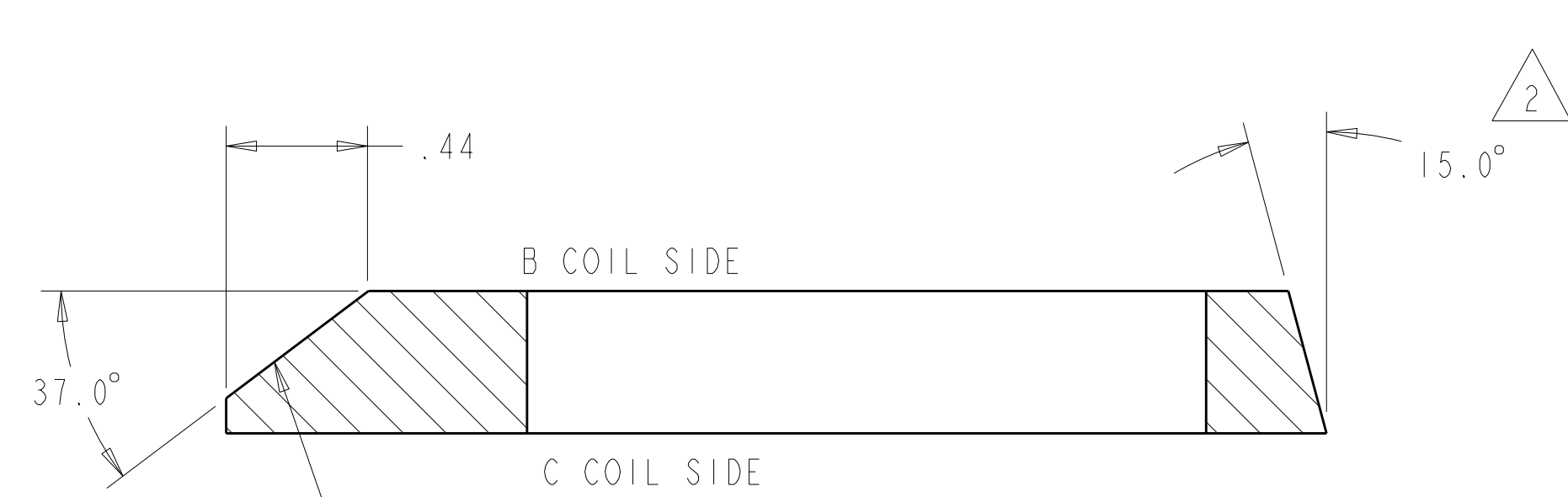
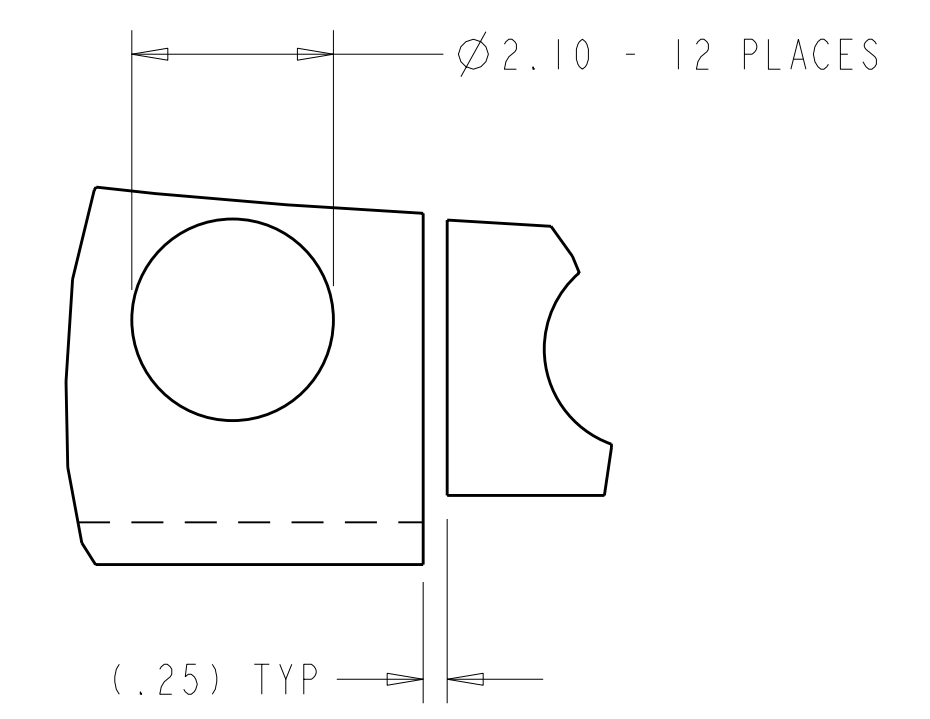


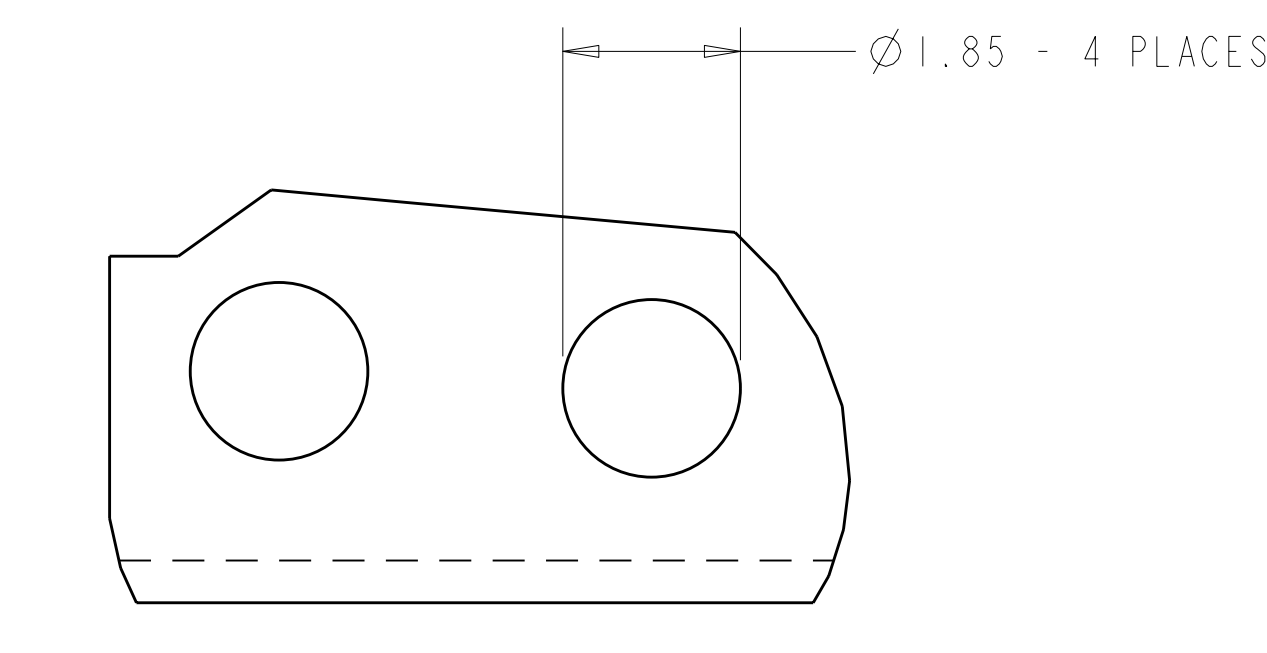
- NOTES
1. DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2004.
  2. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994.
  3. DIMENSIONS ARE IN INCHES
  4. MAGNETIC PERMEABILITY NOT TO EXCEED 1.02 AS TESTED BY A SEVERN INDICATOR. AVAILABLE FROM: SEVERN ENGINEERING AUBURN, ALABAMA 36830 WWW.SEVERENGINEERING.COM
  5. SHIMS TO BE ANNEALED AFTER ALL CUTTING AND GRINDING IF PERMEABILITY SPEC IN NOTE 4 IS NOT MEET
  6. SHIMS MAY BE FIELD TRIMMED AS REQUIRED
  7. COMPLETED PARTS TO BE CLEAN AND FREE OF ANY OIL, DEBRIS, OR CONTAMINATES.



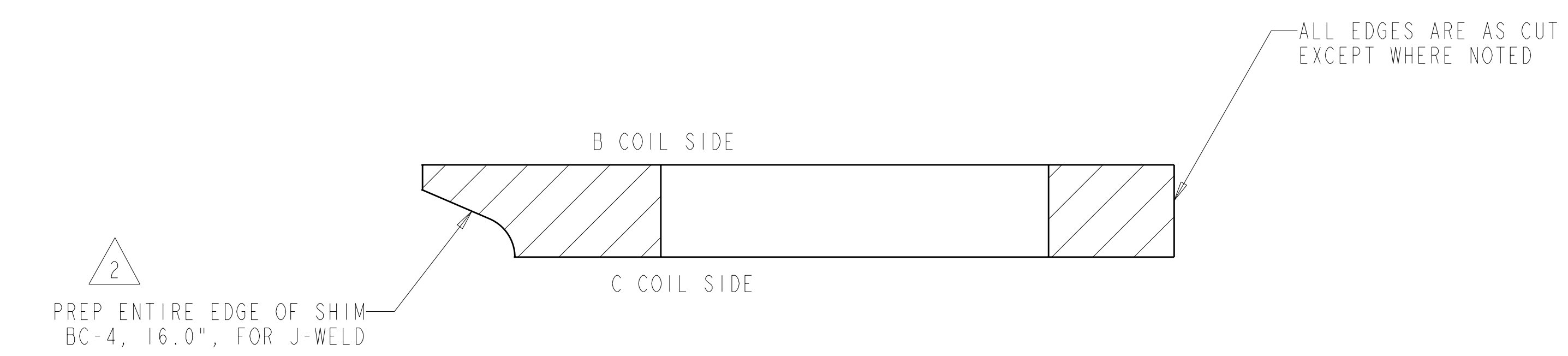
**SECTION C-C**  
SCALE 2.00



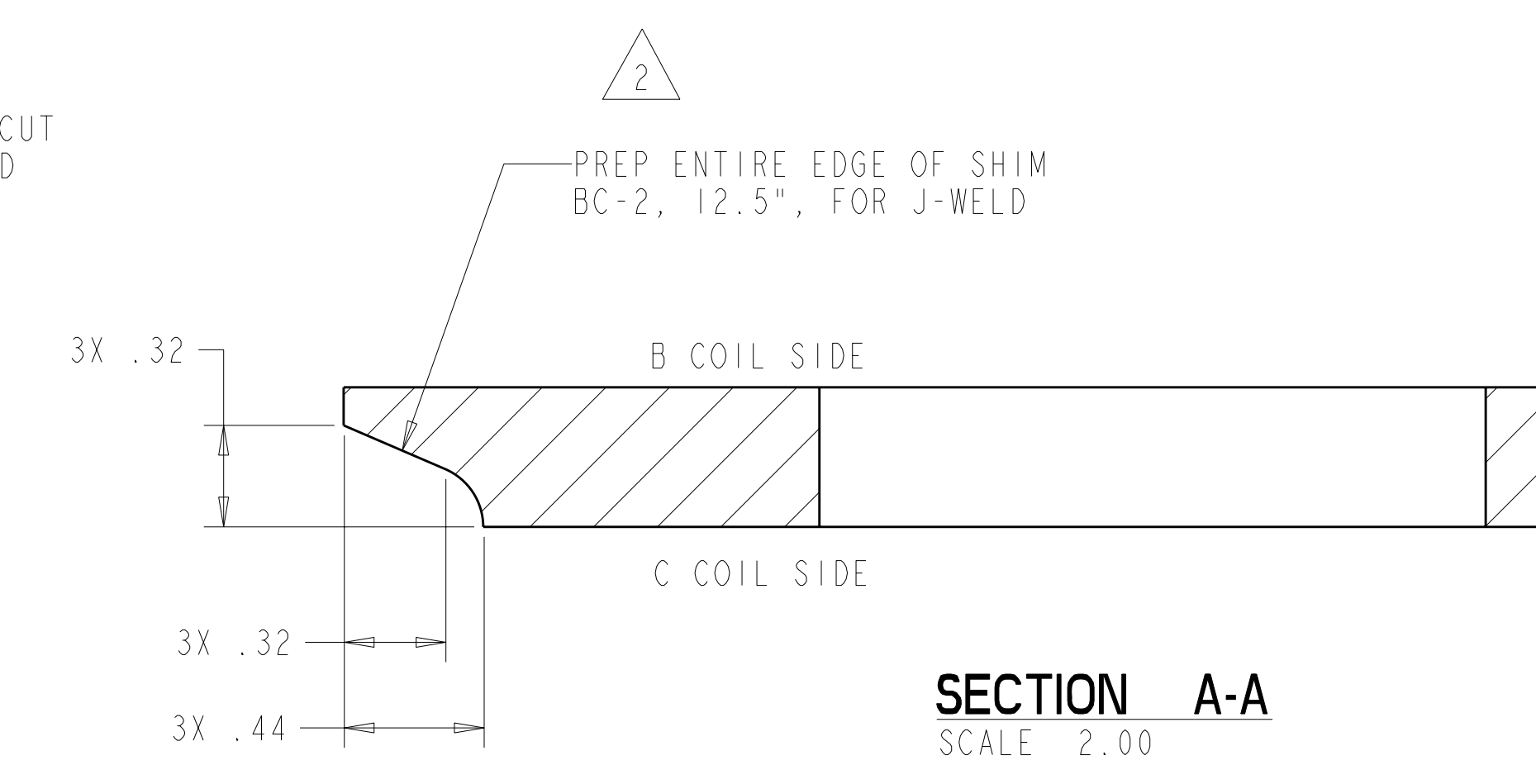
**DETAIL E**  
SCALE 0.50



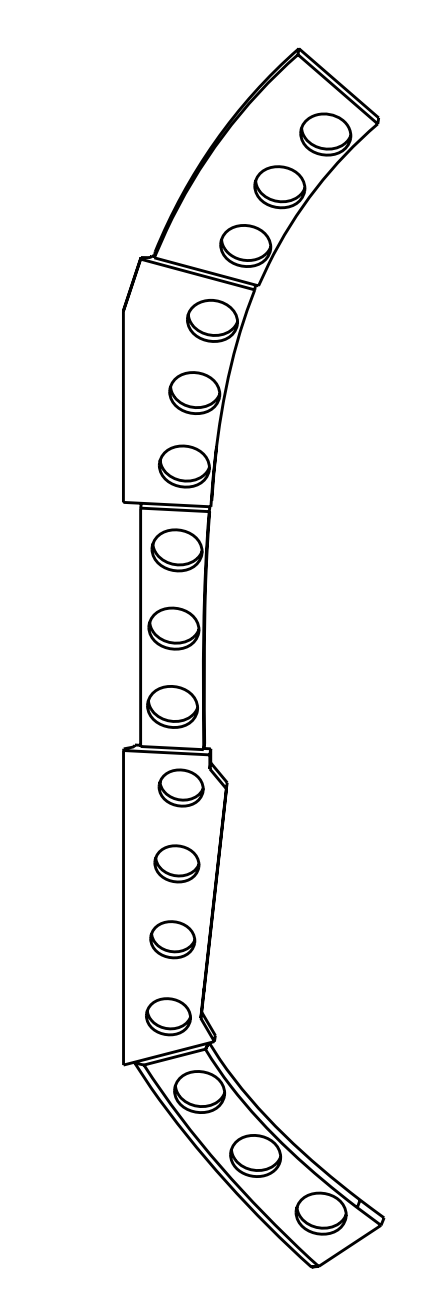
**DETAIL D**  
SCALE 0.50



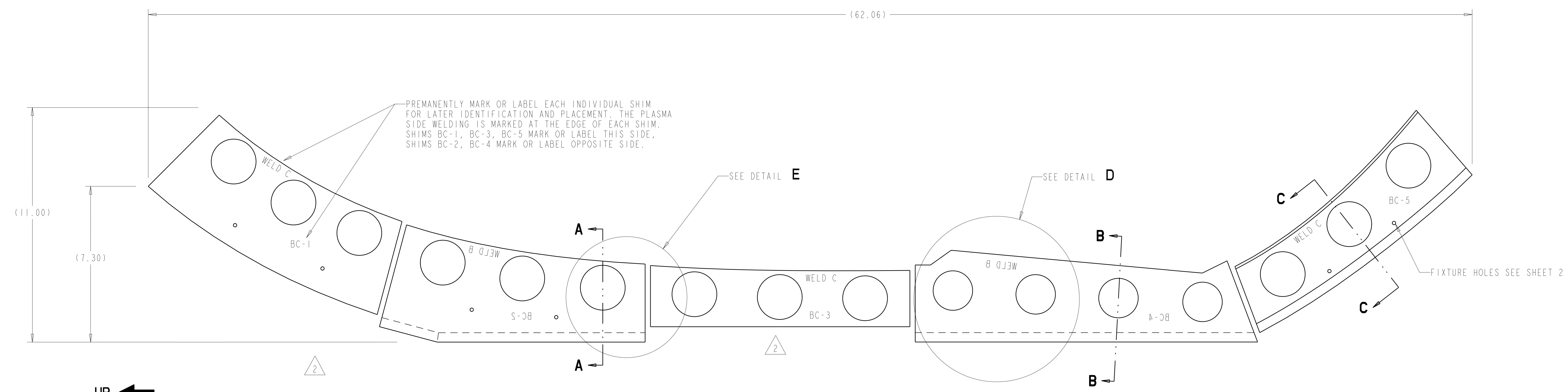
**SECTION B-B**  
SCALE 2.00



**SECTION A-A**  
SCALE 2.00



**ISOMETRIC VIEW**  
SCALE 0.125



**-1 BC INBOARD SHEAR PLATE**  
SCALE 0.50

NOTE: PART TO BE CUT FROM FULL SIZE TEMPLATE CREATED BY DXF FILE SE140-053.DXF, SEE SHEET 2.

AR	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
SE140-046	-1	BC INBOARD SHEAR PLATE	316L ANNEALED	ASTM A240	I	
PARTS LIST						

**RELEASED FOR FABRICATION / INSTALLATION**  
PPPL Drafting

NO REPRESENTATION OR WARRANTY, EXPRESSED OR IMPLIED, IS MADE AS TO THE ACCURACY, COMPLETENESS OR USEFULNESS OF THE INFORMATION OR STATEMENTS CONTAINED IN THESE DRAWINGS, OR THAT THE USE OR DISCLOSURE OF ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS MAY NOT INFRINGE PRIVATE RIGHTS OF OTHERS. NO LIABILITY IS ASSUMED WITH RESPECT TO THE USE OF, OR FOR DAMAGES RESULTING FROM THE USE OF, ANY INFORMATION, APPARATUS, METHOD OR PROCESS DISCLOSED IN THESE DRAWINGS. DRAWINGS MADE AVAILABLE FOR INFORMATION TO BIDDER ARE NOT TO BE USED FOR OTHER PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

**P** THIS DRAWING PRODUCED ON PRO-ENGINEER

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
3	CHANGED J WELD TO DOUBLE V WELD. ECN# 5381	GM	07/08									
2	TO SE140-046, PER ECN # 5332	GM	05/08	MC		05/08						
2	AND J PREPS ON BC-3. CHANGED "NEXT ASSY"											
2	EDGES ON BC-2, BC-4, AND BC-5. DELETED NOTE 8											
2	V WELD PREP TO 15° CHAMFER. ADDED J WELD PREP											
2	SHORTENED BACK EDGE OF BC-5 AND CHANGED											
1	NOTE 8. CHANGED TITLE, PER ECN # 5319	GM	01/08	MC		01/08						
1	ADDED EXTRA MATERIAL TO BC-5, ADDED											
0	ORIGINAL ISSUE	SH	01/08	MC		01/08						

SCALE NOTED		DESIGNER		DRAWN		CHECKED	
TOLERANCES UNLESS OTHERWISE SPECIFIED		D WILLIAMSON		S HOMESCU		M COLE	
FRACTIONS		01/2008		01/2008		01/2008	
XX DECIMALS ±.01							
XXX DECIMALS ±.005							
ANGLES ±0°15'							
BREAK SHARP EDGES OR MAX							
FINISH .125 UNLESS OTHERWISE SPECIFIED							

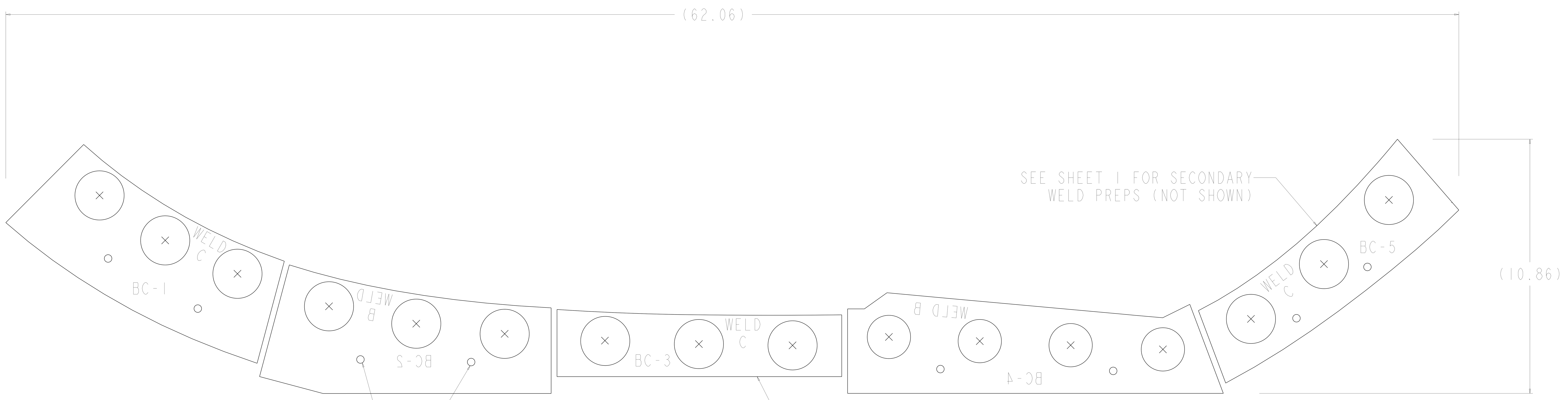
DESIGNER		DRAWN		CHECKED		VERSION NO.		PLANT		BLDG		FL		SHT		OF		TYPE		CLASS	
D WILLIAMSON		S HOMESCU		M COLE		I		ORNL		5700		3		1		2		S		U	
PPPL DRFT J SIEGEL																					
RELEASE LEVEL		Fabrication																			
DRAWING APPROVALS																					

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**

**B-C INBOARD SHEAR PLATE**

SE140-053 REV 3



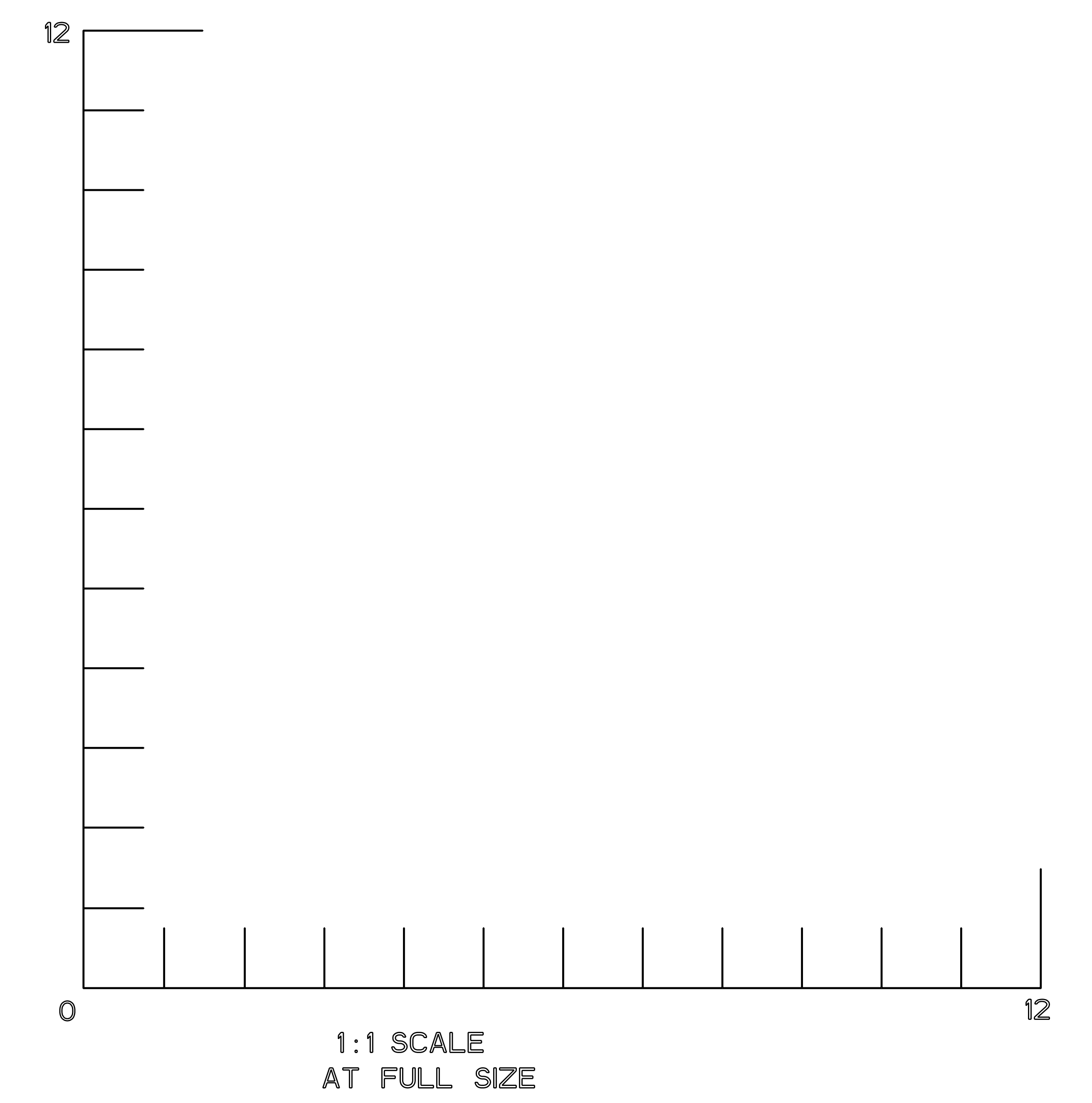
SEE SHEET 1 FOR SECONDARY WELD PREPS (NOT SHOWN)

2 FIXTURE HOLES PER SHIM,  $\phi$ .31 DIA, MAY BE LOCATED APPROXIMATELY IN AREAS SHOWN AS REQUIRED.

FIXTURE HOLES MAY NOT BE LOCATED INSIDE PERIMETER OF NARROW SHIMS. VENDOR OPTION TO FIXTURE WITH OTHER METHODS.

**FULL SIZE TEMPLATE - CREATED FROM DXF FILE SE140-053.DXF**  
SCALE 1 : 1

NOTE: PART SIZE AND HOLE LOCATIONS MUST NOT DEVIATE FROM DXF FILE BY MORE THAN  $\pm$  .03



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

UT-BATTELLE		Oak Ridge National Laboratory Managed by the Department of Energy for the Office of Science, U.S. Department of Energy under contract number DE-AC05-84OR21400	
NATIONAL COMPACT STELLARATOR EXPERIMENT			
B-C INBOARD SHEAR PLATE			
DESIGN NO.	PLANT	BUILD	FL. INT. OF THIS DRAWING
SE140-053	ORNL	3100	3 12 2 8
DESIGN LEVEL		Fabrication	
PROJECT NO.		SE140-053	