

NOTES CONTINUED:

⑤ SCRIBE, ENGRAVE (A VIBRATORY TOOL MAY BE USED), LASER MARK OR MECHANICALLY STAMP (NO INKS OR DYES) DRAWING PART NUMBER, REVISION (AND VARIANT OR "TYPE" IF APPLICABLE) ON NOTED SURFACE OF PART FOLLOWED ON THE NEXT LINE WITH A THREE DIGIT SERIAL NUMBER. SERIAL NUMBERS START AT 001 FOR THE FIRST ARTICLE AND PROCEED CONSECUTIVELY. USE MINIMUM 0.12" HIGH CHARACTERS, UNLESS THE SIZE OF THE PART DICTATES SMALLER CHARACTERS. EXAMPLE: DXXXXXX-VY, TYPE-XX, S/N XXX

6. APPROXIMATE WEIGHT = SEE FIELD OF DRAWING.

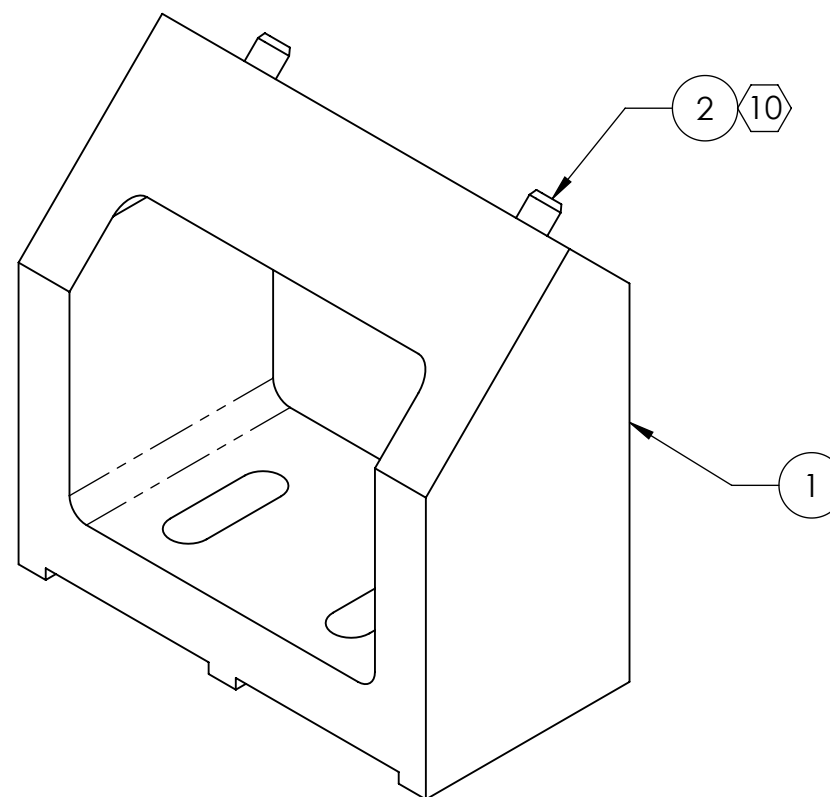
7. ALL PARTS SHALL BE MANUFACTURED IN ACCORDANCE WITH LIGO SPECIFICATION E0900364.

8. MACHINE ALL SURFACES TO REMOVE OXIDES AND MILL FINISH. USE OF ABRASIVE REMOVAL TECHNIQUES IS NOT ALLOWED. REFER TO LIGO-E0900364

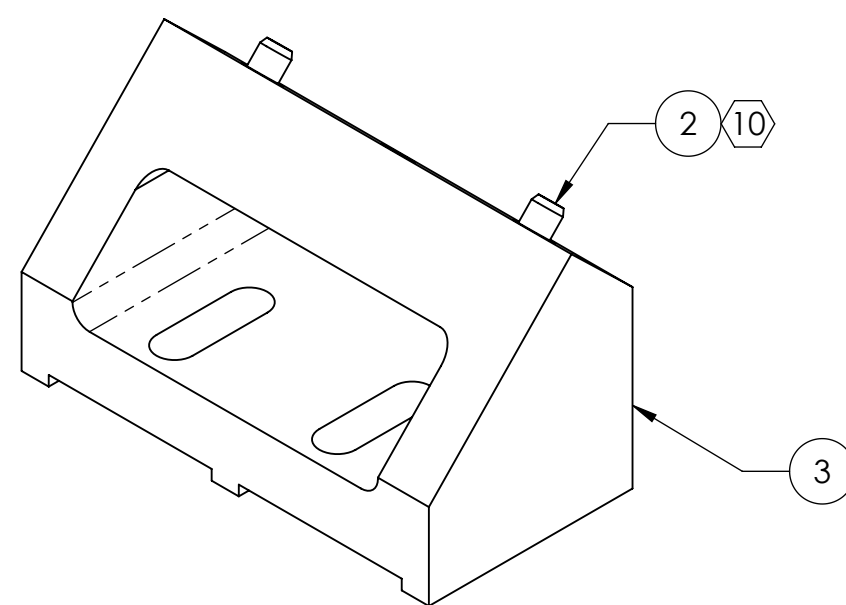
9. ALL MATERIAL IS TO BE VIRGIN MATERIAL (i.e. NO WELD REPAIRS, PLUGS OR RECYCLED MATERIAL). NO REPAIRS SHALL BE MADE UNLESS APPROVED IN ADVANCE, AND IN WRITING, BY LIGO LABORATORY. REFER TO LIGO-E0900364.

⑩ ITEMS ② (PIN) TO BE INSTALLED BY LIGO PERSONEL, AFTER DELIVERY OF FINISHED PARTS. USE GAUGE TOOL D1300025-v2 TO ACHIEVE PROPER PRESSED DEPTH.

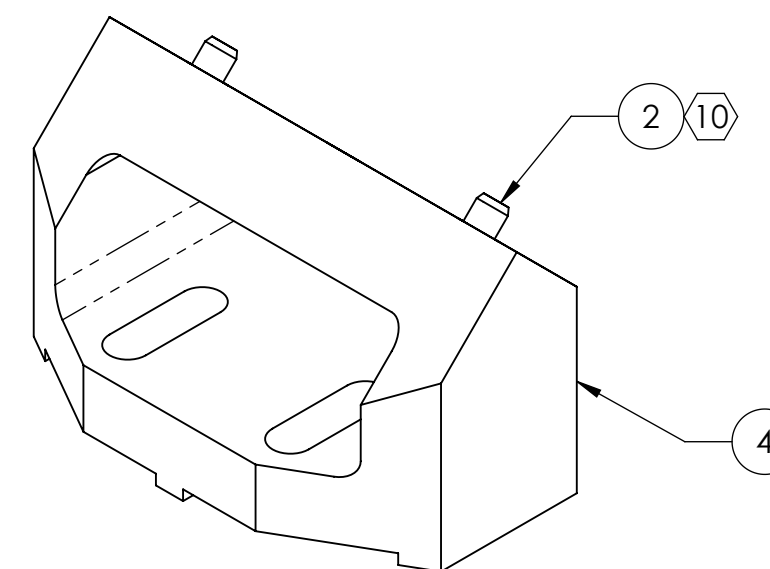
REV.	DATE	DCN #	DRAWING TREE #
v1	25 OCT 2012	E1200963-V1	
v2	28 NOV 2012	E1200963-V2	
v3	17 JUL 2013	E1300602	



**D1200173-1**  
WEIGHT: .49 LBS



**D1200173-2**  
WEIGHT: .33 LBS



**D1200173-3**  
WEIGHT: .29 LBS

ITEM NO.	PART NO.	DESCRIPTION	REV.	MATERIAL	QTY.	REV.	QTY.	REV.	QTY.
4	-3	aLIGO PCAL MIRROR MOUNT BASE, CAMERA, 1.317"H	-	6061-T6 Al	-	-	-	1	
3	-2	aLIGO PCAL MIRROR MOUNT BASE, CAMERA, 1.285"H	-	6061-T6 Al	-	1	-		
2	D1300022	aLIGO PCAL PERISCOPE MIRROR ALIGNMENT PIN	v2	304, 316 OR 302 SSSL	2	2	2		
1	-1	aLIGO PCAL MIRROR MOUNT BASE, CAMERA, 1.285"H	-	6061-T6 Al	1	-	-		

NOTES AND TOLERANCES: (UNLESS OTHERWISE SPECIFIED)

- INTERPRET DRAWING PER ASME Y14.5-1994.
- REMOVE ALL SHARP EDGES, .005-.015.
- DO NOT SCALE FROM DRAWING.
- ALL MACHINING FLUIDS MUST BE FULLY SYNTHETIC, FULLY WATER SOLUBLE AND FREE OF SULFUR, SILICONE, AND CHLORINE.

MATERIAL AL ALLOY 6061-T6

FINISH 63 μinch

**LIGO** CALIFORNIA INSTITUTE OF TECHNOLOGY  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SYSTEM ADVANCED LIGO

SUB-SYSTEM AOS

NEXT ASSY D1200174

PART NAME

aLIGO, PCAL,  
MIRROR MNT BASE, CAMERA

DESIGNER S. SHANKLE 13 OCT 2012  
DRAFTER S. SHANKLE 13 OCT 2012  
CHECKER 13 OCT 2012  
APPROVAL 13 OCT 2012

SIZE DWG. NO. c D1200173

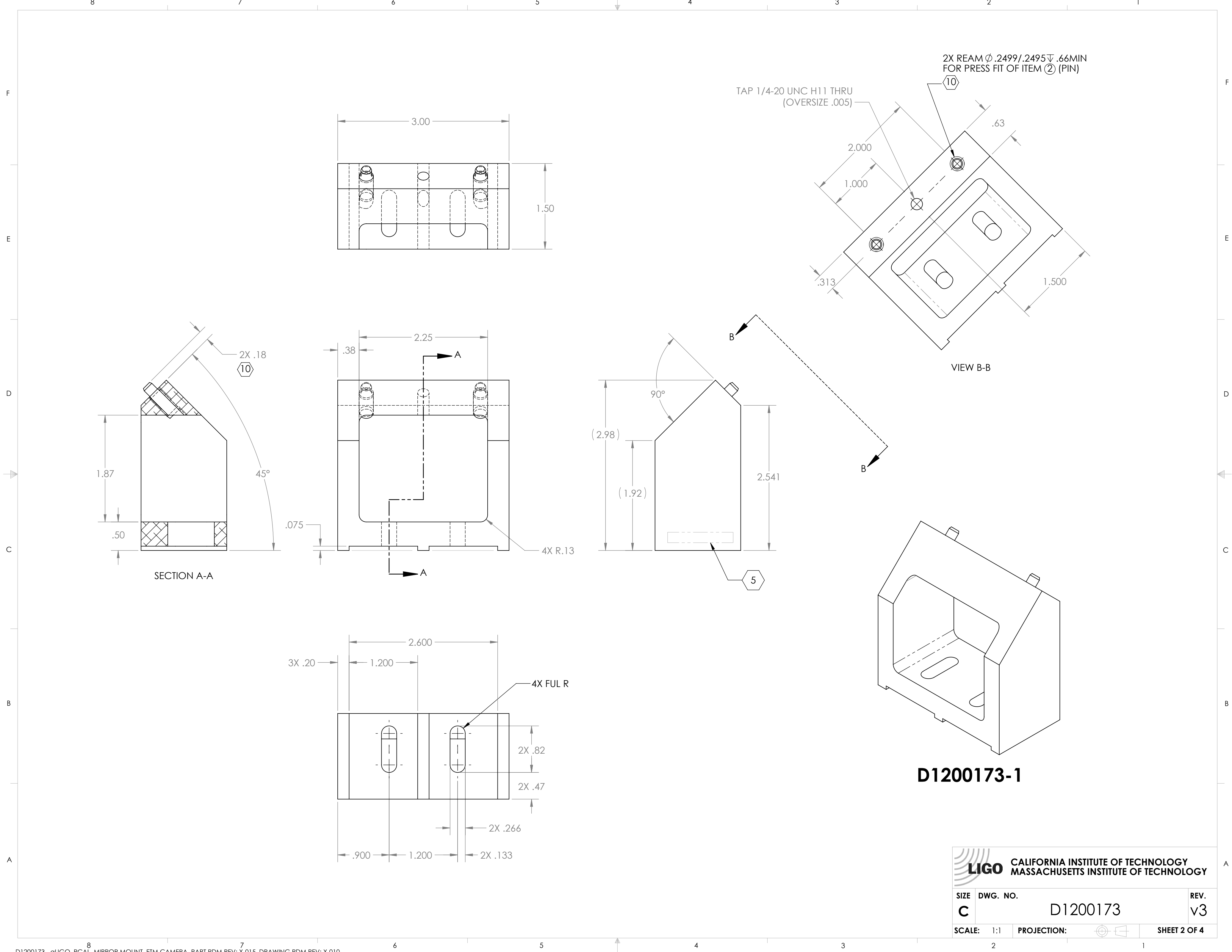
REV. v3

SCALE: 1:1 PROJECTION: SHEET 1 OF 4



DIMENSIONS ARE IN INCHES

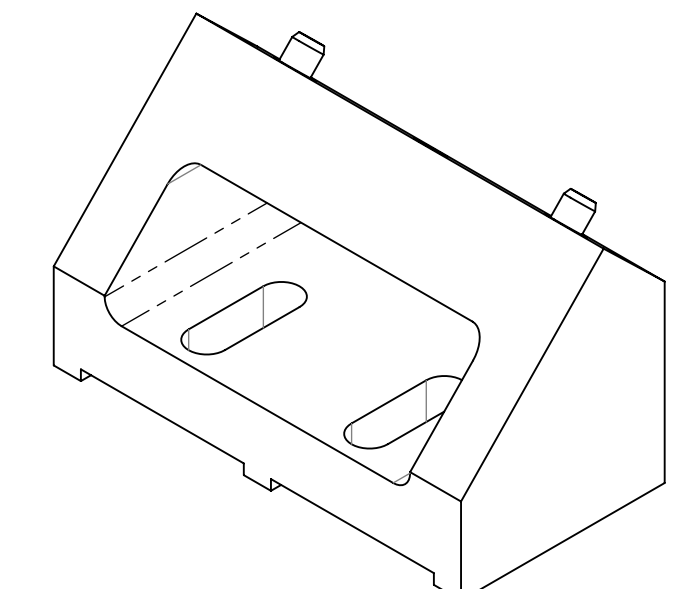
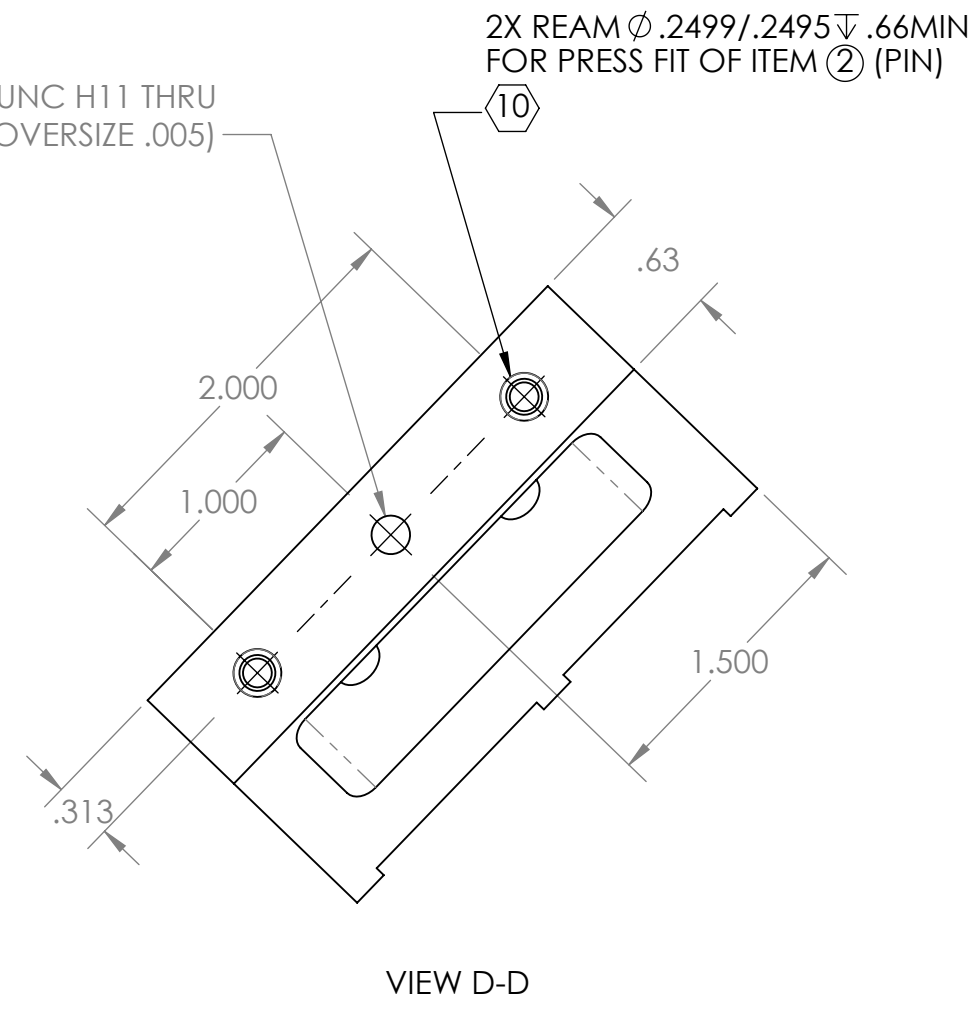
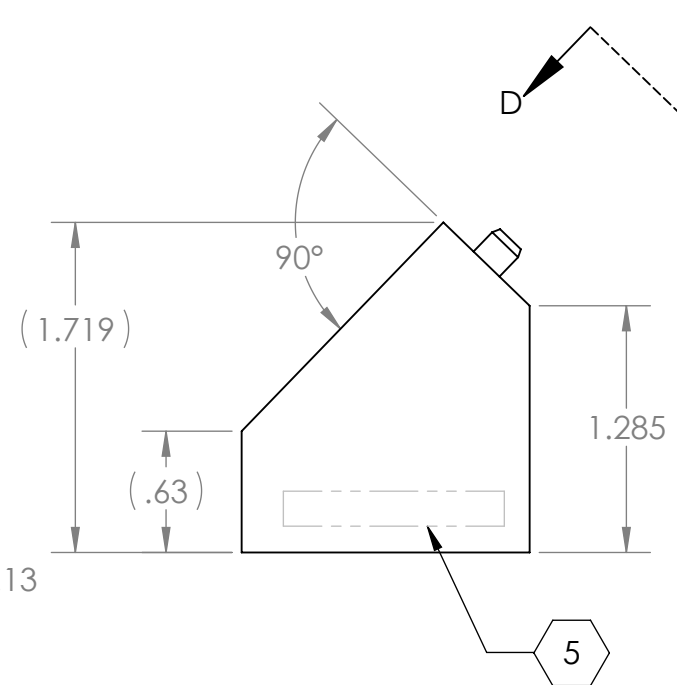
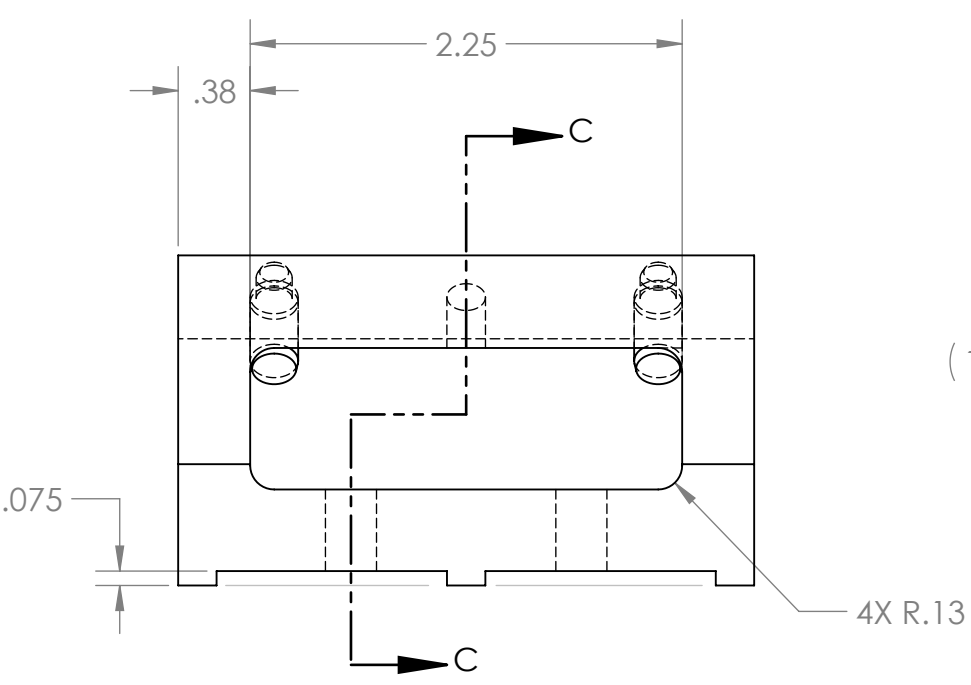
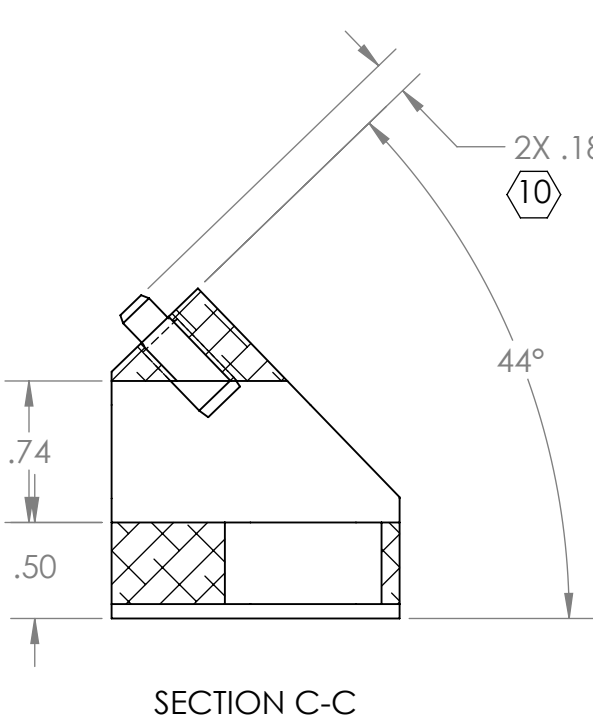
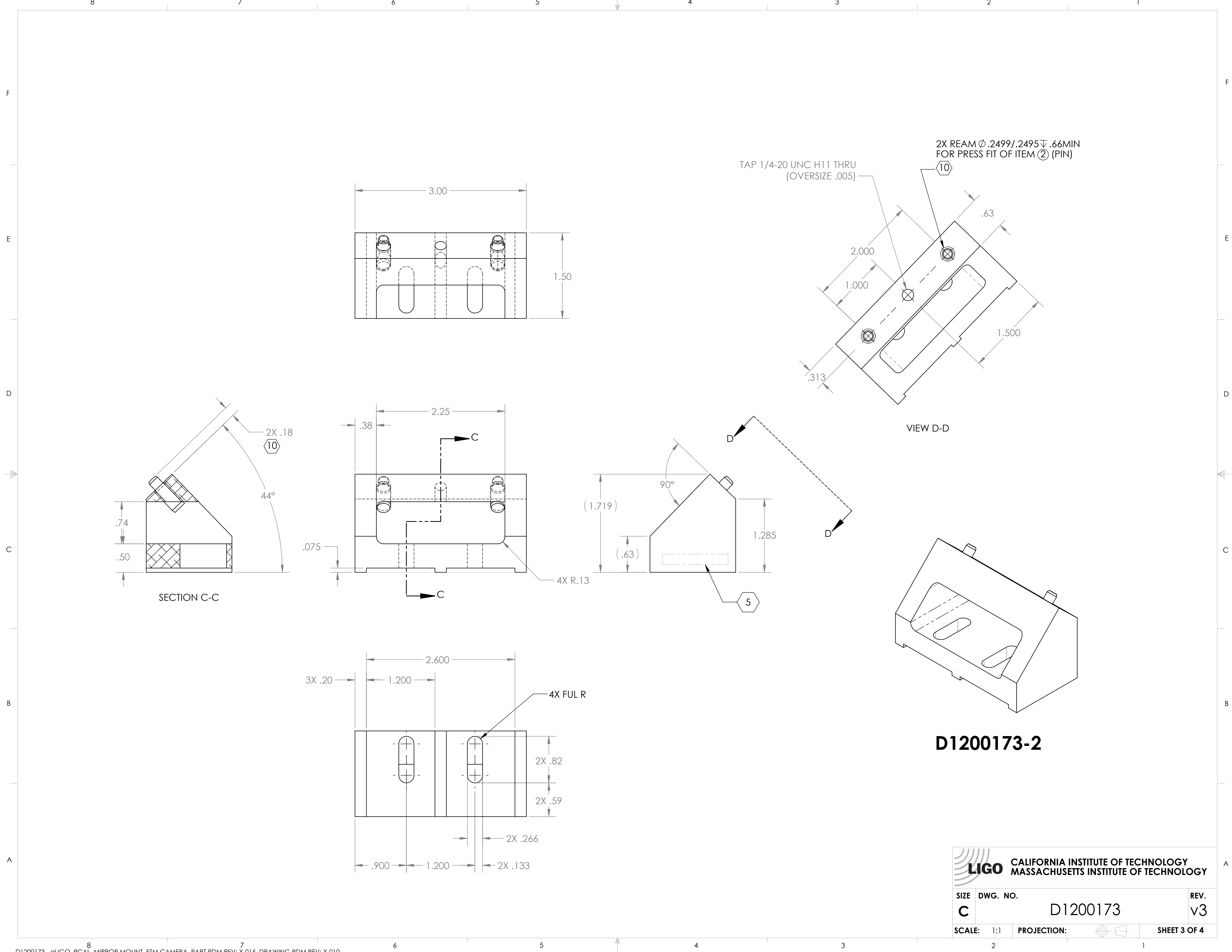
TOLERANCES:  
.XX ± .10  
.XXX ± .005

ANGULAR ± 0.5°

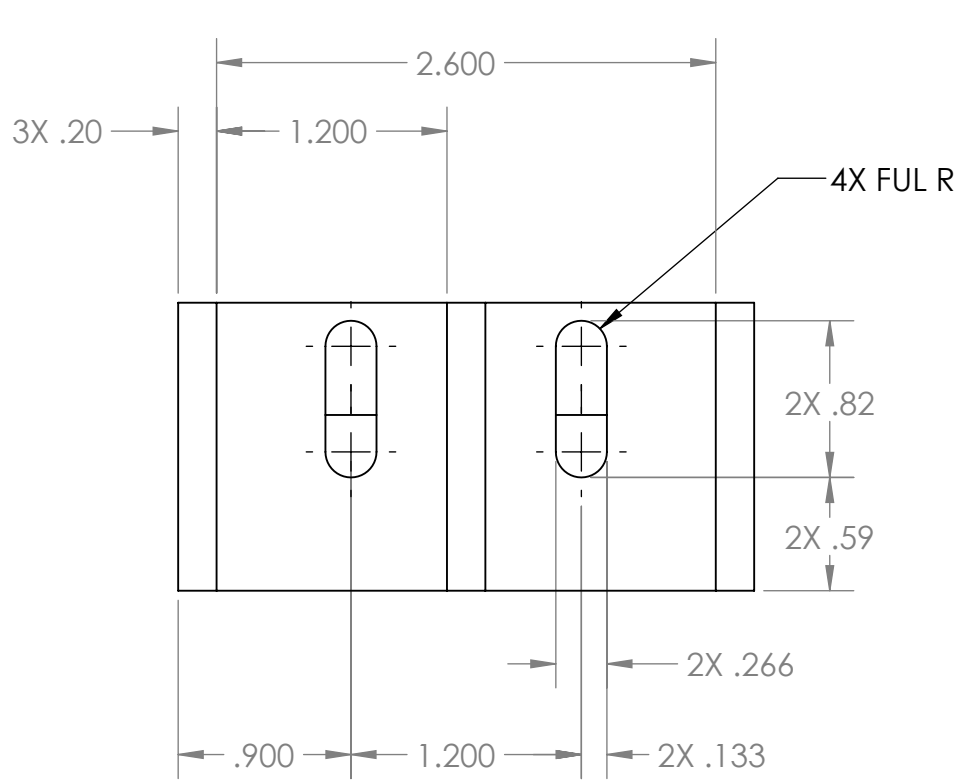


**D1200173-1**

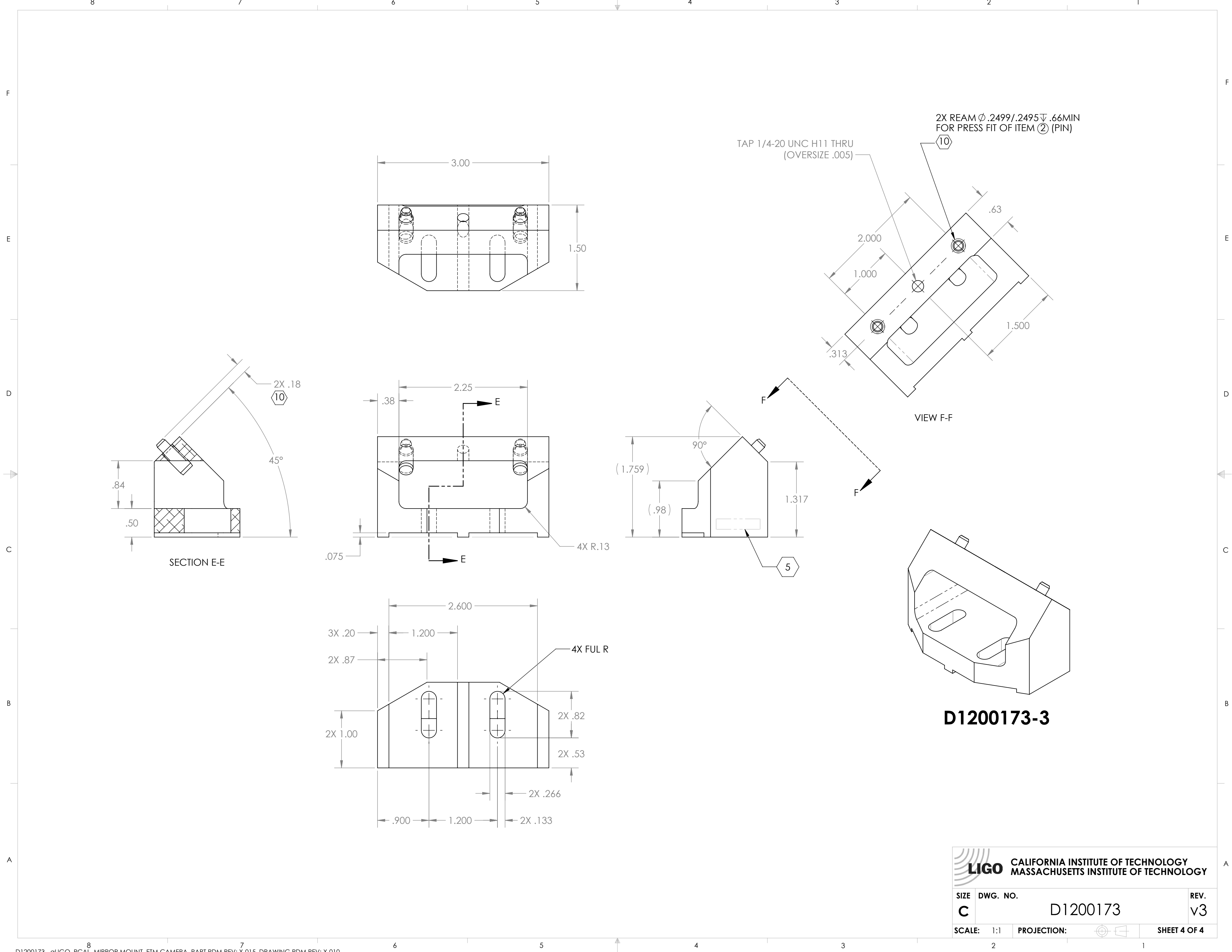
 <b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b> <b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>		
SIZE <b>C</b>	DWG. NO. <b>D1200173</b>	REV. <b>v3</b>
SCALE: 1:1	PROJECTION: 	SHEET 2 OF 4



**D1200173-2**



<b>LIGO</b> CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY		REV.
SIZE	DWG. NO.	v3
<b>C</b>	D1200173	
SCALE: 1:1	PROJECTION:	SHEET 3 OF 4




TAP 1/4-20 UNC H11 THRU (OVERSIZE .005)

2X REAM  $\phi .2499 / .2495 \sqrt{.66 \text{ MIN}}$  FOR PRESS FIT OF ITEM ② (PIN)

VIEW F-F

**D1200173-3**

 <b>CALIFORNIA INSTITUTE OF TECHNOLOGY</b> <b>MASSACHUSETTS INSTITUTE OF TECHNOLOGY</b>		
SIZE	DWG. NO.	REV.
<b>C</b>	<b>D1200173</b>	<b>v3</b>
SCALE: 1:1	PROJECTION:	SHEET 4 OF 4