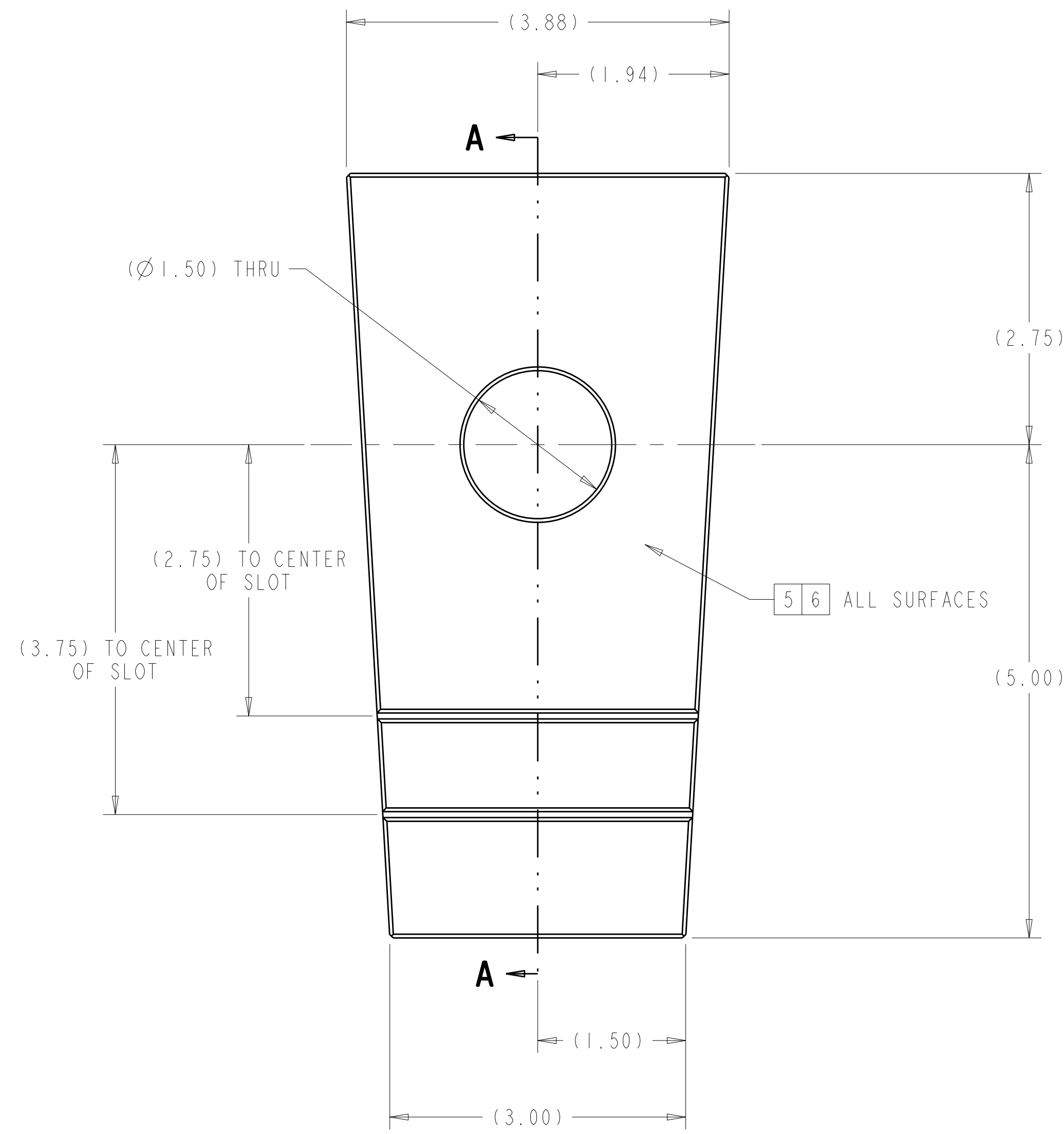


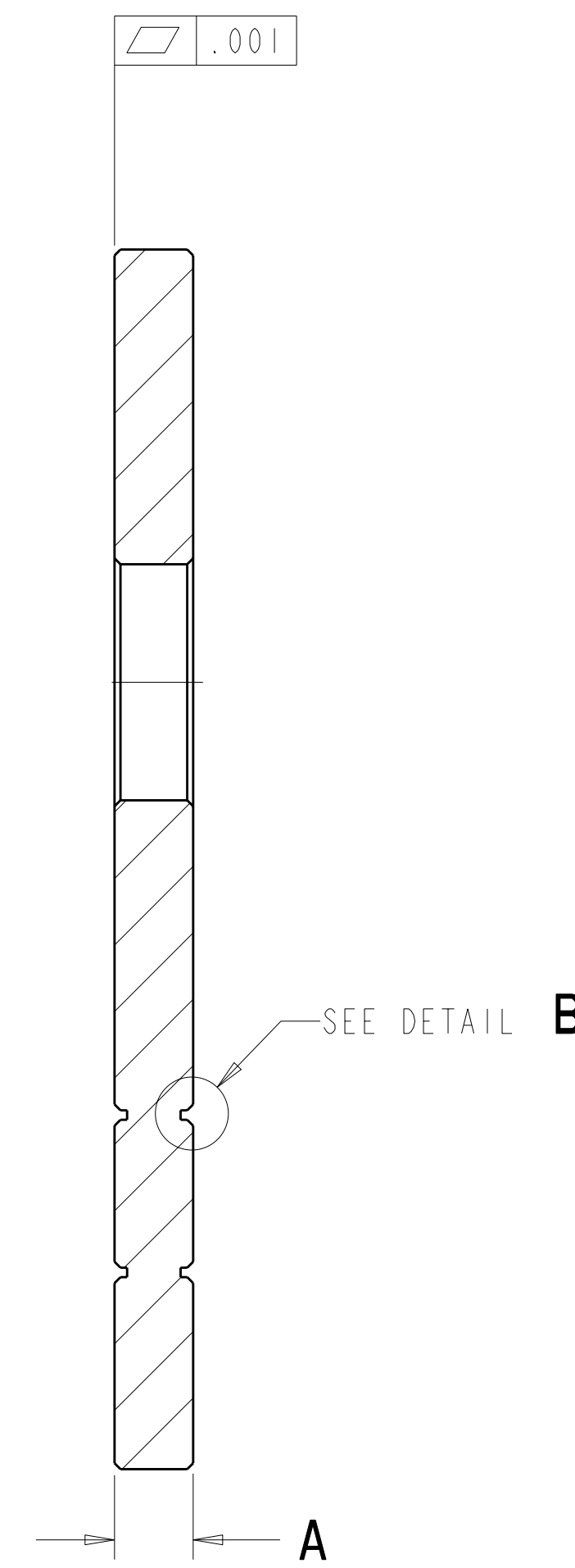
**DETAIL B**  
SCALE 4.00

- NOTES
- DRAWING PREPARED IN ACCORDANCE WITH ASME Y14.100-2004.
  - INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5M-1994.
  - DIMENSIONS ARE IN INCHES
  - MAGNETIC PERMEABILITY NOT TO EXCEED 1.02 AS TESTED BY A SEVERN INDICATOR. AVAILABLE FROM:  
SEVERN ENGINEERING  
AUBURN, ALABAMA 36830  
WWW.SEVERNENGINEERING.COM
  - IF PERMEABILITY SPEC IS NOT ACHIEVED THEN SOLUTION ANNEAL PART PRIOR TO COATING.
  - ALUMINA COATING PER SPECIFICATION NCSX-CSPEC-142-06-00.
  - SURFACE FINISH AFTER COATING 150-500.  
SURFACE FINISH ON NON-COATED PART 125 OR LESS UNLESS OTHERWISE SPECIFIED BY COATING SUPPLIER.



**-1 SHINGLE HOLE SHIM**  
SCALE 1.00

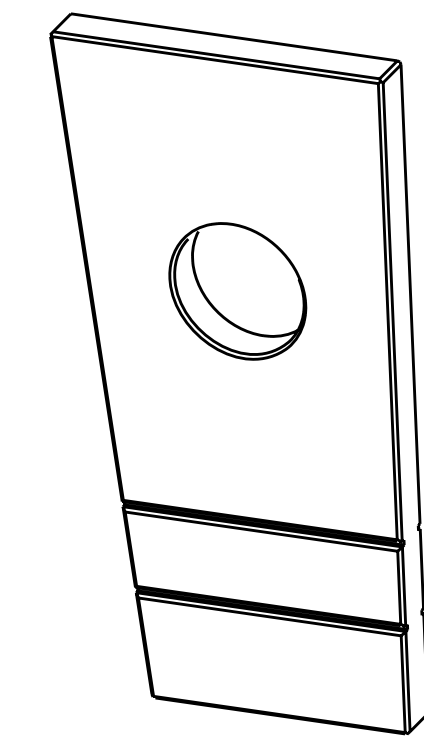
NOTE: DIMENSIONS SHOWN ON THIS SHEET APPLY AFTER COATING  
SEE SHEET 2 FOR NON-COATED PART



**SECTION A-A**

TOTAL **214**

QTY REQ'D	DIM A FINISHED SIZE ALUMINA COATED THICKNESS PER SIDE .025 +.003 / -.002	MIN FINISHED SIZE	MAX FINISHED SIZE	THICKNESS OF SS ± .001	PART NO
1	.540	.535	.547	.490	-36
1	.538	.533	.545	.488	-35
1	.536	.531	.543	.486	-34
1	.534	.529	.541	.484	-33
2	.532	.527	.539	.482	-32
2	.530	.525	.537	.480	-31
3	.528	.523	.535	.478	-30
4	.526	.521	.533	.476	-29
5	.524	.519	.531	.474	-28
6	.522	.517	.529	.472	-27
7	.520	.515	.527	.470	-26
8	.518	.513	.525	.468	-25
9	.516	.511	.523	.466	-24
10	.514	.509	.521	.464	-23
10	.512	.507	.519	.462	-22
11	.510	.505	.517	.460	-21
12	.508	.503	.515	.458	-20
12	.506	.501	.513	.456	-19
12	.504	.499	.511	.454	-18
12	.502	.497	.509	.452	-17
11	.500	.495	.507	.450	-16
11	.498	.493	.505	.448	-15
10	.496	.491	.503	.446	-14
9	.494	.489	.501	.444	-13
8	.492	.487	.499	.442	-12
7	.490	.485	.497	.440	-11
6	.488	.483	.495	.438	-10
5	.486	.481	.493	.436	-9
4	.484	.479	.491	.434	-8
4	.482	.477	.489	.432	-7
3	.480	.475	.487	.430	-6
2	.478	.473	.485	.428	-5
2	.476	.471	.483	.426	-4
1	.474	.469	.481	.424	-3
1	.472	.467	.479	.422	-2
1	.470	.465	.477	.420	-1



**ISOMETRIC VIEW**  
SCALE .50

AR	AR	AR	SEE CHART	SINGLE HOLE SHIM	316 SST [4]	PLASMA ALUMINA COATED [5]	ASTM A240	I
SE100-001	SE100-002	SE140-003	CAGE CODE	PART OR IDENTIFYING NO	NOMENCLATURE OR DESCRIPTION	MATERIAL	SPECIFICATION	FIND NO

**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 PURPOSES, AND ARE TO BE RETURNED UPON REQUEST OF THE FORWARDING CONTRACTOR.

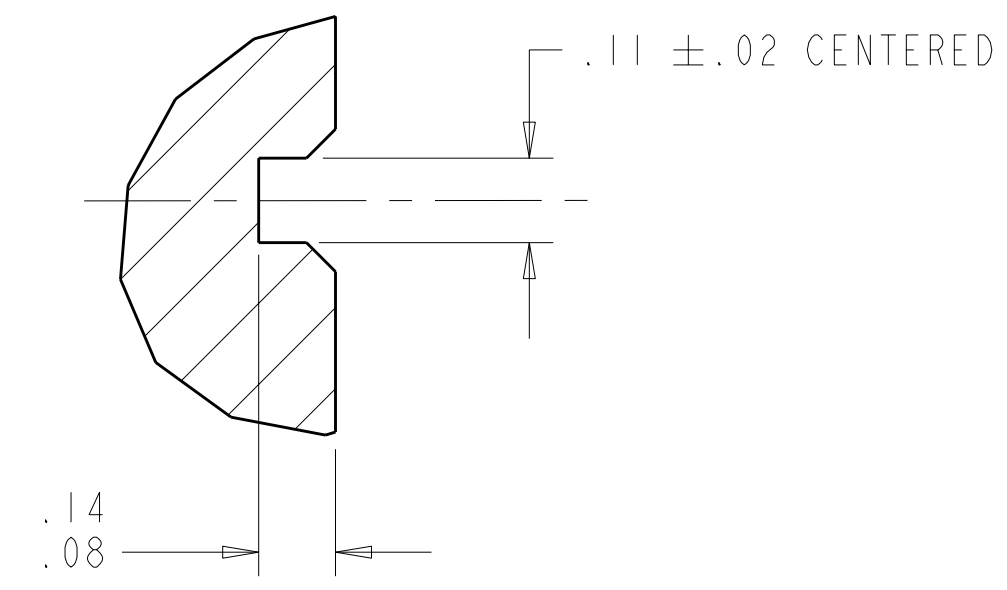
**P** THIS DRAWING PRODUCED ON PRO-ENGINEER

REV	DESCRIPTION	BY	DATE	CHK	DEPT	DATE	PE	REQ	DATE	ORNL	DOE	DATE
0	ORIGINAL ISSUE	GM	07/07	MC		07/07	DW		07/07			

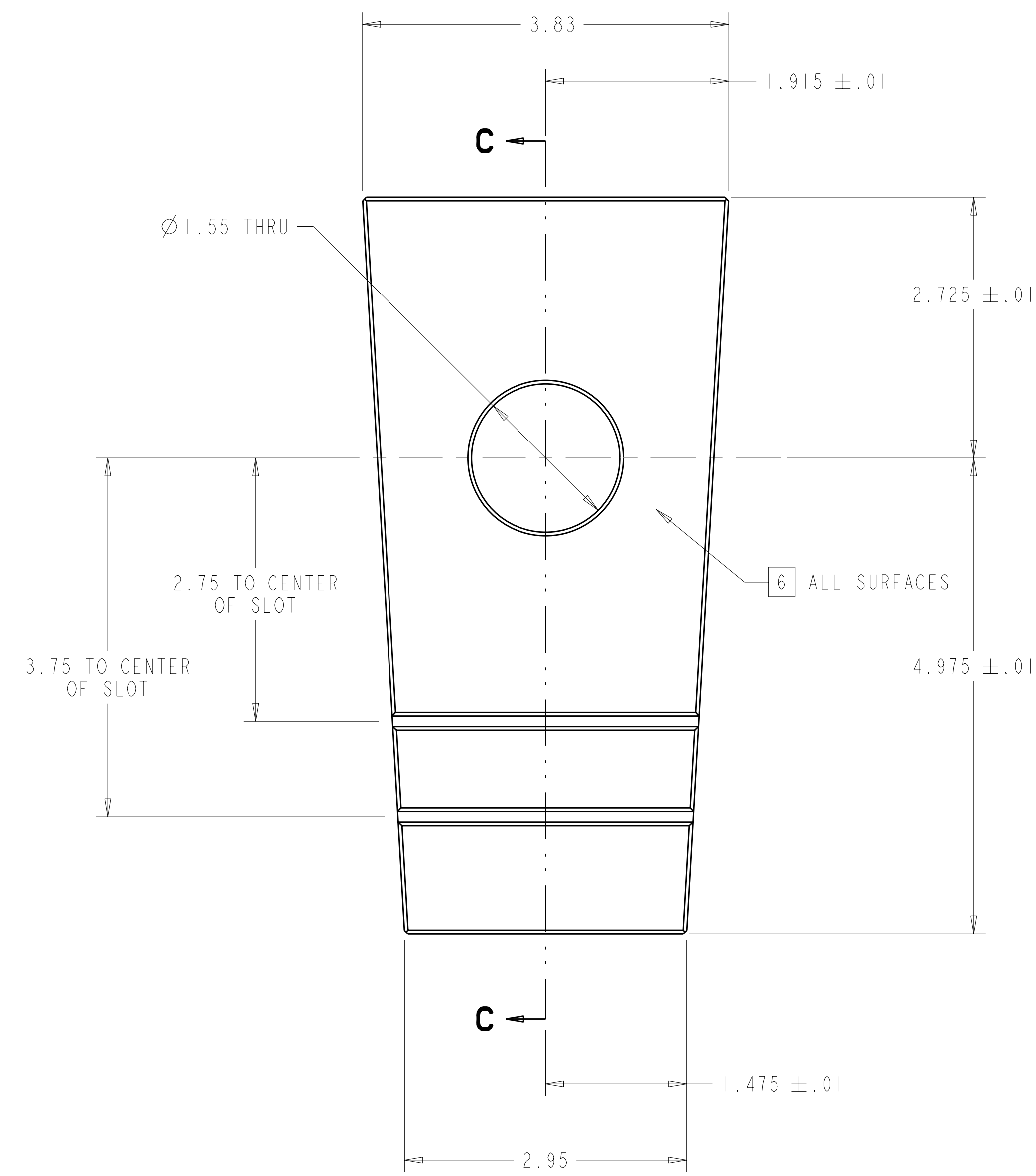
SCALE	NOTED	DES	D WILLIAMSON	07/07
		DRW	G MCGINNIS	07/07
		CHK	M COLE	07/07
		SECT		
		DEPT		
		PE		
		CR		
		PJ		
		REQ		
		FINISH		

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

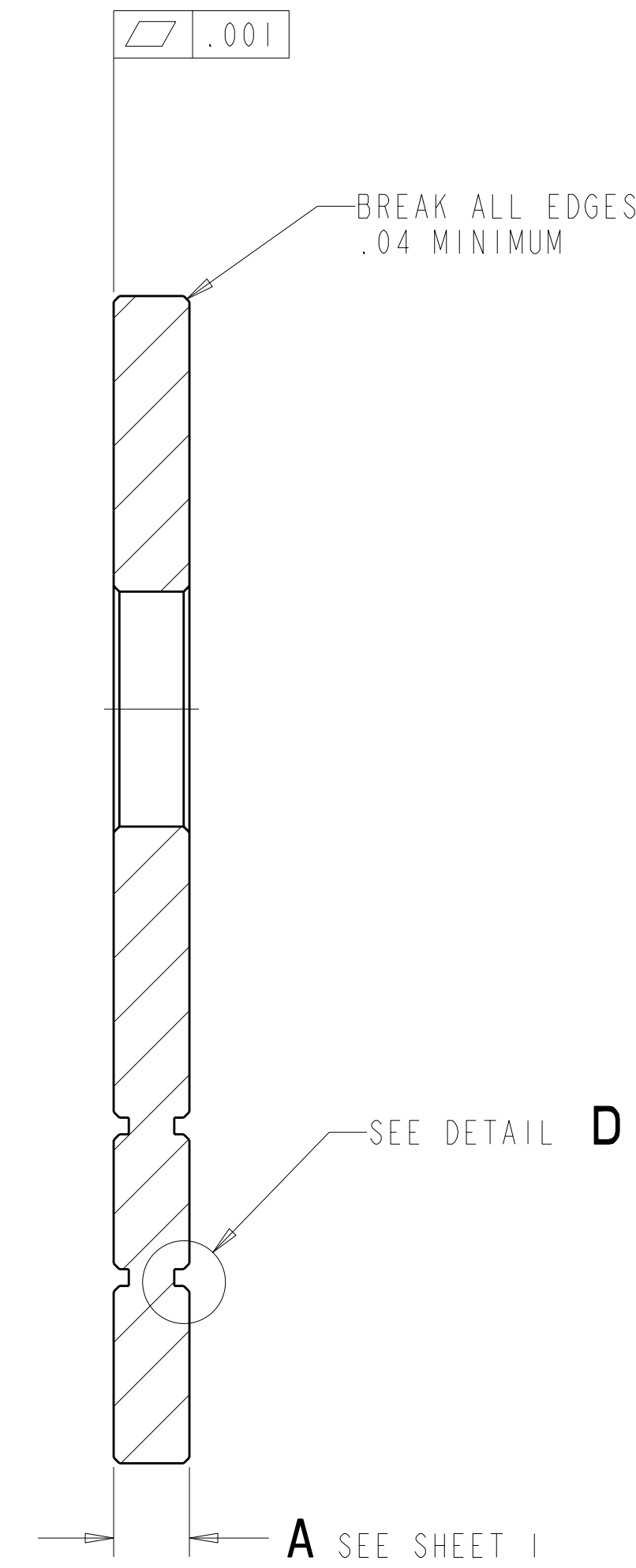
**UT-BATTELLE**  
NATIONAL COMPACT STELLARATOR EXPERIMENT  
SINGLE HOLE SHIM PLATE  
SE140-040  
REV 0



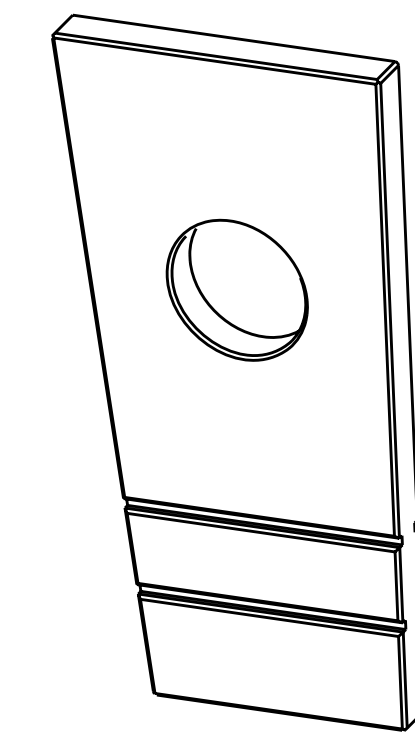
DETAIL D  
SCALE 4.00



SCALE 1.00



SECTION C-C



ISOMETRIC VIEW  
SCALE 0.50

NOTE: DIMENSIONS SHOWN ON THIS SHEET ARE FOR NON-COATED PART  
SEE SHEET 1 FOR ADDITIONAL NOTES AND SPECIFICATIONS

RELEASED FOR  
FABRICATION / INSTALLATION  
PPPL Drafting

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 <b>NATIONAL COMPACT STELLARATOR EXPERIMENT</b>										
PART NAME <b>SINGLE HOLE SHIM PLATE</b>										
VERSION NO. 18	PLANT ORNL	BLDG 5700	FL 3	SHT OF 2	TYPE S	CLASS U				
RELEASE LEVEL Fabrication		SE140-040					REV 0			