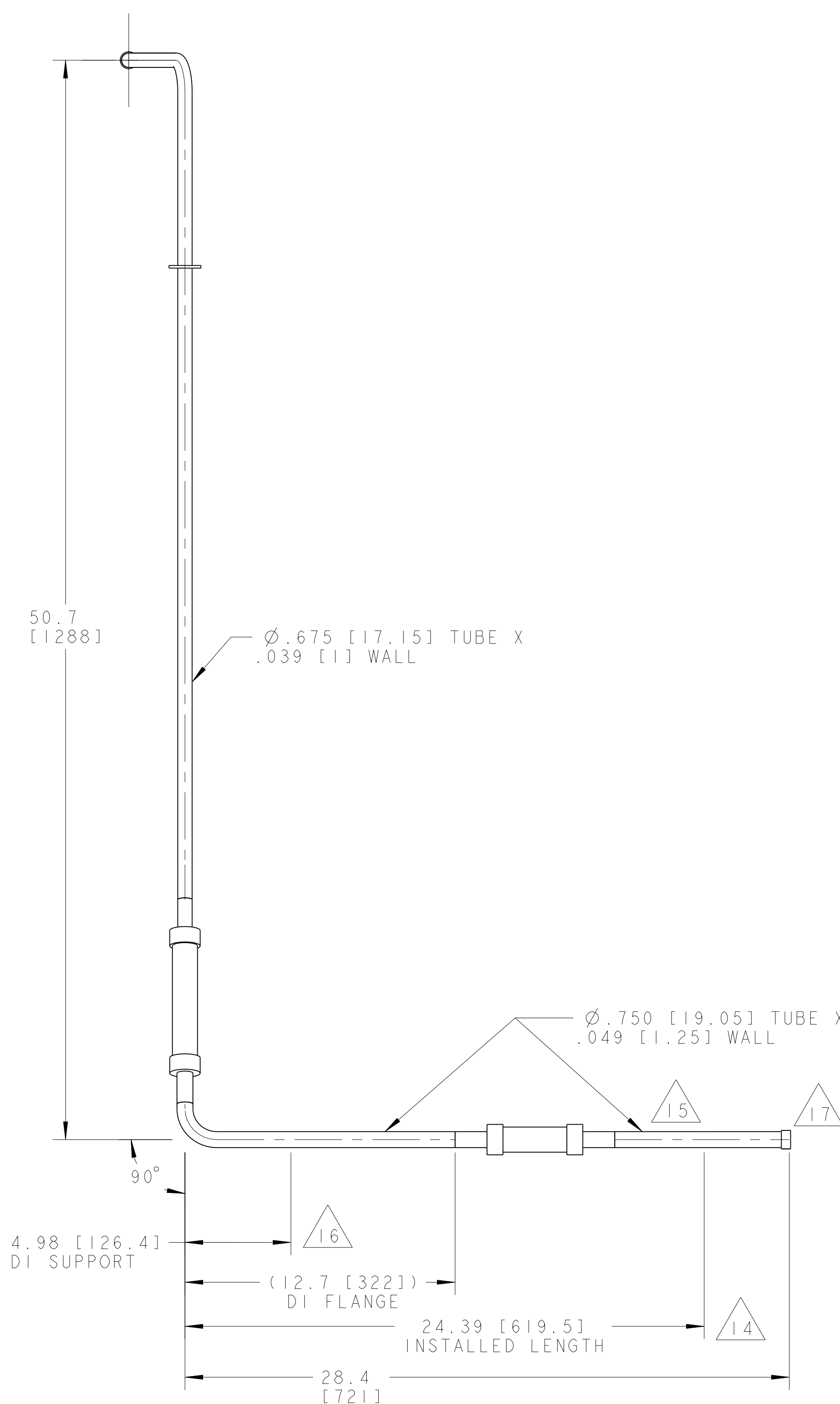
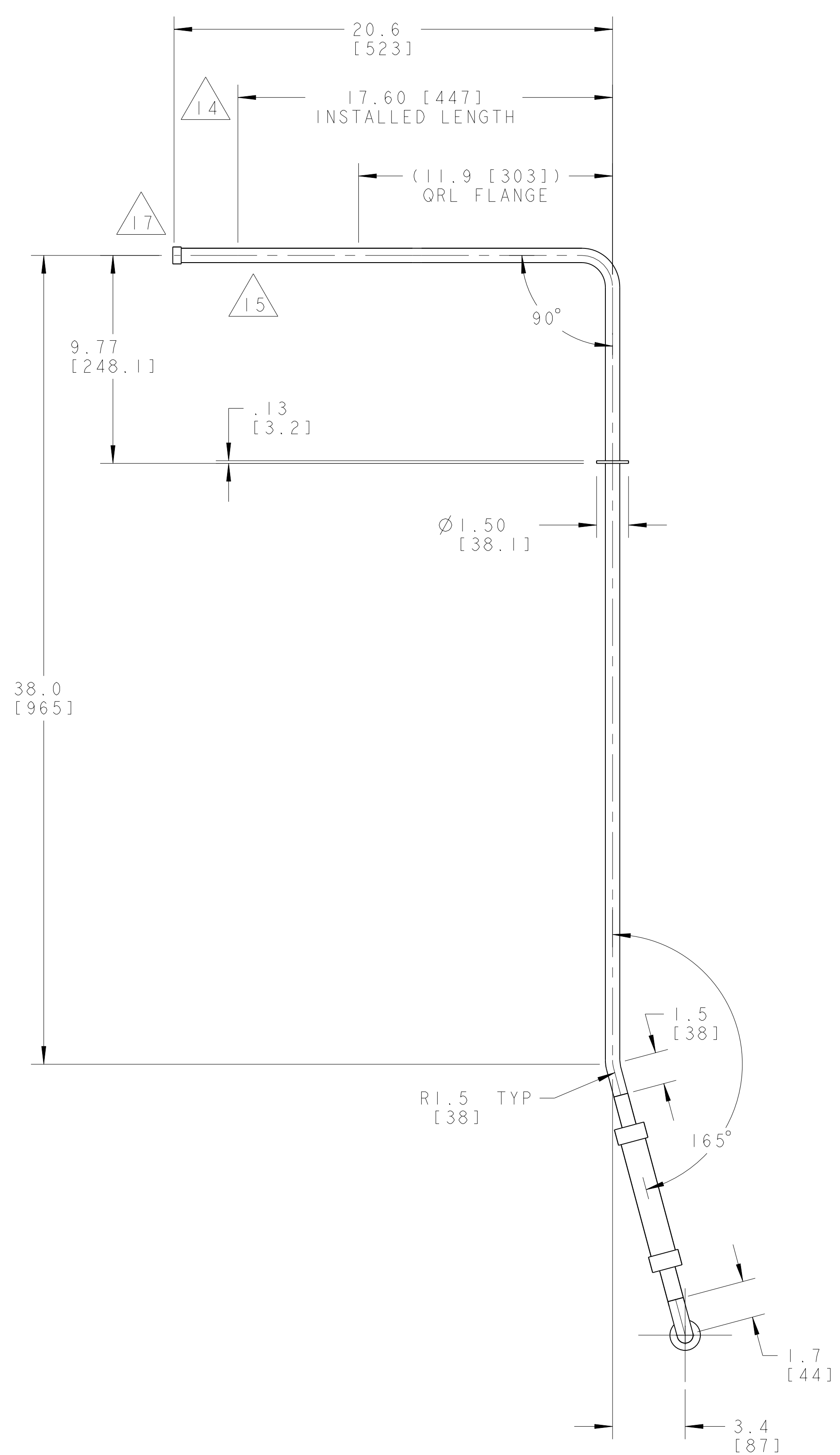
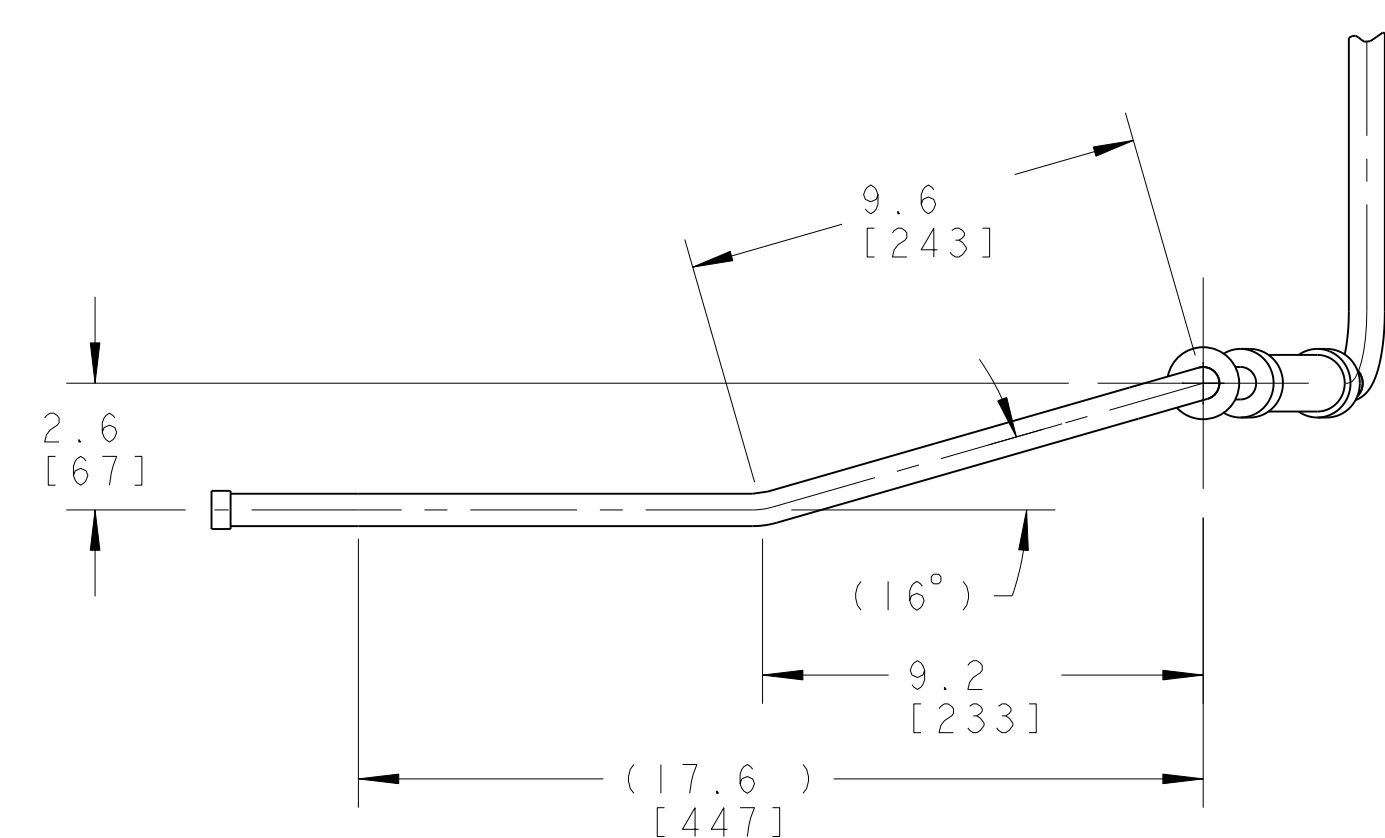


NOTES: (UNLESS OTHERWISE SPECIFIED)

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 DEEDBOX 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.



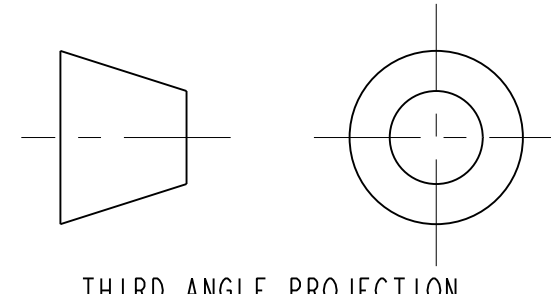
ITEM	PART NO	REQD	DESCRIPTION	MATERIAL
6	-	1	TUBE, PER ASTM A269	SS 304L
5	-	1	TUBE, PER ASTM A269	SS 304L
4	-	1	TUBE, PER ASTM A269	SS 304L
3	-	1	COLLAR	SS 304L
2	-	1	BRAIDED FLEX HOSE, 3/4" ID X 5.4' LL	SS 309 SERIES
1	-	1	BRAIDED FLEX HOSE, 3/4" ID X 3' LL	SS 309 SERIES

UNLESS OTHERWISE SPECIFIED		SHOP ORDERS		REV	DATE
TOLERANCES	FRACTIONAL	NO	NO	NO	NO
X.X ± 0.1	FRACTIONAL	NO	NO	NO	NO
X.XX ± 0.03	ANGLES ± 1.0°	NO	NO	NO	NO
X.XXX ± 0.010	FINISH	NO	NO	NO	NO
DO NOT SCALE PRINT					
TOLERANCES 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 SPLICED & LOOSE SCALE					
IN ACCORDANCE WITH ASME Y14.5M & B.6.1					

ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY		UNIVERSITY OF CALIFORNIA BERKELEY	
LHC IR FEEDBOX CRYOGENICS PIPE, E2			
REV	DATE	REV	DATE
A	12-26-02	1	12-26-02
DRAWN BY: J. ZHANG		CHECKED BY: J. ZHANG	
DATE: 12-26-02		DATE: 12-26-02	
PROJECT: LHC IR FEEDBOX		PROJECT: LHC IR FEEDBOX	
SHEET 1 OF 1		SHEET 1 OF 1	



REV	DATE	BY	CHK	ZONE
A	12-26-02	J. ZHANG		
INITIAL RELEASE				
CHANGES				