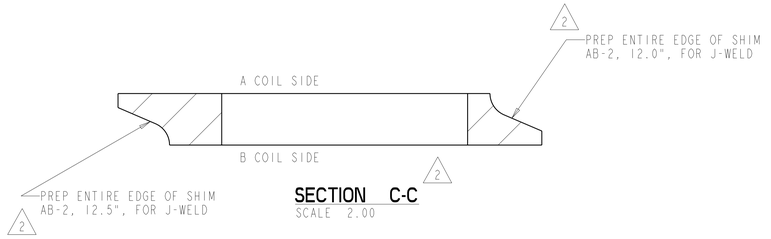
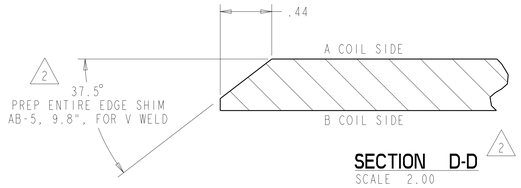


SECTION C-C
SCALE 2.00



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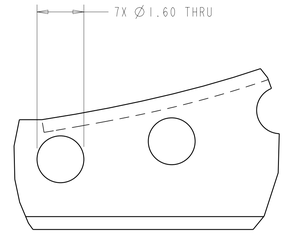
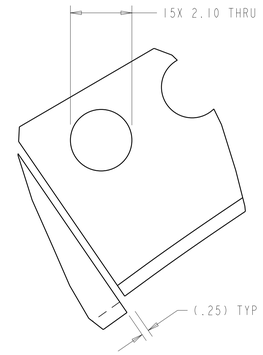


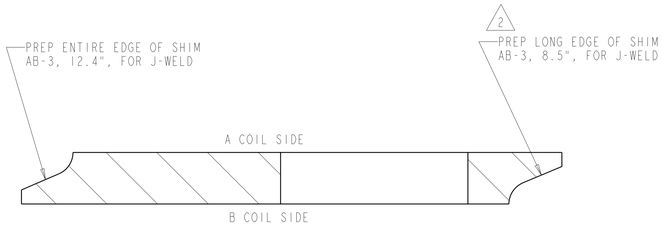
DETAIL A
SCALE 0.50



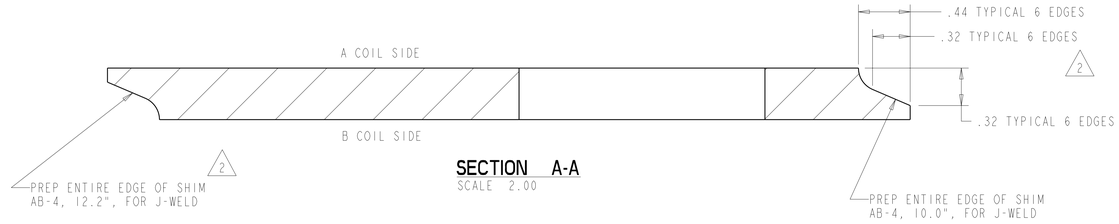
DETAIL B
SCALE 0.50

NOTES

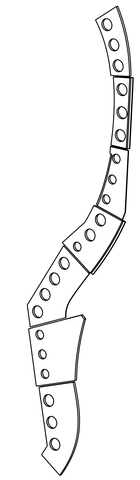
1. DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2004.
2. INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994.
3. DIMENSIONS ARE IN INCHES
4. MAGNETIC PERMEABILITY NOT TO EXCEED 1.02 AS TESTED BY A SEVERN INDICATOR. AVAILABLE FROM:
   SEVERN ENGINEERING
   AUBURN, ALABAMA 36830
   WWW.SEVERNENGINEERING.COM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



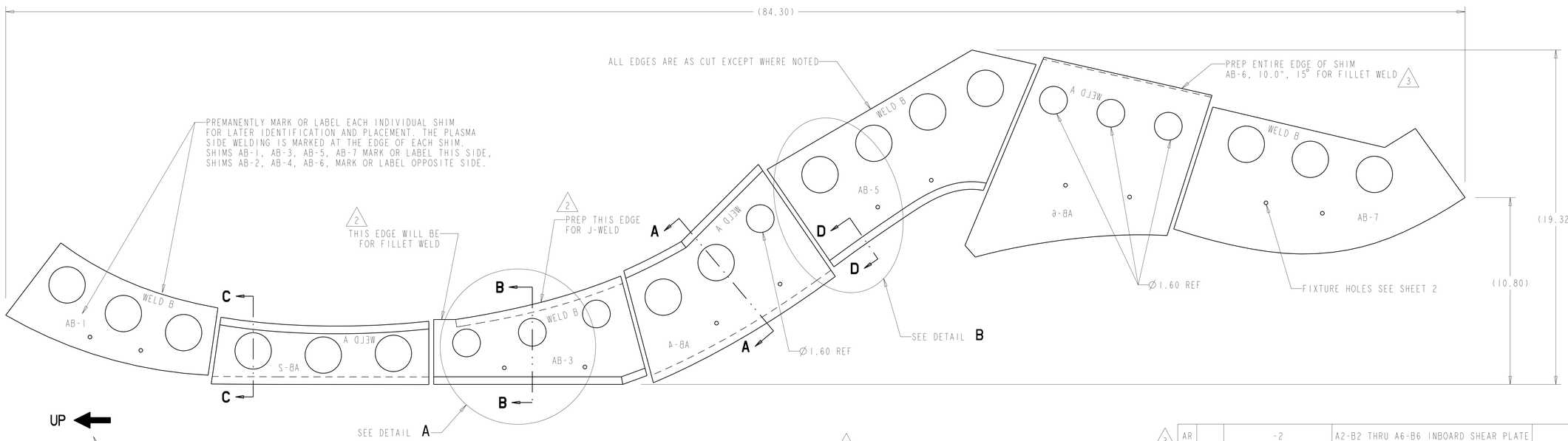
SECTION B-B
SCALE 2.00



SECTION A-A
SCALE 2.00



ISOMETRIC VIEW
SCALE 0.100



-1 A1-B1 INBOARD SHEAR PLATE
SCALE 0.40

NOTE: PART TO BE CUT FROM FULL SIZE TEMPLATE CREATED BY DXF FILE SE140-052-1.DXF, SEE SHEET 2.

AR		-2	A2-B2 THRU A6-B6 INBOARD SHEAR PLATE	316L ANNEALED	ASTM A240	2
AR		-1	A1-B1 INBOARD SHEAR PLATE			1
SE140-046	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO
	NEXT ASSEMBLY		PARTS LIST			

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PPPL Drafting: jerome siegel

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
3	ADDED -2 PART NO AND SHEET 3 & 4. PER ECN# 5356	GM	05/08	MC		05/08						
2	PER ECN # 5332	GM	05/08	MC		05/08						
2	ON AB-2, CHANGED "NEXT ASSY" TO SE140-046.											
2	RELOCATED (3) Ø2.1 HOLES AND BOTH EDGES											
2	ADDED V WELD PREP TO AB-5. ADDED SECTION D.											
2	EDGES OF AB-2 AND AB-4. MOVED SECTION C.											
2	PLATE ZONE C6. ADDED J-PREP TO BOTH											
2	REMOVED J-WELD PREP ON SHORT LEG OF AB-3											
1	15° WAS 20°. CHANGED TITLE. PER ECN # 5319	GM	01/08	MC		01/08						
1	ADDED EXTRA MATERIAL TO AB-6, ADDED NOTE 8.											
0	ORIGINAL ISSUE	SH	01/08	MC		01/08						

REVISION OR ISSUE PURPOSE — REVISION APPROVAL

SCALE NOTED
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±
XX DECIMALS ±.01
XXX DECIMALS ±.005
ANGLES ±0°15'
BREAK SHARP EDGES .06 MAX
FINISH 125 UNLESS OTHERWISE SPECIFIED

DES	D WILLIAMSON	01/2008
DRW	S HOMESCU	01/2008
CHK	M COLE	01/2008
SECT	:	:
DEPT	:	:
PE	:	:
CR	:	:
PJ	:	:
REO	:	:
PPPL DRFT	J SIEGEL	01/2008
	:	:
	:	:

DRAWING APPROVALS — DATE

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

PROJECT NAME: NATIONAL COMPACT STELLARATOR EXPERIMENT

A-B INBOARD SHEAR PLATE

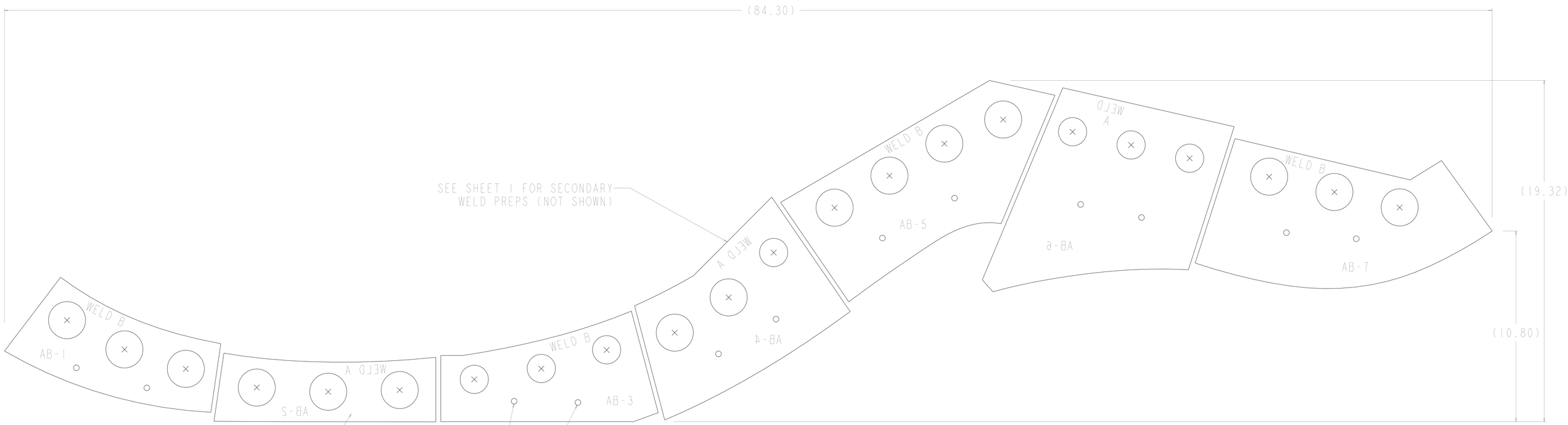
VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
2	ORNL	5700	3	1	4	S	U

RELEASE LEVEL: Fabrication — SE140-052 — REV 3

SE140-052

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



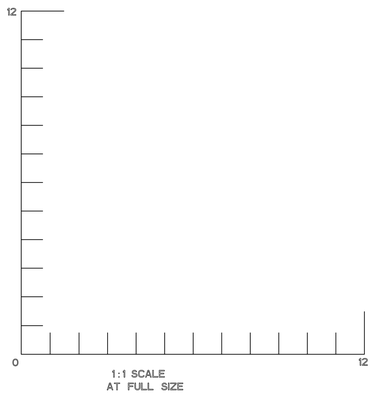
FIXTURE HOLES MAY NOT BE LOCATED INSIDE PERIMETER OF NARROW PLATES. VENDOR OPTION TO FIXTURE WITH OTHER METHODS.

2 FIXTURE HOLES PER PLATE ∅.31 DIA, MAY BE LOCATED APPROXIMATLY IN AREAS SHOWN AS REQUIRED.

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

FULL SIZE TEMPLATE - CREATED FROM DXF FILE SE140-052-1.DXF

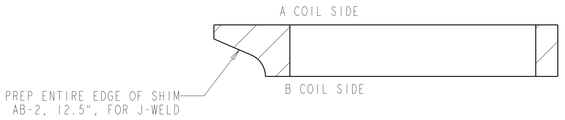
SCALE 1 : 1



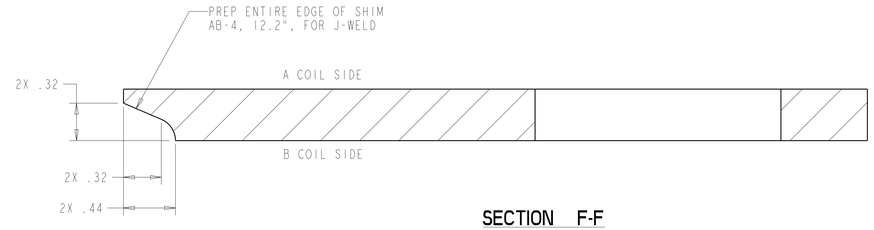
RELEASED FOR FABRICATION / INSTALLATION

PPPL Drafting: jerome siegel

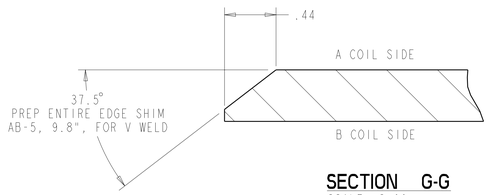
UT-BATTELLE	Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under CONTRACT NUMBER DE-AC05-00OR22725 BY BATTELLE, LLC. Oak Ridge, Tennessee							
NATIONAL COMPACT STELLARATOR EXPERIMENT								
A-B INBOARD SHEAR PLATE								
DRAWING NO.	PLANT	BLDG.	TL	SHT	OF	TYPE	CLASS	
2	CNTRL	5700	3	2	4	S	U	
RELEASE LEVEL	SE140-052						REV.	
Fabrication							3	



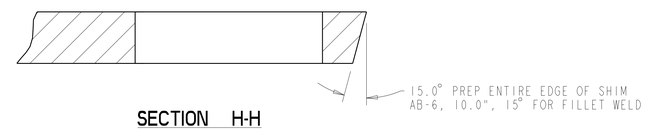
SECTION E-E
SCALE 2.00



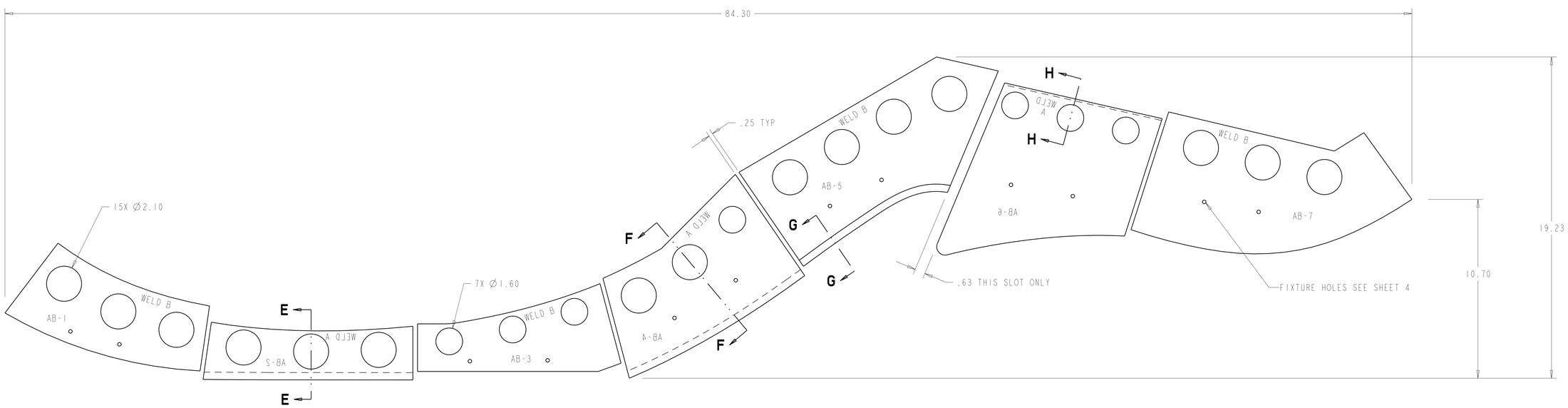
SECTION F-F
SCALE 2.00



SECTION G-G
SCALE 2.00



SECTION H-H
SCALE 2.00



-2 A2-B2 THRU A6-B6 INBOARD SHEAR PLATE
SCALE 0.40

NOTE: PART TO BE CUT FROM FULL SIZE TEMPLATE CREATED BY DXF FILE SE140-052-2.DXF, SEE SHEET 4.

RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting: jerome siegel

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

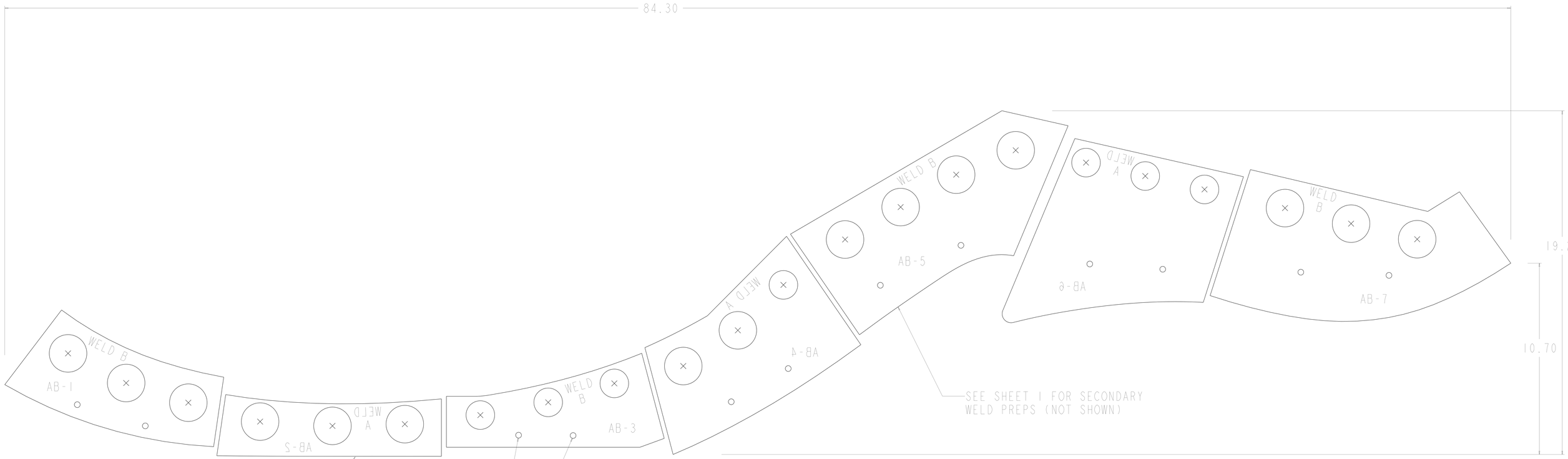
PROJECT NAME
NATIONAL COMPACT STELLARATOR EXPERIMENT

A-B INBOARD SHEAR PLATE

VERSION NO.	PLANT	BLDG	FL	SHT	OF	TYPE	CLASS
2	ORNL	5700	3	3	4	S	U

RELEASE LEVEL		REV
Fabrication	SE140-052	3

SE140-052



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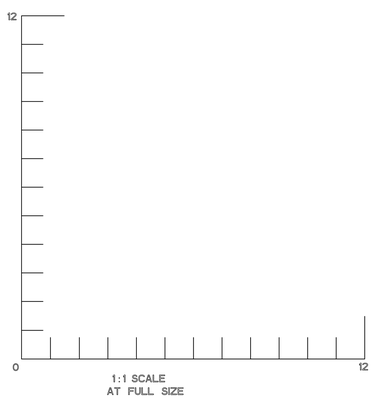
FULL SIZE TEMPLATE - CREATED FROM DXF FILE SE140-052-2.DXF

SCALE 1 : 1

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



RELEASED FOR FABRICATION / INSTALLATION
PPPL Drafting: jerome siegel

UT-BATTELLE	Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725 OAK RIDGE, TENNESSEE							
NATIONAL COMPACT STELLARATOR EXPERIMENT								
A-B INBOARD SHEAR PLATE								
VERSION NO	PLANT	BLDG.	FL	SHT	OF	TYPE	CLASS	
	ORNL	5700	3	4	4	S	U	
RELEASE LEVEL							REV	
Fabrication		SE140-052						