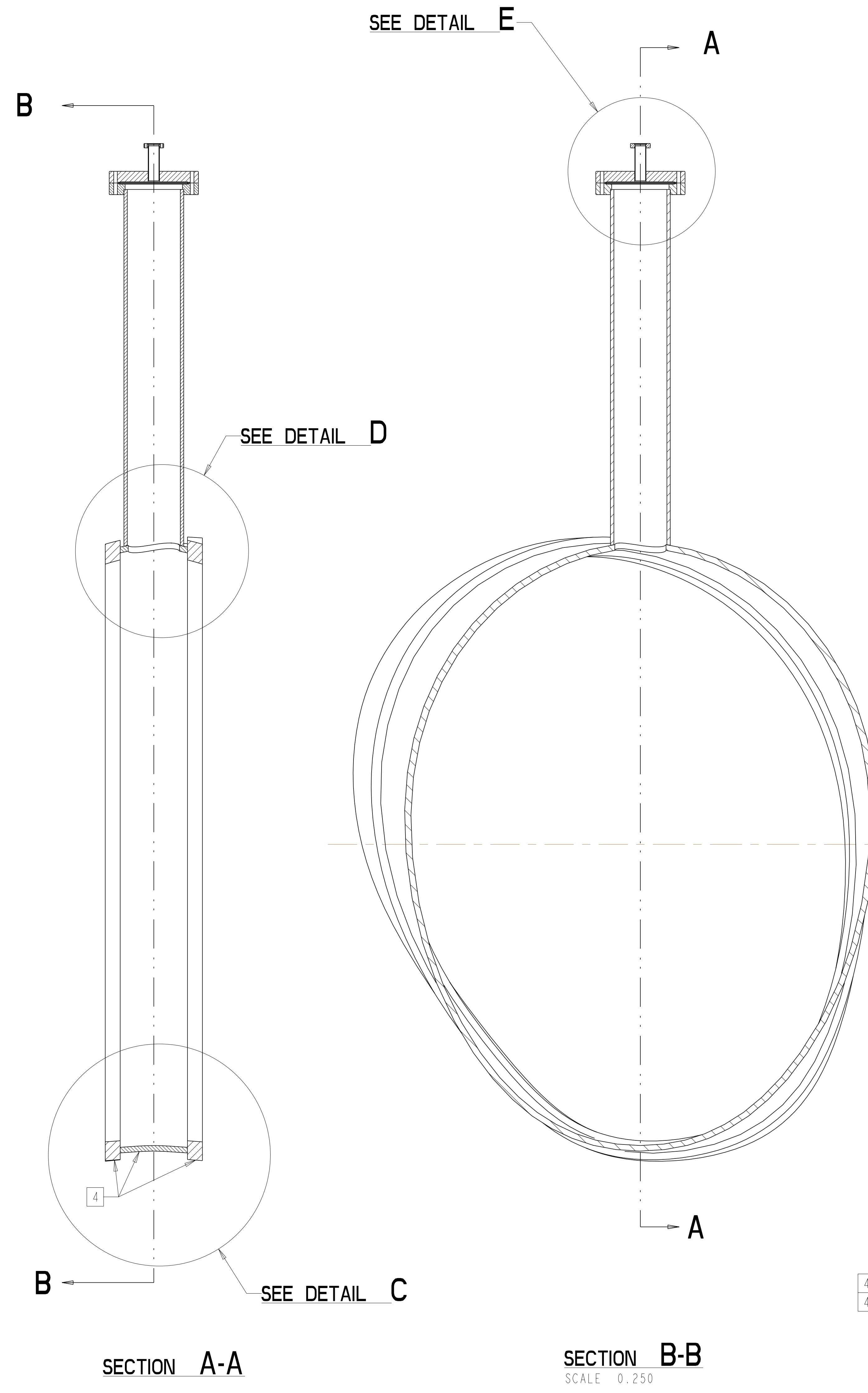
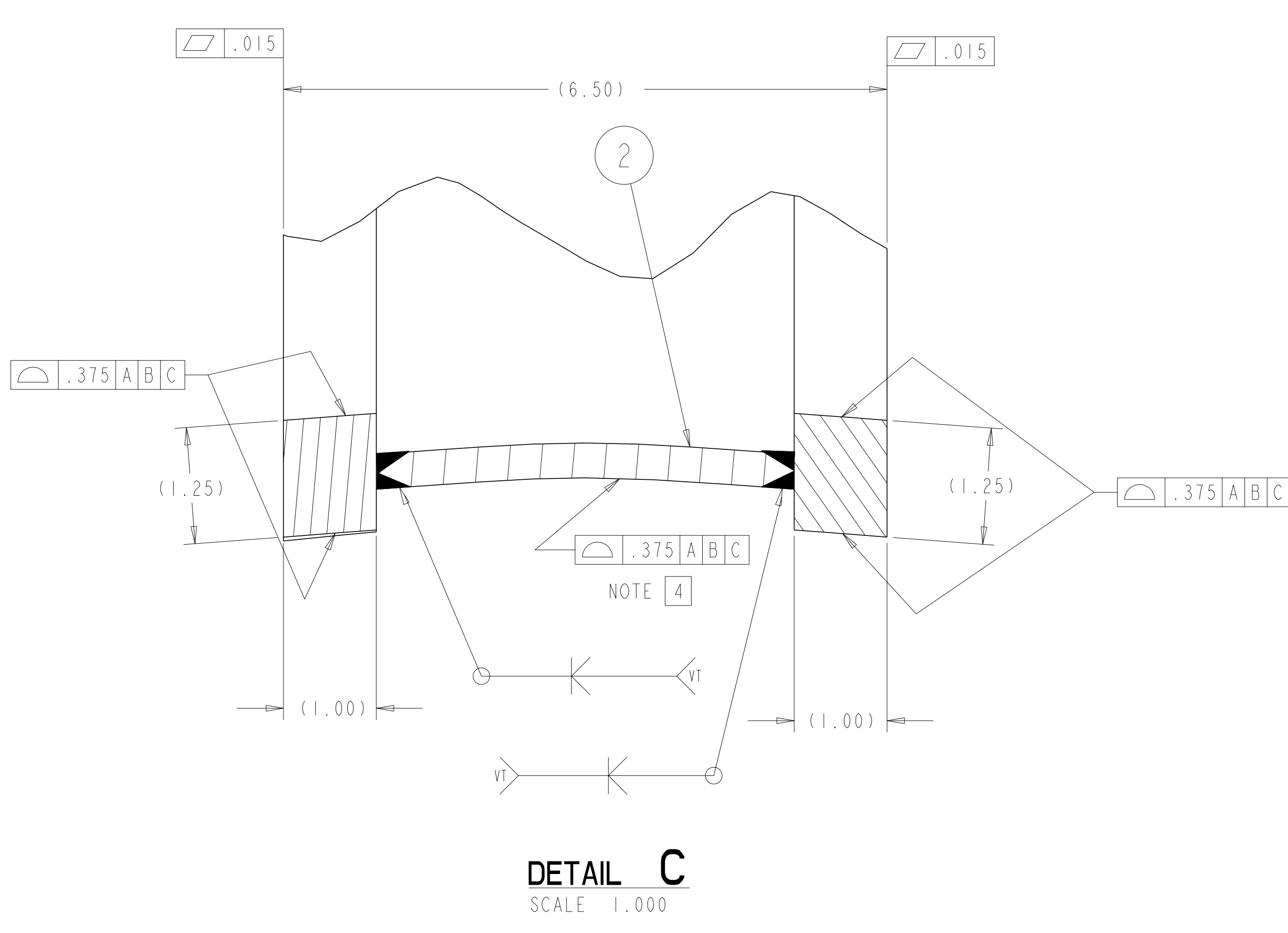
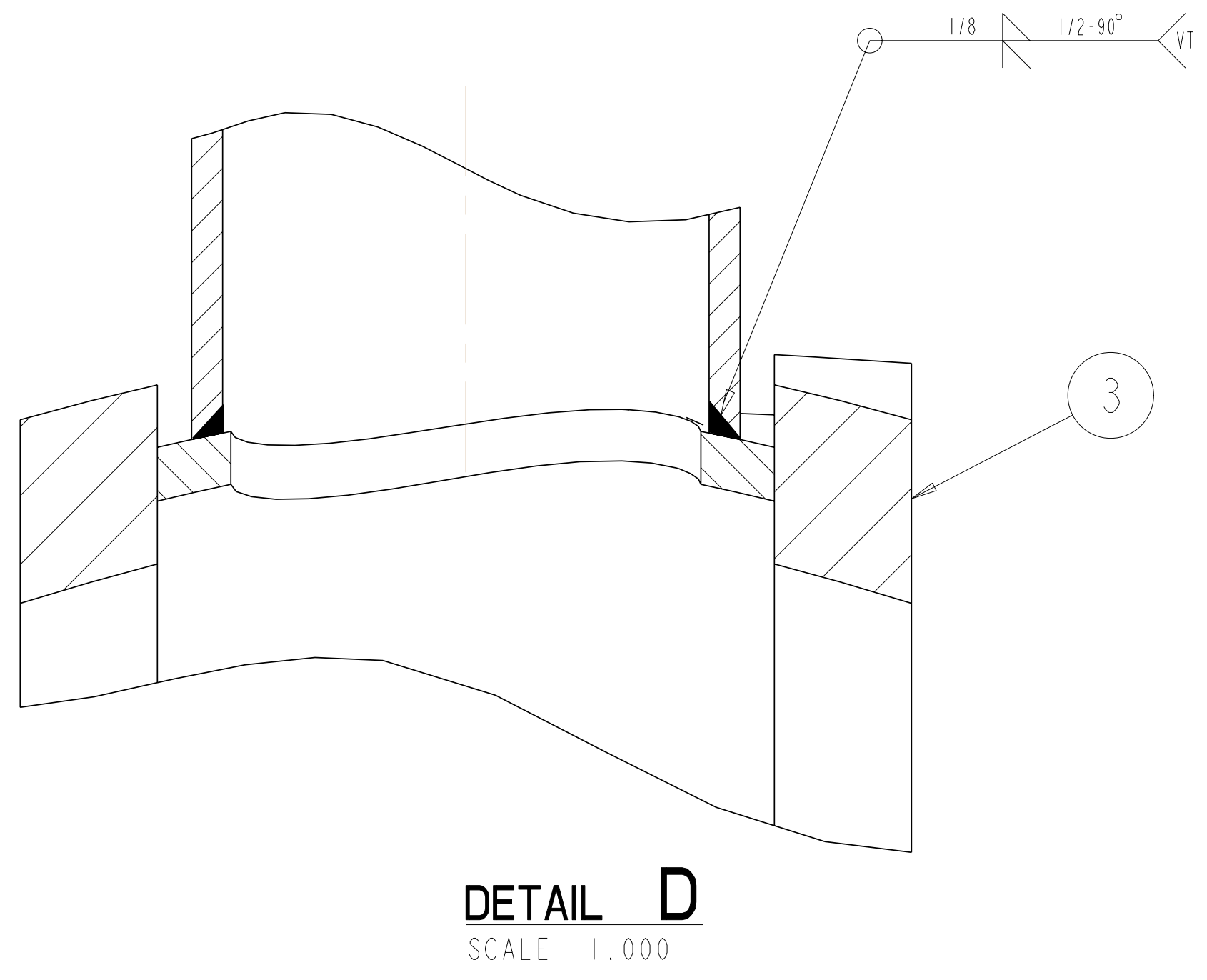
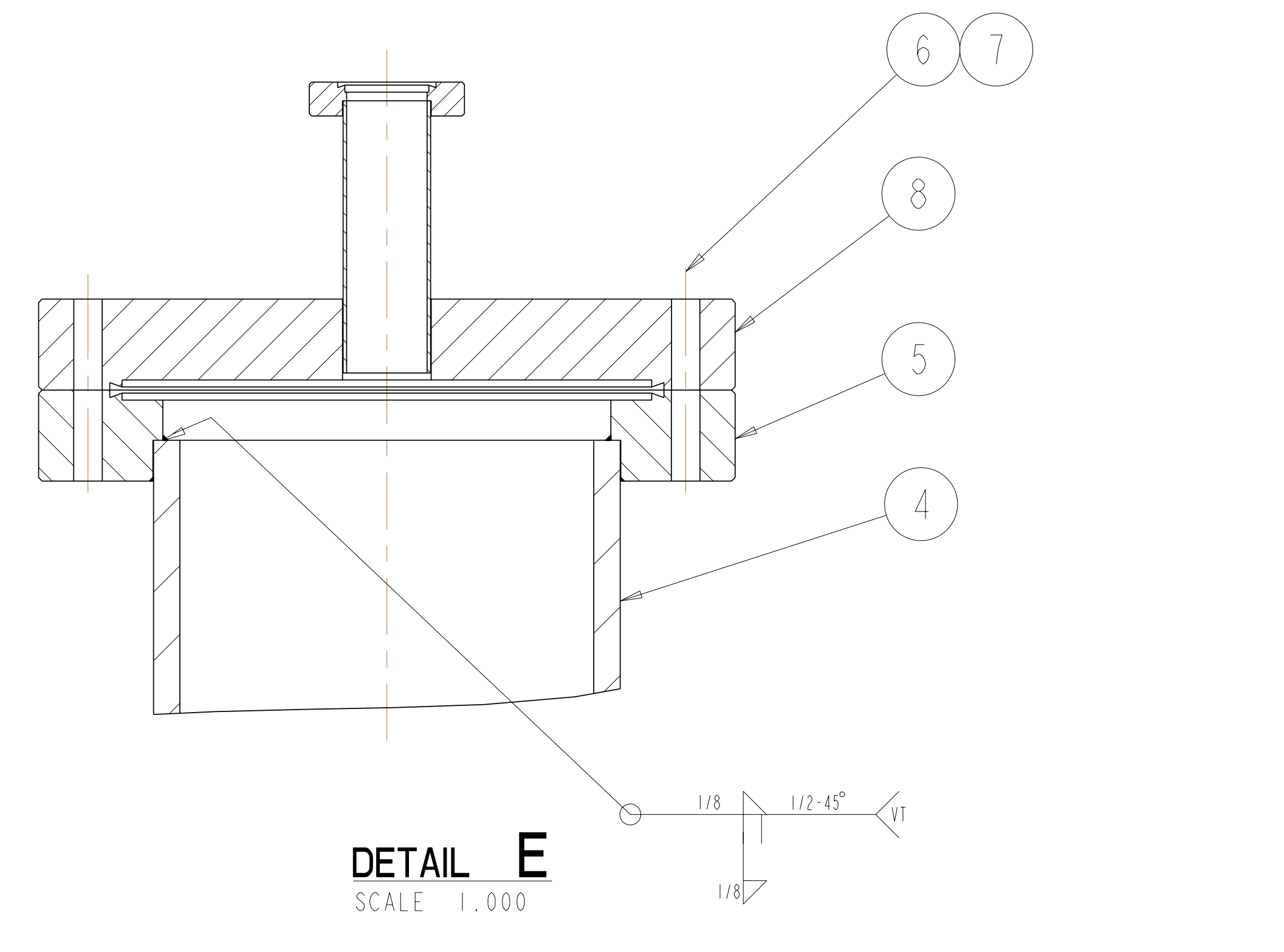


- NOTES:
1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
 2. DIMENSIONS ARE IN INCHES.
 3. FABRICATION, INSPECTION, AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION NCSX-CSPEC-121-02 AND STATEMENT OF WORK NCSX-SOW-121-03.
 4. PROFILE TOLERANCE IS BILATERAL, i.e., 0.1875 EITHER SIDE OF REFERENCE SURFACE.
 5. LEAK CHECK ITEM -8 (REDUCING NIPPLE) IS OPTIONAL. BLANK FLANGE MAY BE SUBSTITUTED.



Rev 1-a: ECN-4972 (RFD-12-002R1) approved substitution of Schedule 10 for Schedule 40 piping – Applicable to All 3 VVSAs.

Rev 1-b: ECN-5114 (RFD-12-015) approved leaving excess stock on the face to provide additional flexibility for final setup. Accordingly, the 6.5" height and 1.0 thickness reference dimensions are considered as suggestions – Applicable to All 3 VVSAs.

Rev 1-c: ECN-5082 eliminated weld relief originally requested by MTM since they elected to pursue other means of leak checking. Grooves no longer required. – Applicable to All 3 VVSAs.

RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting:

CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FINISH	FIND NO
AR	-9	WELD, FILLER METAL				9
I	FA06000133	6 INCH REDUCING NIPPLE	VARIAN VACUUM TECHNOLOGIES 121 HARTWELL AVE. LEXINGTON, MA 02421 OR EQUIVALENT			8
I	191013	GASKET, COPPER 4.01 ID, PKG 10 REF 6.00 FLG				7
I	190058	BOLT SET 4.63 OD & 6.00 FLG 12 PT BOLT, SILVER PLTG, PKG 25	MDC VACUUM PRODUCTS CORP. 23842 CABOT BOULEVARD HAYWARD, CA. 94545-1651 OR EQUIVALENT			6
I	130026	CONFLAT, 6.00 O.D. TAPPED				5
AR	-4	PIPE 3 1/2 SCH 40				4
4	2	SPACER FLANGE	UNS N06625			3
4	1	SPACER				2
AR	-1	SPACER WELDMENT				1
PARTS LIST						

WELDING ENGINEER
APPROVED R. PARSELLS DATE: 6/04

SCALE: .250

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
1	REVISD PER ECN-4945	GHJ	2/27/03	MJC								
2	ADDED NOTE 5											

SCALE NOTED
TOLERANCES UNLESS OTHERWISE SPECIFIED

DES: PL. GORANSON 08/03
DRW: G.H. JONES 08/03
CHK: M.J. COLE 6/04

UT-BATTELLE Oak Ridge National Laboratory
managed for the DEPARTMENT OF ENERGY under
U.S. GOVERNMENT CONTRACT DE-AC05-00OR22725
UT-BATTELLE, LLC, Oak Ridge, Tennessee

NATIONAL COMPACT STELLARATOR EXPERIMENT
VACUUM VESSEL SPACER WELDMENT

VERSION NO. 1 PLANT X-10 BLDG 5700 FL 3 SHT OF 2 TYPE S CLASS U

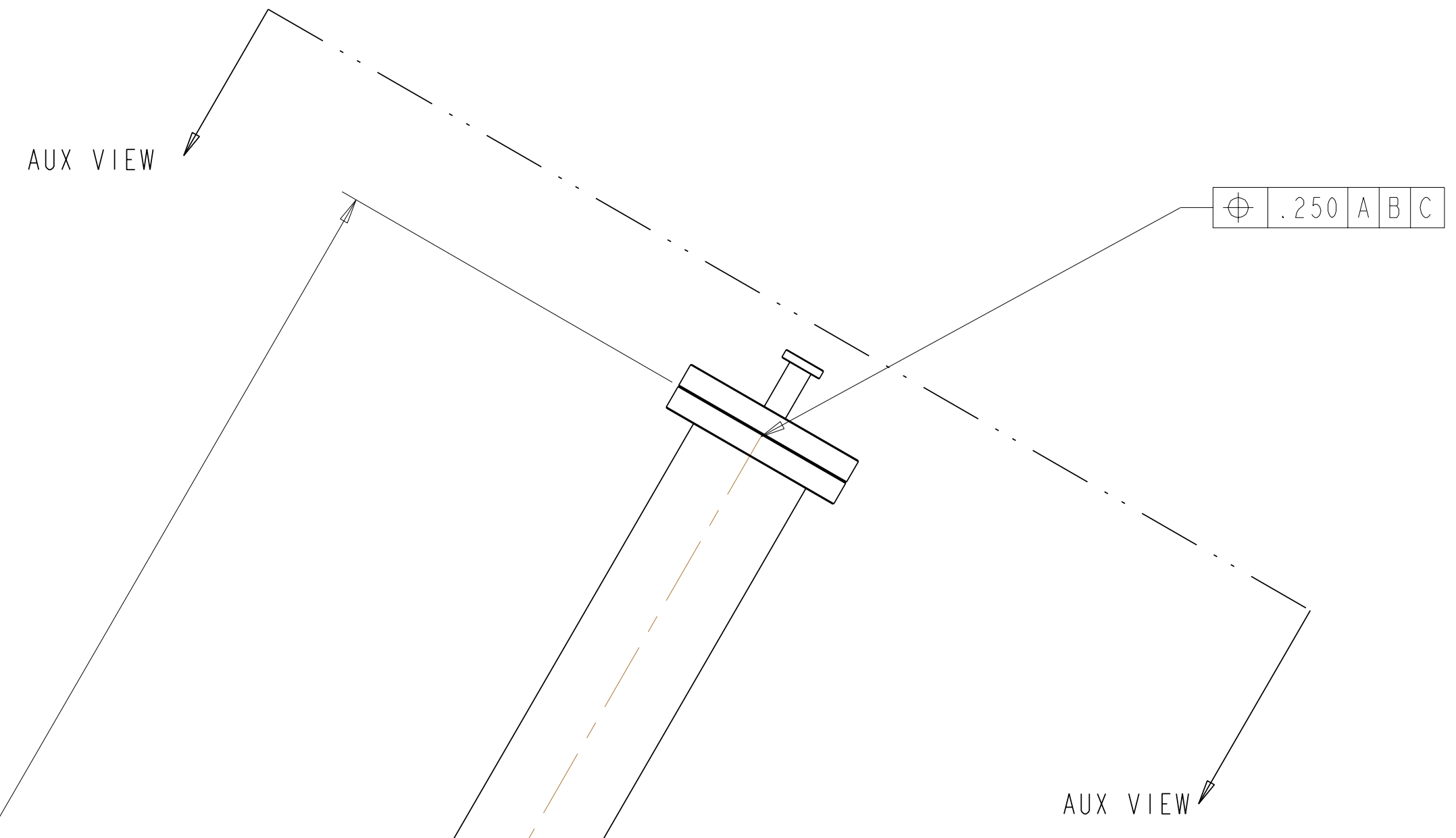
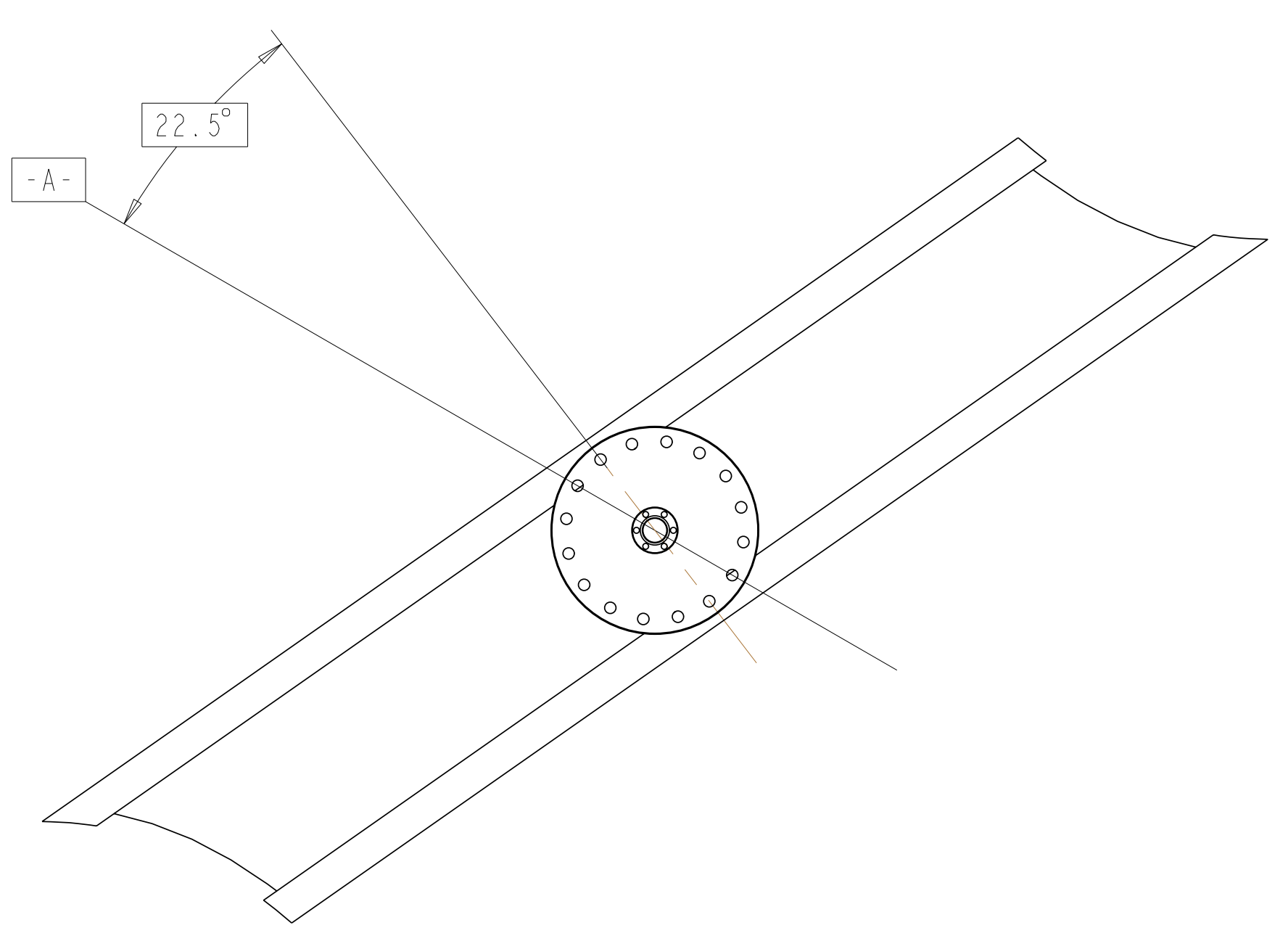
RELEASE LEVEL 1

DRAWING APPROVALS DATE

P THIS DRAWING PRODUCED ON PRO-ENGINEER

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FOR NOTES AND PARTS LIST SEE SHEET 1



99.36

⊕ .250 A B C

⌒ .375 A B C

DATUM A = PLANE THRU "XY"
 DATUM B = PLANE THRU "XZ"
 DATUM C = PLANE THRU "YZ"

(60°)

SCALE 0.250

-B-

**RELEASED FOR
 FABRICATION / INSTALLATION**
 PPPL Drafting:

UT-BATTELLE		Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 UT-BATTELLE, LLC, Oak Ridge, Tennessee					
NATIONAL COMPACT STELLARATOR EXPERIMENT							
VACUUM VESSEL SPACER WELDMENT							
VERSION NO.	PLANT	BLDG	FL	SHT OF	TYPE	CLASS	
1	X-10	5700	3	2 2	S	U	
RELEASE LEVEL Fabrication		SEI21-014					

H
G
F
E
D
C
B
A
SEI21-014