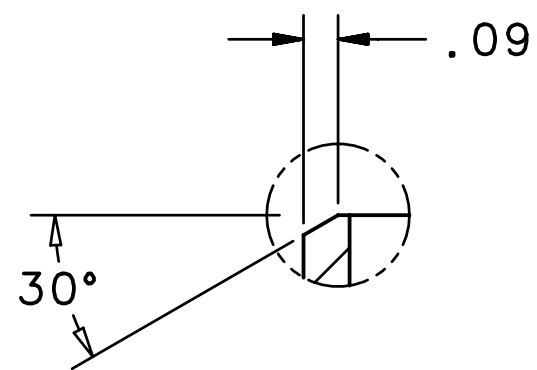
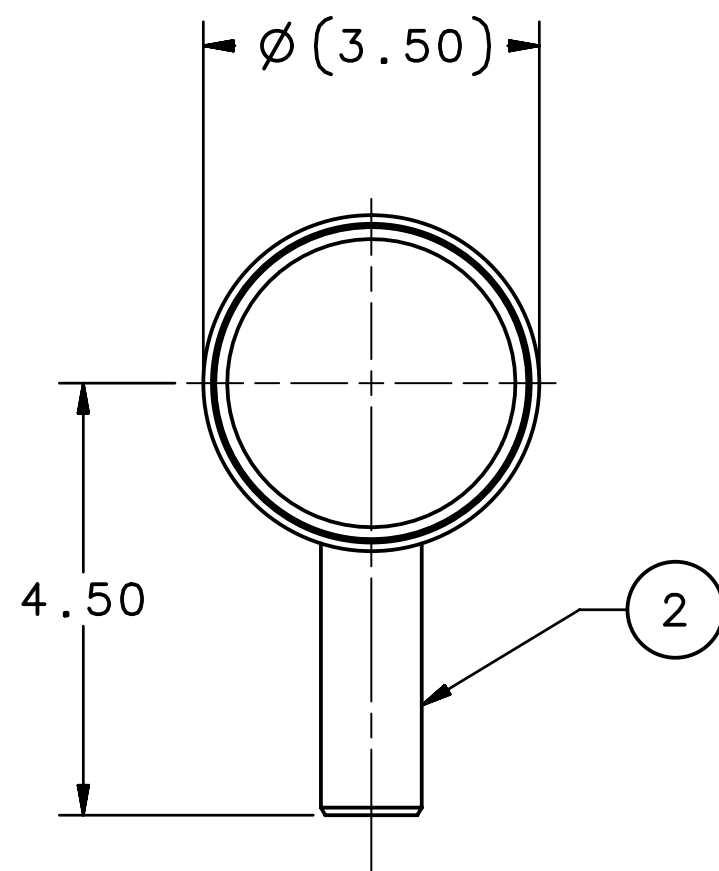


D

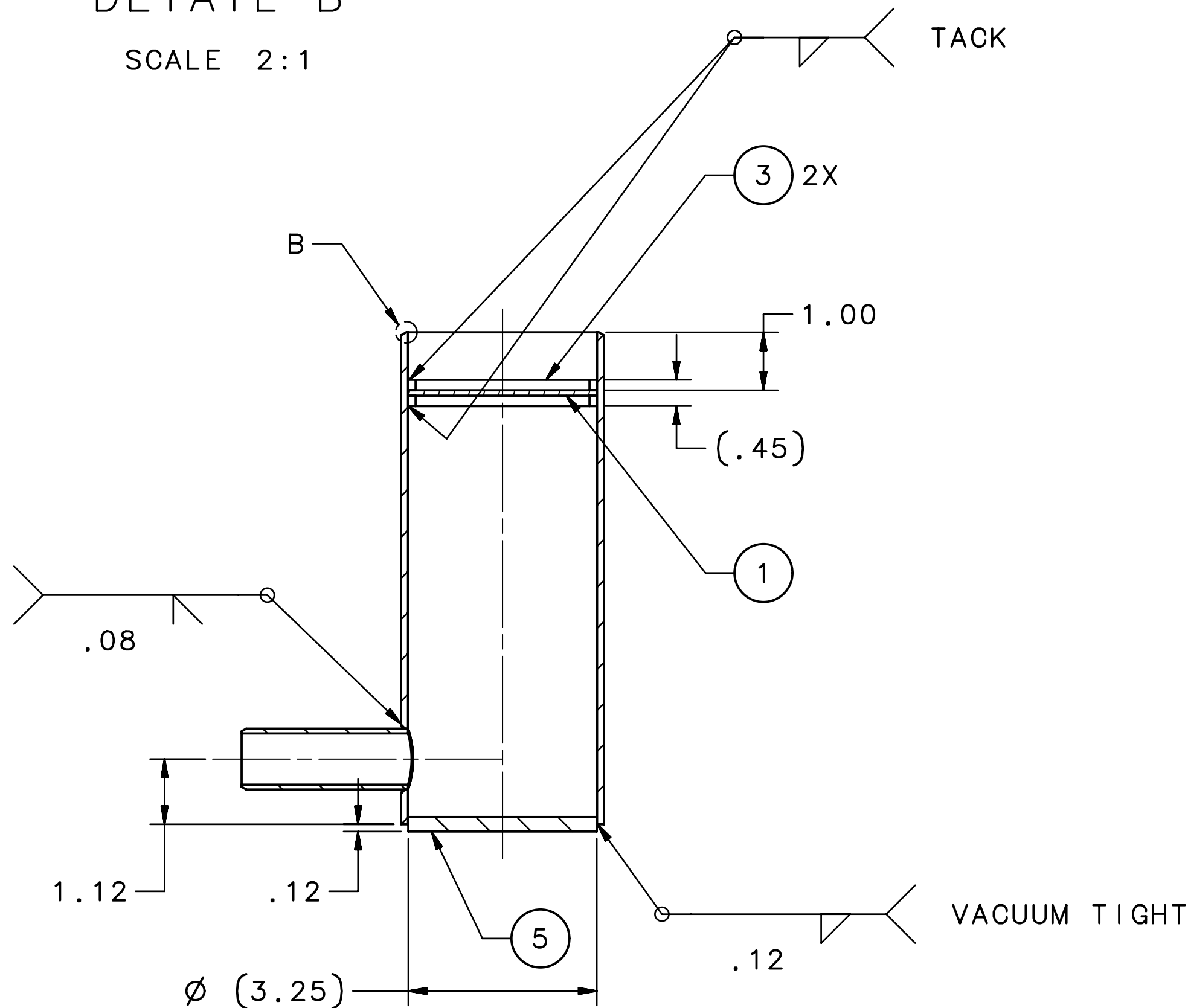
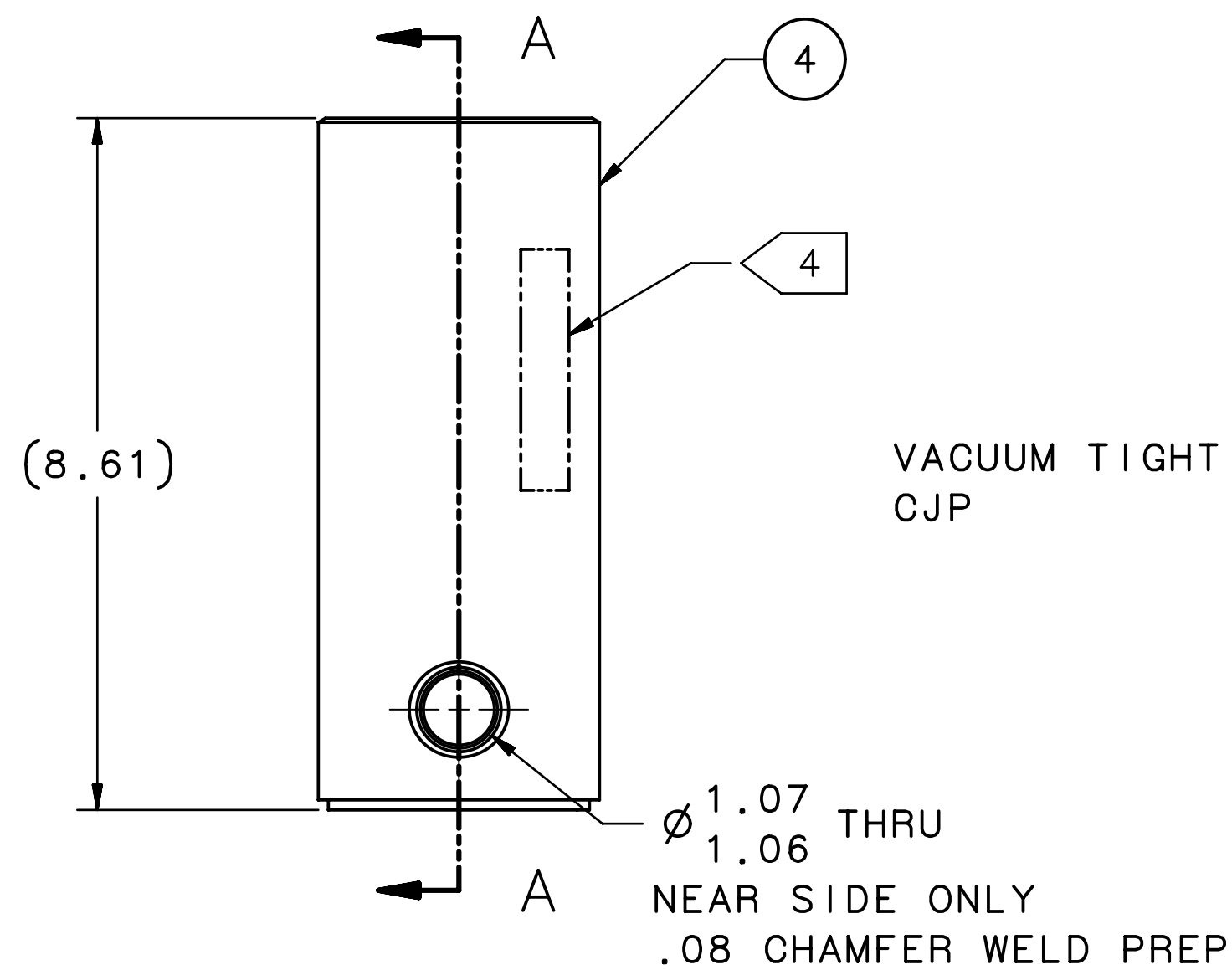
C

B

A



DETAIL B
SCALE 2:1



SECTION A-A

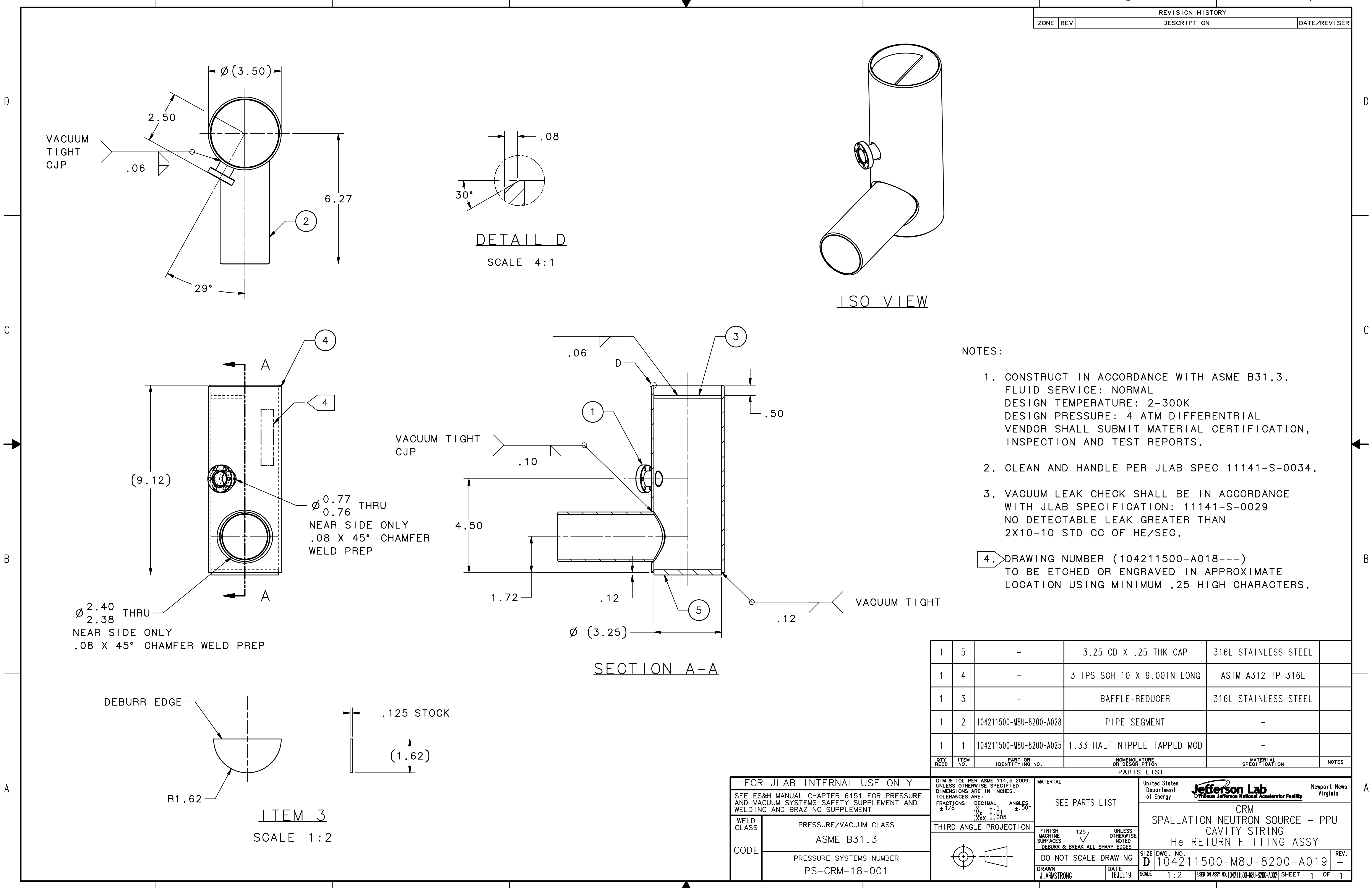
NOTES:

- CONSTRUCT IN ACCORDANCE WITH ASME B31.3.
FLUID SERVICE: NORMAL
DESIGN TEMPERATURE: 2-300K
DESIGN PRESSURE: 4 ATM DIFFERENTIAL
VENDOR SHALL SUBMIT MATERIAL CERTIFICATION,
INSPECTION AND TEST REPORTS.
- CLEAN AND HANDLE PER JLAB SPEC 11141-S-0034.
- VACUUM LEAK CHECK SHALL BE IN ACCORDANCE
WITH JLAB SPECIFICATION: 11141-S-0029
NO DETECTABLE LEAK GREATER THAN
2X10-10 STD CC OF HE/SEC.
- DRAWING NUMBER (104211500-A018---)
TO BE ETCHED OR ENGRAVED IN APPROXIMATE
LOCATION USING MINIMUM .25 HIGH CHARACTERS.
- SUGGESTED SOURCE:

MOTT CORPORATION
84 SPRING LANE
FARMINGTON CT.
860-747-6333

1	5	-	3.25 OD X .25 THK CAP	316L STAINLESS STEEL	
1	4	-	3 IPS SCH 10 X 8.49IN LONG	ASTM A312 TP 316L	
2	3	-	RETAINER 3.00ID X 3.25OD X .18THK	316L STAINLESS STEEL	
1	2	104211500-M8U-8200-A020	INLET TUBE		
1	1	MOTT CORP. P/N 1000-3.25-.093-100	POROUS DISC .093THK X 3.25DIA OD	316L STAINLESS STEEL	5

QTY REQD	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
PARTS LIST					
FOR JLAB INTERNAL USE ONLY					
SEE ES&H MANUAL CHAPTER 6151 FOR PRESSURE AND VACUUM SYSTEMS SAFETY SUPPLEMENT AND WELDING AND BRAZING SUPPLEMENT					
DIM & TOL PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE: FRACTIONS DECIMAL ANGLES .X ±.1 .XX ±.01 .XXX ±.005					
THIRD ANGLE PROJECTION					
WELD CLASS PRESSURE/VACUUM CLASS ASME B31.3					
CODE PRESSURE SYSTEMS NUMBER PS-CRM-18-001					
MATERIAL SEE PARTS LIST					
FINISH MACHINE SURFACES DEBURR & BREAK ALL SHARP EDGES					
DO NOT SCALE DRAWING					
DRAWN J. ARMSTRONG DATE 15 JUL 19					
United States Department of Energy Jefferson Lab Thomas Jefferson National Accelerator Facility Newport News Virginia					
CRM SPALLATION NEUTRON SOURCE - PPU CAVITY STRING HELIUM INLET BAFFLE ASSY					
SIZE DWG. NO. 104211500-M8U-8200-A018 REV. -					
SCALE 1:2 USED ON ASSY NO. 104211500-M8U-8200-A002 SHEET 1 OF 1					



REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE/REVISER

- NOTES:
- CONSTRUCT IN ACCORDANCE WITH ASME B31.3.
FLUID SERVICE: NORMAL
DESIGN TEMPERATURE: 2-300K
DESIGN PRESSURE: 4 ATM DIFFERENTIAL
VENDOR SHALL SUBMIT MATERIAL CERTIFICATION,
INSPECTION AND TEST REPORTS.
 - CLEAN AND HANDLE PER JLAB SPEC 11141-S-0034.
 - VACUUM LEAK CHECK SHALL BE IN ACCORDANCE
WITH JLAB SPECIFICATION: 11141-S-0029
NO DETECTABLE LEAK GREATER THAN
2X10-10 STD CC OF HE/SEC.
 - DRAWING NUMBER (104211500-A018---)
TO BE ETCHED OR ENGRAVED IN APPROXIMATE
LOCATION USING MINIMUM .25 HIGH CHARACTERS.

1	5	-	3.25 OD X .25 THK CAP	316L STAINLESS STEEL	
1	4	-	3 IPS SCH 10 X 9.00IN LONG	ASTM A312 TP 316L	
1	3	-	BAFFLE-REDUCER	316L STAINLESS STEEL	
1	2	104211500-M8U-8200-A028	PIPE SEGMENT	-	
1	1	104211500-M8U-8200-A025	1.33 HALF NIPPLE TAPPED MOD	-	

QTY REQD	ITEM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION	NOTES
PARTS LIST					
FOR JLAB INTERNAL USE ONLY					
SEE ES&H MANUAL CHAPTER 6151 FOR PRESSURE AND VACUUM SYSTEMS SAFETY SUPPLEMENT AND WELDING AND BRAZING SUPPLEMENT					
WELD CLASS	PRESSURE/VACUUM CLASS				
	ASME B31.3				
CODE	PRESSURE SYSTEMS NUMBER				
	PS-CRM-18-001				
DIM & TOL PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ARE:			MATERIAL		
FRACTIONS DECIMAL ANGLES			SEE PARTS LIST		
± 1/8 ± .01 ± .50			THIRD ANGLE PROJECTION		
.XXX ± .005			FINISH MACHINE SURFACES UNLESS OTHERWISE NOTED		
DO NOT SCALE DRAWING			DEBURR & BREAK ALL SHARP EDGES		
DRAWN J. ARMSTRONG			DATE 16 JUL 19		
SCALE 1:2			UNITED STATES DEPARTMENT OF ENERGY		
USED ON ASSY NO. 104211500-M8U-8200-A002			SHEET 1 OF 1		

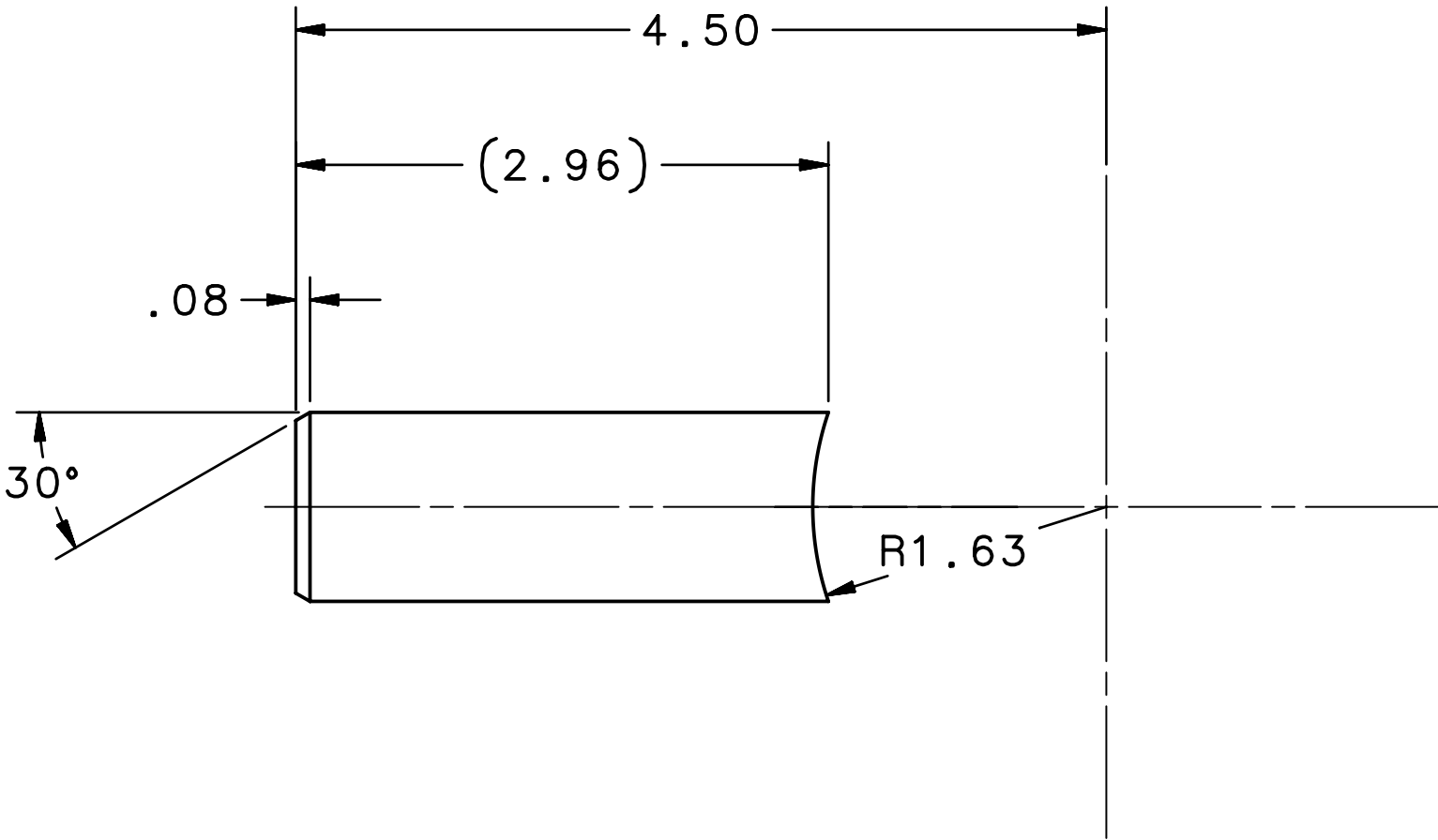
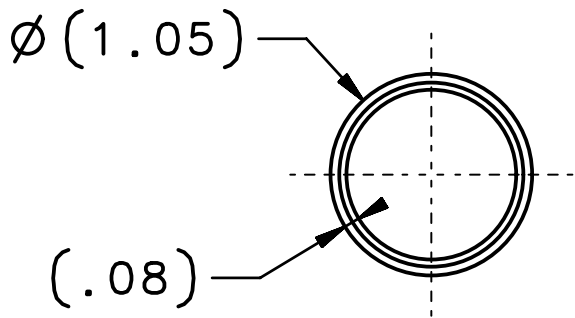
4

3

2

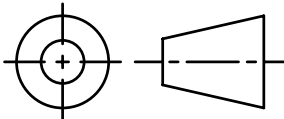
1

REVISION HISTORY			
ZONE	REV	DESCRIPTION	DATE/REVISER

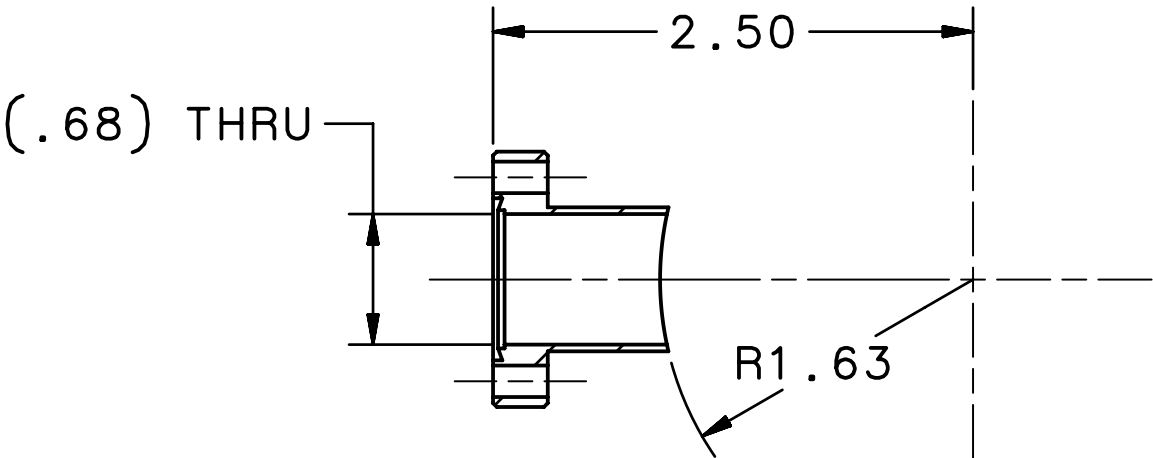
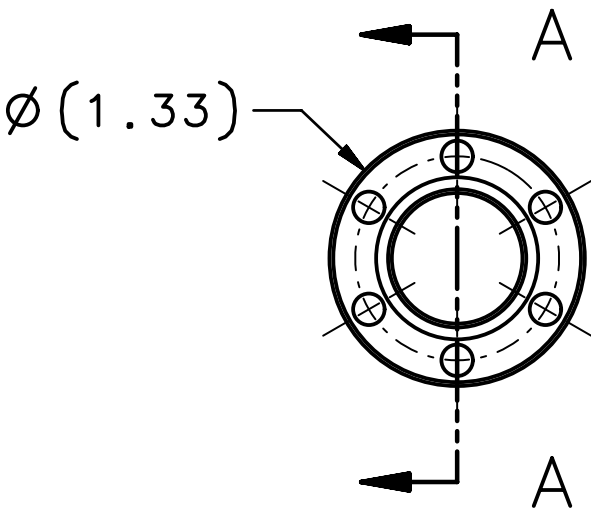


NOTES:

1. CLEAN AND HANDLE PER JLAB SPEC 11141-S-0034

DIM & TOL PER ASME Y14.5 2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± 1/8 .X ±.1 ± .50° .XX ±.01 .XXX ±.005		MATERIAL 3/4NPS SCH 10 ASTM A312 TP 316L		United States Department of Energy		 Jefferson Lab <i>Orinoss Jefferson National Accelerator Facility</i>		Newport News Virginia	
THIRD ANGLE PROJECTION		FINISH 125 UNLESS MACHINED SURFACES OTHERWISE ✓ NOTED DEBURR & BREAK ALL SHARP EDGES		CRM SPALLATION NEUTRON SOURCE - PPU CAVITY STRING INLET TUBE					
		DO NOT SCALE DRAWING		SIZE	DWG. NO.				REV.
		DRAWN J.ARMSTRONG		DATE 15JUL19		C	104211500-M8U-8200-A020		
				SCALE	1:1	USED ON ASSY NO. 104211500-M8U-8200-A018			SHEET 1 OF 1

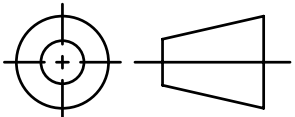
REVISION HISTORY		
REV	DESCRIPTION	DATE/REVISER

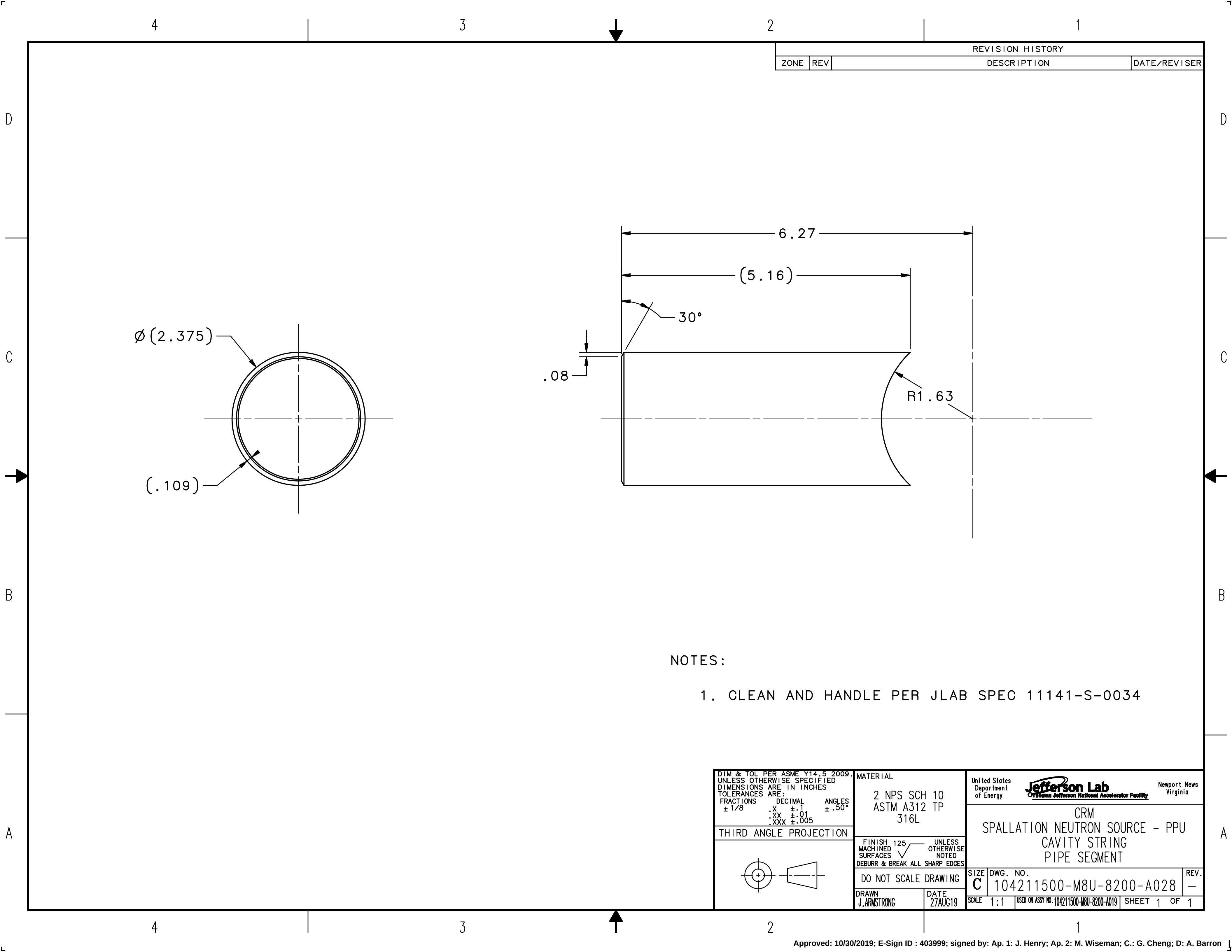


SECTION A-A

NOTES:

- CLEAN AND HANDLE PER JLAB SPEC 11141-S-0034.

DIM & TOL PER ASME Y14.5 2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: <table border="1"> <tr> <th>FRACTIONS</th> <th>DECIMAL</th> <th>ANGLES</th> </tr> <tr> <td>±1/8</td> <td>.X ±.1</td> <td>±.50°</td> </tr> <tr> <td></td> <td>.XX ±.01</td> <td></td> </tr> <tr> <td></td> <td>.XXX ±.005</td> <td></td> </tr> </table>		FRACTIONS	DECIMAL	ANGLES	±1/8	.X ±.1	±.50°		.XX ±.01			.XXX ±.005		MATERIAL MDC 401021 MOD 304 STAINLESS STEEL		United States Department of Energy  Newport News Virginia
FRACTIONS	DECIMAL	ANGLES														
±1/8	.X ±.1	±.50°														
	.XX ±.01															
	.XXX ±.005															
THIRD ANGLE PROJECTION 		FINISH 125 UNLESS MACHINED SURFACES OTHERWISE DEBURR & BREAK ALL SHARP EDGES NOTED		CRM SPALLATION NEUTRON SOURCE - PPU CAVITY STRING 1.33 HALF NIPPLE TAPPED MOD												
DO NOT SCALE DRAWING		SIZE DWG. NO. B 104211500-M8U-8200-A025	DATE 24JUL19	REV. -												
DRAWN J.ARMSTRONG		SCALE 1:1	USED ON ASSY NO. 104211500-M8U-8200-A017/A019	SHEET 1 OF 1												



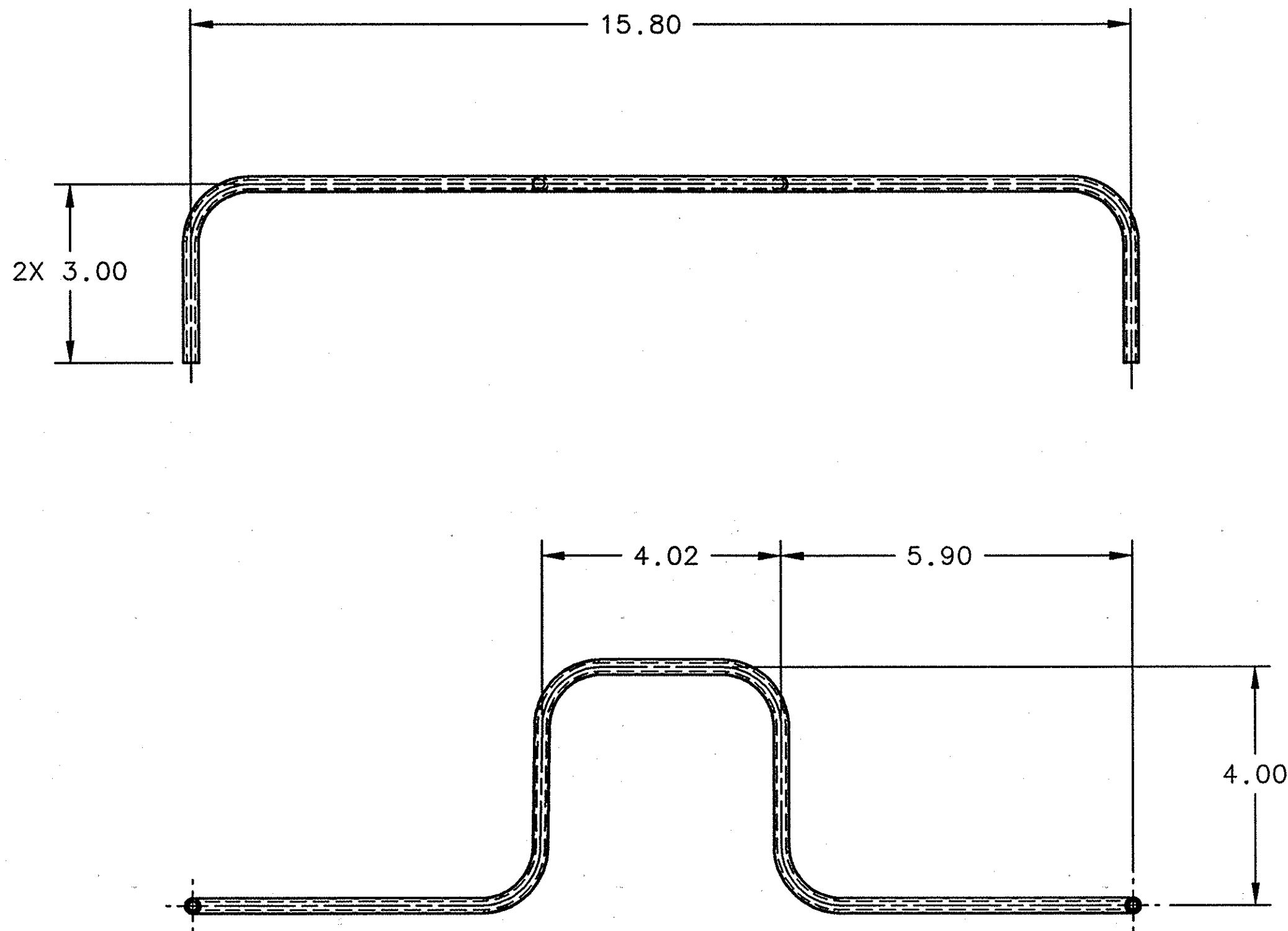
4

3

2

1

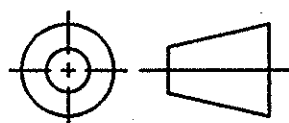
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
ALL	A	EXTENSIVE CHANGES, REVISED ENTIRE DRAWING. RG 21FEB02	7-2-02	DM
			7-3-02	2FD



NOTES:

- CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
- DEVELOPED LENGTH APPROXIMATELY 27.20 INCHES.
- CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

IDG



DIM & TOL PER ANSI Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMAL ANGLES
±N/A .XX ±.06 ±1°
.XXX ±N/A

MATERIAL
SEAMLESS STAINLESS STEEL 304
.250 O.D. X .049 WALL

FINISH 125 UNLESS OTHERWISE NOTED
DEBURR & BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

CADD I.D. NO.: I-DEAS
SNS DRAWING NUMBER
104100202-M8C-8200-A010-R00

APPROVALS DATE

DRAWN R. GETZ 28JAN02

CHECKED D. MACHIE 2/4/02

APPROVED EDWARD F. DALY 2/4/02

APPROVED EDWARD F. DALY 2/4/02

Jefferson Lab
Thomas Jefferson National Accelerator Facility
NEWPORT NEWS, VIRGINIA
UNITED STATES DEPARTMENT OF ENERGY

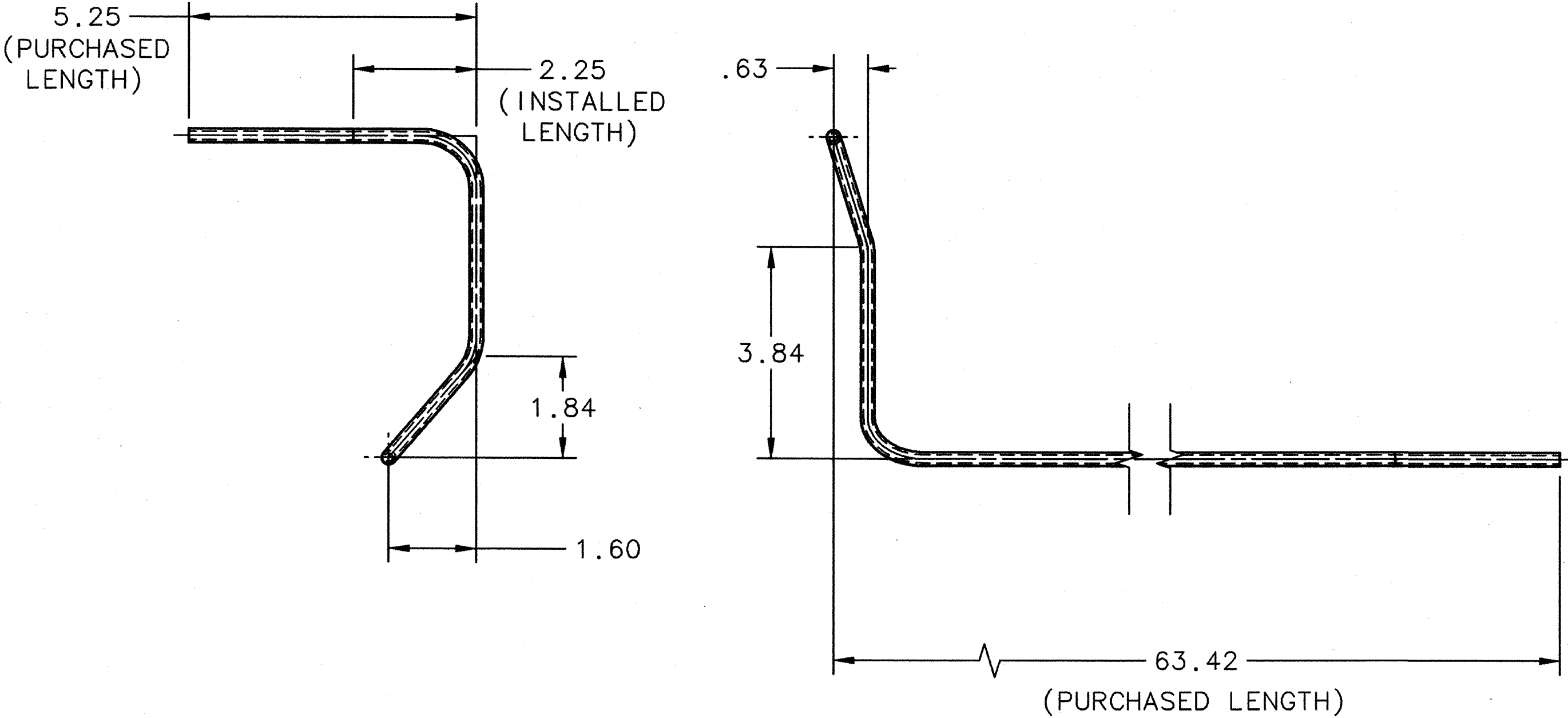
SPALLATION NEUTRON SOURCE
0.61 BETA CRYMODULE
CAVITY STRING
.25 TUBE-COOLING (SHORT) - DETAIL

SIZE DWG. NO. CRM9007000-1053 REV. A

SCALE 1:2 USED ON ASSY NO. CRM9007000-0000 SHEET 1 OF 1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ISOMETRIC VIEW



- NOTES:
- 1. CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
 - 2. DEVELOPED LENGTH APPROXIMATELY 73 INCHES.
 - 3. CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

DOCUMENT CONTROL STAMP 		DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ±.1 ± N/A .XX ±.06 .XXX ±N/A		TRACKING NO. SNS DRAWING NO.: 104110202-MBC-8200-A004-R00		 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY	
MATERIAL SEAMLESS STAINLESS STEEL 304 .250 O.D. X .049 WALL		THIRD ANGLE PROJECTION 		APPROVALS DRAWN J HENRY CHECKED D. W. C. W. C. W. APPROVED E. D. E. D. E. D. APPROVED G. H. G. H. G. H.	DATE 30OCT03 12/3/03 3 DEC 03 12/3/03	SPALLATION NEUTRON SOURCE 0.81 BETA CRYMODULE CAVITY STRING .25 O.D. TUBE - FLANGE INTERCEPT	
FINISH MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES		DO NOT SCALE DRAWING		SIZE C		DWG. NO. CRM-900-7000-3005	REV. -
				SCALE 1:2		USED ON ASSY NO. CRM-900-7000-0001	
						SHEET 1 OF 1	

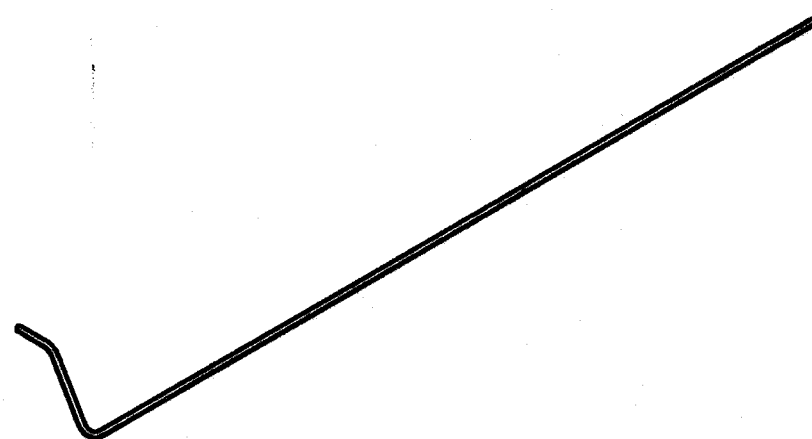
4

3

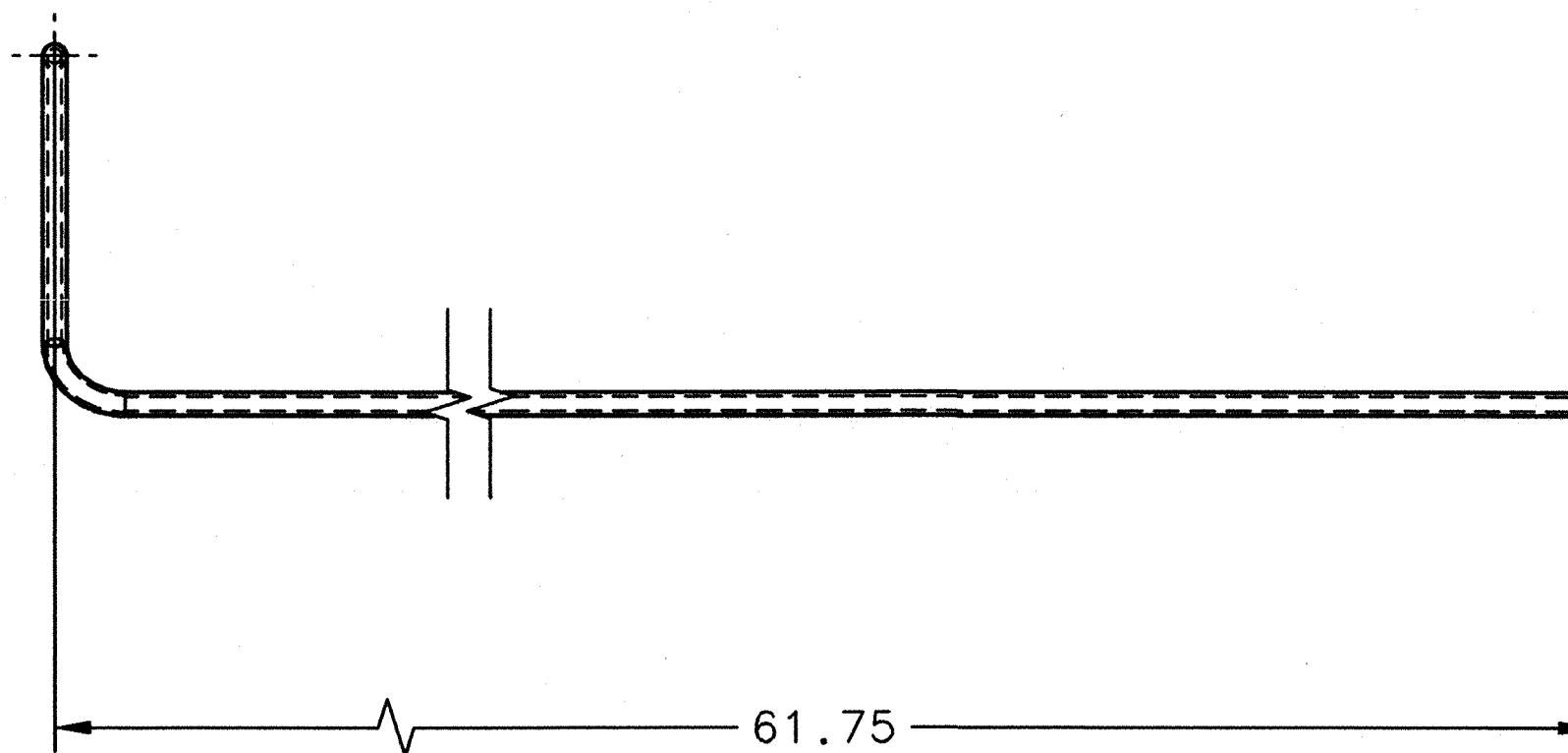
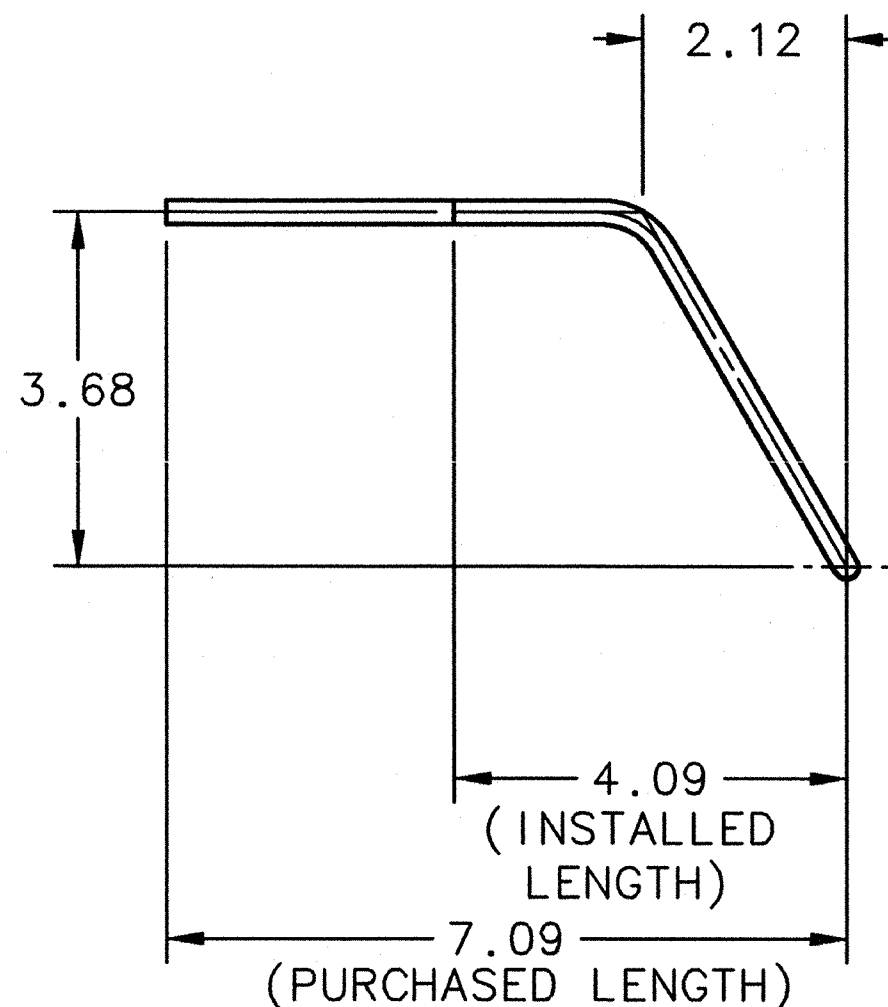
2

1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED



ISOMETRIC VIEW



NOTES:

1. CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
2. DEVELOPED LENGTH APPROXIMATELY 54.00 INCHES.
3. CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± 1° .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NUMBER 104110202-MBC-8200-A005-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY
MATERIAL SEAMLESS STAINLESS STEEL 304 .250 O.D. X .049 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. MACIIE APPROVED E. Salas APPROVED M. Williams	DATE 30OCT03 12/3/03 30OCT03 12/3/03
FINISH MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES	UNLESS OTHERWISE NOTED 125	SIZE C	DWG. NO. CRM-900-7000-3006
DO NOT SCALE DRAWING	SCALE 1:2	USED ON ASSY NO. CRM-900-7000-0001	SHEET 1 OF 1

4

3

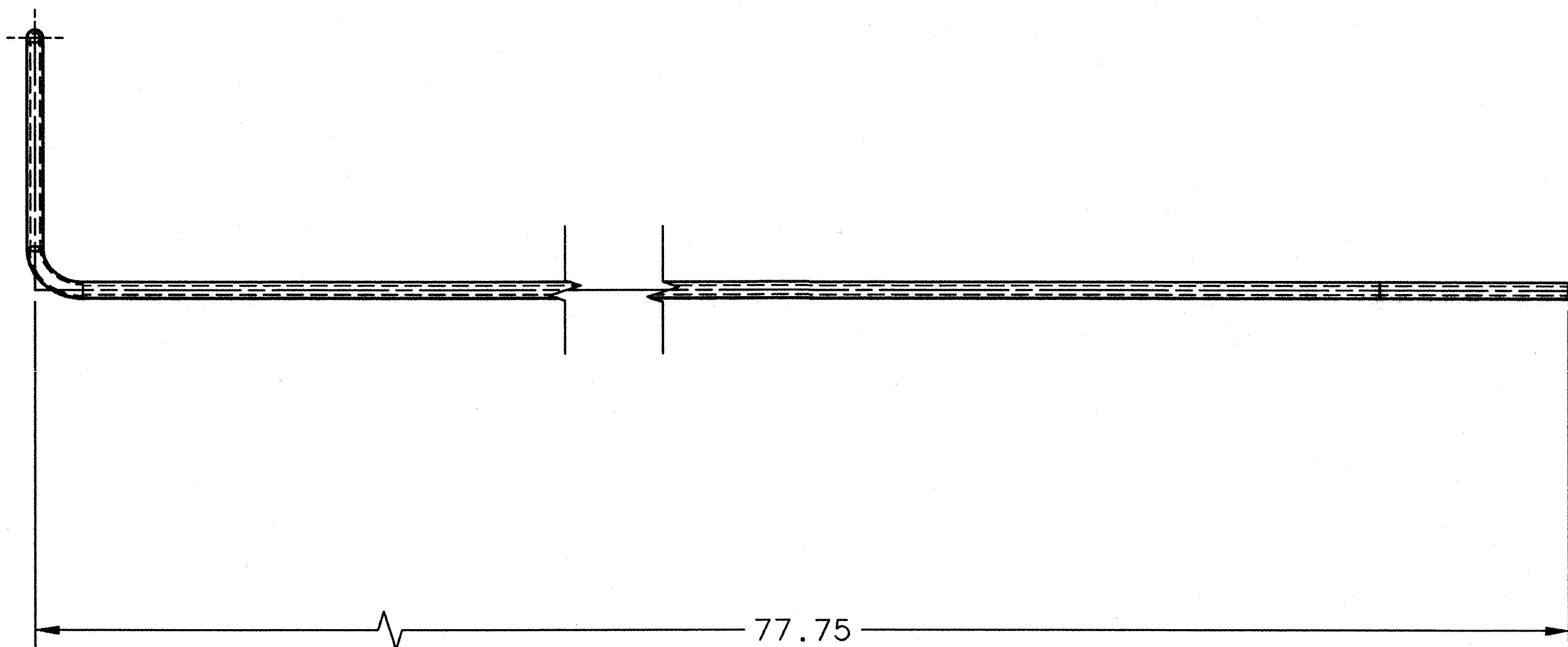
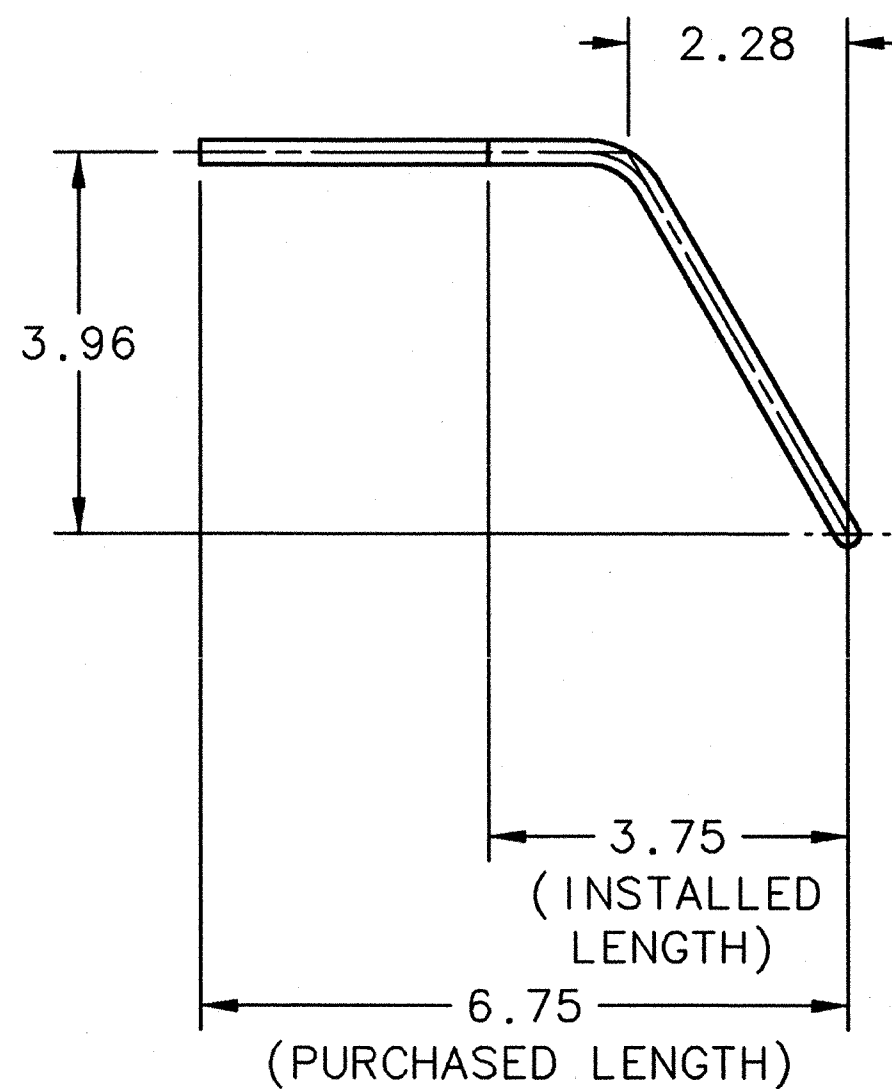
2

1

REVISION HISTORY

ZONE	REV	DESCRIPTION	DATE	APPROVED
------	-----	-------------	------	----------

ISOMETRIC VIEW



NOTES:

1. CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
2. DEVELOPED LENGTH APPROXIMATELY 69.00 INCHES.
3. CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

DOCUMENT CONTROL STAMP

IOG

MATERIAL
SEAMLESS STAINLESS STEEL 304
.250 O.D. X .049 WALL

FINISH
MACHINED
SURFACES
DEBURR & BREAK ALL SHARP EDGES

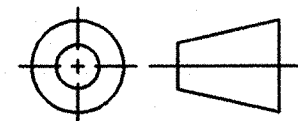
125

UNLESS
OTHERWISE
NOTED

DO NOT SCALE DRAWING

DIM & TOL PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMAL ANGLES
± N/A .X ± N/A ± N/A
.XX ± .06
.XXX ± N/A

THIRD ANGLE PROJECTION



TRACKING NO.

SNS DRAWING NUMBER
104110202-MBC-8200-A006-R00

APPROVALS

DRAWN

J HENRY

CHECKED

D. MACOIE

APPROVED

E. DALY

APPROVED

M. L. HAN

DATE

30OCT03

12/3/03

30OCT03

12/3/03

Thomas Jefferson National Accelerator Facility
NEWPORT NEWS, VIRGINIA
UNITED STATES DEPARTMENT OF ENERGY

SPALLATION NEUTRON SOURCE
0.81 HIGH BETA CRYMODULE
CAVITY STRING
.25 TUBE-COUPLER/FPC-2 - DETAIL

SIZE
C

DWG. NO.

CRM-900-7000-3007

REV.

-

SCALE 1:2

USED ON ASSY NO. CRM-900-7000-0001

SHEET 1 OF 1

4

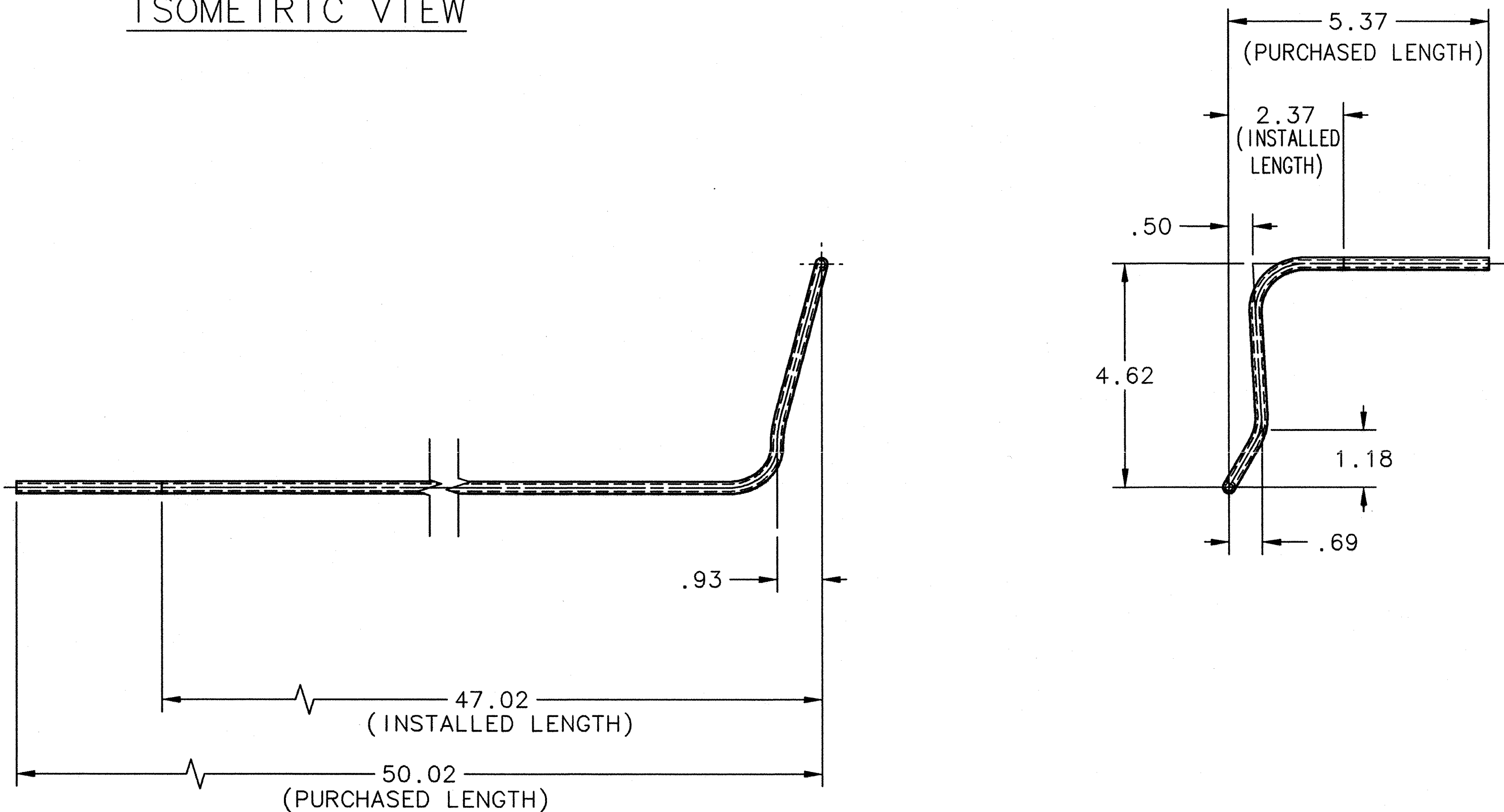
3

2

1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ISOMETRIC VIEW



NOTES:

1. CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
2. DEVELOPED LENGTH APPROXIMATELY 58.00 INCHES.
3. CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

DOCUMENT CONTROL STAMP



MATERIAL
SEAMLESS STAINLESS STEEL 304
.250 O.D. X .049 WALL

FINISH
MACHINED SURFACES
DEBURR & BREAK ALL SHARP EDGES

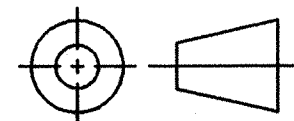
125

UNLESS
OTHERWISE
NOTED

DO NOT SCALE DRAWING

DIM & TOL PER ASME Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMAL ANGLES
± N/A .X ± N/A ± N/A
.XX ± .06
.XXX ± N/A

THIRD ANGLE PROJECTION



TRACKING NO.

SNS DRAWING NUMBER
104110202-MBC-8200-A007-R00

APPROVALS

DRAWN
J HENRY

CHECKED
D. WACHIE

APPROVED
E. J. HENRY

APPROVED
M. L. HENRY

DATE

30OCT03

11/12/03

11/18/03

12/2/03

Thomas Jefferson National Accelerator Facility
NEWPORT NEWS, VIRGINIA
UNITED STATES DEPARTMENT OF ENERGY

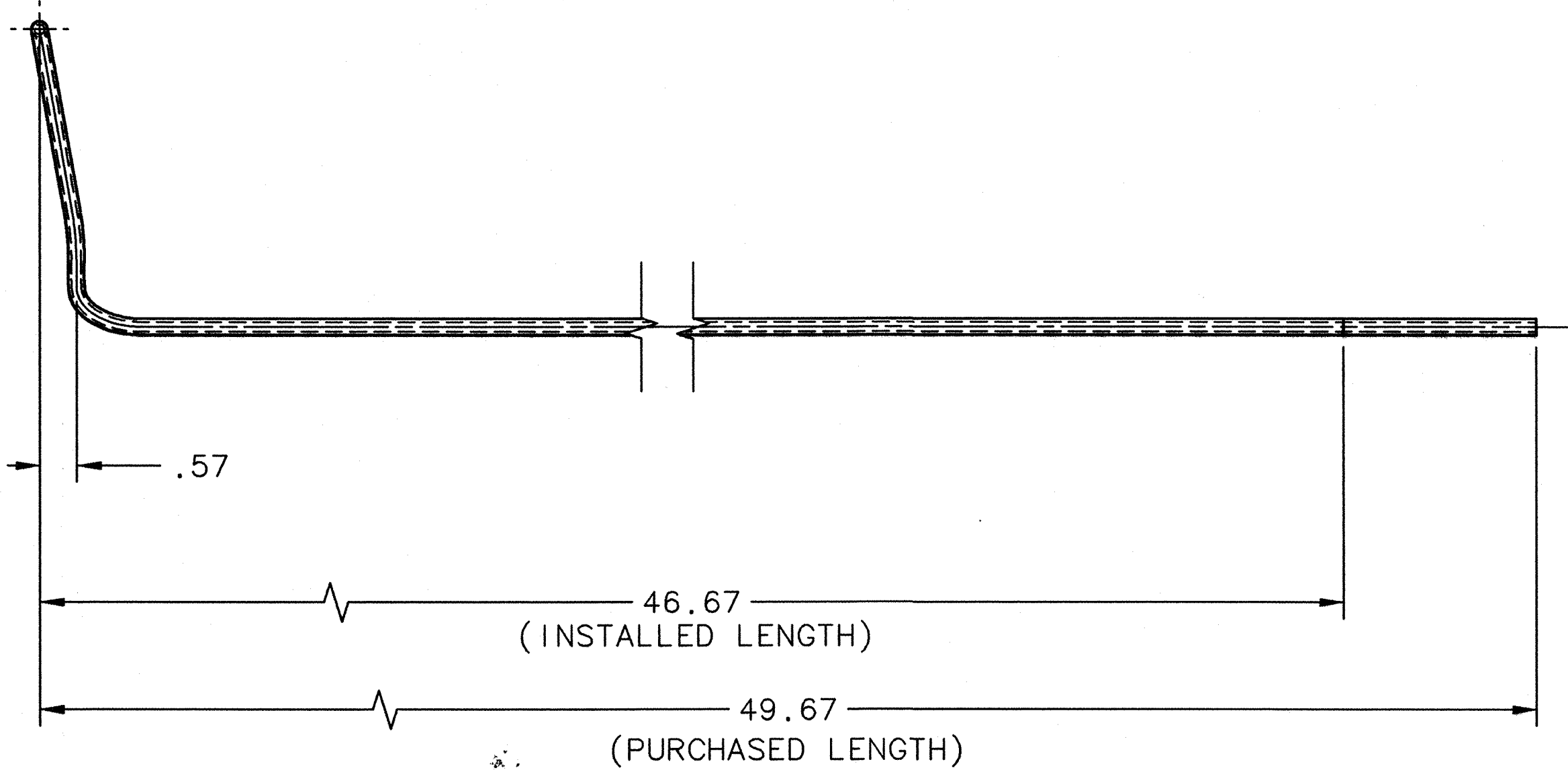
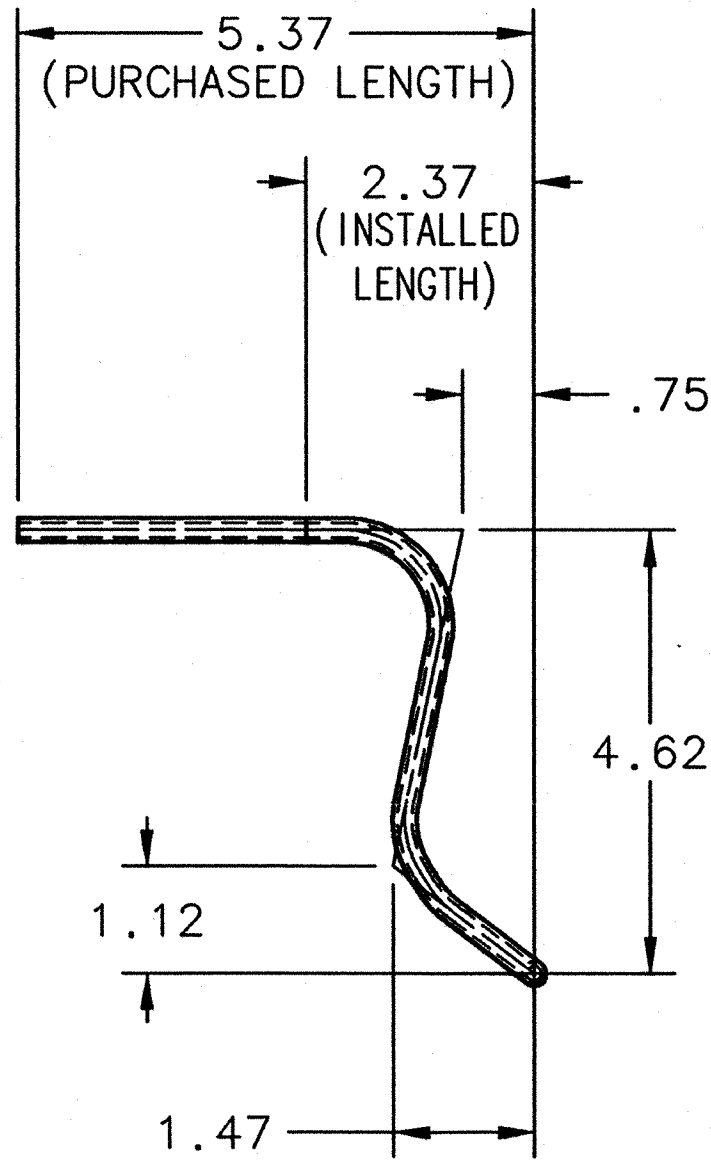
SPALLATION NEUTRON SOURCE
0.81 HIGH BETA CRYMODULE
CAVITY STRING
.25 TUBE-COOLING (FPC/OUT) - DETAIL

SIZE DWG. NO.
C CRM-900-7000-3008

SCALE 1:2 USED ON ASSY NO. CRM-900-7000-0001 SHEET 1 OF 1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ISOMETRIC VIEW



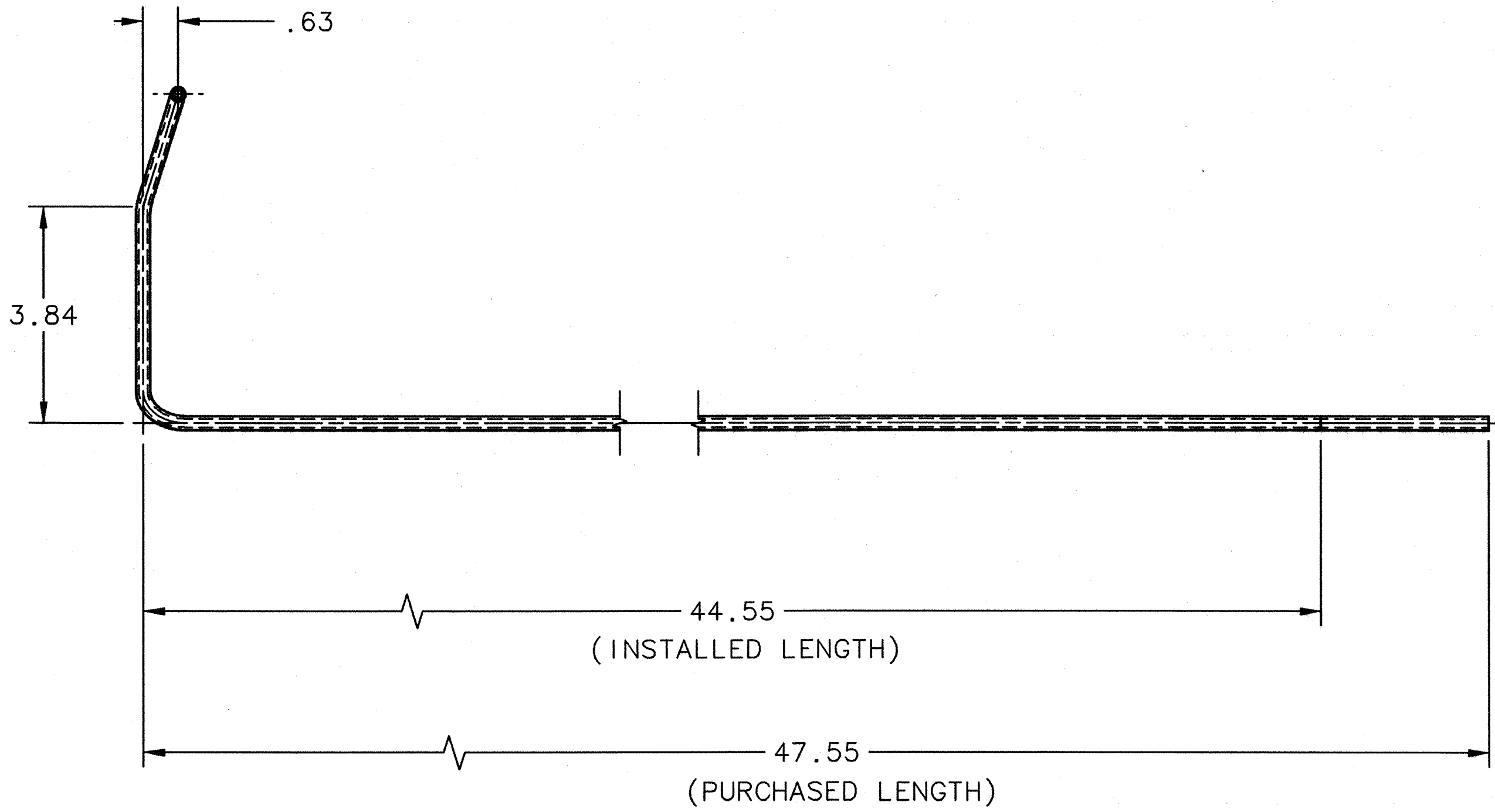
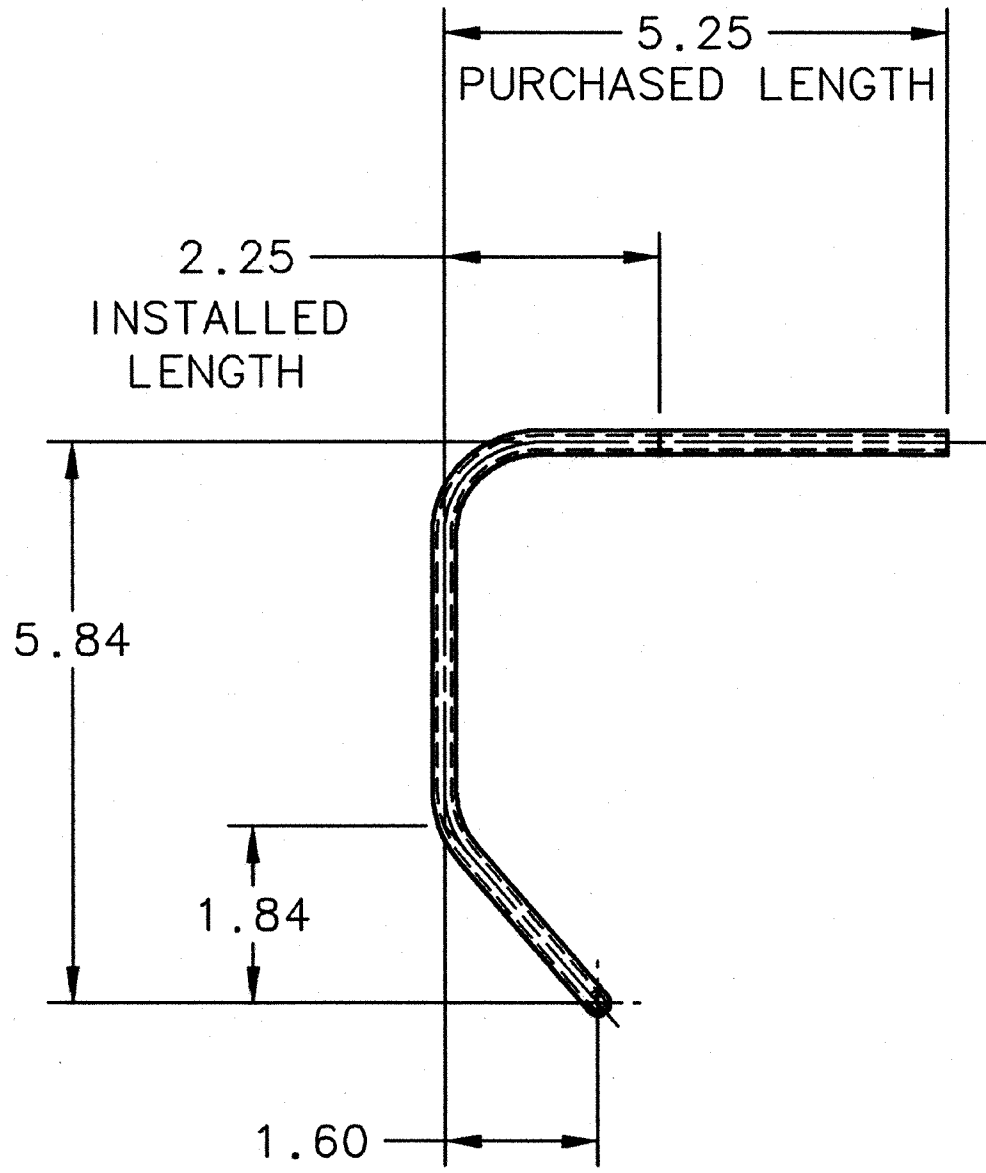
NOTES:

- 1. CLEAN AND HANDLE PER TJNAF SPEC: 11141-S-0034.
- 2. DEVELOPED LENGTH APPROXIMATELY 58 INCHES.
- 3. CENTERLINE BEND RADIUS TO BE 1.00 UNLESS OTHERWISE SPECIFIED.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NUMBER 104110202-MBC-8200-A008-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY
MATERIAL SEAMLESS STAINLESS STEEL 304 .250 O.D. X .049 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. MACCUBB APPROVED [Signature] APPROVED [Signature]	DATE 30OCT03 11/10/03 11/18/03 12/2/03
FINISH MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES 125 UNLESS OTHERWISE NOTED	DO NOT SCALE DRAWING	SPALLATION NEUTRON SOURCE 0.81 BETA CRYMODULE CAVITY STRING .25 TUBE-COOLING (FPC/OUT) - DETAIL	
		SIZE C DWG. NO. CRM-900-7000-3009 REV. - SCALE 1:2 USED ON ASSY NO. CRM-900-7000-0001 SHEET 1 OF 1	

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ISOMETRIC VIEW



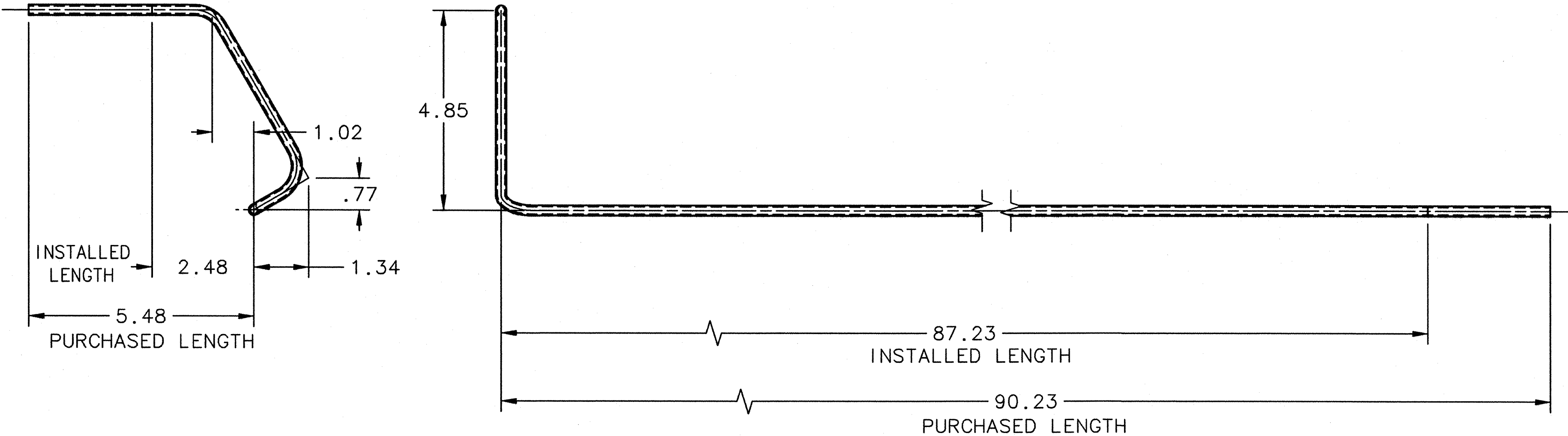
NOTES

- CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0034.
- DEVELOPED LENGTH APPROXIMATELY 59 INCHES.
- CENTERLINE BEND RADIUS SHALL BE 1.00.

DOCUMENT CONTROL STAMP 		DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A		TRACKING NO. SNS DRAWING NO: 104110202-MBC-8200-A009-R00	
MATERIAL SEAMLESS STAINLESS STEEL 304 .250 O.D. X .049 WALL		THIRD ANGLE PROJECTION 		APPROVALS DRAWN J HENRY CHECKED D. HENRY APPROVED [Signature] APPROVED [Signature]	DATE 01OCT03 11/18/03 12/2/03
FINISH MACHINED SURFACES 125 UNLESS OTHERWISE NOTED DEBURR & BREAK ALL SHARP EDGES		DO NOT SCALE DRAWING		Jefferson Lab Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY SPALLATION NEUTRON SOURCE 0.81 BETA CRYOMODULE CAVITY STRING .25 TUBE FLANGE INTERCEPT	
				SIZE C DWG. NO. CRM-900-7000-3010 SCALE 1:2 USED ON ASSY NO. CRM-900-7000-0001	REV. - SHEET 1 OF 1

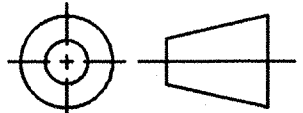
REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED

ISOMETRIC VIEW



NOTES

- CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0034.
- DEVELOPED LENGTH APPROXIMATELY 100 INCHES.
- CENTERLINE BEND RADIUS SHALL BE 1.00.

DOCUMENT CONTROL STAMP		DIM & TOL PER ASME Y14.5 . UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A .XX ± .06 XXX ± N/A		TRACKING NO. SNS DRAWING NO.: 104110202-MBC-8200-A010-R00		Jefferson Lab Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY					
		THIRD ANGLE PROJECTION		APPROVALS		DATE		SPALLATION NEUTRON SOURCE 0.81 BETA CRYMODULE CAVITY STRING .25 OD COUPLER TUBING			
MATERIAL SEAMLESS STAINLESS STEEL 304 .25 O.D. X .049 WALL				DRAWN J HENRY		17OCT03		SIZE DWG. NO. REV. C CRM-900-7000-3011 - SCALE 1:2 USED ON ASSY NO. CRM-900-7000-0001 SHEET 1 OF 1			
FINISH MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES				CHECKED D. MACFARLANE		11/11/03					
				APPROVED E. M. J. J. J.		11/10/03					
DO NOT SCALE DRAWING				APPROVED J HENRY		12/2/03					

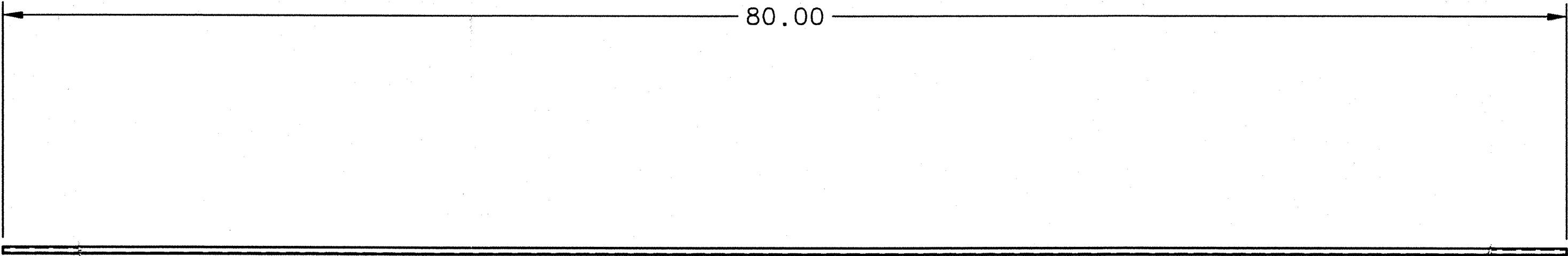
4

3

2

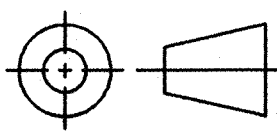
1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTES

1. CLEAN AND HANDLE PER TJANF SPECIFICATION 11141-S-0034.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NO: 104110202-MBC-8200-A011-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY	
MATERIAL SEAMLESS STAINLESS STEEL 304 .250 O.D. X .049 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. MACGEE APPROVED E. DELG APPROVED Thalia G...	DATE 01OCT03 12/3/03 3 DEC 03 3/DEC/03	SPALLATION NEUTRON SOURCE 0.81 BETA CRYMODULE CAVITY STRING .25 COUPLER TUBING
FINISH MACHINED SURFACES 125 ✓ UNLESS OTHERWISE NOTED DEBURR & BREAK ALL SHARP EDGES	DO NOT SCALE DRAWING	SIZE C	DWG. NO. CRM-900-7000-3012	REV. -
		SCALE 1:4	USED ON ASSY NO. CRM-900-7000-0001	SHEET 1 OF 1

4

3

2

1

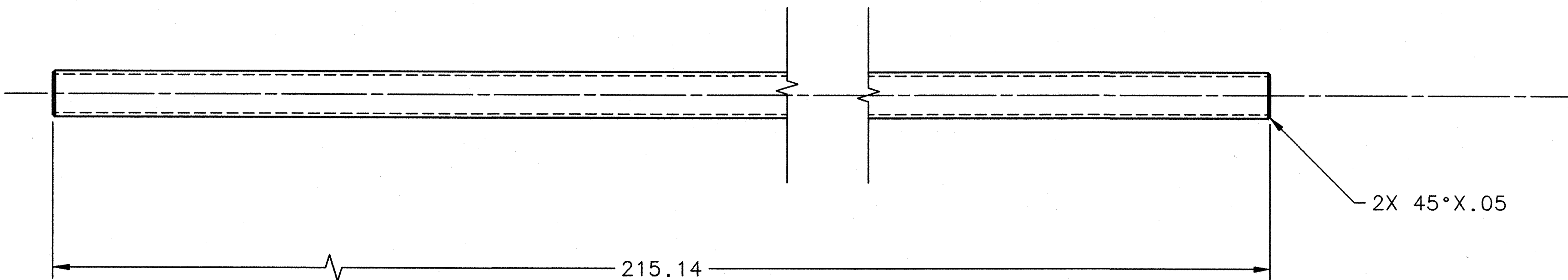
4

3

2

1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTES

1. CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0034.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NO: 104110202-MBC-8200-A012-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY
MATERIAL 304 STAINLESS STEEL SEAMLESS 3/4 IPS SCH 10S .083 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. MACPHE APPROVED Edwin APPROVED Munku	DATE 01OCT03 11/10/03 11/10/03 12/4/03
FINISH MACHINED SURFACES DEBURR & BREAK ALL SHARP EDGES	UNLESS OTHERWISE NOTED 125 ✓ UNLESS OTHERWISE NOTED	SIZE C	DWG. NO. CRM-900-7000-3013
DO NOT SCALE DRAWING	SCALE 1:2	USED ON ASSY NO. CRM-900-7000-0001	SHEET 1 OF 1

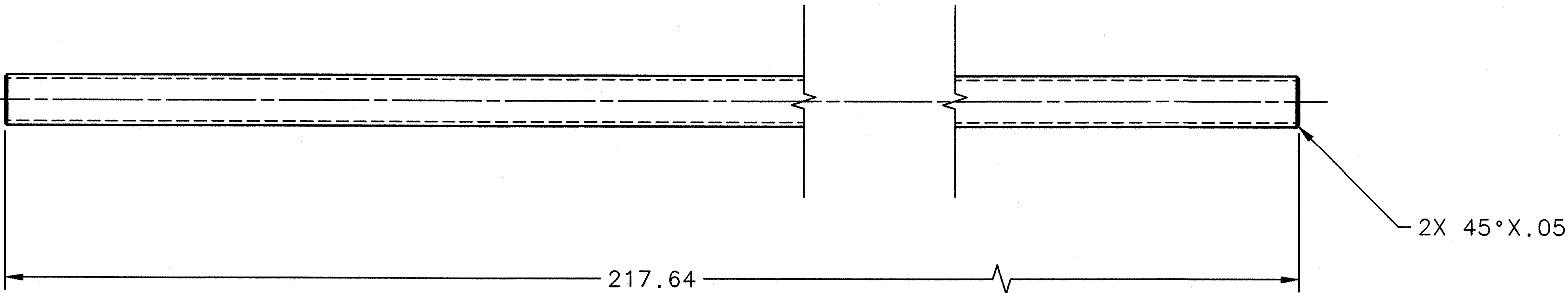
4

3

2

1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTES

1. CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0034.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NO: 104110202-MBC-8200-A013-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY
MATERIAL 304 STAINLESS STEEL SEAMLESS 3/4 IPS SCH 10S .083 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. WACHIE APPROVED [Signature] APPROVED [Signature]	DATE 01OCT03 11/10/03 12/2/03
FINISH MACHINED SURFACES 125 DEBURR & BREAK ALL SHARP EDGES UNLESS OTHERWISE NOTED	DO NOT SCALE DRAWING	SIZE C	DWG. NO. CRM-900-7000-3014
		SCALE 1:2	USED ON ASSY NO. CRM-900-7000-0001
		SHEET 1 OF 1	REV. -

4

3

2

1

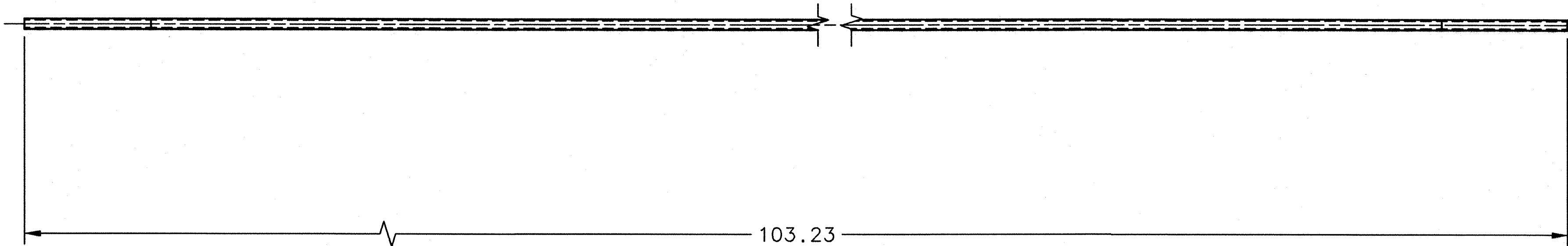
4

3

2

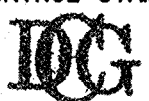
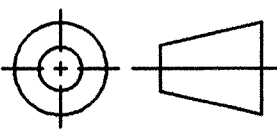
1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED



NOTES

1. CLEAN AND HANDLE PER TJNAF SPECIFICATION 11141-S-0034.

DOCUMENT CONTROL STAMP 	DIM & TOL PER ASME Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMAL ANGLES ± N/A .X ± N/A ± N/A .XX ± .06 .XXX ± N/A	TRACKING NO. SNS DRAWING NO.: 104110202-MBC-8200-A014-R00	 Thomas Jefferson National Accelerator Facility NEWPORT NEWS, VIRGINIA UNITED STATES DEPARTMENT OF ENERGY	
MATERIAL SEAMLESS STAINLESS STEEL 304 .25 O.D. X .049 WALL	THIRD ANGLE PROJECTION 	APPROVALS DRAWN J HENRY CHECKED D. WACHIE APPROVED E. Dyer APPROVED M. A. H. H.	DATE 17OCT03 12/3/03 3DEC03 12/3/03	SPALLATION NEUTRON SOURCE 0.81 BETA CRYMODULE CAVITY STRING .25 OD COUPLER TUBING
FINISH MACHINED SURFACES 125 DEBURR & BREAK ALL SHARP EDGES UNLESS OTHERWISE NOTED	DO NOT SCALE DRAWING	SIZE C	DWG. NO. CRM900-7000-3015	REV. -
		SCALE 1:2	USED ON ASSY NO. CRM-900-7000-0001	SHEET 1 OF 1

4

3

2

1

4

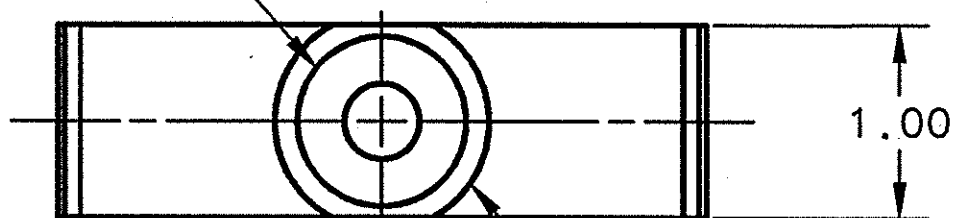
3

2

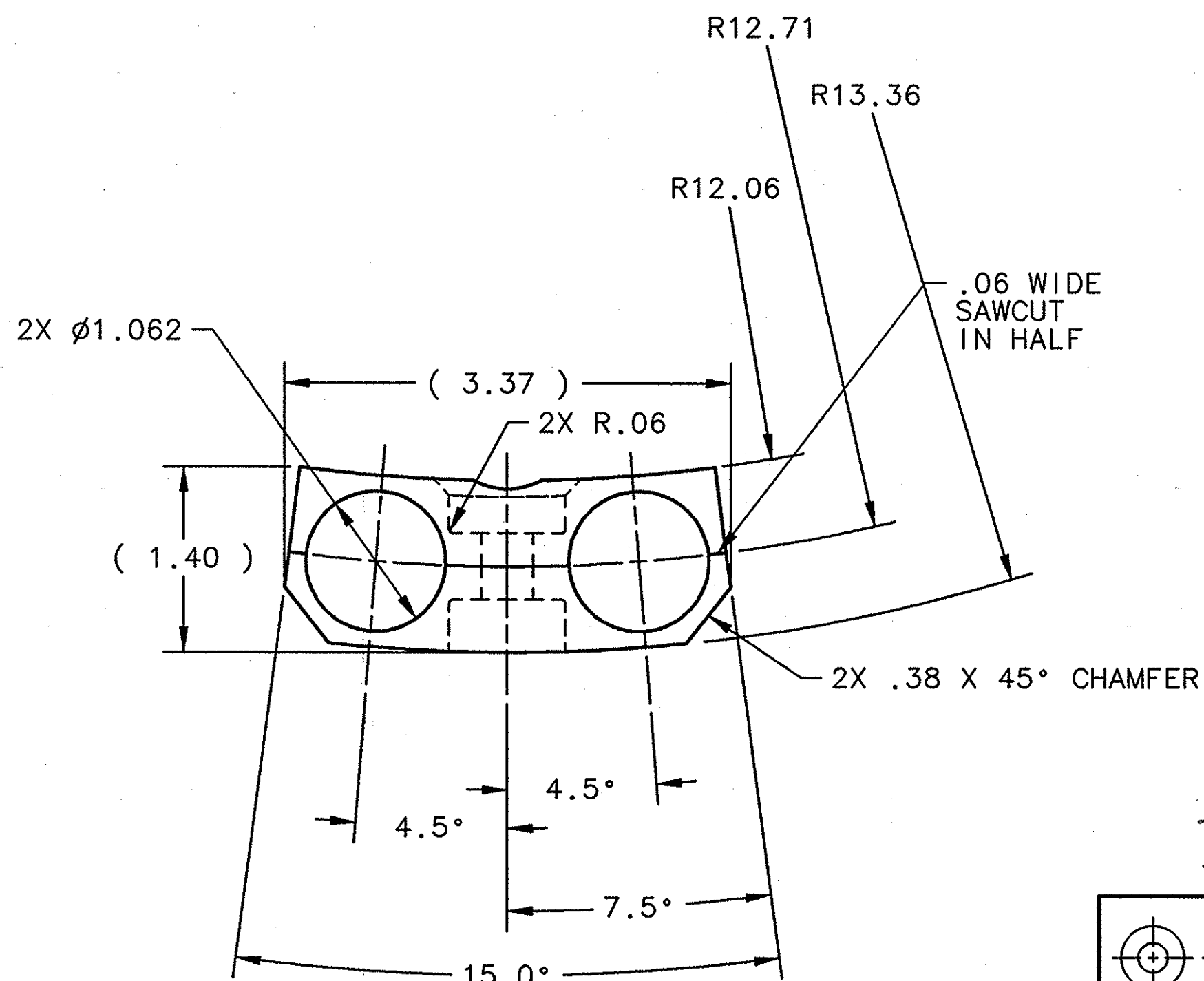
1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
A-1	A	REMOVED CR FROM MATERIAL. CHANGED NEXT ASSY.	6-7-02	DM
A-2		WAS CRM9007020-0000/0001.	6-12-02	EGP
RG 07JUN02				

2X ϕ .391 THRU, ϕ .88 C'BORE X .40 DEEP



.12 X 45° CHAMFER
TOP ONLY



DIM & TOL PER ANSI Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMAL ANGLES
±N/A .XX ±.01 ±1°
XXX ±.005

MATERIAL
FIBERGLASS
GRADE G-11

FINISH 125
DEBURR & BREAK ALL SHARP EDGES

DO NOT SCALE DRAWING

CADD I.D. NO.: I-DEAS
SNS DRAWING NUMBER
104100102-M8C-8200-A026-R00

APPROVALS	DATE
DRAWN R. BISHOP	090CT00
CHECKED D. MACHIE	11/6/00
APPROVED EDWARD F. DALY	11/7/00
APPROVED W. SCHNEIDER	11/6/00

Jefferson Lab
Thomas Jefferson National Accelerator Facility
NEWPORT NEWS, VIRGINIA
UNITED STATES DEPARTMENT OF ENERGY

SPALLATION NEUTRON SOURCE
0.61 BETA CRYMODULE
HELIUM VESSEL
3/4 INCH PIPE CLAMP-DETAIL

SIZE	DWG. NO.	REV.
C	CRM-900-7020-1026	A
SCALE	1:1	USED ON ASSY NO. CRM-900-7000-0000/0001
SHEET	1	OF 1

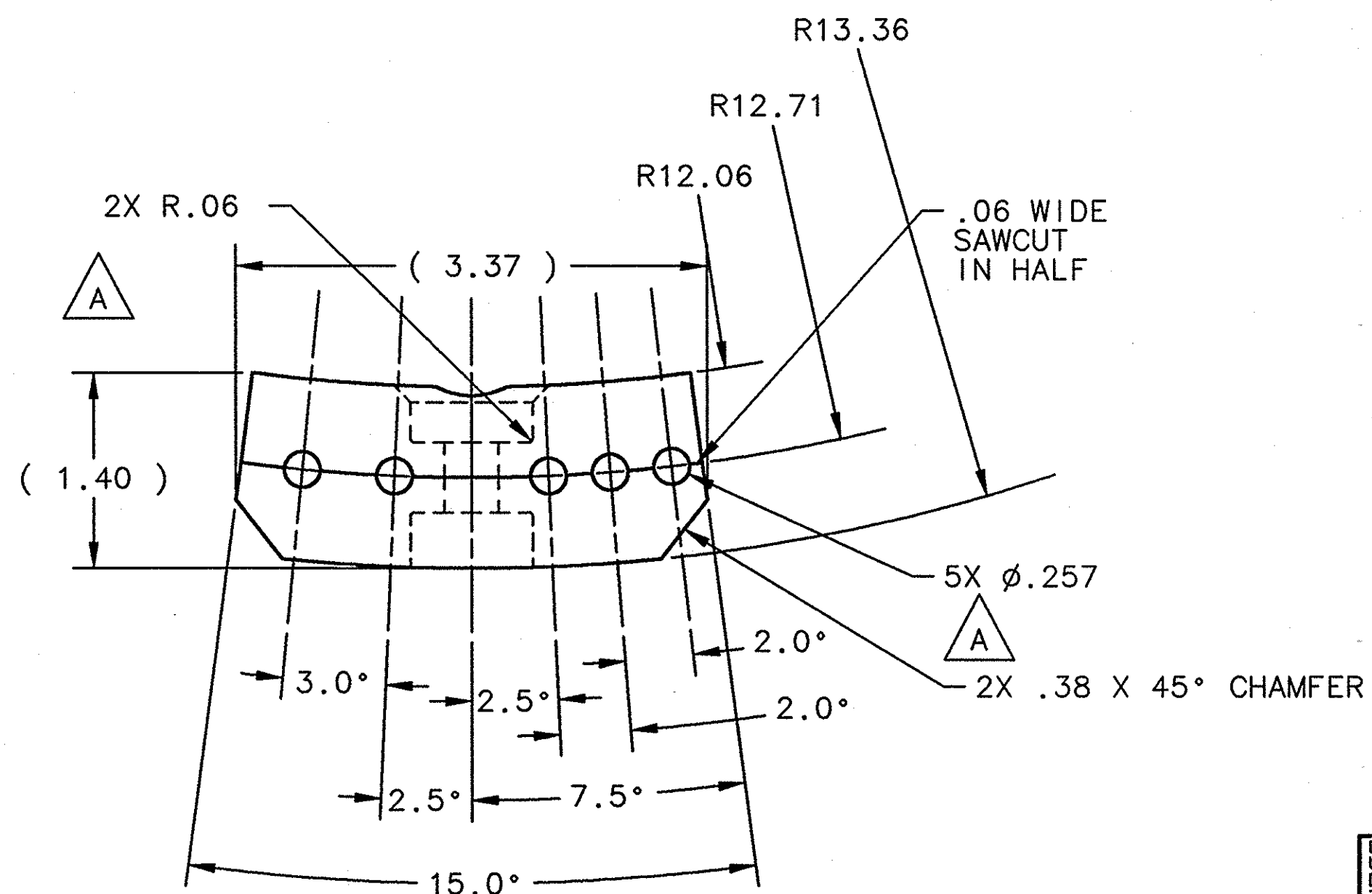
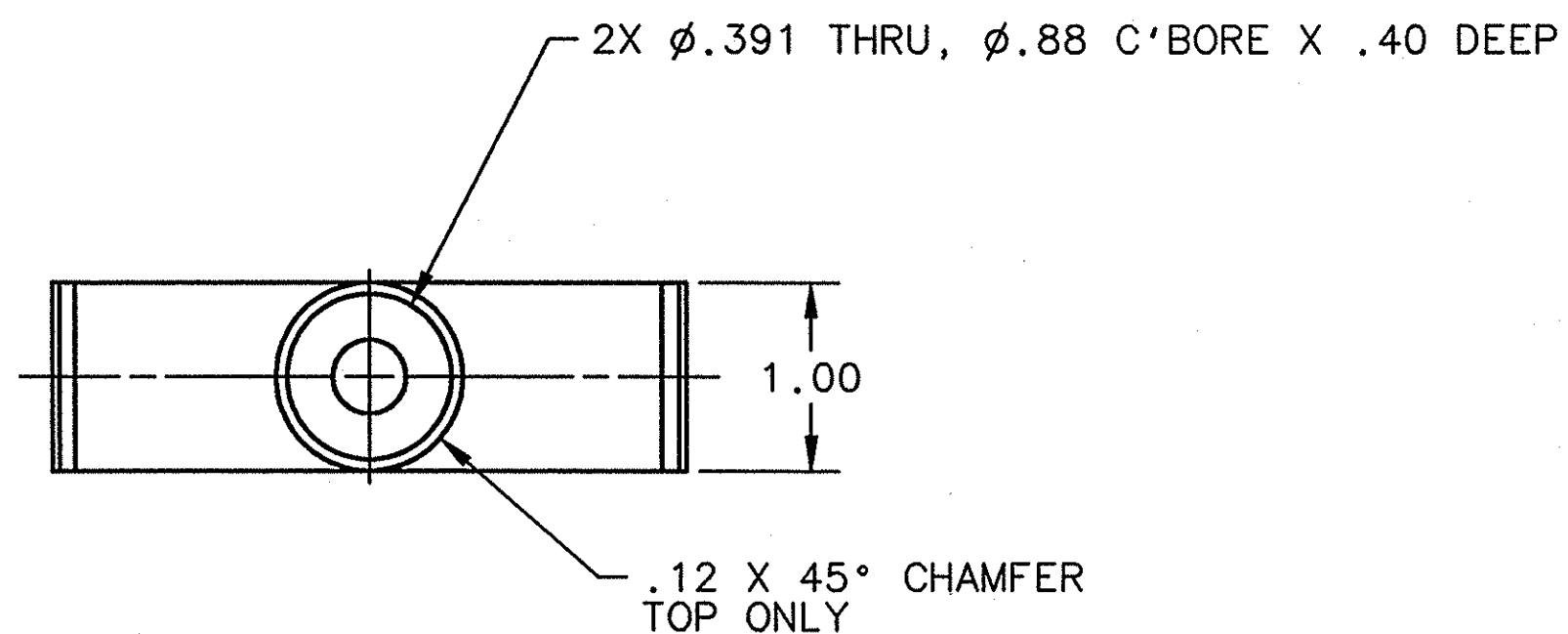
4

3

2

1

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B4	A	CHANGED ϕ .844 HOLE TO ϕ .257 HOLE RG12MAR01	3-15-01	D.M.
A1	B	CHANGED NEXT ASSEMBLY, WAS CRM9007020-0000/0001. RG 23SEP02	9-25-02	dm
			9-25-02	sg



DIM & TOL PER ANSI Y14.5
UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE:
FRACTIONS DECIMAL ANGLES
±N/A .XX ±.01 ±1°
.XXX ±.005

MATERIAL
FIBERGLASS
GRADE G-11

FINISH 125
UNLESS OTHERWISE NOTED
DEBURR & BREAK ALL SHARP EDGES
DO NOT SCALE DRAWING

CADD I.D. NO.: I-DEAS
SNS DRAWING NUMBER
104100102-M8C-8200-A027-R00

APPROVALS	DATE
DRAWN R. BISHOP	090CT00
CHECKED D. MACHIE	11/6/00
APPROVED EDWARD F. DALY	11/7/00
APPROVED W. SCHNEIDER	11/6/00

Jefferson Lab
Thomas Jefferson National Accelerator Facility
NEWPORT NEWS, VIRGINIA
UNITED STATES DEPARTMENT OF ENERGY

SPALLATION NEUTRON SOURCE
0.61 BETA CRYOMODULE
HELIUM VESSEL
1/4 INCH TUBE CLAMP-DETAIL

SIZE C	DWG. NO. CRM-900-7020-1027	REV. B
SCALE 1:1	USED ON ASSY NO. CRM-900-7000-0000/0001	SHEET 1 OF 1