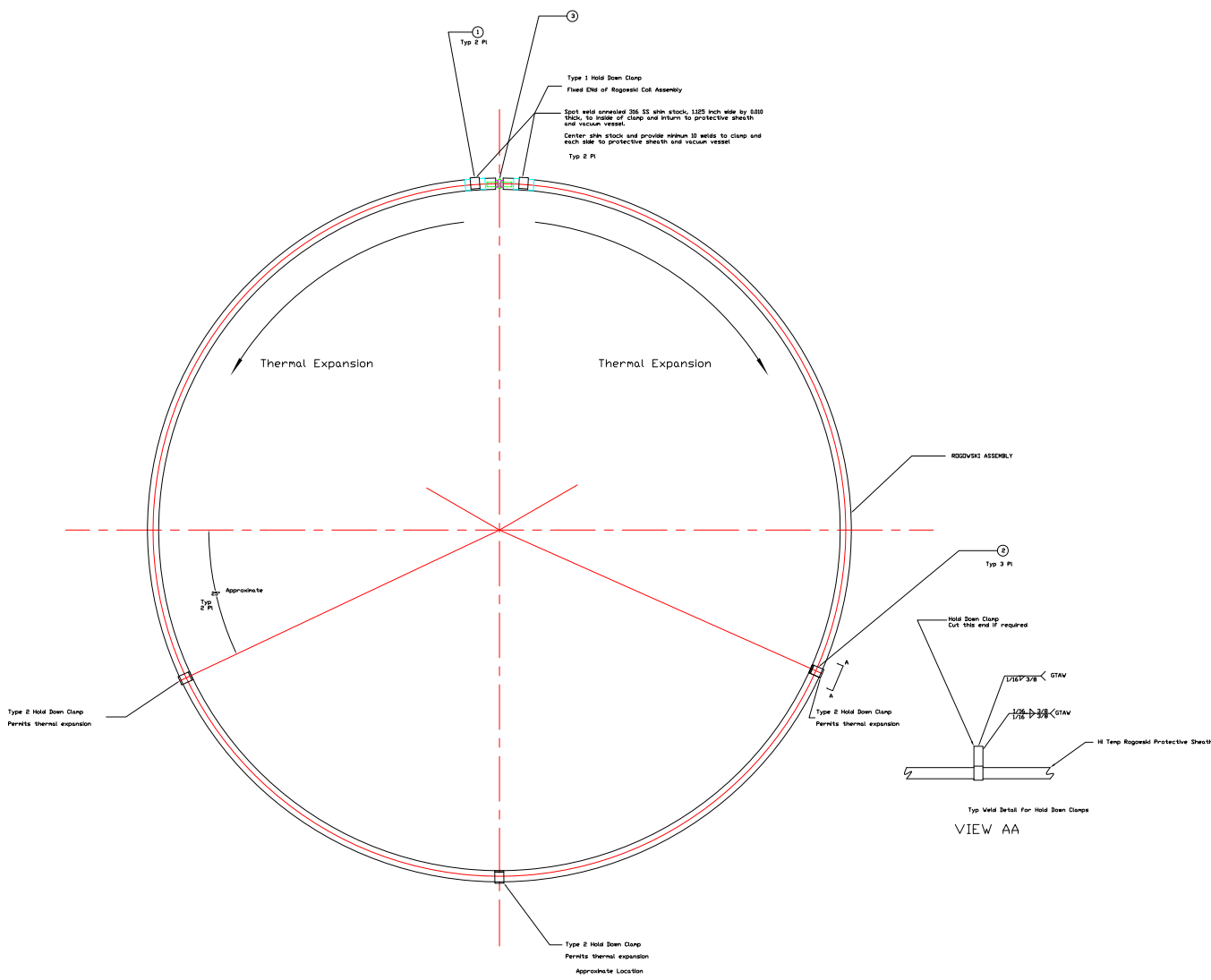


13	14	15
NO.	REVISION	BY CH SUP APPROVED DATE

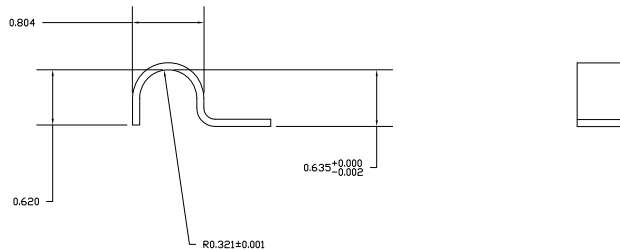
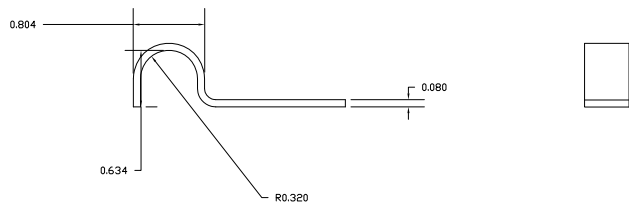
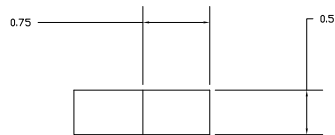
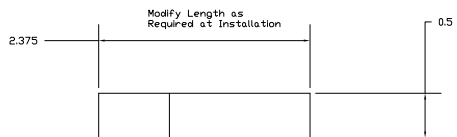


- NOTES:
1. Install three Rogowski Coil Assemblies, 120 degree apart, one on each of the 3 VV segments on the outer surface and at the end port. The protection is standing outside the machine flange panels, looking at the RB port, with the vacuum vessel port 12 oriented vertically, top flange up, install on the left weld flange.
 2. Add 0.010 inch thick shim stock between the Rogowski protective sheath and crossed external flux loop and spot weld to the vacuum vessel. This will act to protect the coil ends.
 3. Nondet end fixture, one Rogowski Coil on VV1 to use Inconel with Lactoflux #3 coating (0.001 inch \pm) by General Magnetics, and two Rogowski coils on VV2 and VV3 to use Zircon.
 4. Position nondet ends against the electric end fitting.
 5. Per project requirements, Rogowski Coil Components, magnetic permeability ≤ 100 .

Weld Notes:
 Welding shall be performed in accordance with the requirements of FPPL Procedure ENG 037.
 Visual inspection shall be performed in accordance with the acceptance criteria of AWS D1.6

RELEASED FOR FABRICATION / INSTALLATION
 FPPL Drafting

03	02	01	PART NO.	ROGOWSKI COIL ASSEMBLY	DRAWING NO.	THIS DWG SH 1
COMPUTER GENERATED DRAWING MANUAL CHANGES NOT PERMITTED			NOMENCLATURE OR DESCRIPTION		PRINCETON PLASMA PHYSICS LABORATORY PRINCETON UNIVERSITY NATIONAL COMPACT STELLARATOR EXPERIMENT HIGH TEMPERATURE ROGOWSKI COIL	
UNCHECKED			DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED		SHEET 1 OF 2	
DO NOT WRITE DIMENSIONS IN DIMENSION LINES			SCALE: TELEPHONICS NON-COMMERCIAL		DWG. FILE: se 310-050	
APPROVED: L. DUBOK DATE: 04/15/2000			DRAWN: L. DUBOK		SHEET 1 OF 2 REV 0	

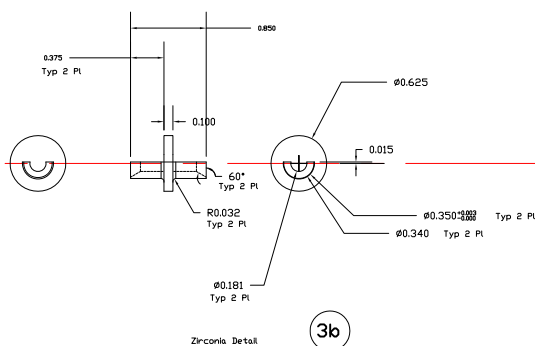
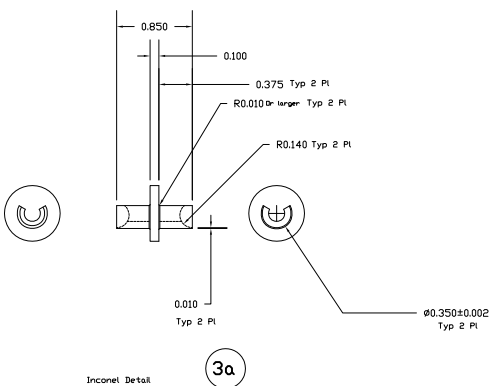


Type 2
Middle Supports

Type 1
Mandrel Ends

(2)

(1)



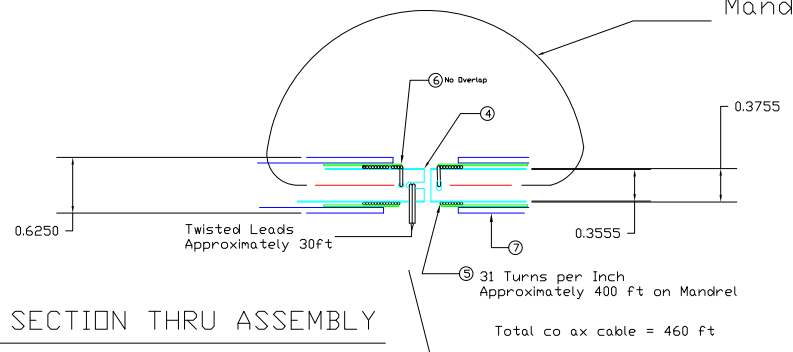
**RELEASED FOR
FABRICATION / INSTALLATION**
PPPL Drafting

Q3	Q2	Q1	PART NO.	NOMENCLATURE OR DESCRIPTION	DRAWING NO.	INTERNAL
1	Sh		MANDREL END ALIGNMENT FITTING	THIS DWD SH 2		THIS DWD SH 2
2	H		HOLD DOWN CLAMP TYPE 2	THIS DWD SH 2		MANDREL END
3	H		HOLD DOWN CLAMP TYPE 1	THIS DWD SH 2		MANDREL END
			SUB ASSEMBLY	THIS DWD SH 2		
COMPUTER GENERATED DRAWING						
MANUAL CHANGES NOT PERMITTED						
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED						
PRINCETON PLASMA PHYSICS LABORATORY						
NATIONAL COMPACT STELLARATOR EXPERIMENT						
HIGH TEMPERATURE ROGOWSKI COIL						
DRAWN BY: J. L. WRIGHT / CHECKED BY: J. L. WRIGHT						
SCALE: TELEPHONE: NON-CUMULATIVE						
MATERIALS: INCONEL / ZIRCONIA						
FINISHES: POLISHED / BLANK						
APPROVED: _____ DATE: _____						
DRAWN: J. L. WRIGHT / CHECKED: J. L. WRIGHT						
SHEET 2 OF 3						
REV 0						

WELDING ENGINEER: _____
 NEXT ASSEMBLY: _____
 APPROVED: _____ DATE: _____
 DRAWN: J. L. WRIGHT / CHECKED: J. L. WRIGHT
 SHEET 2 OF 3
 REV 0

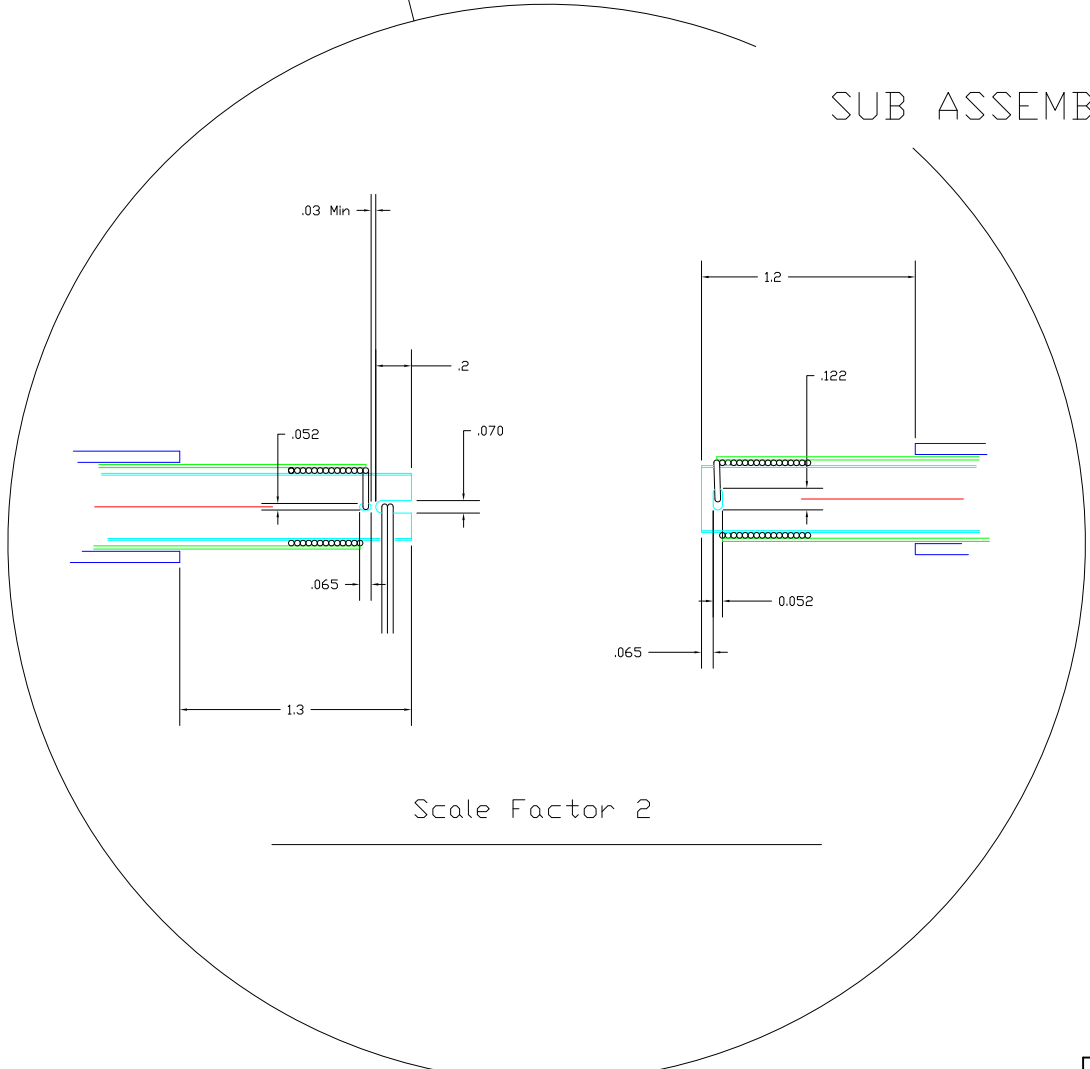
13	14	15
NO.	REVISION	BY CH SUP APPROVED DATE

Mandrel Length 119.75 inches



CROSS SECTION THRU ASSEMBLY

SUB ASSEMBLY



Scale Factor 2

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FABRICATION / INSTALLATION**
 PPPL Drafting:

03	02	01	PART NO.	NOMENCLATURE OR DESCRIPTION	DRAWING NO.	INTERNAL
1	7		PROTECTIVE SHEATH, 1/8" OD X 1/8" ID BRASS-117.25 INCHES	THIS DWG SH 2		SH 2S-ASSEMBLED
1	6		NON ADHESIVE TAPE, 1 BY 0.018-50 FT	THIS DWG SH 2		MODEL
1	5		20 GA ZNCL COIL, 0.036 OD, 0.008 CONDUCTOR, 540 INDUCTOR - 50 FT	THIS DWG SH 2		SH 2S-ASSEMBLED
1	4		MANDREL - 0.375 OD BY 0.010 WALL BRASS-119.75 INCHES	THIS DWG SH 2		SH 2S-ASSEMBLED
1			SUB ASSEMBLY	THIS DWG SH 2		
03	02	01	PART NO.	NOMENCLATURE OR DESCRIPTION	DRAWING NO.	INTERNAL
COMPUTER GENERATED DRAWING				PRINCETON PLASMA PHYSICS LABORATORY		
MANUAL CHANGES NOT FORMITTED				PRINCETON UNIVERSITY		
UNLESS OTHERWISE SPECIFIED				NATIONAL COMPACT STELLATOR EXPERIMENT		
DIMENSIONS ARE IN INCHES UNLESS SURFACES ARE OTHERWISE SPECIFIED				HIGH TEMPERATURE ROGOWSKI COIL		
DRAWN BY: JIMMY GIBSON				DATE: 01/10/88		
CHECKED BY: JIMMY GIBSON				DATE: 01/10/88		
APPROVED BY: JIMMY GIBSON				DATE: 01/10/88		
SCALE: TELEPHONICS NON-CUMULATIVE				DR: FDM	DRD: JAMESON	CRD: PLE
SHEET NO. - 31				DESIGN: BLANK	APP: BLANK	REV: 0
SHEET NO. - 32				DESIGN: BLANK	APP: BLANK	REV: 0
SHEET NO. - 33				DESIGN: BLANK	APP: BLANK	REV: 0
SHEET NO. - 34				DESIGN: BLANK	APP: BLANK	REV: 0
SHEET NO. - 35				DESIGN: BLANK	APP: BLANK	REV: 0

WELDING ENGINEER	DATE
DATE	DATE

NO. 310-050	REV 0
DATE	DATE