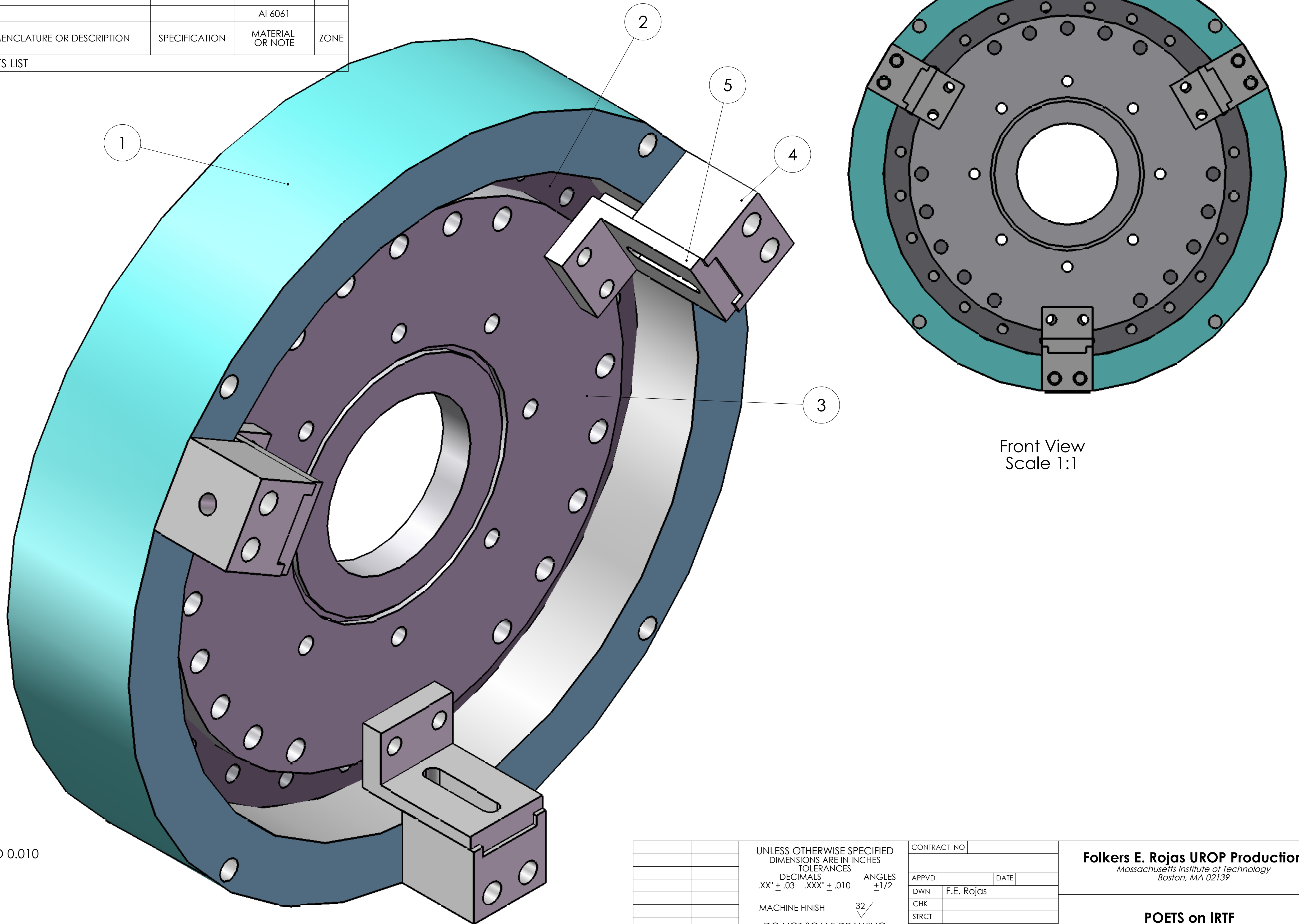


QTY REQ'D	ITEM NO.	REF DES	CAGE NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL OR NOTE	ZONE
3	5		10-015	IRTF_Face Plate raiser P4	Male Z-Slider		Al 6061	
3	4		10-014	IRTF_Face plate raiser P1	Female Z-slider		Al 6061	
1	3		10-013	IRTF_Poets Face Adapter			Al 6061	
1	2		10-012	IRTF_stainless focus ring			Stainless 1024	
1	1		10-011	IRTF_Extension FER v1			Al 6061	

PARTS LIST

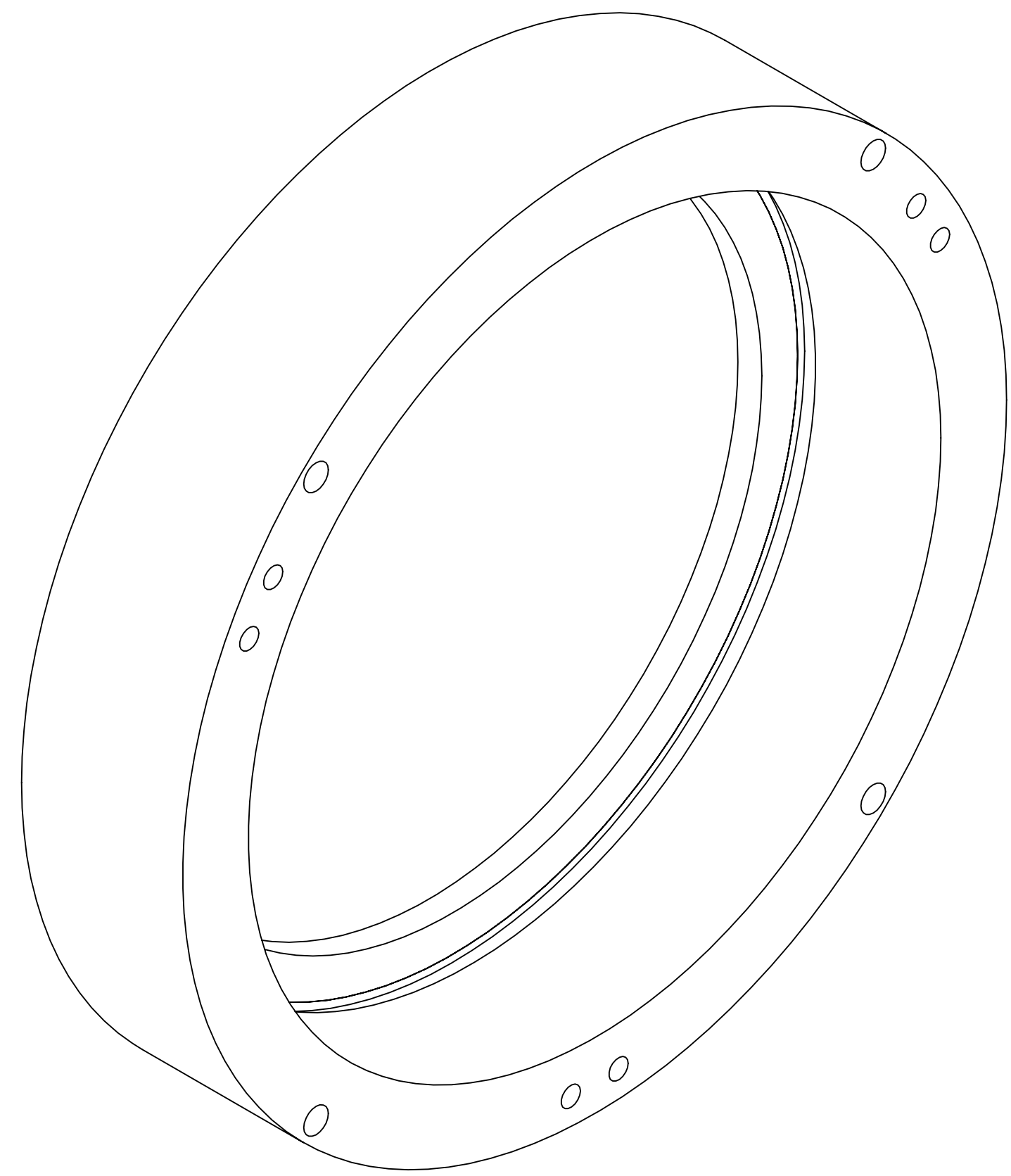


Front View  
Scale 1:1

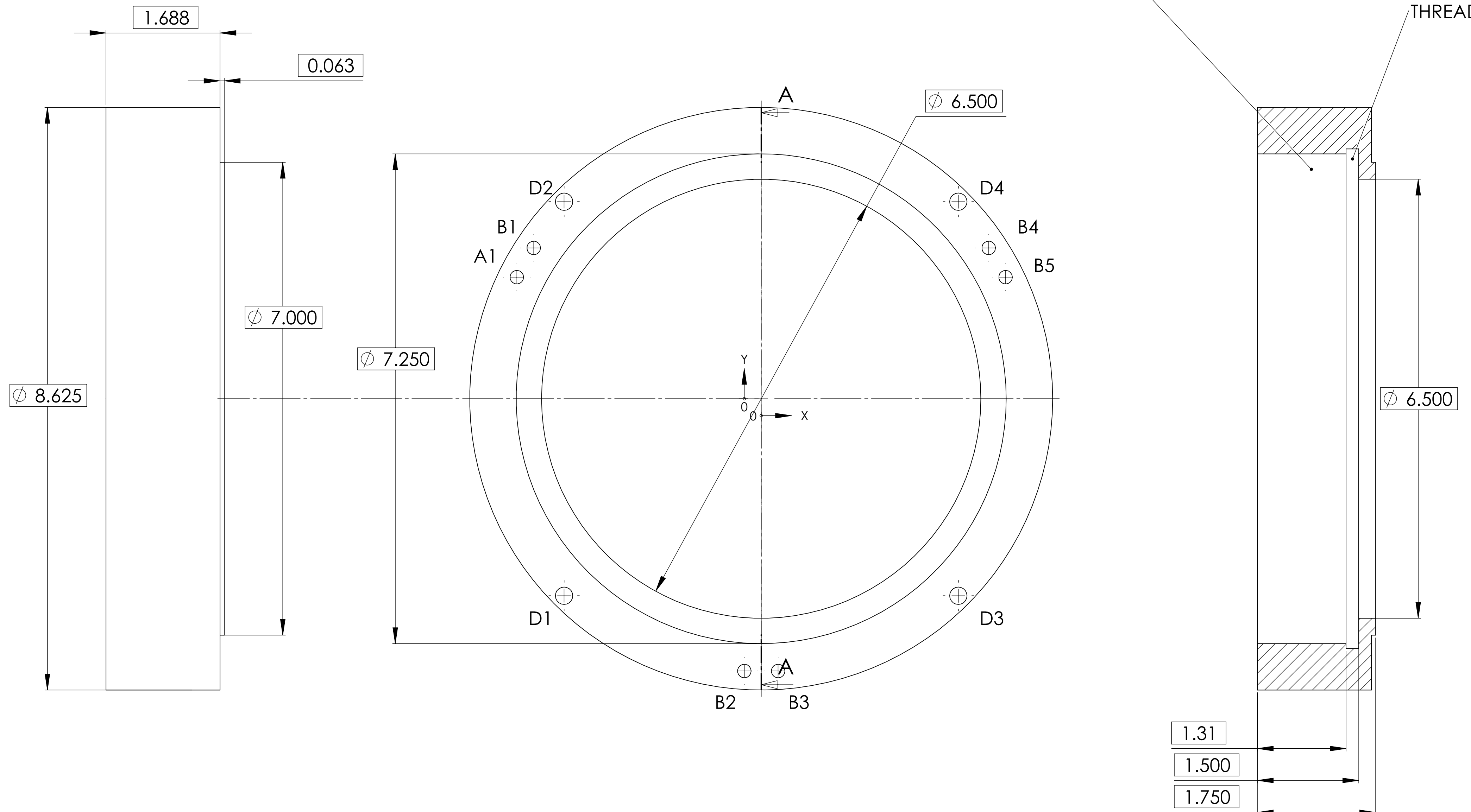
- 3. ENSURE ALL GROVES ARE FREE OF CHIPS.
- 2. REMOVE ALL BURRS & SHAPR EDGES 0.003 TO 0.010
- 1. ASSEMBLE TO FIT

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>	
DECIMALS .XX" ± .03	ANGLES .XXX" ± .010	ANGLES ± 1/2	DATE		
MACHINE FINISH 32		MATERIAL		<b>POETS on IRTF Z Extension Assembly</b>	
DO NOT SCALE DRAWING INTERPRET DWG BY ISO		ENGR F.E. Rojas DSGN SUPV		SCALE D	CAGE NO 10-010
APPLICATION		NEXT ASSEMBLY 10-999 USED ON		FILE: SUB-ASSEMBLY	REV B
				SCALE 2/1	UNCLASSIFIED
				SHEET 1 OF 1	



PROJECTED VIEW  
FOR REFERENCE ONLY  
DO NOT SCALE



ID THREADED 32TPI  
Made to fit the stainless  
focus ring

THREADED RELIEF

SECTION A-A

TAG	X LOC	Y LOC	SIZE
A1	-3.616	1.799	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
B1	-3.366	2.232	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
B2	-0.250	-4.031	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
B3	0.250	-4.031	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
B4	3.366	2.232	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
B5	3.616	1.799	$\phi$ 0.201 $\nabla$ 0.750 1/4-20 UNC $\nabla$ 0.500
D1	-2.917	-2.917	$\phi$ 0.257 THRU ALL
D2	-2.917	2.917	$\phi$ 0.257 THRU ALL
D3	2.917	-2.917	$\phi$ 0.257 THRU ALL
D4	2.917	2.917	$\phi$ 0.257 THRU ALL

- INTERIOR THREAD MADE TO MATCH PART 10-011
- REMOVE ALL BURRS AND SHARP EDGES .003 TO .010

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" $\pm$ .03 .XXX" $\pm$ .010 ANGLES $\pm$ 1/2 MACHINE FINISH 32/ DO NOT SCALE DRAWING INTERPRET DWG BY ISO		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>	
MATERIAL CAST AL		APPVD F.E. Rojas DATE			
APPLICATION		ENGR F.E. Rojas		<b>POETS on IRTF</b> <b>Z Extension: Extension Ring</b>	
NEXT ASSEMBLY USED ON		SCALE D		CAGE NO 10-011	
		SCALE 1/1		FILE: PART	
		UNCLASSIFIED		REV B	
		SHEET 1 OF 1			

47 x  $\phi 0.201 \nabla 0.375$   
1/4-20 UNC

15°

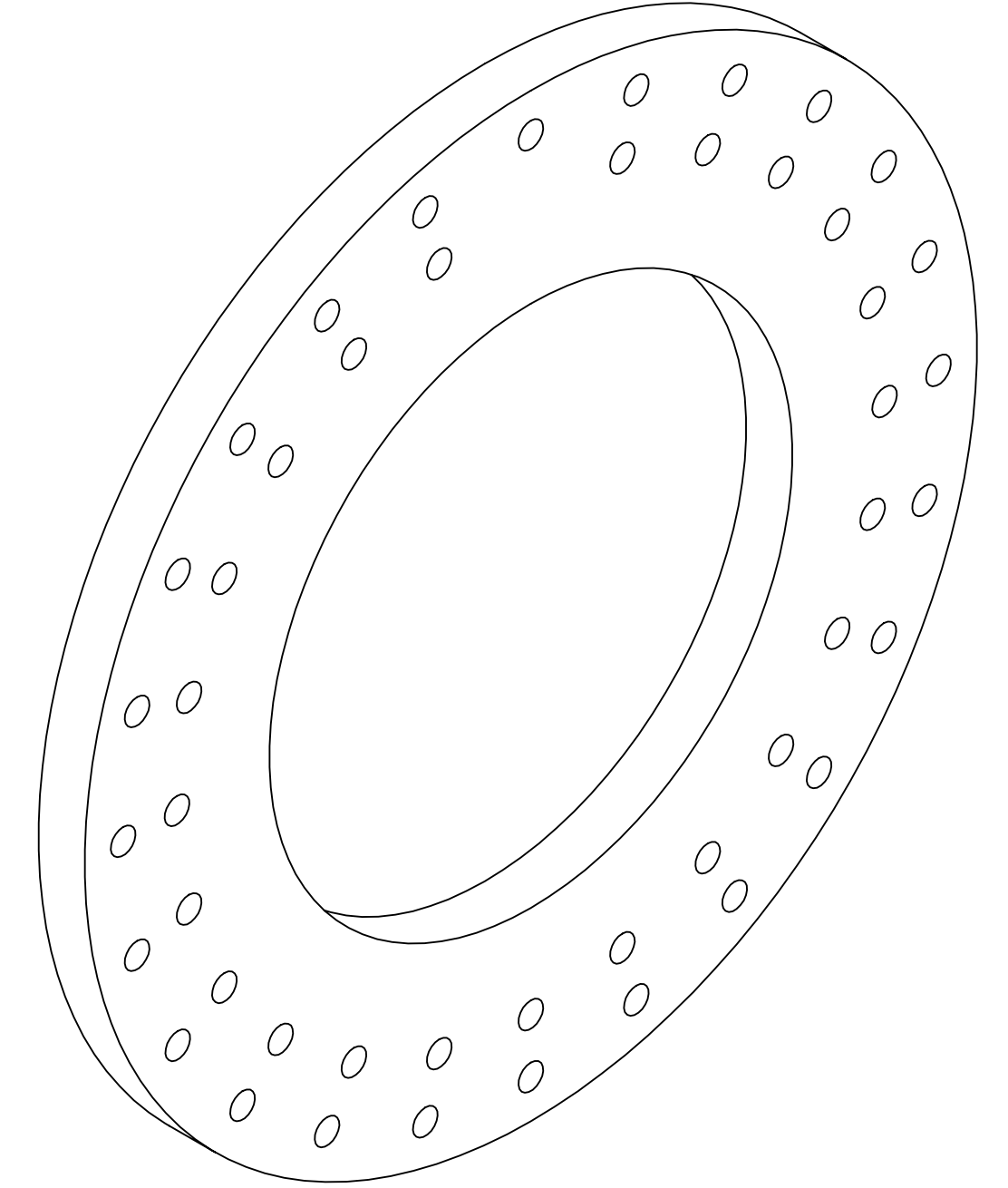
5.750 BC

6.625 BC

$\phi 4.250$

$\phi 7.250$

THREADED OD AT 32 TPI  
MADE TO FIT TIGHTLY ON  
IRTF EXTENSION FER V1  
Z EXTENSION PLATE

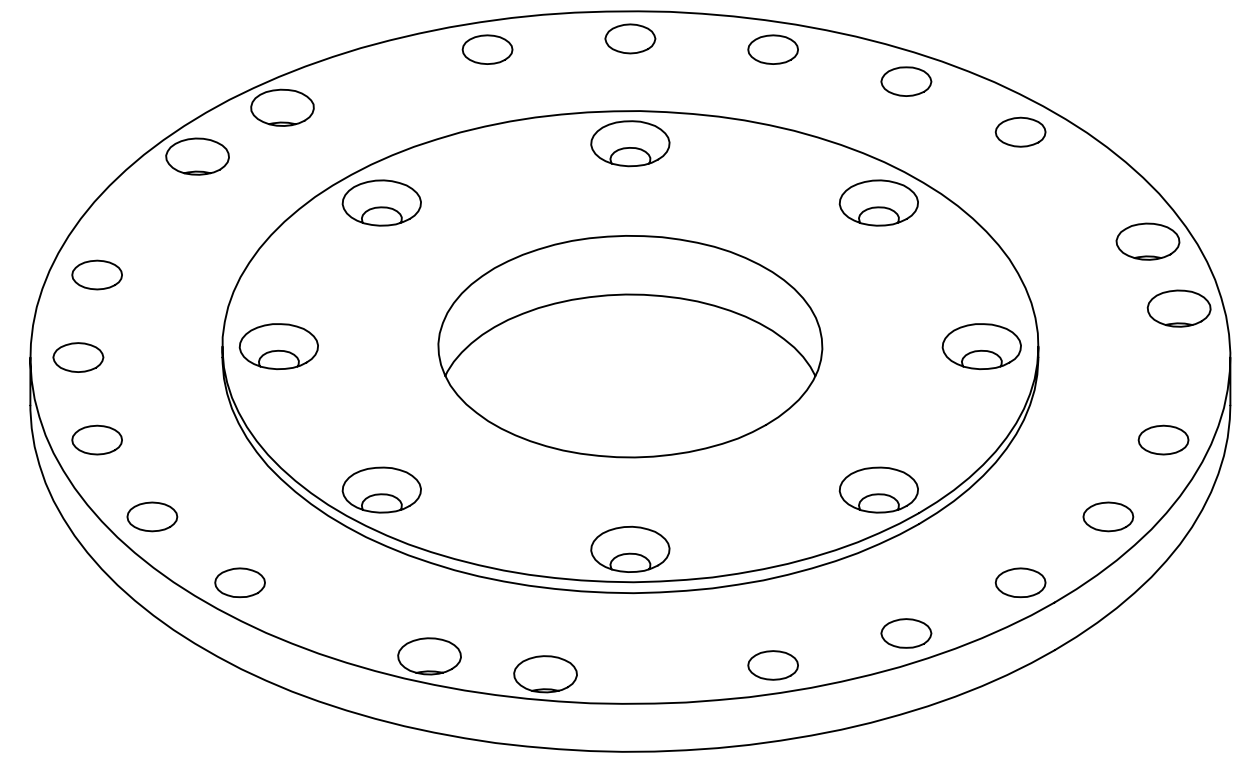


PROJECTED VIEW  
FOR REFERENCE ONLY  
DO NOT SCALE

0.375

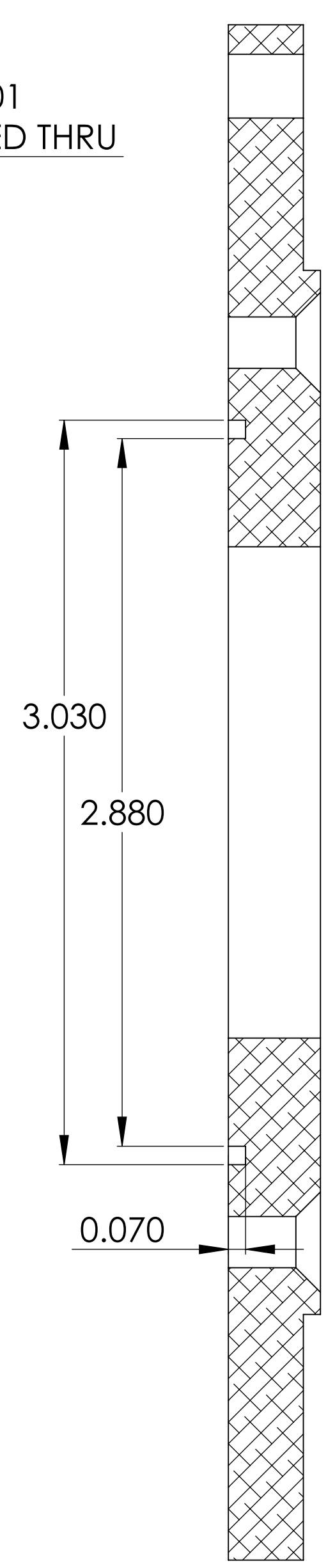
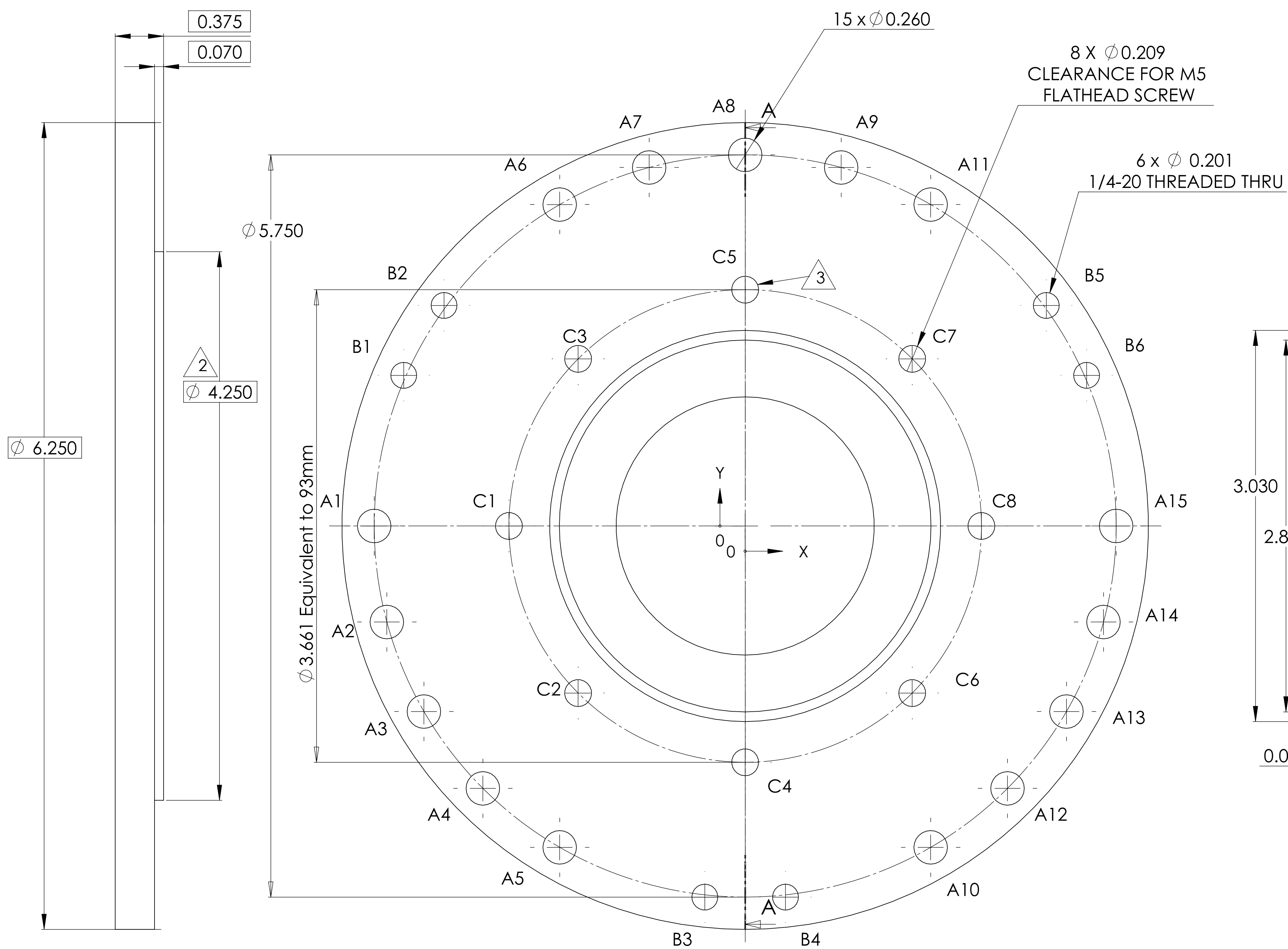
- 2. OD THREADING TO MATCH PART 10-011
  - 1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010
- NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>			
DECIMALS .XX" ± .03	ANGLES .XXX" ± .010 ± 1/2	APPVD	DATE				
MACHINE FINISH	32	DWN	F.E. ROJAS	<b>POETS on IRTF Z Extension: Focus Ring</b>			
DO NOT SCALE DRAWING INTERPRET DWG BY ISO		CHK					
MATERIAL	Carbon Steel Alloy 1040	STRCT		SCALE	CAGE NO	FILE:	REV
10-010		MATL		D	10-012	PART	B
APPLICATION		THRM CONT		SCALE 2/1	UNCLASSIFIED	SHEET 1 OF 1	
ENGR	F.E. ROJAS						



PROJECTED VIEW  
FOR REFERENCE ONLY  
DO NOT SCALE

TAG	X LOC	Y LOC	SIZE
A1	-2.875	0.000	Ø 0.260 THRU
A2	-2.777	-0.744	Ø 0.260 THRU
A3	-2.490	-1.437	Ø 0.260 THRU
A4	-2.033	-2.033	Ø 0.260 THRU
A5	-1.437	-2.490	Ø 0.260 THRU
A6	-1.437	2.490	Ø 0.260 THRU
A7	-0.744	2.777	Ø 0.260 THRU
A8	0.000	2.875	Ø 0.260 THRU
A9	0.744	2.777	Ø 0.260 THRU
A10	1.438	-2.490	Ø 0.260 THRU
A11	1.438	2.490	Ø 0.260 THRU
A12	2.033	-2.033	Ø 0.260 THRU
A13	2.490	-1.437	Ø 0.260 THRU
A14	2.777	-0.744	Ø 0.260 THRU
A15	2.875	0.000	Ø 0.260 THRU
B1	-2.646	1.167	1/4-20 THREADED
B2	-2.334	1.708	1/4-20 THREADED
B3	-0.312	-2.875	1/4-20 THREADED
B4	0.313	-2.875	1/4-20 THREADED
B5	2.334	1.708	1/4-20 THREADED
B6	2.646	1.167	1/4-20 THREADED
C1	-1.831	0.000	Ø 0.209 ∇ 0.2750
C2	-1.295	-1.295	Ø 0.209 ∇ 0.2750
C3	-1.295	1.295	Ø 0.209 ∇ 0.2750
C4	0.000	-1.831	Ø 0.209 ∇ 0.2750
C5	0.000	1.831	Ø 0.209 ∇ 0.2750
C6	1.295	-1.295	Ø 0.209 ∇ 0.2750
C7	1.295	1.295	Ø 0.209 ∇ 0.2750
C8	1.831	0.000	Ø 0.209 ∇ 0.2750



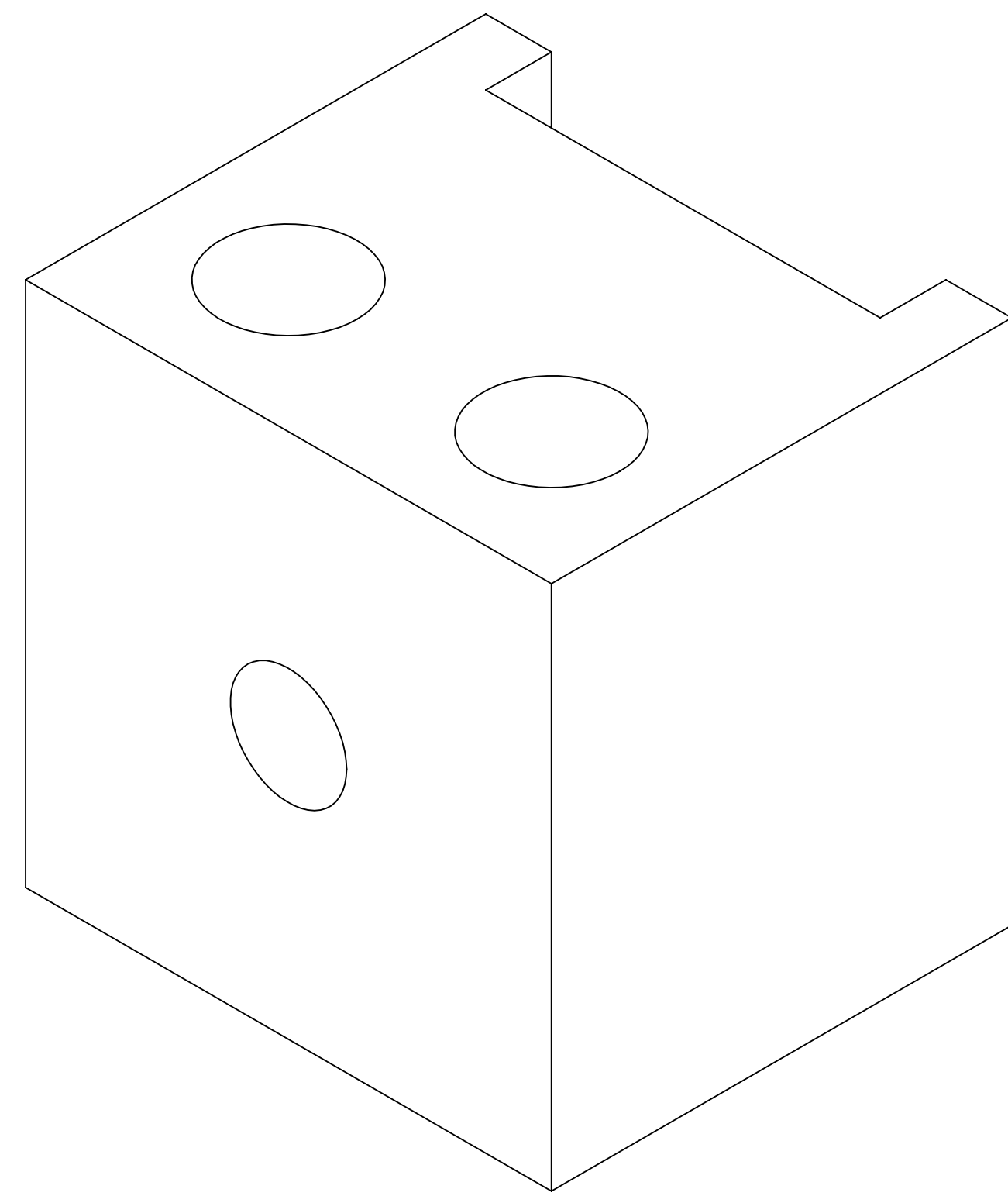
SECTION A-A  
SCALE 2 : 1

- 3. POETS HOLES ARE METRIC (5 MM)
- 2. MATE WITH PART 10-012 TO TEST FITTING
- 1. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010

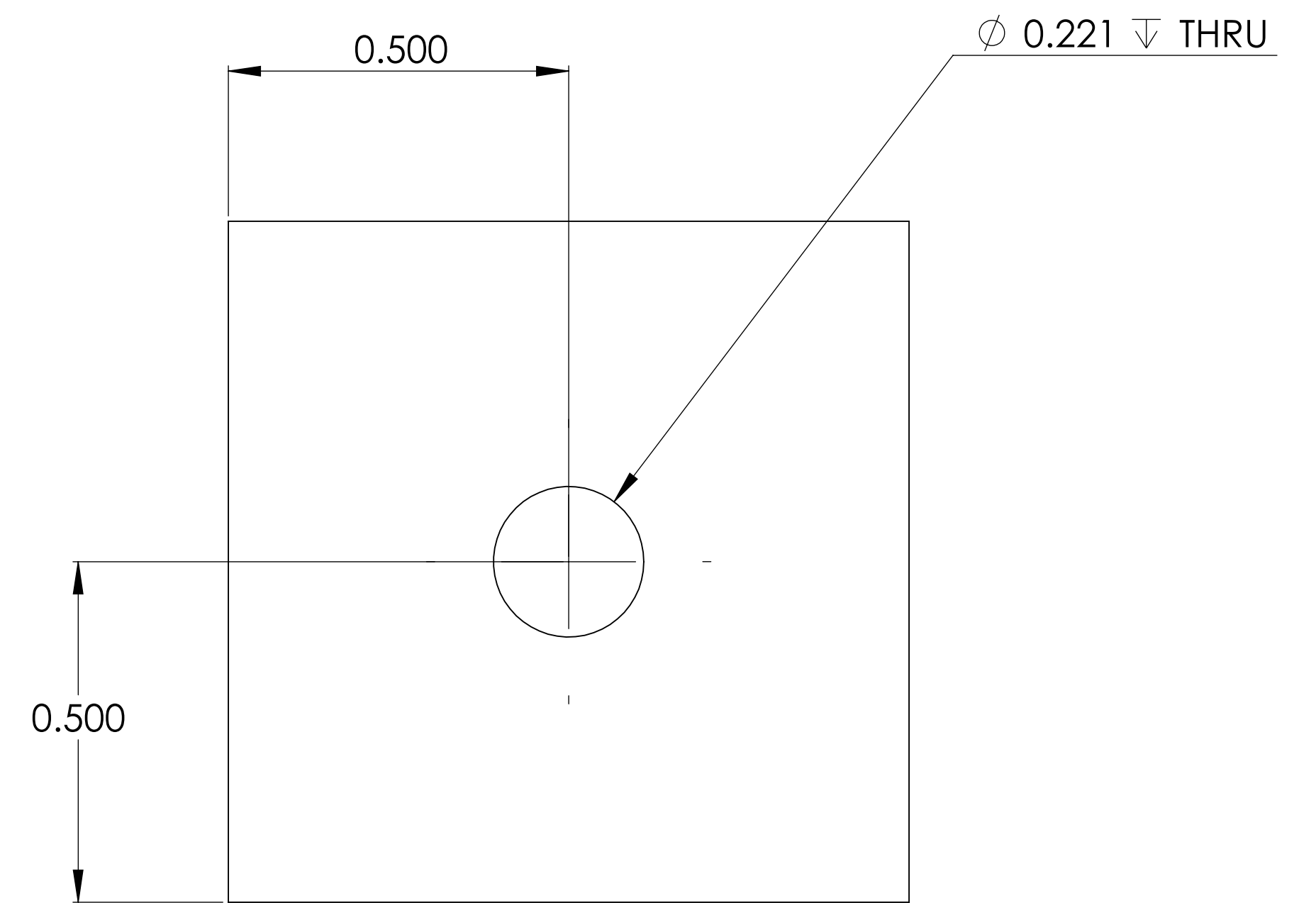
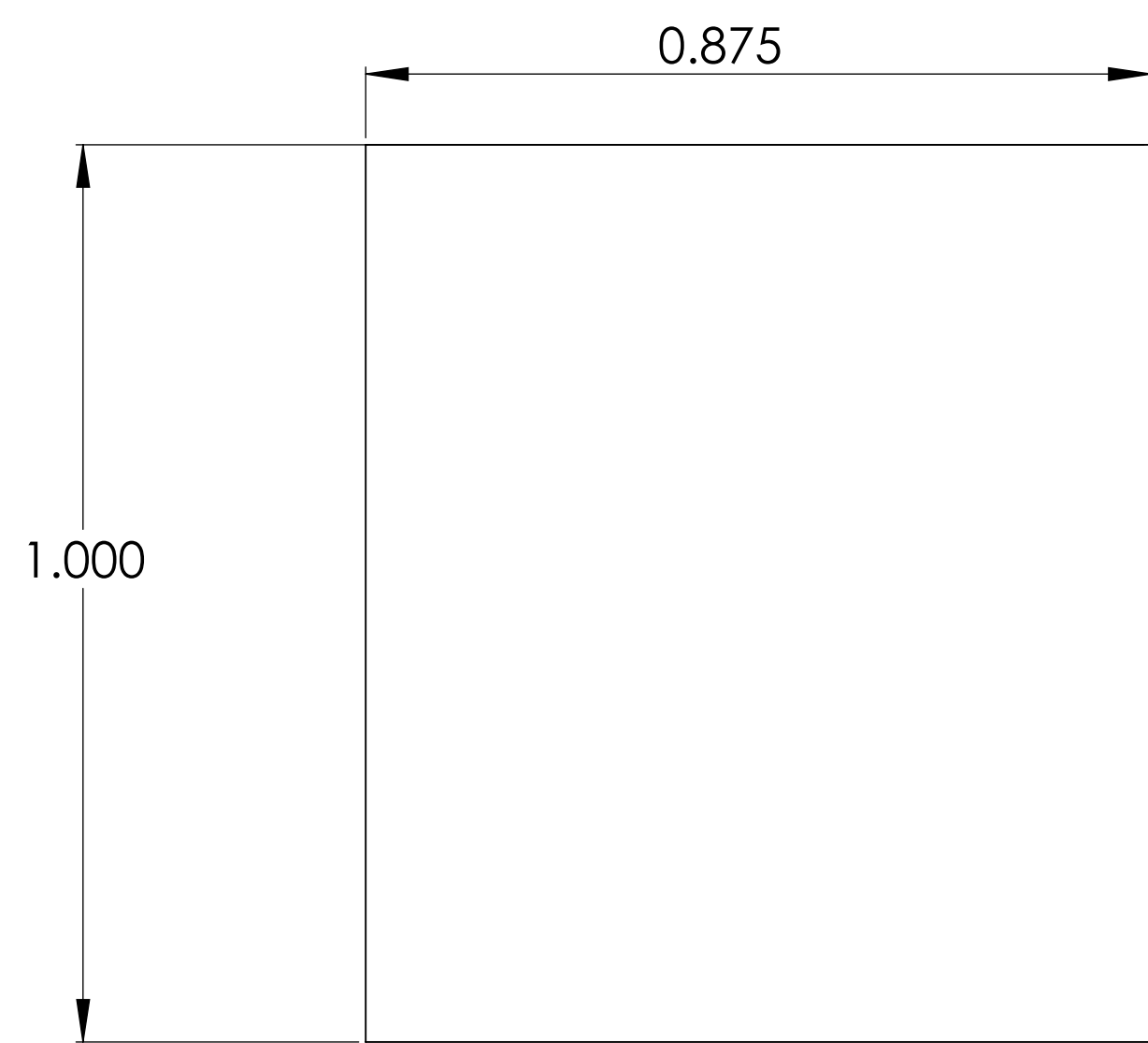
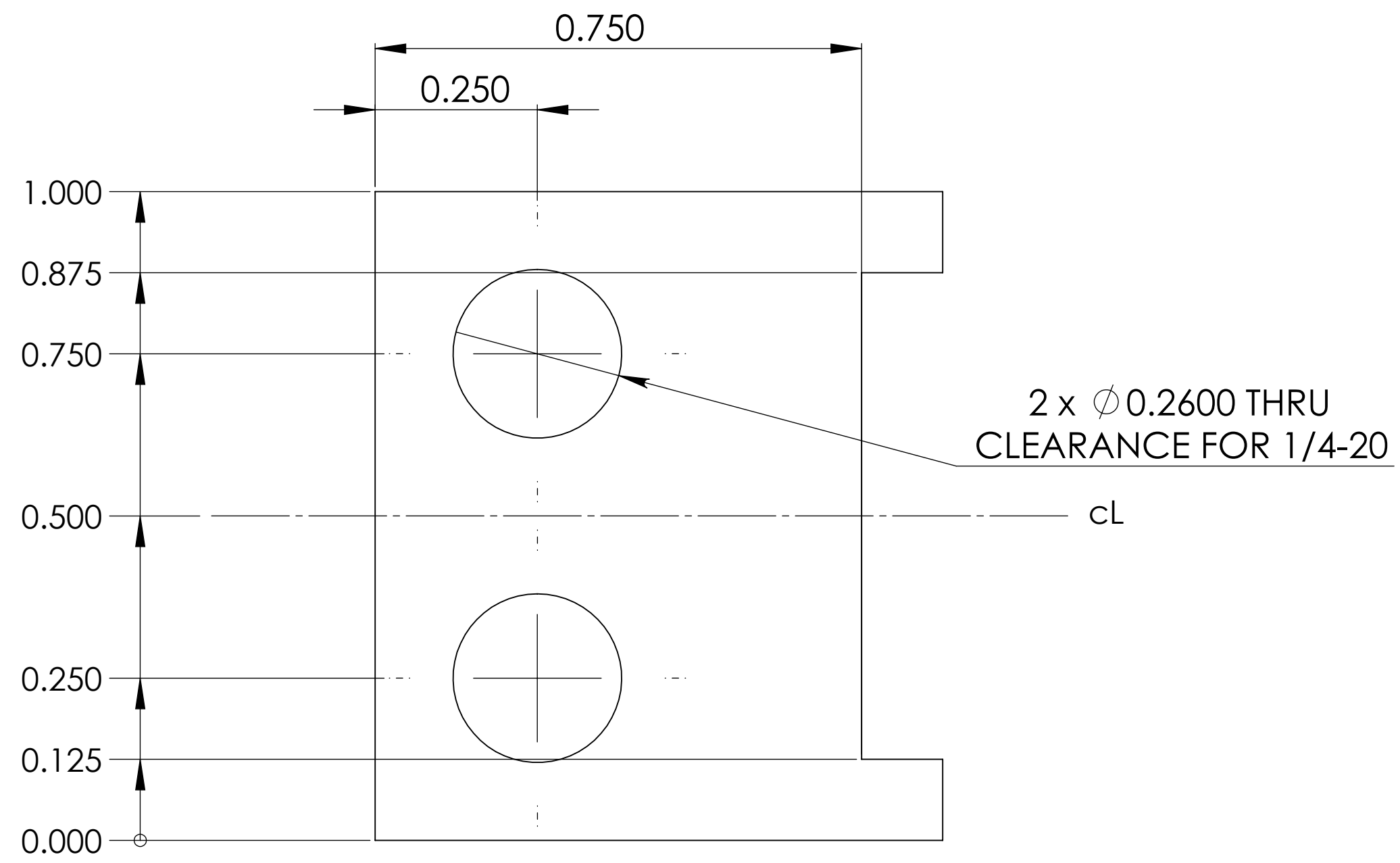
NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" ± .03 .XXX" ± .010 ANGLES ± 1/2		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>	
MACHINE FINISH 16 /		APPVD F.E. ROJAS DATE			
DO NOT SCALE DRAWING INTERPRET DWG BY ISO		CHK		<b>POETS on IRTF</b> <b>Z Extension: Poets Face Adapter</b>	
MATERIAL Al 6061 CAST		STRCT			
NEXT ASSEMBLY 10-010 USED ON		MATL		SCALE D CAGE NO 10-013 FILE: PART REV B	
APPLICATION		ENGR		SCALE 2/1 UNCLASSIFIED SHEET 1 OF 1	





PROJECTED VIEW  
FOR REFERENCE ONLY  
DO NOT SCALE



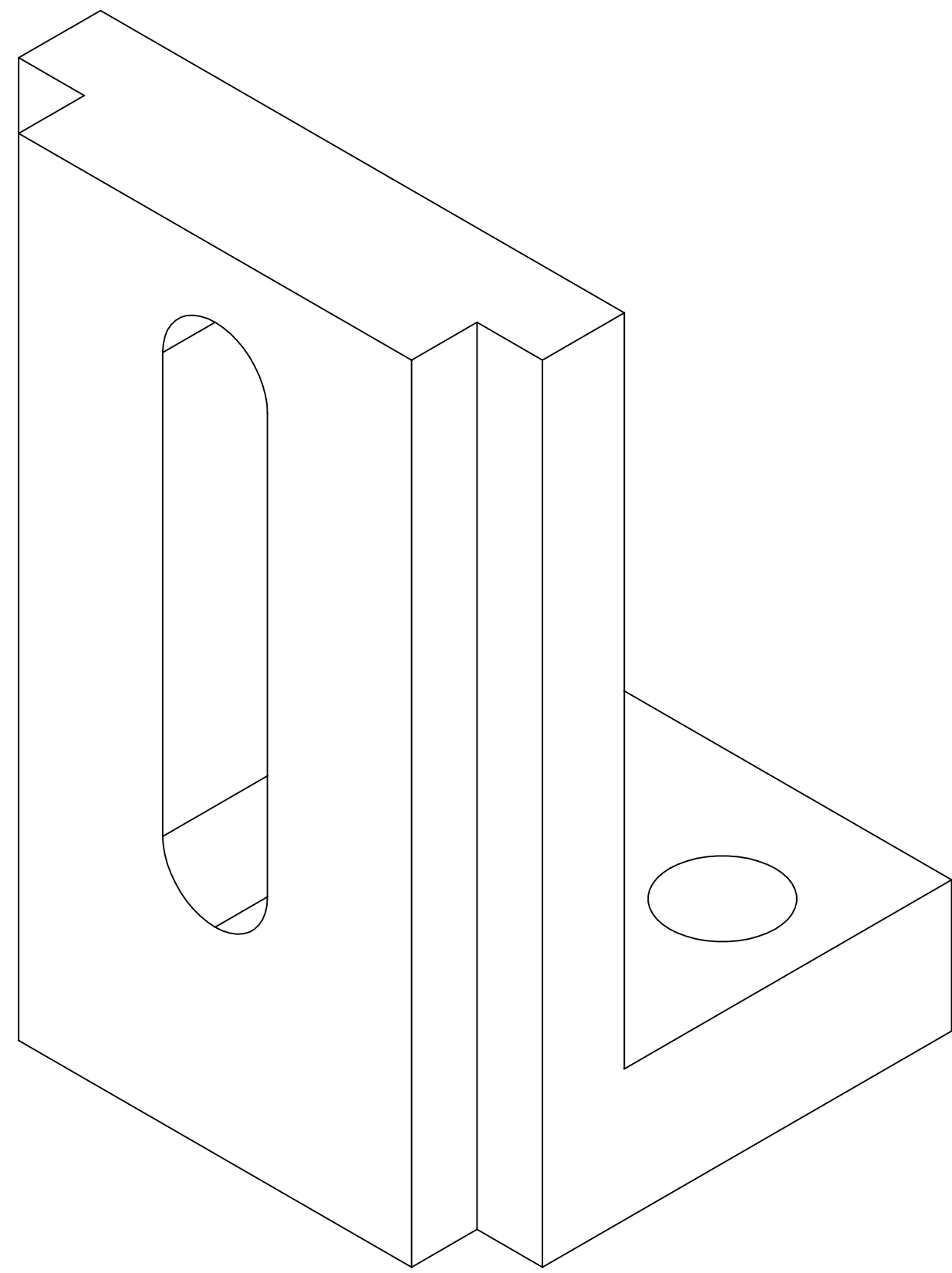
2. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010

1 ASSEMBLE TO FIT WITH PART 10-015

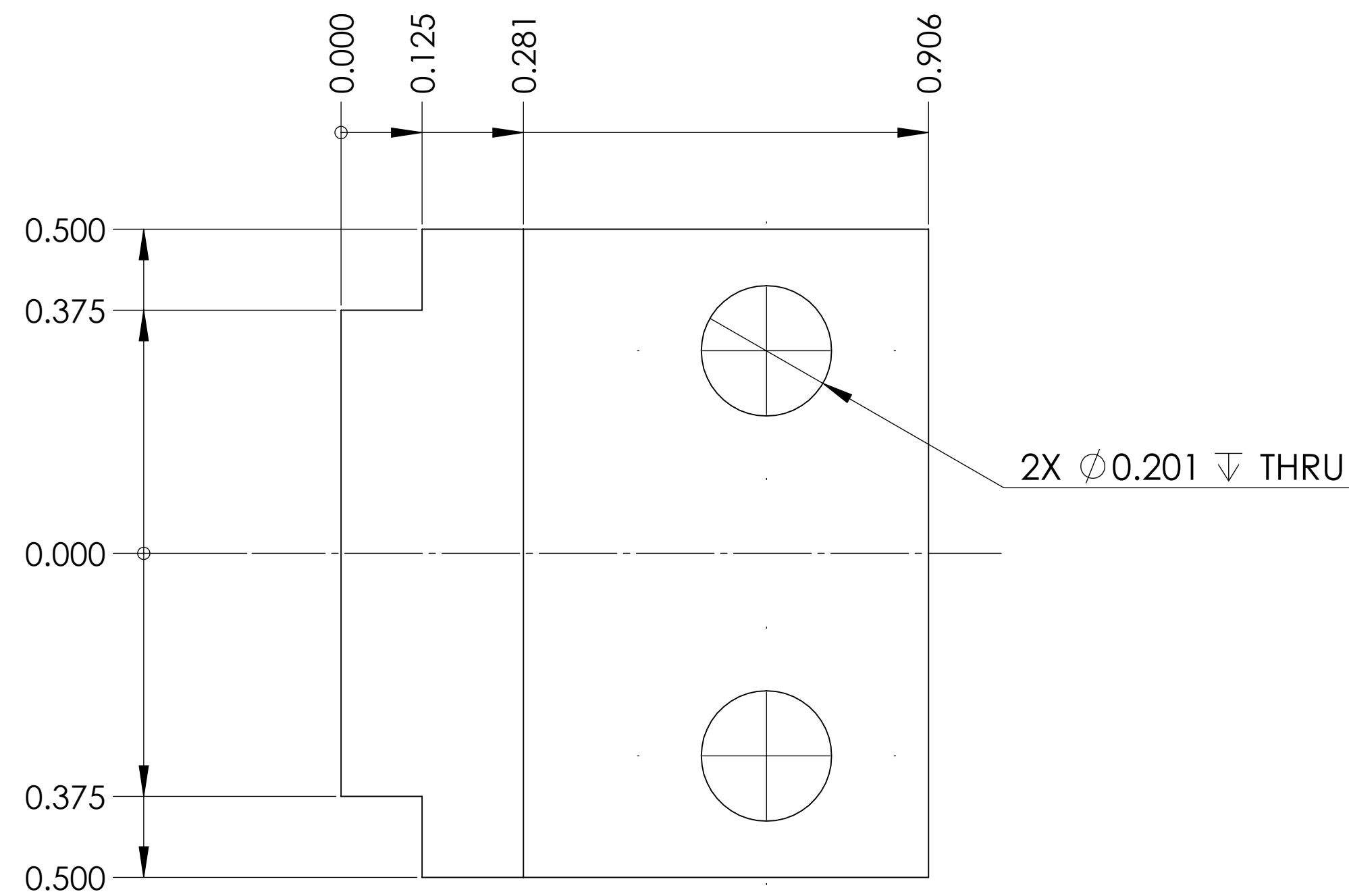
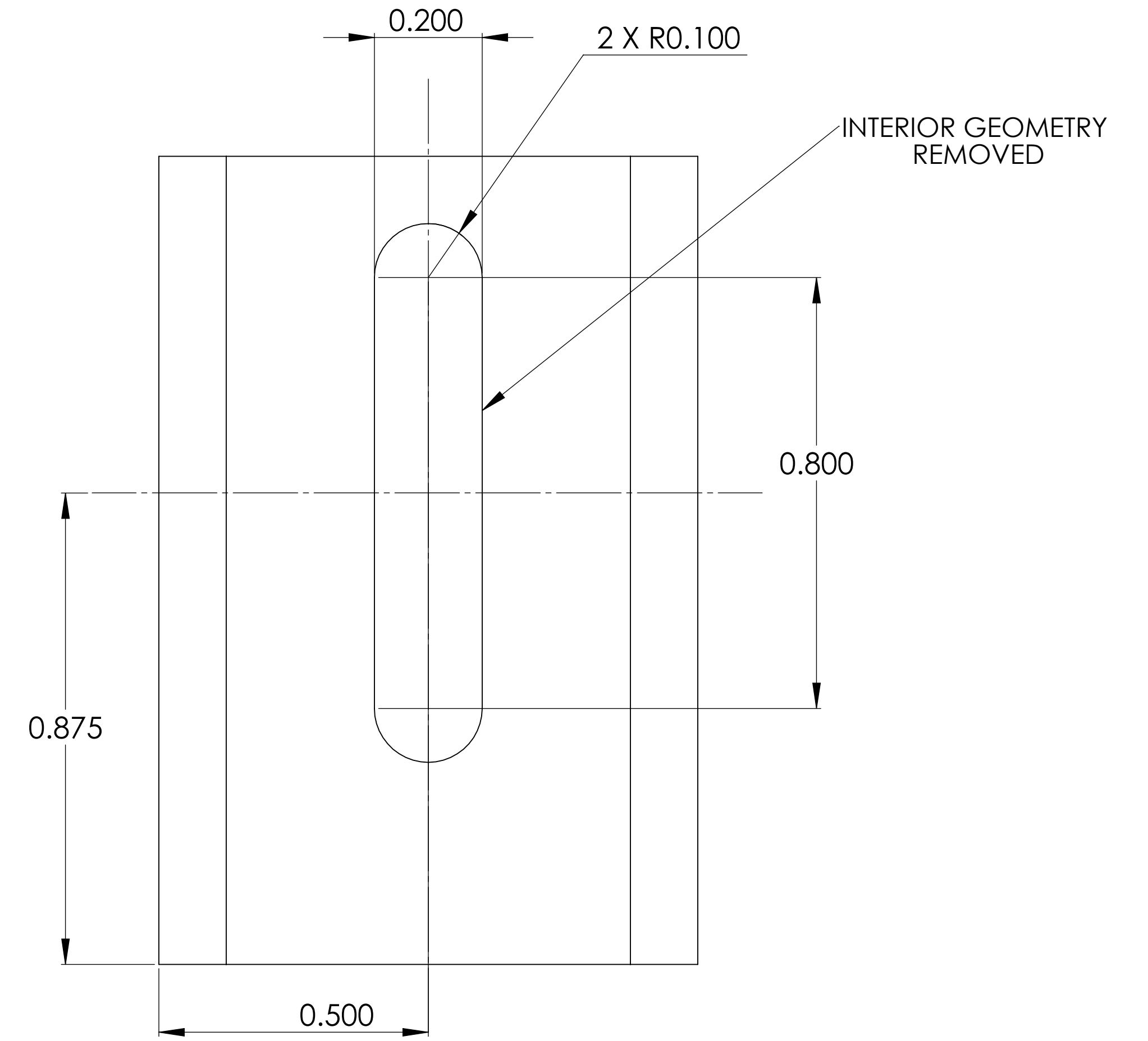
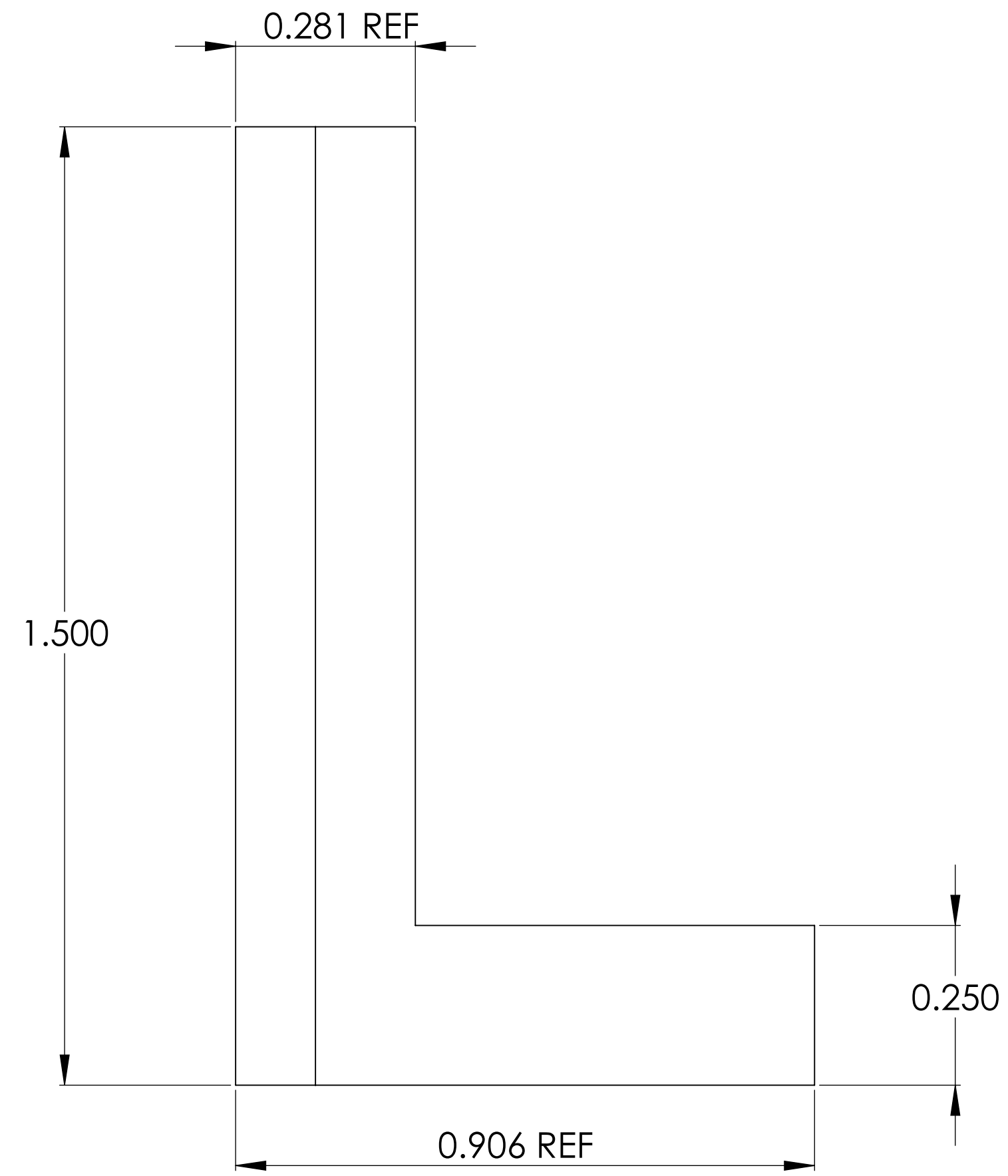
NOTES: UNLESS OTHERWISE SPECIFIED

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" ± .03 ANGLES ±1/2 .XXX" ± .010		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>	
		MACHINE FINISH 32/ DO NOT SCALE DRAWING INTERPRET DWG BY ISO		APPVD F.E. ROJAS DATE			
		MATERIAL AL 6061		CHK		<b>POETS on IRTF</b> <b>Z-EXTENSION: RAISERS FEMALE</b>	
		NEXT ASSEMBLY 10-010 USED ON		STRCT			
APPLICATION				MATL		SCALE D	
				THRM CONT		CAGE NO 10-014	
				ENGR		FILE: PART	
				DSGN SUPV		REV B	
						SCALE 5/1 UNCLASSIFIED SHEET 1 OF 1	

REV  
10-014-B  
D



PROJECTED VIEW  
FOR REFERENCE ONLY  
DO NOT SCALE



2. REMOVE ALL BURRS AND SHARP EDGES .003 TO .010

1. ASSEMBLE TO FIT WITH PART 10-014

NOTES: UNLESS OTHERWISE SPECIFIED

		UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES DECIMALS .XX" ± .03 ANGLES ±1/2 .XXX" ± .010		CONTRACT NO		<b>Folkers E. Rojas UROP Production</b> <i>Massachusetts Institute of Technology</i> <i>Boston, MA 02139</i>	
		MACHINE FINISH 32/		APPVD F.E. ROJAS DATE			
		DO NOT SCALE DRAWING INTERPRET DWG BY ISO		DWN		<b>POETS on IRTF</b> <b>Z-EXTENSION: RAISERS MALE</b>	
		MATERIAL AL 6061		CHK			
		APPLICATION		STRCT		SCALE D	
		NEXT ASSEMBLY USED ON		MATL		CAGE NO 10-015	
				THRM CONT		FILE: PART	
				ENGR		REV B	
				DSGN SUPV		SCALE 5/1 UNCLASSIFIED SHEET 1 OF 1	

REV 10-015-B